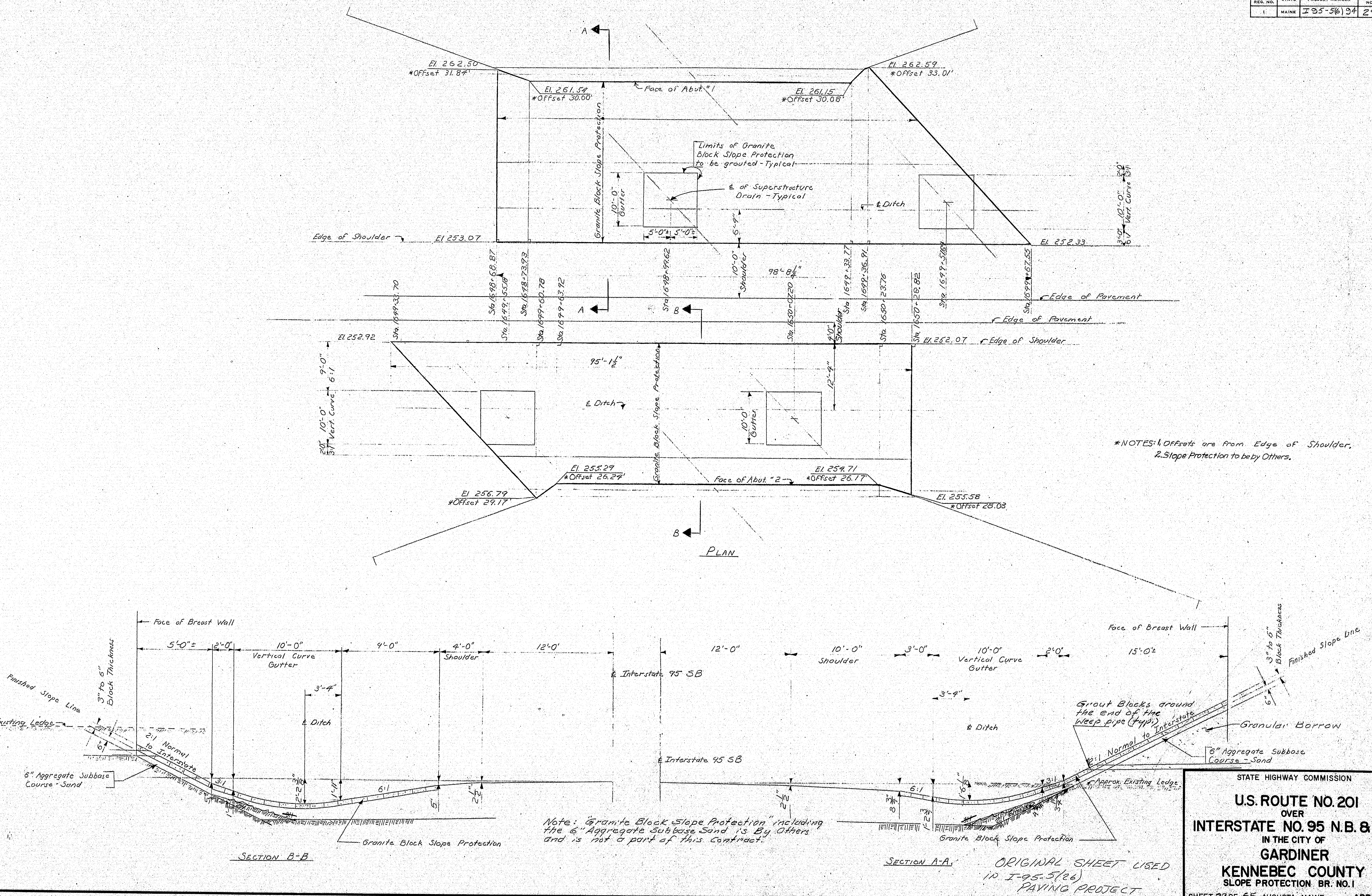
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95-5(6)94	29	55


A
El. 262.50
*Offset 31.84'
El. 261.54
*Offset 30.00'
Face of Abut. #1
El. 261.15
*Offset 30.08'
El. 262.59
*Offset 33.01'
Limits of Granite Block Slope Protection to be grouted - Typical
℄ of Superstructure Drain - Typical
Granite Block Slope Protection
10'-0" Gutter
5'-0"± 5'-0"±
6'-4"
℄ Ditch
2'-0" 10'-0" Vert. Curve 3'-0" 6:1
Edge of Shoulder
El 253.07
El. 252.33
Sta.1648+68.87
Sta.1649+55.18
Sta.1648+73.93
Sta.1649+60.78
Sta.1649+63.92
Sta.1649+33.70
Sta.1648+99.62
10'-0" Shoulder
98'-8 1/4"
Sta.1650+07.20
Sta.1649+33.77
Sta.1649+36.91
Sta.1650+23.76
Sta.1650+28.82
Sta.1649+57.64
Sta.1649+67.55
Edge of Pavement
Edge of Pavement
Edge of Shoulder
B
4'-0" Shoulder
El. 252.92
El. 252.07
95'-1 1/2"
12'-4"
9'-0" 6:1 10'-0" 3'-0" Vert. Curve 3:1
℄ Ditch
10'-0" Gutter
Granite Block Slope Protection
El. 255.29
*Offset 26.24'
Face of Abut. #2
El. 254.71
*Offset 26.17'
El. 256.79
*Offset 29.17
El. 255.58
*Offset 28.03
PLAN
Face of Breast Wall
5'-0"±
2'-0"
10'-0" Vertical Curve Gutter
4'-0"
4'-0" Shoulder
12'-0"
3'-4"
℄ Ditch
℄ Interstate 95 SB
Finished Slope Line
3" to 6" Block Thickness
Approx. Existing Ledge
2:1 Normal to Interstate
6" Aggregate Subbase Course - Sand
3:1
6:1
Granite Block Slope Protection
SECTION B-B
12'-0"
10'-0" Shoulder
3'-0"
10'-0" Vertical Curve Gutter
2'-0"
15'-0"±
Face of Breast Wall
3'-4"
℄ Ditch
Grout Blocks around the end of the weep pipe (typ.)
Granular Borrow
2:1 Normal to Interstate
6" Aggregate Subbase Course - Sand
Approx. Existing Ledge
Granite Block Slope Protection
SECTION A-A.

*NOTES: 1. Offsets are from Edge of Shoulder.
2. Slope Protection to be by Others.

Note: "Granite Block Slope Protection" including the 6" Aggregate Subbase Sand is By Others and is not a part of this Contract.

ORIGINAL SHEET USED
IN I-95-5(26)
PAVING PROJECT

PLANS	Proj. Des. Eng.: ALL	BY		DATE
	DESIGN - DETAILED	CR	WK	9-71
	CHECKED	EBC		
	REVISIONS			
As Built	FIELD CHANGES	M.C.E.		3/5/74

STATE HIGHWAY COMMISSION

U.S. ROUTE NO. 201
OVER
INTERSTATE NO. 95 N.B. & S.B.
IN THE CITY OF
GARDINER
KENNEBEC COUNTY
SLOPE PROTECTION BR. NO. 1

SHEET 29 OF 55 AUGUSTA, MAINE APRIL 1971

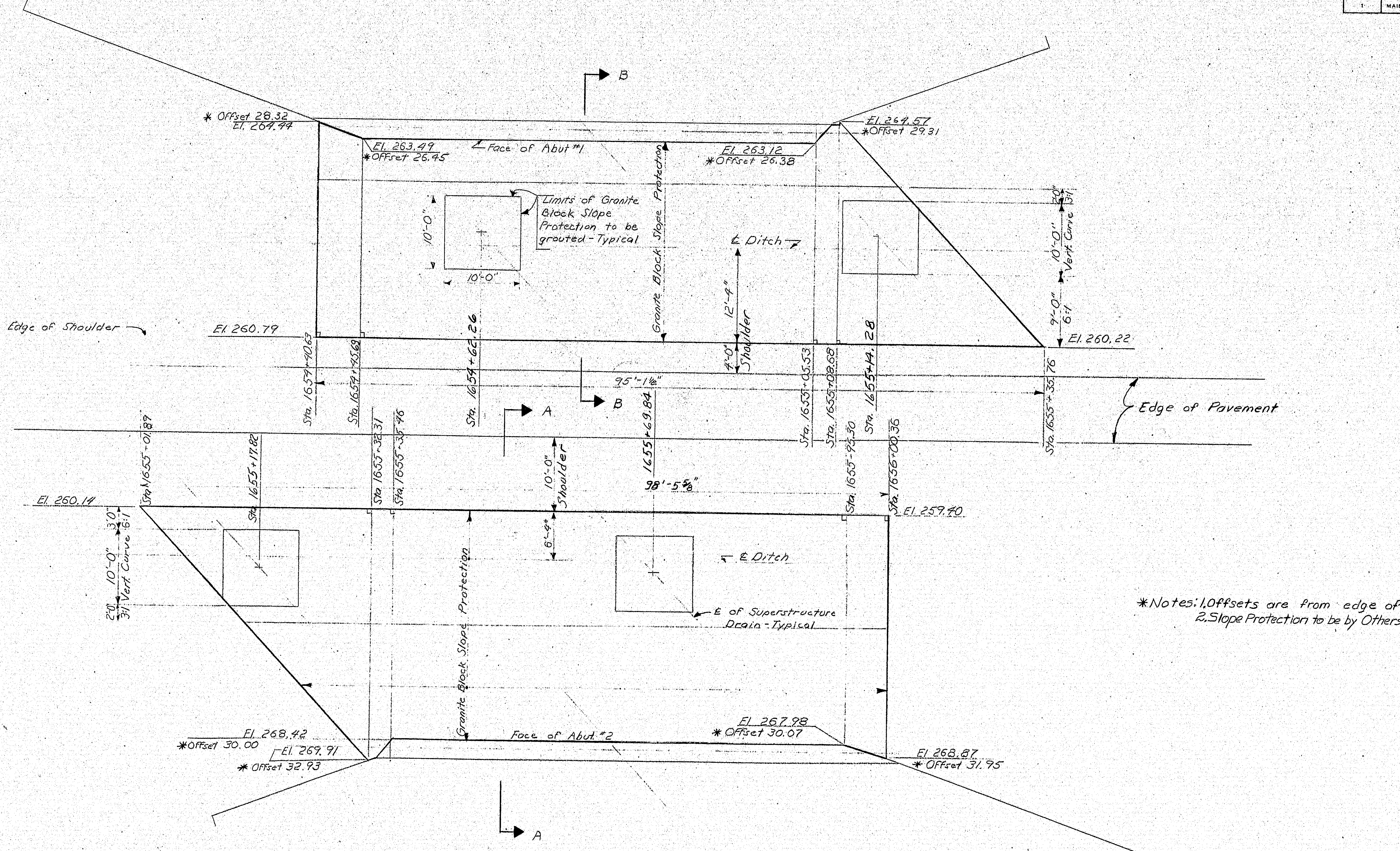
JANUARY 1968

203-1 2080

152-60

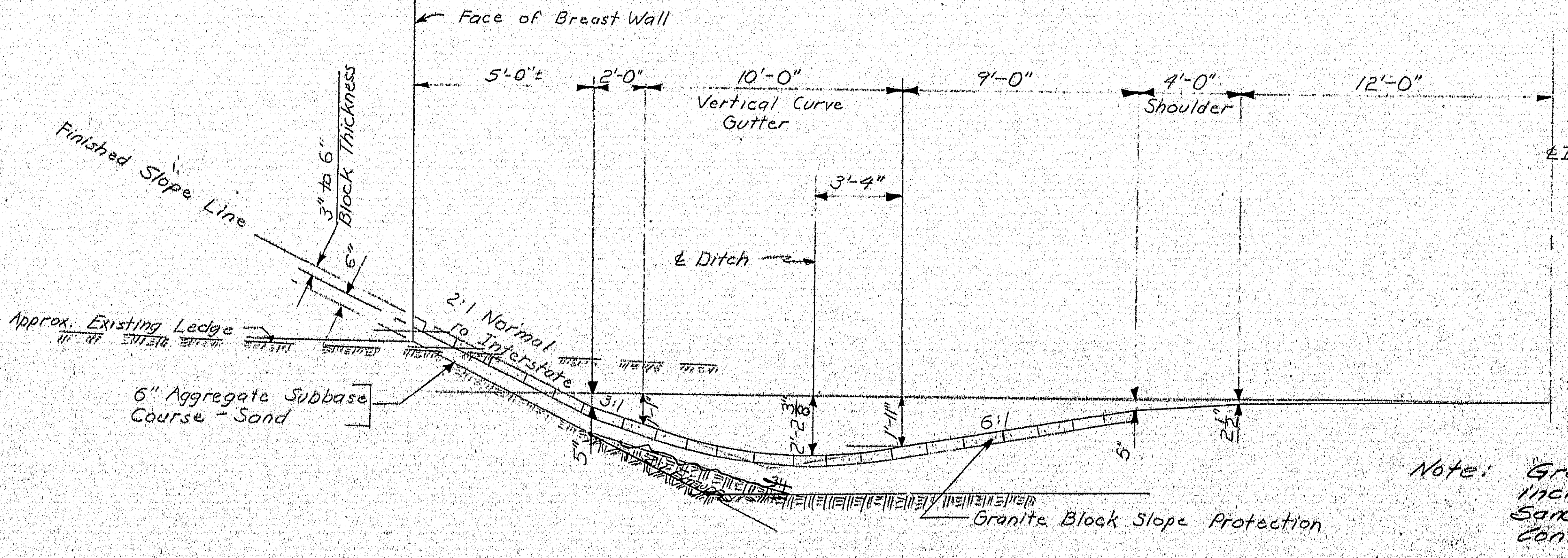
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	30	55

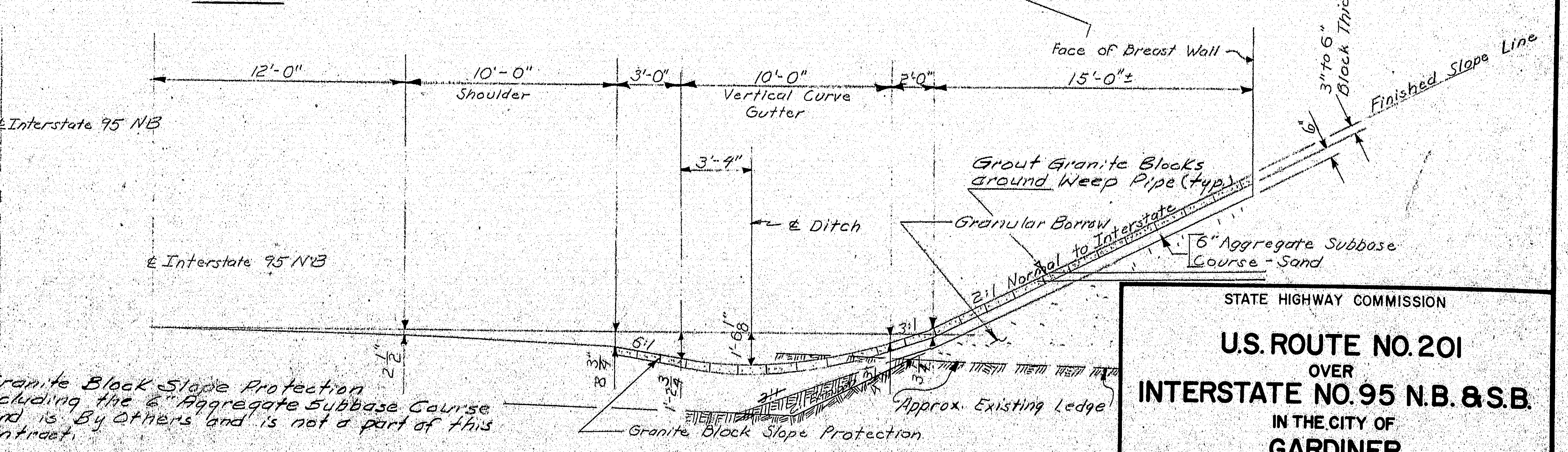

B
* Offset 28.32
El. 264.44
El. 263.49
* Offset 26.45
Face of Abut #1
El. 263.12
* Offset 26.38
El. 264.57
* Offset 29.31
Limits of Granite Block Slope Protection to be grouted - Typical
10'-0"
10'-0"
Granite Block Slope Protection
℄ Ditch
12'-4"
10'-0"
Vert Curve 3'1"
9'-0"
6:1
Edge of Shoulder
El. 260.79
El. 260.22
4'-0" Shoulder
Sta. 1654+90.63
Sta. 1654+93.63
Sta. 1654+66.26
Sta. 1655+05.53
Sta. 1655+08.68
Sta. 1655+14.28
Sta. 1655+35.76
95'-1⅛"
B
Edge of Pavement
Sta. 1655+01.89
Sta. 1655+17.82
Sta. 1655+38.31
Sta. 1655+38.46
A
1655+69.84
10'-0" Shoulder
98'-5⅝"
Sta. 1655+95.30
Sta. 1656+00.36
Edge of Shoulder
El. 260.14
El. 259.40
3'0"
10'-0"
3:1 Vert Curve 6:1
2'0"
6'-4"
℄ Ditch
℄ of Superstructure Drain - Typical
Granite Block Slope Protection
El. 268.42
* Offset 30.00
El. 269.91
* Offset 32.93
Face of Abut #2
El. 267.98
* Offset 30.07
El. 268.87
* Offset 31.95
A

*Notes: 1. Offsets are from edge of shoulder.
2. Slope Protection to be by Others.

PLAN


Face of Breast Wall
5'-0"±
2'-0"
10'-0"
Vertical Curve Gutter
9'-0"
4'-0"
Shoulder
12'-0"
3'-4"
℄ Ditch
℄ Interstate 95 NB
Finished Slope Line
3" to 6" Block Thickness
6"
Approx. Existing Ledge
2:1 Normal to Interstate
6" Aggregate Subbase Course - Sand
3:1
2'-2½"
1'-1"
6:1
5"
2½"
Granite Block Slope Protection

SECTION B-B


12'-0"
10'-0"
Shoulder
3'-0"
10'-0"
Vertical Curve Gutter
2'-0"
15'-0"±
Face of Breast Wall
3" to 6" Block Thickness
6"
Finished Slope Line
3'-4"
℄ Ditch
Grout Granite Blocks
Ground Weep Pipe (typ.)
Granular Borrow
2:1 Normal to Interstate
6" Aggregate Subbase Course - Sand
℄ Interstate 95 NB
2½"
6:1
1'-6⅞"
3:1
Granite Block Slope Protection
Approx. Existing Ledge

Note: Granite Block Slope Protection including the 6" Aggregate Subbase Course Sand is By Others and is not a part of this Contract.

SECTION A-A

JANUARY 1969

PLANS	Proj. Des. Eng.: All	BY		DATE
	DESIGN - DETAILED	CR	WK	9-71
	CHECKED	EBC		
	REVISIONS			
As Built	FIELD CHANGES	W.C.E.		3/5/74

ORIGINAL SHEET USED IN I-95-5(26) PAVING PROJECT

STATE HIGHWAY COMMISSION

U.S. ROUTE NO. 201
OVER
INTERSTATE NO. 95 N.B. & S.B.
IN THE CITY OF
GARDINER
KENNEBEC COUNTY
SLOPE PROTECTION BR. NO. 2
SHEET 30 OF 55 AUGUSTA, MAINE APRIL 1971

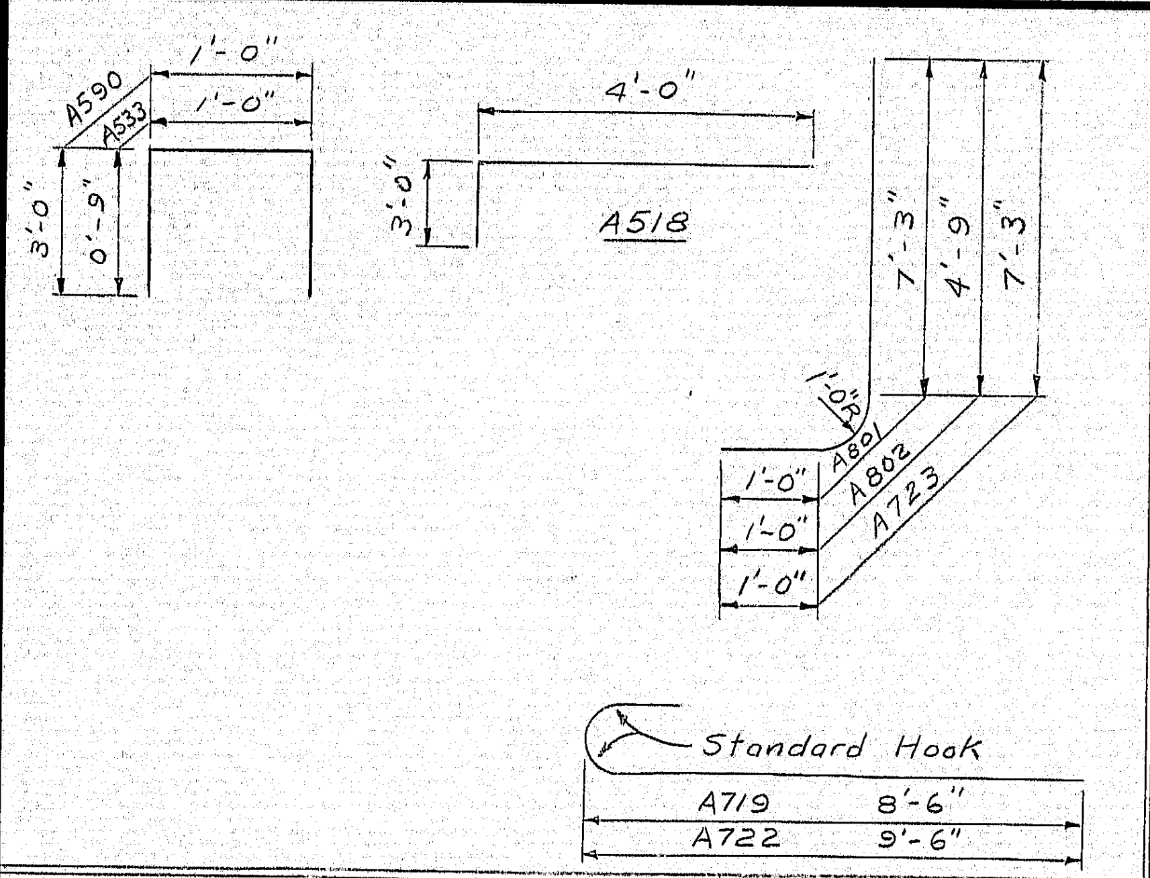
203-1 2080

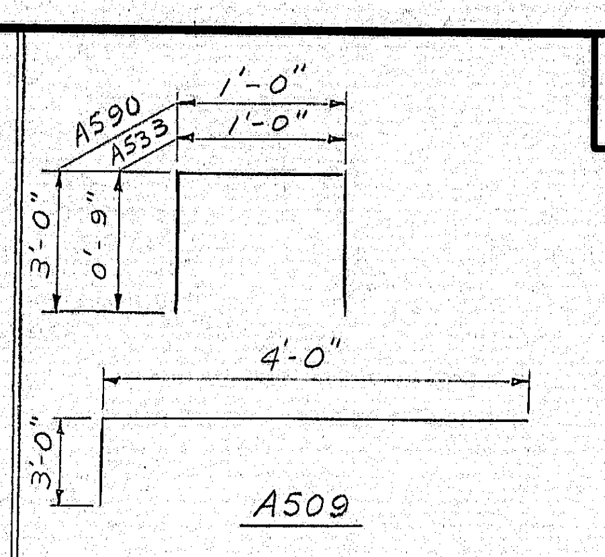
152-61

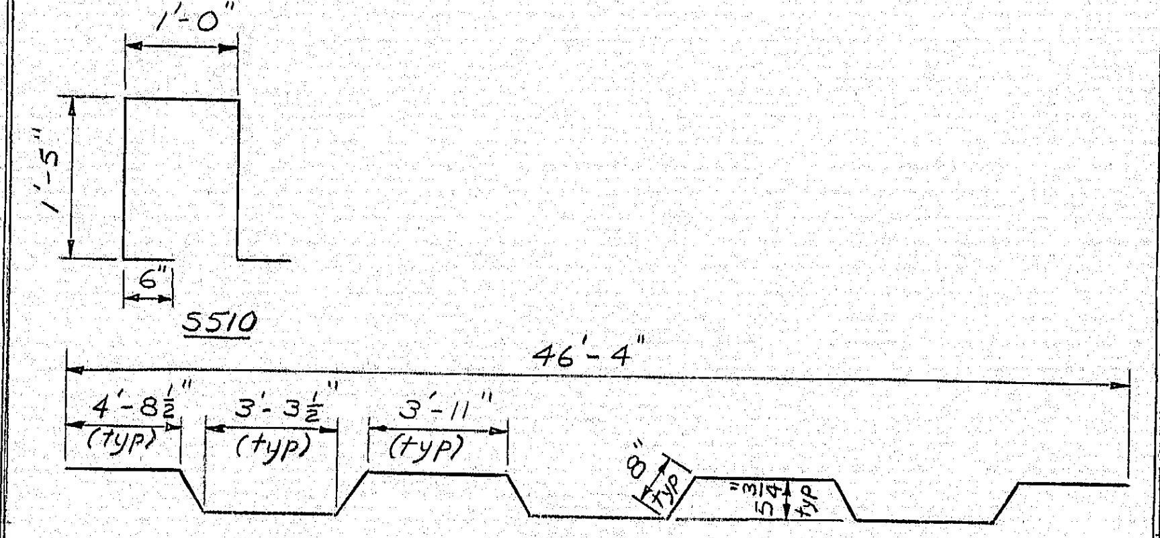
touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

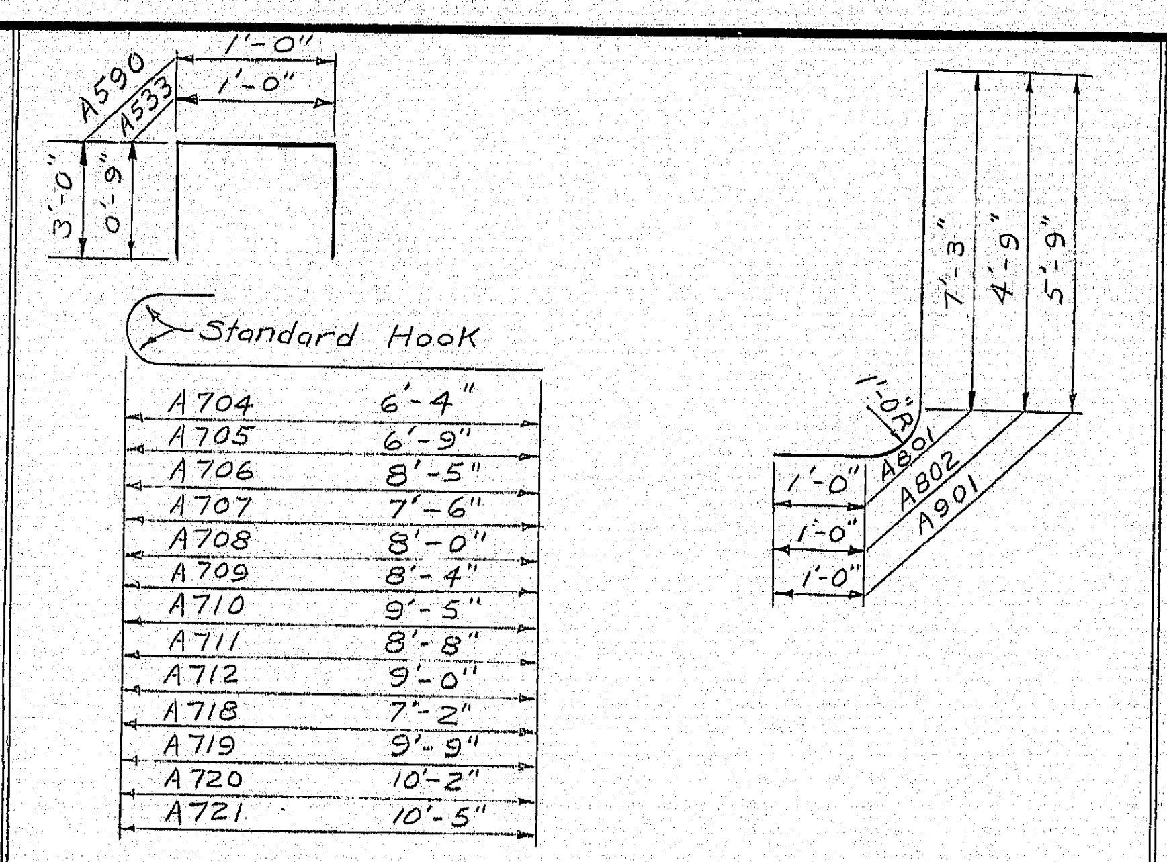
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	31	55

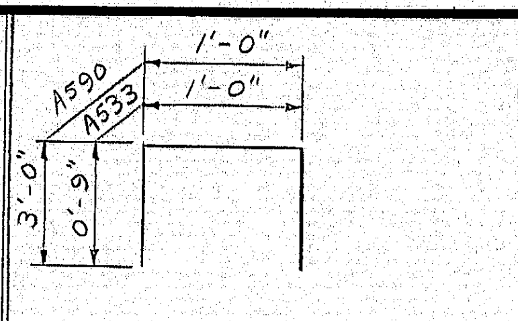
NOTE: ALL BAR DIMENSIONS ARE OUT TO OUT

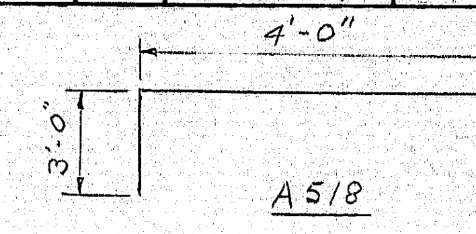












BRIDGE NO. 1

ABUTMENT NO. 1

Mark	Size	No.	Length	Location
				Bent Bars
A518	5	48	7'-0"	Breastwall, Top
A533	5	24	2'-6"	Under Bearing Pedestals
A590	5	8	7'-0"	Top of Backwall
A719	7	118	9'-3"	Bottom Footing
A722	7	63	10'-3"	Bottom Wing Footing
A723	7	77	9'-10"	Footing to Breastwall
A801	8	29	9'-10"	Footing to Breastwall
A802	8	16	7'-4"	Footing to Breastwall
				Straight Bars
A505	5	8	20'-0"	Breastwall (FF)
A516	5	120	5'-0"	Breastwall, Backwall, Wingwall-Dowels
A526	5	8	21'-6"	Breastwall
A534	5	96	6'-3"	Backwall
A535	5	26	21'-9"	Backwall & Breastwall
A536	5	8	25'-9"	Breastwall (NF)
A537	5	8	25'-6"	Breast wall (FF)
A538	5	1	21'-11"	Bridge seat (NF)
A539	5	1	25'-7"	Bridge Seat
A540	5	48	10'-8"	Breastwall (NF)
A541	5	1	19'-9"	Bridge Seat (FF)
A542	5	1	19'-5"	Bridge Seat (NF)
A543	5	5	20'-0"	Backwall (FF)
A544	5	2	28'-3"	Top of Wing Wall
A545	5	2	5'-9"	Wing Wall
A546	5	2	11'-0"	Wing Wall
A547	5	16	12'-0"	Wing Wall (NF)
A548	5	2	22'-3"	Wing Wall
A549	5	10	27'-6"	Wing Wall
A550	5	6	23'-0"	Wing Wall
A551	5	16	5'-6"	Wing Wall, top (NF)
A552	5	16	10'-0"	Wing Wall, top (FF)
A553	5	5	25'-3"	Backwall (FF)
A554	5	5	25'-6"	Backwall (NF)
A555	5	5	19'-10"	Backwall (NF)
A556	5	2	7'-10"	Wing Wall
A557	5	2	7'-6"	Wing Wall
A558	5	2	7'-0"	Wing Wall
A559	5	2	16'-6"	Wing Wall (EF)
A591	5	4	4'-6"	Backwall, Top
A601	6	40	6'-6"	Haunch
A612	6	39	3'-6"	Approach Slab
A613	6	79	8'-6"	Footing, Top
A615	6	20	34'-0"	Wing Wall, footing
A617	6	1	4'-0"	Footing
A618	6	1	8'-0"	Footing
A624	6	36	32'-0"	Footing
A702	7	16	10'-0"	Wing Wall (FF)
A714	7	1	8'-0"	Footing, Bottom
A720	7	42	9'-6"	Footing, Top
A721	7	1	4'-0"	Footing, Bottom
A718	7	48	9'-2"	Breastwall (FF)

ABUTMENT NO. 2

Mark	Size	No.	Length	Location
				Bent Bars
A509	5	41	7'-0"	Breastwall
A533	5	24	2'-6"	Under Bearing Pedestals
A590	5	8	7'-0"	Backwall
				Straight Bars
A501	5	92	6'-9"	Backwall
A502	5	46	3'-8"	Backwall & Breastwall
A503	5	46	7'-10"	Breastwall
A504	5	10	25'-3"	Backwall
A505	5	7	25'-6"	Breastwall
A506	5	17	21'-9"	Backwall
A507	5	10	20'-4"	Backwall
A508	5	7	21'-6"	Breastwall
A591	5	4	7'-0"	Backwall
A612	6	39	3'-6"	Approach Slab Seat
A690	6	4	18'-0"	Wing Wall

SUPERSTRUCTURE

Mark	Size	No.	Length	Location
				Bent Bars
S500	5	184	48'-2½"	Slab
S510	5	540	4'-10"	Curb
				Straight Bars
S300	3	540	29'-9"	Wearing Surface
S301	3	344	30'-0"	Wearing Surface
S302	3	86	20'-0"	Wearing Surface
*S401	4	64	57'-10"	Approach Slab
S501	5	364	46'-4"	Slab
S505	5	728	30'-0"	Slab
S506	5	182	22'-3"	Slab
S511	5	72	14'-8"	Curb
S513	5	24	44'-9"	Slab
S514	5	16	43'-6"	Slab
S515	5	16	42'-6"	Slab
S516	5	16	41'-6"	Slab
S517	5	16	40'-3"	Slab
S518	5	16	39'-3"	Slab
S519	5	16	38'-3"	Slab
S520	5	16	37'-0"	Slab
S521	5	16	36'-0"	Slab
S522	5	16	35'-0"	Slab
S523	5	16	33'-9"	Slab
S524	5	16	32'-9"	Slab
S525	5	16	31'-9"	Slab
S526	5	16	30'-6"	Slab
S527	5	16	29'-6"	Slab
S528	5	16	28'-6"	Slab
S529	5	16	27'-3"	Slab
S530	5	18	26'-3"	Slab
S531	5	16	25'-3"	Slab
S532	5	16	24'-0"	Slab
S533	5	16	23'-0"	Slab
S534	5	16	22'-0"	Slab
S535	5	16	20'-9"	Slab
S536	5	16	19'-9"	Slab
S537	5	16	18'-9"	Slab
S538	5	16	17'-6"	Slab
S539	5	16	16'-6"	Slab
S540	5	16	15'-6"	Slab
S541	5	16	14'-3"	Slab
S542	5	16	13'-3"	Slab
S543	5	16	12'-3"	Slab
S544	5	16	11'-0"	Slab
S545	5	16	10'-0"	Slab
S546	5	16	9'-0"	Slab
S547	5	16	7'-9"	Slab
S548	5	16	6'-9"	Slab
S549	5	16	5'-9"	Slab
S550	5	16	4'-6"	Slab
S551	5	16	3'-6"	Slab
S552	5	16	2'-6"	Slab
S553	5	32	2'-0"	Slab
*S613	6	680	14'-6"	Approach Slab

* = By Others

BRIDGE NO. 2

ABUTMENT NO. 2

Mark	Size	No.	Length	Location
				Bent Bars
A533	5	24	2'-6"	Under Bearing Seats
A590	5	8	7'-0"	Backwall
A704	7	6	7'-2"	Footing
A705	7	6	7'-7"	Footing
A706	7	49	9'-3"	Footing
A707	7	6	8'-4"	Footing
A708	7	6	8'-10"	Footing
A709	7	6	9'-2"	Footing
A710	7	118	10'-3"	Footing
A711	7	6	9'-6"	Footing
A712	7	6	9'-10"	Footing
A718	7	6	8'-0"	Footings
A719	7	6	10'-7"	Footings
A720	7	6	11'-0"	Footings
A721	7	31	11'-3"	Footings
A801	8	114	9'-10"	Wing Walls (FF) Breastwall
A802	8	24	7'-4"	Wing Walls
A901	9	29	8'-4"	Left Wing Wall
				Straight Bars
A501	5	15	12'-3"	Left Wing Wall
A502	5	2	8'-3"	Right Wing Wall
A503	5	95	13'-6"	Wing Walls & Bridge Seat
A504	5	87	3'-10"	Footing Dowels
A505	5	10	20'-0"	Backwall (FF)
A506	5	2	6'-3"	Top Left Wing Wall
A507	5	10	20'-0"	Top Backwall
A508	5	18	9'-0"	Left & Right Wing Wall (FF)
A509	5	12	6'-6"	Left Wing Wall
A510	5	2	16'-0"	Right Wing Wall
A511	5	10	22'-6"	Left Wing Wall, top
A512	5	54	6'-9"	Wing Walls & Backwall (FF)
A513	5	2	17'-0"	Wing Walls
A514	5	2	5'-4"	Left Wing Wall
A515	5	2	5'-0"	Left Wing Wall
A516	5	56	4'-6"	Backwall (NF)
A517	5	50	6'-9"	Backwall (NF) & Wing
A518	5	48	7'-0"	Backwall (NF)
A519	5	21	25'-6"	Breastwall (FF)
A520	5	12	25'-9"	Breastwall (NF)
A521	5	34	21'-9"	Breastwall (EF) & Backwall (EF)
A522	5	38	21'-6"	Breastwall (NF) & Left Wing
A523	5	2	10'-0"	Top Right Wing Wall
A524	5	14	17'-6"	Left Wing Wall, Bottom
A525	5	12	22'-6"	Right Wing Wall
A526	5	2	19'-6"	Right Wing Wall
A527	5	2	13'-0"	Right Wing Wall
A528	5	2	4'-0"	Right Wing Wall
A529	5	21	10'-4"	Wing Walls (NF)
A530	5	6	5'-7"	Right Wing Wall (NF)
A531	5	2	25'-0"	Right Wing Wall, Top
A532	5	2	9'-0"	Right Wing Wall
A591	5	4	4'-6"	Backwall
A601	6	40	6'-6"	Haunch
A602	6	75	9'-6"	Footing

ABUTMENT NO. 1

Mark	Size	No.	Length	Location
				Bent Bars
A518	5	41	7'-0"	Breastwall
A533	5	24	2'-6"	Under Bearing Seat
A590	5	8	7'-0"	Backwall
				Straight Bars
A504	5	46	3'-9"	Breastwall & Back wall
A505	5	17	21'-9"	Backwall
A509	5	30	6'-0"	Backwall
A517	5	62	6'-3"	Backwall
A548	5	12	25'-3"	Left Backwall
A556	5	46	7'-10"	Breastwall
A557	5	5	24'-6"	Left Breastwall
A558	5	12	20'-2"	Right Backwall
A559	5	5	21'-3"	Right Breastwall
A591	5	4	4'-6"	Backwall
A612	6	39	3'-6"	Approach Slab Seat
A690	6	2	18'-0"	Wing Wall

ABUTMENT NO. 2 - Continued

Mark	Size	No.	Length	Location
A603	6	14	53'-0"	Footing
A604	6	2	51'-0"	Footing
A605	6	2	42'-8"	Footing
A606	6	2	34'-5"	Footing
A607	6	2	26'-2"	Footing
A609	6	20	54'-0"	Footing
A610	6	18	26'-0"	Footing
A611	6	33	8'-6"	Footing
A612	6	39	3'-6"	Approach Slab Seat
A701	7	29	12'-0"	Left Wing Wall
A702	7	24	10'-0"	Wing Walls
A703	7	92	11'-0"	Breast Wall (FF)
A713	7	4	6'-6"	Footing
A714	7	4	6'-10"	Footing
A715	7	4	7'-3"	Footing
A716	7	4	7'-7"	Footing
A717	7	4	8'-0"	Footing
A803	8	4	8'-4"	Footing
A804	8	4	8'-9"	Footing
A805	8	4	9'-1"	Footing
A806	8	4	9'-6"	Footing
A807	8	4	9'-10"	Footings
A808	8	4	10'-3"	Footings
A809	8	21	10'-6"	Footings

Note: Reinforcing Steel shall conform to ASTM A615 (Gr. 60)

PLANS As Built	Proj. Des. Eng. ALL	BY	DATE
	DESIGN - DETAILED	DEW	3 Dec 71
	CHECKED	EBC	
	REVISIONS		
	FIELD CHANGES	NCE	3/6/74

JANUARY 1966

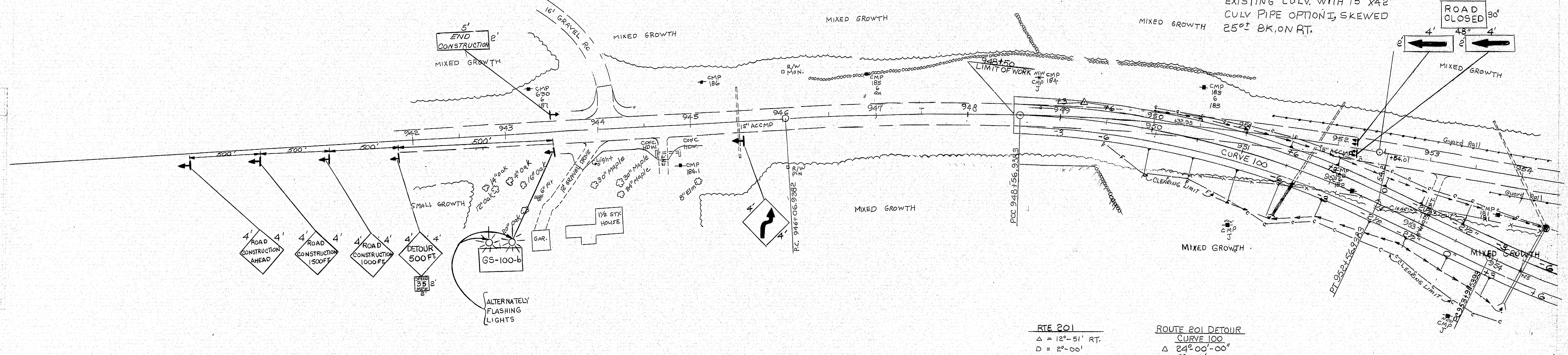
STATE HIGHWAY COMMISSION

U.S. ROUTE NO. 201
OVER
INTERSTATE NO. 95 N.B. & S.B.
IN THE CITY OF
GARDINER
KENNEBEC COUNTY
REINFORCING STEEL
SHEET 31 OF 55 AUGUSTA, MAINE

203-1 2060

152-62

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	32	55



OVERSIZED PORTABLE BARRICADES
WITH FLASHING LIGHTS
ROAD CLOSED
30"
48"
4'
2'
STA 951+75 15' RT±, EXTEND EXISTING CULV. WITH 15"X42' CULV PIPE OPTION I, SKEWED 25°± BK, ON RT.
END CONSTRUCTION
5'
2'
16' GRAVEL RD.
MIXED GROWTH
SMALL GROWTH
CMP 630 6 87
CMP 186
CMP 185 6 0N
R/W MON.
948+50 LIMIT OF WORK
CMP 184
CMP 183 6 183
942
943
944
945
946
947
948
949
950
951
952
953
954
500'
15" ACCMP
CONC HDW.
CMP 186.1
8" Elm
12" oak
14" oak
18" oak
16" oak
6" Fir
20" oak
30" maple
30" Maple
24" Maple
Gravel Drive
GAR.
1½ STY. HOUSE
GS-100-b
ALTERNATELY FLASHING LIGHTS
ROAD CONSTRUCTION AHEAD
ROAD CONSTRUCTION 1500 FT
ROAD CONSTRUCTION 1000 FT
DETOUR 500 FT.
35
4'
R/W
P.C. 946+06.9382
POC 948+36.9383
CURVE 100
CLEARING LIMIT
Guard Rail
NEW CMP
PT 952+56.9383
PC 953+91.5393
0 25' 50'
SCALE

RTE 201
Δ = 12°-51' RT.
D = 2°-00'
T = 322.7'
L = 642.5'
R = 2865.'
E = 18.1'

ROUTE 201 DETOUR
CURVE 100
Δ 24°-00'-00"
D= 6°-00'
T= 202.9766'
L= 400.00'
R= 954.93'
E= 21.337'

GENERAL NOTES

① UTILITY

THE UTILITIES INVOLVED IN THIS CONTRACT ARE:
CENTRAL MAINE POWER CO.
NEW ENGLAND TELEPHONE AND TELEGRAPH

② UTILITY ADJUSTMENT

ALL UTILITIES ARE TO BE ADJUSTED BY THE RESPECTIVE UTILITIES.

③ CLEARING

CLEARING LIMITS ARE AS SHOWN ON THE PLANS. THE QUANTITY OF CLEARING FOR PAYMENT SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT ENGINEER.

④ PRESPLITTING ROCK

THE AREAS TO BE PRESPLIT ARE AS FOLLOWS:
NB STA 1653+00 TO STA 1656+25 LT.
NB STA 1653+00 TO STA 1657+00 RT.
SB STA 1647+50 TO STA 1650+50 LT.
SB STA 1647+50 TO STA 1651+25 RT.
NOTE: SEE NOTE SHEET NO. 12 INVOLVING LEDGE IN THE AREAS OF THE STRUCTURES.

⑤ EXCAVATION LIMITS NB. AND SB.

THE AREAS TO BE EXCAVATED ARE AS FOLLOWS:
NB STA 1653+50 TO STA 1656+00 LT.
NB STA 1654+00 TO STA 1656+75 RT.
SB STA 1648+00 TO STA 1650+25 LT.
SB STA 1648+50 TO STA 1651+00 RT.
THE AREAS THAT ARE NOT TO BE EXCAVATED ARE CROSS HATCHED ON THE PLAN SHEETS.

⑥ COMMON BORROW

COMMON BORROW HAS BEEN ESTIMATED TO COMPLETE THE 201 DETOUR IN THE EVENT THAT THE EXCAVATION GENERATED IS NOT SUFFICIENT TO COMPLETE THE DETOUR.

⑦ SEEDING

ALL SEEDING ON THIS PROJECT SHALL BE SEEDING METHOD No. 2. WITH HAY MULCH. No LOAM WILL BE USED ON THE PROJECT. THE THREE INCH GROWTH REQUIREMENT IS WAIVED ON THIS PROJECT.

⑧ LOAM

NO LOAM REQUIRED ON THIS PROJECT.

⑨ EROISION CONTROL MESH, SODDING

ALL EROSION CONTROL MESH AND SODDING WILL BE PLACED WITHOUT LOAM. THE AREAS REQUIRING THE ABOVE WILL BE HAND RAKED TO LOSEN THE EXISTING GROUND PRIOR TO INSTALLATION.

⑩ SURPLUS EARTH EXCAVATION

ALL SUITABLE EARTH EXCAV. IN ACCESS OF THAT REQUIRED TO CONSTRUCT THE ROUTE 201 DETOUR WILL BE PLACED WITHIN THE LIMITS OF EXISTING ROUTE 201. EXCEPT THE AREAS REQUIRING GRANULAR BORROW AT THE ABUTMENTS. THE SURPLUS EARTH EXCAVATION SHALL BE PLACED UNIFORMALLY AND GRADED TO DRAIN AS DIRECTED BY THE RESIDENT ENGINEER.

⑪ SURPLUS ROCK EXCAVATION

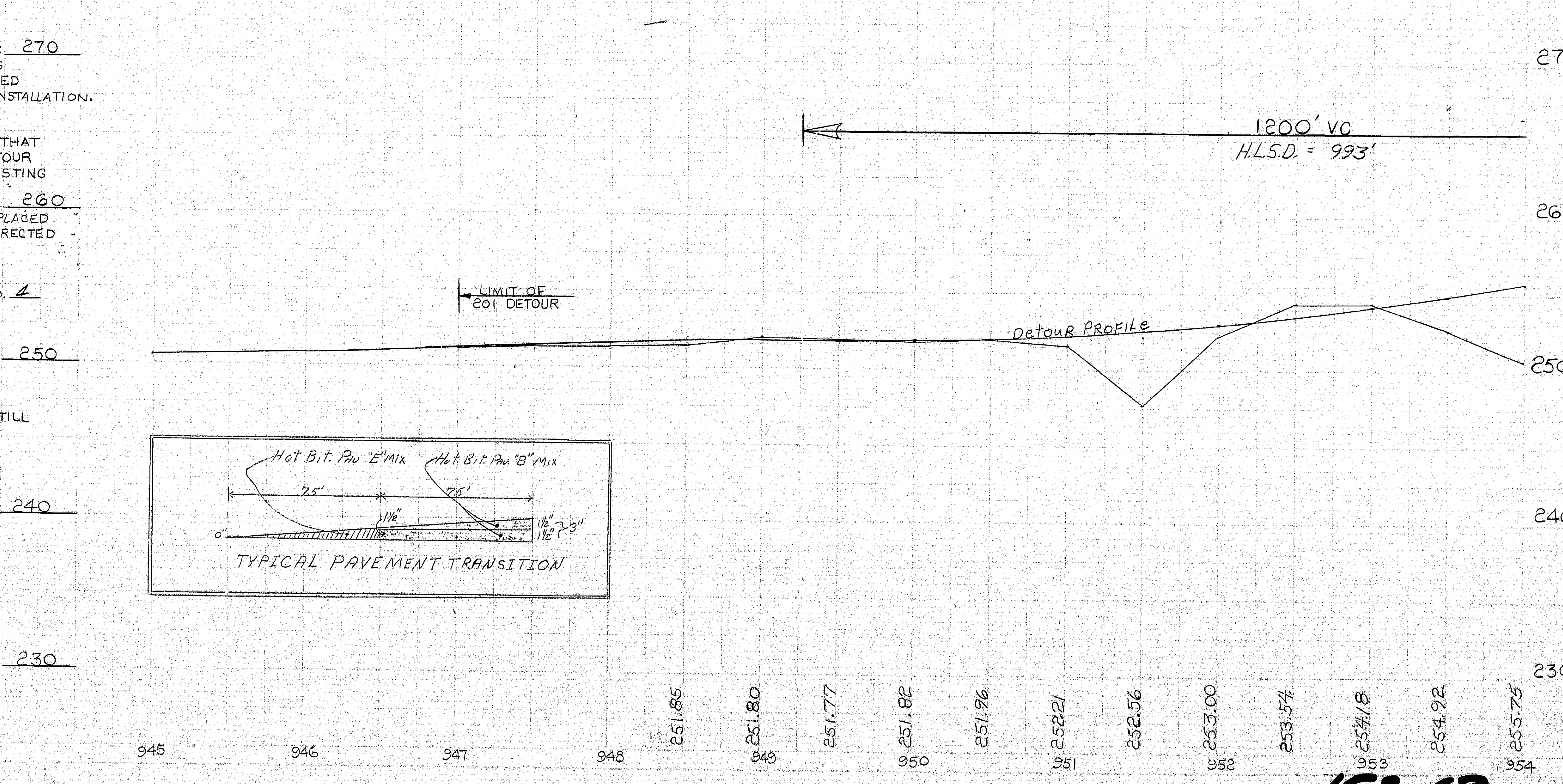
SEE NOTE: ROCK EXCAVATION SHEET NO. 4

⑫ RESERVED AREA ACCESS

THE CONTRACTOR WILL PROVIDE SUITABLE ACCESS TO THE RESERVED AREA SHOWN ON THE PLANS, STA 955+00± TO STA 956+50± LEFT OF ROUTE 201.
THE ACCESS SHALL BE MAINTAINED UNTILL NO LATER THAN JULY 1st 1972.

⑬ EXISTING PICNIC HARDWARE

ALL EXISTING HARDWARE IN THE EXISTING 201 PICNIC AREA SHALL BE REMOVED BY OTHERS.



