B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	1	

I-95-5(15)

STATE OF MAINE

STATE HIGHWAY COMMISSION

GRADING - DRAINAGE - BASE

FEDERAL AID PROJECT I-95-4(21)75

LENGTH = 0.237 MILES

IN THE TOWN OF

BRUNSWICK

CUMBERLAND COUNTY

INTERSTATE 95

OVER

ANDROSCOGGIN RIVER

AND

OLD LEWISTON ROAD

FEDERAL AID PROJECT I-95-5(15)75

LENGTH = 0.397 MILES

BETWEEN THE TOWNS OF

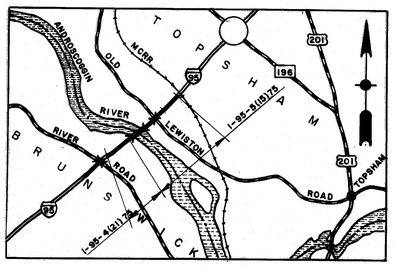
BRUNSWICK - CUMBERLAND COUNTY

AND

TOPSHAM - SAGADAHOC COUNTY

TRAFFIC

OLD LEWISTON ROAD		INTERSTATE 95
450	ADT 1970	8680
720	ADT 1990	15,460
94	DHV	2010
10 %	T	10 %
60 %	D	60 %
50 MPH	V	60 MPH



LOCATION MAP

SCALE IN MILES

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
ESTIMATE OF QUANTITIES	2
SURVEY PLANS & PROFILES	
I-95 PLAN	3 TO 7
I-95 PROFILE	8 TO 12
RAMPS "A" & "B"	13 Void
OLD LEWISTON RD. - PLAN & PROFILE	49 AND 50
CROSSECTIONS	
I-95 N.B.	14 TO 29
I-95 S.B.	30 TO 43
RAMP "A"	44 AND 45 Void
RAMP "B"	46 Void
TYPICAL I-95	47 AND
OLD LEWISTON ROAD	51 TO 56
OLD LEWISTON RD. (DITCH)	57
STRUCTURES	
I-95 OVER ANDROSCOGGIN RIVER	
GENERAL PLAN	58
SOILS	59 TO 65
ABUTMENTS - N.B. & S.B.	66 TO 68
PIERS - N.B. & S.B.	69 TO 72
STRUCTURAL STEEL	73 TO 77
SUPERSTRUCTURE SLAB & DETAILS	78 TO 85
I-95 OVER OLD LEWISTON ROAD	
GENERAL PLANS	86
SOILS	87 TO 89
ABUTMENTS - N.B. & S.B.	90 TO 93
STRUCTURAL STEEL	94 AND 95
SUPERSTRUCTURE	96 AND 97
STANDARD DETAILS	
CATCH BASINS & MANHOLE (1)	98
METAL SLUICE - UNDERDRAIN, ETC. (2)	99
CURB, DITCHES, SLOPES, CATCH BASINS (3)	100
CULVERT INLETS & OUTLETS (4)	101
GUARD RAILS, MUCK EXCAVATION, ETC. (5)	102
GUARD RAILS, ANCHOR ASSEMBLIES ETC (6)	103
FENCING (11)	104
BARRICADES, WARNING SIGNS, ETC. (7)	105
DRIVEWAYS, FIELD OFFICE, ETC. (12)	106
DIAPHRAMS ARMORED JOINTS	BD-104-63 107
ALUMINUM RAILING	BD-106-69 108
TRAFFIC CONTROL DEVICES	BD-111-63 109

APPROVED
MAINE STATE HIGHWAY COMMISSION

CHAIRMAN

CHIEF ENGINEER

JULY 2, 1969
DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

REGION 1

APPROVED

DIVISION ENGINEER — DATE

123-73

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21) I-95-5(15)	2	109

ENGINEERS ESTIMATE OF QUANTITIES

Description	Unit	I-95-4(21) South Approach Section	I-95-5(15) Androscoggin River Bridge	I-95-5(15) Sect. Between Structures	I-95-5(15) I-95 Over Old Lewiston Rd.	I-95-5(15) North Approach Section	I-95-5(15) Old Lewiston Road	Total Quantity
Clearing	Acre	5.7		1.5		6.4	1.2	14.8
Selective Clearing & Thinning	Acre	0.5		0.6		2.2	0.2	3.5
Removing Single Trees, over 24" to 48" Tops only	Each						2	2
Removing Stumps, over 24" to 48"	Each						2	2
Common Excavation	Cu.Yd.	28,400				16,800	2,800	48,000
Rock Excavation	Cu.Yd.	3,000				33,700	2,700	41,400
Common Borrow	Cu.Yd.	120,000		84,000		1,000	12,000	217,000
Granular Borrow	Cu.Yd.					75		75
Gravel Borrow	Cu.Yd.	6,400	36,800	9,400	7,500	2,400		62,500
Structural Earth Excavation - Drainage & Minor Strs.	Cu.Yd.	400	535			55	100	1090
Structural Rock Excavation - Drainage & Minor Strs.	Cu.Yd.					40		40
Structural Earth Excavation - Piers	Cu.Yd.		3,350					3,350
Aggregate Base Course - Screened	Cu.Yd.	40		70		30	960	1,160
Aggregate Subbase Course - Gravel	Cu.Yd.	4,900		750		2,600	2,750	11,000
Aggregate Subbase Course - Granular	Cu.Yd.	12,500		1,500		6,500		20,500
Hot Bituminous Pavement, Grading "B"	Ton						370	370
Hot Bituminous Pavement, Grading "C"	Ton						260	260
Hot Bituminous Pavement, Grading "E" (Shimming)	Ton						20	20
Asphalt Cement, Hot Bituminous Surface Pavements	Ton						40	40
Tar, Applied	Gal.						2,600	2,600
Cover Coat Material, Sand	Cu.Yd.						40	40
Untreated Aggregate Surface Course	Cu.Yd.						400	400
Steel H-Beam Piles 42 lbs./ft.	L.F.		4,950					4,950
Steel H-Beam Piles 73 lbs./ft., Andros. River Br.	L.F.		14,000					14,000
Steel H-Beam Piles 73 lbs./ft., I-95 over Old Lew. Rd.	L.F.				2,700			2,700
Str. Concrete, Abutments & Retaining Walls	Cu.Yd.		500		600			1,100
Str. Concrete, Piers	Cu.Yd.		2,850					2,850
Str. Concrete, Piers (placed in the water)	Cu.Yd.		2,100					2,100
Str. Conc., Roadway & Sidewalk Slabs on Steel Str's.								
— Androscoggin River Bridge	L.S.		Lump Sum					Lump Sum
Str. Conc., Roadway & Sidewalk Slabs on Steel Bridges								
— I-95 over Old Lewiston Road	L.S.				Lump Sum			Lump Sum
Str. Concrete, Wearing Surface on Bridges								
— Androscoggin River Bridge	L.S.		Lump Sum					Lump Sum
Str. Concrete, Wearing Surface on Bridges								
— I-95 over Old Lewiston Road	L.S.				Lump Sum			Lump Sum
Str. Concrete, Approach Slabs, Andros. River Br.	L.S.		Lump Sum					Lump Sum
Str. Concrete, Approach Slabs, I-95 over Old Lew. Rd.	L.S.				Lump Sum			Lump Sum
Reinforcing Steel, Fabricated & Delivered	Lb.		852,200		128,300			980,500
Reinforcing Steel, Placing	Lb.		852,200		128,300			980,500
Welded Steel Wire Fabric, Delivered —								
— Androscoggin River Br.	L.S.		Lump Sum					Lump Sum
Welded Steel Wire Fabric, Delivered —								
— I-95 over Old Lewiston Rd	L.S.				Lump Sum			Lump Sum
Welded Steel Wire Fabric, Placing. —								
— Androscoggin River Bridge	L.S.		Lump Sum					Lump Sum
Welded Steel Wire Fabric, Placing —								
— I-95 over Old Lewiston Rd.	L.S.				Lump Sum			Lump Sum
Str. Steel, Fab. & Delivered - Andros. River Br.	L.S.		Lump Sum					Lump Sum
Str. Steel, Fab. & Delivered - I-95 over Old Lew. Rd.	L.S.				Lump Sum			Lump Sum
Str. Steel, Erection, Androscoggin River Bridge	L.S.		Lump Sum					Lump Sum
Str. Steel, Erection, I-95 over Old Lew. Rd.	L.S.				Lump Sum			Lump Sum
Shear Connectors - Androscoggin River Bridge	L.S.		Lump Sum					Lump Sum
Shear Connectors - I-95 over Old Lew. Rd.	L.S.				Lump Sum			Lump Sum
Field Painting, Str. Steel - Andros. River Br.	L.S.		Lump Sum					Lump Sum
Field Painting, Str. Steel - I-95 over Old Lew. Rd.	L.S.				Lump Sum			Lump Sum
Bridge Railing	L.F.		3,410		388			3,798
Cofferdam, Pier No. 1, Northbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 2, Northbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 3, Northbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 4, Northbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 1, Southbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 2, Southbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 3, Southbound	L.S.		1					Lump Sum
Cofferdam, Pier No. 4, Southbound	L.S.		1					Lump Sum
Slope Protection - Bituminous Treated Stone	Sq.Yd.		870		680			1,550
Curing Box for Concrete Cylinders	Each		1		1			2
Protective Coating for Concrete Surfaces	Sq.Yd.		9,400		1,370			10,770
Elastomeric Expansion Device (Type 1)	L.F.				82			82

ENGINEERS ESTIMATE OF QUANTITIES (Continued)

Description	Unit	I-95-4(21) South Approach Section	I-95-5(15) Androscoggin River Bridge	I-95-5(15) Sect. Between Structures	I-95-5(15) I-95 Over Old Lewiston Rd.	I-95-5(15) North Approach Section	I-95-5(15) Old Lewiston Road	Total Quantity
Elastomeric Expansion Device (Type 2)	L.F.				94			94
Modular Expansion Divices	Each		2					2
12" Corrugated Metal Pipe	L.F.						36	36
15" Reinforced Concrete Pipe Class III	L.F.	120						120
24" Bit. Coated Corrugated Metal Pipe	L.F.		80				306	386
* 24" Reinforced Concrete Pipe Class III	L.F.	326				86		412
36" Bit. Coated Corrugated Metal Pipe	L.F.		200					200
* Catch Basin, Type B1	Each	2						2
6 Inch Underdrain Type "B"	L.F.	500						500
Guard Rail Type 1b	L.F.						1,350	1,350
Anchorages for Cable Guard Rail	Each						8	8
Woven Wire Fence - Metal Posts	L.F.	2,350		600		1,315		4,265
Walk Gateway - 4 feet - Metal	Each			2				2
Bracing Assemblies, Type I - Metal Posts	Each	6		13		6		25
Bracing Assemblies, Type II - Metal Posts	Each	10		11		11		32
Vertical Curb - Type 1	L.F.			68				68
Vertical Bridge Curb - Type 1	L.F.		3,390		400			3,790
Terminal Curb, Type 1	Each			8				8
6 Inch Underdrain Outlet	L.F.	100						100
Stone Fill	Cu.Yd.	3,200	7,500					10,700
Hand Laid Riprap	Cu.Yd.	50	190	85		15		340
Portland Cement for Riprap Grout	Bbl.	24	85	44		7		160
Loam	Cu.Yd.	2,170		330		1,100	500	4,100
Sodding	Sq.Yd.	175				30	80	285
Erosion Control Mesh (Standard)	Sq.Yd.	1,100		200			260	1,560
Seeding, Method No. 2	Unit	350		55		175	85	665
Hay Mulch	Ton	20		5		10	5	40
Right of Way Monuments	Each	8		3	1	5	6	23
Survey Monuments	Each	4		3	1	5	1	14
Labor, Straight time	M. Hr.	50				50		100
Traffic Officers	M. Hr.						100	100
Air Compressor (including operator)	Hour	25				25		50
Air Tool (including operator)	Hour	25				25		50
All Purpose Excavator (including operator)	Hour	20				20		40
Bulldozer (including operator)	Hour	20				20		40
Grader (including operator)	Hour	20				20		40
Truck - small (including operator)	Hour	20				20		40
Front End Loader (including operator)	Hour	20				20		40
Warning Lights	Group	2					2	4
Portable Barricades	Each						2	2
Calcium Chloride	Ton						6	6
Field Office, Type A	Each		1					1
Field Office, Type B	Each		1					1
Testing Facilities, Soils	L.S.							Lump Sum
Testing Facilities, Bituminous Mixes	L.S.						1	Lump Sum
Testing Facilities, Bit. Liquids & Cements	L.S.						1	Lump Sum
Grounding Rods	Each						9	9
Mineral Filler	Ton						13	13
Hydrated Lime	Ton						7	7

Estimated Quantities of Lump Sum Items

Item	Andros. River Br.	Old Lewiston Road Br.
Struct. Concrete, Roadway & Sidewalk Slab on Bridges	2,320 Cu. Yd.	266 Cu. Yd.
Struct. Concrete, Wearing Surface	624 Cu. Yd.	74 Cu. Yd.
Struct. Concrete, Approach Slabs	158 Cu. Yd.	118 Cu. Yd.
Welded Steel Wire Fabric	* 67,700 Sq. Ft.	* 8,000 Sq. Ft.
Structural Steel	2,696,000 Lbs.	224,200 Lbs.
Shear Connectors	9,040 Studs	3,260 Studs

* The figure shown is the area in sq. ft. to be reinforced with Welded Steel Wire Fabric and no allowance for splices and salvage have been considered.

DESIGN— TRACE+LAYOUT— G. WHITEHOUSE
CHECK— G.O. TARRIO
BRIDGE NO.
SURVEY—
PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

I-95 FROM STA. 618+40 TO STA. 654 + 50 AND OLD LEWISTON ROAD

IN THE TOWNS OF

BRUNSWICK — CUMBERLAND COUNTY

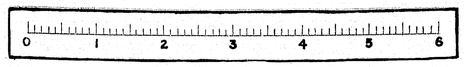
AND

TOPSHAM — SAGADAHOC COUNTY

ENGINEERS ESTIMATE OF QUANTITIES

SHEET 2 OF 109 AUGUSTA, MAINE SEPT. 1969

123-74



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	3	

R/W MONUMENTS		□
STATION	LT.	RT.
P.T. 7+01.92 RAMP A		125'
11+50.00 RAMP A		125'
11+50.00 RAMP A		185'
17+00.00 RAMP A		185'
1+00.00 RAMP B		125'
1+00.00 RAMP B		350'
P.C. 6+73.79 RAMP B		125'
P.T. 9+87.66 RAMP B		125'
640+50.00 S.B.	175'	
640+50.00 S.B.	250'	
642+24.71 S.B.	175'	
643+59.71 S.B.	150'	
P.C. 646+24.15 S.B.	150'	
651+00.00 S.B.	150'	
642+93.51 N.B.		150'
P.C. 646+07.23 N.B.		125'
651+00.00 N.B.		125'

SURVEY MARKERS		⊠
STATION	LT.	RT.
P.T. 7+01.92 RAMP A		60'
17+00.00 RAMP A		145'
P.C. 6+73.79 RAMP B		75'
P.T. 9+87.66 RAMP B		80'

STA. 16+98.61 RAMP "B" =
STA. 39+00.00 Const. ℄

Fencing
All Fencing installed under this contract shall be "Woven Wire Fencing - Metal Posts".

Begin Fencing Sta. 10+00 125' Rt. Ramp "B"
Construct Ramp "B" from Sta. 10+0
Ramp B, Ramp C and
ahead of 10+00 ± Sta.
more or less

Ramp "B" Deleted from this contract
(Control Edge - Ramp B)

Δ = 11°-59'-01" Rt.
D = 5°-42'-30"
R = 1,000.00'
L = 313.674'
T = 159.238'

P.T. Sta. 6+87.66

Sta. 9+30 Ramp "B" Install 24"-122'
R.C.P. Class III Sodded Inlet & Outlet

Outlet Rt. 86.0

S 72°-38'-59" W

Limits of Work

Chicken House

Drive

2 Story Frame House

Chicken House

Buildings No. 1 Removed by others

Brush

Pines 9"±

Clump Bushes & Small Trees

Ditch (By Others)

CPL

Ditch Elev. 88.10

Begin Construction

Horsehead

Sta. 34+95.33 Const. ℄ =
S.B. Sta. 615+72.25
L = 102°-17'-01"

℄ I-95 Southbound

Clearing Pay Line

TYPE "B" U.D.

2 Strand Barbed Wire

Bushes

Field Entrance

RIVER ROAD

Limit of Work

New 16" dia. R.C.P. (ductile pipe allowed by others) under I-95

I Story Frame House

Drive

Begin Project

℄ I-95 Northbound

Sta. 33+41.81 Const. ℄ =
N.B. Sta. 616+40.66
L = 77°-42'-59"

16" C.I. Water Main

Garden

Building No. 2 Removed by Others

1½ Story Frame House

Brick Fireplace

(Ramp "A" Deleted from this Contract)
(Control Edge - Ramp A)

Match Line

Revised July 15, 1970 - GMC ✓ PMW

Sta. 3+60 Ramp "A" Install 24"-68'
R.C.P. Class III Sodded Inlet & Outlet

Δ = 100°-33'-55" Rt.
D = 14°-19'-37"
R = 399.912'
L = 701.923'
T = 481.400'

CATCH BASIN - TYPE "B"
STA. 622+00 ± 29' Rt. N.B.

Sta. 622+00 N.B. 29' Rt. Install
15"-45° R.C.P. Class III Sod Around Outlet

Install Fencing

Const. of Ramp "A" (Control Line)
Ramp "A" Begin Construction
See profile sheet

Scale 1" = 30'

Start Fencing Sta. 5+00 Ramp "A" 125' Rt.

GENERAL INTERSTATE NOTES

1. All backslopes shall be 3:1 in earth and 1:1 in ledge unless noted.
2. All fill slopes below bottom of aggregate subbase-gravel shall be loamed 2" unless otherwise directed by the Engineer.
3. All loam areas and depths must be authorized by the Engineer unless specified on the Sections, Plans or in the Specifications.
4. Seeding Method No. 1 and Hay Mulch on all loamed slopes.
5. Grubbing in fills shall be done for a width as indicated by the heavy vertical fish marks shown on the cross sections. For a normal section, the maximum width shall be as follows unless otherwise directed by the Engineer:
   30' from ℄ for 10' shoulders
   25' from ℄ for 4' shoulders
6. All Utility Facilities are to be adjusted by the respective utilities unless noted.
   Utilities involved:
   New England Telephone Company
   Central Maine Power Company
   Brunswick & Topsham Water District
7. Any Muck Excavation to be paid as Item 203.20 Common Excavation.

NOTE
Do not interfere with hydrant or 16" C.I. Water Main.

TYPE "B" UNDERDRAIN
S.B. STA. 620+60 to 625+00 - 440 L.F.

UNDERDRAIN OUTLET
S.B. STA. 625+00 - 80 L.F. USE 45° ELBOW

P.C. STA. 0+00.00 RAMP "A" =
STA. 27+91.29 Const. ℄, 24' Lt.

DESIGN— BRIDGE NO.
TRACE— R.L. SURVEY—
CHECK— H.L.D. PLOT— H.R.Q.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY
SURVEY

SHEET 3 OF 109 AUGUSTA, MAINE Feb. 1966

123-75

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	4	

Sta. 624+50 S.B. 31' Left Install 15'-7" RCP Class III Skewed Ahead 15° Plunge Spall Around Outlet.

Catch Basin - Type B1 Solid Temp. Drain Inlet Sta. 624+58 31' Left S.B.

Temporary Drain Inlet Adjust Fills to Stabilize Materials and Install Inlet to be Identified as Item 604.08 Catch Basin Type B1

Limit of Cantilever Deck This Side Only

18"CMP 15 ft.

Catch Basin Type B1

Match Line

R/W

Clearing

Clearing Pay Limits shall be 5' outside the construction slope limit line and the Clearing Pay Limit lines as shown on plans. Payment will be made under Item 201.11, Clearing. All other Wooded areas within the Right of Way shall be selectively cleared and thinned. Payment will be made under Item 201.12, Selective Clearing and Thinning.

Grubbing in Fills

NB	Sta 621+25	to	Sta 623+25
NB	Sta 625+25	to	Sta 625+75
NB	Sta 645+00	to	Sta 645+50
NB	Sta 650+00	to	Sta 650+50
SB	Sta 620+65	to	Sta 622+75
SB	Sta 624+75	to	Sta 625+25
SB	Sta 644+00	to	Sta 644+60
SB	Sta 651+50	to	Sta 652+00

Erosion Control Mesh in ditch. Sta. 625+50 to 626+00 S.B. Lt.

Install Fencing

Ramp "B" (Delete from this Contract) Sta. 0+00 to 22+15 S.B. 12 C.F.

Ramp "B" Deleted (Control Edge - Ramp "B")

Clearing Pay Line

Field

S 54°-39'-38" W

N 50°-39'-38" E

℄ I-95 Southbound

℄ Strand Barbed Wire

TYPE "B" UD

UD outlet

Erosion Control Mesh Sta 621+00 to 625+15± S.B. Rt.

Const. Grouted Hand Laid Riprap Inlet

Ditch Block

Mixed Growth - Mostly Alders

Woods

℄ I-95 Northbound

N 50°-39'-38" E

Existing Run

Mixed Growth Hand Laid Riprap Grouted Downspout

Ramp "A" (Control Edge - Ramp "A") N48°-56'-32"E (Ramp "A" deleted from this contract)

Sta 626+10 NB. Install 24"x 118" RCP Class III Hand Laid Riprap Inlet Construct Hand Laid Riprap Grouted Downspout - Right. See Section A-A Sheet # 6

Erosion Control Mesh In Median from NB Sta 627+00 to NB Sta 632+05± In drainage ditch Right NB Sta 627+00 To River

Ditch Hand Laid Riprap, Grouted Left - NB Sta 625+50 to NB Sta 626+20 Right - NB Sta 625+50 to NB Sta 657+00

See Section A-A Sheet #6

N 48°-56'-32" E

550.0'

Scale 1" = 30'

Revised July 1, 1970 - GWC

DESIGN– TRACE– R. L. CHECK– H. L. D.

BRIDGE NO. SURVEY– PLOT– H.R.G.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY
SURVEY

SHEET 4 OF 109 AUGUSTA, MAINE Feb. 1966

123-76

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(115)	5	

N 54° 39' 38" E 260.80' P/W

Match Line

Clearing Pay Line

Sta. 631+00 Ramp "B" 12' Left

631+56.29 631+75.69

Match Line Sta. 631+75.69

631+76.75 167.61

631+76.76 2nd Typ.

15'-0"

632+03.29 23.54

B

B'

2' Loam & Seed

Fill, with waste material, to drain Loam & Seed as directed by the Engineer in the field.

NOTE: Spur Dike Points indicated thus: Sta. Const. & Offset from Const. ℄

Elev. 66.00'

15'-0"

2" Loam & Seed

Stone Fill

Gravel Borrow

SECTION B-B

6'-0"

6"

Bituminous Treated Stone Slope Protection

1'-0" min. (typ.) Hand Laid Rip Rap

GROUTED GUTTER DETAIL

(centered under roadway drains)

B.M. – Vertical Spike in root of 23" Maple Stump Elev. 48.556

Install Fencing

℄ Brgs. Abut #1 S.B. 631+69.27

375'±

Field

Tri Pl.

631+03.81 Iron

Woods

Hub 2.69'

Grouted Gutter

632+00

Bit. Treat Slope Protection

35.73'

6.23

25" Oak

Grouted Gutter

For Elevation See Profile

Inlet Elev. 58.3

Outlet Elev. 57.3

Grouted Ramp Gutter See Section AA Sht. 6 of 109

Grouted Riprap

Install Fencing

Elev. 67.00

30' Typ.

Elev. 66.00

29'-8" B.C.M.P.

2' Loam & Seed

4" Elm

631+38.65

8" Elm 17±0

Grouted Gutter

N 50°-39'-38" E

Bit. Treat Slope Protection

Grouted Gutter

Stone Fill 6' Thick

℄ Brgs. Abut #1 N.B. Sta. 632+05

Match Line

2' Loam & Seed

Install Fencing

145'

Ditch

135.0'

550.0' P/W N 48°-56'-32" E 786.93' P/W

℄ Brgs. Pier #1 S.B. Sta. 633+07.27

℄ Brgs. Pier #2 S.B. Sta. 634+90.27

℄ Brgs Pier #3 S.B. Sta. 636+73.27

℄ Brgs Pier #4 S.B. Sta. 638+56.27

℄ Brgs. Pier #1 N.B. Sta. 633+43

℄ Brgs. Pier #2 N.B. Sta. 635+26

℄ Brgs. Pier #3 N.B. Sta. 637+09

℄ Brgs. Pier #4 N.B. Sta. 638+92

℄ Brgs. Abut #2 N.B. Sta. 640+30

631+00 632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00 641+00

ANDROSCOGGIN RIVER

S Flow

195.88'

125.0'

400.0' P/W P/W

PLAN

Scale: 1" = 30'

N 50° 39' 38" E 250.0' P/W P/W

250.0'

125.0'

36' x 200' BCMP

Match Line

Invert 48.5

El. 58.2

Woods

Grouted Gutter

Bit. Treat Slope Protection

Grouted Gutter

Iron Pin & Triangulation

Grouted Riprap Gutter (See Section HH Sht. 6)

Stone Fill 6' Thick

Face

Install Fencing

Woods

Install Fencing

Grouted Gutter

Bit. Treat Slope Protection

Grouted Gutter

Match Line

Install Fencing

El. 66.00

5' High Bank Nearly Vertical

250'

150.0'

P/W P/W

Revised July 1, 1970 - G.W.C. ✓ PMW

DESIGN– H.L.D. Dat. 6.0.7
TRACE– N.E.R.
CHECK– P.J.L.

BRIDGE NO.
SURVEY– Blake
PLOT– C.R.B. & G.O.T.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
SURVEY

SHEET 5 OF 109 AUGUSTA, MAINE Jan. 1968

123-77

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	6	

CONDUIT DETAIL

Open Drainage Ditch

2" Loam, Seed, and Hay Mulch

In Ledge Cut

In Earth Cut

Curve Data, Southbound:
P.I. Sta. 669+97.34
Δ = 15°-23'-40" Lt.
D = 0°-20'
T = 2323.19'
L = 4618.40'
R = 17188.74'

SECTION B-B
Ditch Excavation to be paid as Item 203.20 (Common Excav.) in earth cut
Item 203.21 (Rock Excav.) in ledge cut

Curve Data, Northbound:
P.I. Sta. 668+21.63
Δ = 14°-40'-55" Lt.
D = 0°-20'
T = 2214.40'
L = 4404.55'
R = 17,188.74'
E = 142.05'

Sta 645+00 N.B.
Install 24" RCP, Class III x 86'
Place Sod around Inlet

Scale: 1" = 30'

SECTION A-A
Hand Laid Riprap, Grouted

Erosion Control Mesh
In Median from NB Sta 640+12± to NB Sta 642+70±

DESIGN–	BRIDGE NO.
TRACE– RGG	SURVEY– BLAKE
CHECK–	PLOT– C.K.B., R.G.G.

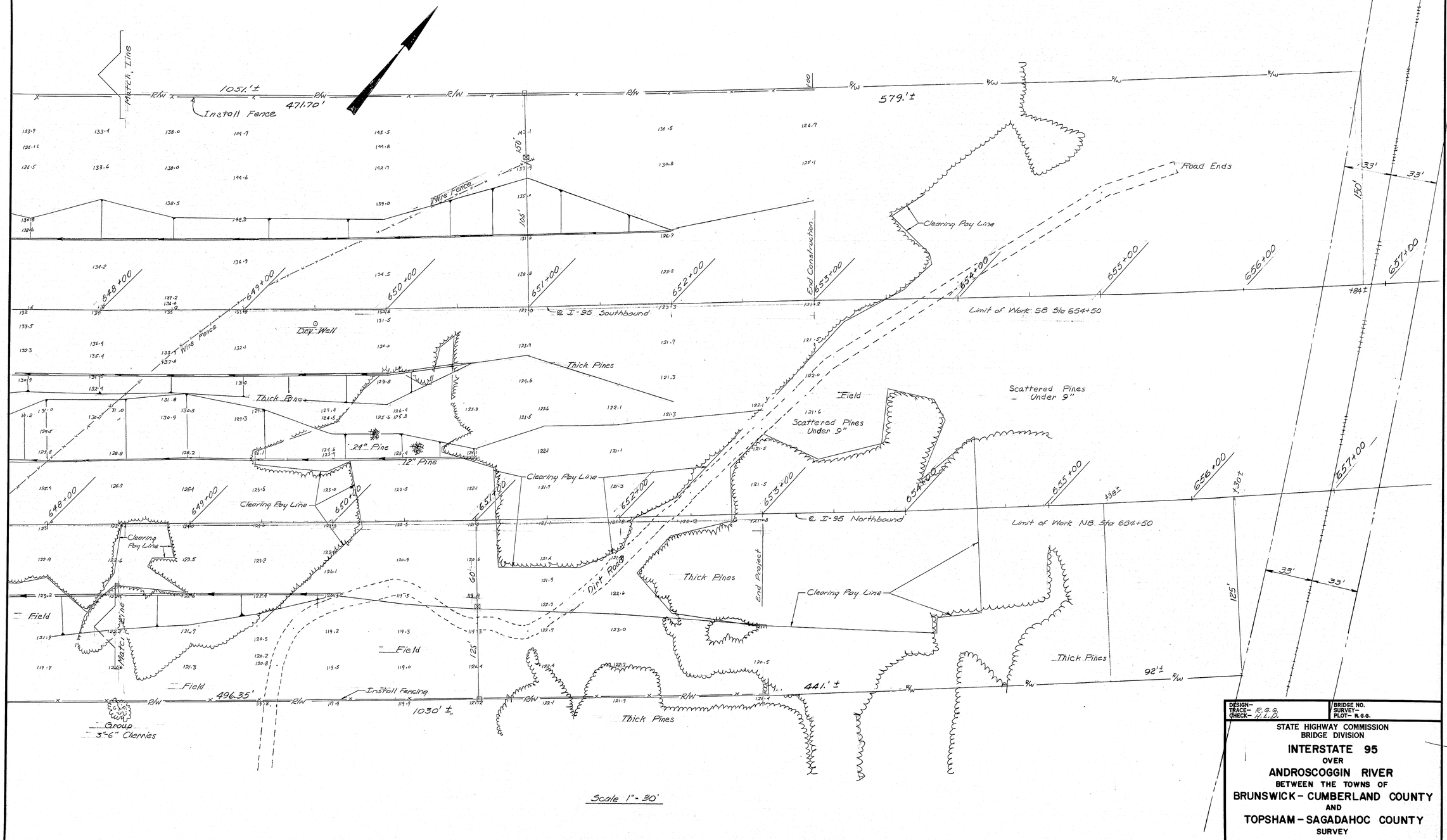
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
SURVEY

SHEET 6 OF 109 AUGUSTA, MAINE Feb 1966

123-78

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	7	



Scale 1"- 30'

DESIGN– TRACE– R.G.G. CHECK– H.L.D.
BRIDGE NO.
SURVEY–
PLOT– R.G.G.

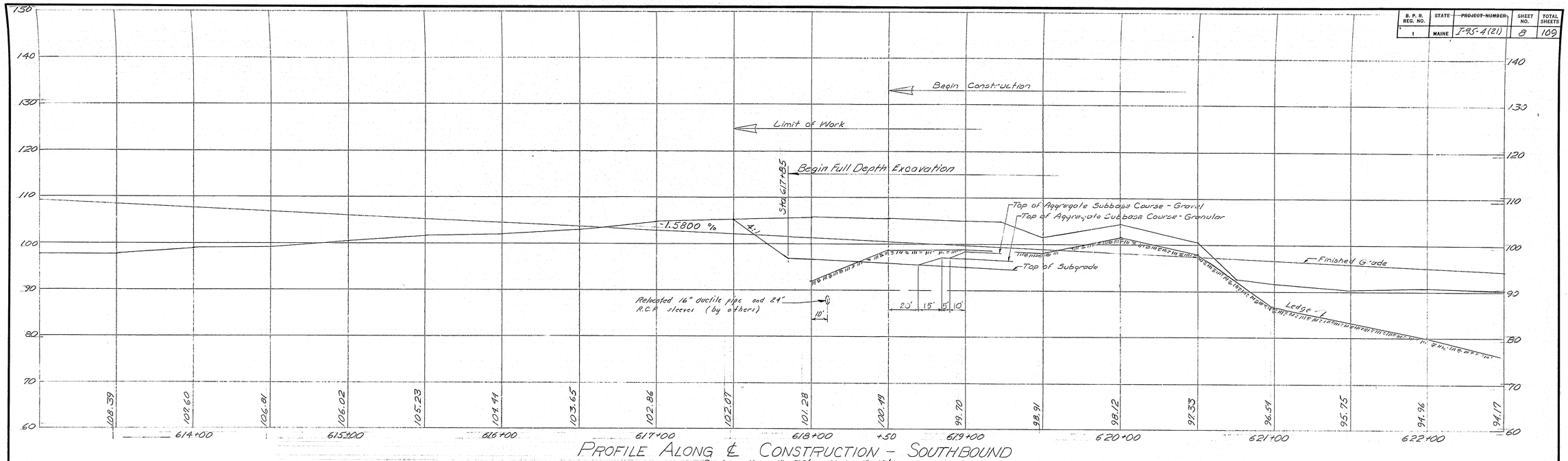
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK – CUMBERLAND COUNTY
AND
TOPSHAM – SAGADAHOC COUNTY
SURVEY

SHEET 7 OF 109 AUGUSTA, MAINE Feb. 1966

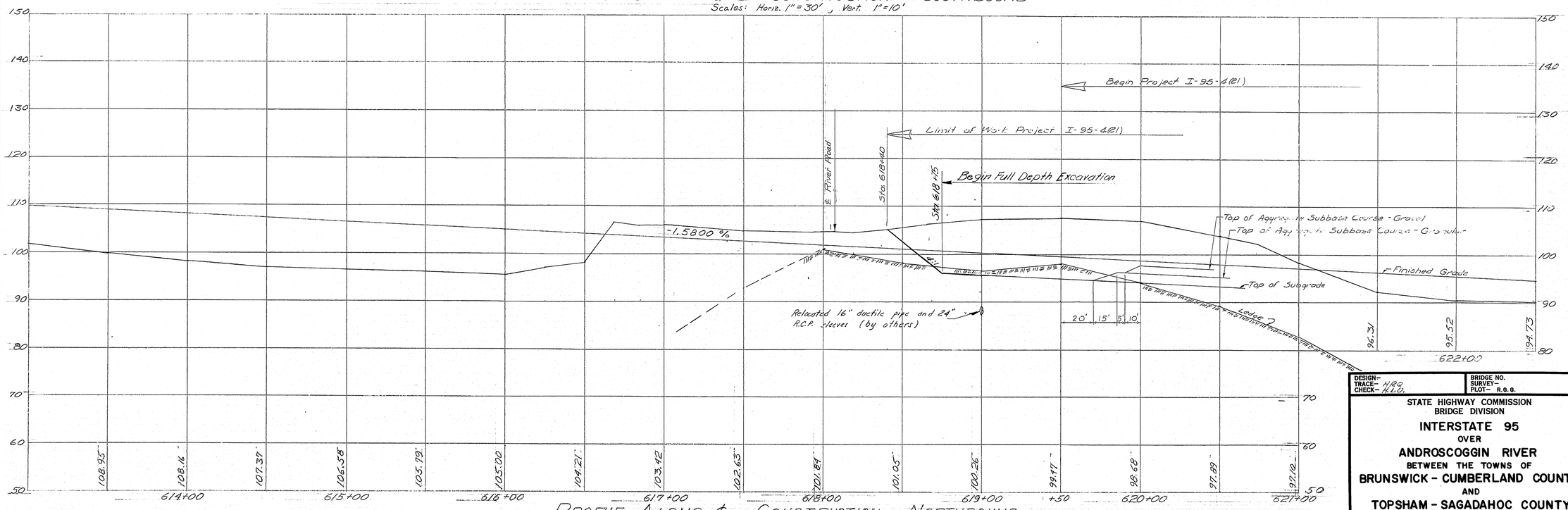
123-79

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	8	109



PROFILE ALONG ℄ CONSTRUCTION – SOUTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'



PROFILE ALONG ℄ CONSTRUCTION – NORTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'

DESIGN–	BRIDGE NO.
TRACE– H.R.B.	SURVEY–
CHECK– H.L.D.	PLOT– R.G.G.

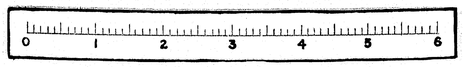
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK – CUMBERLAND COUNTY
AND
TOPSHAM – SAGADAHOC COUNTY

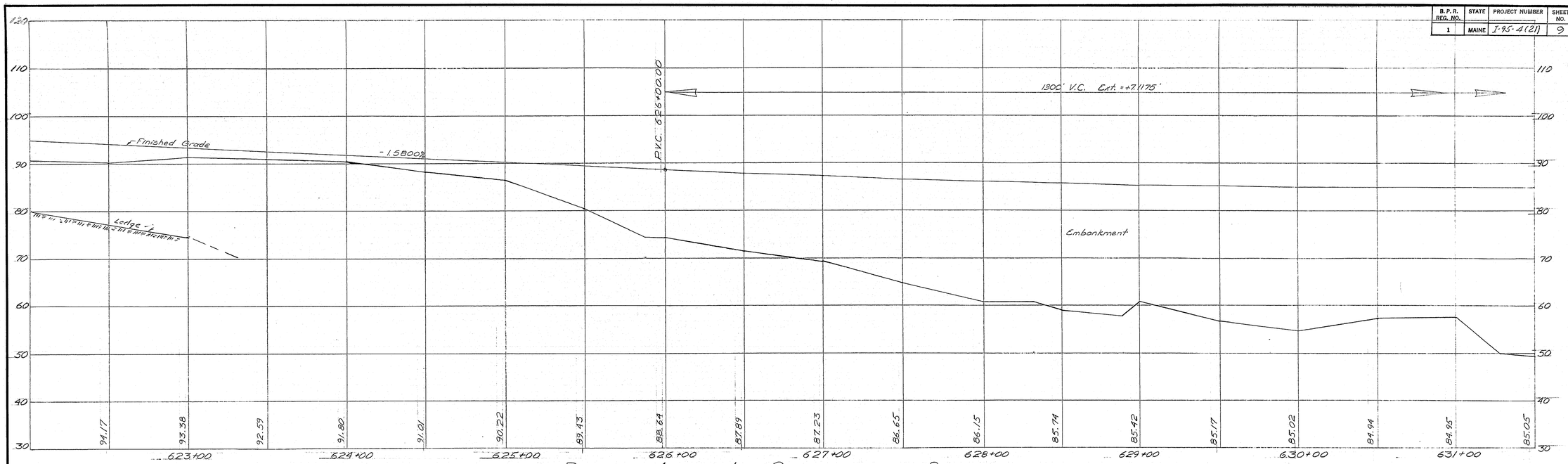
PROFILE

SHEET 8 OF 109 AUGUSTA, MAINE Sept 1969

123-80

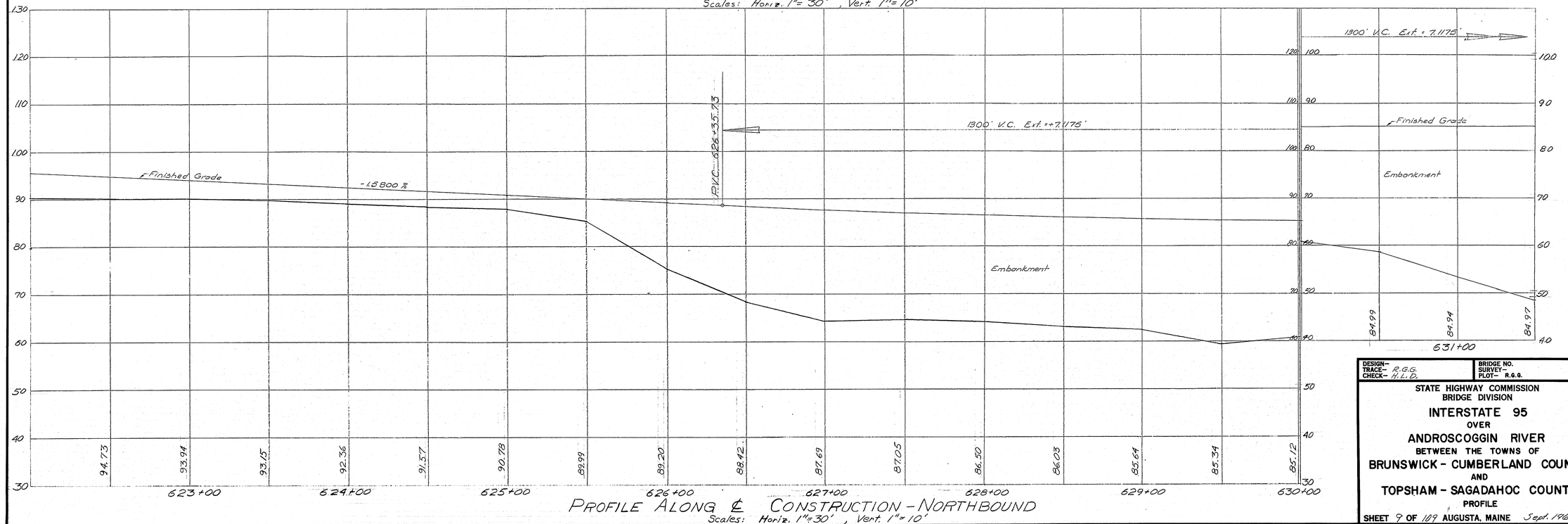


B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	9	109



PROFILE ALONG ℄ CONSTRUCTION – SOUTHBOUND

Scales: Horiz. 1"= 30', Vert. 1"= 10'



PROFILE ALONG ℄ CONSTRUCTION – NORTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'

DESIGN–	BRIDGE NO.
TRACE– R.G.G.	SURVEY–
CHECK– H.L.D.	PLOT– R.G.G.

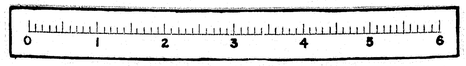
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

PROFILE

SHEET 9 OF 109 AUGUSTA, MAINE Sept. 1969

123-81



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	I-95-5(15)	10	109

End Project I-95-4(21) Begin Project I-95-5(15)
V.C. 1300'
Sta. 631+66.02 Ext. 7.1175
Back of Backwall
℄ Brgs. Abut #1
Sta. 631+69.27
-1.5800%
+2.800%
Sta 631+49.25
PVI
El 78.37
℄ Brgs. Pier #1
Sta. 633+07.27
℄ Brgs. Pier #2
Sta. 634+90.27
℄ Brgs. Pier #3
Sta 636+73.27
℄ Brgs Aer #4
Sta. 638+56.27
P.V.T. 639+42.00
Sta 639+47.62
Finished Grade Line
High Water 1936, El. 65.00
Water El. 42.1
Existing Ground
Steel Piles (Typ)
5 Steel Piles (Typ)
Gravel Borrow Limits
Stone Fill
℄ Brgs Abut #2
Sta. 639+94.27
85.05 85.22 85.49 85.83 86.27 86.78 87.38 88.01 88.83 89.69 90.62 91.64 92.75 93.94 95.21 P.V.T. 96.57 97.97 99.37 100.77
632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00

PROFILE ALONG ℄ CONSTRUCTION - SOUTHBOUND
Scales: Horiz 1"=30' Vert. 1"=10'

End Project I-95-4(21) Begin Project I-95-5(15)
Sta. 632+01.75
Back of Backwall
V.C. 1300'
Ext. 7.1175
Approach Slab @ Grade Typ.
℄ Brgs Abut #1
Sta. 632+05
℄ Brgs. Pier #1
Sta. 633+43
℄ Brgs Pier #2
Sta. 635+26
℄ Brgs Pier #3
Sta. 637+09
℄ Brgs. Pier #4
Sta. 638+92
-1.5800%
+2.800%
El. 67.00
El. 66.00
631+82.25
PVI
78.36.99
P.V.T. 639+35.23
Elev 96.57
Sta. 640+42.75
High Water 1936, El. 65.00
Water El. 42.1
Existing Ground
Steel Piles (Typ)
Gravel Borrow Limits
℄ Brgs. Abut #2
Sta. 640+30
84.97 85.09 85.29 85.49 85.68 85.95 86.40 86.94 87.57 88.28 89.07 89.94 90.91 91.95 93.08 94.29 95.59 96.97 98.37 99.77
632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00 +50

PROFILE ALONG ℄ CONSTRUCTION - NORTHBOUND
Scales: Horiz. 1"=30', Vert. 1"=10'

DESIGN– H.L.D. Detail G.O.T.	BRIDGE NO.
TRACE– K.E.R.	SURVEY Blake
CHECK– R.J.L.	PLOT– C.R.B. Y.G.O.T.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

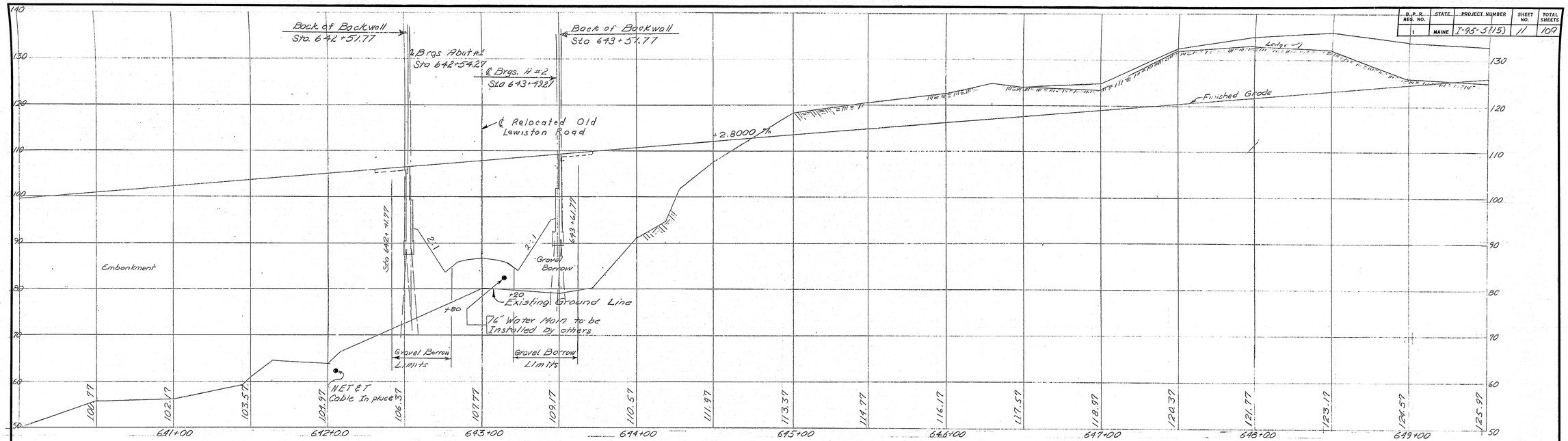
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK–CUMBERLAND COUNTY
AND
TOPSHAM–SAGADAHOC COUNTY

PROFILE
SHEET 10 OF 109 AUGUSTA, MAINE Sept. 1969

123-82

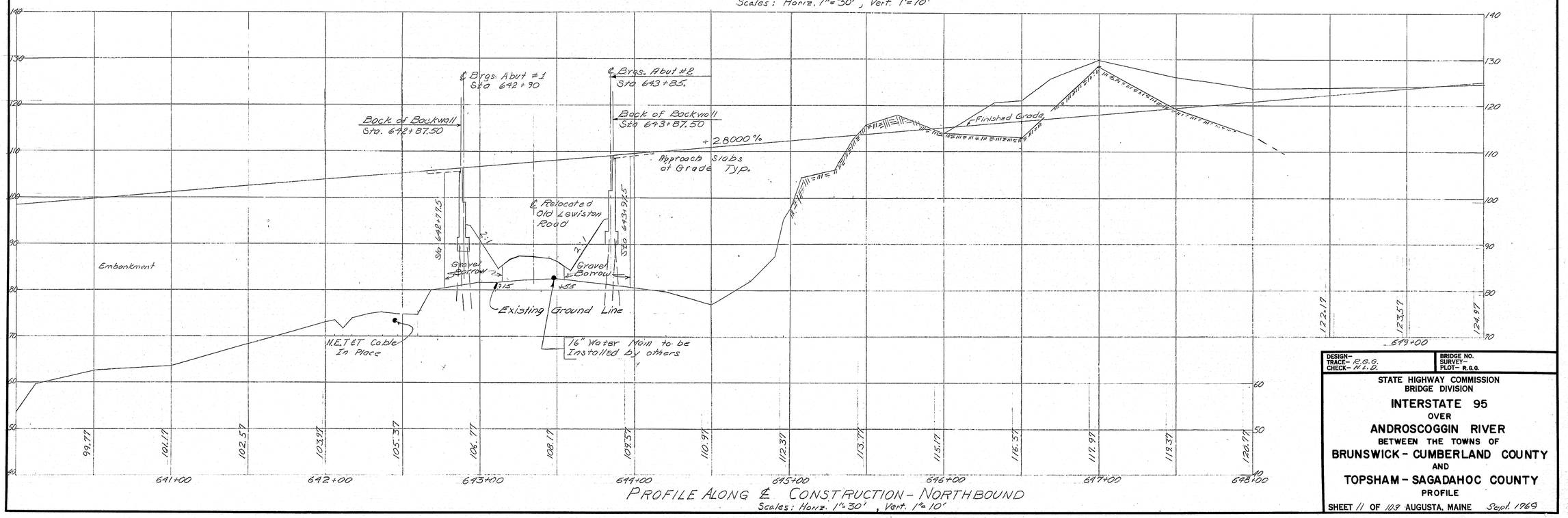
0 1 2 3 4 5 6

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	11	109



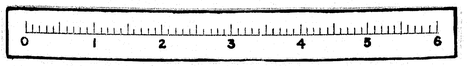
PROFILE ALONG ℄ CONSTRUCTION - SOUTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'



PROFILE ALONG ℄ CONSTRUCTION - NORTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'



DESIGN–	BRIDGE NO.
TRACE– R.G.G.	SURVEY–
CHECK– H.I.D.	PLOT– R.G.G.

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

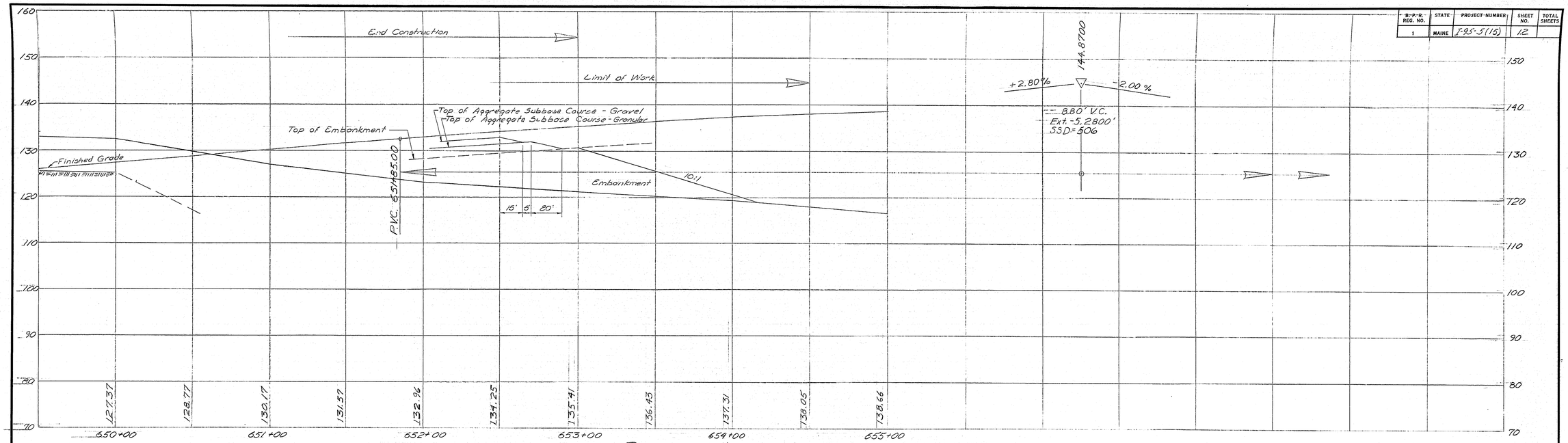
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

PROFILE

SHEET 11 OF 109 AUGUSTA, MAINE Sept. 1969

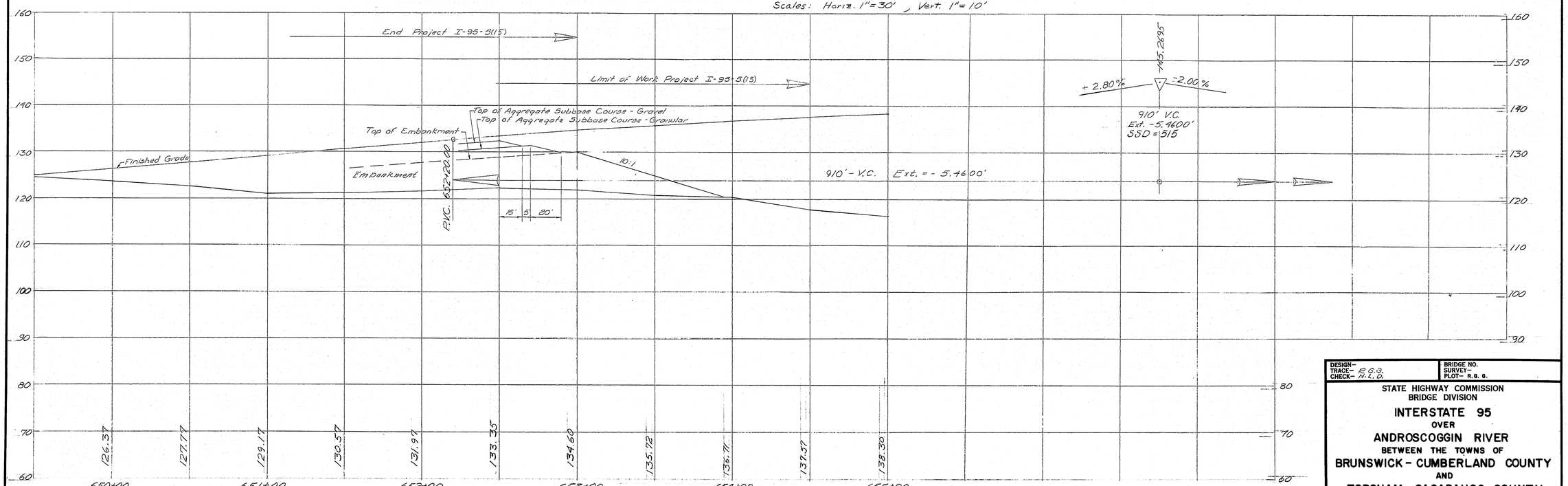
123-83

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	12	



PROFILE ALONG ℄ CONSTRUCTION - SOUTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'



PROFILE ALONG ℄ CONSTRUCTION - NORTHBOUND

Scales: Horiz. 1"=30', Vert. 1"=10'

DESIGN–	BRIDGE NO.
TRACE– R.G.G.	SURVEY–
CHECK– H.L.D.	PLOT– R.G.G.

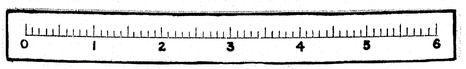
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

PROFILE

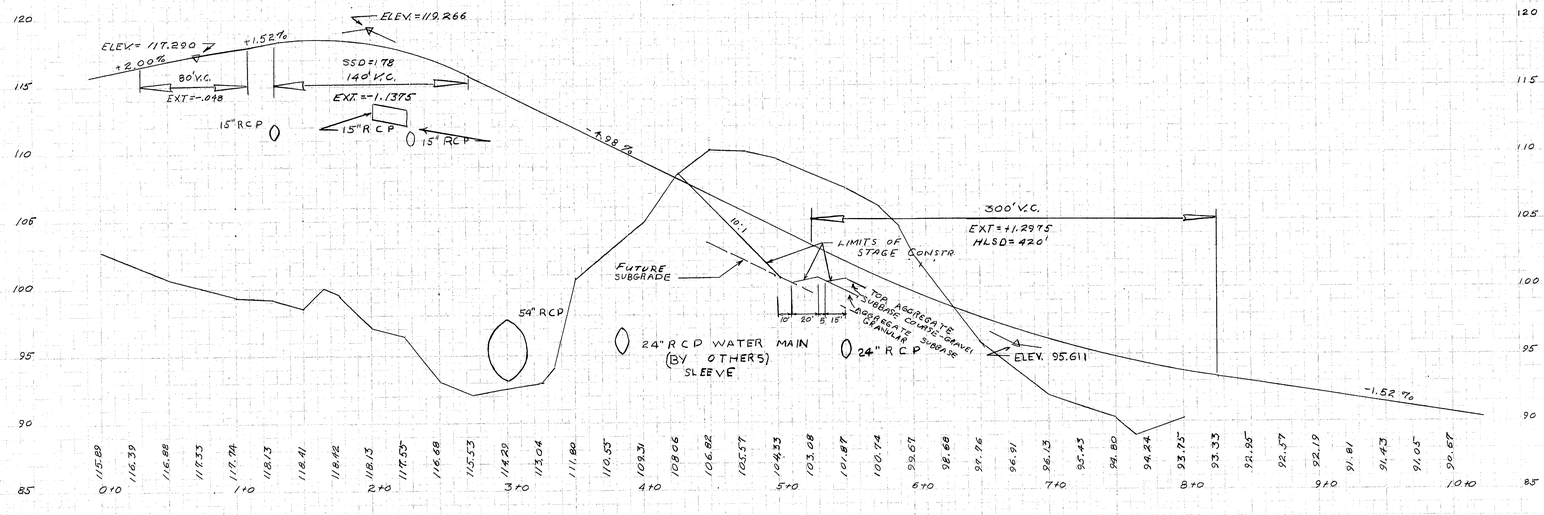
SHEET 12 OF 109 AUGUSTA, MAINE Sept. 1969

123-84

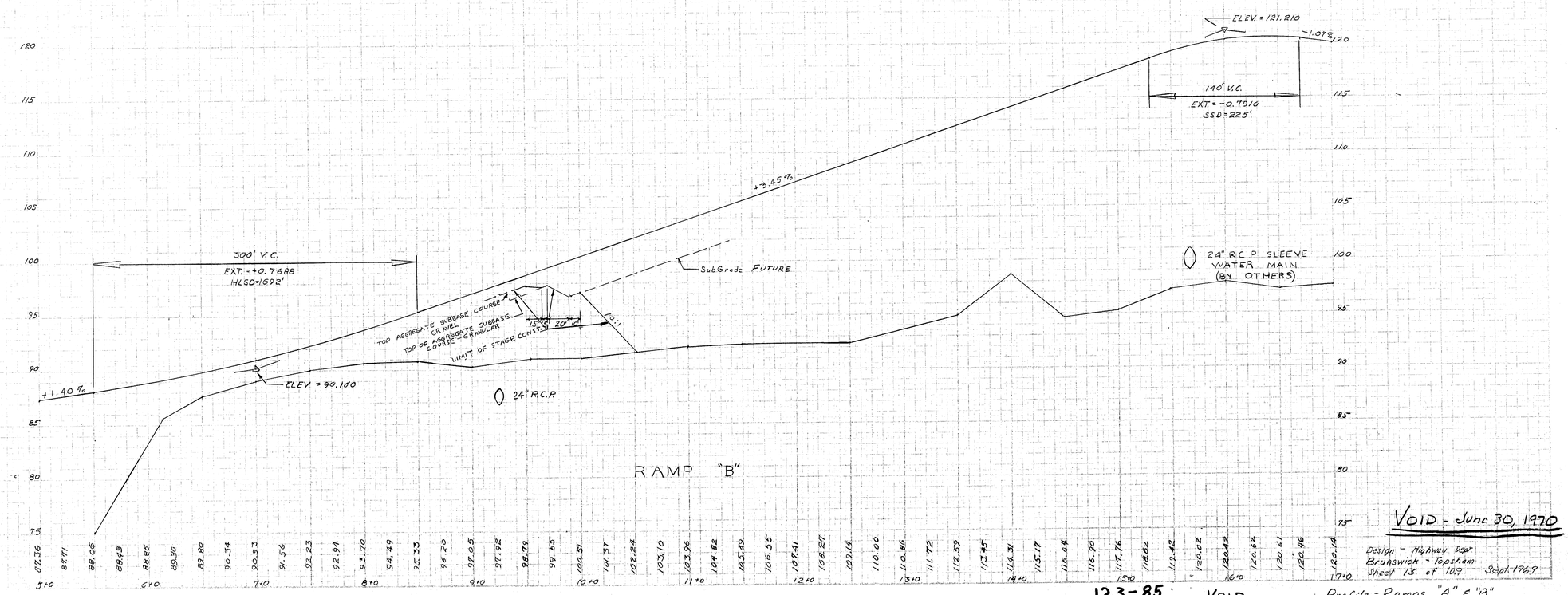


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	13	109

ORIGINAL SURVEY PLOTTED TRACED CHK. BY: CHKD. BY: NO. AREAS CHECKED BY DATE



RAMP "A"



RAMP "B"

VOID - June 30, 1970

Design - Highway Dept.
Brunswick - Topsham
Sheet 13 of 109 Sept. 1969

123-85 VOID Profile - Ramps "A" & "B"

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	295-4(21)	14	109

574. 617+50 to 619+50 NB

Scale
Horiz. 1"=50'
Vert. 1"=10'

SECTIONS
BRUNSWICK - TOPSHAM
Sheet 14 of 109
Sept. 1980

123-86

617+50

90 100 110

102.63

618+00

90 100 110

101.84

℄ River Rd.

Begin Excavation @ Sta. 618+40
℄ Ramp to 618+75 @ 10:1

+50

90 100 110

101.05

River Road

+66

90 100 110

100.80

Drive

16" ductile pipe with 24" RCP sleeves under I-95 at Sta. 619+00 ± (by others)

619+00

90 100 110

100.26

Drive

3:1 3:1

MATCH LINE

Begin Project I-95-4(21)

+50

90 100 110

99.47

-2½" -2½"

3:1 6:1 6:1 3:1

MATCH LINE

C 2924 Cy
L 428 Cy

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE	R. MACFARLAND	9/24/79
AREAS		
NOTE BOOK		
AREAS CHECKED		
NO.		

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

B. T. R. ENG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-354-1(21)	15	109

Sta. 620+00 to 622+50 NB

BRUNSWICK - TOPSHAM

Sheet 15 of 109 Sheets

1" = 10' Horiz. Scale

1" = 5' Vert. Scale

123-87

DESIGN HWY. OFFICE

MATCH LINE

620+00

98.68

92.89

+50

C-2742 cy.
L - 152 Cy

+73

97.53

C-1737 Cy
L 65 Cy

621+00

97.10

45'-0"

MATCH LINE

+50

C 620 Cy
F 34 Cy
G 58 Cy

96.31

57.5'

C 181 Cy
F 164 Cy
G 127 Cy

622+00

95.52

54.5'

Grubbing Limits

75'

MATCH LINE

+50

C- 169 Cy
F-196 Cy
G-131 Cy

94.73

54.5'

Grubbing Limits

75'

MATCH LINE

C 246 Cy
F 85 Cy
G 121 Cy

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED	M. MAFFEI/LDN/D	3-/8-/89
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	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	293-4(12)	16	109

BRUNSWICK-TOPSHAM
SHEET 16 of 109 SHEETS

123-88

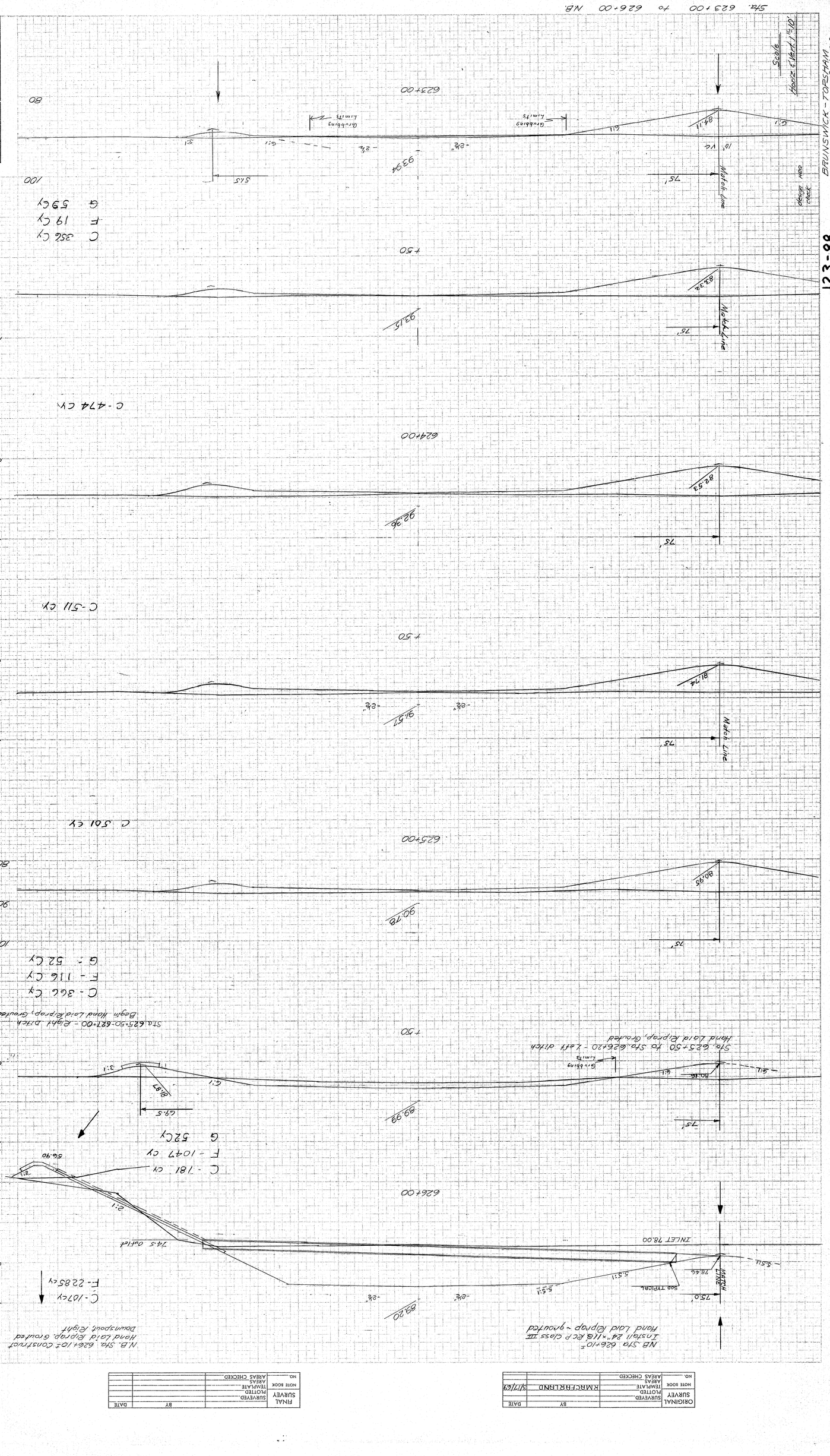
Sta. 623+00 to 626+00 NB.

ORIGINAL			
SURVEY	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	RMARCFARLAND	3/17/89
	AREAS		
	AREAS CHECKED		
NO.			

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

NB Sta 626+10
Install 24"x118 RCP class III
Hand Laid Riprap - grouted

NB. Sta. 626+10 Construct
Hand Laid Riprap. Grouted
Downspout, Right



C.H.D. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	Z-95-4(21)	17	109

Sta. 626+50 to 628+50 NB

Erosion Control Mesh
NB Sta. 627+00 To NB Sta 633+52

Scale
Horiz 1"=10'
Vert 1"=10'

BRUNSWICK-TOPSHAM
Sheet 17 of 109 Sept 1989

123-89

626+50

CONST DITCH BLOCK
STA 626+50 NB LT
TAPERED 8x8 AHD 25'

MATCH LINE

95.0'

Const Ditch Elev

8842

-6¢

2:1

5:1

90
80
70
60
50

C- 135 Cy
F- 4147 Cy

627+00

47.55

Brook

Run

2:1

8169

4.75:1

16.01

8.75:1

MATCH LINE

C- 145 Cy
F- 5,147 Cy

+50

47.09

2:1

8205

4.5:1

74.96

7.5:1

MATCH LINE

100
90
80
70
60

C 66 Cy
F- 4,556 Cy

628+00

46.64

Brook

2:1

8265

4.25:1

72.88

7.5:1

MATCH LINE

C 185 Cy
F 4,310 Cy

+50

46.18

2:1

8209

-2%

-6%

Fringe 26'

6:1

4:1

72.88

MATCH LINE

C 254 Cy
F 4,234 Cy

ORIGINAL SURVEY	NOTE BOOK	NO
SURVEYED		
PLOTTED		
TEMPLATE	R. MAC LEARLAND	3/27/89
AREAS		
AREAS CHECKED		

DATE	BY

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

DATE	BY

0 1 2 3 4 5 6

B. P. R. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	18	109

BRUNSWICK - TOPSHAM
Sheet 18 of 109
Sept. 1969

123-90

Sta. 629+00 to 630+50 NB

Scale
Horiz. 1"=10'

629+00

2:1
3.45:1
3.35:1
71.84
MATCH LINE
85.44
-22"
-0"
design
check

C 124 Cy
F 5,236 Cy

+50

45.27
brook
2:1
3.5:1
3.5:1
69.42
MATCH LINE
85.34

630+00

44.82
2:1
2.85:1
3.65:1
68.19
MATCH LINE
85.12

C 191 Cy
F 5,754 Cy

Sta. 630+00 NB Rt
Q Section for Toe Fill
First Fill Section Sta
631+00 NB Rt

+50

44.36
Stone Fill
2:1
2:1
3:1
66.69
MATCH LINE
84.99

C 481 Cy
F 7200 Cy

ORIGINAL SURVEY	
SURVEYED	
PLOTTED	R. MACFARLAND
TEMPLATE	
AREAS	
NOTE BOOK	
NO.	AREAS CHECKED

BY	DATE
	3-21-69

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

BY	DATE

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-3054(2D)	19	109

Sta 631+00 to 633+34 N.B.

BRUNSWICK-TOPSHAM
SCALE HORIZ. & VERT. 1"=10'

123-91

631+00

Stone Fill

43.81

2:1

1.5

30'

2:1

2.75:1

MATCH LINE

64.97

EXIST.

632+00

Stone Fill

43.00

FL 43.00

2:1

1.5

30'

2:1

2.5:1

MATCH LINE

62.99

EXIST.

633+00

ABUTMENT No. 1 STA 632+05 NBL

+34 (Top River bank)

75.00'

2:1

1.5

30'

2:1

MATCH LINE

58.66

EXIST.

C 394 Cy
F 7953 Cy

C 120 Cy
F 8412 Cy

ORIGINAL SURVEY	NOTE BOOK	
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE
R.MACFARLAND	3-24-92

FINAL SURVEY	NOTE BOOK	
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

BY	DATE

N. H. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-95-5(15)	20	109

Sta. 638+75 to 639+24 NB.

Scale
Horiz. 1"=10'
Vert. 1"=10'

BRUNSWICK - TOPSHAM
Sheet 20 of 109 Sept 1980

123-92

design
check
draft
date

638+75 (top bank)

brook

639+00

brook

+11 (top bank)

brook

+24 (bottom of bank)

brook

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

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

B. P. R. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-95-3(16)	21	109

Sta. 639+50 to 640+08 NB

Scale
Horiz. & Vert. 1"=10'

BRUNSWICK – TOPSHAM
Sheet 21 of 109 Sept. 1989

#123-93

design check

639+50

Brook

40 50 60 70 80 90 100

7+76

Brook

50 60 70 80 90 100

92.10

640+00

Brook Brook

50 60 70 80 90 100

70.93

98.97

50 60 70 80 90 100

7+08

Brook

70.19

98.59

Ledge

50 60 70 80 90 100

@ Brgs Abut #2 Sta 640+30
I-95 Over Androscoggin River

ORIGINAL SURVEY			
NOTE BOOK	SURVEYED	BY	DATE
NO.	PLOTTED	R MACFARLAND	3-24-49
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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

R. P. H. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(16)	22	109

123-94

BRUNSWICK - TOPSHAM
Scale Horiz. 1"=40', Vert. 1"=10'

Sta. 640+50 To 642+00 N.B.

