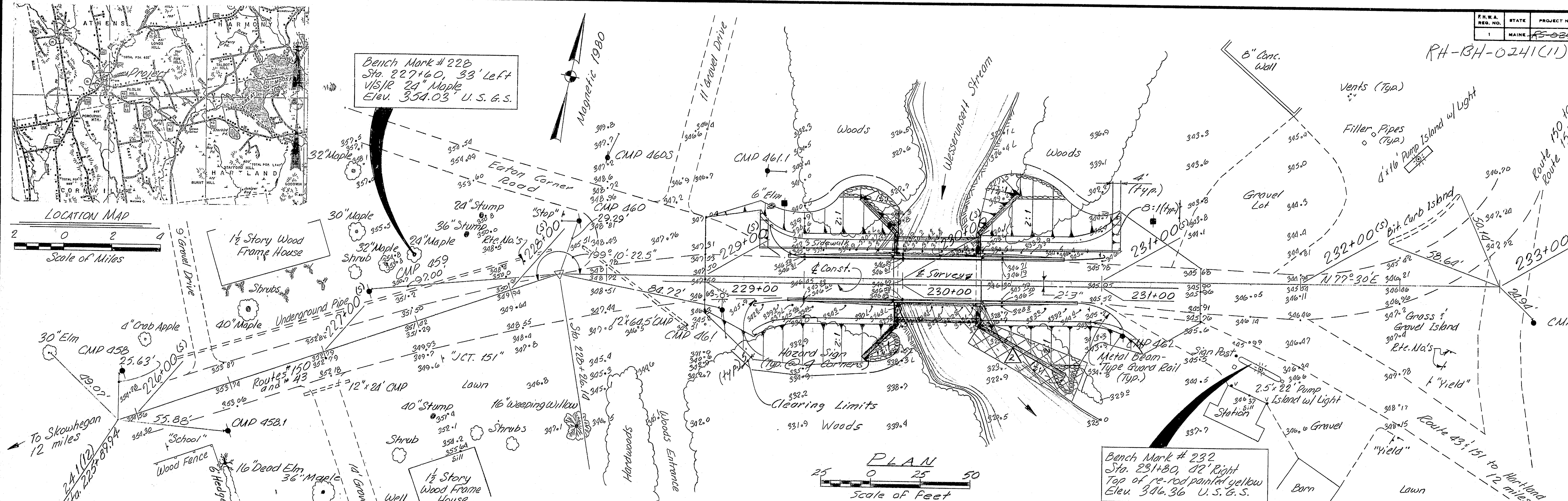
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	~~RS-0241(11)~~	1	19

RH-BH-0241(11)



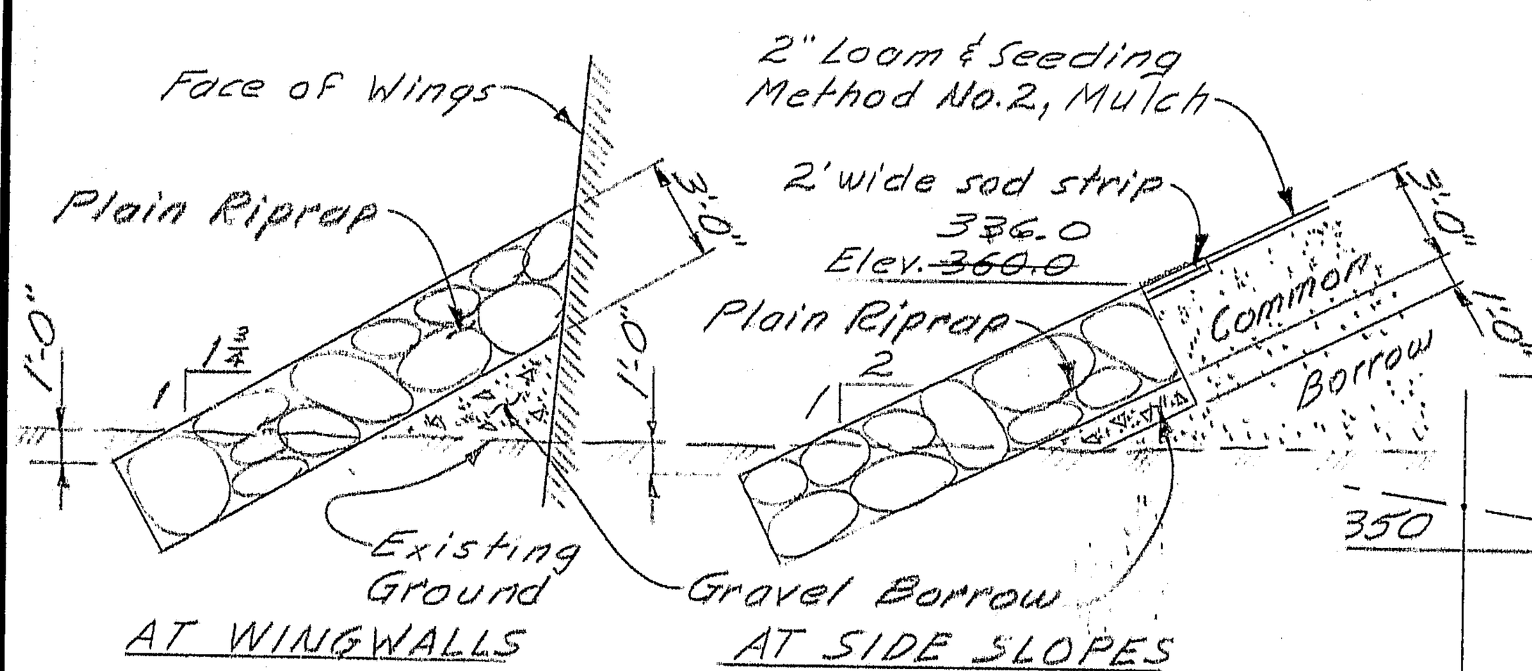
INDEX OF SHEETS

SURVEY NOTES

Superstructure: Concrete T-beam deck in good condition with some spalling. 20' curb-to-curb.
Substructure: Mass concrete abutments with dry cut granite wings in good condition.
Approaches: 22' bituminous roadway in fair to good condition. Travelled heavily by Scott Paper Company log trucks.
Stream: Swift flow. Water elev. on July 29, 1980 = 325.8.
Foundation: Ledge streambed.
Utilities: Central Maine Power Company.
Somerset Telephone Company.
New England Telephone Co.

△1	Added New T-Beam Details, Sheet #3	8-31-82
△2	Revisions-Gabions & Riprap-See Sh. 6a & 6b.	10/7/82

Br.#2925



TYPICAL RIPRAP SECTIONS

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN-DETAILED	PJM	7-81
CHECKED	R.T.A.	7-81
REVISIONS		
FIELD CHANGES		

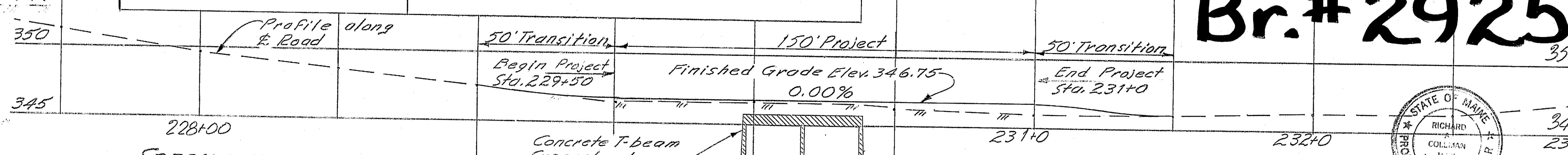
Survey Plotted: Survey Checked:

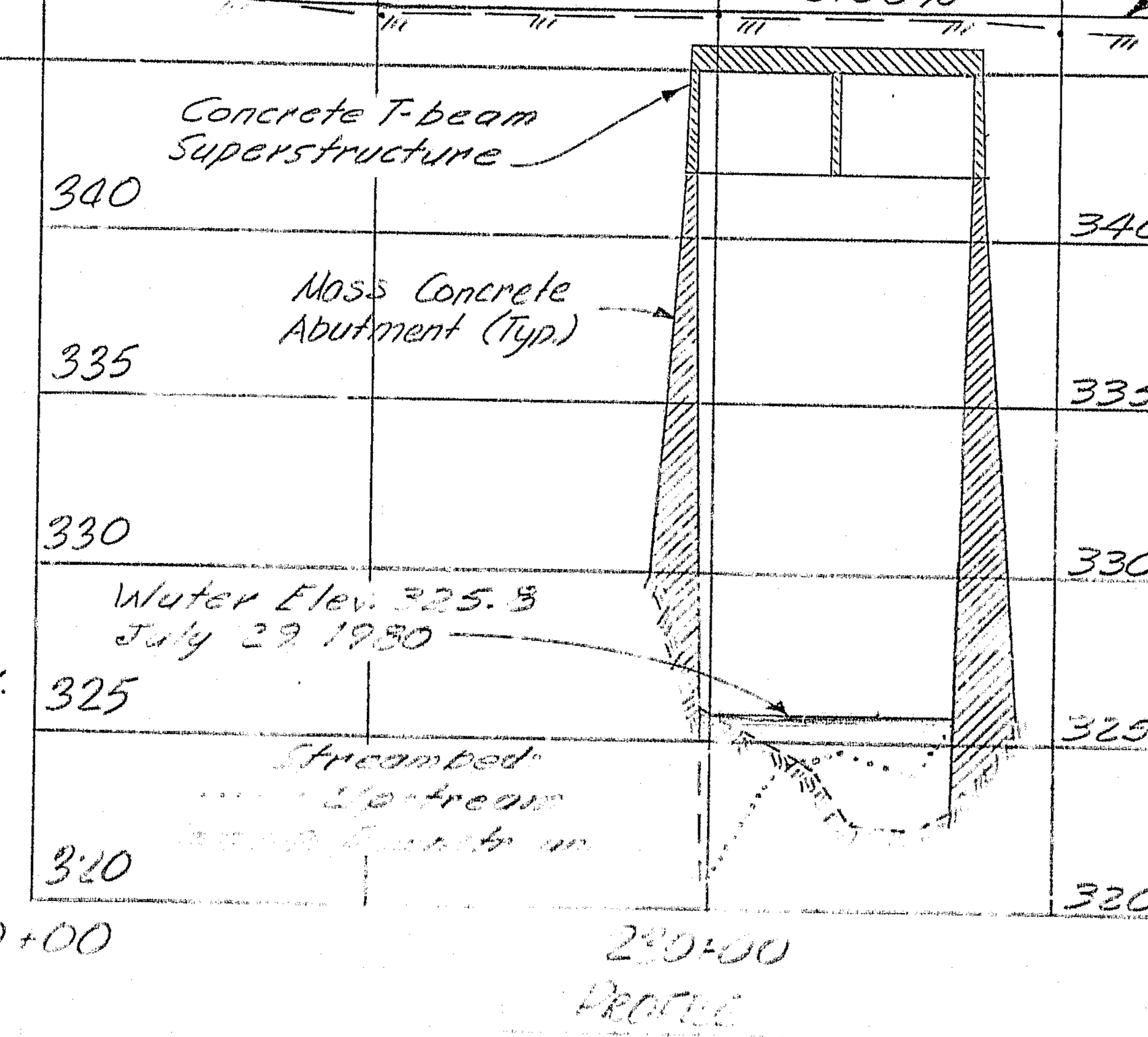
HYDROLOGIC DATA

Drainage Area..............51.84 sq. mi.
Design Discharge (Q50)........5,000 cfs
Check Discharge (Q100).......6,000 cfs
Headwater Elev. at (Q50).....Elev. 337.3
Headwater Elev. at (Q100).....Elev. 339.0
Discharge Velocity (Q50)......16.0 Fps
Discharge Velocity (Q100)......17.1 Fps

TRAFFIC DATA

AADT.....1980.........1740
AADT.....2000.........2550
DHV..................281
T%....................8
D%....................65
V.....................30
18 k...P2.0......24
4-(NB)





SPECIFICATIONS

DESIGN: AASHTO Standard Specifications for Highway Bridges 1977 and Interim Specifications 1978 thru 1980.

CONTRACT: State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of June 1981

DESIGN LOADING

Live Load...............H20

MATERIALS

STRUCTURAL CONCRETE..............Class "A"
REINFORCING STEEL....ASTM A615...Grade 60

BASIC ALLOWABLE STRESSES

STRUCTURAL CONCRETE F_c = 1200 p.s.i. n = 9
REINFORCING STEEL F_s = 24,000 p.s.i.

APPROVED:

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

George N. Campbell — COMMISSIONER — DATE 12/21/81

Richard A. Coleman — CHIEF ENGINEER — 12/21/81

STATE OF MAINE RICHARD A. COLEMAN 1559 REGISTERED PROFESSIONAL ENGINEER

"As Built" 1983

References:
Bridge No. 2925
Field Notebook No. 8848

NOTE:
All work contemplated under this contract shall be governed by and in conformity with the Standard Specifications (Revision of June 1981) and supplements thereto except as modified on the plans and in the Special Provisions.

Plans of the existing bridge and a hydrologic report of the bridge site are available for the Contractor's reference at the Bridge Design Office in Augusta. The plans are reproductions of original drawings as prepared for the construction of the bridge and it is very unlikely that the plans will show any construction field changes or any alterations which have ... to the bridge during its life span. The hydrologic report is based on the interpretation by the Department of information obtained ... subject ... and no assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.

R89-458

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT STREAM BRIDGE

IN THE TOWN OF
ATHENS
SOMERSET COUNTY

GENERAL PLAN

SHEET 1 OF 19 AUGUSTA, MAINE Jan. 1982.

JANUARY 1969

ESTIMATED QUANTITIES

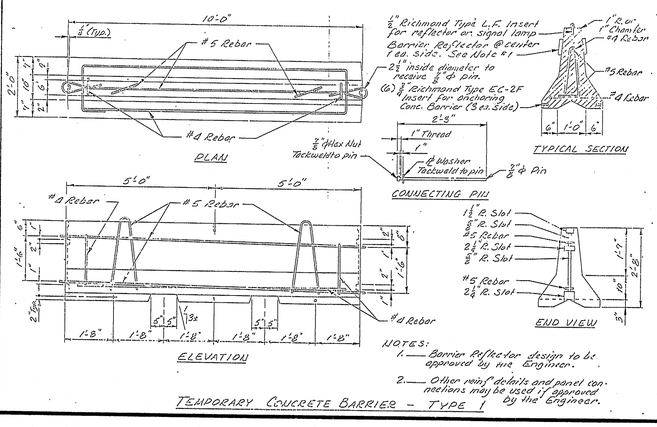
ITEM No.	DESCRIPTION	QUANTITY	UNIT
202.17	Removal of Existing Str. Concrete	1	Lump Sum
203.20	Common Excavation	315	Cu. Yds.
203.24	Common Borrow	800	Cu. Yds.
203.25	Granular Borrow	115	Cu. Yds.
203.26	Gravel Borrow	525	Cu. Yds.
206.081	Structural Earth Excavation-Abutments, Retaining Walls, Box Culverts and Structural Plate Units	200	Cu. Yds.
206.091	Structural Rock Excavation-Abutments, Retaining Walls, Box Culverts and Structural Plate Units	10	Cu. Yds.
304.10	Aggregate Subbase Course - Gravel	800	Cu. Yds.
307.20	Sand Leveling	13	Cu. Yds.
403.07	Hot Bituminous Pavement, Grading B	130	Ton
403.08	Hot Bituminous Pavement, Grading C	80	Ton
403.101	Hot Bituminous Pavement, Grading D (sidewalk)	15	Ton
502.21	Structural Concrete, Abutments & Retaining Walls	450	Cu. Yds.
502.27	Structural Concrete Superstructure T-beam Type	1	Lump Sum
503.12	Reinforcing Steel Fabricated & Delivered	16,500	Lbs.
503.13	Reinforcing Steel Placing	16,500	Lbs.
507.092	Aluminum Bridge Railing, 2 Bar	33	Lin. Ft.
507.094	Aluminum Bridge Railing, 3 Bar, with poles	33	Lin. Ft.
511.0701	Cofferdam - Abut. #1	1	Lump Sum
511.0702	Cofferdam - Abut. #2	1	Lump Sum
512.08	French Drains	170	Lin. Ft.
514.06	Curing Box For Concrete Cylinders	1	Each
515.20	Protective Coating For Concrete Surfaces	115	Sq. Yds.
526.30	Temporary Concrete Barrier, Type 1	100	Lin. Ft.
526.40	Resetting Temporary Concrete Barrier, Type 1	100	Lin. Ft.
606.265	Terminal End-Single Rail-Galvanized Steel	4	Each
606.35	Guard Rail Delineator Post	4	Each
606.55	Guard Rail Type 3 - Single Rail	213	Lin. Ft.
606.60	Guard Rail Type 3 - over 15 Ft. Radius	88	Lin. Ft.
609.13	Vertical Bridge Curb - Type 1	81	Lin. Ft.
609.31	Curb Type 3	130	Lin. Ft.
610.08	Plain Riprap	120	Cu. Yds.
615.07	Loam	26	Cu. Yds.
616.08	Sodding	12	Sq. Yds.
618.14	Seeding Method No. 2	4	Unit
618.15	Temporary Seeding	3	Lbs.
619.12	Mulch	4	Unit
627.63	4 inch Solid Yellow Pavement Marking Line	500	Lin. Ft.
627.67	Removing Pavement Markings	168	Sq. Ft.
629.05	Hand Labor, Straight Time	10	Man Hr.
630.0606	Traffic Officers	25	Man Hr.
631.10	Air Compressor (including operator)	10	Hour
631.11	Air Tool (including operator)	10	Hour
631.12	All Purpose Excavator (including operator)	10	Hour
631.132	Small Bulldozer (including operator)	10	Hour

ESTIMATED QUANTITIES

ITEM No.	DESCRIPTION	QUANTITY	UNIT
631.171	Truck - small (including operator)	10	Hour
631.22	Front End Loader (including operator)	10	Hour
637.07	Sprinkling	10	M. Gal
637.08	Calcium Chloride	1	Ton
639.20	Field Office Type C	1	Each
643.72	Temporary Traffic Signal	1	Lump Sum
652.31	Type I Barricades	10	Each
652.34	Cones	10	Each
652.35	Construction Signs	300	Sq. Ft.
652.36	Maintenance of Traffic Control Devices	120	Col. Days
652.37	Warning Lights	2	Group
652.38	Flaggers	100	Man Hr.
659.10	Mobilization	1	Lump Sum

ESTIMATED LUMP SUM ITEMS

502.27	Structural Concrete Superstructure T-beam Type	78	Cu. Yds.



TEMPORARY CONCRETE BARRIER - TYPE 1

CONSTRUCTION NOTES

1. All utility facilities shall be adjusted by the respective utilities unless noted.

2. For easements, construction limits and right-of-way lines refer to Right of Way Map.

3. The Contractor shall maintain a minimum 14 foot roadway at all times.

4. Place a 2 foot wide strip of sod on the side slopes along the top of the riprap.

5. The clearing limits as shown on the plans are approximate. The exact limits shall be established in the field by the Engineer. Payment for clearing shall be incidental to contract items.