270
260
250
240
230
1200' VC
H.L.S.D. = 993'
LIMIT OF 201 DETOUR
Detour Profile
Hot Bit. Pav "E" Mix
Hot Bit. Pav "B" Mix
75'
1½"
0"
3"
TYPICAL PAVEMENT TRANSITION
251.85
251.80
251.77
251.82
251.96
252.21
252.56
253.00
253.54
254.18
254.92
255.75
945
946
947
948
949
950
951
952
953
954

As Built Plans WCS 3/5/74

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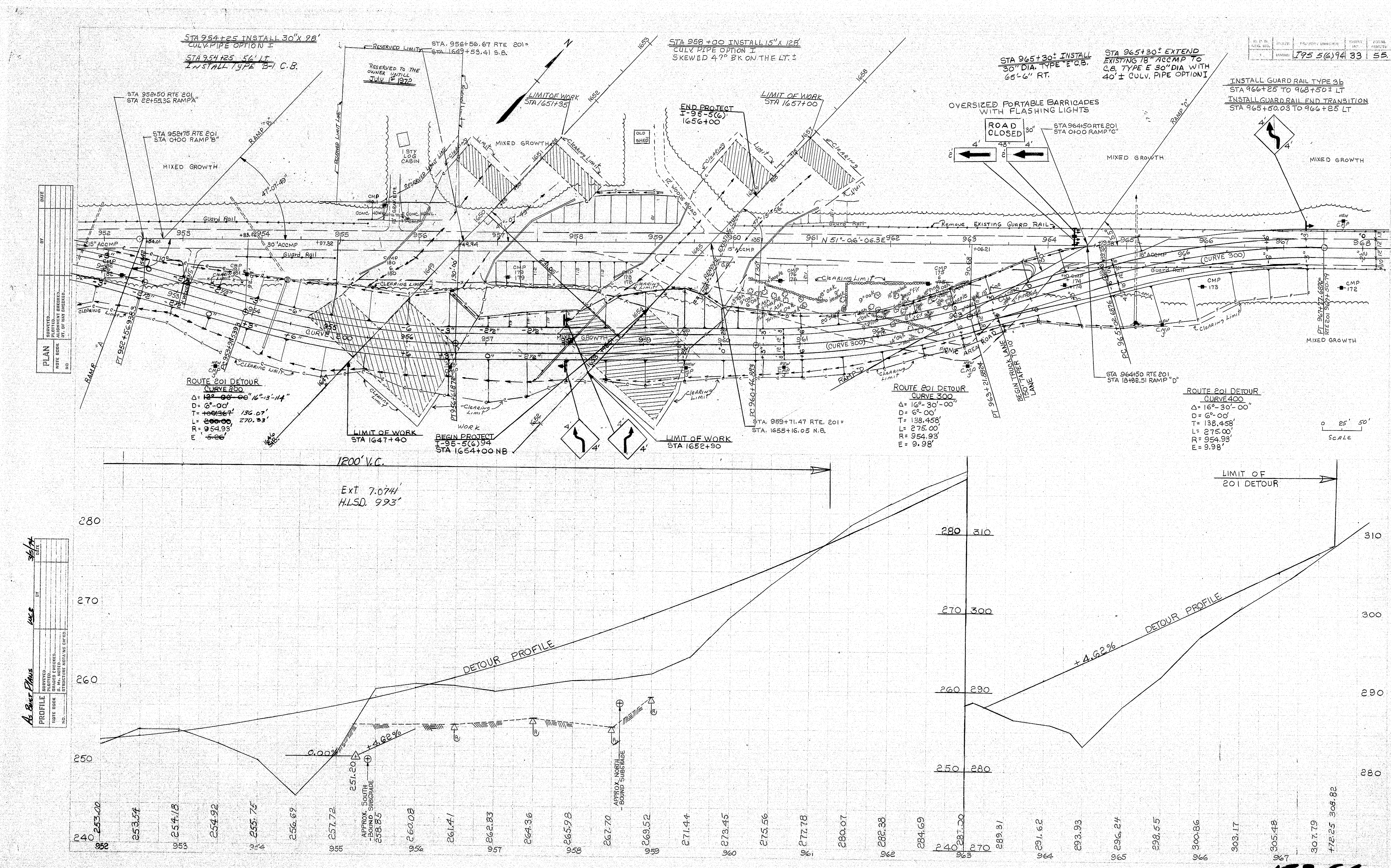
MAINE
I95 5(6)94
33
55.
STA 954+25 INSTALL 30"x 98' CULV. PIPE OPTION I
STA 954+25 56' LT. INSTALL TYPE B-1 C.B.
RESERVED LIMIT
STA. 956+56.67 RTE 201= STA 1649+53.41 S.B.
RESERVED TO THE OWNER UNTILL July 1st 1972
RESERVED LIMIT LINE
N
LIMIT OF WORK STA 1651+35
STA 958+00 INSTALL 15"x 128' CULV. PIPE OPTION I SKEWED 47° BK ON THE LT. ±
END PROJECT I-95-5(6) 1656+00
LIMIT OF WORK STA 1657+00
STA 952+50 RTE 201 STA 22+55.36 RAMP "A"
STA 952+75 RTE 201 STA 0+00 RAMP "B"
RAMP "B"
47°-07'-49"
MIXED GROWTH
1 STY LOG CABIN
OLD SHED
12' WOODS ROAD
EXISTING CUT
47°-15'-56"
CLEARING LIMIT
Guard Rail
CONC. HDWL.
GRAV. ENT.
CMP 180.1
15" ACCMP
30" ACCMP
N 51°-06'-06.3E
Remove EXISTING GUARD RAIL
STA 965+30± INSTALL 30" DIA. TYPE "E" C.B. 65'-6" RT.
STA 965+30± EXTEND EXISTING 18" ACCMP TO C.B. TYPE E 30" DIA WITH 40'± CULV. PIPE OPTION I
OVERSIZED PORTABLE BARRICADES WITH FLASHING LIGHTS
ROAD CLOSED
30"
48"
4'
2'
STA 964+50 RTE 201 STA 0+00 RAMP "C"
RAMP "C"
INSTALL GUARD RAIL TYPE 3b STA 966+25 TO 968+50± LT
INSTALL GUARD RAIL END TRANSITION STA 965+50.03 TO 966+25 LT
18" ACCMP
(CURVE 300)
NEW CMP
PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
NOTE BOOK
NO.
RAMP "A"
PT 952+56.9383
PC 953+91.5393
CURVE 200
ROUTE 201 DETOUR CURVE 200
Δ= ~~12°-00'-00"~~ 16°-13'-11.4"
D= 6°-00'
T= ~~100.367'~~ 136.07'
L= ~~200.00~~ 270.33'
R= 954.93'
E= ~~5.26'~~
LIMIT OF WORK STA 1647+40
PT 956+61.872
WORK
BEGIN PROJECT I-95-5(6)94 STA 1654+00 NB
LIMIT OF WORK STA 1652+90
PC 960+46.883
STA. 959+71.47 RTE. 201= STA. 1655+16.05 N.B.
RAMP "D"
PICNIC AREA ROAD
PT 963+21.8824
BEGIN TRUCK LANE 150' TAPER TO 10' LANE
PC 965+02.6876
STA 964+50 RTE 201 STA 18+82.51 RAMP "D"
ROUTE 201 DETOUR CURVE 300
Δ= 16°-30'-00"
D= 6°-00'
T= 138.458'
L= 275.00'
R= 954.93'
E= 9.98'
ROUTE 201 DETOUR CURVE 400
Δ= 16°-30'-00"
D= 6°-00'
T= 138.458'
L= 275.00'
R= 954.93'
E= 9.98'
PT 967+77.68 RTE 201 967+...
0 25' 50'
SCALE
1200' V.C.
Ext. 7.0741'
H.LSD. 993'
LIMIT OF 201 DETOUR
DETOUR PROFILE
0.00%
+4.62%
251.20
APPROX. SOUTH-BOUND SUBGRADE
APPROX. NORTH-BOUND SUBGRADE
280
270
260
250
240
310
300
290
280
270
As Built Plans
WCS
3/5/74
PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B. Ms. NOTED
STRUCTURE NOTA'NS CH'KD.
NOTE BOOK
NO.
253.00
253.54
254.18
254.92
255.75
256.69
257.72
258.85
260.08
261.41
262.83
264.36
265.98
267.70
269.52
271.44
273.45
275.56
277.78
280.07
282.38
284.69
287.00
289.31
291.62
293.93
296.24
298.55
300.86
303.17
305.48
307.79
+72.25 308.82
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967

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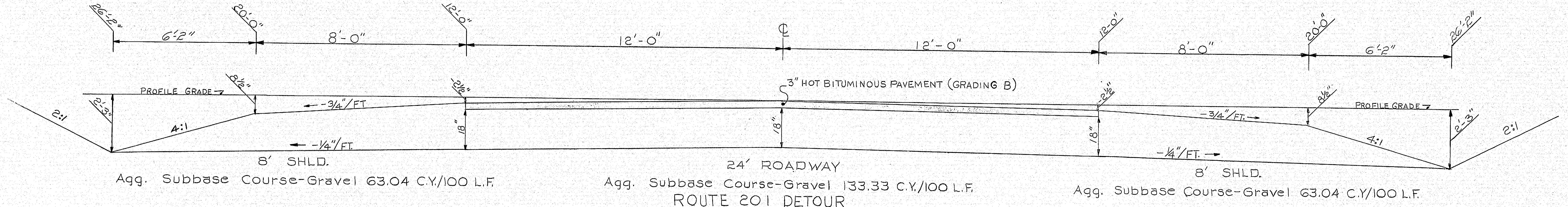
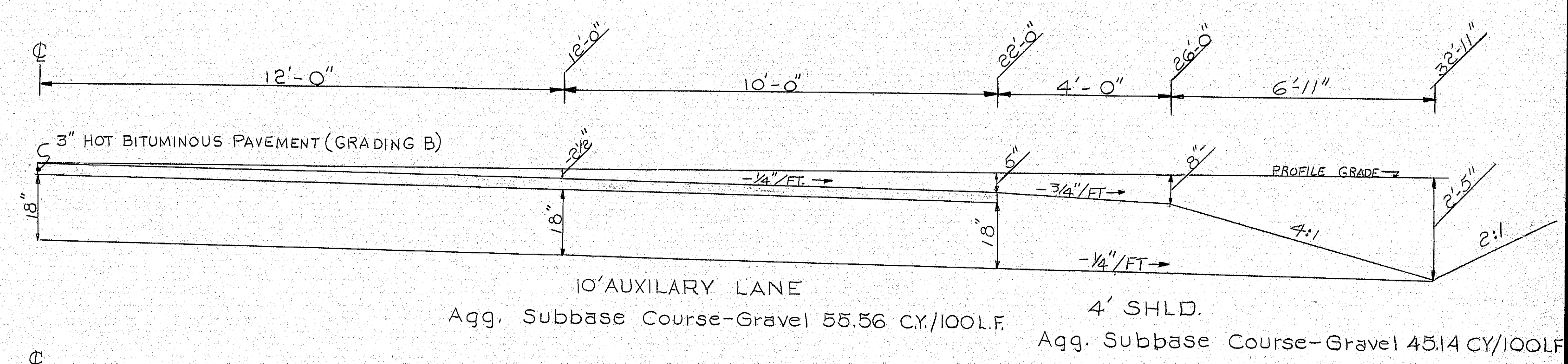
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	34-	55

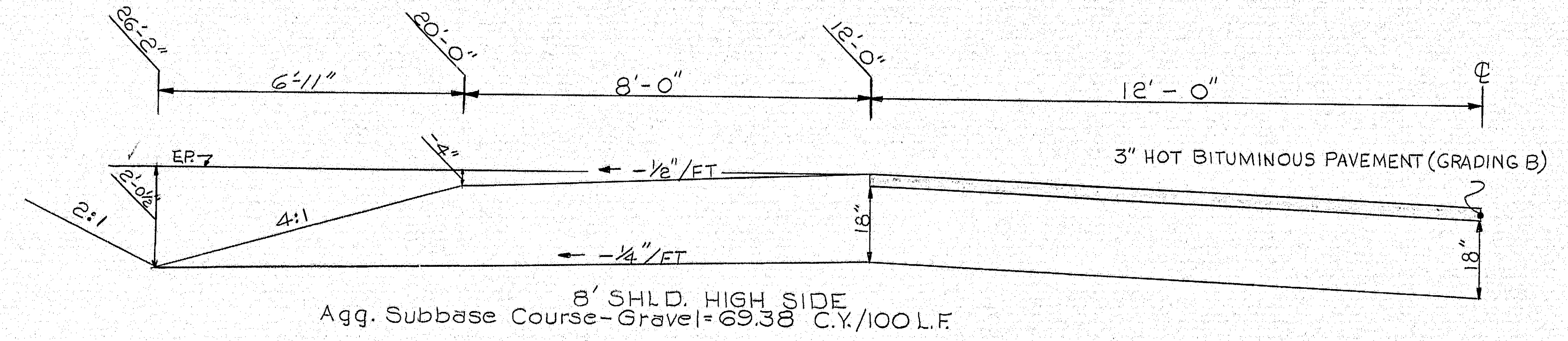
3" HOT BITUMINOUS PAVEMENT

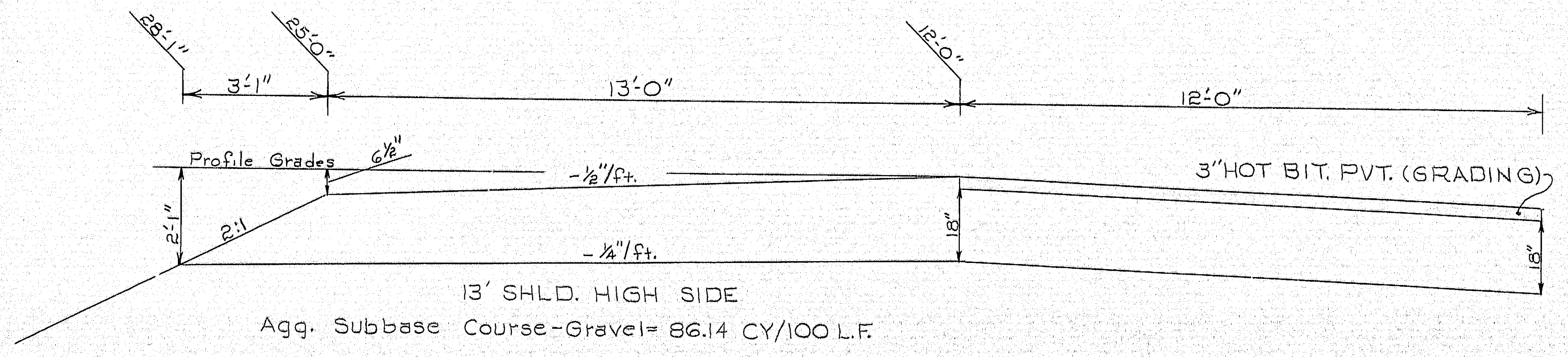
ROUTE 201 DETOUR


26'-2"
6'-2"
20'-0"
8'-0"
12'-0"
12'-0"
℄
12'-0"
12'-0"
8'-0"
20'-0"
6'-2"
26'-2"
PROFILE GRADE
8½"
2½"
3" HOT BITUMINOUS PAVEMENT (GRADING B)
2½"
8½"
PROFILE GRADE
2'-3"
2:1
4:1
-¾"/FT
18"
18"
18"
-¾"/FT.
4:1
2'-3"
2:1
-¼"/FT.
-¼"/FT.
8' SHLD.
Agg. Subbase Course-Gravel 63.04 C.Y./100 L.F.
24' ROADWAY
Agg. Subbase Course-Gravel 133.33 C.Y./100 L.F.
8' SHLD.
Agg. Subbase Course-Gravel 63.04 C.Y./100 L.F.

ROUTE 201 DETOUR
NORMAL SECTION


℄
12'-0"
12'-0"
10'-0"
22'-0"
4'-0"
26'-0"
6'-11"
32'-11"
3" HOT BITUMINOUS PAVEMENT (GRADING B)
2½"
6"
8"
PROFILE GRADE
-½"/FT.
-¾"/FT.
18"
18"
18"
2'-5"
4:1
2:1
-¼"/FT.
10'AUXILARY LANE
Agg. Subbase Course-Gravel 55.56 C.Y./100L.F.
4' SHLD.
Agg. Subbase Course-Gravel 45.14 CY/100LF


26'-2"
6'-11"
20'-0"
8'-0"
12'-0"
12'-0"
℄
E.P.
-4"
-½"/FT
3" HOT BITUMINOUS PAVEMENT (GRADING B)
2'-0½"
2:1
4:1
18"
18"
-¼"/FT
8' SHLD. HIGH SIDE
Agg. Subbase Course-Gravel=69.38 C.Y./100 L.F.


28'-1"
3'-1"
25'-0"
13'-0"
12'-0"
12'-0"
Profile Grades
6½"
-½"/ft.
3"HOT BIT. PVT. (GRADING)
2'-1"
2:1
18"
18"
-½"/ft.
13' SHLD. HIGH SIDE
Agg. Subbase Course-Gravel= 86.14 CY/100 L.F.

BITUMINOUS PAVEMENT ITEMS

DESCRIPTION OF COURSE	GRADATION DESIGNATION	ITEM No.	BITUMEN CONTENT PERCENT MIX	TOTAL THICKNESS INCHES	NUMBER OF LAYERS	NOTES
Hot BIT. PAVEMENT	"B"	403.07	5.0- 6.5	3"	2	1, 2
Hot BIT. PAVEMENT	"E"	403.121	6.5 - 8.0	VARIABLE	1	1, 2 & 3

1. THE BITUMINOUS MATERIAL SHALL BE ASPHALT CEMENT PENETRATION GRADE 120-150 OR VISCOSITY GRADE AC 10.
2. THE ASPHALT CONTENTS SHOWN ARE TO SERVE AS A GUIDE ONLY.
3. DENSITY REQUIREMENTS ARE WAIVED.

PLANS		BY	DATE
As Built	DESIGN- DETAILED		
	CHECKED		
	REVISIONS		
	FIELD CHANGES	WCE	3/5/74

STATE HIGHWAY COMMISSION

TYPICAL SECTIONS
ROUTE 201 DETOUR

SCALE 1"=2'

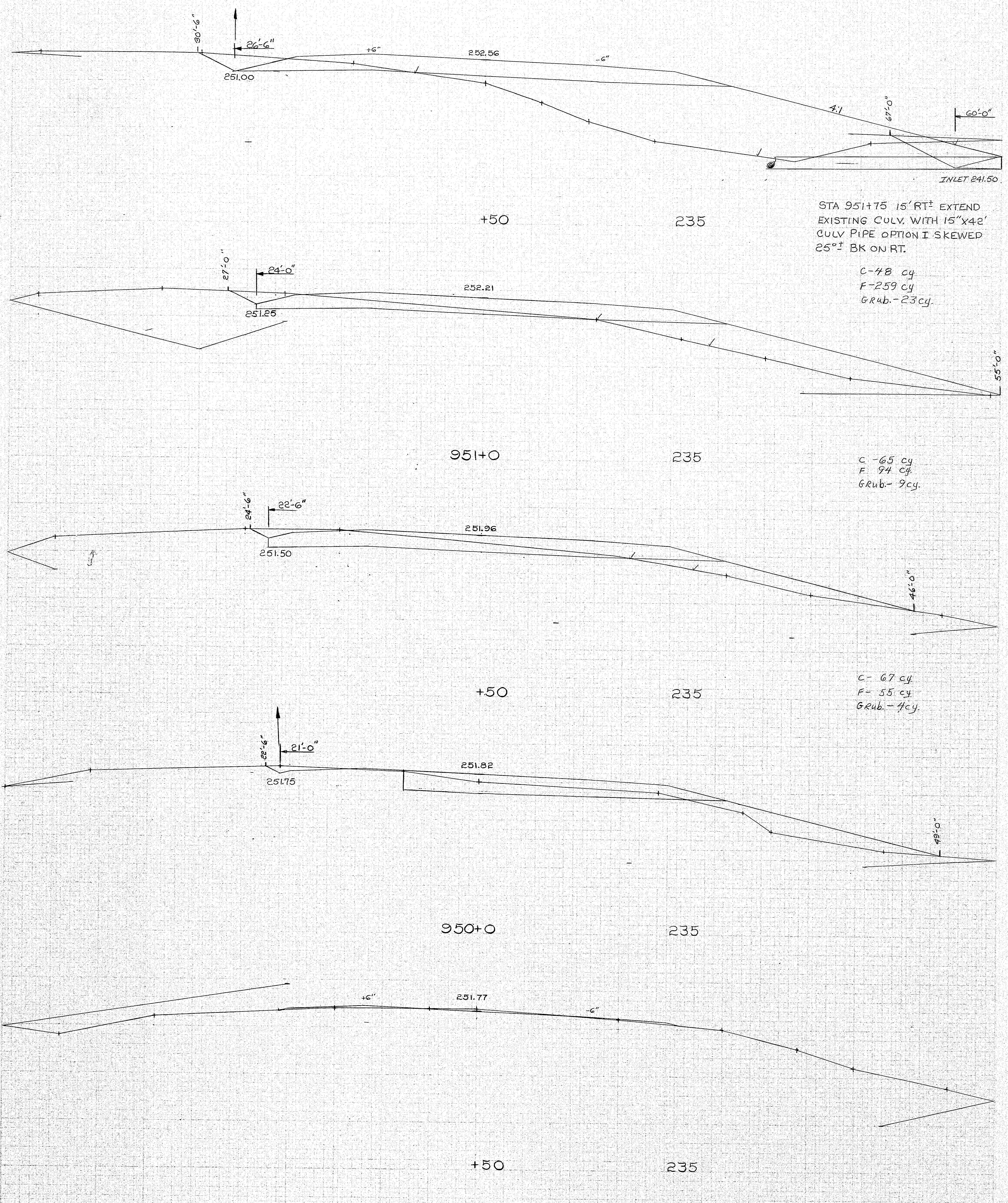
SHEET 34 OF 55 AUGUSTA, MAINE

152-65

TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ KYPLEX

ORIGINAL SURVEY		BY	DATE
	SURVEYED	Interpolated	Dec 71
	PLOTTED	Briggs	Dec 71
NOTE BOOK	TEMPLATE	M PRAY	12-71
NO.	AREAS	M PRAY	12-71
	AREAS CHECKED	DPB	

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		



30'-6"
26'-6"
+6"
252.56
-6"
251.00
4:1
67'-0"
60'-0"
INLET 241.50
+50
235
27'-0"
24'-0"
252.21
251.25
55'-0"
951+0
235
24'-6"
22'-6"
251.96
251.50
46'-0"
+50
235
22'-6"
21'-0"
251.82
251.75
49'-0"
950+0
235
+6"
251.77
-6"
+50
235
+3"
251.80
-3"
4:1
949+0
235

STA 951+75 15' RT± EXTEND
EXISTING CULV. WITH 15"X42'
CULV PIPE OPTION I SKEWED
25°± BK ON RT.

C-48 cy
F-259 cy
GRub.-23 cy.

C -65 cy
F 94 cy
GRub.-9cy.

C- 67 cy
F- 55 cy
GRub.-4cy.

LIMIT OF WORK 948+50

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	35	55

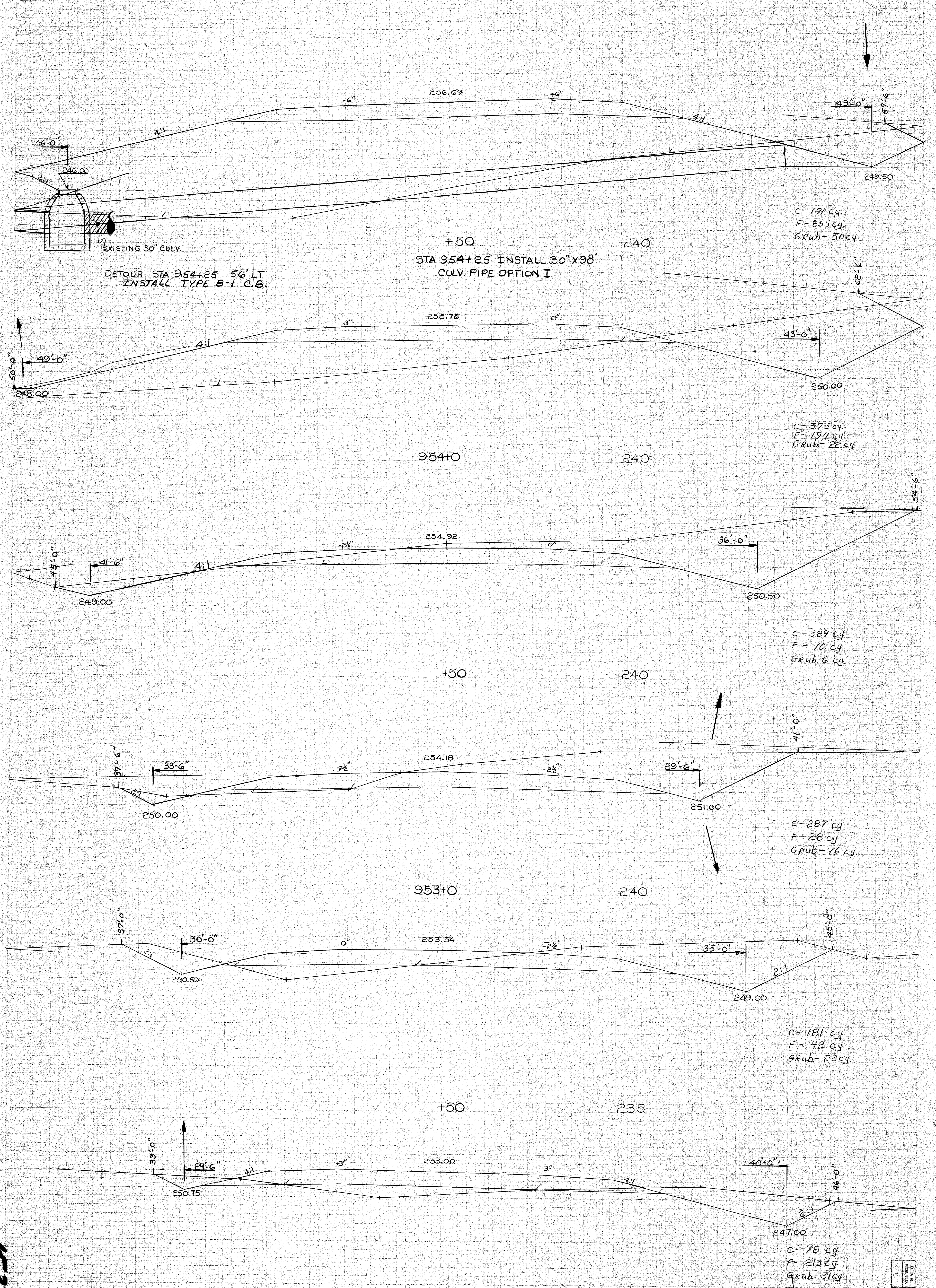
152-66

949+0—951+50

℄

ORIGINAL SURVEY		BY	DATE
	SURVEYED	Interpolated	Dec 71
	PLOTTED	Briggs	Dec 71
NOTE BOOK	TEMPLATE	M. PRAY	12-71
	AREAS	M. PRAY	12-71
NO. ~	AREAS CHECKED	DPB	

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



56'-0"
246.00
2:1
4:1
-6"
256.69
+6"
4:1
49'-0"
59'-6"
249.50
EXISTING 30" CULV.
DETOUR STA 954+25 56' LT
INSTALL TYPE B-1 C.B.
+50
STA 954+25 INSTALL 30" X 98'
CULV. PIPE OPTION I
240
C-191 cy.
F-855 cy.
Grub-50 cy.
50'-0"
49'-0"
248.00
4:1
-3"
255.75
+3"
43'-0"
62'-6"
250.00
C-373 cy.
F-194 cy.
Grub-22 cy.
954+0
240
45'-0"
41'-6"
249.00
4:1
-2½"
254.92
0"
36'-0"
54'-6"
250.50
C-389 cy
F-10 cy
Grub-6 cy.
+50
240
37'-6"
33'-6"
2:1
250.00
-2½"
254.18
-2½"
29'-6"
41'-0"
251.00
C-287 cy
F-28 cy
Grub-16 cy.
953+0
240
37'-0"
30'-0"
2:1
250.50
0"
253.54
-2½"
35'-0"
45'-0"
2:1
249.00
C-181 cy
F-42 cy
Grub-23 cy.
+50
235
33'-0"
29'-6"
4:1
250.75
+3"
253.00
-3"
4:1
40'-0"
46'-0"
2:1
247.00
C-78 cy.
F-213 cy.
Grub-31 cy.
952+0
235

D.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	36	55

952+0 — 954+50

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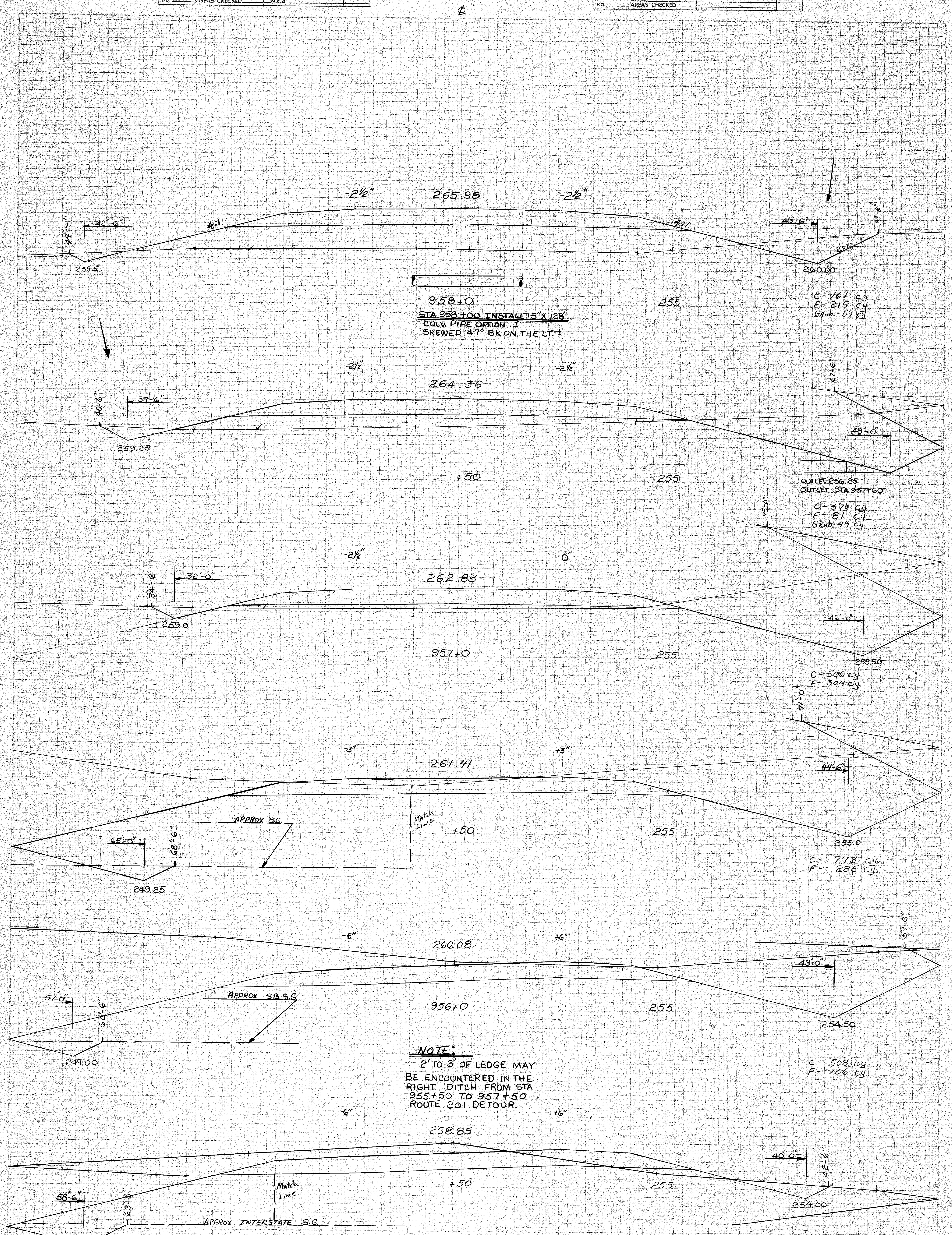
[redacted]

[redacted]

ORIGINAL SURVEY		BY	DATE
	SURVEYED	BROWN & CREW	9/71
	PLOTTED	JONES	10/71
NOTE BOOK	TEMPLATE	M. PRAY	10-71
	AREAS	M. Pray	10-71
NO.	AREAS CHECKED	DPB	

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		


℄
-2½"
265.98
-2½"
4:1
4:1
44'-3"
42'-6"
40'-6"
47'-6"
2:1
259.5
260.00
958+0
255
C-161 cy
F-215 cy
Grub-59 cy
-2½"
-2½"
264.36
40'-6"
37'-6"
47'-6"
49'-0"
259.25
+50
255
OUTLET 256.25
OUTLET STA 957+60
C-370 cy
F-81 cy
Grub-49 cy
95'-0"
-2½"
0"
262.83
34'-6
32'-0"
46'-0"
259.0
957+0
255
255.50
C-506 cy
F-304 cy
71'-0"
-3"
+3"
261.41
44'-6"
Match Line
APPROX S.G.
65'-0"
68'-6"
+50
255
249.25
255.0
C-773 cy
F-285 cy
-6"
+6"
260.08
59'-0"
43'-0"
57'-0"
60'-6"
APPROX SB S.G.
956+0
255
249.00
254.50
C-508 cy
F-106 cy
-6"
+6"
258.85
40'-0"
42'-6"
Match Line
58'-6"
63'-6"
+50
255
APPROX INTERSTATE S.G.
248.00
254.00
C-27 cy
F-523 cy
Grub-27 cy
-6"
257.72
+6"
59'-0"
4:1
4:1
51'-6"
65'-0"
61'-6"
247.00
250.00
C-49 cy
F-1079 cy
Grub-53 cy
955+0
240
℄

STA 958+00 INSTALL 15"x128'
CULV. PIPE OPTION I
SKEWED 47° BK ON THE LT. ‡

NOTE:
2' TO 3' OF LEDGE MAY
BE ENCOUNTERED IN THE
RIGHT DITCH FROM STA
955+50 TO 957+50
ROUTE 201 DETOUR.

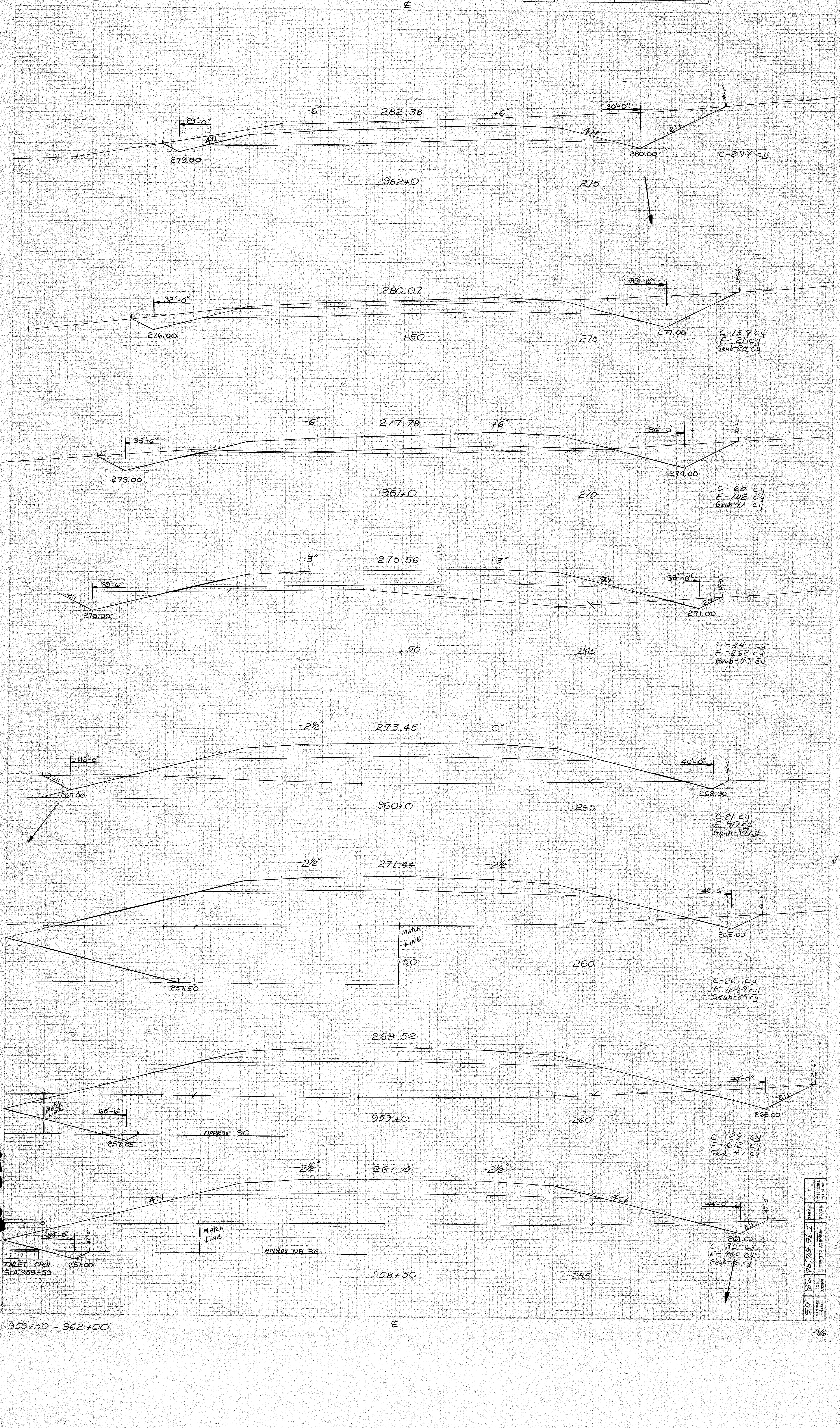
F.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	I95 5(6)96	37	55

955+00 - 958+00

152-68

ORIGINAL SURVEY		BY	DATE
	SURVEYED	BROWN & CREW	9/71
	PLOTTED	JONES	10/71
NOTE BOOK	TEMPLATE	M. PRAY	10-71
NO.	AREAS	M. PRAY	10-71
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		


℄
-6"
282.38
+6"
30'-0"
29'-0"
4:1
2:1
279.00
280.00
C-297 cy
962+0
275
280.07
33'-6"
32'-0"
276.00
277.00
C-157 cy
F- 21 cy
Grub-20 cy
+50
275
-6"
277.78
+6"
36'-0"
35'-6"
273.00
274.00
961+0
270
C-60 cy
F-102 cy
Grub-41 cy
-3"
275.56
+3"
39'-6"
38'-0"
270.00
271.00
+50
265
C-34 cy
F-252 cy
Grub-43 cy
-2½"
273.45
0"
42'-0"
40'-0"
267.00
268.00
960+0
265
C-21 cy
F-917 cy
Grub-34 cy
-2½"
271.44
-2½"
42'-6"
Match Line
265.00
257.50
+50
260
C-26 cy
F-1,049 cy
Grub-35 cy
269.52
47'-0"
65'-6"
Match Line
262.00
257.25
APPROX SG
959+0
260
C-29 cy
F-612 cy
Grub-47 cy
-2½"
267.70
-2½"
4:1
59'-0"
44'-0"
Match Line
APPROX NB SG
257.00
261.00
INLET elev
STA 958+50
C-35 cy
F-460 cy
Grub-56 cy
958+50
255
℄

958+50 - 962+00

F.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	38	55

4/6

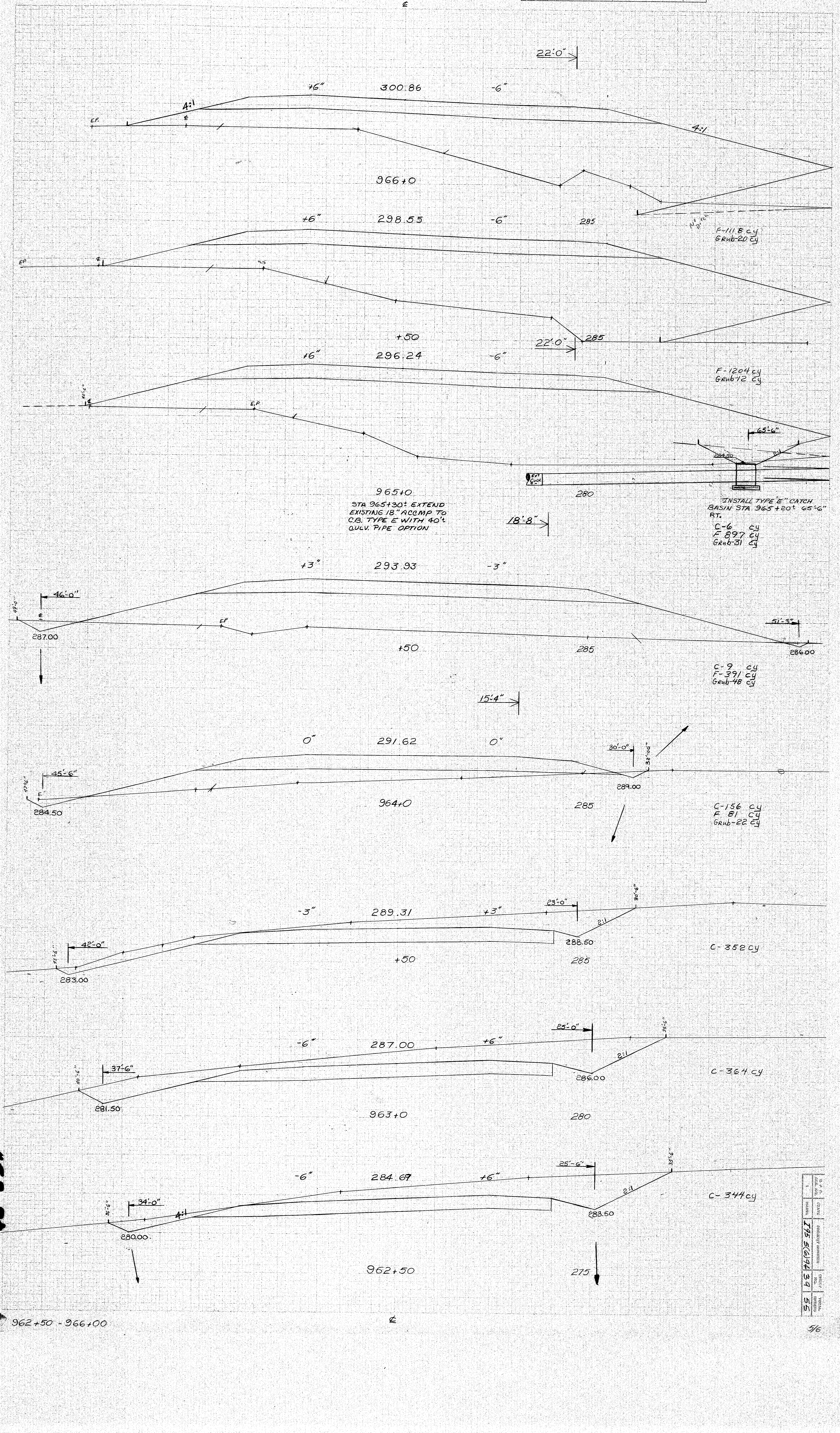
152-69

[redacted]

[redacted]

ORIGINAL SURVEY		BY	DATE
	SURVEYED	BROWN & CREW	9/71
NOTE BOOK	PLOTTED	JONES	10/71
	TEMPLATE	M. PRAY	10-71
	AREAS	M. PRAY	10-71
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



℄
22'0"
+6"
300.86
-6"
4:1
E.P.
4:1
966+0
+6"
298.55
-6"
285
F-111.8 cy
Grub-20 cy
E.P.
+50
22'0"
285
+6"
296.24
-6"
F-1204 cy
Grub-12 cy
E.P.
65'-6"
280
965+0
18'8"
+3"
293.93
-3"
46'-0"
287.00
E.P.
51'-3"
286.00
+50
285
C-9 cy
F-391 cy
Grub-48 cy
15'4"
0"
291.62
0"
45'-6"
30'-0"
284.50
289.00
964+0
285
C-156 cy
F 81 cy
Grub-22 cy
-3"
289.31
+3"
42'-0"
23'-0"
2:1
283.00
288.50
+50
285
C-352 cy
-6"
287.00
+6"
37'-6"
25'-0"
2:1
281.50
286.00
963+0
280
C-364 cy
-6"
284.69
+6"
34'-0"
25'-6"
4:1
2:1
280.00
283.50
962+50
275
C-344 cy
℄

STA 965+30± EXTEND EXISTING 18" ACCMP TO C.B. TYPE E WITH 40'± CULV. PIPE OPTION

INSTALL TYPE "E" CATCH BASIN STA 965+20± 65'-6" RT.
C-6 cy
F 897 cy
Grub-31 cy

962+50 - 966+00

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	39	55

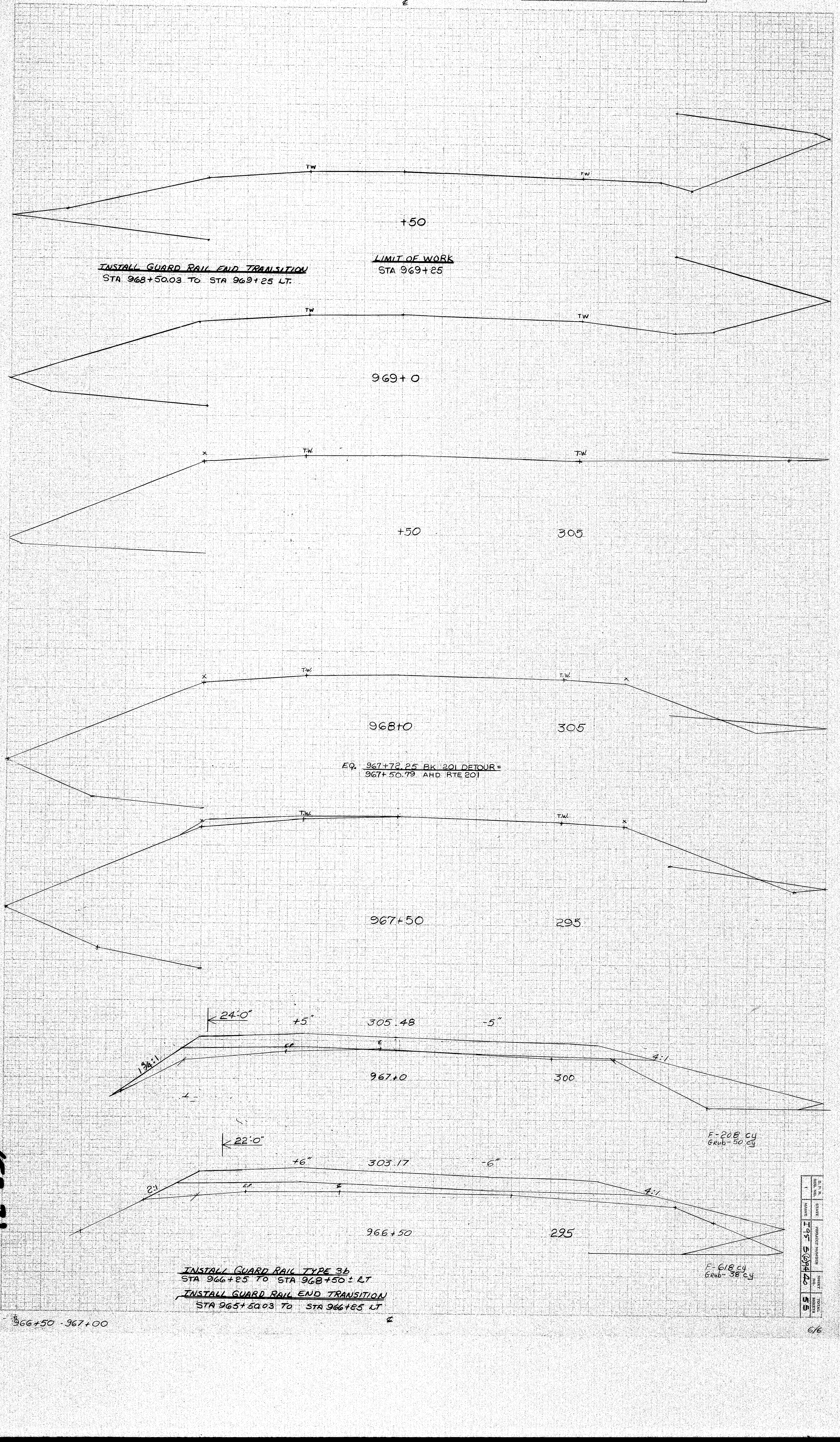
5/6

152-70

[redacted]

ORIGINAL SURVEY		BY	DATE
	SURVEYED	BROWN & CREW	9/71
	PLOTTED	JONES	10/71
NOTE BOOK	TEMPLATE	M. PRAY	10-71
	AREAS	M. Pray	10-71
NO.	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		


℄
+50
TW
TW
969+0
TW
TW
T.W.
T.W.
+50
305
T.W.
T.W.
968+0
305
T.W.
T.W.
967+50
295
24'0"
+5"
305.48
-5"
1¾:1
E.P.
℄
4:1
967+0
300
22'0"
+6"
303.17
-6"
2:1
E.P.
℄
4:1
966+50
295
℄

INSTALL GUARD RAIL END TRANSITION
STA 968+50.03 TO STA 969+25 LT.