℄

MATCH LINE 2659'

640+50

50 60 80 90 100

13.34

MATCH LINE

10'VC

2:1

2:1

99.77

641+00

F 7,152 Cy

14.75

MATCH LINE

10.17

642+00

60 70 80 90 100

F 6,775 Cy

76.15

MATCH LINE

10.57

642+00

60 70 80 90 100

F 6,009 Cy

77.55

MATCH LINE

10.97

642+00

60 70 80 90 100

F 776 Cy

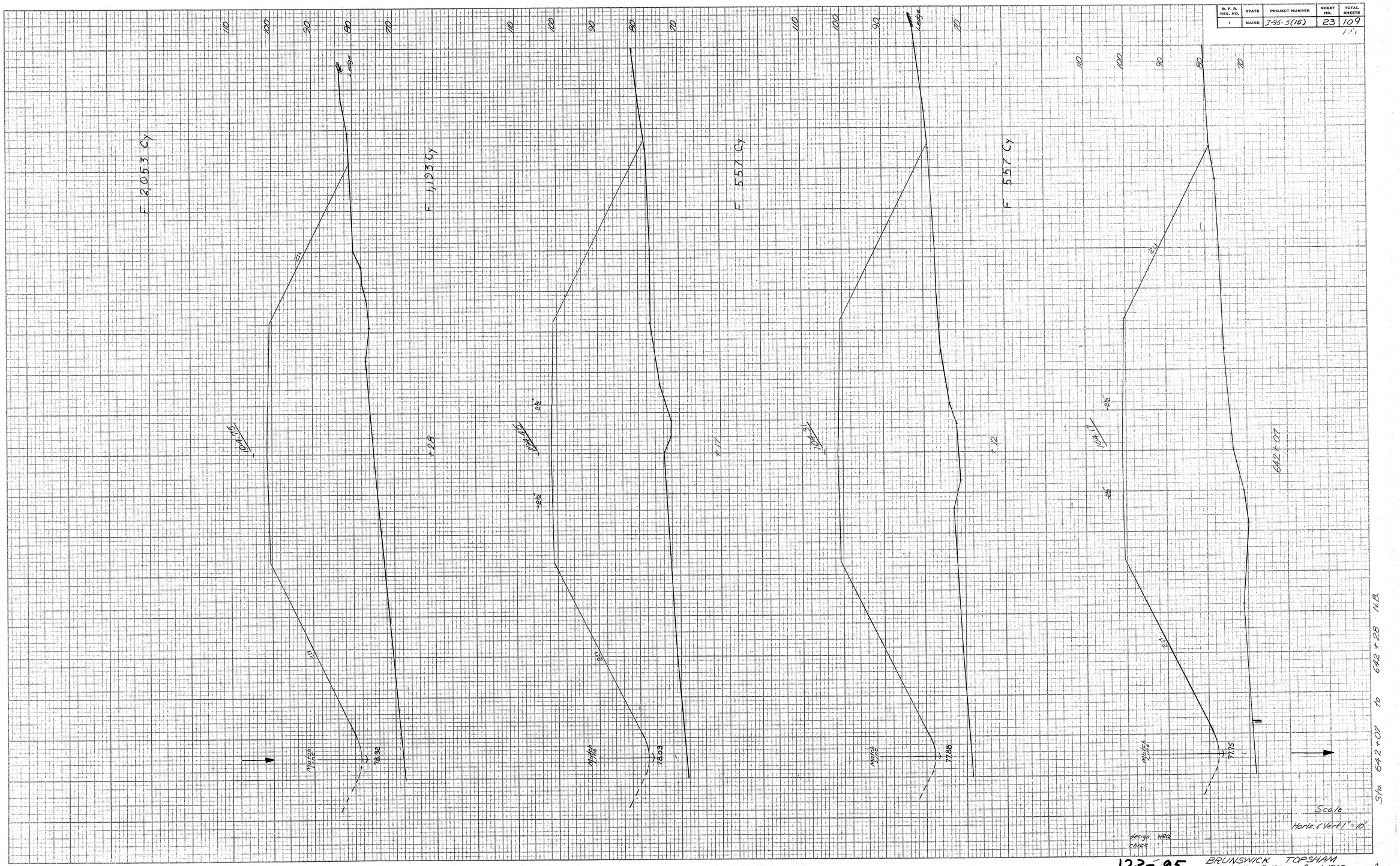
ORIGINAL SURVEY				
NOTE BOOK	SURVEYED			
	PLOTTED	R. MACFARLAND	3/26/69	
	TEMPLATE			
	AREAS			
NO.	AREAS CHECKED			
		BY		DATE

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

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	23	109

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

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO. 2nd Issue	PLOTTED	R. MACPHERLAND	3/24/69
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

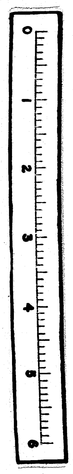


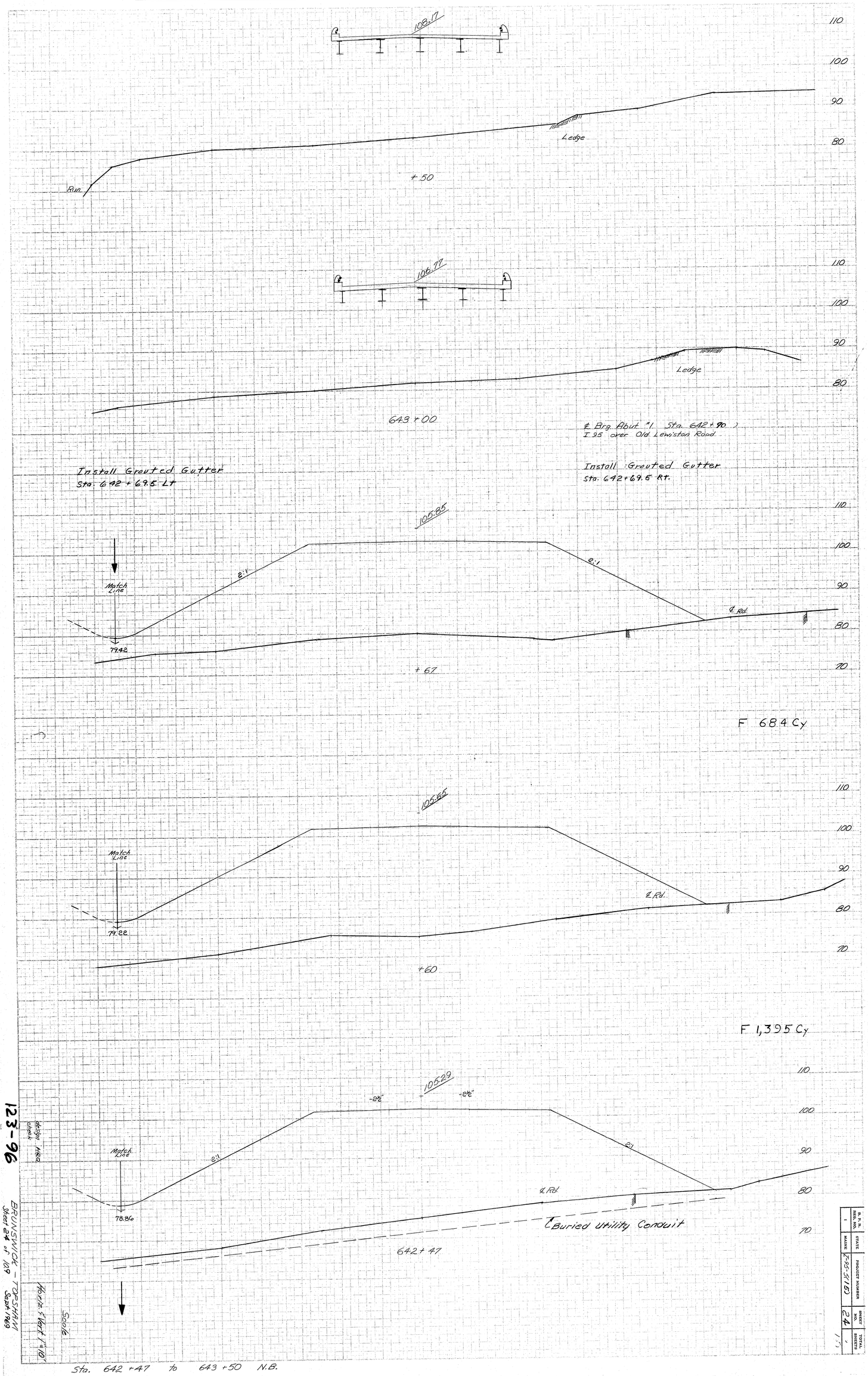
0 1 2 3 4 5 6

123-95 BRUNSWICK TOPSHAM
Sheet 23 of 109 Sept. 1969

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3/20/69
NO.	AREAS		
	AREAS CHECKED		

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





123-96

BRUNSWICK - TOPSHAM
Sheet 24 of 109
Sept 1969

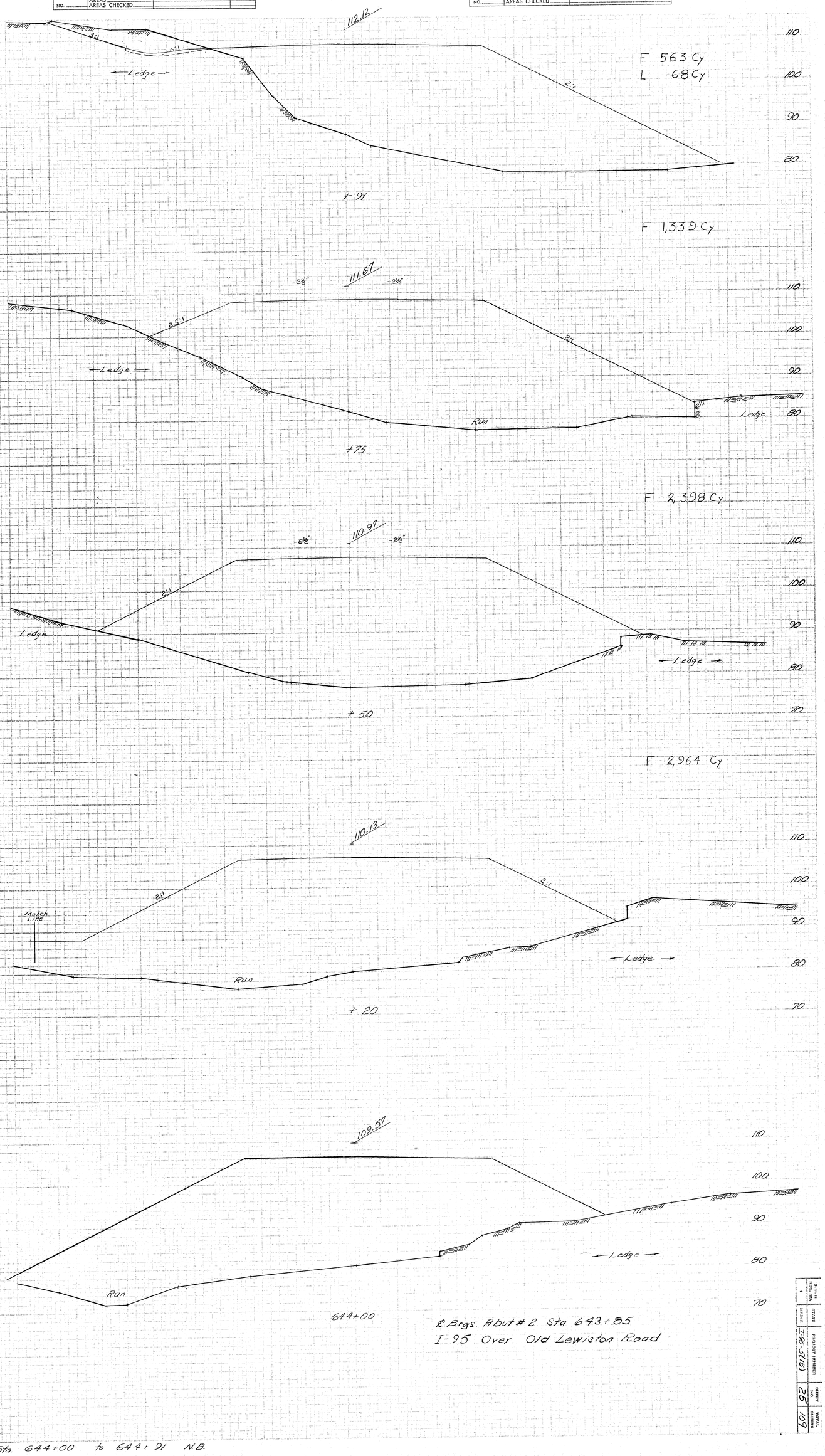
Horiz. 1"=10'
Scale

Sta. 642+47 to 643+50 N.B.

D. P. W. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	24	109

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R.MacFARLAND	3/20/69
NO.	AREAS		
	AREAS CHECKED		

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



℄ Brgs. Abut # 2 Sta 643+85
I-95 Over Old Lewiston Road

Sta. 644+00 to 644+91 N.B.

Scale
Horiz. 1" = 1'-0"
Vert. 1" = 1'-0"

design
detail
check

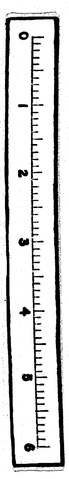
123-97

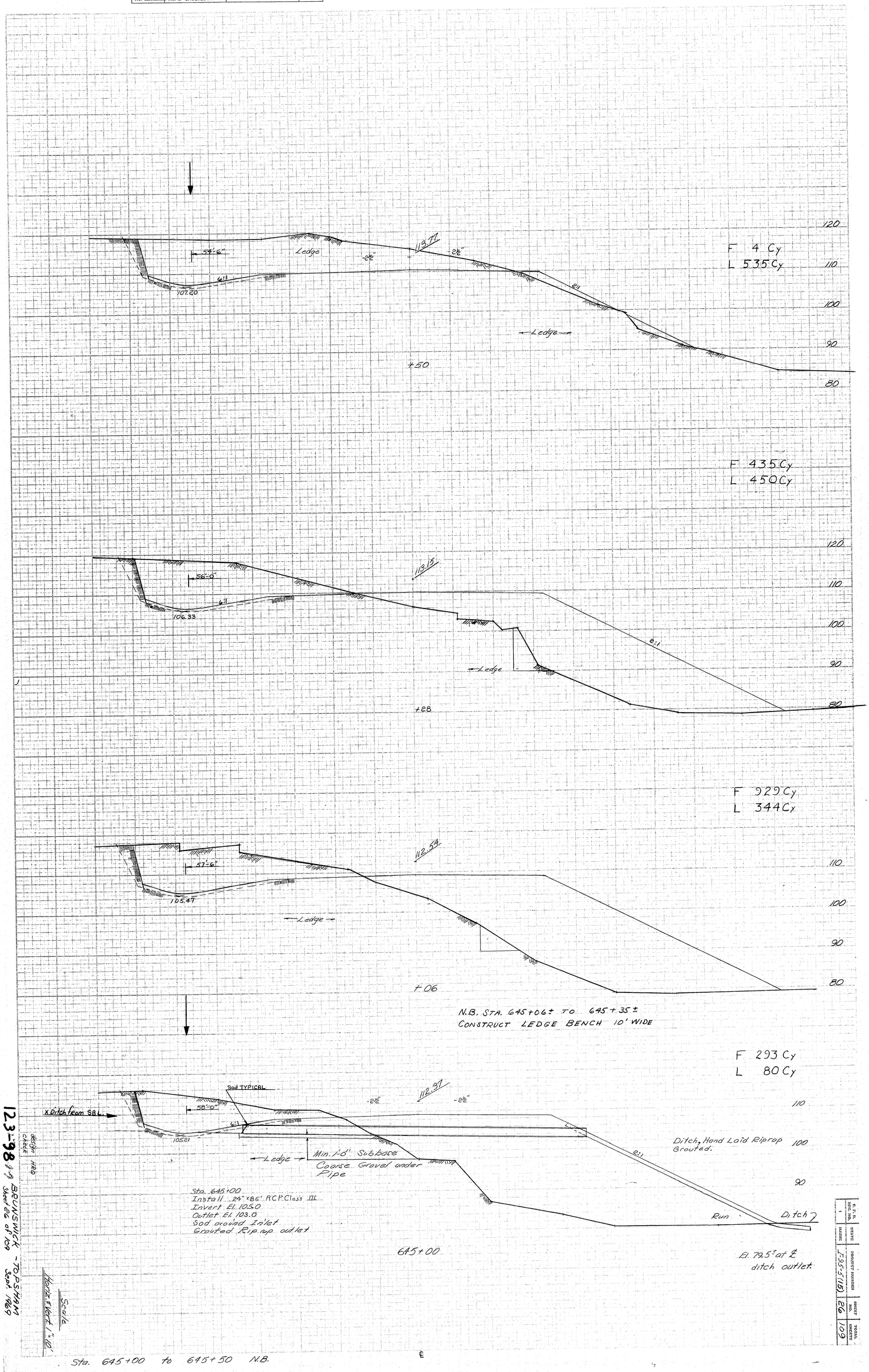
BRUNSWICK - TOPSHAM
Sheet 25 of 109
Sept.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	I-95-3(16)	25	109

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3-20-69
NO.	AREAS		
	AREAS CHECKED		

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





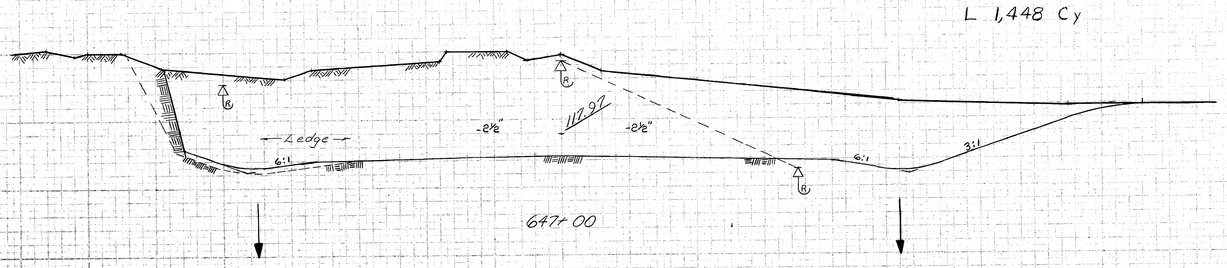
123-98 F.A.P. BRUNSWICK - TOPSHAM
Sheet 26 of 109
Sept. 1969

D. P. W. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-95-5(11)	26	109

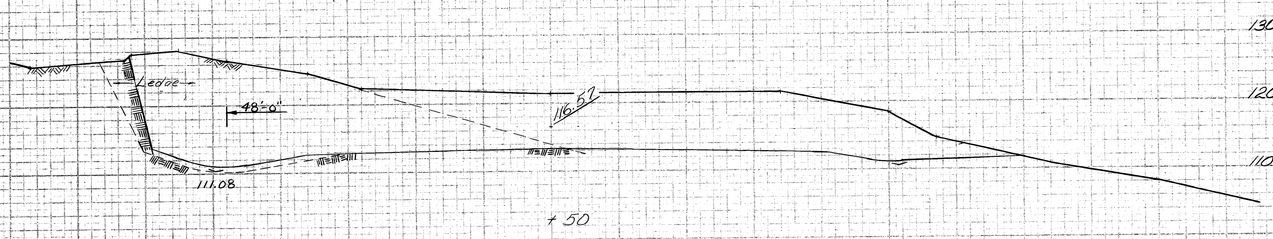
ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3-20-69
NO.	AREAS		
	AREAS CHECKED		

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

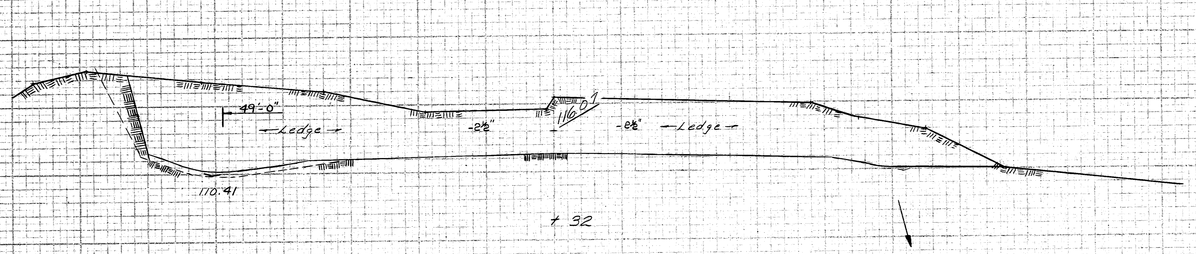
C 1,167 Cy
L 1,448 Cy



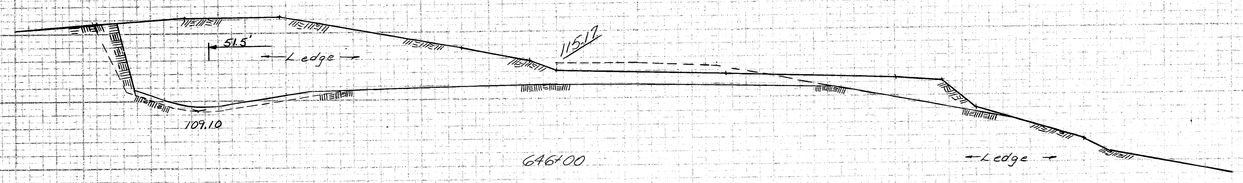
C 972 Cy
L 1,513 Cy



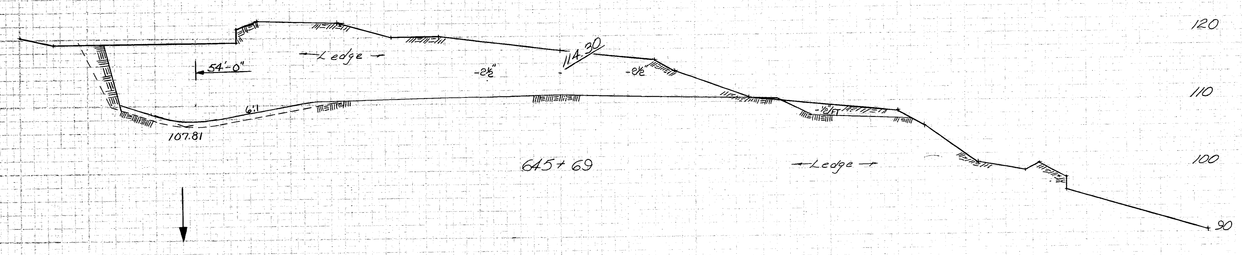
C 183 Cy
L 545 Cy



L 1,019 Cy



L 877 Cy



Sta. 645+69 to 647+00 N.B.

Scale
Horiz 1"=10'

Design Check

123-69
BRUNSWICK TOPSHAM
Sheet 27 of 109
Sept 1969

NO.	STATE	PROJECT ENGINEER	PROJECT NO.	TOTAL SHEETS
1	MAINE	J. E. [illegible]	27	109

D. P. W. APPROVAL	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
	MAINE	F-95-5(16)	28	109

Sta. 647+50 to 649+50 NB.

Scale
Horiz. 1"=40'
Vert. 1"=10'

BRUNSWICK TOPSHAM
Sheet 28 of 109
Sept. 1969

123-100

Design 1980
Check

Ledge

647+50

110
120
130

119.37
-2¢"
-2¢"
8:1
6:1

C 1,431 Cy
L 722 Cy

648+00

110
120
130

120.17
-2¢"
6:1
8:1

Main Line

C 1,389 Cy
L 352 Cy

+50

110
120
130

122.17
-2¢"
-2¢"
6:1
8:1

Main Line

C 412 Cy
L 130 Cy

649+00

110
120
130

111.10
116.40
-2¢"
6:1
8:1

58'-0"

Main Line

C 1,265 Cy

+50

110
120
130

117.40
117.80
-2¢"
-2¢"
6:1
3:1

64'-6"

Main Line

C 710 Cy

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R.MACGREGOR L.N.D.	2-20-69
	AREAS		
NO.	AREAS CHECKED		

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

ORIGINAL SURVEY				
PLOTTED	SURVEYED			
NOTE BOOK	TEMPLATE	R.MACFARLAND	3-26-64	
	AREAS			
NO.	AREAS CHECKED			

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

D. P. W. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS	
1	MAINE	I-95-5(15)	29	109	

Sta 650+00 to 653+00 NB

Scale
Horiz. 1"=10'

design HRD
check

123-101 BRUNSWICK - TOPSHAM
Sheet 29 of 10

650+00

120 110 130

118.00

99'-0"

-2%

-8%

128.37

650+00

120 110 130

C 238 Cy
F 139 Cy
G 24 Cy

651+00

120 110 130

Grubbing Limits

Grubbing Limit

-2%

129.17

C 46 Cy
F 463 Cy
G 115 Cy

652+00

120 110 130

Grubbing Limits

Grubbing Limits

4:1

7+50

121.77

E 1,963 Cy
G 33 Cy

653+00

120 110 130

End Project I-95-3(15)
Sta 653+00

E 3,167 Cy

134.60

-2%

4:1

653+00

120 110 130

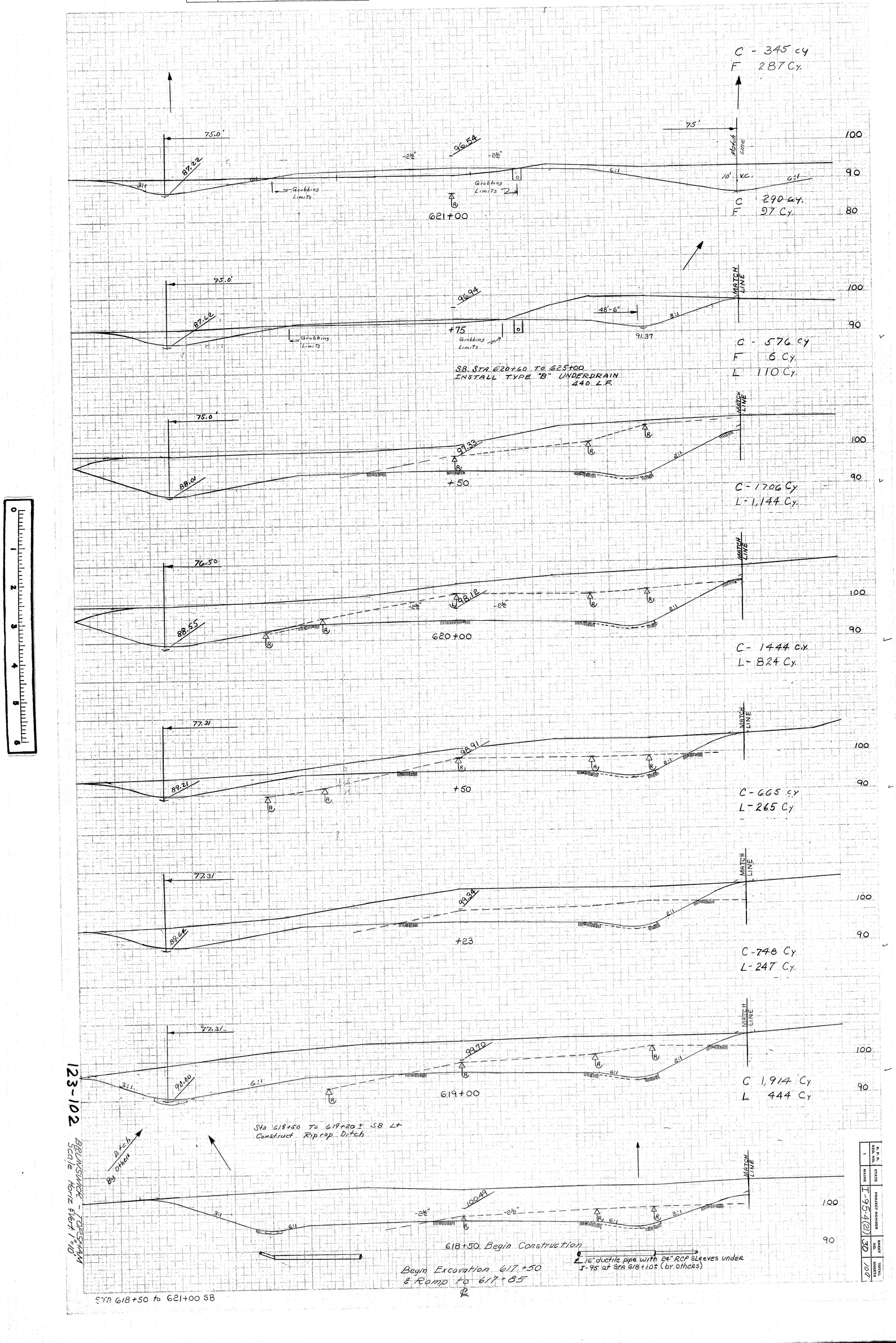
131.97

4:1

4:1

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3/10/69
NO	AREAS		
	AREAS CHECKED		

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



N. P. P. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	30	107

D. P. N. SHTS. NO.	STATE	ESCAMBIA I-95-4(20)	SHEET NO. 31	TOTAL SHEETS 109
1	FLORIDA			

BRUNSWICK - TOPSHAM
Scale Horiz. 1"=10'

123-2103

STA 621+50 to 625+00 SB

621+50

See M.B. Sections for Median Grades

622+00

C - 331 cy.
F - 156 Cy.

+50

C 454 cy.
F 50 Cy.

623+00

C 753 cy.
F 3 Cy

+50

Erosion Control Mesh
Sta. 623+50 - 625+00 SB Rt

C-1051 cy

+50

C-1081 cy

624+00

C - 884
F - 10 Cy

Sta 625+00 to Sta 625+50 SB Rt
Construct Rip Rap Ditch

Sb. Str. 625+00 INSTALL TYPE B UNDERDRAIN OUTLET 45° ELBOW C - 512 cy
F - 10 Cy

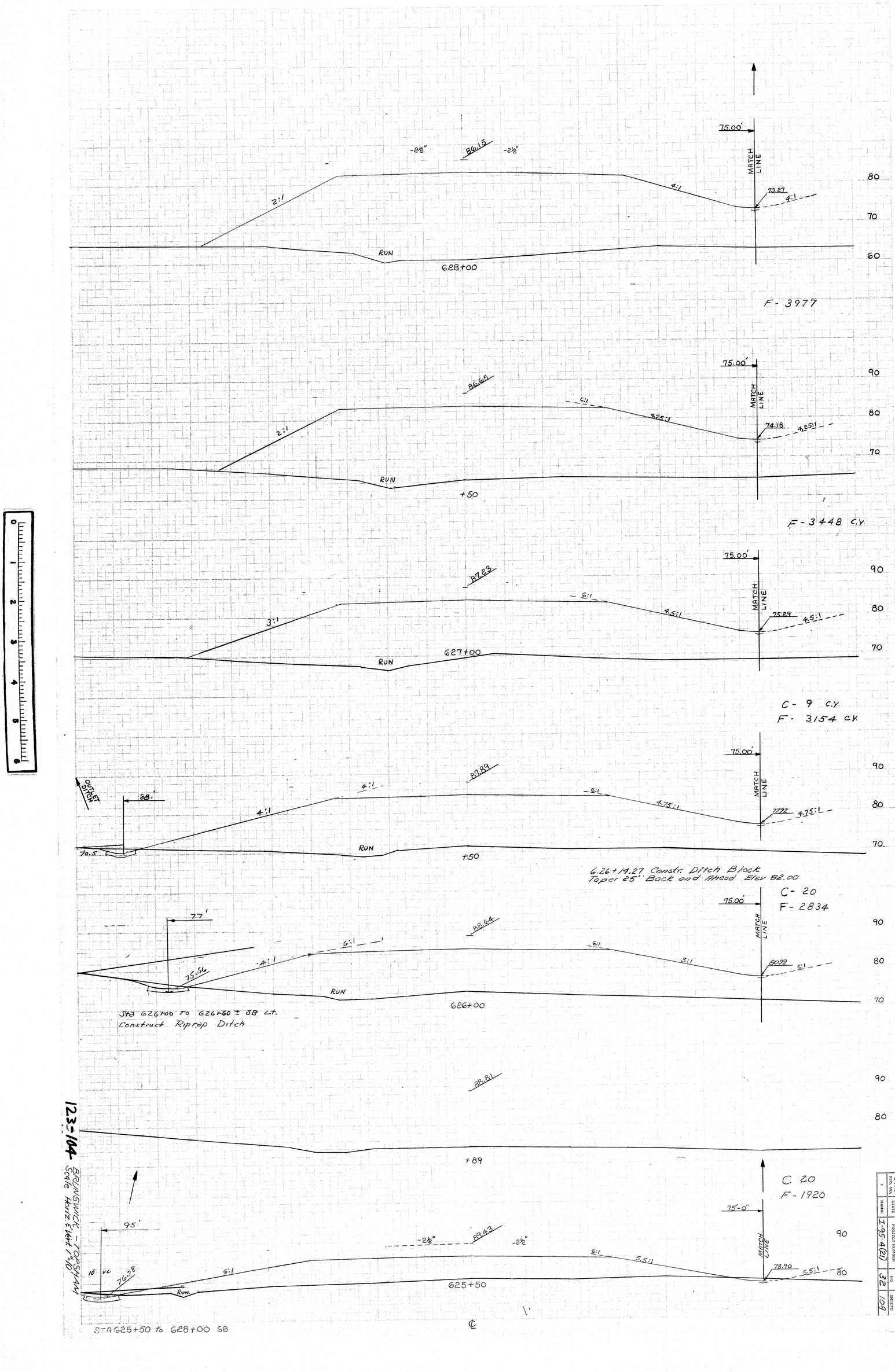
625+00

NO.	REVISIONS	BY	DATE
	ORIGINAL SURVEY PLOTTED	R.MACFARLAND	3/20/67
	SURVEYED TEMPLATE		
	TEMPLATE AREAS		
	AREAS CHECKED		

NO.	REVISIONS	BY	DATE
	FINAL SURVEY PLOTTED		
	SURVEYED TEMPLATE		
	TEMPLATE AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3/2/69
	AREAS		
NO.	AREAS CHECKED		

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



123-104

BRUNSWICK - TOPSHAM
Scale Horiz. 1 Inch = 10 Ft.

D. P. W. DIVISION	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-354(21)	32	104

STA 628+31 to STA 629+83.58

BRUNSWICK - TOPSHAM
Scale: Horiz. & Vert. 1"=10'

123-105

D.O.T. RDS. DIV.	COUNTY	ROUTE NO.	SHEET NO.	TOTAL SHEETS
5	SAGADAHOC	I-95-4(21)	33	109

ORIGINAL SURVEY		BY	DATE
SURVEYED		R. MACFARLAND	3/3/69
PLOTTED			
TEMPLATE			
AREAS			
NOTE BOOK			
NO.	AREAS CHECKED		

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

F.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	I-95-4(21)	34	109

STA G30+00 to G31+50 SB

℄

123-106 BRUNSWICK - TOPSHAM
Scale Horiz 1"=50' Vert 1"=10'

STA 627+62 SB LT
0 SECTION FOR TOE
FILL FIRST FULL SEC
-TION STA 630+00 SB LT

G30+00

50 60 70 80

2:1 6' 2:1

3:1 3:1 MATCH LINE 75.0' 67.18 3:1

85.06 -2½" -2½"

F 6,028 Cy

450

50 60 70 80

2:1 6' 2:1

2.75:1 2.75:1 MATCH LINE 75.0' 65.38 2.75:1

12.0' 64.94

F 5797 Cy

G31+00

50 60 70 80

10' 2:1 30'

2:1 2:1 MATCH LINE 75.0' 63.67 2.5:1

84.95 -2½" -2½"

F 3639 Cy

428

50 60 70 80

10' 2:1 30'

2.65:1 2.65:1 MATCH LINE 75.00' 61.46 2.65:1

84.99 -2½" -2½"

F 3,351 Cy

+50

50 60 70 80

SPIKE FILL 12.3' 2:1 6' 2:1 30'

2:1 6:1 MATCH LINE 75.00' 58.46 6:1

85.05 -2½" -2½"

F 5,076 Cy

ORIGINAL SURVEY		BY	DATE
PLOTTED	SURVEYED		
NOTE BOOK	TEMPLATE	KMACGREGOR/DKP	3-27-69
NO.	AREAS CHECKED		

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

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

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

℄

8510

80
70
60
50
40

+82
(TOP OF RIVER BANK)

8549

80
70
60
50
40

+50

8522

80
70
60
50
40

632+00

℄ BEARING @ ABUT # 1 = STA 631+69.27 S.B.

I-95 Over Androscoggin River

123-107 BRUNSWICK - TOPSHAM
SCALE HORIZ. & VERT. 1" = 10'

Sta. 632+00 to 632+82 S.B.

℄

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(2)	35	107

R. P. E. D. BOOK NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	IT-95-5(U5)	36	109

123-108

BRUNSWICK - TOPSHAM
SCALE: HORIZ. 1"=10'

STA. 638+50 TO 639+30 S.B.

638+50

9521

+92

9535

639+00

9567

+30

9741

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

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

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3-31-69
NO.	AREAS		
	AREAS CHECKED		

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

F. 6,202 Cy

99.37

-2½ -2½

2:1 6:1 2:1 12.79

100 90 80 70 60 50

Brook 640+00

℄ BEARING ABUT #2 - STA 639+94.27

I-95 Over The Androscoggin River

98.56

Match Line

100 90 80 70 60 50

+71

Brook 113'→

98.42

Match Line

100 90 80 70 60 50

brook brook brook

+66

91.77

Match Line 75.00'

100 90 80 70 60 50

639+43

Erosion Control Mesh

Sta 640+12± S.B. to Sta 642+35± S.B.

℄

Sta. 639+43 to 640+00 S.B.

Scale 1 Inch = 10 Feet

123-109

DIV. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-95-1(16)	87	109

N. P. R. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	38	109

Sta. 640+29 to 641+09 S.B.

℄

Brunswick - Topsham
Scale Horiz. & Vert. 1" = 10'

123-110

Brook

640+29

1:1

1:1

13.69

75.0'

100.18

-2⅛"

-2⅛"

F 4,542 cy

+09 (Top bank of brook)

641+00

1:1

1:1

15.49

75.0'

100.17

+50

F 10,676 cy

1:1

1:1

14.19

75.0'

100.17

F 1,912 cy

1:1

1:1

15.84

75.0'

100.18

-2⅛"

-2⅛"

F 2,375 cy

ORIGINAL SURVEY	
NOTE BOOK	
NO.	

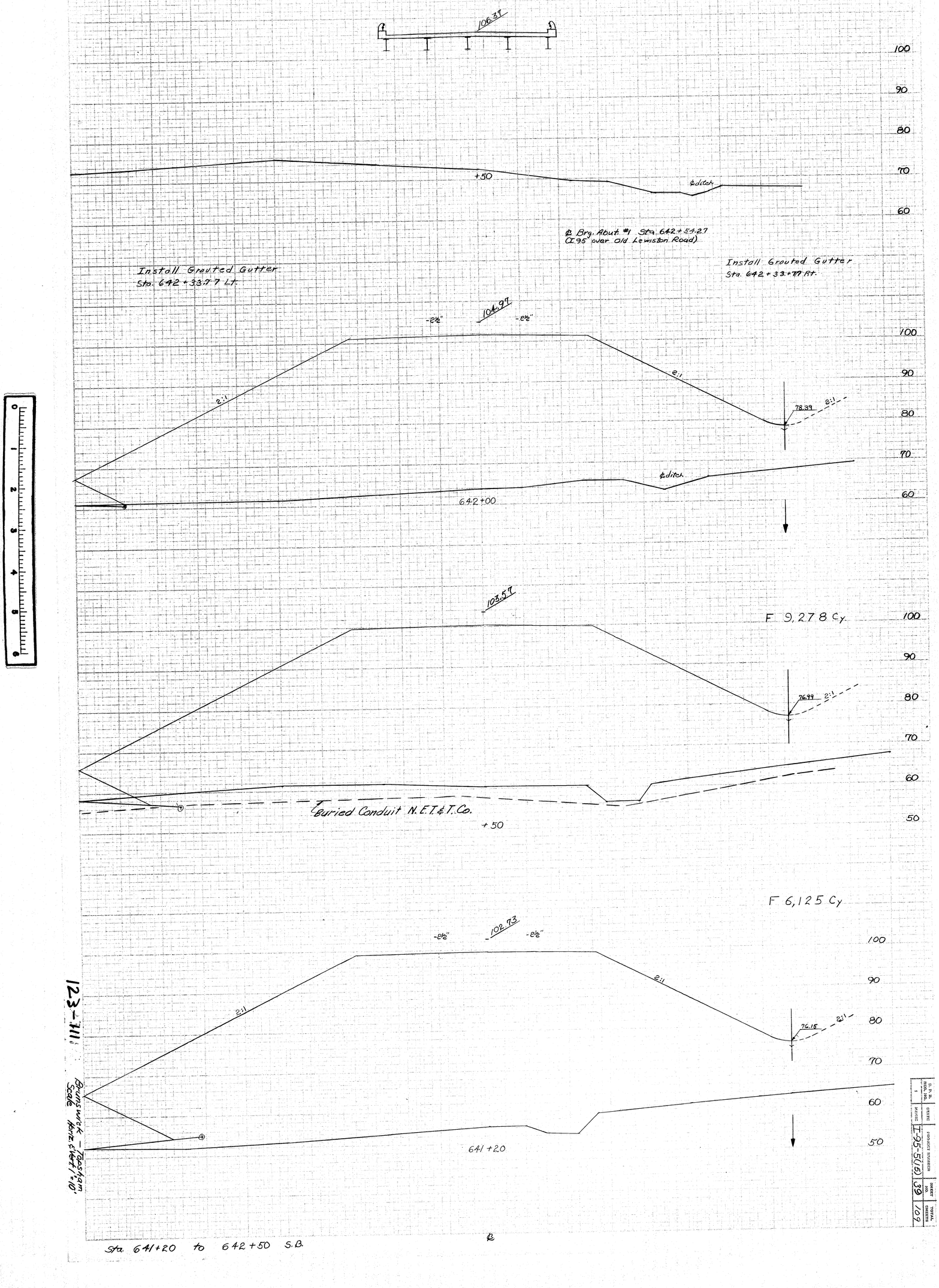
SURVEYED		DATE
PLOTTED		
TEMPLATE	R.MACFARLAND	3-31-49
AREAS		
AREAS CHECKED		

FINAL SURVEY	
NOTE BOOK	
NO.	

SURVEYED		DATE
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED	R. MACFARLAND	3-31-69
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

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



123-111

Brunswick – Topsham
Scale Horiz. & Vert. 1"=10'

Sta. 641+20 to 642+50 S.B.

U.S. ROUTE NO.	STATE	DISTRICT	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1			F-95-5(6)	39	109

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE	R. MACFARLAND	3-21-69
	AREAS		
NO.	AREAS CHECKED		

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

F 301 Cy
L 7 Cy

-2½" 111.10 -2½"

2:1 2:1 ledge

+19

110 100 90 80

F 952 Cy

110.57 2:1 ledge

644+00

110 100 90 80

90 80

+72

℄ Brg. Abut #2 Sta 643+97.27
(I-95 over Old Lewiston Road)

109.17

100 90 80

+50 ℄ ditch

70

107.77

100 90 80

643+00

70 60

℄

Sta. 643+00 to 644+19 S.B.

123-112

Brunswick - Topsham
Scale Horiz. 1"=10'

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	I-95-5(15)	40	109

R. P. EL. REVISIONS	STATE	PROJECT NUMBER	SHEET NUMBER
	MAINE	F85-5(16)	41

	TOTAL SHEETS
	109

Sta. 644+28 to 646+30 SB

Scale
Horiz 1 Vert 1" = 10'

BRUNSWICK - TOPSHAM
Sheet 41 of 109

12.3-1W3

644+28

Ledge

-2:1

-2:1

111.35

-2¢"

-8¢"

-2'-1FT-

80 90 100 110

F 327 Cy
L 73 Cy

450

Ledge

2:1

111.97

90 100 110

F 23 Cy
L 1,122 Cy

475

Ledge

2:1

-2'-1FT-

113.97

56'-0"

106.55

Ditch to 24"RCP Northbound
INVERT ELEV 105.90

645+00

90 100 110 120

L 2,137 Cy

450

Ledge

2:1

111.71

46'-6"

109.53

90 100 110 120

L 2,119 Cy

446+00

Ledge

2:1

116.17

90 100 110 120

L 1,134 Cy

430

2:1

-2¢"

-8¢"

117.01

90 100 110 120

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE	F. MACCARIAND	3-21-49
	AREAS		
NO.	AREAS CHECKED		

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

0 1 2 3 4

B.R.S. No.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(16)	42	109

Sta. 646+50 to 649+00 SB

℄

Scale Horiz. 1"=50' Vert. 1"=10'

BRUNSWICK TOPSHAM Sheet 42 of 109 Sept. 1989

123-114

design AEP check

646+50

C 42 Cy
L 699 Cy

120 | 110 | 130

Ledge

11.57

647+00

C 181 Cy
L 2,059 Cy

120 | 110 | 130

11.97

648+00

C 255 Cy
L 2,824 Cy

110 | 120 | 130

+50

12.37

649+00

C 3,074 Cy
L 2,391 Cy

140 | 130 | 120 | 110

WIRE FENCE

12.47

+50

C 1,000 Cy
L 2,513 Cy

140 | 130 | 120

WIRE FENCE

12.37

+50

C 491 Cy
L 3,320 Cy

140 | 130 | 120 | 110

Ledge

12.17

648+00

C 370 Cy
L 3,287 Cy

130 | 120 | 110

Ledge

12.17

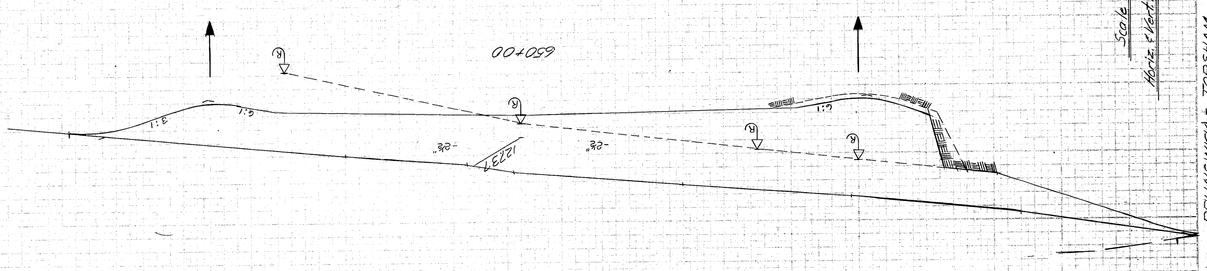
ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED	R.MAC FARLAND	3-21-91
	TEMPLATE		
NOTE BOOK	AREAS		
NO	AREAS CHECKED		

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

0 1 2 3 4 5

D. P. W. APPROVAL	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F95-5(10)	43	107

Sta. 650+00 to 653+00 SB



123-115

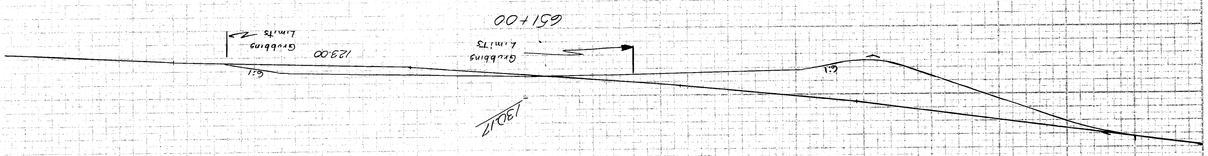
DESIGN AREA CHECK

BRUNSWICK - TOPSHAM
Sheet 43 of 107
Scale 1"=10'

120
130
140

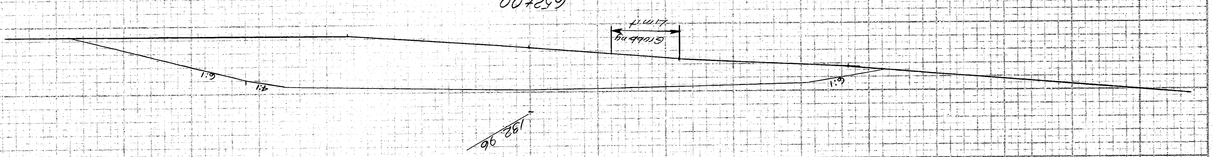
C 2,074 Cy
F 28 Cy
L 310 Cy
G 44 Cy

150



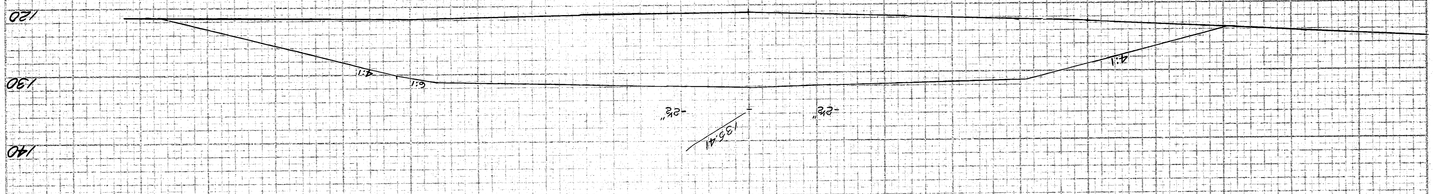
120
130
140

C 222 Cy
F 1,093 Cy
G 115 Cy

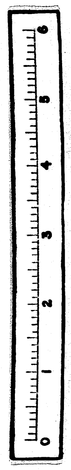


120
130
140

F 3,222 Cy
G 7 Cy



120
130
140



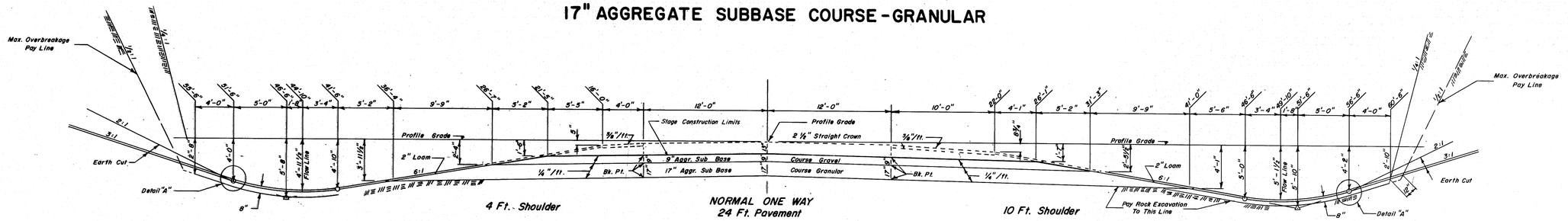
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	R.M.B.C.F.R.L.&N.D.
AREAS	
NOTE BOOK	3-21-69
AREAS CHECKED	
NO	
	BY
	DATE

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

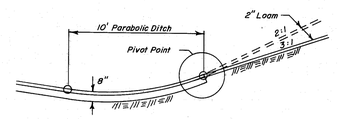
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21) I-95-5(15)	47	109

STAGE CONSTRUCTION – GRADING & SUBBASE

9" AGGREGATE SUBBASE COURSE - GRAVEL
17" AGGREGATE SUBBASE COURSE - GRANULAR

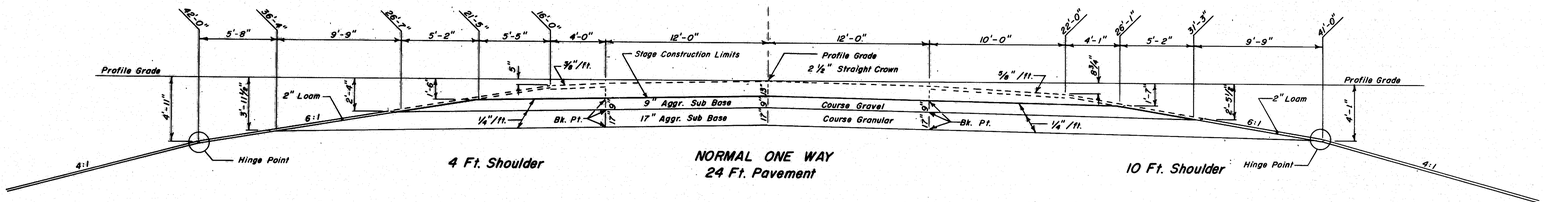


9" Aggr. Sub Base Course – Gravel = 32.79 Cu. Yds. Per 100 Lin. Ft. 9" Aggr. Sub Base Course – Gravel = 66.67 Cu. Yds. Per 100 Lin. Ft. 9" Aggr. Sub Base Course – Gravel = 46.77 Cu. Yds. Per 100 Lin. Ft.
17" Aggr. Sub Base Course – Granular = 102.46 Cu. Yds. Per 100 Lin. Ft. 17" Aggr. Sub Base Course – Granular = 125.93 Cu. Yds. Per 100 Lin. Ft. 17" Aggr. Sub Base Course – Granular = 126.48 Cu. Yds. Per 100 Lin. Ft.

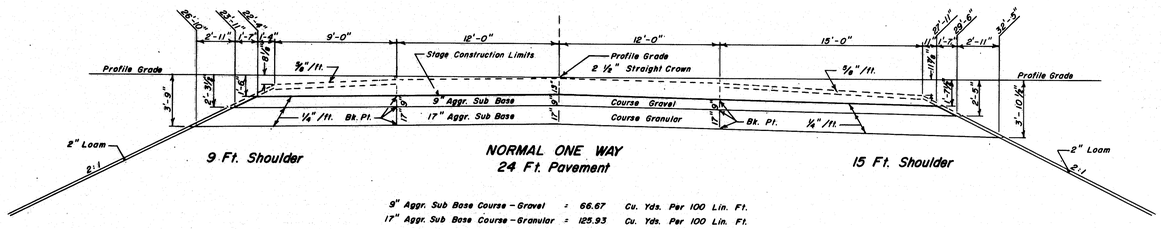


Pay Rock Excavation to this line, in shallow ledge cuts with 2:1 or 3:1 backslopes.

DETAIL "A"



9" Aggr. Sub Base Course – Gravel = 32.79 Cu. Yds. Per 100 Lin. Ft. 9" Aggr. Sub Base Course – Gravel = 66.67 Cu. Yds. Per 100 Lin. Ft. 9" Aggr. Sub Base Course – Gravel = 46.77 Cu. Yds. Per 100 Lin. Ft.
17" Aggr. Sub Base Course – Granular = 102.46 Cu. Yds. Per 100 Lin. Ft. 17" Aggr. Sub Base Course – Granular = 125.93 Cu. Yds. Per 100 Lin. Ft. 17" Aggr. Sub Base Course – Granular = 126.48 Cu. Yds. Per 100 Lin. Ft.



9" Aggr. Sub Base Course – Gravel = 66.67 Cu. Yds. Per 100 Lin. Ft.
17" Aggr. Sub Base Course – Granular = 125.93 Cu. Yds. Per 100 Lin. Ft.

9" Aggr. Sub Base Course – Gravel = 31.09 Cu. Yds. Per 100 Lin. Ft.
17" Aggr. Sub Base Course – Granular = 69.75 Cu. Yds. Per 100 Lin. Ft.

9" Aggr. Sub Base Course – Gravel = 46.66 Cu. Yds. Per 100 Lin. Ft.
17" Aggr. Sub Base Course – Granular = 98.80 Cu. Yds. Per 100 Lin. Ft.

PLANS	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

DESIGN BY	DATE	CHECKED BY	DATE
C.M.	2/12/69	A.S.	6/6/69
REVISED BY	DATE	REVISED BY	DATE
GRW	10/23/69	AR	10/23/69

STATE HIGHWAY COMMISSION

INTERSTATE - 95
FROM STA. 618+40 TO STA. 654+50
IN THE TOWNS OF
BRUNSWICK - CUMBERLAND CO.
AND
TOPSHAM - SAGADAHOC COUNTY
TYPICAL SECTIONS-ROADWAY

SHEET 47 OF 109 AUGUSTA, MAINE Sept. 1969

123-116

JANUARY 1968

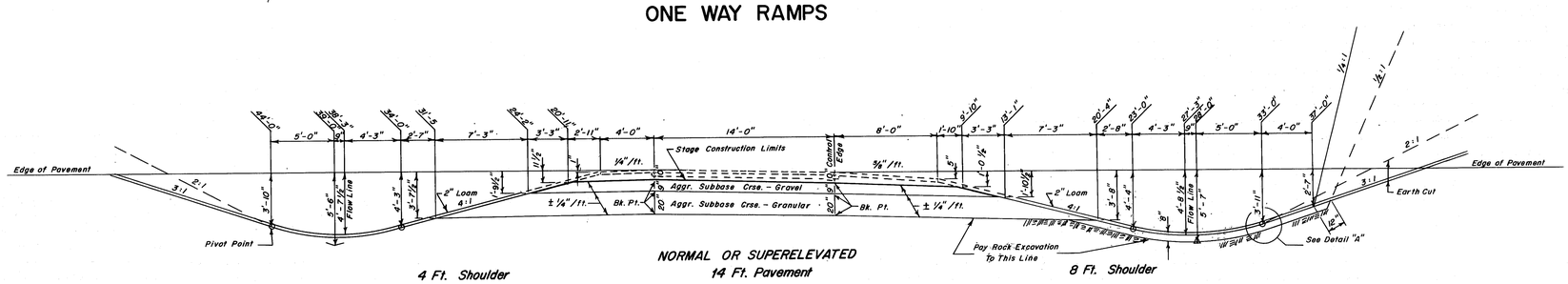
283-1 2060

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-4(21)	48	109

STAGE CONSTRUCTION – GRADING & SUBBASE

ONE WAY RAMPS



4 Ft. Shoulder

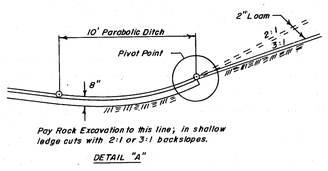
NORMAL OR SUPERELEVATED
14 Ft. Pavement

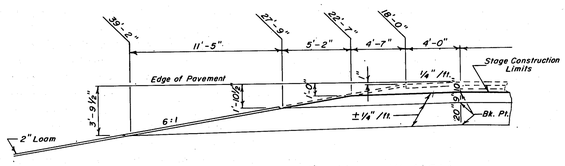
8 Ft. Shoulder

9" Aggregate Subbase – Gravel = 24.04 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 85.47 Cu. Yds. Per 100 Lin. Ft.

9" Aggregate Subbase – Gravel = 38.89 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 86.42 Cu. Yds. Per 100 Lin. Ft.

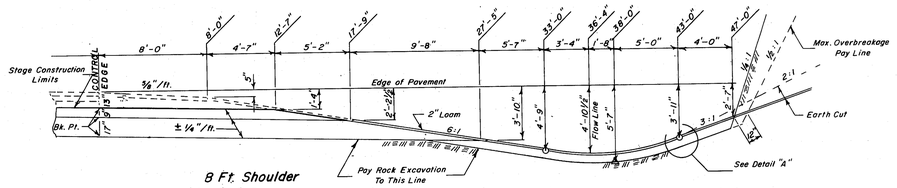
9" Aggregate Subbase – Gravel = 32.09 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 102.25 Cu. Yds. Per 100 Lin. Ft.





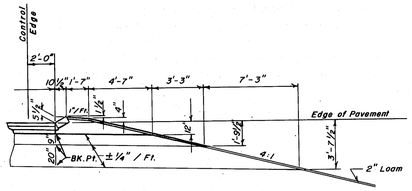
4 Ft. Shoulder High Side

9" Aggregate Subbase – Gravel = 31.41 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 120.31 Cu. Yds. Per 100 Lin. Ft.



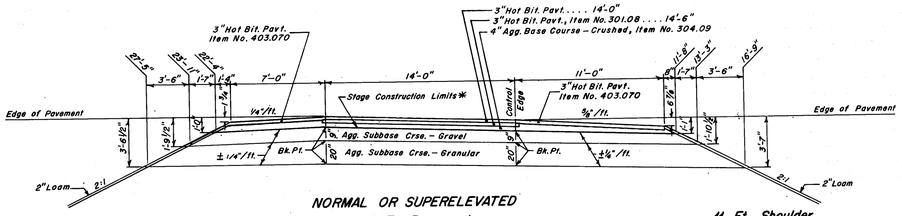
8 Ft. Shoulder
To Match – N.B. & S.B.

9" Aggregate Subbase – Gravel = 42.65 Cu. Yds. Per 100 Lin. Ft.
17" Aggregate Subbase – Granular = 118.63 Cu. Yds. Per 100 Lin. Ft.



Curb Section

Aggregate Base Course – Crushed = 16.67 Cu. Yds. Per 100 Lin. Ft.
9" Aggregate Subbase – Gravel = 23.61 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 86.28 Cu. Yds. Per 100 Lin. Ft.



7 Ft. Shoulder

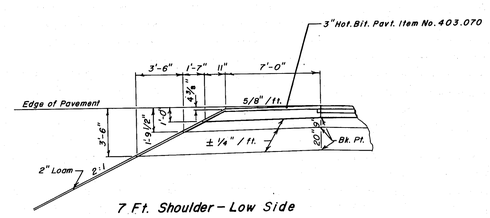
NORMAL OR SUPERELEVATED
14 Ft. Pavement

11 Ft. Shoulder

Aggregate Base Course – Crushed = 16.45 Cu. Yds. Per 100 Lin. Ft.
9" Aggregate Subbase – Gravel = 25.50 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 72.20 Cu. Yds. Per 100 Lin. Ft.

4"Aggregate Base Course – Crushed = 17.28 Cu. Yds. Per 100 Lin. Ft.
9" Aggregate Subbase – Gravel = 38.89 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 86.42 Cu. Yds. Per 100 Lin. Ft.

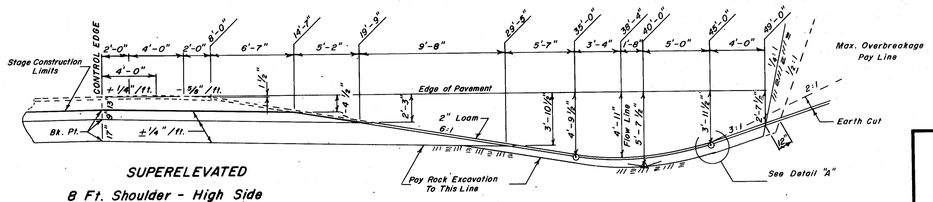
Aggregate Base Course – Crushed = 17.07 Cu. Yds. Per 100 Lin. Ft.
9" Aggregate Subbase – Gravel = 34.77 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 91.72 Cu. Yds. Per 100 Lin. Ft.



7 Ft. Shoulder – Low Side

Aggregate Base Course – Crushed = 12.84 Cu. Yds. Per 100 Lin. Ft.
9" Aggregate Subbase – Gravel = 24.31 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 68.83 Cu. Yds. Per 100 Lin. Ft.

* Note: For Limits of Paving See Grading Plans of Ramp Terminals.



SUPERELEVATED
8 Ft. Shoulder – High Side
Match Ramp "E" To N B

9" Aggregate Subbase – Gravel = 48.27 Cu. Yds. Per 100 Lin. Ft.
20" Aggregate Subbase – Granular = 129.15 Cu. Yds. Per 100 Lin. Ft.

VOID

VOID – June 30, 1970

STATE HIGHWAY COMMISSION

INTERSTATE – 95
PROJECT NO. I-95-4(21)
IN THE TOWN OF
BRUNSWICK – CUMBERLAND COUNTY

TYPICAL SECTIONS – RAMPS

SHEET 48 OF 109 AUGUSTA, MAINE Sept. 1969

123-117

PLANS	BY	DATE
DESIGN – DETAILED	C.W.M.	6-6-69
CHECKED	S.W.H.	7-8-69
REVISIONS		
FIELD CHANGES		

JANUARY, 1968.

203-1 2080

R. I. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F95-5	49	

* CHANGED WILE (JAN. 1964)

R/W Monuments

See insert on this sheet for Sta. 1+00

Sta.	Left	Right
22+00.38	50'	50'
23+60		50'
34+40.08	50'	60'
37+59.08	27'	50'

Survey Markers

For other Cross Sections see Sheet "57"

Sta.	Left	Right
34+40.08	50'	

Install 24" Dia. Coated Corrugated Metal Pipe x 90' to be placed in ditch. Place Sod around Inlet & Outlet

Drainage Easement Limit Line

Note: If in the opinion of the engineer, it is necessary to provide protection against erosion at the point which drainage from the culvert @ Sta. 29+50 will cross the N.E.T. & T. Co. buried cable, Riprap maybe placed over the cable for protection.

Ditch Out to Drain

Install 24"x82' Bit. Coated Corr. Metal Pipe @ Sta. 29+50 Place Sod around Inlet & outlet

Ditch out to Drain Brook

Ditch Layout
Scale: 1" = 100'

ANDROSCOGGIN RIVER

OLD TOPSHAM - LEWISTON ROAD

FIELD & BUSHES

FRUIT TREES

HARDWOOD GROWTH

MIXED GROWTH

CLEARING - OLD POWER LINE

FIELD

LAWN

Sodded Gutter Installl 12" CMP x 35'

INLET-THILLER

2 CAR FR. GAR.

1 STY. CONC. BLOCK GAR.

FUEL TANK

GETTY TANK 550 GAL.

WOODS ROAD

Buried Conduit

W.W. FENCE

Burned Office Mem.

Buried Cable

Existing Pole

Sta. 2G+40.43 = Sta. G42+36.89 ∠ = 81°-42'-00" RT.

Sta. 27+93.71 = Sta. 641.81.21 ∠ = 81°-42'-00"

Sta. 28+37.14 ∠ = 178°-01'-00" RT.

Sta. 26+16.25 NE Sta 643+35.44 ∠ = 90°-00'-00"

400'-16" ϕ Water Main by Brunswick & Topsham Water District

Sta 27+66.26 SA Sta 643+99.71 ∠ = 30°-00'-00"

Clearing Pay Line

Erosion Control Mesh
Sta 25+38± to Sta 27+75± Left & Right
Sta 27+92± to Sta 28+40± Left
Sta 27+92± to Sta 28+30± Right

General Notes
6" loam shall be placed on all Earth Slopes.
Seeding Method No 2 on all Earth Slopes.
Where existing pavement would be visible after construction, remove existing pavement and loam and seed.

Grubbing in fills
Sta. 25+90 to Sta. 26+25
Sta. 27+50 to Sta. 29+00
Sta 29+75 to Sta. 31+00
Sta 33+00 to Sta. 35+50

~ UTILITIES ~
Brunswick & Topsham Water District (see Special Provisions)
Central Maine Power Company
New England Tel. & Tel. Company
The C.N.R.R. & N.E.T.T. Co. Utility Objects are located as shown, and care shall be taken by the contractor during construction to protect the installations.

Plan
Scale: 1" = 50'

Install 21" Dia. Coated Corrugated Metal Pipe @ 13.6% Sta 32+12 - Skewed Ahead on Rt. 35° Place Sod around Inlet & outlet

100 Transition

Begin Limit of Work ℄

Begin Project

+0.30%

-0.201%

-1.98%

200' V.C. Ext = -0.125'
Stopping Sight Distance = 1500'

300' V.C. Ext = -0.667'
Stopping Sight Distance = 545'

300' V.C. Ext = +0.7425

Existing Ground - Construction Line

Old Line Profile

87.50 87.62 87.68 87.67 87.60 87.50 87.40 87.30 87.20 87.10 87.00 86.89 86.79 86.69 86.52 86.19 85.72 85.10 84.34 83.42 82.44 81.44 80.55 79.54 78.50 77.88

20 21 22 23 24 25 26 27 28 29 30 31 32 33 +50

90 80 70 60

Scales: Hor. 1" = 50'; Vert. 1" = 5'

123-118 Sheet 1 of 2

0 1 2 3 4 5 6

R.C. & M. REC. NO.	STATE	PROJECT NUMBER	CHECK NO.	TOTAL SHEETS
1	MAINE	I-95-5	40	

(* CHANGED WIDE THAN 1967)

R/W Monuments

See Insert on this sheet No. 1 for Sta. 10+00

Sta.	Left	Right
22+00.38	50'	50'
23+60		50'
34+40.08	50'	60'
37+59.08	27'	50'

Survey Markers

For other Cross Section see Sheet No. 57

Sta.	Left	Right
34+40.08	50'	

Drainage Easement Limit Line

Install 24" Int. Coated Corr. Metal Pipe ± 62 L.F. placed in ditch. Place Sod around Inlet & Outlet

HARDWOOD GROWTH

FIELD & BUSHES

FRUIT TREES

CMP Sta 22+00

N 62°-57'-12" W

W.W. FENCE

3" APPLE

OLD TOPSHAM - LEWISTON ROAD

PAVED DR.

27" MAP

32" MAP REMOVE

20" MAP

25" ELM

3" SPRUCE

LILAC

20" ELM

1½ STY. FR. HO.

23" APPLE

Sodded Gutter Install 12" CMP x 35'

INLET TYP. II

POLE W/ STER.

FUEL TANK

GAS PUMP

14" APPLE

2 CAR FR. GAR.

1 STY. CONC. BLOCK GAR.

LAWN

FIELD

Grubbing in Fills
Sta. 26+90 to Sta. 26+25
Sta. 27+50 to Sta. 29+00
Sta. 29+75 to Sta. 31+00
Sta. 33+00 to Sta. 35+50

~ UTILITIES ~
Brunswick & Topsham Water District (see Special Provisions)
Central Maine Power Company
New England Tel. & Tel. Company
The C.M.P. & N.E.T.T. Co. Wire Lines are located as shown, but care shall be taken by the contractor during construction to protect the installations.

100' Transition

Dist. Layout
Scale: 1" = 100'

Sta. 22+00.38 P.C.

Sta. 23+60 P.T.

Sta. 24+40.08 P.C.C.

Sta. 25+59.08 P.C.C.

Sta. 26+90 P.T.

Sta. 27+50 P.C.

Sta. 29+75 P.T.

Sta. 33+00 P.C.

Sta. 35+50 P.T.

Sta. 36+78.25 = NE Sta 643+95.44
∠ = 90°-00'-00"

400'-16"ϕ Water Main by Brunswick & Topsham Water District

Sta 27+66.25
+ Sta Sta 345+99.71
∠ = 90° 00'-00"

Erosion Control Mesh
Sta 25+37± to Sta 27+45± Left & Right
Sta 27+92± to Sta 28+40± Left
Sta 27+92± to Sta 231.39± Right

General Notes
Sod shall be placed on all Earth Slopes
Seeding Method No 2 on all Earth Slopes
Where existing pavement would be removed after construction, remove existing pavement and loam and seed.

NOTE: If in the opinion of the Engineer, it is necessary to provide protection against erosion at the point which drainage from the culvert @ sta. 29+80 will cross the N.E.T.&T.Co. buried cable, Riprap maybe placed over the cable for protection.

Ditch Out to Drain

Install 24" Int. Coated Corr. Metal Pipe ± 134' Sta. 27+50 Place Sod around Inlet & outlet

Ditch Out to Drain

STA. 29+42.07± No STA. 642+38.89 ∠ = 81°-42'-00"

STA. 27+93.71± Sp STA. 641.81.21 ∠ = 81°-42'-00"

△ STA. 29+40.43 ∠ = 15°-18'-50" RT.

18"x35' BOX CULV. (POOR) REMOVE

Exist. R/W

Buried Conduit

N 47°-38'-22" W

MIXED GROWTH

CLEARING - OLD POWER LINE

△ STA. 28+37.14 ∠ = 178°-01'-00" RT.

14'x5'x3' BOX CULV. (POOR)

N 30°-37'-22" W

REMOVE

Buried Conduit

NET 76

24"x40' CMP

Clearing Pay Line

Construction

CMP SECT. 31 27

W.W. FENCE

Exist. R/W

Install 24" Int. Coated Corrugated Metal Pipe ± 134' Sta. 32+15 ± - Skewed Angle in Ar. 35° Place Sod around Inlet & outlet

SEE SHEET 26

Sta 22+00.38 P.C.

Sta 23+60 P.T.

Sta 24+40.08 P.C.C.

Sta 25+59.08 P.C.C.

Sta 26+90 P.T.

Sta 27+50 P.C.

Sta 29+75 P.T.

Sta 33+00 P.C.

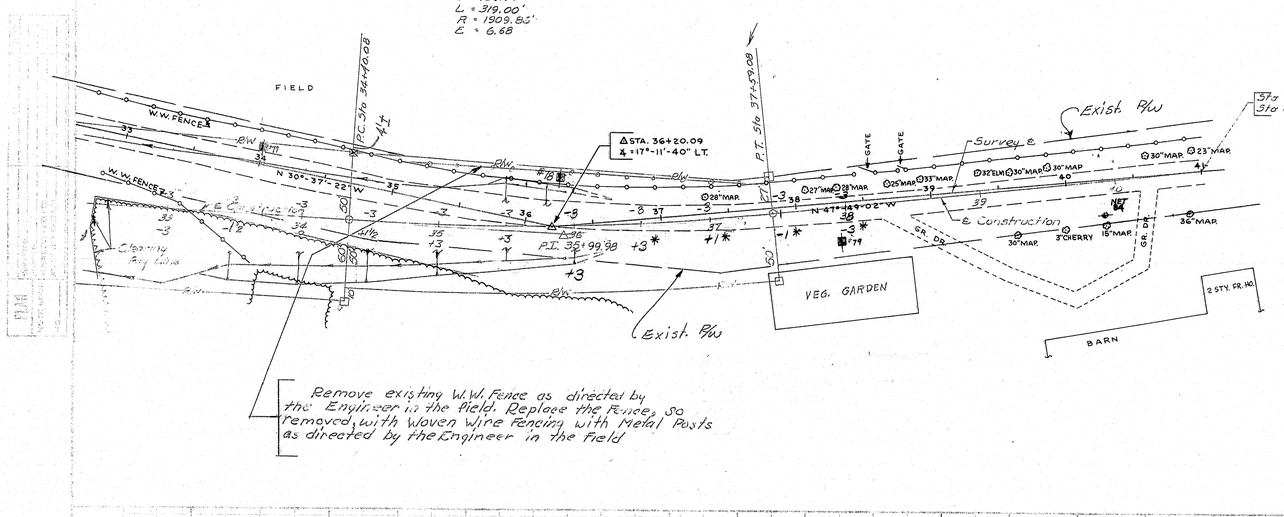
Sta 35+50 P.T.