6. Place loam, 2 inches deep, on slopes between Station 229+10 and Station 231+50.

7. Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Engineer. Shaping and compacting of the existing subbase and layers of new subbase 6 inches or less thick, in areas where the Engineer directs the Contractor not to excavate to the subgrade line shown on the plans, will be paid for with appropriate equipment rental items.

8. One guard rail delineator post and one terminal end shall be installed at each guard rail end.

9. All embankment material, except as otherwise shown, placed below Elevation 328.0, shall be granular borrow meeting the requirements of Subsection 703.19, Material For Underwater Backfill.

10. Payment for removal of the existing concrete curbs and portions of the T-beams, where shown on the plans, shall be paid for under Item 202.17.

11. The Contractor shall remove the 4 granite mill wheels, located in the existing wingwalls, with care and shall store them within the right of way. They are to become the property of the Town of Athens. Payment for removing and storing of the granite mill wheels shall be incidental to contract items.

12. Sodded gutters shall be constructed after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion.

13. Payment for the removal of the existing beam type guard rail over superstructure curbs to be considered incidental to Item 202.17.

14. Chamfer all exposed edges of concrete a consistent dimension between $\frac{1}{2}$ inch and $\frac{3}{4}$ inch inclusive, unless otherwise indicated.

15. Reinforcing steel shall have 2 inches cover unless otherwise indicated.

16. Break bond at vertical contraction joints by a method approved by the Engineer.

17. Waterstops are not required in horizontal construction joints.

18. Protective coating for concrete surfaces shall be applied to the following areas:
- Top of concrete sidewalk and curb.
- Fascias and outside face of exterior T-beams.
- Ends of sidewalk and curb to 1 foot below Finished grade.
- Top and back face of parapets to 1 foot below Finished grade.
- All exposed surfaces of concrete end posts.

19. Place 4 inch diameter drains in breastwall and wings at 20 foot maximum spacing. Exact location to be determined by the Engineer in the field.

20. Form a 1 inch V-groove on the Fascias at the horizontal joint between the curb and the slab.

21. Mortar for bedding and for joints in the granite curb, and for the grout used in setting dowels (S508) shall contain an approved non-shrink additive.

22. Payment for drilling and grouting of dowels shall be considered incidental to contract items.

23. The superstructure slab concrete shall be placed monolithically with the beam section and shall be kept plastic until the entire slab concrete, on at least one side of the bridge, has been placed. Approved set retarding admixtures shall be used when authorized by the Engineer, in accordance with the Standard Specifications.

24. All deteriorated concrete on the exposed Faces of the existing T-beams shall be removed and shall be patched with a non-shrink grout as directed by the Engineer. Payment for all materials and labor to be incidental to contract items.

25. The ends of the superstructure 4 inch PVC sections shall be plugged by a method approved by the Engineer.

As Built 1983

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	RS-0241(1)	2	19

PROJECT DESIGN ENGINEER — PLANS

BY	DATE
RJM	2-81

DESIGN - DETAILED
CHECKED
REVISED
FIELD CHANGES

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT

STREAM BRIDGE

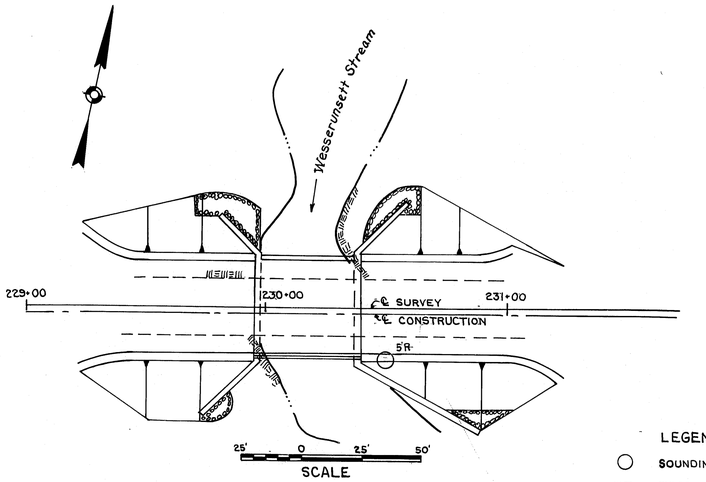
ATHENS

ESTIMATED QUANTITIES and CONSTRUCTION NOTES

SHEET 2 OF 19 AUGUSTA, MAINE JAN 1982

R89-459

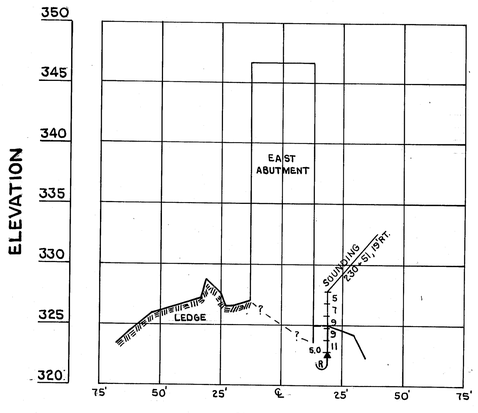
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BRS-0241(11)	3	19



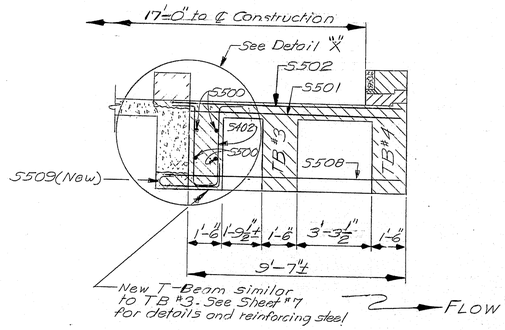
PLAN

LEGEND

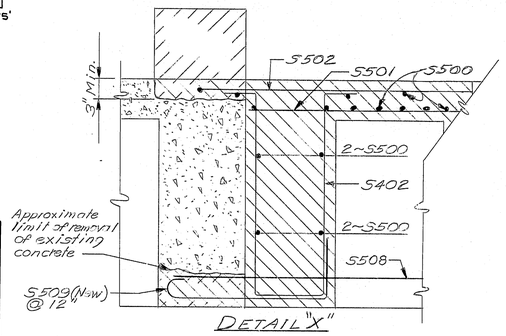
- ○ SOUNDING
- III EXPOSED LEDGE
- 7/8 BLOWS PER FOOT-ROD SOUNDING
- (R) REFUSAL



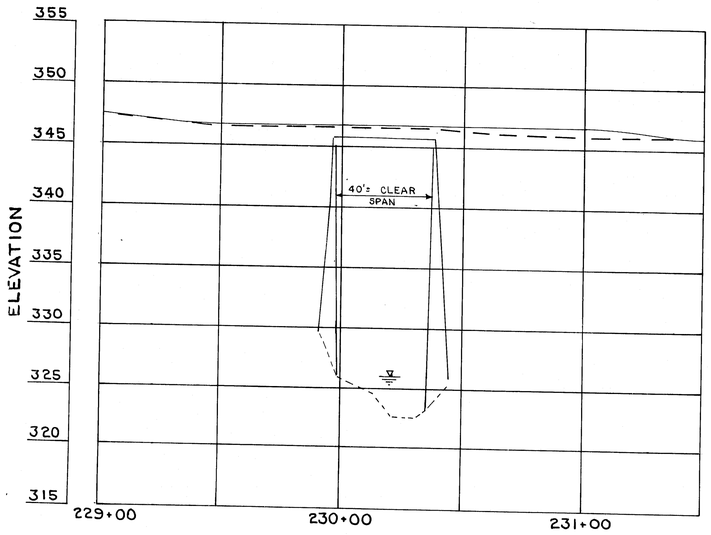
STA. 230+40



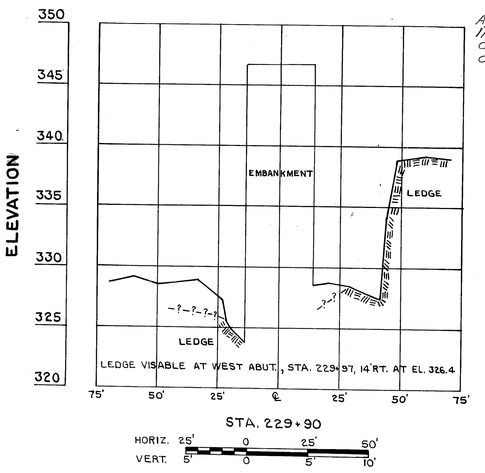
DOWNSTREAM TRANSVERSE SECTION



DETAIL "X"



PROFILE



STA. 229+90

HORIZ. 25' 0 25' 50'
VERT. 5' 0 5' 10'

TRANSVERSE SECTIONS

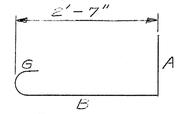
ADDITIONAL REINFORCING STEEL REQUIRED

MARK	NUMBER
5500	17
5800	5
5900	2
5901	16
5402	26
5801	3
5509	40 (maximum, if full length of existing T-Beam concrete removed at bottom)

NOTE: See Sheet #9 for Reinforcing Steel Schedule. Bar 5509 is on this sheet. Additional 5500 bars are required due to previous omission from the reinforcing steel schedule of bars required in the T-Beams.

⚠ Detail of T-Beam revision on downstream side of bridge with additional reinforcing steel required. 10-1-82

As Built 1993 23



BAR 5509

A = 1'-0"
B = 2'-7"
G = 7"
Length = 4'-2"

PROJECT DESIGN ENGINEER	BY	DATE
PLANS — DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

BRUNING 44-132 45710

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT STREAM BRIDGE

IN THE TOWN OF

ATHENS

SOMERSET COUNTY

FOUNDATION SURVEY

R89-455

R89-456

X-SECTIONS 4 Sheet of 19

WISSAHICKON DRIVE

ATHENS AVE

F.A. NO.	ROUTE NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1		NAME	0104-82	4	19

Sta 229+25 Begin Guard Rail
Install 25 Lin Ft Guard
Rail Type 3 Circular 345

Sta 229+75 Begin Guard Rail
Install 25 Lin Ft Guard
Rail Type 3 Circular 345

Sta 231+25 End Guard Rail
Installed 25 Lin Ft Guard Rail
Type 3 Circular 345

Sta 231+92 End Guard Rail
Install 25 Lin Ft Guard
Rail Type 3 Circular 345

Sta 229+50 Begin Guard Rail
Install 25 Lin Ft Guard
Rail Type 3 Circular 345

Sta 231+09 End Guard Rail
Install 25 Lin Ft Guard
Rail Type 3 Circular 345

Begin Project 220+0
End Project 250+0

Begin Transition 229+0

Survey ℄ 23'
℄ Construction

Begin Transition 232+0

End Transition 250+0

Curb Type 3 (Mod 4")
℄ Construction

Begin Transition 251+0
End Project

Concrete Curb, Typ.

Bridge 245'

Guide Rail Transition Typ.

Revisions
Obstructions & Pipeline Relocations
See Sh. Gen & Gds 10/7/82

Typical Section
for Notes See Sheet #2

6" Hot Bituminous Pavement
Sand Leveling
11'-0"
11'-0"
Subbase
Course
Gravel
Aggregate
Guard Rail Type 3 (Typ)
1½" Hot Bituminous Pavement
2" Hot Bituminous Pavement
3'-0" 2'-0"
Sidewalk
8'-0"
17'-0"
25'-0"
20'-6"
9'-6"
6'-6" 3'-0"

Install 87.5 Lin Ft
Guard Rail Type 3

Sta 232+0
℄ Survey 2'-3" ℄ Construction
2'-3"

Sta 231+62 End Guard Rail
Installed 25 Lin Ft Guard Rail
Type 3 Circular

Inst Transition Lin Ft Guard
Rail Type 3 Circular

Sta 231+09 End Guard Rail
Install Type 3 Circular

Sta 229+25 Begin Guard Rail
Install Type 3 Circular

Inst Transition Lin Ft Guard
Rail Type 3 Circular (15' Radius)

Sta 229+75 Begin Guard Rail
Install Type 3 Circular

Inst Transition Lin Ft Guard
Rail Type 3 Circular

Sta 231+62 End Guard Rail
Installed 25 Lin Ft Guard
Rail Type 3 Circular

+10 Guy Anchor

+ 8.5 CMP *46' with Light

+10 Guy Anchor

+11 CMP *46 with Transformer

+08 Guy Anchor

+ 31 CMP *46'

+ 80 Guy Anchor

+25 Aleu Pole

+23 ℄ Elm.

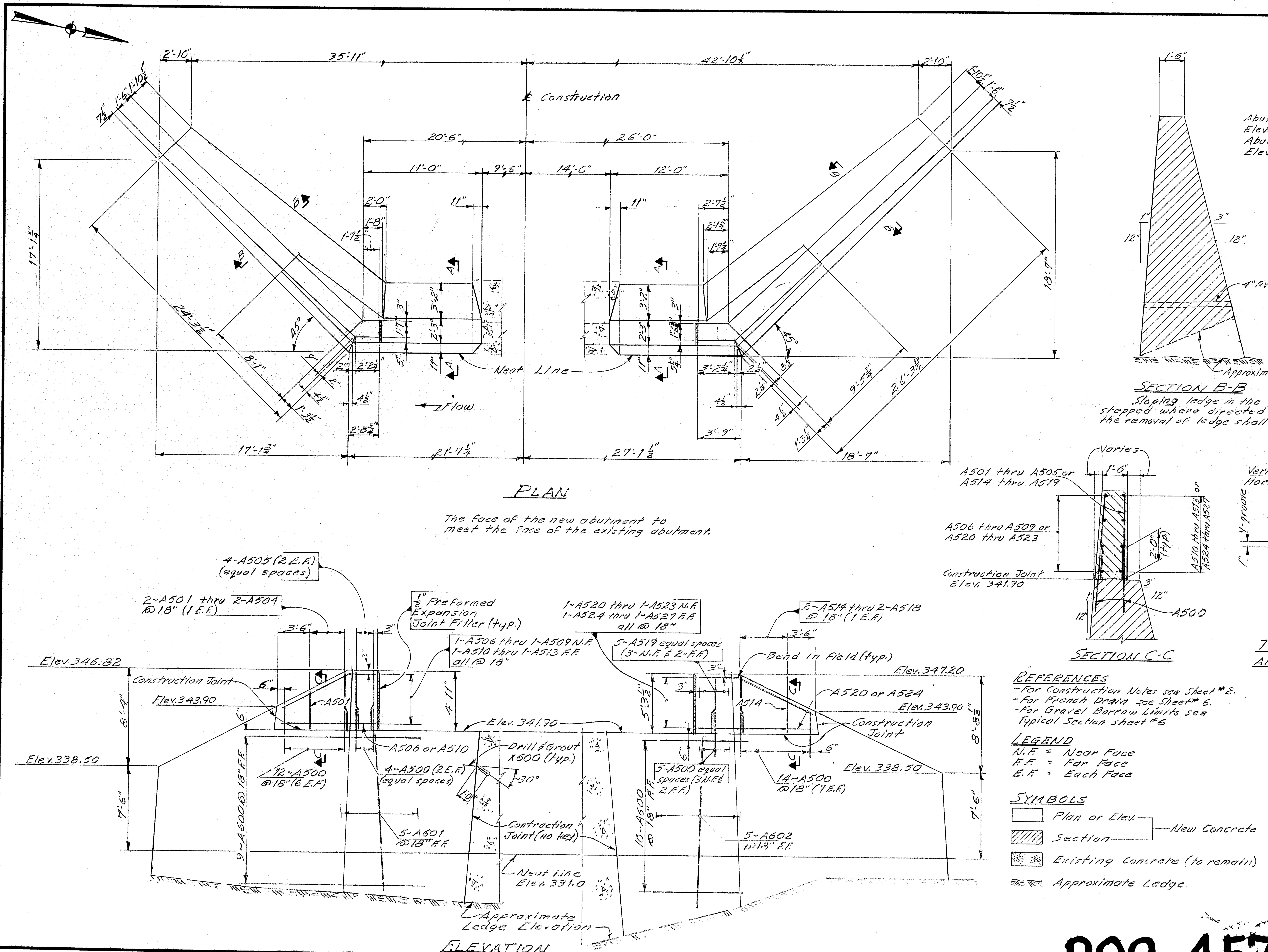
+40 Aleu Pole

ORIGINAL SURVEY	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED	E.C.A.	7-81
		TECHNICIAN	R. T.H.	7-81
		AREA*		
	NO	AREAS CHECKED		

FINAL SURVEY	NOTE BOOK	SURVEYED	BY	DATE
		PLOTTED		
		TECHNICIAN		
		AREA*		
	NO	AREAS CHECKED		

DESIGN: RJM

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(1)	5	19



REFERENCES
- For Construction Notes see Sheet #2.
- For French Drain see Sheet #6.
- For Gravel Borrow Limits see Typical Section sheet #6

LEGEND
N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

SYMBOLS
Plan or Elev. — New Concrete
Section — New Concrete
Existing Concrete (to remain)
Approximate Ledge

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN-DETAILED	RJM R.T.A	7-81
CHECKED	R.W.M.	9-81
REVISIONS		
FIELD CHANGES		