LIMIT OF WORK
STA 969+25

EQ. 967+72.25 BK. 201 DETOUR =
967+50.79 AHD RTE 201

F-208 cy
Grub-50 cy

F-618 cy
Grub-38 cy

INSTALL GUARD RAIL TYPE 3b
STA 966+25 TO STA 968+50 ± LT
INSTALL GUARD RAIL END TRANSITION
STA 965+50.03 TO STA 966+25 LT

966+50 - 967+00

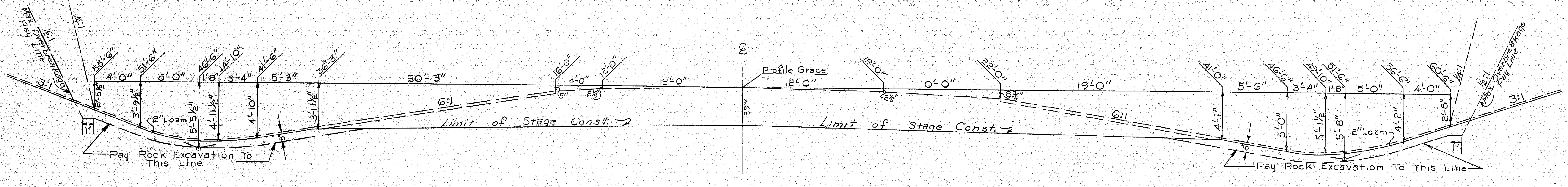
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	40	55

6/6

152-21

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	41	55

I-95 STAGE CONSTRUCTION


Max. Overbreakage Pay Line
½:1
¼:1
3:1
55'-6"
51'-6"
46'-6"
44'-10"
41'-6"
36'-3"
4'-0"
5'-0"
1'-8"
3'-4"
5'-3"
20'-3"
2'-5½"
3'-9½"
5'-5½"
4'-11½"
4'-10"
3'-11½"
2" Loam
1'
8"
6:1
Pay Rock Excavation To This Line
Limit of Stage Const.
16'-0"
12'-0"
4'-0"
5"
2½"
12'-0"
℄
39"
Profile Grade
12'-0"
12'-0"
22'-0"
10'-0"
2½"
8¾"
Limit of Stage Const.
19'-0"
6:1
41'-0"
46'-6"
49'-10"
51'-6"
56'-6"
60'-6"
5'-6"
3'-4"
1'-8"
5'-0"
4'-0"
4'-1"
5'-0"
5'-1½"
5'-8"
4'-2"
2'-8"
2" Loam
8"
1'
¼:1
½:1
Max. Overbreakage Pay Line
3:1
Pay Rock Excavation To This Line

DRAINAGE

STATION	RCP			BCCMP		CMP		CULVERT PIPE		CATCH BASINS							MAN HOLES	UNDERDRAINS				REMARKS
																		'B'	'C'		'B' OUTLET	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1	A2	B1	B2	C1	C2	E		LENGTH	SIZE	LENGTH	LENGTH	
951+50								15"	84'													OPTION I
951+50 40' Lt.																1						
954+50								30"	104'													OPTION I
958+0								15"	128'													OPTION I
965+20 65.5' RT.																1						
965+30								18"	48'													OPTION I

PLANS	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

JANUARY [illegible]

STATE HIGHWAY COMMISSION

TYPICAL SECTIONS
I - 95

DRAINAGE
LIST

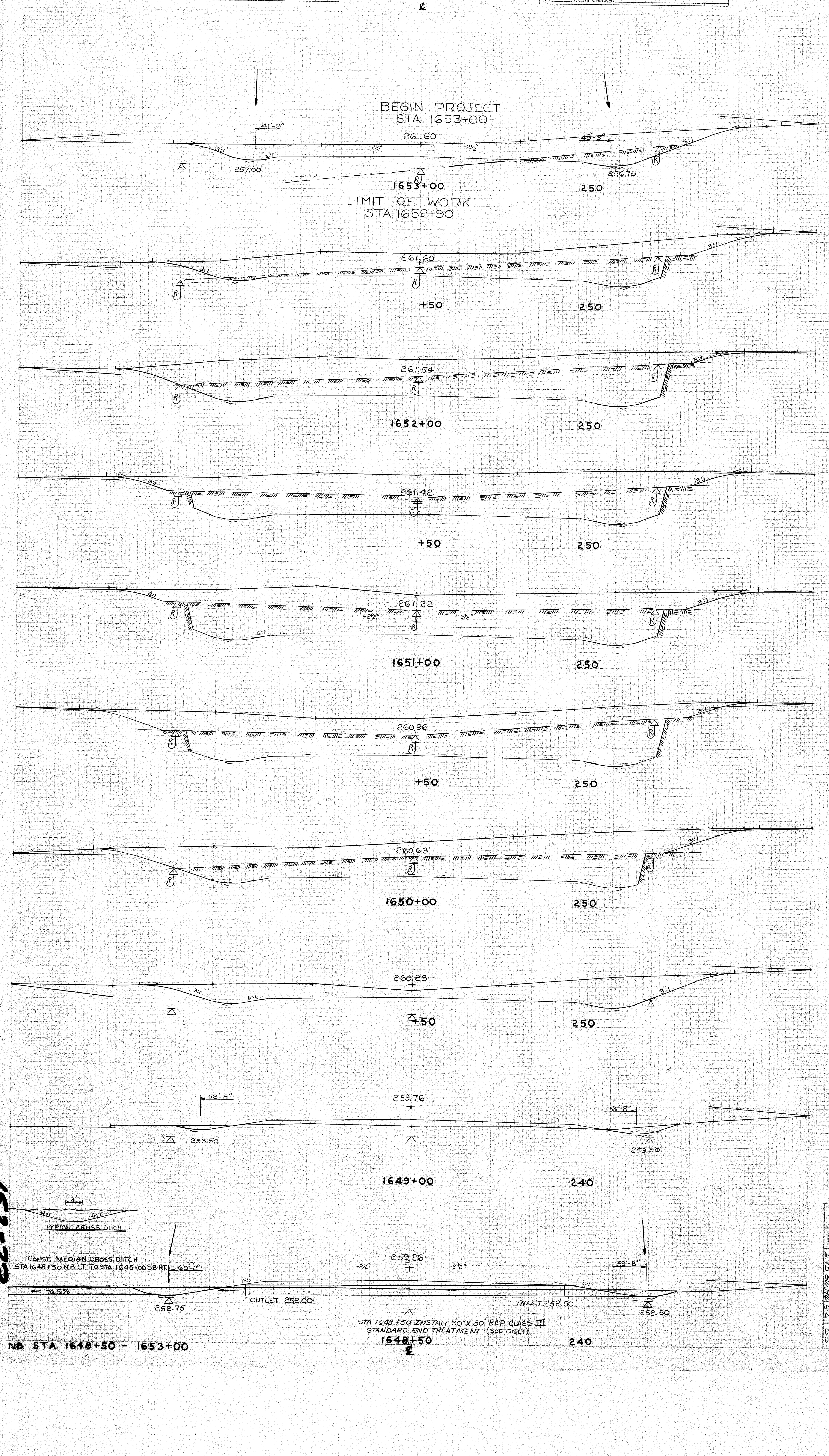
SHEET 41 OF 55 AUGUSTA, MAINE

152-72

203-1 2080

ORIGINAL SURVEY		BY	DATE
	SURVEYED	LANDERKIN + CREW	3-14-66
	PLOTTED	BRIGGS + BEAULIEU	10-4-68
NOTE BOOK	TEMPLATE		
NO. 95/2515	AREAS	M. PRAY	11-71
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		


℄
BEGIN PROJECT
STA. 1653+00
41'-9"
48'-3"
261.60
-2½"
-2½"
3:1
6:1
257.00
256.75
1653+00
250
LIMIT OF WORK
STA 1652+90
261.60
3:1
R
+50
250
261.54
R
1652+00
250
261.42
3:1
R
+50
250
261.22
-2½"
6:1
R
1651+00
250
260.96
R
+50
250
260.63
3:1
R
1650+00
250
260.23
3:1
6:1
+50
250
52'-8"
56'-8"
259.76
253.50
253.50
1649+00
240
4'
4:1
TYPICAL CROSS DITCH
CONST. MEDIAN CROSS DITCH
STA 1648+50 NB LT TO STA 1645+00 SB RT.
60'-2"
59'-8"
259.26
-2½"
6:1
-0.5%
252.75
OUTLET 252.00
INLET 252.50
252.50
STA 1648+50 INSTALL 30"X 80' RCP CLASS III
STANDARD END TREATMENT (SOD ONLY)
1648+50
℄
240

N.B. STA. 1648+50 - 1653+00

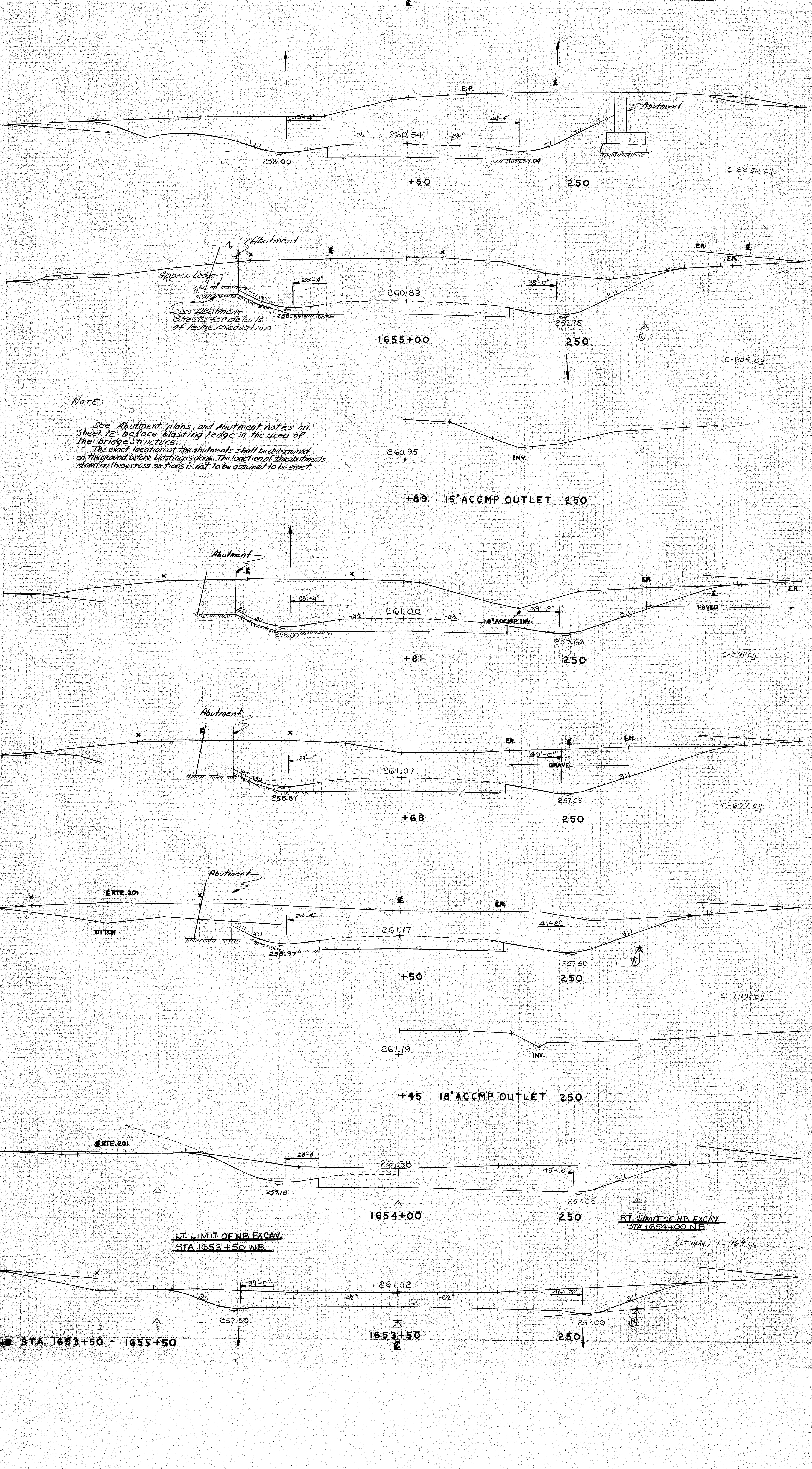
152-73

U. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	42	55

[redacted]

ORIGINAL SURVEY		BY	DATE
	SURVEYED	LANDERKIN + CREW	3-14-66
	PLOTTED	BRIGGS + BEAULIEU	10-4-68
NOTE BOOK NO. 95/2515	TEMPLATE		
	AREAS	M. Pray	11-71
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		


℄
E.P.
℄
Abutment
30'-4"
28'-4"
-2½"
260.54
-2½"
3:1
3:1
2:1
258.00
259.04
+50
250
C-22 50 cy
Abutment
℄
x
x
E.R.
℄
E.R.
Approx. Ledge
2:1
1½:1
28'-4"
260.89
38'-0"
2:1
See Abutment Sheets for details of ledge excavation
258.65
257.75
1655+00
250
C-805 cy
260.95
INV.
+89
15" ACCMP OUTLET
250
Abutment
℄
x
x
E.R.
℄
E.R.
2:1
1½:1
28'-4"
-2½"
261.00
-2½"
18" ACCMP INV.
39'-2"
3:1
PAVED
258.80
257.66
+81
250
C-541 cy
Abutment
x
℄
x
E.R.
℄
E.R.
2:1
1½:1
28'-4"
261.07
40'-0"
GRAVEL
3:1
258.87
257.59
+68
250
C-697 cy
Abutment
x
℄ RTE. 201
x
DITCH
℄
E.R.
2:1
1½:1
28'-4"
261.17
41'-2"
3:1
258.97
257.50
+50
250
C-1491 cy
261.19
INV.
+45
18" ACCMP OUTLET
250
x
℄ RTE. 201
28'-4
261.38
43'-10"
3:1
259.18
257.25
1654+00
250
RT. LIMIT OF NB EXCAV.
STA 1654+00 N.B.
(Lt. only) C-464 cy
LT. LIMIT OF NB EXCAV.
STA 1653+50 N.B.
x
3:1
39'-2"
-2½"
261.52
-2½"
46'-3"
3:1
257.50
257.00
1653+50
℄
250

NOTE:

See Abutment plans, and Abutment notes on Sheet 12 before blasting ledge in the area of the bridge structure.

The exact location at the abutments shall be determined on the ground before blasting is done. The location of the abutments shown on these cross sections is not to be assumed to be exact.

NB STA. 1653+50 - 1655+50

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	I 95 5(6)94	43	55

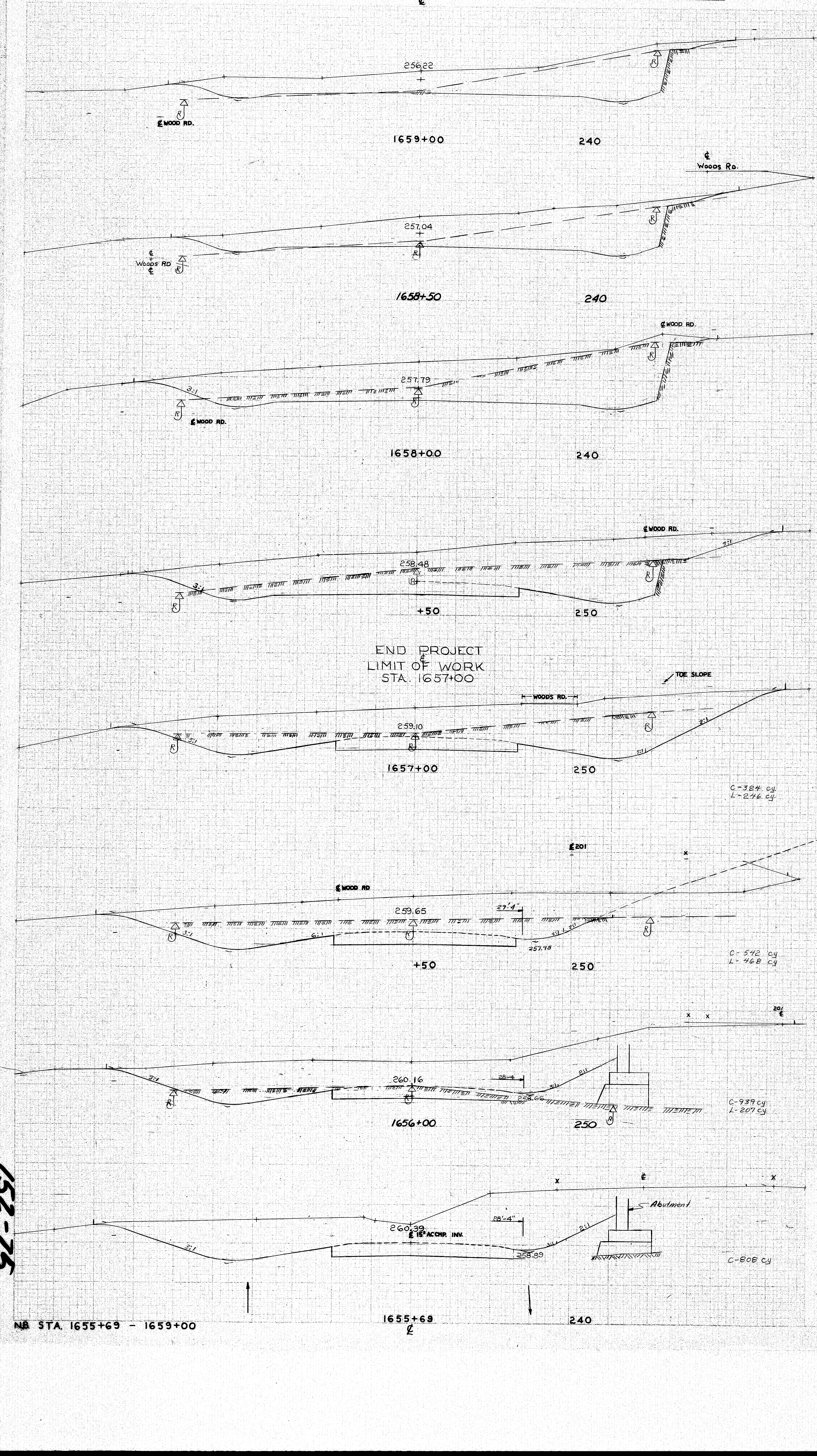
152-74

[redacted]

ORIGINAL SURVEY		BY	DATE
	SURVEYED	LANDERKIN + CREW	1-10-65
	PLOTTED	BRIGGS + BEAULIEU	10-14-68
NOTE BOOK NO. 95/2517	TEMPLATE		
	AREAS	M. Pray	11-71
	AREAS CHECKED		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	44	55



℄
256.22
℄ WOOD RD.
1659+00
240
℄ Woods Rd.
257.04
℄ Woods Rd ℄
1658+50
240
℄ WOOD RD.
257.79
3:1
℄ WOOD RD.
1658+00
240
℄ WOOD RD.
258.48
3:1
+50
250
END PROJECT
LIMIT OF WORK
℄
STA. 1657+00
TOE SLOPE
WOODS RD.
259.10
3:1
1657+00
250
C-324 cy.
L-246 cy.
℄ 201
℄ WOOD RD
29'-4"
259.65
3:1
6:1
257.98
+50
250
C-542 cy
L-468 cy
201 ℄
28'-4
260.16
3:1
258.66
2:1
1656+00
250
C-939 cy
L-207 cy
℄
Abutment
28'-4"
260.39
℄ 15" ACCMP. INV.
3:1
2:1
258.89
C-808 cy
1655+69
℄
240

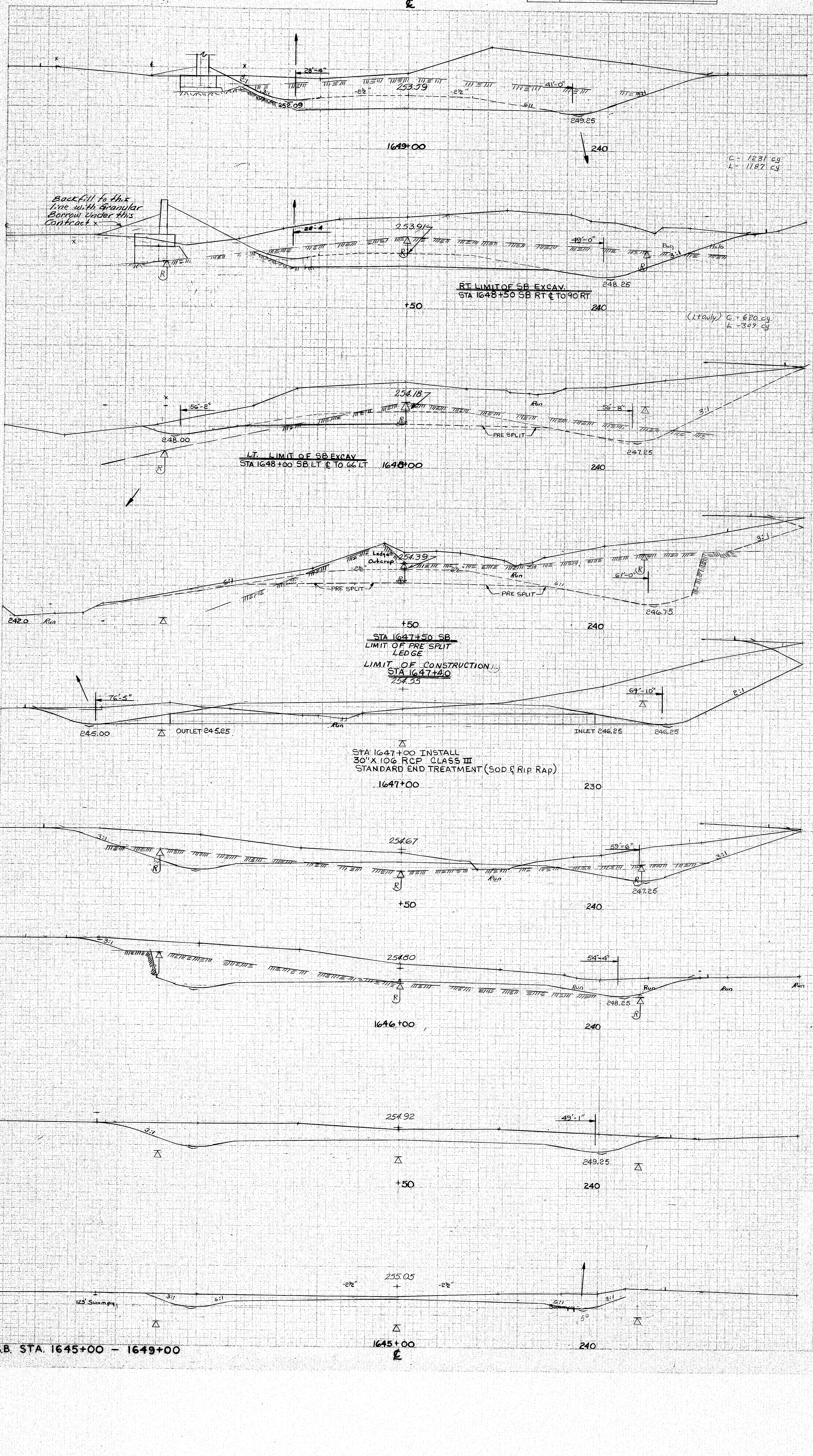
NB STA. 1655+69 - 1659+00

152-75

[redacted]

		BY	DATE
ORIGINAL SURVEY	SURVEYED	Hinds & Crew	2-24-66
	PLOTTED	Briggs & Beaulieu	
NOTE BOOK	TEMPLATE	"	~~10-8-68~~
NO. 95/2520	AREAS	M. Pray	11-71
	AREAS CHECKED		

		BY	DATE
FINAL SURVEY	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		


℄
28'-4"
253.59
41'-0"
252.09
249.25
-2%
6:1
3:1
2:1
1649+00
240
C - 1231 cy
L - 1187 cy
Backfill to this Line with Granular Borrow Under this Contract
28'-4
253.91
49'-0"
248.25
3:1
RT. LIMIT OF SB EXCAV.
STA 1648+50 SB RT ℄ TO 90 RT
+50
240
(Lt Only) C - 820 cy
L - 309 cy
56'-2"
254.18
56'-8"
248.00
247.25
PRE SPLIT
Run
LT. LIMIT OF SB EXCAV.
STA 1648+00 SB LT ℄ TO 66 LT
1648+00
240
Ledge Outcrop
254.39
61'-0"
PRE SPLIT
6:1
242.0
Run
246.75
+50
240
STA 1647+50 SB
LIMIT OF PRE SPLIT LEDGE
LIMIT OF CONSTRUCTION
STA 1647+40
254.35
76'-5"
69'-10"
2:1
245.00
OUTLET 245.25
INLET 246.25
246.25
STA 1647+00 INSTALL
30"x106 RCP CLASS III
STANDARD END TREATMENT (SOD & Rip Rap)
1647+00
230
254.67
59'-6"
247.25
+50
240
254.80
54'-4"
248.25
1646+00
240
254.92
49'-1"
249.25
+50
240
255.05
-2%
125' Swampy
Swampy
5°
1645+00
℄
240

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	45	55

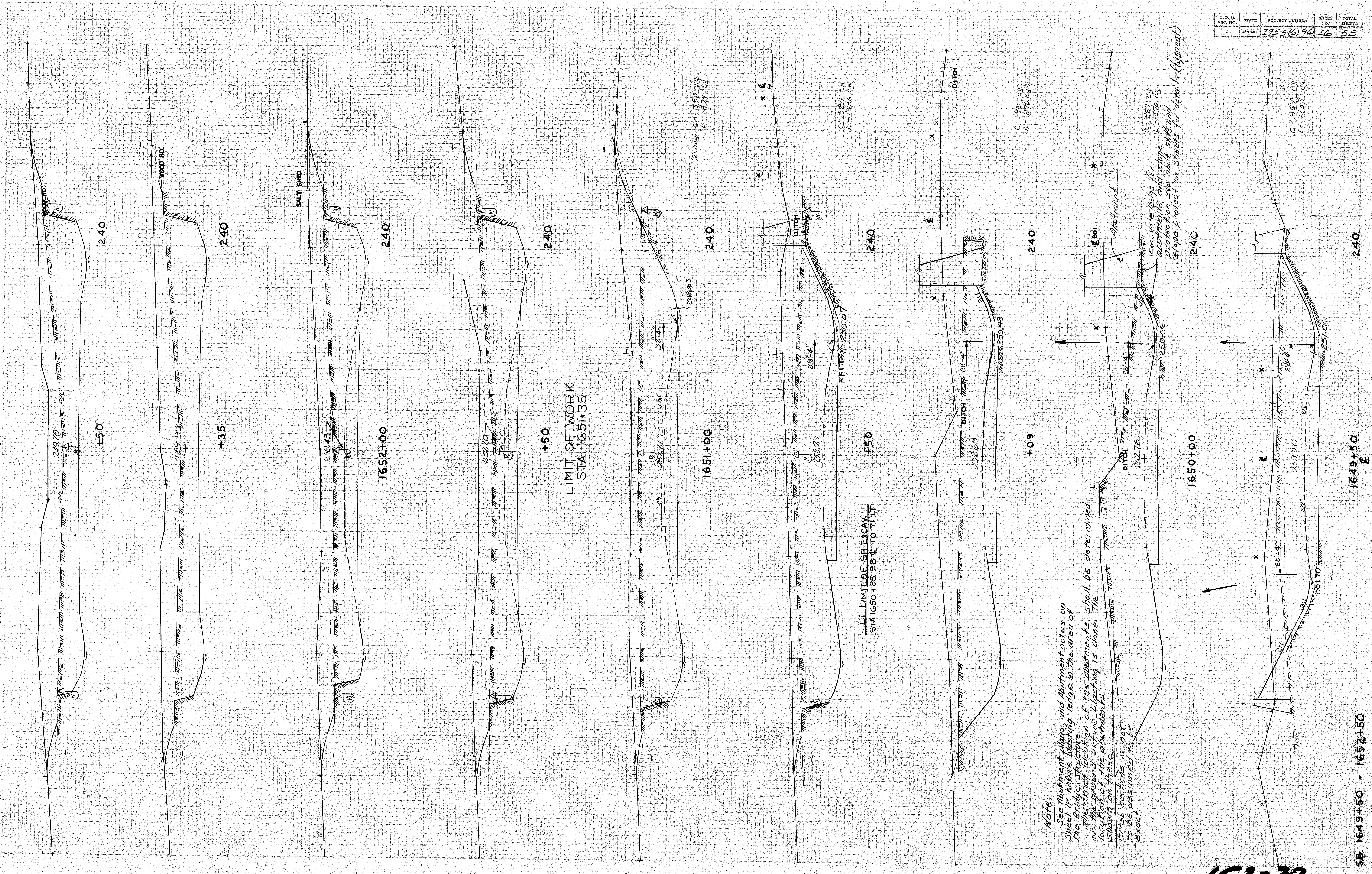
S.B. STA. 1645+00 - 1649+00

152-76

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6) 94	46	55

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED	DION + CREW	10-7-65
	PLOTTED	BRIGG + BEAULIEU	10-8-68
	TEMPLATE		
NOTE BOOK	AREAS	M. Pray	11-71
NO. 95/2518	AREAS CHECKED		

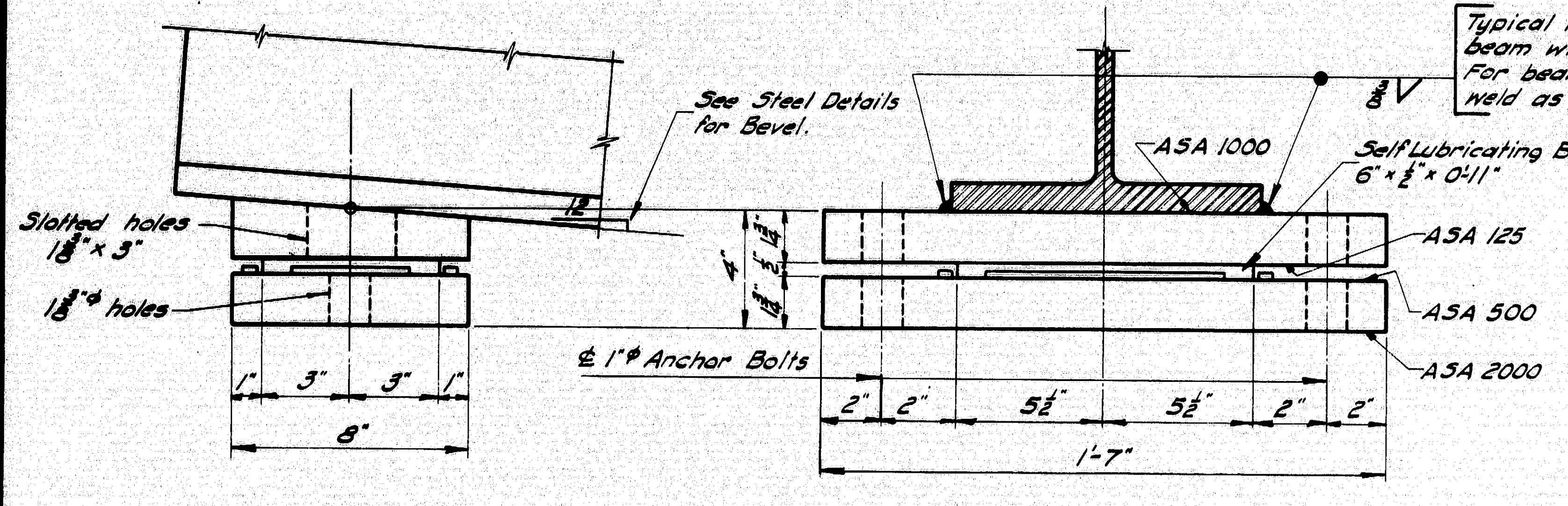

+50
+35
1652+00
+50
LIMIT OF WORK
STA. 1651+35
1651+00
+50
+09
1650+00
1649+50
240
WOOD RD.
SALT SHED
DITCH
Abutment
249.10
249.93
250.43
251.10
248.83
252.27
250.07
252.68
250.48
252.76
250.56
253.20
251.00
(Rt only) C - 380 cy L - 874 cy
C - 524 cy L - 1336 cy
C - 98 cy L - 270 cy
C - 589 cy L - 1370 cy
C - 867 cy L - 1139 cy
Excavate ledge for abutments and slope protection, see abut. sht. and slope protection sheets for details (typical)
LT. LIMIT OF SB EXCAV.
STA 1650+25 96 ℄ TO 71 LT.
28'-4"
38'-4"
-2%
℄

Note:
See Abutment plans, and Abutment notes on Sheet 12 before blasting ledge in the area of the Bridge structure.
The exact location of the abutments shall be determined on the ground before blasting is done. The location of the abutments shown on these Cross sections is not to be assumed to be exact.

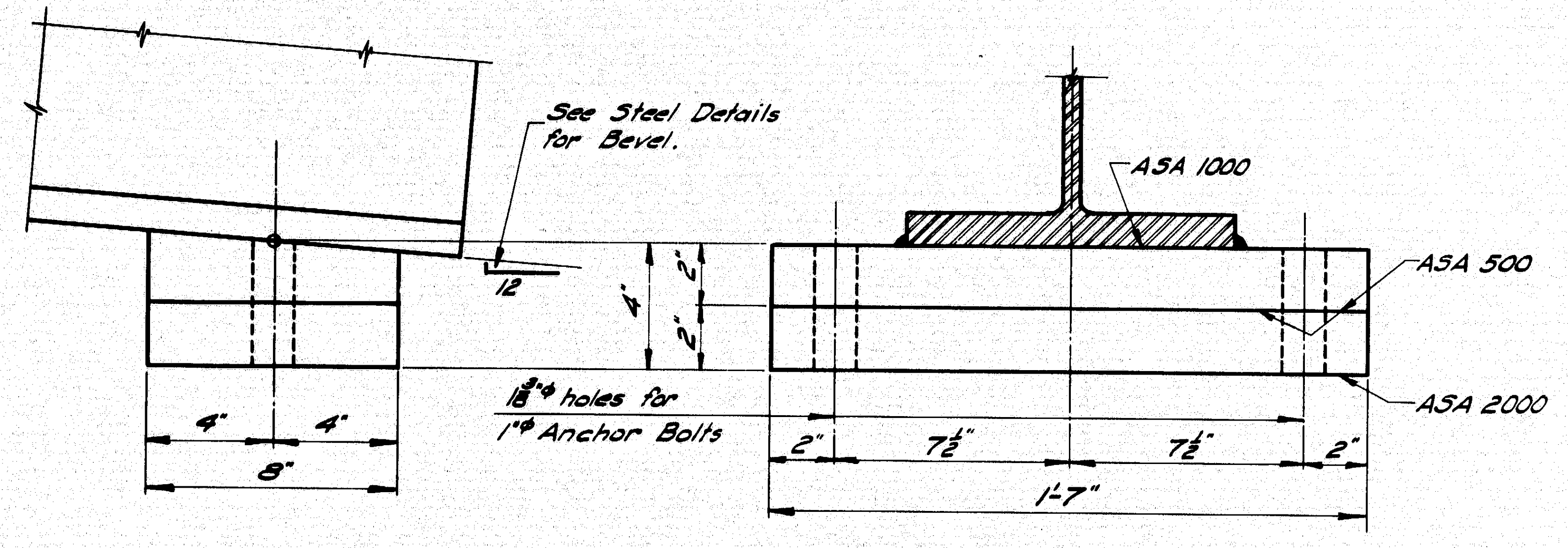
S.B. 1649+50 - 1652+50

152-79

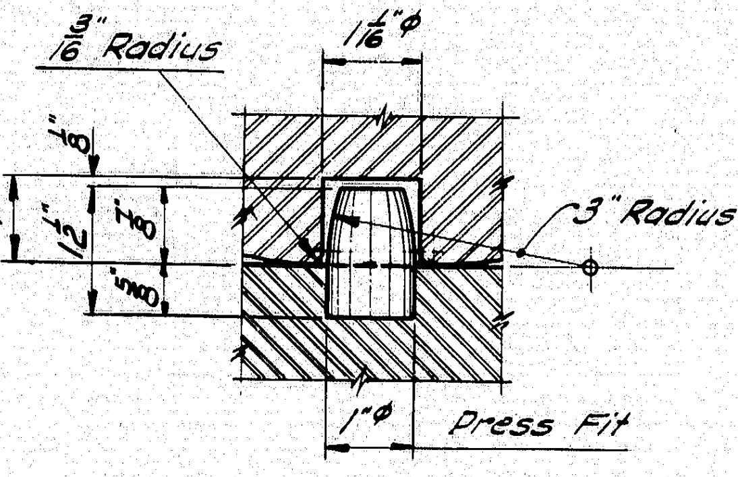
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	47	55.


See Steel Details for Bevel.
Typical for EPA & FPA for beam without cover ℞. For beam with cover ℞ weld as shown for EPB.
3/8 V
ASA 1000
Self Lubricating Bronze ℞ 6" × ½" × 0'-11"
Slotted holes 1 3/8" × 3"
1 3/8"φ holes
℄ 1"φ Anchor Bolts
ASA 125
ASA 500
ASA 2000
4"
1" 3" 3" 1"
8"
2" 2" 5½" 5½" 2" 2"
1'-7"

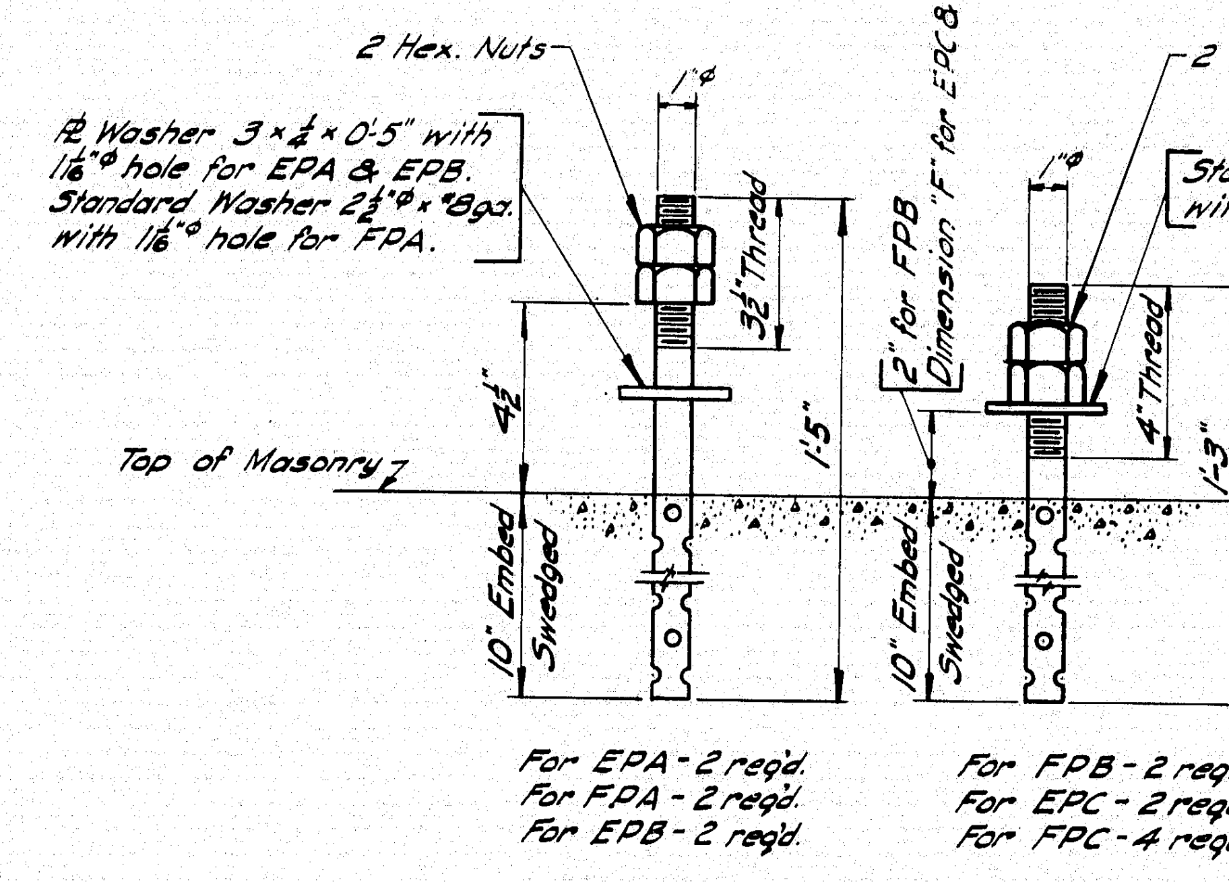
EXPANSION PEDESTAL - EPA


See Steel Details for Bevel.
ASA 1000
ASA 500
ASA 2000
1 3/8"φ holes for 1"φ Anchor Bolts
4"
4" 4"
8"
2" 7½" 7½" 2"
1'-7"

FIXED PEDESTAL - FPA


3/16" Radius
1 1/16"φ
1"
1½"
3" Radius
1"φ
Press Fit

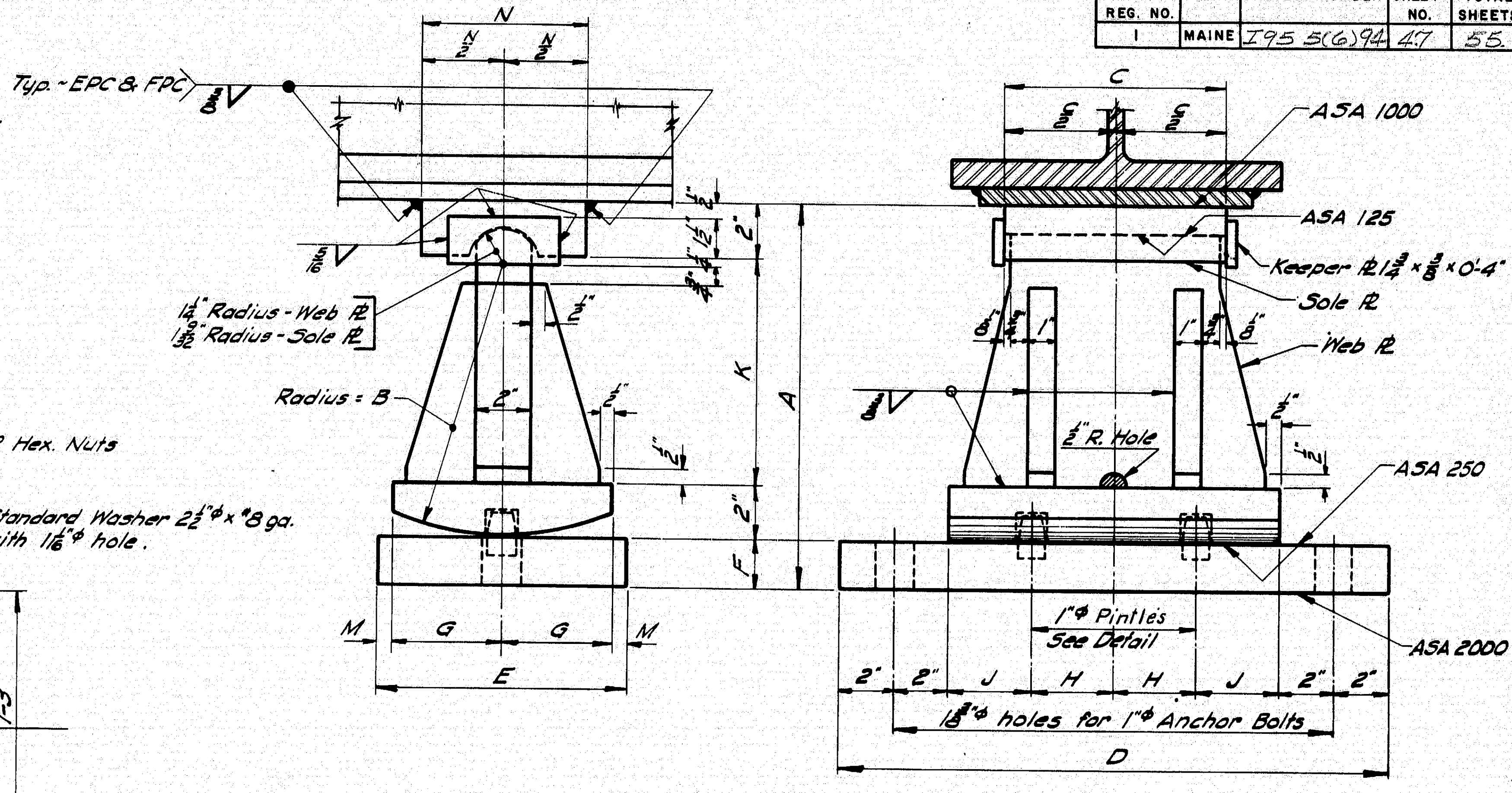
PINTLE DETAIL


2 Hex. Nuts
℞ Washer 3 × ¼ × 0'-5" with 1 1/16"φ hole for EPA & EPB. Standard Washer 2½"φ × #8 ga. with 1 1/16"φ hole for FPA.
1"φ
3½" Thread
4½"
1'-5"
Top of Masonry
10" Embed
Swedged
2" for FPB
Dimension "F" for EPC & FPC
2 Hex. Nuts
Standard Washer 2½"φ × #8 ga. with 1 1/16"φ hole.
4" Thread
1'-3"

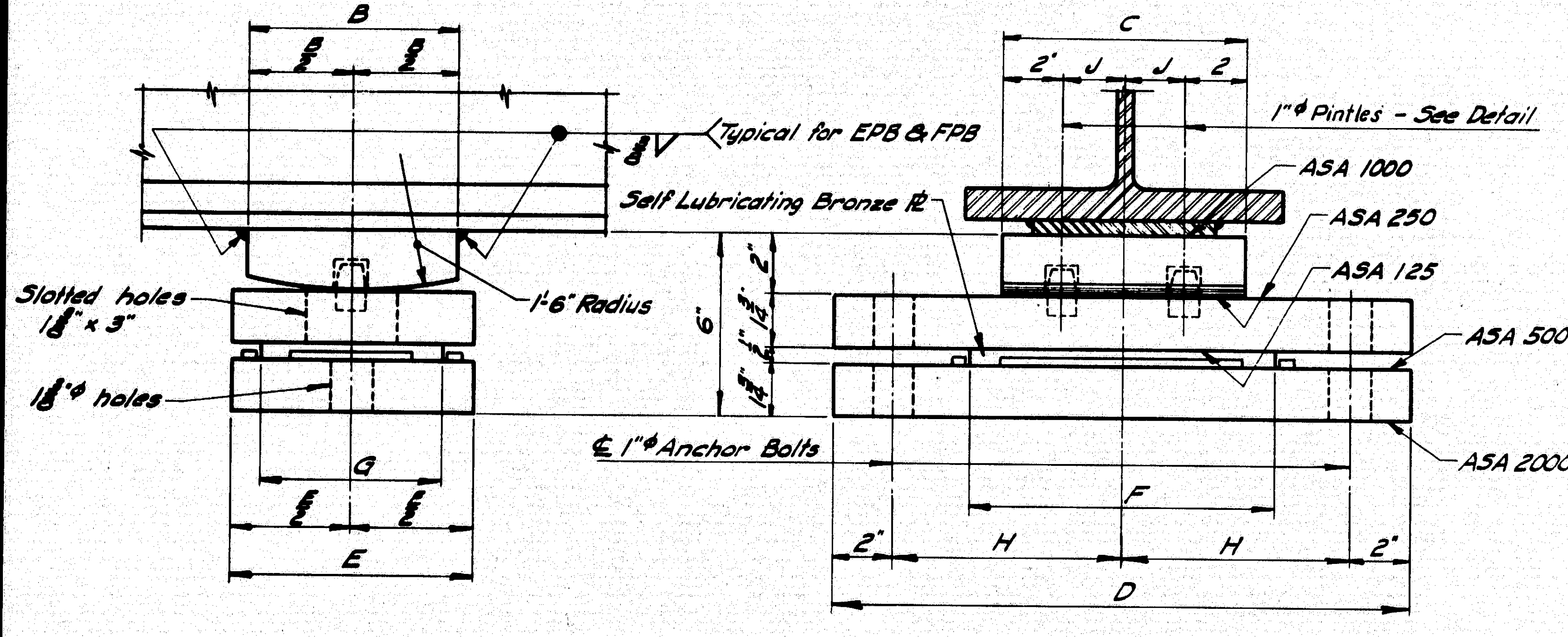
For EPA - 2 req'd.
For FPA - 2 req'd.
For EPB - 2 req'd.

For FPB - 2 req'd.
For EPC - 2 req'd.
For FPC - 4 req'd.

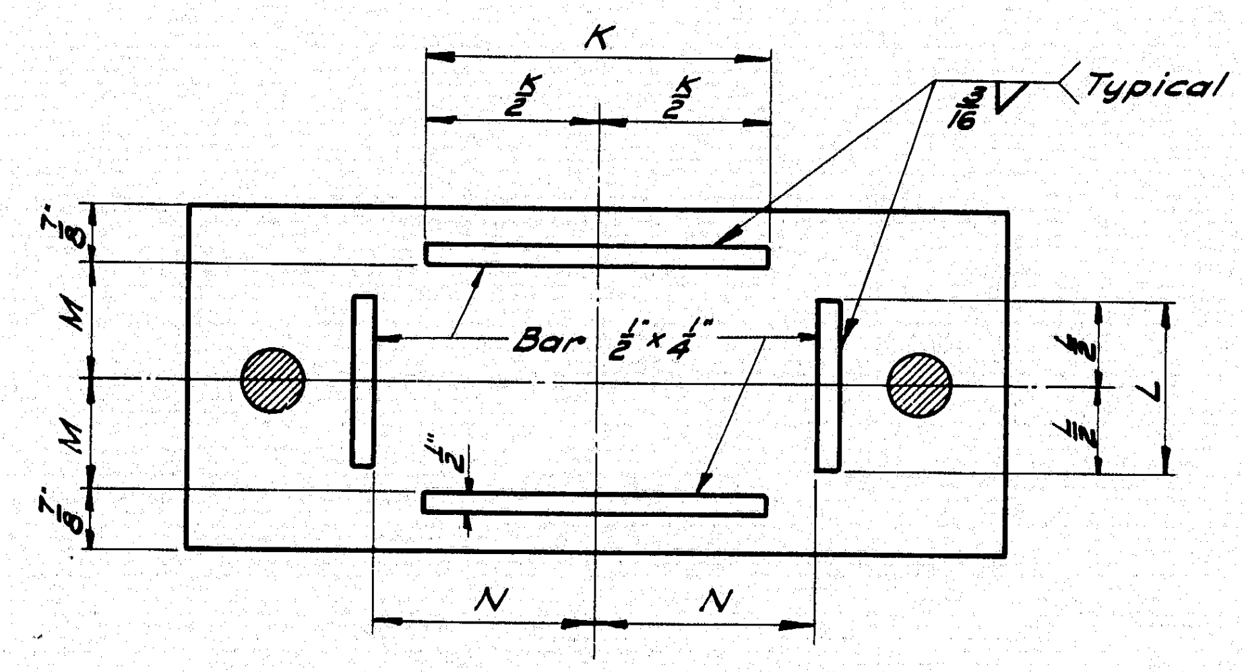
ANCHOR BOLT DETAIL


N
N/2 N/2
Typ. - EPC & FPC
3/16 V
1¼" Radius - Web ℞
1 9/32" Radius - Sole ℞
Radius = B
2"
K
A
F
M G G M
E
C
ASA 1000
ASA 125
Keeper ℞ 1¾ × 3/8 × 0'-4"
Sole ℞
Web ℞
½" R. Hole
ASA 250
1"φ Pintles See Detail
ASA 2000
2" 2" J H H J 2" 2"
1 3/8"φ holes for 1"φ Anchor Bolts
D

EXPANSION PEDESTAL - EPC

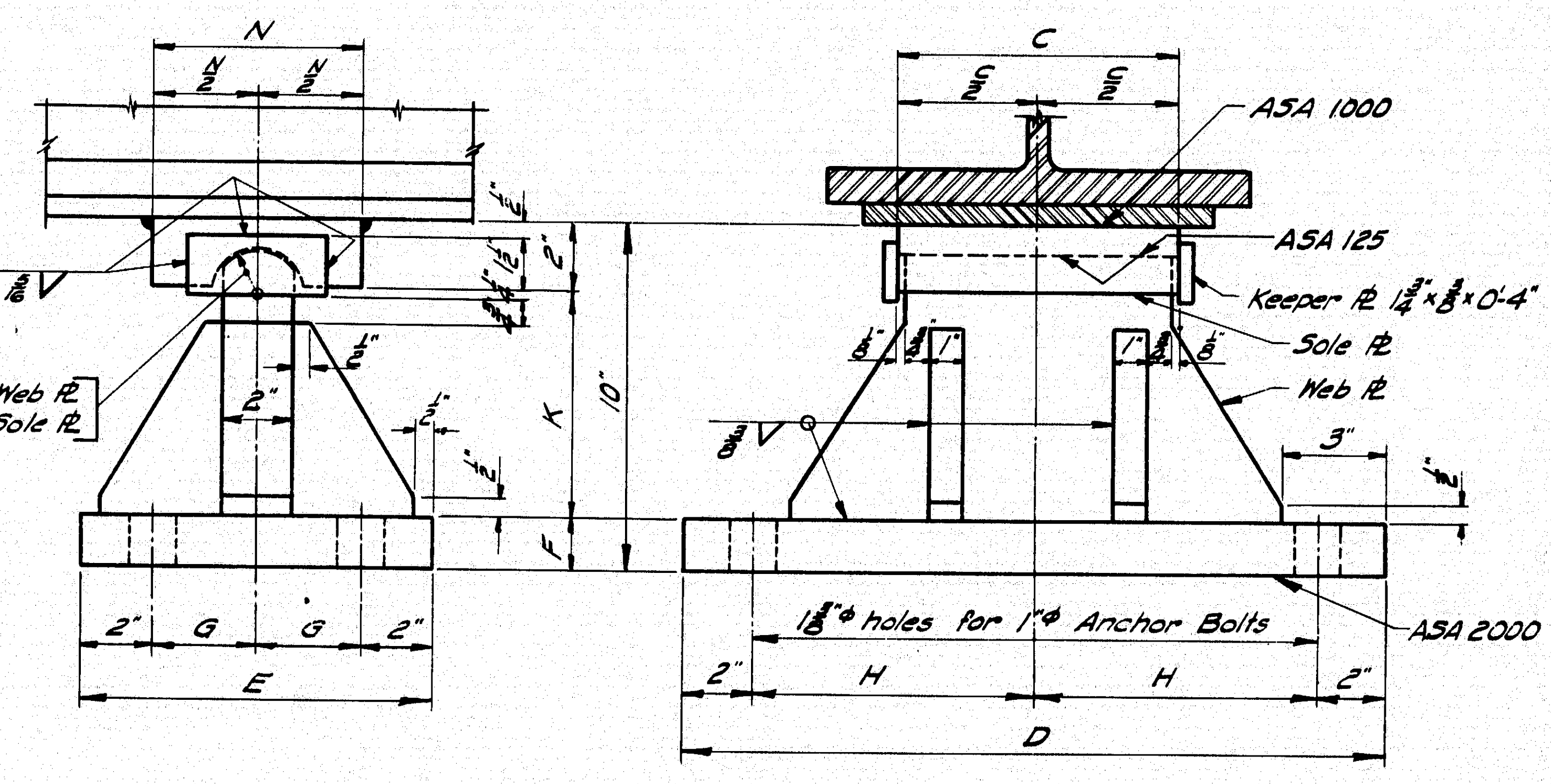

B
Typical for EPB & FPB
C
2" J J 2
1"φ Pintles - See Detail
ASA 1000
Self Lubricating Bronze ℞
ASA 250
ASA 125
ASA 500
ASA 2000
1'-6" Radius
Slotted holes 1 3/8" × 3"
1 3/8"φ holes
℄ 1"φ Anchor Bolts
6"
G
E
F
2" H H 2"
D

EXPANSION PEDESTAL - EPB

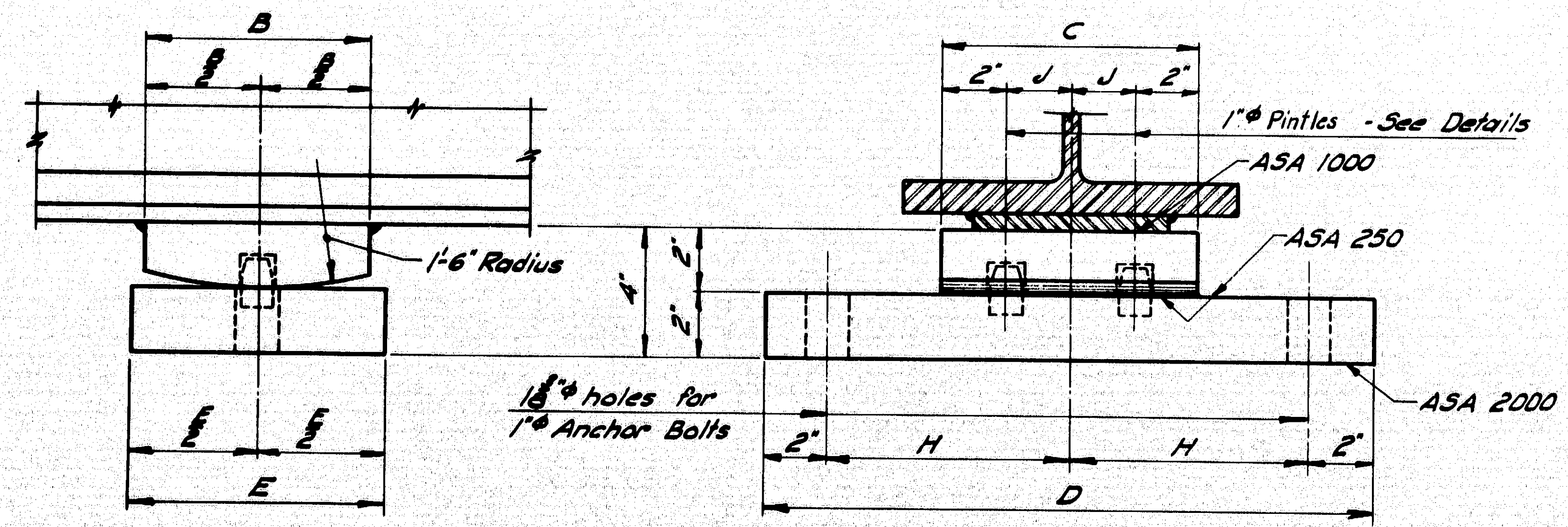

K
K/2 K/2
3/16 V
Typical
Bar ½" × 4"
M
M
L
N N

For EPA & EPB

MASONRY PLATE


N
N/2 N/2
C
ASA 1000
ASA 125
Keeper ℞ 1¾ × 3/8 × 0'-4"
Sole ℞
Web ℞
1¼" Radius - Web ℞
1 9/32" Radius - Sole ℞
K
10"
F
3"
2" G G 2"
E
1 3/8"φ holes for 1"φ Anchor Bolts
ASA 2000
2" H H 2"
D

FIXED PEDESTAL - FPC


B
C
2" J J 2"
1"φ Pintles - See Details
ASA 1000
ASA 250
1'-6" Radius
4"
2"
1 3/8"φ holes for 1"φ Anchor Bolts
ASA 2000
E
2" H H 2"
D

FIXED PEDESTAL - FPB

PEDESTALS — ALLOWABLE LOADS & DIMENSIONS

Pedestal	Load	A	B	C	D	E	F	G	H	J	K	L	M	N
EPA	132ᴷ	—	—	—	—	—	—	—	—	—	8"	4"	3⅛"	5⅝"
FPA	150ᴷ	—	—	—	—	—	—	—	—	—	—	—	—	—
EPB-1	120ᴷ	—	6"	8"	1'-7"	8"	10"	6"	7½"	2"	8"	4"	3⅛"	5⅛"
EPB-2	165ᴷ	—	7"	10"	1'-8"	9"	1'-0"	7"	8"	3"	10"	5"	3⅝"	6⅛"
EPB-3	224ᴷ	—	8"	1'-1"	2'-0"	10"	1'-4"	7"	10"	4½"	1'-2"	5"	3⅝"	8⅛"
FPB-1	120ᴷ	—	6"	8"	1'-7"	8"	—	—	7½"	2"	—	—	—	—
FPB-2	165ᴷ	—	7"	10"	1'-8"	9"	—	—	8"	3"	—	—	—	—
FPB-3	224ᴷ	—	8"	1'-2"	2'-0"	10"	—	—	10"	5"	—	—	—	—
EPC-1	70ᴷ	9¾"	6"	8"	1'-8"	8"	1½"	3½"	3"	3"	4¼"	—	½"	6"
EPC-2	100ᴷ	11¾"	8"	8"	1'-8"	8"	1½"	3½"	3"	3"	6¼"	—	½"	6"
EPC-3	130ᴷ	1'-2"	10"	8"	1'-8"	9"	1¾"	4"	3"	3"	8¼"	—	½"	7"
EPC-4	160ᴷ	1'-2"	10"	8"	1'-10"	9"	1¾"	4"	4"	3"	8¼"	—	½"	7"
EPC-5	190ᴷ	1'-2¼"	10"	9"	2'-0"	10"	2"	4½"	5"	3"	8¼"	—	½"	8"
EPC-6	220ᴷ	1'-4½"	1'-0"	10"	2'-0"	1'-0"	2¼"	5"	5"	3"	10¼"	—	1"	8"
EPC-7	250ᴷ	1'-4½"	1'-0"	1'-0"	2'-2"	1'-0"	2¼"	5"	5"	4"	10¼"	—	1"	8"
FPC-1	100ᴷ	—	—	8"	1'-8"	9"	1¼"	2½"	8"	—	6¾"	—	—	6"
FPC-2	160ᴷ	—	—	8"	1'-8"	10"	1½"	3"	8"	—	6½"	—	—	7"
FPC-3	190ᴷ	—	—	9"	2'-0"	10"	1½"	3"	10"	—	6½"	—	—	8"
FPC-4	220ᴷ	—	—	10"	2'-0"	1'-0"	1¾"	4"	10"	—	6¼"	—	—	8"
FPC-5	250ᴷ	—	—	1'-0"	2'-0"	1'-0"	2"	4"	10"	—	6"	—	—	8"

NOTE: At the location of bearing pedestals the concrete bridge seats shall be dressed one inch larger all around than size of masonry plates and to exact elevations shown on the plans. If dressed areas are below the surface of the surrounding bridge seat a small channel shall be cut to the edge of the bridge seat for drainage where required by the Engineer. Channels shall have a min. width of 2" and min. slope of ½ inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

DESIGN SPECIFICATIONS

A.A.S.H.O., Standard Specifications for Highway Bridges, 1969

A.S.T.M. STEEL CLASSIFICATION

Anchor Bolts - A36
All other - A36.