NEW PLAN
Scale: 1" = 50'

| | | |

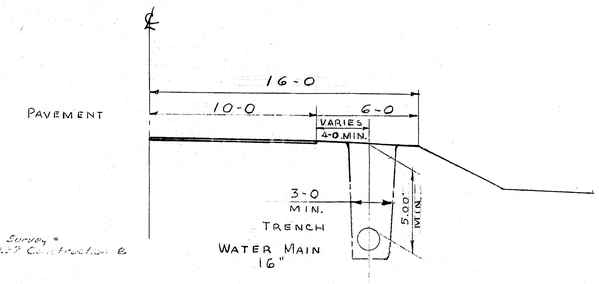
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-955(15)	50	109

P.I. Sta 35+99.98
Δ = 98°34'-15"
D = 3°-00'
T = 159.90'
L = 319.00'
R = 1909.85'
E = 6.68



37+ 41.40 Survey "
31+ 40.58.7 Construction ℄

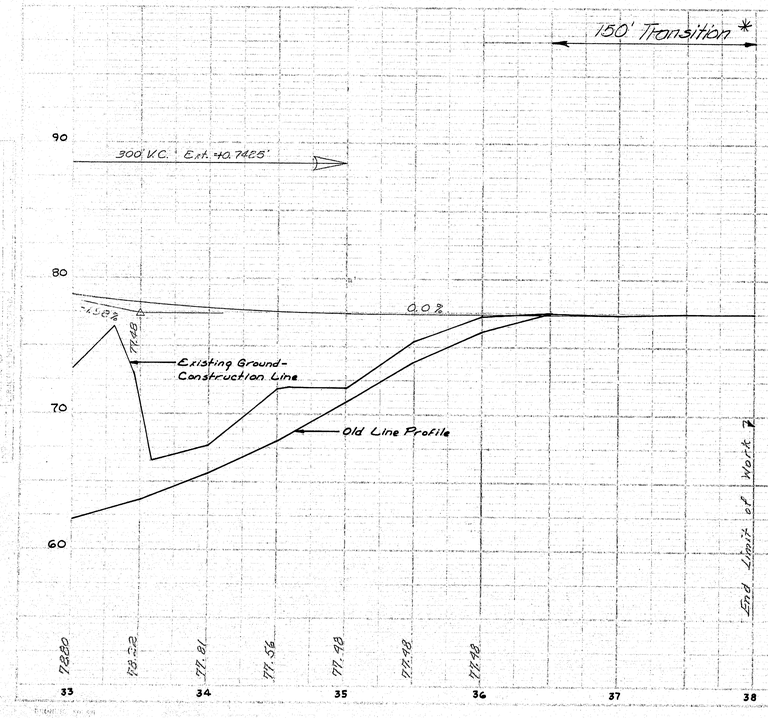
Remove existing W.W. Fence as directed by the Engineer in the field. Replace the Fences so removed, with Woven Wire Fencing with Metal Posts as directed by the Engineer in the Field



TYPICAL SECTION THRU ROADWAY

SHOWING PIPE LOCATION

SCALE 1" = 4'



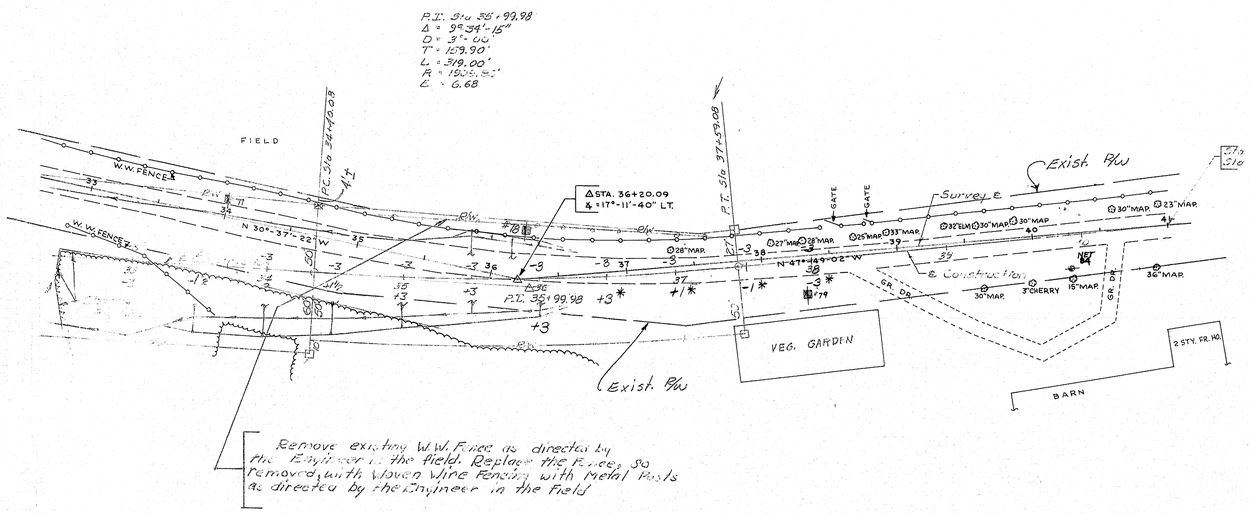
* Revised 3/6/70 W.J. Morrison
Checked 4/1/70 H.L.D.

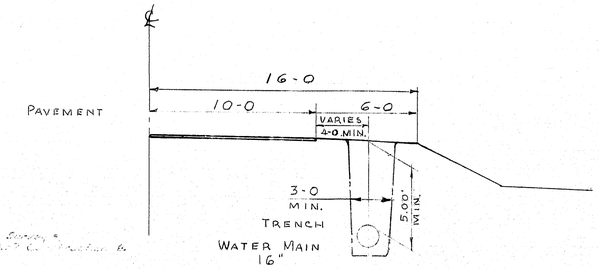
PLATE 1—PLAN—PROFILE

123-119

Sheet 50 of 109 April 1969
Old Lewiston Road

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-955(15)	50	109

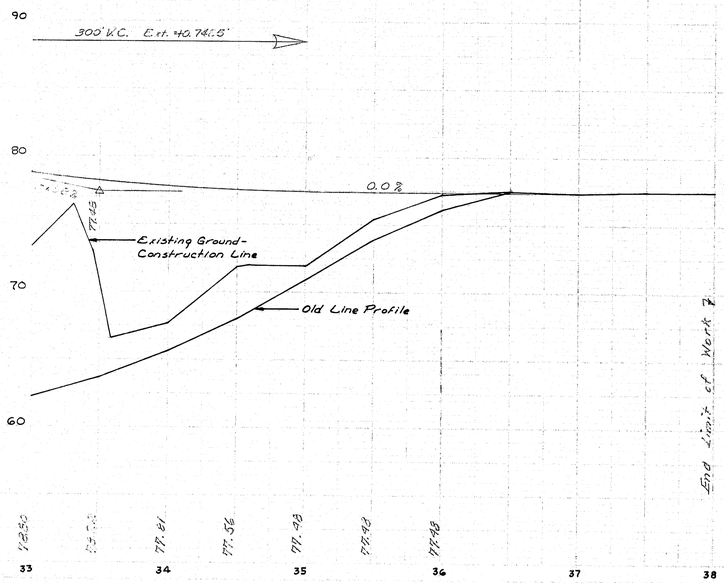




TYPICAL SECTION THRU ROADWAY

SHOWING PIPE LOCATION

SCALE 1" = 4'



* Revised 7/6/70 W.J. Morrison
Checked 7/7/70 H.L.D.

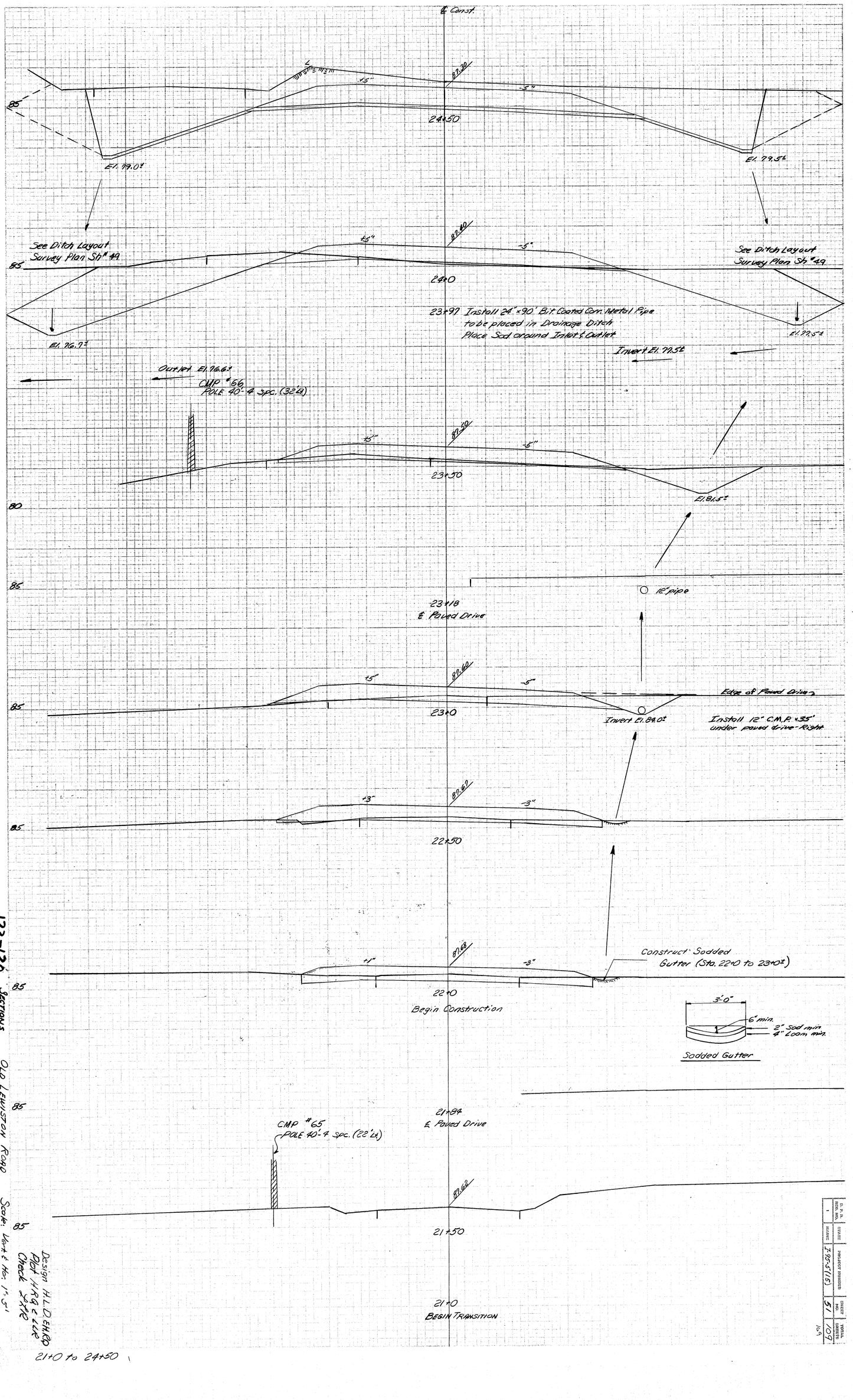
123-119

Sheet 50 of 109 Rpm 1764
Old Lewiston Road

0 1 2 3 4 5 6

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

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



123-126 SECTIONS

OLD LEWISTON ROAD

Sheet of

Scale: Horiz. 1"=5'

Design H.L.D. & H.R.D.
Plot H.R.G. & L.L.R.
Check J.A.R.

21+0 to 24+50

DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F 95-5(15)	51	109

109

R. P. & B. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F-98-3(10)	52	109

24+65 to 25+84

Design: H.K.O.
Plot: H.L.D.
Check: H.R.G. & L.M.P.
Scale: Vert. & Hor. 1" = 5'

Sections of OLD LEWISTON ROAD

123 - 121

El. 80.0±
24+65
+5"
-5"
8.2:1
El. 79.7±

El. 80.9±
24+89
+3"
-3"
6.7:1
El. 80.8±

El. 81.3±
25+0
+5"
-5"
7.2:1
El. 81.3±

El. 82.3±
25+25
+4"
-4"
8.1:5
El. 82.4±
Probable ledge

El. 82.9±
25+41
+1½"
-3"
8.1:1
El. 83.2±
Probable ledge

El. 83.2±
25+50
+1"
-3"
8.1:0
El. 83.5±
Probable ledge

El. 84.0±
25+71
+10½"
-3"
8.0:5
El. 83.5±

El. 84.32
25+84
+10½"
-3"
8.0:3
El. 84.1±
Probable ledge

℄ Const.

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

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

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

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

℄ (Const)

86.19

80

grubbing limit

28+50

grubbing limit

El. 80.0'

86.52

STA 27+93± TO 28+30± RT.
INSTALL BITUMINOUS
TREATED STONE DITCH

El. 83.81

El. 83.81

80

grubbing limit

28+0

grubbing limit

El. 95.23'

El. 93.19'

Sta. 27+92± to Sta. 28+40± Lt.
Place Erosion Control Mesh at
base of Interstate embankment

86.67

El. 83.96

El. 83.96

80

grubbing limit

27+60

El. 95.25'

El. 93.19

86.69

-3

-3

El. 83.98'

El. 83.98

80

70

27+50

86.79

-3

-3

½"/ft.

← 8%± To Sta 642+00N. BL I-95

℄ DITCH STA. 26+91.25

El. 84.08

El. 84.08

STA. 26+37± RT TO 27+45±RT
INSTALL BITUMINOUS TREATED
STONE DITCH

80

Gravel Borrow →

← Gravel Borrow

70

27+0

86.89

-1

-3

85

El. 84.52

El. 84.18

26+50

El. 95.56

El. 93.22'

Sta. 26+38 to Sta. 27+45± Left
Place Erosion Control Mesh at
base of Interstate embankment
to median ditch

Bituminous Treated
Stone Slope Protection

Face of
Breastwall

75

face of Breastwall

Bituminous Treated Stone
Slope Protection

87.00

0

-3

El. 84.29

El. 84.71

Gravel Borrow →

Gravel Borrow

grubbing limit

grubbing limit

80

26+0

℄ (Const)

26+0 to 28+50

123-122 Sections

Old Sheet of

LEWISTON ROAD

Design H.L.D. E.H.P.D.

Plot Check Year

Scale: Vert & Hor. 1"=5'

STATE OF MAINE DEPT. OF TRANSP.							
1	STATE	PROJECT NUMBER	DIVISION NO.	TOTAL SHEETS			
		I-95-5(15)	53	20			

℄ (CONST.)

79.54

70 70

60 60

32+50

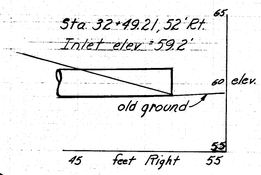
32+49.21

Install 24"x 134' Bit. Coated Corr. Metal Pipe
Skewed Ahead on Rt 35°
Place Sod around Inlet & Outlet

32+12

80.45

Sta. 32+49.21, 52' Rt.
Inlet elev. = 59.2'



80 70 60

70 60

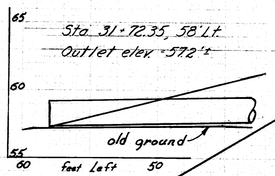
32+0

31+72.35

81.99

80 70 60

Sta. 31+72.35, 58' Lt.
Outlet elev. = 57.2'±



80 70

31+50

82.43

Ditch to drain

80 70

grubbing limits

31+0

70

83.42

80

grubbing limit

80

30+50

grubbing limit

84.34

80

80

30+0

grubbing limits

85.10

80

Sta. 24+50
Inlet Elev. 78.0'±
(at c/l ypeend)

80

Install 24"x 32' Bit. Coated Corr. Metal Pipe
Place Sod around Inlet & Outlet

Sta. 34+50
outlet Elev. 86.0'±
(at old ground)

29+50

85.72

80

Grubbing Limit

grubbing limit

El. 79.00'

80

29+0

℄ (CONST.)

29+0 to 32+50

123-123

Old Lemaster Road
Sheet 5-A of 10

Scale: Vert. & Hor. 1" = 5'
Sept. 1969

design was check H.L.D

FED. AID PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	F 35-1(15)	54	

℄ (Const.)

79.54

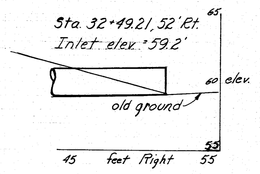
70 70 60 60

32+50

32+49.21

Install 24"x 134' Bit. Coated Corr. Metal Pipe
Skewed Ahead on Rt. 35°
Place Sod around Inlet & Outlet

Sta. 32+49.21, 52' Rt.
Inlet elev. = 59.2'

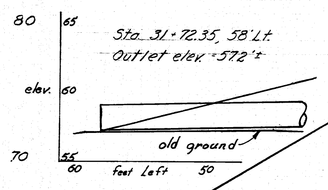


32+12 80.45

80 70 70 60

32+0

31+72.35 81.44



80 70 80 70 60

31+50 82.43

80 grubbing limits

70 31+0 70

83.42

80 grubbing limit 80

grubbing limit

30+50 grubbing limit

84.34

80 80

30+0 grubbing limits

85.10

Sta. 29+50
Inlet Elev. 76.5'±

80 80

Sta. 29+50
Outlet Elev. 66.6'±

29+50

85.72

80 Grubbing Limit grubbing limit El. 79.00' 80

29+0

℄ (Const.)

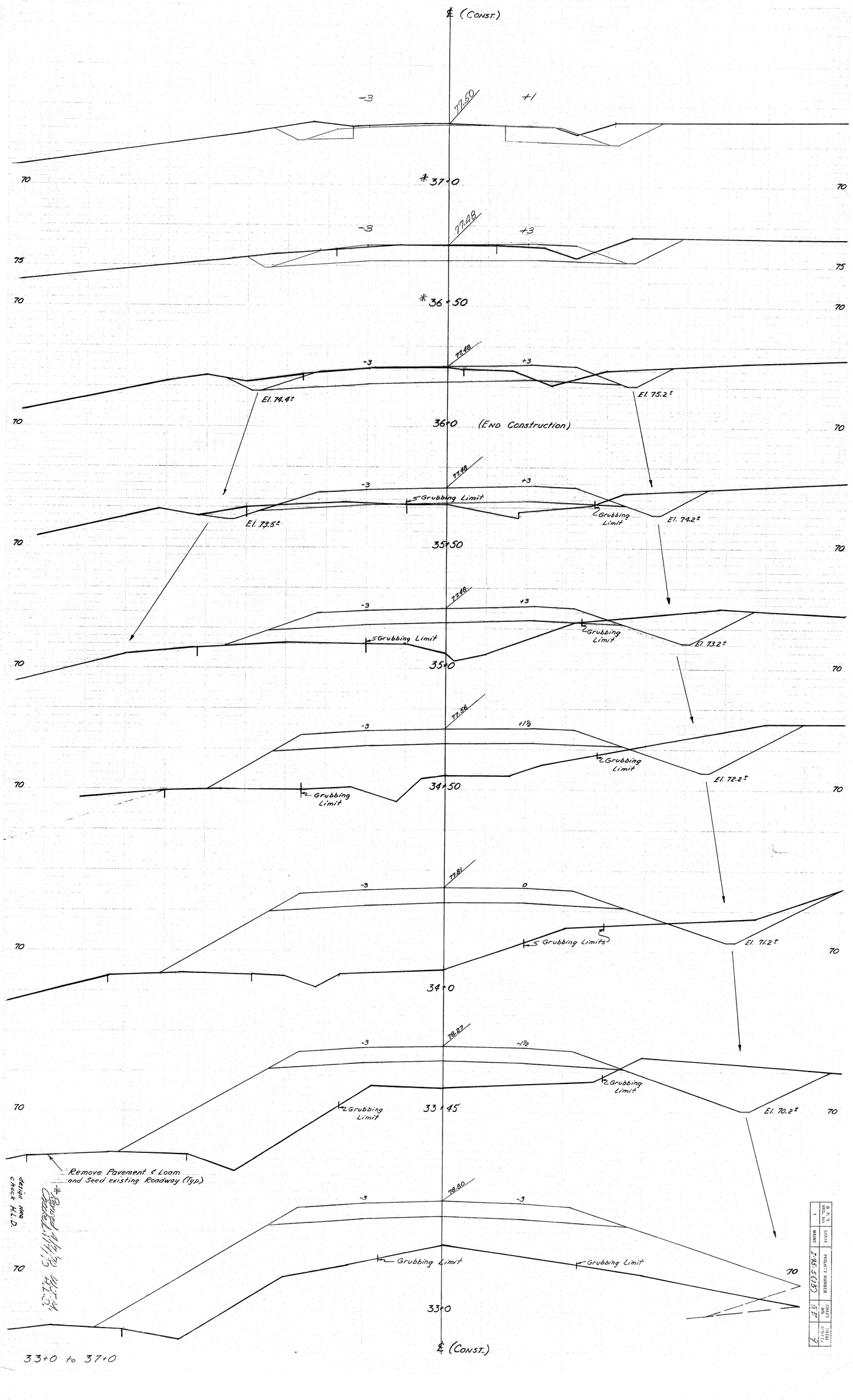
29+0 to 32+50

123-123

Old Lewiston Road
Sheet 5 of 10

Scale: Vert. & Hor. 1" = 5'
Sept. 1969

design MKO
check H.L.D



123-124

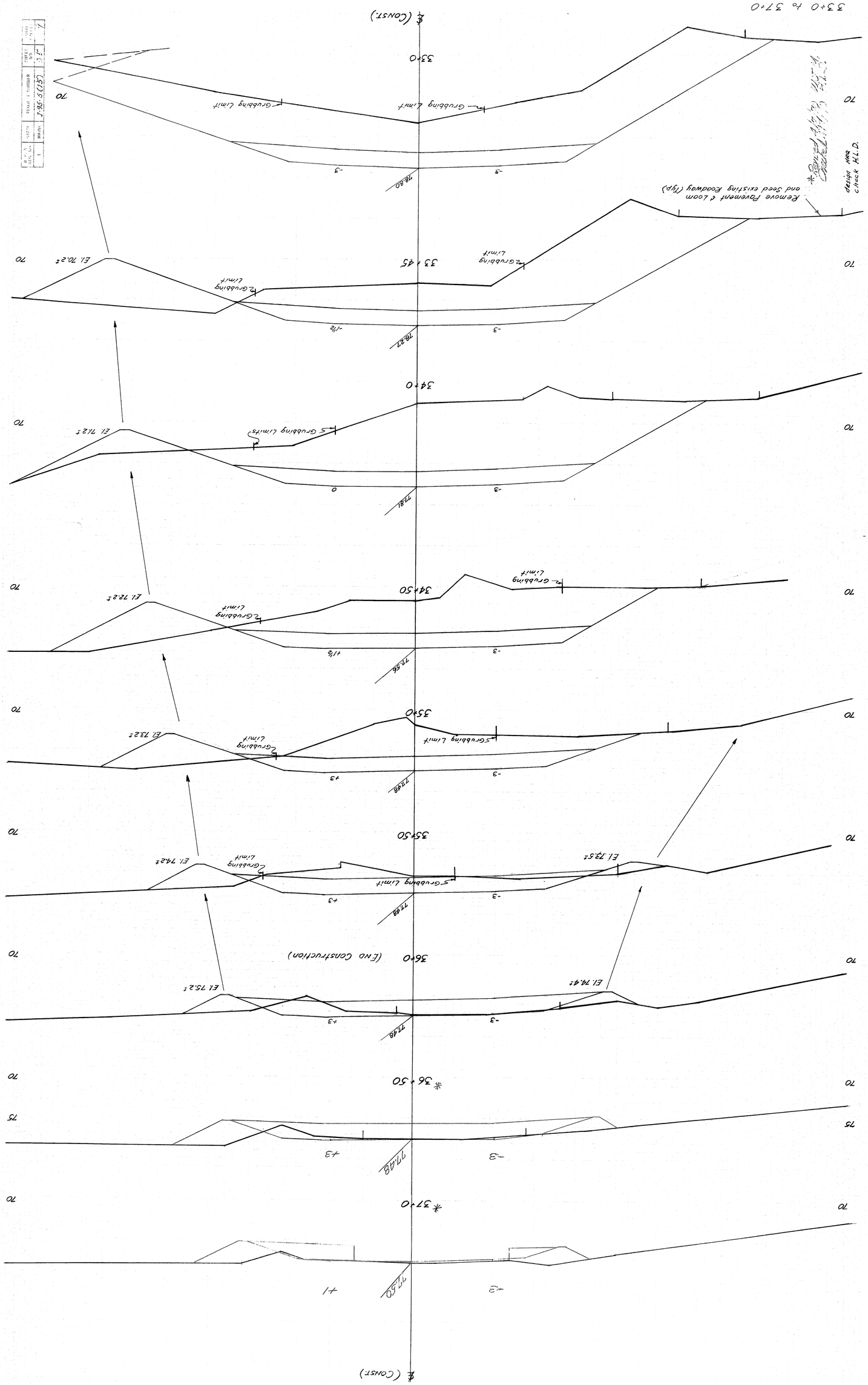
Old Lewiston Road
Sheet 55 of 109

Scale: Horiz & Vert 1"=5'
June, 1969

design HRB
check H.L.D.

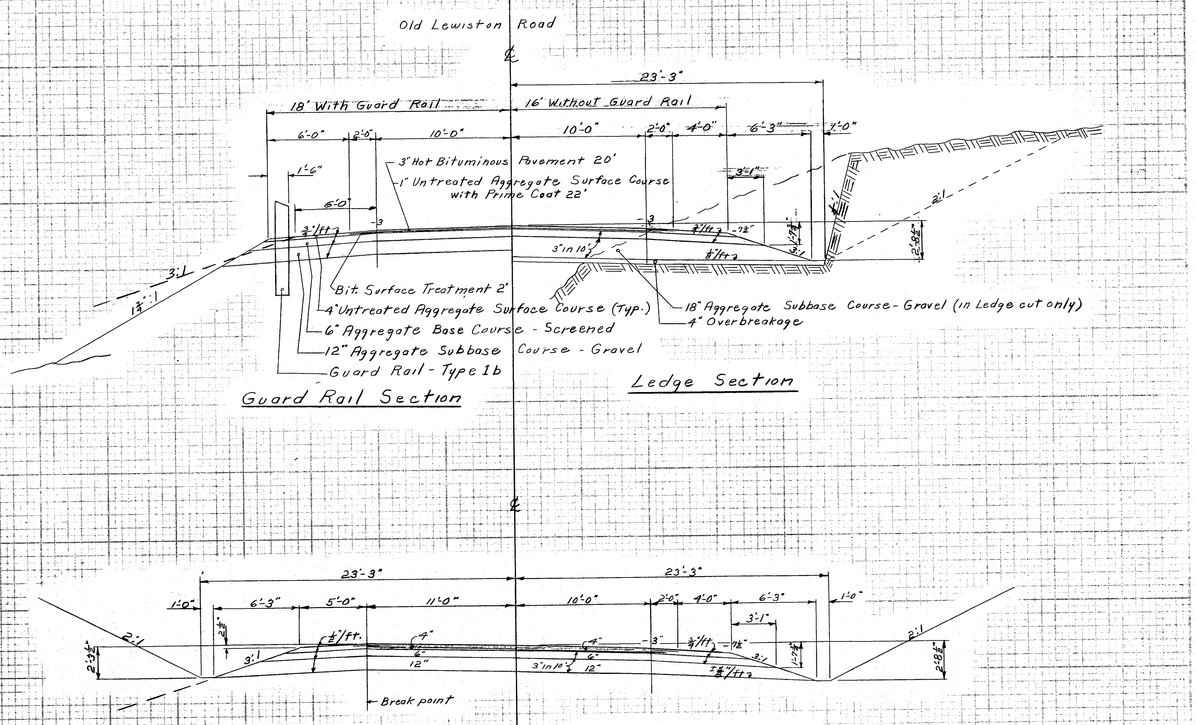
33+0 to 37+0

1					B. R. L. NO. SHEET
MAINE	STATE				
F-95-5(19)	PROJECT NUMBER				
15	SHEETS	NO.			
	TOTAL				


℄ (CONST.)
33+0
Grubbing limit
El. 78.2±
33+45
Remove Pavement & Loam and Seed existing Roadway (Typ)
34+0
S Grubbing limits
34+50
35+0
35+50
36+0 (End Construction)
* 36+50
* 37+0
33+0 to 37+0
Scale: Hor. & Ver. 1"=5'
OLD LEWISTON ROAD
Sheet 55 of 109
123-124
design HRG
check K.L.D.
PE NO. 7495 GOLD
STREET NO. 55
1 MAINE

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

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



Typical Sections

BITUMINOUS PAVEMENT

DESC. of COURSE	Grade Design	Item No.	Bit. Cont. % of Mix	Total Thick.	No. of Layers	Comp. Notes
		Traveled Way				
Wearing	"C"	403.08	7.0	1¼"	1	1,2
Binder	"B"	403.07	5.5	1¾"	1	1,2
		Shim Course				
Leveling	"E"	403.121	7.5	Var.	1 or more	1,2,4

Complementary Notes

1. The bituminous binder for the mixtures shall be Penetration Grade (85-100) asphalt cement and will be paid for separately under Item No. 403.14.
2. The asphalt contents shown are to serve as a guide only and are not specifications.
3. Mixtures meeting the aggregate gradation of "B" or "C" above may be used for the bottom layer with payment to be made under Item No. 403.12.
4. The density requirements are waived.

OTHER BITUMINOUS ITEMS

Treatment of Gravel on Traveled Way

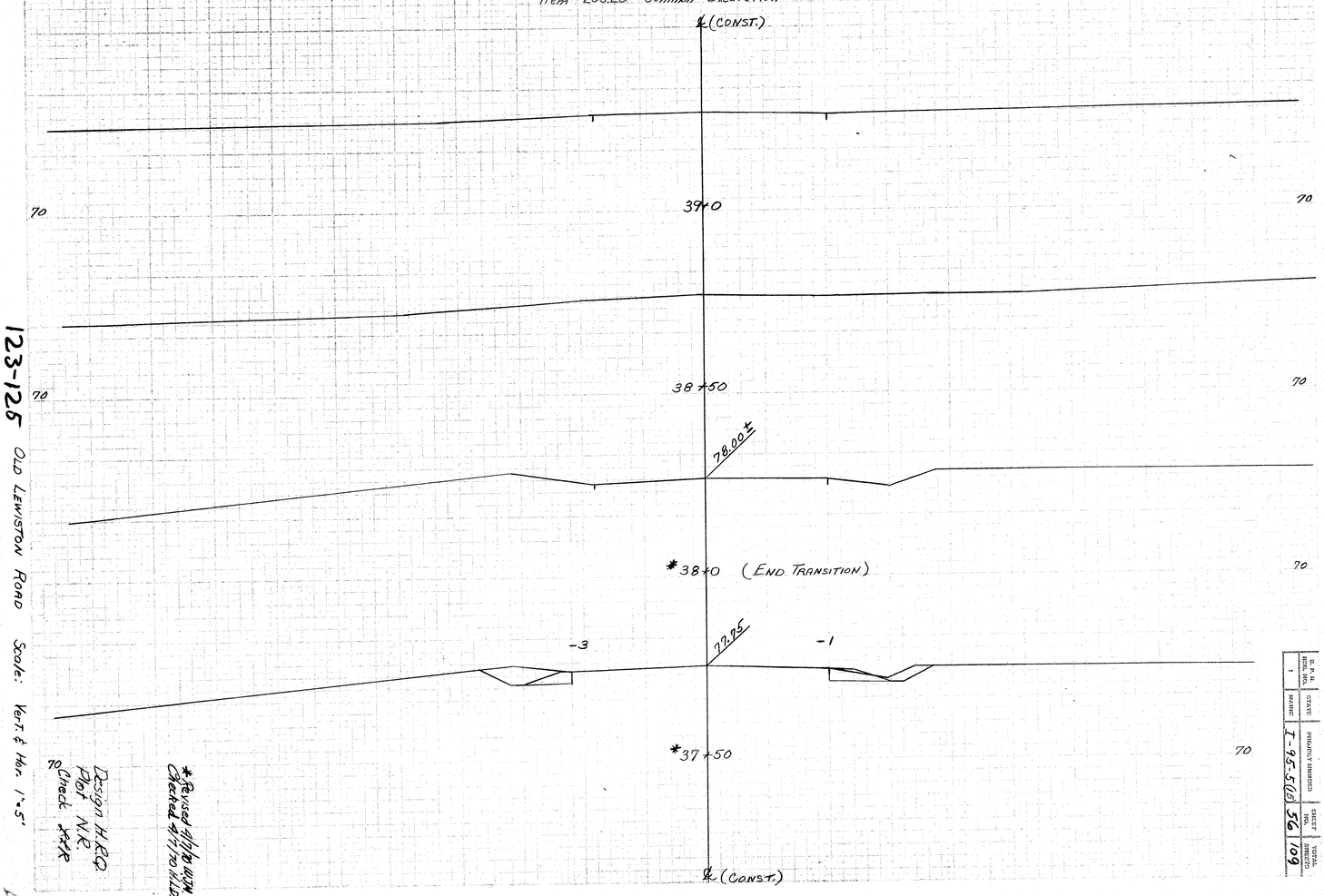
The bituminous treatment of the traveled way shall consist of a Prime Coat of RT-5, Item No. 410.13 and Cover Coat Material-Sand, Item No. 410.16.

Treatment of 2' Shoulders

The bituminous treatment of the 2' shoulders shall consist of a Prime Coat of RT-5, Item No. 410.13 and Cover Coat Material-Sand, Item No. 410.16 (As required) followed by a Seal Coat of RT-6, Item No. 410.13 and Cover Coat Material-Sand, Item No. 410.16.

The use of rollers as specified in sub-section 405.05 and 410.05 may be substituted by adequate rolling in accordance with sub-section 411.04.

Any muck excavation to be paid as Item 203.20 Common Excavation



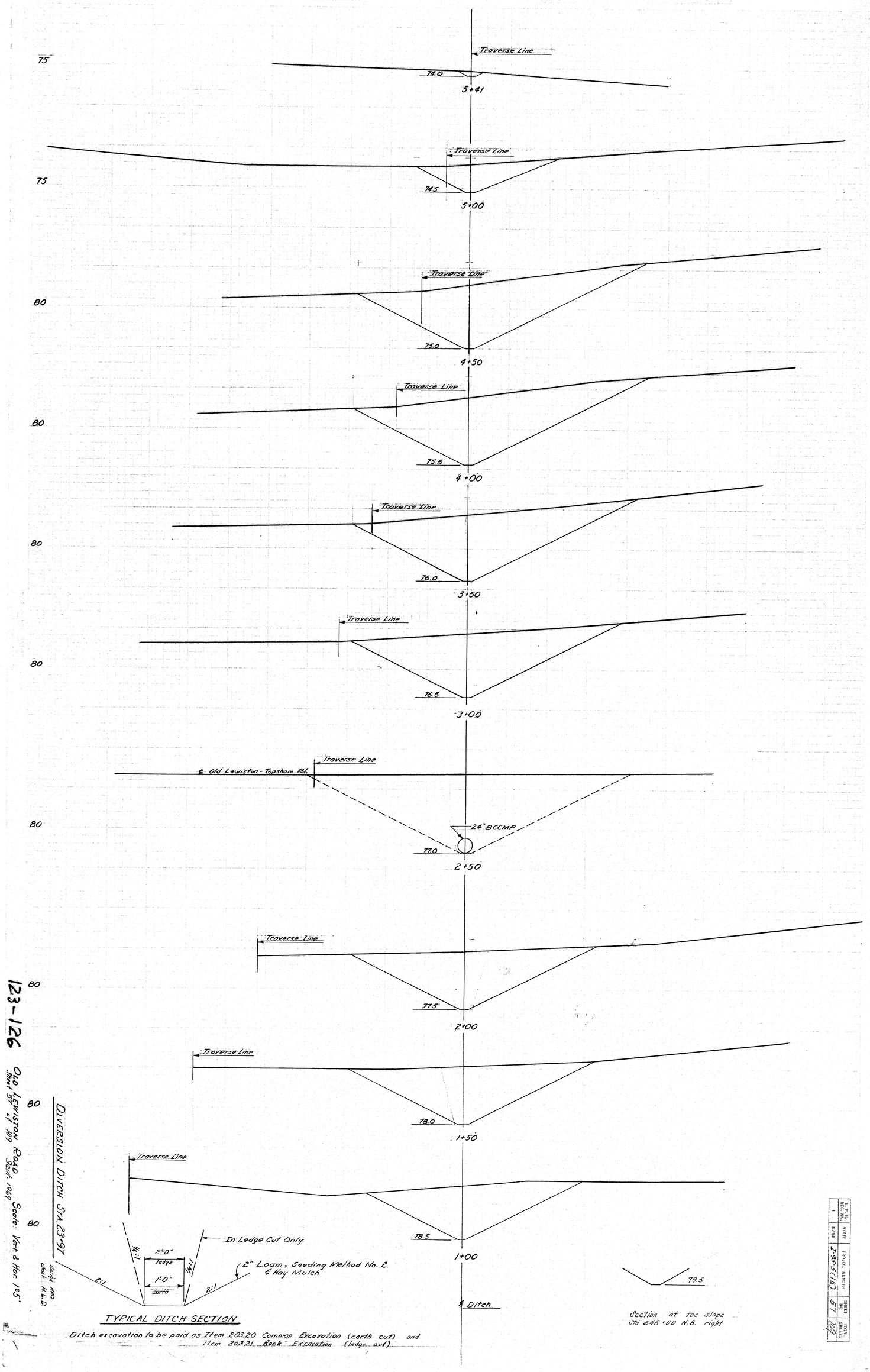
*Revised 4/19/61 WWM Checked 4/19/61 H.L.D.

Design H.R.Q.
Plot N.R.
Check H.R.

37+50 to END OF TRANSITION

123-125 OLD LEWISTON ROAD Scale: Vert & Hor. 1"=5'

D. P. W. HDQ. VOL.	PAGE	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS IN CONTRACT
1		MAINE	I-95-5(6)	56	109



123-126

OLD LEWISTON ROAD
Sheet 37 of 109 Sept. 1969 Scale: Vert & Hor. 1"=5'

NO.	DATE	BY	REVISIONS
1			

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	F-85-1(15)	37	109

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
IDAHO	STP-3715(102)	97	125

DIVERSION DITCH STA 23+97

Old Lewiston Road
Sheet 39 of 109
Scale: Vert & Hor. 1"=5'

123-126

design HRD
check H.L.D

TYPICAL DITCH SECTION

Ditch excavation to be paid as Item 203.20 Common Excavation (earth cut) and Item 203.21 Rock Excavation (ledge cut)

- In ledge cut only
- 2" Loam, Seeding Method No. 2 & Hay Mulch
- 2:0" ledge
- 1:0" earth
- 1:½ 1:1 2:1 2:1

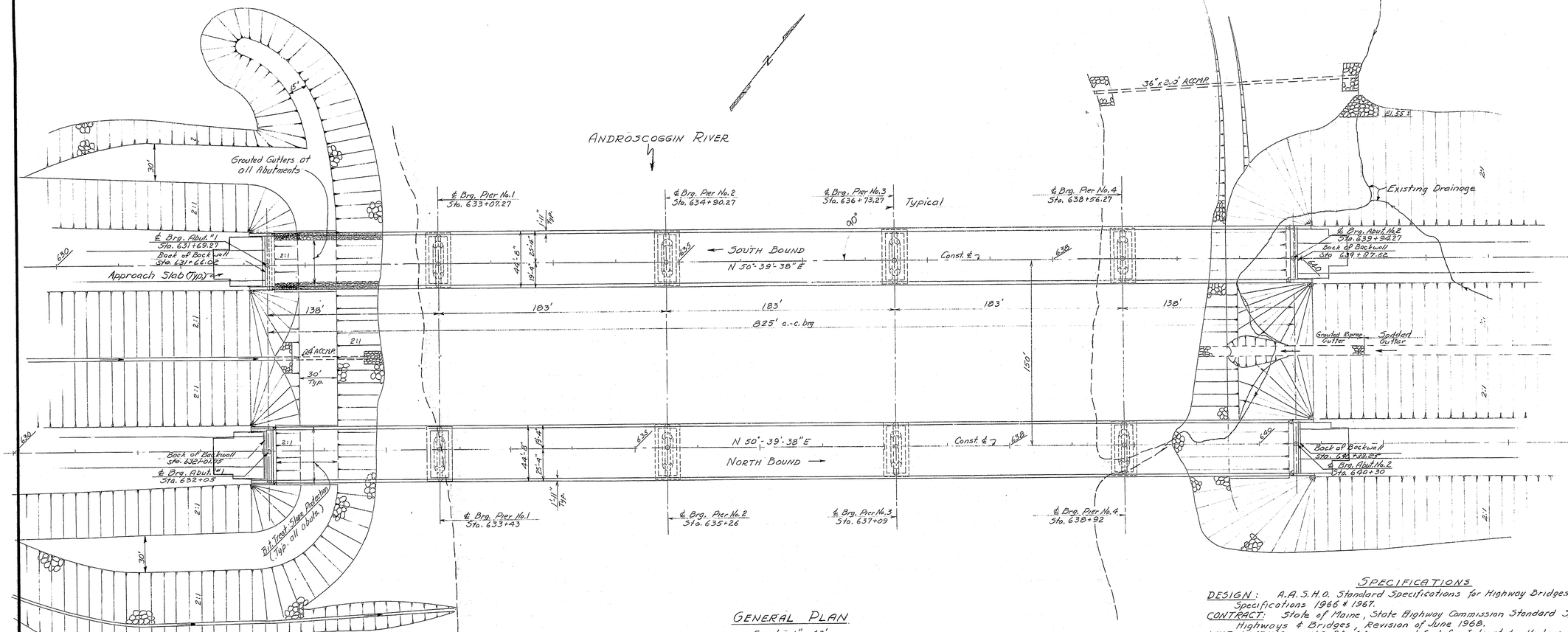
Section of toe slope sta. 643+00 N.B. right

Ditch

3+50	78.5	Traverse Line	80
℄ Old Lewiston - Tocston Rd	77.0	24" BCCMP	80
2+50	77.5	Traverse Line	80
2+00	78.0	Traverse Line	80
1+50	78.5	Traverse Line	80
1+00	79.5	Traverse Line	80
3+50	76.0	Traverse Line	80
4+00	75.5	Traverse Line	80
4+50	75.0	Traverse Line	80
5+00	74.5	Traverse Line	75
5+41	74.0	Traverse Line	75

0 1 2 3 4 5 6

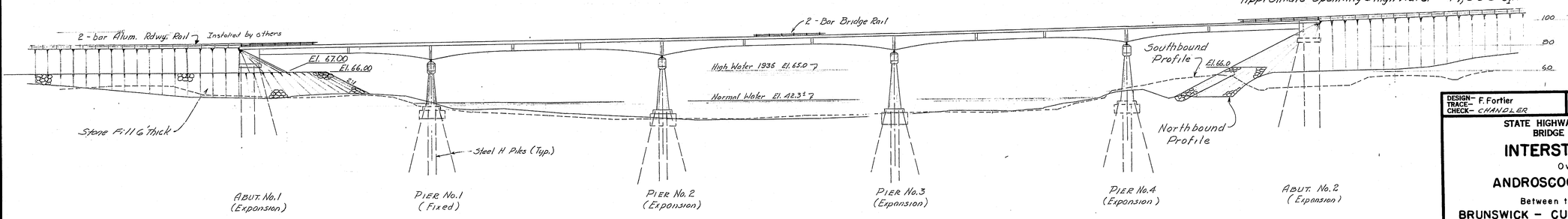
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	58	109



GENERAL PLAN
Scale 1" = 40'

SPECIFICATIONS

DESIGN: A.A.S.H.O. Standard Specifications for Highway Bridges 1965, with Interim Specifications 1966 & 1967.
CONTRACT: State of Maine, State Highway Commission Standard Specifications, Highways & Bridges, Revision of June 1968.
LIVE LOADING: HS 20-44 as modified for Interstate Highway use.
ALLOWABLE STRESSES: Concrete — f_c = 1200 p.s.i. n = 10
Reinforcing Steel — Intermediate Grade — f_s = 20,000 p.s.i.
Structural Steel — A36 = 20,000 p.s.i. ; A 572 (Grade 50) = 27,000 p.s.i.
CONCRETE CLASSIFICATION: Abutments — Class "A" ; Piers — Seal = Class "S", Shaft = Class "A", Cap = Class "A" ; Superstr. & Approach Slabs = Class "A" Wearing Surface = Class "Y"
STRUCTURAL STEEL CLASSIFICATION: Refer to sh. 73, 74, & 77
HYDRAULIC DATA:
Drainage Area = 3430 sq. miles
Discharge = 143,000 c.f.s. 1936
Approximate opening @ High Water = 19,000 sq. ft.



GENERAL ELEVATION
Horiz. & Vert. Scale - 1" = 40'

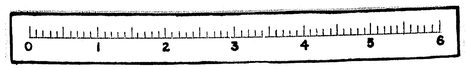
DESIGN- F. Fortier
TRACE-
CHECK- CHANDLER
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

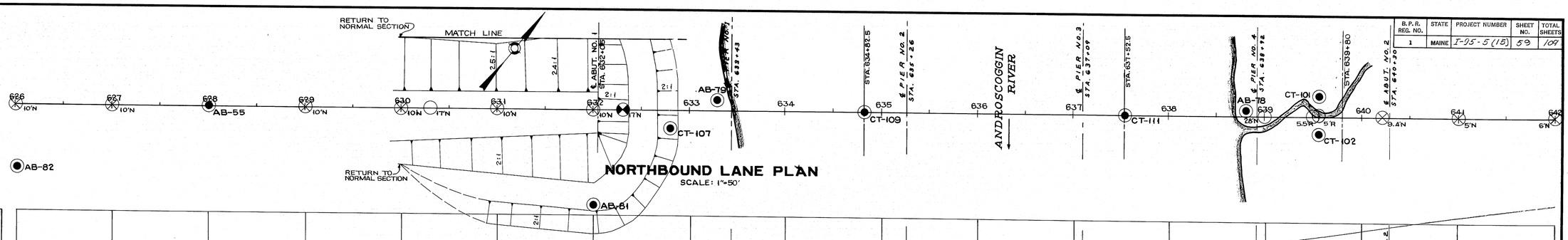
INTERSTATE 95
Over
ANDROSCOGGIN RIVER
Between the Towns of
BRUNSWICK - CUMBERLAND COUNTY
and
TOPSHAM - SAGADAHOC COUNTY
— GENERAL PLAN —

SHEET 58 of 109 AUGUSTA, MAINE SEPT. 1969

123-127

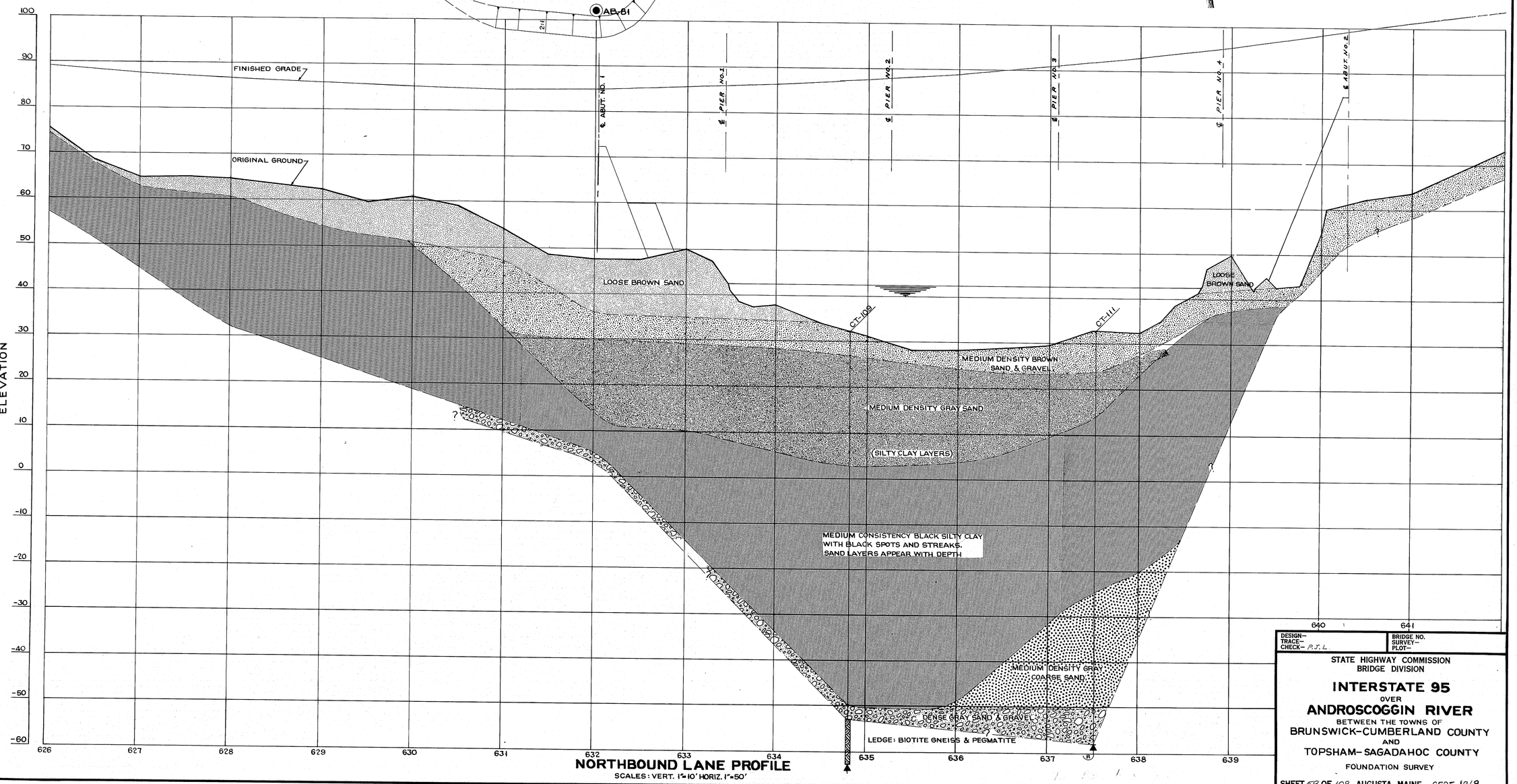


B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	59	109



NORTHBOUND LANE PLAN

SCALE: 1"=50'



NORTHBOUND LANE PROFILE

SCALES: VERT. 1"=10' HORIZ. 1"=50'

DESIGN–	BRIDGE NO.
TRACE–	SURVEY–
CHECK– R.J.L.	PLOT–

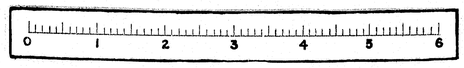
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK–CUMBERLAND COUNTY
AND
TOPSHAM–SAGADAHOC COUNTY

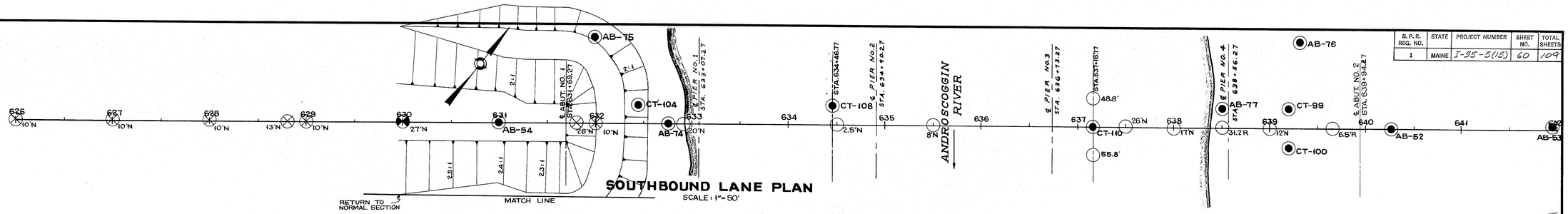
FOUNDATION SURVEY

SHEET 59 OF 109 AUGUSTA, MAINE SEPT. 1969

123-128

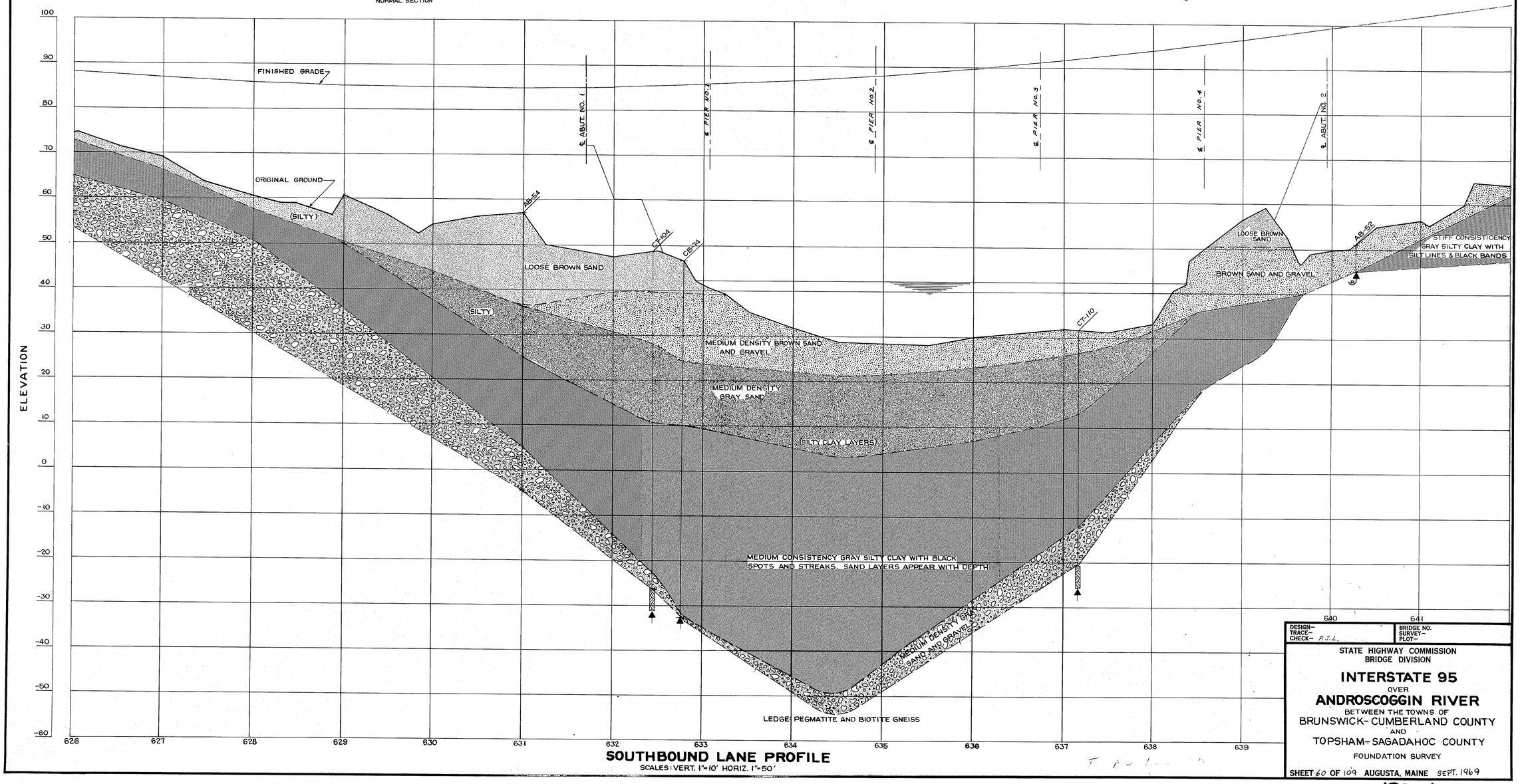


B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	60	109



SOUTHBOUND LANE PLAN

SCALE: 1"= 50'



SOUTHBOUND LANE PROFILE

SCALES: VERT. 1"=10' HORIZ. 1"=50'

DESIGN–	BRIDGE NO.
TRACE–	SURVEY–
CHECK– A.J.L.	PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK- CUMBERLAND COUNTY
AND
TOPSHAM- SAGADAHOC COUNTY

FOUNDATION SURVEY

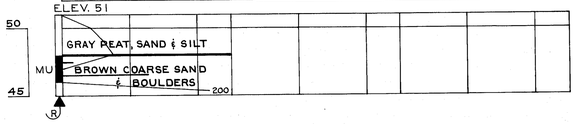
SHEET 60 OF 109 AUGUSTA, MAINE SEPT. 1969

123-129

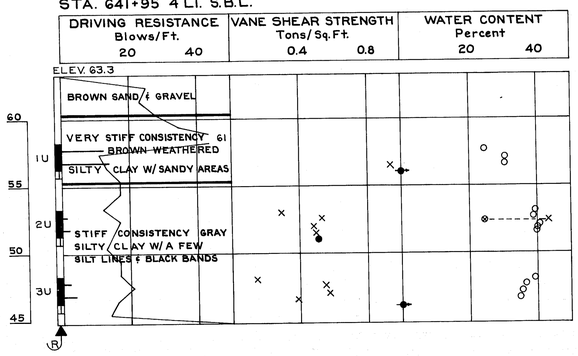
0 1 2 3 4 5 6

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	61	109

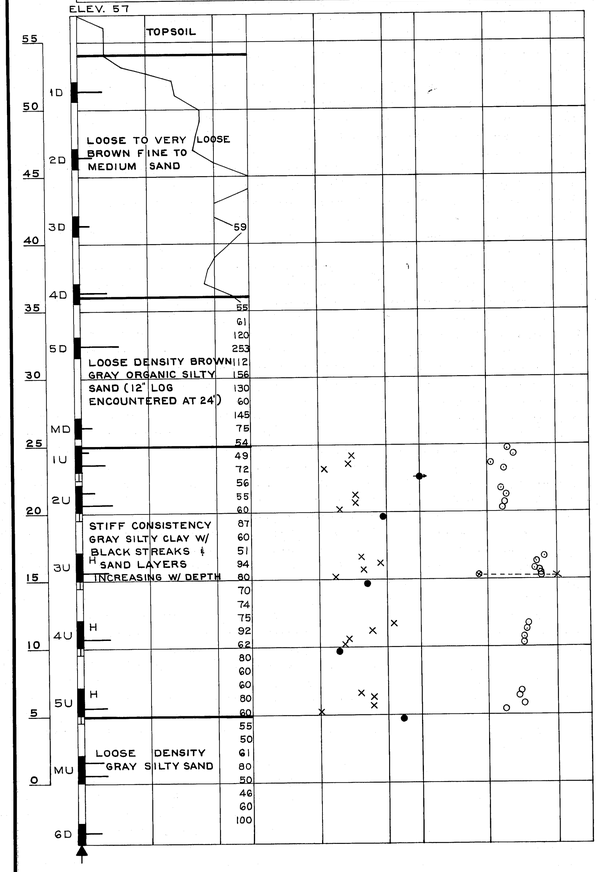
BORING AB-52
STA. 640+27 ℄ S.B.L.



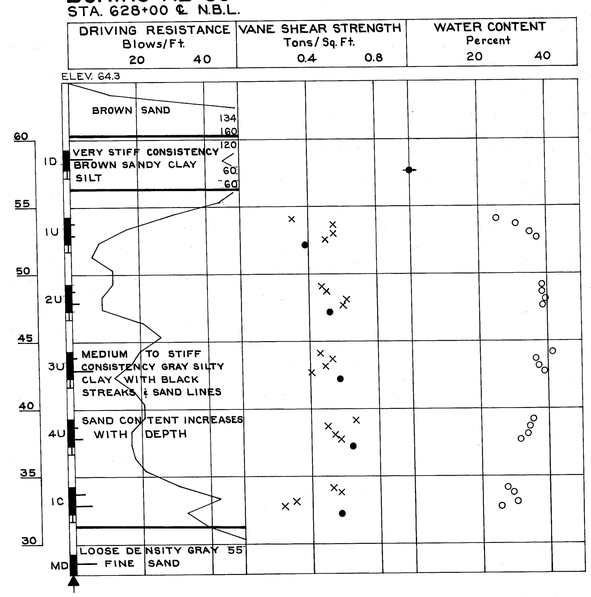
BORING AB-53
STA. 641+95 4'LT. S.B.L.



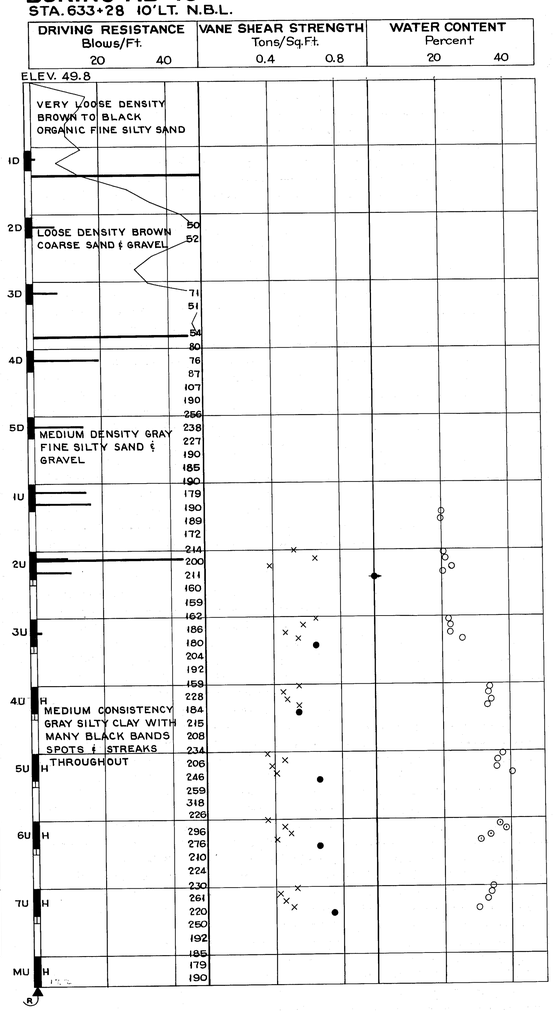
BORING AB-54
STA. 631+00 ℄ S.B.L.



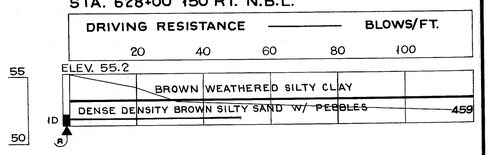
BORING AB-55
STA. 628+00 ℄ N.B.L.



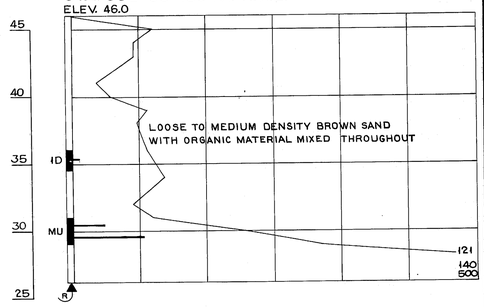
BORING AB-79
STA. 633+28 10'LT. N.B.L.



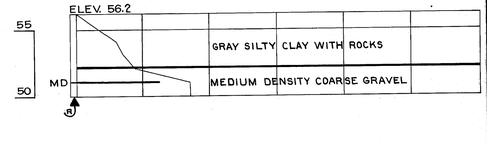
BORING AB-80
STA. 628+00 150'RT. N.B.L.



BORING AB-81
STA. 632+00 100'RT. N.B.L.



BORING AB-82
STA. 626+50 65'RT. N.B.L.



DESIGN— TRACE— CHECK—

BRIDGE NO. SURVEY— PLOT—

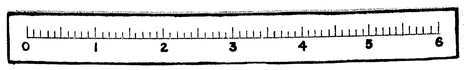
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY

FOUNDATION SURVEY

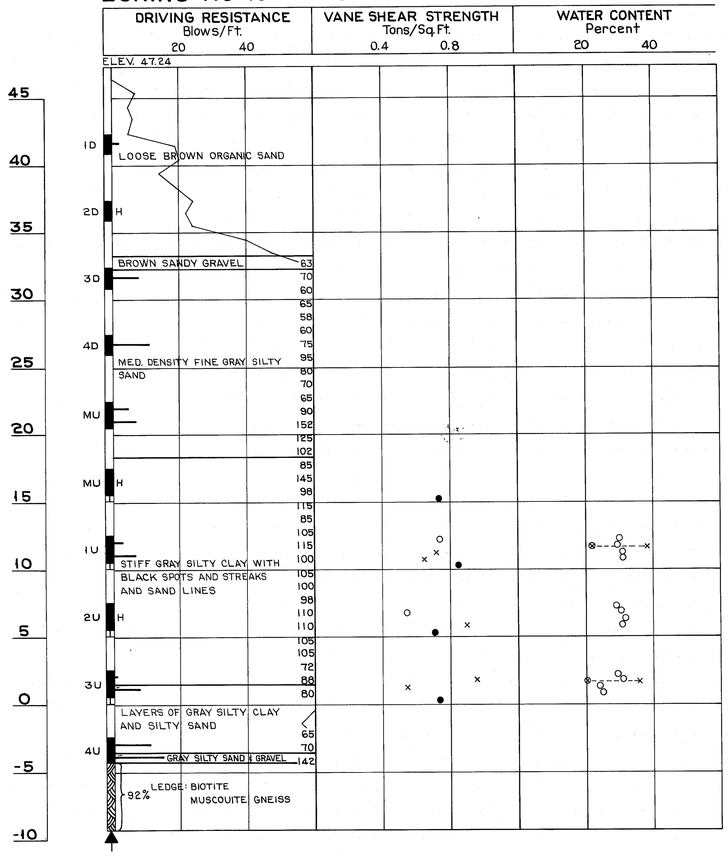
SHEET 61 OF 109 AUGUSTA, MAINE SEPT. 1969

123-130

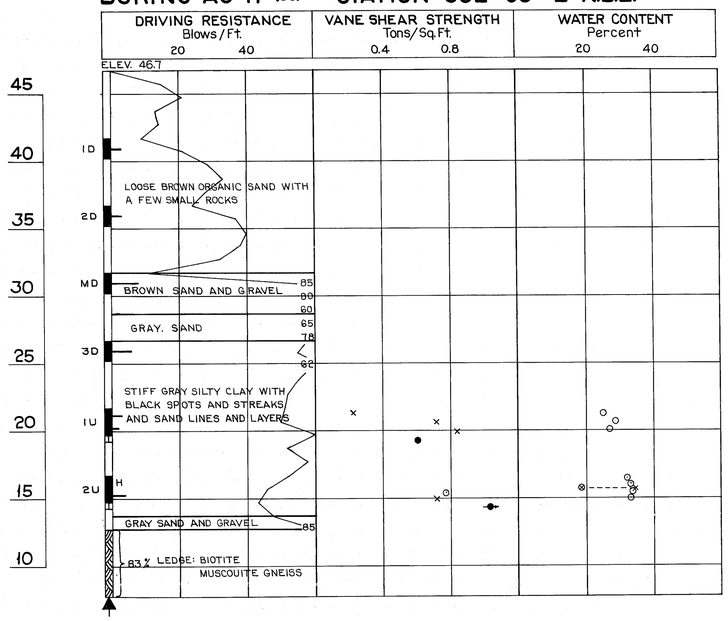


R. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	62	109

BORING AC-10 (69) STATION 631+70 ℄ S.B.L.



BORING AC-11 (69) STATION 632+05 ℄ N.B.L.



BORING NOTES

Casing size 4"
All samples and vanes are made ahead of casing
Number of blows required to drive extra heavy casing one foot with 400 Ft. lbs. of energy per blow
Location of sample or sample attempt
Number and type of dry sample
1D S & H Sampler #1290's
1U 3½" O.D 16 ga. seamless tubing
MD Unsuccessful sample attempt and type of sampler
Number of blows required to drive spoon or tubing one foot with 350 ft lbs. of energy per blow
H Sampling spoon or seamless tubing driven by static weight of drill rods and hammer
Field vane test
Bottom of boring(may not be bottom of soil strata)
Locations cored by diamond bit and per cent recovery of rock

SHEAR NOTES

● Field vane shear strengths
× Laboratory vane shear strengths
→ Shear strengths in excess of capacity of equipment
○ One half unconfined compressive strengths

WATER CONTENT NOTES

○ Natural water contents, given as per cent of dry weight
⊗-× Plastic and liquid limits
Ignition losses are given as per cent of dry weight

PLANS	DATE	BY
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

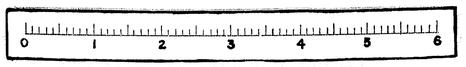
FOUNDATION SURVEY

SHEET 62 OF 109 AUGUSTA, MAINE SEPT. 1969

123-131

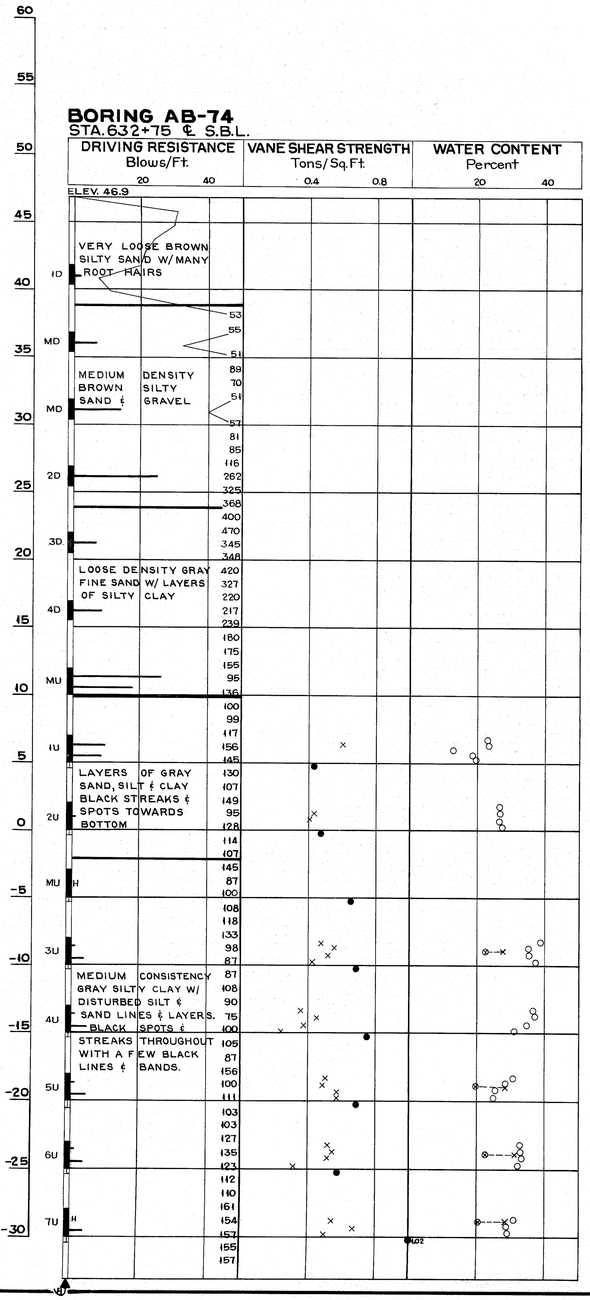
JANUARY 1968

203-1 2080

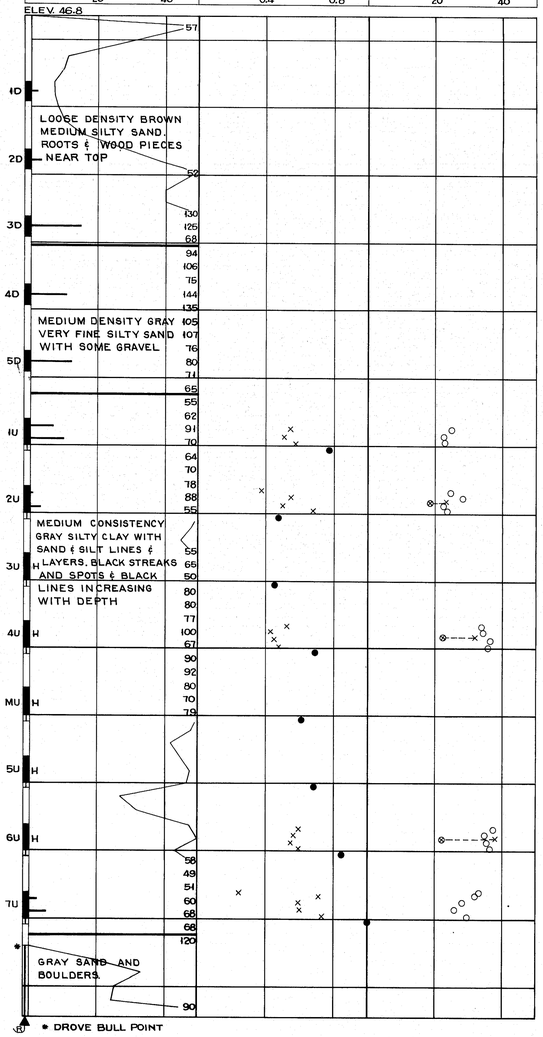


B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	63	109

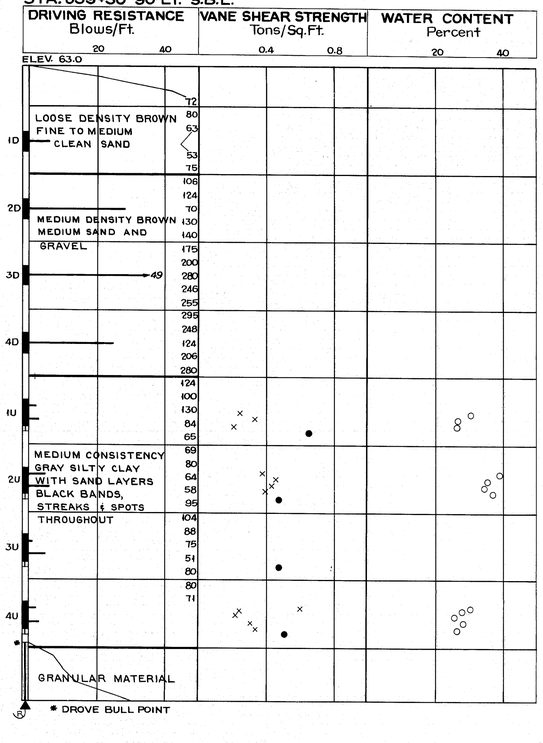
BORING AB-74
STA. 632+75 ℄ S.B.L.



BORING AB-75
STA. 632+00 90'LT. S.B.L.