As Built 1983

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT STREAM BRIDGE

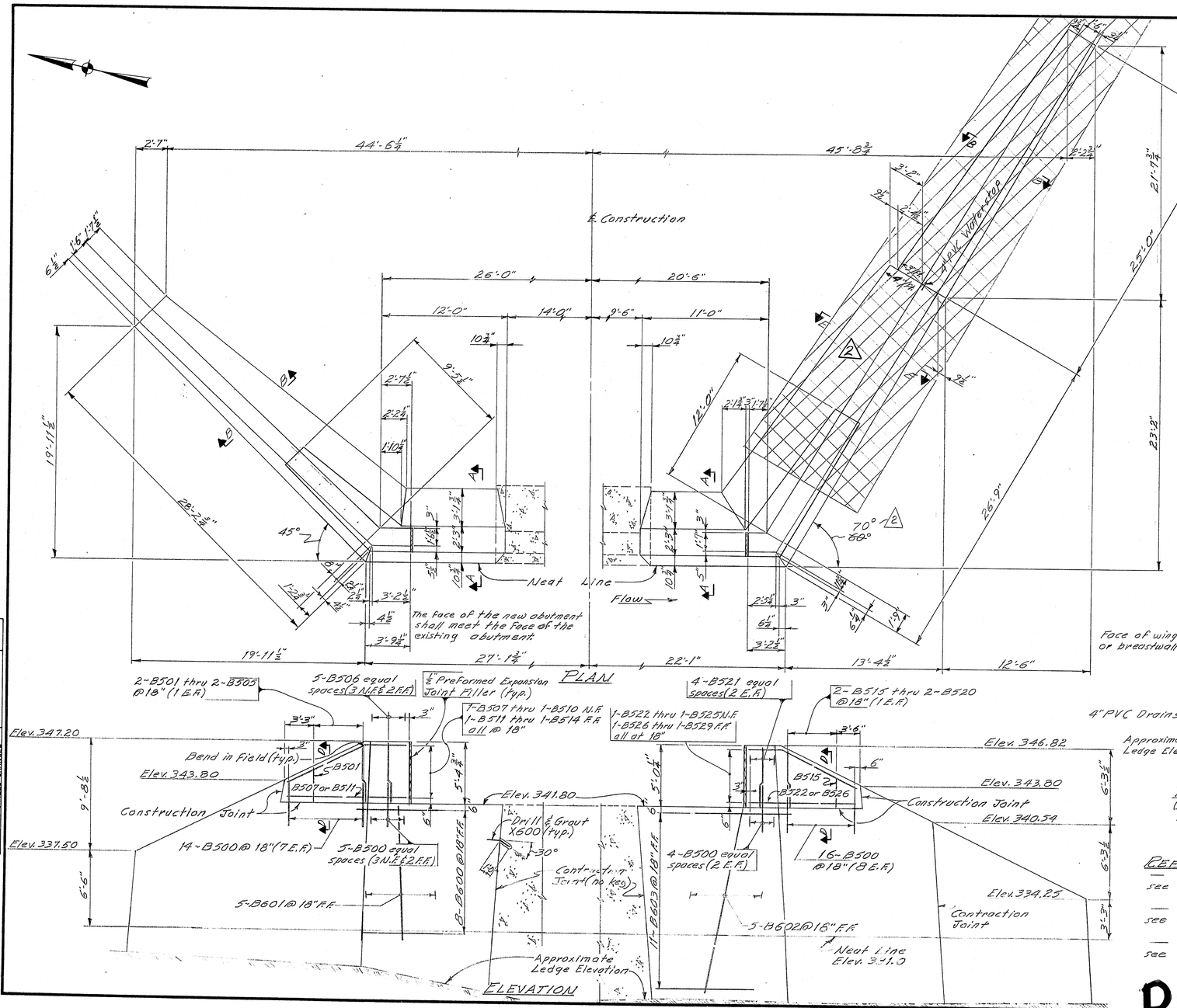
ATHENS

ABUTMENT NO. 1

SHEET 5 OF 19 AUGUSTA, MAINE Jan. 1982

R89-457

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	RS-0241(1)	6	19



PROJECT DESIGN ENGINEER		BY	DATE
PLANS	DESIGN - DETAILED	PJM	7-81
	CHECKED	EJA	9-81
	REVISIONS	PJM	
	FIELD CHANGES		

BRUNING 44-132-4510

As Bu. H 1983

	Revisions - Gabions & Riprap See Sheets Ga & Gb.	10/7/82

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

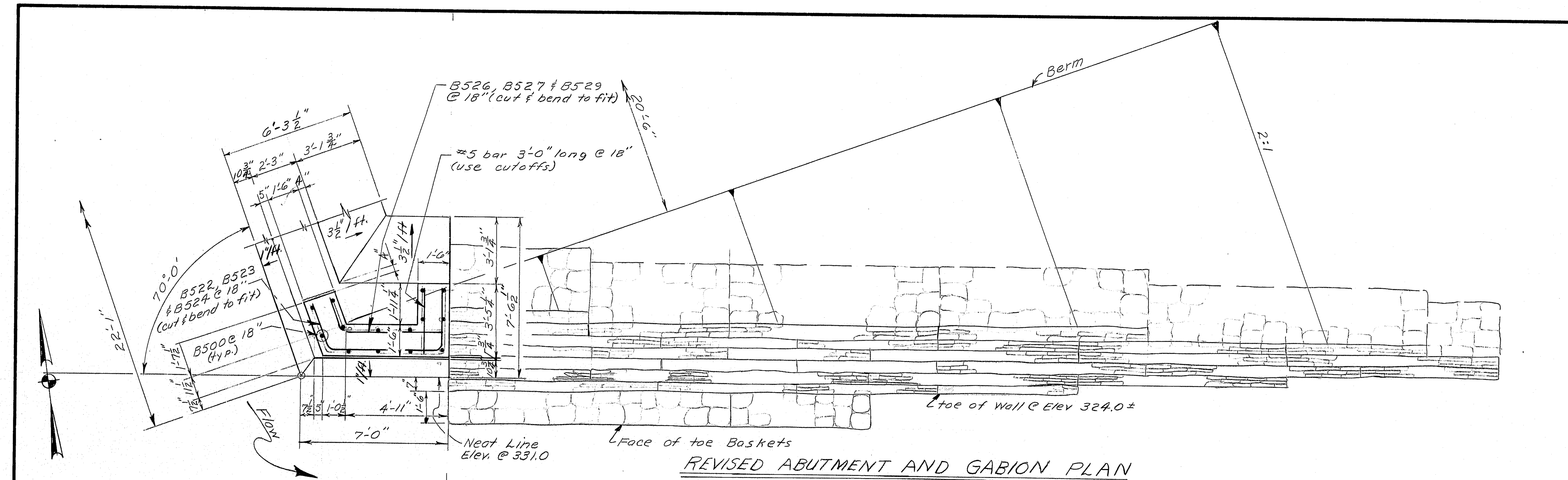
WESSERUNSETT
STREAM BRIDGE
ATHENS
ABUTMENT NO. 2

SHEET 6 OF 19 AUGUSTA, MAINE Jan. 1982

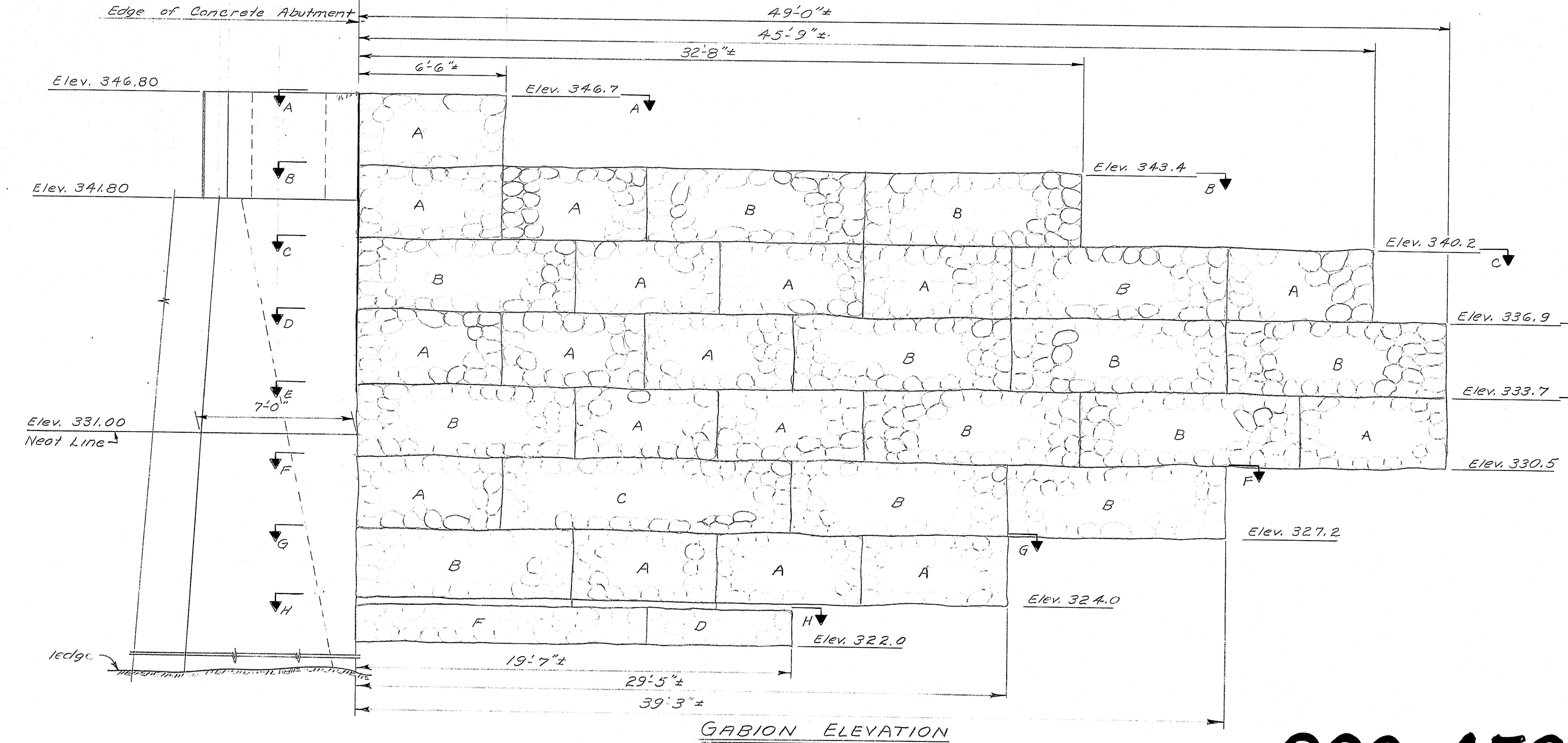
REFERENCES
— For Construction Notes see Sheet "2.
— For Sections A-A & B-B see Sheet "5.
— For Legend & Symbols see Sheet "5

R89-458

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	6a	



REVISED ABUTMENT AND GABION PLAN



GABION ELEVATION

AS Built "1983"

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN - DETAILED	P.J.M.	10/7/82
CHECKED	R.W.M.	10/8/82
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT STREAM BRIDGE

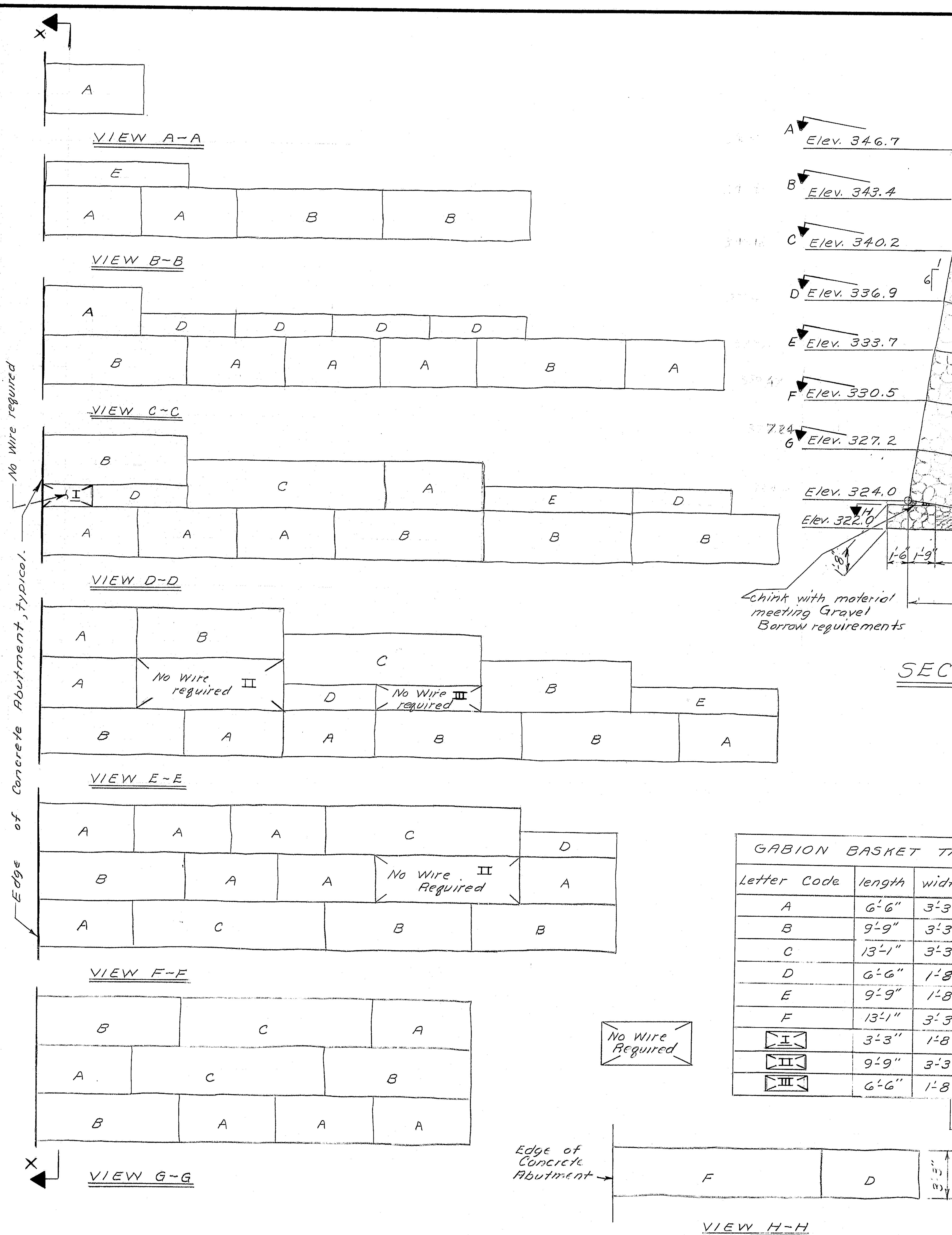
ATHENS

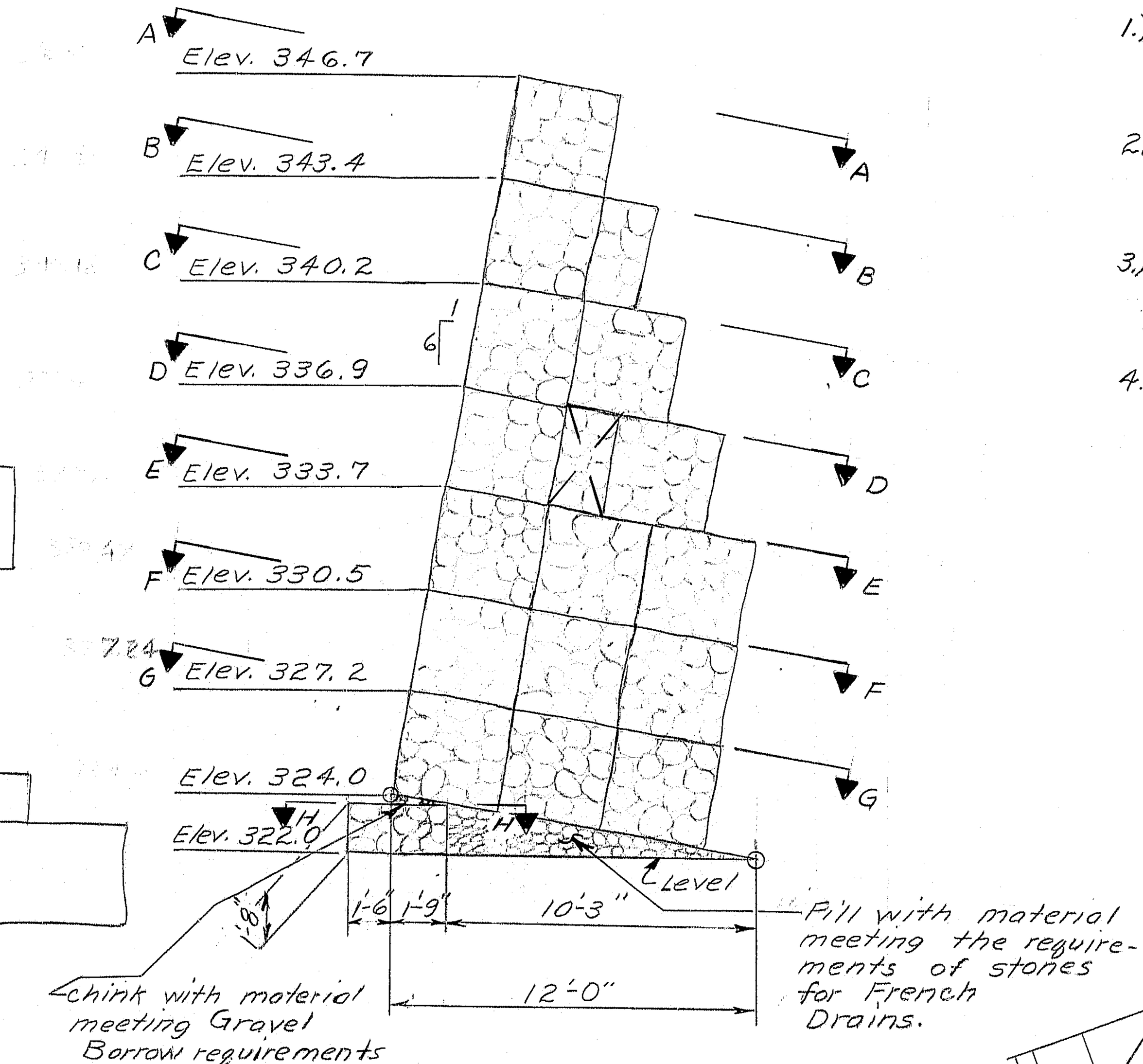
ABUTMENT #2 REVISIONS & GABIONS

SHEET 6a OF — AUGUSTA, MAINE Oct. 7, 1982

R89-459

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	66	





SECTION X-X

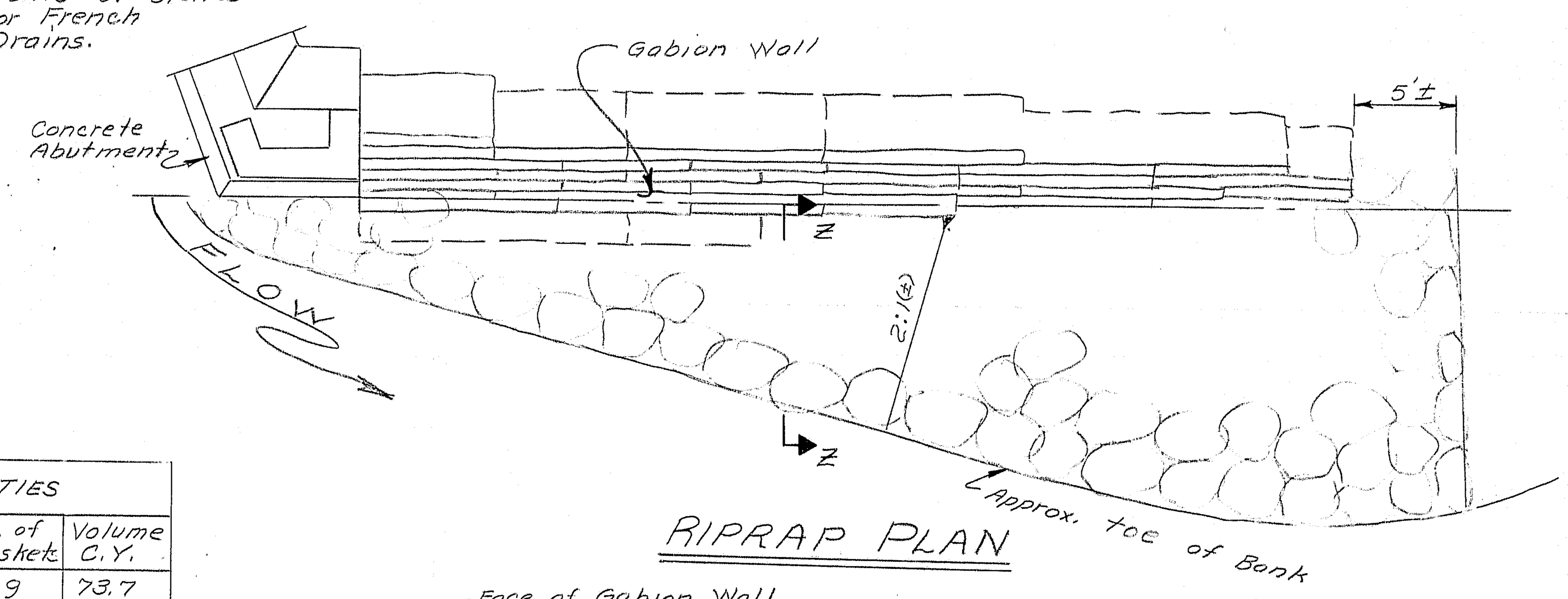
GABION NOTES

1.) The Gabions shall be constructed in accordance with the Department of Transportation Standard Specifications for Highways and Bridges Section 601.