Revised - Design Specifications and A.S.T.M. Steel Classification 1969.

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

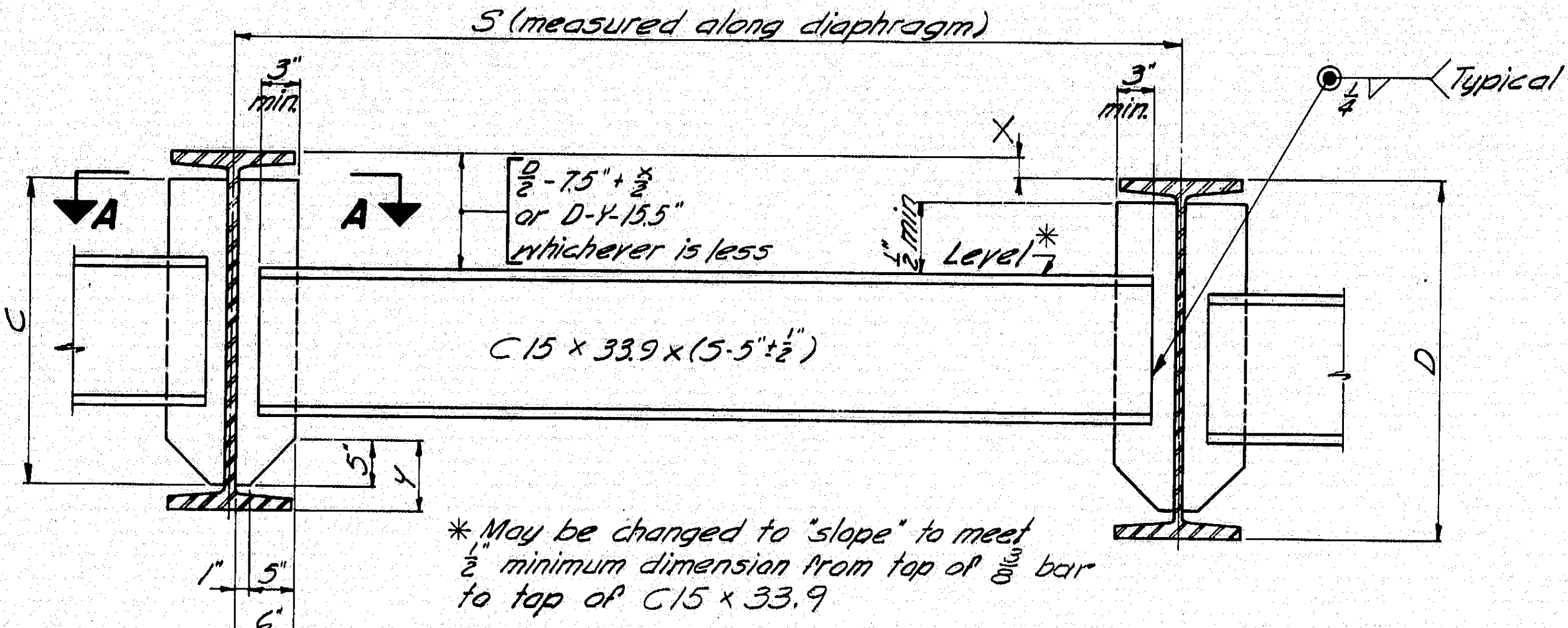
STANDARD DETAILS
(BD 101 - 70)

BEARING PEDESTALS

JANUARY 1970

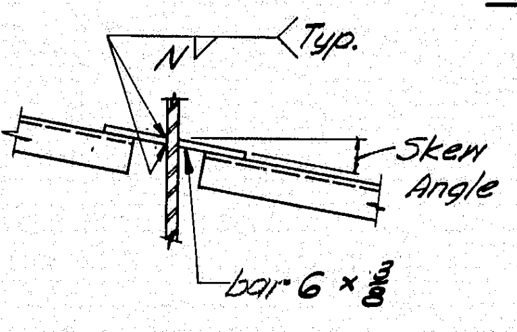
152-78

B.P.R. DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	48	55

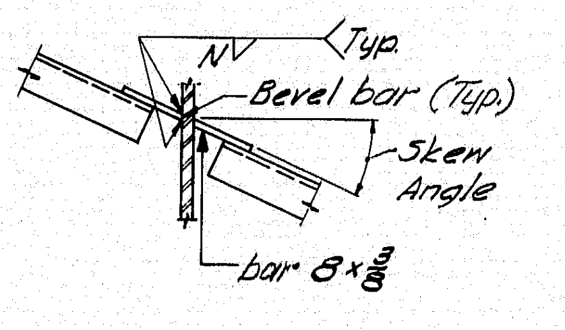

S (measured along diaphragm)
3" min.
A
A
$\frac{3}{4}$ - 7.5" x $\frac{3}{8}$ or D-Y-13.5" whichever is less
Level *
C15 x 33.9 x (S-5 ½")
Typical
C
D
5"
Y
1
5"
6"
bar 6 x $\frac{3}{8}$

*May be changed to "slope" to meet ½ minimum dimension from top of $\frac{3}{8}$ bar to top of C15 x 33.9

TYPE A DIAPHRAGM

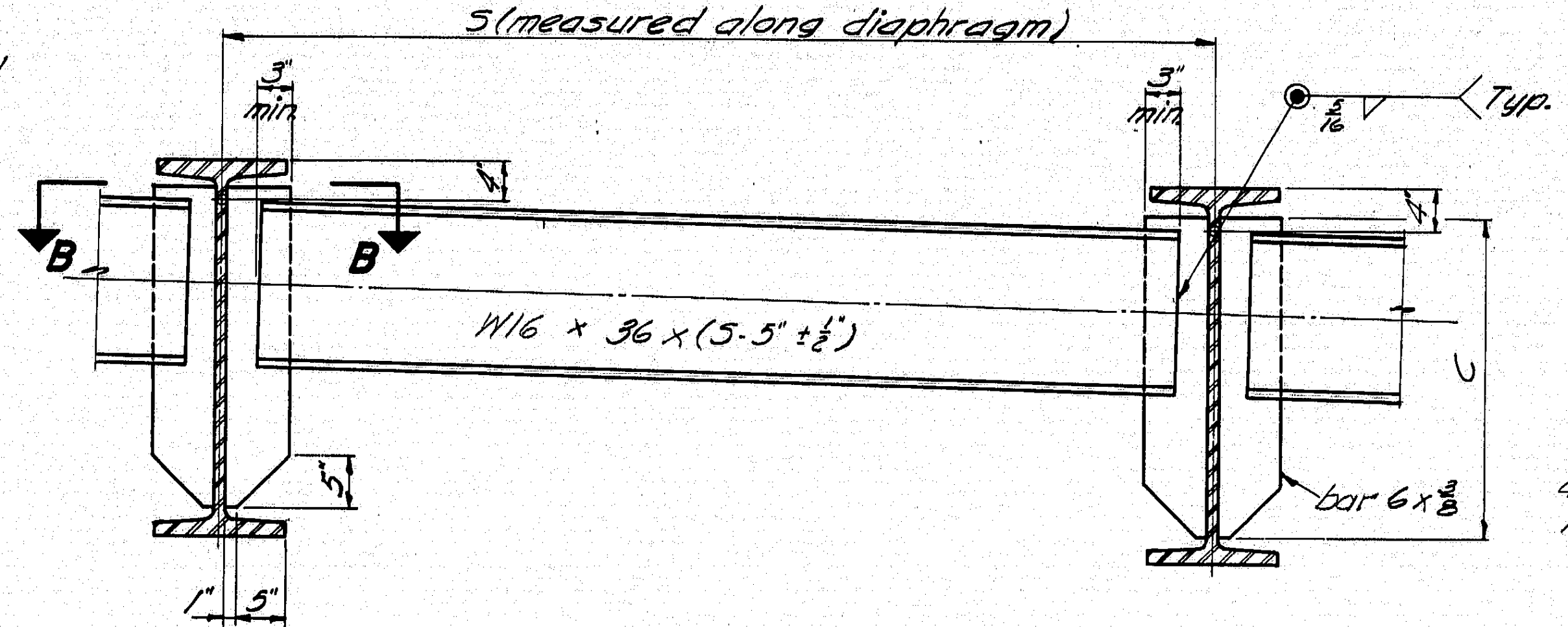

N V Typ.
Skew Angle
bar 6 x $\frac{3}{8}$

SECTION A-A
Skew Angle 0° to 10°-00'


N V Typ.
Bevel bar (Typ.)
Skew Angle
bar 8 x $\frac{3}{8}$

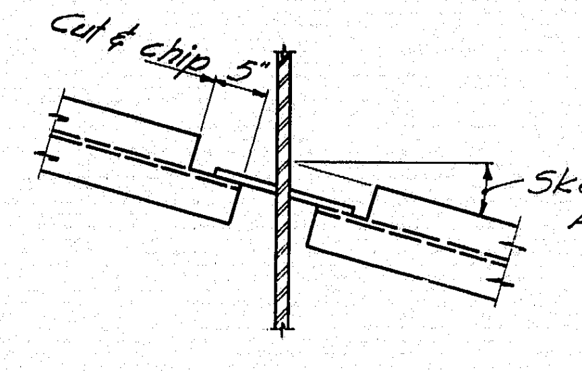
SECTION A-A
Skew Angle over 10°00' to 20°00'

FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM BARS		
BEAM	C	N
W27×84 to 114 incl.	1'-11"	¼"
W30×99 to 132 incl.	2'-2"	¼"
W33×118 to 152 incl.	2'-5"	¼"
W36×135 to 194 incl.	2'-7"	¼"
W36×230 to 300 incl.	2'-6"	$\frac{5}{16}$"

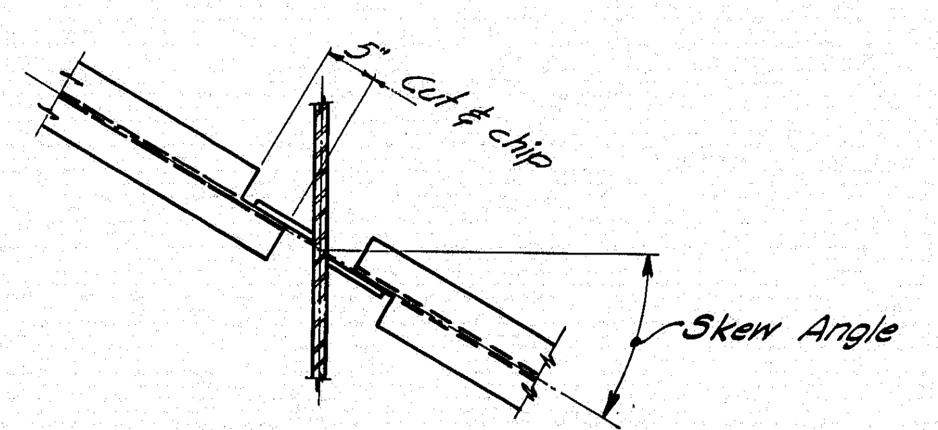

S (measured along diaphragm)
3" min.
B
B
W16 x 36 x (S-5 ½")
Typ.
C
bar 6 x $\frac{3}{8}$

TYPE B DIAPHRAGM

Welding 6x$\frac{3}{8}$ Bars to web same as for Type A Diaphragm.


Cut & chip
Skew Angle

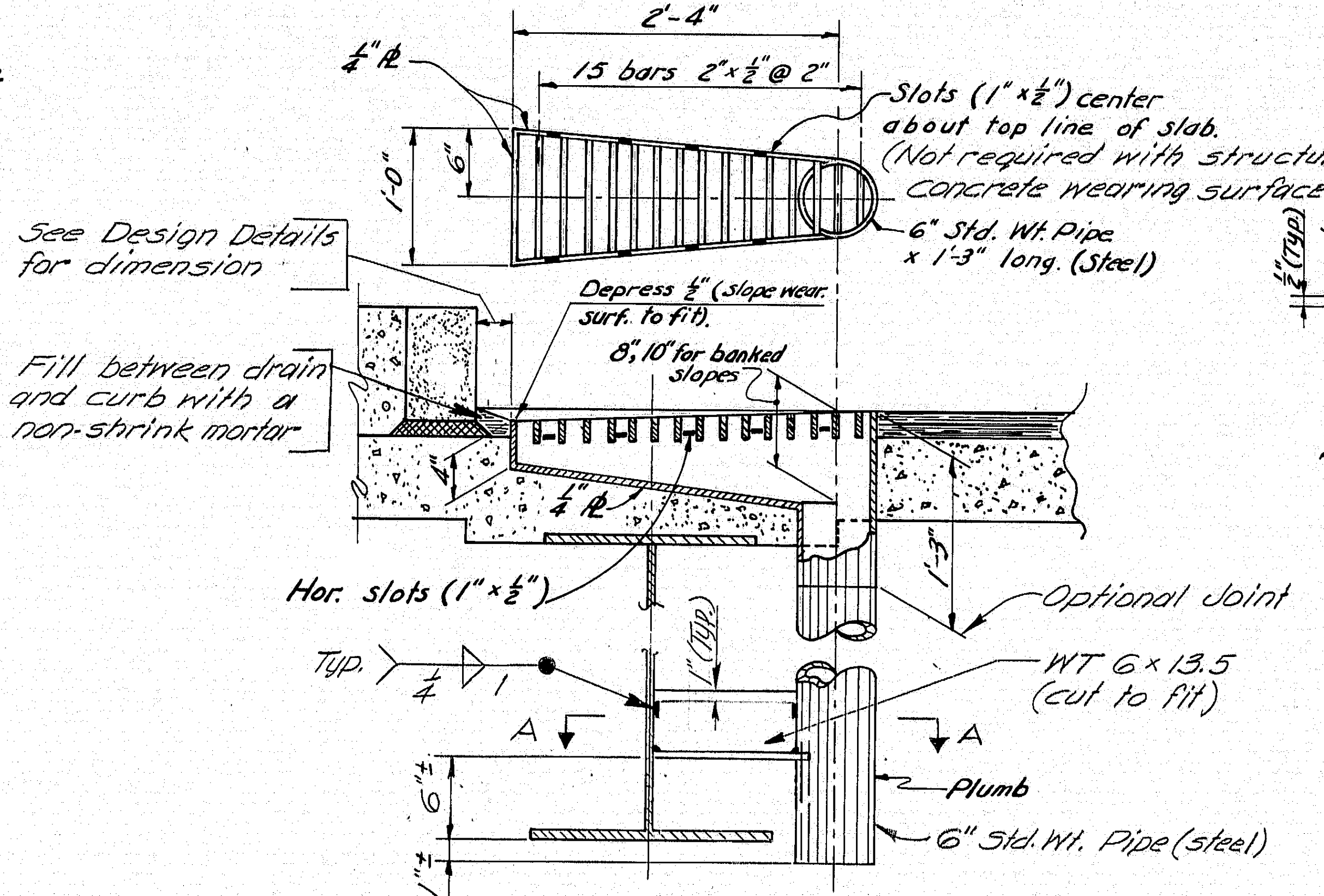
SECTION B-B
Skew Angle 0° to 10°00'


Cut & chip
Skew Angle

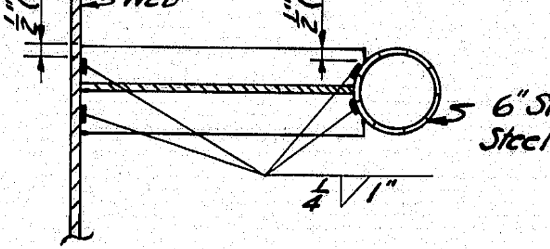
SECTION B-B
Skew Angle over 10°00'

NOTE
See design details for diaphragm type, location and skew.

DIAPHRAGMS

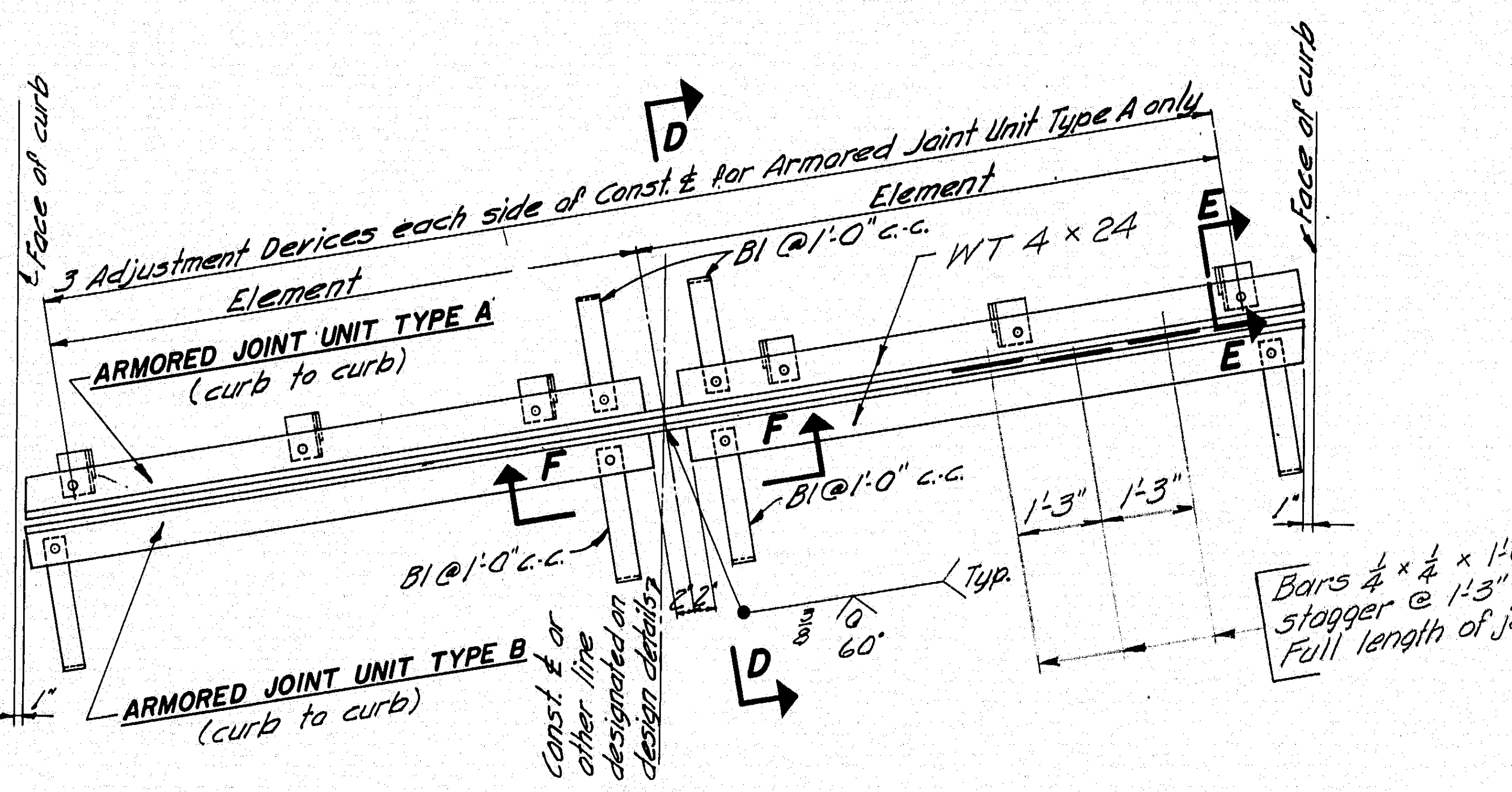

2'-4"
15 bars 2" x ½" @ 2"
Slots (1" x ½") center about top line of slab. (Not required with structural concrete wearing surface.)
6" Std. Wt. Pipe x 1'-3" long. (Steel)
See Design Details for dimension
Depress ½" (slope wear. surf. to fit)
8", 10" for banked slopes
Fill between drain and curb with a non-shrink mortar
Hor. slots (1" x ½")
Typ.
Optional Joint
WT 6 x 13.5 (cut to fit)
Plumb
6" Std. Wt. Pipe (steel)
A
A

DRAIN NO. 1

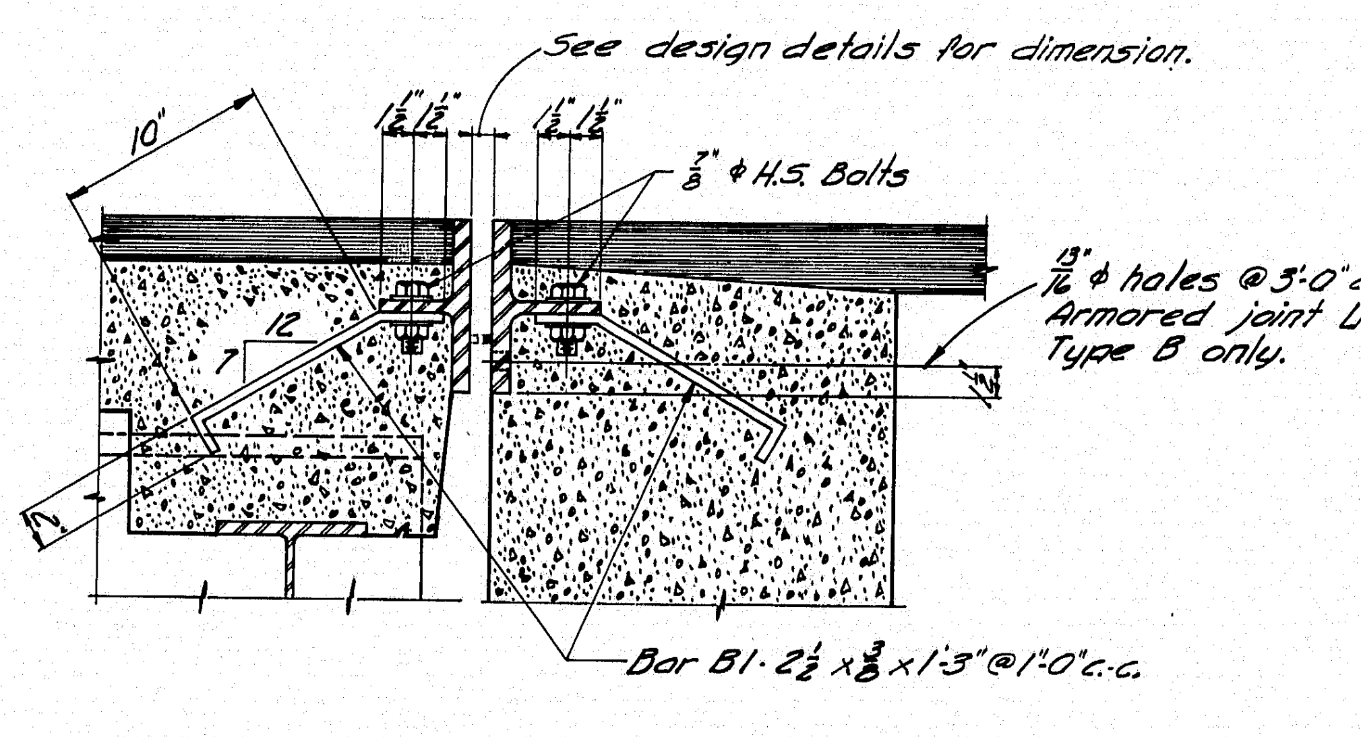

Web
6" Std. Wt. Steel Pipe

SECTION A-A

NOTE:
See design details for location and number of drains and beam size to which it is connected.


3 Adjustment Devices each side of Const. ℄ for Armored Joint Unit Type A only
Element
Element
ARMORED JOINT UNIT TYPE A' (curb to curb)
ARMORED JOINT UNIT TYPE B (curb to curb)
B1 @ 1'-0" c.c.
WT 4 x 24
℄ Face of curb
D
D
E
E
F
F
1'-3"
1'-3"
60°
Typ.
Const. ℄ or other line designated on design details
Bars ¼ x ¼ x 1'-0" stagger @ 1'-5" Full length of joint

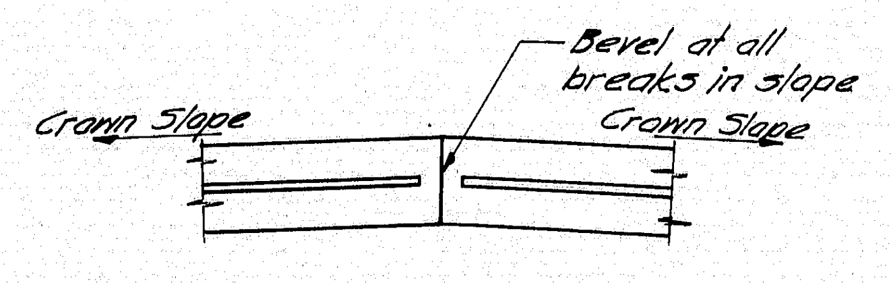
PLAN


See design details for dimension.
10"
$\frac{7}{8}$" ϕ H.S. Bolts
$\frac{15}{16}$" ϕ holes @ 5'-0" c.c. Armored joint Unit Type B only.
Bar B1 - 2½ x $\frac{3}{8}$ x 1'-3" @ 1'-0" c.c.

ARMORED JOINT UNIT TYPE A

ARMORED JOINT UNIT TYPE B

SECTION D-D

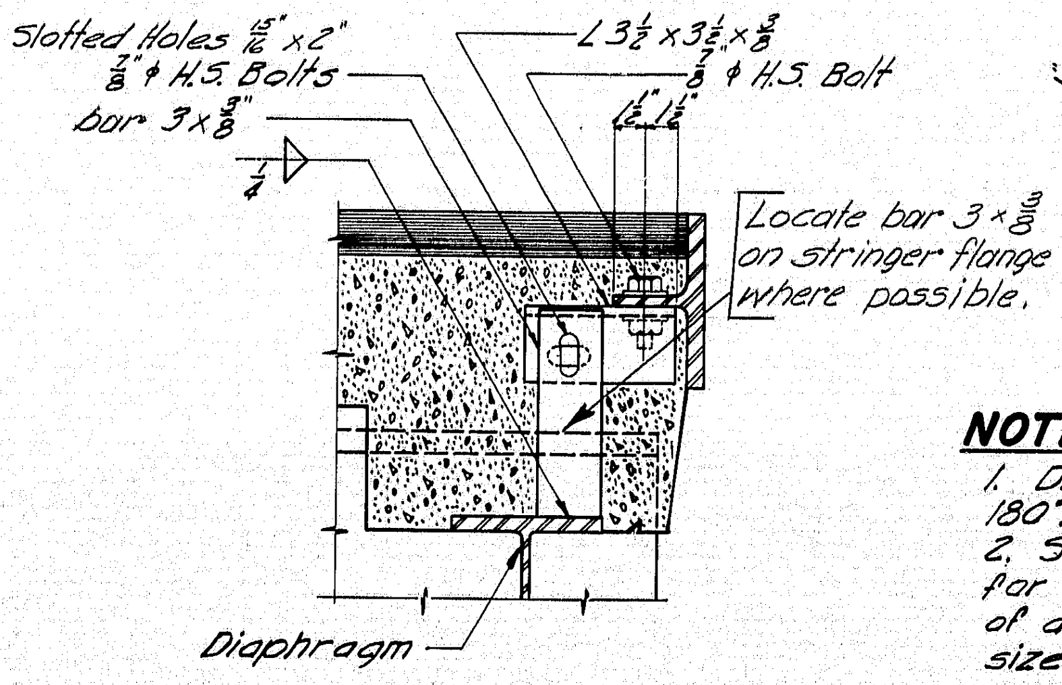

Bevel at all breaks in slope
Crown Slope
Crown Slope

SECTION F-F

Note: See design details for Constr. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

NOTE

1. Type A Armored Joint Units are intended to be used for attachment to superstructures. Type B Armored Joint Units are intended to be used for attachment to abutments. At armored joints over piers, two (2) Type A Armored Joint Units shall be used.
2. If more elements than the two shown in the "Plan" are required by the design details, there shall be three adjustment devices for each element for Armored Joint Unit Type A and the elements of both units shall be field welded together in the same manner as shown in the "Plan".
3. Armored Joints to be paid for as Structural Steel.

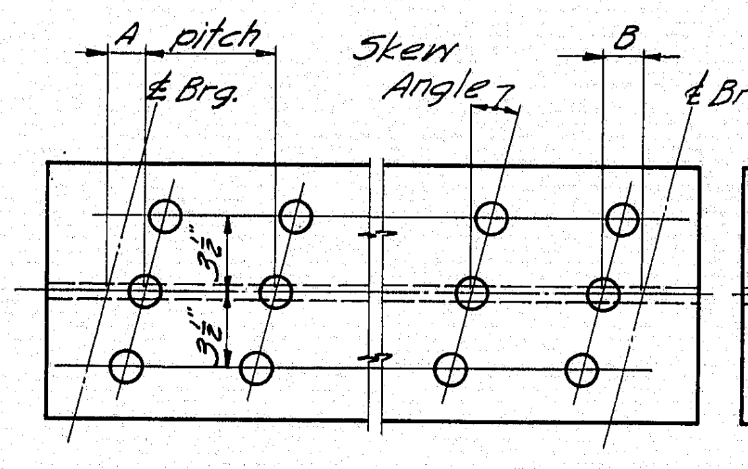

Slotted Holes $\frac{15}{16}$" x 2" $\frac{7}{8}$" ϕ H.S. Bolts
bar 3 x $\frac{3}{8}$
L 3½ x 3½ x $\frac{3}{8}$
$\frac{7}{8}$" ϕ H.S. Bolt
Locate bar 3 x $\frac{3}{8}$ on stringer flange where possible.
Diaphragm

SECTION E-E

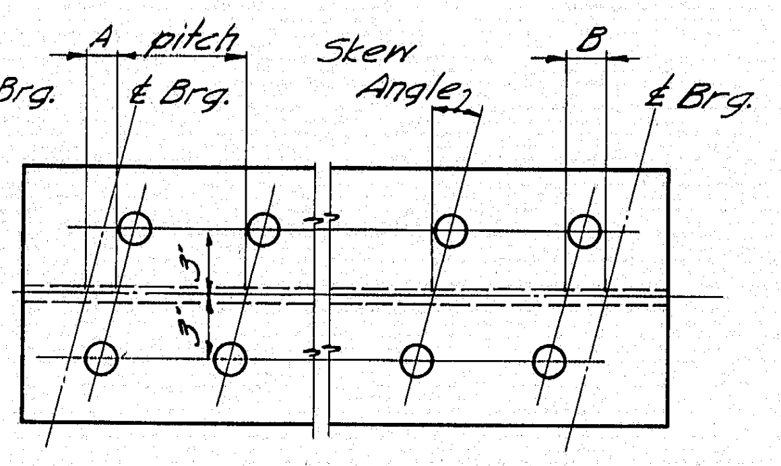
Showing Adjustment Device Armored Joint Unit Type A only - After Unit is in final position weld $\frac{3}{8}$ ℞ to angle with ¼" fillet

ARMORED JOINT

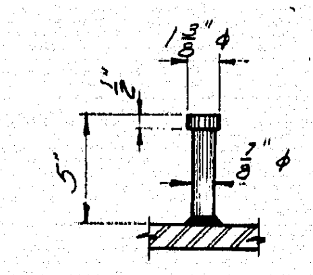
An armored joint consists of two armored joint units. See note 1.


A pitch
℄ Brg.
Skew Angle
B
℄ Brg.
3½"

TRIPLE STUDS


A pitch
℄ Brg.
Skew Angle
B
℄ Brg.
3"

DOUBLE STUDS

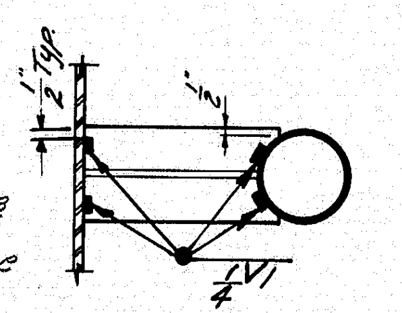


STUD DETAIL

NOTE

1. Studs shall be granular or solid flux filled and automatically end welded to top flange in the shop or field.
2. See the design details for Dimensions "A" & "B", stud pitch and skew angle for studs.

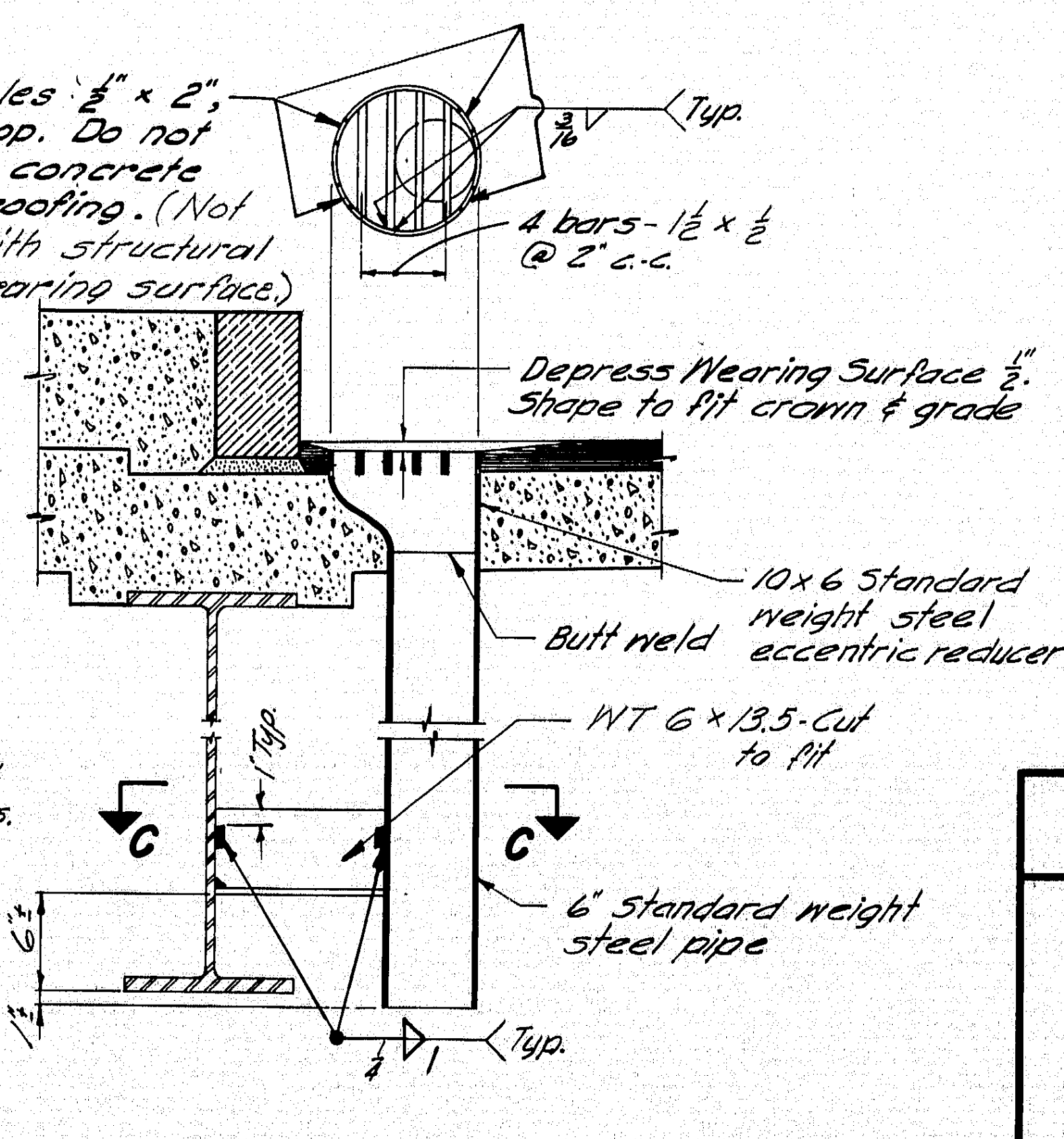
SHEAR CONNECTORS



SECTION C-C

NOTE

1. Drain may be rotated 180°. See design details.
2. See design details for location and number of drains and beam size to which it is connected.


Cut 4 holes ½" x 2", 1¼" from top. Do not cover with concrete or waterproofing. (Not required with structural concrete wearing surface.)
Typ.
4 bars - 1½ x ½ @ 2" c.c.
Depress Wearing Surface ½". Shape to fit crown & grade
10 x 6 Standard weight steel eccentric reducer
Butt weld
WT 6 x 13.5 - Cut to fit
C
C
6" Standard weight steel pipe
Typ.

DRAIN NO. 2

GENERAL NOTE

Use only those items called for on design details. In case of conflict between these Standard Details and the design details, the requirements of the design details shall be followed.

Drains to be incidental, see Section 502.20

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

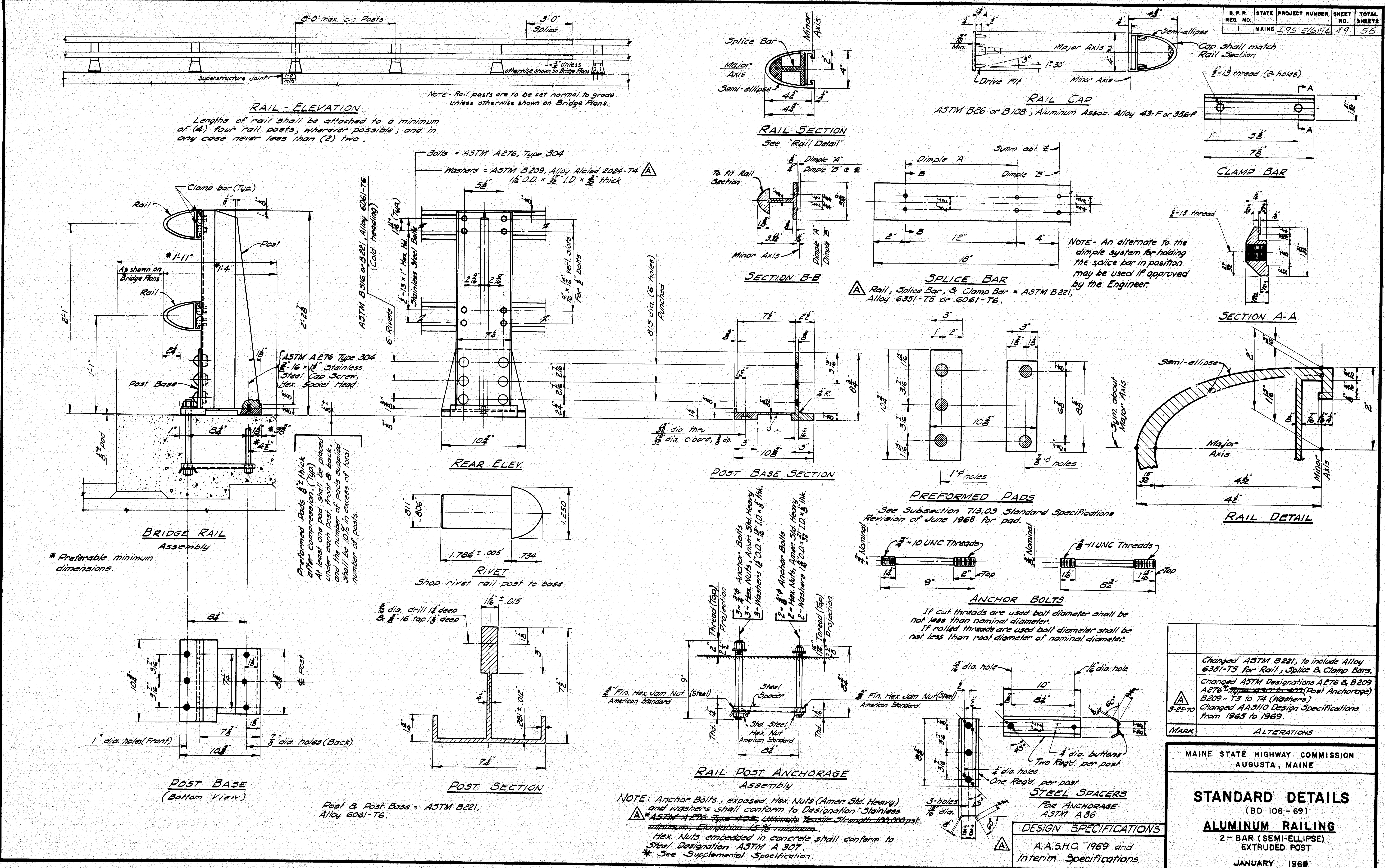
STANDARD DETAILS
(BD 104-71)
DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN

DECEMBER 1971

152-79

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	49	55


8'-0" max. c-c Posts
3'-0" Splice
Superstructure Joint
1'-0" min.
3/4" Unless otherwise shown on Bridge Plans
Splice Bar
Major Axis
Minor Axis
Semi-ellipse
4 1/2"
4 3/4"
2"
4"
1/4"
Drive Fit
Cap shall match Rail Section
3/16" Min.
3°
1°30'
1/2"-13 thread (2-holes)
5 3/8"
7 3/8"
1 21/32"
Clamp bar (Typ.)
Rail
Post
Post Base
*1'-11"
*1'-4"
As shown on Bridge Plans
2'-1"
2'-2 7/8"
1'-1"
2 1/4"
1/8"
1 1/2" pad
8 1/4"
*3 3/8"
*4 1/2"
ASTM A 276 Type 304 3/8"-16 × 1 1/2" Stainless Steel Cap Screw, Hex. Socket Head.
ASTM B316 or B221, Alloy 6061-T6 (Cold heading)
6-Rivets
1/2"-13 × 1" Hex. Hd. Stainless Steel Bolts
1 1/16" (Typ.)
9/16" × 13/16" vert. slots For 1/2" bolts
5 3/8"
2 9/16"
7 1/4"
10 3/4"
.813 dia. (6-holes) Punched
.811
.806
1.250
1.786" ± .005"
.734"
To fit Rail Section
Dimple "A"
Dimple "B" @ ℄
3 11/32"
Symm. abt. ℄
12"
2"
4"
18"
1/2"-13 thread
7 1/2"
2 1/2"
13/32" dia. thru
19/32" dia. c.bore, 3/8" dp.
3"
10 3/8"
1" ϕ holes
7/8" ϕ holes
Sym. about Major Axis
1/2" ~ 10 UNC Threads
5/8" ~ 11 UNC Threads
3/4" Nominal
5/8" Nominal
9"
8 3/4"
Top
5/16" dia. drill 1 1/4" deep & 3/8"-16 tap 1 1/8" deep
1 1/16" ± .015"
1" dia. holes (Front)
7/8" dia. holes (Back)
℄ Post
3~3/4"ϕ Anchor Bolts 3~Hex. Nuts, Amer. Std. Heavy 3~Washers 1 3/8" O.D. × 13/16" I.D. × 1/8" thk.
2~5/8"ϕ Anchor Bolts 2~Hex. Nuts, Amer. Std. Heavy 2~Washers 1 5/16" O.D. × 21/32" I.D. × 1/8" thk.
Thread (Top) Projection
Steel Spacer
3/4" Fin. Hex. Jam Nut (Steel) American Standard
5/8" Fin. Hex. Jam Nut (Steel) American Standard
Std. Steel Hex. Nut American Standard
Thd.
13/16" dia. hole
11/16" dia. hole
10"
1/4" dia. buttons Two Req'd. per post
1/4" dia. holes One Req'd. per post
3-holes 13/16" dia.
45°
60°

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.

RAIL SECTION

See "Rail Detail"

RAIL CAP

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

CLAMP BAR

Bolts = ASTM A276, Type 304

Washers = ASTM B209, Alloy Alclad 2024-T4 A
1 1/16" O.D. × 17/32" I.D. × 3/32" thick

SECTION B-B

SPLICE BAR

A Rail, Splice Bar, & Clamp Bar = ASTM B221, Alloy 6351-T5 or 6061-T6.

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

SECTION A-A

BRIDGE RAIL

Assembly

* Preferable minimum dimensions.

Preformed Pads 1/2" thick after compression. (Typ.) At least one pad shall be placed under each post, front & back, and the number of pads supplied shall be 10% in excess of total number of posts.

REAR ELEV.

RIVET

Shop rivet rail post to base

POST BASE SECTION

PREFORMED PADS

RAIL DETAIL

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.

POST BASE

(Bottom View)

POST SECTION

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

RAIL POST ANCHORAGE

Assembly

NOTE: Anchor Bolts, exposed Hex. Nuts (Amer. Std. Heavy) and washers shall conform to Designation "Stainless A *~~ASTM A276 Type 403, Ultimate Tensile Strength 100,000 psi minimum, Elongation 15% minimum~~.
Hex. Nuts embedded in concrete shall conform to Steel Designation ASTM A 307.
* See Supplemental Specification.

STEEL SPACERS

FOR ANCHORAGE
ASTM A36

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

MARK	ALTERATIONS
	Changed ASTM B221, to include Alloy 6351-T5 for Rail, Splice & Clamp Bars.
A 3-25-70	Changed ASTM Designations A276 & B209 A276* ~~Type 430 to 403~~ (Post Anchorage) B209 ~ T3 to T4 (Washers) Changed AASHO Design Specifications from 1965 to 1969.

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

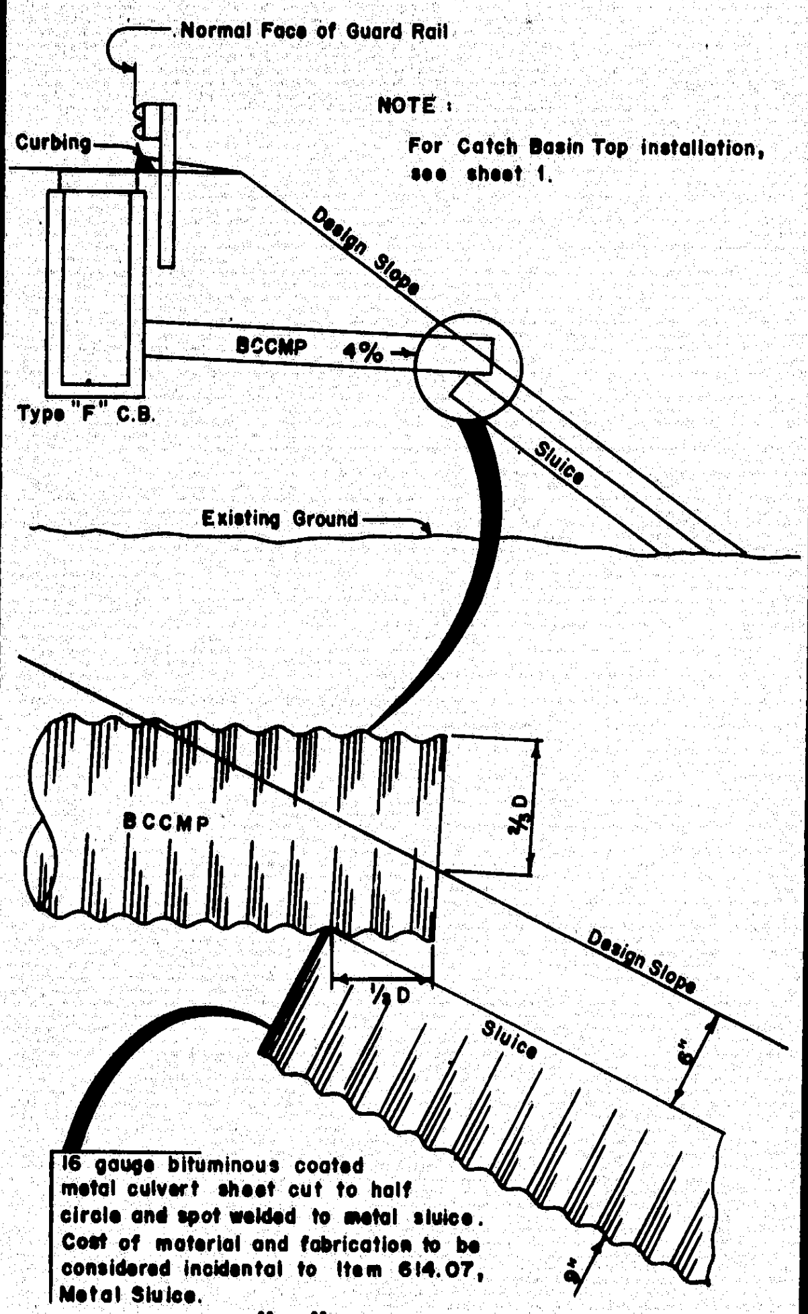
STANDARD DETAILS
(BD 106 - 69)
ALUMINUM RAILING
2 - BAR (SEMI-ELLIPSE)
EXTRUDED POST

JANUARY 1969

152-80

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6) 94	50	55


Normal Face of Guard Rail
Curbing
Design Slope
BCCMP 4%
Type "F" C.B.
Sluice
Existing Ground
BCCMP
⅔ D
⅓ D
Design Slope
Sluice
6"
9"

NOTE:
For Catch Basin Top installation, see sheet 1.

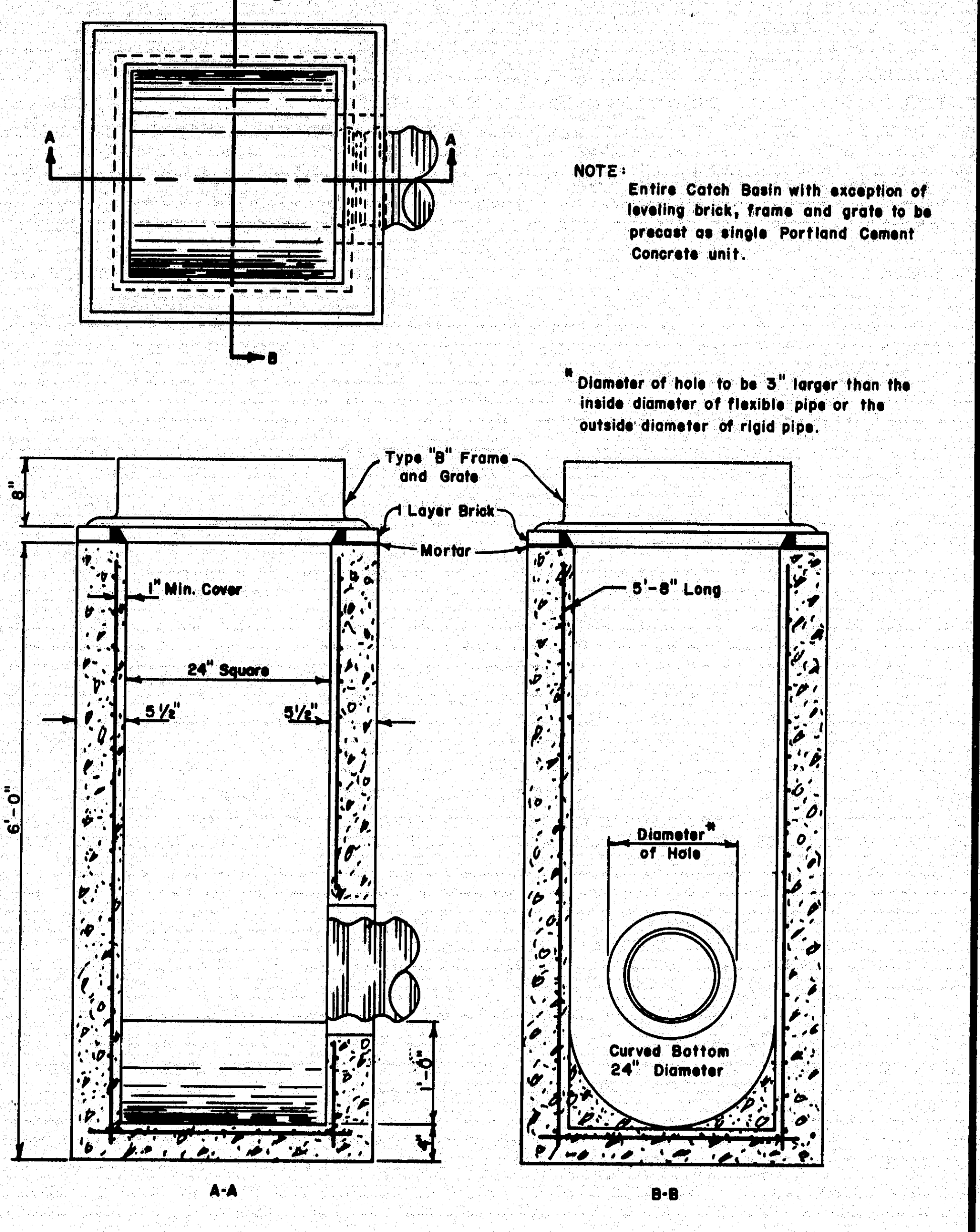
16 gauge bituminous coated metal culvert sheet cut to half circle and spot welded to metal sluice. Cost of material and fabrication to be considered incidental to item 614.07, Metal Sluice.