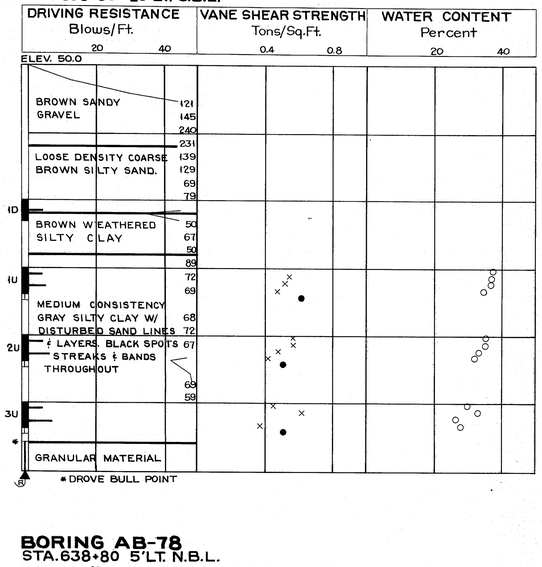


BORING AB-76
STA. 639+30 90'LT. S.B.L.



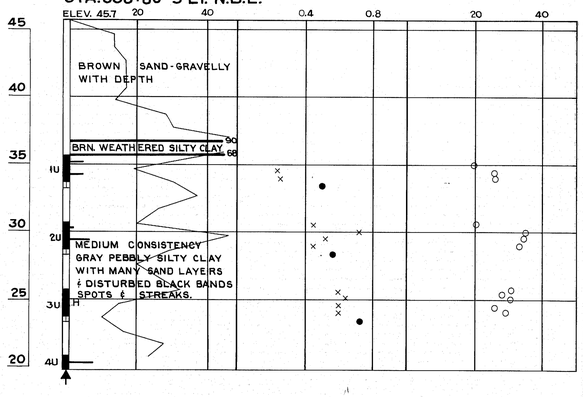
* DROVE BULL POINT

BORING AB-77
STA. 638+50 20'LT. S.B.L.



* DROVE BULL POINT

BORING AB-78
STA. 638+80 5'LT. N.B.L.



DESIGN— TRACE— CHECK—	BRIDGE NO. SURVEY— PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY

FOUNDATION SURVEY

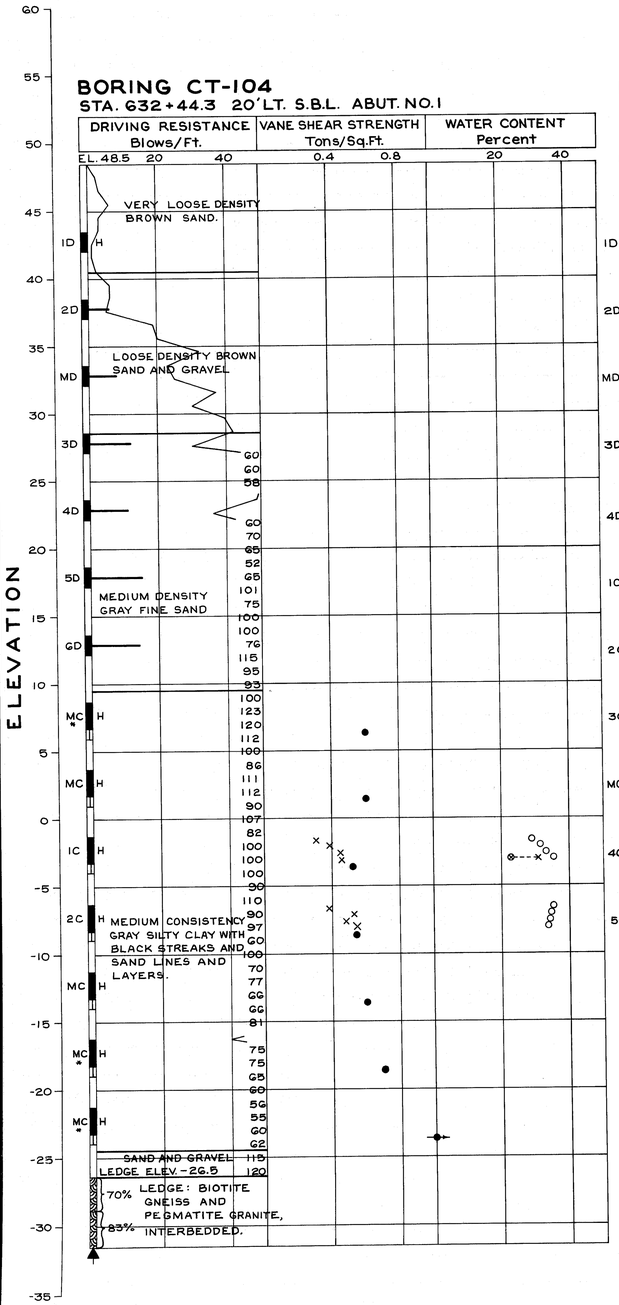
SHEET 63 OF 109 AUGUSTA, MAINE SEPT. 1969

123-132

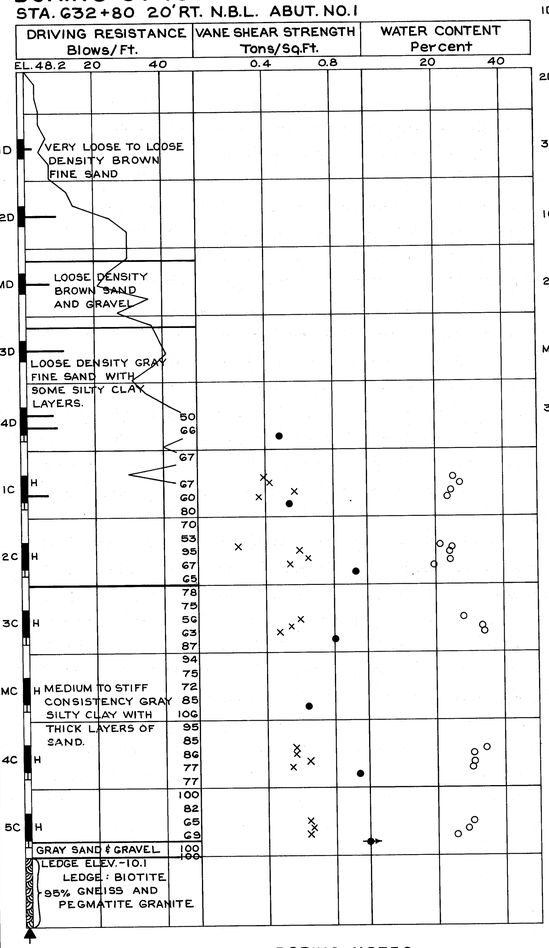
0 1 2 3 4 5 6

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	64	109

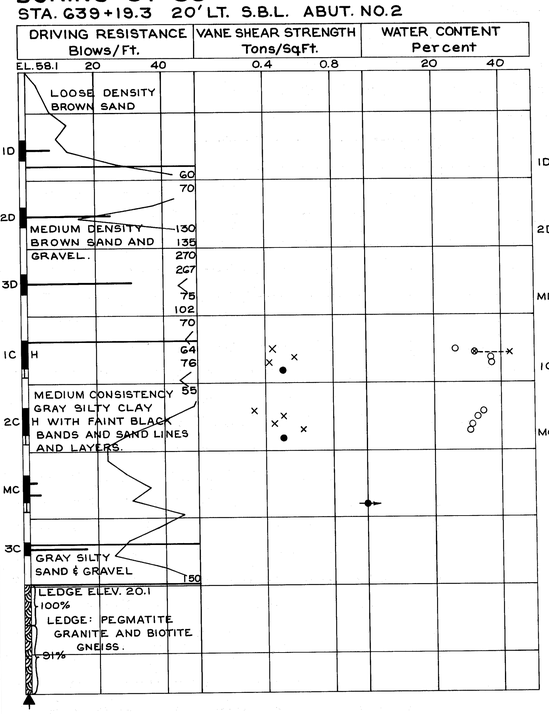
BORING CT-104
STA. 632+44.3 20'LT. S.B.L. ABUT. NO.1



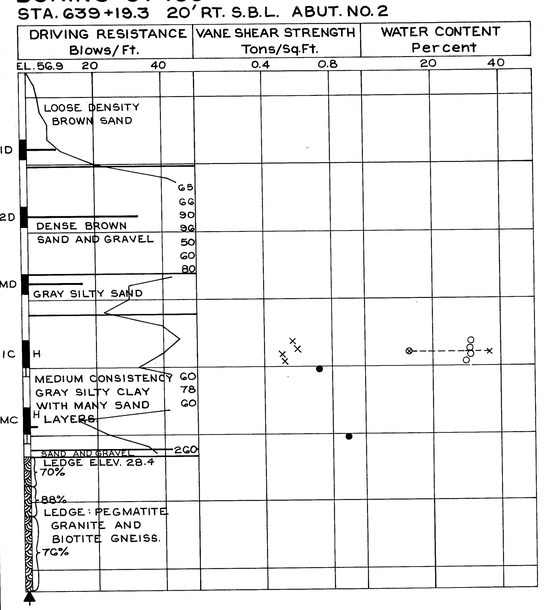
BORING CT-107
STA. 632+80 20'RT. N.B.L. ABUT. NO.1



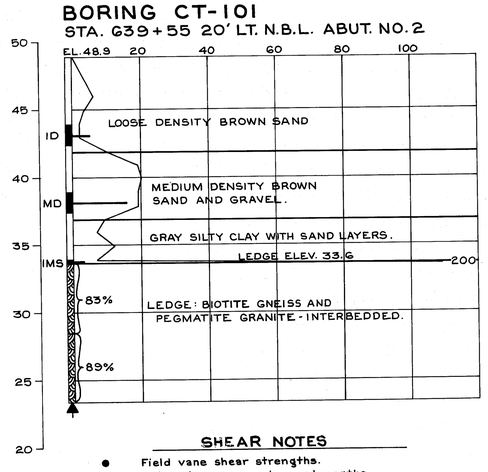
BORING CT-99
STA. 639+19.3 20'LT. S.B.L. ABUT. NO.2



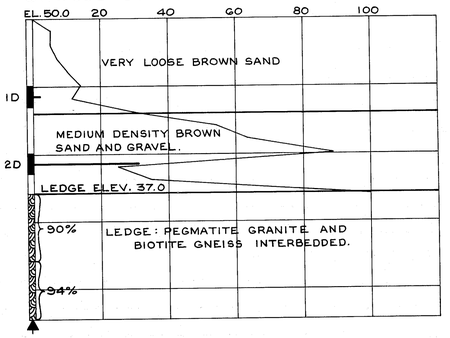
BORING CT-100
STA. 639+19.3 20'RT. S.B.L. ABUT. NO.2



BORING CT-101
STA. 639+55 20'LT. N.B.L. ABUT. NO.2



BORING CT-102
STA. 639+55 20'RT. N.B.L. ABUT. NO.2



BORING NOTES

- Casing size 2½"
- All samples and vanes are made ahead of casing.
- Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow.
- Location of sample or sample attempt.
- Number and type of dry sample.
  - ID — S & H Sampler #1290's
  - IC — 2" O.D. 16 ga. seamless tubing.
  - IU — 3½" O.D. 16 ga. seamless tubing.
  - IW — Wash sample and number.
  - MD — Unsuccessful sample attempt and type of sampler.
- Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow.
- H — Sampling spoon or seamless tubing driven by static weight of drill rods and hammer.
- Field vane test.
- Bottom of boring (may not be bottom of soil strata).
- Refusal of drill rods or casing (may not be ledge).
- 70% — Locations cored by diamond bit and per cent recovery of rock.
- * Took spoon sample after failing tube.

SHEAR NOTES

- ● Field vane shear strengths.
- × Laboratory vane shear strengths
- → Shear strengths in excess of capacity of equipment.

WATER CONTENT NOTES

- o Natural water contents, given as per cent of dry weight.
- ⊗---× Plastic and liquid limits.
- Ignition losses are given as per cent of dry weight.

DESIGN— TRACE— CHECK— | BRIDGE NO. SURVEY— PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
BORING DETAILS

SHEET 64 OF 109 AUGUSTA, MAINE SEPT. 1969

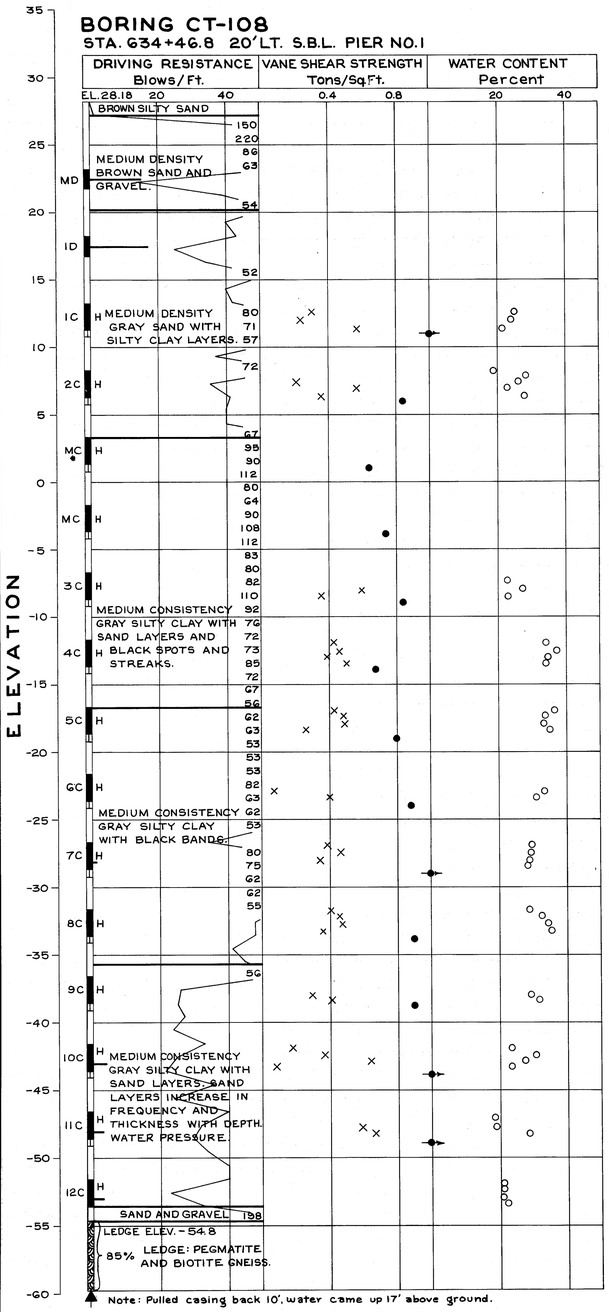
123-133

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	65	109

BORING CT-108

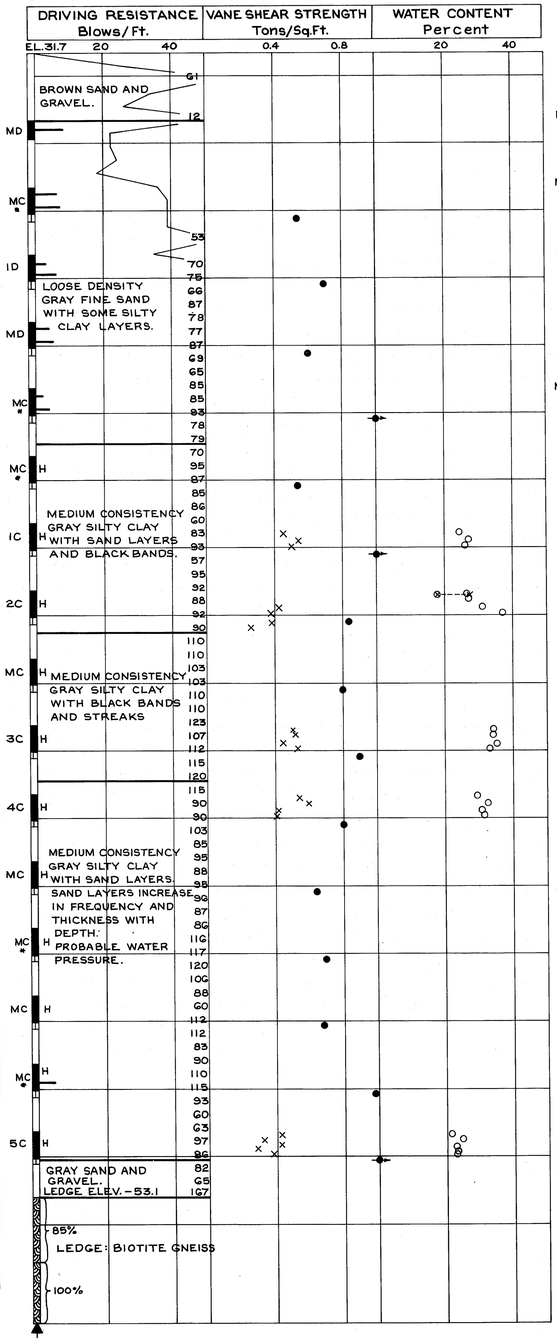
STA. 634+46.8 20' LT. S.B.L. PIER NO.1



Note: Pulled casing back 10', water came up 17' above ground.

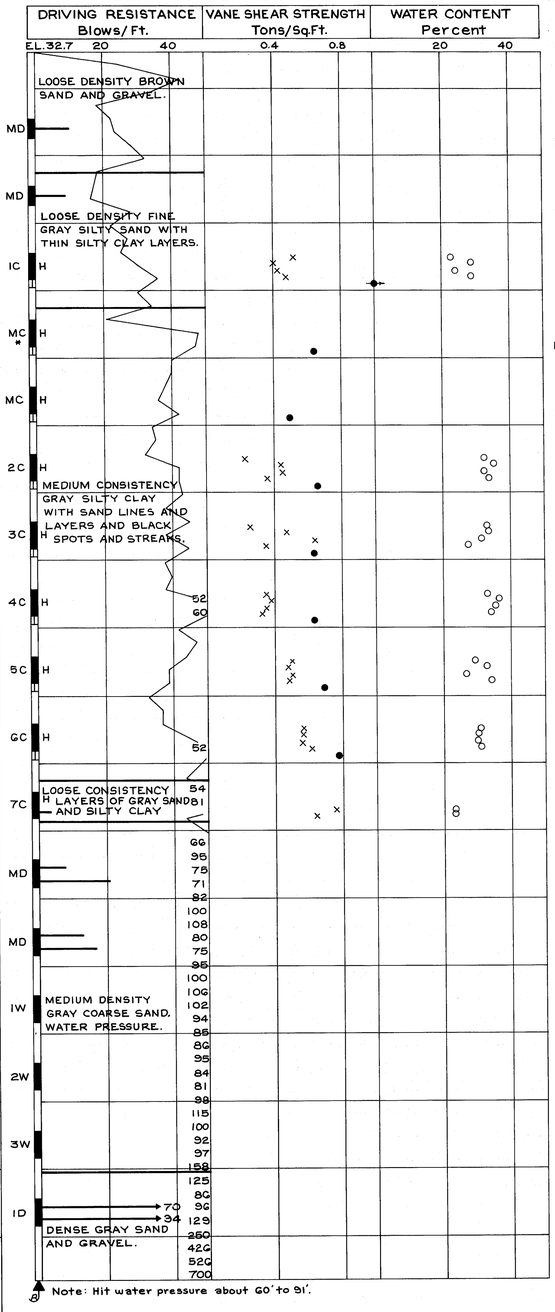
BORING CT-109

STA. 634+89.5 ℄ N.B.L. PIER NO.1



BORING CT-111

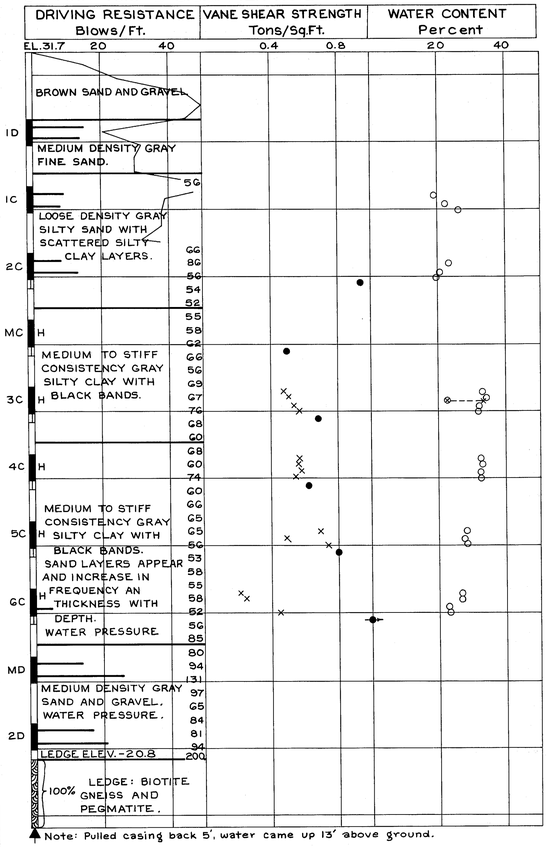
STA. 637+52.5 ℄ N.B.L. PIER NO.2



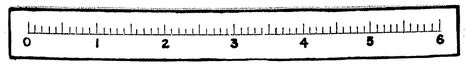
Note: Hit water pressure about 60' to 91'.

BORING CT-110

STA. 637+16.8 ℄ S.B.L. PIER NO.2



Note: Pulled casing back 5', water came up 13' above ground.



DESIGN—
TRACE—
CHECK—

BRIDGE NO.
SURVEY—
PLOT—

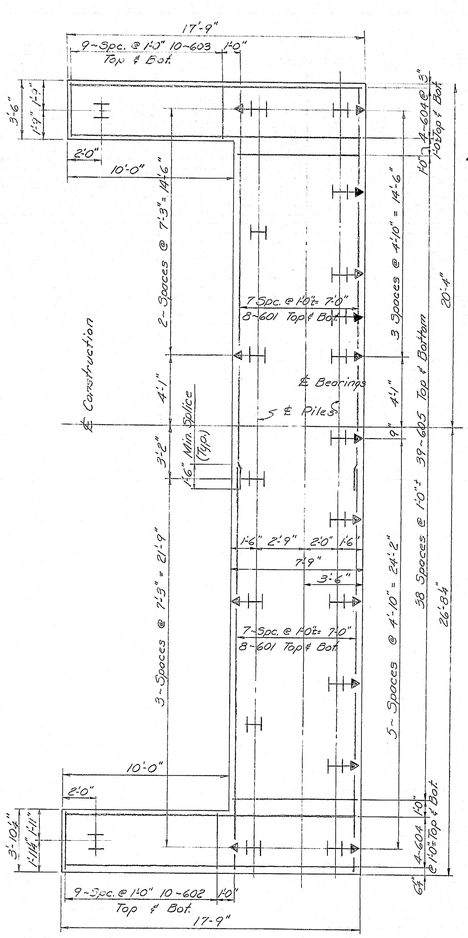
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
BORING DETAILS

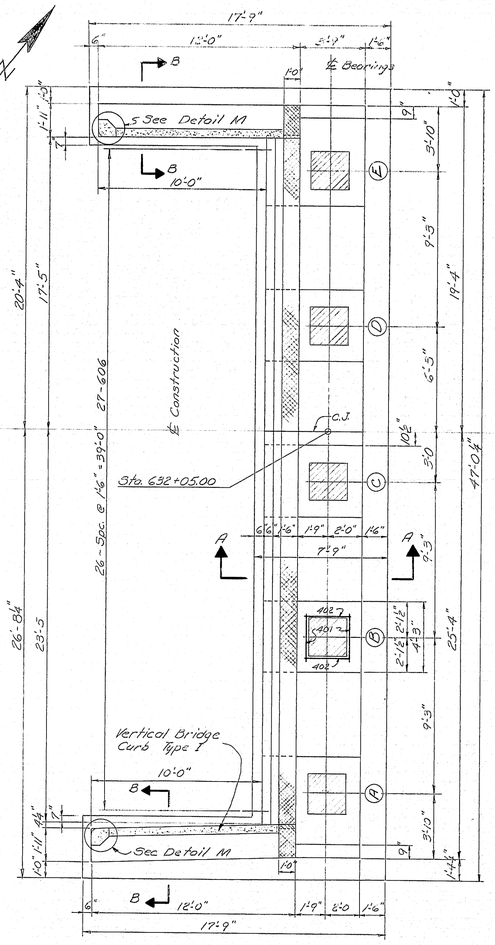
SHEET 65 OF 109 AUGUSTA, MAINE SEPT. 1969

123-134

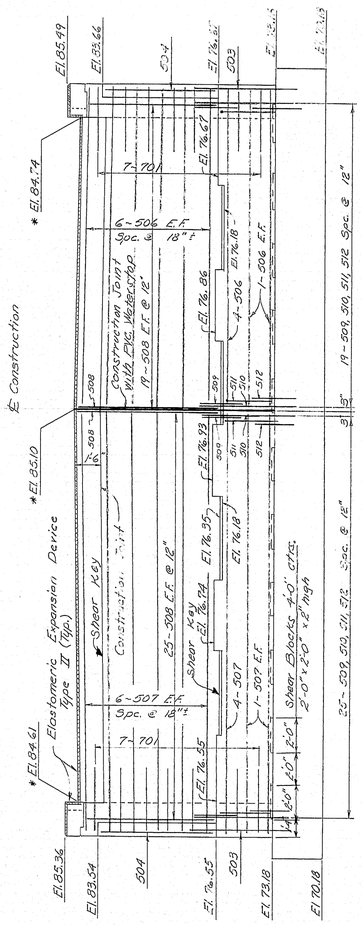
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	66	109



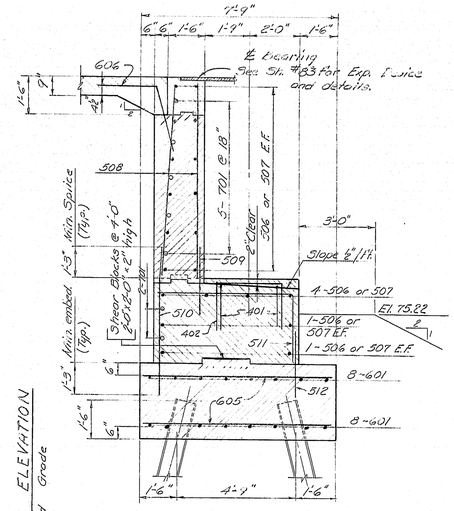
PILE & FOOTING PLAN



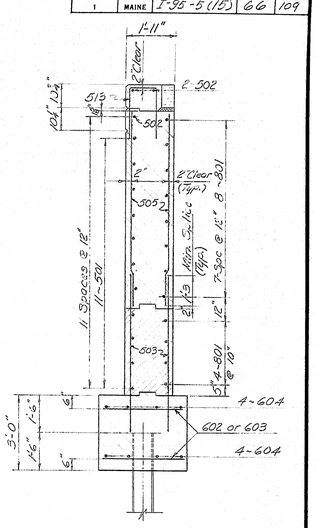
PLAN



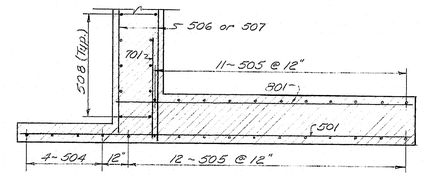
FRONT ELEVATION
* Finished Grade



SECTION A-A
No. 1 Abutments only



SECTION B-B



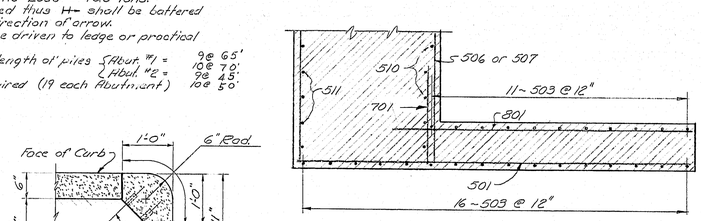
SECTION C-C

ABUTMENT NOTES

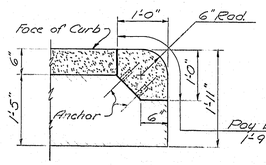
1. Chamfer all exposed edges of concrete ¾".
2. Dress shaded bearing areas 1" larger all around than the metal masonry plates. Dress shaded areas to exact Elevation shown.
3. All reinforcing steel splices or embedments are to be a minimum of 24 bar diameters.
4. Reinforcing steel to have 3" clear unless otherwise noted or shown.
5. Place reinforcing steel in bridge seats to clear anchor bolts.
6. Break bond of vertical contraction joints with a coat of asphalt paint.
7. Backwalls shall not be built until Superstructure slab has been placed, except by permission from the Engineer.
8. Apply "Protective Coating for Concrete Surfaces" to top of backwall and top of curb.
9. For Abutment Rail Spacing & Details See Sheet No. 83 and Standard Details BD106-69 ~ Sheet No. 106.

PILE NOTES

All piles shall be 10BP42, Steel H Piles.
Allowable Pile Load = 46.3 Tons.
Piles marked thus H← shall be battered 2½"/1ft. in direction of arrow.
Piles shall be driven to ledge or practical refusal.
Estimated length of piles {Abut. #1 = 9@ 65', 10@ 70'; Abut. #2 = 9@ 45', 10@ 50'}
38 Piles required (19 each Abutment)

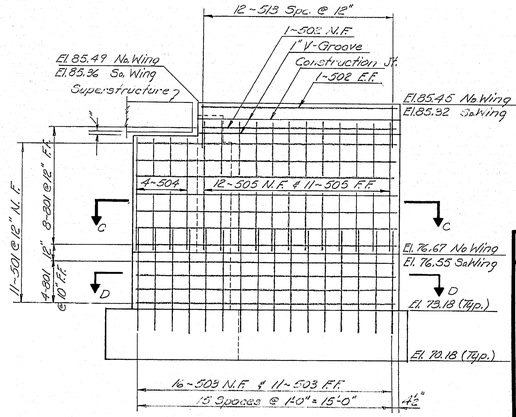


SECTION D-D



Pay Length Item 609.13 1'-9½"

DETAIL M



WING ELEVATION
Width for both wings is typical

LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
C.J. = Contraction Joint
N. = Near
F. = Far
No. = North
So. = South
P.V.C. = Polyvinylchloride

NOTE:
For Polyvinylchloride Waterstop and Construction Joint Details See Sh. # 67

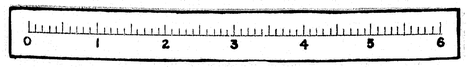
DESIGN– # Each G.O.T.
TRACE–
CHECK– Chandler
BRIDGE NO.
SURVEY–
PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

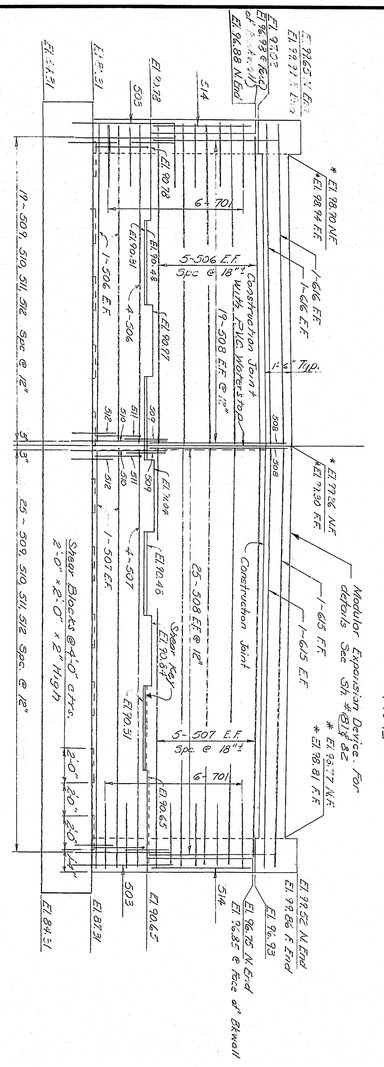
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
ABUTMENT NO. 1 NORTHBOUND

SHEET 66 OF 109 AUGUSTA, MAINE SEPT. 1969

123-135



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	67	109


FRONT ELEVATION
* Finished Grade
NOTE: 5 FLOOR DRAINS
* El 88.80 N.F.
El 88.44 F.F.
1-606 E.F.
Typ.
* El 87.86 N.F.
El 87.50 F.F.
Modular Expansion Device. For details see Sh. # & #
* El 98.81 N.F.
El 98.45 F.F.
El 98.88 N.End
El 98.52 F.End
El 98.32 N.End
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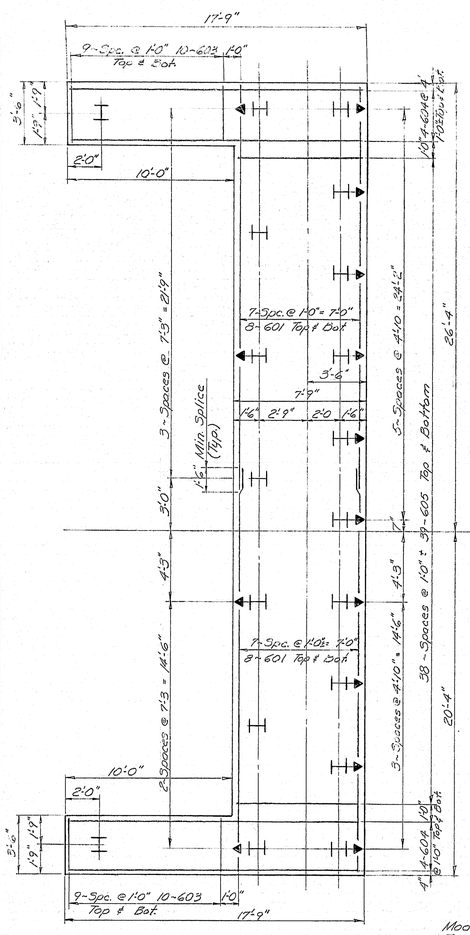
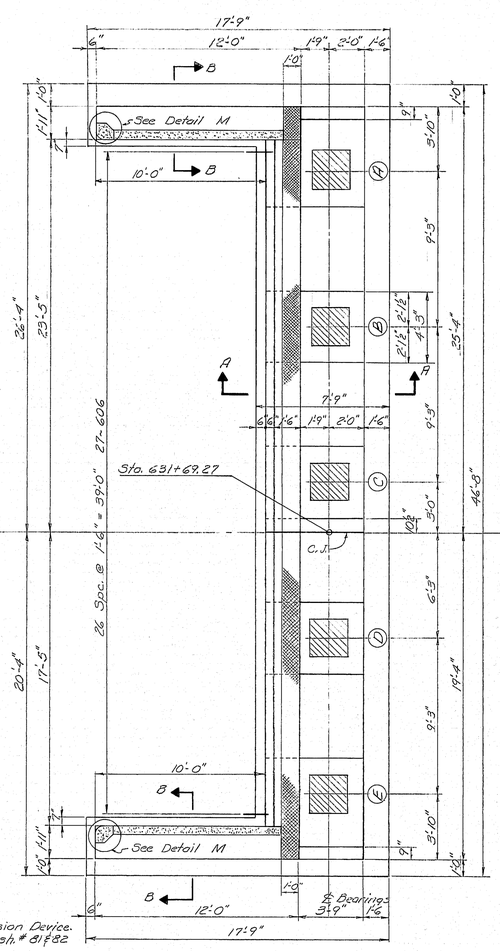
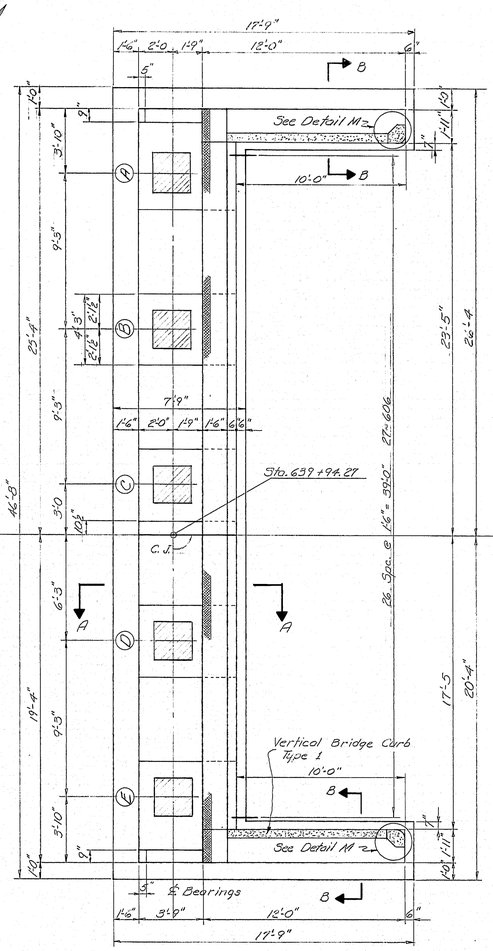
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	68	109



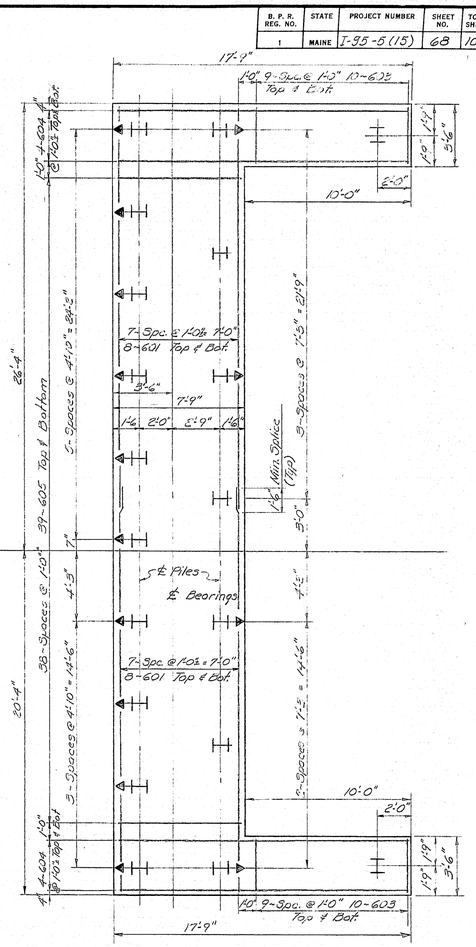
PILE & FOOTING PLAN ABUTMENT # 1



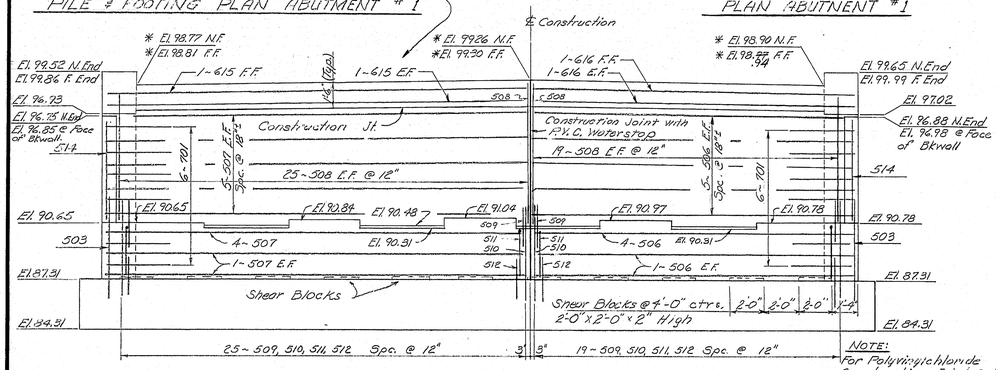
PLAN ABUTMENT # 1



PLAN ABUTMENT # 2

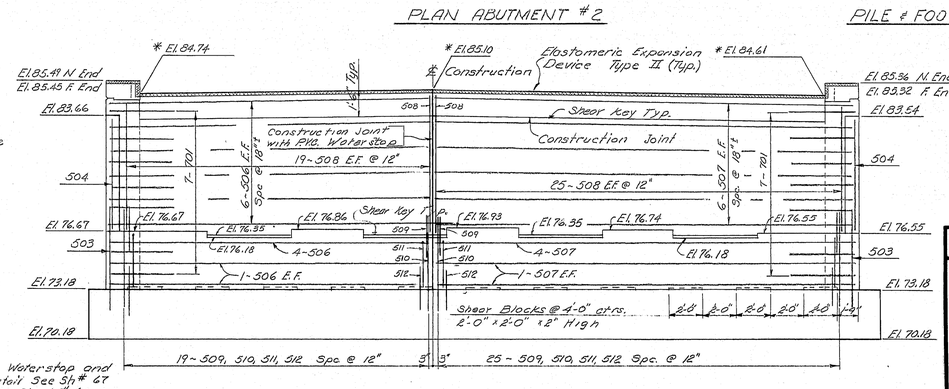


PILE & FOOTING PLAN ABUTMENT # 2



FRONT ELEVATION ABUTMENT # 2

* Finished Grade



FRONT ELEVATION ABUTMENT # 1

* Finished Grade

NOTE:
For Polyvinylchloride Waterstop and Construction Joint Detail See Sh # 47
For Abutment notes See Sheet # 66
For Sections A-A & B-B See Sheets #67
For Wing Reinforcing See Wing Elevation Sheet #67
For Legend See Sheet # 66
For Vertical Bridge Curb Details See Sheet # 80 & 67
For Construction Jt. & V-Groove Details See Sheet #67 & 80

PILE NOTES

All piles shall be 10BP42 Steel H Piles.
Allowable Pile Load = 46.3 Tons.
Piles marked thus ⊢ shall be battered 2 1/2" in the direction of arrow
Piles shall be driven to ledge or practical refusal.
Estimated length of piles (Abut. #1 = 108.85'; Abut. #2 = 98.55'; Total = 207.40'
38 Piles required (19 each Abutment)

DESIGN- & Det. Gen.	BRIDGE NO.
TRACE-	SURVEY-
CHECK- Chandler	PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
ABUTMENTS NO. 1 & 2 SOUTHBOUND

SHEET 68 OF 109 AUGUSTA, MAINE SEPT. 1969

123-137

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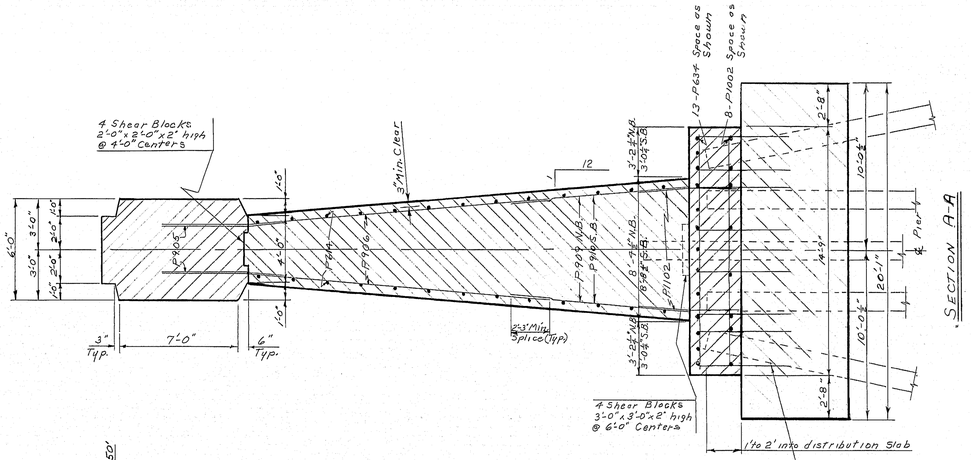
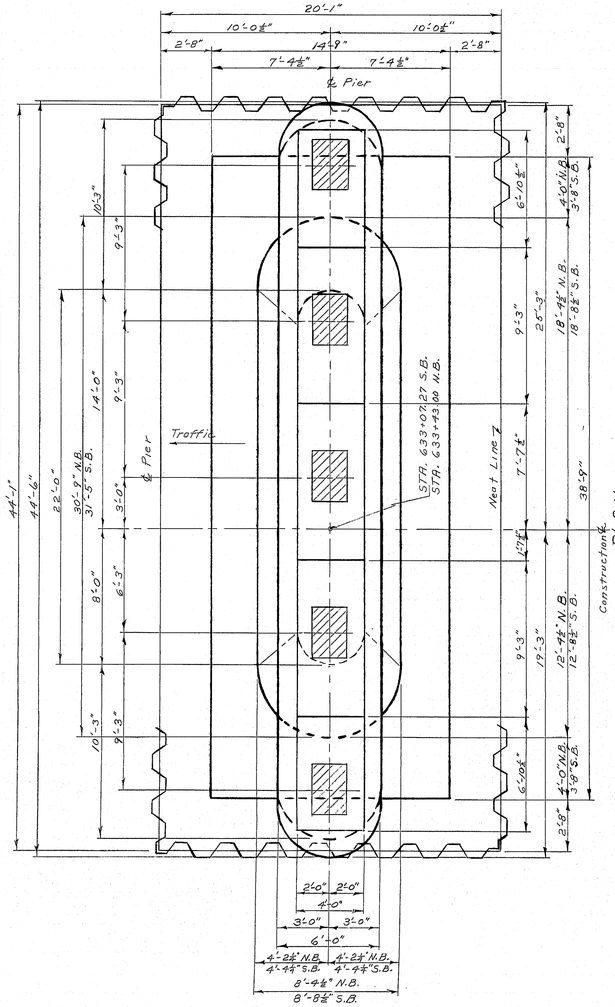
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	69	109

Notes:

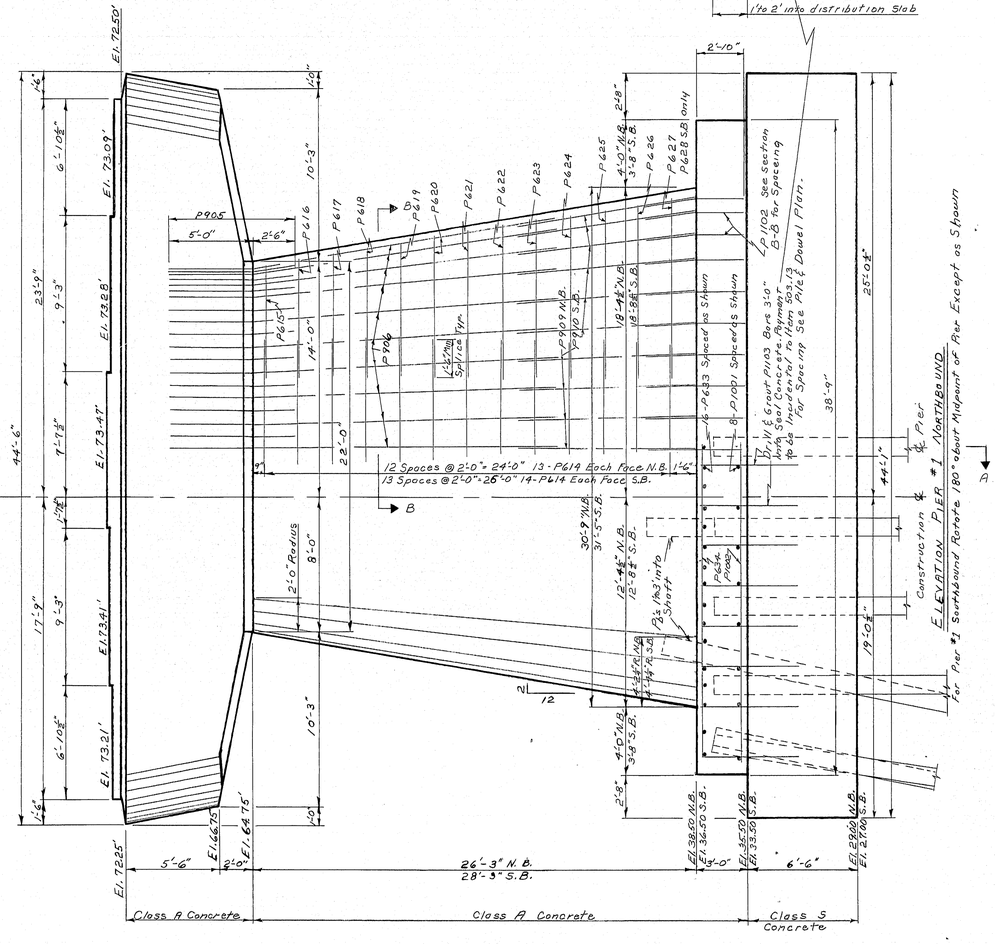
For Pier Cap Reinforcing, See Pier No. 4 on Sheet No. 72
For Pier & Pile Notes see Pier No. 2 Sheet No. 70
For General Pier Notes See Pier No. 2 on Sheet No. 70



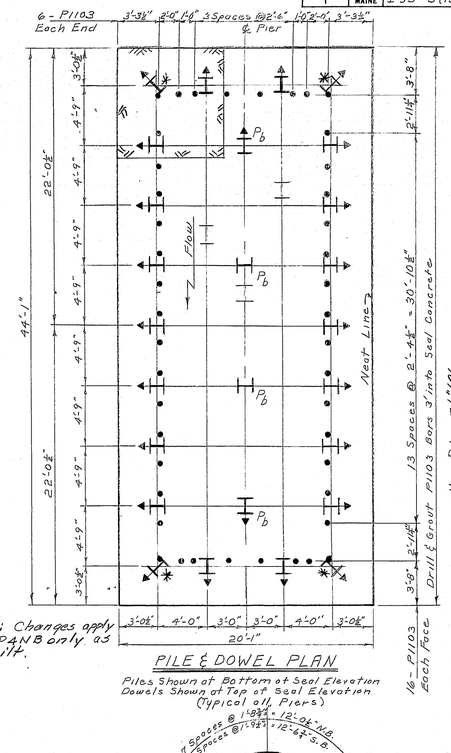
SECTION A-A



PLAN



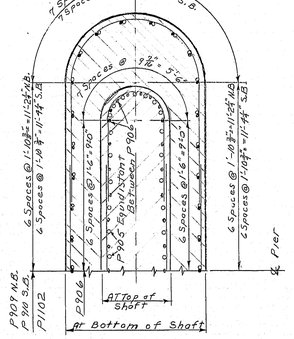
SECTION B-B



Note: Changes apply to P4N.B only as built.

PILE & DOWEL PLAN

Piles Shown at Bottom of Seal Elevation
Dowels Shown at Top of Seal Elevation
(Typical all Piers)



DESIGN- H. L. D.	DETAIL NE.R.	BRIDGE NO.
TRACE- N. E. R.		SURVEY-
CHECK- C. D. H. 6/69		PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
PIER NO. 1 N.B. & S.B.

SHEET 69 OF 109 AUGUSTA, MAINE SEPT. 1969

123-138

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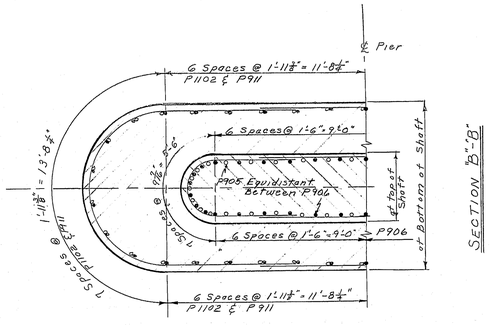
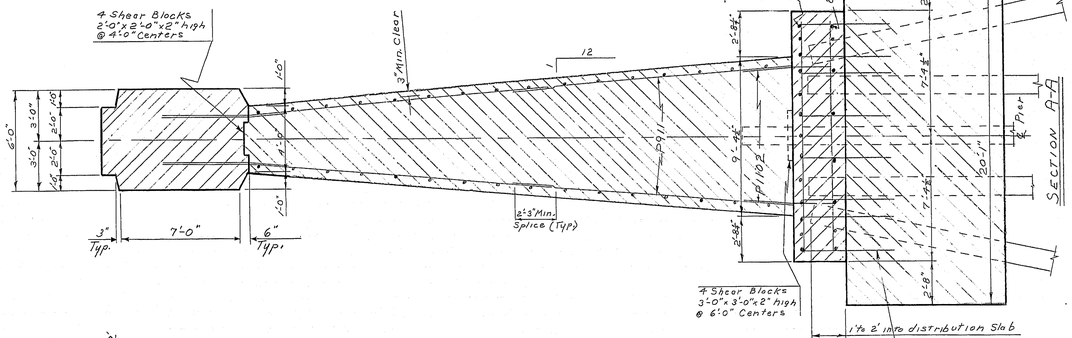
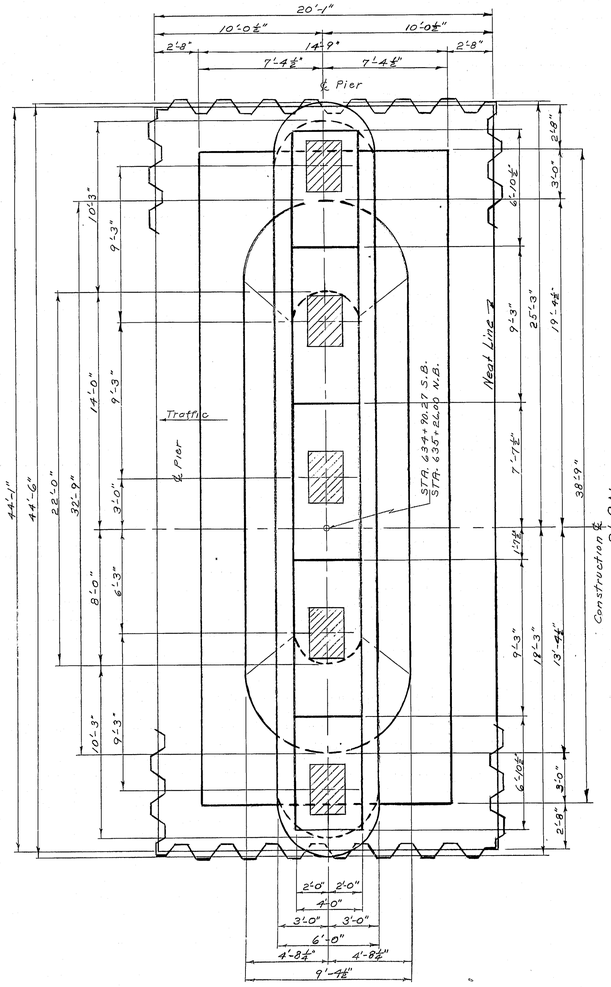
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	70	109



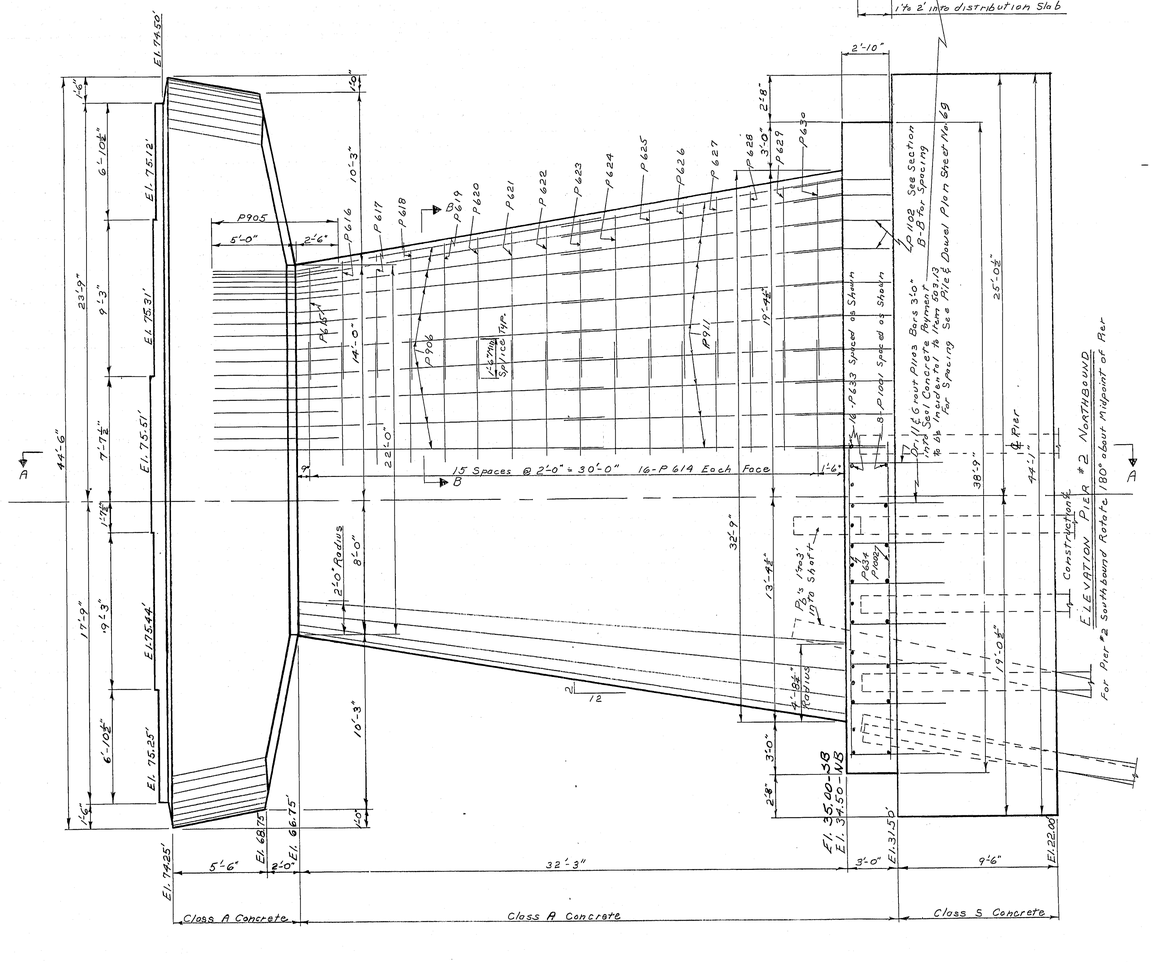
SECTION B-B



SECTION A-A



PLAN



PIER NOTES

Design Criteria

Buoyancy - Water Level Assumed at Elev. 42' & Elev. 65'

Stream Flow. - Velocity of 7.5 ft. per. sec. Skewed at 10° to longitudinal Center Line.

Wind - 100 m.p.h.

Coefficient of Expansion Pedestals - 15 per cent

Ice - Six Inches Thick Producing 400 p.s.i. Ice Pressure Skewed at 10° to Longitudinal Center Line of Pier & Water Level at Elev. 65.0'

Seal Depths, The Depth of Seal is Set for a Water Elev. of 44.0'. If The Water at The Time of Construction is Higher, The Depth of Seal may need to be Adjusted

GENERAL

Reinforcing steel cover 3" unless otherwise noted.

Place reinforcing steel in pier caps to clear anchor bolts.

Seal concrete dimensions are predicated on use of MP-116, DP-2, I-27, or equivalent steel sheet piling with appropriate standard rolled corners. Pay dimensions for seal concrete shall be neat lines. (shown)

Seal concrete is intended to be placed under water and to be paid for under Item 502.24.

Abbreviations - S.B. = Southbound; N.B. = Northbound

All Splices shall be 24 bar diameters Min.

PILE NOTES

Piles to be 14 BP 73

Pile lengths are based on ledge elevations indicated by soils investigation.

Piles to be driven to ledge or practical refusal.

Allowable load per pile = 80 Tons.

Piles marked thus ↦ shall be battered 2½ inches per foot in the direction of arrow (except corner pile).

Piles P_b extend into pier shaft 1'to3'; all others extend into distribution slab 1'to2'

Estimated lengths of Piles.

Pier No. 1	N.B.	26	@	65'
" "	S.B.	26	@	80'
Pier No. 2	N.B.	26	@	90'
" "	S.B.	26	@	90'
Pier No. 3	N.B.	26	@	90'
" "	S.B.	26	@	65'
Pier No. 4	N.B.	26	@	40'
" "	S.B.	26	@	20'

Total Piles Required 208

For Pier Cap Reinforcing, See Pier No. 4 Sheet No. 72

For Pile & Dowel Plan, See Pier No. 1 Sheet No. 69

DESIGN- H.L.D. DETAIL N.E.R.	BRIDGE NO.
TRACE- N.E.R.	SURVEY-
CHECK- C.O.H. 5/69	PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
PIER NO. 2 N.B. & S.B.

SHEET 70 OF 109 AUGUSTA, MAINE SEPT 1969

123-139

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	71	109

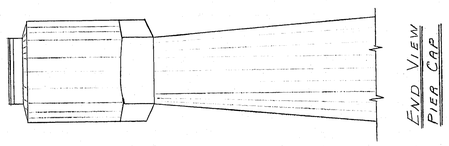
Notes:

For Pier Cap Reinforcing, See Pier No. 4 on Sheet No. 72

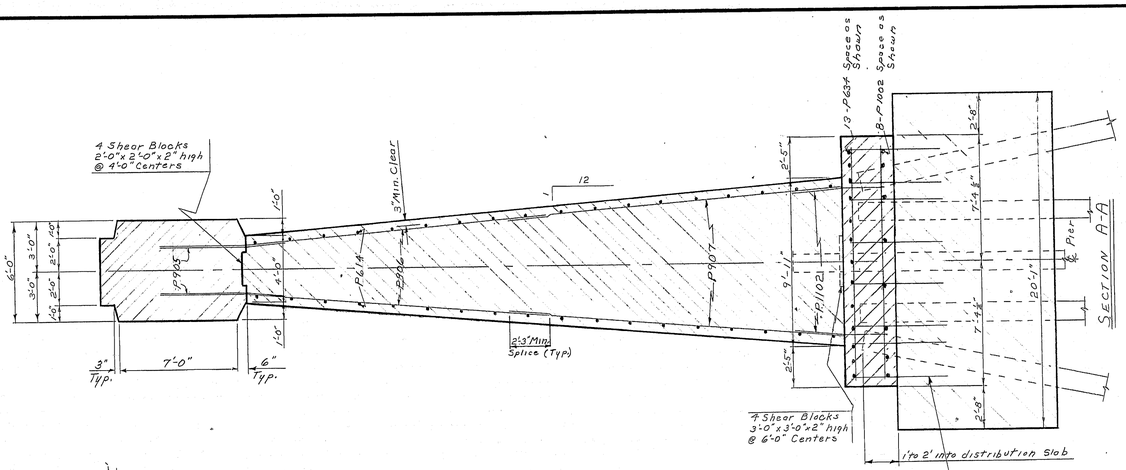
For Pier & Pile Notes See Pier No. 2 on Sheet No. 70

For Pile & Dowel Plan See Pier No. 1 Sheet No. 69 .

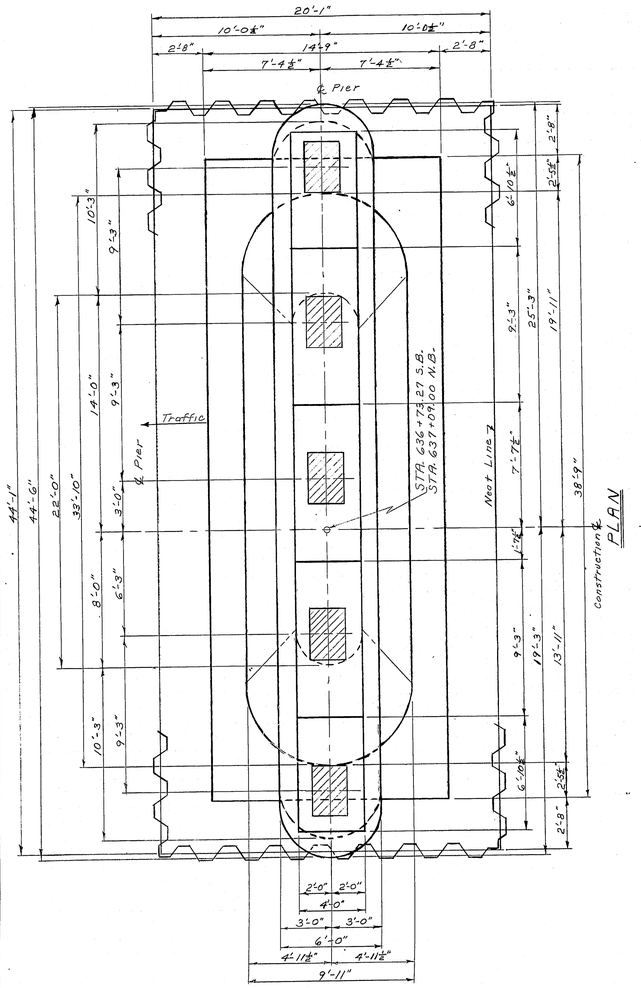
For General Pier Notes See Pier No. 2 on Sheet No. 70



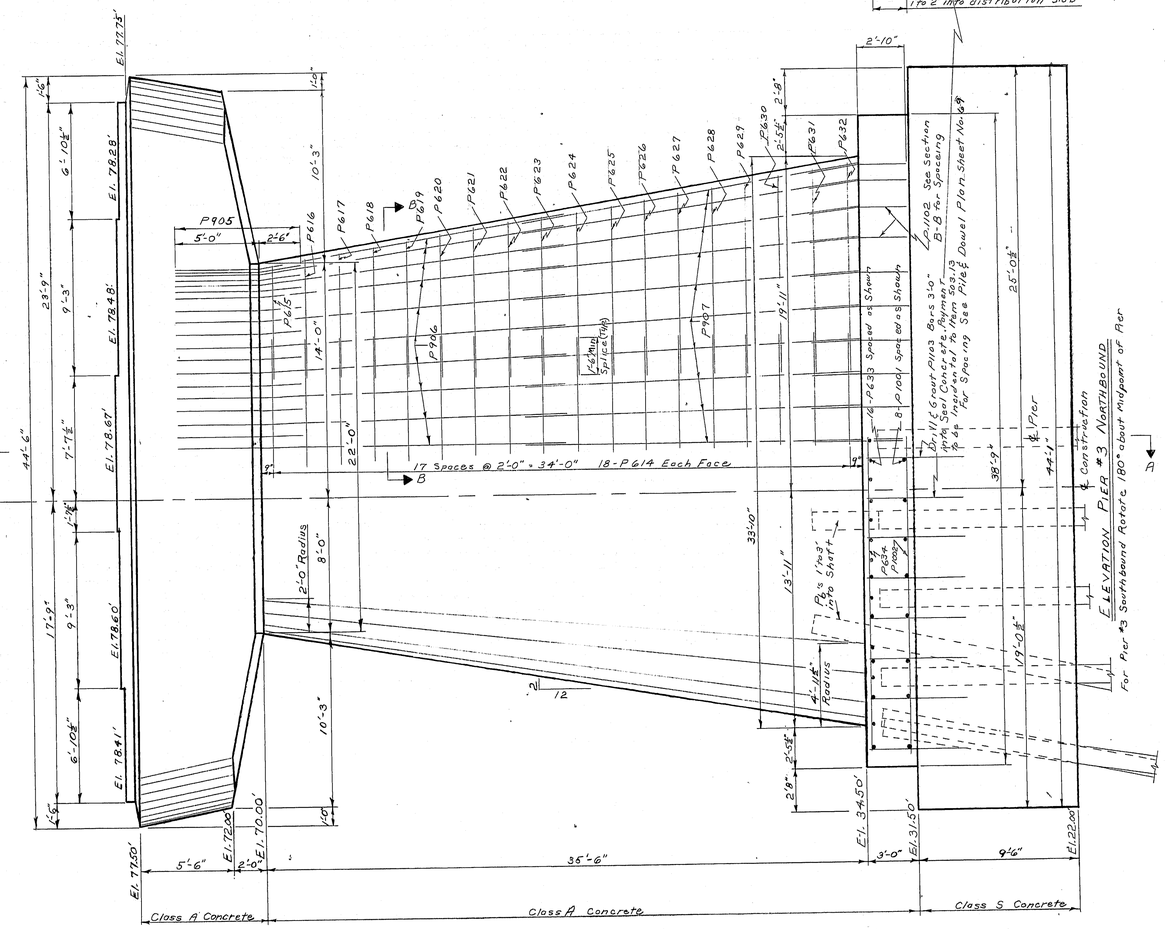
END VIEW PIER CAP



SECTION A-A

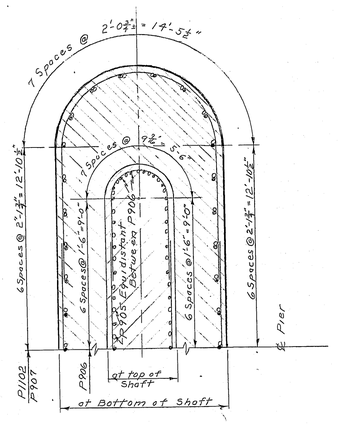


PLAN



ELEVATION PIER #3 NORTHBOUND

For Pier #3 Southbound Rotate 180° about Midpoint of Pier



SECTION "B"-"B"

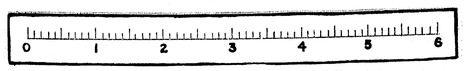
DESIGN– H. L. D.	DETAIL N.E.R.	BRIDGE NO.
TRACE– N.E.R.		SURVEY–
CHECK– C. D. H. 5/69		PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

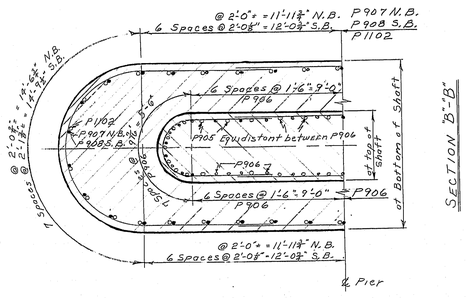
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
PIER NO. 3 N.B. & S.B.

SHEET 71 OF 109 AUGUSTA, MAINE SEPT 1969

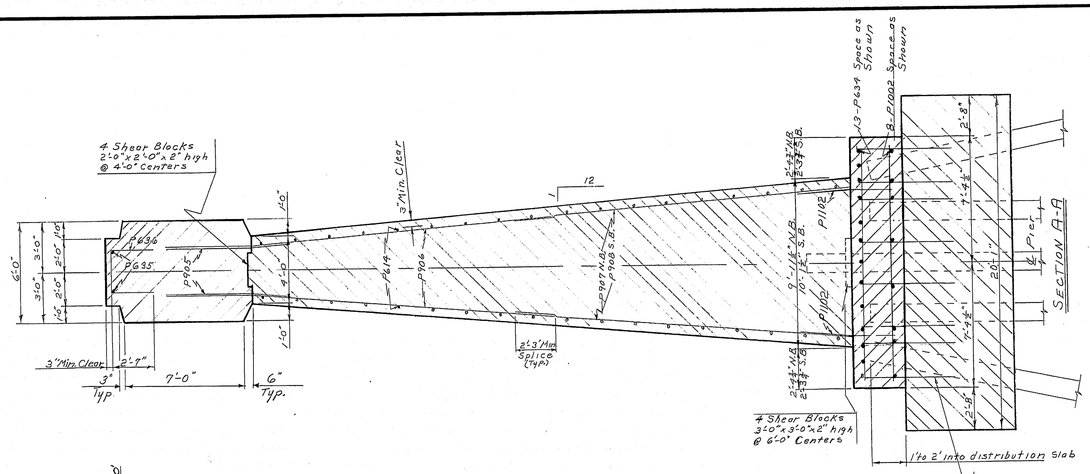
123-140



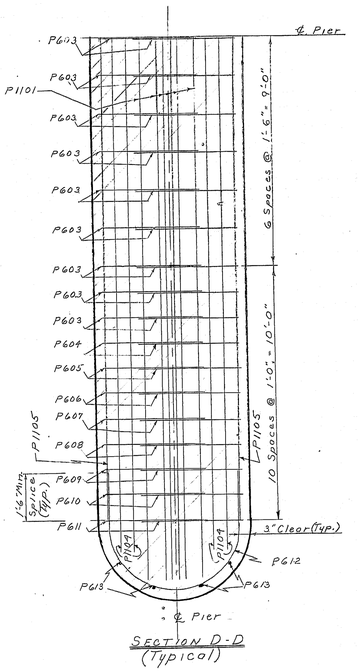
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	72	109



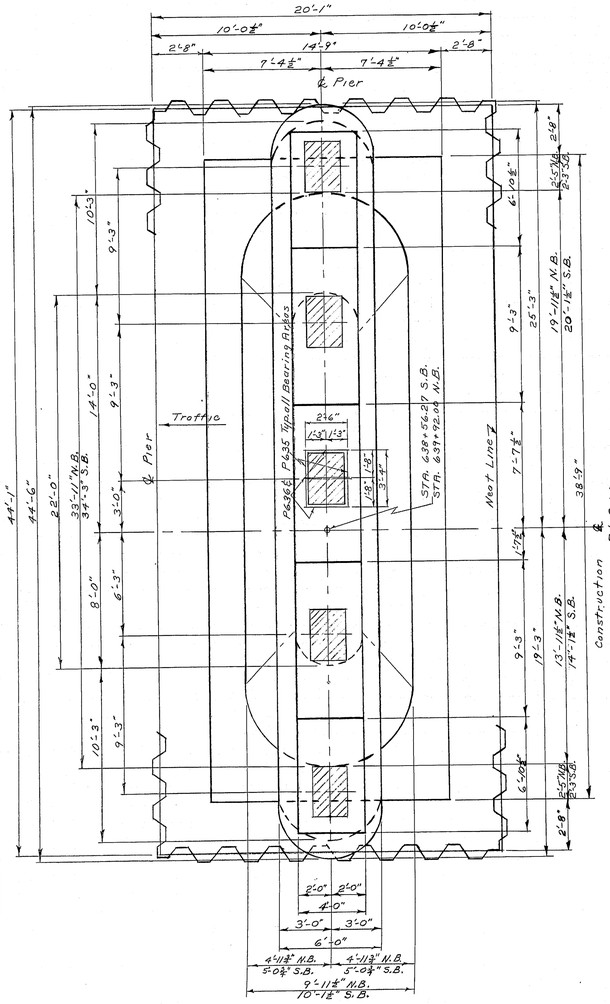
SECTION B-B



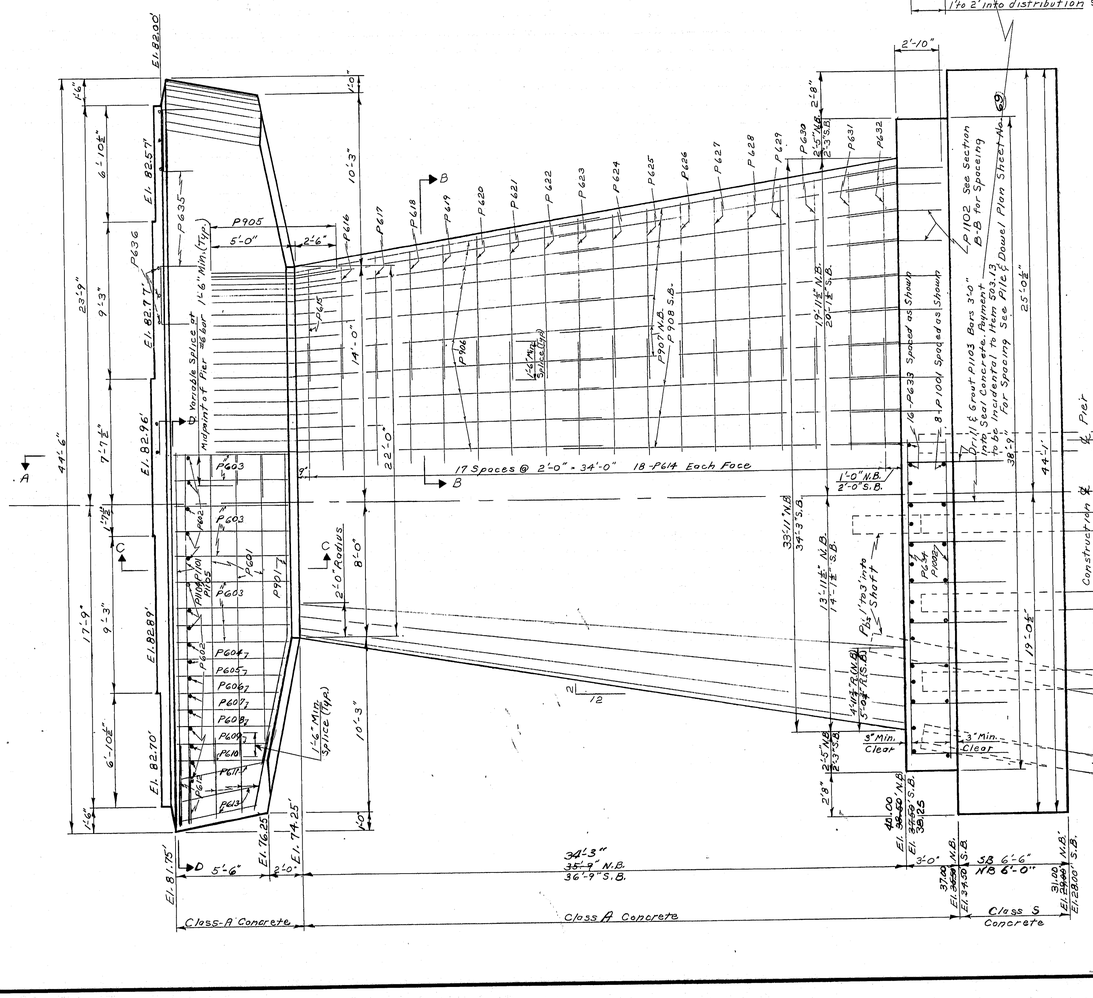
SECTION A-A



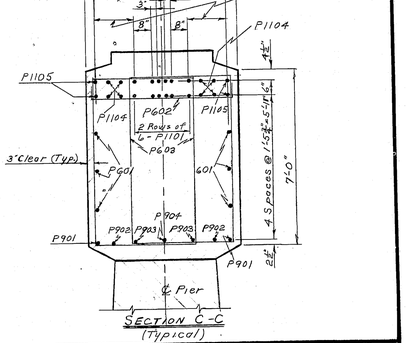
SECTION D-D
(Typical)



PLAN



ELEVATION PIER #4 NORTHBOUND
For Pier 4 Southbound Rotate 180° about Midpoint of Pier. Except as Shown.



