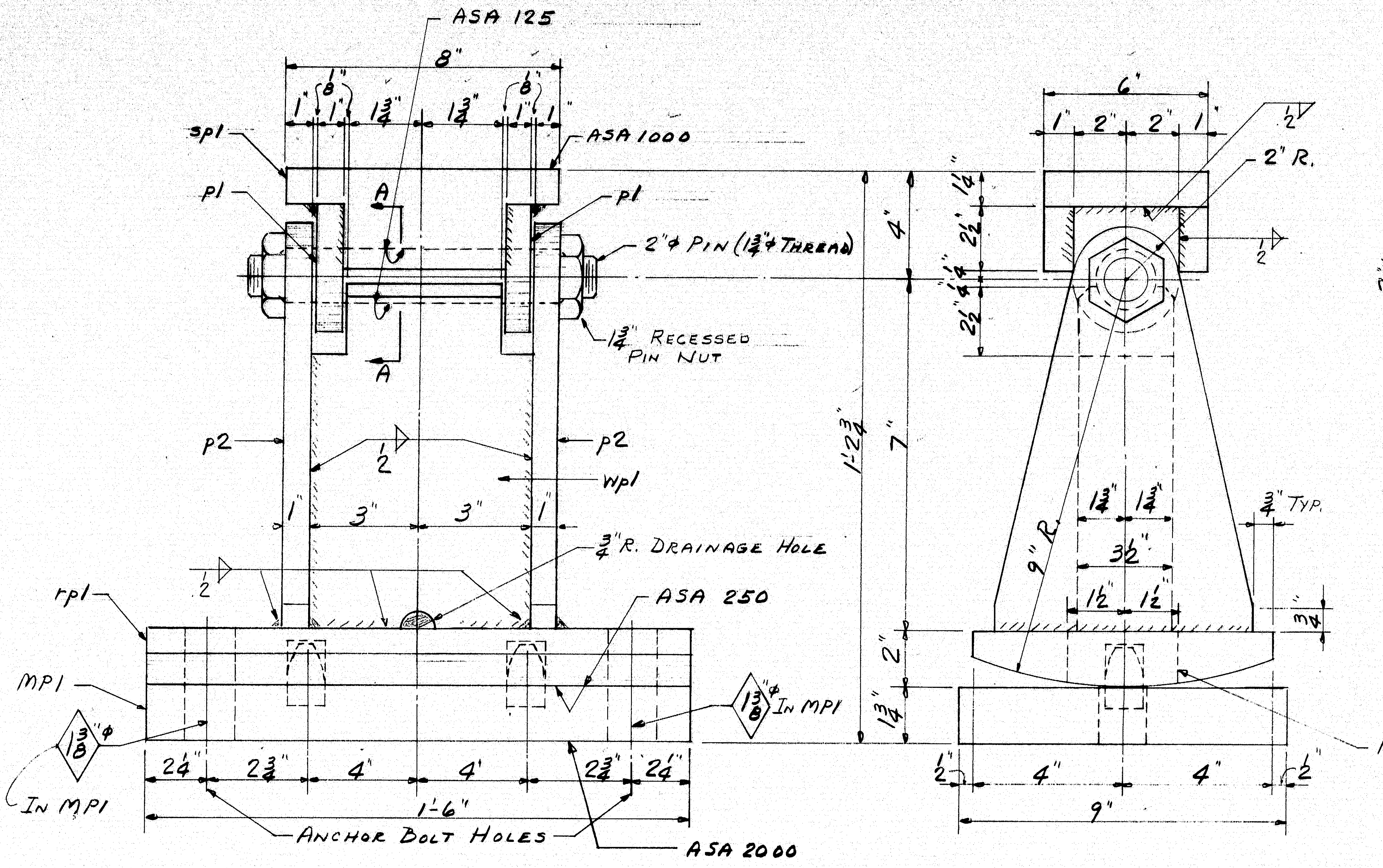
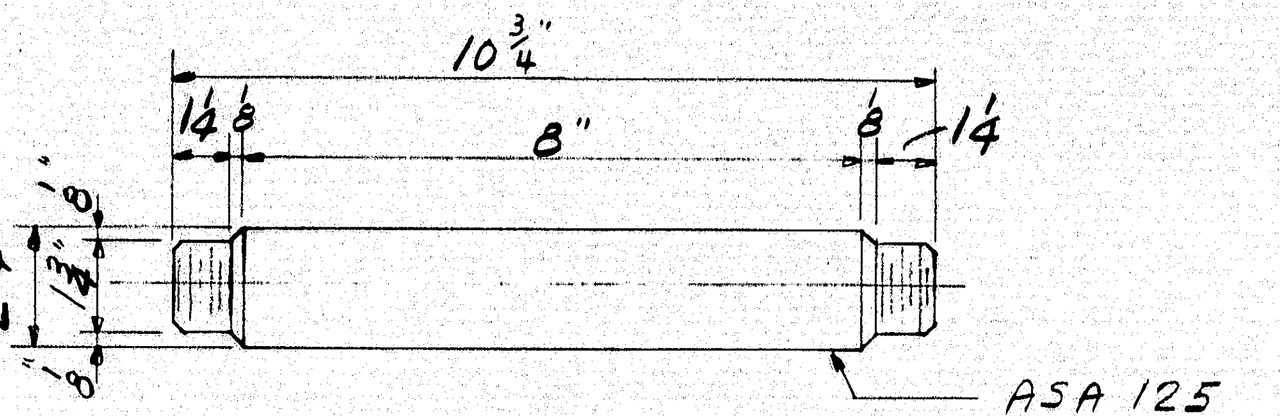


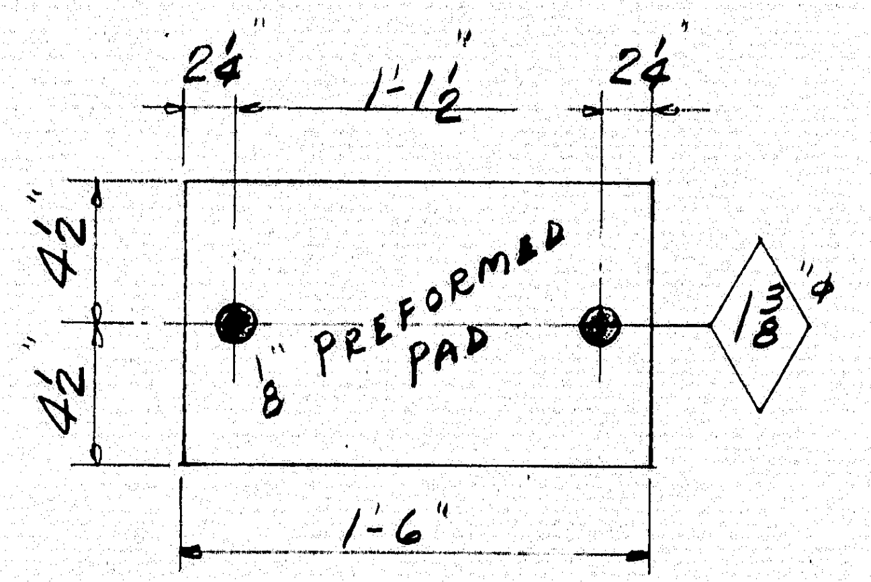
EXPANSION PEDESTAL EPD-2 4-REQ'D

(DO NOT SCALE)

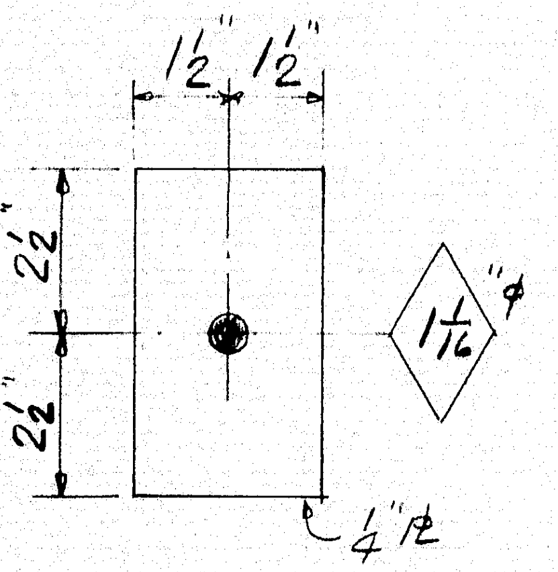


PIN DETAIL 4 REQ'D

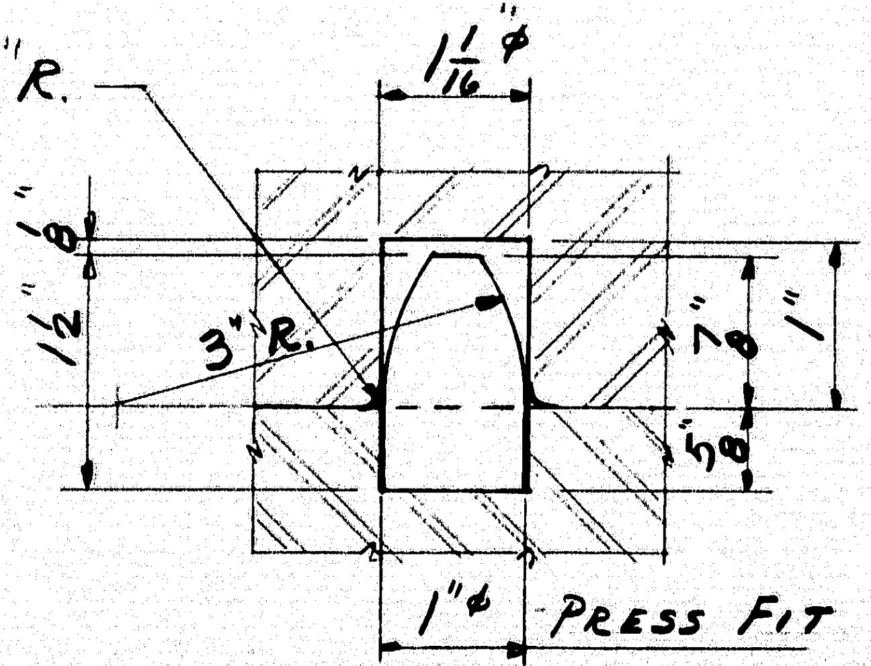
ASSEMBLE WITH EPD-2 FOR SHIPMENT



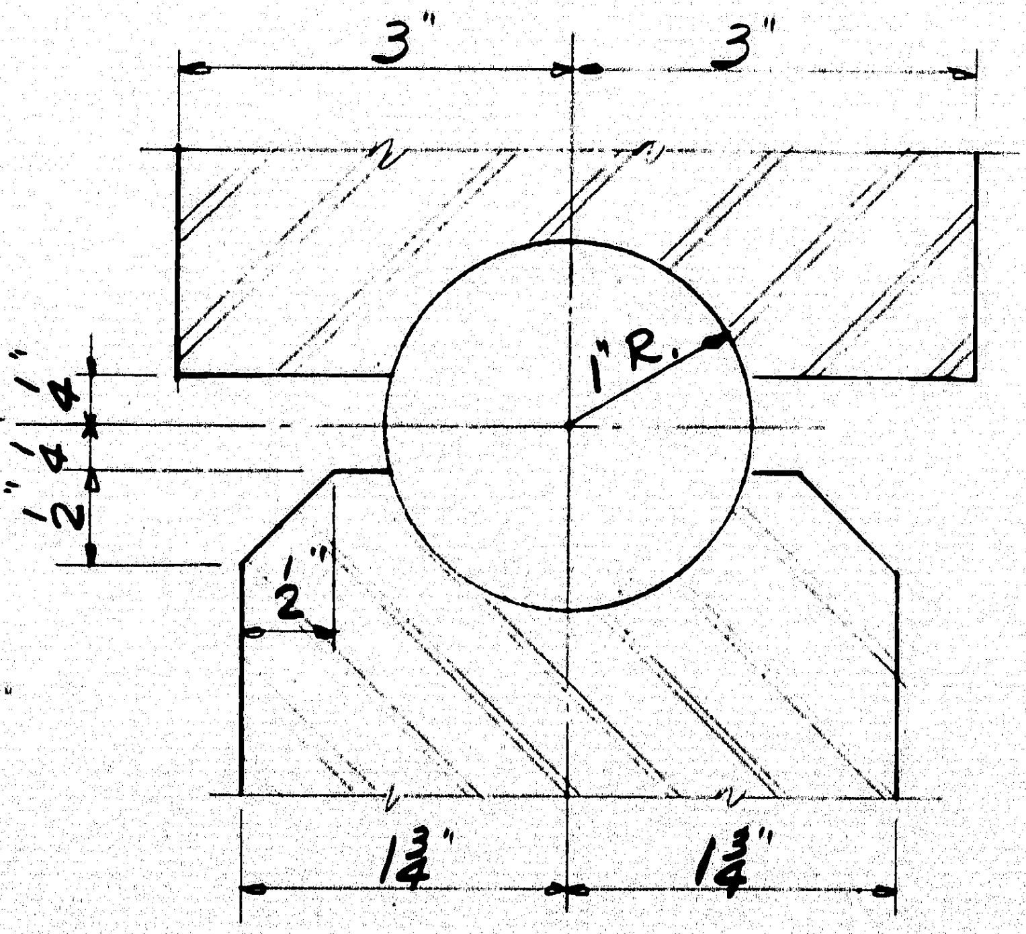
FP1 4 REQ'D



DETAIL OF pW1

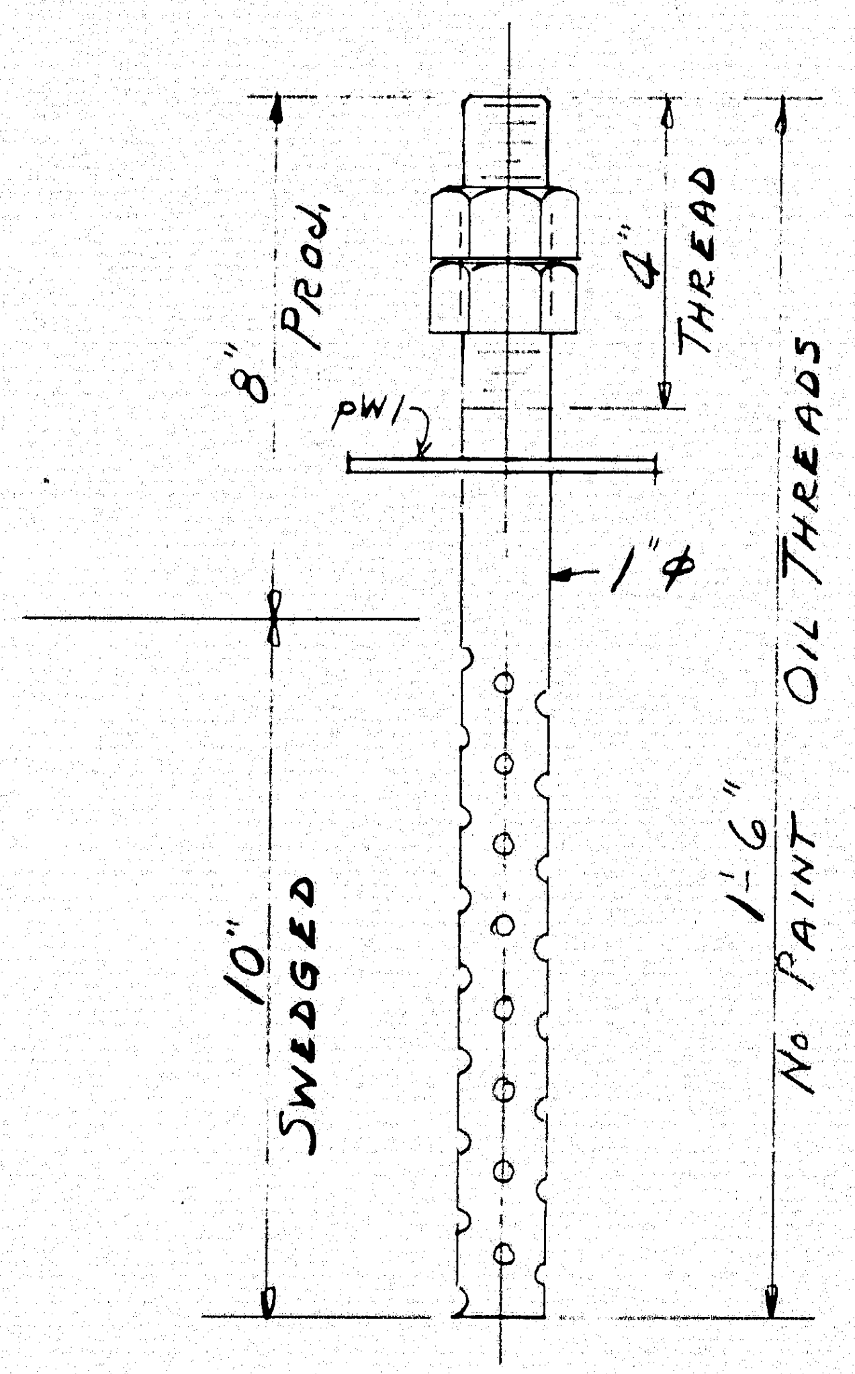


PINTLE DETAIL



SECTION A-A

PIN NOTE:
THE DIAMETER OF THE PIN HOLE SHALL NOT EXCEED THAT OF THE PIN BY MORE THAN 1/50 INCH.



AB1 8 REQ'D

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
MP1	4		PL 1 7/8 x 9	1	6		FIN. TO 1 3/4" THICK
	8		BAR 1"Φ	0	1 1/2		PINTLE
EPD-2	4		ASSEMBLY				
	4	rp1	PL 2 1/8" x 8	1	6		FIN. TO 2" THICK
	4	wp1	PL 3 1/2" x 6"	0	6 3/4		
	4	sp1	PL 3 3/4 x 6	0	8		
	8	p1	PL 1" x 4	0	4 3/4		
	8	p2	PL 1" x 6 1/2	0	9		
	4	PIN	BAR 2"Φ	0	10 3/4		
	8	SHOP	1 3/4" RECESSED PIN NUT				HEX.
AB1	8		BAR 1"Φ	1	6		
	8	pW1	BAR 3 x 1/4	0	5		
	16	SHOP	1" STD. NUT				HEX
FP1	4		1/8" x 9" x	1	6		PREFORMED PAD
ITEM 504.70 STRUCTURAL STEEL							

JOB NO. J-5029 DWG. NO. S-1

ALL STEEL TO BE A36 EXCEPT 2"Φ PIN MAY BE A36; A235, CLASS E; OR A108, GRADE 1016-1030 INCLUSIVE.

NOTE: WELDING PER STATE OF ME. SPEC.

CUSTOMER ORDER NO.: VERBAL.
REFERENCE DRAWINGS:
HOLES: AS NOTED.
FIELD CONN: WELD TO STRINGERS.
PAINT: STATE OF ME. SPECS.

FINAL

APPR.	11-1-71	
APPR.	12-7-71	
SHOP	11-8-71	
F. & O.		
DRAWN	10-31-71	AB
CHECKED	10-31-71	
REVISION	11-8-71	
REVISION	12-21-71	
REVISION		

EXPANSION PEDESTALS

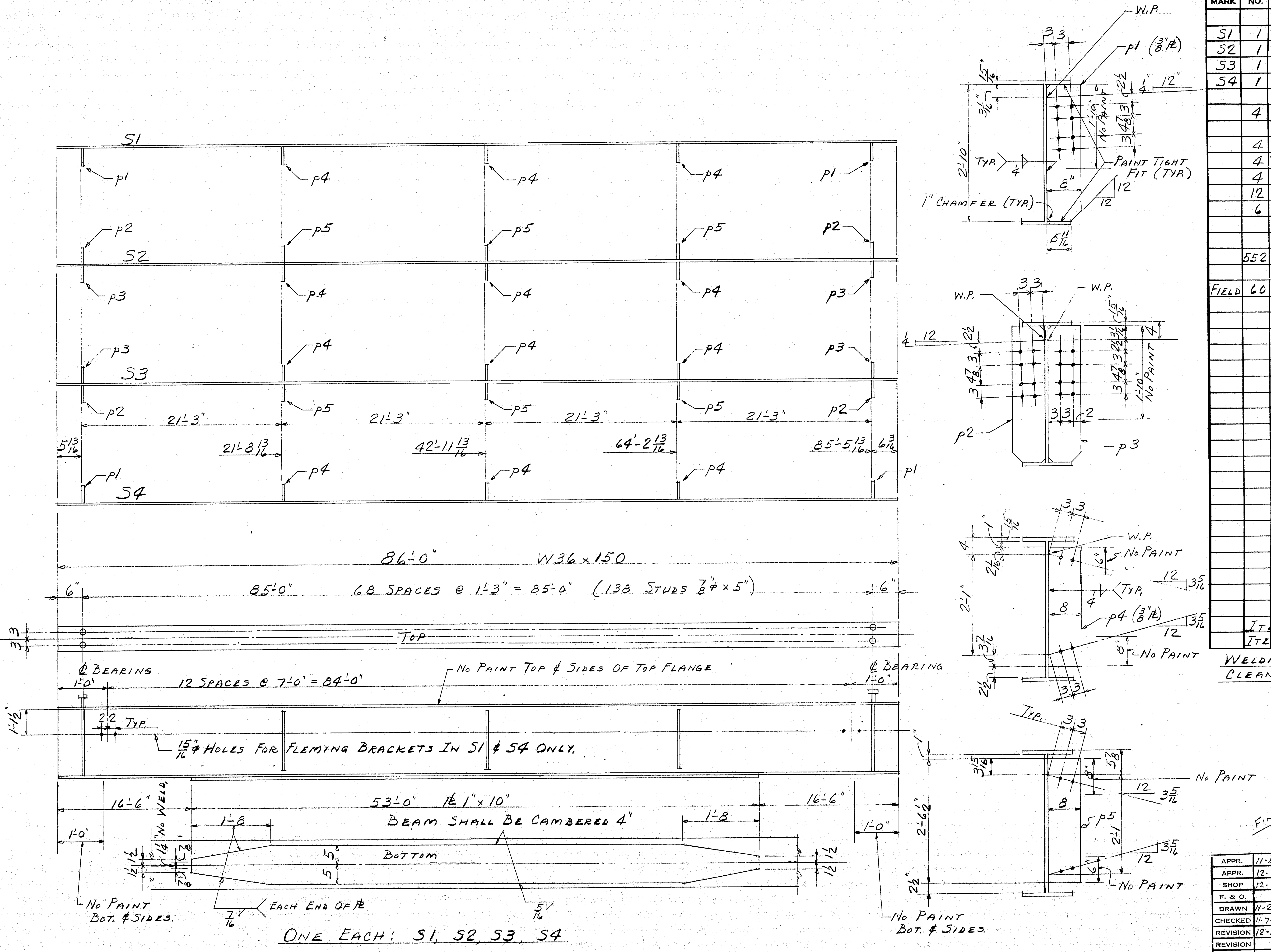
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HUBBARD ROAD BRIDGE
BERWICK, MAINE

CUSTOMER H.B. FLEMING, INC.
ARCHITECT M.S.H.C.

JOB NO. J-5029 DWG. NO. S-1

114-45



ONE EACH: S1, S2, S3, S4

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
S1	1		W36 x 150	86	0		4" CAMBER (A572 GRADE 50)
S2	1		DO.	86	0		
S3	1		DO.	86	0		
S4	1		DO.	86	0		
	4		PL 1" x 10"	53	0		A572 GRADE 50)
	4	p1	PL $\frac{3}{8}$ x 8	2	10		A36
	4	p2	DO.	2	10		
	4	p3	DO	2	10		
	12	p4	DO.	2	$6\frac{1}{2}$		
	6	p5	DO	2	$6\frac{1}{2}$		
	552	SHOP	$\frac{7}{8}$ϕ STUD	0	5		NELSON
FIELD	60		$\frac{5}{8}$"ϕ CARRIAGE BOLT	0	$1\frac{1}{2}$		TO FILL BRACKET HOLES AFTER CONSTR. TACK WELD NUTS TO WEB AFTER INSTALLATION
	ITEM		504.70	STRUCTURAL STEEL			
	ITEM		505.08	SHEAR CONNECTORS			

JOB NO. J-5029 DWG. NO. S2

WELDING: SEE NOTES ON E1.
CLEANING: BLAST CLEAN.

CUSTOMER ORDER NO.: VERBAL
REFERENCE DRAWINGS:
HOLES: $\frac{15}{16}$"ϕ
FIELD CONN: $\frac{7}{8}$"ϕ BOLTS A325
PAINT: STATE OF MAINE SPEC.

FINAL

APPR.	11-8-71	
APPR.	12-7-71	
SHOP	12-7-71	
F. & O.		
DRAWN	11-2-71	AB
CHECKED	11-7-71	AB
REVISION	12-5-71	AB
REVISION		
REVISION		

STRINGERS

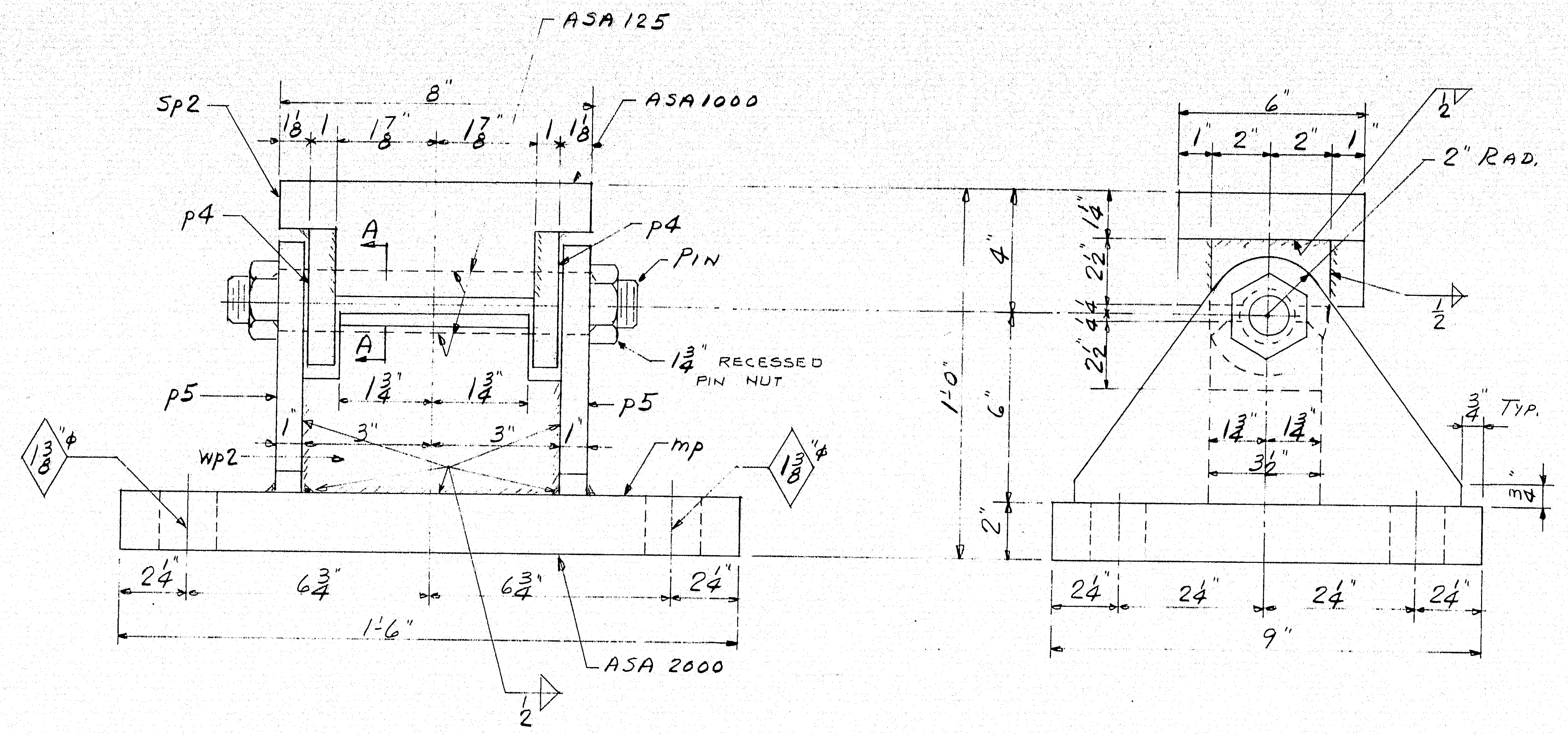
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

HUBBARD ROAD BRIDGE
BERWICK, MAINE

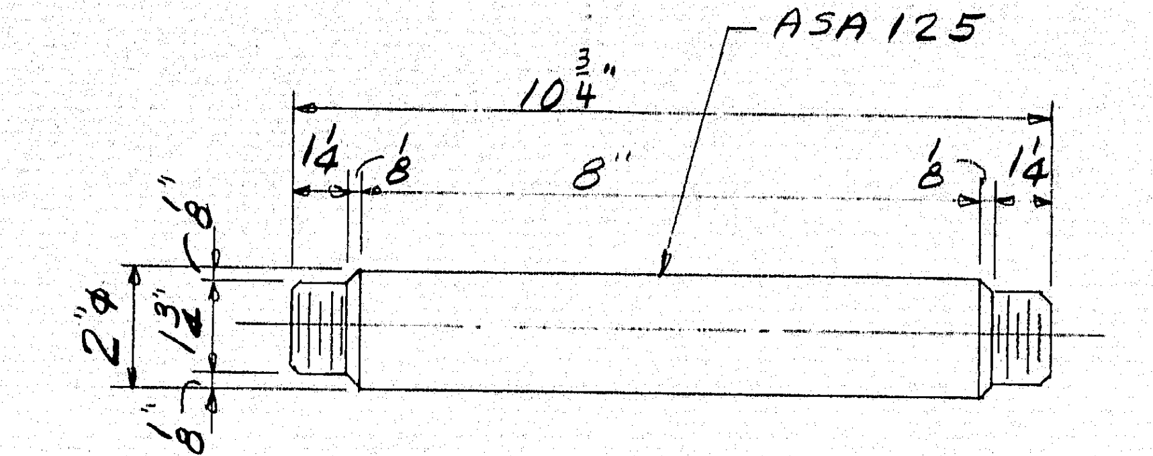
CUSTOMER H. B. FLEMING, INC.
ARCHITECT M. S. H. C.