TYPE "F" CATCH BASIN WITH OUTLET PIPE

(SLUICE OPTIONAL)

(SEE SHEET NO. 2 FOR STANDARD SLUICE DRAWING)

3-A

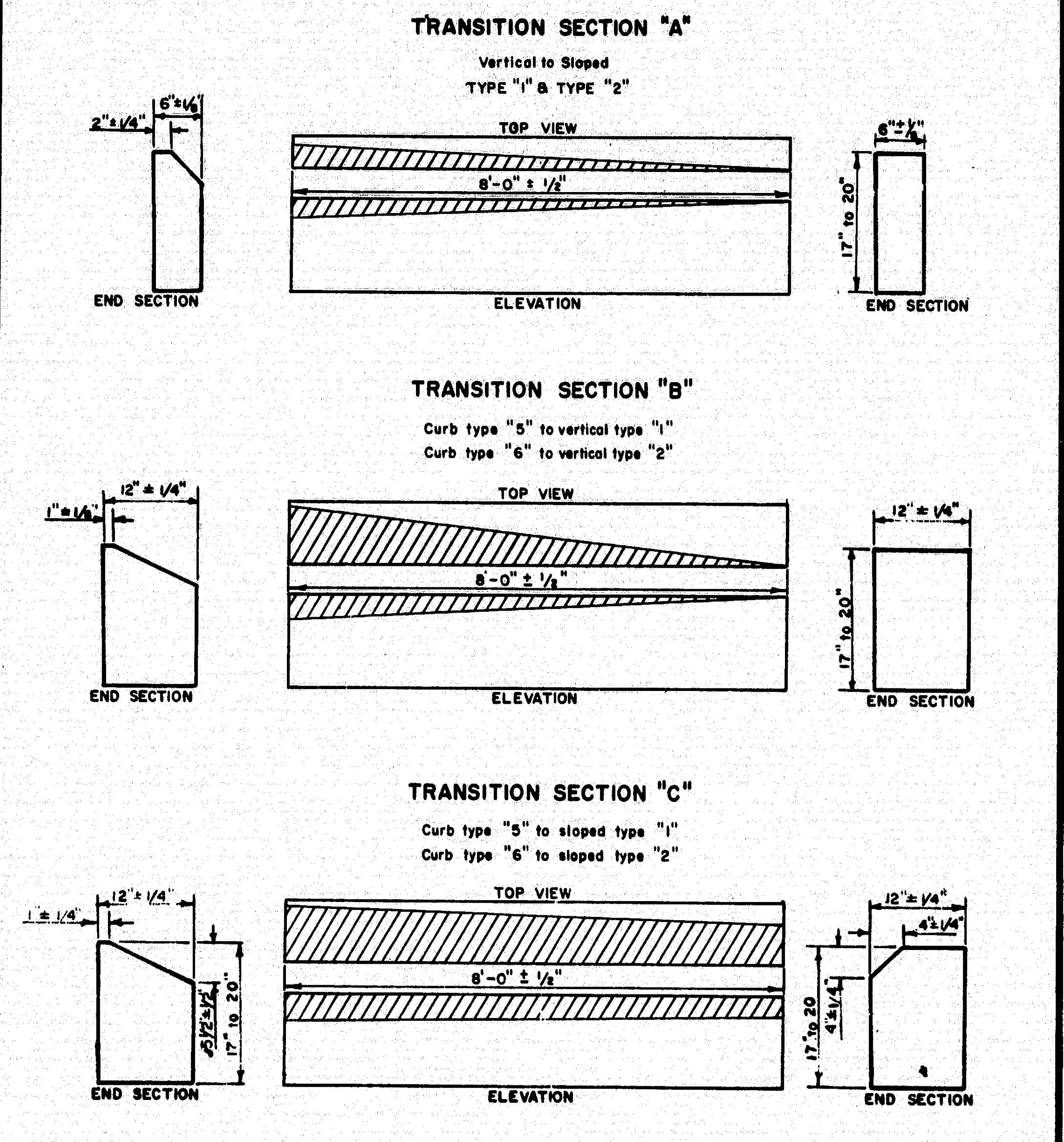

B
A
A
B
Type "B" Frame and Grate
1 Layer Brick
Mortar
8"
1" Min. Cover
24" Square
5½"
5½"
6'-0"
5'-8" Long
Diameter* of Hole
Curved Bottom 24" Diameter
1'-0"
A-A
B-B

NOTE:
Entire Catch Basin with exception of leveling brick, frame and grate to be precast as single Portland Cement Concrete unit.

* Diameter of hole to be 3" larger than the inside diameter of flexible pipe or the outside diameter of rigid pipe.

CATCH BASIN TYPE "F"

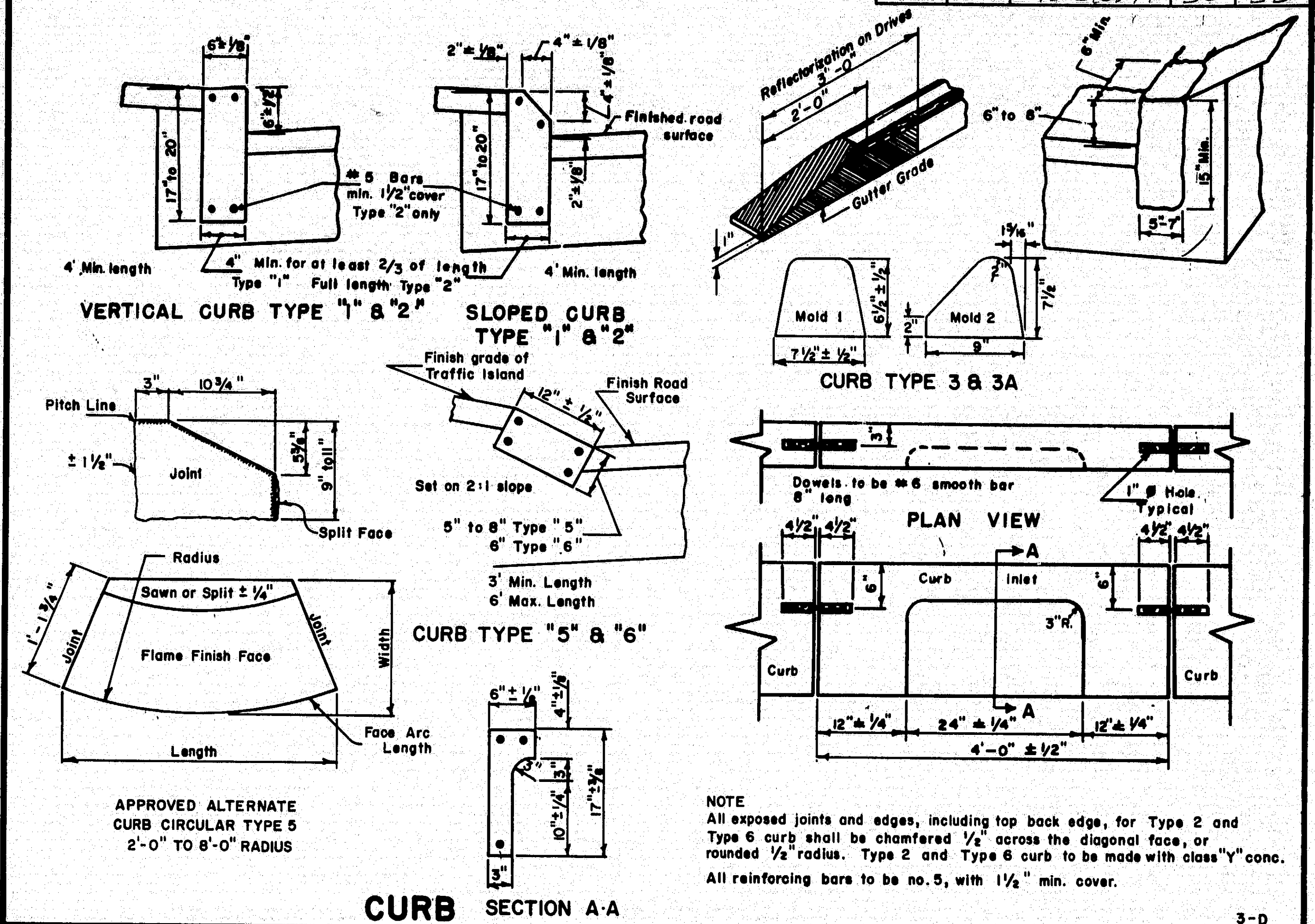
3-B


TRANSITION SECTION "A"
Vertical to Sloped
TYPE "1" & TYPE "2"
2" ± 1/4"
6" ± 1/8"
TOP VIEW
8'-0" ± 1/2"
6" ± 1/8"
17" to 20"
END SECTION
ELEVATION
END SECTION
TRANSITION SECTION "B"
Curb type "5" to vertical type "1"
Curb type "6" to vertical type "2"
1" ± 1/8"
12" ± 1/4"
TOP VIEW
8'-0" ± 1/2"
12" ± 1/4"
17" to 20"
END SECTION
ELEVATION
END SECTION
TRANSITION SECTION "C"
Curb type "5" to sloped type "1"
Curb type "6" to sloped type "2"
1" ± 1/4"
12" ± 1/4"
5½" ± ½"
17" to 20"
TOP VIEW
8'-0" ± 1/2"
12" ± 1/4"
4" ± 1/4"
4" ± 1/4"
17" to 20
END SECTION
ELEVATION
END SECTION

CURB TRANSITION

NOTE - TYPE 2 CURB
Precast concrete curb to be made with class "Y" concrete.
All reinf. bars to be # 5, 1½" min. cover.

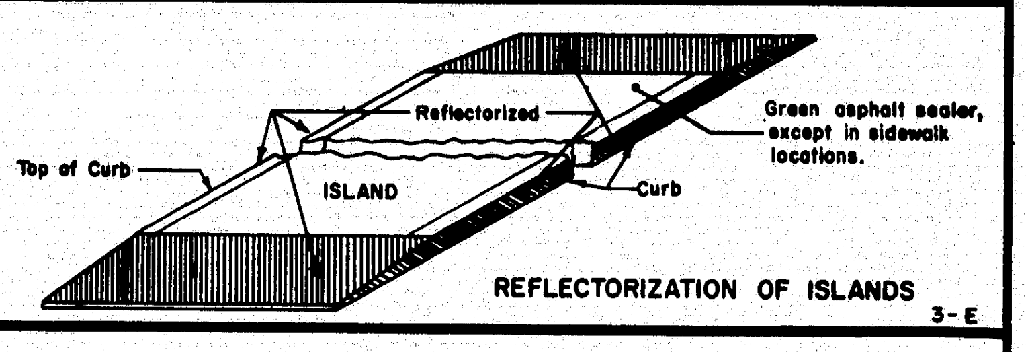
3-C


6" ± 1/8"
6" ± 1/2"
17" to 20"
# 5 Bars min. 1½" cover Type "2" only
4' Min. length
4" Min. for at least 2/3 of length Type "1" Full length Type "2"
2" ± 1/8"
4" ± 1/8"
4" ± 1/8"
Finished road surface
17" to 20"
2" ± 1/8"
4' Min. length
VERTICAL CURB TYPE "1" & "2"
SLOPED CURB TYPE "1" & "2"
Reflectorization on Drives
3'-0"
2'-0"
Gutter Grade
1"
6" Min.
6" to 8"
15" Min.
5"-7"
Mold 1
6½" ± ½
7½" ± ½"
1 5/16"
2"
Mold 2
2"
9"
7½
CURB TYPE 3 & 3A
Pitch Line
3"
10 3/4"
± 1½"
Joint
5 3/8"
9" toll
Split Face
Finish grade of Traffic Island
12" ± ½"
Finish Road Surface
Set on 2:1 slope
5" to 8" Type "5"
6" Type "6"
3' Min. Length
6' Max. Length
CURB TYPE "5" & "6"
Radius
Sawn or Split ± 1/4"
1'-1 3/4"
Joint
Flame Finish Face
Joint
Width
Face Arc Length
Length
APPROVED ALTERNATE CURB CIRCULAR TYPE 5 2'-0" TO 8'-0" RADIUS
6" ± 1/4"
4" ± 1/8"
3"
3"
10" ± 1/4"
17" ± 3/8"
3"
SECTION A-A
3"
Dowels to be # 6 smooth bar 8" long
1" ø Hole Typical
PLAN VIEW
4½"
4½"
A
Curb
Inlet
6"
6"
3"R.
Curb
Curb
A
12" ± 1/4"
24" ± 1/4"
12" ± 1/4"
4'-0" ± 1/2"

NOTE
All exposed joints and edges, including top back edge, for Type 2 and Type 6 curb shall be chamfered ½" across the diagonal face, or rounded ½" radius. Type 2 and Type 6 curb to be made with class "Y" conc.
All reinforcing bars to be no. 5, with 1½" min. cover.

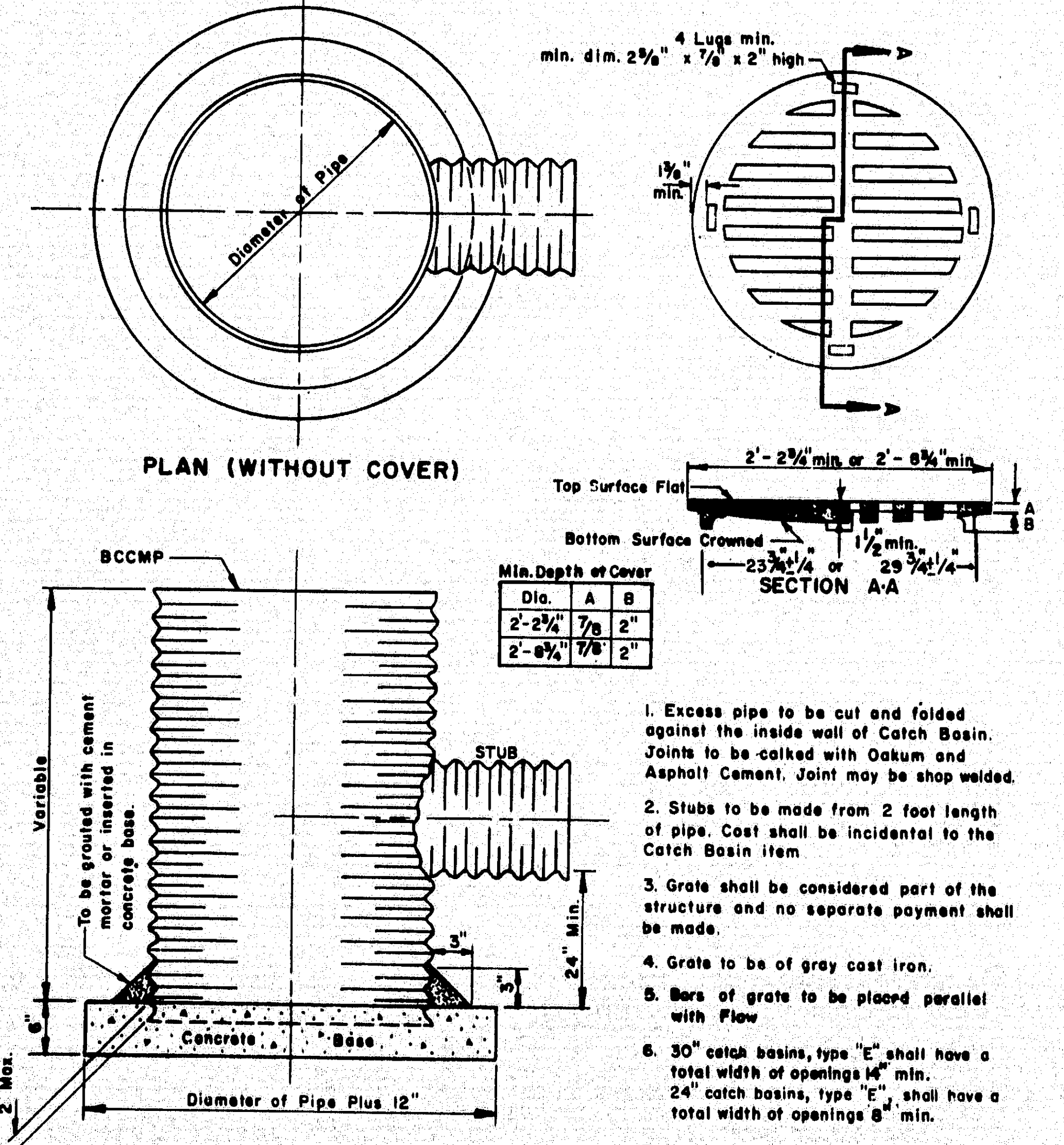
CURB

3-D


Reflectorized
Green asphalt sealer, except in sidewalk locations.
Top of Curb
ISLAND
Curb

REFLECTORIZATION OF ISLANDS

3-E


Diameter of Pipe
4 Lugs min.
min. dim. 2⅝" x ⅞" x 2" high
1⅝" min.
PLAN (WITHOUT COVER)
Top Surface Flat
Bottom Surface Crowned
2'-2¾" min. or 2'-8¾" min.
1½" min.
23¾" ± 1/4" or 29¾" ± 1/4"
SECTION A-A
A
B
BCCMP
Variable
To be grouted with cement mortar or inserted in concrete base.
STUB
3"
3"
24" Min.
6"
2" Max.
Concrete
Base
Diameter of Pipe Plus 12"
ELEVATION

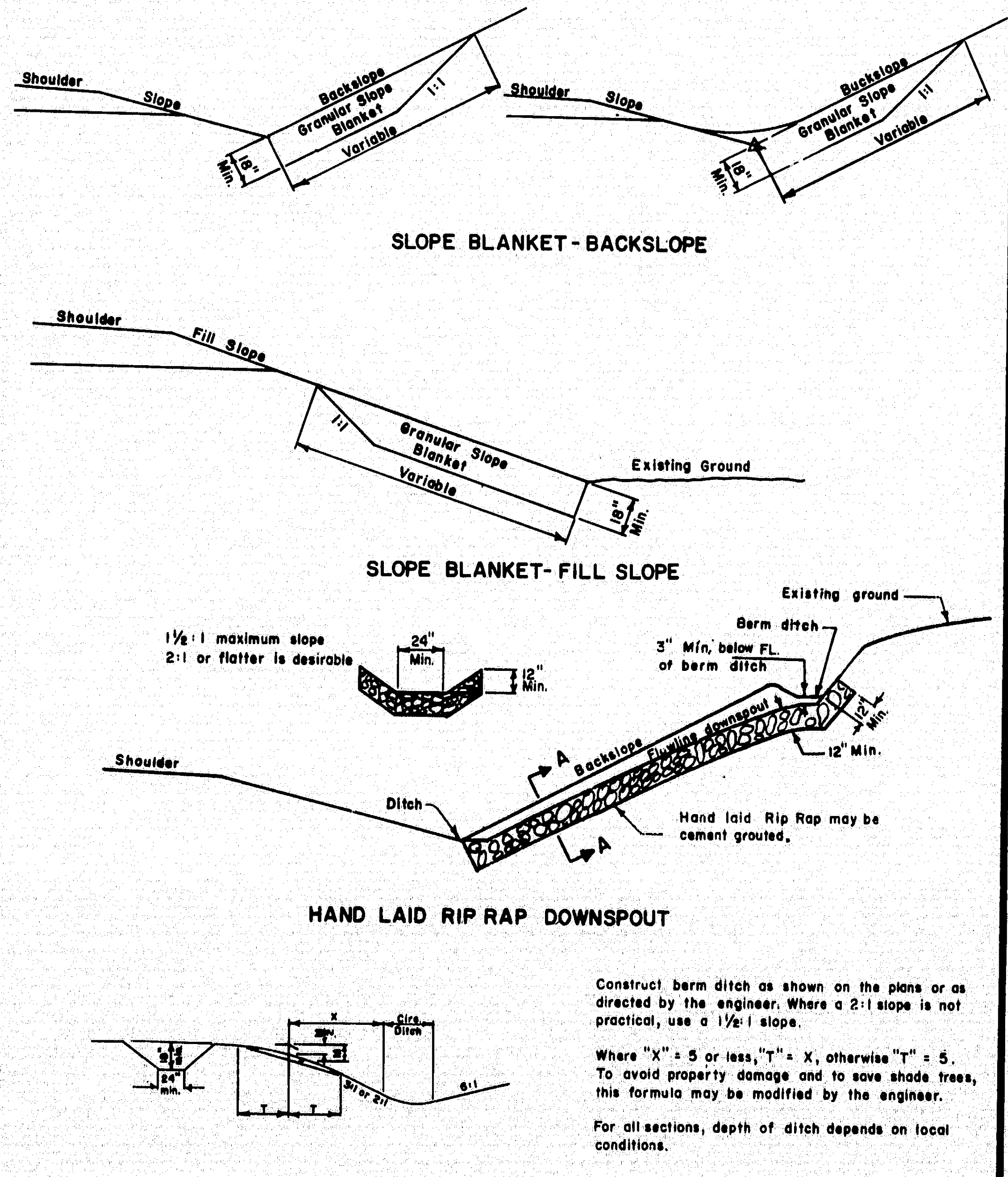
Min. Depth of Cover

Dia.	A	B
2'-2¾"	7/8	2"
2'-8¾"	7/8	2"

1. Excess pipe to be cut and folded against the inside wall of Catch Basin. Joints to be calked with Oakum and Asphalt Cement. Joint may be shop welded.
2. Stubs to be made from 2 foot length of pipe. Cost shall be incidental to the Catch Basin item
3. Grate shall be considered part of the structure and no separate payment shall be made.
4. Grate to be of gray cast iron.
5. Bars of grate to be placed parallel with Flow
6. 30" catch basins, type "E" shall have a total width of openings 14" min.
24" catch basins, type "E", shall have a total width of openings 8" min.
7. Corrugated metal pipe shall be 14 gauge and bituminous coated.

CATCH BASIN TYPE "E"

3-F


Shoulder
Slope
Backslope
Granular Slope Blanket
Variable
1:1
18" Min.
Shoulder
Slope
Backslope
Granular Slope Blanket
Variable
1:1
18" Min.
SLOPE BLANKET - BACKSLOPE
Shoulder
Fill Slope
1:1
Granular Slope Blanket
Variable
Existing Ground
18" Min.
SLOPE BLANKET - FILL SLOPE
1½:1 maximum slope
2:1 or flatter is desirable
24" Min.
12" Min.
Existing ground
Berm ditch
3" Min. below FL. of berm ditch
12" Min.
12" Min.
Shoulder
A
Backslope
Flowline downspout
Ditch
A
Hand laid Rip Rap may be cement grouted.
HAND LAID RIP RAP DOWNSPOUT
X
Circ. Ditch
24" min.
3:1 or 2:1
6:1
T
T

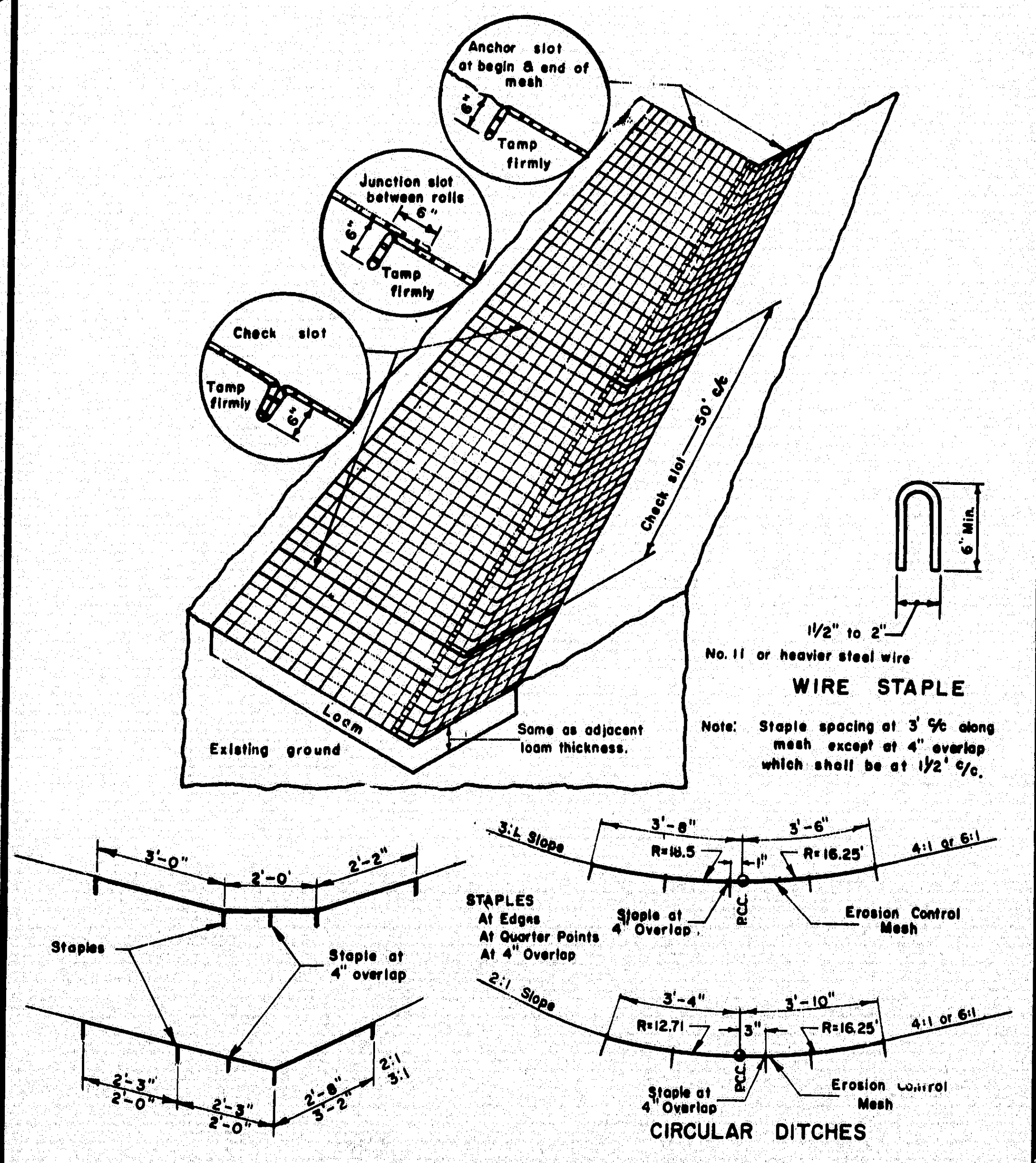
BERM DITCH

Construct berm ditch as shown on the plans or as directed by the engineer. Where a 2:1 slope is not practical, use a 1½:1 slope.

Where "X" = 5 or less, "T" = X, otherwise "T" = 5. To avoid property damage and to save shade trees, this formula may be modified by the engineer.

For all sections, depth of ditch depends on local conditions.

3-G


Anchor slot at begin & end of mesh
6"
Tamp firmly
Junction slot between rolls
6"
Tamp firmly
Check slot
Tamp firmly
6"
Check slot
50' c/c
Loam
Existing ground
Same as adjacent loam thickness.
6" Min.
1½" to 2"
No. 11 or heavier steel wire
WIRE STAPLE
3'-0"
2'-0"
2'-2"
Staples
Staple at 4" overlap
2'-3"
2'-0"
2'-3"
2'-0"
2'-8"
3'-2"
2:1
3:1
3:1 Slope
3'-8"
3'-6"
R=18.5
1"
R=16.25'
4:1 or 6:1
P.C.C.
Staple at 4" Overlap
Erosion Control Mesh
2:1 Slope
3'-4"
3'-10"
R=12.71
3"
R=16.25'
4:1 or 6:1
P.C.C.
Staple at 4" Overlap
Erosion Control Mesh
CIRCULAR DITCHES

Note: Staple spacing at 3' c/c along mesh except at 4" overlap which shall be at 1½' c/c.

STAPLES
At Edges
At Quarter Points
At 4" Overlap

EROSION CONTROL MESH

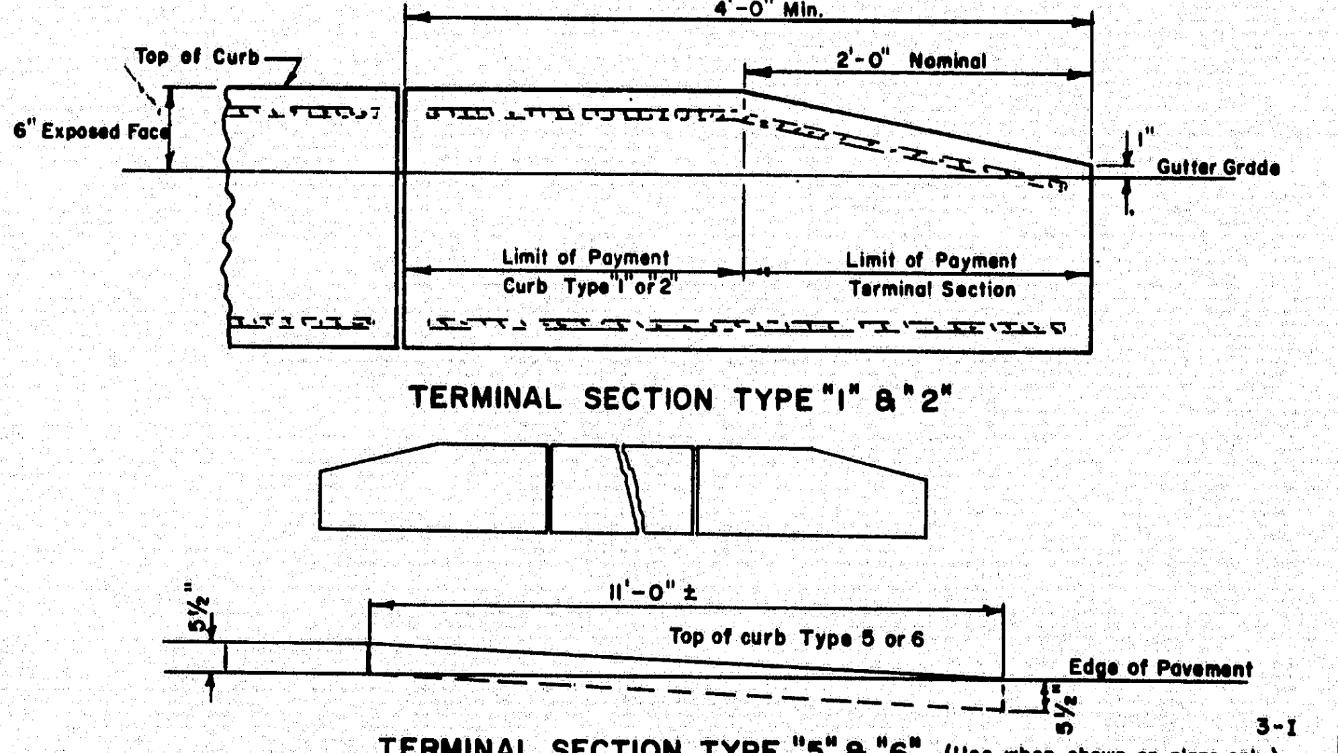
3-H

TYPE	RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
1 & 2	0' To 60' Incl.	4' Min.	Circular	Arc To Fit Curve
	Over 60' To 160'	4' To 6'	Straight	Straight Pieces
5 & 6	0' To 8' Incl.	2' Min.	Circular	To Fit Curve
	Over 8' To 30' Incl.	12" Min. Chord	Circular	Straight Pieces, Radial Ends
	Over 30' And Under 160'	2' To 3'	Straight	Straight Pieces
	160' And Over	3' To 6'	Straight	Straight Pieces

CURB TYPES (1 & 2), (5 & 6) ON CURVES

3-J

TERMINAL CURB SECTION


4'-0" Min.
2'-0" Nominal
Top of Curb
6" Exposed Face
1"
Gutter Grade
Limit of Payment Curb Type 1 or 2
Limit of Payment Terminal Section
TERMINAL SECTION TYPE "1" & "2"
11'-0" ±
5½"
Top of curb Type 5 or 6
Edge of Pavement
5½"

TERMINAL SECTION TYPE "5" & "6" (Use when shown on plans only)

3-I

REVISIONS	
Plate 3-G	12-23-69
Plate 3-F	5-27-70
Plate 3 J	7-15-70
PLATE 3G	3-4-71

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

CURB, DITCHES AND
SLOPES, AND CATCH BASINS
TYPE "E"

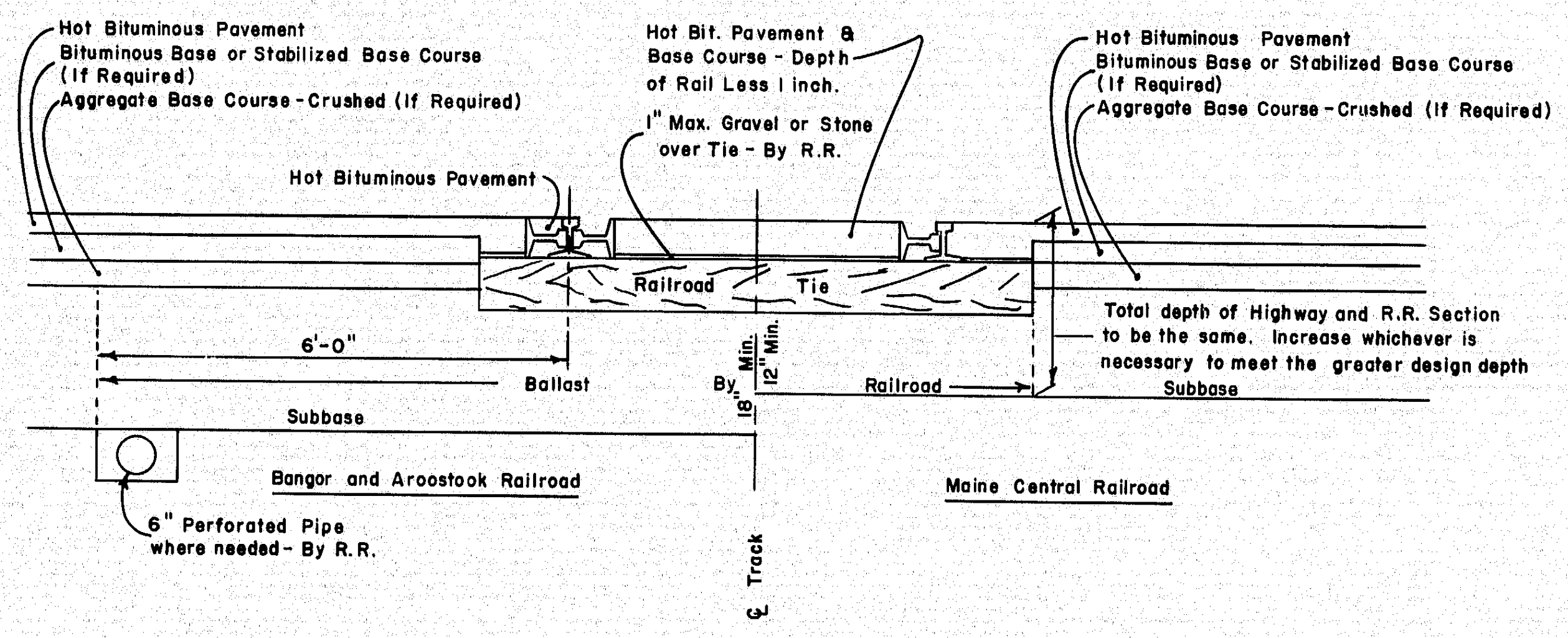
AUG. 1969

3

152-81

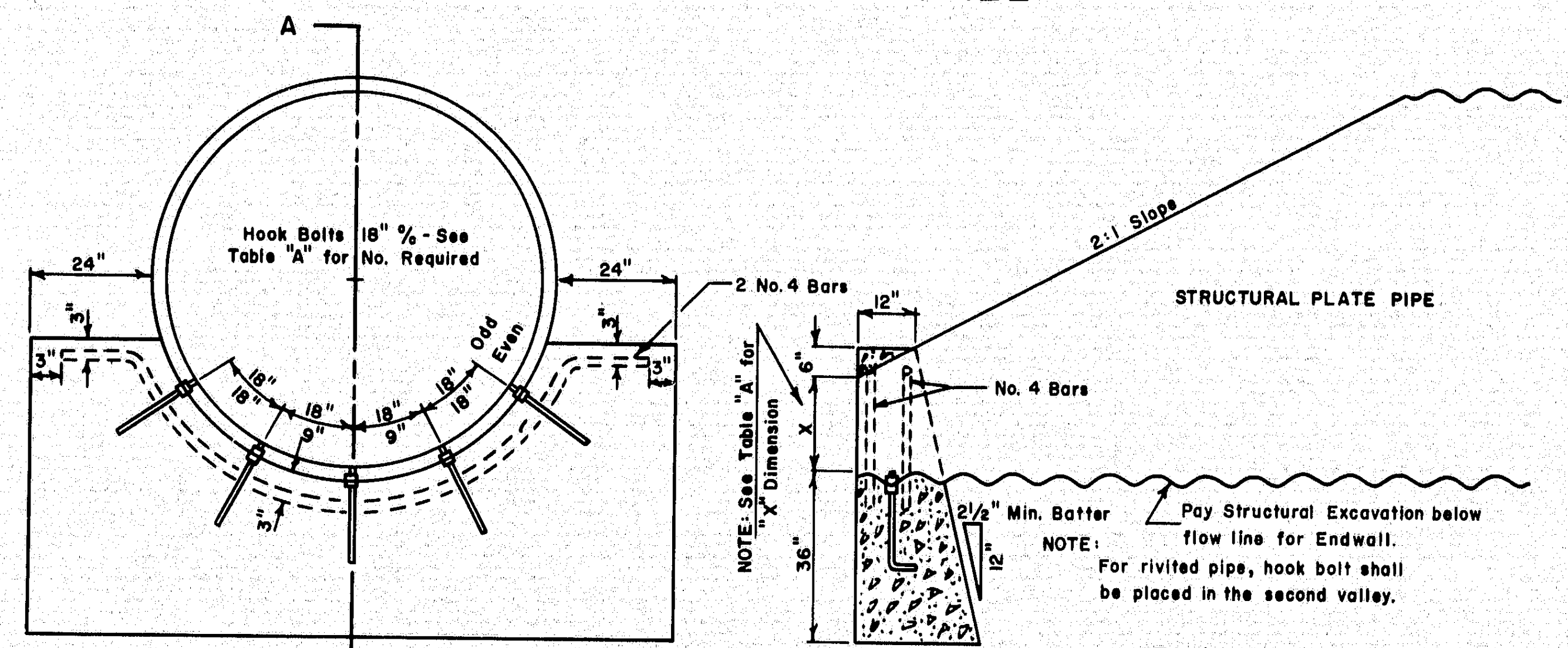
NOTES:

1. Creosote ties through crossing.
2. Rail joints in crossing to be welded
3. Stone Ballast to extend along track beyond each side of the crossing approximately 40'-0". By Railroad.
4. Work to be done by Railroad
    - A. Placement of Ballast.
    - B. Placement of Ties and Rails.
    - C. Placement of 1" max. Gravel over Ties.


Hot Bituminous Pavement
Bituminous Base or Stabilized Base Course (If Required)
Aggregate Base Course - Crushed (If Required)
Hot Bituminous Pavement
Hot Bit. Pavement & Base Course - Depth of Rail Less 1 inch.
1" Max. Gravel or Stone over Tie - By R.R.
Hot Bituminous Pavement
Bituminous Base or Stabilized Base Course (If Required)
Aggregate Base Course - Crushed (If Required)
Railroad
Tie
6'-0"
Ballast
By
18" Min.
12" Min.
Railroad
Total depth of Highway and R.R. Section to be the same. Increase whichever is necessary to meet the greater design depth
Subbase
Subbase
Bangor and Aroostook Railroad
Maine Central Railroad
6" Perforated Pipe where needed - By R.R.
℄ Track

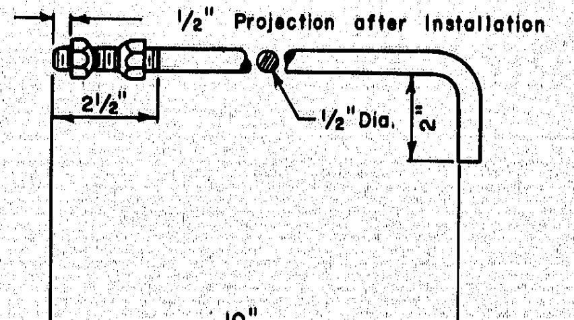
4-A

CONCRETE INLET ENDWALL

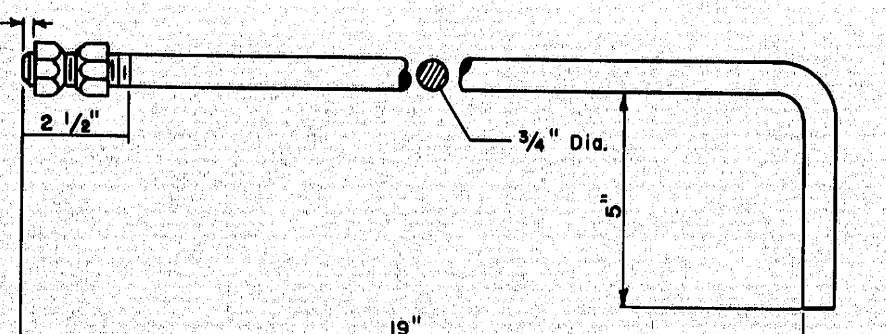

A
Hook Bolts 18" c/c - See Table "A" for No. Required
24"
24"
3"
3"
3"
3"
3"
18"
18"
18"
9"
18"
9"
18"
18"
Odd
Even
A
2 No. 4 Bars
12"
6"
X
36"
NOTE: See Table "A" for "X" Dimension
No. 4 Bars
2:1 Slope
STRUCTURAL PLATE PIPE
2½" Min. Batter
12"
Pay Structural Excavation below flow line for Endwall.

NOTE: For rivited pipe, hook bolt shall be placed in the second valley.

SECTION A-A


½" Projection after Installation
2½"
½" Dia.
2"
10"

HOOK BOLT FOR RIVETED PLATE PIPES



HOOK BOLT FOR STRUCTURAL PLATE PIPES

4-C

TABLE A

SIZE	NO. HOOK BOLTS REQUIRED	"X" DIMENSION
RIVETED PIPES		
60"	4	1.5
66"	4	1.5
72"	4	1.5
78"	5	1.5
84"	5	1.5
STRUCTURAL PLATE PIPE		
72"	4	1.5'
78"	5	1.625'
84"	5	1.75'
90"	5	1.875'
96"	6	2.0'
102"	6	2.125'
108"	6	2.25'
114"	7	2.375'
120"	7	2.5'
126"	7	2.625'
132"	8	2.75'
138"	8	2.875'
144"	9	3.0'
150"	9	3.125'
156"	9	3.25'
162"	10	3.375
168"	10	3.5'
174"	10	3.625'
180"	11	3.75'

NOTES

1. Culverts installed under 2:1 slopes shall have riprap laid on 2:1 slope and no ditch transitions.
2. Excavation required to grade culvert inlets and outlets as shown will not be paid separately, but will be incidental to the culvert.

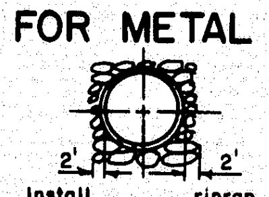
3. Hook bolts are required in metal pipes only and will be incidental to concrete item.
4. Concrete endwall shall be structural concrete class "A" and shall be paid for as item 502.32 structural concrete culvert endwalls.
5. All riprap as shown shall be hand laid.

4-B

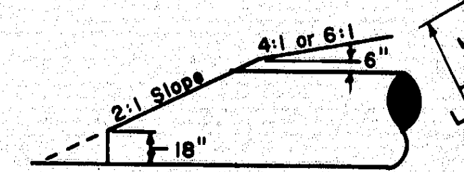
ROADWAY CULVERT END SLOPE TREATMENT
FOR METAL AND CONCRETE CULVERTS

TABLE B

Culvert Diameter	L 4:1 Slope	L 6:1 Slope
18"	9'-0"	13'-0"
21"	10'-0"	15'-0"
24"	11'-0"	16'-6"
30"	13'-0"	20'-0"
36"	15'-6"	23'-0"
42"	17'-6"	26'-0"
48"	19'-6"	29'-6"
54"	22'-0"	32'-6"
60"	24'-0"	36'-0"
66"	26'-0"	39'-6"
72"	28'-6"	42'-6"
84"	32'-6"	49'-0"



Install riprap 2' around diameter of pipe on 2:1 guard rail slopes when called for on the plans.

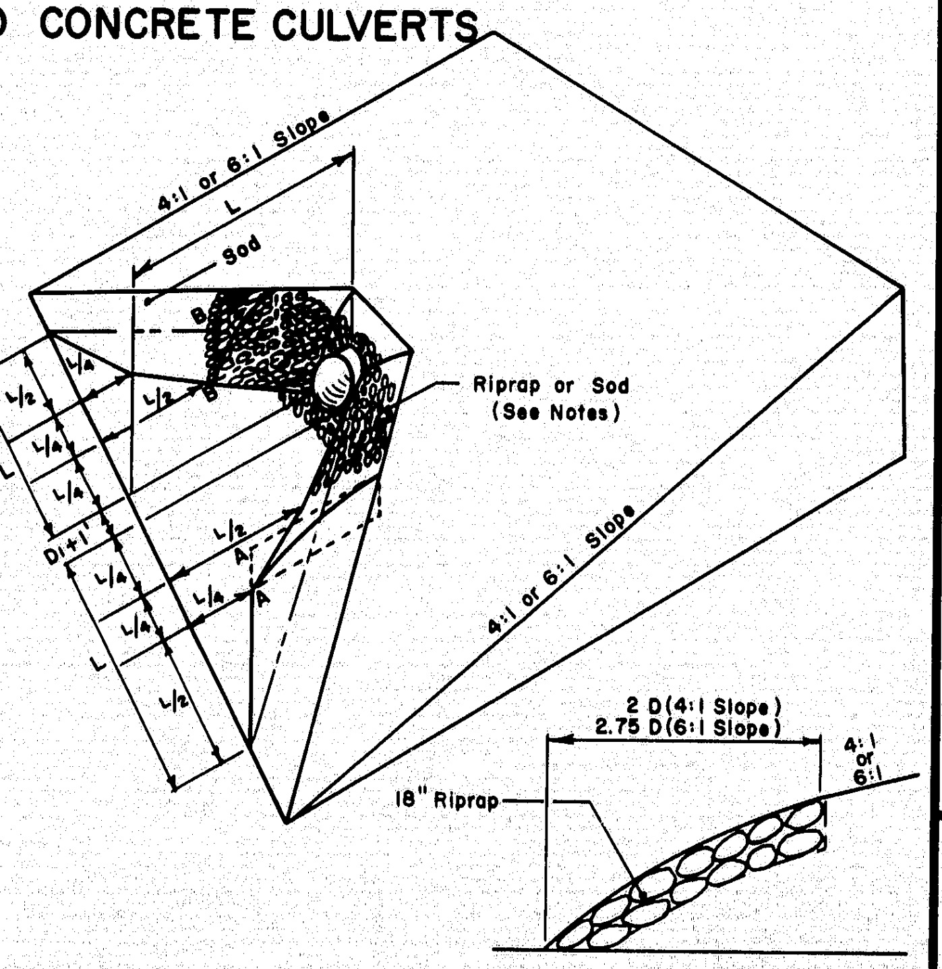

4:1 or 6:1
6"
2:1 Slope
18"

CULVERTS CUT ON A 2:1 SLOPE

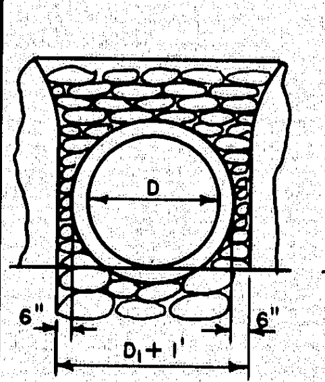
NOTES:

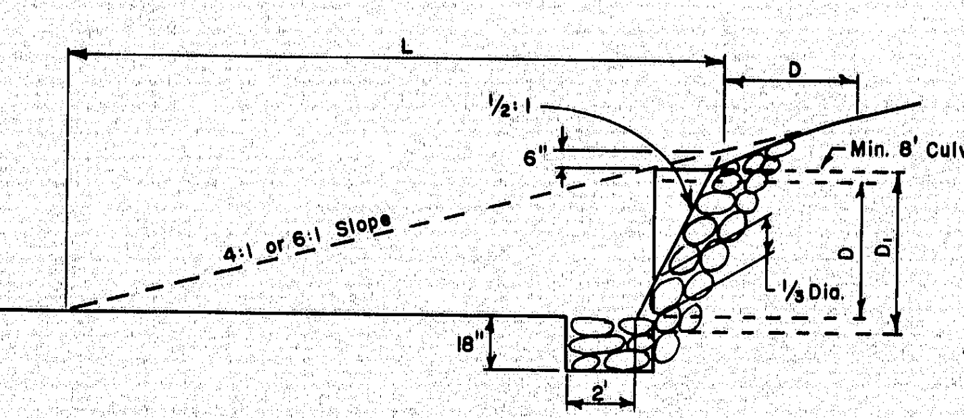
1. The dimensions shown are approximate and may be modified by the resident engineer.
2. Culverts installed under 2:1 slopes shall have riprap laid on 2:1 slope around the inlet and outlet; and no ditch transitions.

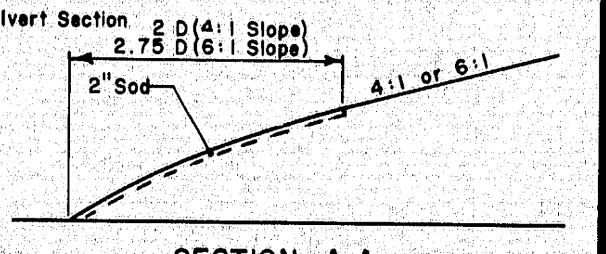
3. Riprap will be required on the portions of the culvert end treatment 1:1 and steeper. The remaining portion shall be sodded or loamed, seeded and hay mulched as directed by the engineer.
4. 24" diameter culverts and under may be sodded around ends of culvert.