2.) All excavation required to construct the Gabion wall to neat lines 1'-6" out from the face of baskets will be paid for under Item 206.081, Structural Earth Excavation Abuts., Ret. Walls, etc.

3.) Payment for all materials equipment and labor required to construct the Gabion foundation, as shown on the plans, will be considered incidental to the Gabions.

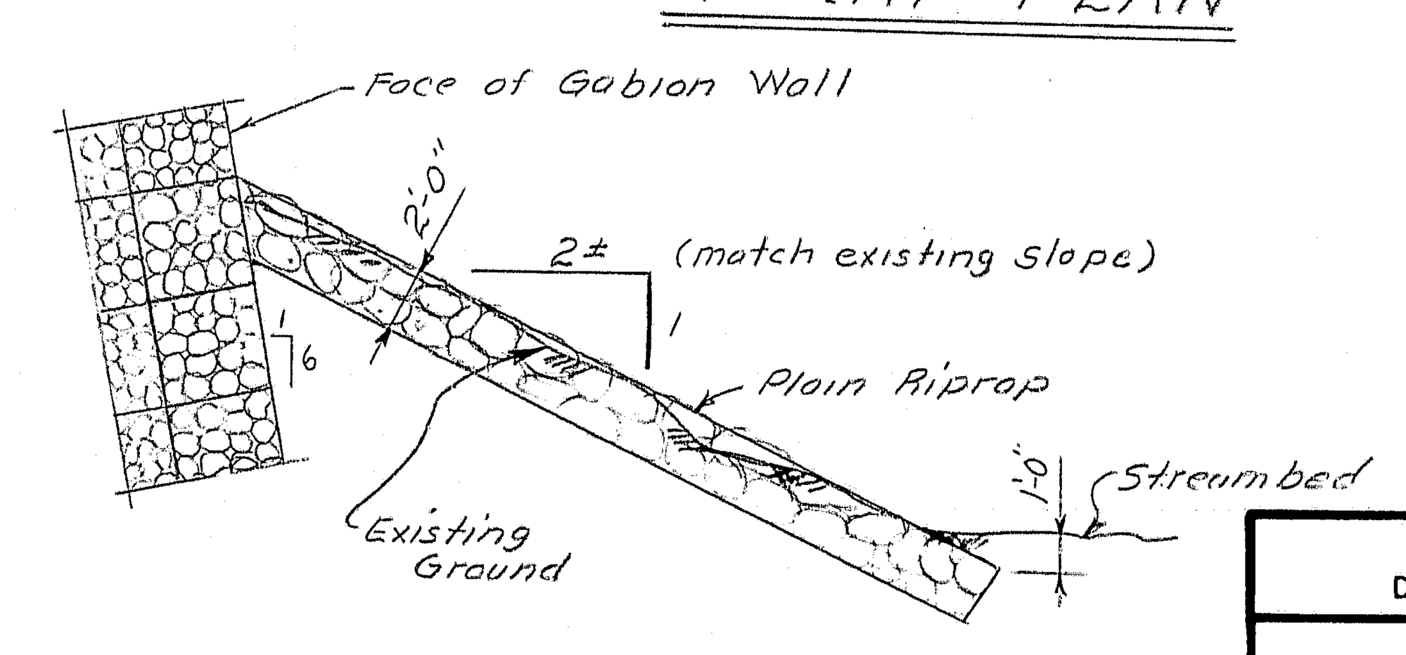
4.) Place a 2 foot wide sod strip along the top of the Gabions.



RIPRAP PLAN

GABION BASKET TABLE				QUANTITIES		
Letter Code	length	width	height	Volume C.Y.	No. of Baskets	Volume C.Y.
A	6'-6"	3'-3"	3'-3"	2.54	29	73.7
B	9'-9"	3'-3"	3'-3"	3.81	19	72.5
C	13'-1"	3'-3"	3'-3"	5.12	6	30.7
D	6'-6"	1'-8"	3'-3"	1.30	9	11.7
E	9'-9"	1'-8"	3'-3"	1.95	3	5.8
F	13'-1"	3'-3"	1'-8"	2.61	1	2.6
I	3'-3"	1'-8"	3'-3"	0.65	1	0.6
II	9'-9"	3'-3"	3'-3"	3.81	2	7.6
III	6'-6"	1'-8"	3'-3"	1.30	1	1.3
TOTAL VOLUME						206.5

VIEW H-H



SECTION Z-Z

As Built 1983

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN-DETAILED	PJM	10/7/82
CHECKED		10/12/82
REVISIONS		
FIELD CHANGES		

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT STREAM BRIDGE

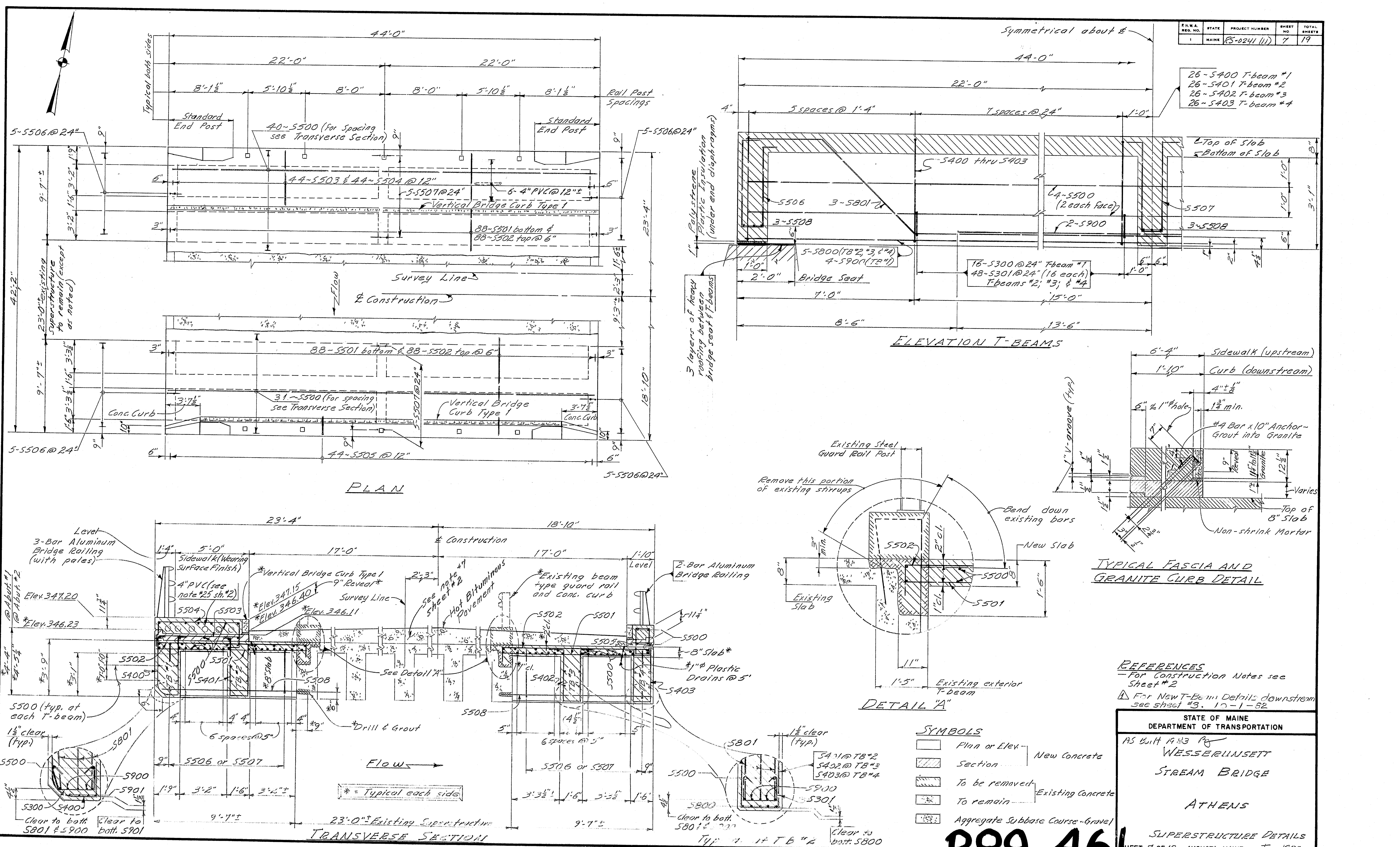
ATHENS

GABION DETAILS

SHEET 66 OF — AUGUSTA, MAINE Oct. 7, 1982

R89-460

BRUNING 44-132 45710



PLAN
ELEVATION T-BEAMS
TRANSVERSE SECTION
DETAIL "A"
TYPICAL FASCIA AND GRANITE CURB DETAIL
Symmetrical about ℄
44'-0"
22'-0"
Rail Post Spacings
Standard End Post
40-S500 (For spacing see Transverse Section)
44-S503 & 44-S504 @ 12"
5-S507@24"
6-4" PVC @ 12"±
Vertical Bridge Curb Type 1
88-S501 bottom & 88-S502 top @ 6"
5-S506@24"
Survey Line
℄ Construction
Flow
31-S500 (For spacing see Transverse Section)
Conc. Curb
44-S505 @ 12"
23'-0"± existing superstructure to remain except as noted
26-S400 T-beam #1
26-S401 T-beam #2
26-S402 T-beam #3
26-S403 T-beam #4
5 spaces @ 1'-4"
7 spaces @ 24"
Top of Slab
Bottom of Slab
S400 thru S403
3-S801
4-S500 (2 each face)
2-S900
3-S508
5-S800 (TB #2, #3, & #4)
4-S900 (TB #1)
16-S300 @ 24" T-beam #1
48-S301 @ 24" (16 each) T-beams #2, #3, & #4
Bridge Seat
1" Polystyrene Plastic Insulation (under end diaphragms)
3 layers of heavy roofing between bridge seat & T-beams
Sidewalk (upstream)
Curb (downstream)
#4 Bar x 10" Anchor-Grout into Granite
Non-shrink Mortar
Top of 8" Slab
Varies
Existing Steel Guard Rail Post
Remove this portion of existing stirrups
Bend down existing bars
New Slab
Existing Slab
Existing exterior T-beam
3-Bar Aluminum Bridge Railing (with posts)
Sidewalk (Wearing Surface Finish)
4" PVC (see note #25 sh. #2)
Vertical Bridge Curb Type 1
9" Reveal*
*Elev. 347.15
*Elev. 346.40
*Elev. 346.11
Elev. 347.20
*Elev. 346.23
See note #7 Sheet #2
Hot Bituminous Pavement
*Existing beam type guard rail and conc. curb
2-Bar Aluminum Bridge Railing
8" Slab*
#1" ⌀ Plastic Drains @ 5'
See Detail "A"
Drill & Grout
S500 (typ. at each T-beam)
Clear to bott. S801 & S900
Clear to bott. S901
* = Typical each side
23'-0"± Existing Superstructure
Typ. ... at T.B. "A"
Clear to bott. S800
REFERENCES
-For Construction Notes see Sheet #2
For New T-Beam Details downstream see sheet #3. 10-1-82
SYMBOLS
Plan or Elev. — New Concrete
Section
To be removed — Existing Concrete
To remain
Aggregate Subbase Course-Gravel
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
AS built ...
WESSERUNSETT STREAM BRIDGE
ATHENS
SUPERSTRUCTURE DETAILS
SHEET 7 OF 19 AUGUSTA, MAINE Jan. 1982
BS-0241(11) 7 19
PLANS
PROJECT DESIGN ENGINEER
DESIGN-DETAILED
CHECKED
REVISIONS
FIELD CHANGES

R89-461

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
ABUTMENT No.1			
A500	35	4'-0"	Dowels
A501	2	3'-1"	Downstream Wing
A502	↓	3'-7"	↓
A503	↓	4'-1"	↓
A504	2	4'-7"	↓
A505	4	4'-9"	Downstream Wing
A514	2	3'-0"	Upstream Wing
A515	↓	3'-7"	↓
A516	↓	4'-1"	↓
A517	↓	4'-7"	↓
A518	2	5'-0"	↓
A519	5	5'-1"	Upstream Wing
A601	5	13'-0"	Walls
A602	5	15'-0"	Walls

MARK	NO.	LENGTH	LOCATION
ABUTMENT NO.2			
B500	39	4'-0"	Dowels
B501	2	3'-0"	Upstream Wing
B502	↓	3'-6"	↓
B503	↓	4'-1"	↓
B504	↓	4'-7"	↓
B505	2	5'-1"	↓
B506	5	5'-2"	Upstream Wing
B515	2	2'-8"	Downstream Wing
B516	↓	3'-1"	↓
B517	↓	3'-6"	↓
B518	↓	3'-10"	↓
B519	↓	4'-2"	↓
B520	2	4'-7"	↓
B521	4	4'-10"	Downstream Wing
B601	5	12'-0"	Walls
B602	5	13'-0"	Walls

MARK	NO.	LENGTH	LOCATION

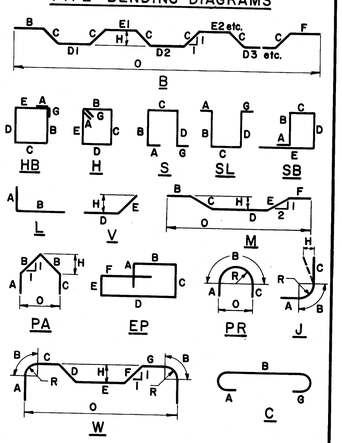
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
		A B U T M E N T N O. 2												
A506	1	10'-11"	V	—	—	—	8'-9"	2'-2"	—	—	1'-6 3/8"	—	—	Downstream Wing
A507	↓	10'-9"	↓	—	—	—	8'-8"	2'-1"	—	—	1'-5 7/8"	—	—	↓
A508	↓	6'-11"	↓	—	—	—	4'-10"	2'-1"	—	—	1'-5 7/8"	—	—	↓
A509	↓	11'-0"	↓	—	—	—	9'-0"	2'-0"	—	—	1'-5"	—	—	↓
A510	↓	9'-5"	↓	—	—	—	7'-11"	1'-6"	—	—	1'-0 3/4"	—	—	↓
A511	↓	9'-5"	↓	—	—	—	7'-11"	↓	—	—	↓	—	—	↓
A512	↓	5'-7"	↓	—	—	—	4'-1"	↓	—	—	↓	—	—	↓
A513	↓	9'-10"	↓	—	—	—	8'-4"	1'-6"	—	—	1'-0 3/4"	—	—	Downstream Wing
A520	↓	13'-3"	↓	—	—	—	10'-1"	3'-2"	—	—	2'-3"	—	—	Upstream Wing
A521	↓	12'-11"	↓	—	—	—	9'-10"	3'-1"	—	—	2'-2"	—	—	↓
A522	↓	8'-6"	↓	—	—	—	5'-5"	3'-1"	—	—	2'-2"	—	—	↓
A523	↓	13'-5"	↓	—	—	—	10'-6"	2'-11"	—	—	2'-0 3/4"	—	—	↓
A524	↓	11'-9"	↓	—	—	—	9'-3"	2'-6"	—	—	1'-9 1/4"	—	—	↓
A525	↓	11'-7"	↓	—	—	—	9'-1"	2'-6"	—	—	1'-9 1/4"	—	—	↓
A526	↓	7'-2"	↓	—	—	—	4'-9"	2'-5"	—	—	1'-8 1/2"	—	—	↓
A527	1	11'-11"	V	—	—	—	9'-6"	2'-5"	—	—	1'-8 1/2"	—	—	Upstream Wing
A600	19	8'-0"	V	—	—	—	4'-0"	4'-0"	—	—	2'-10"	—	—	Walls
		A B U T M E N T N O. 2												
B507	1	13'-2"	V	—	—	—	10'-1"	3'-1"	—	—	2'-2"	—	—	Upstream Wing
B508	↓	12'-9"	↓	—	—	—	9'-8"	3'-1"	—	—	2'-2"	—	—	↓
B509	↓	8'-6"	↓	—	—	—	5'-6"	3'-0"	—	—	2'-1 1/2"	—	—	↓
B510	↓	13'-5"	↓	—	—	—	10'-6"	2'-11"	—	—	2'-0 3/8"	—	—	↓
B511	↓	11'-7"	↓	—	—	—	9'-3"	2'-4"	—	—	1'-7 3/4"	—	—	↓
B512	↓	11'-3"	↓	—	—	—	8'-11"	2'-4"	—	—	1'-7 3/4"	—	—	↓
B513	↓	6'-11"	↓	—	—	—	4'-6"	2'-5"	—	—	1'-8 1/2"	—	—	↓
B514	↓	12'-3"	↓	—	—	—	9'-10"	2'-5"	—	—	1'-8 1/2"	—	—	Upstream Wing
B522	↓	13'-1"	↓	—	—	—	12'-11"	2'-2"	—	—	1'-10 1/2"	—	—	Downstream Wing
B523	↓	15'-0"	↓	—	—	—	12'-11"	2'-1"	—	—	1'-8 1/8"	—	—	↓
B524	↓	9'-0"	↓	—	—	—	6'-11"	2'-1"	—	—	1'-8 1/8"	—	—	↓
B525	↓	15'-3"	↓	—	—	—	13'-1"	2'-2"	—	—	1'-10 1/2"	—	—	↓
B526	↓	13'-2"	↓	—	—	—	11'-9"	1'-5"	—	—	1'-2 3/4"	—	—	↓
B527	↓	13'-2"	↓	—	—	—	11'-9"	↓	—	—	↓	—	—	↓
B528	↓	7'-2"	↓	—	—	—	5'-9"	↓	—	—	↓	—	—	↓
B529	1	13'-7"	V	—	—	—	12'-2"	1'-5"	—	—	1'-2 3/4"	—	—	Downstream Wing
B600	8	8'-0"	V	—	—	—	4'-0"	4'-0"	—	—	2'-10"	—	—	Upstream Wall
B603	11	8'-0"	V	—	—	—	4'-0"	4'-0"	—	—	3'-5 1/2"	—	—	Downstream Wall
X502	4M	2'-3"	V	—	—	—	1'-0"	1'-0"	—	—	6"	—	—	Dowels A"1 & A"2
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