JOB NO. J-5029 DWG. NO. S2

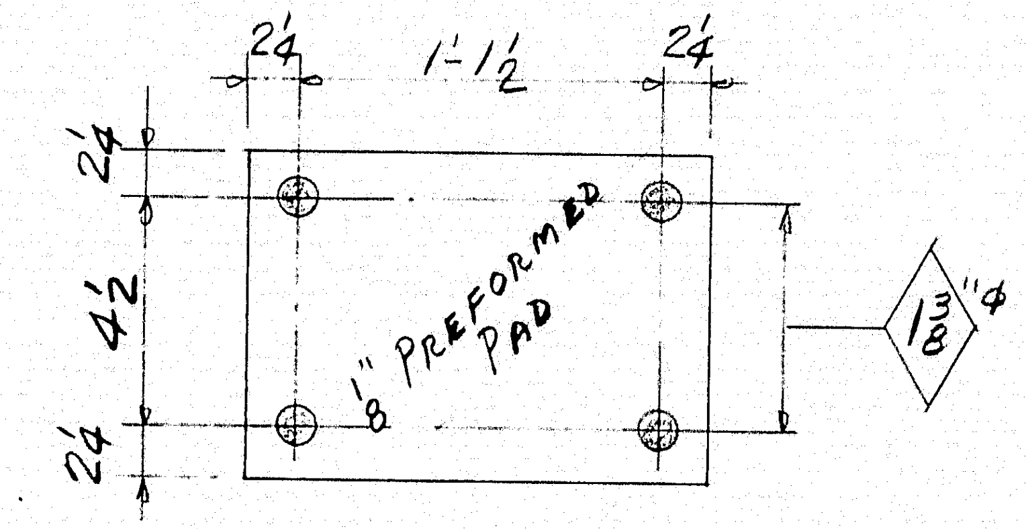
114-45A



Fixed Pedestal FPD-1 4-Req'd
(Do Not Scale)



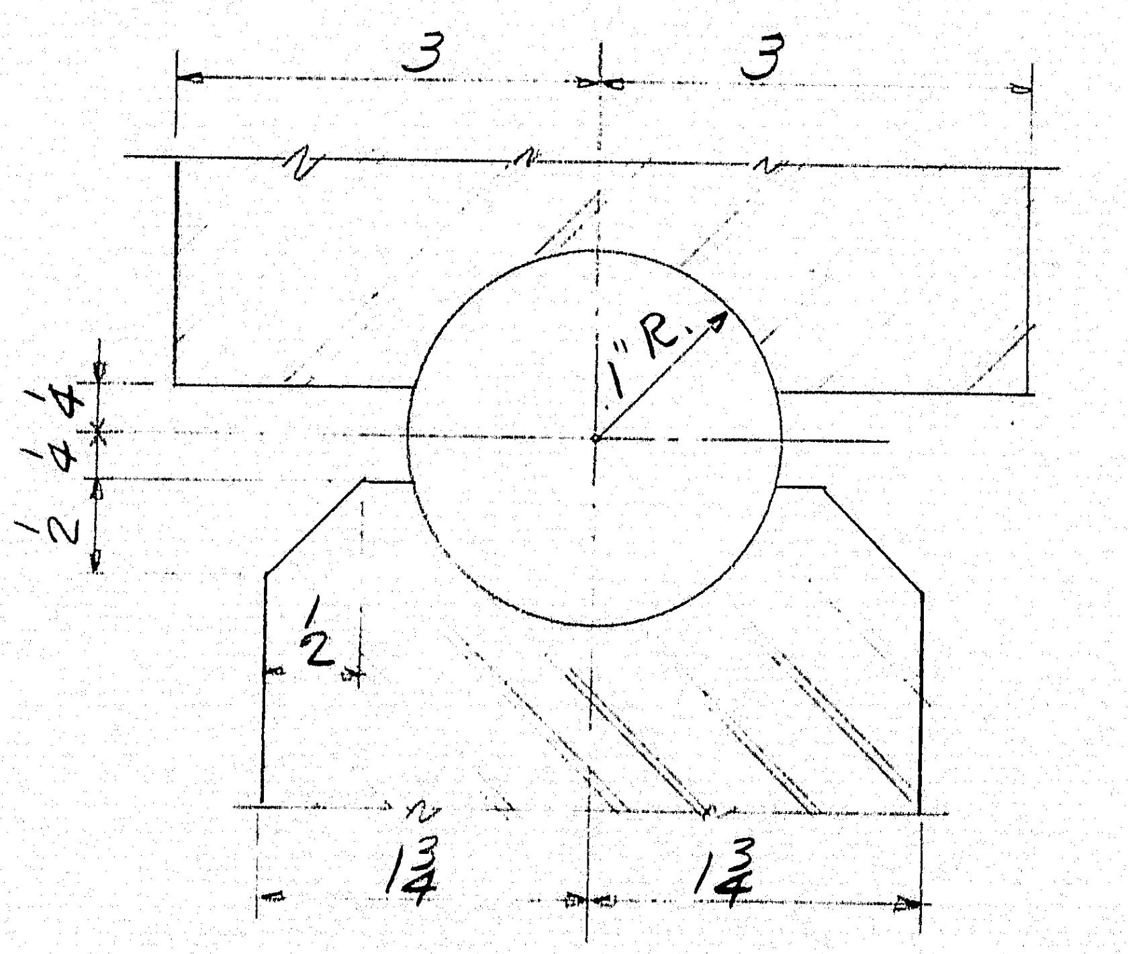
Pin Detail - 4 Req'd
Assemble With FPD-1
For Shipment



FP2- 4 Req'd

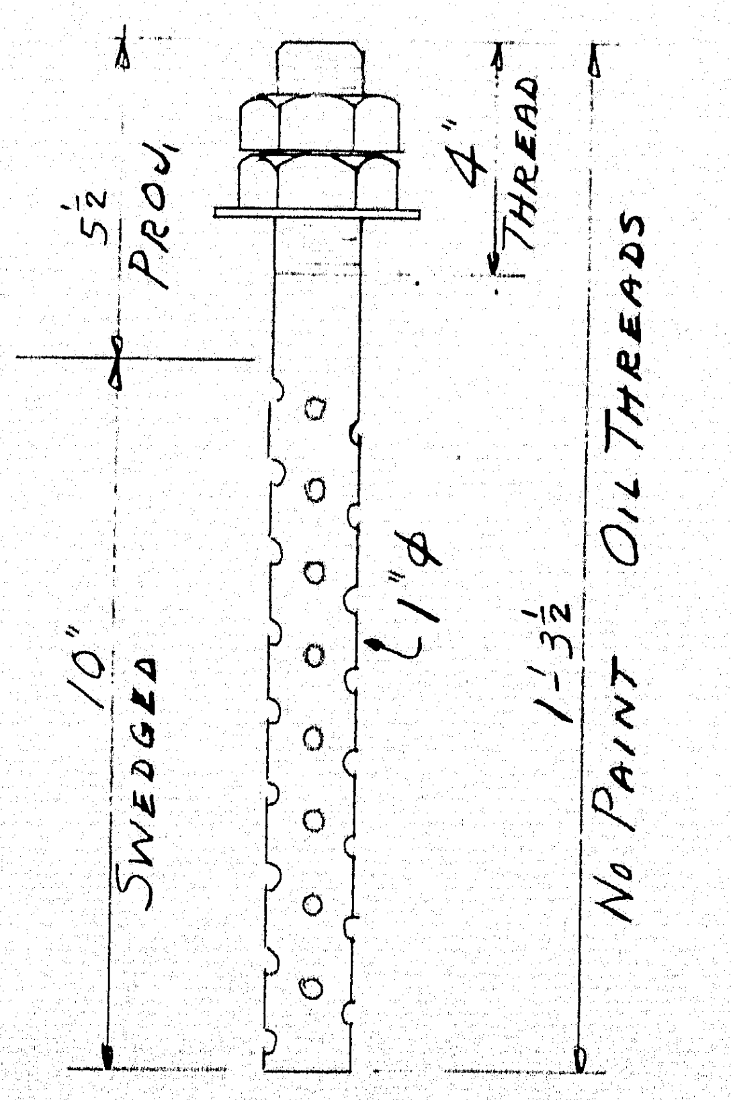
SHIP MARK	BILL OF MATERIAL NO.	MARK	SHAPE	LENGTH		WT.	REMARKS
FPD-1	4		Assembly				
	4	mp	⅊$2\frac{1}{8}$ × 9	1	6		Fin. To 2"
	4	wp2	⅊$3\frac{1}{2}$ × $5\frac{3}{4}$	0	6		
	4	sp2	⅊$3\frac{3}{4}$ × 6	0	8		
	8	p4	⅊1 × 4	0	$4\frac{3}{4}$		
	8	p5	⅊1 × $7\frac{1}{2}$	0	8		
	4	pin	Bar 2"⌀	0	$10\frac{3}{4}$		
	8	Shop	$1\frac{3}{4}$" Recessed Pin Nut				Hex.
AB2	16		Bar 1"⌀	1	$3\frac{1}{2}$		
	16	Shop	1" Std. Washer				
	32	Do.	1" Std. Nut				Hex.
FP2	4		1/8" × 9" ×	1	6		Preformed Pad
Item	504.70	Structural Steel.					

JOB NO. J-5029 DWG. NO. S-2A



Section A-A

Pin Note:
The Diameter Of The Pin Hole Shall Not Exceed That Of The Pin By More Than 1/50th Inch.



AB2 - 16 Req'd

All Steel To Be A36 Except 2"⌀ Pin May Be A36; A235, Class E; Or A108, Grade 1016-1030 Inclusive.
Note: Welding Per State Of Me. Specs.

Customer Order No.: Verbal
Reference Drawings:
Holes: As Noted.
Field Conn: Weld To Stringers.
Paint: State Of Maine Specs.

Final

APPR.	11-1-71	
APPR.	12-7-71	
SHOP	11-8-71	
F. & O.		
DRAWN	10-31-71	AB
CHECKED	10-31-71	
REVISION	11-8-71	
REVISION	12-21-71	
REVISION		

Fixed Pedestals

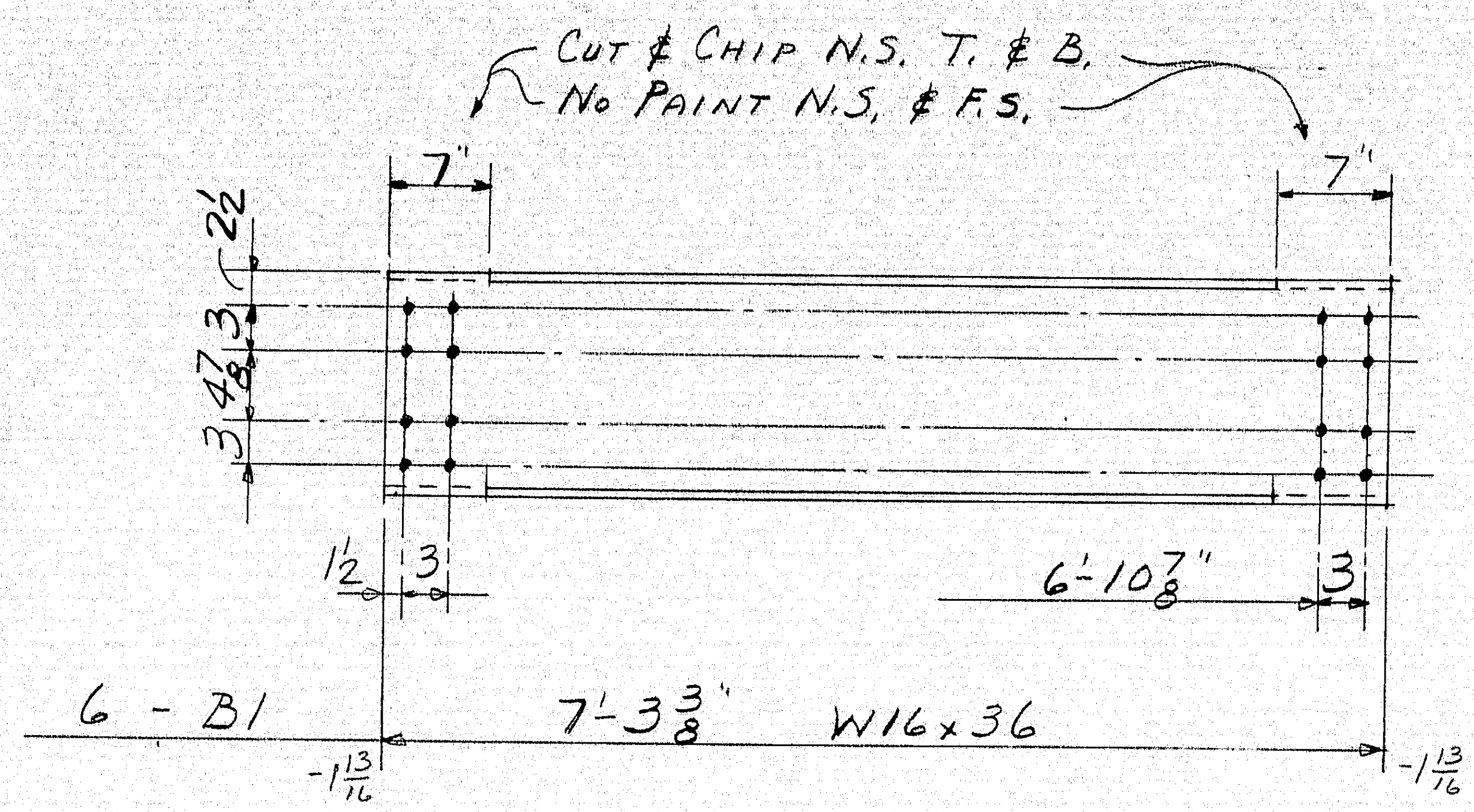
MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

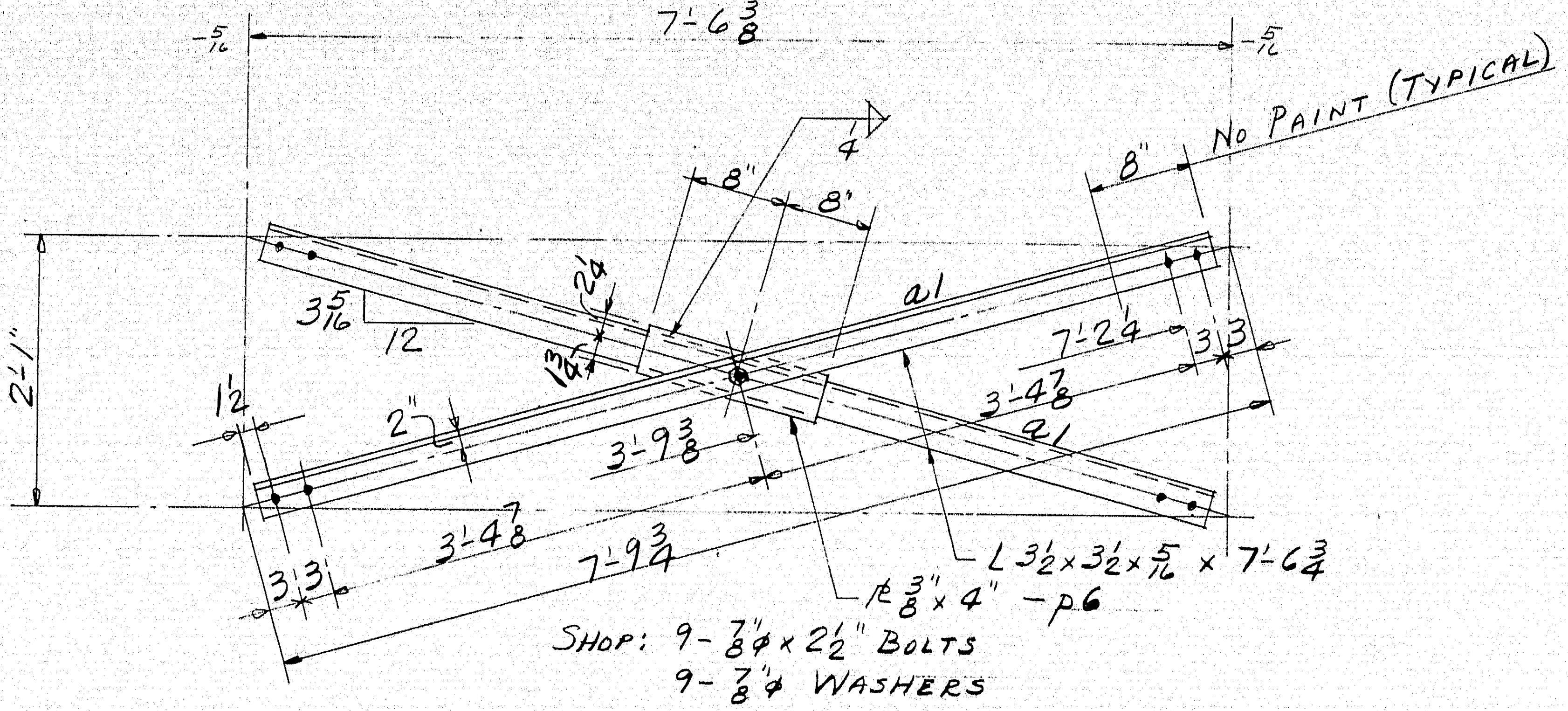
Hubbard Road Bridge
Berwick, Maine

Customer H. B. Fleming, Inc.
Architect M. S. H. C.

Job No. J-5029 Dwg. No. S-2 A

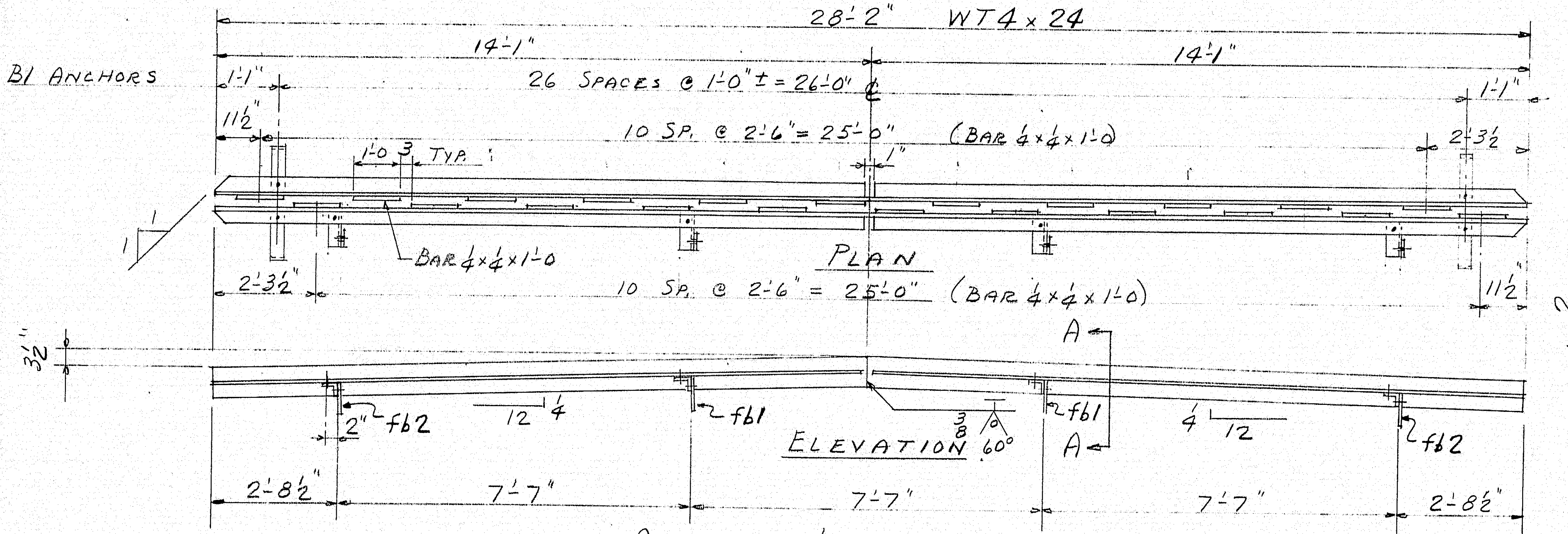
114-46



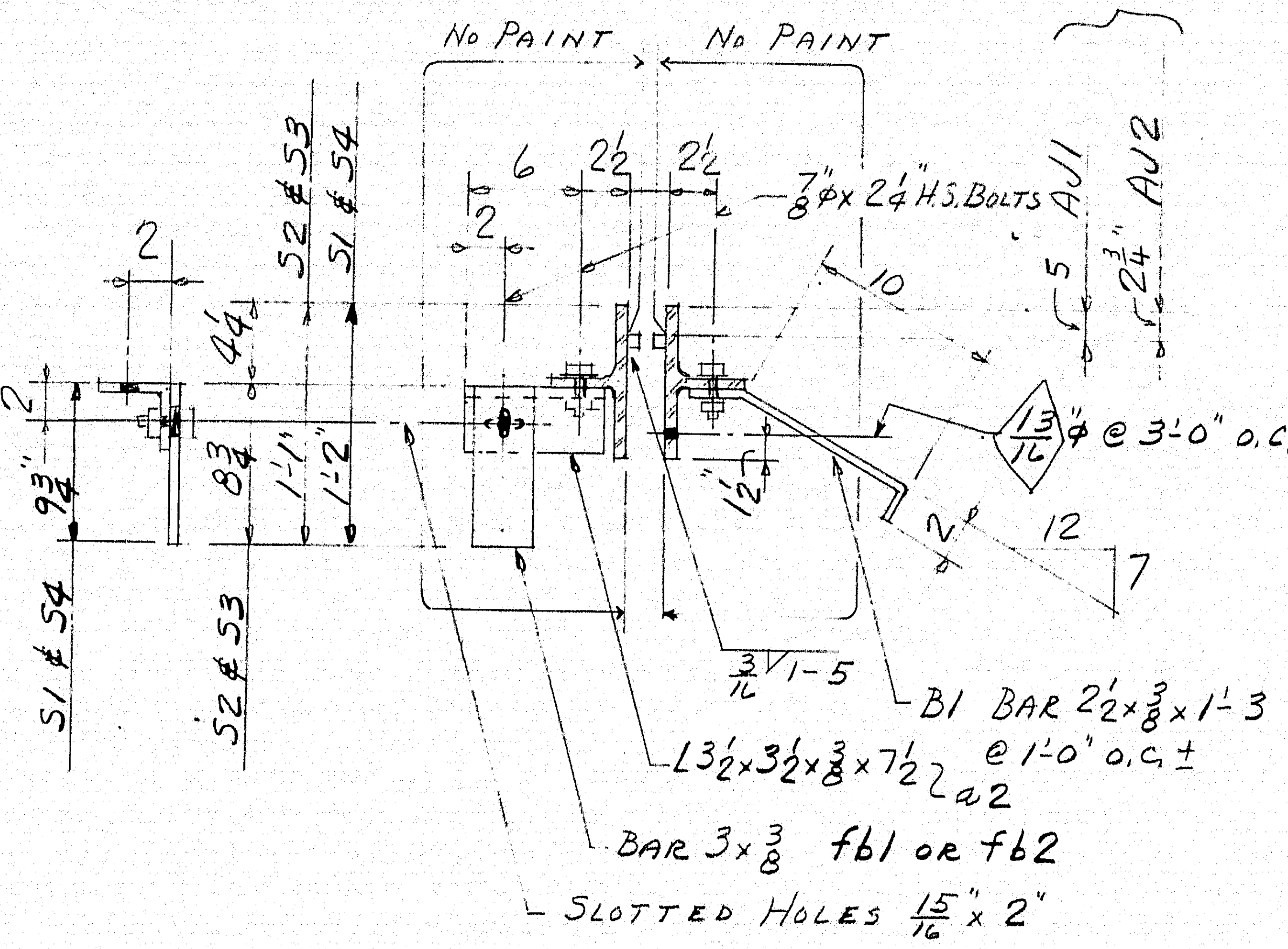


Shop: 9 - 7/8"⌀ x 2 1/2" Bolts
9 - 7/8"⌀ Washers

9 - A1



Armored Joints
One - AJ1
One - AJ2



These dims. will be used with seal selected by H.B. Fleming

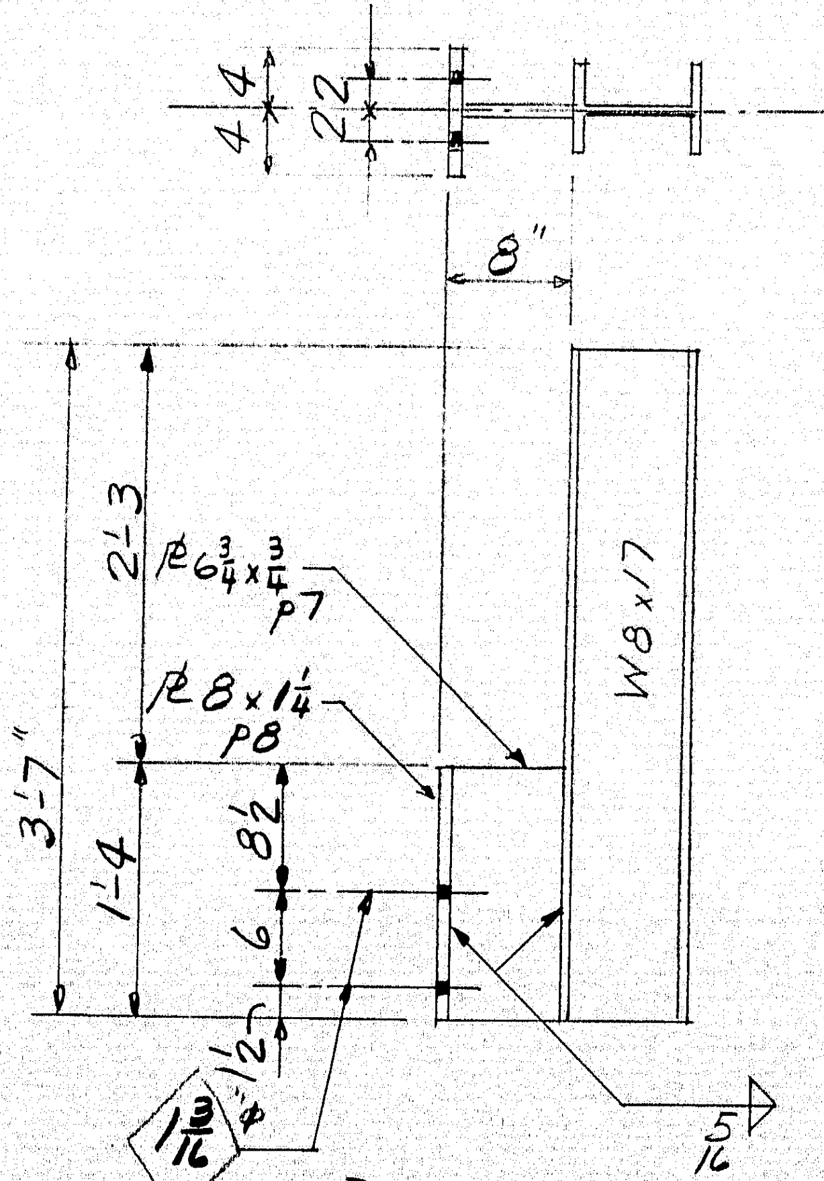
Sect. A-A

Ship Mark	No.	Mark	Shape	Length		Wt.	Remarks
B1	6		W16x36	7	3 3/8		A36
A1	9		Assembly			—	
	18	a1	L 3 1/2 x 3 1/2 x 5/16	7	6 3/4		A36
	9	p6	PL 3/8 x 4	1	4		A36
	9	Shop	7/8"⌀ Bolt	0	2 1/2		A325
	9	Do.	7/8"⌀ Washer				A325
FB-1	172		7/8"⌀ Bolts		2		A325 } Field Bolts
FW-1	172		7/8"⌀ Washers				A325
AJ1	1		Assembly			—	
AJ2	1		Do			—	
	4		WT4x24	28	2		A36
	44		Bar 1/4"□	1	0		
	8	a2	L 3 1/2 x 3 1/2 x 3/8	0	7 1/2		
	4	fb1	Bar 3 x 3/8	0	8 3/4		
	108	B1	Bar 2 1/2 x 3/8	1	3		
	124	Shop	7/8"⌀ Bolt	0	2 1/4		A325
	124	Do	7/8"⌀ Washer				A325
	4	fb2	Bar 3 x 3/8	0	9 3/4		A36
RP	22		W8x17	3	7		A572 Grade 42
	22	p7	PL 3/4 x 6 3/4	1	4		A36
	22	p8	PL 1 1/4 x 8	1	4		A36
AB3	44		Bar 1"⌀	5	10 1/2		Railing Anchors A325
	176	Shop	1" Std. Hex. Nut				
	88	Shop	1" Std. Washer				
R1	8		TS 3 1/2 x 3 1/2 x .250	11	2 5/8	A500 Gr. "B"	Railing Detailed On Dwg. E1.
R2	8		Do.	20	0		
R3	4		Do	20	0		
W1	4		TS 6x8x.250	11	2 5/8		
W2	4		Do.	20	0		
W3	2		Do.	20	0		
	8	p9	PL 3/8 x 3	0	3	A36	
	4	p10	PL 3/8 x 5 1/2	0	7 1/2		
Item 504.70			Structural Steel				
Item 507.08			Bridge Railing				

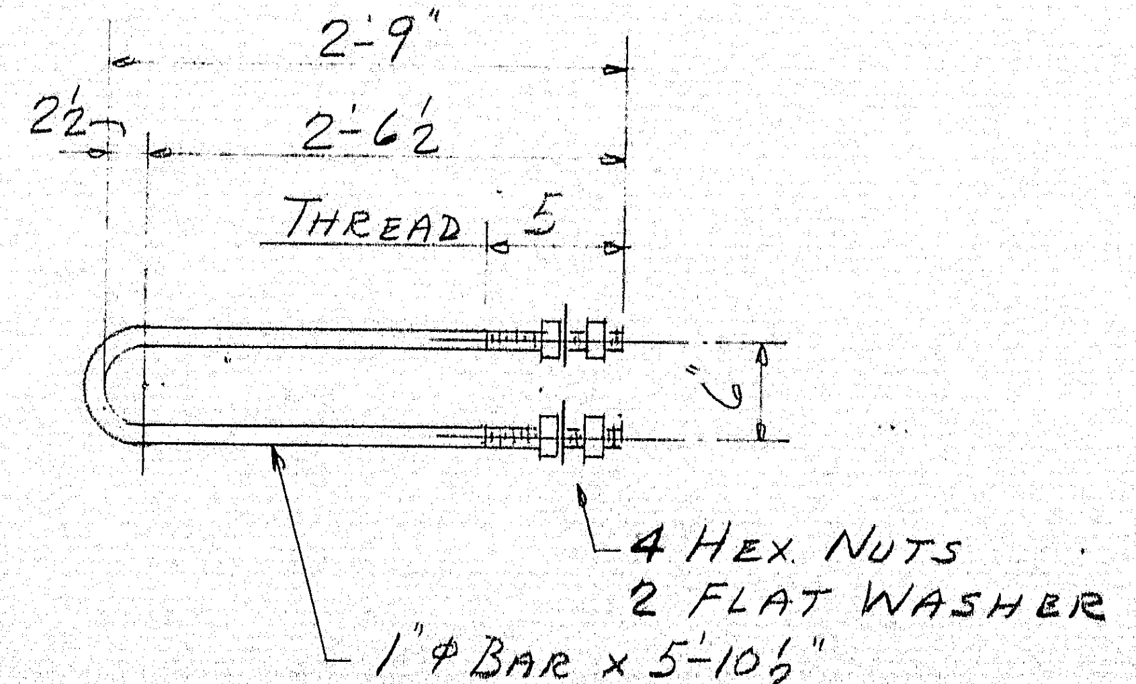
Bill of Material Job No. J-5029 Dwg. No. 53

Welding: See Notes On E1.
Cleaning: Blast Clean.

Customer Order No.: Verbal
Reference Drawings:
Holes: 15/16"⌀ Unless Noted.
Field Conn: 7/8"⌀ Bolts A325 & As Noted.
Paint: State Of Maine Spec.



Railing Post
22 - RP



ASTM A325

Anchor Bolts For Railing Posts
44 - AB3
No Paint

Final
Rev. 1-20-72

Appr.	11-8-71	
Appr.	12-7-71 1-20-72	
Shop	12-22-71 1-20-72	
F. & O.		
Drawn	11-7-71	A.B.
Checked	11-7-71	A.B.
Revision	12-5-71	AB
Revision	12-7-71 12-21-71	
Revision	1-13-72 1-20-72	

Diaphragms, Armored Joints,
Railing Posts & Anchors

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

Hubbard Road Bridge
Berwick, Maine

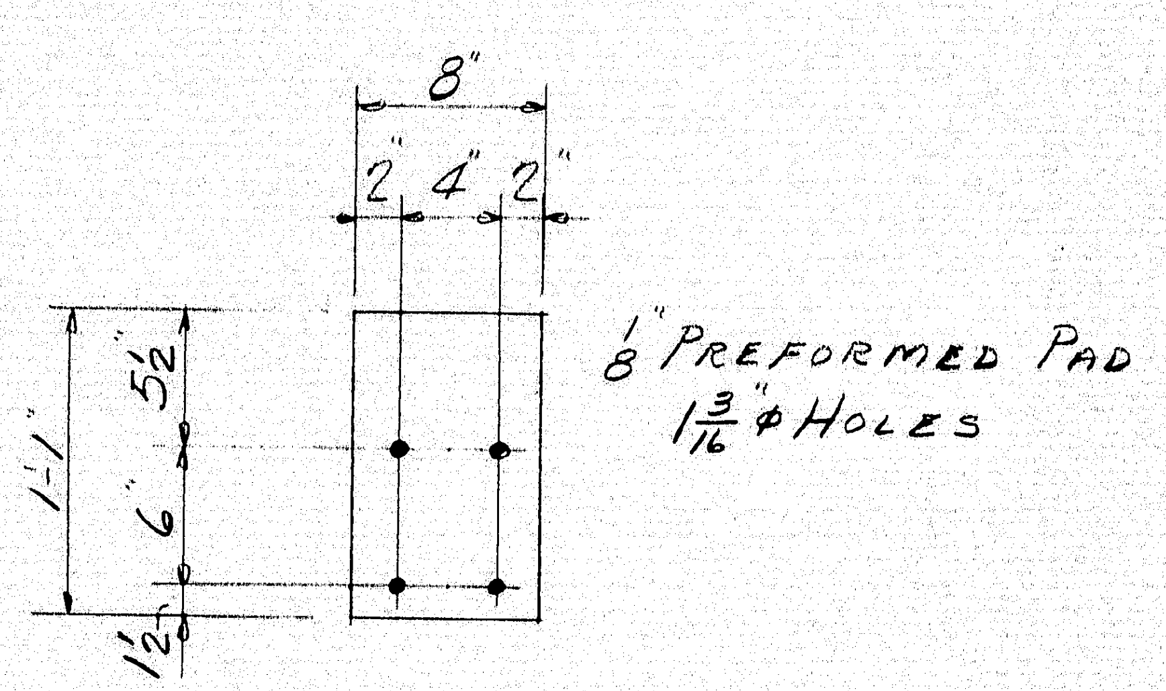
Customer H. B. Fleming, Inc.
Architect M. S. H. C.