4:1 or 6:1 Slope
L
Sod
B
B
L/4
L/2
L/2
L/4
L/4
L
D1+1'
L/2
A
A
L/4
L/4
L/4
L
L/2
Riprap or Sod (See Notes)
4:1 or 6:1 Slope
2 D (4:1 Slope)
2.75 D (6:1 Slope)
4:1 or 6:1
18" Riprap

SECTION B-B
90° to Roadway ℄




L
D
½:1
6"
4:1 or 6:1 Slope
Min. 8' Culvert Section
D
D1
⅓ Dia.
18"
2'

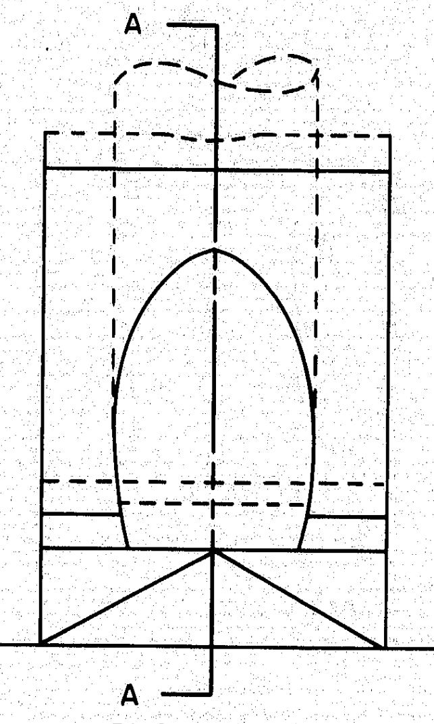

2 D (4:1 Slope)
2.75 D (6:1 Slope)
2" Sod
4:1 or 6:1

SECTION A-A
90° to Roadway ℄

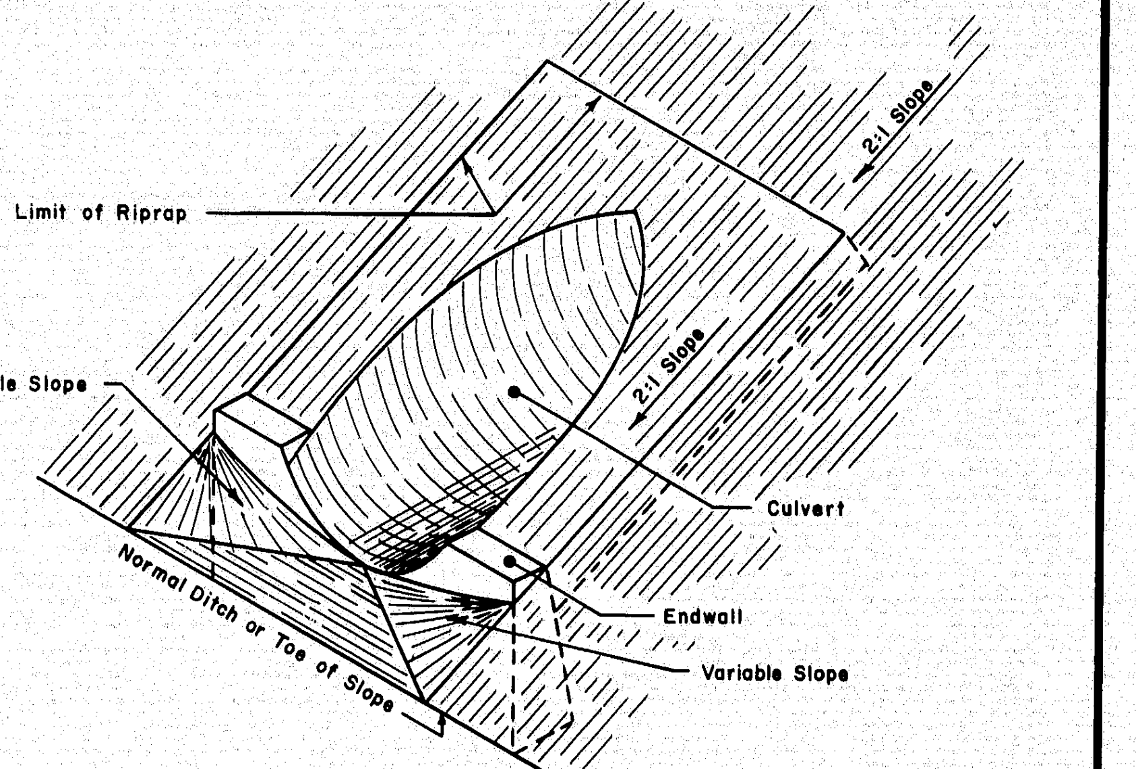
4-D

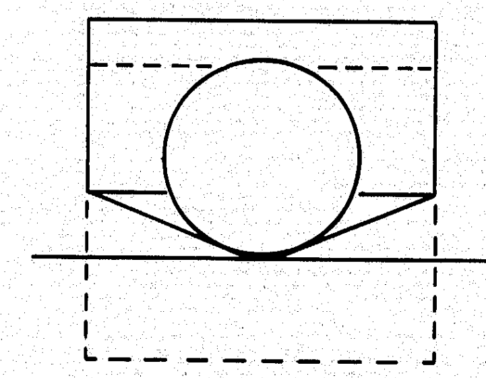
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	51	55

CONCRETE INLET ENDWALLS FOR RIVETED AND STRUCTURAL PLATE PIPES 60" TO 180" IN 2:1 SLOPES

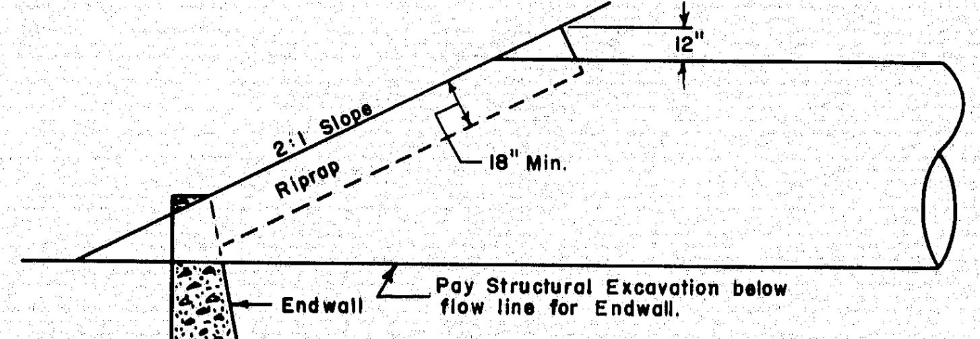


PLAN VIEW


Limit of Riprap
2:1 Slope
2:1 Slope
Variable Slope
Culvert
Normal Ditch or Toe of Slope
Endwall
Variable Slope



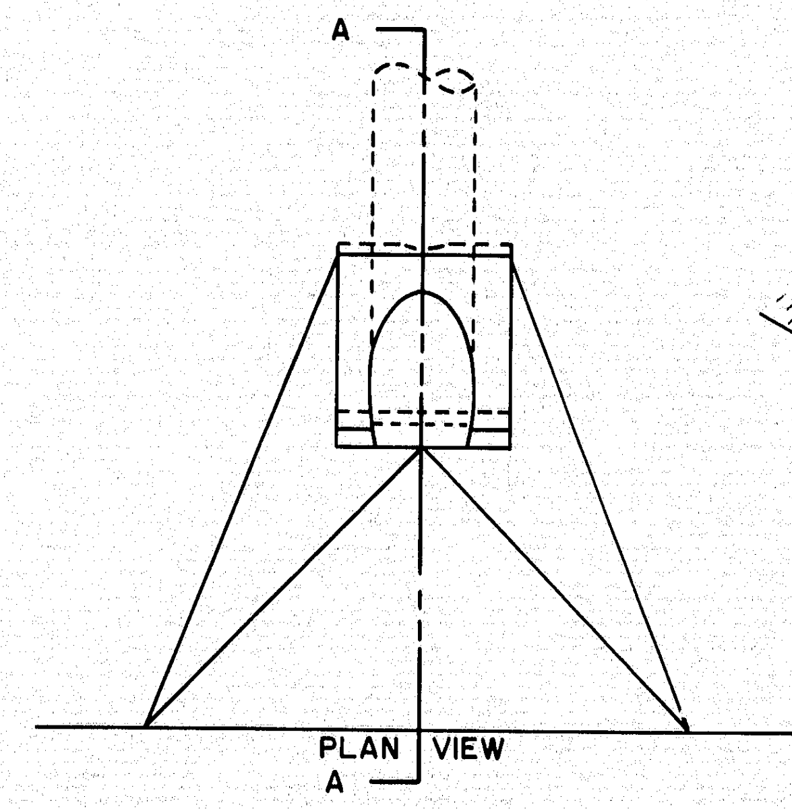
END VIEW


12"
2:1 Slope
Riprap
18" Min.
Endwall
Pay Structural Excavation below flow line for Endwall.

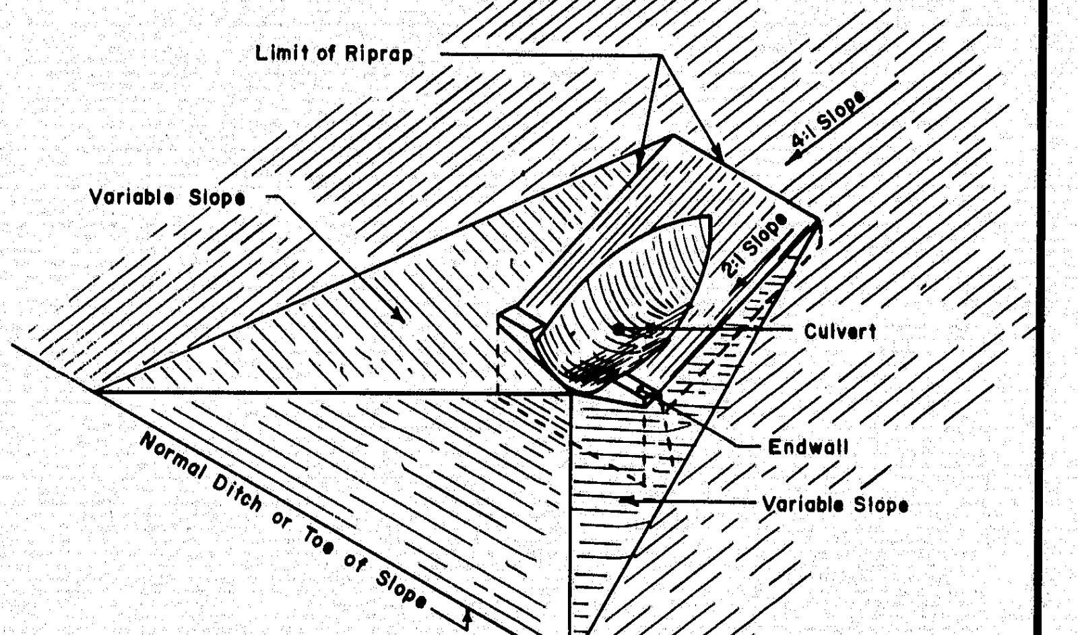
SECTION A-A

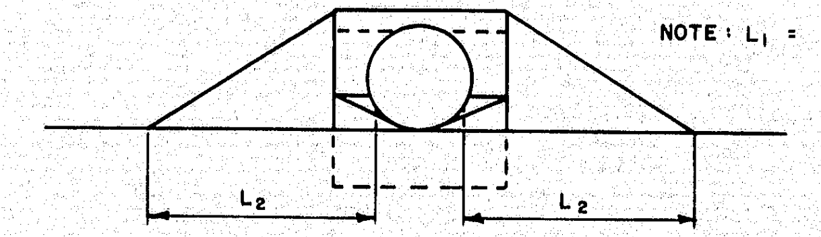
4-E

CONCRETE INLET ENDWALLS FOR RIVETED AND STRUCTURAL PLATE PIPES 60" TO 180" IN 4:1 SLOPES



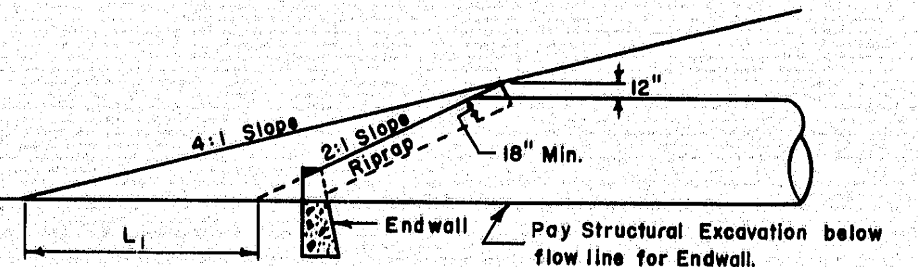
PLAN VIEW


Limit of Riprap
4:1 Slope
Variable Slope
2:1 Slope
Culvert
Normal Ditch or Toe of Slope
Endwall
Variable Slope



END VIEW

NOTE: L1 = L2


12"
4:1 Slope
2:1 Slope
Riprap
18" Min.
L1
Endwall
Pay Structural Excavation below flow line for Endwall.

SECTION A-A

4-F

REVISIONS	
Plate 4-D	12-23-69

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

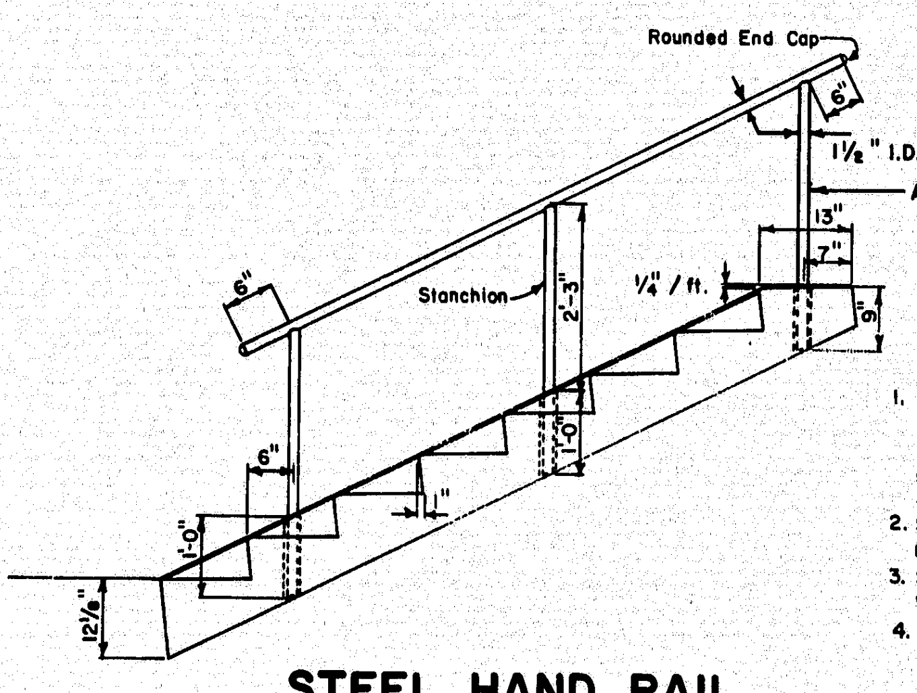
STANDARD DETAILS

CULVERT INLETS & OUTLETS

AUG. 1969 ⟨4⟩

152-82

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	52	55


Rounded End Cap
6"
1½" I.D.
A.S.T.M. schedule No. 40
Standard Strength
13"
7"
¼" / ft.
9"
Stanchion
2'-3"
1'-0"
6"
1"
1'-0"
12⅛"

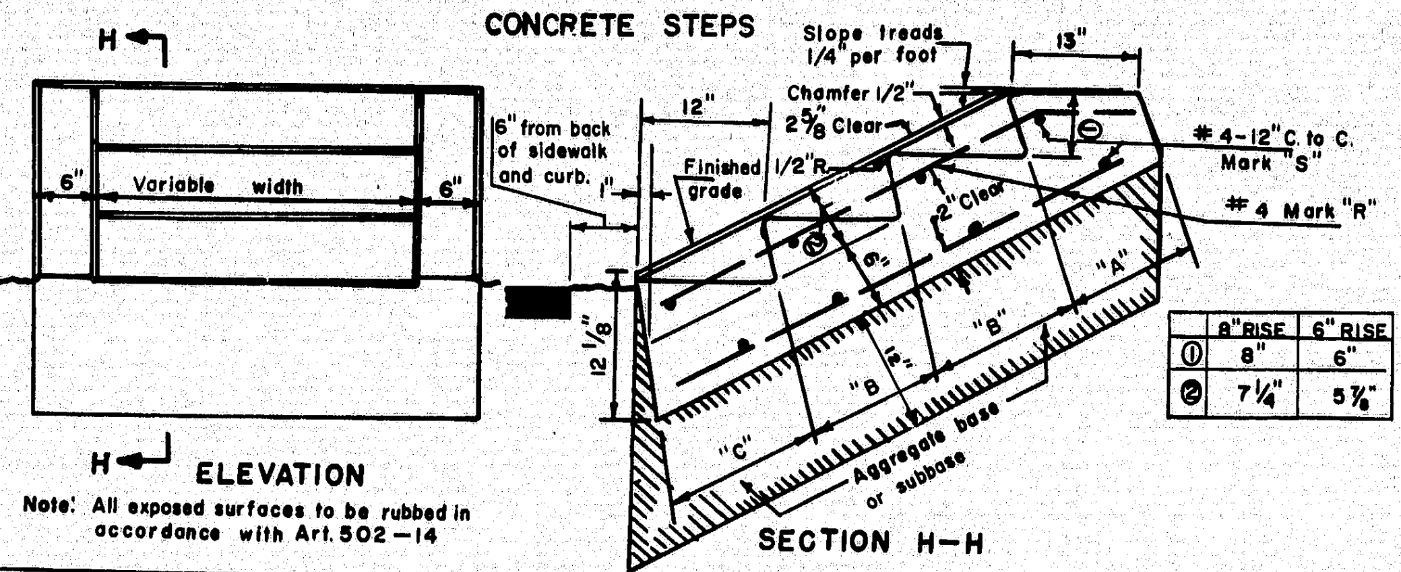
NOTES:
1. Stanchions shall be placed at a maximum horizontal distance of 5'-0". When more than two stanchions are used, spacing shall be equal between end posts and adjacent stanchions.
2. Stanchions shall be used when seven or more steps occurs.
3. Stanchions and end posts to be placed verticaly and in center of parapet wall.
4. All stanchions and rails shall be coated with an approved black enamel paint.

STEEL HAND RAIL

5-A

CONCRETE STEPS & SIDEWALK

CONCRETE STEPS


H
6"
Variable width
6"
H
6" from back of sidewalk and curb.
1"
12"
Finished grade
1/2"R
Slope treads 1/4" per foot
Chamfer 1/2"
2⅝" Clear
13"
#4-12" C. to C. Mark "S"
#4 Mark "R"
2" Clear
6"
12"
12⅛"
"A"
"B"
"B"
"C"
Aggregate base or subbase

ELEVATION

Note: All exposed surfaces to be rubbed in accordance with Art. 502-14

SECTION H-H

	8" RISE	6" RISE
①	8"	6"
②	7¼"	5⅞"

6" RISE - 12" TREAD (2:1) SLOPE

REINFORCING STEEL

Mark	Size	Number	Length (Each)
R	#4 .668 lbs. per ft.	2 Each parapet 1 Each ft. of width	11" For "A" +13.4 For each "B" +12" For "C"
S	#4 668 lbs. per ft.	2 For "A" 2 For each "B" 2 For "C"	4" Each parapet + 12" per ft. of width

CONCRETE CLASS "A"

Section	Steps per ft. of width	Parapet each wall
"A" Header	.030 cu. yds.	.015 cu. yds.
"B" Each inter. step	.030 cu. yds.	.020 cu. yds.
"C" Footer	.030 cu. yds.	.020 cu. yds.

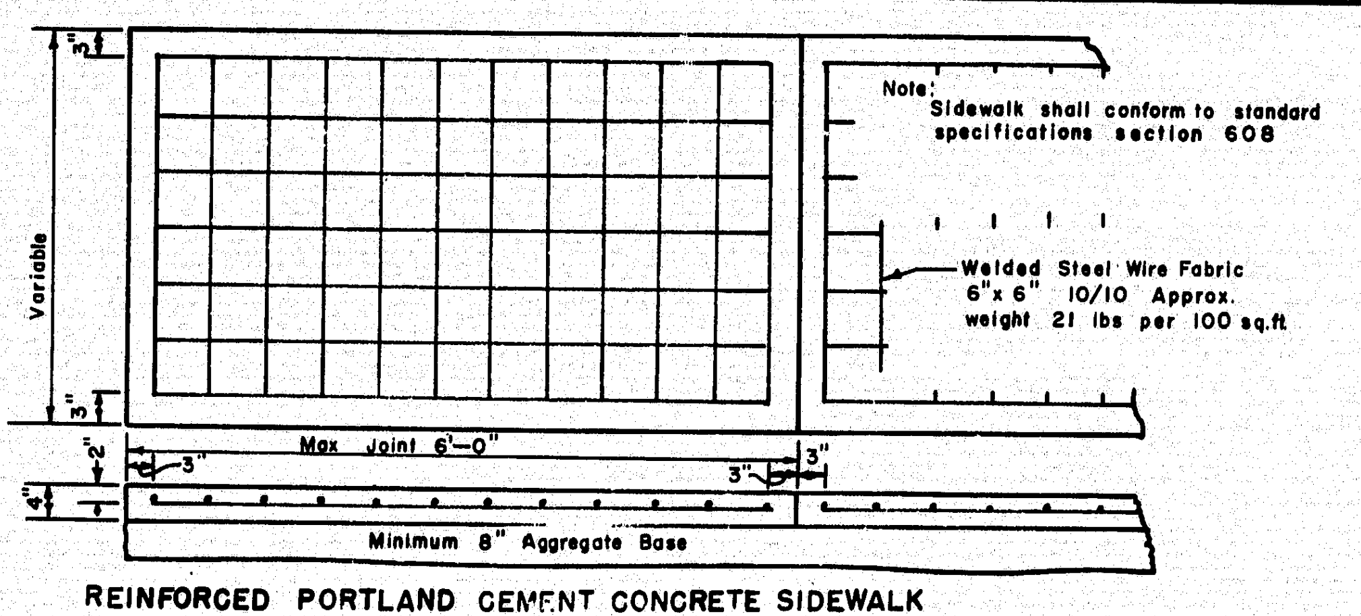
8" RISE - 12" TREAD (1½:1) SLOPE

REINFORCING STEEL

Mark	Size	Number	Length (Each)
R	#4 668 lbs. per ft.	2 Each parapet 1 Each ft. of width	11" For "A" +14½" For each "B" +12" For "C"
S	#4 .668 lbs. per ft.	2 For "A" 2 For each "B" 2 For "C"	4" Each parapet + 12" per. ft. of width

CONCRETE CLASS "A"

Section	Steps per ft. of width	Parapet each wall
"A" Header	.035 cu. yds.	.018 cu. yds.
"B" Each inter. step	.035 cu. yds.	.024 cu. yds.
"C" Footer	.035 cu. yds.	.024 cu. yds.

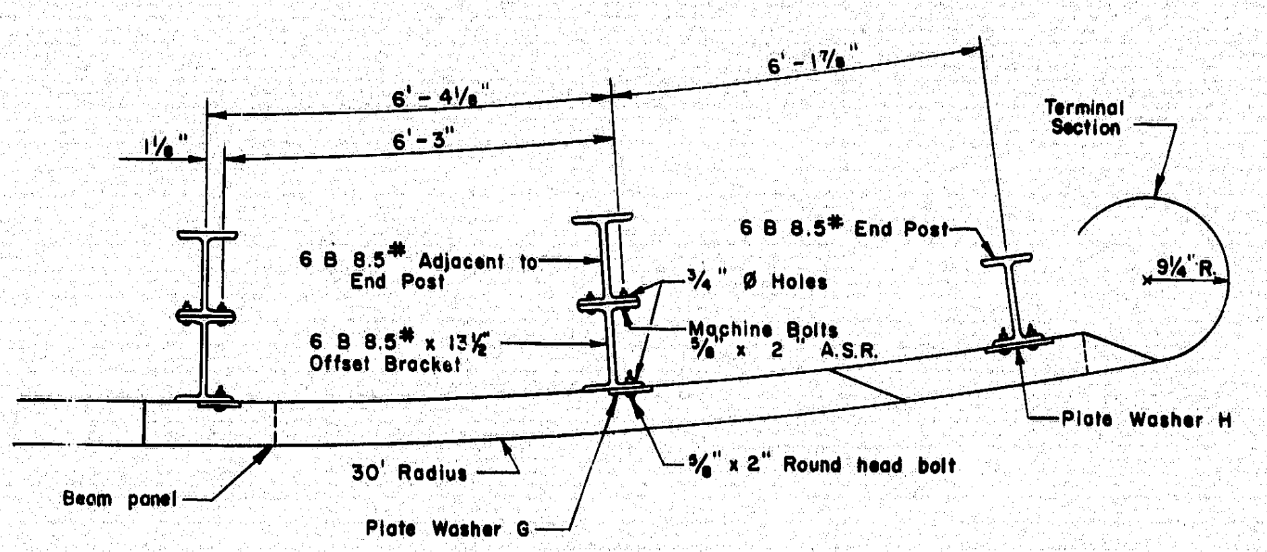

3"
Variable
3"
2"
4"
Max Joint 6'-0"
3"
3"
3"
Minimum 8" Aggregate Base
Welded Steel Wire Fabric
6"x 6" 10/10 Approx.
weight 21 lbs per 100 sq.ft.

Note: Sidewalk shall conform to standard specifications section 608

REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK

5-B

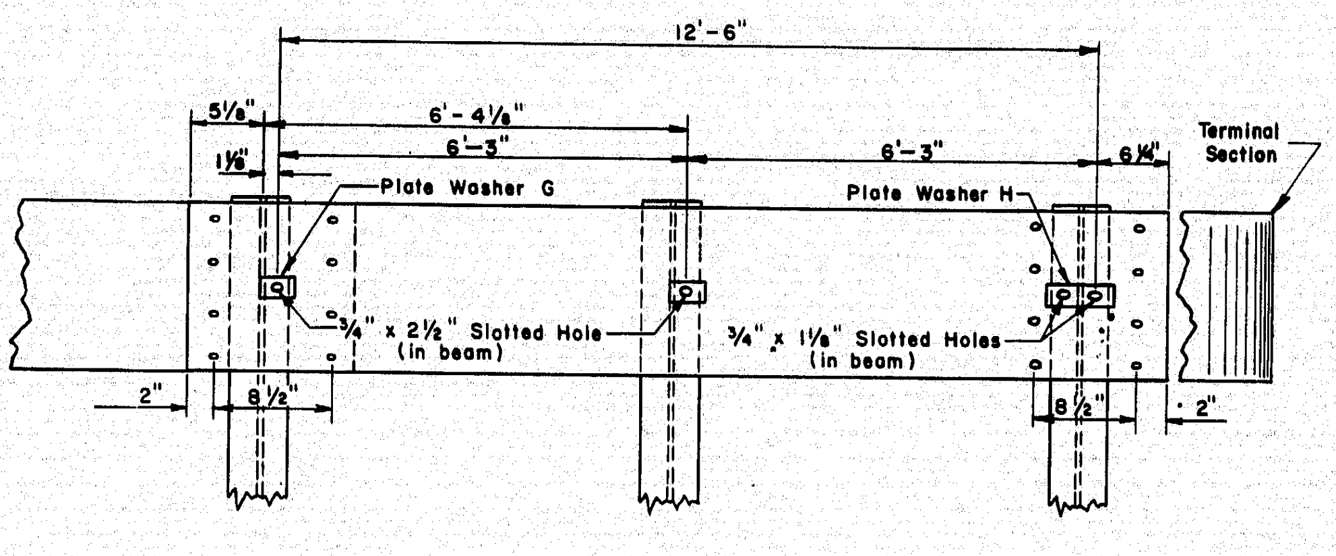
END BEAM ASSEMBLY - SPACING OF POSTS
GUARD RAIL TYPE 3a and 3b


6'-1⅞"
6'-4⅛"
6'-3"
1⅛"
Terminal Section
6 B 8.5# End Post
9¼" R.
6 B 8.5# Adjacent to End Post
¾" Ø Holes
6 B 8.5# x 13½" Offset Bracket
Machine Bolts ⅝" x 2" A.S.R.
Plate Washer H
30' Radius
⅝" x 2" Round head bolt
Beam panel
Plate Washer G

PLAN

To be used in all locations except on the end away from traffic on 4 lane divided.

NOTE: Offset Bracket shall be installed on all posts, except end post.

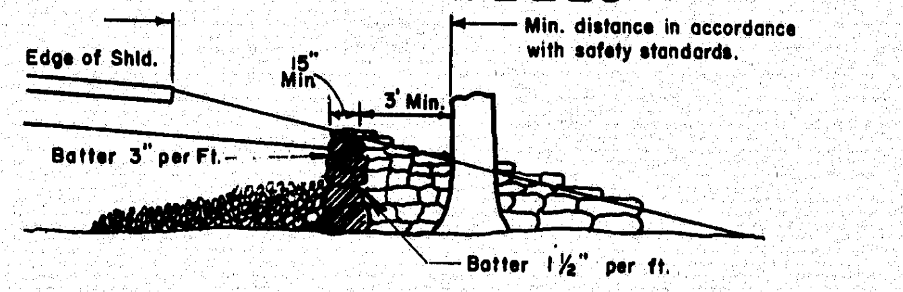

12'-6"
5⅛"
6'-4⅛"
6'-3"
6'-3"
6¼"
1⅛"
Terminal Section
Plate Washer G
Plate Washer H
¾" x 2½" Slotted Hole (in beam)
¾" x 1⅛" Slotted Holes (in beam)
2"
8½"
8½"
2"

ELEVATION

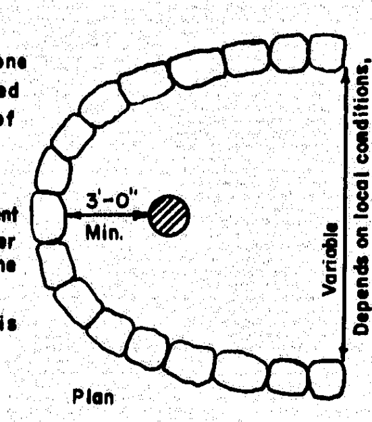
5-C

5-D

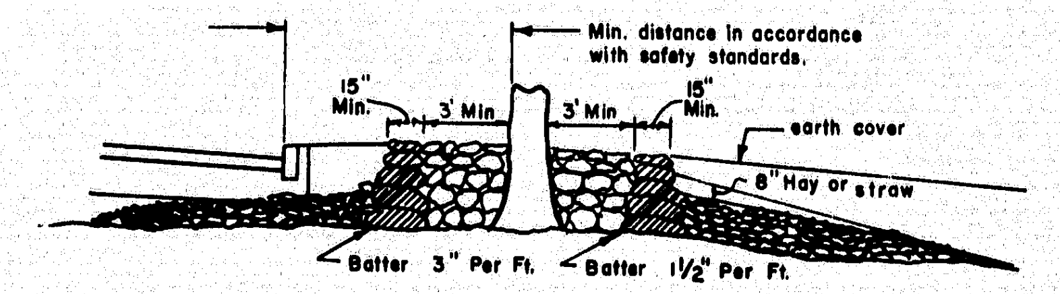
TREE WELLS

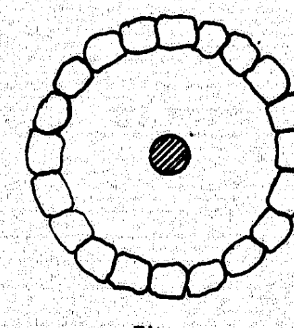

Min. distance in accordance with safety standards.
Edge of Shld.
15" Min
3' Min.
Batter 3" per Ft.
Batter 1½" per ft.

NOTES:
1. Selected ledge excavation, crushed stone or other porous material shall be used to fill around the old ground area of the tree from the tree well to the perimeter of the branches.
2. An 8" layer of hay or straw to prevent infiltration of fines shall be placed over the rock fill except in areas under the roadway and shoulders.
3. If drainage away from the tree well is necessary, underdrain outlet pipe shall be used, and will be paid for under item 605.10.


3'-0" Min.
Variable
Depends on local conditions, kind and size of tree.

Plan

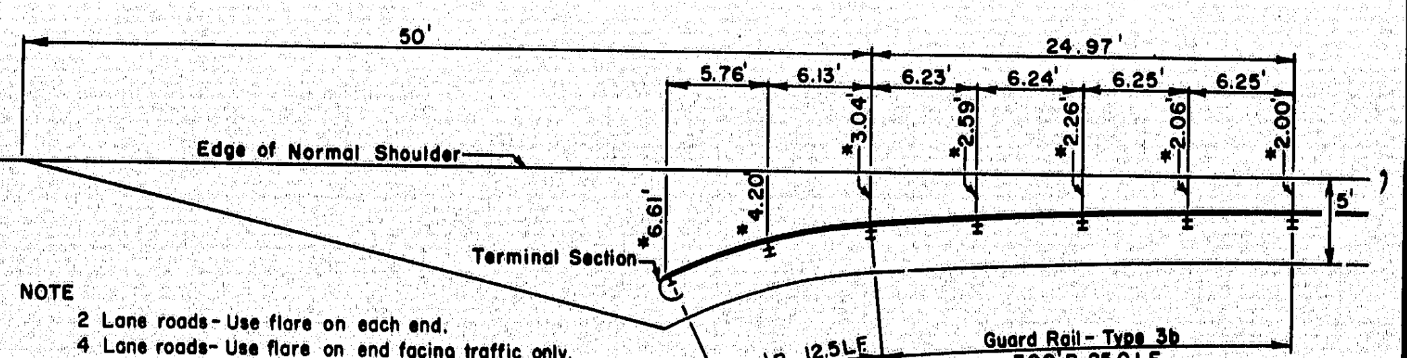

Min. distance in accordance with safety standards.
15" Min.
3' Min
3' Min
15" Min.
earth cover
8" Hay or straw
Batter 3" Per Ft.
Batter 1½" Per Ft.



Plan

To be paid for under item
610.09 Hand laid riprap.
605.10 6" Underdrain Outlet

5-E


50'
24.97'
5.76'
6.13'
6.23'
6.24'
6.25'
6.25'
Edge of Normal Shoulder
*3.04'
*2.59'
*2.26'
*2.06'
*2.00'
*6.61'
*4.20'
5'
Terminal Section
30' R. 12.5 L.F.
Type 3b Circular
Guard Rail - Type 3b
300' R. 25.0 L.F.

NOTE
2 Lane roads - Use flare on each end.
4 Lane roads - Use flare on end facing traffic only.

*Offsets are from edge of normal shoulder to face of offset guard rail.

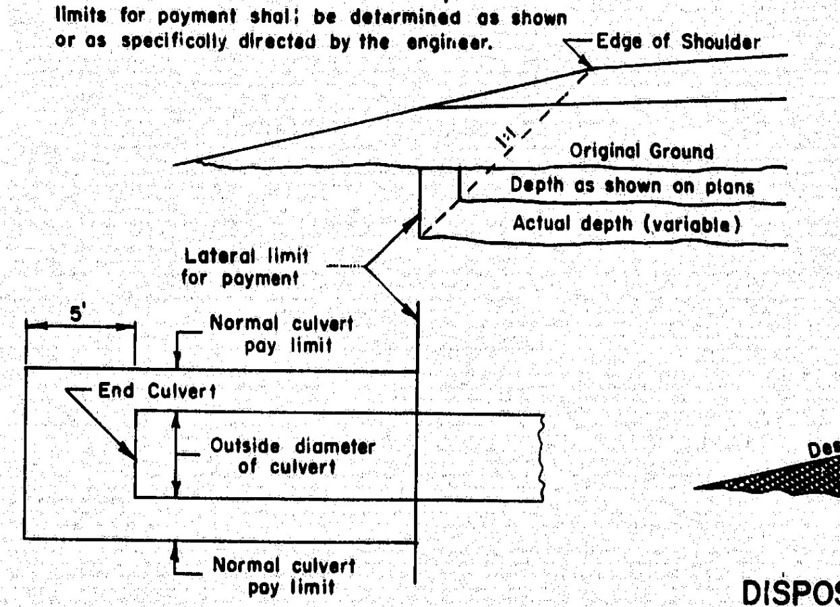
GUARD RAIL END TRANSITION

5-F

5-G

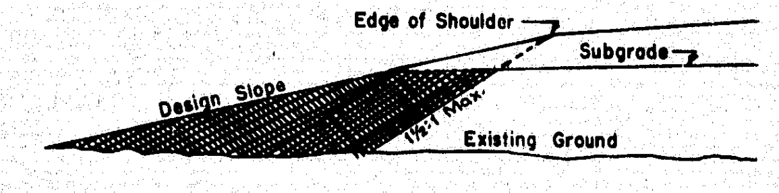
MUCK EXCAVATION
PAYMENT LIMITS

NOTE: When muck is excavated to a depth greater or less than what is shown on the plans, the vertical limits for payment shall be determined as shown or as specifically directed by the engineer.

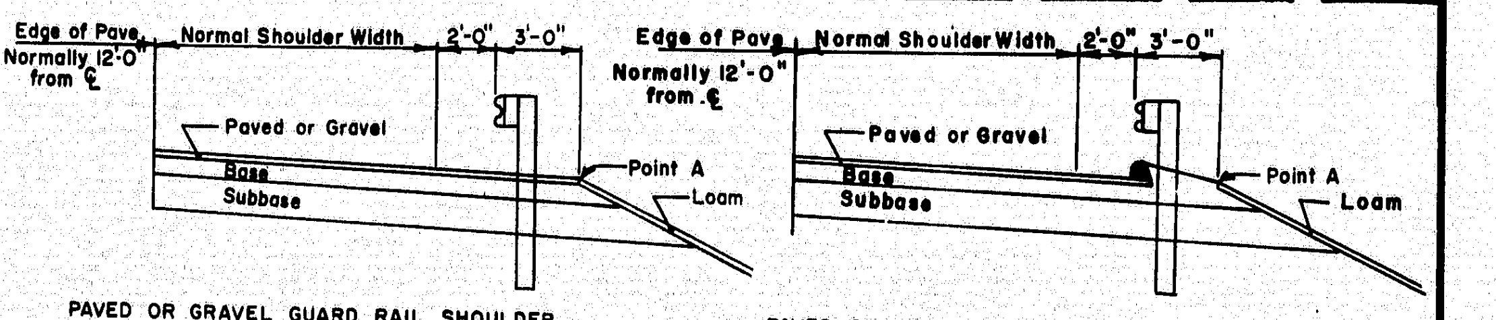

Edge of Shoulder
1:1
Original Ground
Depth as shown on plans
Actual depth (variable)
Lateral limit for payment
5'
Normal culvert pay limit
End Culvert
Outside diameter of culvert
Normal culvert pay limit

CULVERT EXCAVATION LIMITS IN MUCK AREAS
PLAN VIEW

When directed by the engineer, waste material shall be used in this area. No additional payment will be made for this work.


Edge of Shoulder
Subgrade
Design Slope
1½:1 Max.
Existing Ground

DISPOSAL OF WASTE MATERIALS


Edge of Pave. Normally 12'-0" from ℄
Normal Shoulder Width
2'-0"
3'-0"
Paved or Gravel
Base
Subbase
Point A
Loam
Edge of Pave. Normally 12'-0" from ℄
Normal Shoulder Width
2'-0"
3'-0"
Paved or Gravel
Base
Subbase
Point A
Loam

PAVED OR GRAVEL GUARD RAIL SHOULDER

PAVED GUARD RAIL SHOULDER WITH CURB

Point A = Normal Slope Break

LOCATION OF GUARD RAIL

5-H

REVISIONS	
Plate 5-A	12-24-69
PLATE 5B	1-27-71
PLATE 5 H	5-12-71

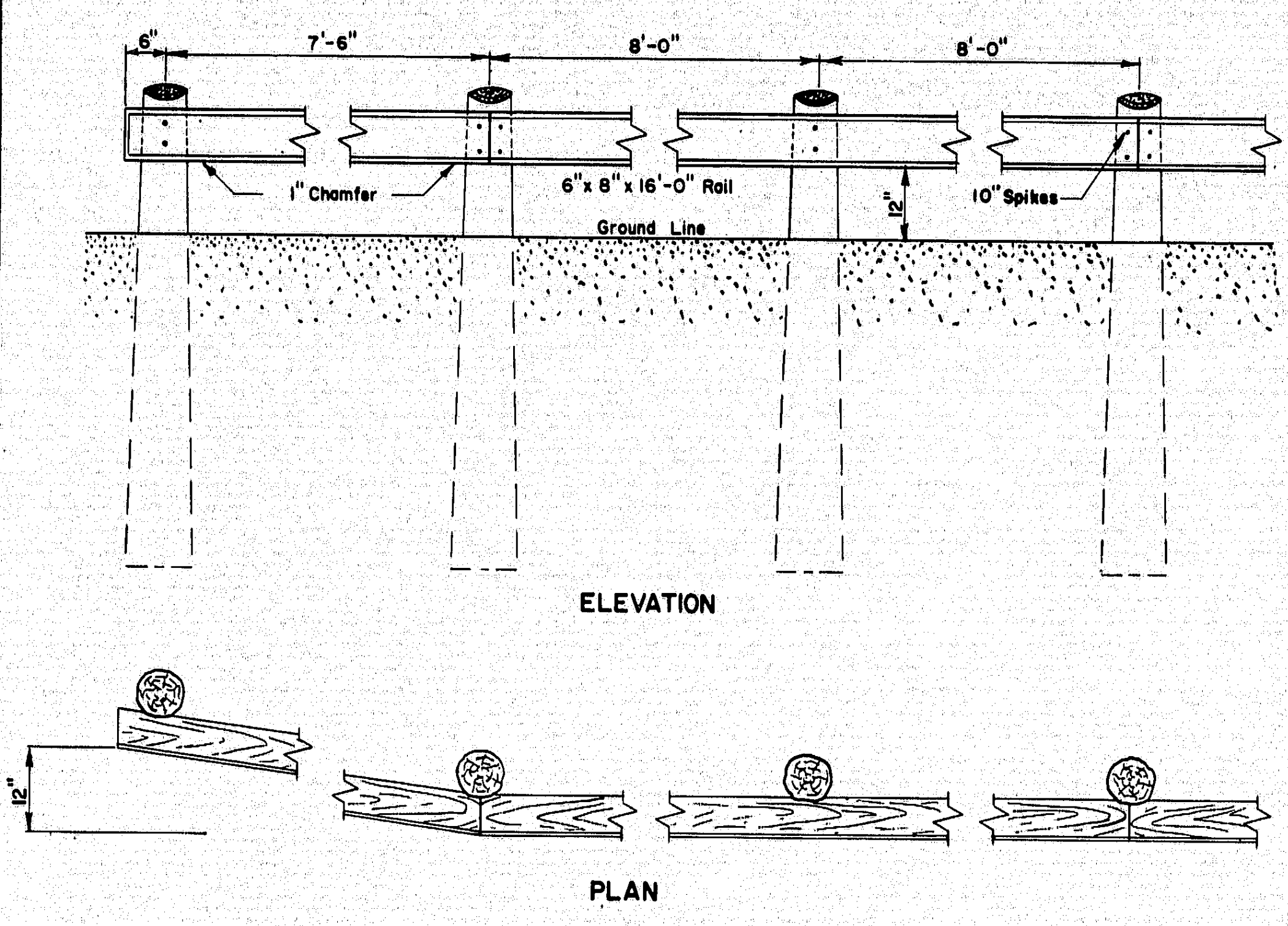
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

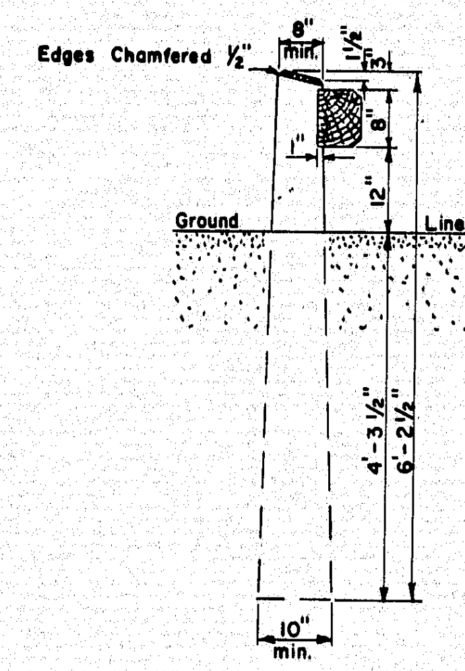
GUARD RAIL, MUCK EXCAVATION
CONCRETE STEPS & SIDEWALK
GUYING TREES
TREE WELLS

AUG. 1969 ⑤

152-83

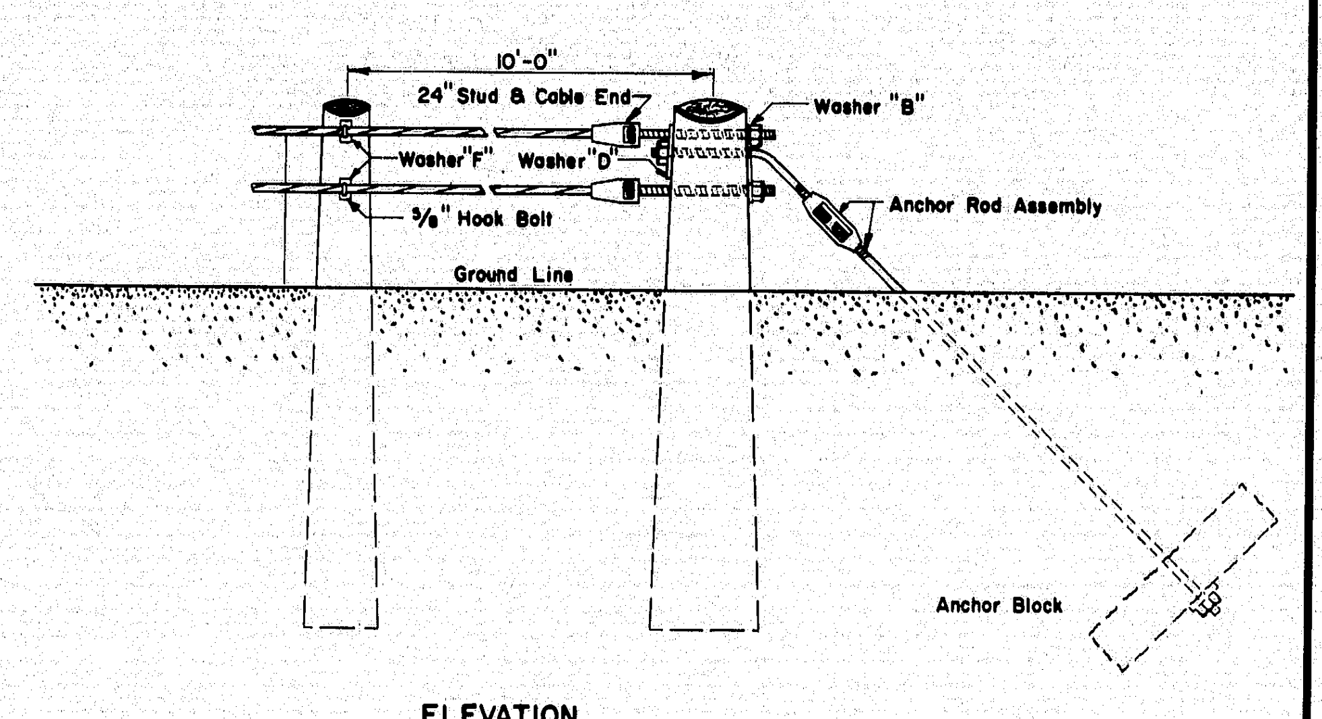

6"
7'-6"
8'-0"
8'-0"
1" Chamfer
6"x 8" x 16'-0" Rail
12"
10" Spikes
Ground Line
ELEVATION
12"
PLAN

NOTE:
1. This guardrail should not be used adjacent to public highways. Location should be limited to driveways, dead ended roads, etc.
2. Unless otherwise specified, all exposed wood above ground, both posts and rails shall be painted with 2 coats of white paint.


Edges Chamfered 1/2"
8" min.
1 1/2"
3"
8"
1"
12"
Ground Line
4'-3 1/2"
6'-2 1/2"
10" min.

FOR TYPE 6 GUARD RAIL SEE STANDARD DETAIL SHEET 21

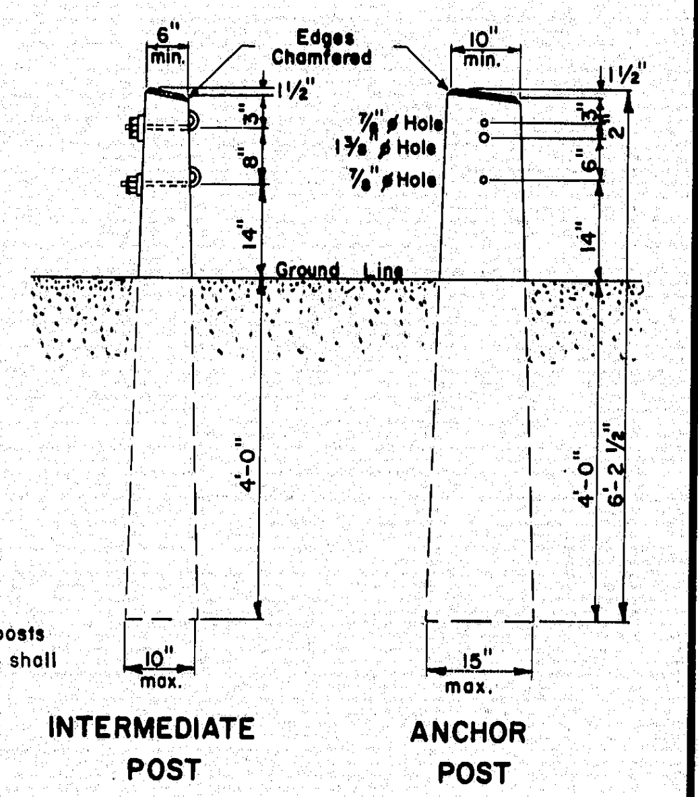
GUARD RAIL
type "5"

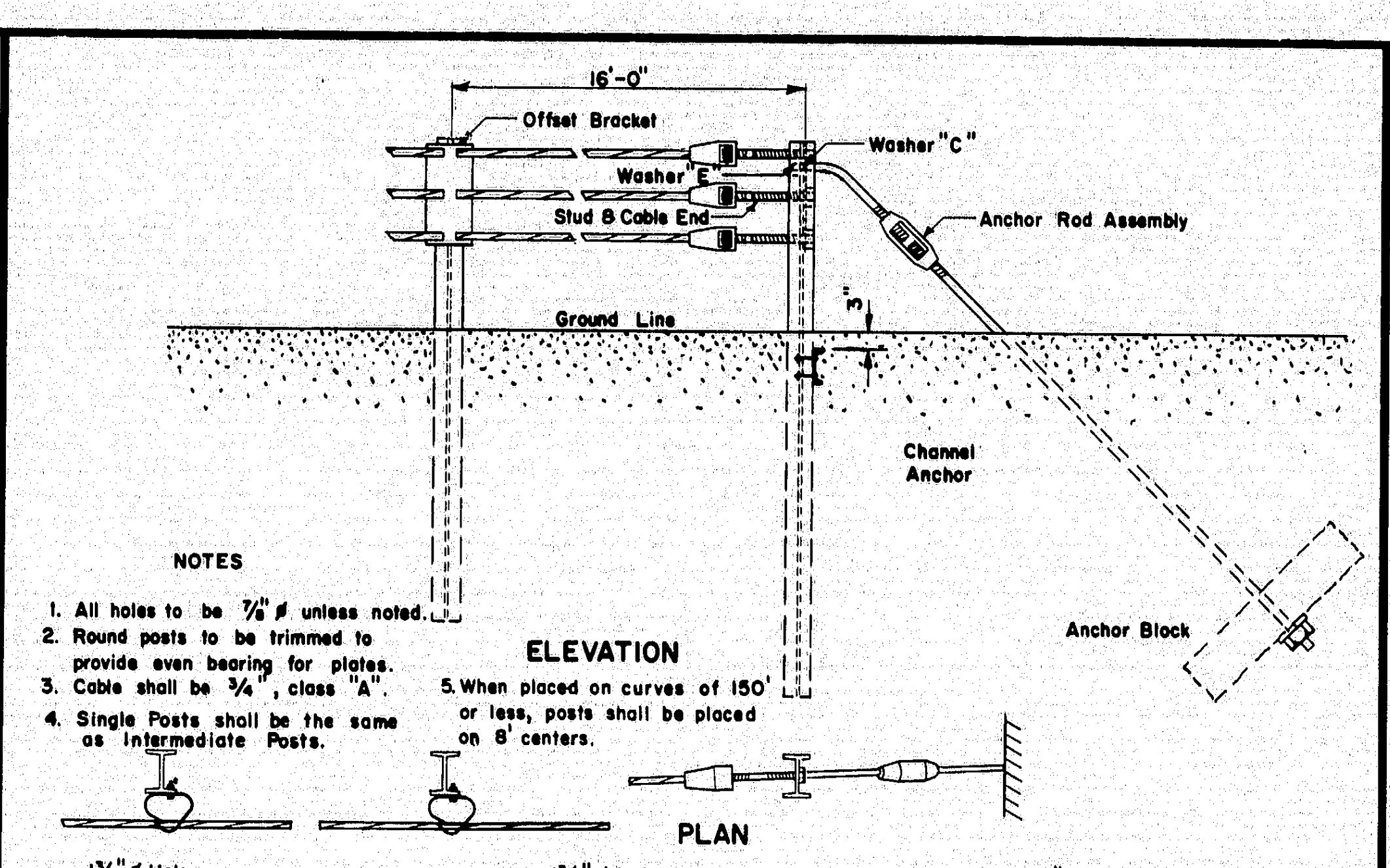

10'-0"
24" Stud & Cable End
Washer "B"
Washer "F"
Washer "D"
5/8" Hook Bolt
Anchor Rod Assembly
Ground Line
Anchor Block
ELEVATION

NOTES

1. Anchor posts shall be White Oak.
2. Alignment – see types 2a, 2b and 2c.
3. Posts to be trimmed to provide even bearing for plates.
4. Unless otherwise specified all wood above ground to be painted with 2 coats of white paint, – for type 1a.
5. Single Posts shall be the same as Intermediate Posts.
6. Cable shall be 3/4" class "A".
7. When type 1, 1a, 2 and 2a wood posts are to be installed in paved areas or behind bituminous curb the posts shall be installed prior to the placing of pavement or bituminous curb.
8. Use of this guardrail should be limited to very low volume highways.
9. If the Contractor chooses to drive posts, then all posts on the project, whether driven or placed in dug holes shall be set with the larger diameter at the top

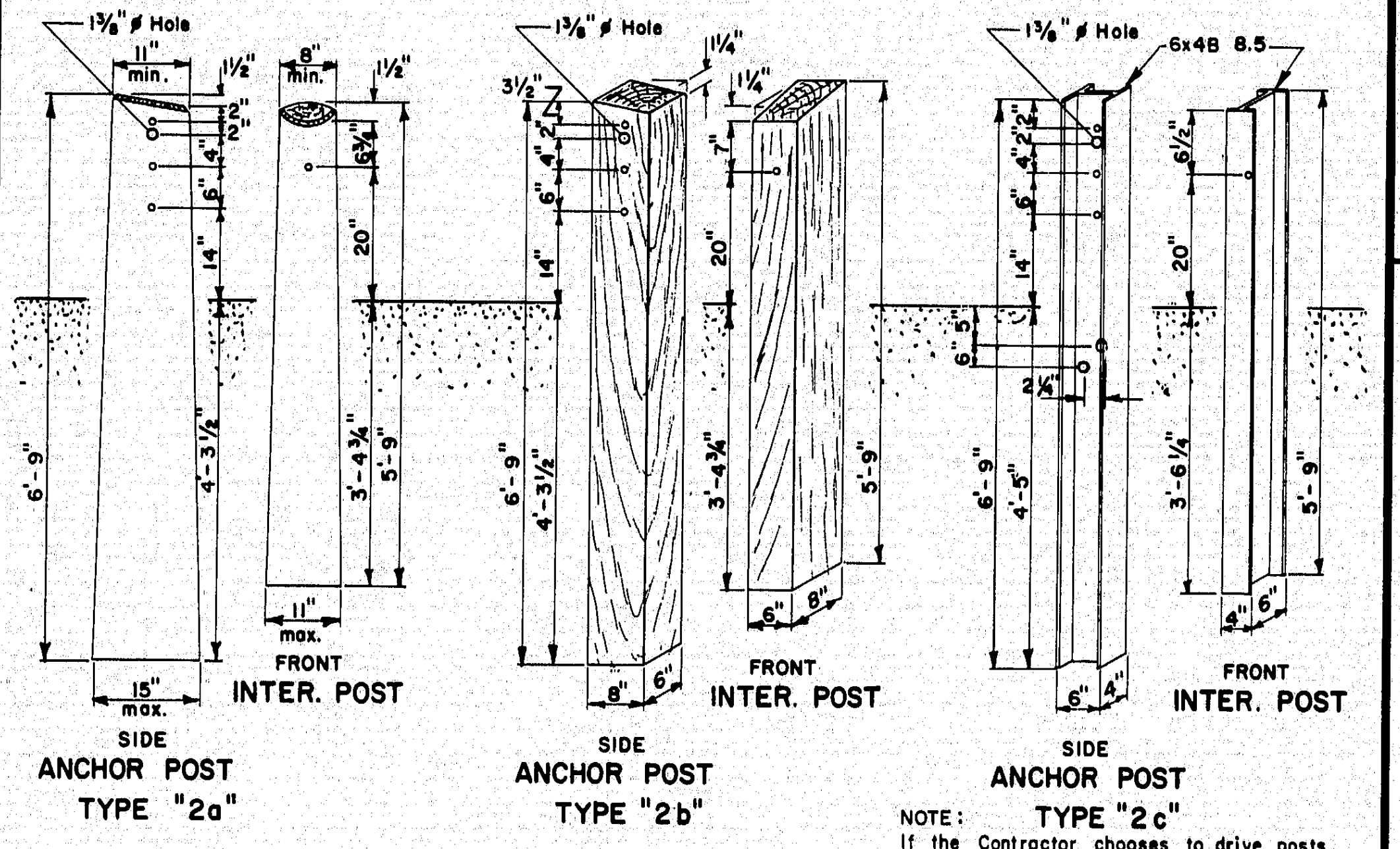
GUARD RAIL
type "1a"-"1b"


6" min.
Edges Chamfered
1 1/2"
3"
8"
14"
Ground Line
4'-0"
10" max.
INTERMEDIATE POST
10" min.
1 1/2"
7/8" ⌀ Hole
1 3/8" ⌀ Hole
7/8" ⌀ Hole
3"
2
6"
14"
4'-0"
6'-2 1/2"
15" max.
ANCHOR POST


16'-0"
Offset Bracket
Washer "C"
Washer "E"
Stud & Cable End
Anchor Rod Assembly
Ground Line
3"
Channel Anchor
Anchor Block
ELEVATION
PLAN

NOTES

1. All holes to be 7/8" ⌀ unless noted.
2. Round posts to be trimmed to provide even bearing for plates.
3. Cable shall be 3/4", class "A".
4. Single Posts shall be the same as Intermediate Posts.
5. When placed on curves of 150' or less, posts shall be placed on 8' centers.