SECTION C-C
(Typical)

Note:
For Pile Plan See Pier No.1 Sheet No.69
For Pier & Pile Notes See Pier No.2 Sheet No. 70
For General Notes See Pier No.2 Sheet No. 70
Pier Cap Reinforcing Typical all Piers

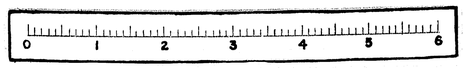
DESIGN- H.L.D.	DETAIL N.E.R.	BRIDGE NO.
TRACE- N.E.R.		SURVEY-
CHECK- C.D.H.	5/69	PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

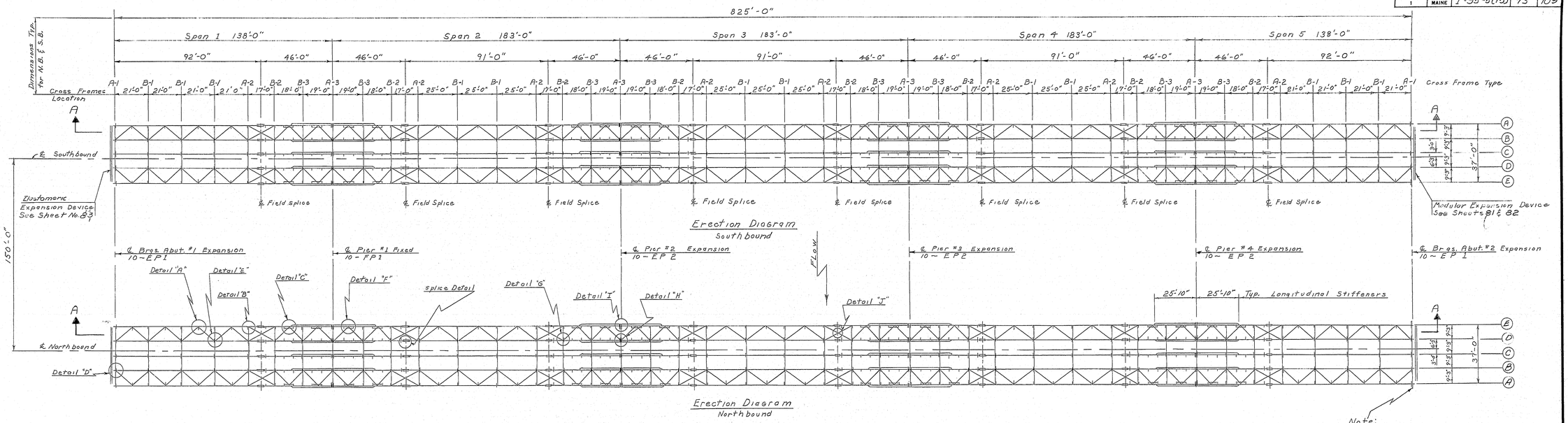
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
PIER NO. 4 N.B. & S.B.

SHEET 72 OF 109 AUGUSTA, MAINE SEPT 1969

123-141



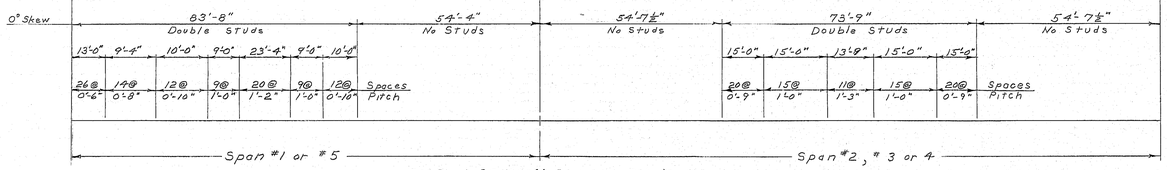
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	73	109



Erection Diagram
South bound

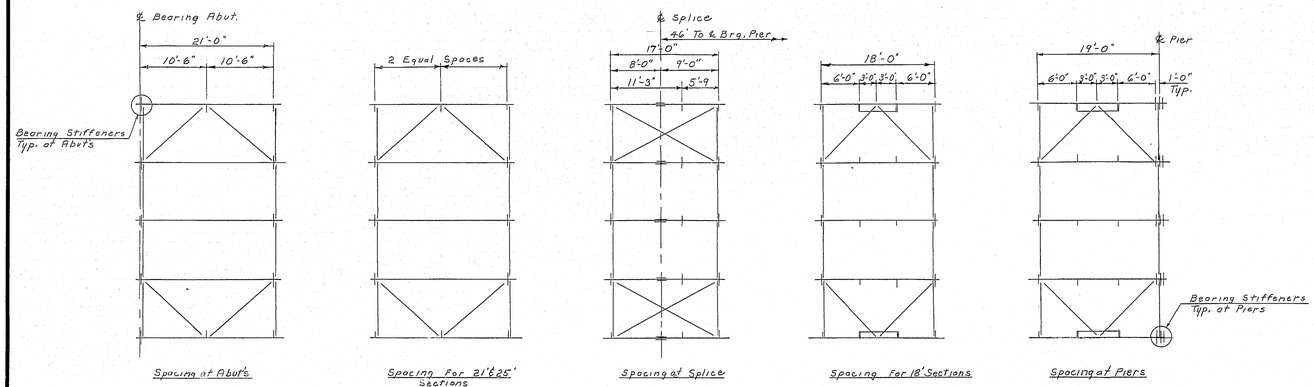
Erection Diagram
North bound

Note:
See Sheet #81 for modified 16WF36 (Exterior diaphragm) at Abut. #2 (Typ.)

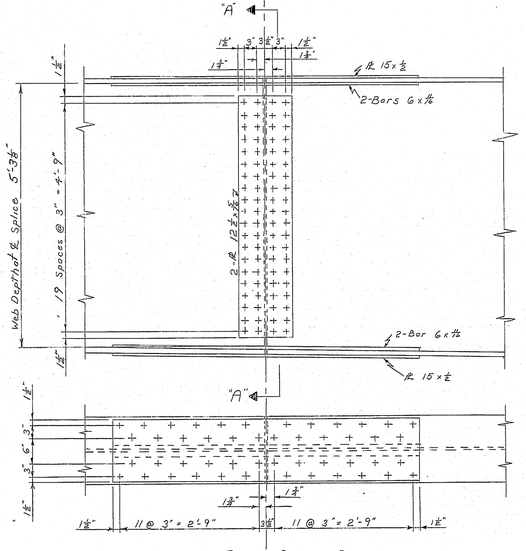


See Sheet BD 104-66 Standard Details sh. 107
Total No. Studs Required = 9040 N.B. & S.B.

SHEAR CONNECTORS

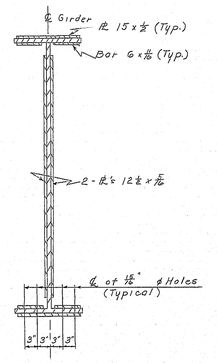


INTERMEDIATE STIFFENER SPACING DETAILS



TYPICAL FIELD SPLICE DETAIL

Note:
Splice PL's A.S.T.M. A 572 Grade 50
Holes 15/16" ∅
Bolts ⅞ ∅ A.S.T.M. A 325



SECTION "A"-"A"

See Sheet #74 for Legend & Notes

DESIGN- H.I.D. Detail M.E.R.
TRACE- N.E.R.
CHECK- CHANDLER

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

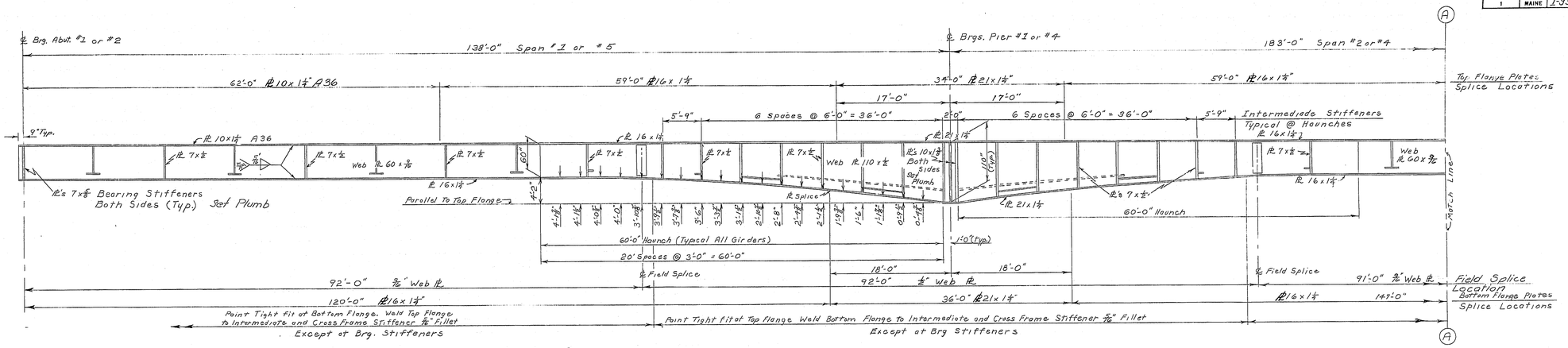
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK- CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY
STRUCTURAL STEEL

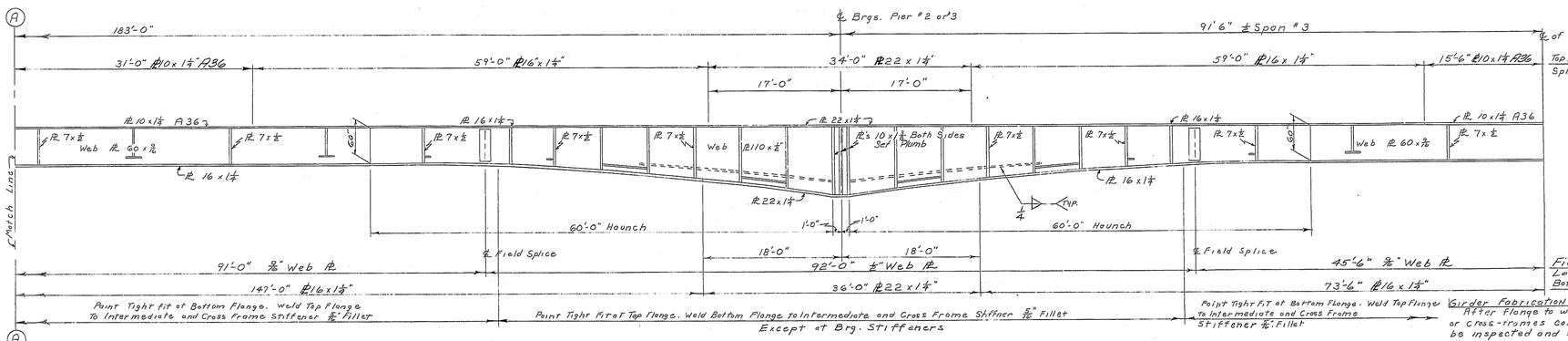
SHEET 73 OF 109 AUGUSTA, MAINE SEPT. 1969

123-142

0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	74	109





VIEW A-A

Left exterior girder shown. All others same except as shown & noted on sheets No.'s 73, 74, 75, & 76
For Brg. stiffener weld detail see sheet No. 75

Note:
Flange & Web Plates A 572, Grade 50 Except as Noted.
All Stiffeners to be A 36 and 6 x ⅜ PL's unless otherwise shown

Top Flange Plates Splice Locations

Field Splice Locations Bottom Flange Plates Splice Locations

Girder Fabrication Notes:

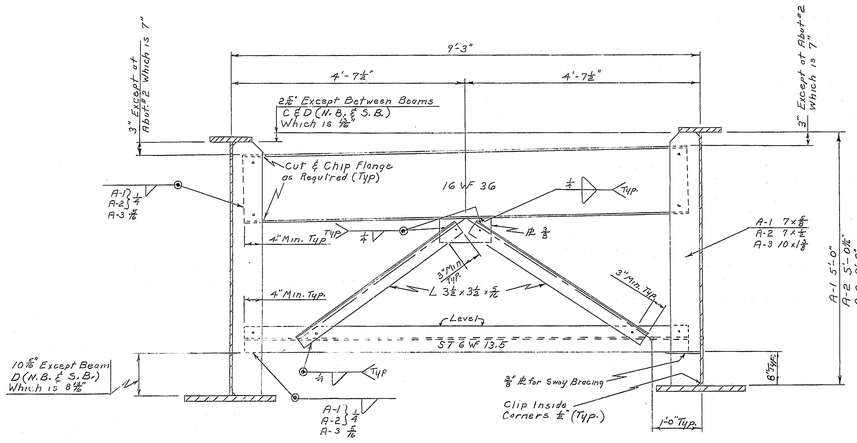
After flange to web welds have been completed, and before any stiffeners or cross-frames connection plates are attached to it the welds shall be inspected and shall be in accordance with "American Welding Society Specifications for Welded Highway and Railway Bridges" Art. 907.

The steel fabricator at his option may fabricate the web plates with butt welds with the following limitations:

A. - A maximum of 2 transverse welds in the positive moment sections per girder per span.

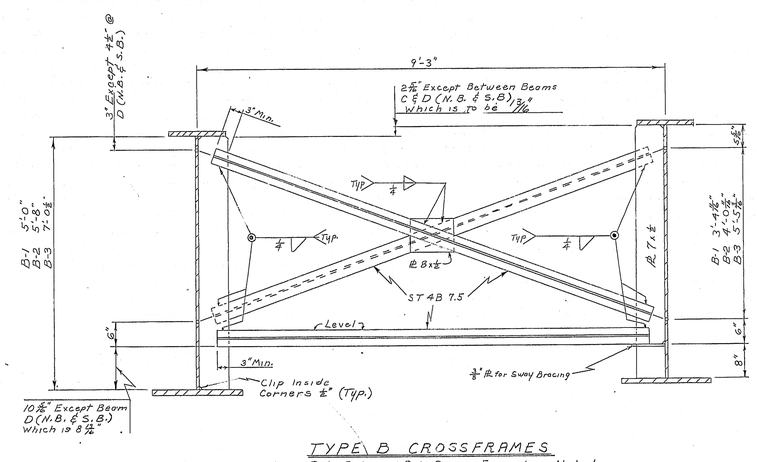
B. - A maximum of 1 transverse weld each side of the ℄ of bearing at a minimum distance of 10'-0" from the ℄ of bearings & 1 longitudinal weld in the negative moment sections per girder per haunch. "Feather Edges" between longitudinal weld & bottom flange shall be avoided.

- If butt welds are used to fabricate the web plates, the location and details shall be shown on the shop detail drawings and shall be subject to approval by the Engineer.
- Girders are to be cambered in accordance with the details shown.
- Girders are to be fitted with Shear Connectors in accordance with the details shown.
- Bearing Stiffeners are to be Plumb.
- All Intermediate & Cross Frame Stiffeners may be normal to top flange or may be plumb at option of fabricator, but in either case the method selected shall be used for entire structure.



TYPE A CROSSFRAMES

At Abuts., Slab Constr. Joints, and Piers
Type A-1, A-2, and A-3 Same Except as Noted
13/16" ℄ Holes For ⅝" ℄ bolts Typical For erection of all Intermediate Cross Frames and Bracing.



TYPE B CROSSFRAMES

Type B-1, B-2, and B-3 Same Except as Noted
Set intermediate crossframes normal to the Girder.

LEGEND

℄ = Plate
N.B. = Northbound
S.B. = Southbound
Typ. = Typical
@ = AT

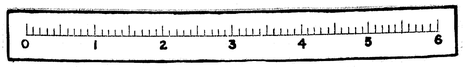
DESIGN- H.L.D. Detail M.E.R.	BRIDGE NO.
TRACE- N.E.B.	SURVEY-
CHECK- CHANDLER	PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

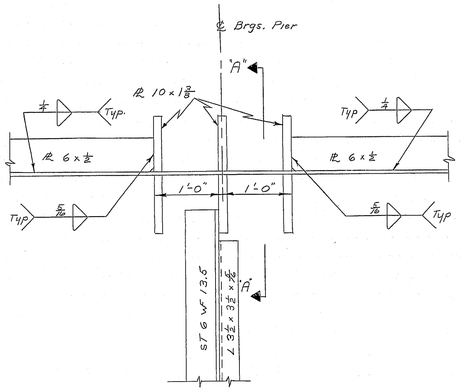
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
GIRDER DETAILS & CROSS FRAMES

SHEET 74 OF 109 AUGUSTA, MAINE SEPT. 1969

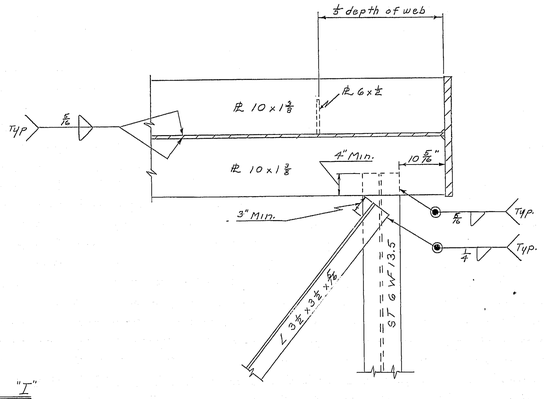
123-143



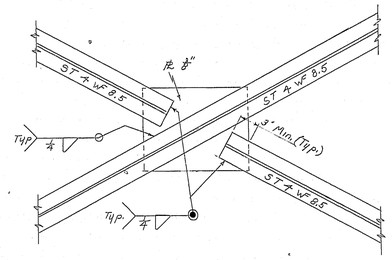
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	75	109



DETAIL "I"



SECTION A-A



DETAIL "J"

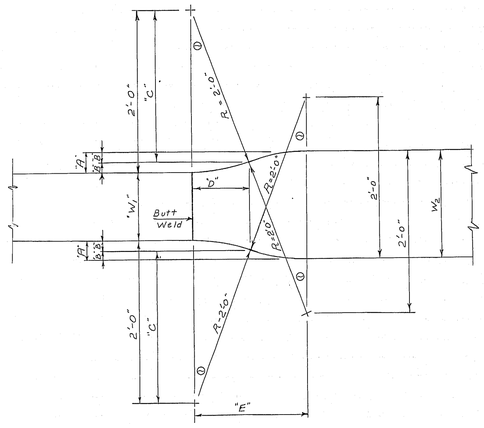
W_1	W_2	A	B	C	D	E
10"	16"	3"	1 1/2"	1'-10 1/2"	8 3/8"	1'-4 3/4"
16"	21"	2 1/2"	1 1/4"	1'-10 3/4"	7 5/8"	1'-3 3/4"
16"	22"	3"	1 1/2"	1'-10 1/2"	8 3/8"	1'-4 3/4"

$A = \frac{W_2 - W_1}{2}$ $\quad C = 2'-0" - B$

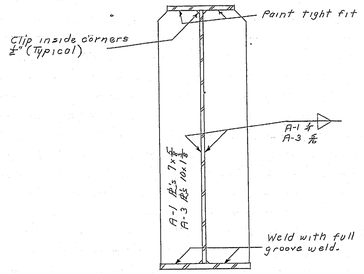
$B = \frac{D}{2}$ $\quad E = 2D$

$D = 2'-0" \times \text{Sine } \Theta$

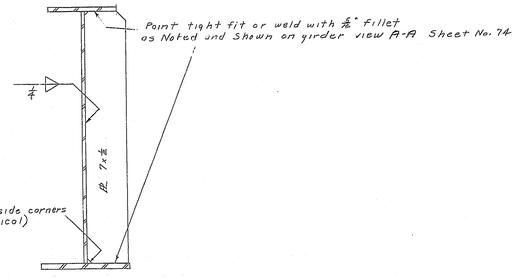
$\Theta = \text{Arc cos. } \frac{B}{2'-0"}$



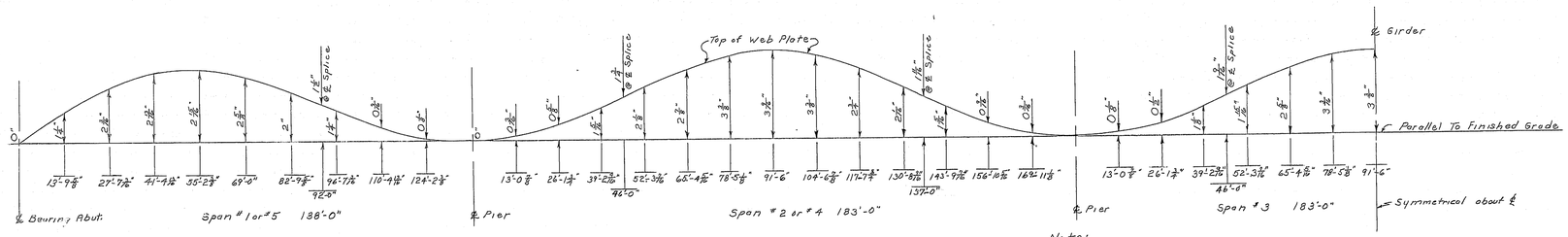
FLANGE SPLICE WIDTH TRANSITION



BEARING SHIFFENER DETAIL



INTERMEDIATE & CROSS FRAME SHIFFENER DETAIL



CAMBER DIAGRAM

For all Girders N.B. & S.B. Structures

Note:
Girders shall be fabricated to conform with finish grade profile. Ordinates shown correct for deflection of girders only and have not been adjusted for roadway vertical curve.

DESIGN- H.L.D. Detail N.E.R.
TRACE- N.E.R.
CHECK- CHANDLER

BRIDGE NO.
SURVEY-
PLOT-

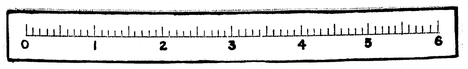
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY

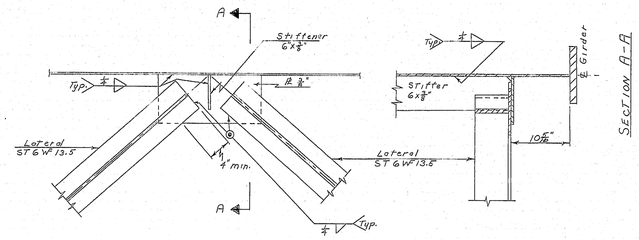
STRUCTURAL STEEL DETAILS

SHEET 75 OF 109 AUGUSTA, MAINE SEPT. 1969

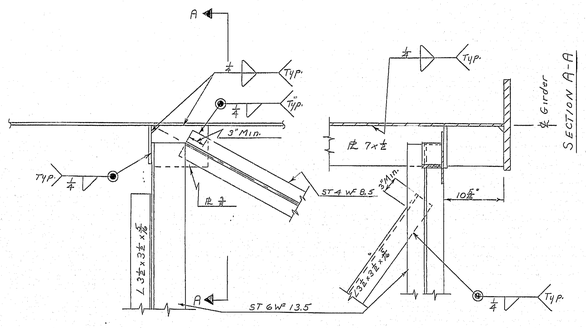
123-144



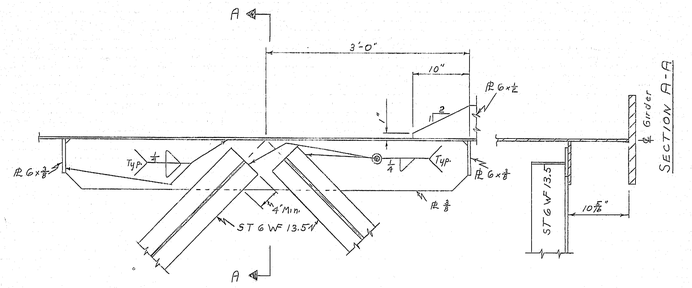
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(12)	76	109



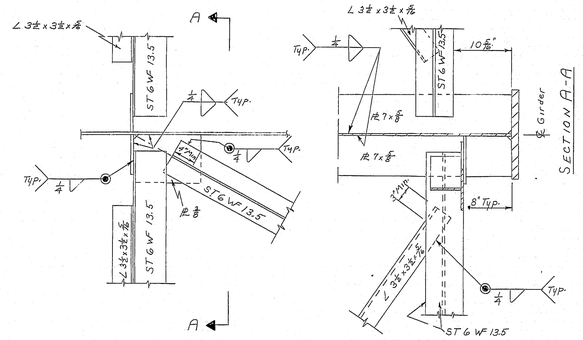
DETAIL "A"



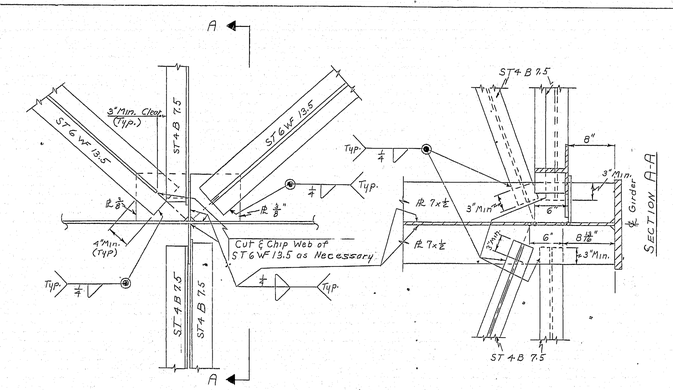
DETAIL "B"



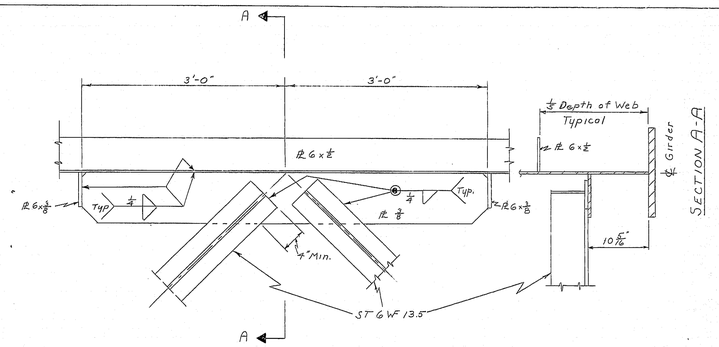
DETAIL "C"



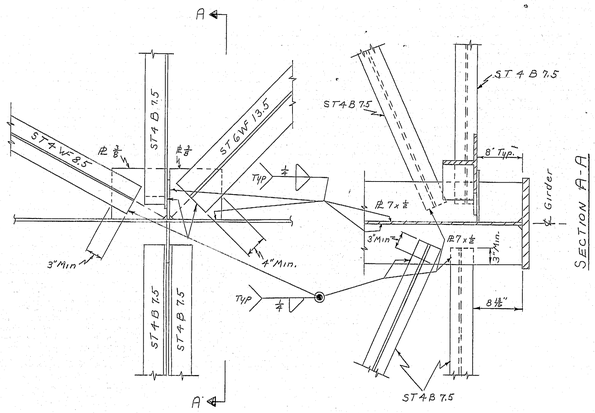
DETAIL "D"



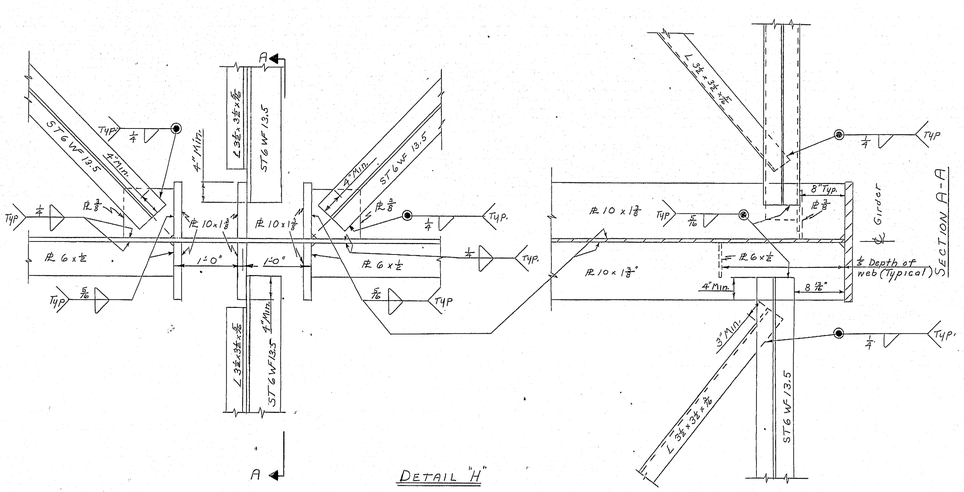
DETAIL "E"



DETAIL "F"



DETAIL "G"



DETAIL "H"

Note:
Clip inside corners of gusset Plates ½"

DESIGN- H.L.D. Detail H.E.R.
TRACE- H.E.R.
CHECK- CHANDLER

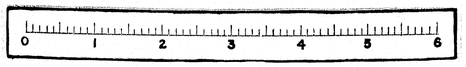
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

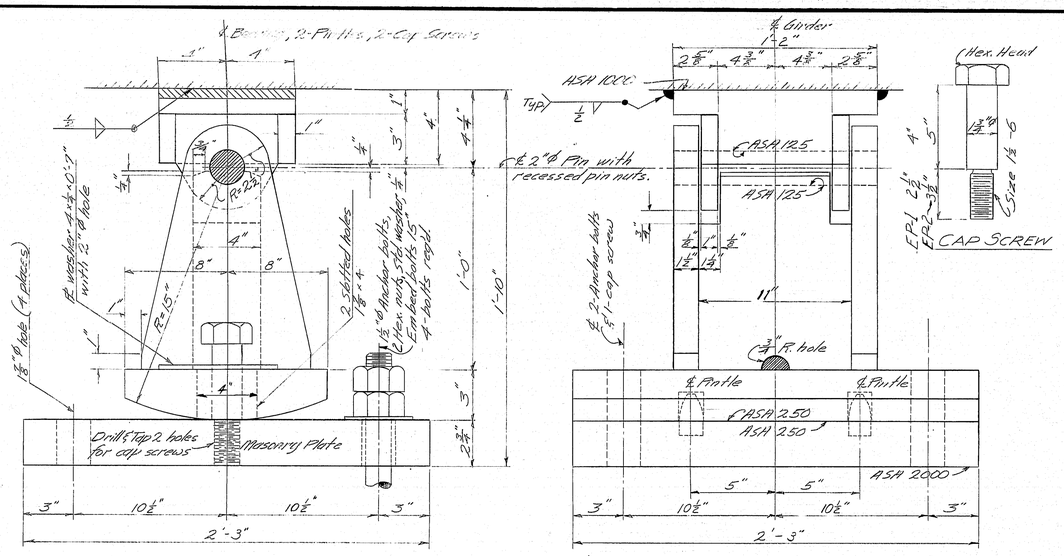
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY
STRUCTURAL STEEL

SHEET 76 OF 109 AUGUSTA, MAINE SEPT. 1969

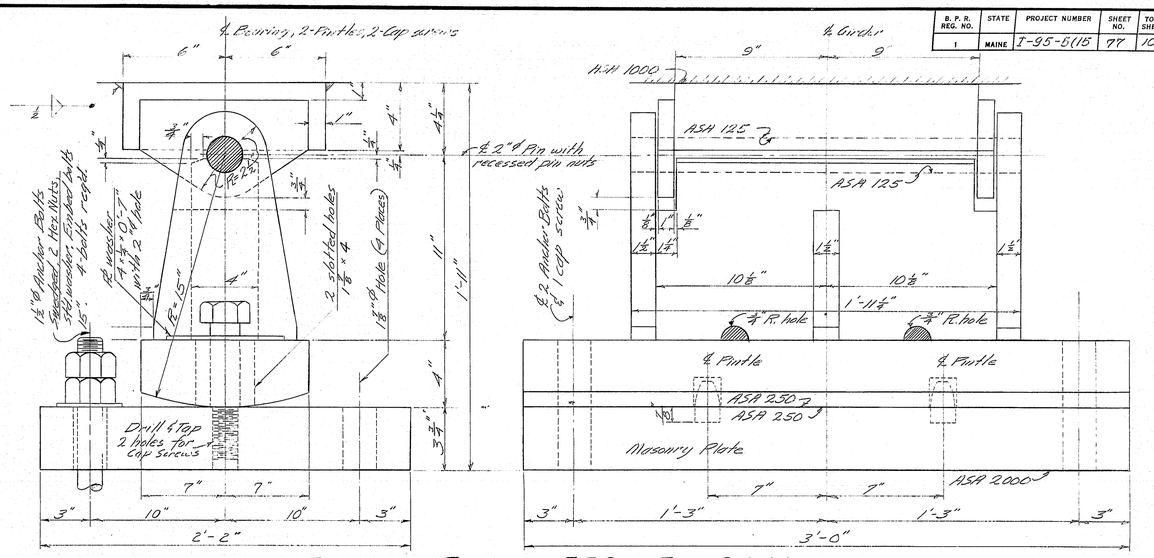
123-145



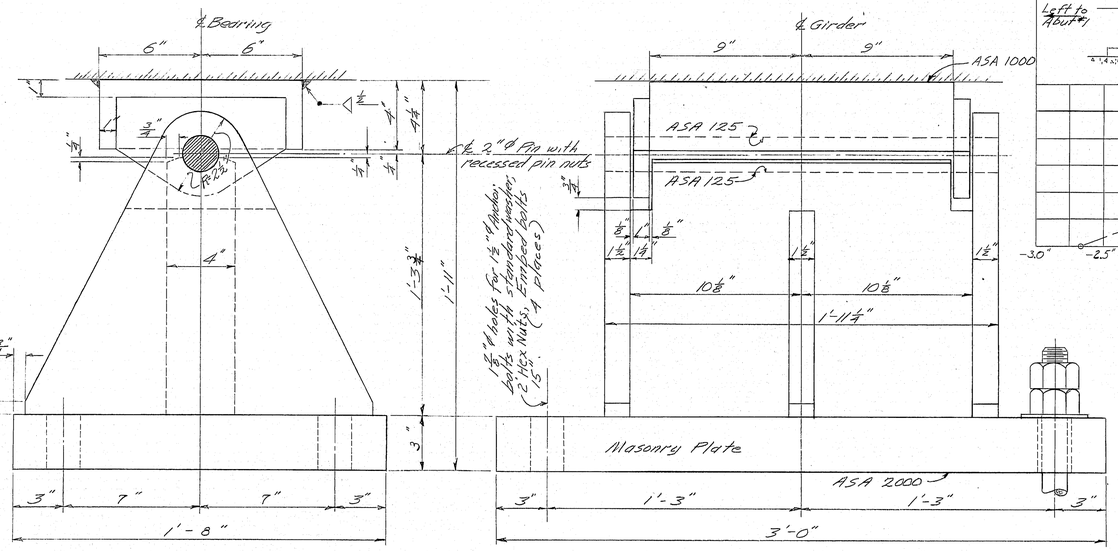
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15	77	109



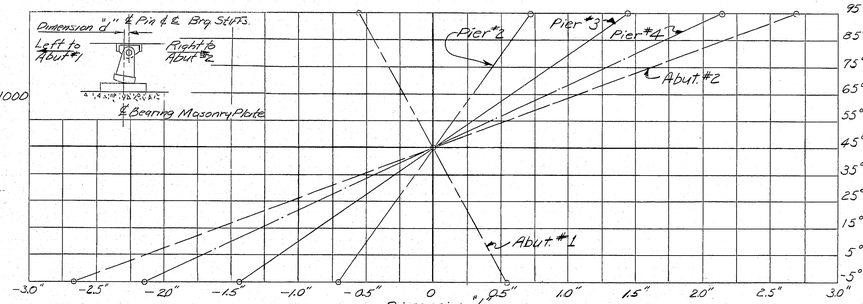
EXPANSION PEDESTAL EP1 ~ ABUTMENTS
10 Required Southbound
10 Required Northbound



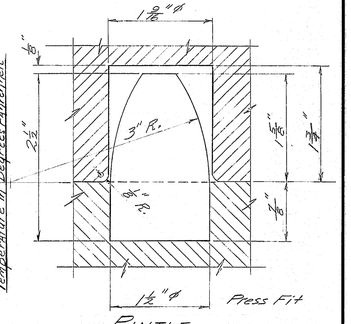
EXPANSION PEDESTAL EP2 ~ PIERS 2, 3, & 4
15 Required Southbound
15 Required Northbound



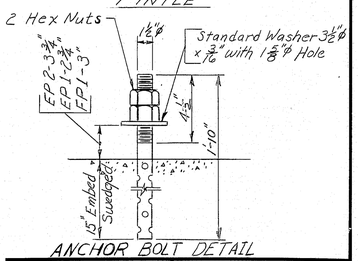
FIXED PEDESTAL FP1 ~ PIER 1
5 Required Southbound
5 Required Northbound



EXPANSION PEDESTAL SETTINGS
After structural steel is erected and before concrete in slab is placed.



PINTLE



ANCHOR BOLT DETAIL

GENERAL NOTES

Material for two structures, Southbound & Northbound only.
Fabricate pedestals with ¼" fillet shop welds.
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 the dressed areas are below 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 minimum width of 2" and a minimum slope of one half inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

ASTM STEEL CLASSIFICATION

2"ϕ Pin ~ A235 (Class E) or A108 (Grade 1016-1030 incl.)
Anchor Bolts, Cap Screws ~ A36 or A307
All other ~ A36

DESIGN- H.L.D.
TRACE- R.W.L. & W.C.E.
CHECK- C. HANDLER

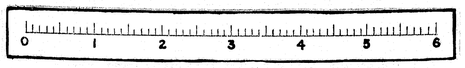
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY
BEARING PEDESTALS

SHEET 77 OF 109 AUGUSTA, MAINE SEPT. 1969

123-146



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	78	109

BOTTOM OF SLAB ELEVATIONS SOUTHBOUND *

DEAD LOAD DEFLECTIONS	SPAN NO. 1										SPAN NO. 2											SPAN NO. 3						
	0.0000	0.0850	0.1536	0.1948	0.2037	0.1817	0.1385	0.0853	0.0375	0.0081	0.0000	0.0120	0.0431	0.0919	0.1485	0.1999	0.2362	0.2489	0.2349	0.1974	0.1453	0.0886	0.0404	0.0106	0.0000	0.0076	0.0344	0.0798	0.1340	0.1840	0.2198	0.2329
GIRDER	℄ Bear. Abut. 1	13.80	27.60	41.40	55.20	69.00	82.80	96.60	110.40	124.20	℄ Pier 1	13.07	26.14	39.21	52.29	65.36	78.43	91.50	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 2	13.07	26.14	39.21	52.29	65.36	78.43	91.50
A	83.70	83.83	83.96	84.06	84.14	84.19	84.23	84.27	84.31	84.39	84.48	84.60	84.75	84.92	85.10	85.28	85.45	85.61	85.74	85.86	85.97	86.08	86.20	86.35	86.52	86.71	86.94	87.18	87.44	87.70	87.96	88.19
B	83.89	84.02	84.15	84.25	84.33	84.39	84.42	84.46	84.51	84.58	84.68	84.80	84.94	85.11	85.29	85.47	85.65	85.80	85.94	86.05	86.16	86.27	86.39	86.54	86.71	86.91	87.13	87.37	87.63	87.89	88.15	88.38
C	84.08	84.22	84.34	84.45	84.52	84.58	84.62	84.65	84.70	84.77	84.87	84.99	85.13	85.30	85.48	85.67	85.84	85.99	86.13	86.24	86.35	86.46	86.58	86.73	86.90	87.10	87.32	87.57	87.83	88.09	88.34	88.58
D	84.01	84.15	84.27	84.38	84.46	84.51	84.55	84.58	84.63	84.70	84.80	84.92	85.07	85.23	85.42	85.60	85.77	85.93	86.06	86.18	86.28	86.39	86.52	86.66	86.84	87.03	87.25	87.50	87.76	88.02	88.27	88.51
E	83.82	83.96	84.08	84.19	84.26	84.32	84.36	84.39	84.44	84.51	84.61	84.73	84.87	85.04	85.22	85.41	85.58	85.73	85.87	85.98	86.09	86.20	86.32	86.47	86.64	86.84	87.06	87.31	87.57	87.83	88.08	88.32

BOTTOM OF SLAB ELEVATIONS SOUTHBOUND (CONT'D.) *

DEAD LOAD DEFLECTIONS	SPAN NO. 3 (Cont'd)						SPAN NO. 4													SPAN NO. 5								
	0.2198	0.1840	0.1340	0.0798	0.0344	0.0076	0.0000	0.0120	0.0431	0.0919	0.1485	0.1999	0.2362	0.2489	0.2349	0.1974	0.1453	0.0886	0.0404	0.0106	0.0000	0.0850	0.1536	0.1948	0.2037	0.1817	0.1385	0.0853	0.0375	0.0081	0.0000
GIRDER	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 3	13.07	26.14	39.21	52.29	65.36	78.43	91.50	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 4	13.80	27.60	41.40	55.20	69.00	82.80	96.60	110.40	124.20	℄ Bear. Abut. 2
A	88.41	88.61	88.80	88.99	89.17	89.42	89.68	89.96	90.27	90.60	90.94	91.28	91.62	91.93	92.23	92.51	92.77	93.04	93.33	93.64	93.97	94.32	94.87	95.29	95.69	96.05	96.40	96.73	97.07	97.42	97.80
B	88.60	88.80	88.99	89.18	89.39	89.62	89.87	90.15	90.46	90.79	91.13	91.48	91.81	92.13	92.42	92.70	92.97	93.24	93.52	93.83	94.16	94.62	95.06	95.48	95.88	96.24	96.59	96.92	97.26	97.62	97.99
C	88.79	88.99	89.18	89.37	89.58	89.81	90.07	90.35	90.65	90.98	91.32	91.67	92.00	92.32	92.61	92.89	93.16	93.43	93.71	94.02	94.36	94.81	95.25	95.68	96.07	96.44	96.78	97.11	97.45	97.81	98.19
D	88.72	88.92	89.11	89.30	89.51	89.74	90.00	90.28	90.58	90.91	91.26	91.60	91.93	92.25	92.55	92.82	93.09	93.36	93.65	93.95	94.29	94.74	95.19	95.61	96.00	96.37	96.71	97.05	97.38	97.74	98.12
E	88.53	88.73	88.92	89.11	89.32	89.55	89.81	90.09	90.39	90.72	91.06	91.41	91.74	92.06	92.35	92.63	92.90	93.17	93.45	93.76	94.10	94.55	94.99	95.42	95.81	96.18	96.52	96.85	97.19	97.55	97.93

BOTTOM OF SLAB ELEVATIONS NORTHBOUND *

DEAD LOAD DEFLECTIONS	SPAN NO. 1										SPAN NO. 2											SPAN NO. 3						
	0.0000	0.0850	0.1536	0.1948	0.2037	0.1817	0.1385	0.0853	0.0375	0.0081	0.0000	0.0120	0.0431	0.0919	0.1485	0.1999	0.2362	0.2489	0.2349	0.1974	0.1453	0.0886	0.0404	0.0106	0.0000	0.0076	0.0344	0.0798	0.1340	0.1840	0.2198	0.2329
GIRDER	℄ Bear. Abut 1	13.80	27.60	41.40	55.20	69.00	82.80	96.60	110.40	124.20	℄ Pier 1	13.07	26.14	39.21	52.29	65.36	78.43	91.50	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 2	13.07	26.14	39.21	52.29	65.36	78.43	91.50
E	83.82	83.96	84.08	84.19	84.26	84.32	84.36	84.39	84.44	84.51	84.61	84.73	84.87	85.04	85.22	85.41	85.58	85.73	85.87	85.98	86.09	86.20	86.32	86.47	86.64	86.84	87.06	87.31	87.57	87.83	88.08	88.32
D	84.01	84.15	84.27	84.38	84.46	84.51	84.55	84.58	84.63	84.70	84.80	84.92	85.07	85.23	85.42	85.60	85.77	85.93	86.06	86.18	86.28	86.39	86.52	86.66	86.84	87.03	87.25	87.50	87.76	88.02	88.27	88.51
C	84.08	84.22	84.34	84.45	84.52	84.58	84.62	84.65	84.70	84.77	84.87	84.99	85.13	85.30	85.48	85.67	85.84	85.99	86.13	86.24	86.35	86.46	86.58	86.73	86.90	87.10	87.32	87.57	87.83	88.09	88.34	88.58
B	83.89	84.02	84.15	84.25	84.33	84.39	84.42	84.46	84.51	84.58	84.68	84.80	84.94	85.11	85.29	85.47	85.65	85.80	85.94	86.05	86.16	86.27	86.39	86.54	86.71	86.91	87.13	87.37	87.63	87.89	88.15	88.38
A	83.70	83.83	83.96	84.06	84.14	84.19	84.23	84.27	84.31	84.39	84.48	84.60	84.75	84.92	85.10	85.28	85.45	85.61	85.74	85.86	85.97	86.08	86.20	86.35	86.52	86.71	86.94	87.18	87.44	87.70	87.96	88.19

BOTTOM OF SLAB ELEVATIONS NORTHBOUND (CONT'D) *

DEAD LOAD DEFLECTIONS	SPAN NO. 3 (Cont'd)						SPAN NO. 4													SPAN NO. 5								
	0.2198	0.1840	0.1340	0.0798	0.0344	0.0076	0.0000	0.0120	0.0431	0.0919	0.1485	0.1999	0.2362	0.2489	0.2349	0.1974	0.1453	0.0886	0.0404	0.0106	0.0000	0.0850	0.1536	0.1948	0.2037	0.1817	0.1385	0.0853	0.0375	0.0081	0.0000
GIRDER	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 3	13.07	26.14	39.21	52.29	65.36	78.43	91.50	104.57	117.64	130.71	143.79	156.86	169.93	℄ Pier 4	13.80	27.60	41.40	55.20	69.00	82.80	96.60	110.40	124.20	℄ Bear. Abut 2
E	88.53	88.73	88.92	89.11	89.32	89.55	89.81	90.09	90.39	90.72	91.06	91.41	91.74	92.06	92.35	92.63	92.90	93.17	93.45	93.76	94.10	94.55	94.99	95.42	95.81	96.18	96.52	96.85	97.19	97.55	97.93
D	88.72	88.92	89.11	89.30	89.51	89.74	90.00	90.28	90.58	90.91	91.26	91.60	91.93	92.25	92.55	92.82	93.09	93.36	93.65	93.95	94.29	94.74	95.19	95.61	96.00	96.37	96.71	97.05	97.38	97.74	98.12
C	88.79	88.99	89.18	89.37	89.58	89.81	90.07	90.35	90.65	90.98	91.32	91.67	92.00	92.32	92.61	92.89	93.16	93.43	93.71	94.02	94.36	94.81	95.25	95.68	96.07	96.44	96.78	97.11	97.45	97.81	98.19
B	88.60	88.80	88.99	89.18	89.39	89.62	89.87	90.15	90.46	90.79	91.13	91.48	91.81	92.13	92.42	92.70	92.97	93.24	93.52	93.83	94.16	94.62	95.06	95.48	95.88	96.24	96.59	96.92	97.26	97.62	97.99
A	88.41	88.61	88.80	88.99	89.17	89.42	89.68	89.96	90.27	90.60	90.94	91.28	91.62	91.93	92.23	92.51	92.77	93.04	93.33	93.64	93.97	94.42	94.87	95.29	95.69	96.05	96.40	96.73	97.07	97.42	97.80

* The above elevations are to be used for setting the slab forms. The elevations have been adjusted to compensate for the effect of dead load deflections. Before these elevation are established by the engineer for setting slab forms, the shear connectors shall be welded to the top flange of the beams, and all Cross-Frame field welding shall be completed.

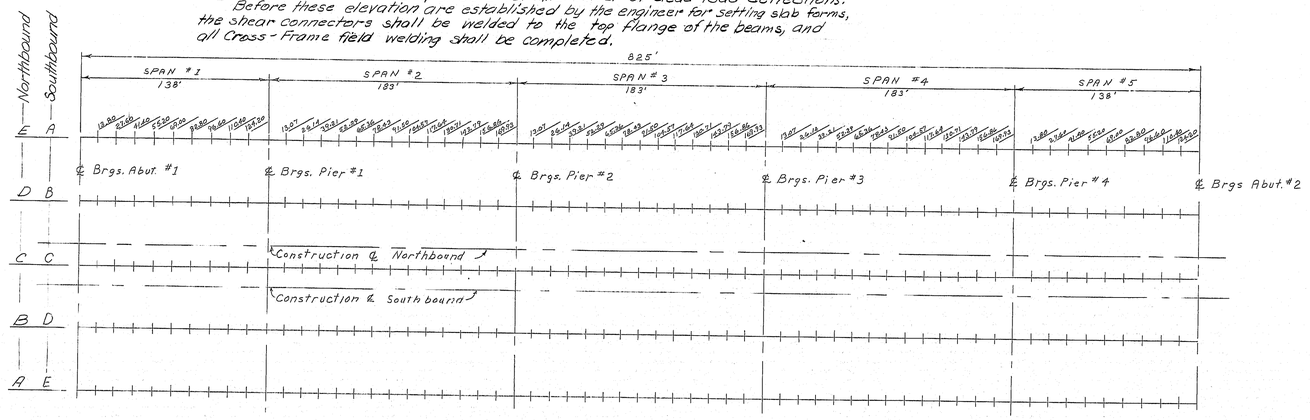
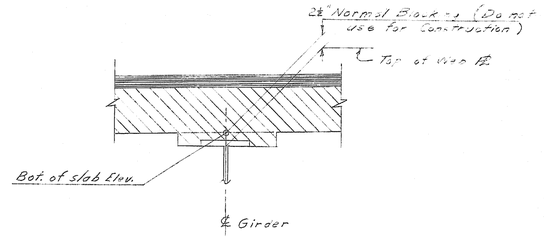


DIAGRAM of BLOCKING POINTS

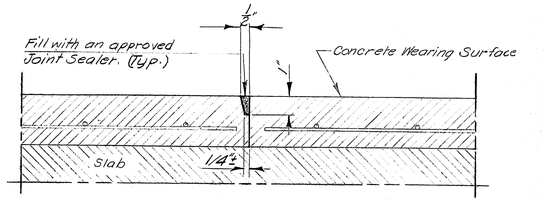
Northbound and Southbound

Note: Minor grade changes in Bottom of Slab Elevs. since, Design neglected to return spans when tables were made up.



BLOCKING DETAIL

Note: Bottom of slab elevations shall be used in conformance with section 502.10(a).
Dead load deflection is for: Dead load 1 - not including wt. of steel.



TYPICAL WEARING SURFACE CONSTRUCTION JOINT

NOTE: The slot in the wearing surface which is to be filled with joint sealer may be formed as shown above, or it may be a 1/2" wide groove sawed into the concrete after the wearing surface concrete has been in place for 7 days.

DESIGN– H.L.D. DETAIL M.E.A. TRACE– N.E.R. CHECK– CHANDLER & MC.E.	BRIDGE NO. SURVEY– PLOT–

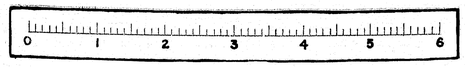
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

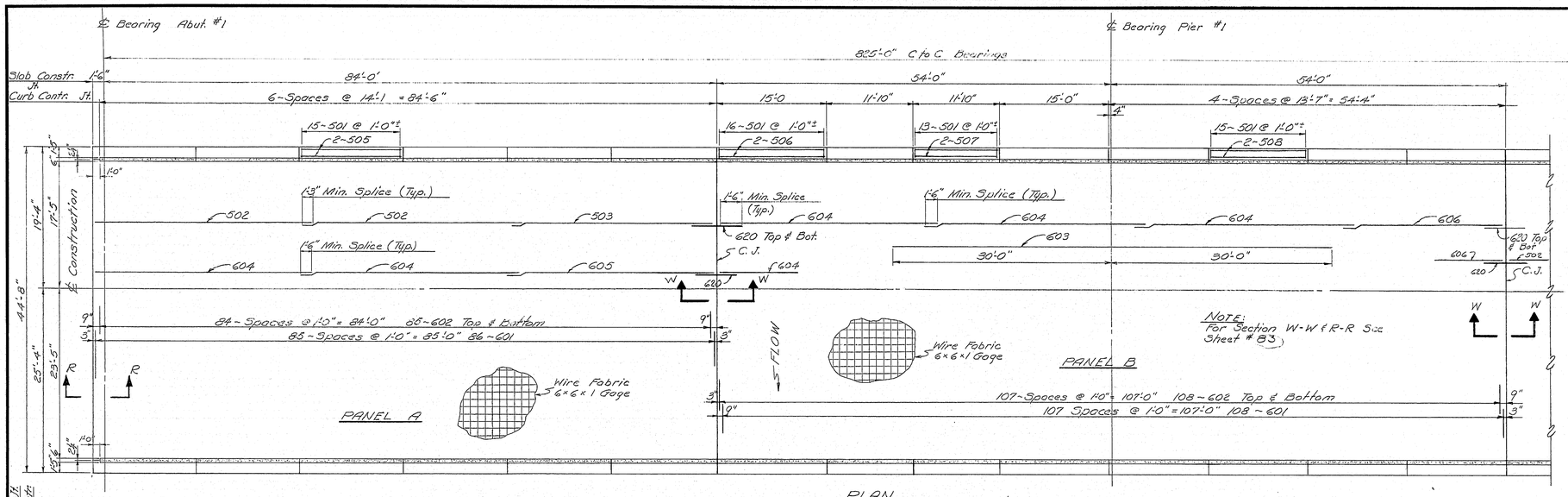
SLAB ELEVATIONS

SHEET 78 OF 109 AUGUSTA, MAINE SEPT. 1969

123-147



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	79	109



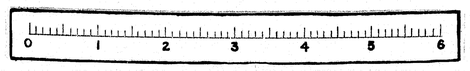
DESIGN- Det G.O.T.	BRIDGE NO.
TRACE-	SURVEY-
CHECK- Chandler	PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

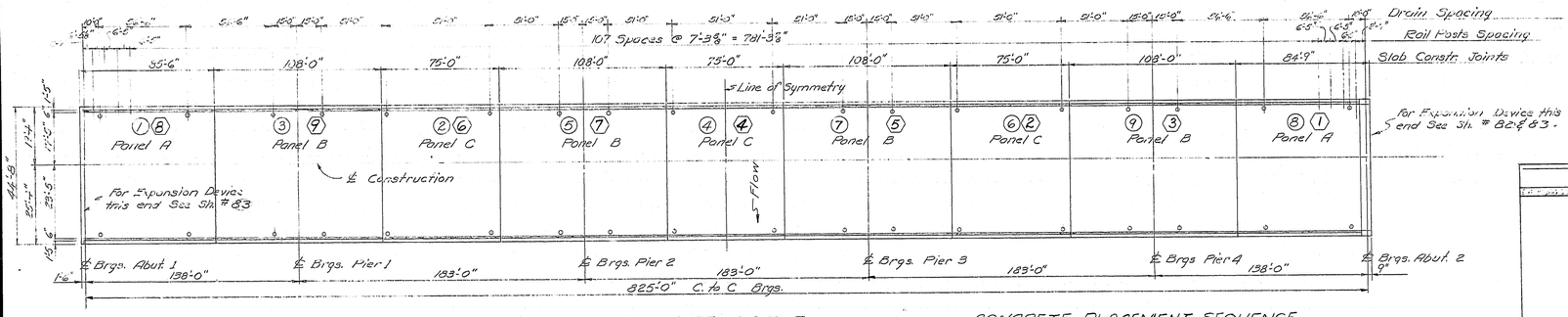
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
SUPERSTRUCTURE

SHEET 79 OF 109 AUGUSTA, MAINE SEPT. 1969

123-148



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	80	109

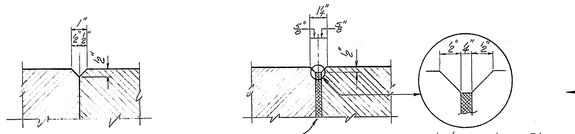


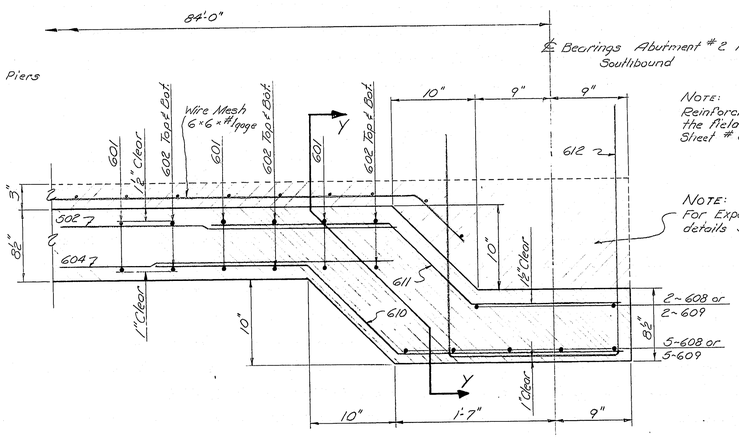
SUPERSTRUCTURE LAYOUT

Typical Northbound & Southbound
Northbound shown, Southbound Similar

CONCRETE PLACEMENT SEQUENCE

The slab concrete shall be placed in sequence ① thru ⑨ or ⑦ thru ①.
No continuous placement of adjoining panels will be allowed. Concrete for a panel shall cure for 24 hrs. before placing concrete in adjoining panels.
The Contractor may at his option place panels 1, 2, 4, 6, and 8 prior to placing panels 3, 5, 7, & 9. In either case only one method is to be used.

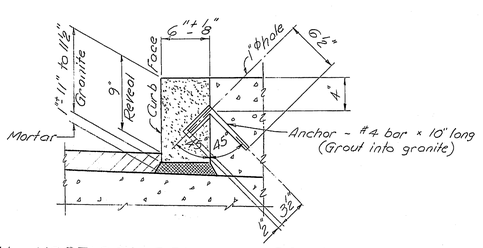




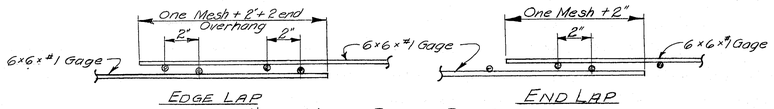
SECTION X-X

Note:
Reinforcing bar #612 is to be bent in the field as shown in Typ. Sect. Sheet #81

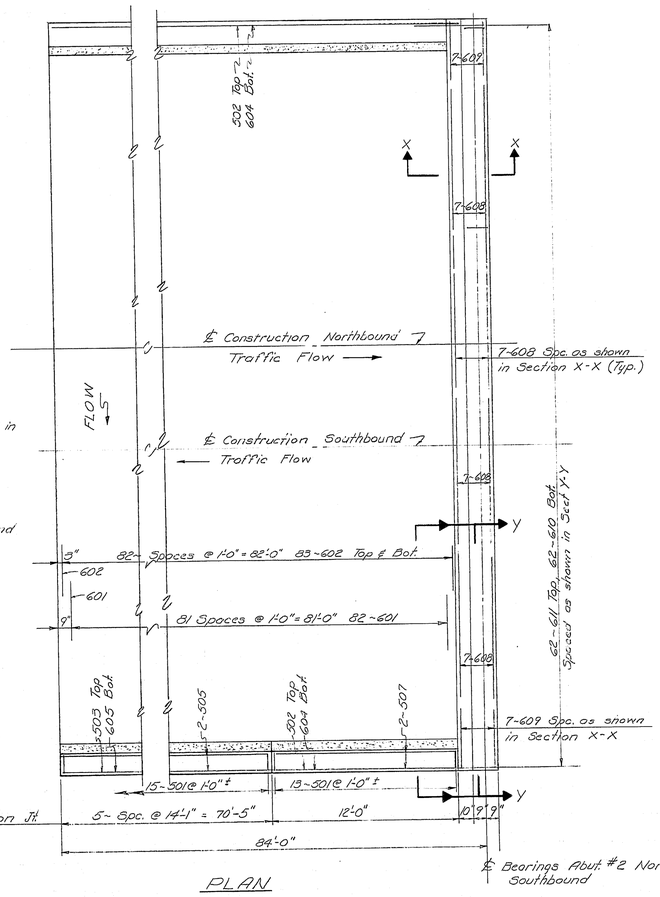
Note:
For Expansion Jt. Reinf. steel and details See Sheets #81



DETAIL - VERTICAL BRIDGE CURB - TYPE 1

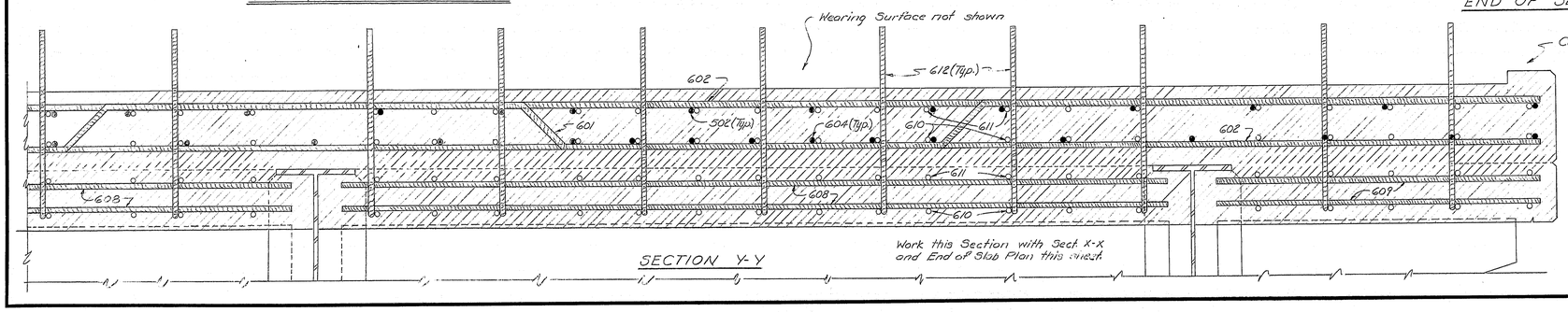


WIRE MESH SPLICE DETAIL



PLAN

END OF SLAB NORTHBOUND & SOUTHBOUND



SECTION Y-Y

DESIGN- Det. G.O.T.
TRACE-
CHECK- Chandler
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK - CUMBERLAND COUNTY
AND
TOPSHAM - SAGADAHOC COUNTY

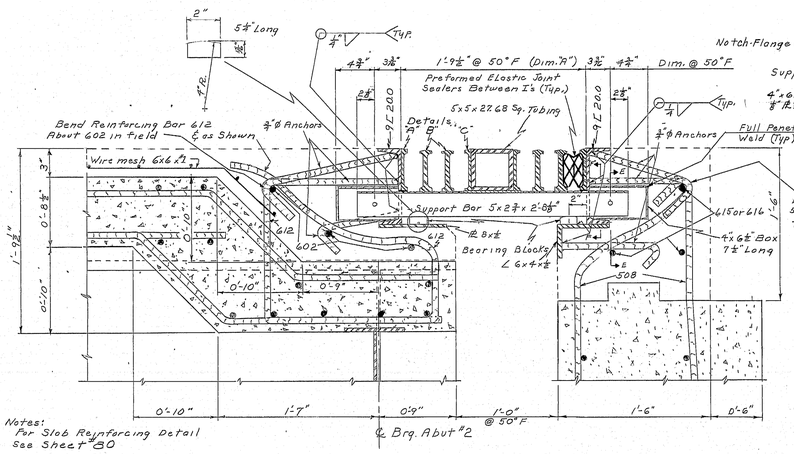
SUPERSTRUCTURE DETAILS

SHEET 80 OF 109 AUGUSTA, MAINE SEPT. 1969

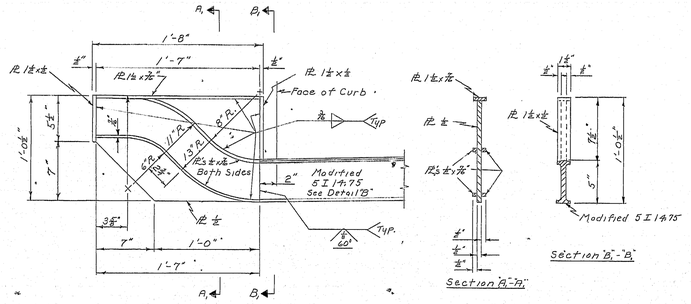
123-149

0 1 2 3 4 5 6

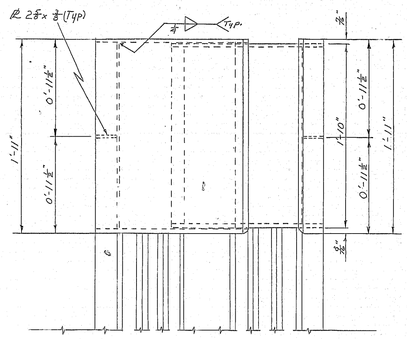
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	81	109



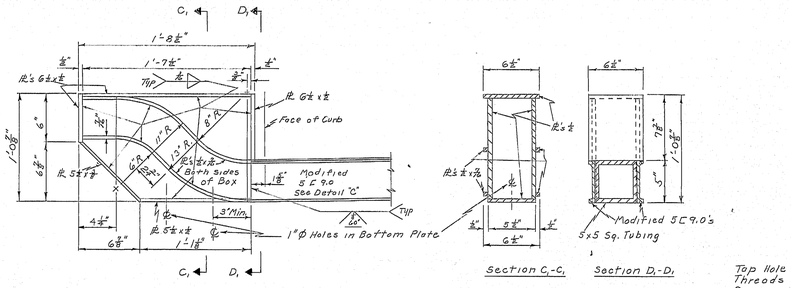
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	82	109



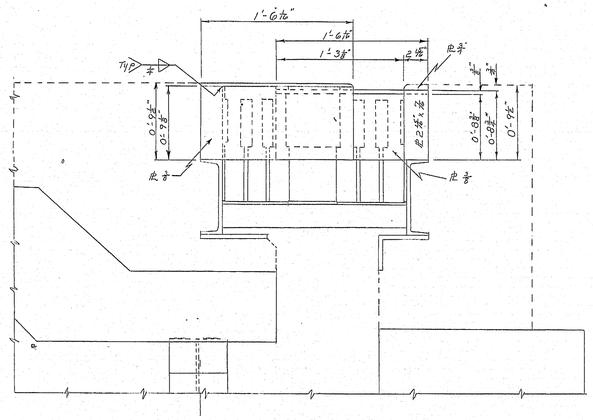
DETAIL "D"



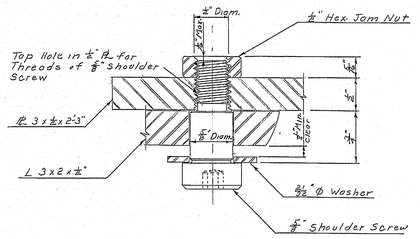
PLAN VIEW "H"-"H"
North bound



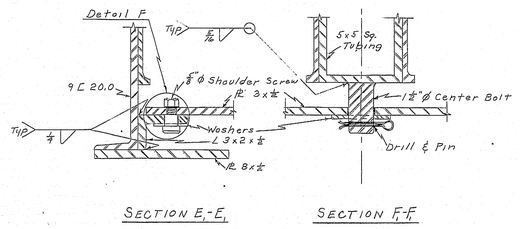
DETAIL "E"



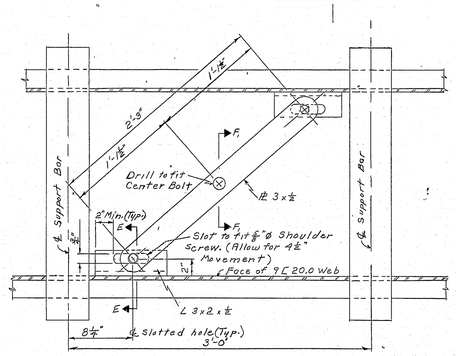
SECTION "J"-"J"
North bound



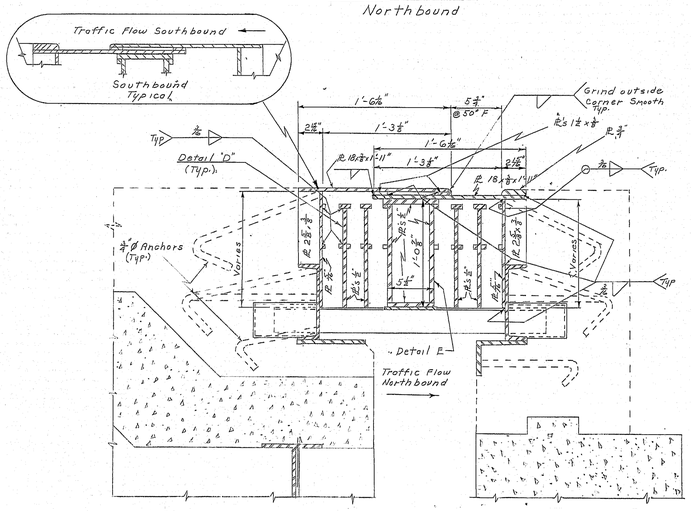
Detail F



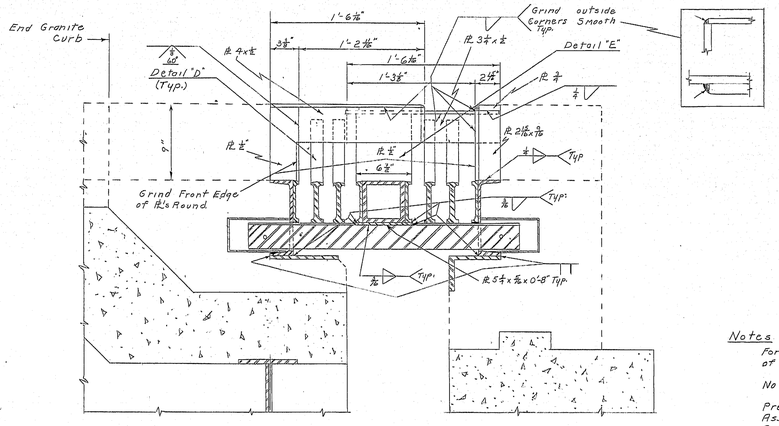
SECTION E-E, SECTION F-F



LINKAGE DETAIL



SECTION "G"-"G"
Northbound as Shown, Southbound Similar Except as Shown or Noted



SECTION "I"-"I"
North bound

Notes

For Bonding of Joint Sealer to 5"L's & 5"I's & for Bonding of Urethane Rubber to Support Bar See Spec's.