Job No. J-5029
Dwg. No. S3
Rev. 1-20-72

114-46A

SHIP **BILL OF MATERIAL** JOB NO. J-5029 DWG. NO. S-4

MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS



22 - REQ'D

CUSTOMER ORDER NO.:
REFERENCE DRAWINGS:
HOLES:
FIELD CONN.:
PAINT:

PADS AT RAILING POSTS

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

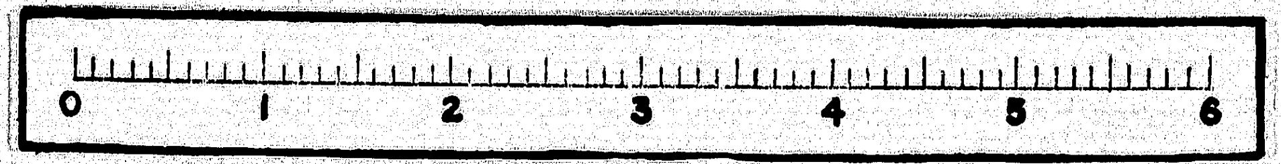
HUBBARD ROAD BRIDGE
BERWICK, MAINE

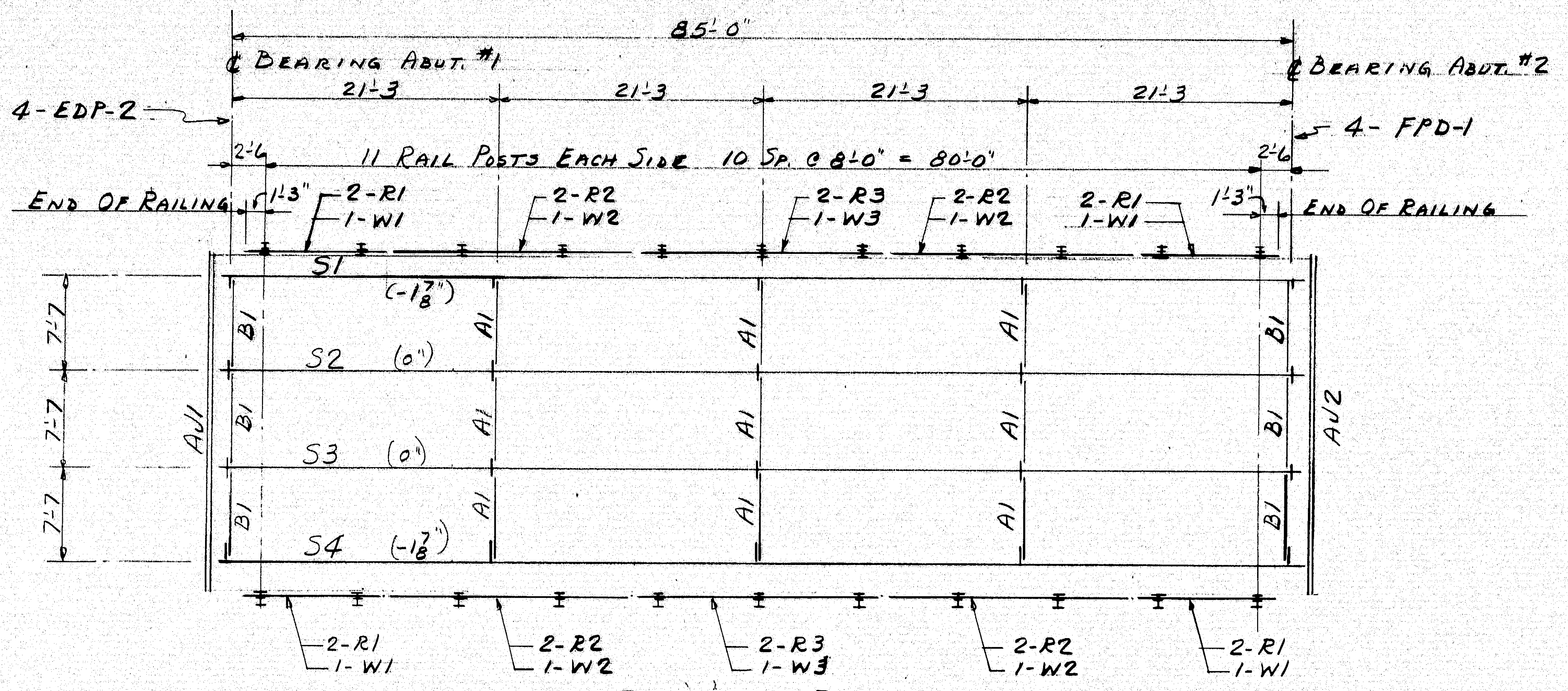
CUSTOMER H. B. FLEMING, INC.
ARCHITECT M.S.H.C.

JOB NO. J-5029 DWG. NO. S-4

APPR.		
APPR.		
SHOP		5-11-72
F. & O.		
DRAWN	D.R.	5-11-72
CHECKED		
REVISION		
REVISION		
REVISION		

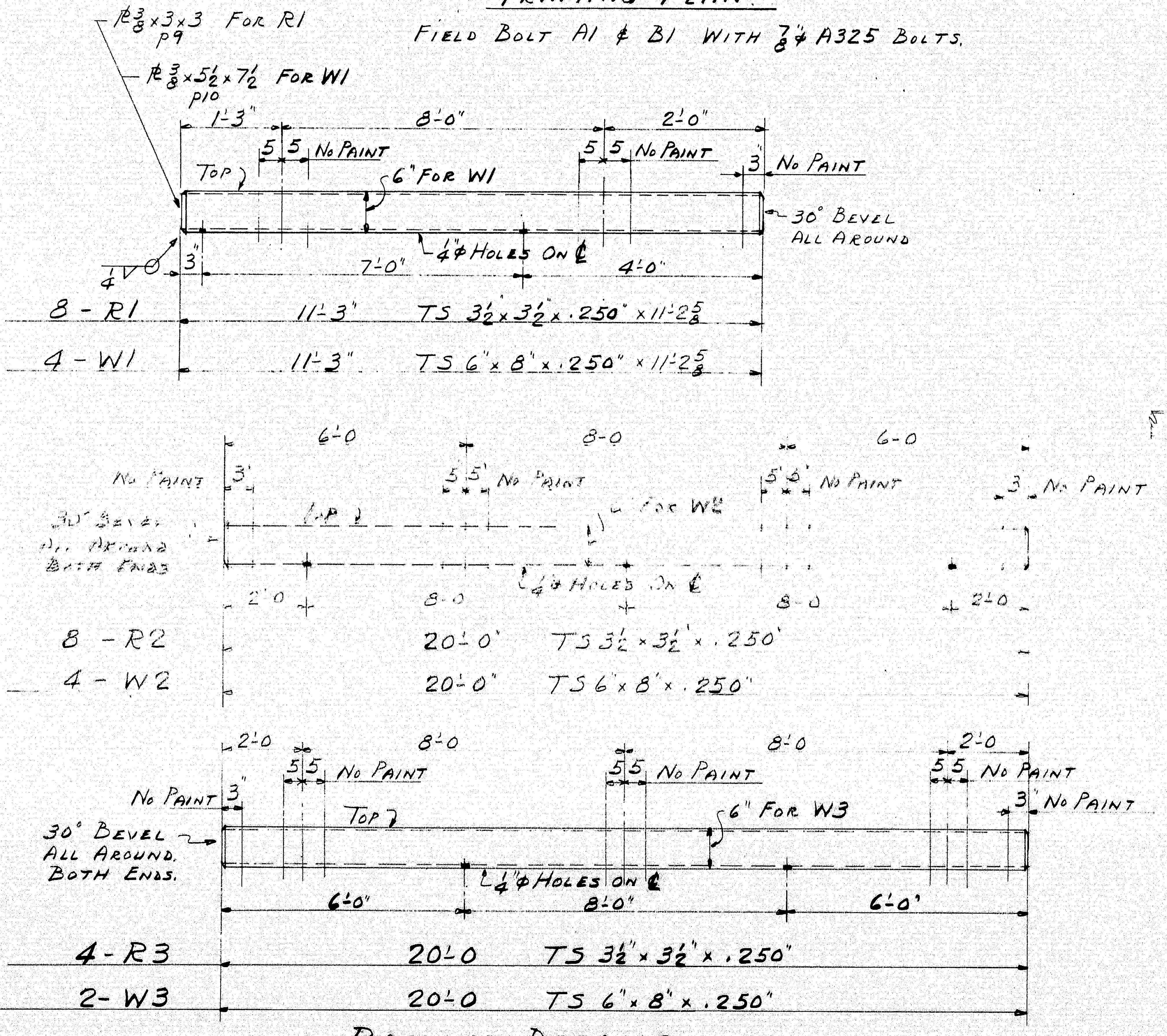
114-47



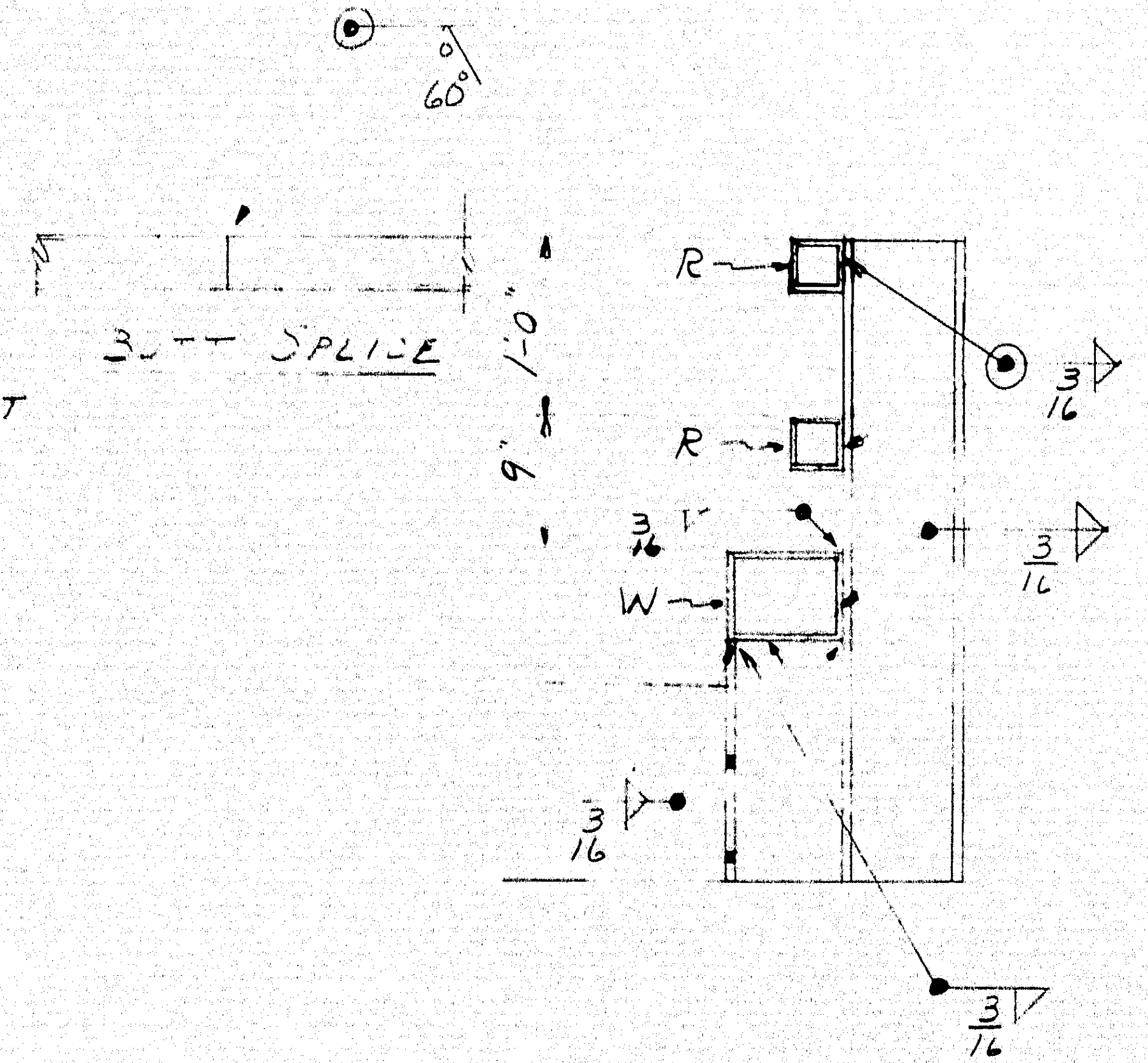


FRAMING PLAN.

FIELD BOLT A1 & B1 WITH 7/8"⌀ A325 BOLTS.



RAILING DETAILS



FIELD WELDING
FOR BRIDGE RAILING

WELDING NOTES:

BEARING STIFFENERS TO WEB AND COVER PLATE TO FLANGE WELDING SHALL BE AUTOMATIC OR SEMI-AUTOMATIC SUBMERGED ARC WELDING. THE FLUX-ELECTRODE COMBINATION SHALL CONFORM TO THE REQUIREMENTS FOR A.W.S. FLUX DESIGNATION F71-XXXX. MATERIAL MUST BE PREHEATED TO 70° F. FOR COVER PLATE TO FLANGE WELDS AND 50° F. FOR ALL OTHER WELDS.

ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING SHALL BE A.W.S. CLASSIFICATION E70 LOW HYDROGEN ELECTRODES.

HOLES FOR CONNECTIONS WILL BE PUNCHED FULL SIZE.

SEE DWG. S1 & S2A FOR BEARING DEVICES.
" " S2 FOR STRINGERS.
" " S3 FOR DIAPHRAGMS, ARMORED JOINTS,
& RAILING POSTS.
RAILING IS TO FIELD WELDED TO POSTS BY
H.B. FLEMING.

FINAL

APPR.	11-8-71	
APPR.	12-7-71	
SHOP	12-7-71 12-22-71	
F. & O.	12-6-71	
DRAWN	11-7-71	AB
CHECKED	11-7-71	AB
REVISION	12-5-71	AB
REVISION	12-21-71	SPH
REVISION		

FRAMING PLAN

MEGQUIER & JONES CORP.
1156 BROADWAY
SOUTH PORTLAND, MAINE 04106

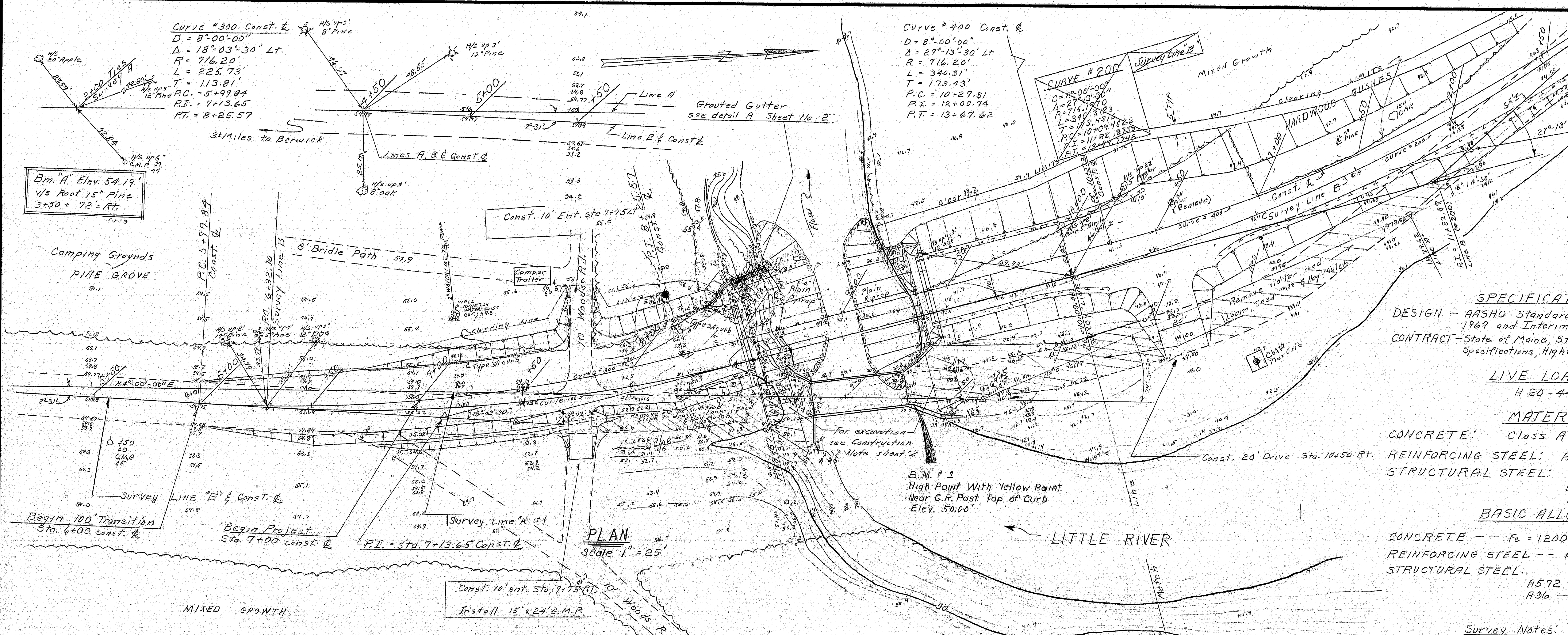
HUBBARD ROAD BRIDGE
BERWICK, MAINE

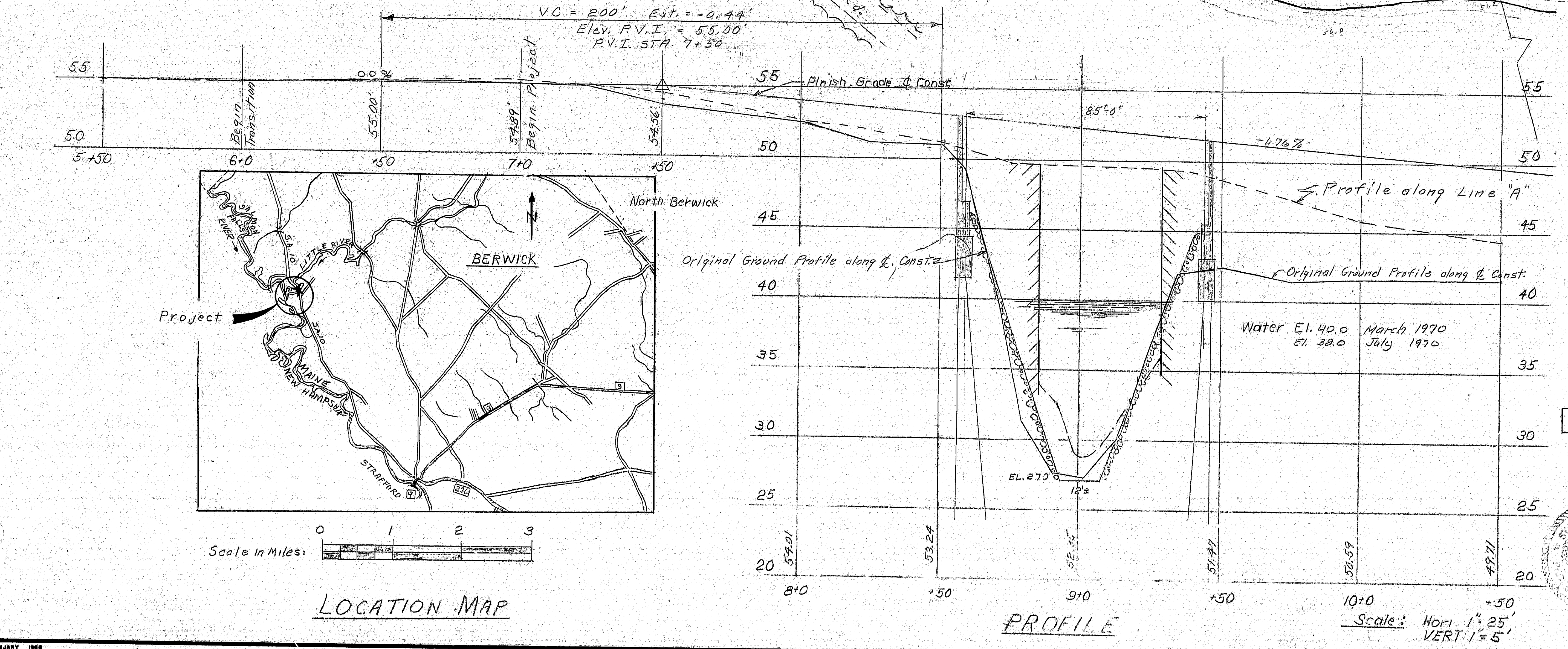
CUSTOMER H.B. FLEMING INC.
ARCHITECT M.S.H.C.

JOB NO. J-5029
DWG. NO. E1

114-48

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	1	22





LOCATION MAP

PROFILE

Scale: Hori 1" = 25'
VERT 1" = 5'

TRAFFIC DATA

AADT (1970)	200
AADT (1990)	330
DHV	13%
DHV (1990)	45

SPECIFICATIONS

DESIGN ~ AASHO Standard Specifications for Highway Bridges 1969 and Interim Specifications 1970

CONTRACT ~ State of Maine, State Highway Commission, Standard Specifications, Highways & Bridges, Revision of June 1968.

LIVE LOADING

H 20-44

MATERIALS

CONCRETE: Class A

REINFORCING STEEL: ASTM A615 Grade 60

STRUCTURAL STEEL: Beams & Cover Plates-A572 Grade 50
Bridge rail members - See sheet No. 10
All other ----- A36

BASIC ALLOWABLE STRESSES

CONCRETE -- fc = 1200. psi n = 10
REINFORCING STEEL -- fs = 24,000. psi
STRUCTURAL STEEL:
A572 Grade 50 --- fs = 27,000. psi
A36 --------- fs = 20,000 psi

Survey Notes:

Foundation - Probably sand & Gravel.

Abutments - Mass concrete, apparently good condition.

Superstr. I-Beam encased in concrete. Apparently everything above Br. seat elevation was formed up, Including tops of wings, and slabs, top of Abuts - Top of wings all filled with Concrete - No provision for expansion (No bad effects) Concrete Rail Post & Bars.

Approaches - Surface treated gravel, poor condition.

Stream - Slow current - backwater from Salmon Falls River. High water over North approach as indicated by cribbing around power poles.

Utilities - Central Maine Power Co.
N.E.T. & T. Co.

Note:

1. See Right of Way Maps for Grading Limits and Construction Limits
2. All utility plant will be adjusted as necessary by the utility company.
3. For Construction Note see sheet #2

INDEX OF SHEETS

Description	Sheet No.
Survey	1 & 2
Foundation survey	3
Cross - Sections	4, 5, 6, & 7
Abutments	8
Structural Steel	9
Superstructure	10
End Post & Reinf. Steel	11
Right of Way	1 of 2 & 2 of 2
(BD 100-70) JAN. 1970	
(BD 111-69) JUNE 1969	
(BD 104-66) Sept 1966	
(BD 110-69) Feb 1969	
Aug. 1969 ②	
Aug. 1969 ③	
Aug. 1969 ⑥	
Aug. 1969 ⑪	
Aug 1969 ⑫	

Note: Coast Guard Permit Not Required

PLANS	BY		DATE
DESIGN - DETAILED	N.E.R. & J.C.	N.E.R.	12/70
CHECKED			
REVISIONS			
FIELD CHANGES			

APPROVED:
MAINE STATE HIGHWAY COMMISSION DATE
David H. Stevens 7-14-71
CHAIRMAN
Bernard A. Lachance 7-14-71
Sylvester L. Poor 7-14-71
CHIEF ENGINEER

DESIGN— N.E.R. 12/70
TRACE— N.E.R. 12/70
CHECK— P.M.W. Dec 1970
BRIDGE NO. 6221
SURVEY— Check Survey - DEW
PLOT— Savery & J.O.

STATE HIGHWAY COMMISSION

HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
SURVEY

SHEET 1 OF 11 AUGUSTA, MAINE MARCH 1971

JANUARY 1968

203-1 2080

151-138

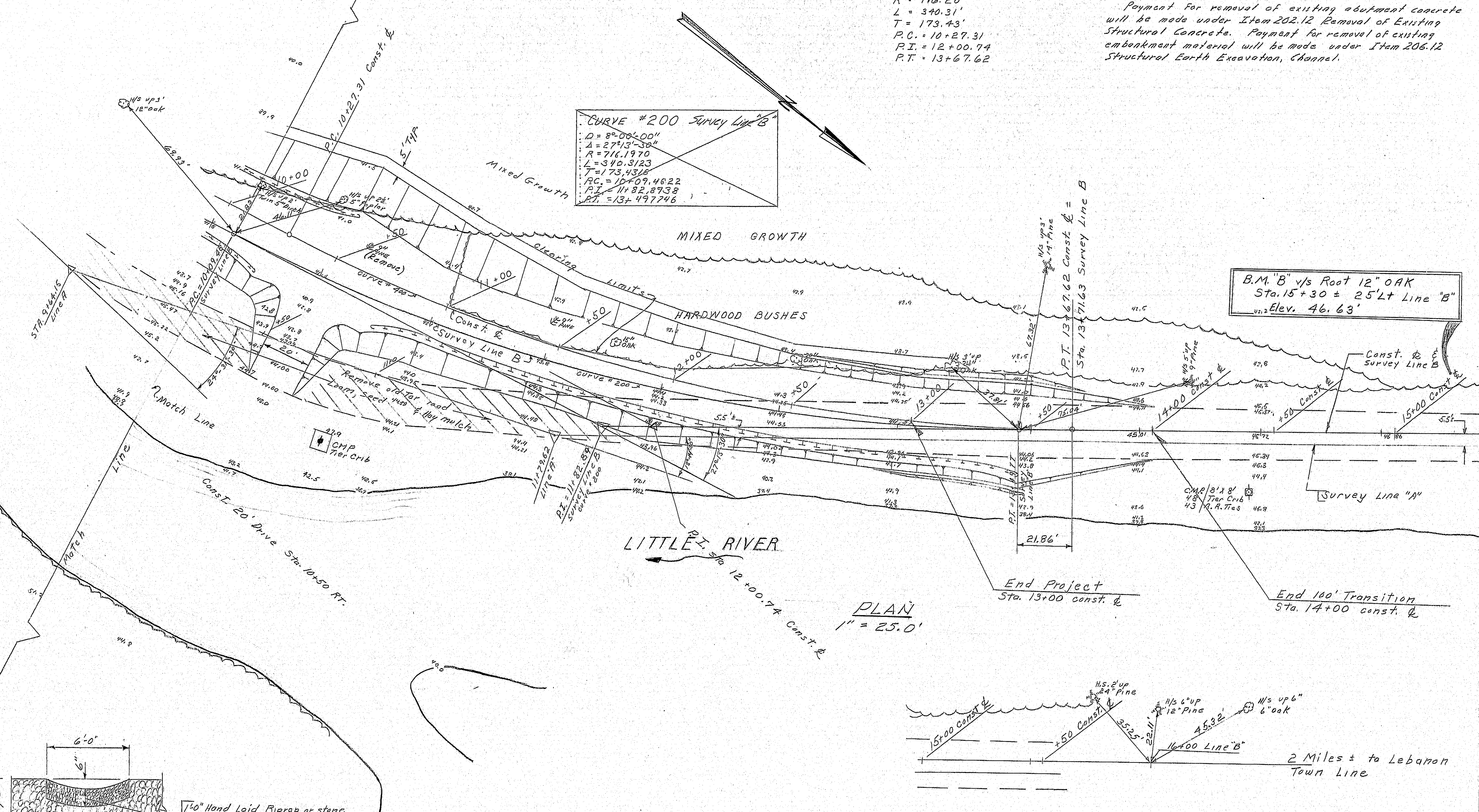
B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	2	22

Curve #400 Const. ℄
D = 8°-00'-00"
Δ = 27°-13'-30' Lt.
R = 716.20'
L = 340.31'
T = 173.43'
P.C. = 10+27.31
P.I. = 12+00.74
P.T. = 13+67.62

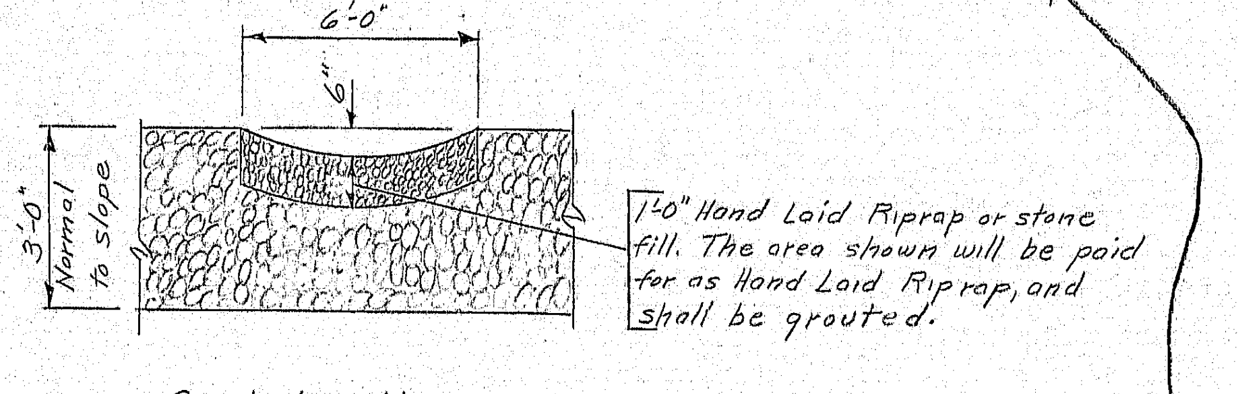
CONSTRUCTION NOTES:

Remove existing abutments to elev. 42.0 or as determined by the Engineer in the field. Cut existing embankment behind abutments to a 1¾:1 slope or as determined by the Engineer in the field.

Payment for removal of existing abutment concrete will be made under Item 202.12 Removal of Existing Structural Concrete. Payment for removal of existing embankment material will be made under Item 206.12 Structural Earth Excavation, Channel.

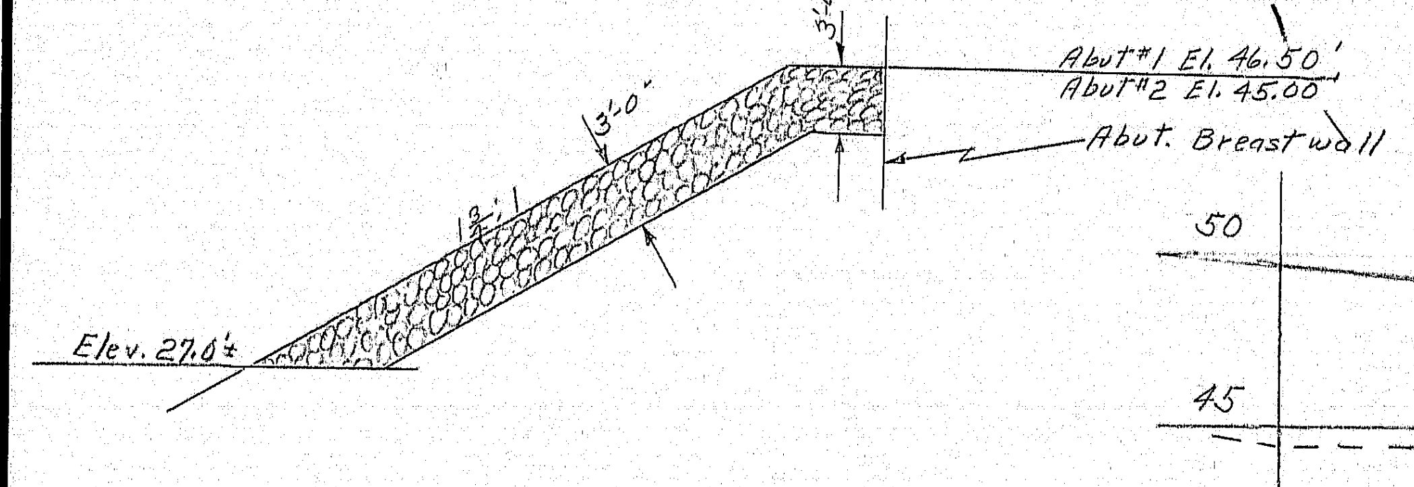


PLAN
1" = 25.0'

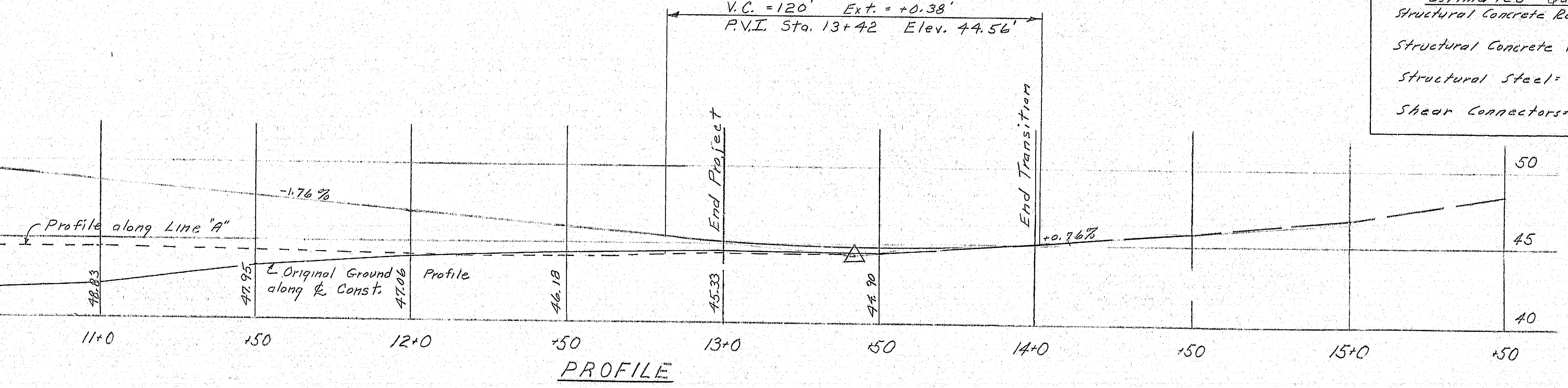


1'-0" Hand Laid Riprap or stone fill. The area shown will be paid for as Hand Laid Riprap, and shall be grouted.