1 3/8" ⌀ Hole
11" min.
1 1/2"
2"
2"
4"
6"
14"
6'-9"
4'-3 1/2"
15" max.
SIDE
ANCHOR POST
TYPE "2a"
8" min.
1 1/2"
6 3/4"
20"
3'-4 3/4"
5'-9"
11" max.
FRONT
INTER. POST
1 3/8" ⌀ Hole
3 1/2"
1 1/4"
1 1/4"
2"
4"
6"
14"
6'-9"
4'-3 1/2"
8"
6"
SIDE
ANCHOR POST
TYPE "2b"
7"
20"
3'-4 3/4"
5'-9"
6"
8"
FRONT
INTER. POST
1 3/8" ⌀ Hole
6x4B 8.5
2"
2"
4"
6"
14"
6"
5"
2 1/4"
6'-9"
4'-5"
6"
4"
SIDE
ANCHOR POST
TYPE "2c"
6 1/2"
20"
3'-6 1/4"
5'-9"
4"
6"
FRONT
INTER. POST

NOTE: If the Contractor chooses to drive posts, then all posts on the project, whether driven or placed in dug holes shall be set with the larger diameter at the top.

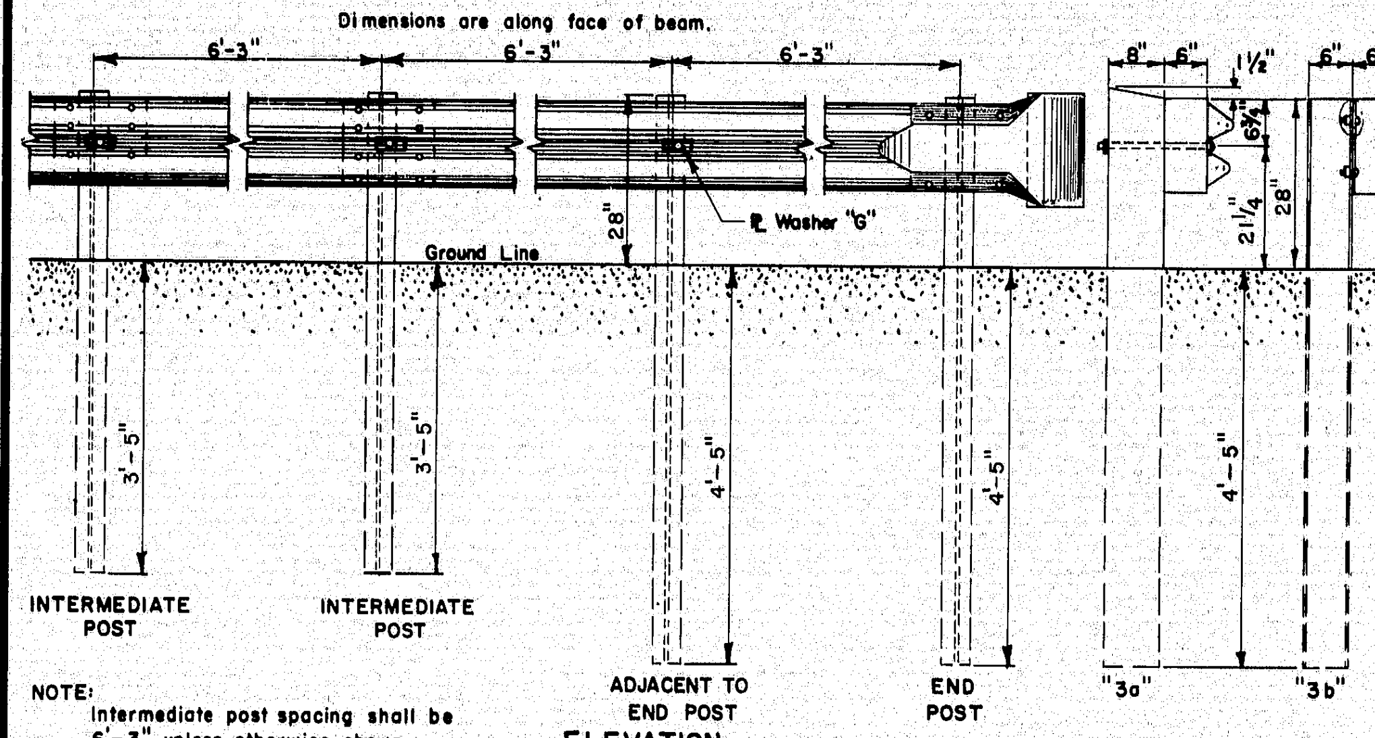
GUARD RAIL type "2a"-"2b"-"2c"

FOR BEAM TYPE GUARD RAIL

Beam Type Guard Rail set on radius of 150' or less to be Circular.

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	53	55

Dimensions are along face of beam.

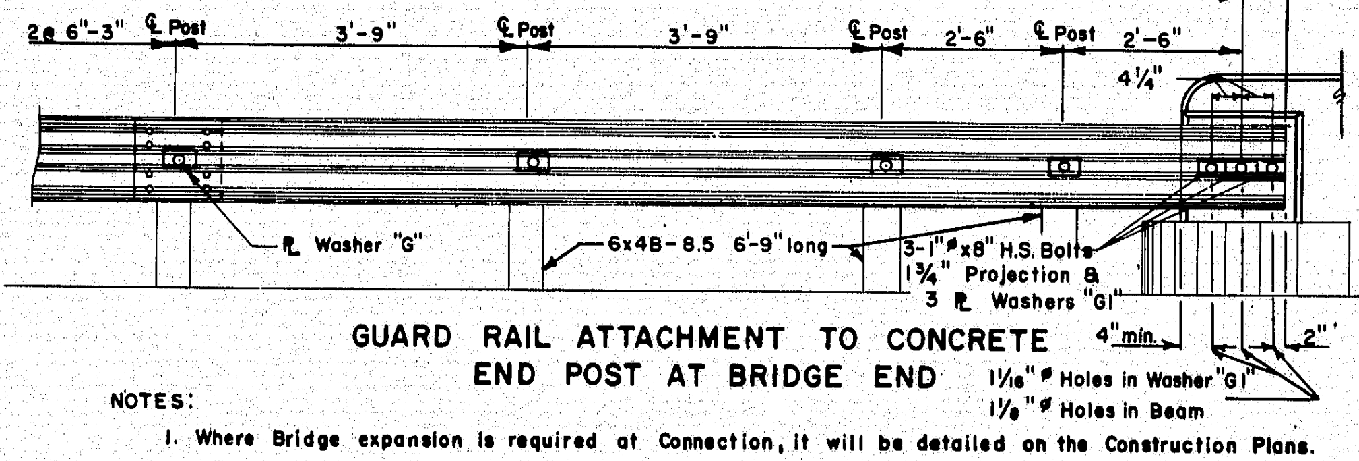

6'-3"
6'-3"
6'-3"
8"
6"
1 1/2"
6"
6"
6 3/4"
6 1/2"
28"
21 1/4"
28"
℄ Washer "G"
Ground Line
3'-5"
3'-5"
4'-5"
4'-5"
4'-5"
INTERMEDIATE POST
INTERMEDIATE POST
ADJACENT TO END POST
END POST
"3a"
"3b"
ELEVATION

NOTE:
Intermediate post spacing shall be 6'-3" unless otherwise shown.

1. Posts for type "3a" Guard Rail shall be 6"x 8" and offset blocks for type "3a" Guard Rail shall be 6"x 6".
2. Posts and offset brackets for type "3b" Guard Rail shall be 6" B 8.5
3. All holes in beam to be shop-punched before galvanizing.
4. Steel posts punched with holes in addition to those specified, to accomodate other types of Guard Rail, will be accepted subject to the approval of the engineer.

MEASUREMENT FOR TYPE 3a & 3b GUARD RAIL SHALL BE TO END OF BEAM

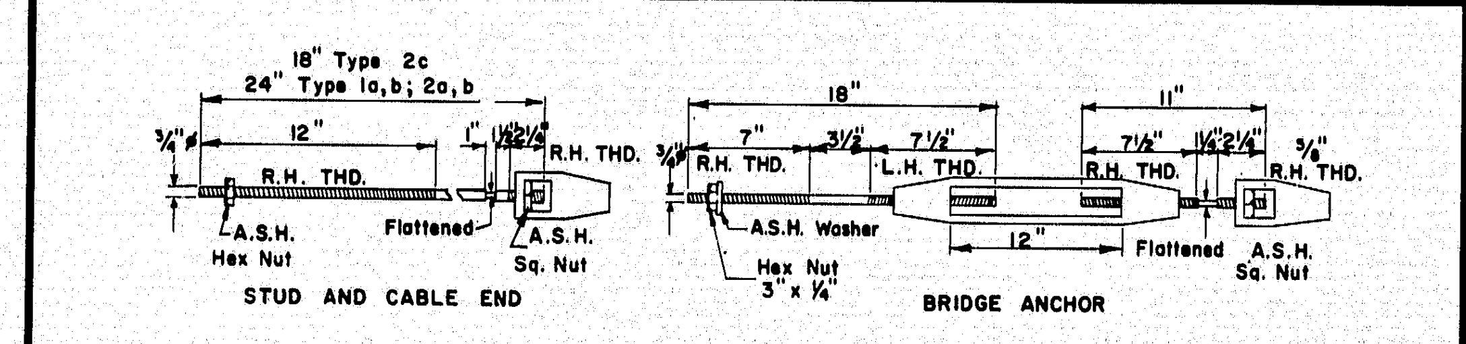
STATIONING ON PLAN-PROFILE SHEETS IS TO ℄ OF MIDDLE WING BOLT.


2 @ 6'-3"
℄ Post
3'-9"
℄ Post
3'-9"
℄ Post
2'-6"
℄ Post
2'-6"
4 1/4"
℄ Washer "G"
6x4B-8.5 6'-9" long
3-1" ⌀ x8" H.S. Bolts
1 3/4" Projection &
3 ℄ Washers "GI"
4" min.
2"
1 1/16" ⌀ Holes in Washer "GI"
1 1/8" ⌀ Holes in Beam

GUARD RAIL ATTACHMENT TO CONCRETE END POST AT BRIDGE END

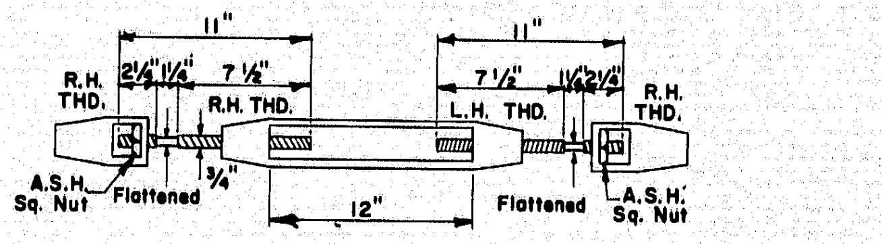
NOTES:
1. Where Bridge expansion is required at Connection, it will be detailed on the Construction Plans.
2. Guard Rail shall be connected to the structure as shown. Payment for the connection to the structure and additional posts shall be incidental to the Guard Rail Item.
3. Splice holes in Guard Rail Beam that are not used in connection, to be plugged with button head bolts. or omitted.

GUARD RAIL type "3a" & "3b" PLATE "D"

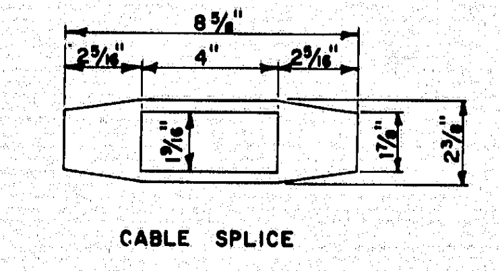

18" Type 2c
24" Type 1a, b; 2a, b
3/4" ⌀
12"
1"
1 1/2"
2 1/4"
R.H. THD.
R.H. THD.
A.S.H. Hex Nut
Flattened
A.S.H. Sq. Nut
STUD AND CABLE END
18"
7"
3 1/2"
7 1/2"
3/4"
R.H. THD.
L.H. THD.
A.S.H. Washer
Hex Nut 3" x 1/4"
12"
11"
7 1/2"
1 1/4"
2 1/4"
5/8"
R.H. THD.
R.H. THD.
Flattened
A.S.H. Sq. Nut
BRIDGE ANCHOR

NOTES
1. Other designs may be used subject to the engineers approval.
2. All turnbuckles shall be installed midway of the threaded portion of each rod.

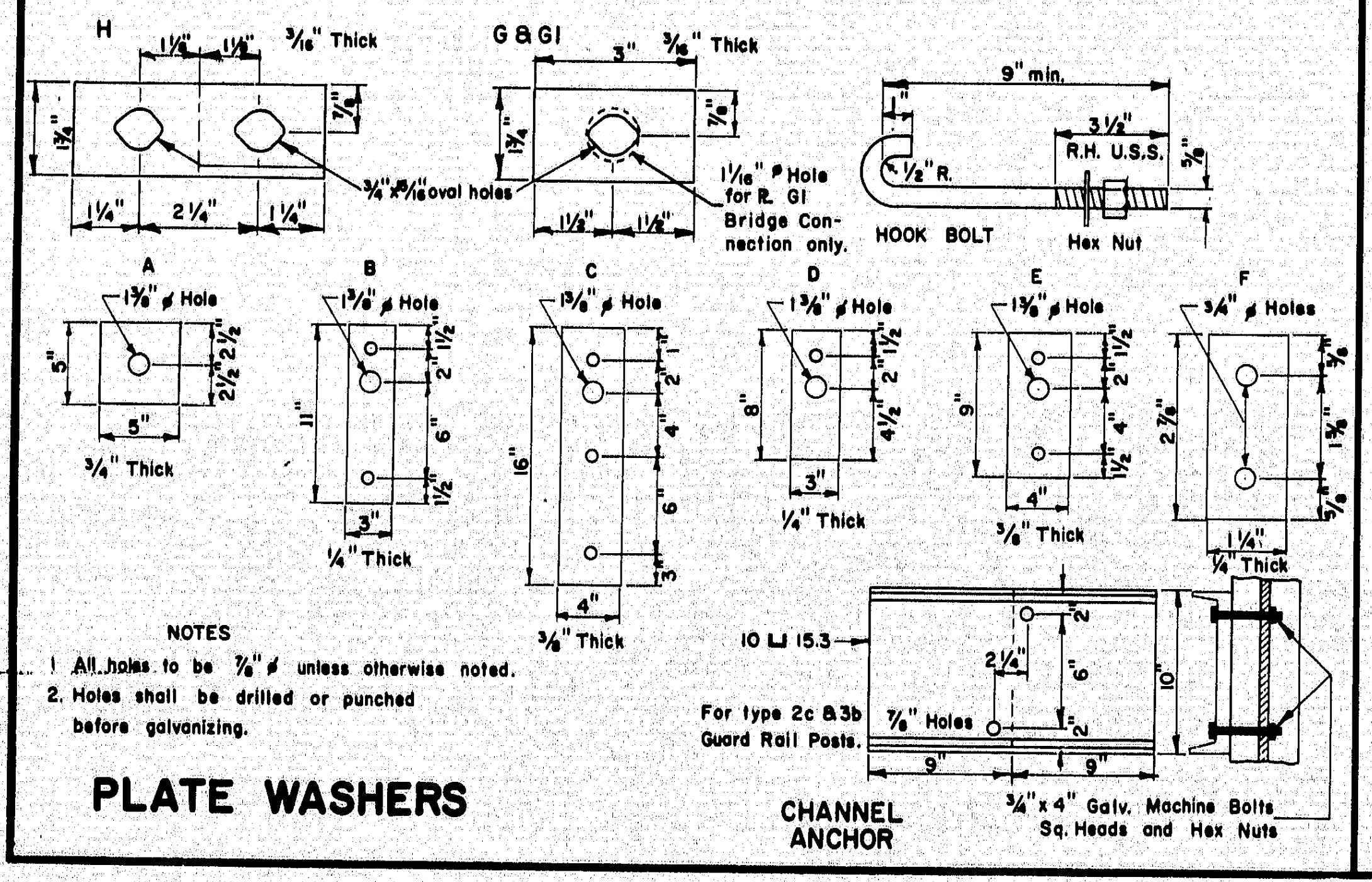
STANDARD FITTINGS


11"
2 1/4"
1 1/4"
7 1/2"
R.H. THD.
R.H. THD.
A.S.H. Sq. Nut
Flattened
3/4"
12"
11"
7 1/2"
1 1/4"
2 1/4"
L.H. THD.
R.H. THD.
Flattened
A.S.H. Sq. Nut

SPLICE ASSEMBLY FOR INTERMEDIATE TAKE UP

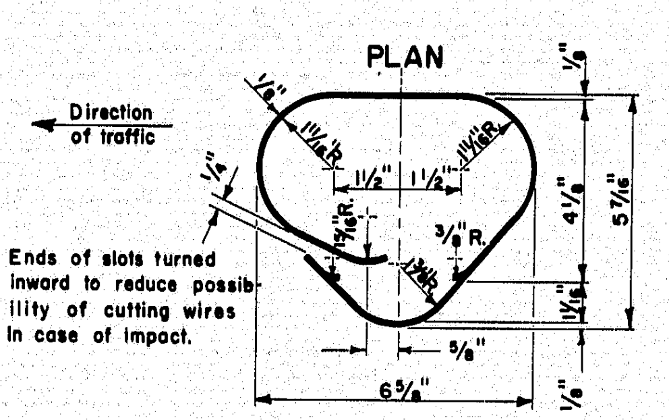

8 5/8"
2 5/16"
4"
2 5/16"
1 9/16"
1 7/8"
2 3/8"

CABLE SPLICE

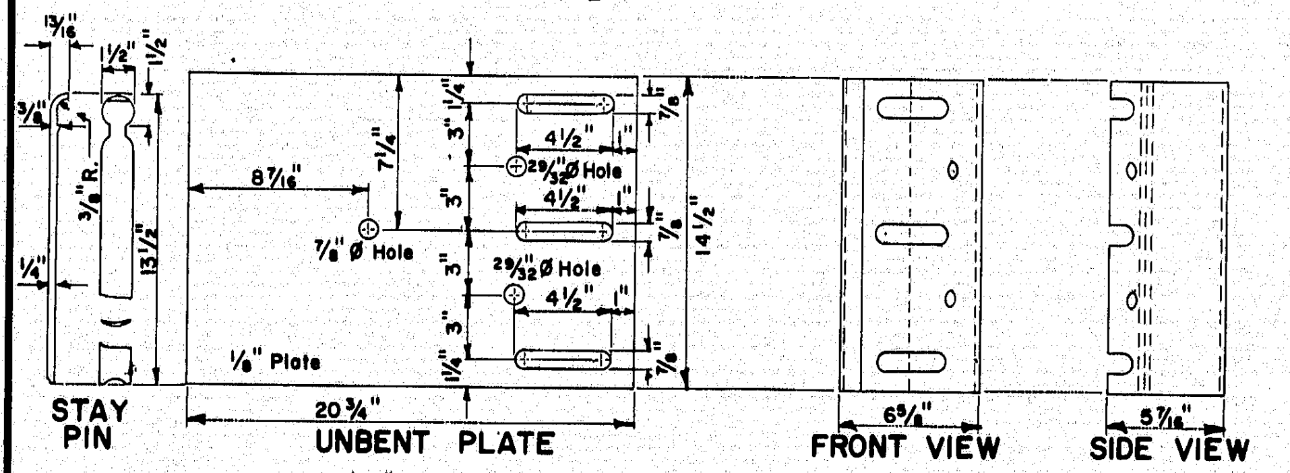

H
1 1/8"
1 1/8"
3/16" Thick
1 3/4"
7/8"
1 1/4"
2 1/4"
1 1/4"
3/4" x 15/16" oval holes
G & GI
3"
3/16" Thick
1 3/4"
7/8"
1 1/2"
1 1/2"
1 1/16" ⌀ Hole for ℄ GI Bridge Connection only.
9" min.
1"
1/2" R.
3 1/2"
R.H. U.S.S.
5/8"
HOOK BOLT
Hex Nut
A
1 3/8" ⌀ Hole
5"
2 1/2"
2 1/2"
5"
3/4" Thick
B
1 3/8" ⌀ Hole
11"
1 1/2"
2"
6"
1 1/2"
3"
1/4" Thick
C
1 3/8" ⌀ Hole
16"
1"
2"
4"
6"
3"
4"
3/8" Thick
D
1 3/8" ⌀ Hole
8"
1 1/2"
2"
4 1/2"
3"
1/4" Thick
E
1 3/8" ⌀ Hole
9"
1 1/2"
2"
4"
1 1/2"
4"
3/8" Thick
F
3/4" ⌀ Holes
2 7/8"
5/8"
1 5/8"
5/8"
1 1/4"
1/4" Thick
10 ⊔ 15.3
For type 2c & 3b Guard Rail Posts.
7/8" Holes
2 1/4"
2
6"
2
10"
9"
9"
3/4" x 4" Galv. Machine Bolts Sq. Heads and Hex Nuts
CHANNEL ANCHOR

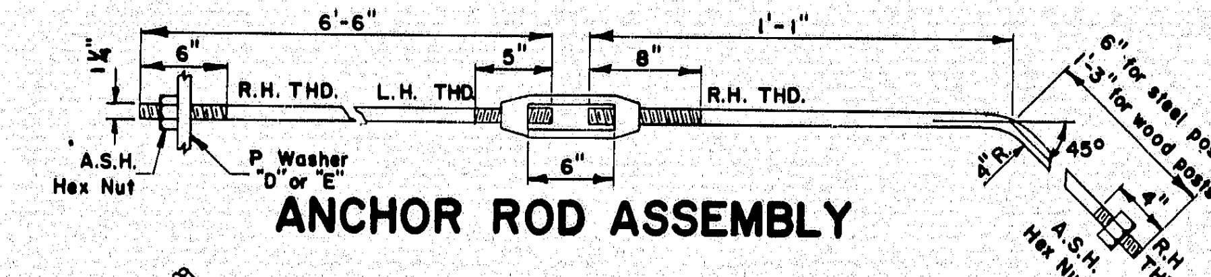
NOTES
1. All holes to be 7/8" ⌀ unless otherwise noted.
2. Holes shall be drilled or punched before galvanizing.

PLATE WASHERS

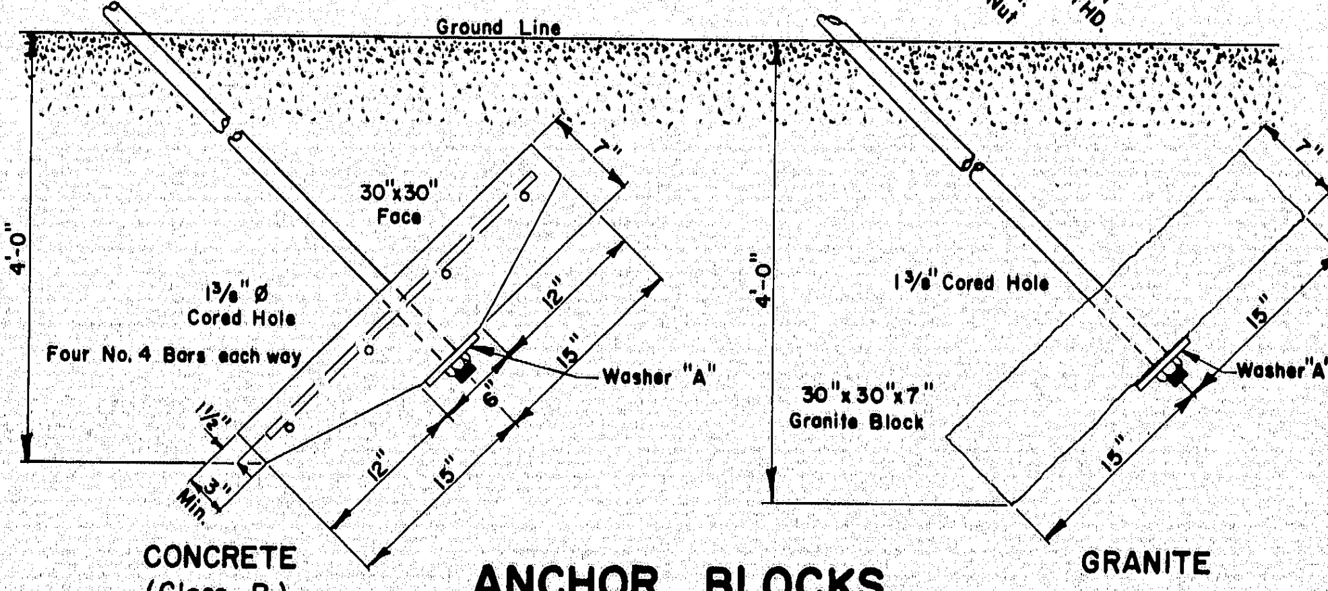

PLAN
Direction of traffic
1/8"
1 1/16" R.
1 1/16" R.
1 1/2"
1 1/2"
1/4"
15/16" R.
3/8" R.
1 3/16" R.
4 1/8"
5 7/16"
1 1/16"
1/8"
5/8"
6 5/8"
1/8"
Ends of slots turned inward to reduce possibility of cutting wires in case of impact.

OFFSET BRACKET

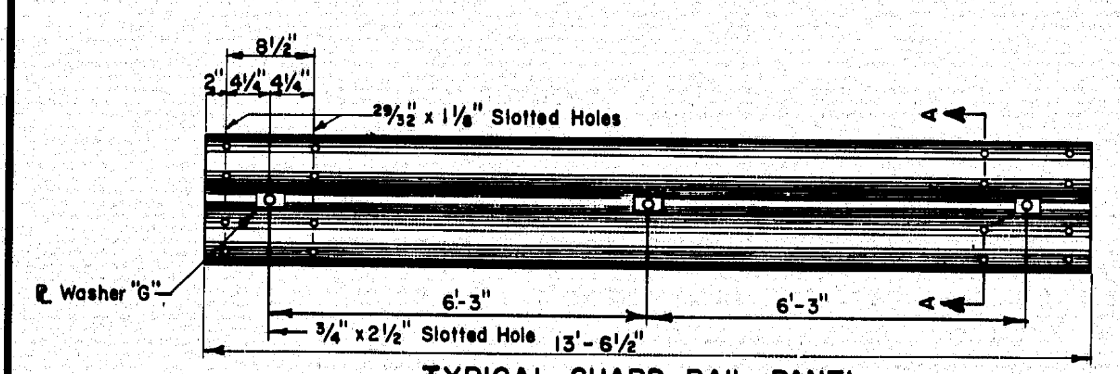

13/16"
1/2"
1 1/2"
3/8"
3/8" R.
13 1/2"
1/4"
STAY PIN
8 7/16"
7 1/4"
7/8" ⌀ Hole
1/4"
3"
3"
3"
3"
1/4"
4 1/2"
29/32" ⌀ Hole
4 1/2"
29/32" ⌀ Hole
4 1/2"
1"
7/8"
7/8"
7/8"
14 1/2"
1/8" Plate
20 3/4"
UNBENT PLATE
6 5/8"
FRONT VIEW
5 7/16"
SIDE VIEW


6'-6"
1 1/4"
6"
5"
R.H. THD.
L.H. THD.
1'-1"
8"
R.H. THD.
6"
A.S.H. Hex Nut
℄ Washer "D" or "E"
6" for steel posts
1'-3" for wood posts
4" R.
45°
4"
A.S.H. Hex Nut
R.H. THD.

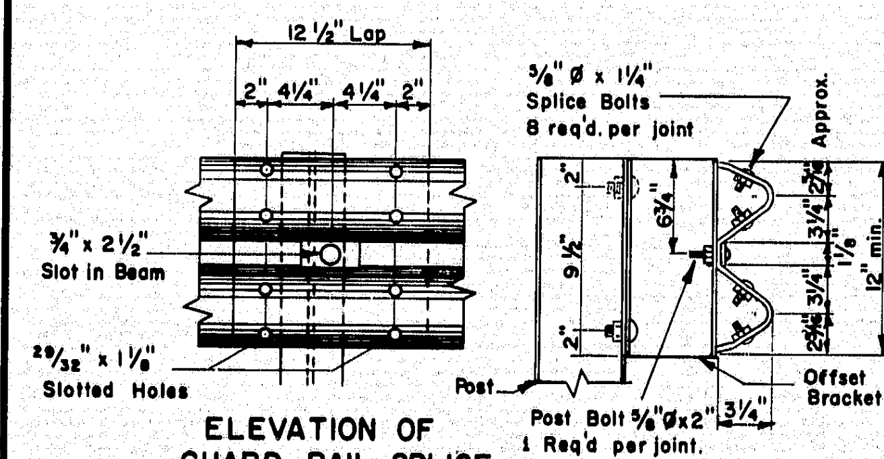
ANCHOR ROD ASSEMBLY


Ground Line
4'-0"
7"
30"x30" Face
1 3/8" ⌀ Cored Hole
Four No. 4 Bars each way
12"
15"
6"
Washer "A"
1 1/2"
3" Min.
12"
15"
CONCRETE (Class B)
4'-0"
1 3/8" Cored Hole
30"x30"x7" Granite Block
7"
15"
Washer "A"
15"
GRANITE

ANCHOR BLOCKS


8 1/2"
2"
4 1/4"
4 1/4"
29/32" x 1 1/8" Slotted Holes
A
℄ Washer "G"
6'-3"
6'-3"
3/4" x 2 1/2" Slotted Hole
13'-6 1/2"
A

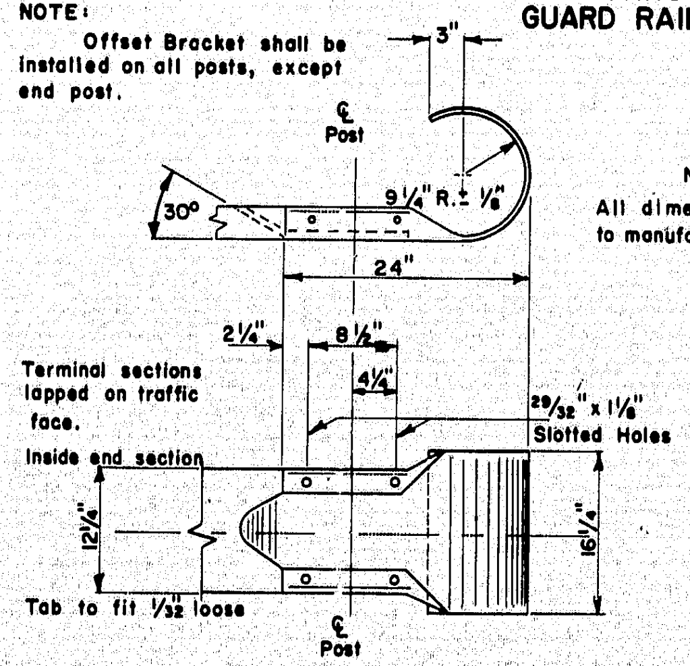
TYPICAL GUARD RAIL PANEL
NO. 10 GAUGE GUARD RAIL BEAM


12 1/2" Lap
2"
4 1/4"
4 1/4"
2"
3/4" x 2 1/2" Slot in Beam
29/32" x 1 1/8" Slotted Holes
5/8" ⌀ x 1 1/4" Splice Bolts 8 req'd. per joint
Approx.
2"
9 1/2"
2"
6 3/4"
2 5/16"
3 1/4"
3 1/4"
2 5/16"
1 1/8"
12" min.
Post
Post Bolt 5/8" ⌀ x 2" 1 Req'd per joint.
3 1/4"
Offset Bracket

ELEVATION OF GUARD RAIL SPLICE AT POST

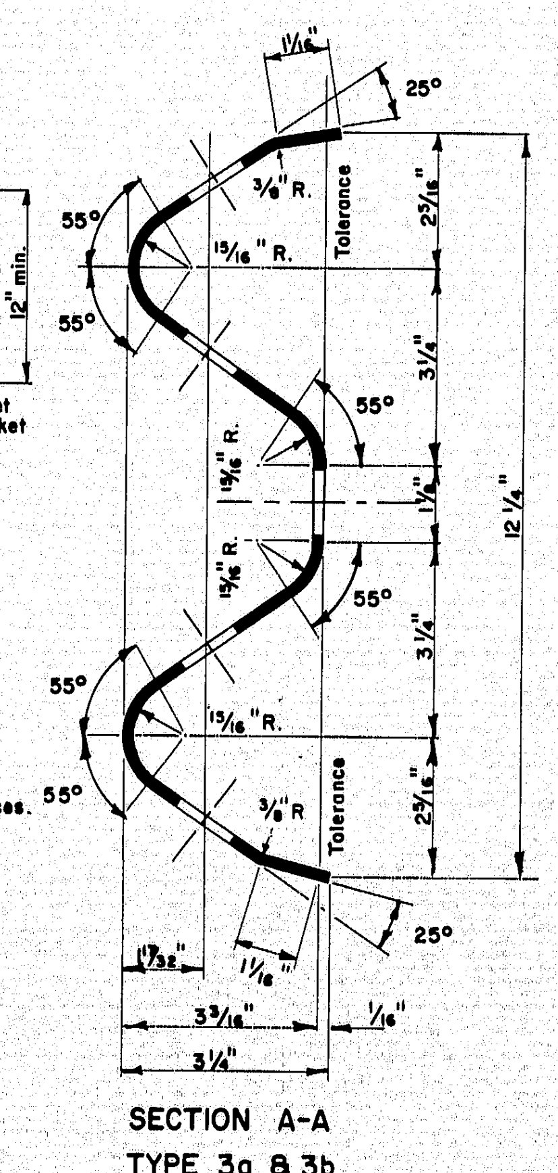
CROSS SECTION THROUGH GUARD RAIL SPLICE

NOTE:
Offset Bracket shall be installed on all posts, except end post.


3"
℄ Post
30°
9 1/4" R. ± 1/8"
24"
2 1/4"
8 1/2"
4 1/4"
29/32" x 1 1/8" Slotted Holes
Terminal sections lapped on traffic face.
Inside end section
12 1/4"
16 1/4"
Tab to fit 1/32 loose
℄ Post

GUARD RAIL-TERMINAL END SECTION

NOTE
All dimensions subject to manufacturing tolerances.


1 1/16"
25°
3/8" R.
15/16" R.
55°
55°
Tolerance
2 5/16"
3 1/4"
55°
1 5/16" R.
1 1/4"
1 5/16" R.
55°
3 1/4"
12 1/4"
55°
55°
15/16" R.
3/8" R
Tolerance
2 5/16"
25°
17/32"
1 1/16"
3 3/16"
1/16"
3 1/4"

SECTION A-A
TYPE 3a & 3b

GUARD RAIL BEAM DETAIL

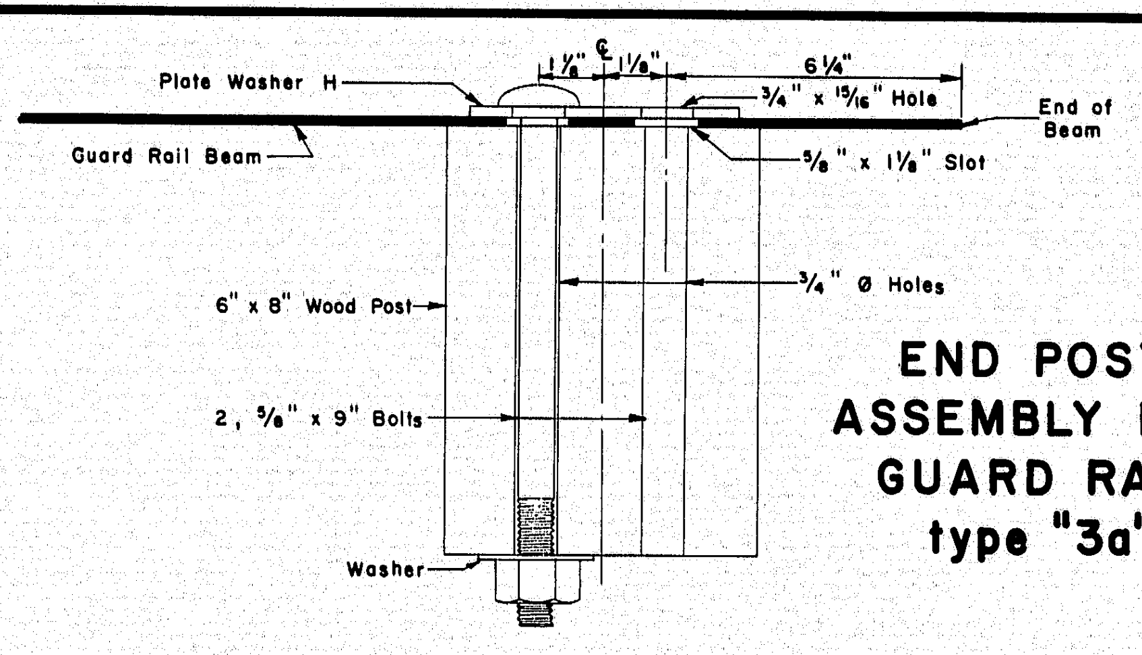
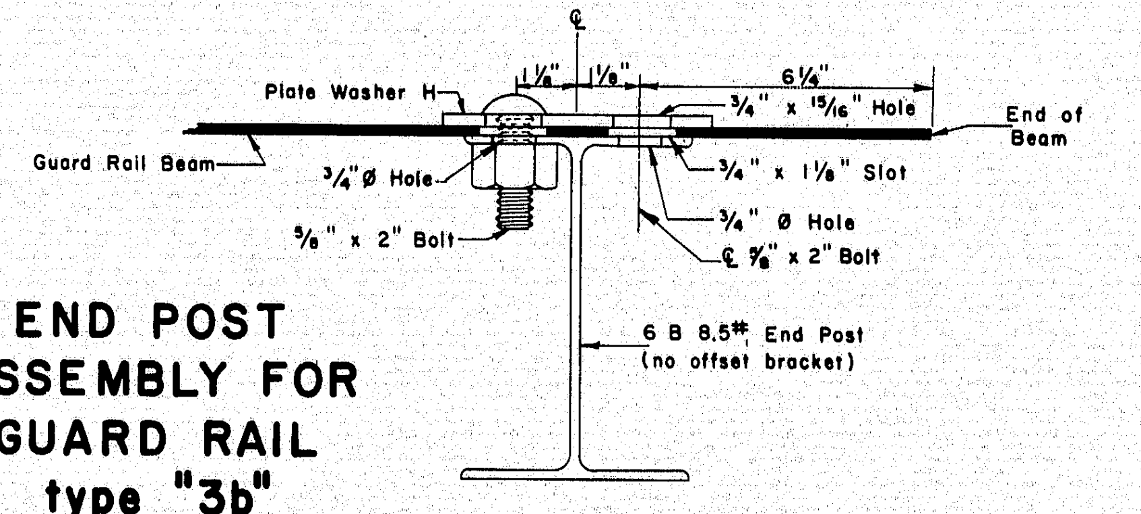


Plate Washer H
1 1/8"
℄
1 1/8"
6 1/4"
3/4" x 15/16" Hole
End of Beam
Guard Rail Beam
5/8" x 1 1/8" Slot
6" x 8" Wood Post
3/4" ⌀ Holes
2, 5/8" x 9" Bolts
Washer

END POST ASSEMBLY FOR GUARD RAIL type "3a"


℄
Plate Washer H
1 1/8"
1 1/8"
6 1/4"
3/4" x 15/16" Hole
End of Beam
Guard Rail Beam
3/4" ⌀ Hole
5/8" x 2" Bolt
3/4" x 1 1/8" Slot
3/4" ⌀ Hole
℄ 5/8" x 2" Bolt
6 B 8.5# End Post (no offset bracket)

END POST ASSEMBLY FOR GUARD RAIL type "3b"

REVISIONS	
Plate "D"	11-22-71

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

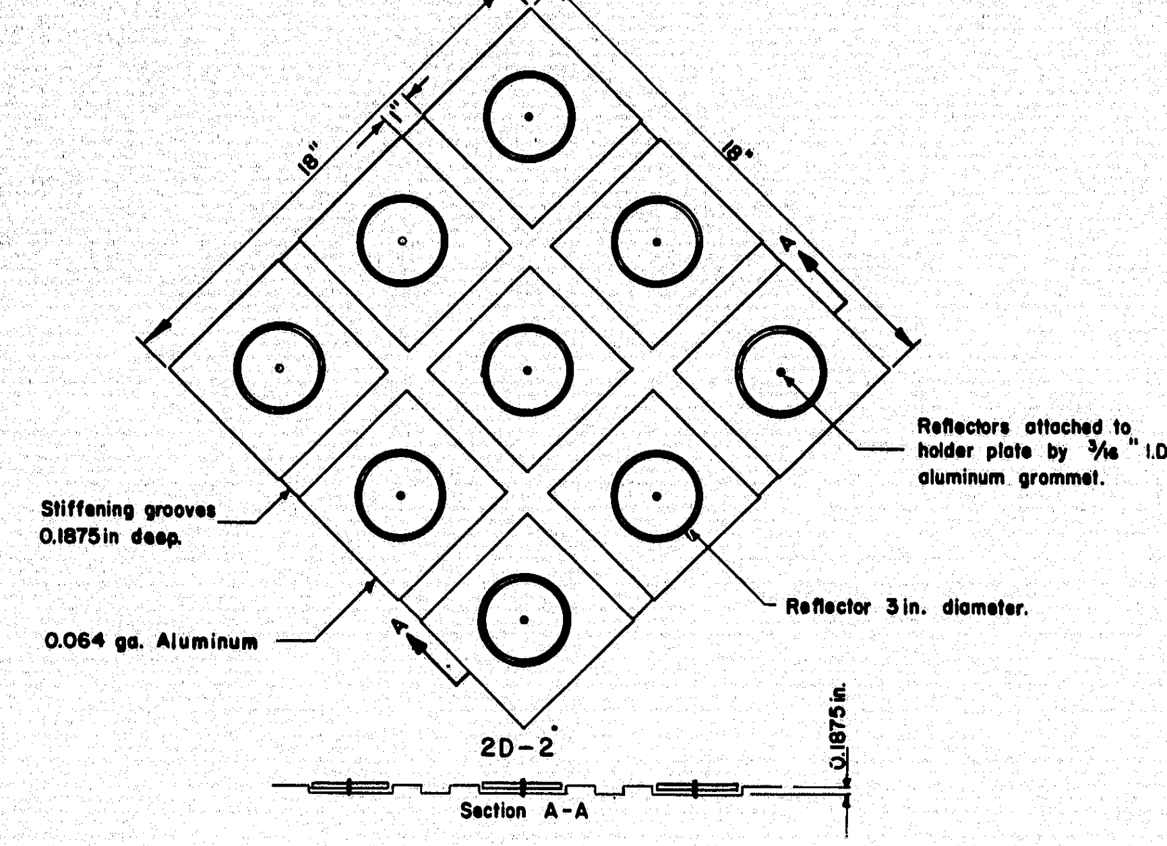
GUARD RAILS, ANCHOR
ASSEMBLIES, PLATE
WASHERS and STANDARD
FITTINGS

AUG. 1969 ⟨6⟩

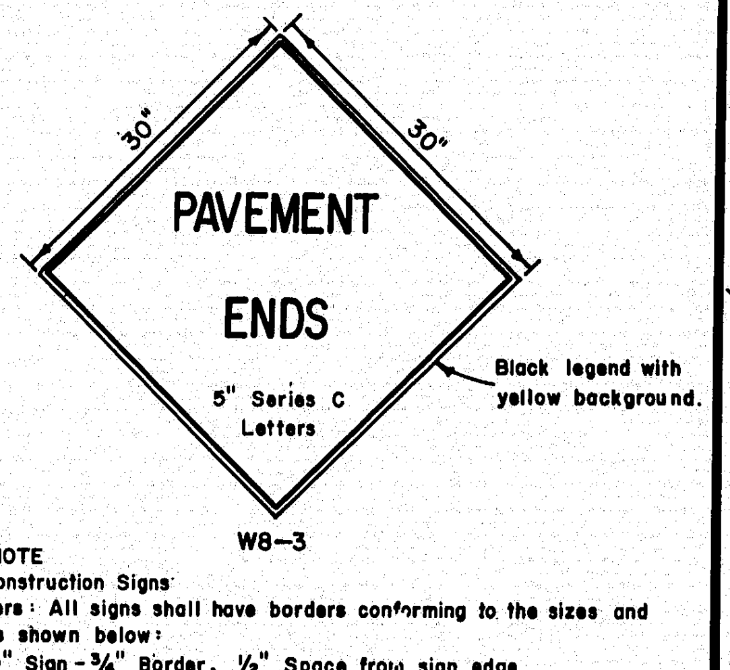
152-84

TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ KYPLEX

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


18"
1"
18"
A
Reflectors attached to holder plate by 3/16" I.D. aluminum grommet.
Stiffening grooves 0.1875in deep.
Reflector 3in. diameter.
0.064 ga. Aluminum
2D-2
0.1875in.
Section A-A

HAZARD MARKER


30"
30"
PAVEMENT
ENDS
5" Series C Letters
Black legend with yellow background.
W8-3

NOTE

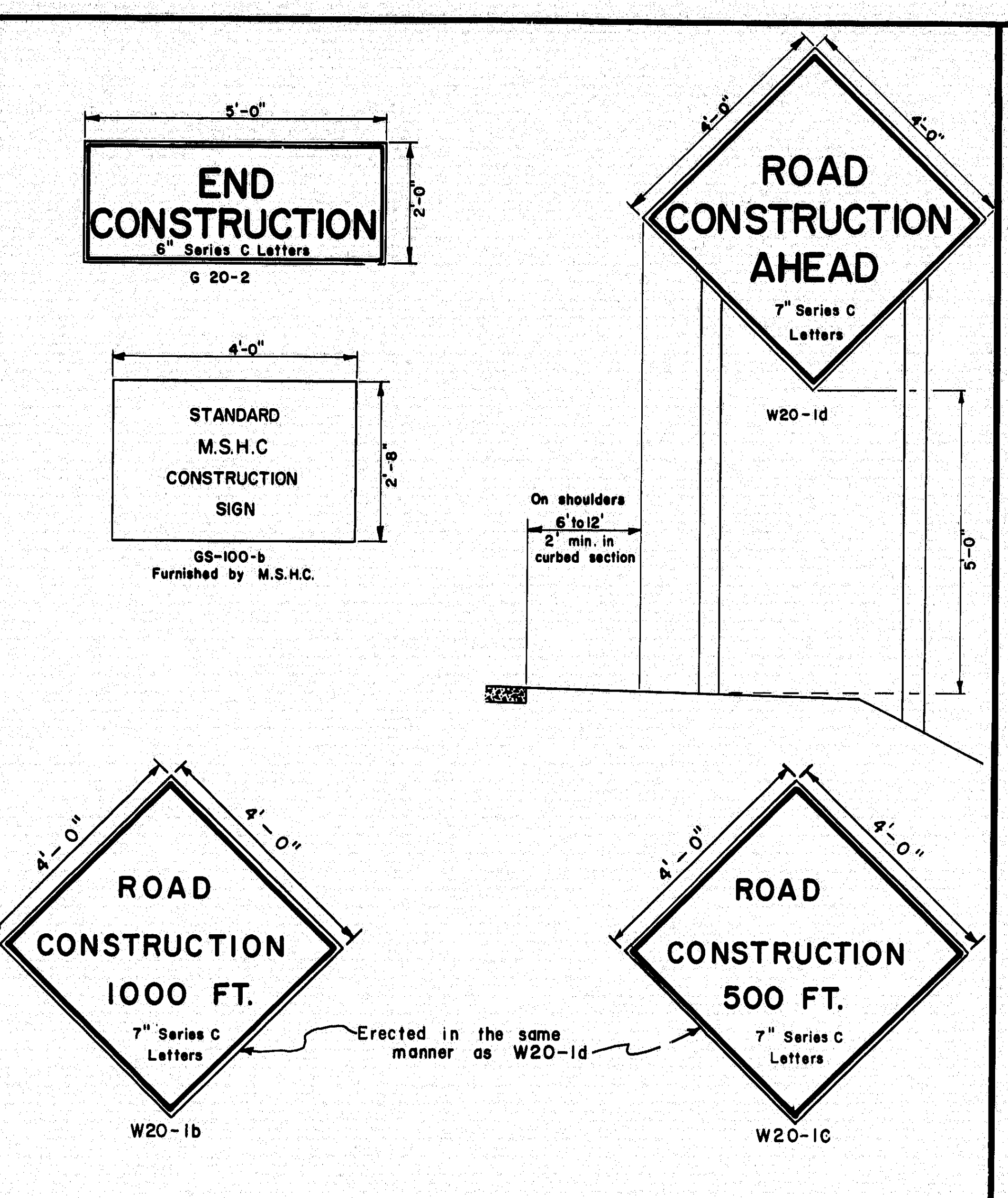
SIGNING IN AN AREA WHERE BLASTING IS NECESSARY SHALL BE PLACED AS OUTLINED IN THE "MANUAL", AND THE PRECAUTIONS OF SUBSECTION 107.12 OF THE STANDARD SPECIFICATIONS SHALL BE OBSERVED.

GENERAL NOTE

Construction Signs

1. Sign Borders: All signs shall have borders conforming to the sizes and spacing as shown below:
   - a. 30"x30" Sign - 3/4" Border, 1/2" Space from sign edge.
   - b. 2' x 5' Sign - 5/8" Border, 3/8" Space from sign edge.
   - c. 3' x 4' Sign - 3/4" Border, 1/2" Space from sign edge.
   - d. 4' x 4' Sign - 1 1/4" Border, 3/4" Space from sign edge.

A


5'-0"
END CONSTRUCTION
6" Series C Letters
2'-0"
G 20-2
4'-0"
STANDARD M.S.H.C CONSTRUCTION SIGN
2'-8"
GS-100-b
Furnished by M.S.H.C.
4'-0"
4'-0"
ROAD CONSTRUCTION AHEAD
7" Series C Letters
W20-1d
On shoulders 6' to 12'
2' min. in curbed section
5'-0"
4'-0"
4'-0"
ROAD CONSTRUCTION 1000 FT.
7" Series C Letters
W20-1b
Erected in the same manner as W20-1d
4'-0"
4'-0"
ROAD CONSTRUCTION 500 FT.
7" Series C Letters
W20-1C

CONSTRUCTION SIGNS

B

GENERAL NOTES - BARRICADES

1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways," published by the U.S. Department of Transportation, Federal Highway Administration, 1971.

2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 16 minimum gauge galvanized steel, or 1/4" plywood. Individual white sheets may be attached to a black or orange painted background to form the black or orange and white stripes. At the Contractor's option the reflective sheeting and backing may extend the full width of the barricade with an opaque film or paint applied to form the stripes.

3. All signs shall be of reflective sheeting on 5/8" thick plywood. The plywood shall conform to subsection 712.25, Maine State Highway Commission, Standard Specifications, June 1968.

4. Pressure sensitive reflective sheeting will be an acceptable alternate to the reflective sheeting required by Maine State Highway Commission, Standard Specifications.

NOTES - PORTABLE BARRICADES

1. Lumber sizes for portable barricades shall be 2" x 8" except posts which shall be 4" x 4" (nominal sizes).

2. The detour sign shall be an oversized M4-10 sign with a demountable "DETOUR" message which shall be made of screened reflective sheeting on 1/4" plywood, masonite, sheet steel or sheet aluminum.

3. Hazard markers shall be attached to the barricade with a bolt assembly of steel cadmium plated 5/16" bolt, lock washer and vandal resistant nuts.

4. When two W1-6 signs are required, R11-2, R11-3, or R11-4 signs shall be omitted.

5. Flashing lights housings shall be mounted to permit rotating in a vertical axis to allow for adjustment to face oncoming traffic.

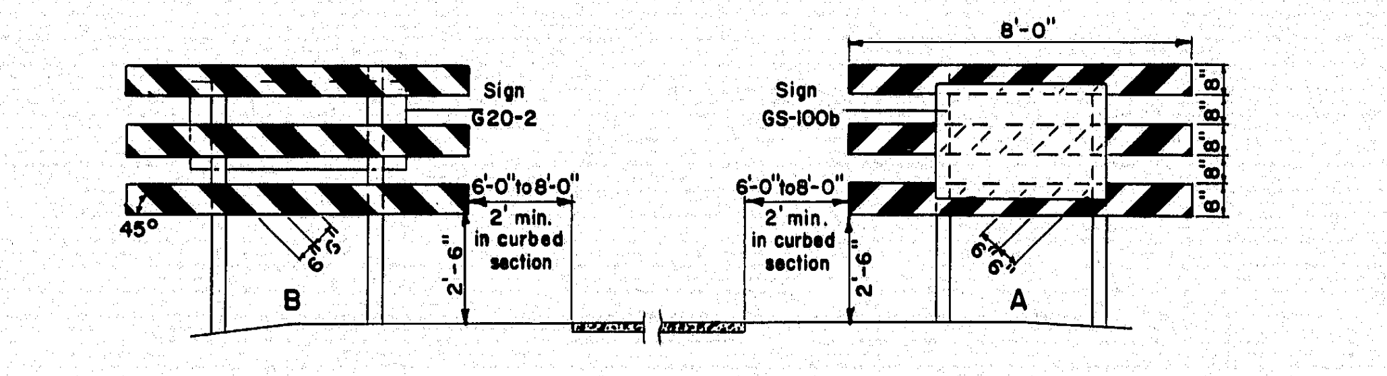
6. Location of electric service and meter to be determined after the power source has been located.