PLANS	BY	DATE
DESIGN-DETAIL	PJM	9-81
CHECKED	KWM	9-81
REVISIONS		
FIELD CHANGES		

FHWA PER. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	(RS-0241(1))	8	19

TYPE-BENDING DIAGRAMS



All dimensions are out to out of reinf. bar

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   - Mark (A502) bar size - #5
   - Mark (P1001) bar size - #10
   - Mark (S603) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT

STREAM BRIDGE

ATHENS

REINFORCING STEEL SCHEDULE
ABUTMENTS

SHEET 8 OF 19 AUGUSTA, MAINE Jan. 1982

R89-462

REINFORCING STEEL SCHEDULE

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
SUPERSTRUCTURE			
S500	71	43'-8"	Longitudinal
S501	176	10'-2"	Transverse
S503	44	6'-0"	Transverse
S508	18	10'-2"	Concrete Diaphgrams
S800	15	43'-8"	T-beams #2, #3, & #4
S900	8	27'-0"	T-beams
S901	4	43'-8"	T-beam #1

MARK	NO.	LENGTH	LOCATION

MARK	NO.	LENGTH	LOCATION
END POSTS			
EPA01	40	1'-10"	all end posts
EPA05	12	1'-5"	downstream end posts
EPA07	12	2'-5"	upstream end posts
EP508	18	5'-3"	all end posts

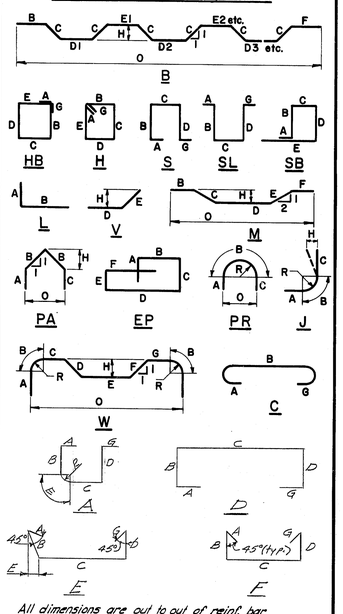
BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
SUPERSTRUCTURE														
S300	16	4'-1"	E	6"	11"	1'-3½"	10½"	2½"	—	6"	—	—	—	T-beam #1
S301	48	4'-0"	F	6"	10⅝"	1'-3"	10½"	—	—	6"	—	—	—	T-beams #2, #3, & #4
S400	26	10'-0"	A	6"	3'-2"	9"	3'-11"	1'-2"	—	6"	—	—	9"	T-beam #1
S401	↓	9'-8"	SL	6"	3'-11"	1'-3"	3'-6"	—	—	6"	—	—	—	T-beam #2
S402		9'-3"	SL	6"	3'-6"	1'-3"	3'-6"	—	—	6"	—	—	—	T-beam #3
S403	26	10'-8"	S	1'-6"	3'-11"	1'-3"	3'-6"	—	—	6"	—	—	—	T-beam #4
					10'-2"									
S502	176	10'-11"	L	9"	~~10⅝"~~	—	—	—	—	—	—	—	—	Transverse
S504	44	10'-1"	D	6"	1'-9"	5'-7"	1'-9"	—	—	6"	—	—	—	Sidewalk
S505	44	6'-4"	H	4"	1'-1"	1'-9"	1'-1"	1'-9"	—	4"	—	—	—	Curb
S506	20	8'-0"	S	6"	3'-2"	8"	3'-2"	—	—	6"	—	—	—	Concrete Diaphgram
S507	10	8'-0"	SL	6"	3'-2"	8"	3'-2"	—	—	6"	—	—	—	Concrete Diaphgram
S801	12	46'-3"	M	—	3'-8"	4'-5⅝"	30'-0"	4'-5⅝"	3'-8"	—	3'-2"	43'-8"	—	T-beams
END POSTS														
EPA02	18	4'-9"	S	0	2'-1"	7"	2'-1"	—	—	0	—	—	—	all end posts
EPA03	18	4'-9"	H	4½"	1'-0"	1'-0"	1'-0"	1'-0"	—	4½"	—	—	—	all end posts
EPA04	8	3'-1"	S	0	1'-3"	7"	1'-3"	—	—	0	—	—	—	upstream end posts
EPA06	8	3'-11"	S	0	1'-8"	7"	1'-8"	—	—	0	—	—	—	downstream end posts
EP301	18	5'-3"	V	—	—	—	3'-0"	2'-3"	—	—	4"	—	—	all end posts
EP502	6	6'-7"	S	0	2'-9"	7"	2'-9"	—	—	6"	—	—	—	downstream end posts
EP503	4	6'-6"	S	0	2'-9"	6"	2'-9"	—	—	6"	—	—	—	downstream end posts
EP504	2	8'-1"	H	5⅝"	2'-9"	10"	2'-9"	10"	—	5⅝"	—	—	—	downstream end posts
EP505	6	9'-1"	S	0	4'-0"	7"	4'-0"	—	—	6"	—	—	—	upstream end posts
EP506	4	9'-0"	S	0	4'-0"	6"	4'-0"	—	—	6"	—	—	—	upstream end posts
EP507	2	10'-7"	H	5⅝"	4'-0"	10"	4'-0"	10"	—	5⅝"	—	—	—	upstream end posts
MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION

PLANS	BY	DATE
DESIGN - DETAIL	PJM	2-82
CHECKED	RJM	9-81
REVISIONS		9-81
FIELD CHANGES		

FHWA REF. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	(85-024)(1)	9	19

TYPE - BENDING DIAGRAMS



All dimensions are out to out of reinf. bar.

Bending details and hooks shall conform to the recommendations of ACI Standard 315-65.

Reinforcing Bar: ASTM A615 Grade 60

GENERAL NOTES

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
   Mark (A502) bar size - #5
   Mark (P1001) bar size - #10
   Mark (S609) bar size - #6
2. Letter of Marks A, P & S locates bars of Abutments, Piers, and Superstructure parts respectively.

⚠ See Sheet #3 for additional reinforcing steel.

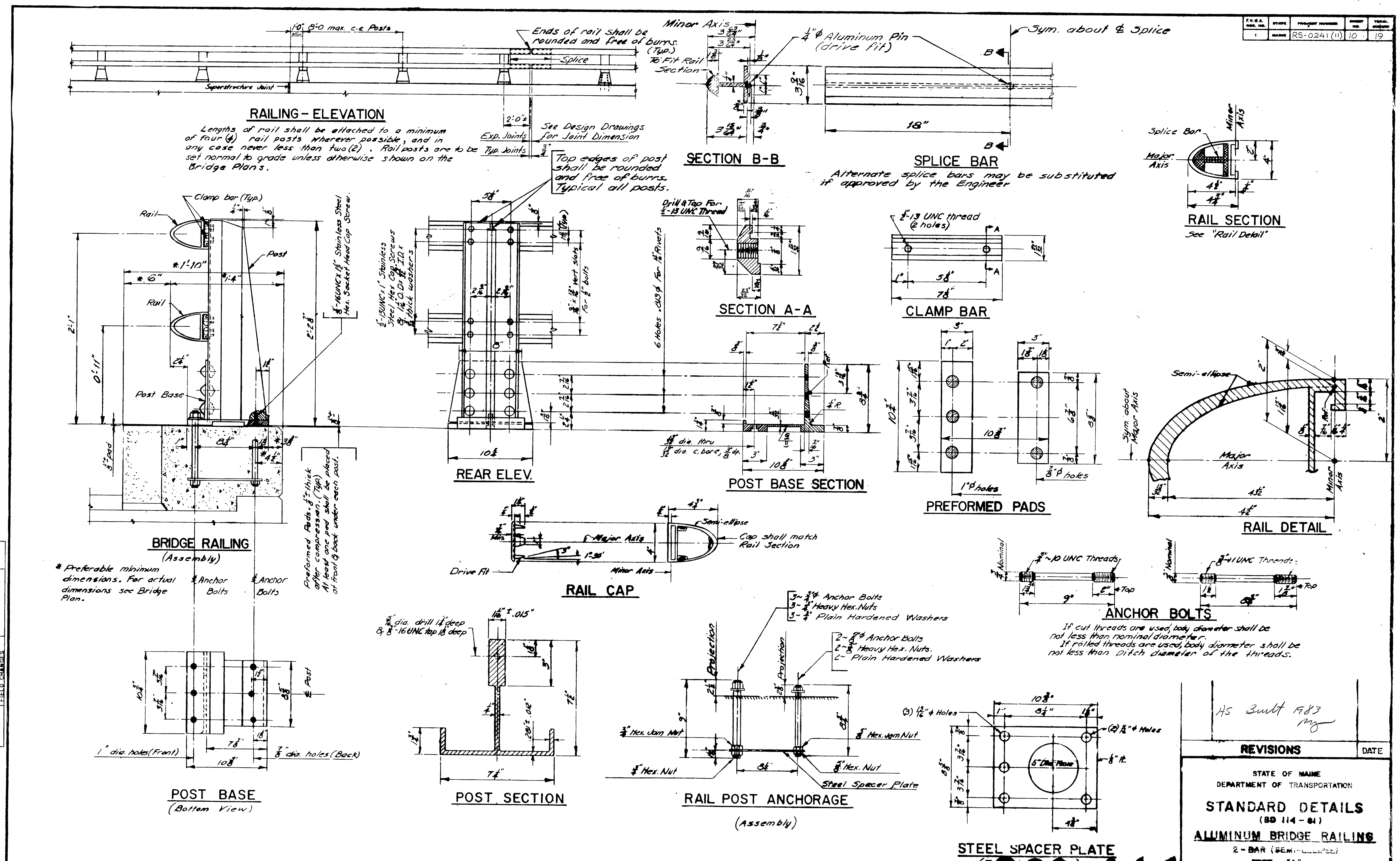
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

WESSERUNSETT
STREAM BRIDGE
ATHENS

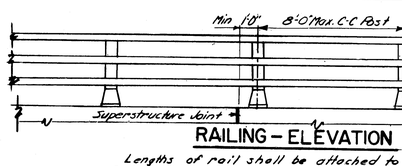
REINFORCING STEEL SCHEDULE
SUPERSTRUCTURE & END POSTS

SHEET 9 OF 19 AUGUSTA, MAINE Jan 1982

R89-463

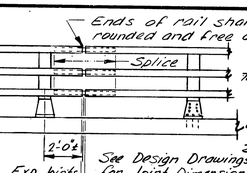

F.H.W.A. REG. NO. 1 | STATE MAINE | PROJECT NUMBER RS-0241(11) | SHEET NO. 10 | TOTAL SHEETS 19
10' 8'-0 max. c.c Posts
Ends of rail shall be rounded and free of burrs. (Typ.)
Splice
Superstructure Joint
RAILING - ELEVATION
Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.
Exp. Joints
Typ. Joints
See Design Drawings for Joint Dimension
Top edges of post shall be rounded and free of burrs. Typical all posts.
Minor Axis
To Fit Rail Section
1/4" ϕ Aluminum Pin (drive fit)
Sym. about ℄ Splice
SECTION B-B
SPLICE BAR
18"
Alternate splice bars may be substituted if approved by the Engineer
Splice Bar
Major Axis
RAIL SECTION
See "Rail Detail"
Clamp bar (Typ.)
Rail
Post
Post Base
* 1'-10"
* 6"
2'-1"
0'-11"
3/8"-16UNC x 1 1/2" Stainless Steel Hex. Socket Head Cap Screw
1 1/2" pad
BRIDGE RAILING
(Assembly)
* Preferable minimum dimensions. For actual dimensions see Bridge Plan.
℄ Anchor Bolts
Preformed Pads, 1/8" thick after compression (Typ.) At least one pad shall be placed at front & back under each post.
REAR ELEV.
6 Holes .013ϕ For 1/4" Rivets
Drill & Tap For 3/8"-13 UNC Thread
SECTION A-A
3/8"-13 UNC thread (2 holes)
CLAMP BAR
POST BASE SECTION
PREFORMED PADS
1"ϕ holes
Semi-ellipse
Sym. about Major Axis
Major Axis
Minor Axis
RAIL DETAIL
Semi-ellipse
Cap shall match Rail Section
Drive Fit
RAIL CAP
Nominal
3/4"-10 UNC Threads
5/8"-11 UNC Threads
Top
ANCHOR BOLTS
If cut threads are used, body diameter shall be not less than nominal diameter.
If rolled threads are used, body diameter shall be not less than pitch diameter of the threads.
POST BASE
(Bottom View)
1" dia. holes (Front)
POST SECTION
3- 3/4"ϕ Anchor Bolts
3- 3/4" Heavy Hex. Nuts
3- 3/4" Plain Hardened Washers
2- 5/8"ϕ Anchor Bolts
2- 5/8" Heavy Hex. Nuts
2- Plain Hardened Washers
Projection
Hex. Jam Nut
Hex. Nut
Steel Spacer Plate
RAIL POST ANCHORAGE
(Assembly)
(3) 1 1/16"ϕ Holes
(2) 13/16"ϕ Holes
5" Dia. Hole
STEEL SPACER PLATE
PLANS
DESIGN - DETAILED
CHECKED
REVISIONS
FIELD CHANGES
HS Built 1983
REVISIONS
DATE
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
STANDARD DETAILS
(BD 114-81)
ALUMINUM BRIDGE RAILING
2 - BAR
TYPE "A"
SHEET 10 OF 19 AUGUSTA, MAINE JUNE 1981
R89-464
Athens

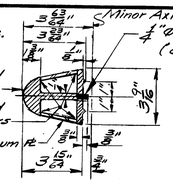
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	11	19



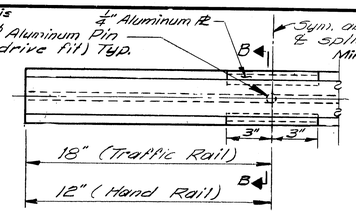
RAILING – ELEVATION

Lengths of rail shall be attached to a minimum of four (4) rail posts, wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on Bridge Plans.



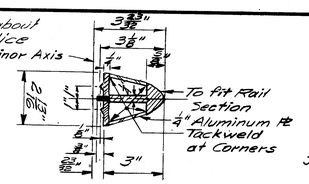


SECTION B-B
TRAFFIC RAIL

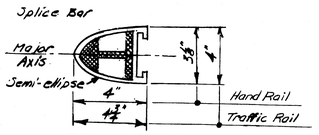


SPLICE BAR

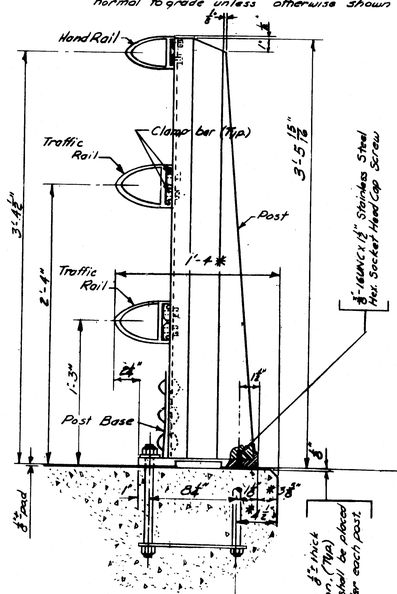
Alternate splice bars may be substituted if approved by the Engineer.



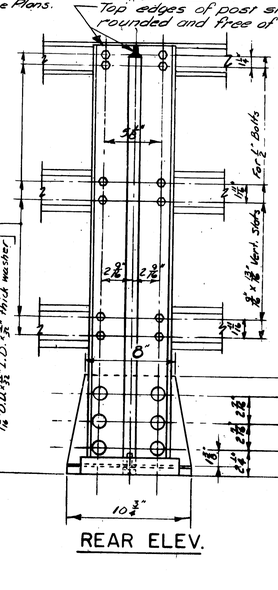
SECTION B-B
HAND RAIL



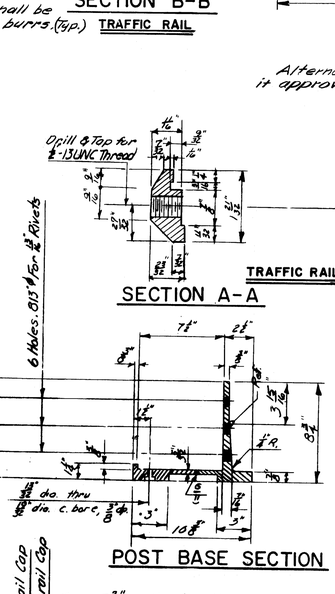
RAIL SECTION
"See "Rail Detail"



BRIDGE RAILING
(Assembly)

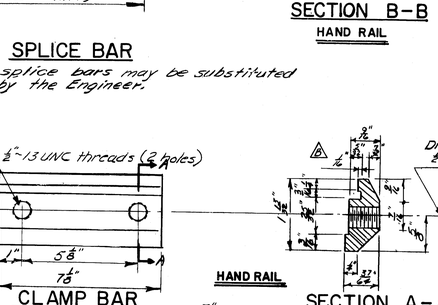


REAR ELEV.

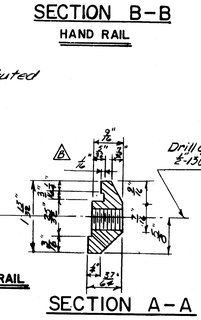


SECTION A-A
TRAFFIC RAIL

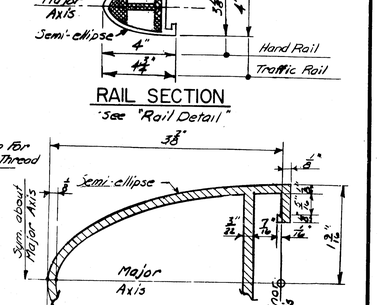
POST BASE SECTION



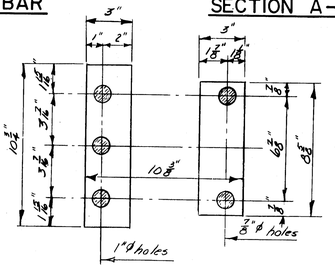
CLAMP BAR



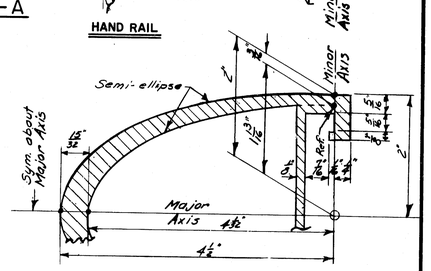
SECTION A-A
HAND RAIL



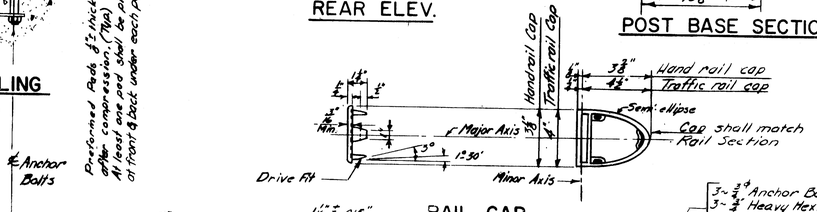
HAND RAIL



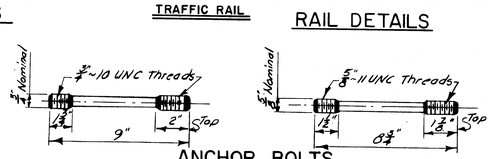
PREFORMED PADS



TRAFFIC RAIL
RAIL DETAILS



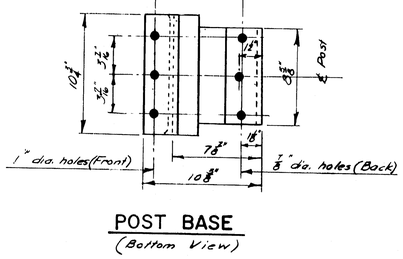
RAIL CAP



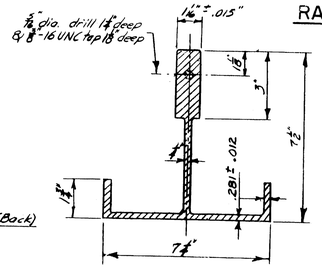
ANCHOR BOLTS

If cut threads are used, body diameter shall be not less than nominal diameter. If rolled threads are used, body diameter shall be not less than the pitch diameter of the threads.