Grouted Gutter
Detail A



PLAIN RIPRAP



PROFILE

ESTIMATED QUANTITIES

Item	Description	Unit	Quantity
201.11	Clearing	Acre	0.30
201.13	Removing single trees, 9" to 24" Tops only	each	1
202.10	Removal of exist. superstructure (Property of Contr.)	L.S.	L.S
202.12	Removal of exist. structural concrete	C.Y.	100
203.20	Common Excavation	C.Y.	800
203.24	Common Borrow	C.Y.	2900
205.04	Overhaul (in place measure)	C.Y./m	3250
206.08	Struct. earth excavation, Abut. & Retaining Wall	C.Y.	170
206.12	Struct. earth excavation, Channel	C.Y.	200
206.06	Struct. earth excavation (Drainage & Minor structure)	C.Y.	30
304.10	Aggregate Subbase Course ~ Gravel	C.Y.	1460
410.20	Bituminous Surface Treatment	S.Y.	1700
411.09	Untreated Aggregate Surface Course	C.Y.	150
501.212	Steel H-Beam Piles 42 lbs/ft.	L.F.	655
502.21	Structural Concrete, Abut. & Retaining walls	C.Y.	115
502.26	Struct. Concrete, Rdwy & Sidewalk Slabs on steel bridge	L.S.	L.S.
502.29	Struct. Concrete, wearing surface on bridges	L.S.	L.S.
503.12	Reinforcing Steel, Fabricated & Delivered	lbs	21000
503.13	Reinforcing Steel, Placing	lbs	21000
504.70	Structural Steel, Fabricated & Delivered	L.S.	L.S.
504.71	Structural Steel, Erection	L.S.	L.S.
505.08	Shear Connectors	L.S.	L.S.
506.14	Field Painting, Structural Steel	L.S.	L.S.
507.08	Bridge Railing	L.F.	165
512.06	French drains	C.Y.	54
515.20	Protective coating for concrete surfaces	S.Y.	315
605.09	6" Underdrain Type B	L.F.	180
603.161	15" Corrugated Metal Pipe	L.F.	24
606.17	Guard Rail Type 3b ~ Single Rail	L.F.	439
606.22	Guard Rail type 3b ~ Circular Greater then 15' Radius	L.F.	75
609.32	CURB Type 3a	L.F.	140
610.08	Plain Riprap	C.Y.	500
610.09	Hand laid Riprap	C.Y.	10
610.12	Portland Cement for Riprap Grout	Barrel	4
615.07	Loam	C.Y.	120
616.08	Sodding	S.Y.	18
618.14	Seeding, Method Number 2	Unit	20
619.08	Hay Mulch	Ton	1.5
623.06	Right-of Way Monuments	each	4
623.07	Survey Minuments	each	4
629.05	Labor ~ Straight Time	Man/hrs	10
631.13	Bulldozer (including operator)	hr	10
631.171	Truck-small (including operator)	hr.	10
631.22	Front end loader (including operator)	hr	10
632.08	Warning Lights	Group	2
633.09	Portable Barricades	each	2
639.09	Field Office ~ Type B	each	1
657.20	Seed & Application, Method A	Acre	1
657.21	Reforesting, Method B	Acre	1
618.15	Temporary Seeding	Pound	20

Estimated Quantities For Lump Sum (L.S.) Items

Structural Concrete Roadway & Sidewalk Slabs on steel bridges = 70 c.y.

Structural Concrete Wearing Surface on bridges = 23 c.y.

Structural Steel = 66,200 lbs.

Shear Connectors = 552 studs required (540 lbs.)

Check - DEW Mar. 1971
Plot - J.D. July 1970

PLANS		BY		DATE
	DESIGN - DETAILED	N.E.Rich	NER	12/70
	CHECKED	Pmw		Dec 1970
	REVISIONS			
	FIELD CHANGES			

JANUARY 1968

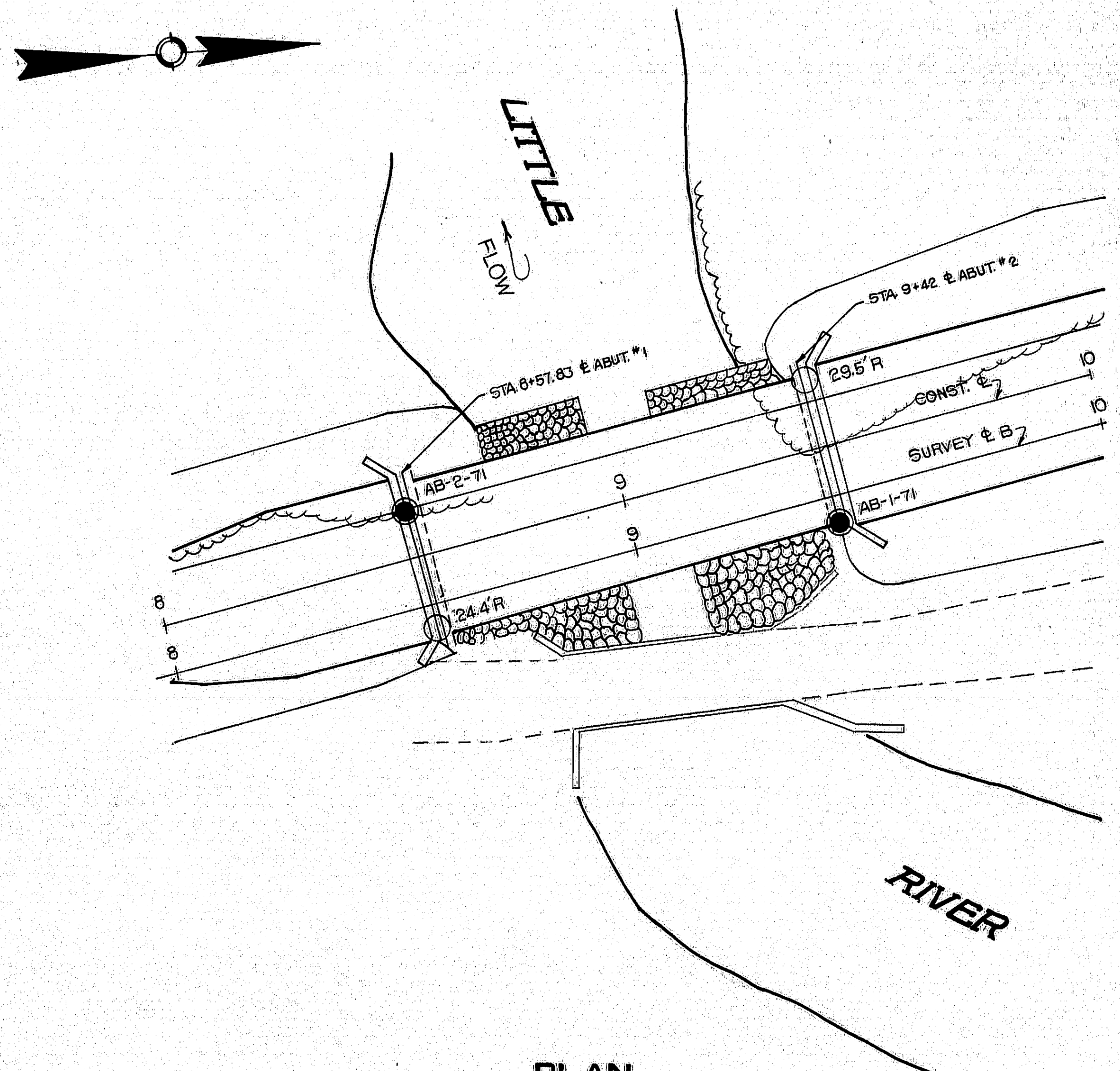
STATE HIGHWAY COMMISSION

HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
SURVEY
SHEET 2 OF 11 AUGUSTA, MAINE MARCH 1971

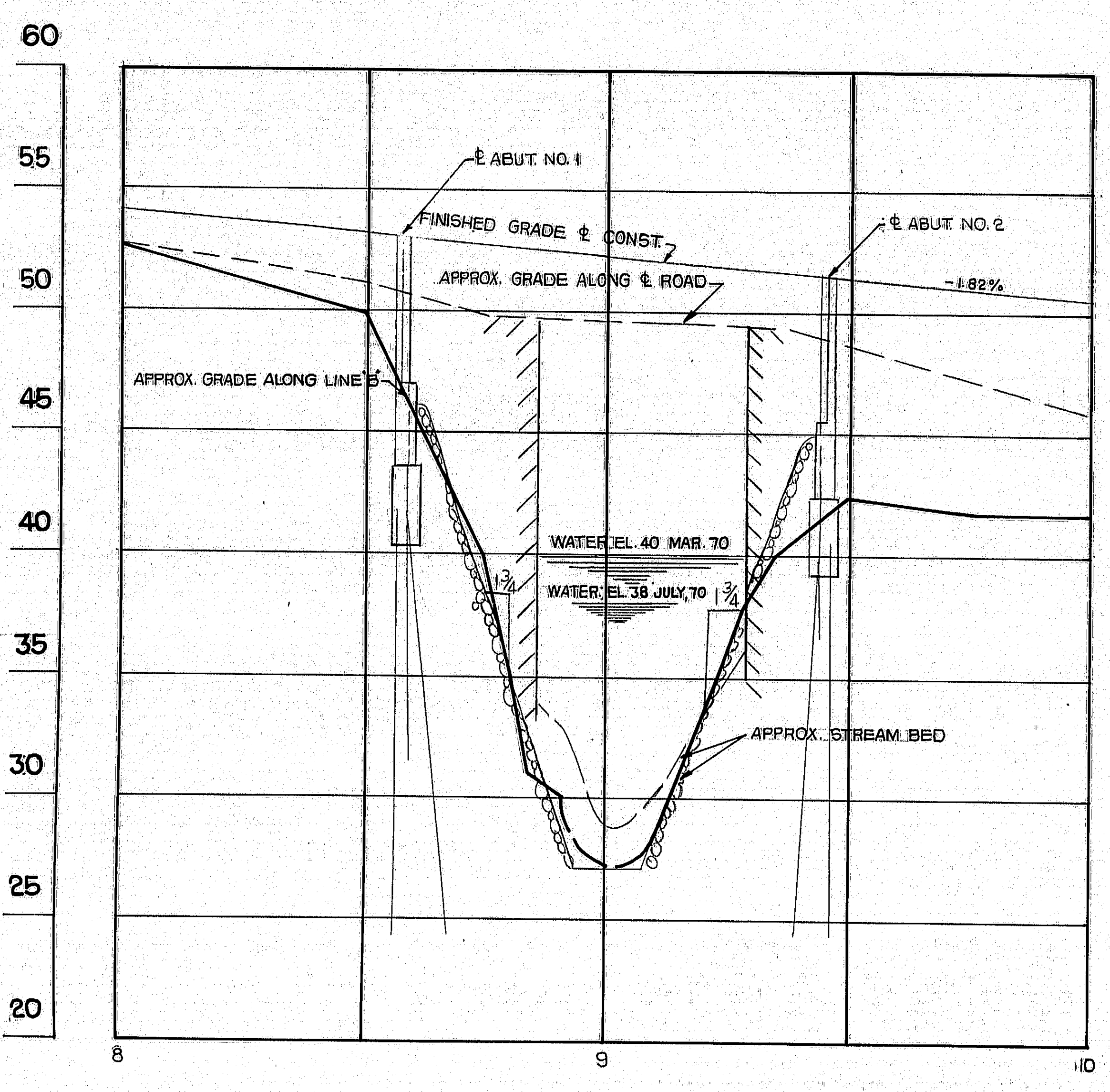
203-1 2080

"AS BUILT" 1972 151-139

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	3	22

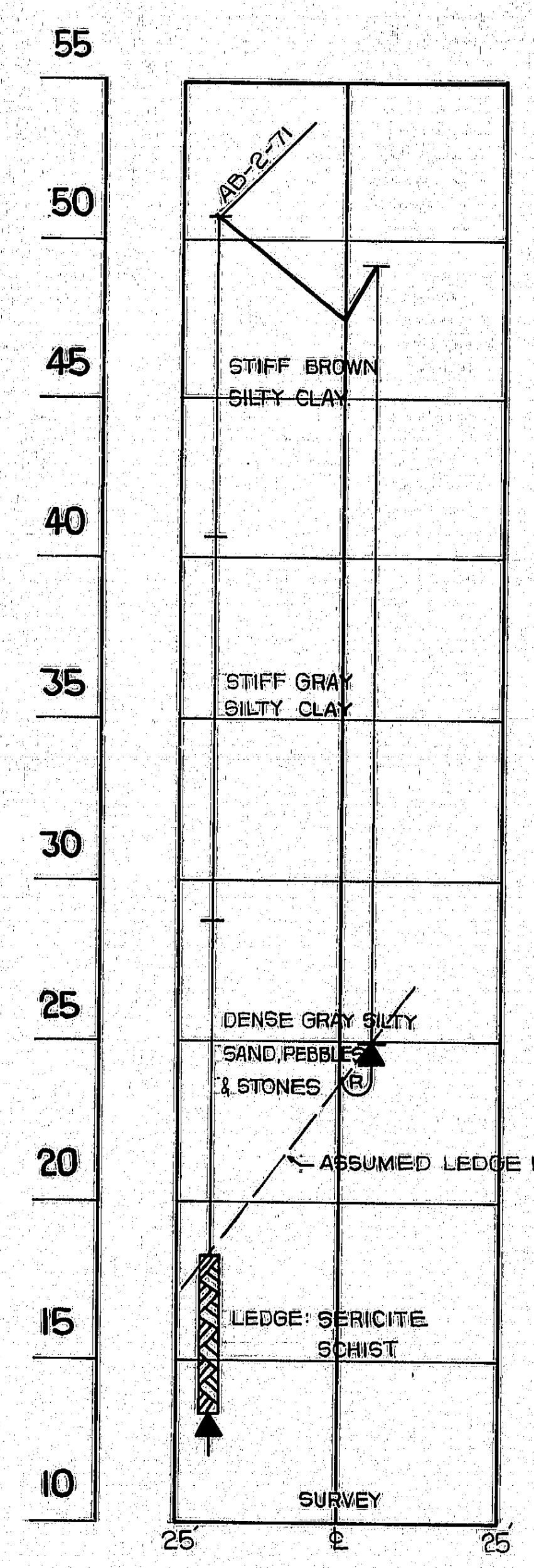


PLAN
SCALE: 1" = 25'

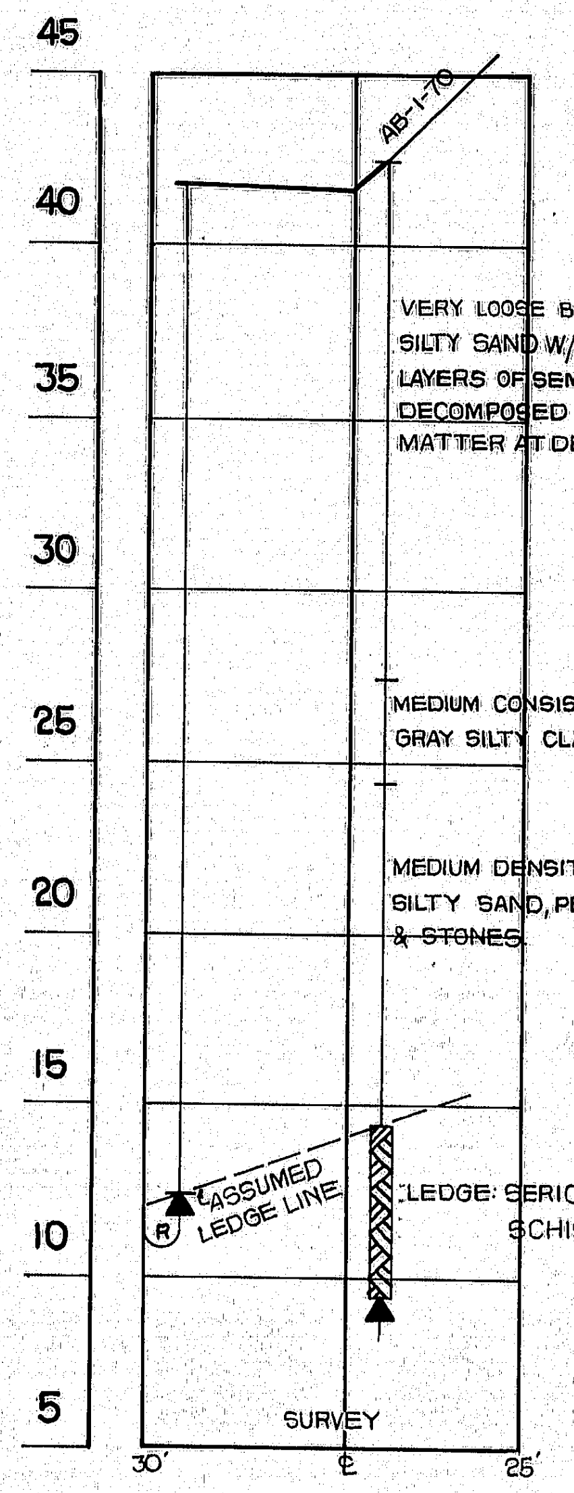


PROFILE
SCALE: 1" = 25' HORIZ.
1" = 5' VERT.

TRANSVERSE SECTIONS

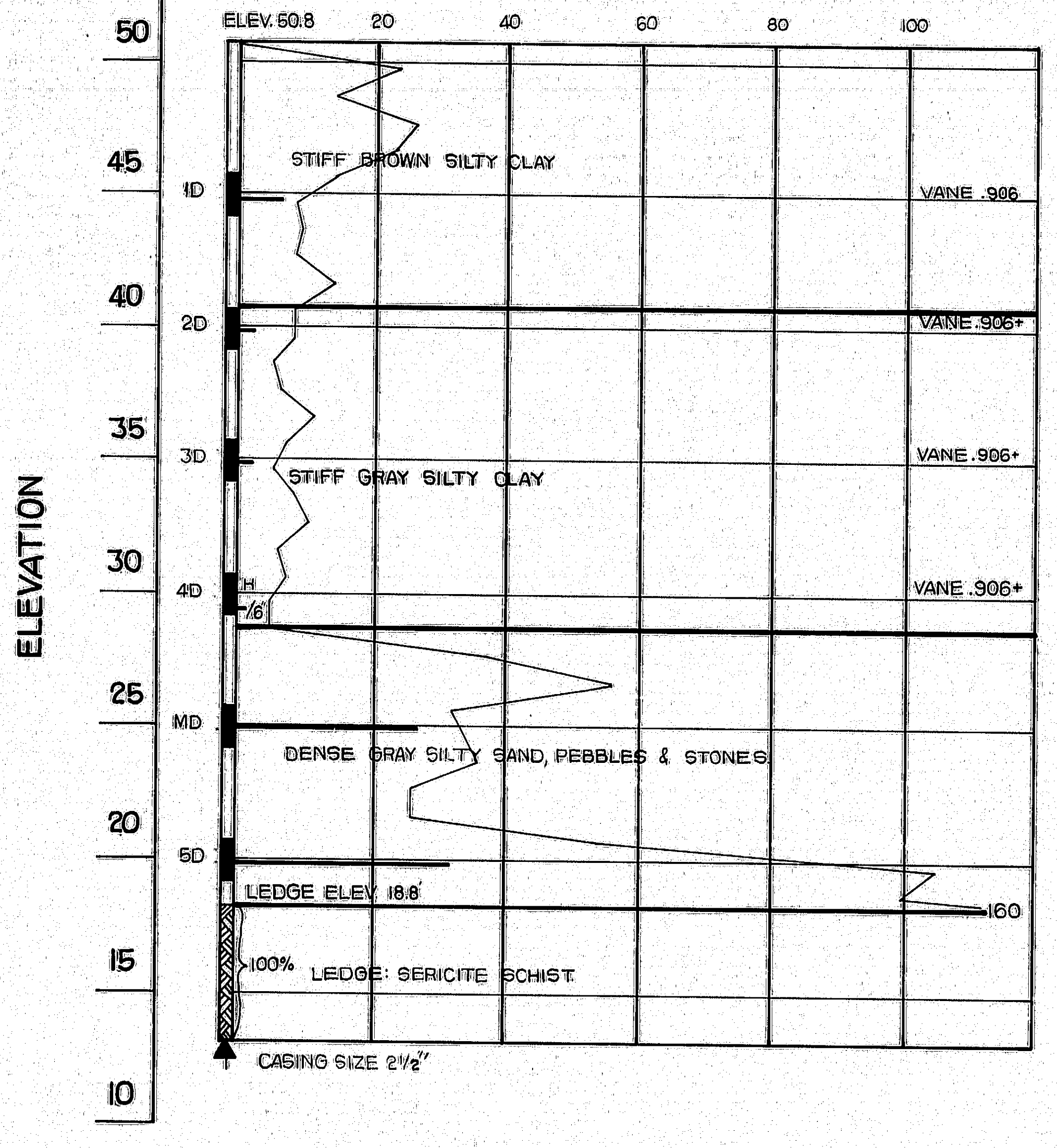


STA. 8+57 ℄ ABUT. NO. 1

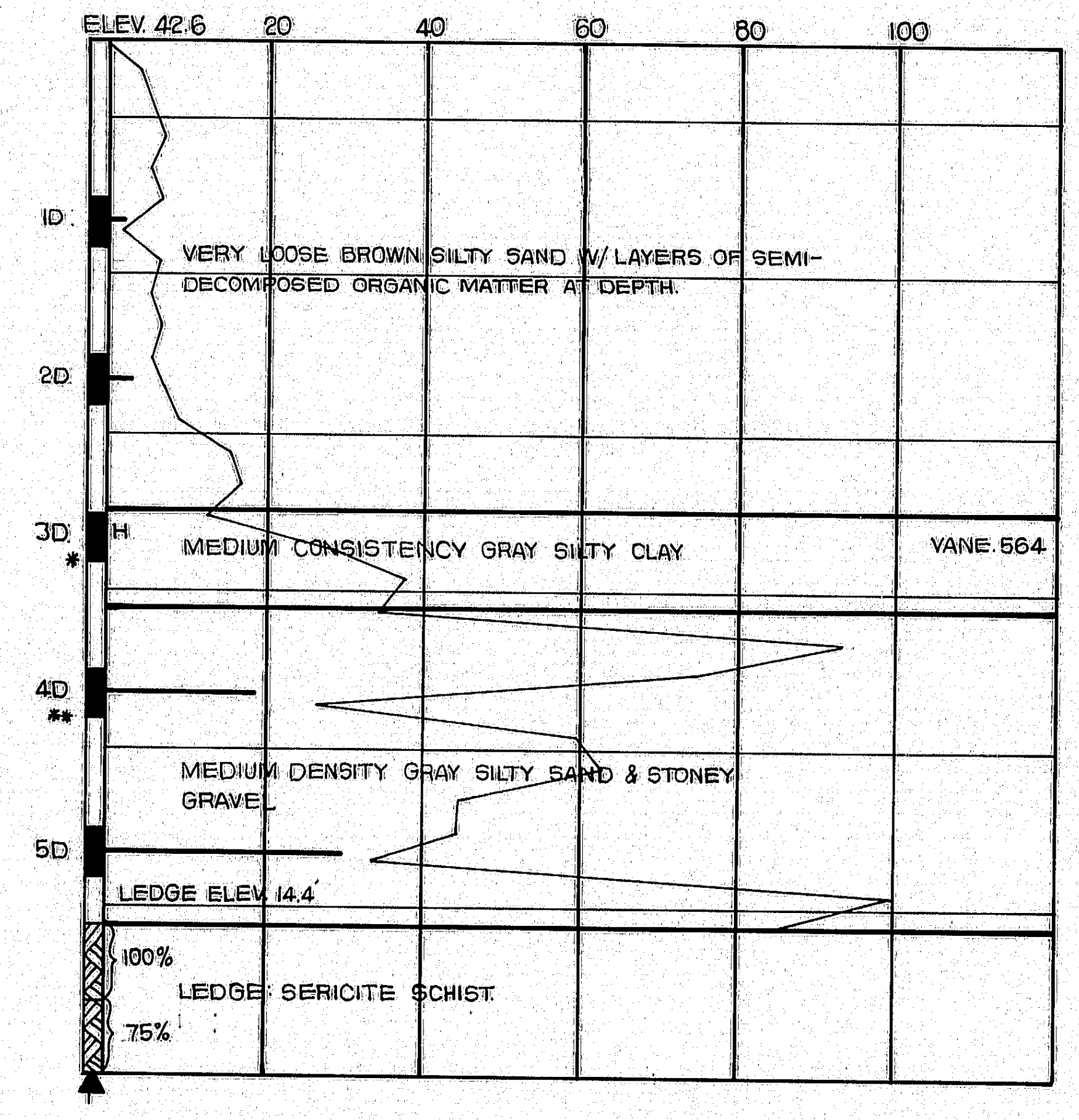

ELEVATIONS
45
40
35
30
25
20
15
10
5
AB-1-70
VERY LOOSE BROWN SILTY SAND W/ LAYERS OF SEMI DECOMPOSED ORGANIC MATTER AT DEPTH
MEDIUM CONSISTENCY GRAY SILTY CLAY.
MEDIUM DENSITY GRAY SILTY SAND, PEBBLES & STONES
R
ASSUMED LEDGE LINE
LEDGE: SERICITE SCHIST.
SURVEY
30'
℄
25'

STA. 9+42 ℄ ABUT. NO. 2

BORING AB-2-71
STATION 8+57 20' LT.



BORING AB-1-71
STATION 9+42 5' RT.



* CHANGED TO 4" CASING.
** CHANGED TO 2½" CASING.

BORING NOTES

All samples and vanes are made ahead of casing

▽	Water elevation
⟋	Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow.
▮	Location of sample or sample attempt.
1D	Number and type of dry sample . S & H sampler # 1290'S
MD	Unsuccessful sample attempt and type of sampler
▮━	Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of enery per blow.
H	Sampling spoon or seamless tubing driven by static weight of drill rods and hammer
▲	Bottom of boring (may not be bottom of soil strata.)
▨ 71%	Locations cored by diamond bit and percent recovery of rock.

PLANS	BY	DATE
DESIGN - DETAILED		
CHECKED		
REVISIONS		
FIELD CHANGES		

STATE HIGHWAY COMMISSION

HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY

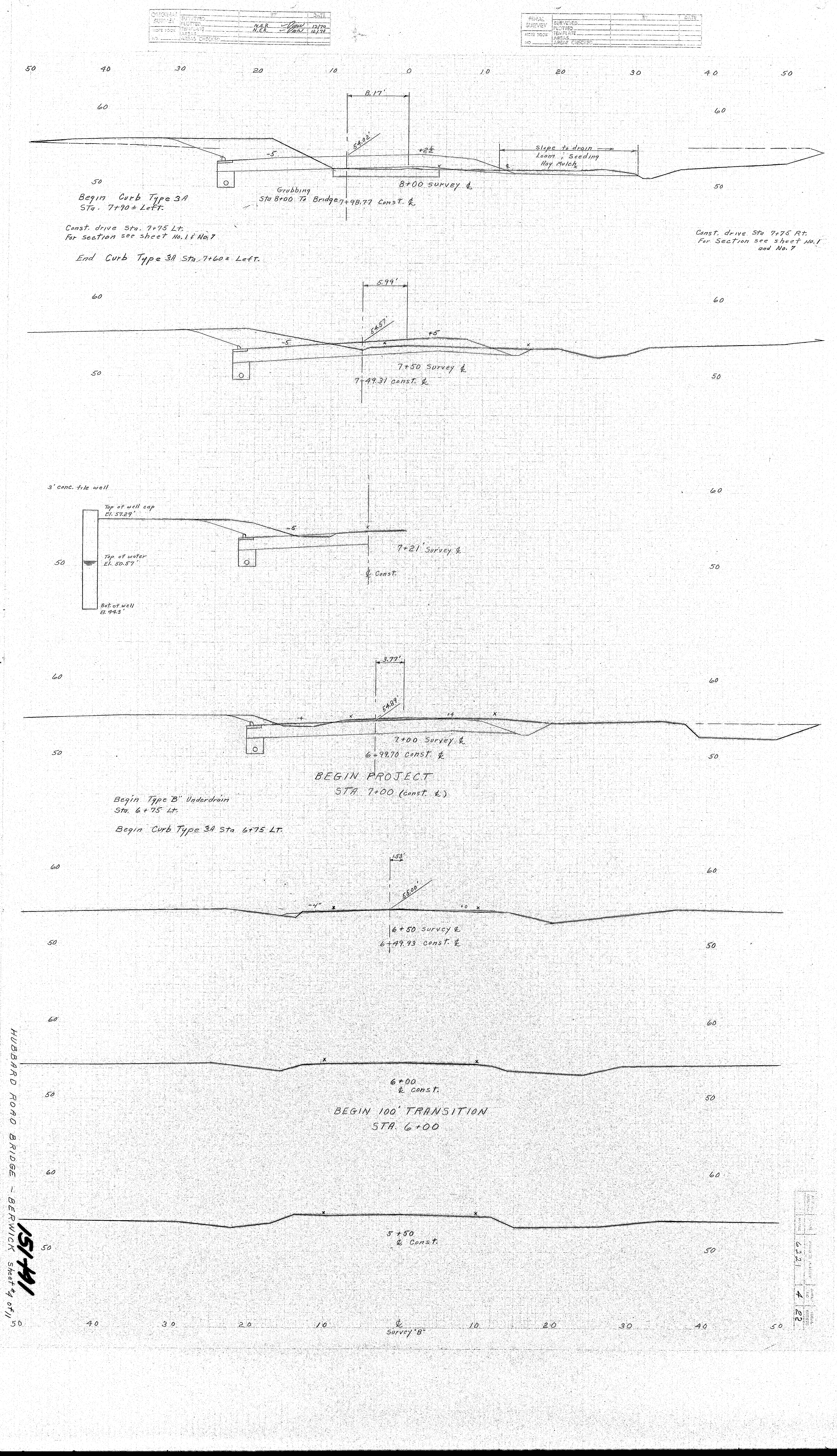
SHEET 3 OF 11 AUGUSTA, MAINE MARCH 1971

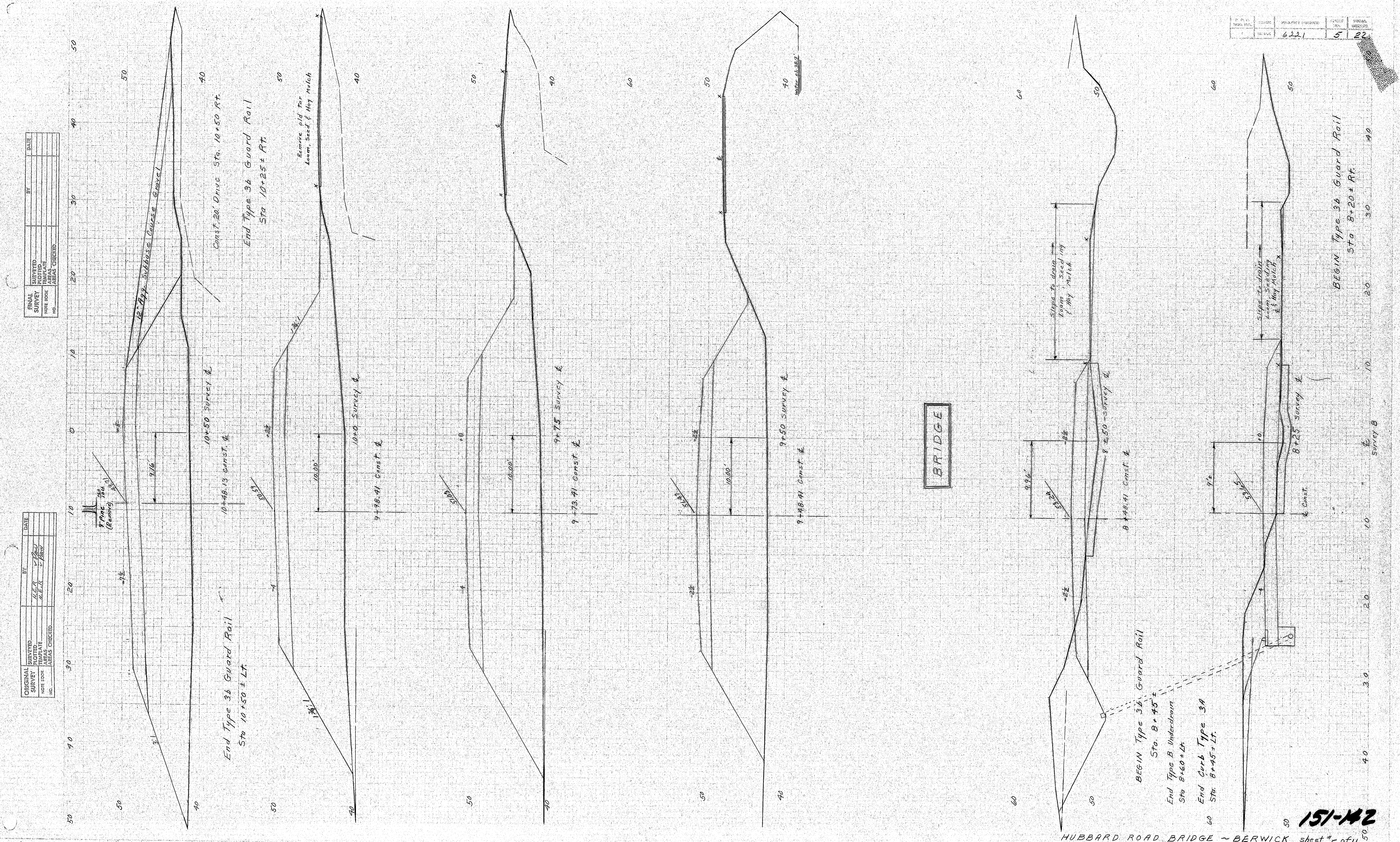
JANUARY 1968

151-140

203-1 2080

[redacted]