NOTES-WING BARRICADES

1. Lumber sizes for wing barricades shall be 1" x 8" except posts which shall be 4" x 4" (nominal sizes).

2. Wing barricades will not be required unless specifically called for in the special provisions.

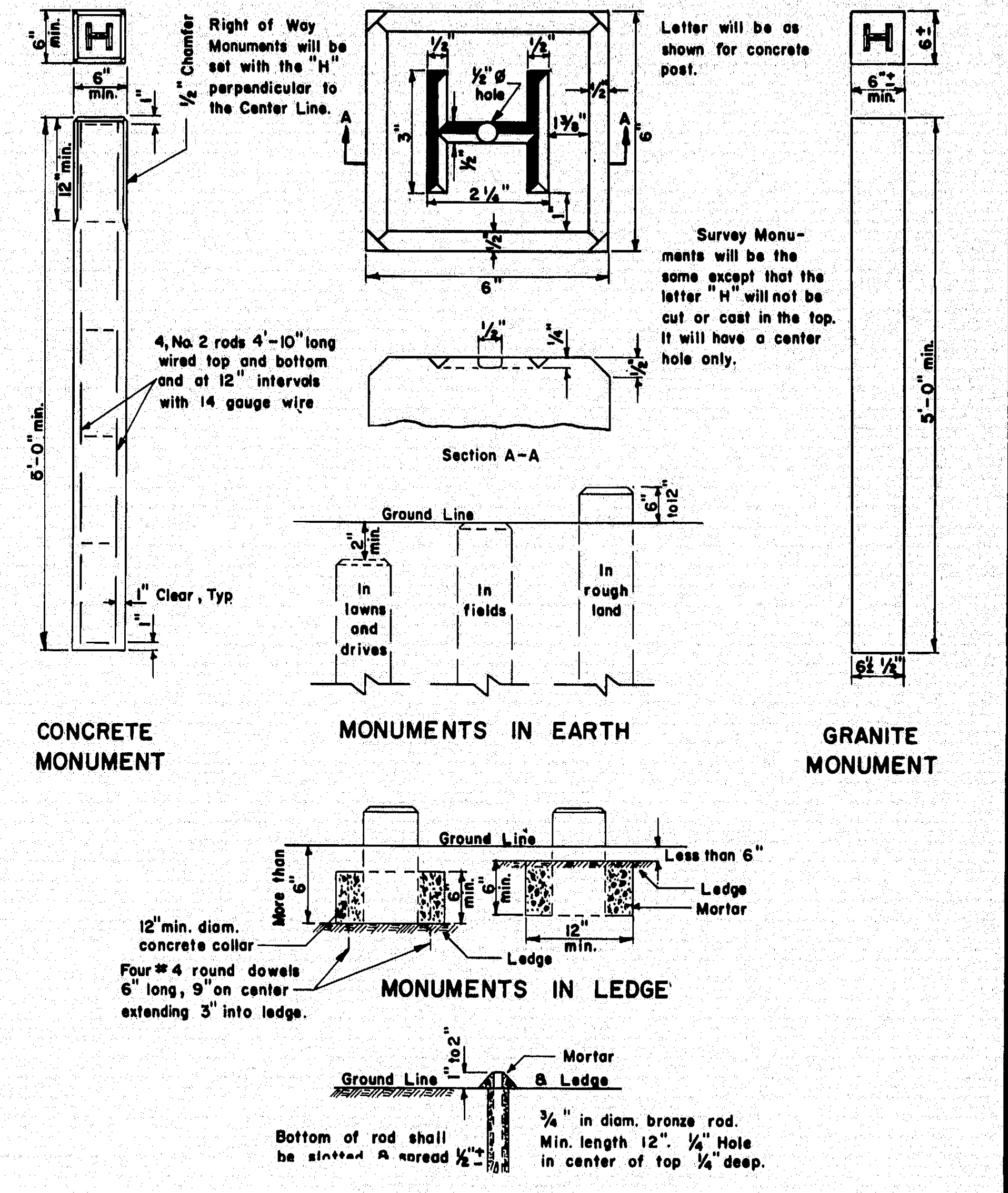
3. Location of signs and barricades will be determined by the Engineer.


Sign G20-2
6'-0" to 8'-0"
2' min. in curbed section
45°
B
8'-0"
Sign GS-100b
6'-0" to 8'-0"
2' min. in curbed section
8"
8"
8"
8"
A

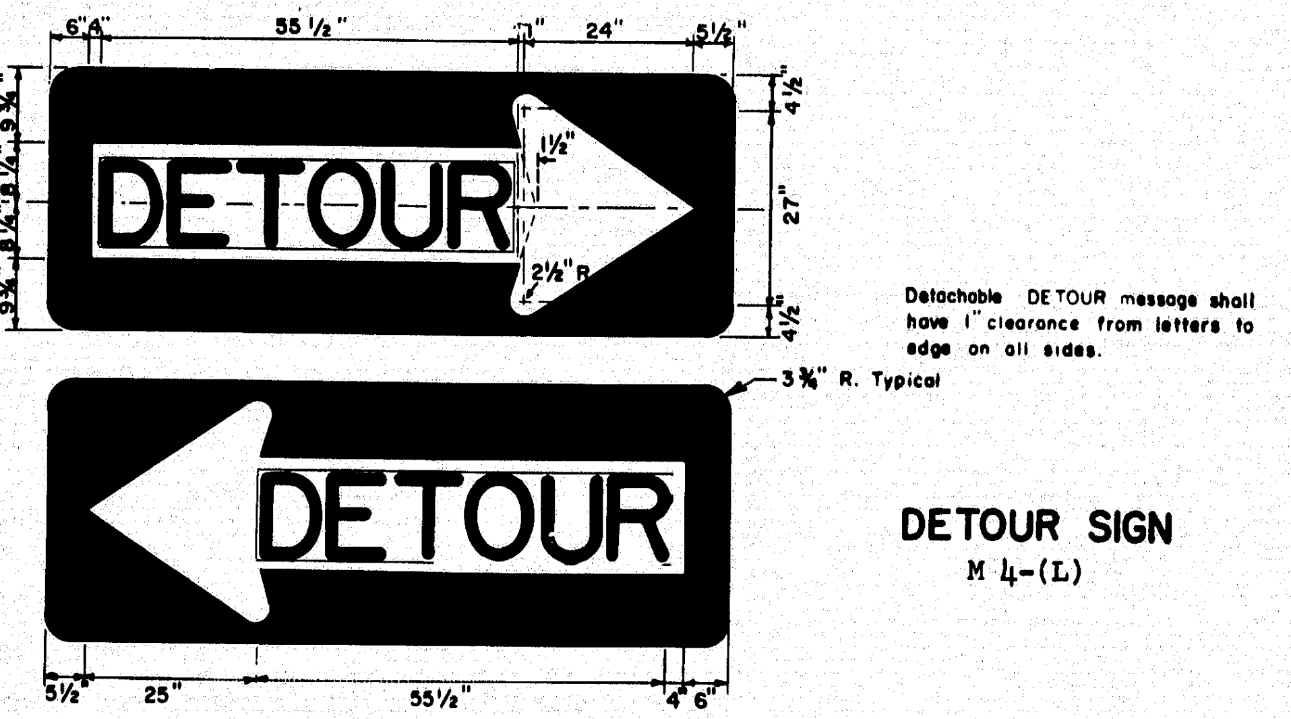
WING BARRICADES

C

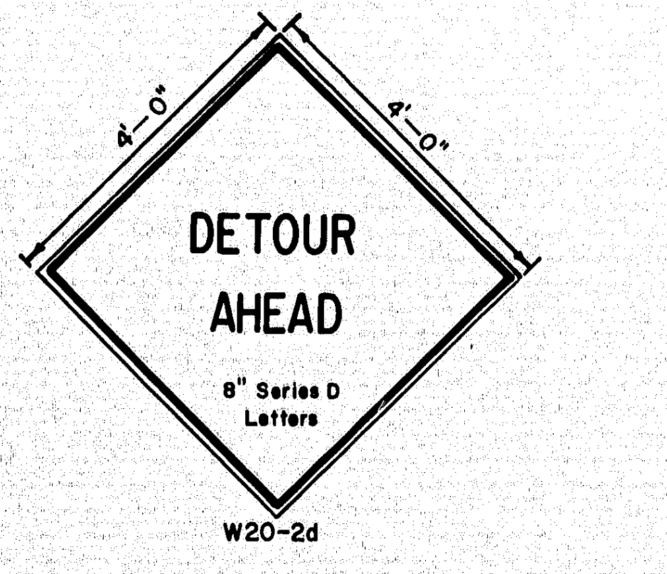
RIGHT OF WAY & SURVEY MONUMENTS


6" min.
6" min.
1/2" Chamfer
Right of Way Monuments will be set with the "H" perpendicular to the Center Line.
12" min.
6'-0" min.
4, No. 2 rods 4'-10" long wired top and bottom and at 12" intervals with 14 gauge wire
1" Clear, Typ
1/2"
1/2"
1/2" Ø hole
3"
1/2"
1 3/8"
2 1/4"
1"
1/2"
6"
6"
A
A
Letter will be as shown for concrete post.
Survey Monuments will be the same except that the letter "H" will not be cut or cast in the top. It will have a center hole only.
1/2"
1/4"
1/2"
Section A-A
Ground Line
2" min.
In lawns and drives
In fields
In rough land
6" to 12"
6"±
6" ± min.
5'-0" min.
6 1/2"
1/2"
CONCRETE MONUMENT
MONUMENTS IN EARTH
GRANITE MONUMENT
Ground Line
More than 6"
6" min.
6" min.
Less than 6"
Ledge
Mortar
12" min.
12" min. diam. concrete collar
Four #4 round dowels 6" long, 9" on center extending 3" into ledge.
Ledge
MONUMENTS IN LEDGE
1" to 2"
Ground Line
Mortar & Ledge
Bottom of rod shall be slotted & spread 1/2"±
3/4" in diam. bronze rod. Min. length 12". 1/4" Hole in center of top 1/4" deep.
BRONZE PIN MARKERS

D

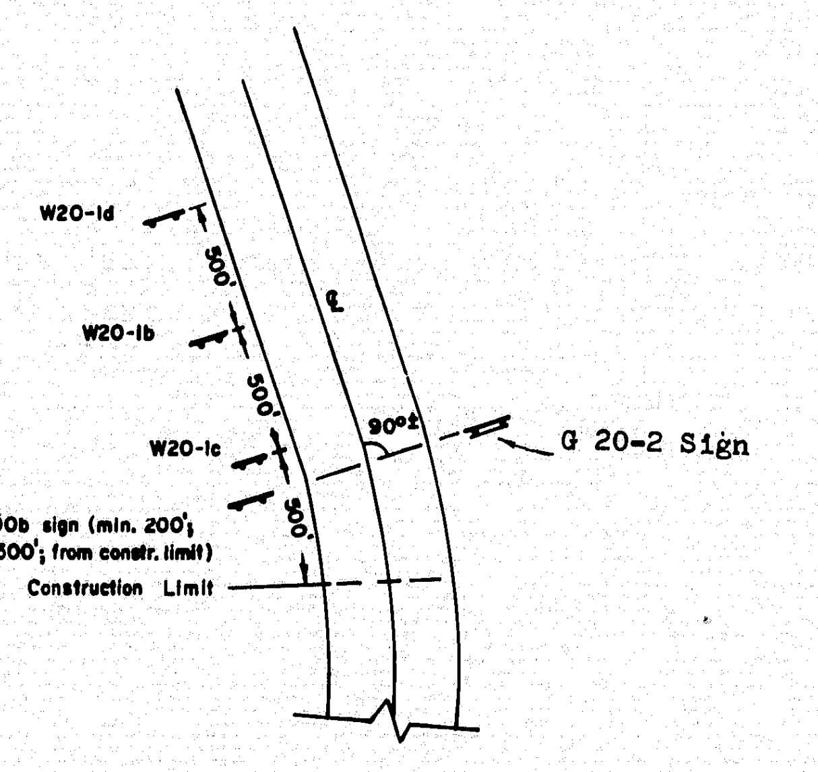

6"
4"
55 1/2"
1"
24"
5 1/2"
9 3/4"
8 1/4"
8 1/4"
9 3/4"
DETOUR
1 1/2"
2 1/2" R
4 1/2"
27"
4 1/2"
Detachable DETOUR message shall have 1" clearance from letters to edge on all sides.
3 3/4" R. Typical
DETOUR
5 1/2"
25"
55 1/2"
4"
6"
12" Series "D" letters
3'x8'

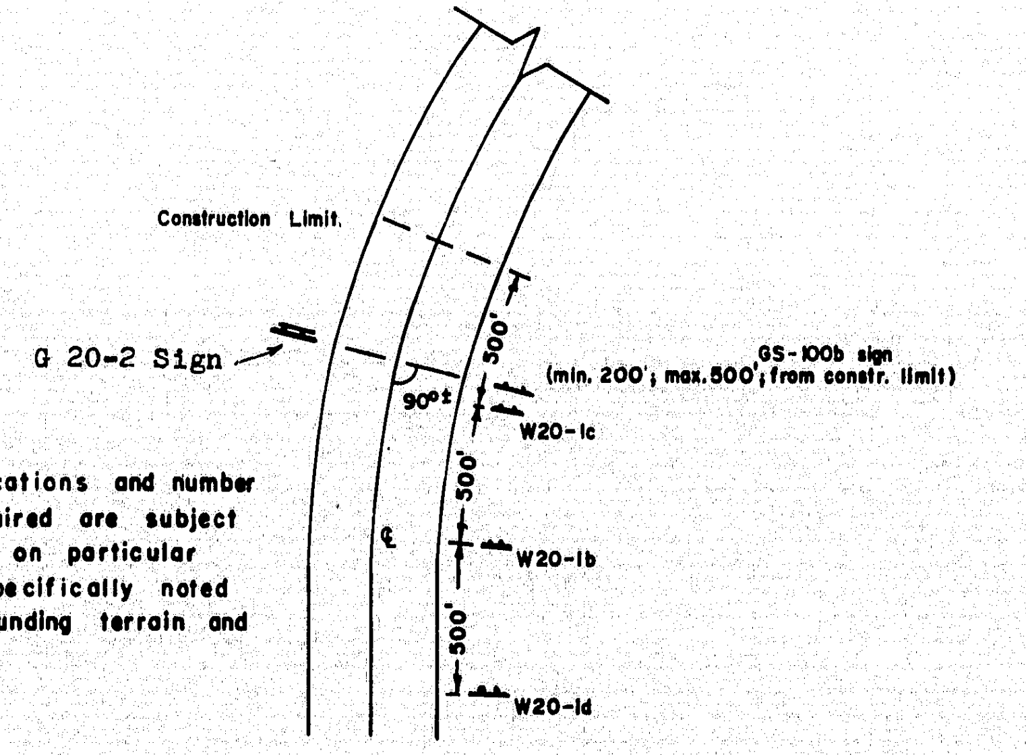
DETOUR SIGN
M 4-(L)


4'-0"
4'-0"
DETOUR AHEAD
8" Series D Letters
W20-2d

E

STANDARD SIGN LOCATIONS

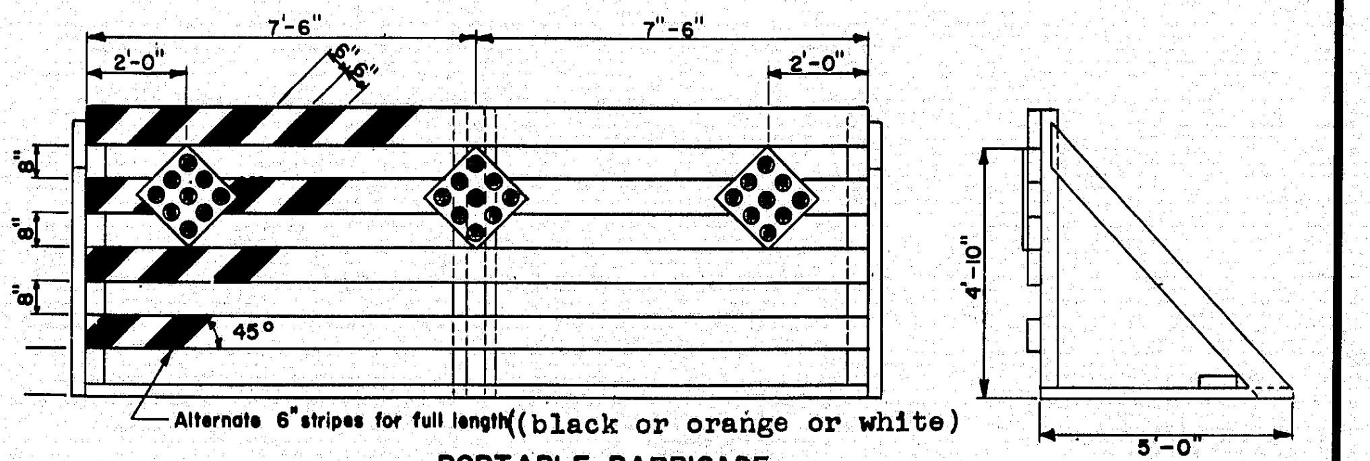

W20-1d
500'
W20-1b
500'
W20-1c
500'
GS-100b sign (min. 200'; max. 500'; from constr. limit)
Construction Limit
℄
90°±
G 20-2 Sign


Construction Limit.
500'
G 20-2 Sign
90°±
GS-100b sign (min. 200'; max. 500'; from constr. limit)
W20-1c
500'
℄
W20-1b
500'
W20-1d

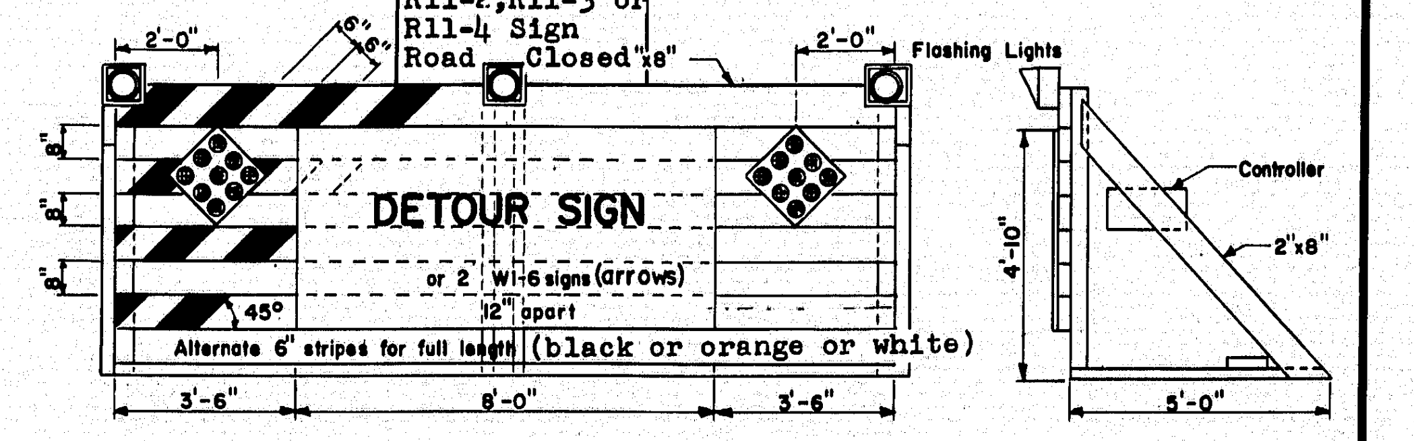
NOTE:

Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.

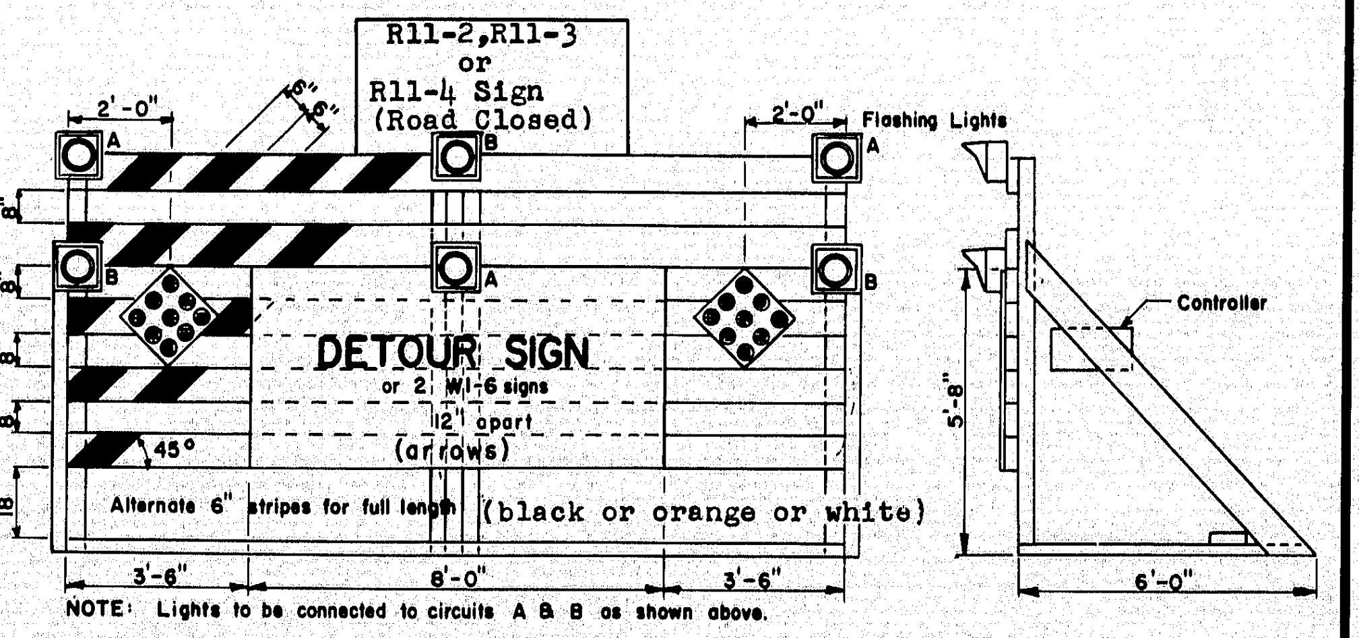
F


7'-6"
7'-6"
2'-0"
2'-0"
6"
6"
8"
8"
8"
45°
4'-10"
5'-0"
Alternate 6" stripes for full length (black or orange or white)

PORTABLE BARRICADE


R11-2,R11-3 or R11-4 Sign Road Closed
x8"
2'-0"
2'-0"
6"
6"
Flashing Lights
8"
8"
8"
DETOUR SIGN
or 2 W1-6 signs (arrows)
12" apart
45°
Alternate 6" stripes for full length (black or orange or white)
3'-6"
8'-0"
3'-6"
Controller
2"x8"
4'-10"
5'-0"

PORTABLE BARRICADE WITH FLASHING LIGHTS (NORMAL SIZE)

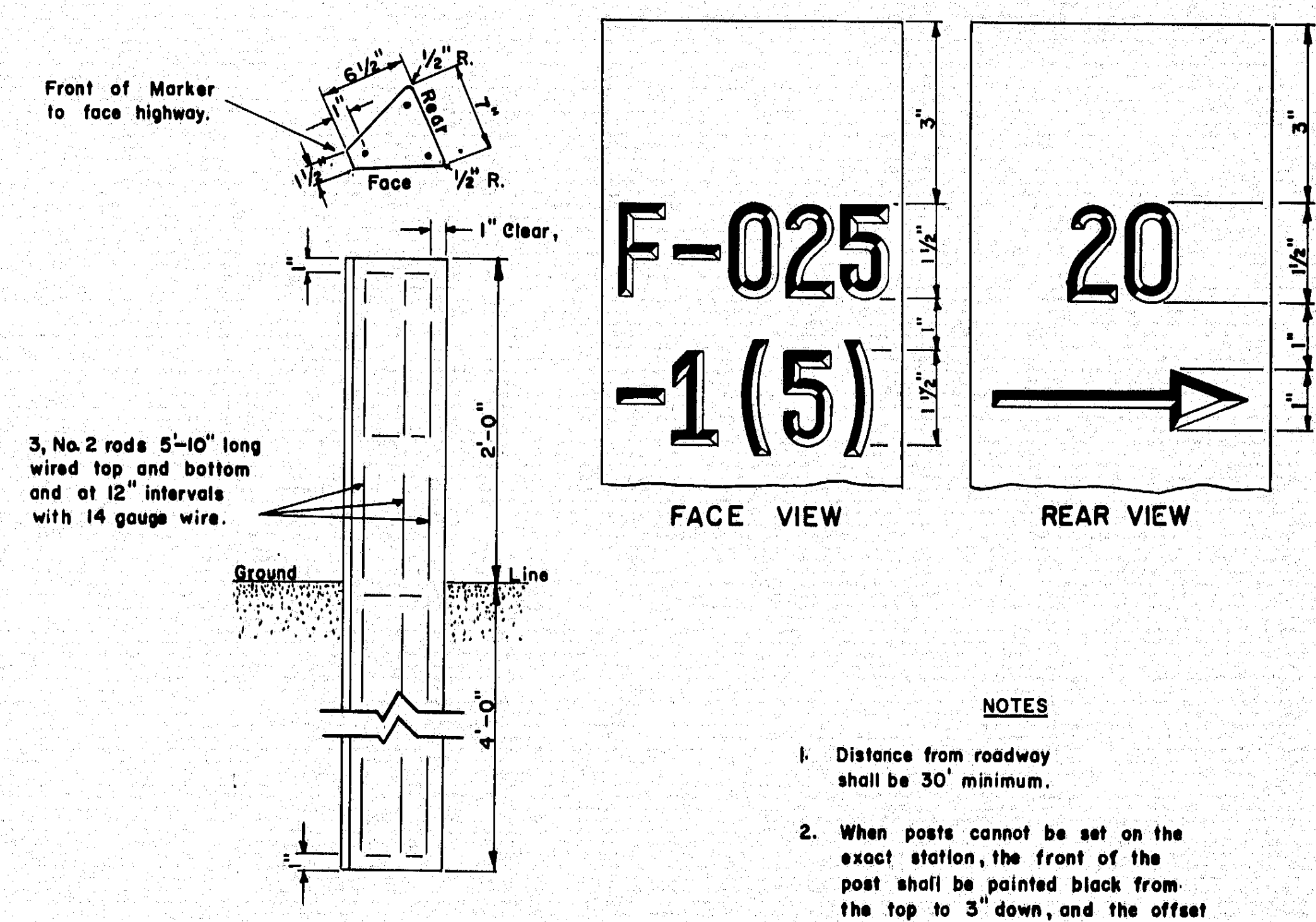

R11-2,R11-3 or R11-4 Sign (Road Closed)
2'-0"
2'-0"
6"
6"
Flashing Lights
A
B
A
B
A
B
8"
8"
8"
8"
18"
DETOUR SIGN
or 2 W1-6 signs
12" apart
(arrows)
45°
Alternate 6" stripes for full length (black or orange or white)
3'-6"
8'-0"
3'-6"
Controller
5'-8"
6'-0"

NOTE: Lights to be connected to circuits A & B as shown above.

OVERSIZED PORTABLE BARRICADE WITH FLASHING LIGHTS

BARRICADES

G


Front of Marker to face highway.
6 1/2"
1/2" R.
Rear
7"
1"
1 1/2"
Face
1/2" R.
1" Clear,
3, No. 2 rods 5'-10" long wired top and bottom and at 12" intervals with 14 gauge wire.
2'-0"
Ground Line
4'-0"
F-025
-1(5)
3"
1 1/2"
1"
1 1/2"
FACE VIEW
20
3"
1 1/2"
1"
1"
REAR VIEW

NOTES

1. Distance from roadway shall be 30' minimum.
2. When posts cannot be set on the exact station, the front of the post shall be painted black from the top to 3" down, and the offset distance marked on rear with an arrow pointing in direction of beginning or end of project.
3. All markings to be 1/4" deep and 3/16" wide.

PROJECT MARKERS

H

REVISION	
PLATE B	12-21-70
PLATES A, C, E, F & G	12-15-71

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

BARRICADES
WARNING SIGNS
MONUMENTS
PROJECT MARKERS

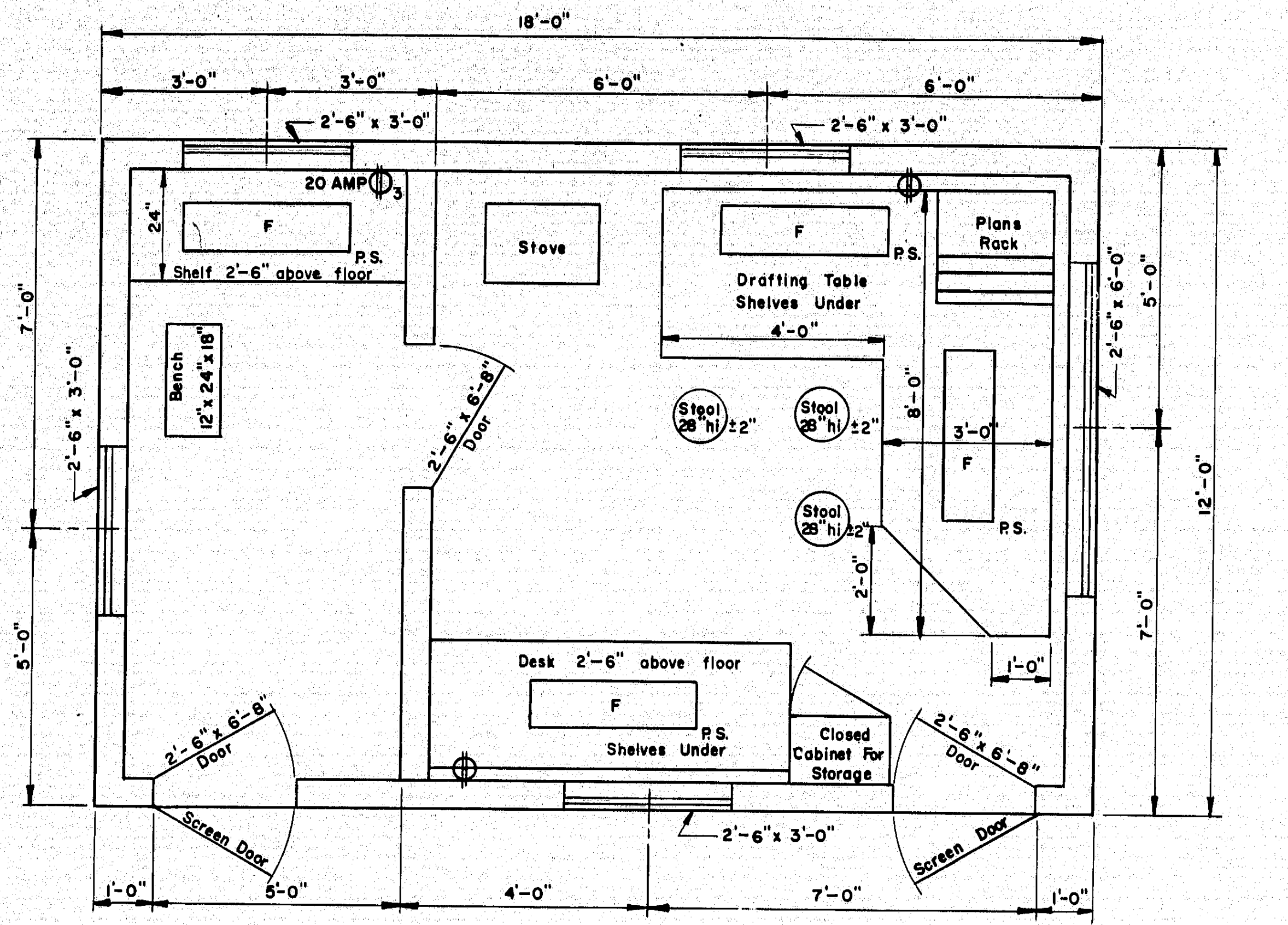
AUG. 1969

11

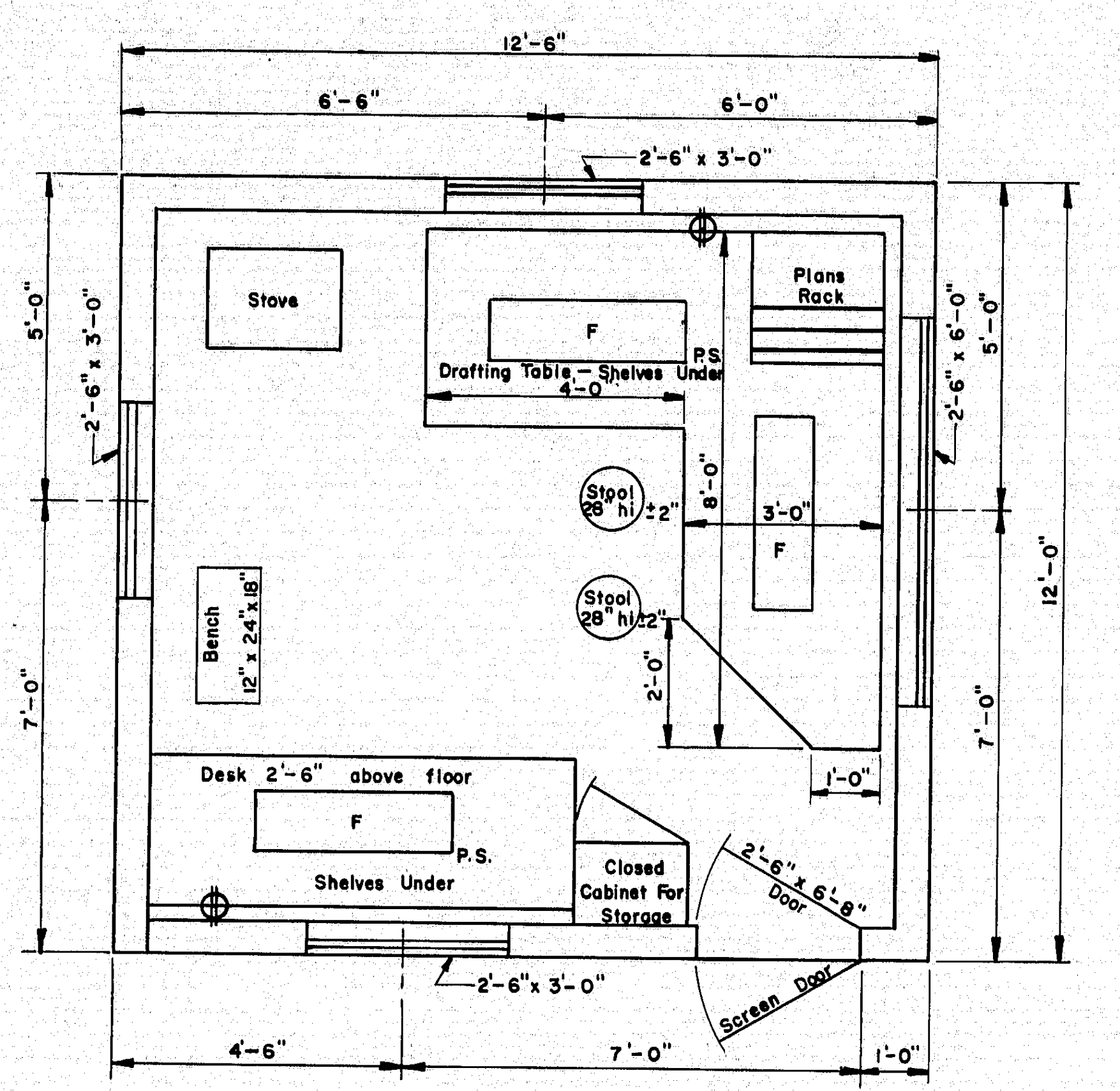
152-85

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

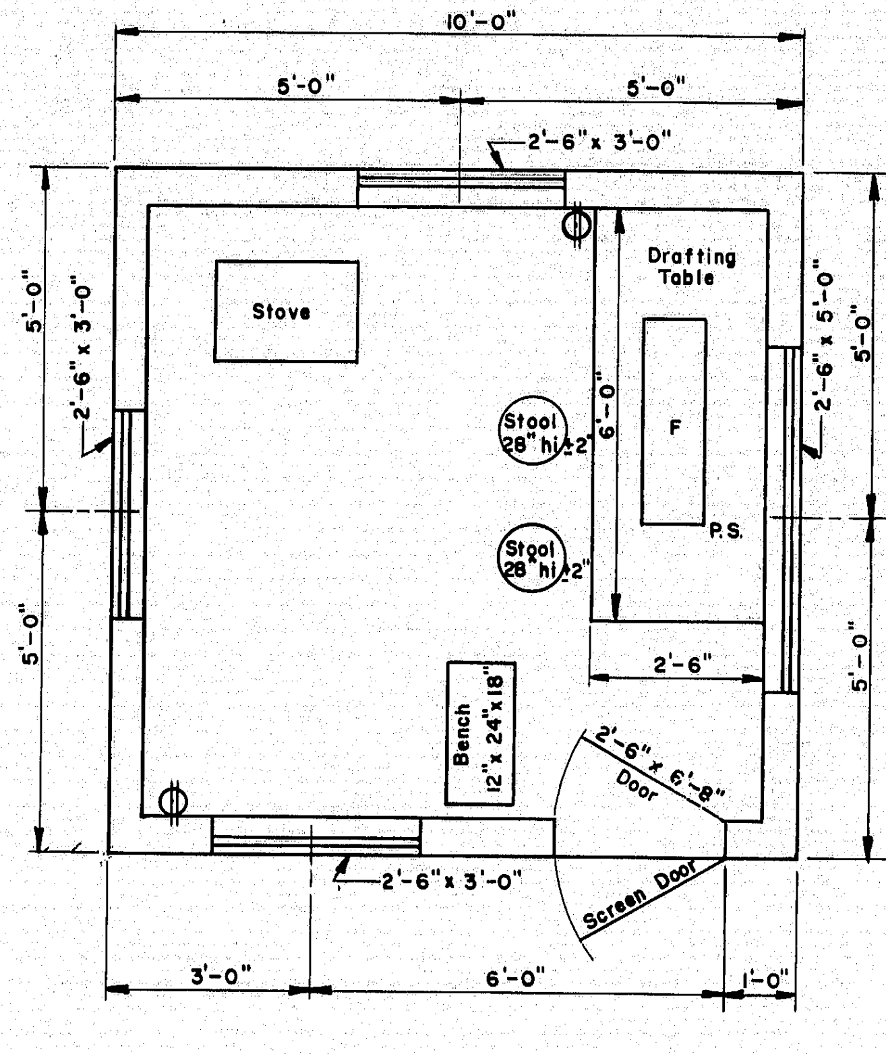
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I95 5(6)94	55	55


18'-0"
3'-0"
3'-0"
6'-0"
6'-0"
2'-6" x 3'-0"
2'-6" x 3'-0"
20 AMP ⏀3
24"
F
P.S.
Shelf 2'-6" above floor
Stove
F
Drafting Table
Shelves Under
P.S.
Plans Rack
4'-0"
Bench 12" x 24" x 18"
2'-6" x 6'-8" Door
Stool 28" hi ±2"
Stool 28" hi ±2"
Stool 28" hi ±2"
8'-0"
3'-0"
F
P.S.
2'-0"
1'-0"
7'-0"
2'-6" x 3'-0"
5'-0"
2'-6" x 6'-0"
5'-0"
12'-0"
7'-0"
Desk 2'-6" above floor
F
P.S.
Shelves Under
Closed Cabinet For Storage
2'-6" x 6'-8" Door
2'-6" x 6'-8" Door
Screen Door
Screen Door
2'-6" x 3'-0"
1'-0"
5'-0"
4'-0"
7'-0"
1'-0"

FLOOR PLAN
TYPE "A"


12'-6"
6'-6"
6'-0"
2'-6" x 3'-0"
5'-0"
2'-6" x 3'-0"
7'-0"
Stove
F
P.S.
Drafting Table — Shelves Under
4'-0"
Plans Rack
Stool 28" hi ±2"
Stool 28" hi ±2"
8'-0"
3'-0"
F
2'-0"
1'-0"
Bench 12" x 24" x 18"
Desk 2'-6" above floor
F
P.S.
Shelves Under
Closed Cabinet For Storage
2'-6" x 6'-8" Door
Screen Door
2'-6" x 6'-0"
5'-0"
12'-0"
7'-0"
2'-6" x 3'-0"
4'-6"
7'-0"
1'-0"

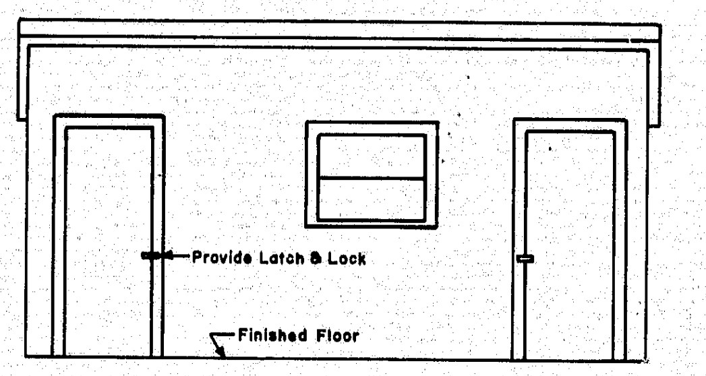
FLOOR PLAN
TYPE "B"


10'-0"
5'-0"
5'-0"
2'-6" x 3'-0"
5'-0"
2'-6" x 3'-0"
5'-0"
Stove
Drafting Table
F
P.S.
Stool 28" hi ±2"
Stool 28" hi ±2"
6'-0"
2'-6"
Bench 12" x 24" x 18"
2'-6" x 6'-8" Door
Screen Door
2'-6" x 5'-0"
5'-0"
5'-0"
10'-0"
2'-6" x 3'-0"
3'-0"
6'-0"
1'-0"

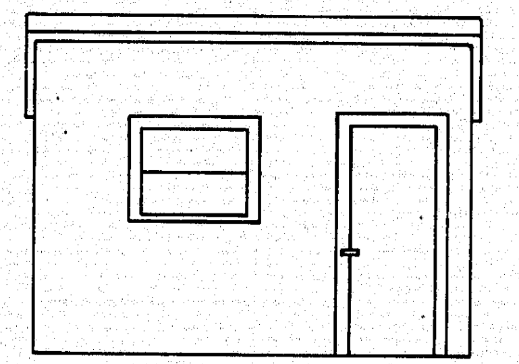
FLOOR PLAN
TYPE "C"

GENERAL NOTES

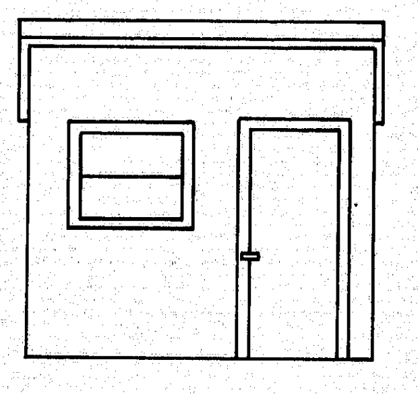
1. Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
2. Shelves under desk shall be constructed to received 11½" x 14" x 25" transfiles.
3. Windows shall be double hung.
4. Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
5. Continuous 110 volt 60 cycle electric service shall be supplied.
6. The engineer may rearrange the items shown on the plan views during construction of the field office.
7. 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
8. SYMBOLS:
   - F Florescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
   - P.S. Pull switch.
   - ⏀ Duplex wall outlet — 15 amp unless otherwise noted.
   - ⏀3 Triplex Wall Outlet
9. 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 furished with water at all times.


Provide Latch & Lock
Finished Floor

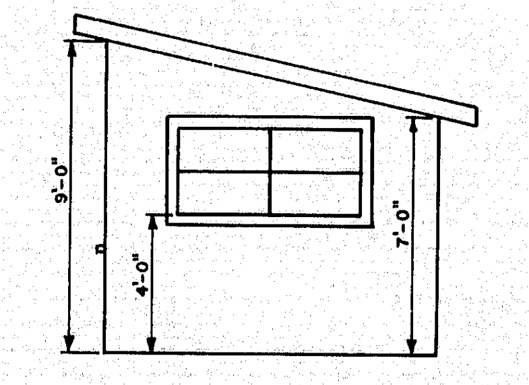
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"

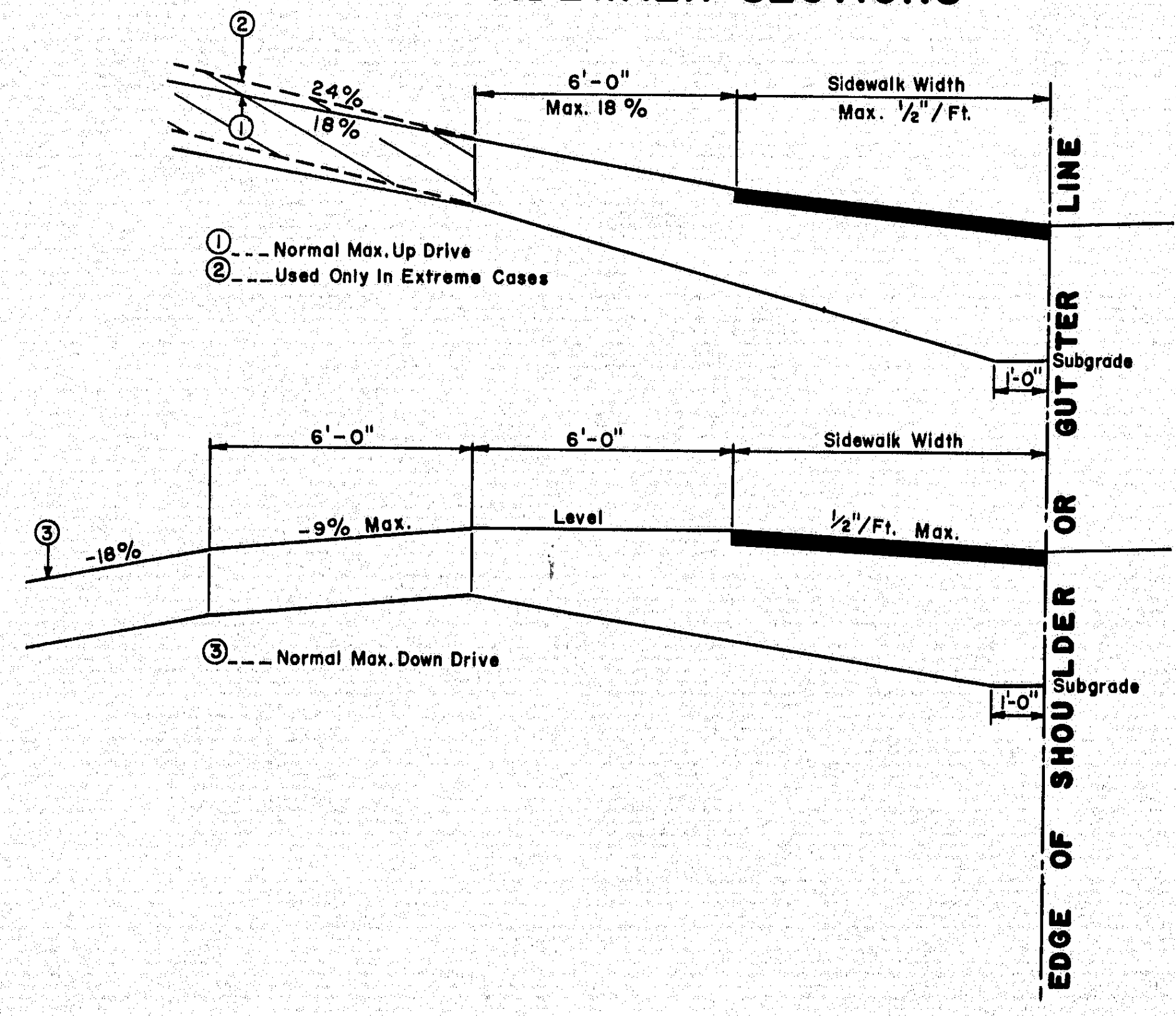


FRONT ELEVATION
TYPE "C"



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

DRIVES ON SIDEWALK SECTIONS


②
24%
①
18%
6'-0"
Max. 18 %
Sidewalk Width
Max. ½"/Ft.
LINE
①--- Normal Max. Up Drive
②--- Used Only In Extreme Cases
Subgrade
1'-0"
GUTTER
6'-0"
6'-0"
Sidewalk Width
③
-18%
-9% Max.
Level
½"/Ft. Max.
OR
③--- Normal Max. Down Drive
Subgrade
1'-0"
SHOULDER
OF
EDGE

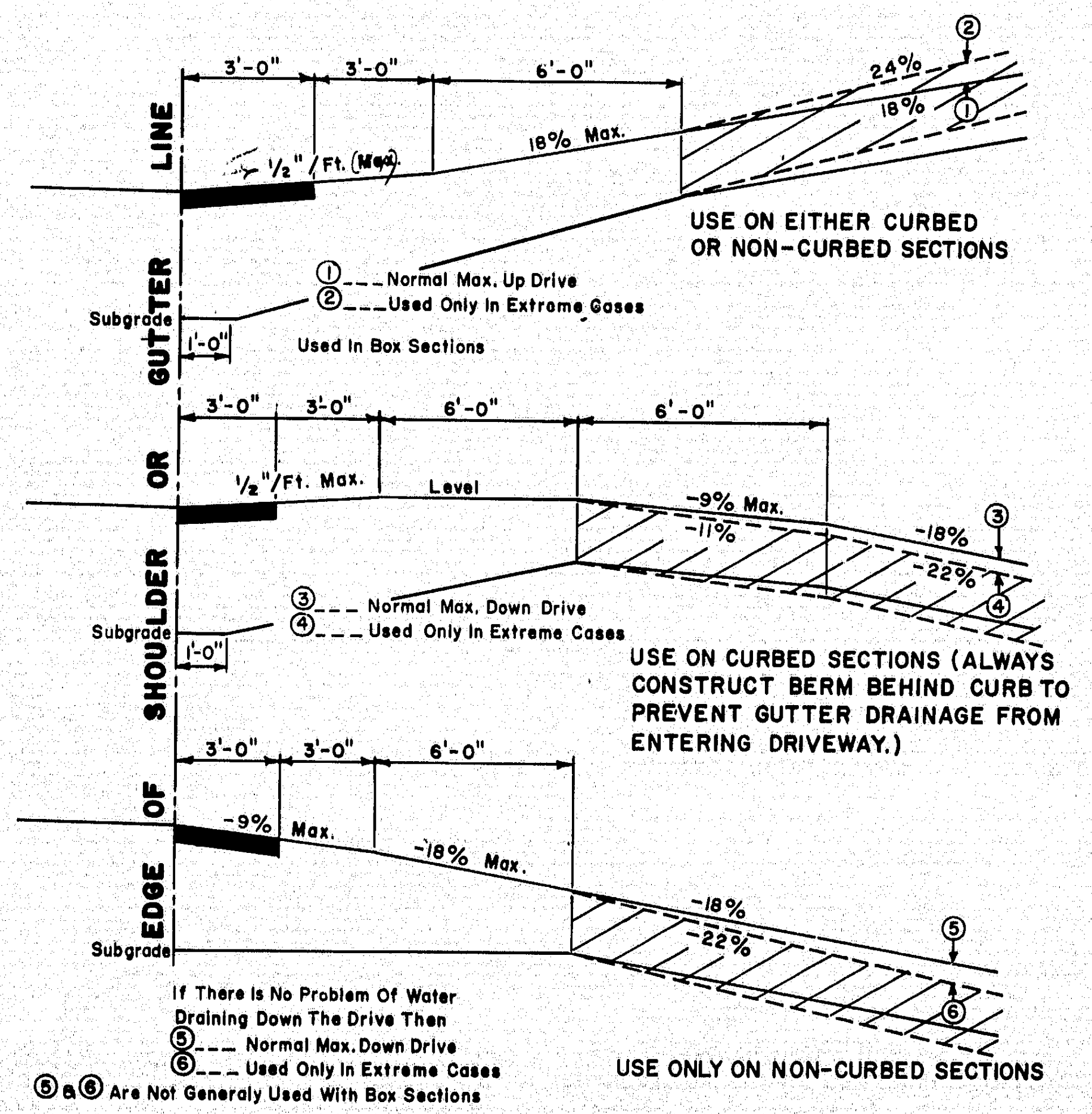
GENERAL NOTES

1. The sidewalk width shall be paved in all cases.
2. All residential or commercial drives over 10% to be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES

1. 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.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. 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.

DRIVES ON NON-SIDEWALK SECTIONS


3'-0"
3'-0"
6'-0"
②
24%
18%
①
LINE
½"/Ft. (Max)
18% Max.
USE ON EITHER CURBED OR NON-CURBED SECTIONS
①--- Normal Max. Up Drive
②--- Used Only In Extreme Cases
Subgrade
1'-0"
Used In Box Sections
GUTTER
3'-0"
3'-0"
6'-0"
6'-0"
OR
½"/Ft. Max.
Level
-9% Max.
-11%
③
-18%
-22%
④
③--- Normal Max. Down Drive
④--- Used Only In Extreme Cases
Subgrade
1'-0"
SHOULDER
USE ON CURBED SECTIONS (ALWAYS CONSTRUCT BERM BEHIND CURB TO PREVENT GUTTER DRAINAGE FROM ENTERING DRIVEWAY.)
3'-0"
3'-0"
6'-0"
OF
-9% Max.
-18% Max.
-18%
-22%
⑤
⑥
EDGE
Subgrade
If There Is No Problem Of Water Draining Down The Drive Then
⑤--- Normal Max. Down Drive
⑥--- Used Only In Extreme Cases
⑤ & ⑥ Are Not Generaly Used With Box Sections
USE ONLY ON NON-CURBED SECTIONS

GENERAL NOTES

1. The first 3' shown as pavement shall be paved only when abuting a paved area.
2. All residential or commercial drives over 10% to be paved.

NOTES ON MAXIMUM DRIVEWAY PROFILES

1. 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.
2. Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
3. 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.

REVISIONS

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969 ⟨12⟩

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