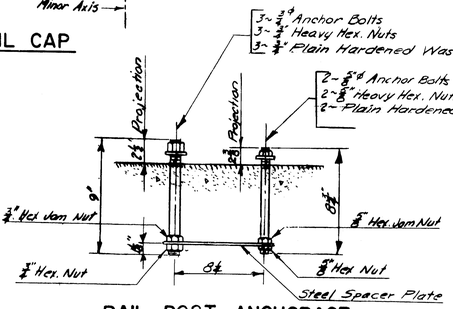
* Preferable minimum dimensions. For actual dimensions - see Bridge Plan.



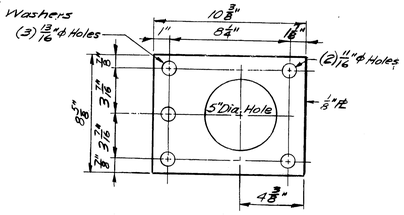
POST BASE
(Bottom View)



POST SECTION



RAIL POST ANCHORAGE
(Assembly)



STEEL SPACER PLATE
(For [illegible])

PLANS	BY	DATE
DESIGN - DETAILED	K. Meeks	Jan. 1981
CHECKED	K.L. Lewis	Jan. 1981
REVISIONS		
FIELD CHANGES		

As Built 1983 mg

REVISIONS	DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STANDARD DETAILS
(BD 115 - 81)

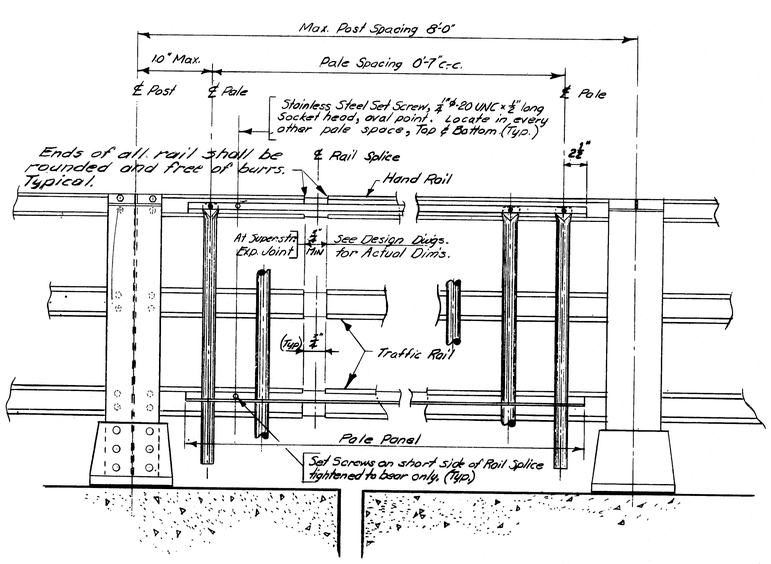
ALUMINUM BRIDGE RAILING
3 - BAR (SEMI-ELLIPSE)
TYPE "B"

SHEET 11 OF 19 AUGUSTA, MAINE JUNE 1981

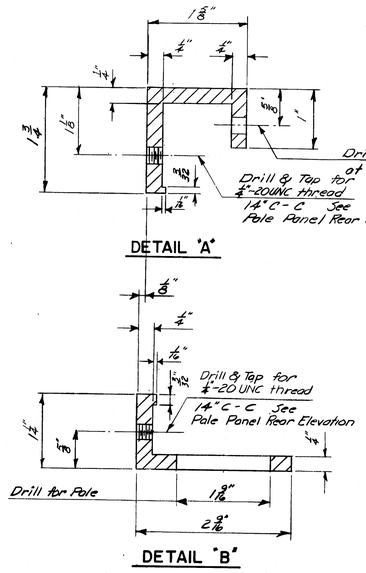
R89-465

Athens

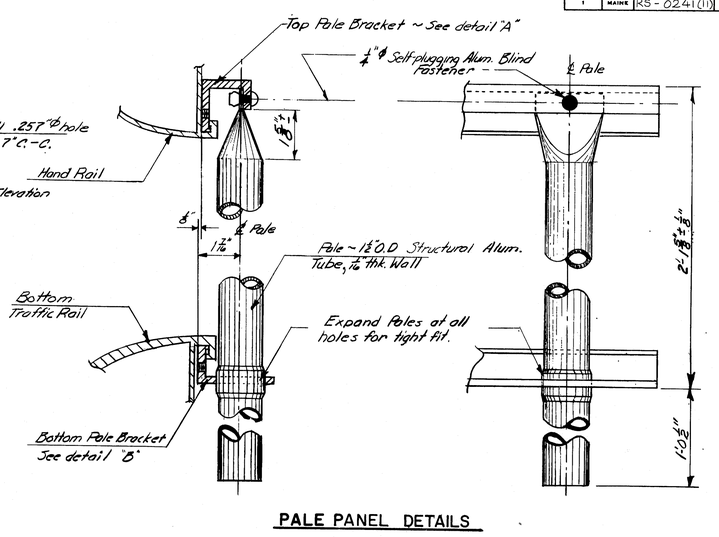
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	12	19



PALE PANEL REAR ELEVATION



DETAIL "B"



PALE PANEL DETAILS

PALE PANEL

PLANS	BY	DATE
DESIGN - DETAILED	K.L. Lewis	Jan. 1993
CHECKED		
REVISIONS		
FIELD CHANGES		

JANUARY 1988

As Built 1993 RMJ

REVISIONS	DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
(SHEET BD115 - 81 SHALL ACCOMPANY THIS SHEET)

STANDARD DETAILS
(BD 116 - 81)

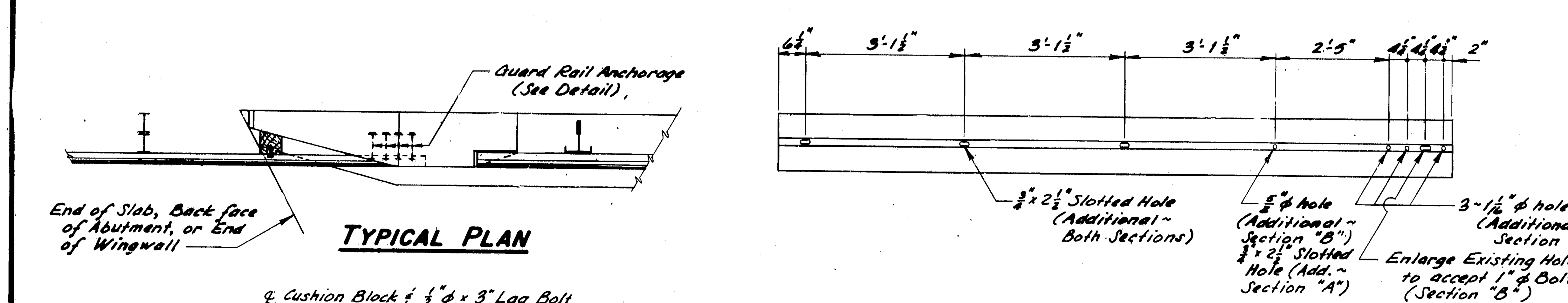
ALUMINUM BRIDGE RAILING
PALE PANEL

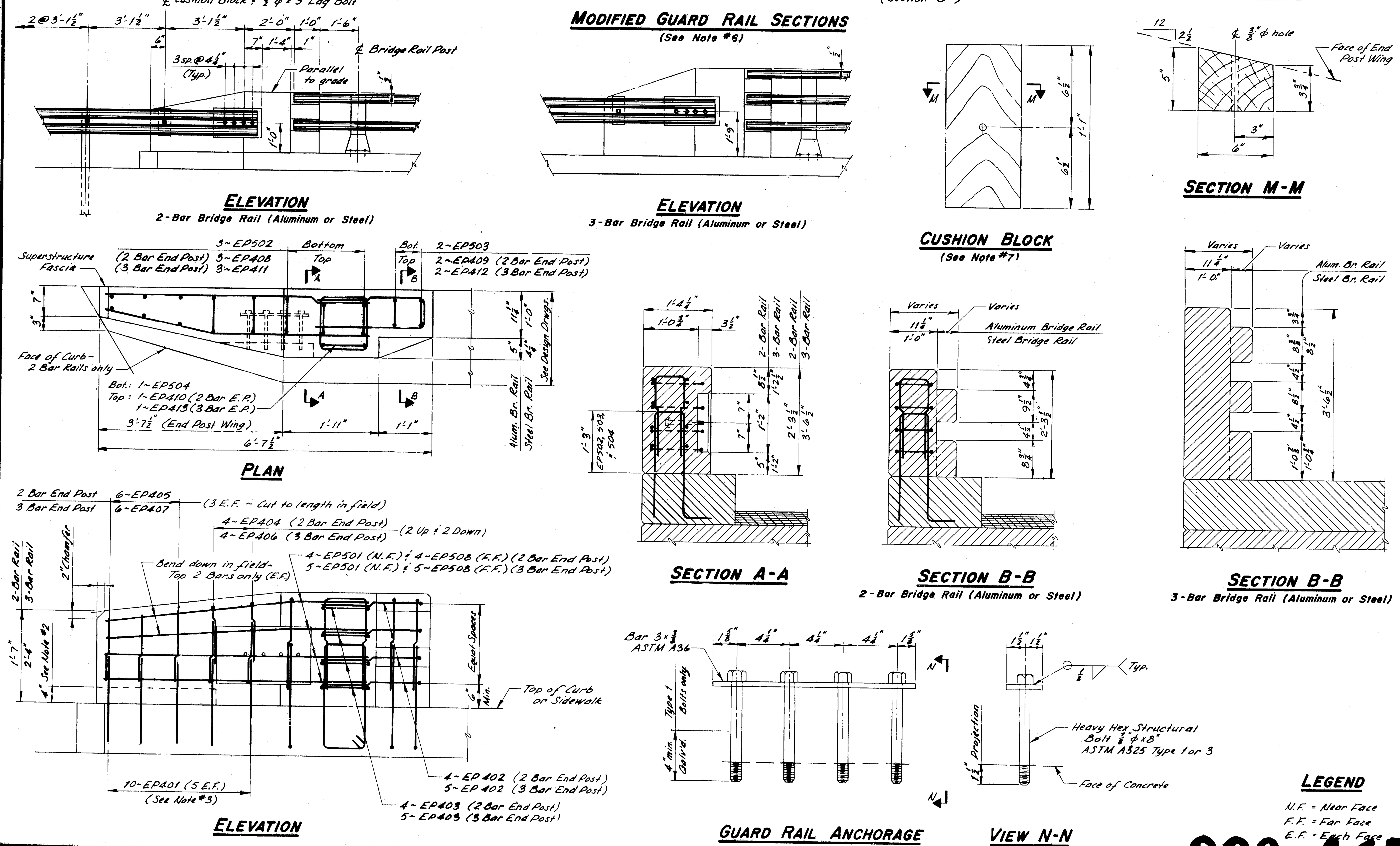
SHEET 12 OF 19 AUGUSTA, MAINE *JUNE 1981*

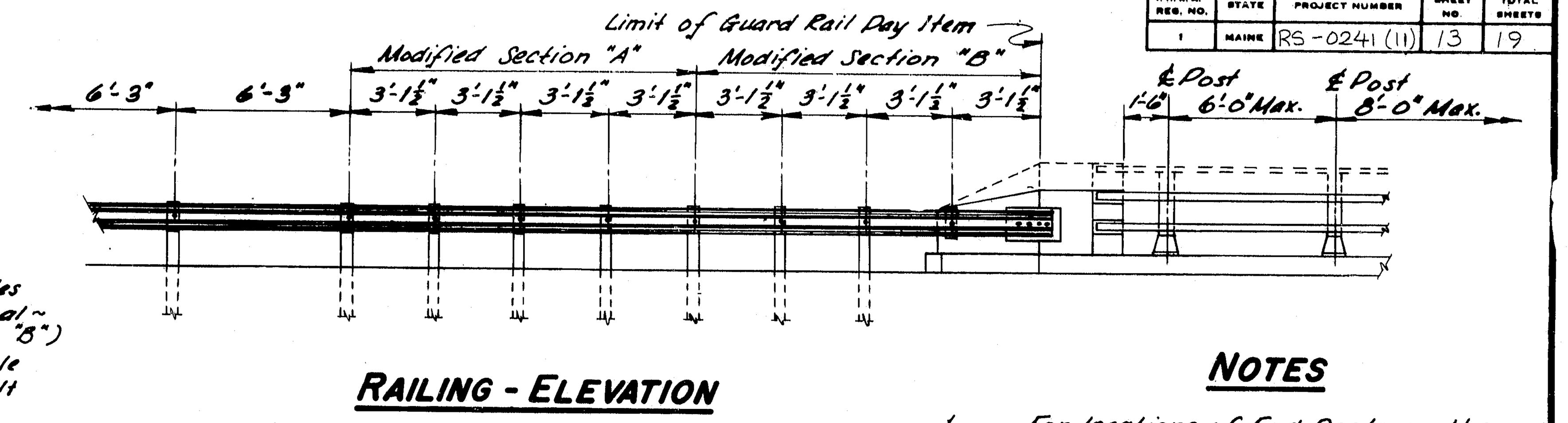
253-1 2500

R89-466

A Thrus







F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	13	19

NOTES

1. For locations of End Posts on the structure, see Design Drawings.
2. At times, an End Post Wing may be cantilevered for all or part of its length. For details, see Design Drwgs.
3. If an End Post Wing is cantilevered, bars EP401 to be omitted as needed.
4. When End Post Wing is cantilevered more than 2'-0", all #5 bars shall be replaced by #7 bars.
5. Nuts for 3/4" ϕ anchor bolts shall be incidental to Guard Rail Pay Items. Nuts shall conform to A.S.T.M. A563, Grade DH, galvanized in accordance with A.S.T.M. A153, or Grade C3, plain.
6. Additional holes in the Modified Guard Rail Sections may be made by drilling, punching, or any other method that produces a neat, clean hole of the required size. Burning of holes will not be allowed.
7. Cushion Block material shall be as specified for Wood Posts in Subsection 710.07 (a). Payment for Cushion Blocks and Lag Bolts shall be incidental to the Guard Rail Pay Items.
8. Reinforcing Steel shall have 2" min. concrete cover.
9. After installation of Guard Rail is complete, upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool.
10. Guard Rail Anchorage shall be incidental to the applicable concrete pay item.
11. End Posts shall be constructed normal to grade unless otherwise shown on Design Drawings.

As Built 1983

LEGEND

N.F. = Near Face
F.F. = Far Face
E.F. = Each Face

PROJECT DESIGN ENGINEER	BY	DATE
PLANS: DESIGN - DETAILED / CHECKED / REVISIONS / FIELD CHANGES	D. Demers	Nov. '81

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

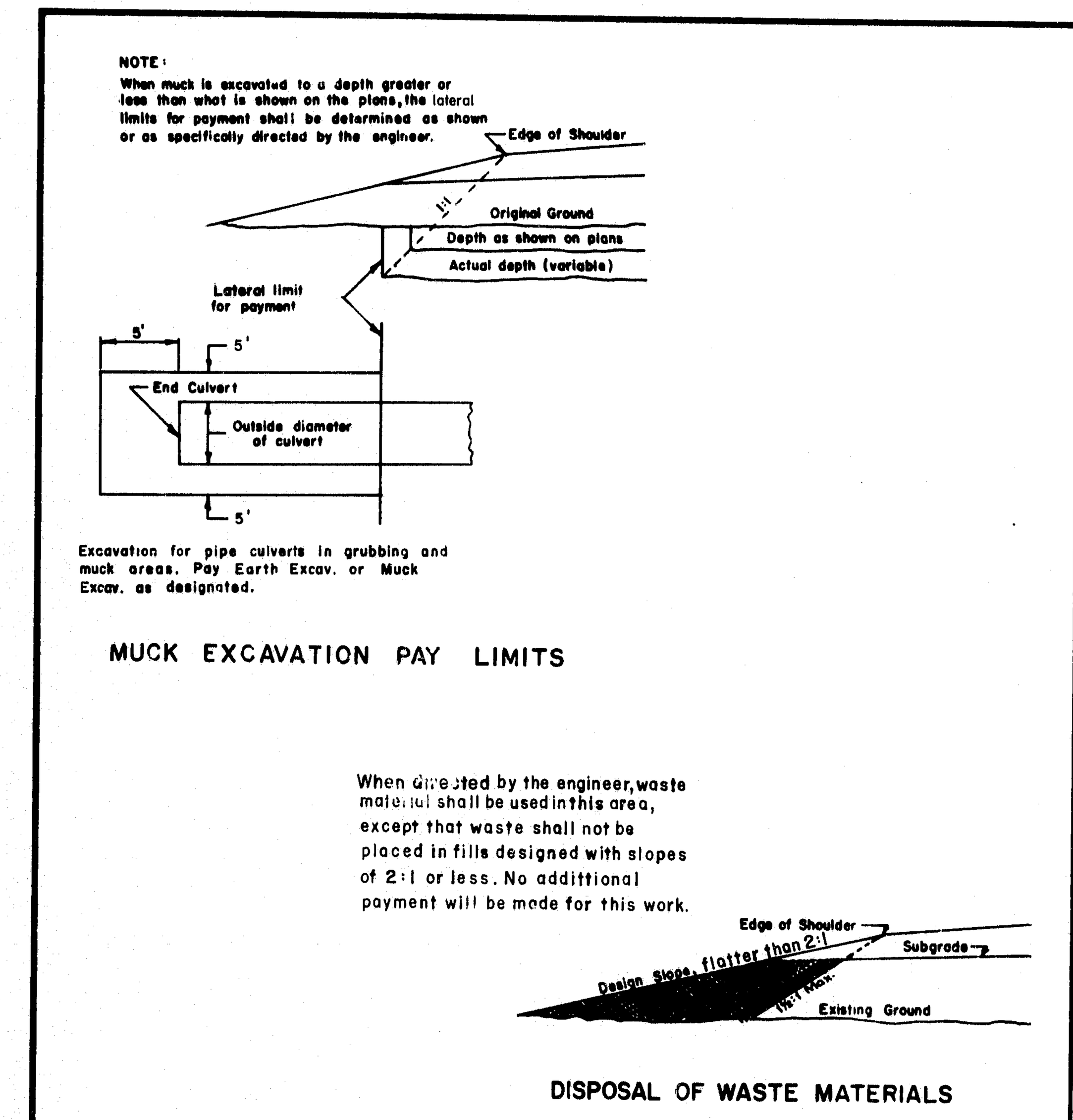
STANDARD DETAILS
(BC 120-81)