ORIGINAL SURVEY
SURVEYED
PLOTTED N.E.R. 12/70
TEMPLATE N.E.R. 12/70
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
50
40
30
20
10
0
10
20
30
40
50
60
50
8.17'
54.02'
-5
+2½
Slope to drain
Loam, Seeding
Hay Mulch
8+00 Survey ℄
Grubbing
Sta 8+00 To Bridge
7+98.77 Const. ℄
Begin Curb Type 3A
Sta. 7+90± Left.
Const. drive Sta. 7+75 Lt.
For section see sheet No.1 & No.7
End Curb Type 3A Sta. 7+60± Left.
Const. drive Sta 7+75 Rt.
For Section see sheet No.1 and No.7
5.99'
54.57'
-5
+5
7+50 Survey ℄
7+49.31 const. ℄
3' conc. tile well
Top of well cap
El. 57.29'
Top of water
El. 50.57'
Bot. of well
El. 44.3'
-5
7+21' Survey ℄
℄ Const.
3.77'
54.89'
+4
+4
7+00 Survey ℄
6+99.70 Const. ℄
BEGIN PROJECT
STA. 7+00 (Const. ℄)
Begin Type "B" Underdrain
Sta. 6+75 Lt.
Begin Curb Type 3A Sta 6+75 Lt.
1.53'
55.00'
-4"
+0
6+50 Survey ℄
6+49.93 Const. ℄
6+00
℄ Const.
BEGIN 100' TRANSITION
STA. 6+00
5+50
℄ Const.
℄
Survey "B"
6321
4
22
HUBBARD ROAD BRIDGE - BERWICK Sheet #4 of 11
151-A1



151-142

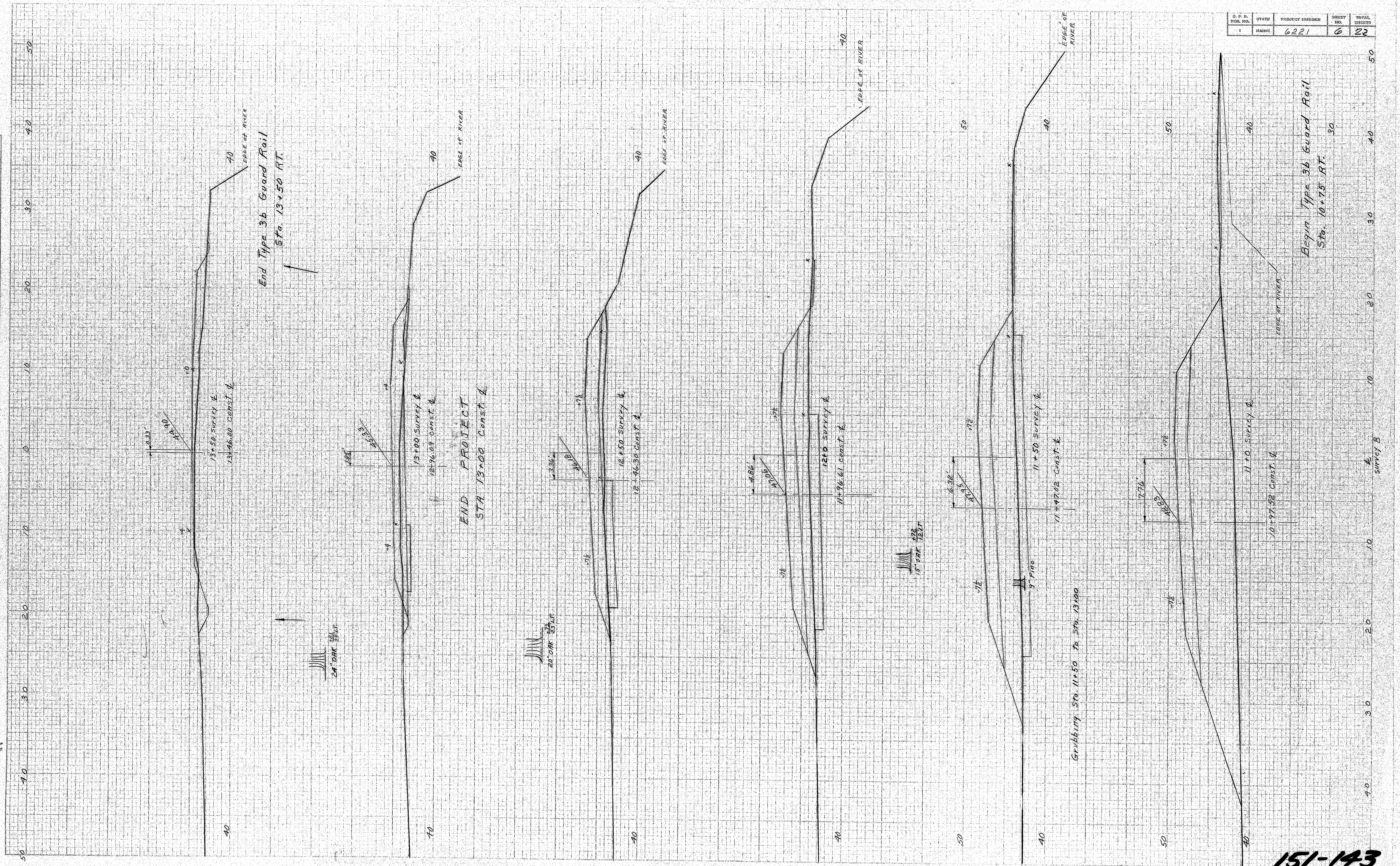
HUBBARD ROAD BRIDGE ~ BERWICK sheet #5 of 11

[redacted]

D. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	6	22

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

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



151-143

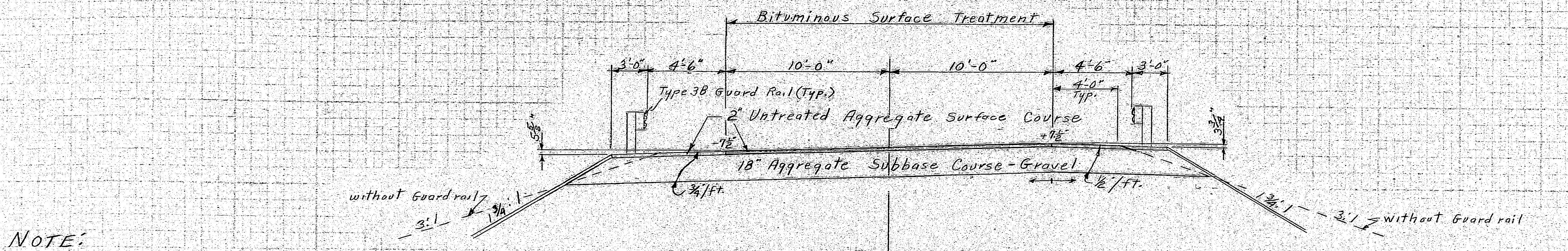
HUBBARD ROAD BRIDGE ~ BERWICK sheet # 6 of 11

[redacted]

[redacted]

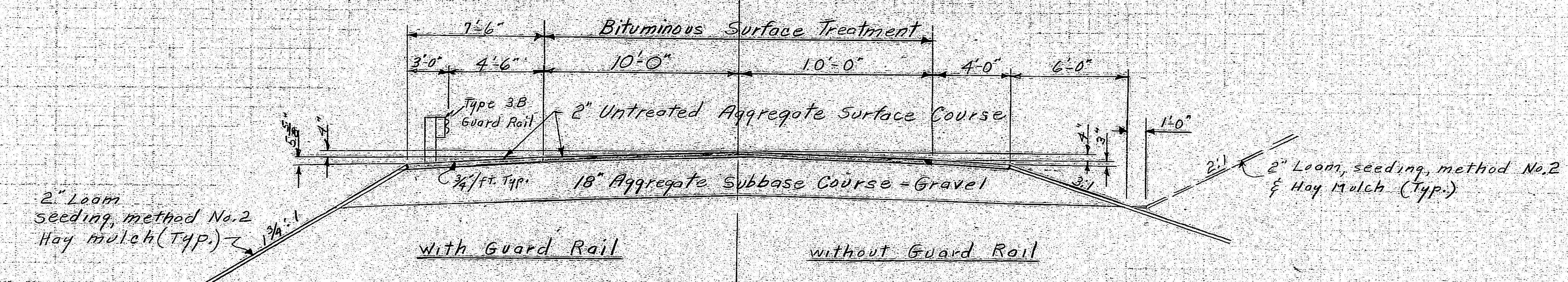
ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED	N.E.R. ✓ [illegible]	
NOTE BOOK	TEMPLATE	N.E.R. ✓ [illegible]	
	AREAS		
NO.	AREAS CHECKED		

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


Bituminous Surface Treatment
3'-0"
4'-6"
10'-0"
10'-0"
4'-6"
3'-0"
4'-0" Typ.
Type 3B Guard Rail (Typ.)
2" Untreated Aggregate Surface Course
18" Aggregate Subbase Course - Gravel
3/4"/ft.
without Guard rail
3:1
1 3/4:1
without Guard rail

NOTE:
Do not excavate for Aggregate Subbase Course where existing material is suitable.

TYPICAL SUPERELEVATED SECTION

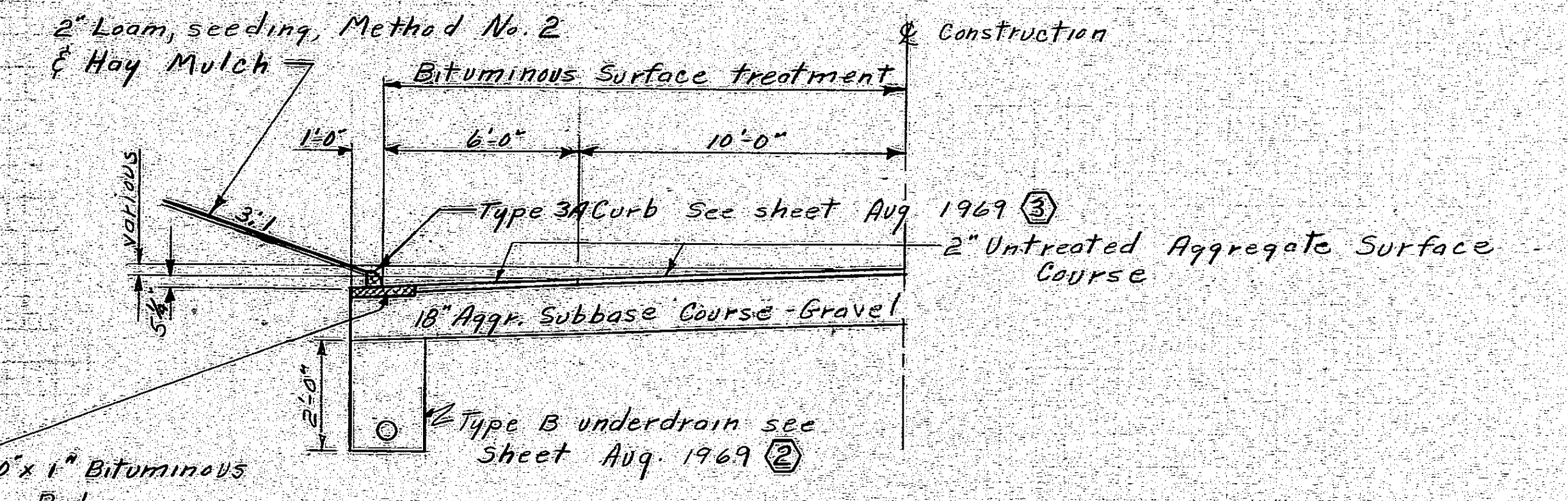

7'-6"
Bituminous Surface Treatment
3'-0"
4'-6"
10'-0"
10'-0"
4'-0"
6'-0"
1'-0"
Type 3B Guard Rail
2" Untreated Aggregate Surface Course
3/4"/ft. Typ.
18" Aggregate Subbase Course - Gravel
2" Loam seeding, method No.2 Hay mulch (Typ.)
1 3/4:1
3:1
2:1
2" Loam, seeding, method No.2 & Hay Mulch (Typ.)
with Guard Rail
without Guard Rail

TYPICAL NORMAL SECTION

NOTE:

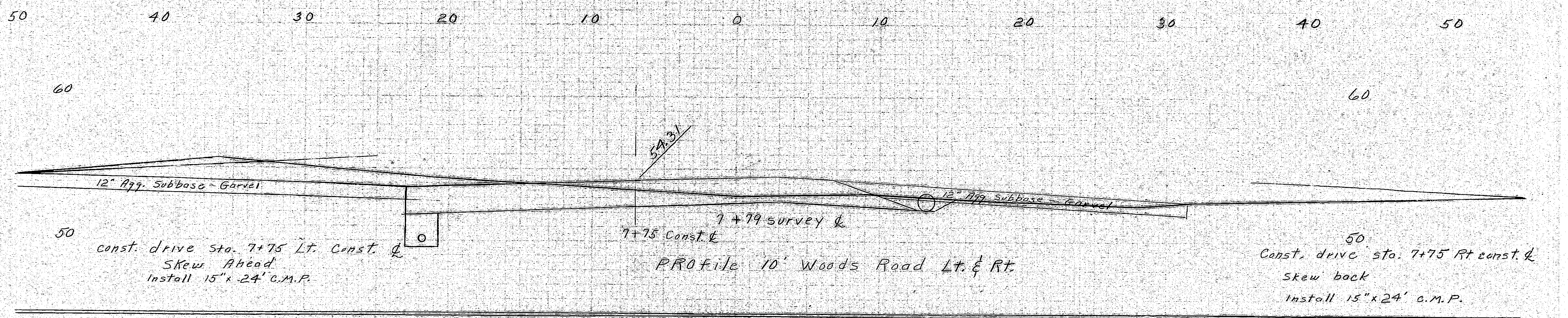
Item 410.20 Bituminous Surface Treatment shall be in accordance with Section 410 and shall consist of the following:

1. The prime coat shall be Road Tar RT-5, applied at the rate of 0.5± gals. per square yard.
2. The blotter material shall be sand applied to a depth of 1/4 inch.
3. The seal coat shall be Road Tar RT-5 applied at the rate of 0.2± gals. per square yard.
4. The cover coat shall be sand applied to a depth of 1/4 inch.
5. The quantity of blotter material may be varied or omitted in accordance with the first paragraph of subsection 410.08 of the Standard Specifications.

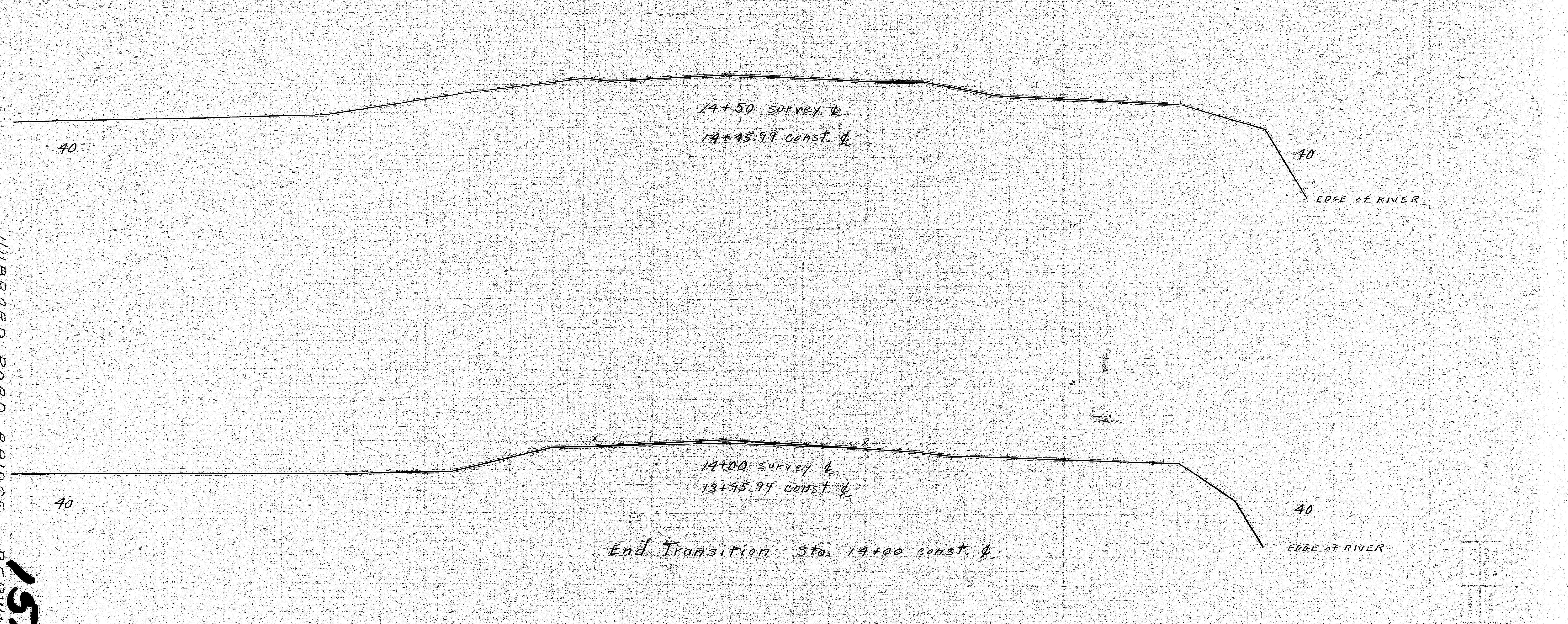

2" Loam, seeding, Method No. 2 & Hay Mulch
℄ Construction
Bituminous Surface treatment
1'-0"
6'-0"
10'-0"
various
3:1
Type 3A Curb See sheet Aug 1969 ③
2" Untreated Aggregate Surface Course
18" Aggr. Subbase Course - Gravel
2'-0"
Type B underdrain see Sheet Aug. 1969 ②
3'-0" x 1" Bituminous Pad

TYPICAL BOX SECTION

Note: The material for the 3'-0" x 1" Bituminous Pad shall conform to the requirements of Section 712.36 Bituminous Curb Type 3A or at the Contractors option to the requirements of Section 403.08 Hot Bituminous Pavement, Grading C
Payment for the 3'-0" x 1" Bituminous Pad will be considered incidental to the type 3A Bituminous Curb.


50
40
30
20
10
0
10
20
30
40
50
60
60
50
50
12" Agg. Subbase - Gravel
12" Agg. Subbase - Gravel
7+99 survey ℄
7+75 Const. ℄
Const. drive Sta. 7+75 Lt. Const. ℄ Skew Ahead Install 15" x 24' C.M.P.
Const. drive Sta. 7+75 Rt const. ℄ Skew back Install 15" x 24' C.M.P.

PROfile 10' Woods Road Lt. & Rt.

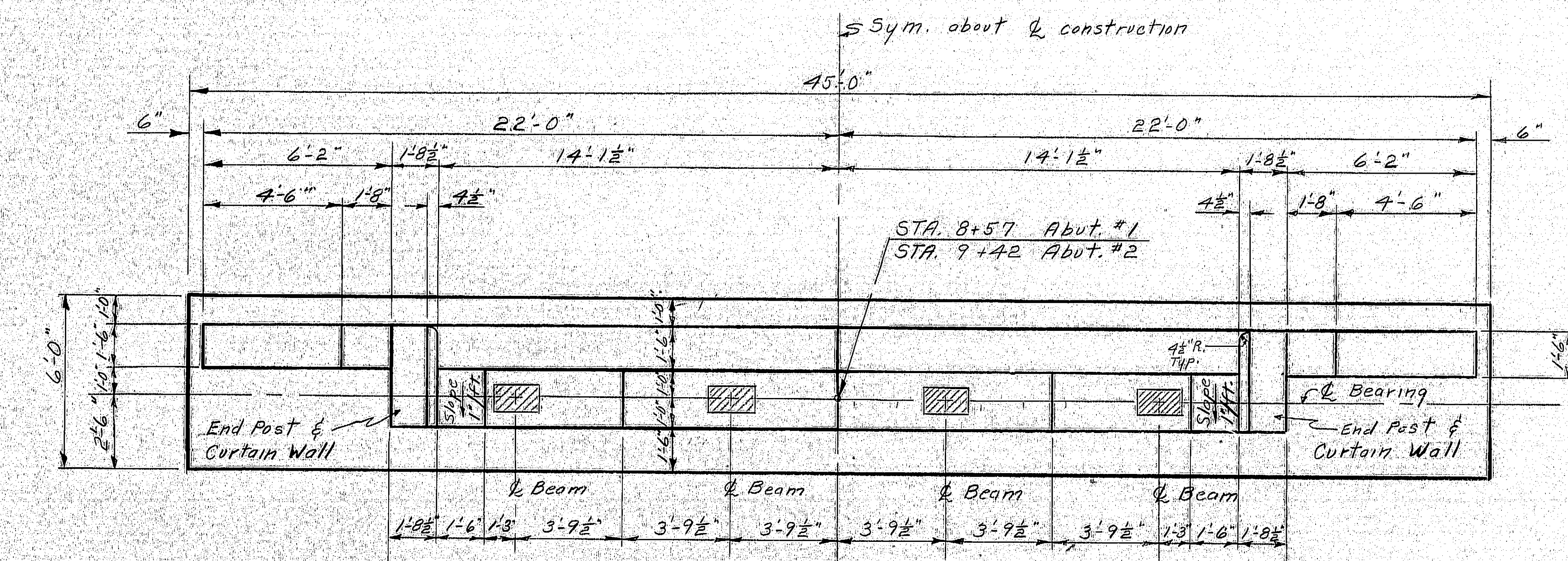


End Transition Sta. 14+00 const. ℄

HUBBARD ROAD BRIDGE ~ BERWICK sheet #7 of 11

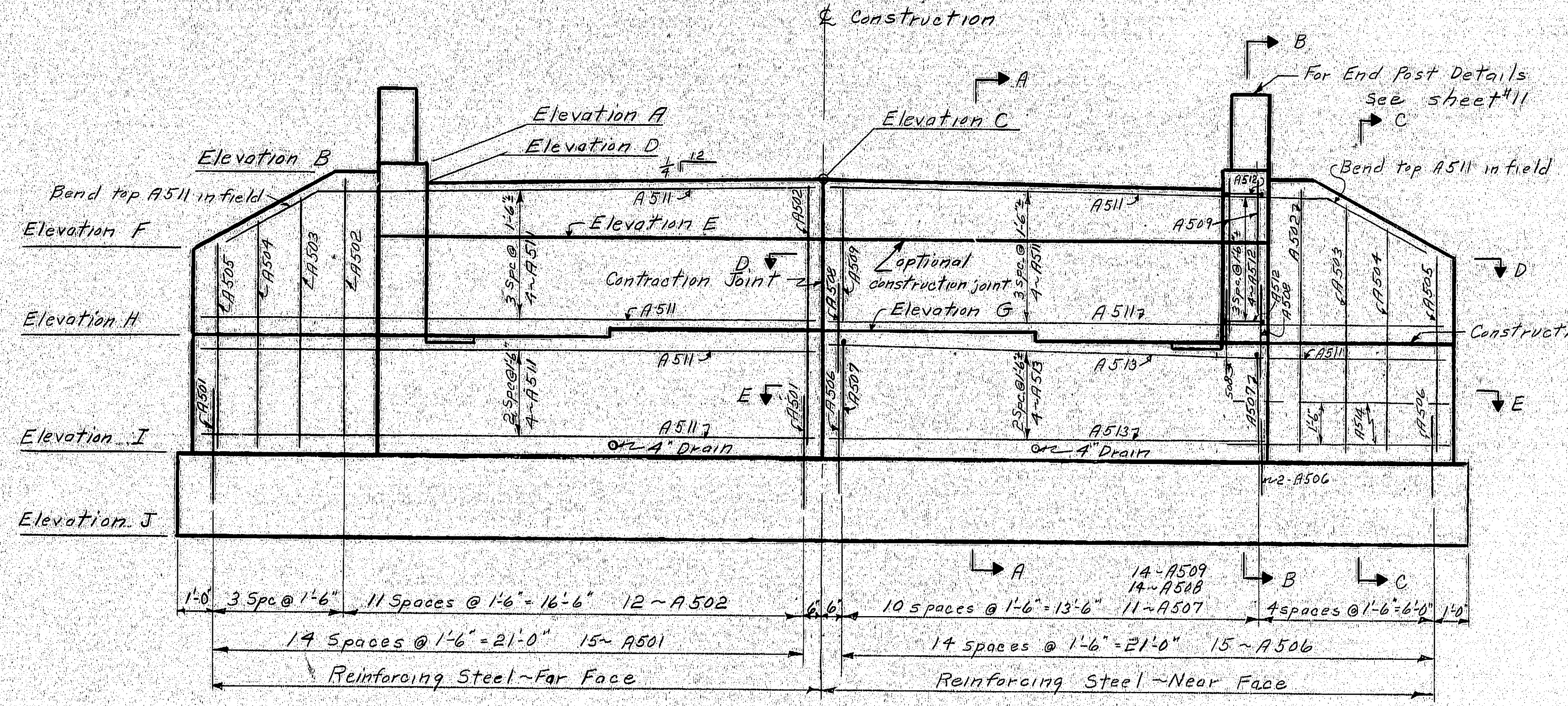
151-144

B.P.R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	8	22



PLAN

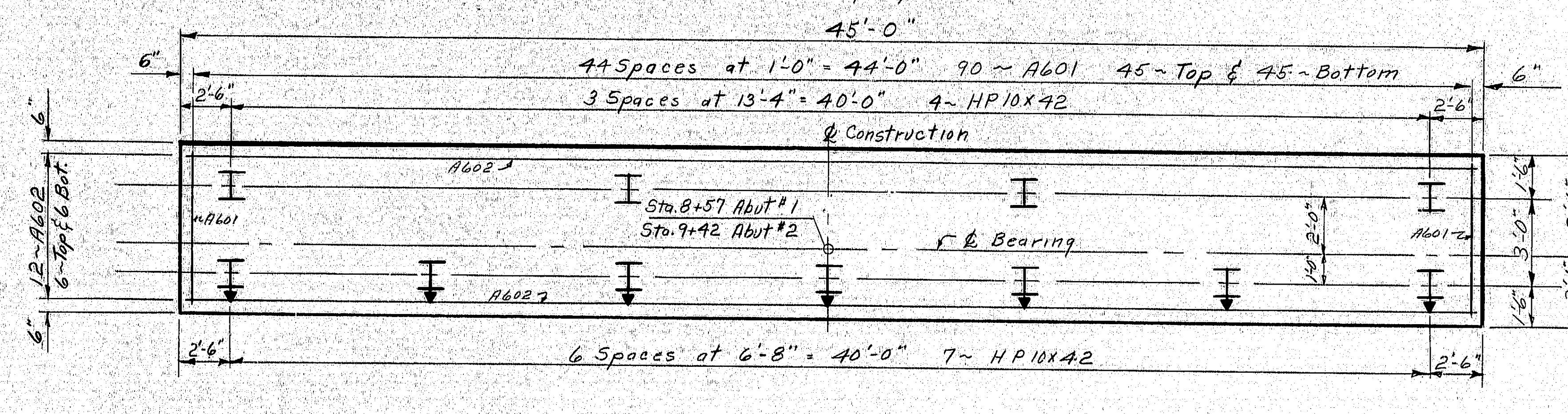
Abutment #1 shown, Rotate 180° for Abut. #2


℄ Construction
Elevation A
Elevation B
Elevation C
Elevation D
Elevation E
Elevation F
Elevation G
Elevation H
Elevation I
Elevation J
For End Post Details see sheet #11
Bend tip A511 in field
Contraction Joint
Optional construction joint
Construction joint
4" Drain
1'-6" 3 Spa @ 1'-6" 11 Spaces @ 1'-6" = 16'-6" 12 ~ A502
10 spaces @ 1'-6" = 15'-6" 11 ~ A507
14 Spaces @ 1'-6" = 21'-0" 15 ~ A501
14 spaces @ 1'-6" = 21'-0" 15 ~ A506
Reinforcing Steel ~ Far Face
Reinforcing Steel ~ Near Face

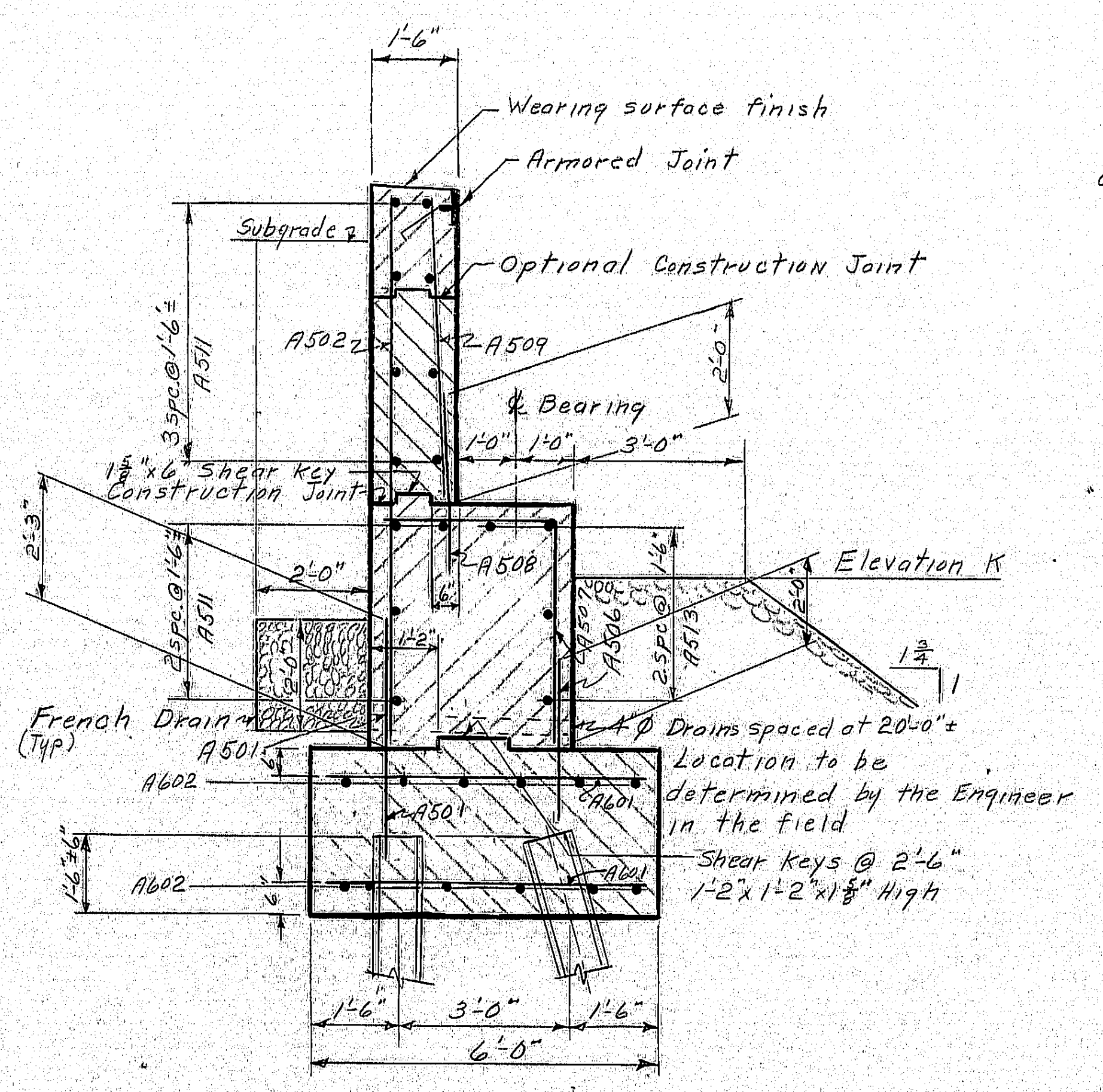
Reinforcing steel Symmetrical about ℄ Construction.