No Splices Will Be Permitted in Joint Sealer.

Prestressing Bolts to be Placed THru Entire Assembly. Assembly to be Prefabricated & Shipped to Site Prestressed to Dimensions Shown @ 70°F.

System to be painted with Cold galvanizing Paint.

DESIGN- H.L.D. Detail N.E.R.
TRACE- N.E.R.
CHECK- CHANDLER

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

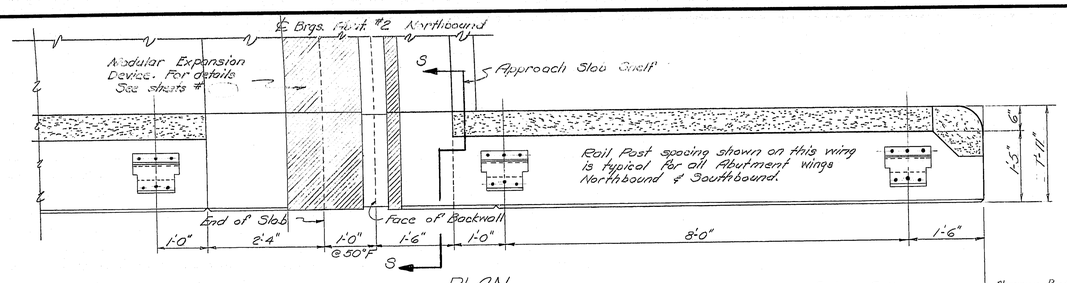
INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY
MODULAR EXPANSION DEVICE

SHEET 82 OF 109 AUGUSTA, MAINE SEPT. 1969

123-151

0 1 2 3 4 5 6

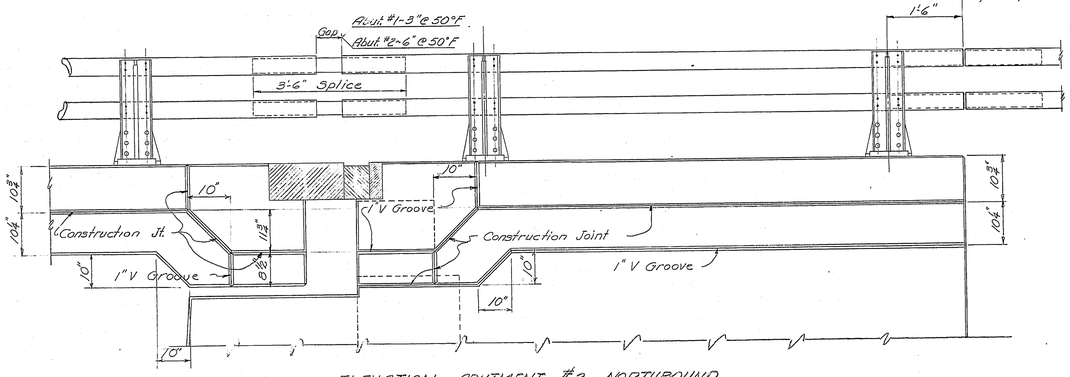
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	83	109



PLAN

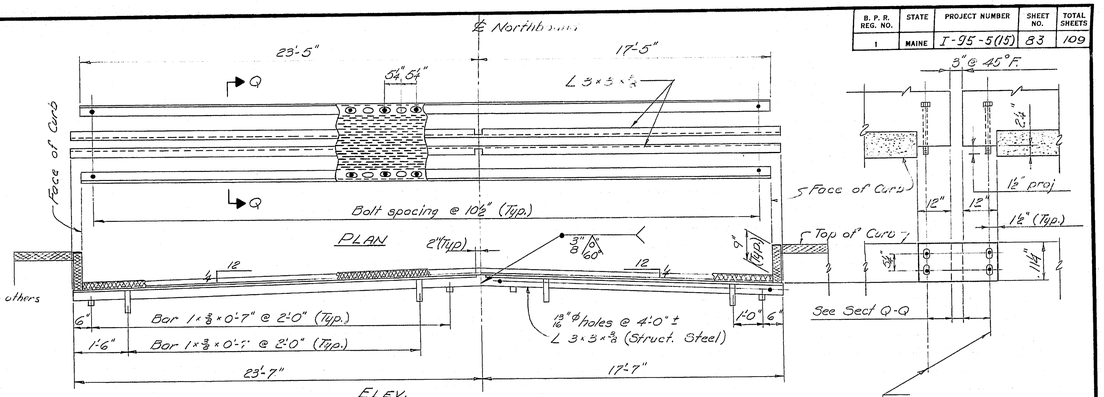
Pay Limit for 2 Bar Aluminum Bridge Rail

Aluminum Roadway Rail by others Splice by other.



ELEVATION ABUTMENT #2 NORTHBOUND

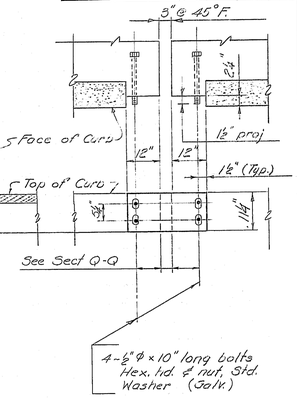
Abutment #2 Southbound same as Abutment #2 Northbound



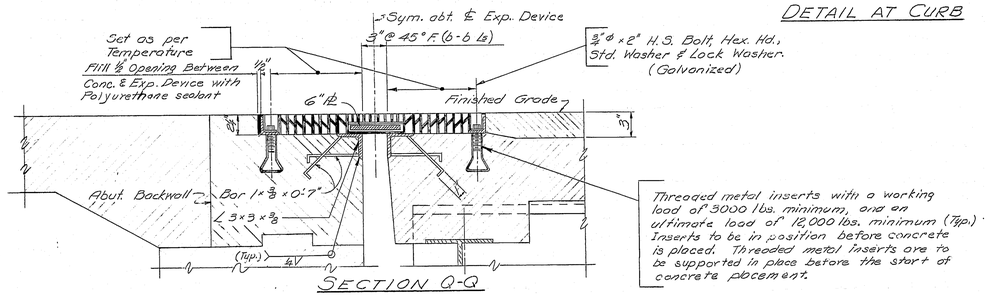
ELEV.

ELASTOMERIC EXPANSION DEVICE ~ TYPE II

Set to grade of 0"/ft along ℄ roadway @ Abutment #1



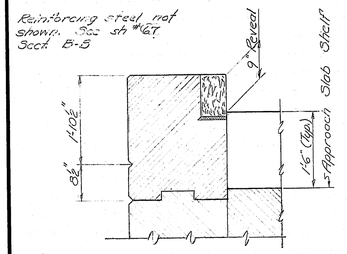
DETAIL AT CURB



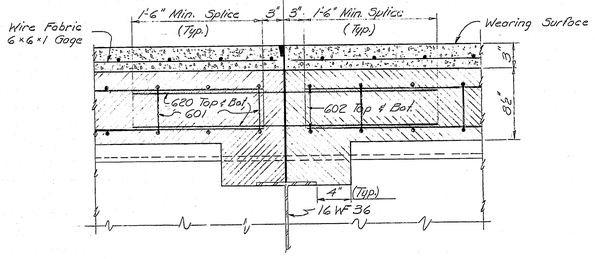
SECTION Q-Q

Threaded metal inserts with a working load of 3000 lbs. minimum, and an ultimate load of 12,000 lbs. minimum (Typ.) Inserts to be in position before concrete is placed. Threaded metal inserts are to be supported in place before the start of concrete placement.

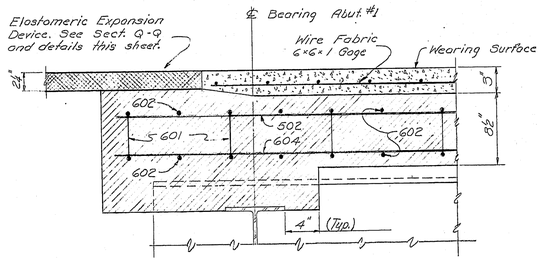
Concrete under Expansion Device shall have a steel trowel finish.



SECTION S-S



SECTION W-W



SECTION R-R

DESIGN– Dept. G.O.T. TRACE– CHECK–Chandler	BRIDGE NO. SURVEY– PLOT–

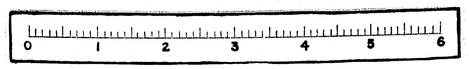
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY

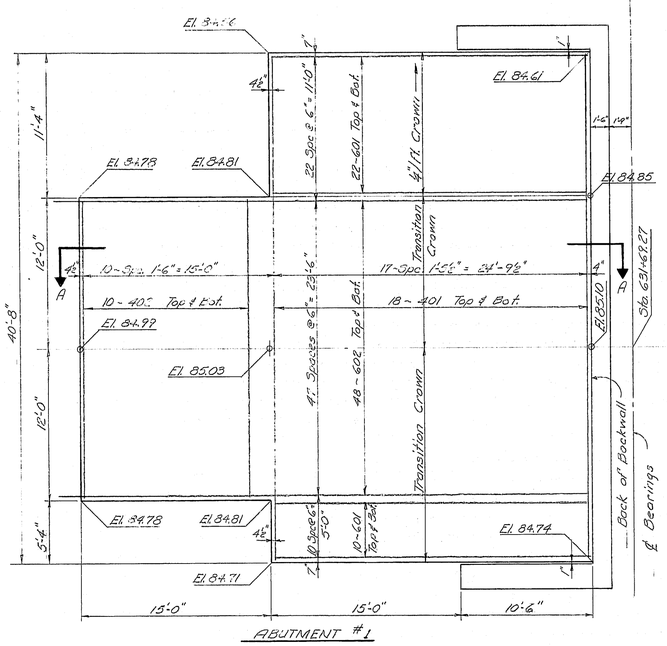
ABUTMENT & SUPERSTRUCTURE DETAILS

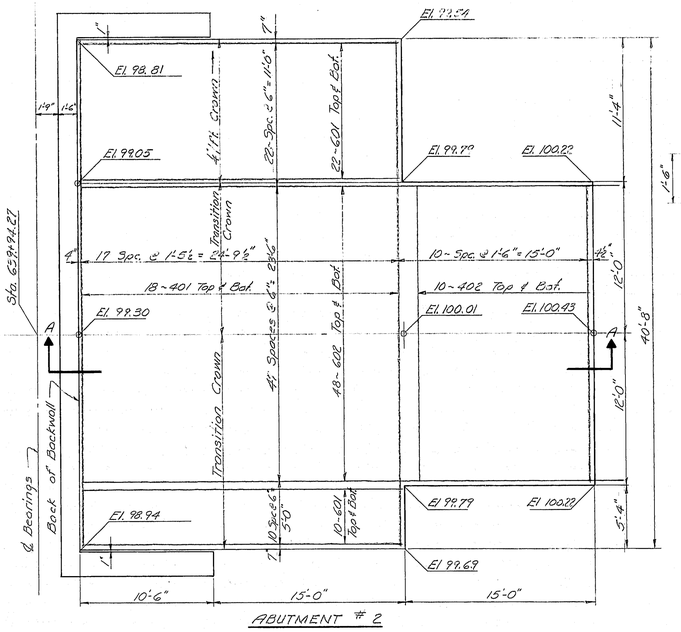
SHEET 83 OF 109 AUGUSTA, MAINE SEPT. 1969

123-152

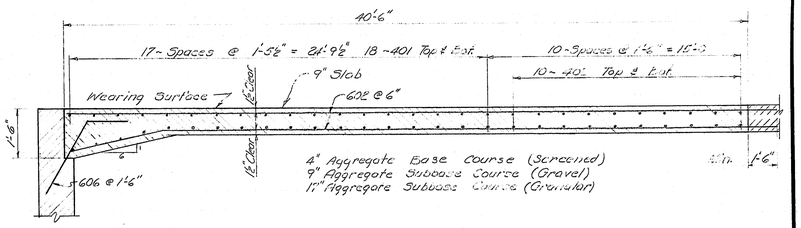


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	84	109

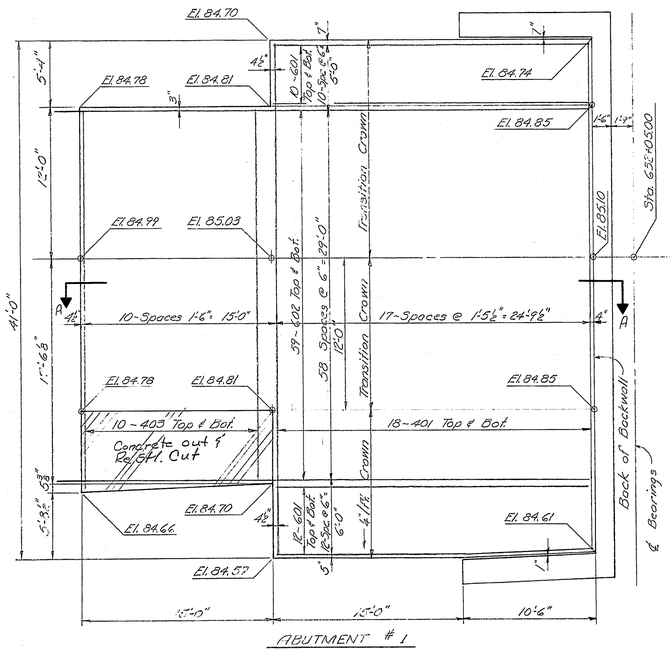


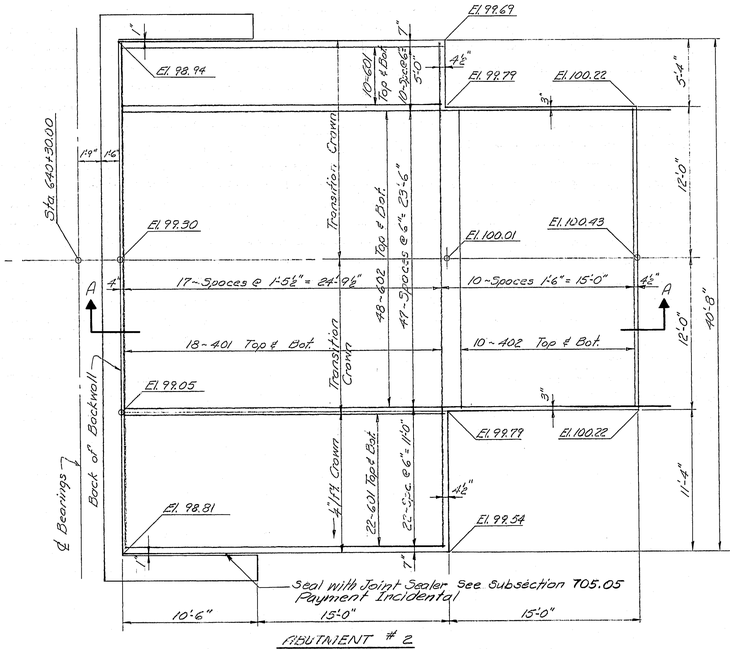


APPROACH SLABS SOUTHBOUND

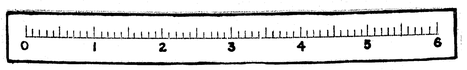


SECTION A-A





APPROACH SLABS NORTHBOUND



DESIGN- ℄ Def. G.O.T.
TRACE-
CHECK- Chandler

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
ANDROSCOGGIN RIVER
BETWEEN THE TOWNS OF
BRUNSWICK-CUMBERLAND COUNTY
AND
TOPSHAM-SAGADAHOC COUNTY

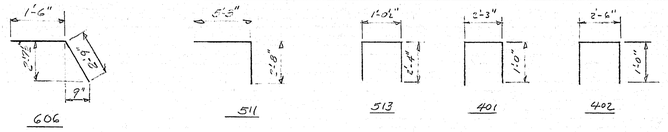
APPROACH SLABS

SHEET 84 OF 109 AUGUSTA, MAINE SEPT. 1969

123-153

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	85	109

ABUTMENTS



BENT BARS

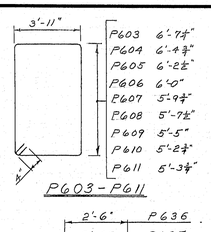
MARK	SIZE	LENGTH	ABUTMENT #1 NORTH & SOUTH BOUND: NO. NORTH	ABUTMENT #1 NORTH & SOUTH BOUND: NO. SOUTH	ABUTMENT #2 NORTH & SOUTH BOUND: NO. NORTH	ABUTMENT #2 NORTH & SOUTH BOUND: NO. SOUTH	TOTAL	LOCATION
606	6	4'-5"	27	27	27	27	108	Approach Slabs
511	5	7'-11"	44	44	44	44	176	Breastwall
SR*	5	5'-8"	24	24	24	24	96	Wings
401	4	4'-3"	10	10	10	10	40	Bearing Areas
402	4	4'-6"	10	10	10	10	40	Bearings Areas
STRAIGHT BARS								
701	4	3'-9"	14	14	12	12	52	Back of Backwalls
601	6	24'-0"	32	32	32	32	128	Footings
602	4	8'-4"	20	—	—	—	20	↓
603	4	3'-0"	20	40	40	40	140	
604	4	1'-3"	16	16	16	16	64	↓
605	6	7'-3"	78	78	78	78	312	Footings
515	6	25'-0"	—	—	3	3	6	Backwall
616	6	8'-3"	—	—	3	3	6	Backwall
801	8	11-6	24	24	24	24	96	Inside Face of Wings
501	5	15'-8"	22	22	20	20	84	Outside face of wings
502	4	11'-6"	6	6	8	8	28	Curbs & Wings
503		2'-0"	54	54	54	54	216	Wings
504		6'-7"	8	8	—	—	16	Certain Walls
505		7'-7"	46	46	46	46	184	Wings
506		19'0"	20	20	18	18	76	Backwall & Breastwall
507		25'-0"	20	20	18	18	76	Backwall & Breastwall
508		7'-11"	88	88	88	83	352	Backwall
509		3'-3"	44	44	44	44	176	Backwall & Breastwall
510	4	6'-6"	44	44	44	44	176	Backwall & Breastwall
512	5	2'-9"	44	44	44	44	176	Face of Breastwall
514	5	5'-10"	—	—	8	8	16	Curtain Wall
517	5	5'-5"	—	—	2	2	4	Curtain Wall

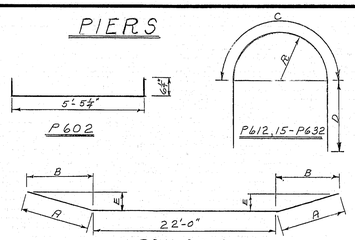
APPROACH SLABS

401	4	40'-0"	36	36	36	36	144
403	4	13'-3"	—	20	—	—	60
403	4	21'-0"	20	—	—	—	20
601	6	25'-2	44	64	64	64	236
602	6	42'-0"	118	96	96	96	406

Design & Detail: G.O.T. Check: Chandler

PIERS





Mark	A	B	E
P901	9'-4"	9'-2⅜"	1'-5"
P902	9'-6"	9'-4⅝"	1'-10"
P903	10'-1"	9'-11"	1'-11¾"
P904	10'-4"	10'-1⅜"	1'-11¾"

Mark	D	R	C
P612	2'-0"	2'-7⅞"	8'-2⅝"
P615	1'-1"	1'-7⅞"	5'-6⅝"
P616	4'-3"	1'-11⅝"	6'-1"
P617	4'-5"	2'-1⅝"	6'-7⅝"
P618	4'-7"	2'-3⅝"	7'-1⅞"
P619	4'-9"	2'-5⅝"	7'-8"
P620	4'-11"	2'-7⅝"	8'-2⅛"
P621	5'-1"	2'-9⅝"	8'-8⅛"
P622	5'-3"	2'-11⅝"	9'-2⅛"
P623	5'-5"	3'-1⅝"	9'-9"
P624	5'-7"	3'-3⅝"	10'-3⅛"
P625	5'-9"	3'-5⅝"	10'-9⅛"
P626	5'-11"	3'-7⅝"	11'-4"
P627	6'-1"	3'-9⅝"	11'-10⅛"
P628	6'-3"	3'-11⅝"	12'-4⅛"
P629	6'-5"	4'-1⅝"	12'-10⅛"
P630	6'-7"	4'-3⅝"	13'-5"
P631	6'-9"	4'-5⅝"	13'-11⅛"
P632	6'-11"	4'-7⅝"	14'-5⅛"

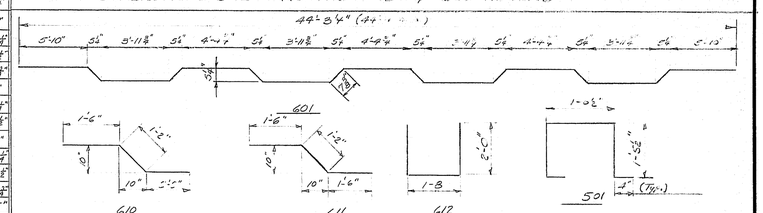
BENT BARS

Mark	Size	Length	NORTH BOUND: Pier1 No.	Pier2 No.	Pier3 No.	Pier4 No.	SOUTH BOUND: Pier1 No.	Pier2 No.	Pier3 No.	Pier4 No.	Total	Location
P602	6	6'-6"	33	33	33	33	33	33	33	33	264	Cap
P603		21'-9"	34	34	34	34	34	34	34	34	272	↑
P604		21'-4"	4	4	4	4	4	4	4	4	32	
P605		20'-11"	↑	↑	↑	↑	↑	↑	↑	↑	↑	
P606		20'-6"										
P607		20'-2"										
P608		19'-9"										
P609		19'-4"										
P610		19'-0"	↓	↓	↓	↓	↓	↓	↓	↓	↓	
P611		19'-2"	4	4	4	4	4	4	4	4	32	↑
P612		12'-3"	10	10	10	10	10	10	10	10	80	Cap
P615		13'-9"	2	2	2	2	2	2	2	2	16	Shaft
P616		14'-7"	↑	↑	↑	↑	↑	↑	↑	↑	↑	
P617		15'-6"										
P618		16'-4"										
P619		17'-2"										
P620		18'-1"										
P621		18'-11"										
P622		19'-9"										
P623		20'-7"										
P624		21'-6"										
P625		22'-4"										
P626		23'-2"	↑								↑	
P627		24'-1"	2				↓				16	
P628		24'-11"	—				2				14	
P629		25'-9"	—				—				12	
P630		26'-7"	—	2			—	2			12	
P631		27'-6"	—	—	↓	↓	—	—	↓	↓	8	↓
P632		28'-4"	—	—	2	2	—	—	2	2	8	Shaft
P635		8'-8"	10	10	10	10	10	10	10	10	80	Cap
P636	6	7'-8"	15	15	15	15	15	15	15	15	120	↑
P901	9	36'-8"	2	2	2	2	2	2	2	2	16	
P902		41'-0"	2	2	2	2	2	2	2	2	16	
P903		42'-2"	2	2	2	2	2	2	2	2	16	↓
P904	9	42'-8"	1	1	1	1	1	1	1	1	8	Cap
STRAIGHT BARS												
P601	6	19'-3"	12	12	12	12	12	12	12	12	96	Cap
P613		4'-8"	8	8	8	8	8	8	8	8	64	Cap
P614		13'-0"	26	32	36	36	28	32	36	36	262	Shaft
P633		14'-0"	31	31	31	31	31	31	31	31	248	Distribution Slab
P634	6	38'-0"	13	13	13	13	13	13	13	13	104	Distribution Slab
P905	9	7'-6"	38	38	38	38	38	38	38	38	304	Shaft & Cap
P906		23'-0"	38	38	38	38	38	38	38	38	304	Shaft & Cap
P907		20'-6"	—	—	38	38	—	—	38	—	114	Shaft
P908		21'-6"	—	—	—	—	—	—	—	38	38	↑
P909		11'-0"	38	—	—	—	—	—	—	—	38	
P910		13'-0"	—	—	—	—	38	—	—	—	38	↓
P911	9	17'-0"	—	38	—	—	—	38	—	—	76	Shaft
P1001	10	14'-0"	16	16	16	16	16	16	16	16	128	Distribution Slab
P1002	10	38'-0"	8	8	8	8	8	8	8	8	64	Distribution Slab
P1101	11	43'-1"	12	12	12	12	12	12	12	12	96	Cap
P1102	11	5'-10"	38	38	38	38	38	38	38	38	304	Distribution Slab & Shaft
P1103	11	5'-9"	44	44	44	44	44	44	44	44	352	Seal & Distribution
P1104	11	40'-9"	8	8	8	8	8	8	8	8	64	Cap
P1105	11	38'-3"	4	4	4	4	4	4	4	4	32	Cap

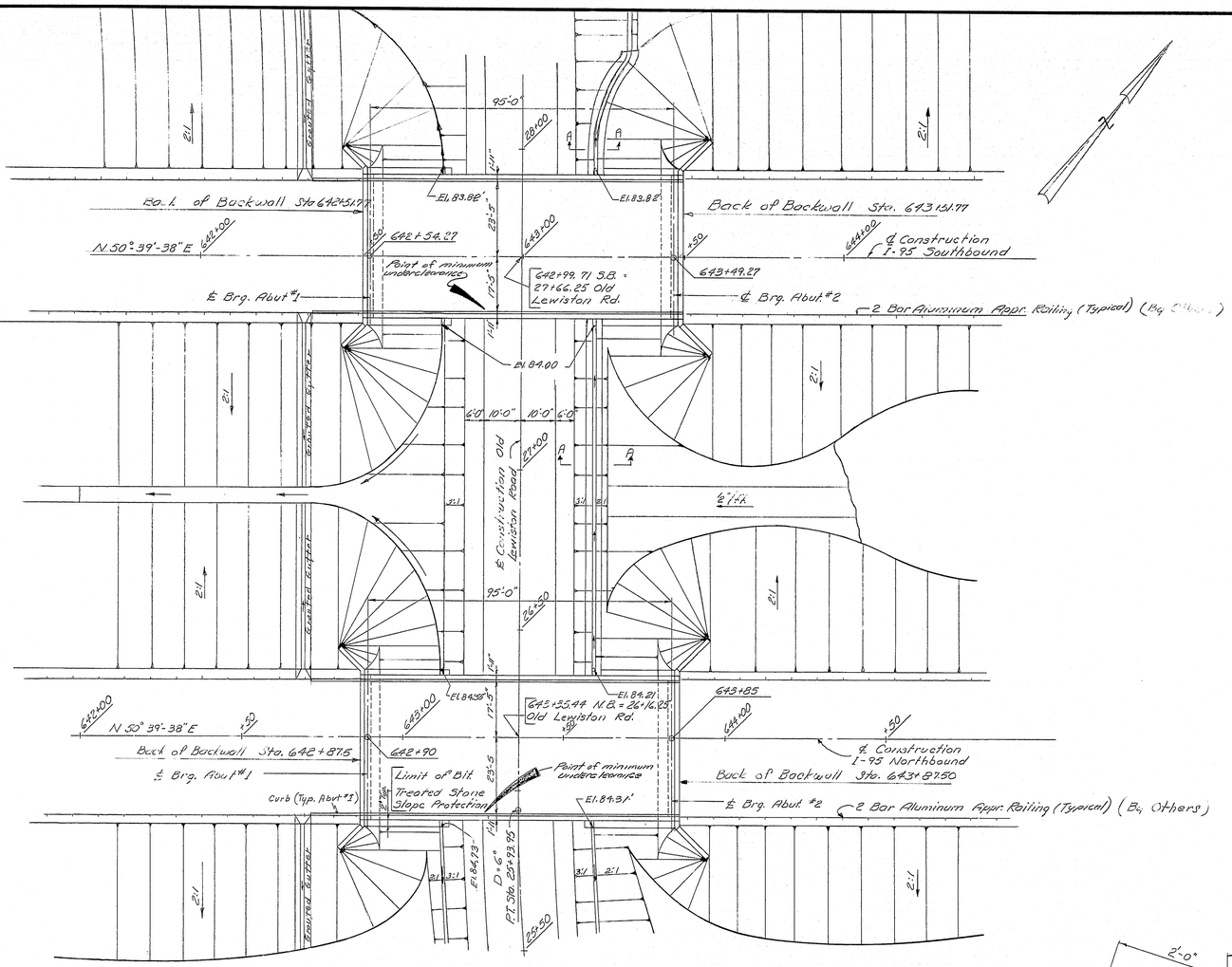
Design H.L.D. Detail N.E.R. Trace N.E.R. Check: C.D.H. 5/69

Note: All dimensions to ℄ of bars.

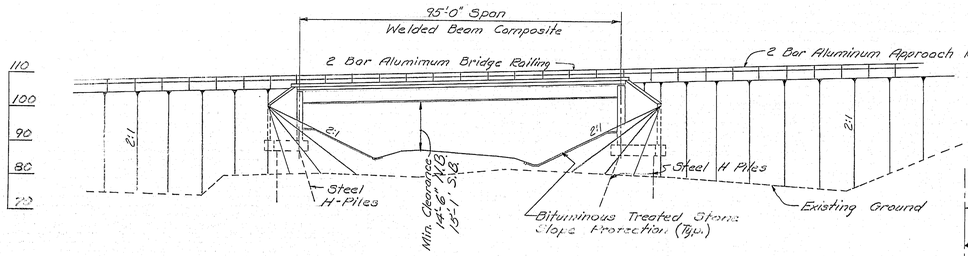
SUPERSTRUCTURE NORTHBOUND & SOUTHBOUND


44'-3¼" (44'-3 11/32")
5'-10"
5'-5"
5'-11⅞"
5'
4'-11½"
5'
5'-11⅞"
5'
4'-9½"
5'
5'-4½"
5'
5'-0"
5'
5'-0"
5'
5'-0

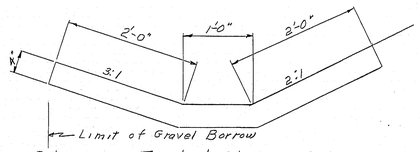
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	86	109



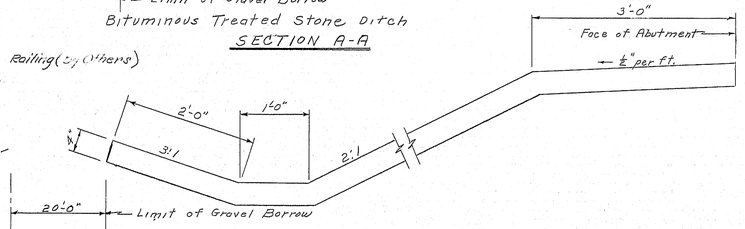
PLAN
Scale: 1" = 20.0'



ELEVATION
Scale: 1" = 20.0'
Both Bridges are Similar



Bituminous Treated Stone Ditch
SECTION A-A



SECTION
Bituminous treated Stone Slope Protection
Typical all Abuts.

SPECIFICATIONS

Design: AASHO Standard Specifications for Highway Bridges 1965 Interim Specifications 1966 and 1967.
Contract: State of Maine, State Highway Commission, Standard Specifications for Highways and Bridges, Revision of June 1968 and Supplements.

LOADING

HS 20-44 as modified for Interstate

ALLOWABLE STRESSES

Concrete ~ f_c = 1200 p.s.i. n = 10
Reinforcing Steel, Intermediate Grade ~ f_s = 20,000 p.s.i.
Structural Steel, A36 = 20,000 p.s.i., A572 (Grade 50) = 27,000 p.s.i.
A307 = 13,500 p.s.i. A108 Grade 1016 to 1030 = 20,000 psi.

STRUCTURAL STEEL CLASSIFICATION

Girders - See Sheet # 94
Anchor Bolts - A36 or A307 & Pins ~ A108 or A36
All other - A36 unless noted

CONCRETE CLASSIFICATION

Abutments & Superstructure Slab shall be Class A.
Wearing Surface shall be Class Y.

DESIGN- H. L. P. Date: 1.6.69
TRACE- G.B.T.
CHECK- [illegible]
BRIDGE NO.
SURVEY-
PLOT-

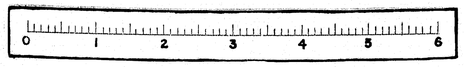
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

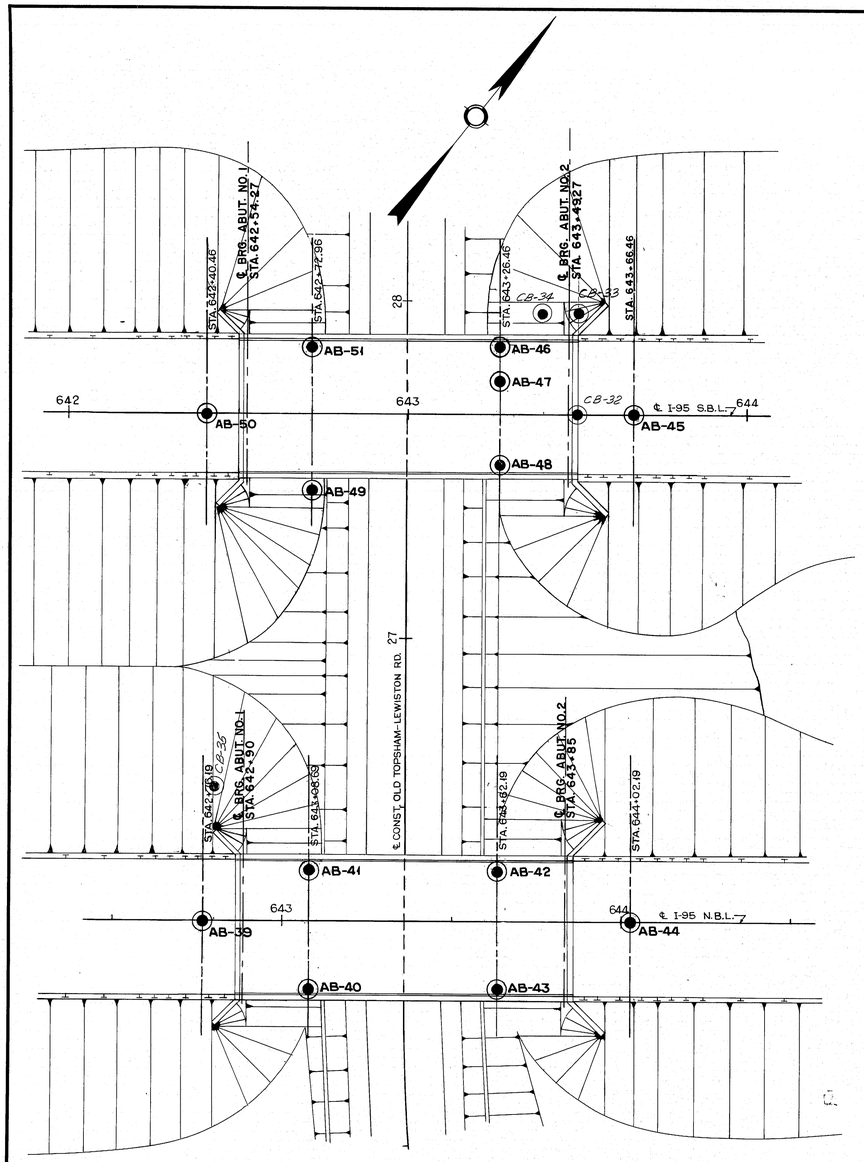
GENERAL PLAN

SHEET 86 OF 109 AUGUSTA, MAINE SEPT. 1969

123-155

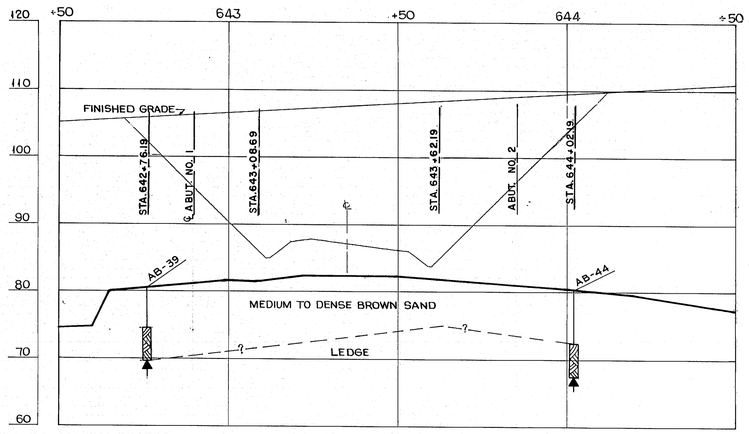


B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-75-5(15)	87	109

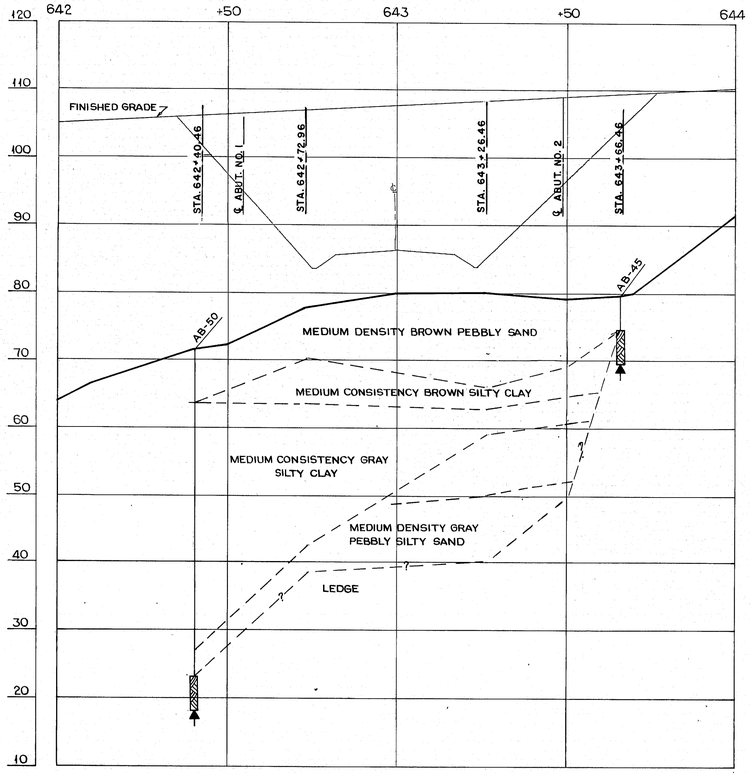


PLAN
SCALE : 1" = 20'

PROFILE - N.B.L.

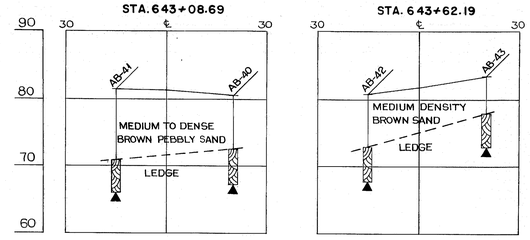


PROFILE - S.B.L.

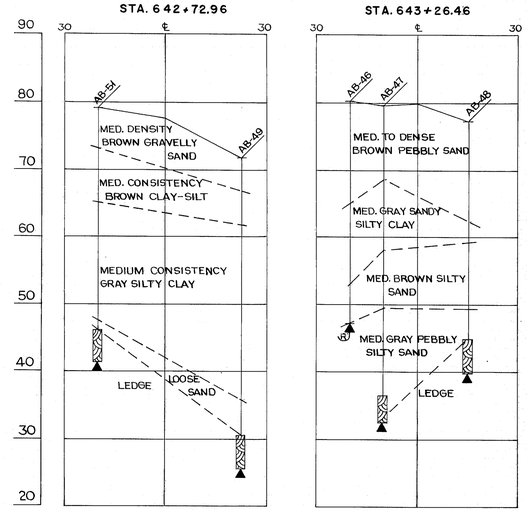


TRANSVERSE SECTIONS

N.B.L.



S.B.L.



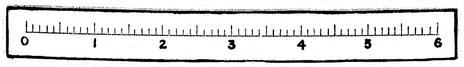
DESIGN– TRACE– CHECK–	BRIDGE NO. SURVEY– PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD TOPSHAM-LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY
FOUNDATION SURVEY

SHEET 87 OF 109 AUGUSTA, MAINE April 1987

123-156



B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	88	109

BORING AB-50
STA. 642+40 ℄ S.B.L.

DRIVING RESISTANCE BLOWS/FT. | VANE SHEAR STRENGTH TONS/SQ.FT. | WATER CONTENT PERCENT

ELEV. 71.5

MEDIUM DENSITY BROWN VERY FINE SILTY SAND — 45, 40 — 1D

1C

2C H

3C H — LL-42.5 RL.-22.8 — 41.5

MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK SPOTS AND STREAKS AND DISTURBED SAND LINES & LAYERS — 4C H — LL-43.0 RL-22.4

5C H

6C H

MC H

MC — 60, 151, 285, 200

DENSE GRAY SAND AND ROCKS

LEDGE SURFACE 23.0

LEDGE: INTERBEDDED BIOTITE GNEISS AND PEGMATITE — 80%

BORING AB-49
STA. 642+73 23'RT. S.B.L.

DRIVING RESISTANCE BLOWS/FT. | VANE SHEAR STRENGTH TONS/SQ.FT. | WATER CONTENT PERCENT

ELEV. 71.9

BROWN SAND AND SMALL BOULDERS — 71, 40 — MD

MEDIUM CONSISTENCY BROWN SILTY CLAY — 1C

2C H — LL-40.8 RL.-22.0

3C H MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK STREAKS AND SPOTS AND DISTURBED SAND LAYERS — LL-41.1 RL. 22.1

4C

5C H

6C H

LOOSE DENSITY BROWN & GRAY SILTY GRAVELLY SAND — 45, 60, 40, 58 — 1D

LEDGE SURFACE 30.65

LEDGE: INTERBEDDED BIOTITE GNEISS & PEGMATITE — 100%

BORING AB-51
STA. 642+73 20'LT. S.B.L.

DRIVING RESISTANCE BLOWS/FT. | VANE SHEAR STRENGTH TONS/SQ.FT. | WATER CONTENT PERCENT

ELEV. 79.3

MEDIUM DENSITY BROWN GRAVELLY SAND — 76, 60, 47 — 1D

MEDIUM CONSISTENCY BROWN FINE SANDY SILT — 46, 46, 50 — 2D

1C H

2C H MEDIUM CONSISTENCY GRAY SILTY CLAY WITH BLACK STREAKS AND SPOTS AND A FEW SAND LINES AND LAYERS

3C H

4C H

BROWN SAND — 100

LEDGE SURFACE 46.3

LEDGE: INTERBEDDED BIOTITE GNEISS AND PEGMATITE — 83%, 66%

BORING AB-48
STA. 643+26 15'RT. S.B.L.

DRIVING RESISTANCE BLOWS / FT. 20 . 40

ELEV. 77.3

MEDIUM DENSITY BROWN PEBBLY SAND AND BOULDERS — 81, 65 — 1D

2D — MEDIUM DENSITY BROWN PEBBLY SAND — 80, 60

3D — MEDIUM CONSISTENCY BROWN LAYERED CLAYEY SILT WITH SAND LINES — 75, 130

4D — 70, 80, 120

MEDIUM TO DENSE BROWN SILTY PEBBLY SAND — 132, 110, 63, 79

5D — 157, 100

MEDIUM DENSITY GRAY SILTY SAND WITH FEW PEBBLES — 75, 69, 62, 91

6D

LEDGE SURFACE 44.8 — 100

100% LEDGE: BIOTITE GNEISS AND PEGMATITE

BORING AB-47
STA. 643+26 10'LT. S.B.L.

DRIVING RESISTANCE BLOWS/FT. | VANE SHEAR STRENGTH TONS/SQ.FT. | WATER CONTENT PERCENT

ELEV. 79.7

1D — MEDIUM DENSITY BROWN PEBBLY SAND — 85, 300, 270, 91

2D — MEDIUM CONSISTENCY BROWN SILTY CLAY WITH SILT LINES AND SCATTERED PEBBLES — 43, 60, 40, 51

1C — LL-48.0 PL-24.7 — 43, 41

MED. CONSISTENCY GRAY SANDY SILTY CLAY WITH BLACK STREAKS AND SAND AND SILT LINES — 45, 42.2 — 2C

3D — MEDIUM DENSITY BROWN FINE SILTY SAND WITH A FEW PEBBLES — 40, 80, 60, 40, 56, 65, 43

4D — 40, 60, 56, 60, 58

MD — MEDIUM DENSITY GRAY GRAVELLY SAND — 70, 91, 200, 284, 185, 160, 194, 239, 300

MD — 40% ASSORTED BOULDERS, 60% LEDGE SURFACE 33.7

PROBABLE LEDGE- PEGMATITE

NOTE: ALL CASING SIZES ARE 2 ½"

BORING AB-39
STA. 642+76 ℄ N.B.L.

DRIVING RESISTANCE BLOWS / FT. 20 40

ELEV. 81.4

MEDIUM DENSITY BROWN GRAVELLY SAND — 102, 100, 150 — 1D

LEDGE SURFACE 75.4

LEDGE: GRANITE PEGMATITE — 89%, 59%

BORING AB-40
STA. 643+08 20'RT. N.B.L.

DRIVING RESISTANCE BLOWS/FT. 20 40

ELEV. 80.6

MEDIUM DENSITY BROWN SAND WITH PEBBLES IN LOWER PORTION — 110, 170 — 1D

LEDGE SURFACE 72.6

LEDGE: BIOTITE GNEISS AND GRANITE PEGMATITE — 75%, 75%, 75%

BORING AB-41
STA. 643+08 15'LT. N.B.L.

DRIVING RESISTANCE BLOWS/FT. 20 40

ELEV. 81.4

MEDIUM DENSITY BROWN-FINE PEBBLY SAND WITH SOME SILT LAYERS IN LOWER PORTION — 1D

2D — 6" — 83%

LEDGE SURFACE 70.9

LEDGE: GRANITE PEGMATITE — 83%

BORING AB-42
STA. 643+62 15'LT. N.B.L.

DRIVING RESISTANCE BLOWS/FT. 20 40

ELEV. 80.8

MEDIUM DENSITY BROWN SAND — 1D

LEDGE SURFACE 72.8

85% LEDGE: BIOTITE GNEISS AND GRANITE PEGMATITE

BORING AB-43
STA. 643+62 20'RT. N.B.L.

DRIVING RESISTANCE BLOWS / FT. 20 40

ELEV. 83.4

MEDIUM DENSITY BROWN SAND — 71, 100 — 1D

6" — LEDGE SURFACE 77.9 — 100%

LEDGE: BIOTITE GNEISS AND GRANITE PEGMATITE — 100%

BORING AB-44
STA. 644+02 ℄ N.B.L.

DRIVING RESISTANCE BLOWS/FT. 20 40

ELEV. 78.3

MEDIUM DENSITY BROWN FINE SAND — 76, 71 — 1D

LEDGE SURFACE 70.3

LEDGE: GRANITE PEGMATITE AND BIOTITE GNEISS — 100%, 100%

BORING AB-46
STA. 643+26 20'LT. S.B.L.

DRIVING RESISTANCE BLOWS/FT. | VANE SHEAR STRENGTH TONS/SQ.FT. | WATER CONTENT PERCENT

ELEV. 80.2

40, 45, 40 — 1D

MEDIUM DENSITY BROWN SAND WITH LARGE PEBBLES — 200, 85, 45 — MD

45, 65, 64, 45 — 2D

MEDIUM CONSISTENCY GRAY SANDY SILTY CLAY WITH BLACK SPOTS AND A FEW DISTURBED SAND LINES AND LAYERS — 41, 45, 40 — 1C H

LL-31.7 PL-17.8 — 44, 40, 33, 30, 28, 31, 34, 34

2C H — 27% Boulder — 80

MEDIUM DENSITY FINE BROWN SILTY SAND — LL-17.1 PL-13.8

BORING AB-45
STA. 643+66 ℄ S.B.L.

DRIVING RESISTANCE BLOWS / FT. 20 40

ELEV. 79.7

MEDIUM DENSITY BROWN SAND — 121, 95

LEDGE SURFACE 74.7

80% LEDGE: BIOTITE GNEISS AND PEGMATITE

DESIGN–	BRIDGE NO.
TRACE–	SURVEY–
CHECK–	PLOT–

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD TOPSHAM-LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY
FOUNDATION SURVEY

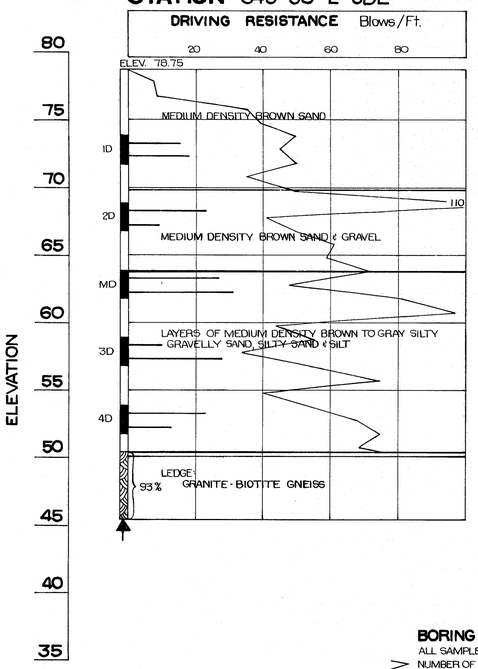
SHEET 88 OF 109 AUGUSTA, MAINE April 1969

123-157

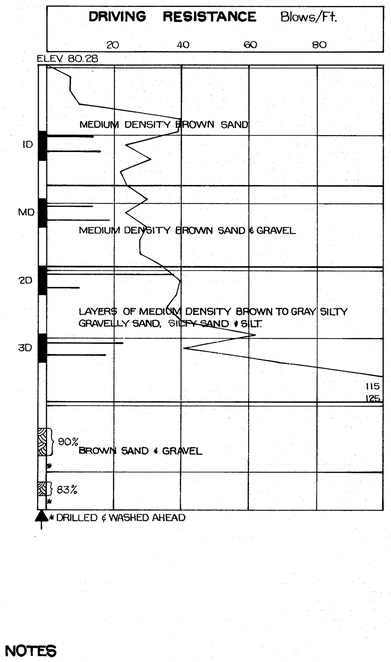
0 1 2 3 4 5 6

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	89	109

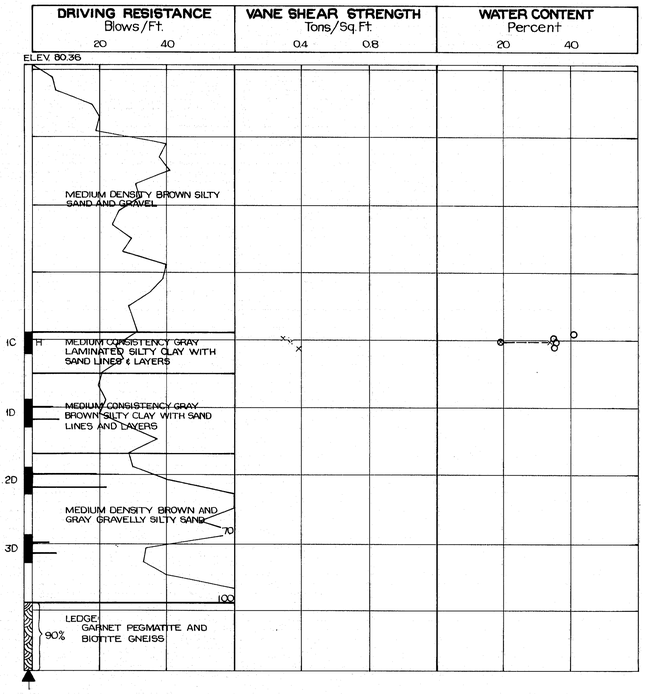
BORING CB-32 (69)
STATION 643+50 ℄ SBL



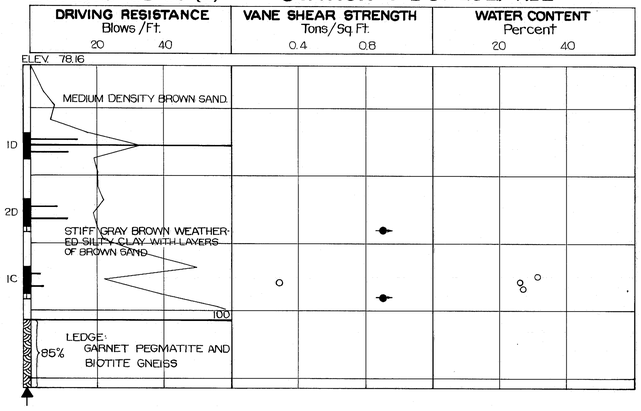
BORING CB-33 (69)
STATION 643+50 30'LT SBL



BORING CB-34 (69)
STATION 643+40 30'LT. SBL



BORING CB-35 (69)
STATION 642+80 40'LT NBL



BORING NOTES

ALL SAMPLES AND VANES ARE MADE AHEAD OF CASING

- NUMBER OF BLOWS REQUIRED TO DRIVE EXTRA HEAVY CASING ONE FOOT WITH 400 FT LBS. OF ENERGY PER BLOW
- LOCATION OF SAMPLE OR SAMPLE ATTEMPT
- NUMBER AND TYPE OF DRY SAMPLE
  - 1D 5⅛ H SAMPLER "1290's
  - 1C 2" O.D. 16 GA. SEAMLESS TUBING
  - 1U 3½ O.D. 16 GA. SEAMLESS TUBING
- MD UNSUCCESSFUL SAMPLE ATTEMPT AND TYPE OF SAMPLER
- NUMBER OF BLOWS REQUIRED TO DRIVE SPOON OR TUBING ONE FOOT WITH 350 FT LBS OF ENERGY PER BLOW
- H SAMPLING SPOON OR SEAMLESS TUBING DRIVEN BY STATIC WEIGHT OF DRILL RODS AND HAMMER
- P PISTON SAMPLER
- H FIELD VANE TEST
- ▲ BOTTOM OF BORING (MAY NOT BE BOTTOM OF SOIL STRATA)
- R ▲ REFUSAL OF DRILL RODS OR CASING (MAY NOT BE LEDGE)
- 77% LOCATIONS CORED BY DIAMOND BIT AND PER CENT RECOVERY OF ROCK

SHEAR NOTES

- • FIELD VANE SHEAR STRENGTH
- x LABORATORY VANE SHEAR STRENGTH
- → SHEAR STRENGTHS IN EXCESS OF CAPACITY OF EQUIPMENT
- O ONE HALF UNCONFINED COMPRESSIVE STRENGTHS

WATER CONTENT NOTES

- O NATURAL WATER CONTENTS, GIVEN AS PER CENT OF DRY WEIGHT
- ⊗—x PLASTIC AND LIQUID LIMITS

IGNITION LOSSES ARE GIVEN AS PERCENT OF DRY WEIGHT

PLANS	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

JANUARY 1968

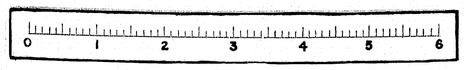
STATE HIGHWAY COMMISSION

INTERSTATE 95
OVER
OLD TOPSHAM - LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY
FOUNDATION SURVEY

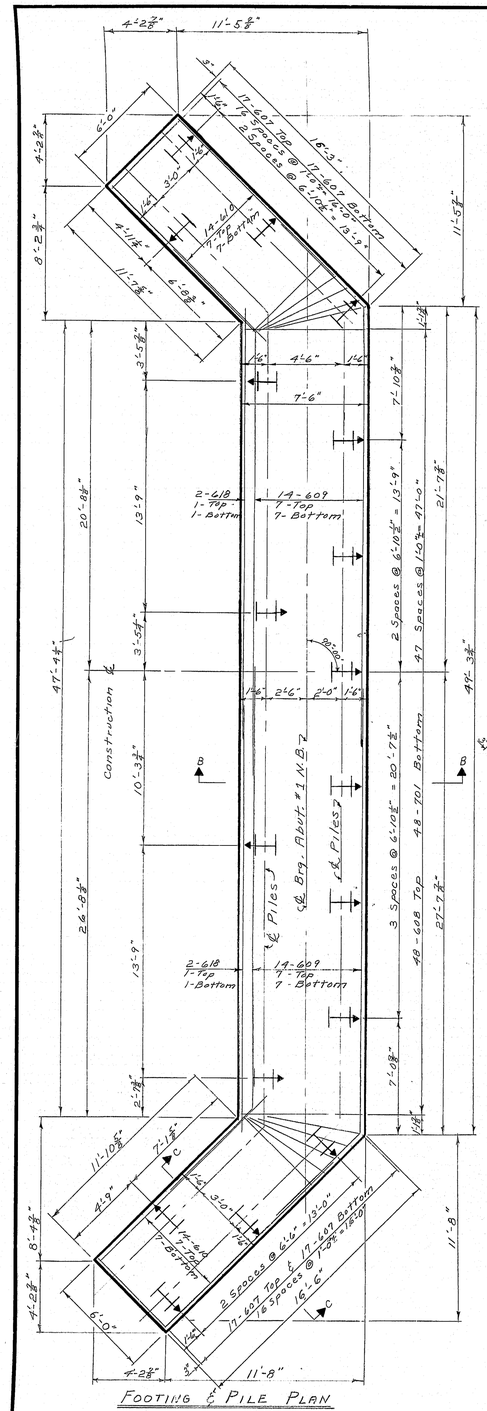
SHEET 89 OF 109 AUGUSTA, MAINE April 1969

123-158

2034 2080



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	90	109

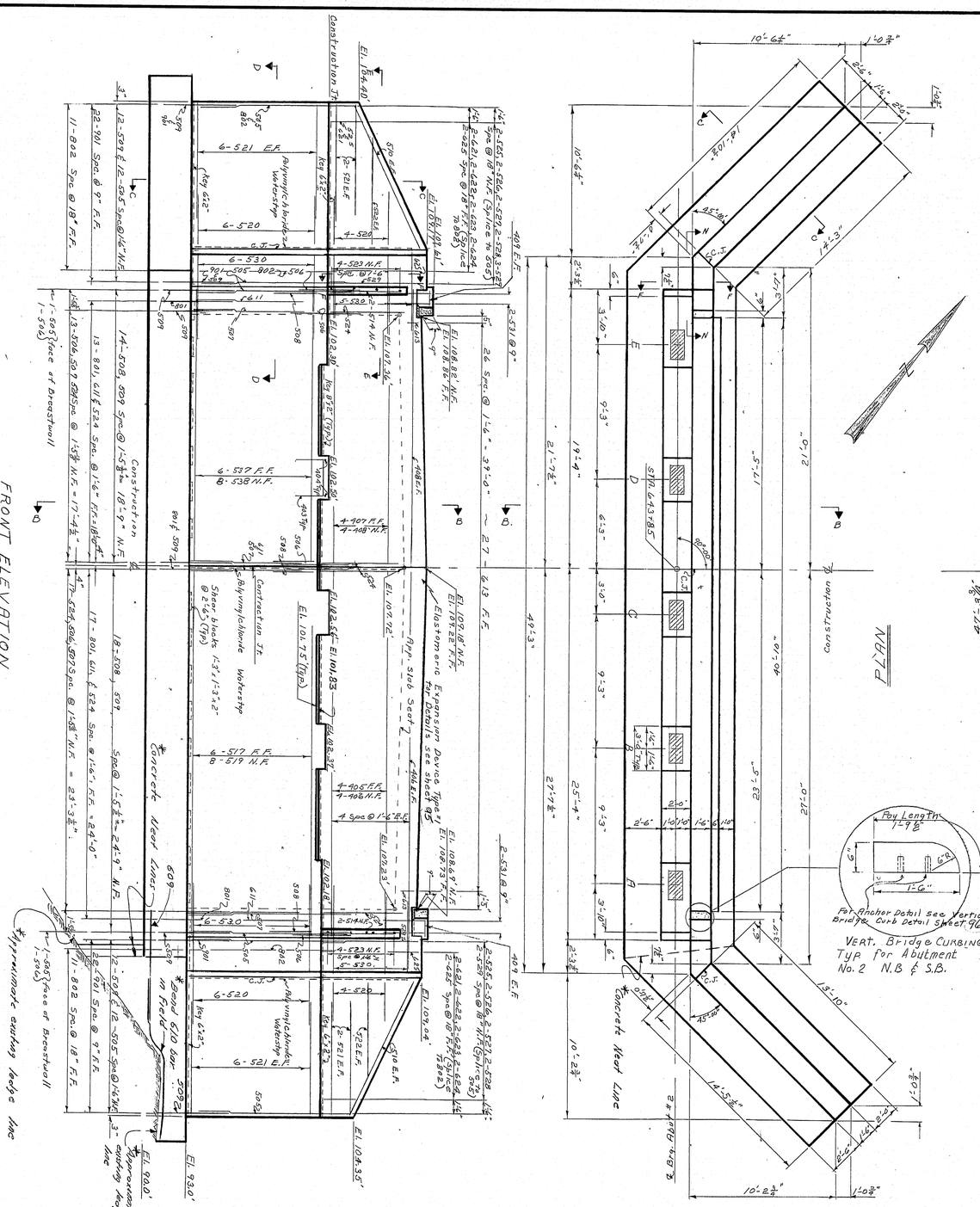

4'-2⅞"
11'-5⅞"
6'-0"
3'-0"
1-#6
17-#07 Top
17 Spaces @ 6'-10⅝" = 9'-0"
16'-3"
17-#07 Bottom
17 Spaces @ 6'-10⅝" = 9'-0"
14-#6 Top
7-Bottom
4'-1¼"
11'-7⅜"
6'-0⅜"
8'-2⅜"
11'-5⅞"
4'-6"
7'-6"
7'-10⅞"
20'-8⅜"
13'-9"
3'-5⅞"
2-#8
1-Top
1-Bottom
14-#09
7-Top
7-Bottom
2 Spaces @ 6'-10⅝" = 13'-9"
47 Spaces @ 10⅜" = 41'-0"
21'-7⅞"
47'-9¼"
49'-3⅜"
10'-3⅞"
24'-8⅜"
℄ Brg. Abut #1 N.B.
℄ Piles
3 Spaces @ 6'-10⅝" = 20'-7⅞"
48-#08 Top
48-#01 Bottom
27'-7⅞"
2'-7⅛"
7'-10⅞"
11'-10⅝"
7'-1⅝"
4'-1⅜"
3'-2"
2 Spaces @ 6'-6" = 13'-0"
17-#07 Top & 17-#09 Bottom
18 Spaces @ 1'-0" = 18'-0"
16'-6"
6'-0"
4'-2⅜"
8'-1⅝"
11'-8"
FOOTING & PILE PLAN
8'-2⅜"
8'-9"
12'-4⅛"
45°-00'
11'-9"
4'-1"
6"
Level
2½"
3'-3⅜"
3'-10"
9'-3"
6'-3"
3'-0"
℄ Grouted Gutter
STA. 642+69.5
Transition from curb Elevs. to a level Elev. 106.81
E
D
C
B
A
22'-0"
17'-5"
40'-10"
57'-3"
℄ Construction
℄ Brg. Abut #1 N.B.
SECTION E-E
Similar all abutments
#02
#05
#11
#16
#17
#12
#13
#19
#14
#24
#23
#22
#21
#18
#15
#20
#10
#09
#08
#07
#06
#04
#03
#01
524 @ 1'-5⅝"
405 or 407
406 or 408
3'-0" min.
4-#83
90°-00'
Sta. 642+90
SECTION D-D
Similar all abutments
℄ Grouted Gutter
STA. 642+69.5
Note:
For Curb Details
See Sheet 96
G
H
12'-0"
45°-00'
12'-7⅞"
8'-11⅝"
Transition from Curb Elevs to a level Elev 106.69
℄ Brg. Abut #1 N.B.
Elev. 91.50'
Elev. 88.50'
Elev. 102.30'
2-#10 2-#12 2-#15 1-#18 #20
Spc. @ 18" N.F. (Splice in Stem)
2-#15 2-#16 2-#17 1-#19
2-#14 Spc. @ 18" F.F. (Splice in #02)
532 E.F.
523 E.F.
541 E.F.
5-530
4-523 N.F.
Spc. @ 1'-6"
4-521 E.F.
Polyvinylchloride waterstop C.J.
Key 6"x2"
Armored Joint See Detail in Sheet #96
Elev. 106.69 N.F.
Elev. 106.81 F.F.
Elev. 104.82
Elev. 104.98
524 E.F.
4-408 N.F.
4-407 F.F.
408 E.F.
B-538 N.F.
6-537 F.F.
Construction Jt.
Polyvinylchloride waterstop
Elev. 100.66
Elev. 100.82
3-531@1'-9"
1'-3"
Elev. 106.69 N.F.
Elev. 106.81 F.F.
2-#14 Spc. @ 18" N.F. (Splice in #05)
2-#15 2-#16 2-#17 2-#19
2-#14 Spc. @ 18" F.F. (Splice in #02)
532 E.F.
523 E.F.
541 E.F.
5-530
4-523 N.F.
Spc. @ 1'-6"
4-521 E.F.
6-521 E.F.
Key 6"x2"
Polyvinylchloride Waterstop
Elev. 102.82
Elev. 102.98
Elev. 100.66
Elev. 100.82
Elev. 102.82
Elev. 102.98
Elev. 99.42
Elev. 99.58
Elev. 97.50
Elev. 97.66
Elev. 94.66
Elev. 94.82
Elev. 91.50
Elev. 91.66
Elev. 88.50
Elev. 88.66
Elev. 102.20'
Construction Jt.
PLAN
FRONT ELEVATION
26 Spc. @ 1'-6" = 39'-0" ~ 27-613 F.F.
℄ Construction
℄ Brg. Abut #1 N.B.
℄ Brg. Abut #2 S.B.
Elev. 105.75 N.F.
Elev. 105.92 F.F.
Elev. 105.92 N.F.
Elev. 106.08 F.F.
App. slab seat
4 Spcs @ 1'-6" = 6'-0"
4-406 N.F.
4-408 F.F.
406 E.F.
443 & 444 (Typ.)
#08
#09
#10
#11
#12
#13
#14
#15
#16
#17
#18
#19
#20
#21
#22
#23
#24
#25
#26
#27
#28
#29
#30
#31
#32
#33
#34
#35
#36
#37
#38
#39
#40
#41
#42
#43
#44
#45
#46
#47

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	91	109

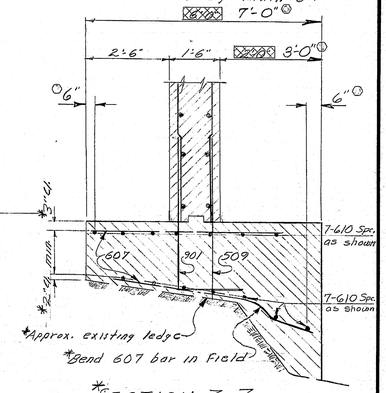
Notes:
For sections B-B; C-C; D-D;
E-E & F-F See Sheet No. 90

For Abutment Notes see sheet 90
For Pile Notes see sheet 90
For Construction Joint detail see sheet 92
For Polyvinylchloride Waterstop see sheet 92

For section N-N see sheet 93



*REVISIONS:
Revisions made by R.T.A. 6-8-70
" by N.W.T. 6-9-70



*____ Revised dimension or line
*____ Pile to be omitted.
*____ Relocated Pile
~~old item~~ Dimension or wording to be omitted.
○ Revised 9-8-70 H.L.D.
Checked P.J.L.
▨ Void dimension
○ Revised dimension

LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
C.J. = Contraction Joint

DESIGN- H.L.D. DETAIL N.E.R.
TRACE- N.E.R. & A.D.D.
CHECK- P.J.L.
BRIDGE NO.
SURVEY-
PLOT-

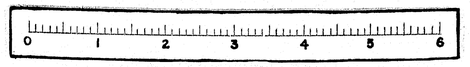
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

ABUTMENT NO.2. NORTHBOUND

SHEET 91 OF 109 AUGUSTA, MAINE SEPT. 1969

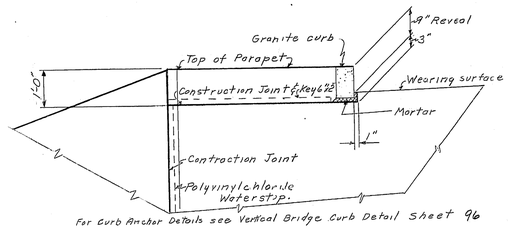
123-160



B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	92	109

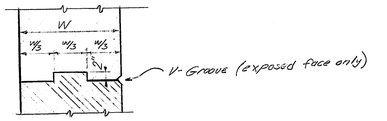
Notes:
For sections B-B; C-C; D-D; E-E & F-F See Sheet No. 90

For Abutment Notes see sheet 90
For Pile Notes see sheet 90

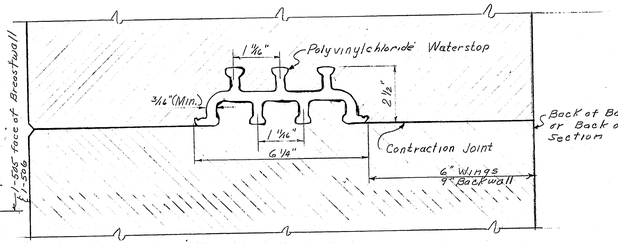


For Curb Anchor Details see Vertical Bridge Curb Detail Sheet 96

SECTION M-M
Typical Abutment #1 N.B. & S.B.
Rotate 180° for opposite Parapet & Curb.



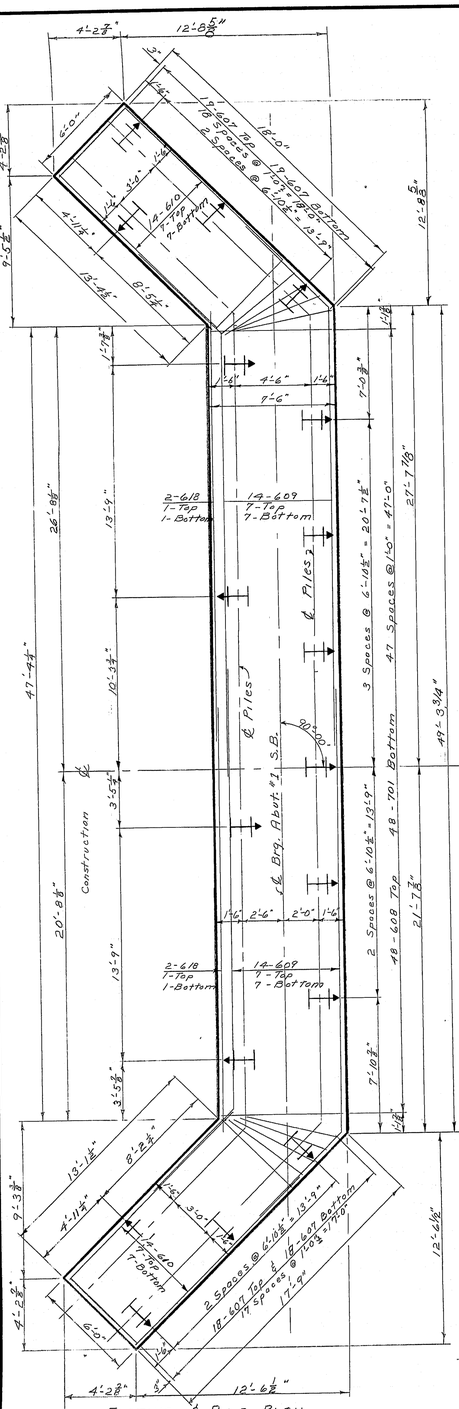
Horizontal Construction Joint Detail

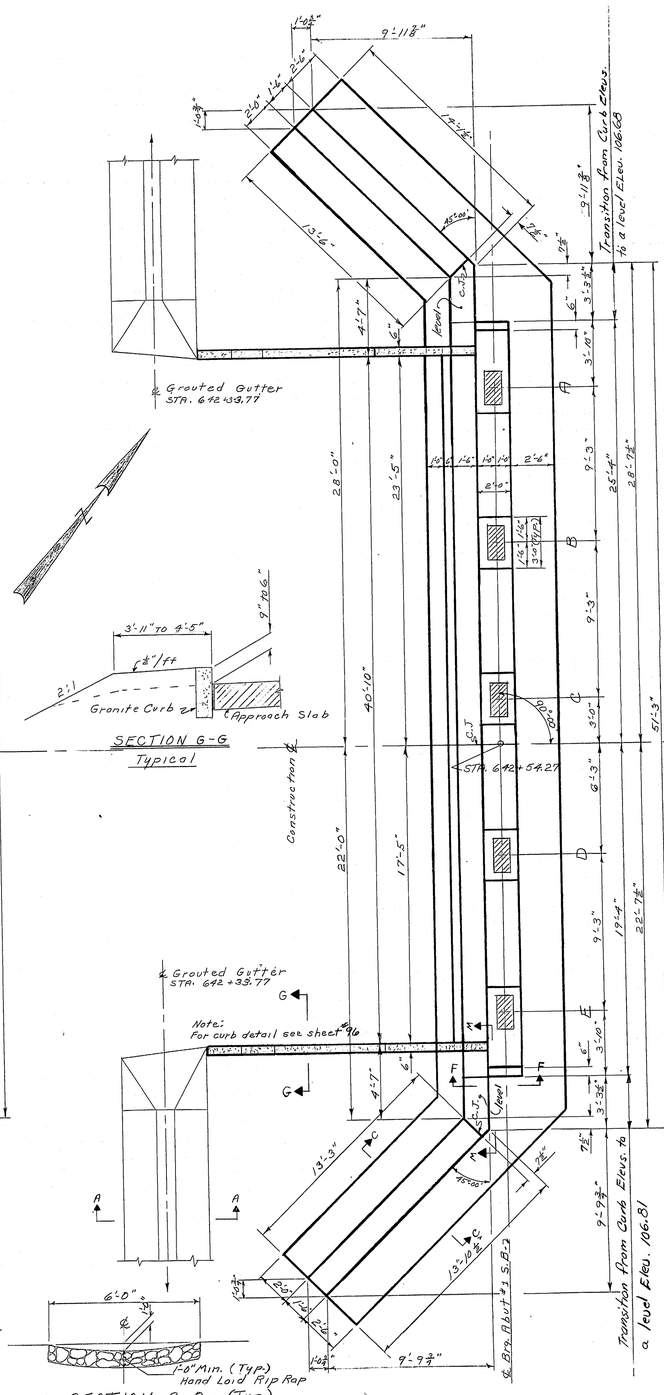


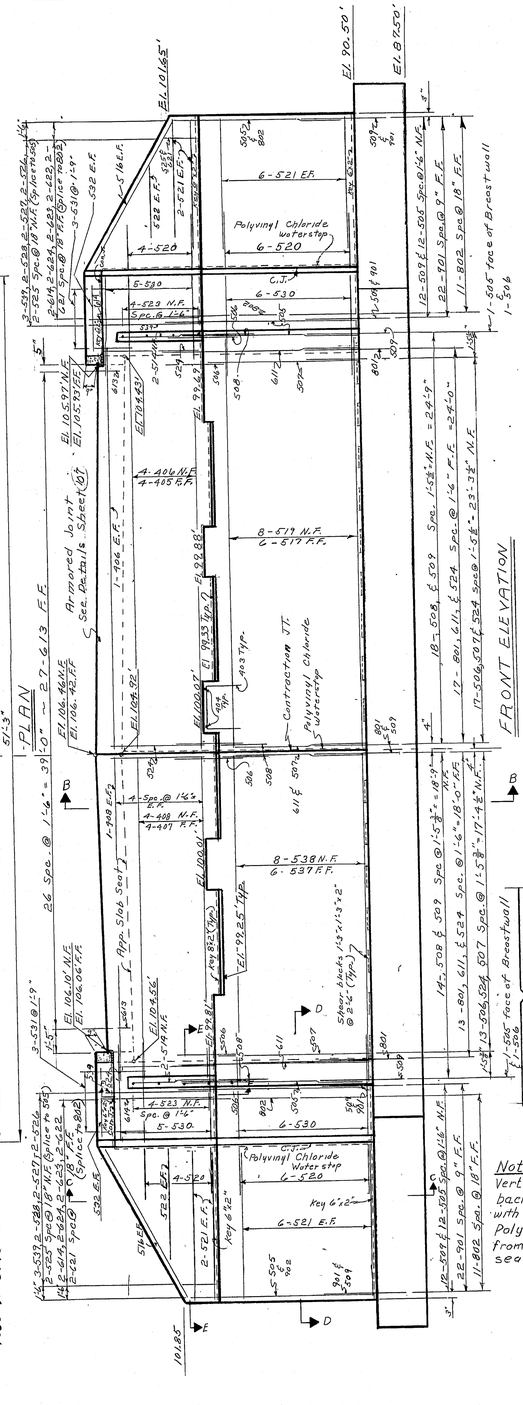
POLYVINYLCHLORIDE WATERSTOP
(PLAN SECTION)

Note:
Vertical Contraction Joints in abutment backwalls, breastwalls & wingwalls shall be sealed with a Polyvinylchloride Waterstop. The Polyvinylchloride Waterstop shall extend from El. top of Footing to approach slab seat or to one foot from top of wing.

LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
C.J. = Contraction Joint
Con.J. Construction Joint



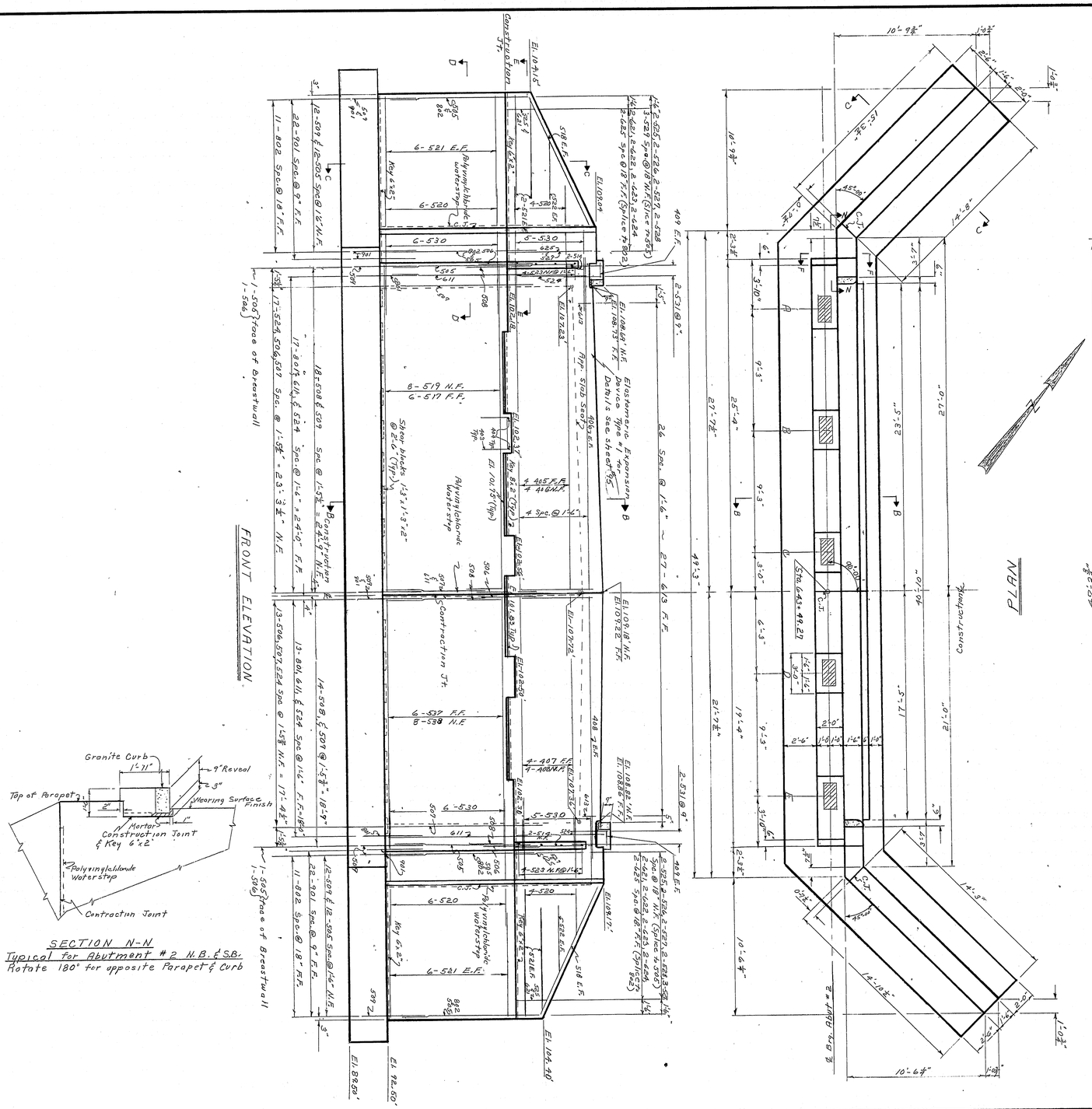




B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	93	109

Notes:
For sections B-B; C-C; D-D;
E-E & F-F see Sheet No. 90

For Abutment Notes see sheet 90
For Pile Notes see sheet
For Construction Joint detail see sheet 90
For Polyvinyl Chloride Waterstop see sheet 92



FRONT ELEVATION

SECTION N-N
Typical for Abutment #2 N.B. & S.B.
Rotate 180° for opposite Parapet & Curb

PLAN

FOOTING & PILE PLAN

LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face
C.J. = Contraction Joint

DESIGN- H.L.D. DETAIL N.E.R.
TRACE- N.E.R.
CHECK- [illegible]
BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

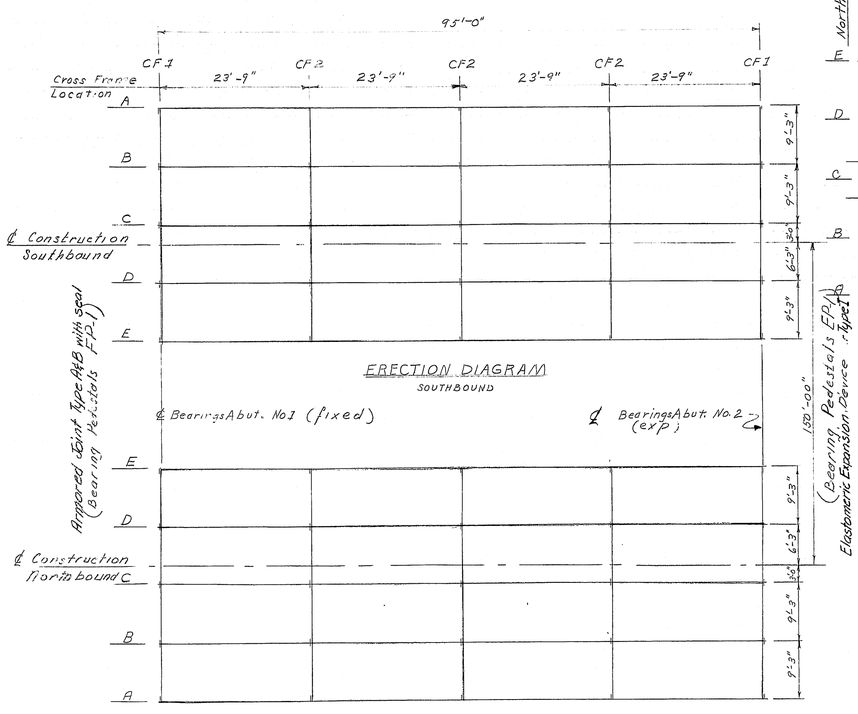
INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

ABUTMENT NO.2. SOUTHBOUND

SHEET 93 OF 109 AUGUSTA, MAINE SEPT. 1969

123-162

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15	94	109



ERECTION DIAGRAM
SOUTHBOUND

ERECTION DIAGRAM
NORTHBOUND

STRUCTURAL STEEL LAYOUT

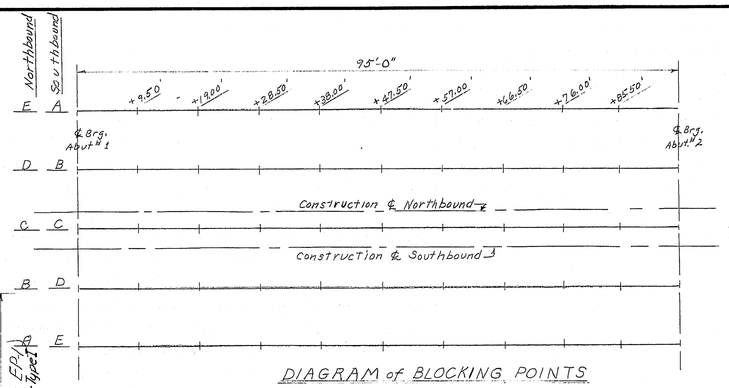
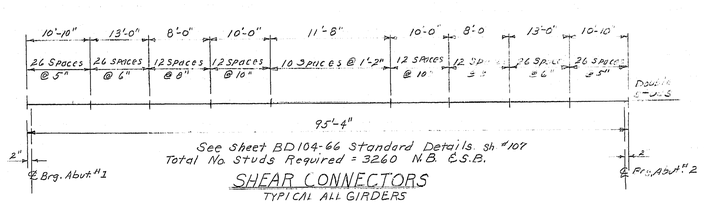


DIAGRAM of BLOCKING POINTS
Northbound & Southbound



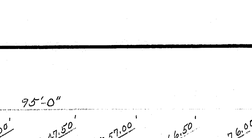
See Sheet BD104-66 Standard Details Sh #107
Total No. Studs Required = 3260 N.B. E.S.B.

SHEAR CONNECTORS
TYPICAL ALL GIRDERS

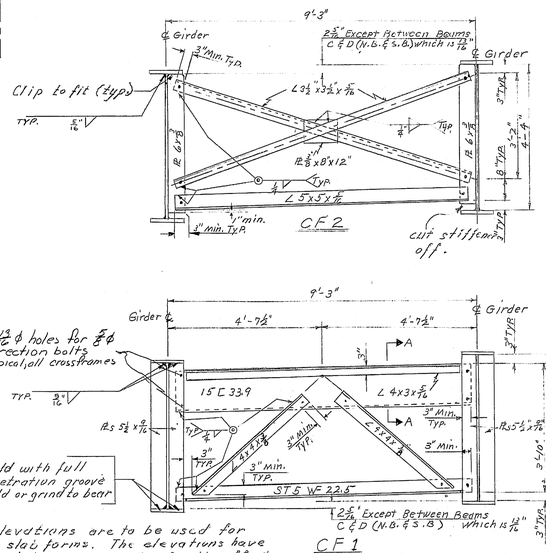
BOTTOM OF SLAB ELEVATIONS *												
	SOUTHBOUND											
Dead Load Deflections	0.0000	0.0675	0.1262	0.1697	0.1969	0.2063	0.1969	0.1697	0.1262	0.0675	0.0000
Line	℄ Bear. Abut #1	+9.50'	+19.00'	+28.50'	+38.00'	+47.50'	+57.00'	+66.50'	+76.00'	+85.50'	℄ Bear. Abut #2
A	105.08	105.42	105.74	106.05	106.35	106.62	106.88	107.12	107.34	107.55	107.74
B	105.28	105.61	105.93	106.24	106.54	106.81	107.07	107.31	107.53	107.74	107.94
C	105.47	105.80	106.13	106.44	106.73	107.01	107.26	107.50	107.72	107.93	108.13
D	105.40	105.73	106.06	106.37	106.66	106.94	107.19	107.43	107.66	107.86	108.06
E	105.21	105.54	105.87	106.18	106.47	106.75	107.00	107.24	107.46	107.67	107.87

BOTTOM OF SLAB ELEVATIONS *												
	NORTHBOUND											
Dead Load Deflections	0.0000	0.0675	0.1262	0.1697	0.1969	0.2063	0.1969	0.1697	0.1262	0.0675	0.0000
Line	℄ Bear. Abut #1	+9.50'	+19.00'	+28.50'	+38.00'	+47.50'	+57.00'	+66.50'	+76.00'	+85.50'	℄ Bear. Abut #2
E	105.21	105.54	105.87	106.18	106.47	106.75	107.00	107.24	107.46	107.67	107.87
D	105.40	105.73	106.06	106.37	106.66	106.94	107.19	107.43	107.66	107.86	108.06
C	105.47	105.80	106.13	106.44	106.73	107.01	107.26	107.50	107.72	107.93	108.13
B	105.28	105.61	105.93	106.24	106.54	106.81	107.07	107.31	107.53	107.74	107.94
A	105.08	105.42	105.74	106.05	106.35	106.62	106.88	107.12	107.34	107.55	107.74

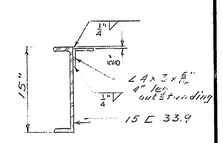
* The above elevations are to be used for setting the slab forms. The elevations have been adjusted to compensate for the effect of dead load deflections.
Before these elevations are established by the Engineer for setting slab forms, the shear connectors shall be welded to top flange of beams, and all Cross-Frame field welding shall be completed.



BLOCKING DETAIL



Note:
Int. crossframes are normal to flanges.



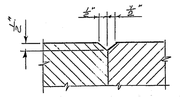
SECTION A-A

CF 1

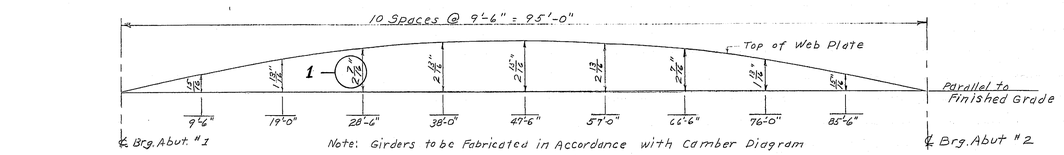
Weld with full penetration groove weld or grind to bear

CROSS FRAMES

Note: After the flange to web welds have been completed, the beam shall be inspected and shall be in accordance with "American Welding Society Specifications for Highway and Railway Bridges" Article 4C.7 before any stiffener or crossframe connection plates are attached to it.

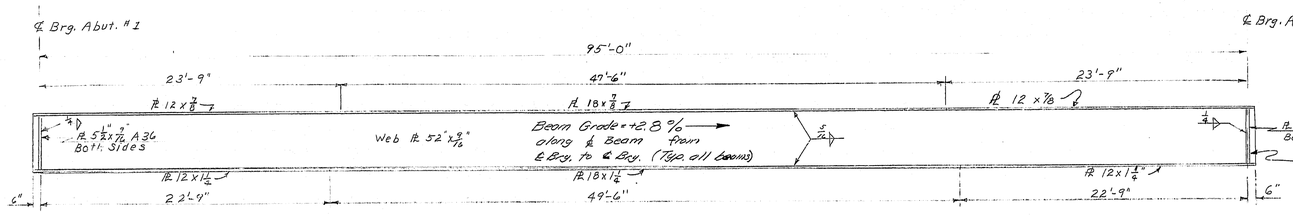


1" V-GROOVE
Detail



Note: Girders to be Fabricated in Accordance with Camber Diagram

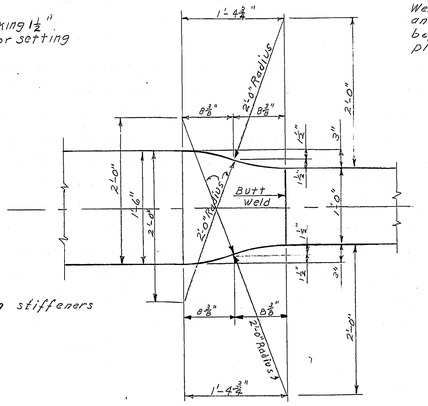
CAMBER DIAGRAM
For all Girders, Northbound & Southbound Structures



Note:
Two flanges PL A36 (Grade 50)
Web PL A572 Grade 50.

TYPICAL GIRDER

For Girder Fabrication Note see sheet 95



FLANGE SPLICE WIDTH TRANSITION

DESIGN- H.L.D. DETAIL N.E.R.
TRACE- L.D.
CHECK- P.J.M.

BRIDGE NO.
SURVEY-
PLOT-

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

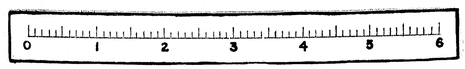
INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

STRUCTURAL STEEL & BLOCKING

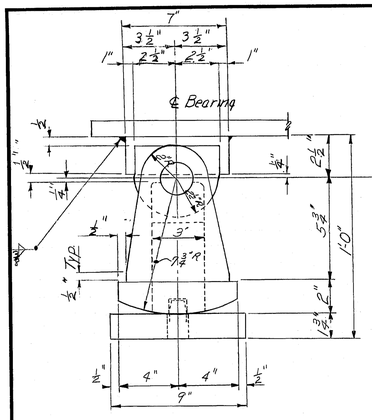
SHEET 94 OF 109 AUGUSTA, MAINE SEPT. 1969

Revision 1 Feb 19 1970 P.J.L. V.H.L.D.

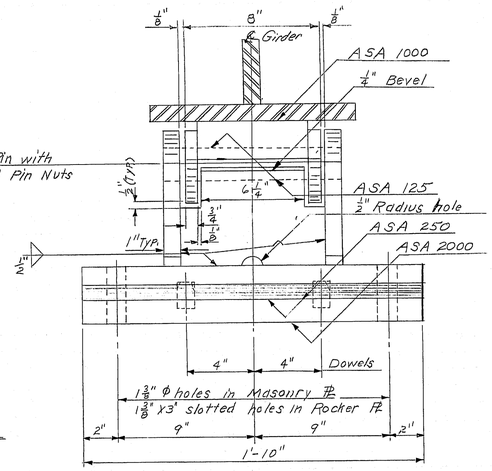
123-163



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	95	109



EP1 - EXPANSION PEDESTAL (Abuts. #2)
10 Required



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 ¼ inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

Fabricate pedestals with ⅜" shop fillet welds unless otherwise shown.

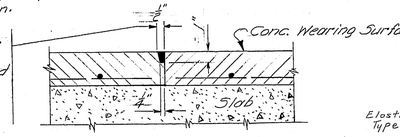
The slot in the wearing surface is to be filled with an approved joint sealer. Slot may be formed as indicated, or after wearing surface has been in place (7) days a groove ¾" wide may be sawed into concrete, 1" deep.

GIRDER FABRICATION NOTE

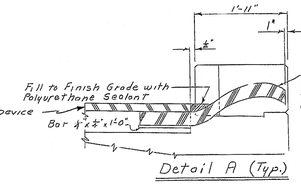
Flanges are to be butt-welded in accordance with specifications and the details shown.

Inspection shall conform with the specifications prior to welding flange to web. Girders to be fitted with shear connectors.

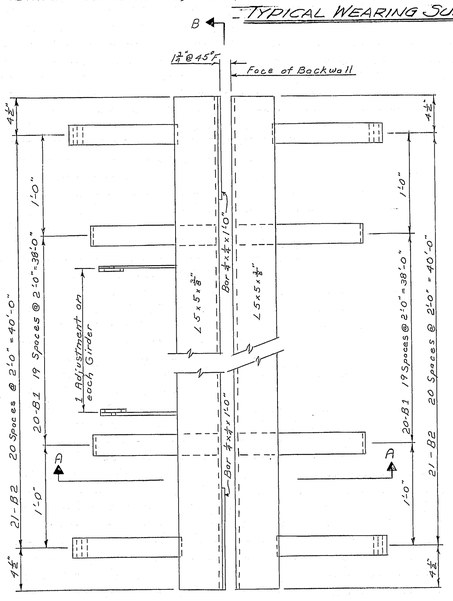
A maximum of two (2) transverse butt weld splices may be used to fabricate the web ℙ. Butt welds shall be made in accordance with; Section 2, Part II, Article 204 Paragraph (d) of the "American Welding Society specifications for Welded Highway and Railway Bridges," and located not less than ten feet from the ℄ of the beam and their location shall be shown on the shop details.

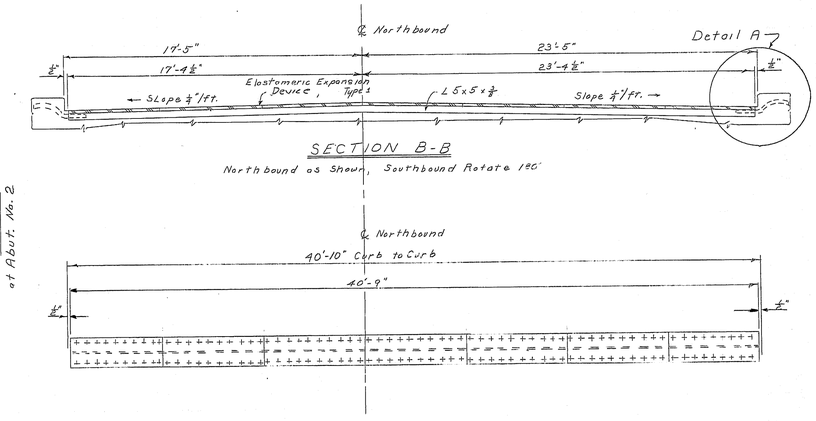


TYPICAL WEARING SURFACE CONSTR. JOINT



Detail A (Typ.)

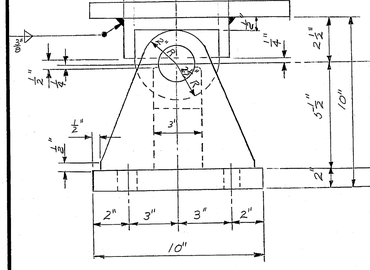




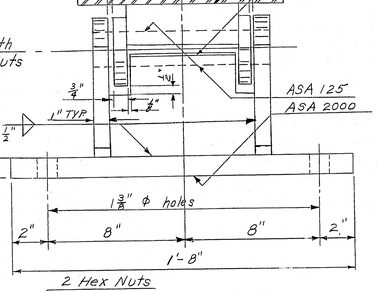
SECTION B-B
Northbound as Shown, Southbound Rotate 180°

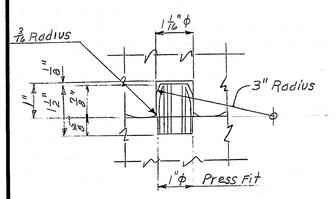
PLAN at Abut. 1 & 2

H.S. BOLT SPACING
Northbound as Shown, Southbound Rotate 180°

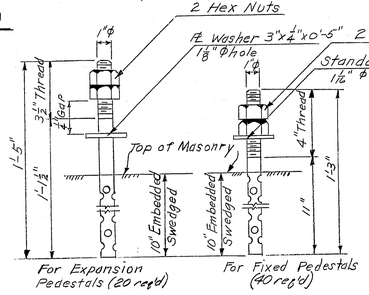


FP1 - FIXED PEDESTAL (Abuts. #1)
10 Required





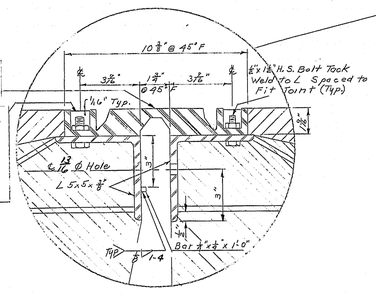
DOWEL DETAIL



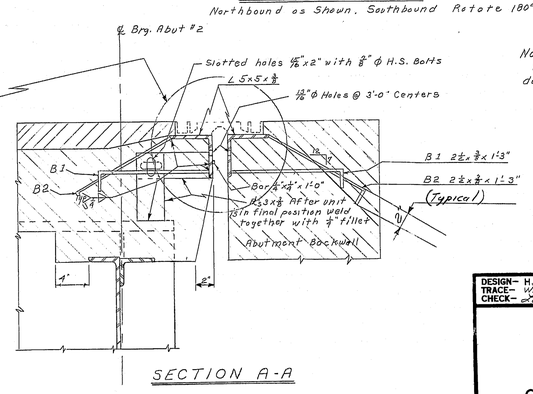
ANCHOR BOLTS

Elastomeric Expansion Device Type I

Fill bolt head pockets, after bolts are tight, to within 1/16" of finish grade with polyurethane sealant, and finish to a smooth and uniform surface



ANCHORAGE FOR ELASTOMERIC EXPANSION DEVICE, TYPE 1
At Abutment #2



SECTION A-A

Note:
Provide for deflection of girders due to dead load in setting anchorages.

DESIGN- H.L.D. DETAIL N.E.R.
TRACE- W.F.S.M.E.
CHECK- C.E.D.

BRIDGE NO.
SURVEY-
PLOT-

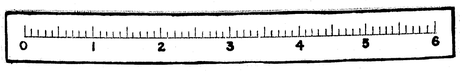
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

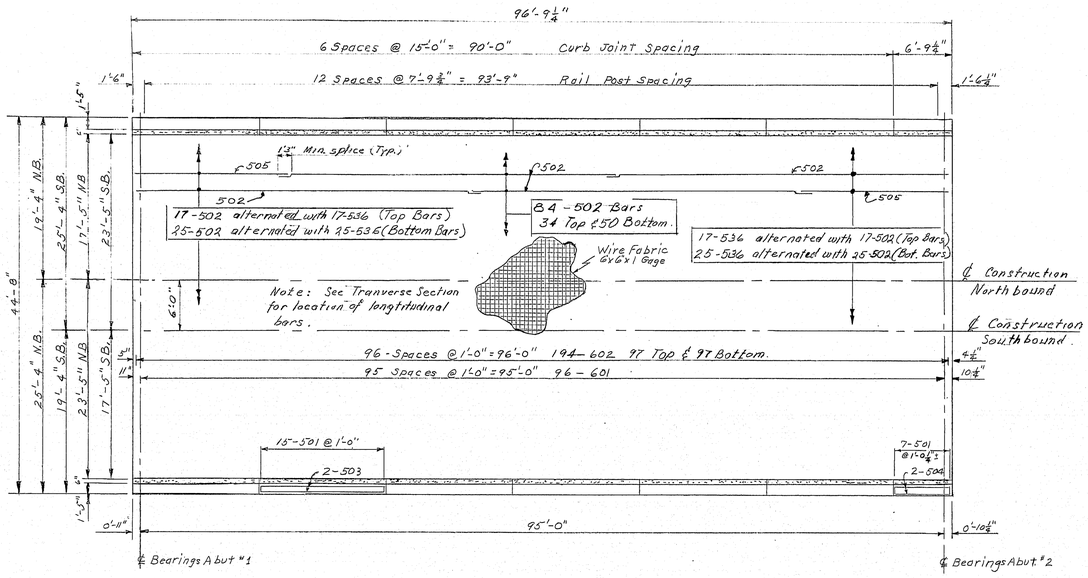
BEARING PEDESTAL & EXPANSION JOINT

SHEET 95 OF 109 AUGUSTA, MAINE SEPT. 1969

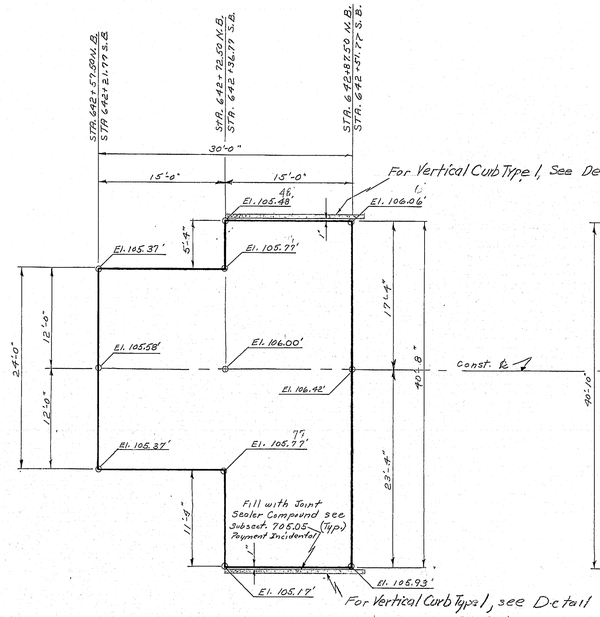
123-164

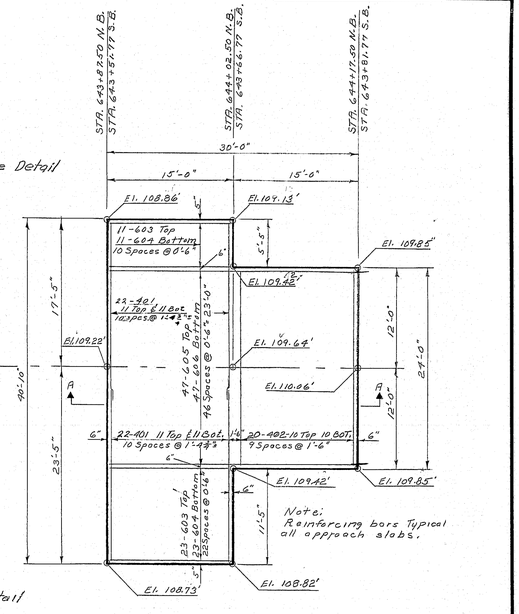


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	96	109



PLAN

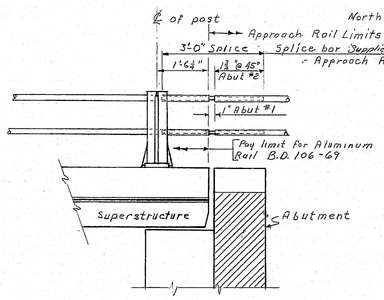




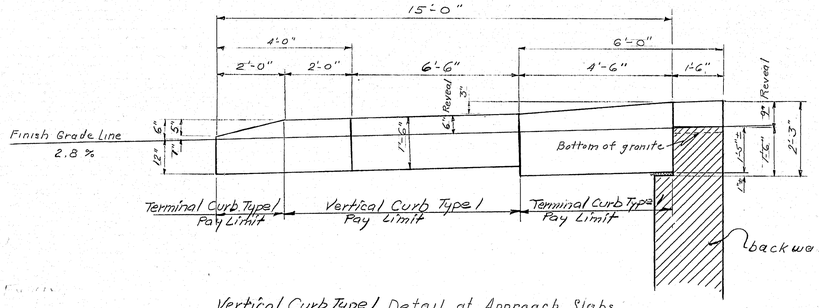
PLAN
APPROACH SLABS

Northbound Shown. Rotate 180° About Const ℄ for Southbound Except as noted

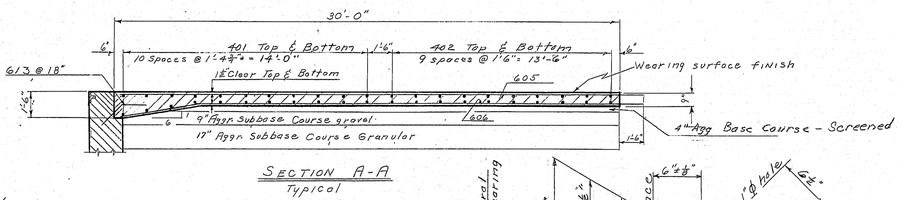
Approach slab concrete to be paid for under Item 502.312 Structural Concrete, Approach Slabs. I-95 over Old Lewiston Road.



SIDE ELEVATION ~ RAIL DETAIL

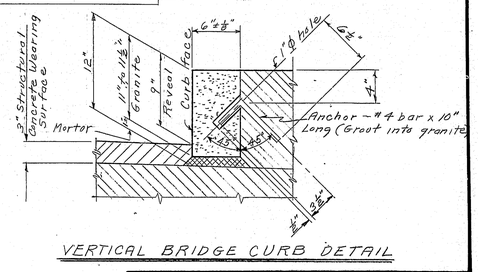


Vertical Curb Type 1 Detail at Approach Slabs
Typical Abut #1 N.B. & S.B.
℄ Construction (N.B. or S.B.)

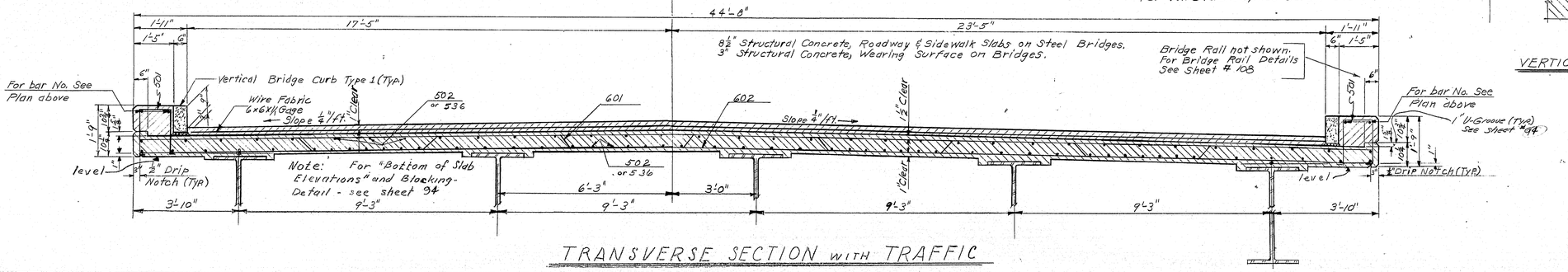


SECTION A-A
Typical

NOTE:
Apply Protective Coating For Concrete Surfaces to Top of Curb, Wearing Surface & Approach Slab.
For Wearing Surface Construction Joint Detail see sheet # 95.
For Wire Fabric Splice Detail see sheet # 97.



VERTICAL BRIDGE CURB DETAIL



TRANSVERSE SECTION WITH TRAFFIC

DESIGN- H.L.D. DETAIL N.E.R. | BRIDGE NO.
TRACE- L.D. & N.E.R. & A.D.D. | SURVEY-
CHECK- R.J.M. | PLOT-

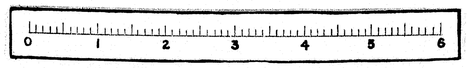
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY

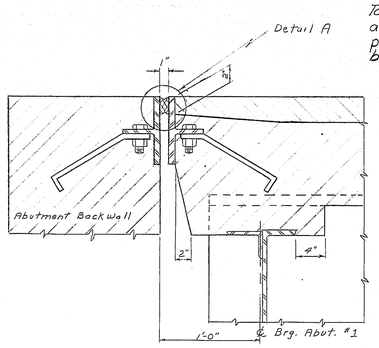
SUPERSTRUCTURE & APPROACH SLAB

SHEET 96 OF 109 AUGUSTA, MAINE SEPT. 1969

123-165

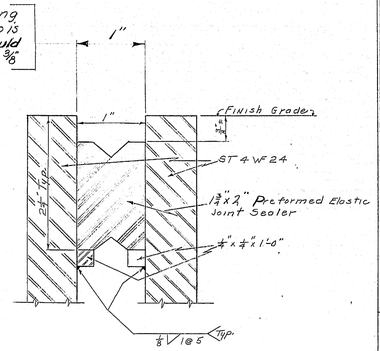


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	I-95-5(15)	97	109

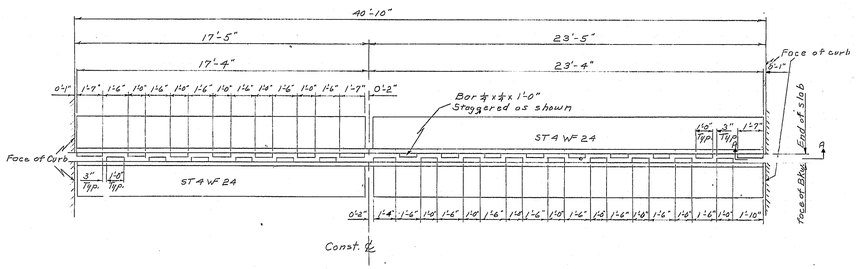


SECTION AT END OF SLAB ABUT. No. 1

To obtain the 1" opening after the concrete slab is placed the opening should be set 5/8" closer or 3/8"

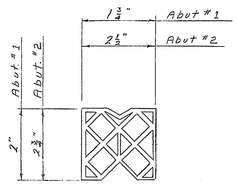


DETAIL A



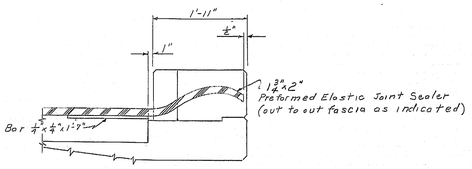
Abutment #1 Armored Joint Showing Spacing of 4" Bars
Northbound shown. For southbound rotate 180°

PLAN



Note
The preformed elastic joint sealer shall be approved by the Engineer before ordering.

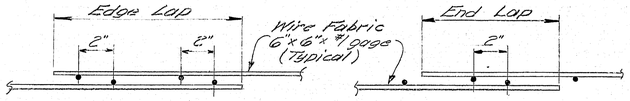
PREFORMED ELASTIC JOINT SEALER



SECTION A-A
Typical

ARMORED JOINT DETAILS
AT ABUTMENT #1

Note:
See 'Standard Detail (BD 104-66) sh.# 107

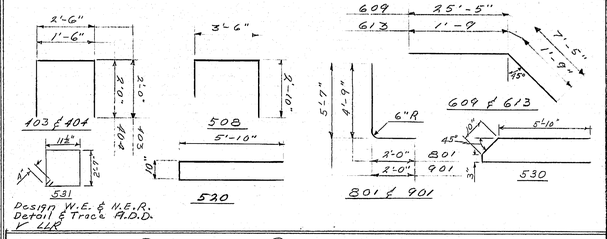


WIRE FABRIC SPLICE DETAIL

Design H.L.D.
Detail & Trace N.E.R.

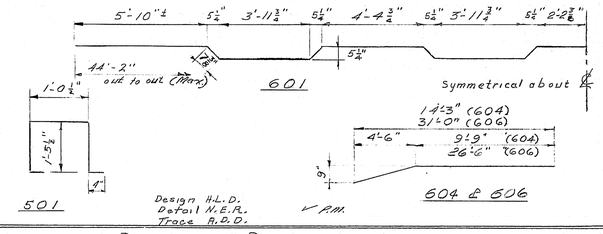
REINFORCING STEEL SCHEDULE

ABUTMENTS



Design W.E. & N.E.R.
Detail & Trace A.D.D.
LLR

SUPERSTRUCTURE



Design H.L.D.
Detail N.E.R.
Trace A.D.D.
RM.

BENT BARS

MARK	SIZE	LENGTH	NB #1	SB #1	NB #2	SB #2	TOTAL	LOCATION
403	4	6'-6"	10	10	10	10	40	Bridge seat
404	4	5'-6"	10	10	10	10	40	" "
531	5	7'-9"	6	6	4	4	20	Backwall
508	5	7'-10"	32	32	32	32	128	Breastwall
520	5	12'-6"	—	20	20	20	60	Breastwall & Backwall
530	5	12'-9"	22	22	22	22	88	" " " "
609	6	32'-10"	28	28	28	28	112	Footing
613	6	3'-6"	27	27	27	27	108	Backwall
801	8	6'-8"	30	30	30	30	120	Footing
901	9	7'-6"	40	44	44	44	172	Footing

STRAIGHT BARS

505	5	10'-5"	24	26	26	26	102	Breastwall & Wings
506		4'-4"	32	32	32	32	128	"
507		7'-6"	30	30	30	30	120	"
509		4'-1"	54	56	56	56	222	Footing
510		14'-0"	—	—	4	—	4	Wing
511		3'-0"	4	—	—	—	4	"
512		4'-1"	4	—	—	—	4	"
513		5'-1"	4	—	—	—	4	"
514		4'-11"	4	4	4	4	16	Wing & Curtainwall
515		6'-5"	2	—	—	—	2	Wing
516		13'-10"	—	4	—	—	4	"
517		22'-11"	6	6	6	6	24	Breastwall & Backwall
518		14'-6"	—	—	4	4	4	Wing
519		25'-0"	8	8	8	8	32	Breastwall & Backwall
521		11'-3"	32	32	32	32	128	Wings
522		8'-6"	4	4	4	4	16	Wings
523		3'-0"	12	8	8	8	36	Curtain & Wing
524		6'-0"	60	60	60	60	240	Backwall & Wing
525		2'-5"	—	4	4	4	12	Wing
526		3'-6"	—	4	4	4	12	"
527		4'-7"	—	4	4	4	12	"
528		5'-7"	—	4	4	4	12	"
529		6'-6"	—	—	6	6	12	"
532		3'-8"	4	4	—	—	8	Backwall
537		10'-11"	6	6	6	6	24	Breastwall & Backwall
538		19'-0"	8	8	8	8	32	" "
539	5	6'-9"	6	6	—	—	12	Backwall
540	5	12'-0"	4	—	—	—	4	Wings
607	6	5'-6"	68	74	76	78	296	Footing
608		7'-0"	48	48	46	46	188	"
610		13'-0"	28	28	28	28	112	"
611		11'-9"	30	30	30	30	120	Breastwall
614		6'-9"	4	4	—	—	8	Wings
615		3'-0"	4	—	—	—	4	"
616		4'-1"	4	—	—	—	4	"
617		5'-1"	4	—	—	—	4	"
618		25'-6"	4	4	4	4	16	Footing
619		6'-5"	2	—	—	—	2	Wing
621		2'-5"	—	4	4	4	12	"
622		3'-6"	—	4	4	4	12	"
623		4'-7"	—	4	4	4	12	"
624		5'-7"	—	4	4	4	12	"
625	6	6'-6"	—	—	4	4	8	"
405	4	22'-11"	4	4	4	4	16	Backwall
406		25'-0"	6	6	6	6	24	"
407		16'-11"	4	4	4	4	16	"
408		19'-0"	6	6	6	6	24	"
409	4	0'-11"	—	—	4	4	8	"
701	7	7'-0"	48	48	46	46	188	Footing
802	8	10'-5"	20	22	22	22	86	Wings

BENT BARS

MARK	SIZE	LENGTH	Northbound	Southbound	TOTAL	Location
501	5	4'-8"	194	194	388	Curbs
601	6	45'-8"	96	96	192	Slab

STRAIGHT BARS

MARK	SIZE	LENGTH	Northbound	South bound	TOTAL	Location
502	5	40'-9"	168	168	336	Slab - Longitudinal
503	5	14'-6"	24	24	48	Curbs
504	5	6'-3"	4	4	8	Curbs
536	5	18'-9"	84	84	168	Slab - Longitudinal
602	6	44'-2"	194	194	388	Slab

APPROACH SLAB

BENT BARS

MARK	SIZE	LENGTH	NB #1	NB #2	SB #1	SB #2	TOTAL
604	6	14'-4"	34	34	34	34	136
606	6	31'-1"	47	47	47	47	188

STRAIGHT BARS

MARK	SIZE	LENGTH	NB #1	NB #2	SB #1	SB #2	TOTAL
401	4	20'-8"	44	44	44	44	176
402	4	23'-6"	20	20	20	20	80
603	6	14'-6"	34	34	34	34	136
605	6	31'-3"	47	47	47	47	188

Note: All dimensions to ℄ of bars.

DESIGN— as noted DETAIL as noted
TRACE— as noted
CHECK— " "

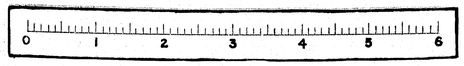
BRIDGE NO.
SURVEY—
PLOT—

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

INTERSTATE 95
OVER
OLD LEWISTON ROAD
IN THE TOWN OF
TOPSHAM
SAGADAHOC COUNTY
ARMORED JOINT & STEEL SCHEDULE

SHEET 97 OF 109 AUGUSTA, MAINE SEPT. 1966

123-166



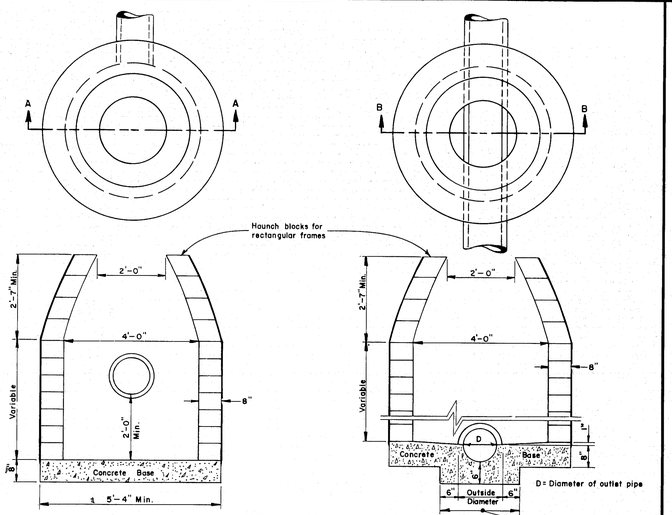
B. P. R. REQ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		98	109

GENERAL NOTES — ALL CATCH BASINS AND MANHOLES

1. Any Catch Basin in excess of 8' in depth shall, if directed be provided with steps similar to those detailed for Manholes.
2. Frames, Grates & Covers shall be considered as part of the structure, and no separate payment shall be made.

GENERAL NOTES — PRECAST CATCH BASINS AND MANHOLES

1. Drain holes in precast sumps to be not over 3" in diameter, and shall be plugged with mortar when constructed.
2. All precast sections of less than 8" wall thickness shall have tongue and groove joints.
3. Cone and Ring sections wall thickness min. 4", max. 8"
4. Minimun wall thickness of sump may be 4" as specified in A.S.T.M. C-478, however, if concrete blocks are used around the inlet and outlet pipes, the wall thickness of sump shall be 8".
5. Wall around inlet and outlet pipes may be built of 8" concrete blocks or a precast ring with an opening 2" larger than the outside diameter of the pipe may be used.
6. Lift Holes shall be provided.

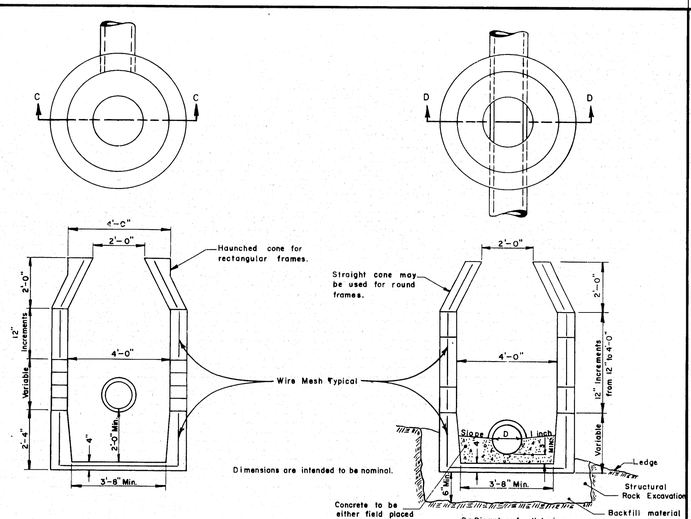


SECTION A-A
SHAPE "1"

Dimensions are intended to be nominal.

SECTION B-B
SHAPE "2"

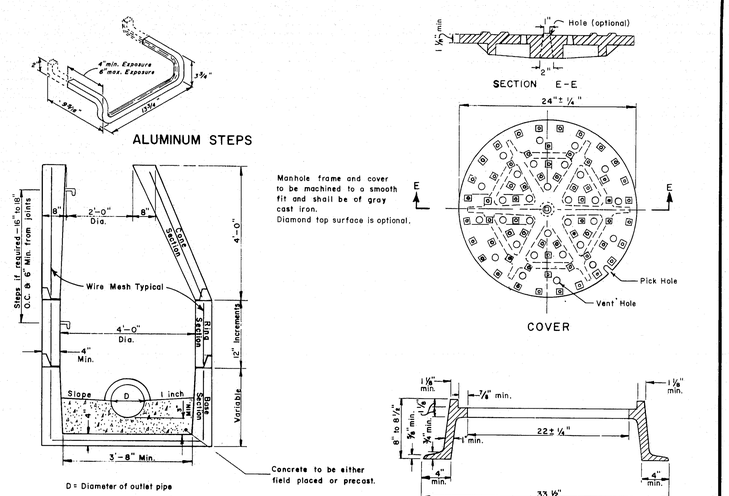
CATCH BASINS (Concrete Blocks or Bricks)



SECTION C-C
SHAPE "3"

SECTION D-D
SHAPE "4"

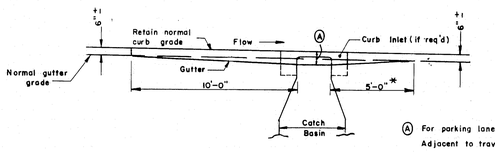
CATCH BASINS (Precast Units)



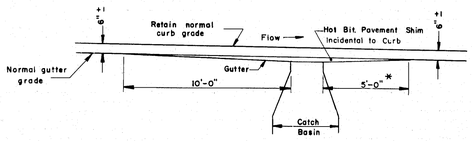
SHAPE "5"

Dimensions are intended to be nominal

MANHOLE



AT CURB INLETS

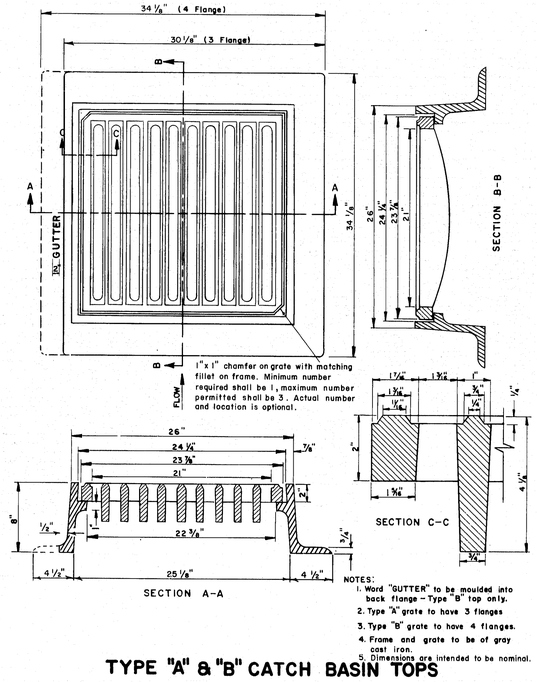


AT CURB WITHOUT INLET STONES

* If at bottom of sag, this dimension to be 10'-0."

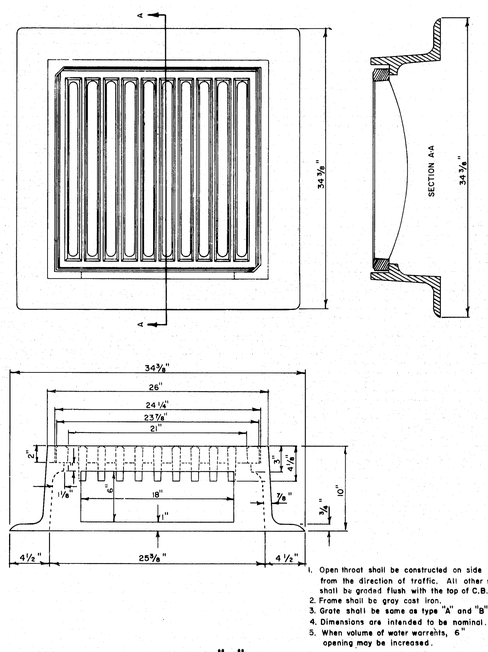
NOTE:
All grates shall be installed on a level grade. The grates shall be depressed 3" below the normal gutter grade unless this depression interferes with traffic.
Dimensions are intended to be nominal.

GUTTER GRADE TRANSITION AT CATCH BASIN



NOTES:
1. Word "GUTTER" to be moulded into back flange - Type "B" top only.
2. Type "A" grate to have 3 flanges
3. Type "B" grate to have 4 flanges.
4. Frame and grate to be of gray cast iron.
5. Dimensions are intended to be nominal.

TYPE "A" & "B" CATCH BASIN TOPS



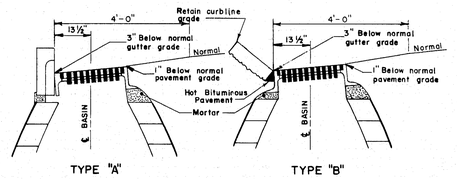
1. Open throat shall be constructed on side away from the direction of traffic. All other sides shall be graded flush with the top of C.B. grate.
2. Frame shall be gray cast iron.
3. Grate shall be same as type "A" and "B".
4. Dimensions are intended to be nominal.
5. When volume of water warrants, 6" opening may be increased.

TYPE "C" CATCH BASIN TOPS

STRUCTURE	TOP				SHAPE				
CATCH BASIN	A	B	C	D	1	2	3	4	5
Type A-1	X				X		X		
Type A-2	X					X		X	
Type B-1		X			X		X		
Type B-2		X				X		X	
Type C-1			X		X		X		
Type C-2			X			X		X	
MANHOLE				X		X		X	X

TABLE OF CATCH BASIN TYPES
(COMBINATION OF TOPS AND SHAPES)

For Type "E" & Type "F" C.B. See Sheet No. 3



Dimension are intended to be nominal.

CATCH BASIN TOP INSTALLATION

REVISIONS	

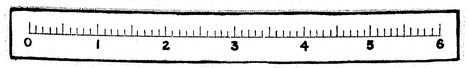
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

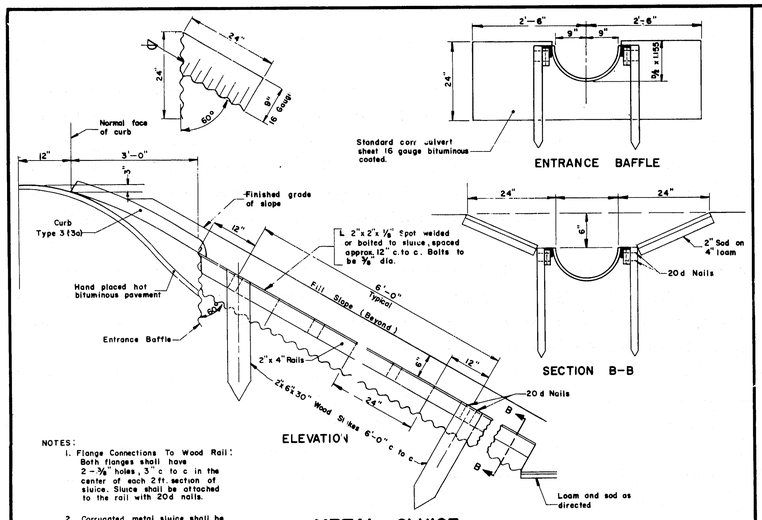
CATCH BASINS
AND
MANHOLES

AUG. 1969 (1)

123-167



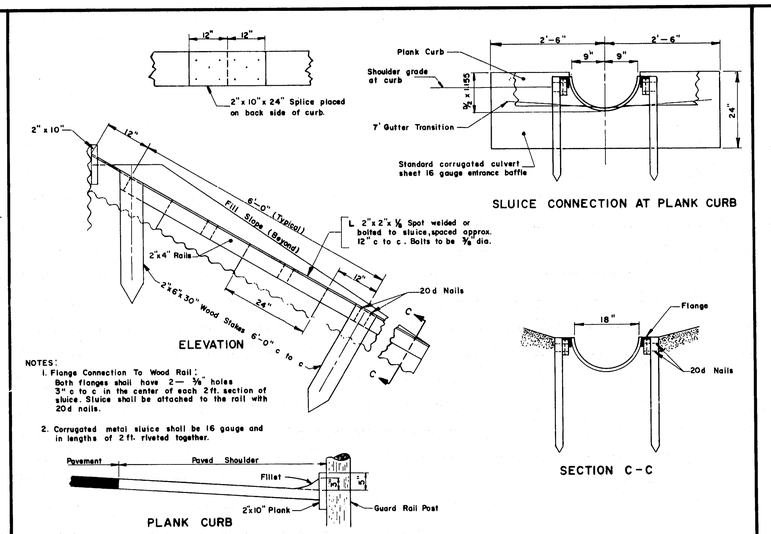
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE		99	



NOTES:

1. Flange Connections To Wood Rail: Both flanges shall have 2 – 3/8" holes, 3" c to c in the center of each 2 ft. section of sluice. Sluice shall be attached to the rail with 20d nails.
2. Corrugated metal sluice shall be 16 gauge and in lengths of 2 ft. riveted together.

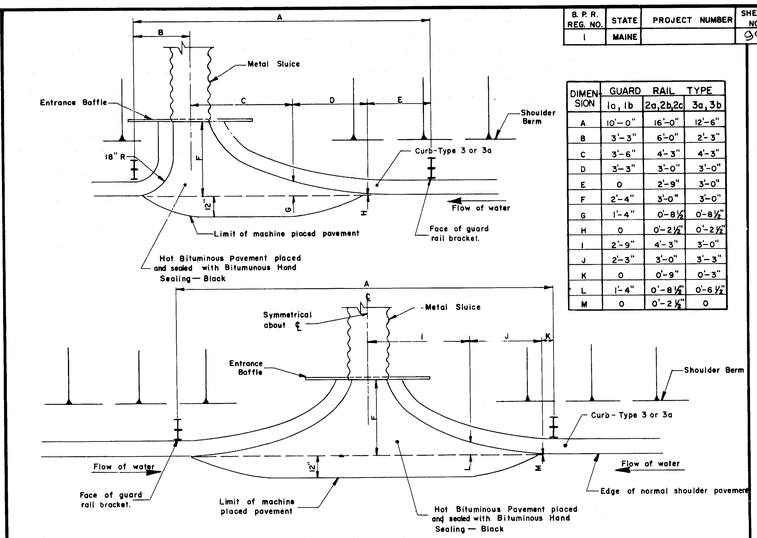
METAL SLUICE WITH CURB TYPE 3 or 3a



NOTES:

1. Flange Connection To Wood Rail: Both flanges shall have 2 – 3/8" holes 3" c to c in the center of each 2 ft. section of sluice. Sluice shall be attached to the rail with 20d nails.
2. Corrugated metal sluice shall be 16 gauge and in lengths of 2 ft. riveted together.

METAL SLUICE WITH PLANK CURB



DIMENSION	GUARD RAIL TYPE 1a, 1b	2a, 2b, 2c	3a, 3b
A	10'-0"	16'-0"	12'-6"
B	3'-3"	6'-0"	2'-3"
C	3'-6"	4'-3"	4'-3"
D	3'-3"	3'-0"	3'-0"
E	0	2'-9"	3'-0"
F	2'-4"	3'-0"	3'-0"
G	1'-4"	0'-8½"	0'-8½"
H	0	0'-2½"	0'-2½"
I	2'-9"	4'-3"	3'-0"
J	2'-3"	3'-0"	3'-3"
K	0	0'-9"	0'-3"
L	1'-4"	0'-8½"	0'-6½"
M	0	0'-2½"	0

SLUICE ENTRANCE DETAIL

CIRCULAR

NOMINAL INSIDE DIAMETER	THICKNESS in INCHES CMP or BCCMP	THICKNESS in INCHES CAP	CLASS and WALL RCP
8 inch	.064	.060	
10 "	.064	.060	
12 "	.064	.060	
15 "	.064	.060	B
18 "	.064	.060	or
21 "	.064	.060	A
24 "	.064	.060	Wall
30 "	.079	.075	
36 "	.079	.075	
42 "	.109	.105	III
48 "	.109	.105	Class
54 "	.109	.105	
60	.138	.135	
66	.138	.135	
72	.168	.164	
84	.168	.164	

PIPE ARCH

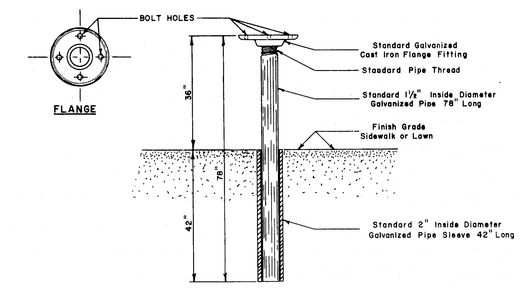
NOMINAL SIZES	GAUGE BCCMPA-CMPA	THICKNESS (inches) CAPA
18" span x 11" rise	16	.060
22" " x 13" "	16	.060
25" " x 16" "	16	.060
29" " x 18" "	14	.075
36" " x 22" "	14	.075
43" " x 27" "	12	.105
50" " x 31" "	12	.105
58" " x 36" "	10	.135
65" " x 40" "	10	.135
72" " x 44" "	8	.164

CMP = Corrugated Metal Pipe
BCCMP = Bituminous Coated Corrugated Metal Pipe
CAP = Corrugated Aluminum Pipe

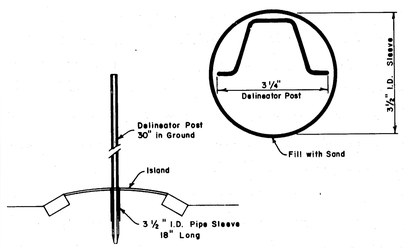
RCP = Reinforced Concrete Pipe

Above abbreviations followed by "A" indicate "Arch"
All RCPA shall be class III
Minimum thickness, class, and wall types for culvert pipe, unless otherwise designated.

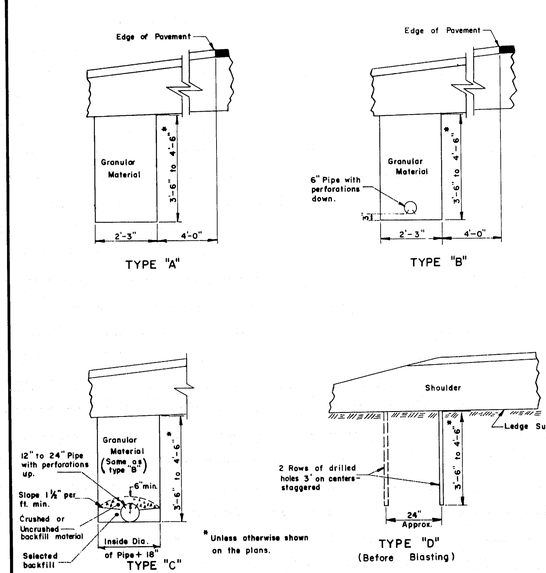
CULVERT PIPE DATA



SINGLE POST TYPE 1C



PIPE SLEEVE FOR DELINEATOR POST

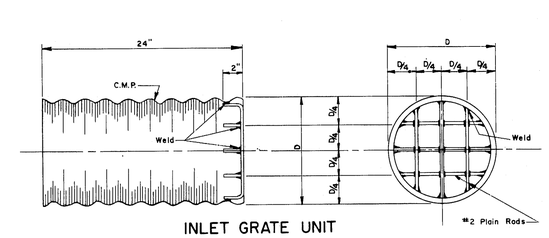


* Unless otherwise shown on the plans.

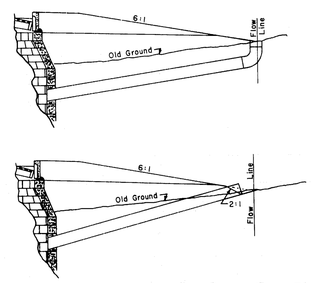
NOTES

1. The maximum vertical measurement of depth for payment of Structural Rock Excavation will be to a horizontal plane located 1 foot below the bottom of the trench for Underdrain Type "B" and Underdrain Type "C".
2. The material for Ells, Tees and Wyes for underdrain types "B" and "C" shall be at least as thick as the largest size pipe being connected.
3. Width of the trench for underdrain outlet will be the same as the underdrain trench.
4. No allowance for payment will be made for excavating or material excavated beyond the horizontal dimensions shown for Types A, B or C Underdrain.
5. In "Box Sections" the edge of trench shall be in line with edge of box section.

UNDERDRAIN



INLET GRATE UNIT



NOTES:

1. All units to be complete shop assembly.
2. All units to have one shop coat of approved Aluminum paint.
3. An Elbow shall be installed if directed by the Engineer to provide a horizontal grate, and shall be paid for as 3 additional feet of the type and size of pipe involved.
4. Rods shall conform to the requirements of section 709.01 of the Standard Specifications.

INLET UNITS IN FILL AREAS

REVISIONS	

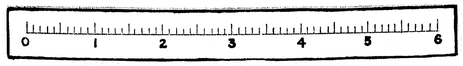
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

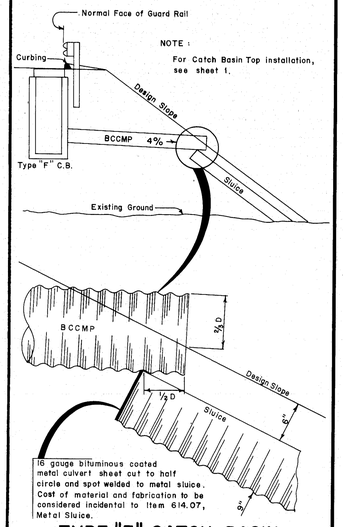
METAL SLUICE – UNDERDRAIN – CULVERT PIPE DATA CULVERT INLET GRATE

AUG. 1969 (2)

123-168

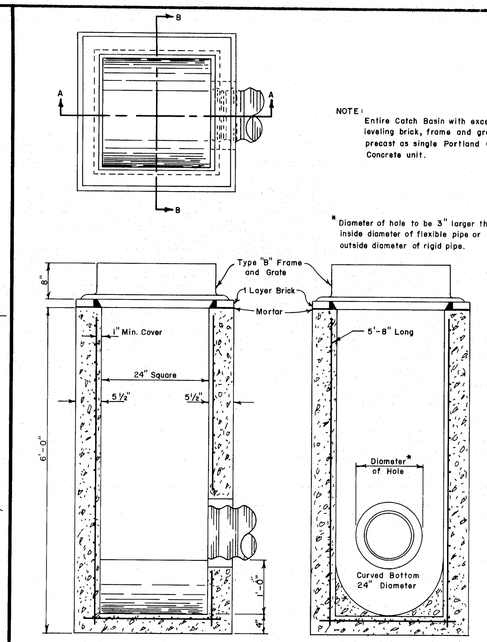


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		100	109

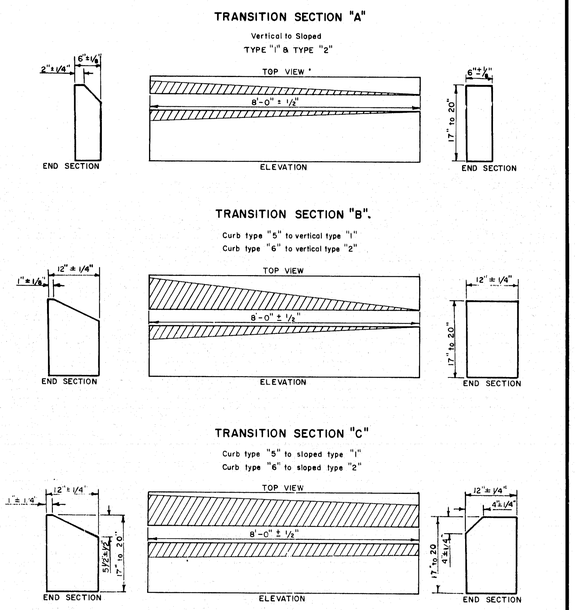


TYPE "F" CATCH BASIN WITH OUTLET PIPE (SLUICE OPTIONAL)

(SEE SHEET NO. 2 FOR STANDARD SLUICE DRAWING)

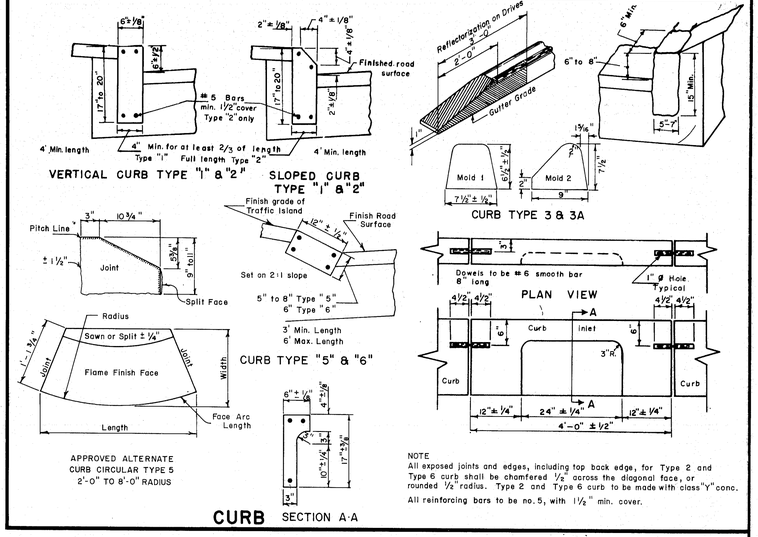


CATCH BASIN TYPE "F"

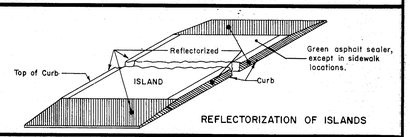


CURB TRANSITION

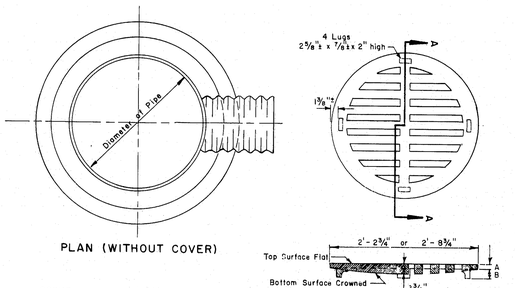
NOTE – TYPE 2 CURB
Precast concrete curb to be made with class "Y" concrete.
All reinf. bars to be # 5, 1½" min. cover.



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.



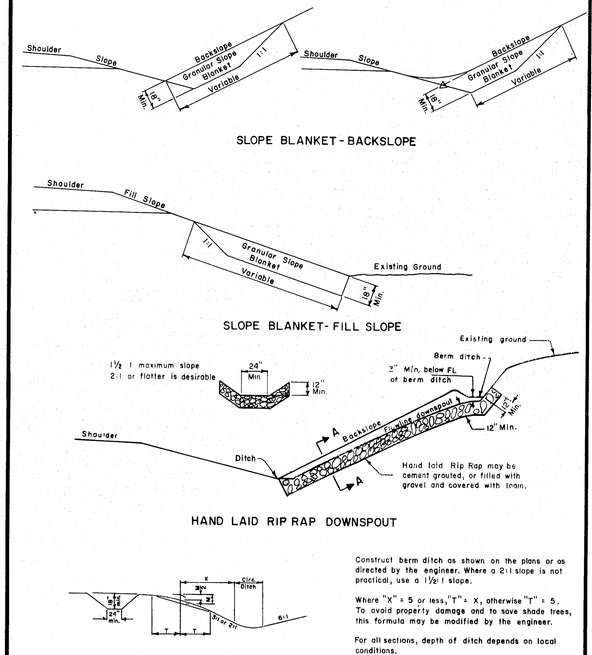
REFLECTORIZATION OF ISLANDS



Depth of Cover		
Dia.	A	B
2'-2¾"	1"	2"
2'-8¾"	1⅛"	2"

1. Excess pipe to be cut and folded against the inside wall of Catch Basin. Joints to be caulked 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 minimum of 8 slots – 1¾" wide. 24" catch basins, type "E", shall have a minimum of 8 slots – 1" wide.
7. Corrugated metal pipe shall be 14 gauge and bituminous coated.