CONCRETE END POSTS

SHEET 13 OF 19 AUGUSTA, MAINE JUNE 1981

R89-467

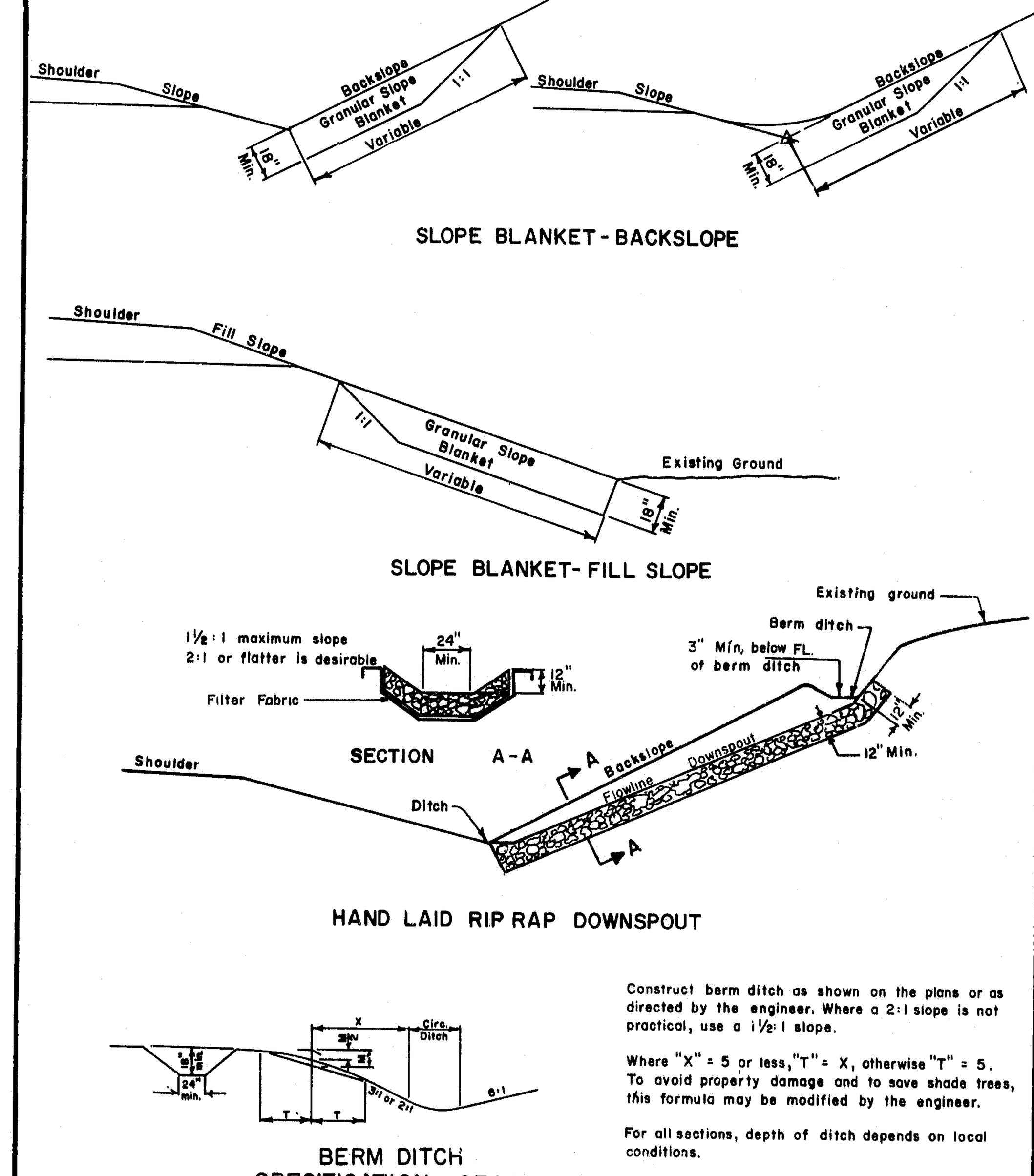
Athens


NOTE:
When muck is excavated to a depth greater or less than what is shown on the plans, the lateral limits for payment shall be determined as shown or as specifically directed by the engineer.
Edge of Shoulder
Original Ground
Depth as shown on plans
Actual depth (variable)
Lateral limit for payment
End Culvert
Outside diameter of culvert
Excavation for pipe culverts in grubbing and muck areas. Pay Earth Excav. or Muck Excav. as designated.
MUCK EXCAVATION PAY LIMITS
When directed by the engineer, waste material shall be used in this area, except that waste shall not be placed in fills designed with slopes of 2:1 or less. No additional payment will be made for this work.
Edge of Shoulder
Subgrade
Existing Ground
DISPOSAL OF WASTE MATERIALS

MUCK EXCAVATION AND WASTE DISPOSAL

SPECIFICATION SECTION 203

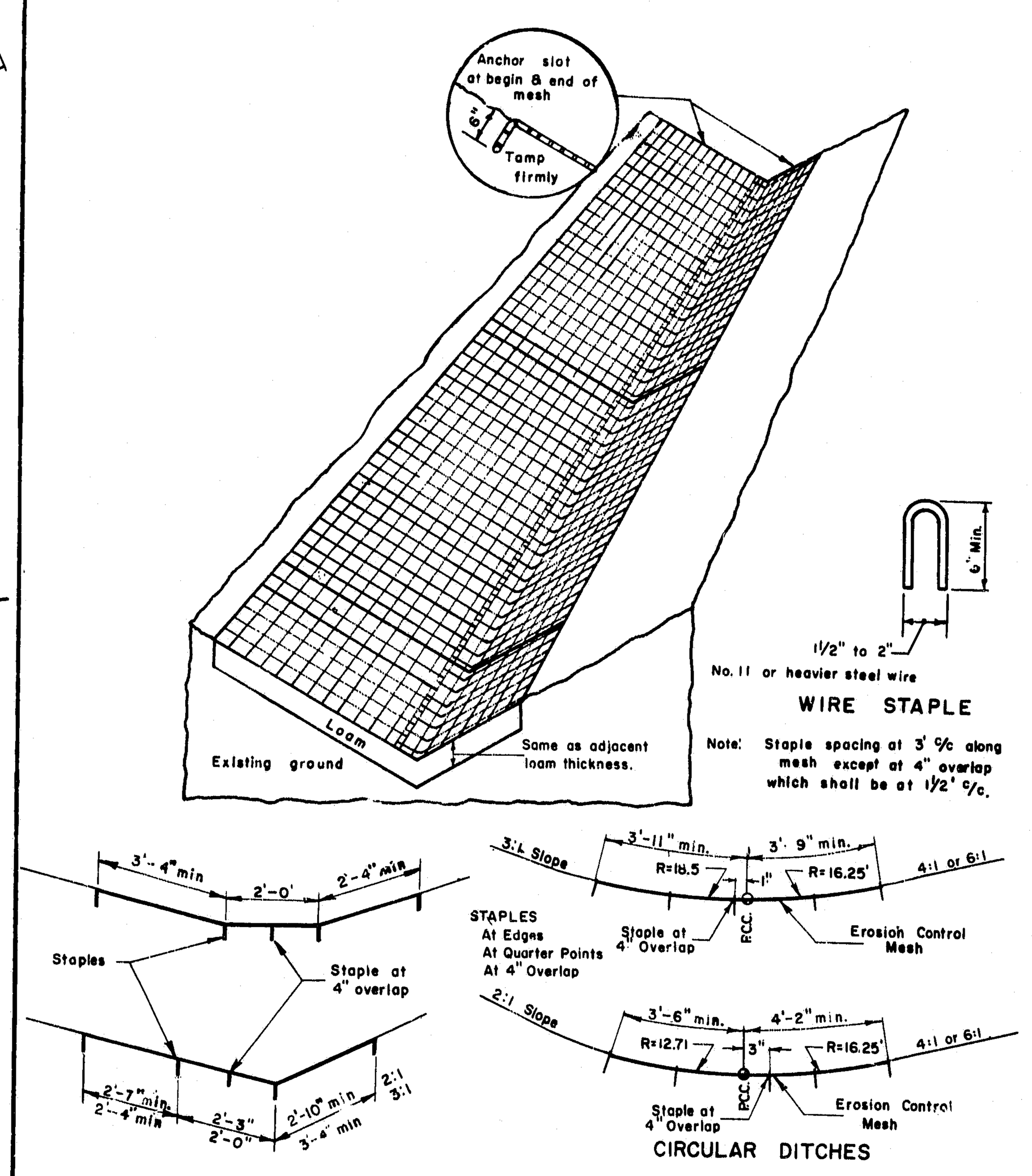
A


Shoulder
Slope
Backslope
Granular Slope Blanket
Variable
SLOPE BLANKET - BACKSLOPE
Fill Slope
Existing Ground
SLOPE BLANKET - FILL SLOPE
1½:1 maximum slope
2:1 or flatter is desirable
Filter Fabric
SECTION A-A
Existing ground
Berm ditch
3" Min. below FL of berm ditch
Backslope
Ditch
12" Min.
HAND LAID RIP RAP DOWNSPOUT
BERM DITCH
Construct berm ditch as shown on the plans or as directed by the engineer. Where a 2:1 slope is not practical, use a 1½:1 slope.
Where "X" = 5 or less, "T" = X, otherwise "T" = 5. To avoid property damage and to save shade trees, this formula may be modified by the engineer.
For all sections, depth of ditch depends on local conditions.

SPECIFICATION SECTIONS 203 & 616

DITCHES AND SLOPES

B

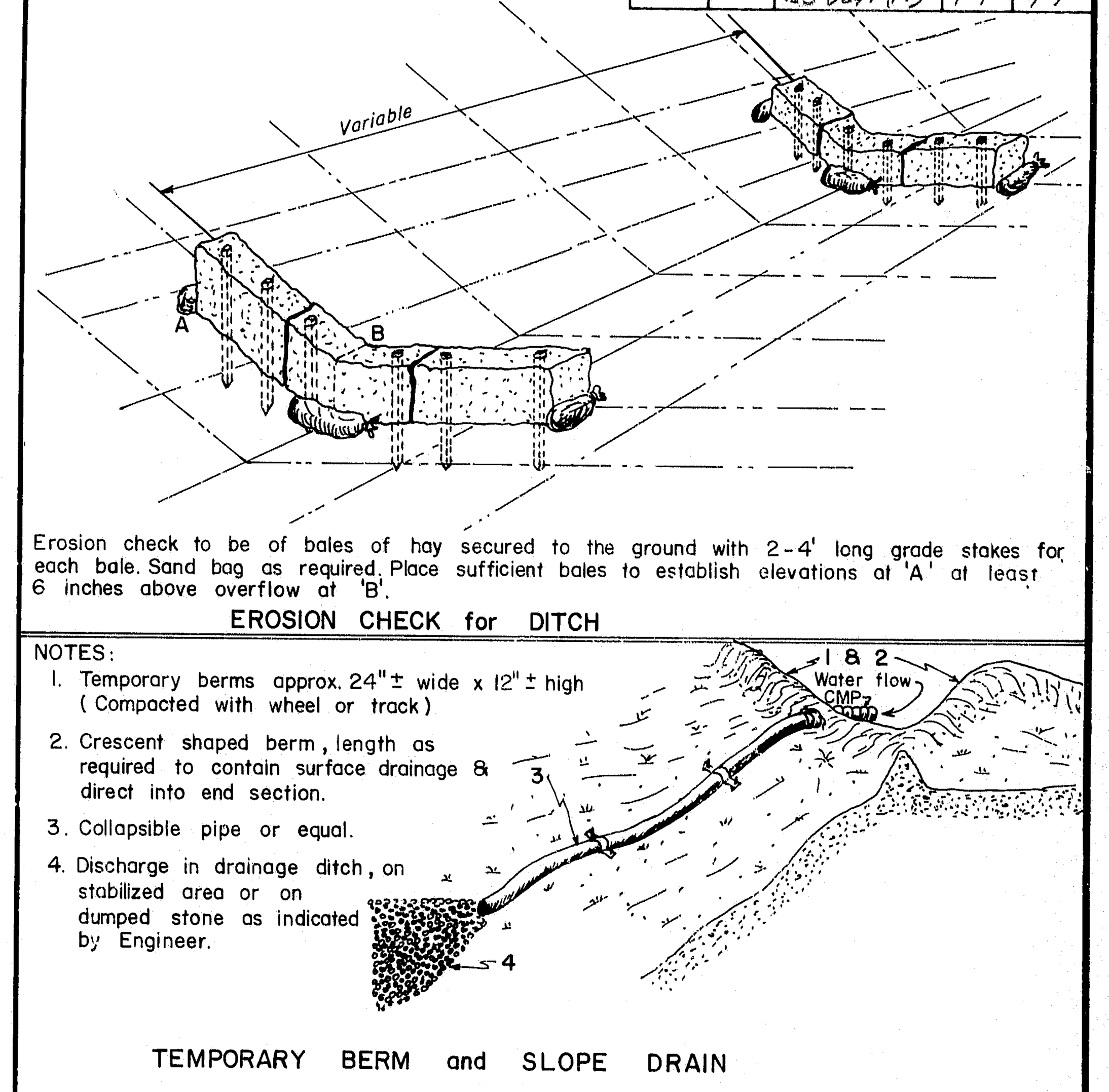

Anchor slot at begin & end of mesh
Tamp firmly
Existing ground
Loam
Same as adjacent loam thickness.
No. 11 or heavier steel wire
WIRE STAPLE
Note: Staple spacing at 3' c/c along mesh except at 4" overlap which shall be at 1½' c/c.
Staples
Staple at 4" overlap
STAPLES
At Edges
At Quarter Points
At 4" Overlap
Staple at 4" Overlap
Erosion Control Mesh
CIRCULAR DITCHES

EROSION CONTROL MESH

SPECIFICATION SECTION 617

C

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	RS-0241(11)	14	19


Variable
Erosion check to be of bales of hay secured to the ground with 2-4' long grade stakes for each bale. Sand bag as required. Place sufficient bales to establish elevations at 'A' at least 6 inches above overflow at 'B'.
EROSION CHECK for DITCH
NOTES:
1. Temporary berms approx. 24"± wide x 12"± high (Compacted with wheel or track)
2. Crescent shaped berm, length as required to contain surface drainage & direct into end section.
3. Collapsible pipe or equal.
4. Discharge in drainage ditch, on stabilized area or on dumped stone as indicated by Engineer.
Water flow
CMP
TEMPORARY BERM and SLOPE DRAIN