ELEVATION

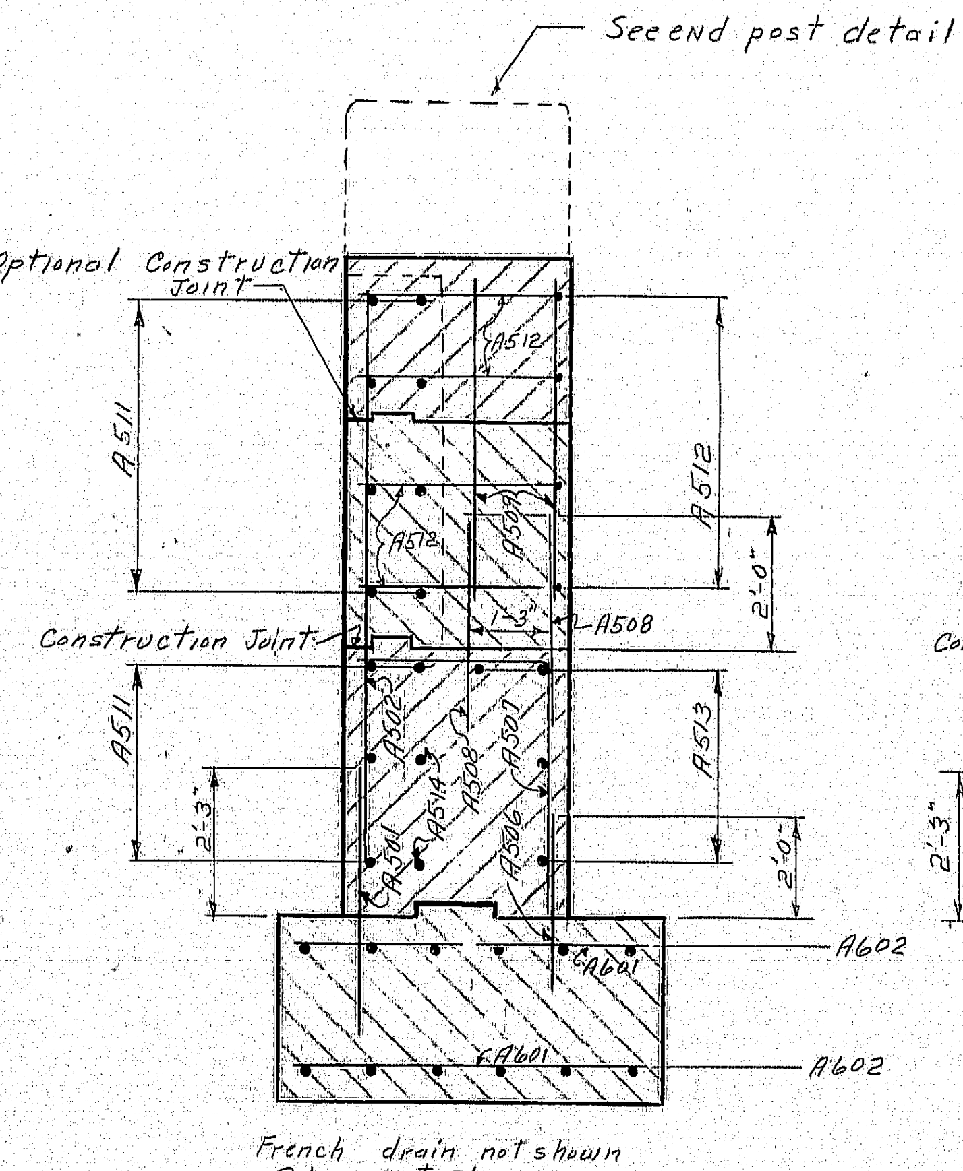
Shear blocks & Keys not shown


45'-0"
44 Spaces at 1'-0" = 44'-0" 90 ~ A601 45 ~ Top & 45 ~ Bottom
3 Spaces at 13'-4" = 40'-0" 4 ~ HP10x42
℄ Construction
Sta. 8+57 Abut #1
Sta. 9+42 Abut #2
℄ Bearing
A601
A602
12 ~ A602
6 ~ Top & 6 Bot.
6 Spaces at 6'-8" = 40'-0" 7 ~ HP10x42
6'-0"

FOOTING PLAN

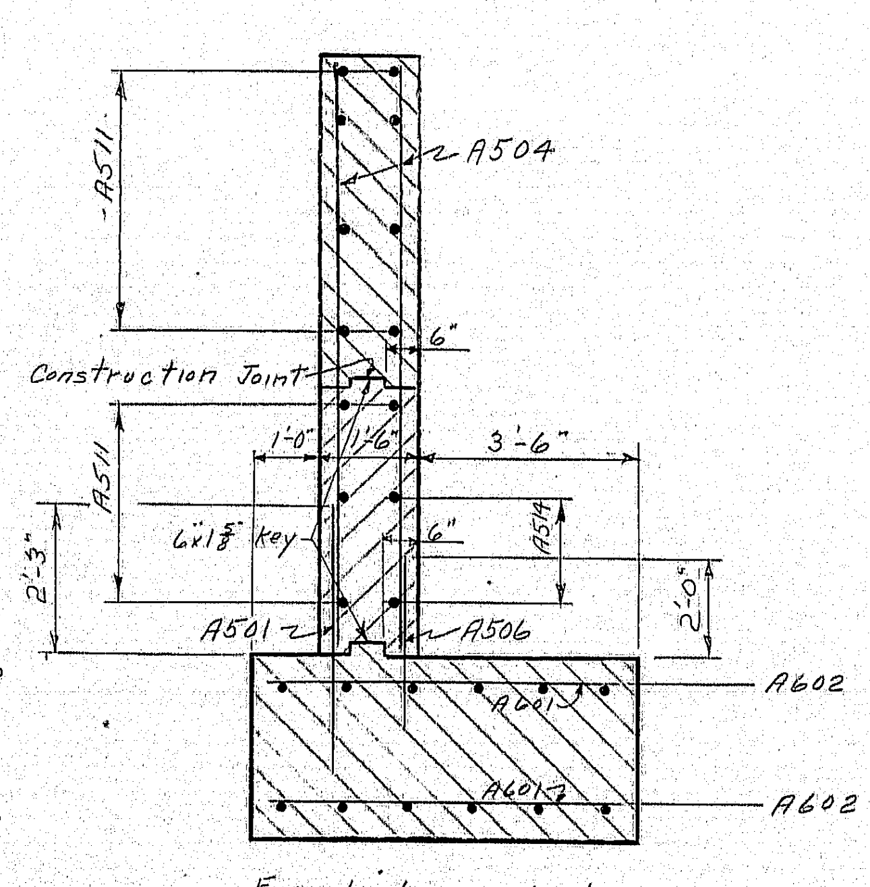

Wearing surface finish
Armored Joint
Optional Construction Joint
℄ Bearing
Subgrade
Shear Key Construction Joint
French Drain (Typ)
Elevation K
Drains spaced at 20'-0" ± Location to be determined by the Engineer in the field
Shear keys @ 2'-6" 1'-2"x1'-2"x1⅛" High
1'-6"
3'-0"
6'-0"

SECTION A-A



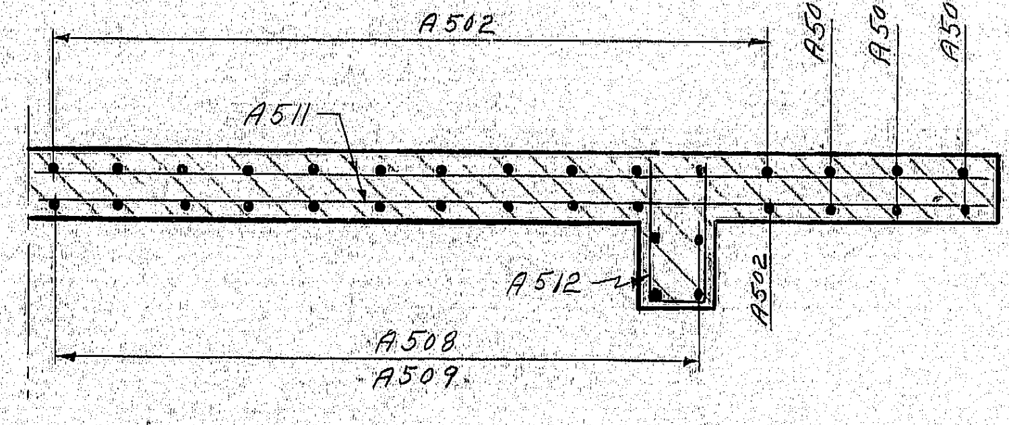
French drain not shown
Piles not shown

SECTION B-B



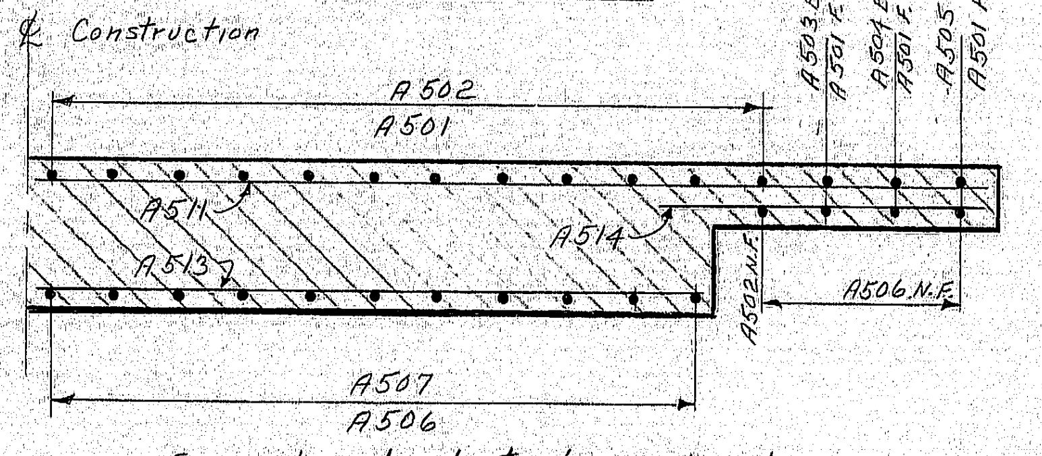
French drain not shown
Piles not shown

SECTION C-C



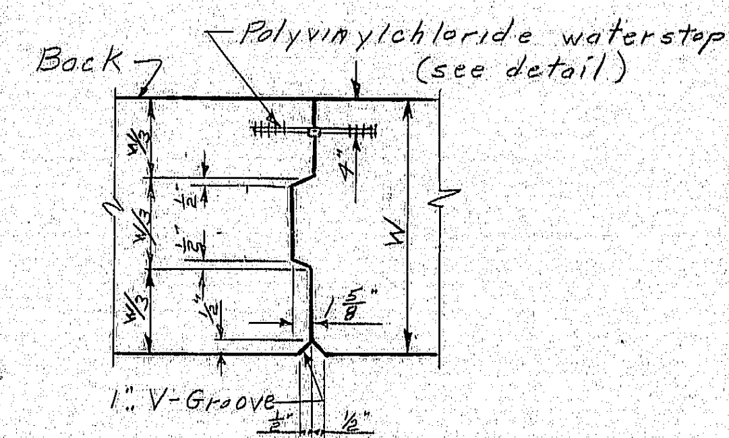
Symmetrical about ℄ construction

SECTION D-D

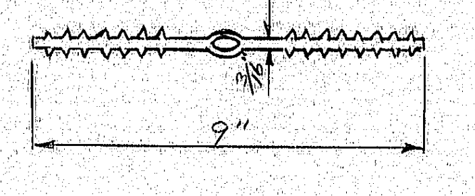


Symmetrical about ℄ construction

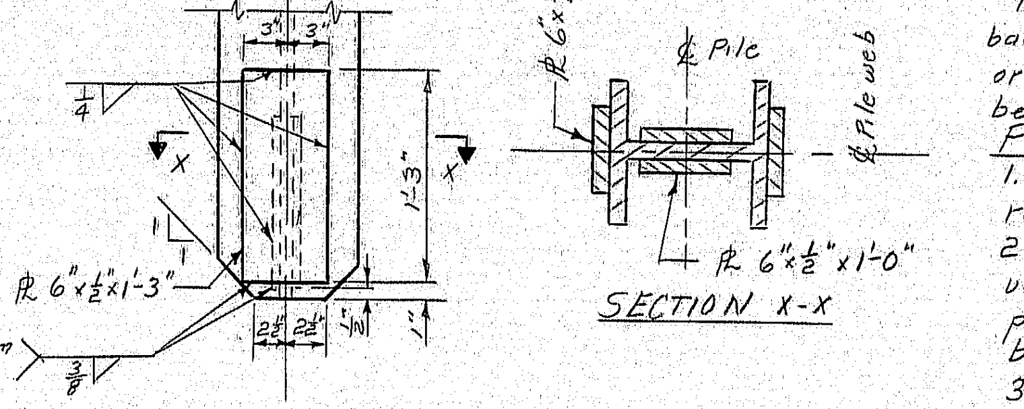
SECTION E-E



Contraction Joint.



Polyvinylchloride Waterstop Detail



Pointed Reinforced Pile Tip.

	ABUTMENT #1		ABUTMENT #2	
Elevation	Near face	Far face	Near face	Far Face
A	53.56'	53.62'	52.09'	52.03'
B	53.25'		51.75'	
C	53.13'	53.16'	51.60'	51.57'
D	52.84'	52.87'	51.31'	51.28'
E	51.00'		49.50'	
F	50.75'		49.25'	
G	47.72'		46.45'	
H	47.48'		46.21'	
I	44.50'		43.00'	
J	41.50		40.00'	
K	46.50"		45.00'	

Note:
Abutme t. Elevations are Symmetrical abou center Line of construction.

NOTES:

1. Chamfer all exposed edges of concrete ½".
2. All reinforcing steel splices & embedments are to be a minimum of 24 bar diameters enless otherwise shown, or noted.
3. Reinforcing steel to have 3" clear cover unless otherwise noted.
4. Place reinforcing steel in bridge seats to clear anchor bolts.
5. Break bond at vertical contraction joints by a method to be approved by the Engineer.
6. Place concrete in the top of abutment backwalls after the superstructure concrete has been placed. Water stops are not required in horizontal & vertical construction joints in the Abutment. Backwalls.
7. The Contractor may eliminate the "Optional Construction Joint" in the Abutment Backwall on the condition that the concrete in the entire Abutment Backwall is placed after the Superstructure Concrete has been placed.
8. Coat the top of the Backwall, curbs, & entire surface of the end post with "Protective Coating For Concrete Surface", Item. 515.20.
9. A strip of sod 4'-0" wide shall be placed along the back of the wings and shall extend to the toe of slope or water elevation. The center of the 4'-0" strip shall be recessed 3" To 6" to form a gutter.

Pile Notes:

1. Piles shall be HP 10X42 with pointed reinforced tip.
2. Alternate types of pointed pile tips may be used if they are equal to or better than the pointed reinforced pile tip shown, if approved by the Engineer.
3. Piles shall be driven to ledge or practical refusal.
4. Estimated Driven Lengths of Piles are estimated from available soils information with no allowance for Pile cut-offs and no allowance for uncertain pile penetration
5. Maximum Pile Load equals 55.5 Tons
6. Batter front piles in the direction shown 3"/ft.
7. Following are Pile locations, number of Piles required, size of Piles and Estimated Driven Lengths:

Abutment #1	5	HP 10 x 42	30'
	6	HP 10 x 42	25'
Abutment #2	5	HP 10 x 42	35'
	6	HP 10 x 42	30'

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

STATE HIGHWAY COMMISSION
HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
ABUTMENTS
SHEET 8 OF 11 AUGUSTA, MAINE MARCH 1971

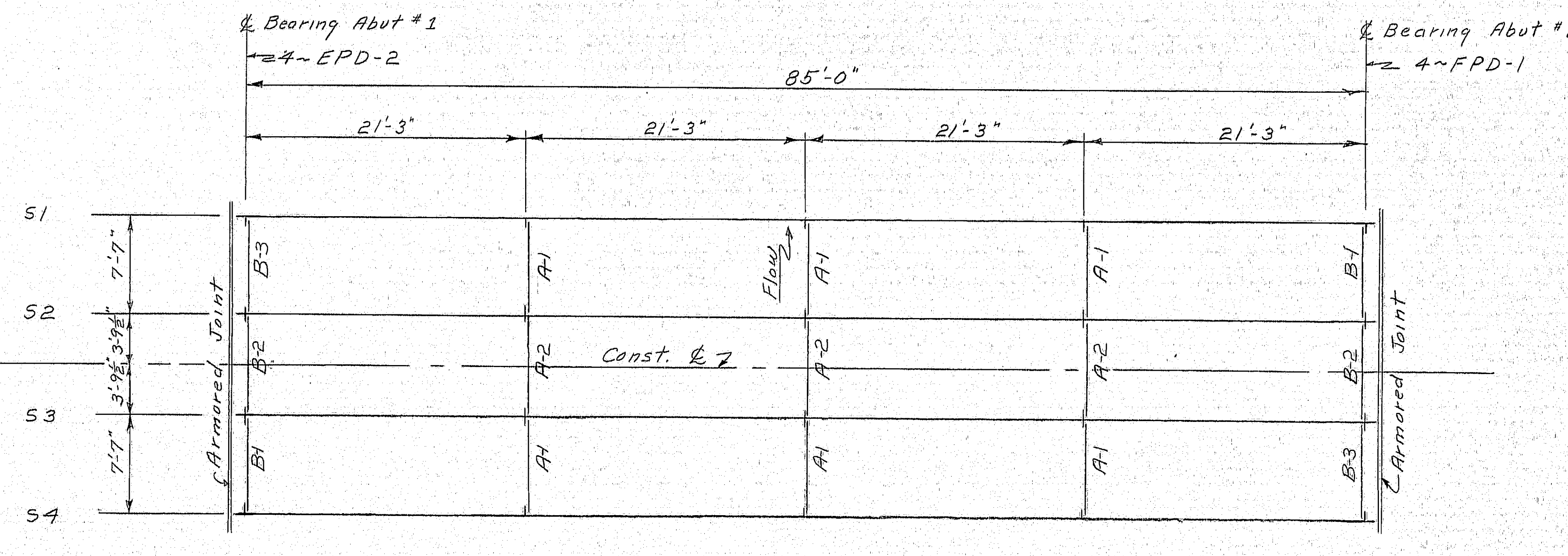
203-1 2080

151-145

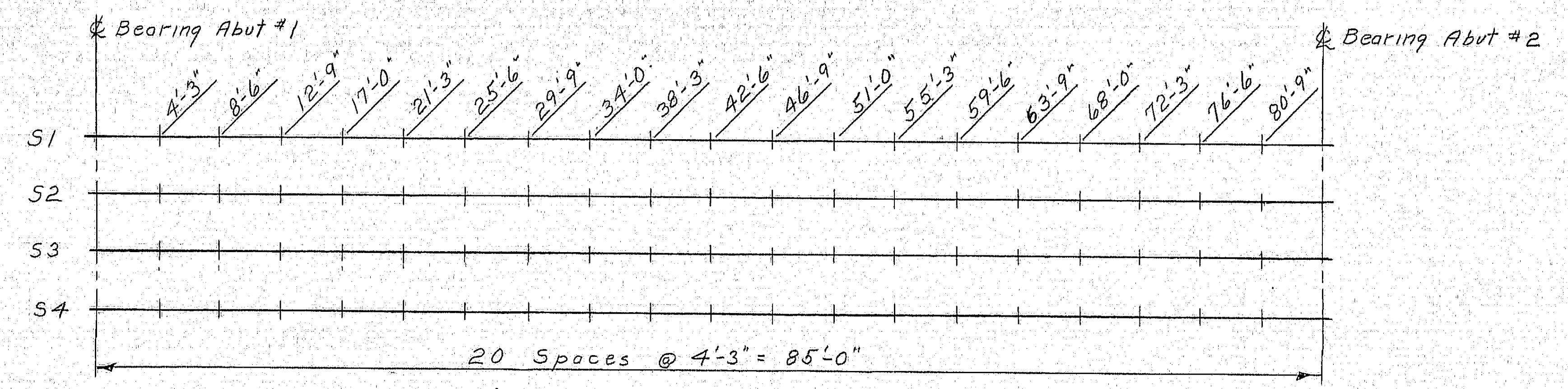
PLANS	BY	DATE
DESIGN - DETAILED	N.E.R.	2-71
CHECKED	GWC	4-71
REVISIONS		
FIELD CHANGES		

JANUARY 1968

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	9	22



FRAMING PLAN



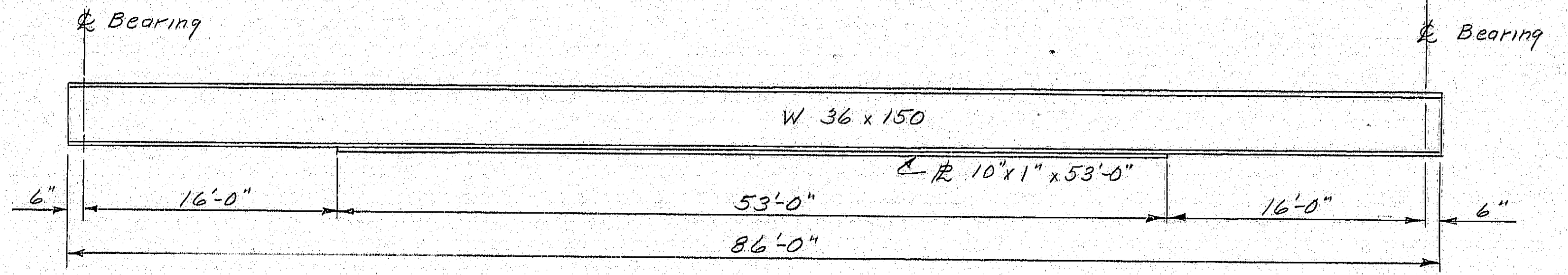
LAYOUT FOR BOTTOM OF SLAB ELEVATIONS

BOTTOM OF SLAB ELEVATIONS

POINT	℄ Brg. Abut #1	4'-3"	8'-6"	12'-9"	17'-0"	21'-3"	25'-6"	29'-9"	34'-0"	38'-3"	42'-6"	46'-9"	51'-0"	55'-3"	59'-6"	63'-9"	68'-0"	72'-3"	76'-6"	80'-9"	℄ Brg. Abut #2
S1 & S4	51.92	51.89	51.86	51.83	51.79	51.75	51.71	51.66	51.60	51.53	51.46	51.38	51.30	51.21	51.11	51.01	50.90	50.78	50.66	50.54	50.42
S2 & S3	52.08	52.05	52.02	51.99	51.95	51.91	51.87	51.82	51.76	51.69	51.62	51.54	51.46	51.37	51.27	51.16	51.05	50.94	51.82	50.70	50.58

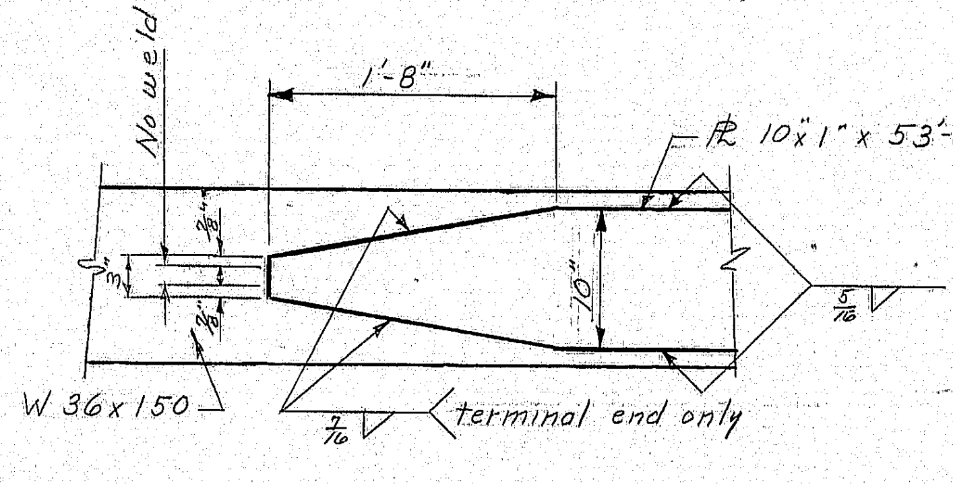
NOTE:

Bottom of slab elevations are adjusted to compensate for concrete (fluid & superimposed) dead load deflections; use in conformance with Sub-section 502.10(a).

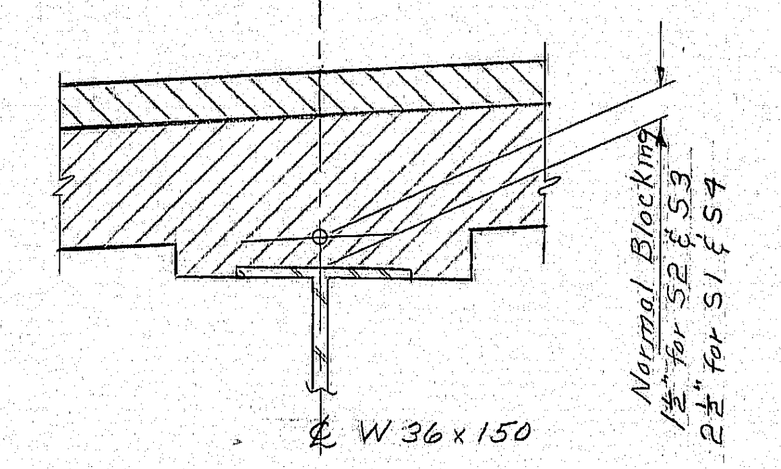


BEAMS S1, S2, S3, & S4

Note:
Beams shall be Cambered 4"



COVER PLATE DETAIL

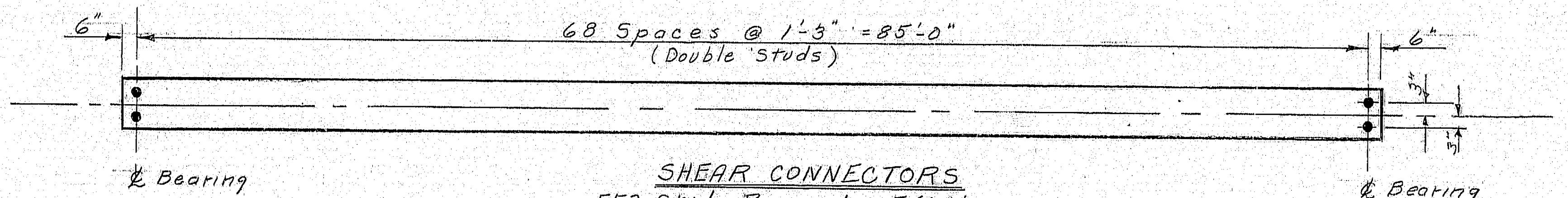


BLOCKING DETAIL

Do not use for Construction

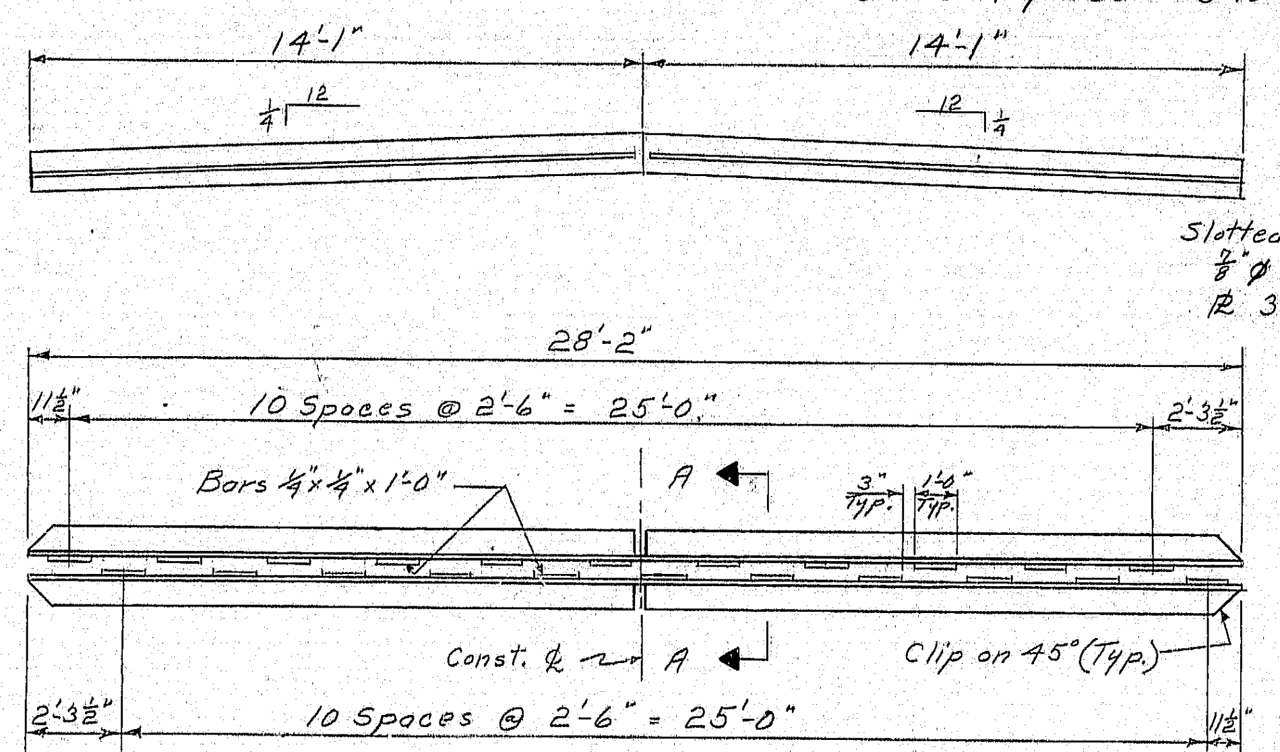
NOTES:

1. Bolted connections shall be ⅞" Ø high strength bolts $\frac{15}{16}$" Ø holes. Edge distance 1½" min.
2. All dimensions are horizontal or vertical.
3. For shear connectors refer to standard detail sheet BD 104-66
4. For Bearing Pedestals refer to standard detail sheet BD 100-70