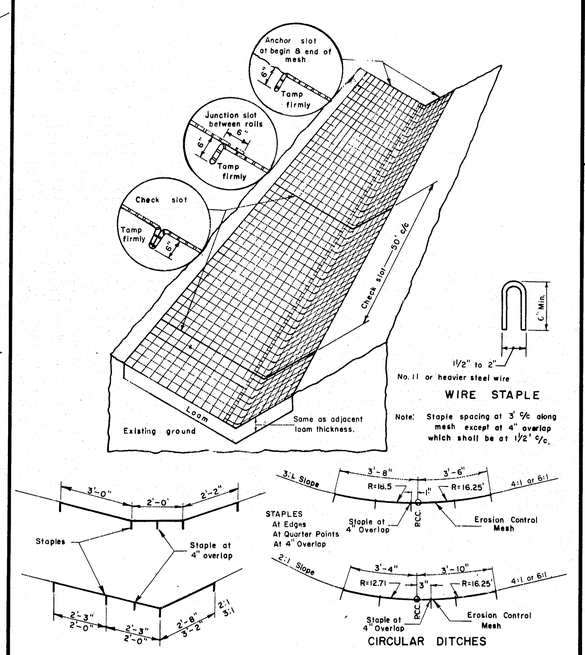
CATCH BASIN TYPE "E"



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.

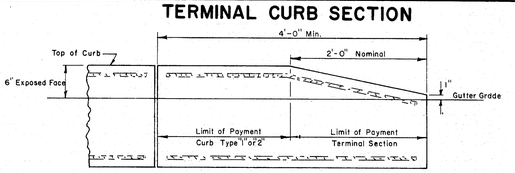
For all sections, depth of ditch depends on local conditions.



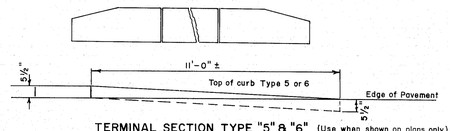
CURB TYPES 5 AND 6 ON CURVES

RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
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

TERMINAL CURB SECTION



TERMINAL SECTION TYPE "1" & "2"



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

REVISIONS	

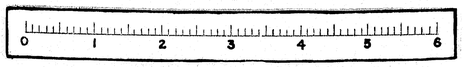
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

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

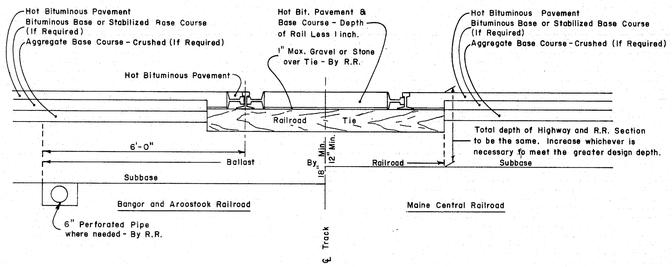
AUG. 1969 (3)

123-169



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.



STANDARD RAILROAD CROSSING

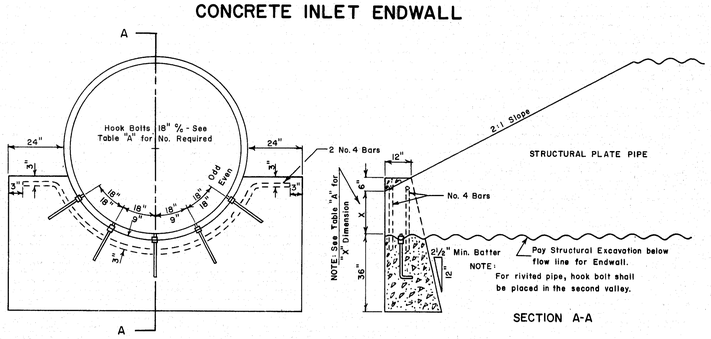
TABLE A

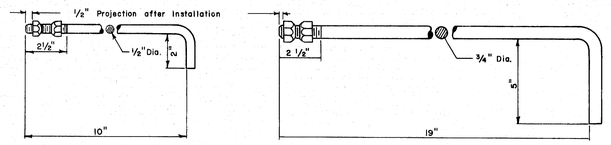
RIVETED PIPES		
SIZE	NO. HOOK BOLTS REQUIRED	"X" DIMENSION
60"	4	1.5
66"	4	1.5
72"	4	1.5
78"	5	1.5
84"	5	1.5
STRUCTURAL PLATE PIPE		
SIZE	NO. HOOK BOLTS REQUIRED	"X" DIMENSION
72"	4	1.5"
78"	5	1.625"
84"	5	1.75"
90"	5	1.875"
96"	6	2.0"
102"	6	2.125"
108"	6	2.25"
114"	7	2.375"
120"	7	2.5"
126"	7	2.625"
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.

CONCRETE INLET ENDWALL

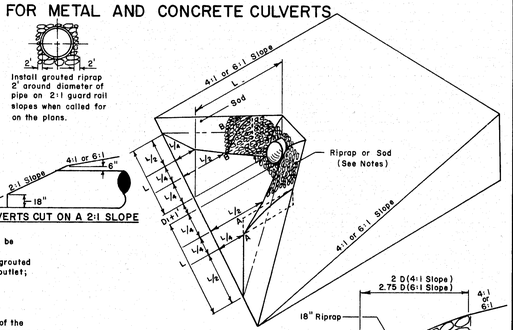




ROADWAY CULVERT END SLOPE TREATMENT FOR METAL AND CONCRETE CULVERTS

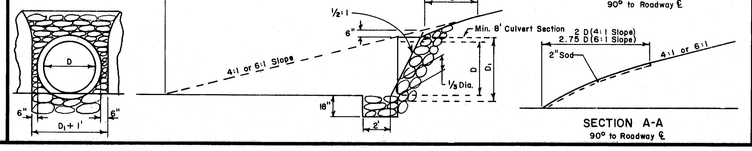
TABLE B

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"

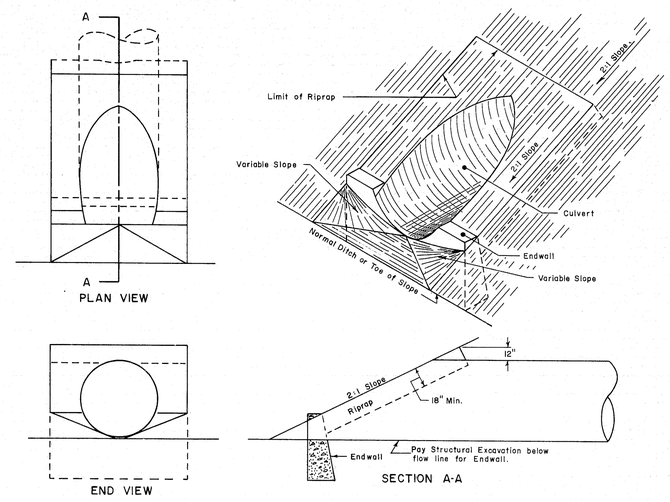


NOTES:

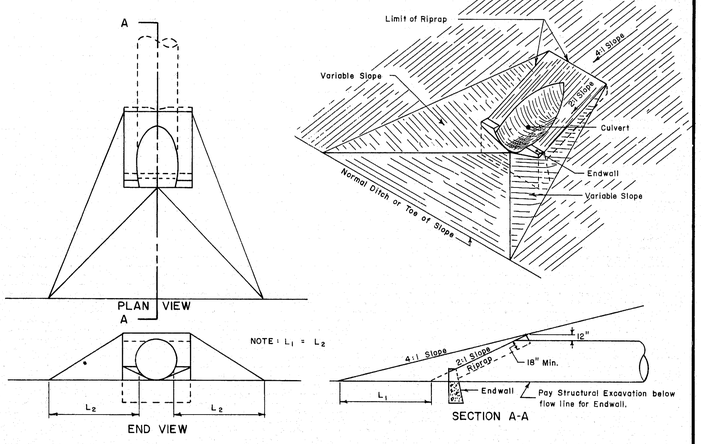
1. The dimensions shown are approximate and may be modified by the resident engineer.
2. Culverts installed under 2:1 slopes shall have grouted riprap laid on 2:1 slope around the inlet and outlet; and no ditch transitions.
3. Grouted riprap will be required on the portions of the culvert end treatment 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.



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



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



REVISIONS	

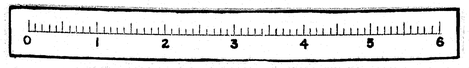
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

CULVERT INLETS & OUTLETS
RAILROAD CROSSING

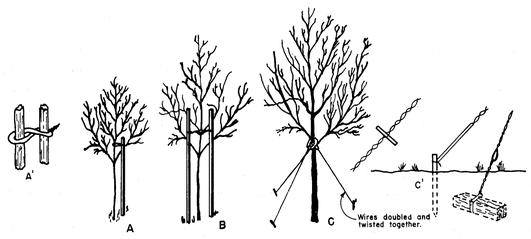
NOV., 1968 (4)

123-170

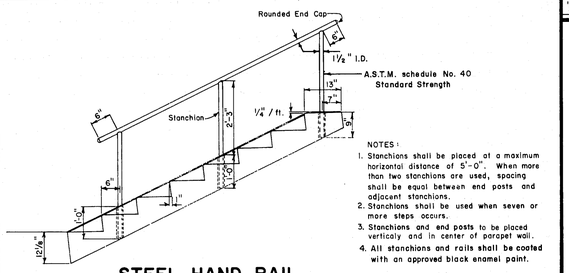


B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		102	109

GUYING AND STAKING TREES



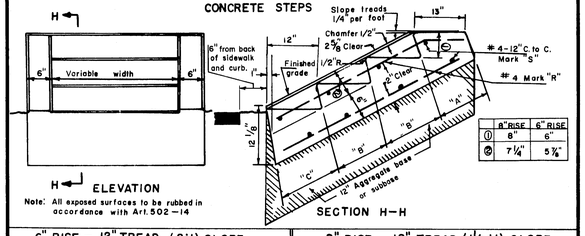
NOTES:
1. A single stake shall be used with trees up to 2 inches in diameter. The tree to be attached to the stake by means of a wire run through a piece of old hose. See detail A and A'.
2. Trees 2 to 4 inches in diameter shall be supported by two or three stakes. Attached as indicated in detail B.
3. Trees over 4 inches in diameter shall be guyed with at least three guys. Cable or wire shall be attached to the tree by running the wires through a piece of hose or by the use of lag-hooks. The guys shall be secured to a stake, 2 x 4 inches by 4 feet or to a deadman as indicated in detail C'.



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 vertically and in center of parapet wall.
4. All stanchions and rails shall be coated with an approved black enamel paint.

STEEL HAND RAIL

CONCRETE STEPS & SIDEWALK



	6" RISE	8" RISE
①	8"	6"
②	7¼"	5⅞"

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

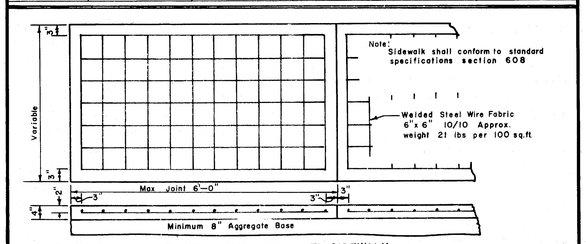
6" RISE – 12" TREAD (2:1) SLOPE	8" RISE – 12" TREAD (1½:1) SLOPE

REINFORCING STEEL

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

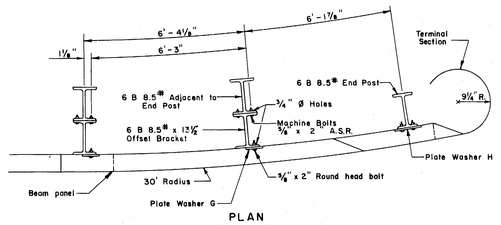
CONCRETE CLASS "A"

Section	Steps per ft. of width	Parapet each wall	Section	Steps per ft. of width	Parapet each wall
"A" Header	.030 cu. yds.	.015 cu. yds.	"A" Header	.035 cu. yds.	.018 cu. yds.
"B" Each inter. step	.030 cu. yds.	.020 cu. yds.	"B" Each inter. step	.035 cu. yds.	.024 cu. yds.
"C" Footer	.030 cu. yds.	.020 cu. yds.	"C" Footer	.035 cu. yds.	.024 cu. yds.



REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK

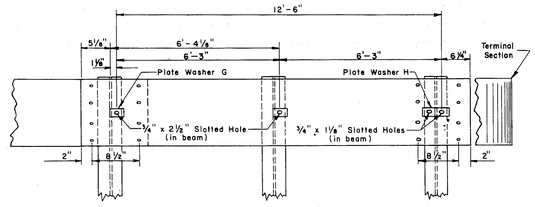
END BEAM ASSEMBLY - SPACING OF POSTS GUARD RAIL TYPE 3a and 3b



PLAN

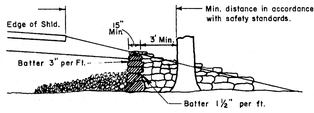
To be used in all locations except on the end away from traffic on 4 lane divided.

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

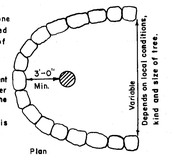


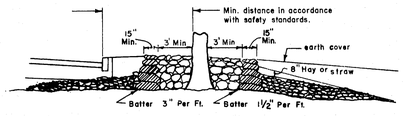
ELEVATION

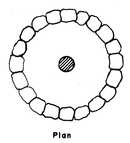
TREE WELLS



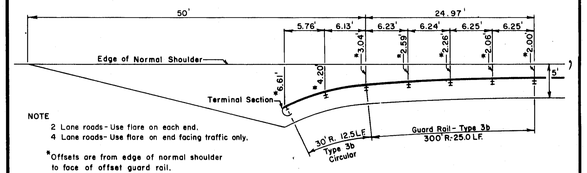
NOTES:
1. Selected ledge excavation, crushed stone or other porous material shall be used to fill around the old ground area of the tree from the tree well to the perimeter of the branches.
2. An 8" layer of hay or straw to prevent infiltration of fines shall be placed over the rock fill except in areas 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.







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



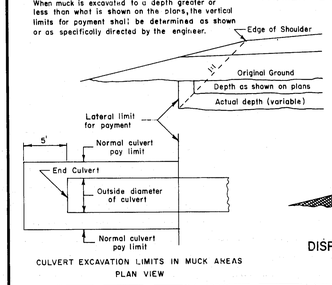
NOTE
2 Lane roads - Use flare on each end.
4 Lane roads - Use flare on end facing traffic only.
*Offsets are from edge of normal shoulder to face of offset guard rail.

GUARD RAIL END TRANSITION

MUCK EXCAVATION

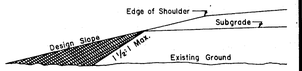
PAYMENT LIMITS

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.

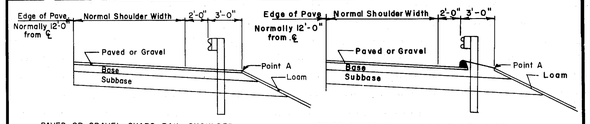


CULVERT EXCAVATION LIMITS IN MUCK AREAS
PLAN VIEW

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



DISPOSAL OF WASTE MATERIALS



PAVED OR GRAVEL GUARD RAIL SHOULDER

PAVED GUARD RAIL SHOULDER WITH CURB

Point A = Normal Slope Break

LOCATION OF GUARD RAIL

REVISIONS

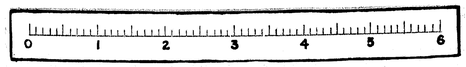
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

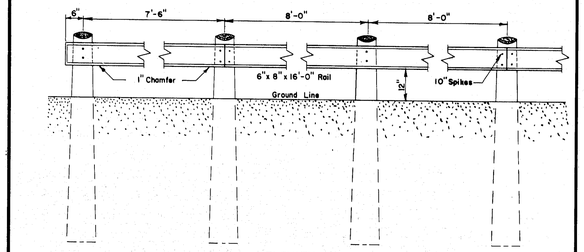
STANDARD DETAILS

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

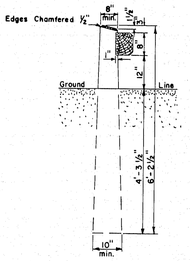
AUG. 1969 (5)

123-171



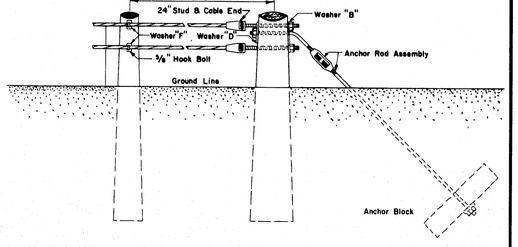


NOTE:
1. This guardrail should not be used adjacent to public highways. Location should be limited to driveways, dead ended roads, etc.
2. Unless otherwise specified, all exposed wood above ground, both posts and rails shall be painted with 2 coats of white paint.

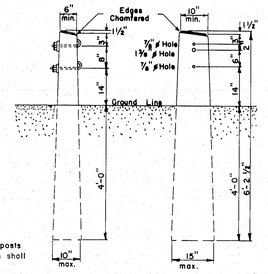


FOR TYPE 6 GUARD RAIL SEE STANDARD DETAIL SHEET 21

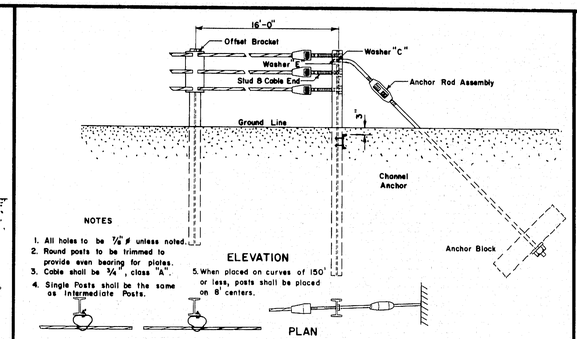
GUARD RAIL type "5"



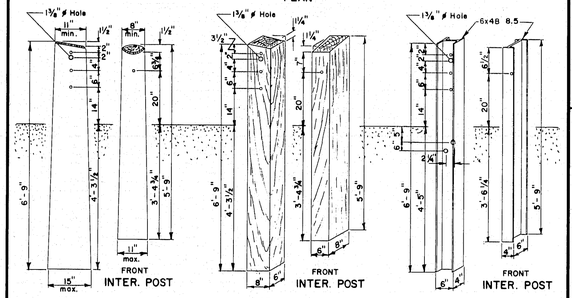
NOTES
1. Anchor posts shall be White Oak.
2. Alignment – see types 2a, 2b and 2c.
3. Posts to be trimmed to provide even bearing for plates.
4. Unless otherwise specified all wood above ground to be painted with 2 coats of white paint, – for type 1a.
5. Single Posts shall be the same as Intermediate Posts.
6. Cable shall be ¾" 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"



NOTES
1. All holes to be ⅞" ø unless noted.
2. Round posts to be trimmed to provide even bearing for plates.
3. Cable shall be ¾", 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.



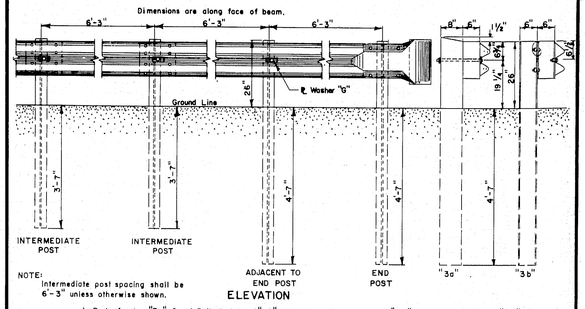
NOTE: If the Contractor chooses to drive posts, then all posts on the project, whether driven or placed in dug holes shall be set with the larger diameter of the top.

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

FOR BEAM TYPE GUARD RAIL

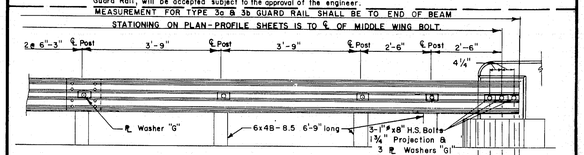
Beam Type Guard Rail set on radius of 150' or less to be Circular

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		103	109



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

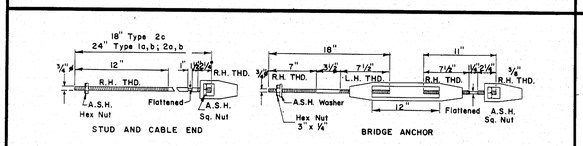
1. Posts for type "3a" Guard Rail shall be 6"x 8" and offset blocks for type "3a" Guard Rail shall be 6"x 6".
2. Posts and offset brackets for type "3b" Guard Rail shall be 6" B 8.5
3. All holes in beam to be shop-punched before galvanizing.
4. Steel posts punched with holes in addition to those specified,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



GUARD RAIL ATTACHMENT TO CONCRETE END POST AT BRIDGE END

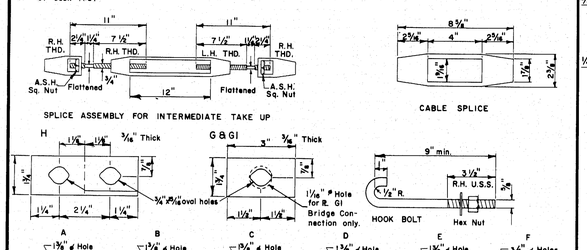
NOTES:
1. Where Bridge expansion is required at Connection, it will be detailed on the Construction Plans.
2. Guard Rail shall be connected to the structure as shown. Payment for the connection to the structure and additional posts shall be incidental to the Guard Rail item.
3. Splice holes in Guard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

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



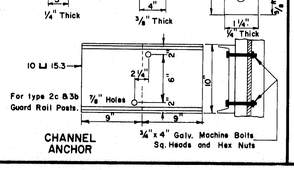
NOTES
1. Other designs may be used subject to the engineers approval.
2. All turnbuckles shall be installed midway of the threaded portion of each rod.

STANDARD FITTINGS

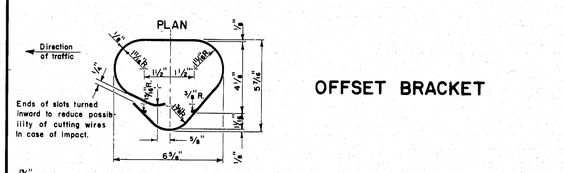


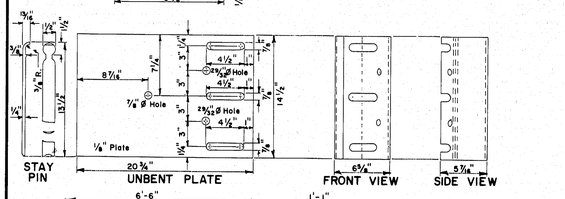
NOTES
1. All holes to be ⅞" ø unless otherwise noted.
2. Holes shall be drilled or punched before galvanizing.

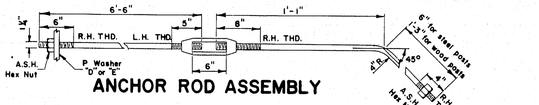
PLATE WASHERS

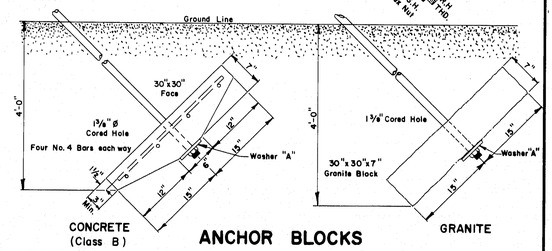


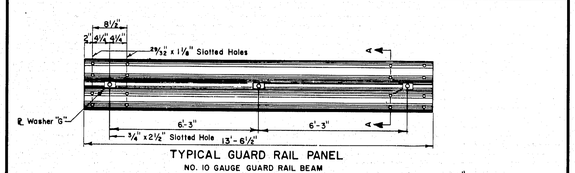
CHANNEL ANCHOR

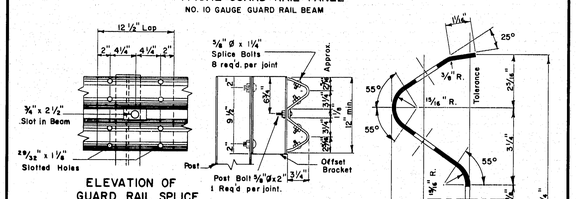




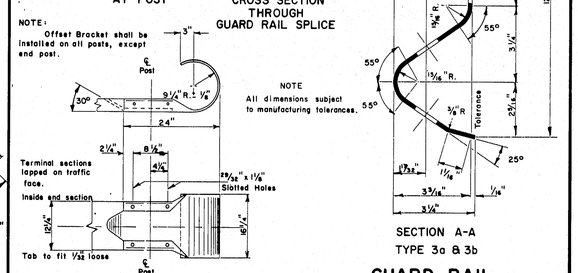




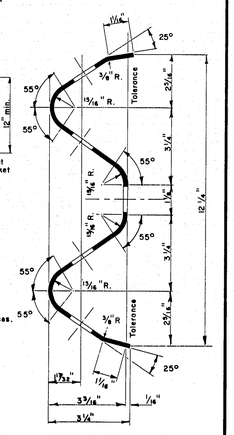


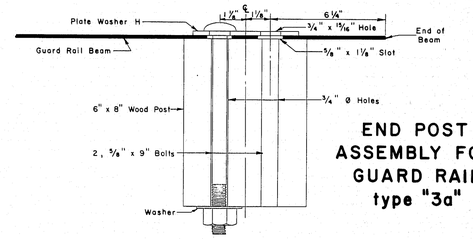


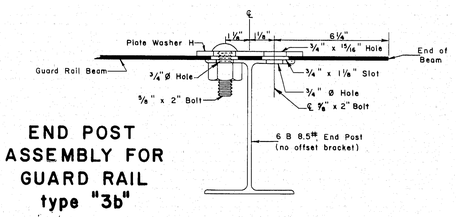
NOTE: Offset Bracket shall be installed on all posts, except end post.



NOTE All dimensions subject to manufacturing tolerances.







REVISIONS	

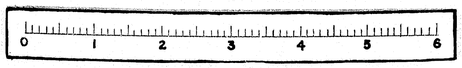
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

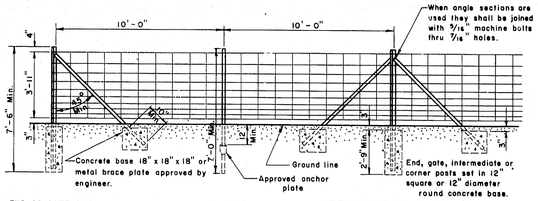
GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

AUG. 1969 (6)

123-172



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		104	109



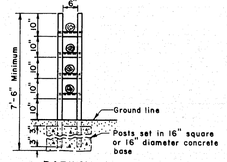
END, INTERMEDIATE AND CORNER POSTS - 2½" x 2½" x ¼" angle or nominal diameter 2" galvanized steel pipe minimum weight of 3.65 pounds per foot with approved top cap, length 7'-6"

GATE POSTS - 3½" x 3½" x ⅜" rolled angle section, or nominal diameter 2½" galvanized steel pipe with minimum weight of 5.79 pounds per foot. Pipe shall be filled with concrete and have an approved top cap, length 7'-6"

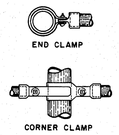
BRACES - 1¾" x 1¾" x ¼" rolled angle section, or nominal diameter 1¼" galvanized steel pipe with minimum weight of 2.27 pounds per foot.

LINE POSTS - Standard studded "T" post with minimum weight of 1.33 pounds per foot or standard lug "U" post with minimum weight of 1.12 pounds per foot, length 7'-0"

WOVEN WIRE FENCING - METAL POSTS



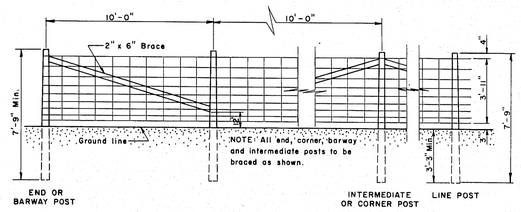
BARWAY



BRACE CLAMPS - PIPE POSTS

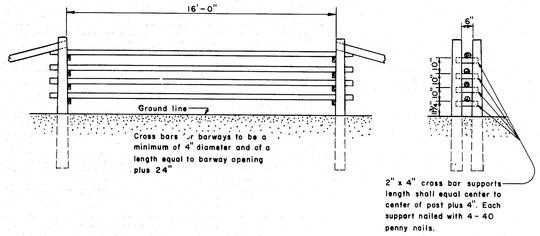
BARWAYS - Metal posts shall be installed for a 16'-0" opening. Barway posts and braces shall conform to requirements of "Gate Posts" and "Braces" under "Woven Wire Fencing - Metal Posts." Cross bar supports for barways shall be 1¾" x 1¾" x ¼" rolled angle section. When round gate posts are used, length of cross bar supports shall equal center to center of posts plus 2 inches and they shall be attached to the barway post with ⅝" x 4¼" machine bolts. When angle section gate posts are used, the length of cross bar supports shall be equal to the out to out dimensions of the angle sections and shall be attached with ⅝" x 1" machine bolts. All bracing shall conform to the requirements of "Woven Wire Fencing - Metal Posts." Cross bars shall be as required for "Barways - Wood Posts."

BARWAYS - METAL POSTS

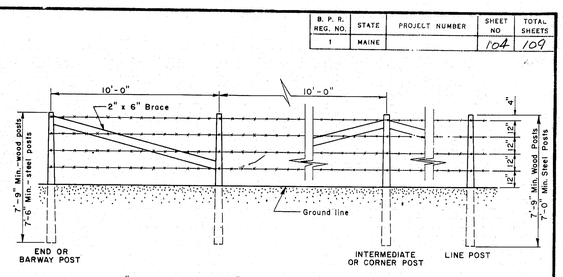


WOVEN WIRE FENCING - WOOD POSTS

Staples for wood posts to be 9 ga. 1½", placed according to the specifications.

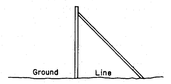


BARWAYS - WOOD POSTS



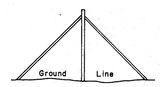
"Barbed Wire - Metal Posts" shall be constructed with the post and wire spacing shown above. Metal posts and braces shall conform to all the requirements noted and shown for "Woven Wire Fencing - Metal Posts," including concrete bases.

BARBED WIRE FENCING - WOOD POSTS AND BARBED WIRE FENCING - METAL POSTS



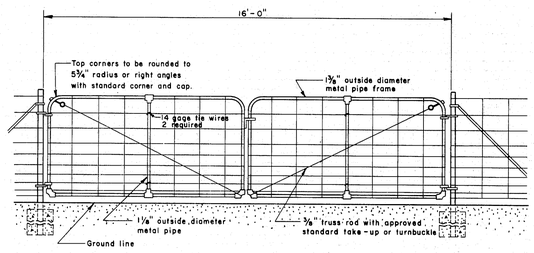
BRACING - TYPE I

Used at Gates, Barways and Terminals.



BRACING - TYPE II

Used at Corners, Intermediate Points, and changes in Vertical Alignment



Gate posts, braces and anchorages to be as specified under "woven wire fencing - metal posts."

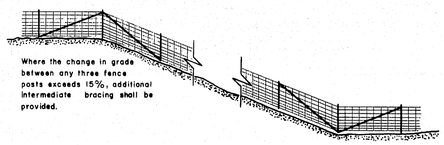
All gates shall be installed with the top hinge pin pointing down.

Wire for gates shall conform to A.S.T.M. A116, class 1, design no. 1047-12-11.

The required fittings for fence and gates shall be steel or malleable iron of approved standard type.

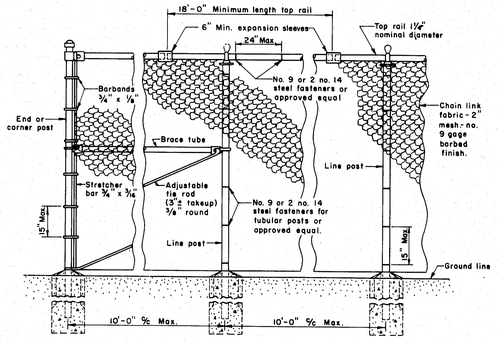
Gates shall be furnished with standard fork latch and one piece of ⅜6" straight link, alloy steel chain, 24" long. One end shall be attached to gate frame and attached to the other end shall be a snap lock or other approved fastening device.

DRIVE GATEWAYS - 16 FEET



Where the change in grade between any three fence posts exceeds 15%, additional intermediate bracing shall be provided.

INTERMEDIATE BRACING

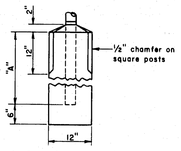


END OR CORNER POSTS: Nominal 2" diameter, galvanized steel pipe, minimum 3.65 pounds per linear foot or 2½" x 2" "H" section. Minimum weight per linear foot = 4.10.

LINE POSTS: Nominal 1½" diameter, galvanized steel pipe, minimum weight 2.72 pounds per linear foot or 1⅞" x 1¼" steel "H" section. Minimum weight per linear foot = 2.70.

BRACE TUBES: Nominal 1¼" diameter, galvanized steel pipe, minimum weight 2.27 pounds per linear foot.

STRETCHER BARS: Length to be 1" less than full height of fabric. One stretcher bar for each gate and end post, and two stretcher bars for corner and bracing.

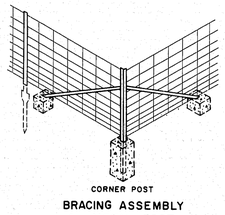


"A" = 2'-6" for 4' fence; 3'-0" for 6' fence and 5'-0" for all end and gate posts.

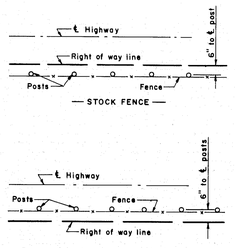
NOTE: Round bases may be substituted for the square bases shown by using fibre tubular forms.

LINE, GATE AND END POST BASE

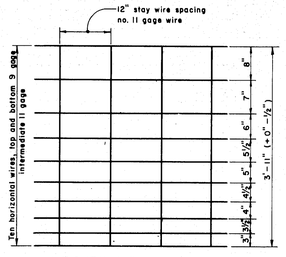
CHAIN LINK FENCE



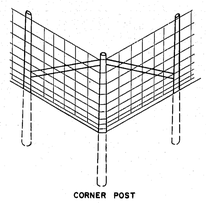
BRACING ASSEMBLY for METAL POST



FENCE LOCATION WITH RESPECT TO RIGHT OF WAY LINE



WOVEN WIRE FENCE



BRACING ASSEMBLY for WOOD POST

GENERAL NOTES: FENCING

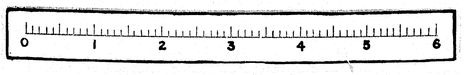
1. When ledge is encountered, steel posts shall be set and grouted 12" deep unless the posts penetrate the ground to the depth indicated on the drawings.
2. When wood posts are used, braces shall be attached to posts with a minimum of 4, 40 penny nails per attachment.
3. When the word *"standard"* is used, it shall be interpreted as if it were followed by the expression *"to the fence industry"*
4. Woven Wire and Barbed Wire Fencing shall be attached to wood posts with 9 gauge 1½" galvanized staples.
5. Concrete for post foundations shall be class B.

SPACING OF FENCE POSTS ON CURVES:

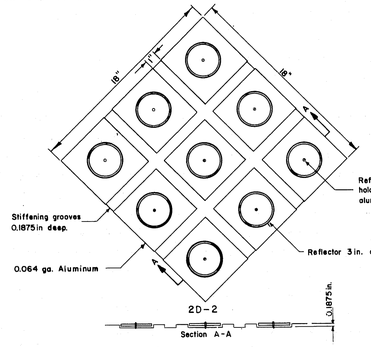
Radius of curve at fence location	Normal post spacing
Over 500 feet	10 feet
Over 200 feet to 500 feet	8 feet
Over 100 feet to 200 feet	6 feet
100 feet or less	5 feet

REVISIONS		MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE
		STANDARD DETAILS
		FENCING
		AUG. 1969 (10)

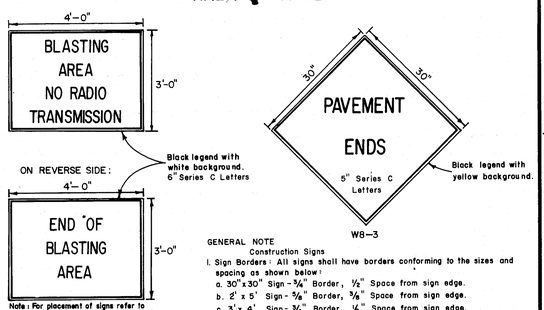
123-173



B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		105	109



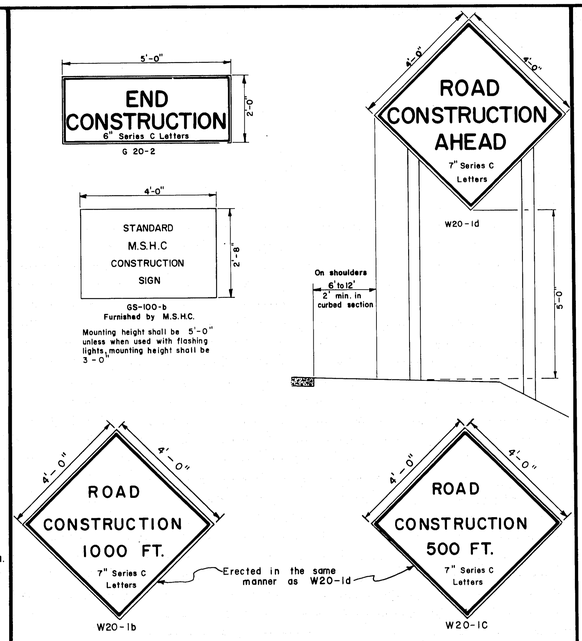
HAZARD MARKER



Note: For placement of signs refer to subsection 107.12, Maine State Highway Commission, Standard Specifications.

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.



CONSTRUCTION SIGNS

GENERAL NOTES - BARRICADES

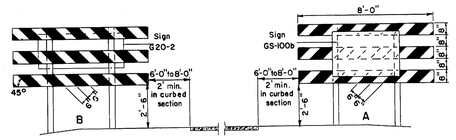
1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways", published by the Department of Commerce, Bureau of Public Roads.
2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 16 minimum gauge galvanized steel, or 1/4" plywood. Individual white sheets may be attached to a black painted background to form the black 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 1965.
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 M5-7 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 WI-6 signs are required, RIO-2 or RIO-3 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.

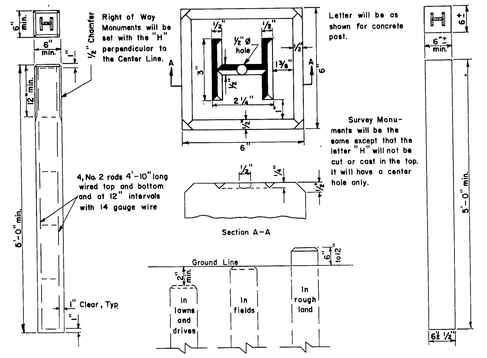
NOTES - WING BARRICADES

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.

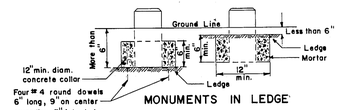


WING BARRICADES

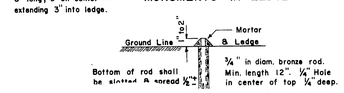
RIGHT OF WAY & SURVEY MONUMENTS



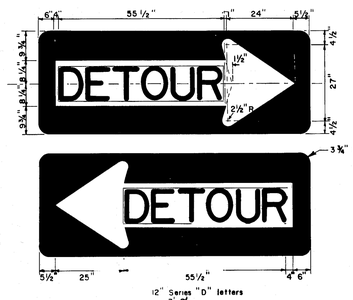
CONCRETE MONUMENT | MONUMENTS IN EARTH | GRANITE MONUMENT



MONUMENTS IN LEDGE

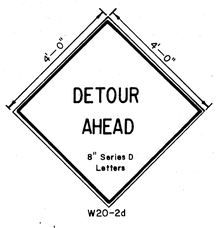


BRONZE PIN MARKERS

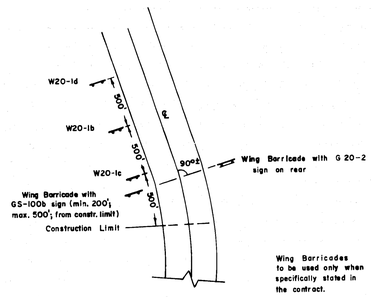


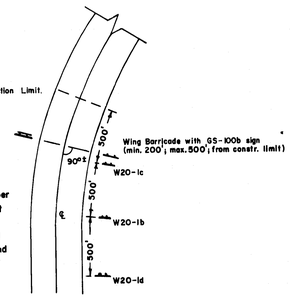
Detachable DETOUR message shall have 1" clearance from letters to edge on all sides.

DETOUR SIGN
M5-7(L)

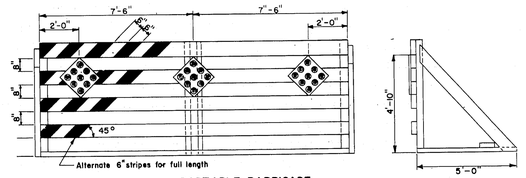


STANDARD SIGN LOCATIONS

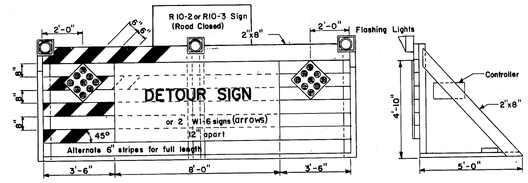




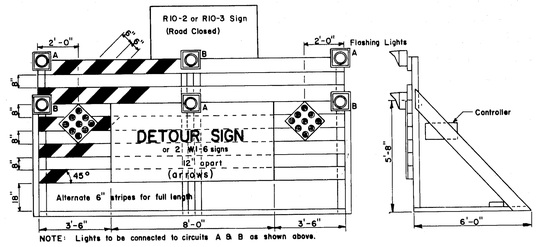
NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.



PORTABLE BARRICADE



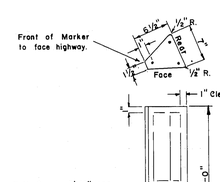
PORTABLE BARRICADE WITH FLASHING LIGHTS (NORMAL SIZE)

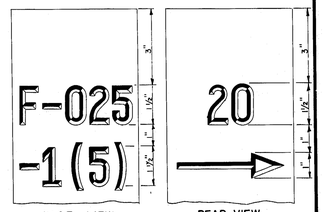


NOTE: Lights to be connected to circuits A & B as shown above.

OVERSIZED PORTABLE BARRICADE WITH FLASHING LIGHTS

BARRICADES





NOTES

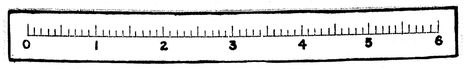
1. Distance from roadway shall be 30' minimum.
2. When posts cannot be set on the exact station, the front of the post shall be painted black from the top to 3" down, and the offset distance marked on rear with an arrow pointing in direction of beginning or end of project.
3. All markings to be 1/4"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

PROJECT MARKERS

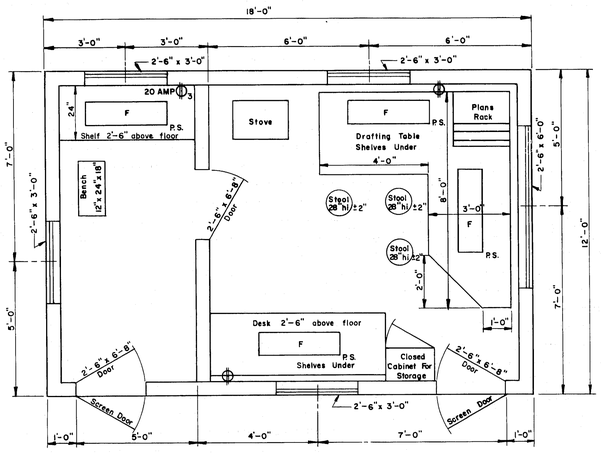
REVISION	MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE
	BARRICADES WARNING SIGNS MONUMENTS PROJECT MARKERS
	AUG. 1969

11

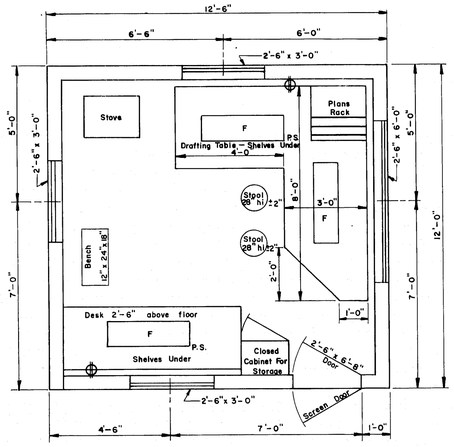
123-174



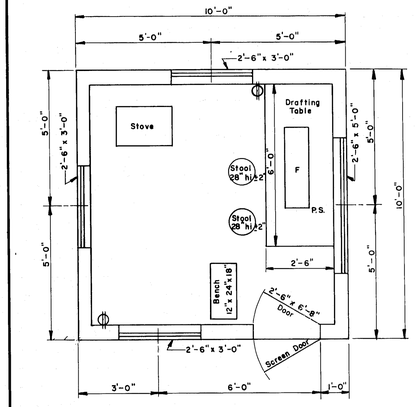
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		106	109



FLOOR PLAN
TYPE "A"



FLOOR PLAN
TYPE "B"

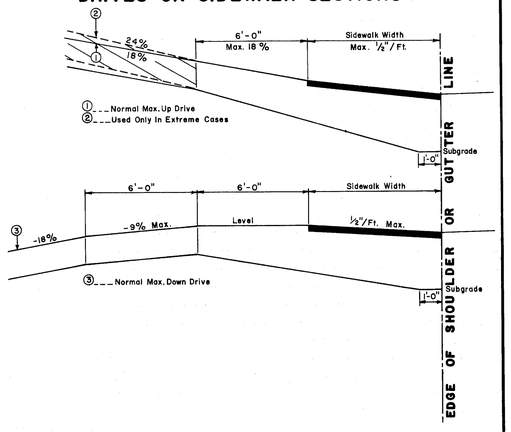


FLOOR PLAN
TYPE "C"

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.
   - $\oplus_3$ 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.

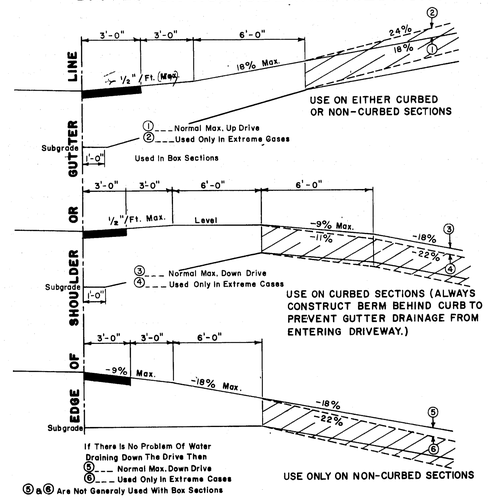
DRIVES ON SIDEWALK SECTIONS



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

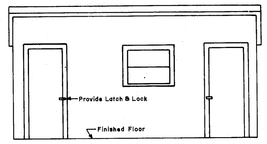
NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter 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

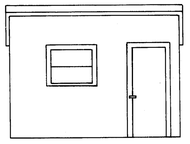


GENERAL NOTES
1. The first 3' shown as pavement shall be paved only when abutting a paved area.
2. All residential or commercial drives over 10% to be paved.

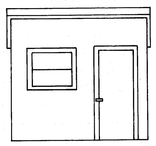
NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter 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.



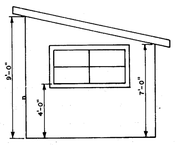
FRONT ELEVATION
TYPE "A"



FRONT ELEVATION
TYPE "B"



FRONT ELEVATION
TYPE "C"



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

REVISIONS	

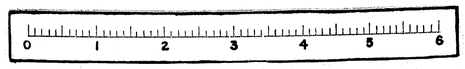
MAINE STATE HIGHWAY COMMISSION
AUGUSTA , MAINE

STANDARD DETAILS

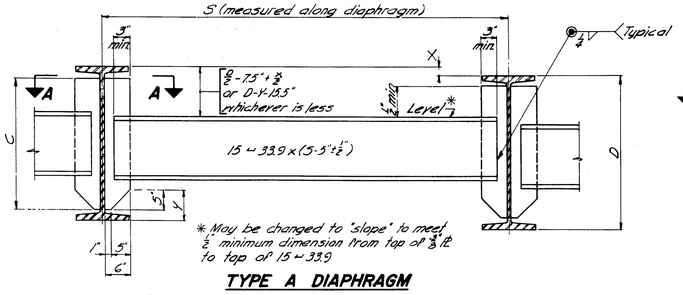
DRIVEWAY DETAILS
FIELD OFFICES
TESTING LABORATORY

AUG. 1969 (12)

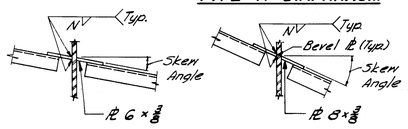
123-175



B.P.R. DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		107	109



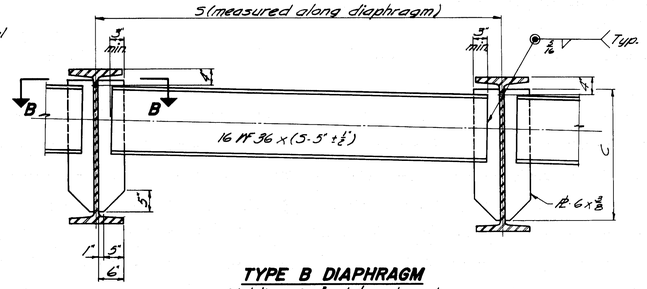
TYPE A DIAPHRAGM



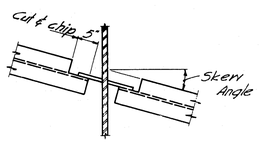
SECTION A-A
Skew Angle 0° to 10°-00'

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

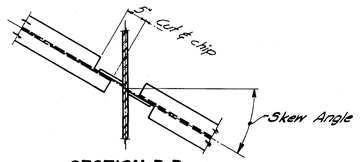
FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM PLATES		
BEAM	C	N
27 MF 84 to 114 incl.	1'-11"	1/4"
30 MF 99 to 132 incl.	2'-2"	1/4"
33 MF 118 to 152 incl.	2'-5"	1/4"
36 MF 135 to 194 incl.	2'-7"	1/4"
36 MF 230 to 300 incl.	2'-6"	5/16"



TYPE B DIAPHRAGM
Welding 6 x 3/8 plates to web same as for Type A Diaphragm.



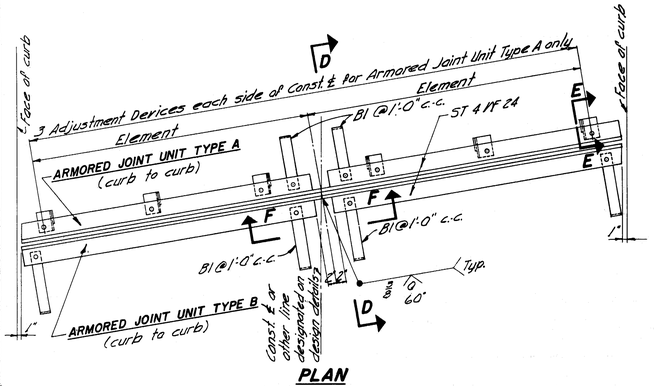
SECTION B-B
Skew Angle 0° to 10°-00'



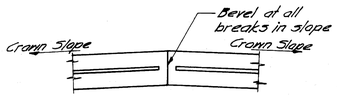
SECTION B-B
Skew Angle over 10°00'

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

DIAPHRAGMS



PLAN



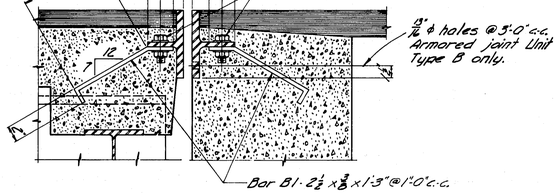
SECTION F-F
Note: See design details for Const. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

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.

ARMORED JOINT

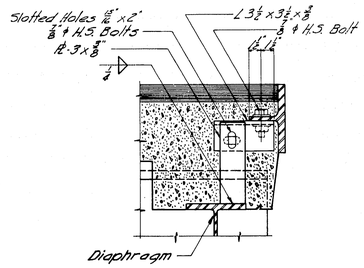
An armored joint consists of two armored joint units. See note 1.



ARMORED JOINT UNIT TYPE A

ARMORED JOINT UNIT TYPE B

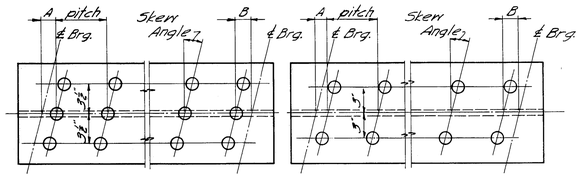
SECTION D-D



SECTION E-E
Showing Adjustment Device Armored Joint Unit Type A only - After Unit is in final position weld 3/8" PL to angle with 1/4" fillet

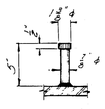
SHEAR CONNECTOR NOTE

The connectors may be either steel studs or spirally formed bars. At the request of the contractor a plan for using spirally formed bars will be provided.



TRIPLE STUDS

DOUBLE STUDS

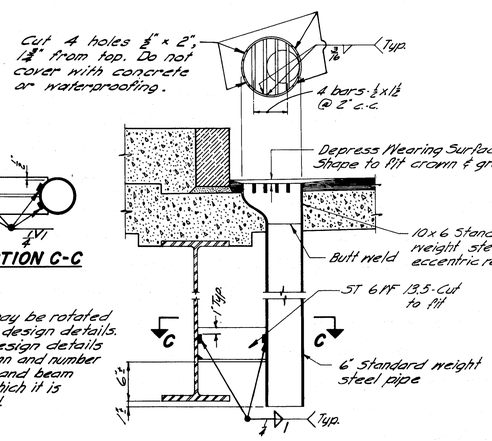


STUD DETAIL

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.

DRAIN

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.

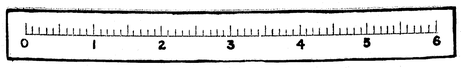
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 104-66)

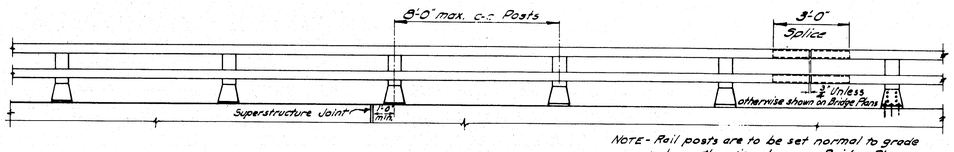
DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN

SEPTEMBER 1966

123-176



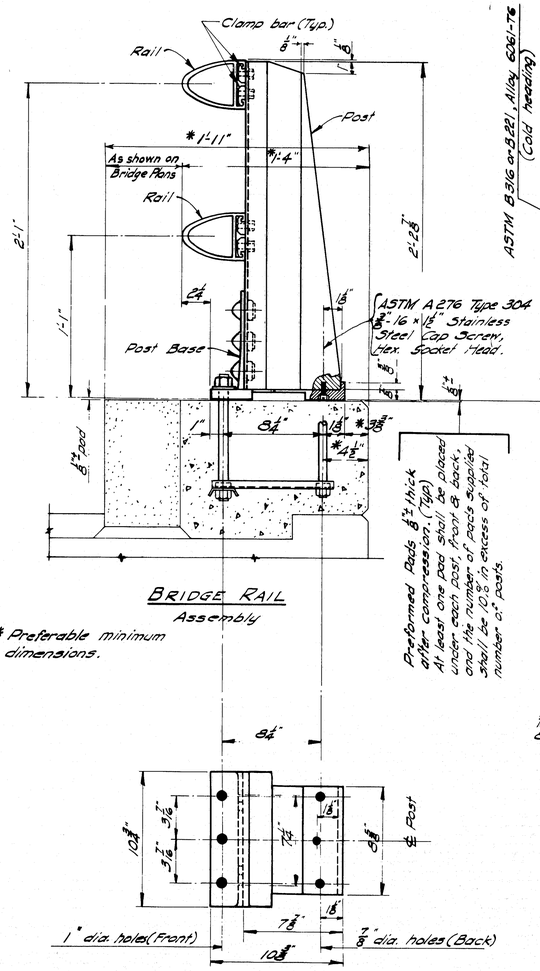
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE		108	109



Note - Rail posts are to be set normal to grade unless otherwise shown on Bridge Plans.

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.



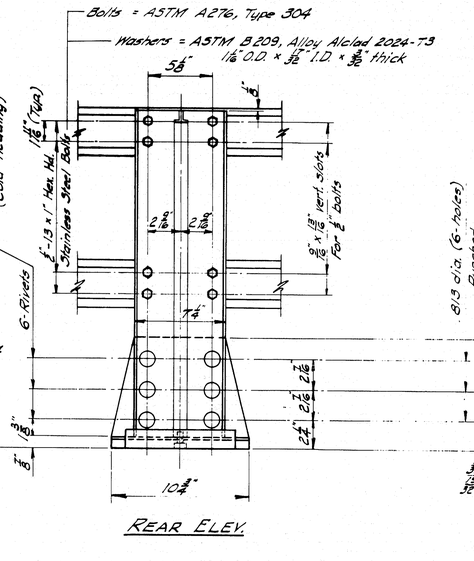
BRIDGE RAIL

Assembly

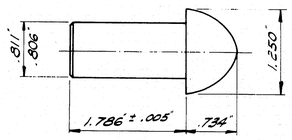
* Preferable minimum dimensions.

POST BASE

(Bottom View)

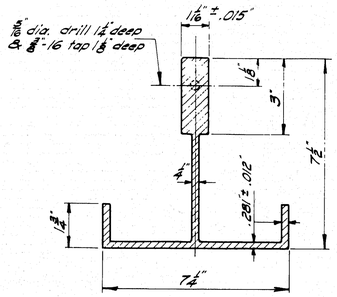


REAR ELEV.

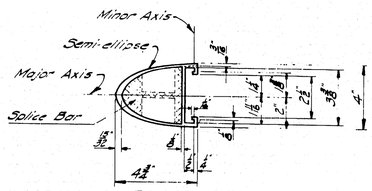


RIVET

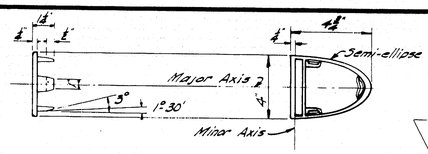
Shop rivet rail post to base



POST SECTION

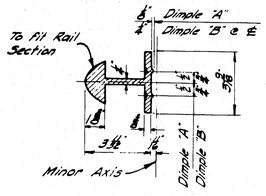


RAIL SECTION

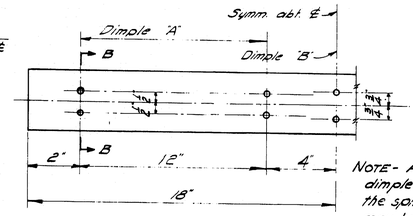


RAIL CAP

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



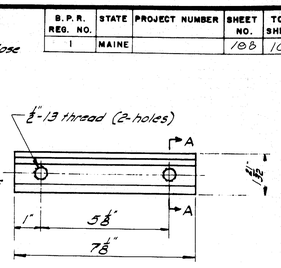
SECTION B-B



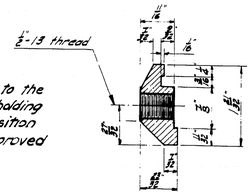
SPLICE BAR

Post, Post Base, Rail, Splice Bar, & Clamp Bar = ASTM B221, Alloy 6061-T6

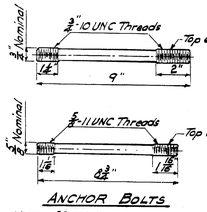
Note - An alternate to the dimple system for holding the splice bar in position may be used if approved by the Engineer.



CLAMP BAR

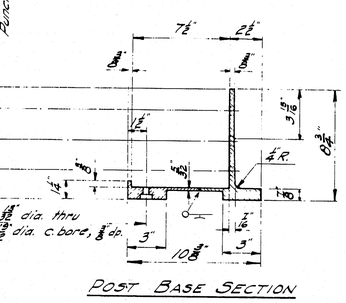


SECTION A-A

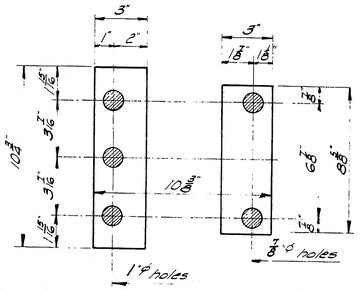


ANCHOR BOLTS

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

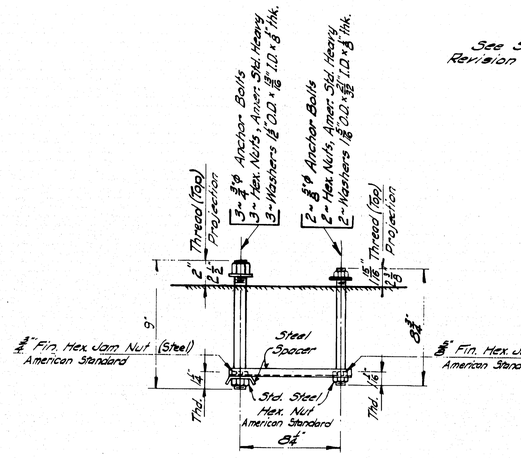


POST BASE SECTION



PREFORMED PADS

See Subsection 718.03 Standard Specifications Revision of June 1968 for pad.

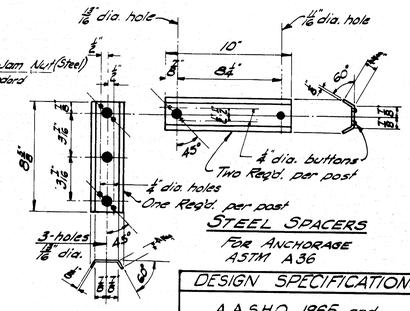


RAIL POST ANCHORAGE

Assembly

NOTE: Anchor Bolts, exposed Hex. Nuts (Amer. Std. Heavy) and washers shall conform to Designation "Stainless ASTM A276 Type 430 100,000 psi 15% elongation."

Hex. Nuts embedded in concrete shall conform to Steel Designation ASTM A 307.



STEEL SPACERS

For Anchorage ASTM A36

DESIGN SPECIFICATIONS

A.A.S.H.O. 1965 and Interim Specifications.

REVISIONS AND CORRECTIONS

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

(BD 106 - 69)

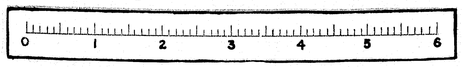
ALUMINUM RAILING

2 - BAR (SEMI-ELLIPSE) EXTRUDED POST

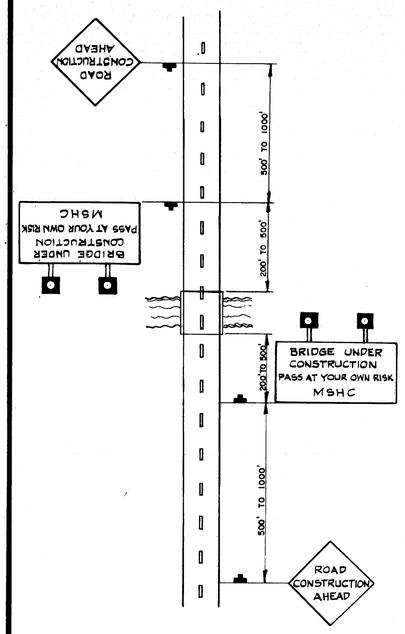
JANUARY 1969

123-177

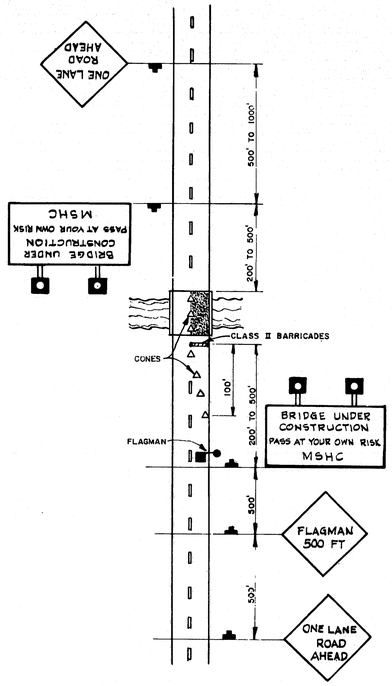
BRUNING 44-131 11224



B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	I-95-5(15) I-95-4(21)	103	109



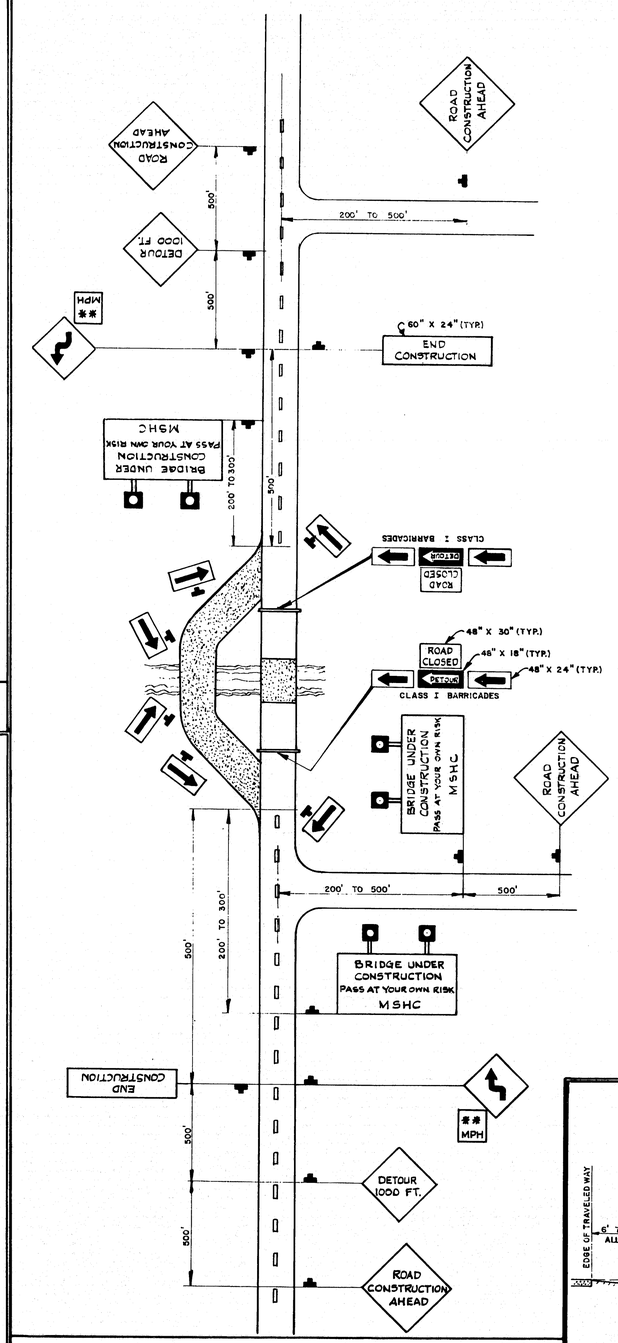
WHEN DETOURS OR LANE CLOSURES ARE NOT REQUIRED.



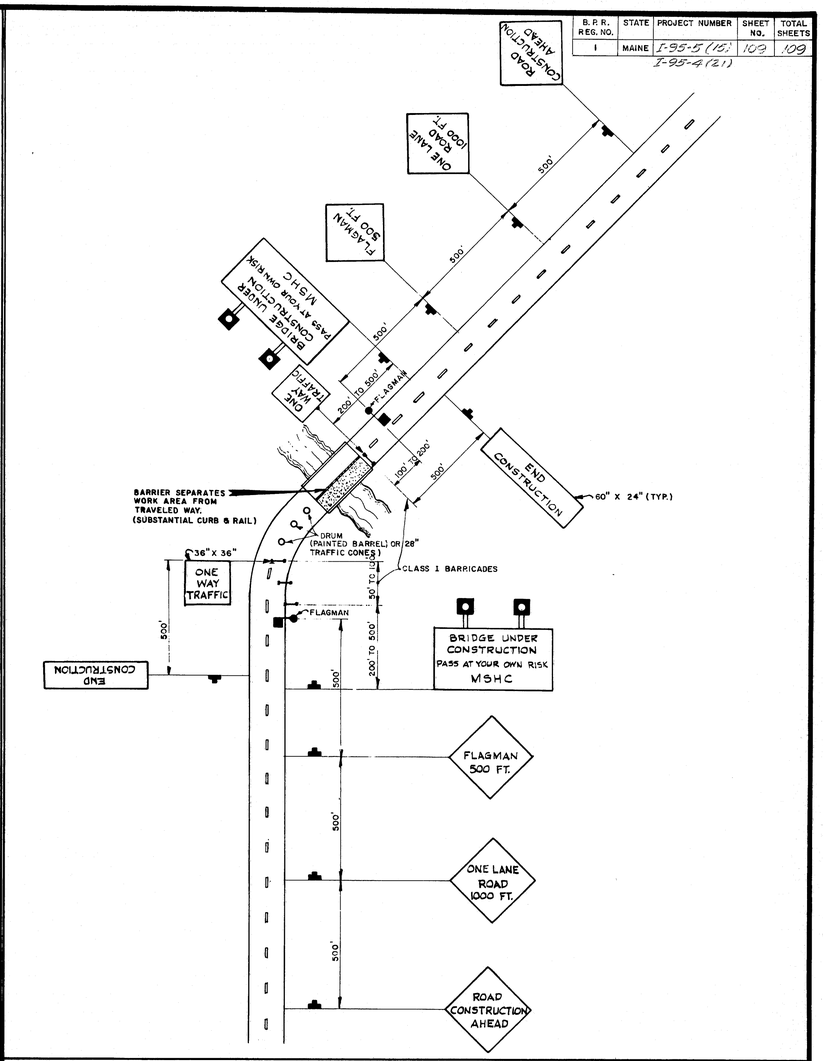
MINOR OPERATIONS OF SHORT DURATION REQUIRING LANE CLOSURE

GENERAL NOTES

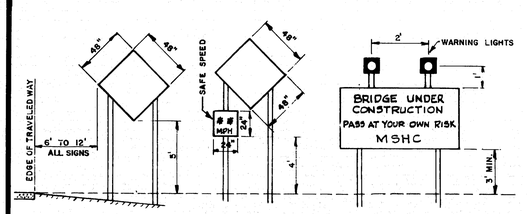
1. DISTANCES SHOWN ON PLANS ARE APPROXIMATE
2. USE FLAGMAN AND FLAGMAN SIGNS WHEN REQUIRED BY THE ENGINEER.
3. MINIMUM SIGNING REQUIREMENTS ARE SHOWN FOR THE MOST FREQUENT SITUATIONS ONLY. FOR SIGNING PROJECTS NOT DESCRIBED OR REQUIRING MODIFICATIONS TO THOSE SHOWN THE TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AS THE ENGINEER DIRECTS.
4. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND STATE OF MAINE S H C "STANDARD SPECIFICATIONS HIGHWAYS AND BRIDGES REVISIONS OF JUNE 1968."
5. ALL SIGNS THAT ARE TO CONVEY MESSAGES DURING HOURS OF DARKNESS SHALL BE REFLECTORIZED WITH REFLECTIVE SHEETING COMPLYING WITH FEDERAL SPECIFICATIONS LS-300. ILLUMINATION MAY BE REQUIRED IN ACCORDANCE WITH SECTION 5B-2 OF THE MANUAL ON TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
6. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
7. TRAFFIC CONTROL DEVICES SHALL BE ERECTED PRIOR TO THE START OF CONSTRUCTION OR MAINTENANCE OPERATION AND SHALL BE MAINTAINED DURING THE TIME SUCH SPECIAL CONDITIONS EXIST. THE CONTROL DEVICES SHALL REMAIN IN PLACE FOR AS LONG AS CONTROLS ARE NECESSARY BUT SHALL BE REMOVED IMMEDIATELY THEREAFTER.
8. EXISTING TRAFFIC CONTROL DEVICES WHICH TEND TO CONFUSE TRAFFIC SHALL BE REMOVED OR COVERED BY THE CONTRACTOR. EXISTING CENTER LINE STRIPES WHICH TEND TO DIRECT TRAFFIC INTO THE AREA BEING DETOURED SHALL OBLITERATED BY THE CONTRACTOR TO THE APPROVAL OF THE ENGINEER.
9. WARNING LIGHTS SHALL BE INSTALLED ABOVE EACH "BRIDGE UNDER CONSTRUCTION" SIGN AND IN OTHER LOCATIONS WHEN REQUIRED BY THE ENGINEER. WHEN POWER IS NOT AVAILABLE HIGH INTENSITY BATTERY POWERED FLASHERS SHALL BE USED.
10. THE SIZE OF THE LETTERING ON SIGNS BEARING MESSAGES AND THEIR BORDERS SHALL BE IN THE SAME PROPORTION AS THE EXAMPLES SHOWN IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES." IN GENERAL THE LETTERING SHALL NOT BE LESS THAN 7" IN HEIGHT EXCEPT AS NOTED UNDER PARAGRAPH 5B-16 OF THE MANUAL.
11. FOR SIGN SIZES NOT SHOWN ON PLANS SEE "TYPICAL INSTALLATION - ALL SIGNS."
12. THE MINIMUM DIMENSION ABOVE GROUND FOR ALL SIGNS INCLUDING DIRECTIONAL ARROWS SHALL BE 3 FEET.



FOR ALL TRAFFIC CONDITIONS WHEN DETOURS ARE REQUIRED



MAJOR OPERATIONS OF LONG DURATION REQUIRING LANE CLOSURE



TYPICAL INSTALLATION - ALL SIGNS
(SEE NOTE 12)

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD III - 69)

TRAFFIC CONTROL DEVICES
FOR BRIDGE PROJECTS ON 2-LANE HIGHWAYS

JUNE 1969

123-178

BRUNING 44-131