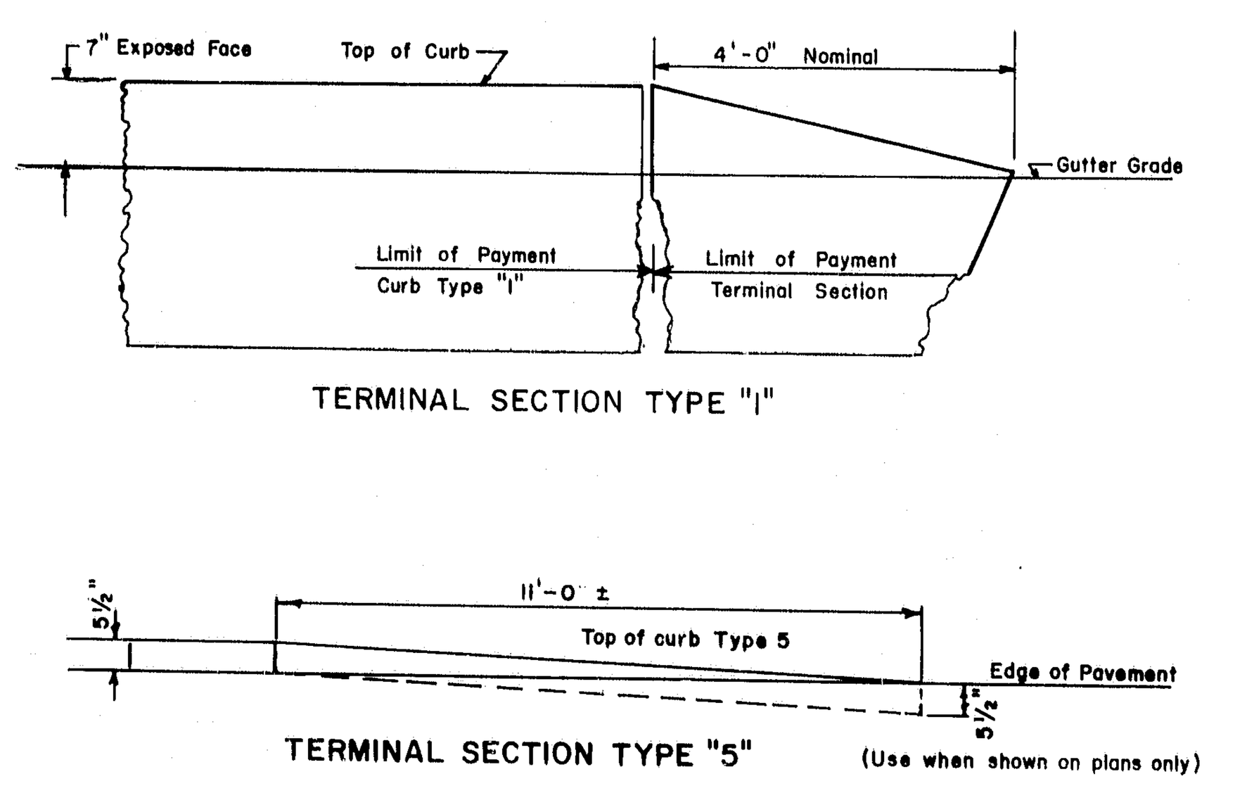
TEMPORARY EROSION CONTROL

SPECIFICATION SECTION 656

D

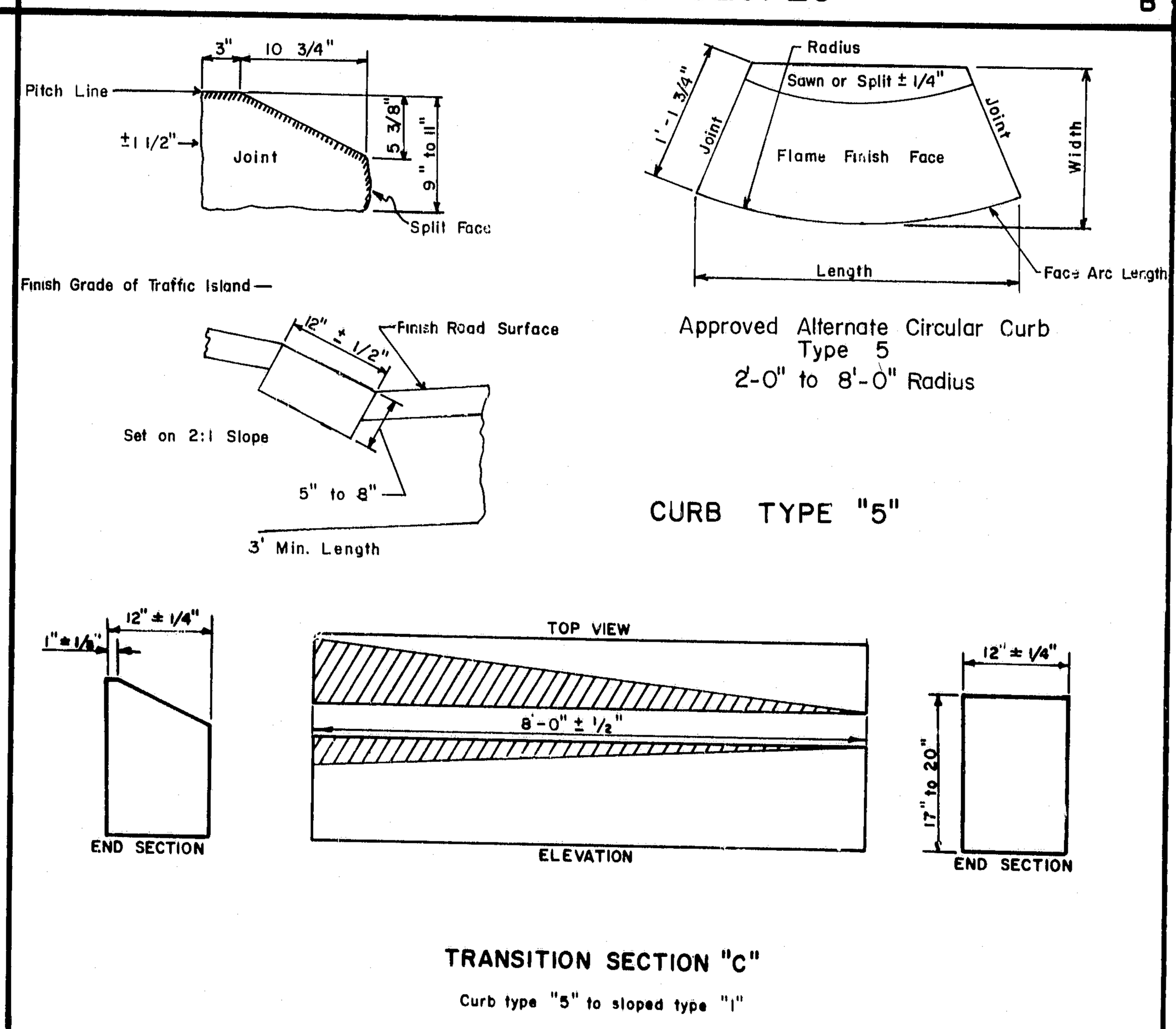
CURB TYPES 1 & 5 ON CURVES				
TYPE	RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
1 & 2	0' To 60' Incl.	4' Min.	Circular	Arc To Fit Curve
	Over 60' To 160'	4' To 6'	Straight	Straight Pieces
5 & 6	0' To 8' Incl.	2' Min.	Circular	To Fit Curve
	Over 8' To 30' Incl.	12" Min. Chord	Circular	Straight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

TERMINAL CURB SECTION



SPECIFICATION SECTION 609

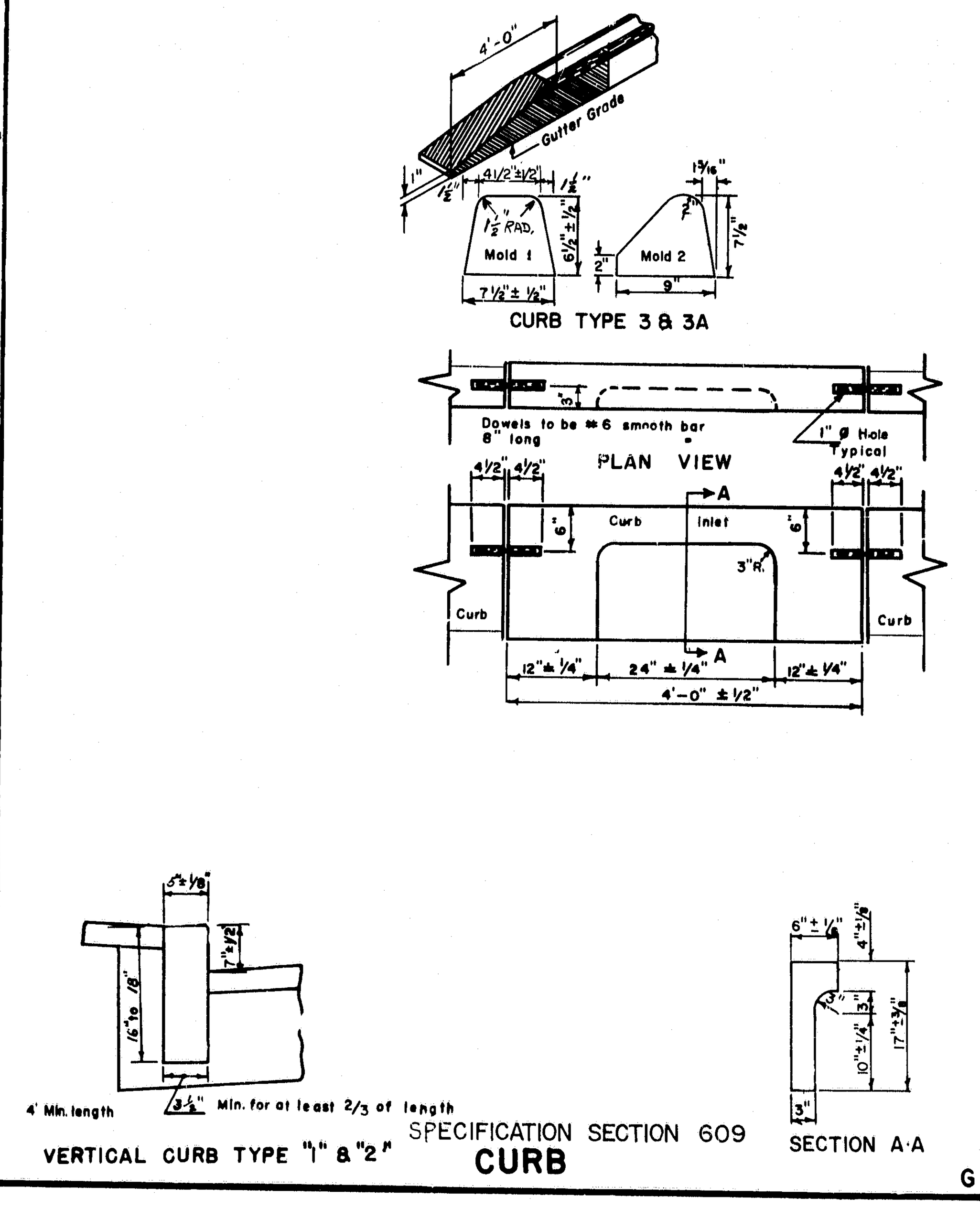
E


Pitch Line
Joint
Split Face
Finish Grade of Traffic Island
Finish Road Surface
Set on 2:1 Slope
5" to 8"
3' Min. Length
Radius
Sawn or Split
Flame Finish Face
Length
Face Arc Length
Width
Approved Alternate Circular Curb Type 5
2'-0" to 8'-0" Radius
CURB TYPE "5"
TOP VIEW
8'-0" ± ½"
ELEVATION
END SECTION
END SECTION
TRANSITION SECTION "C"
Curb type "5" to sloped type "1"

CURB TRANSITION

SPECIFICATION SECTION 609

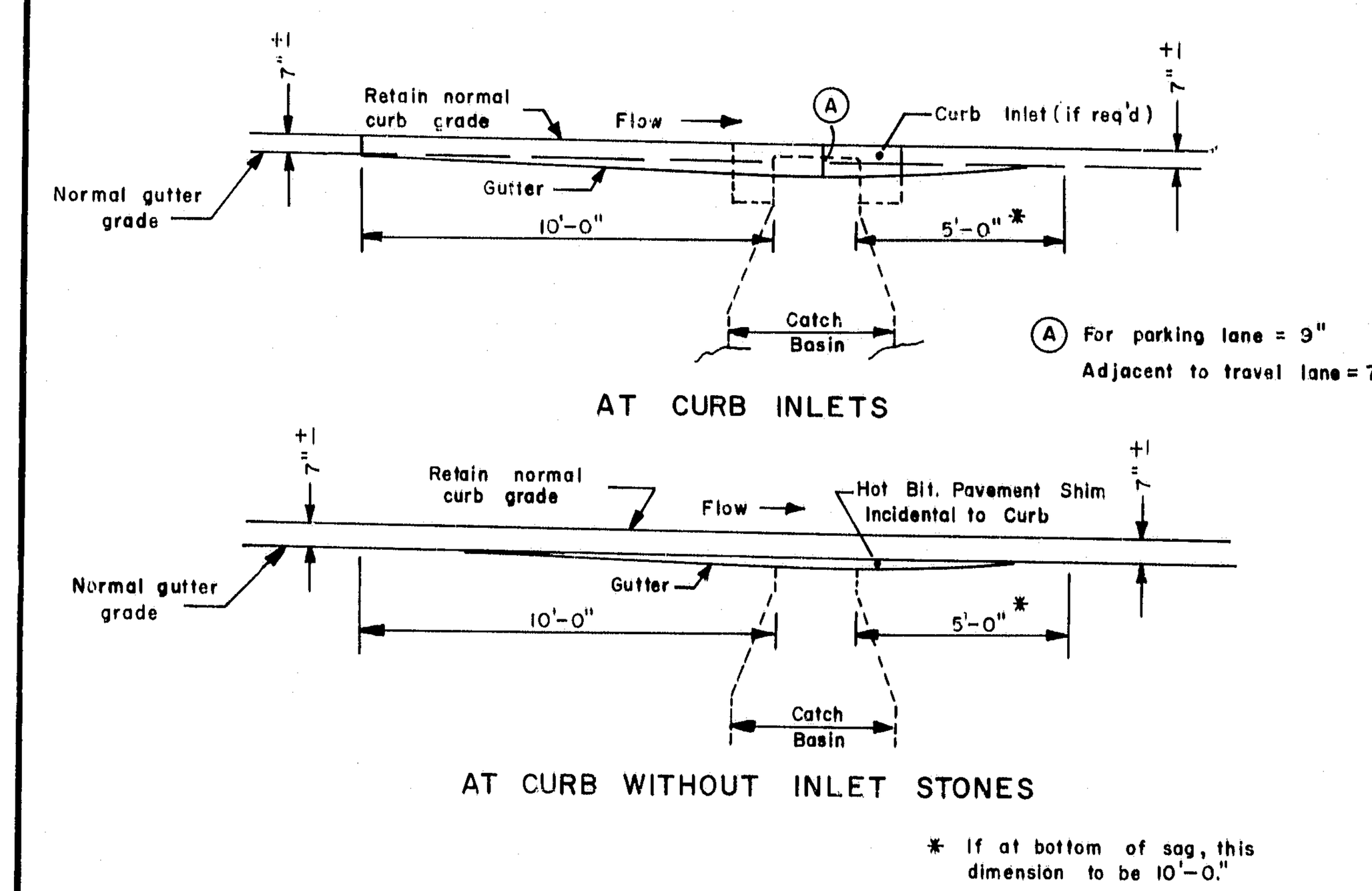
F



SPECIFICATION SECTION 609

CURB

G


Normal gutter grade
Retain normal curb grade
Flow
Curb inlet (if req'd)
Gutter
10'-0"
5'-0"
Catch Basin
Ⓐ For parking lane = 9"
Adjacent to travel lane = 7"
AT CURB INLETS
Retain normal curb grade
Hot Bit. Pavement Shim incidental to Curb
Normal gutter grade
Gutter
10'-0"
5'-0"
Catch Basin
AT CURB WITHOUT INLET STONES
* If at bottom of sag, this dimension to be 10'-0."

NOTE: Cascade grates shall be installed on gradient of the gutter. The grates shall be depressed 2" below the normal gutter grade unless this depression interferes with traffic. Parallel bar grates shall be installed on a level gradient. Dimensions are intended to be nominal.

GUTTER GRADE TRANSITION AT CATCH BASIN

H

REVISIONS Description	APPROVED Me.DOT	FHWA
Original Plan	Nov. 1980	
Added Plate H	Mar. 1981	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

As Built 1983 RMZ

STANDARD DETAILS
CURB, DITCHES AND SLOPES
EROSION CONTROL
MUCK EXCAVATION AND WASTE DISPOSAL

AUGUSTA, MAINE

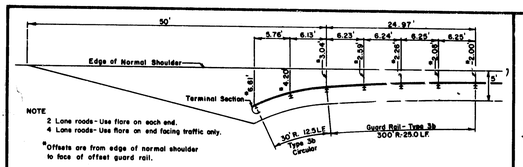
4

203-1 2000

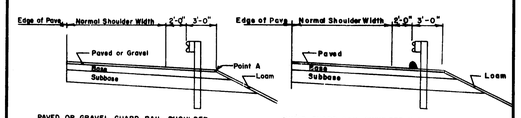
R89-468

Wessarunsett Stream – Athens

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	(BS-0241(61))	15	19



GUARD RAIL END TRANSITION



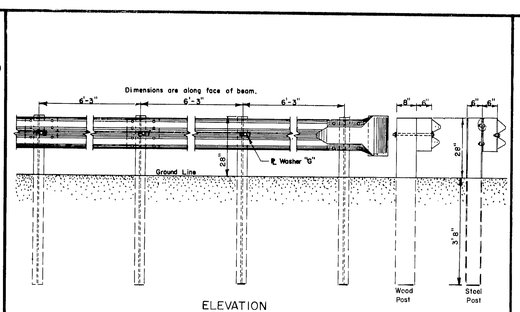
PAVED OR GRAVEL GUARD RAIL SHOULDER

PAVED GUARD RAIL SHOULDER WITH CURB

Point A = Normal Slope Break

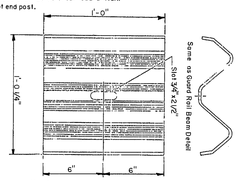
LOCATION OF GUARD RAIL

A



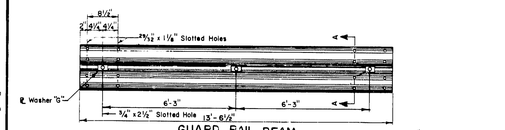
ELEVATION

1. Intermediate post spacing shall be 6'-3" unless otherwise shown.
2. Wood posts for Guard Rail shall be 6"x8" and offset blocks for type "3a" Guard Rail shall be 6"x6".
3. Steel posts and offset brackets for Guard Rail shall be W6 X 8.5 or W6 x 9.0.
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.
5. "W" Beam Back up Plates shall be placed behined rail elments at intermediate steel posts (non splice posts).
6. Beam Type Guard Rail set on radius of 150' or less shall be Circular Guard Rail.
7. Offset Bracket shall be installed on all posts, except end post.

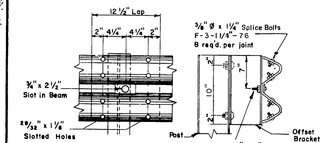


"W" Beam Backup Plate
RE-4-76
For use of steel post only See Note 5 above

B

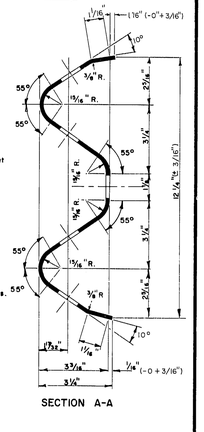


GUARD RAIL BEAM
Minimum Thickness 0.105



GUARD RAIL SPLICE AT POST

CROSS SECTION THROUGH GUARD RAIL SPLICE



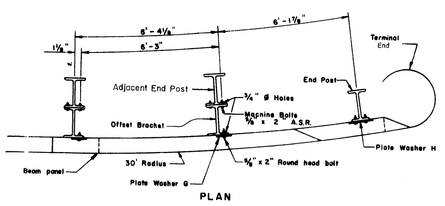
GUARD RAIL - TERMINAL END SECTION
RE-6-79

SECTION A-A

GUARD RAIL BEAM DETAIL
RE-3-73

C

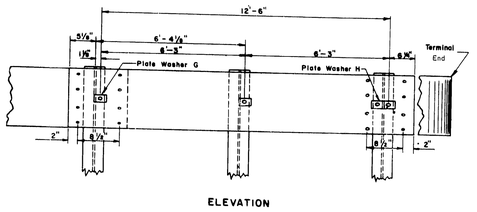
D



PLAN

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

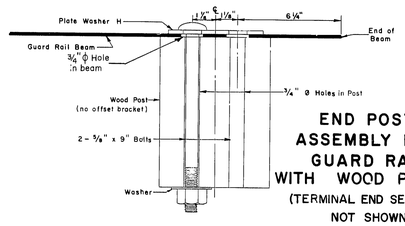
NOTE: Offset Bracket shall be installed on all posts, except end post.



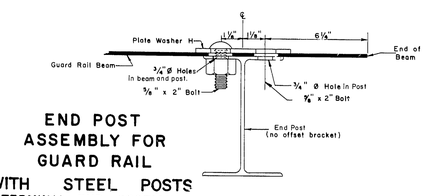
ELEVATION

END BEAM ASSEMBLY - SPACING OF POSTS GUARD RAIL TYPE 3

E

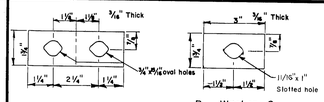


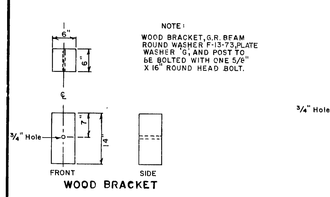
END POST ASSEMBLY FOR GUARD RAIL WITH WOOD POSTS (TERMINAL END SECTION NOT SHOWN)



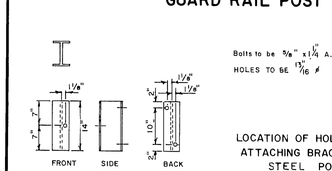
END POST ASSEMBLY FOR GUARD RAIL WITH STEEL POSTS (TERMINAL END SECTION NOT SHOWN)

F





OFFSET BRACKET FOR WOOD GUARD RAIL POST



OFFSET BRACKET AND PLATE WASHERS FOR STEEL GUARD RAIL POST

G

NOTE: Identification letters and numbers on drawings refer to the standard detail drawings shown in "A Guide to Standardized Highway Barrier Rail Hardware" by AASHTO - AGC - ARTBA Joint Cooperative Committee.

H

REVISIONS Description	APPROVAL Me.DOT	APPROVAL FHWA
Original Plan	Nov. 1990	
GUARD RAIL BEAM DETAIL	JAN. 1981	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

As Built 1983 Kimz

STANDARD DETAILS

TYPE 3 GUARD RAIL

SPECIFICATION SECTION 606

AUGUSTA, MAINE

6

R89-469

Returned from Athens