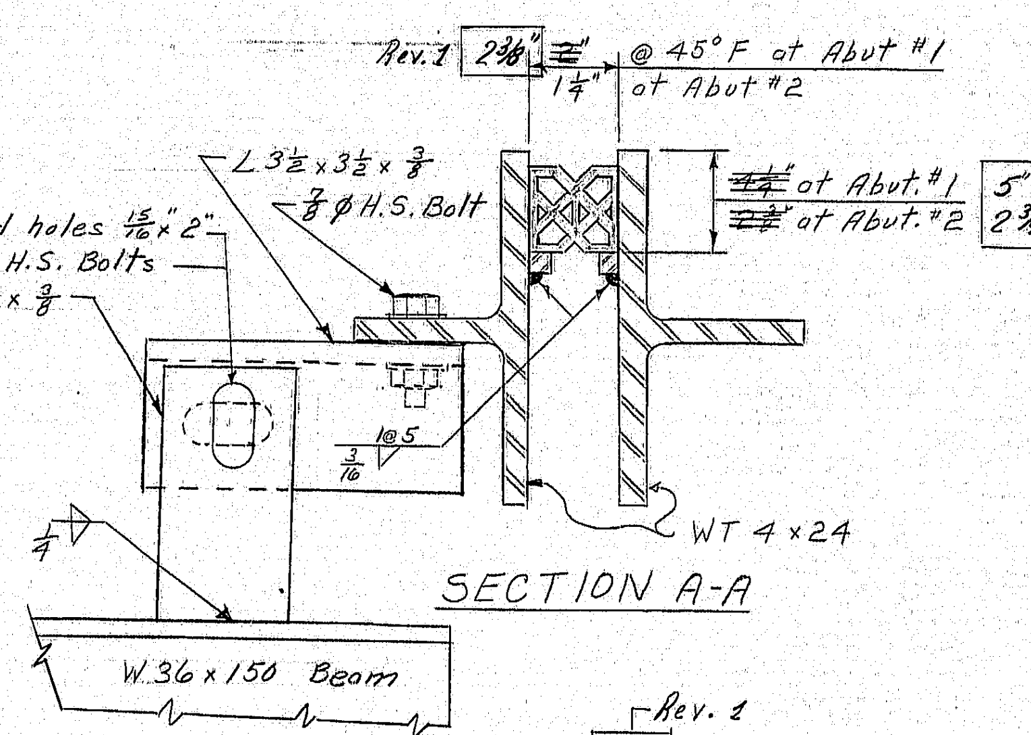


SHEAR CONNECTORS

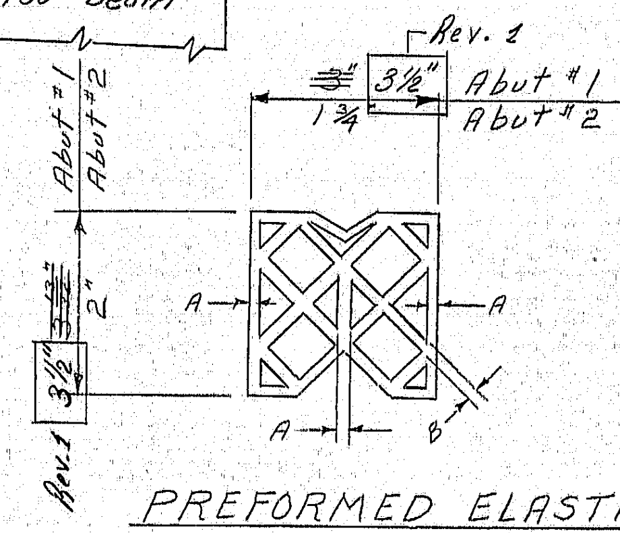
552 Studs Required = 540 Lbs



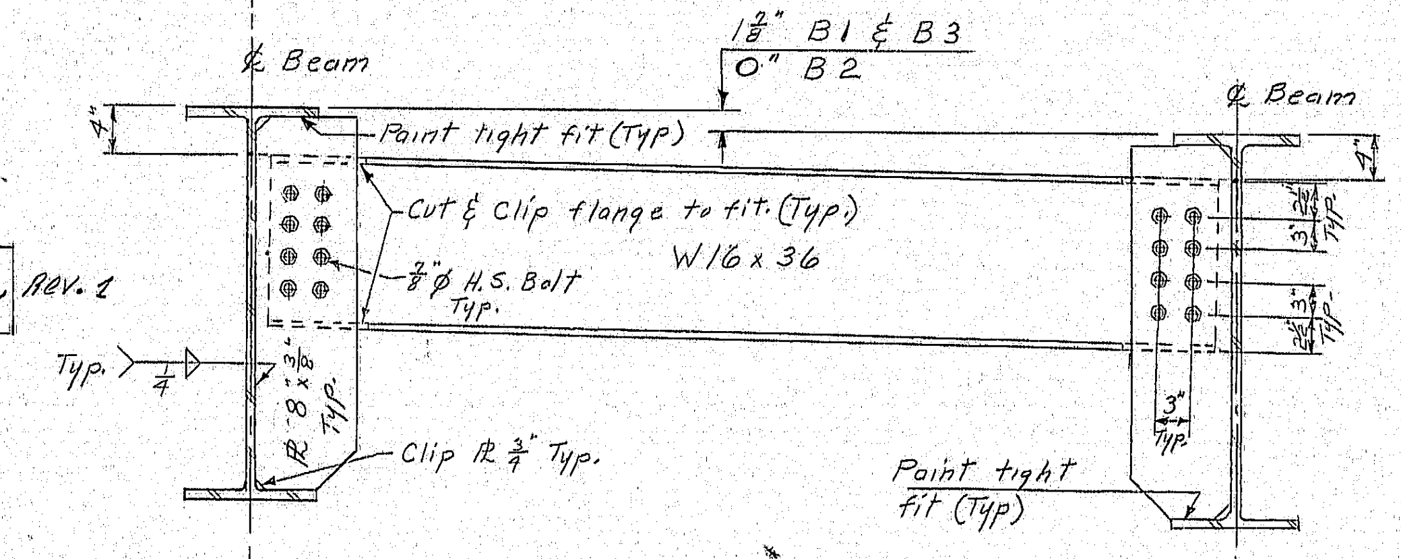
ARMORED JOINT



SECTION A-A

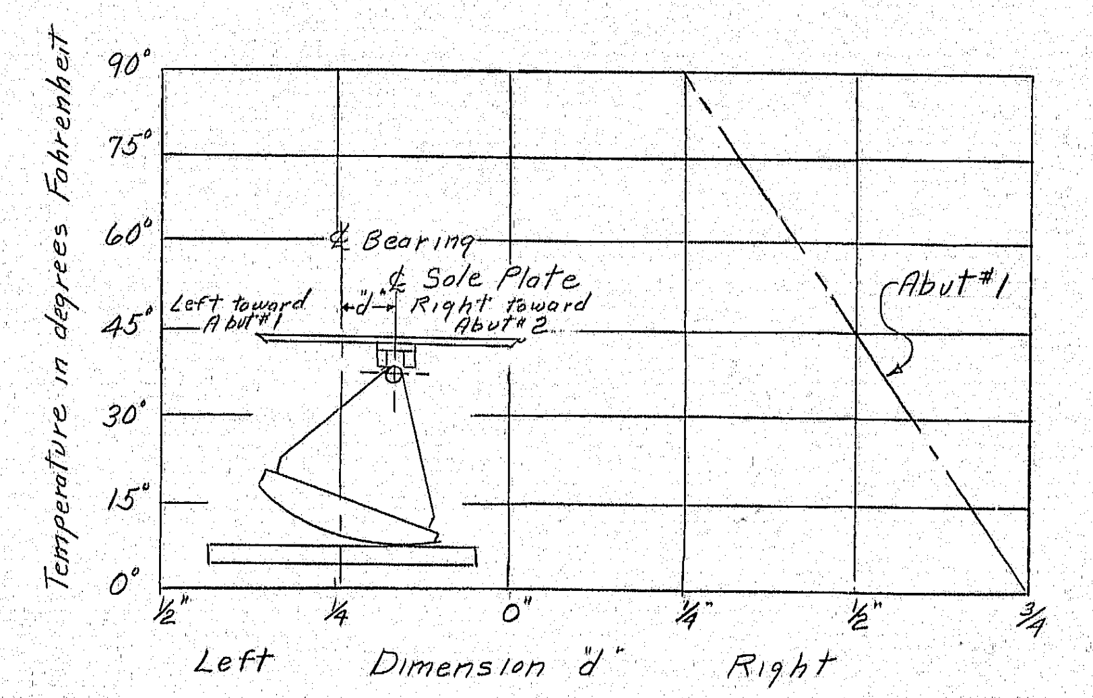


PREFORMED ELASTIC JOINT SEALER



TYPE B CROSSFRAME

(See Framing Plan for Location)

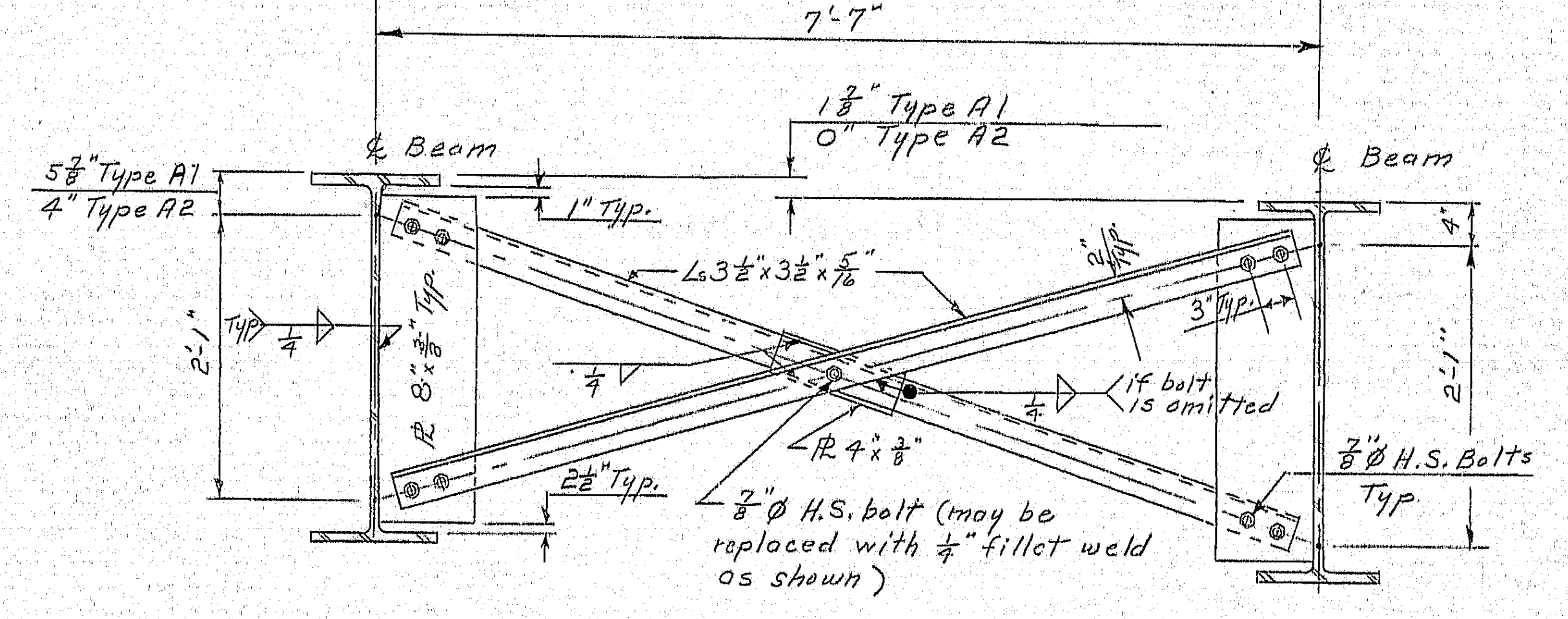


Expansion Pedestal Settings

(After structural steel is erected & before concrete in slab is placed.

Notes:

1. For armored joint details, except as shown on this sheet, see standard detail sheet BD 104-66
2~Type A & 2~Type B units required.
2. The configuration of the preformed elastic joint sealer may be changed from that shown in order to conform with shapes as produced by various manufacturers. However, the cross sectional dimensions, including those of the internal elements & the shell (A & B) shall be approved by the Engineer before ordering the preformed elastic joint sealer.



TYPE A CROSSFRAME

(See Framing Plan for Location)

Rev. 1	KP 1/19/72 EBC 1/19/72	Revised Arm. Joint & Seal Dim.s. to reflect Contractor's seal choice.

STATE HIGHWAY COMMISSION

HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
STRUCTURAL STEEL

SHEET 9 OF 11 AUGUSTA, MAINE MARCH 1971

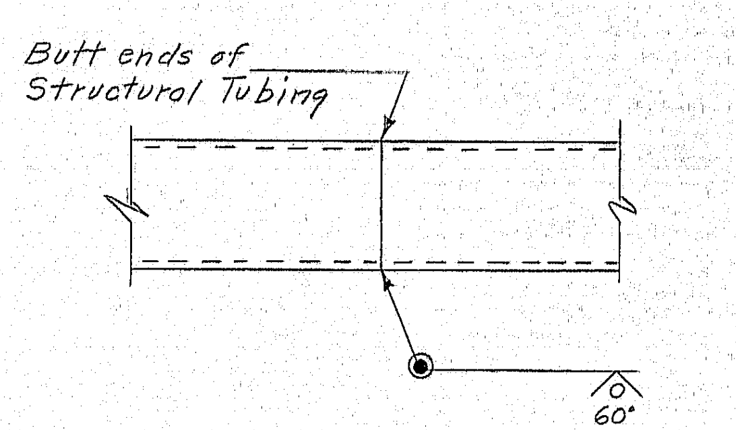
203-1 2080

151-146

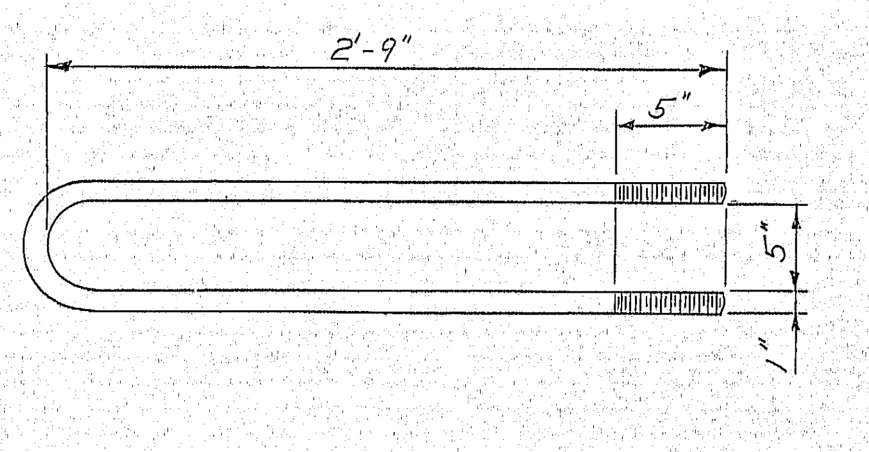
PLANS		BY	DATE
	DESIGN - DETAILED	N.E.R. & EJC	4/71
	CHECKED	N.E.R. & GWC	4-71
	REVISIONS		
	FIELD CHANGES		

JANUARY 1966

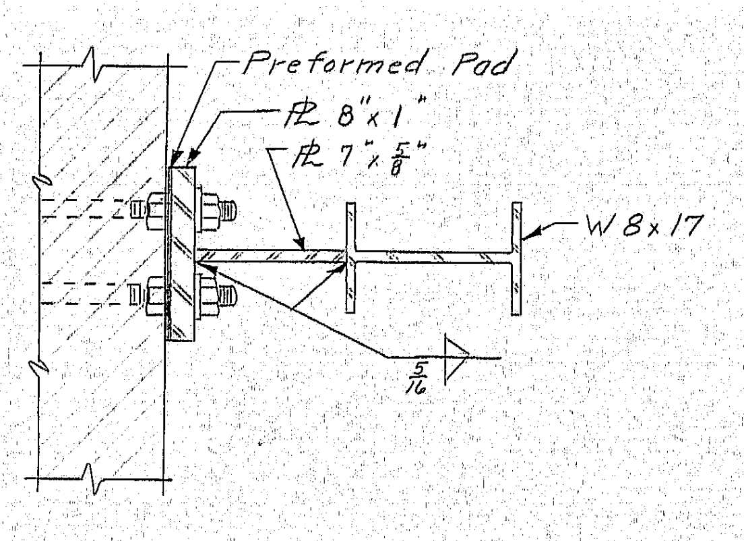
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	10	22



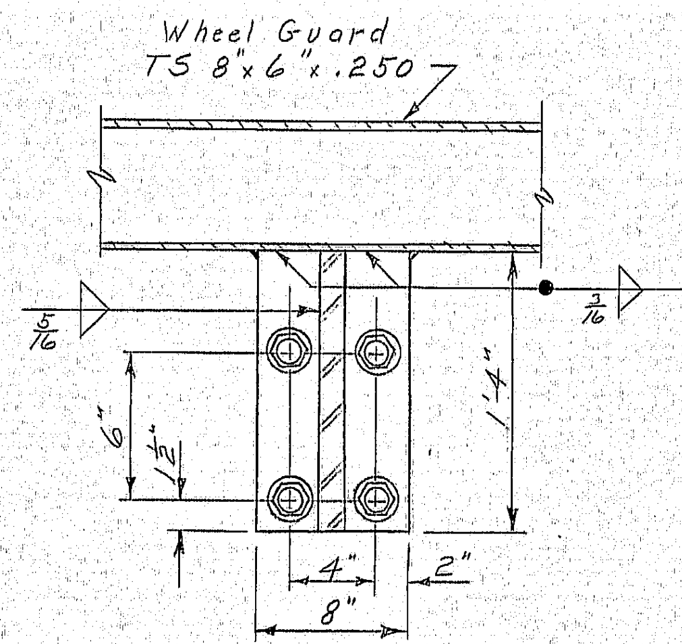
TYPICAL SPLICE DETAIL
for railing & wheel guard.



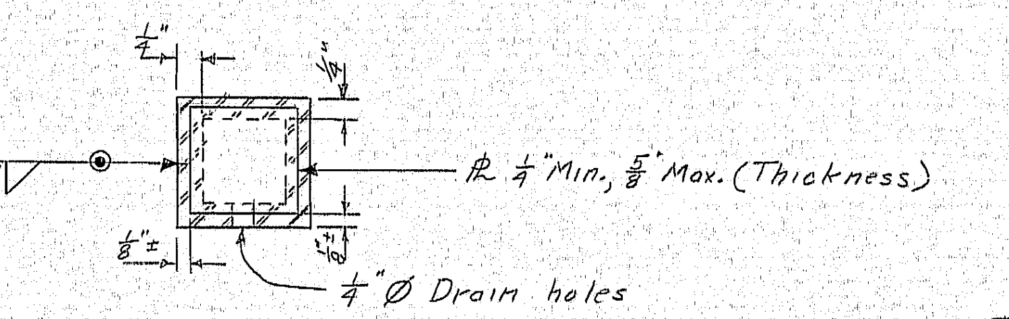
1"Ø ANCHOR BOLT
for Bridge Rail



SECTION B-B

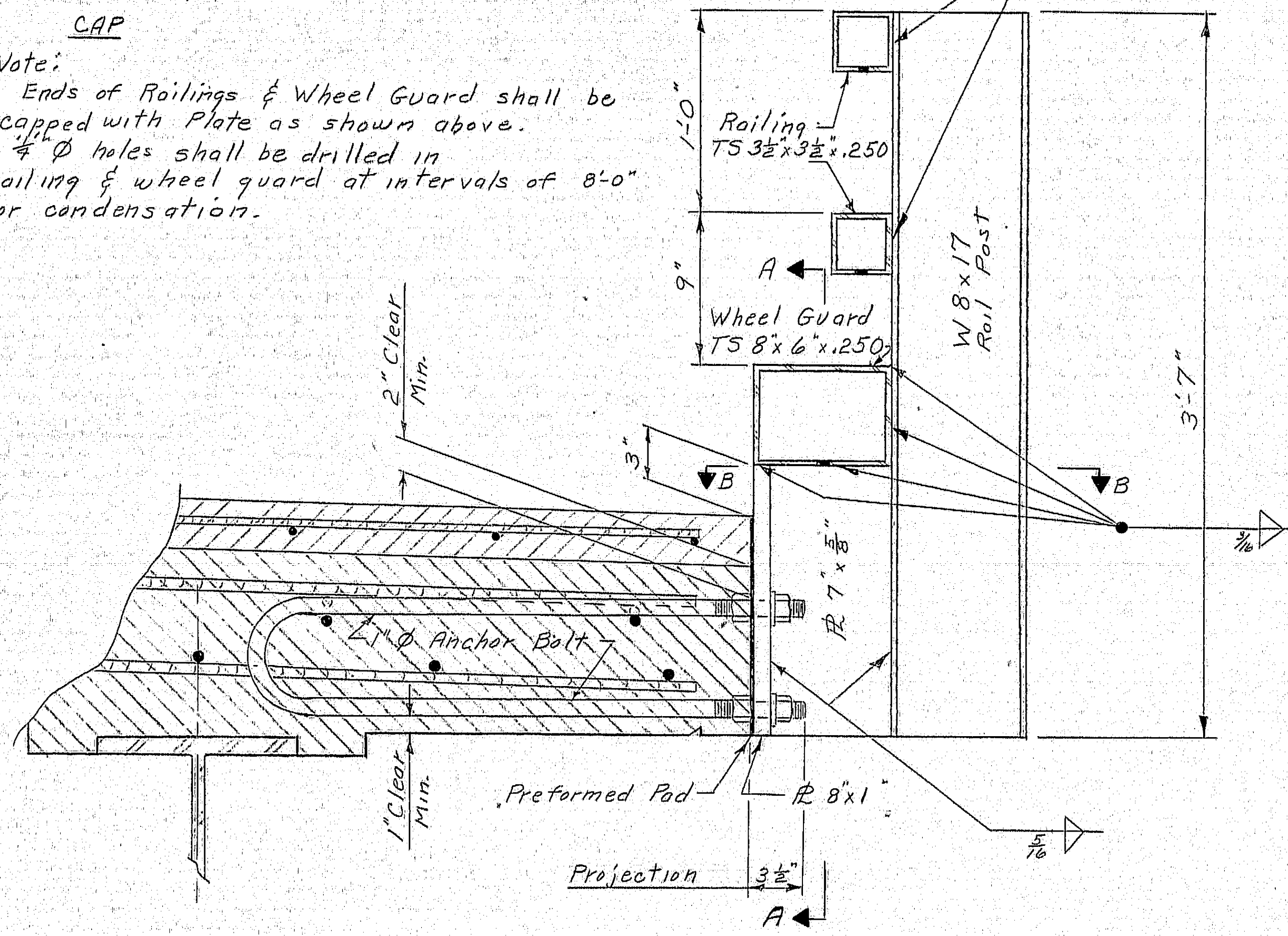


SECTION A-A

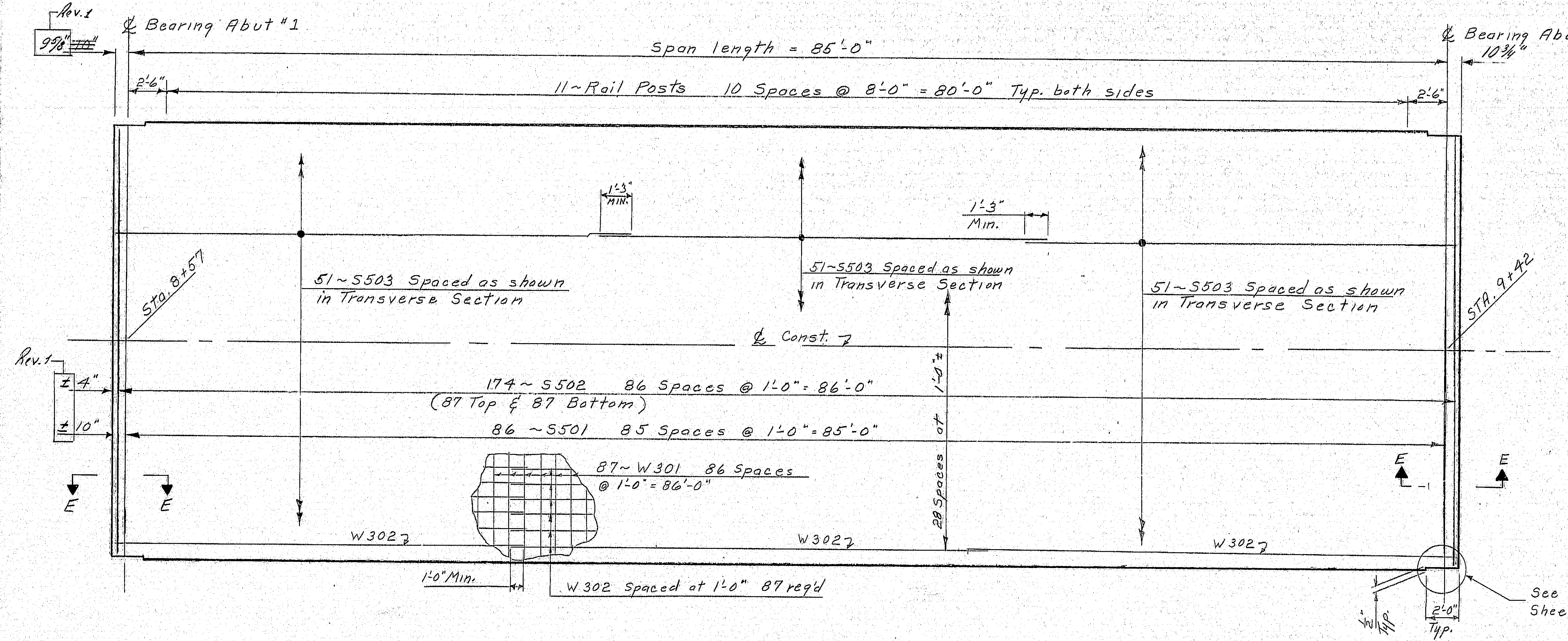


CAP

Note:
Ends of Railings & Wheel Guard shall be capped with Plate as shown above.
¼" Ø holes shall be drilled in railing & wheel guard at intervals of 8'-0" for condensation.



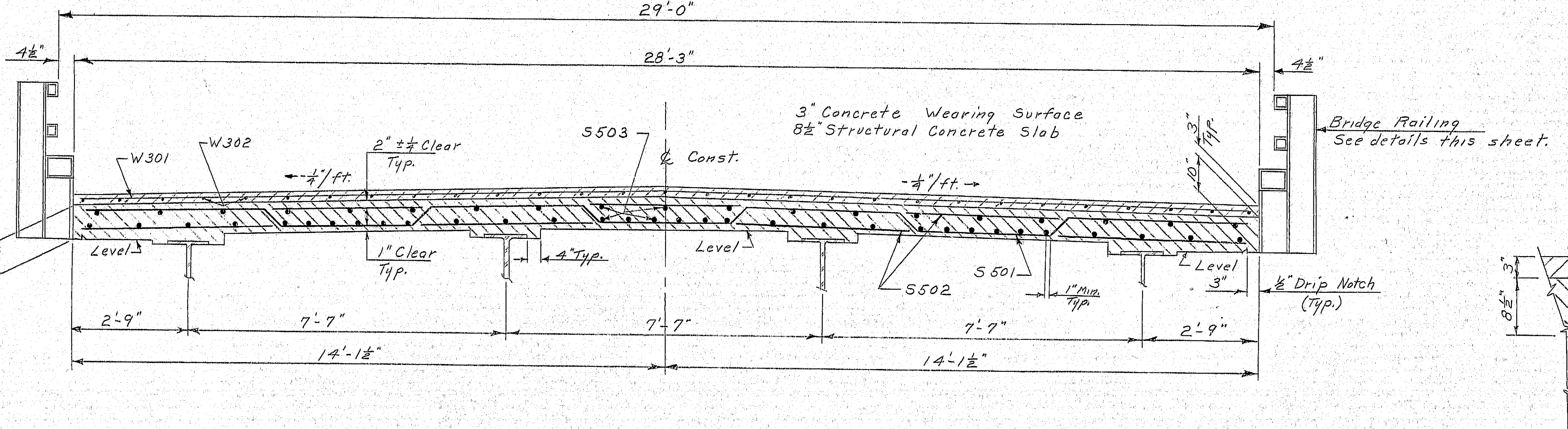
BRIDGE RAILING DETAIL


Rev.1
9⅝" ~~10"~~
℄ Bearing Abut #1
Span length = 85'-0"
℄ Bearing Abut #2
10¾"
2'-6"
11~Rail Posts 10 Spaces @ 8'-0" = 80'-0" Typ. both sides
2'-6"
1'-3" MIN.
1'-3" Min.
Sta. 8+57
51~S503 Spaced as shown in Transverse Section
51~S503 Spaced as shown in Transverse Section
51~S503 Spaced as shown in Transverse Section
STA. 9+42
℄ Const.
Rev.1
±4"
±10"
174~S502 86 Spaces @ 1'-0" = 86'-0"
(87 Top & 87 Bottom)
86~S501 85 Spaces @ 1'-0" = 85'-0"
28 Spaces at 1'-0"±
87~W301 86 Spaces @ 1'-0" = 86'-0"
E
E
E
E
W302
W302
W302
1'-0" Min.
W 302 Spaced at 1'-0" 87 req'd
½" Typ.
2'-0" Typ.
See End Post Detail Sheet No. 11

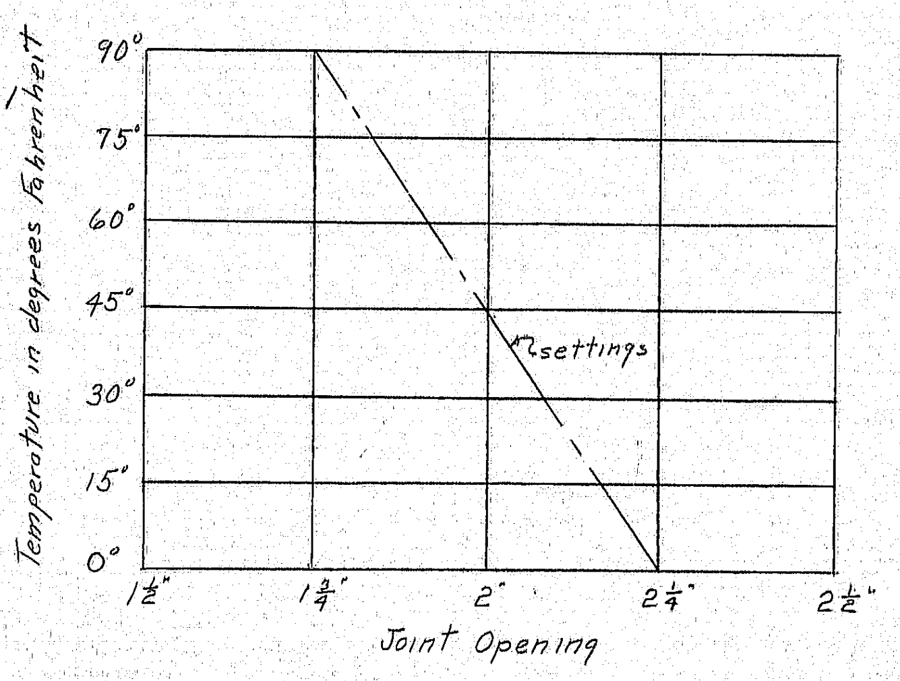
SUPERSTRUCTURE PLAN

General Superstructure Notes

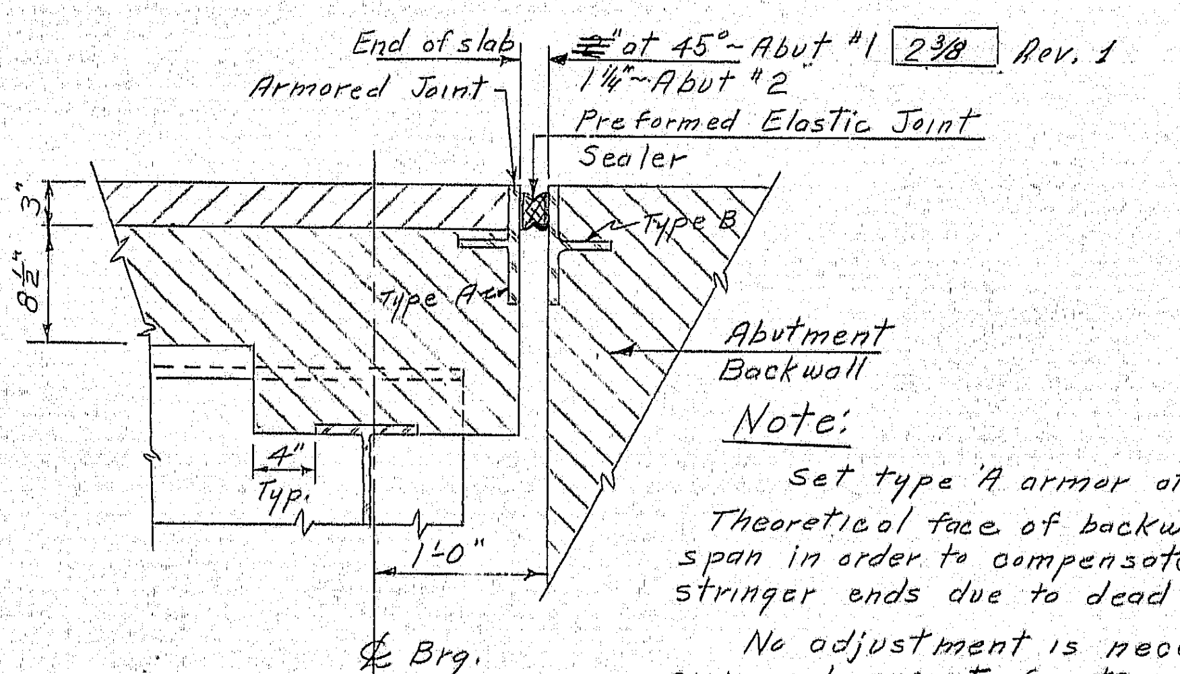
1. Coat the top and outside edge of the Concrete Wearing Surface & the outside edge of the Concrete Slab down to the Drip Notch under the slab with "Protective Coating For Concrete Surface," Item 515.20.
2. Reinforcing steel shall have 2" clearance unless otherwise shown.
3. Bridge rail tubing shall be ASTM A500 Grade B or approved equivalent. Other members A572 Grade 42
4. 1"Ø Anchor Bolts & Nuts shall be ASTM A325
5. Truss bars may be replaced by 2 straight #5 bars (one top & one bottom). Payment in either case will be based on truss bars as scheduled on the plans.
6. Bridge Railing shall be painted in accordance with Section 504 and Section 506.



TRANSVERSE SECTION



Expansion Joint Settings



Note:
Set type 'A' armor at Abut 2 ¾" from Theoretical face of backwall before loading span in order to compensate for rotation of stringer ends due to dead load deflection.
No adjustment is necessary at expansion end except for temperature.

SECTION E-E
END of SLAB DETAIL

Rev.		
1	AY 1/19/72 EBC 1/19/72	Revised Arm.d Jt. openings & End of Slab dims to reflect Contractor Choice of Seal.

STATE HIGHWAY COMMISSION

HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
SUPERSTRUCTURE

SHEET 10 OF 11 AUGUSTA, MAINE MARCH 1971

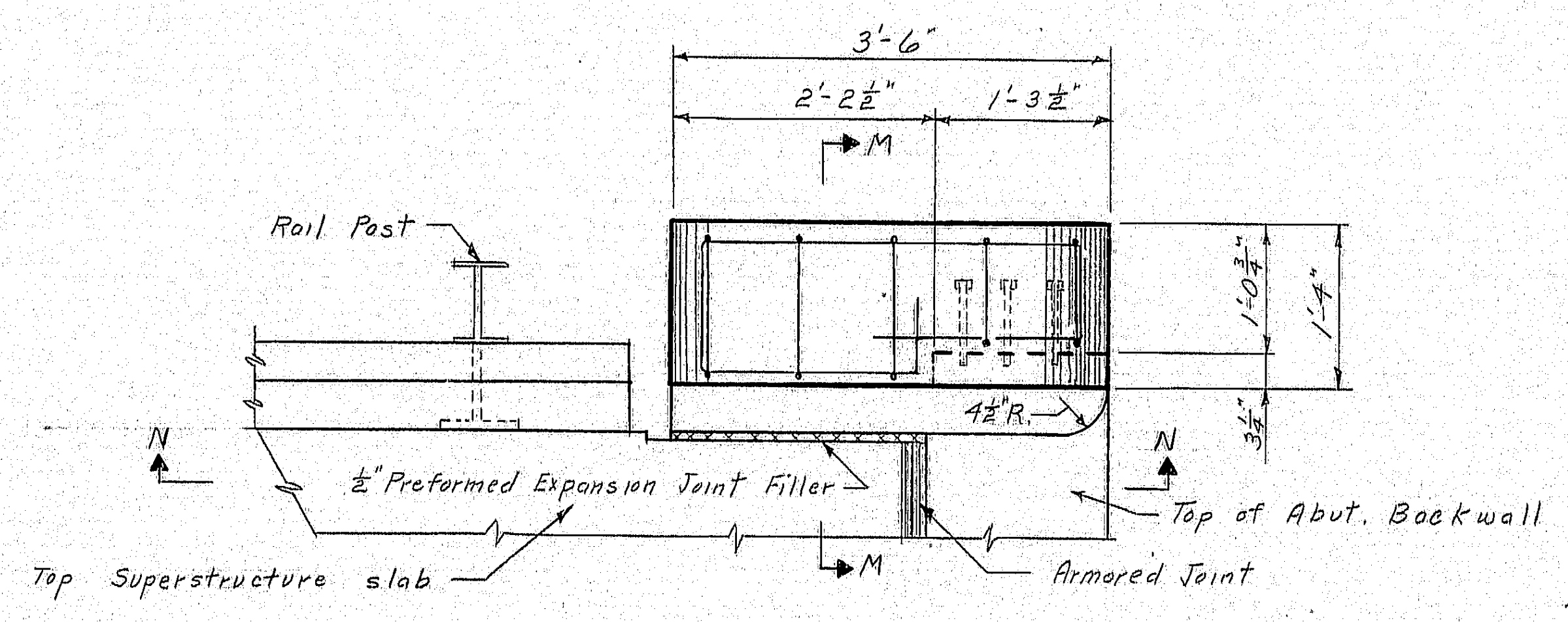
203-1 2080

151-147

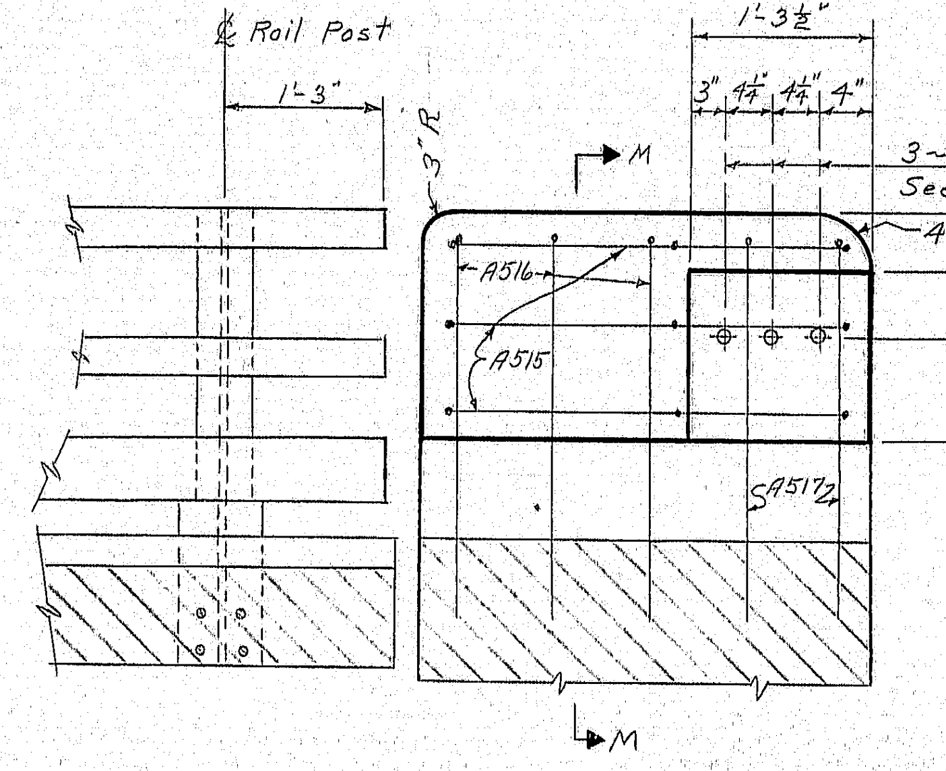
PLANS	BY	DATE
DESIGN - DETAILED	W.E.R/J.C. W.E.R.	4-71
CHECKED	GWC	4-71
REVISIONS		
FIELD CHANGES		

JANUARY 1968

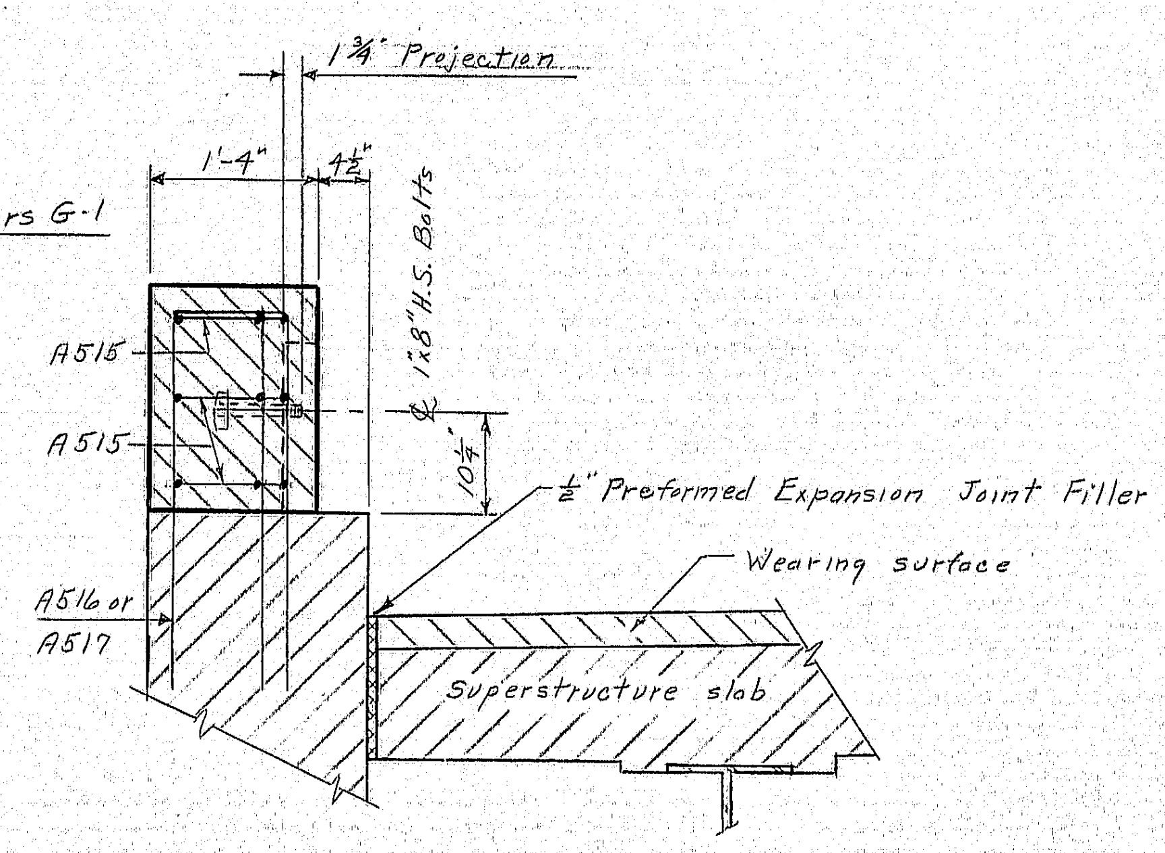
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	11	22



PLAN



SECTION N-N

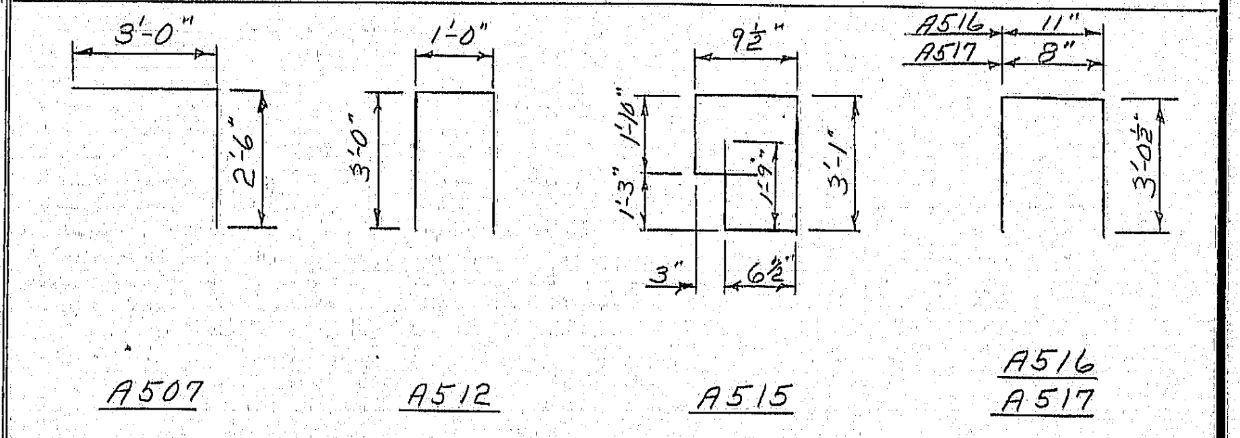


SECTION M-M

END POST DETAILS

ABUTMENTS

Bent Bars

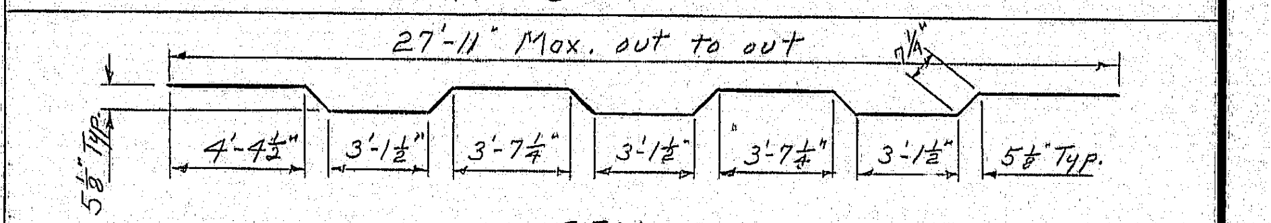


Note:
Dimensions are to ℄ of bars.

MARK	SIZE	No.	LENGTH	LOCATION
A507	#5	44	5'-6"	Breastwall
A512	#5	16	7'-0"	Curtain Wall
A515	#5	12	8'-9"	End Post
A516	#5	12	7'-0"	End Post
A517	#5	8	6'-9"	End Post
		STRAIGHT BARS		
A501	#5	60	4'-2"	Footing & Breastwall
A502	#5	52	8'-0"	Breastwall & Backwall
A503	#5	8	7'-8"	Wing
A504	#5	8	6'-10"	Wing
A505	#5	8	6'-0"	Wing
A506	#5	60	3'-3"	Footing & Breastwall
A508	#5	56	3'-3"	Backwall & Breastwall
A509	#5	56	4'-9"	Backwall & Wing
A511	#5	48	21'-6"	Breastwall & Backwall
A513	#5	16	15'-4"	Breastwall
A514	#5	8	7'-6"	Wing
A601	#6	180	5'6"	Footing
A602	#6	24	44'-6"	Footing

SUPERSTRUCTURE SLAB

Bent Bar



S501

S501	#5	86	28'-11"	Slab (Crank Bars)

STRAIGHT BARS

S502	#5	174	27'-11"	Slab (Transverse Bars)
S503	#5	153	30'-0"	Slab (Longitudinal Bars)
W301	#3	87	27'-11"	Wearing Surface
W302	#3	87	30'-0"	Wearing Surface

PLANS		BY		DATE
	DESIGN - DETAILED	N.E.R.E.J.L.	N.E.R.	4-71
	CHECKED	GWC		4-71
	REVISIONS			
	FIELD CHANGES			

STATE HIGHWAY COMMISSION
HUBBARD ROAD BRIDGE
OVER
LITTLE RIVER
IN THE TOWN OF
BERWICK
YORK COUNTY
END POST &
REINFORCING STEEL
SHEET 11 OF 11 AUGUSTA, MAINE MARCH 1971

JANUARY 1969

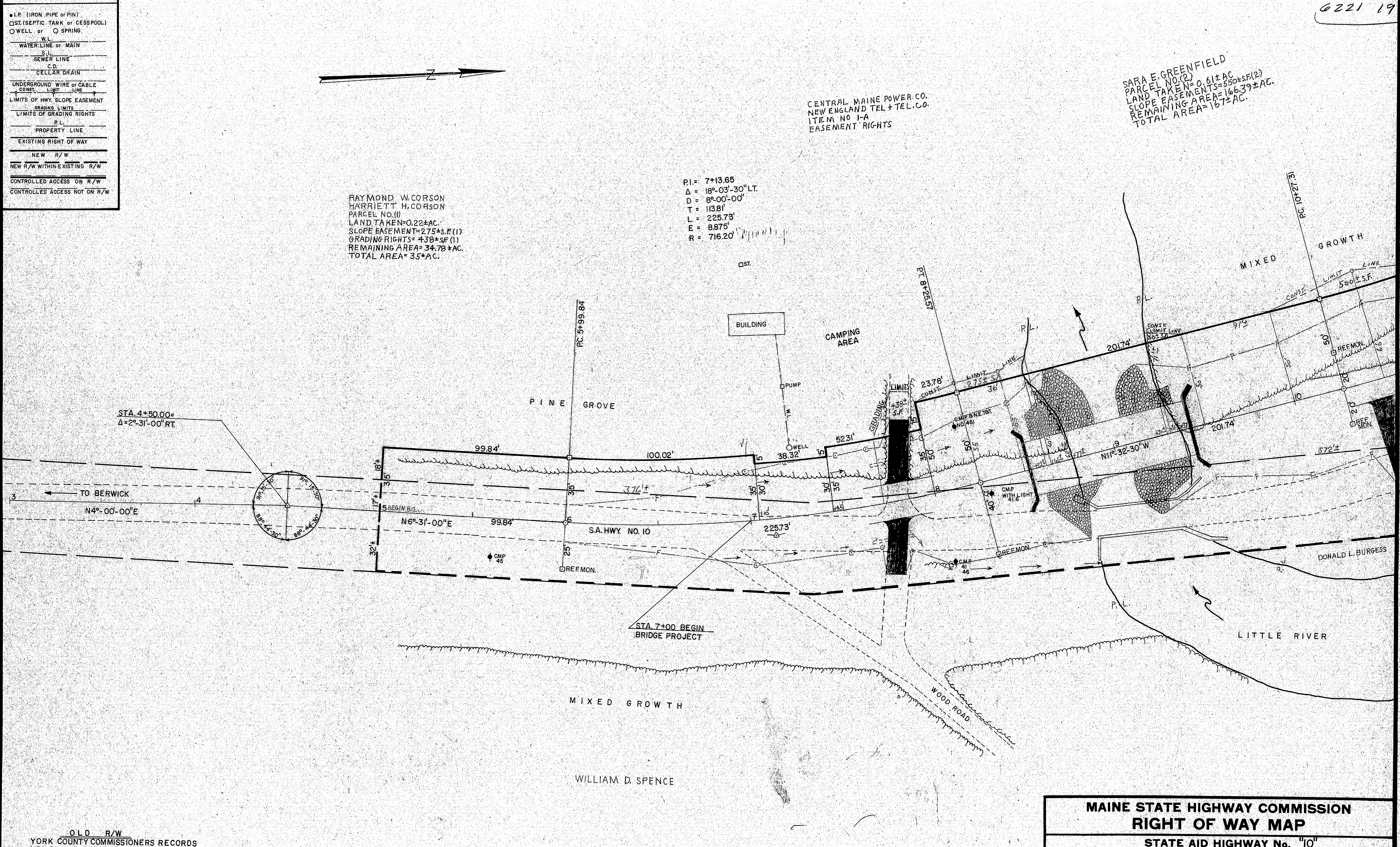
203-1 2080

151-148

6221 19 OF 20

SYMBOLS

● I.P. (IRON PIPE or PIN)
□ ST. (SEPTIC TANK or CESSPOOL)
○ WELL or ○ SPRING
W.L. — WATER LINE or MAIN
S.L. — SEWER LINE
C.D. — CELLAR DRAIN
UNDERGROUND WIRE or CABLE
CONST. LIMIT LINE — LIMITS OF HWY. SLOPE EASEMENT
GRADING LIMITS — LIMITS OF GRADING RIGHTS
P.L. — PROPERTY LINE
EXISTING RIGHT OF WAY
NEW R/W
NEW R/W WITHIN EXISTING R/W
CONTROLLED ACCESS ON R/W
CONTROLLED ACCESS NOT ON R/W



OLD R/W
YORK COUNTY COMMISSIONERS RECORDS
VOL. 21
PG. 133
3 RODS

ITEM	FIGURED	PLOTTED	CHECKED
BASE LINE	J.R.F.	J.R.F.	W.L.T.
TOPOGRAPHY		J.R.F.	W.L.T.
R W LINES		J.R.F.	W.L.T.
AREAS		J.R.F.	W.L.T.
R W MON.		J.R.F.	W.L.T.
CO. RECORD			

REVISIONS

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			

BRUNING 44-540 12353

PLAN FILED IN PLAN BOOK PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE

MAINE STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP

STATE AID HIGHWAY No. "10"
BERWICK YORK COUNTY
HUBBARD ROAD BRIDGE OVER LITTLE RIVER. (BRIDGE NO. 6221)

APPROVED:
DATE: FEBRUARY 1971
SCALE: 1 INCH = 25 FEET
SHEET NO. 1 OF 2 SHEETS

DAVID H. STEVENS
CHAIRMAN
BERTRAND A. LACHARITE
STEVEN D. SHAW
CHIEF ENGINEER

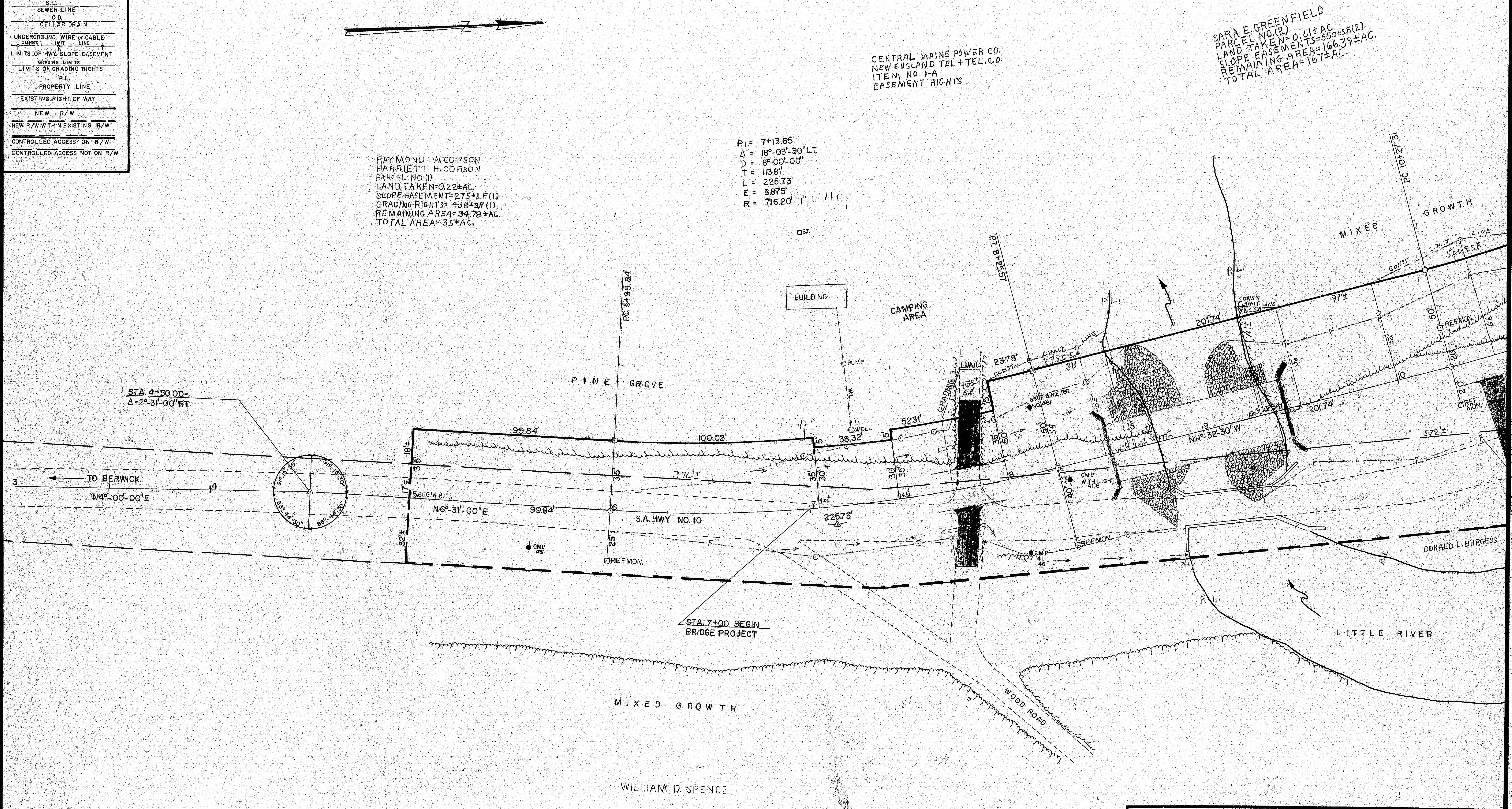
S.H.C. FILE NO. S-16-337

151-149

6221 19 OF 20

SYMBOLS

- ● I.P. (IRON PIPE or PIN)
- □ S.T. (SEPTIC TANK or CESSPOOL)
- ○ WELL or ○ SPRING
- W.L. — WATER LINE or MAIN
- S.L. — SEWER LINE
- C.D. — CELLAR DRAIN
- UNDERGROUND WIRE or CABLE
- CONST. LIMIT LINE — LIMITS OF HWY. SLOPE EASEMENT
- GRADING LIMITS — LIMITS OF GRADING RIGHTS
- P.L. — PROPERTY LINE
- EXISTING RIGHT OF WAY
- NEW R/W
- NEW R/W WITHIN EXISTING R/W
- CONTROLLED ACCESS ON R/W
- CONTROLLED ACCESS NOT ON R/W



OLD R/W
YORK COUNTY COMMISSIONERS RECORDS
VOL. 21
PG. 133
3 RODS

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AREAS		J.R.F.	W.L.T.
R W MON.		J.R.F.	W.L.T.
CO. RECORD			

REVISIONS

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			

BRUNING 44-540 12353

PLAN FILED IN PLAN BOOK PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE

MAINE STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP

STATE AID HIGHWAY No. "10"

BERWICK YORK COUNTY
HUBBARD ROAD BRIDGE OVER LITTLE RIVER (BRIDGE NO. 6221)

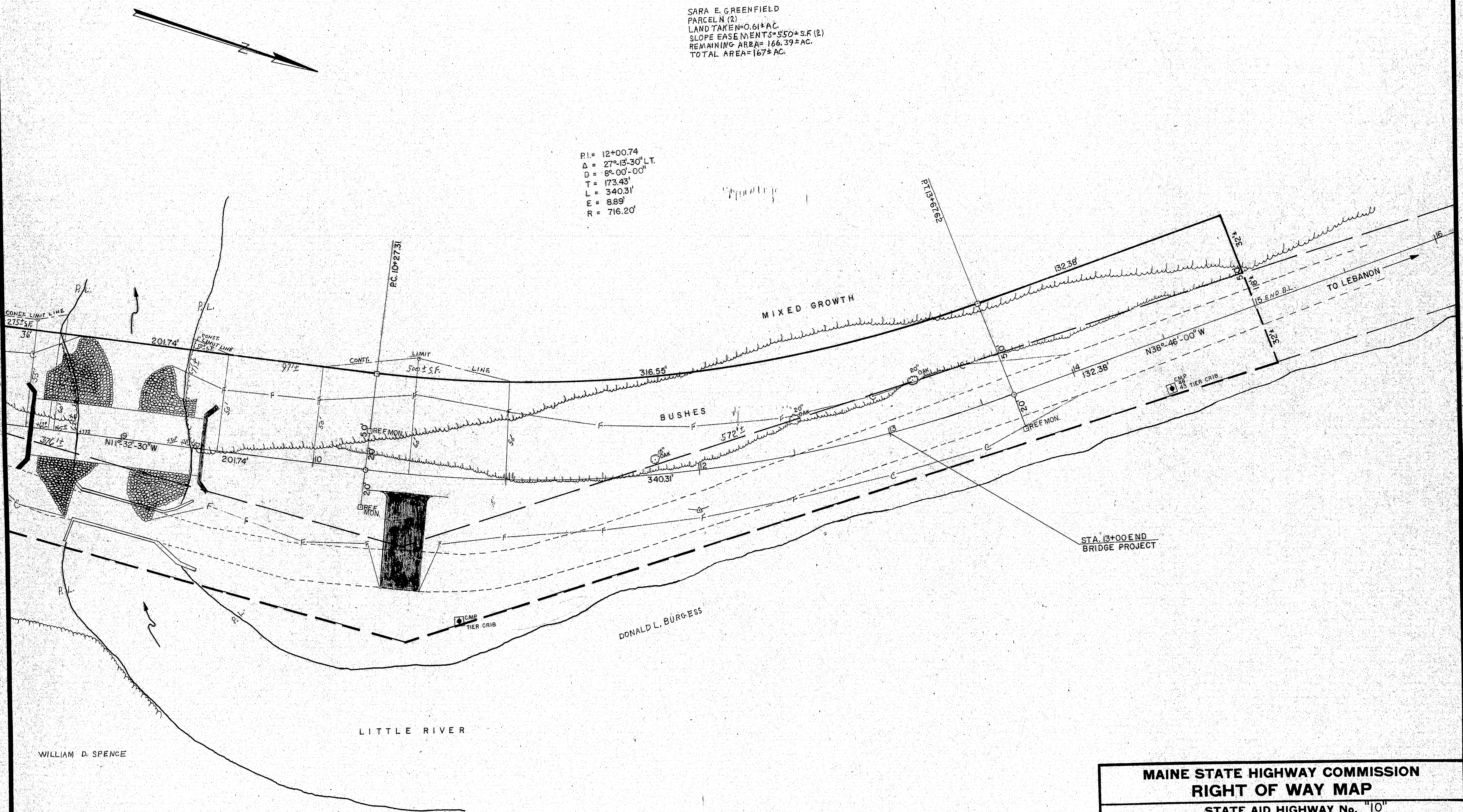
DATE: FEBRUARY 1971
SCALE: 1 INCH = 25 FEET
SHEET NO. 1 OF 2 SHEETS

APPROVED:
DAVID H. STEVENS
CHAIRMAN
BERTRAND A. LACHARITE
STEVEN D. SHAW
CHIEF ENGINEER

S.H.C. FILE NO. S-16-337

151-149

6221 20 OF 20



OLD R/W
YORK COUNTY COMMISSIONERS RECORDS
VOL. 21
PG. 133
3 RODS

ITEM	FIGURED	PLOTTED	CHECKED
BASE LINE	J.R.F.	J.R.F.	W.L.T.
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R W LINES		J.R.F.	W.L.T.
AREAS		J.R.F.	W.L.T.
R W MON.		J.R.F.	W.L.T.
CO. RECORD			

REVISIONS

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			

BRUNING 44-540 12353

PLAN FILED IN PLAN BOOK PAGE

NO.	GRANTOR	COUNTY RECORD INSTRUMENT	DATE	BOOK	PAGE

MAINE STATE HIGHWAY COMMISSION
RIGHT OF WAY MAP

STATE AID HIGHWAY No. "10"
BERWICK YORK COUNTY
HUBBARD ROAD BRIDGE OVER LITTLE RIVER (BRIDGE NO. 6221)

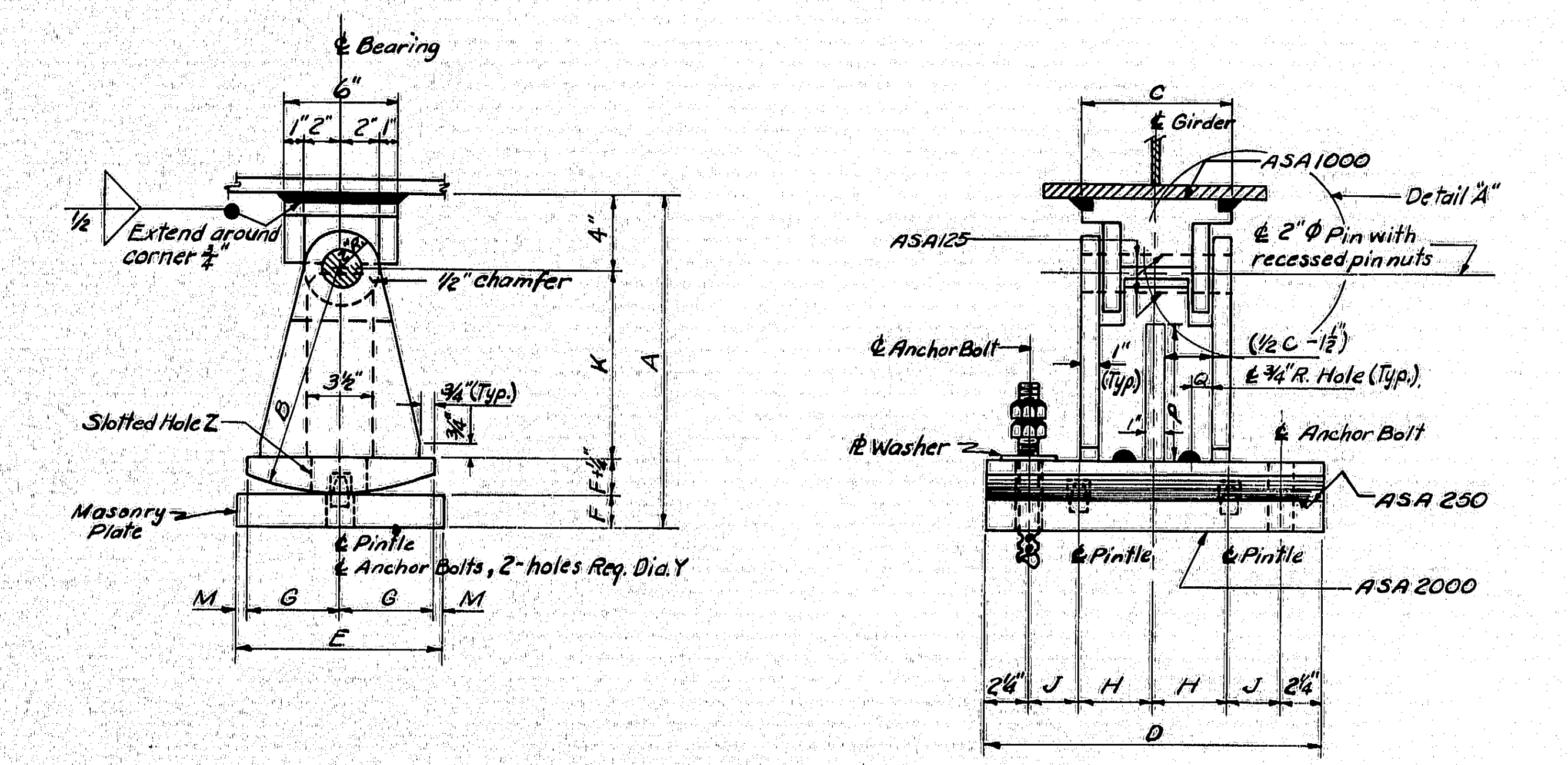
DATE: FEBRUARY 1971
SCALE: 1 INCH = 25 FEET
SHEET NO. 2 OF 2 SHEETS

APPROVED:
DAVID H. STEVENS CHAIRMAN
BERTRAND A. LACHARITE
STEVEN D. SHAW
CHIEF ENGINEER

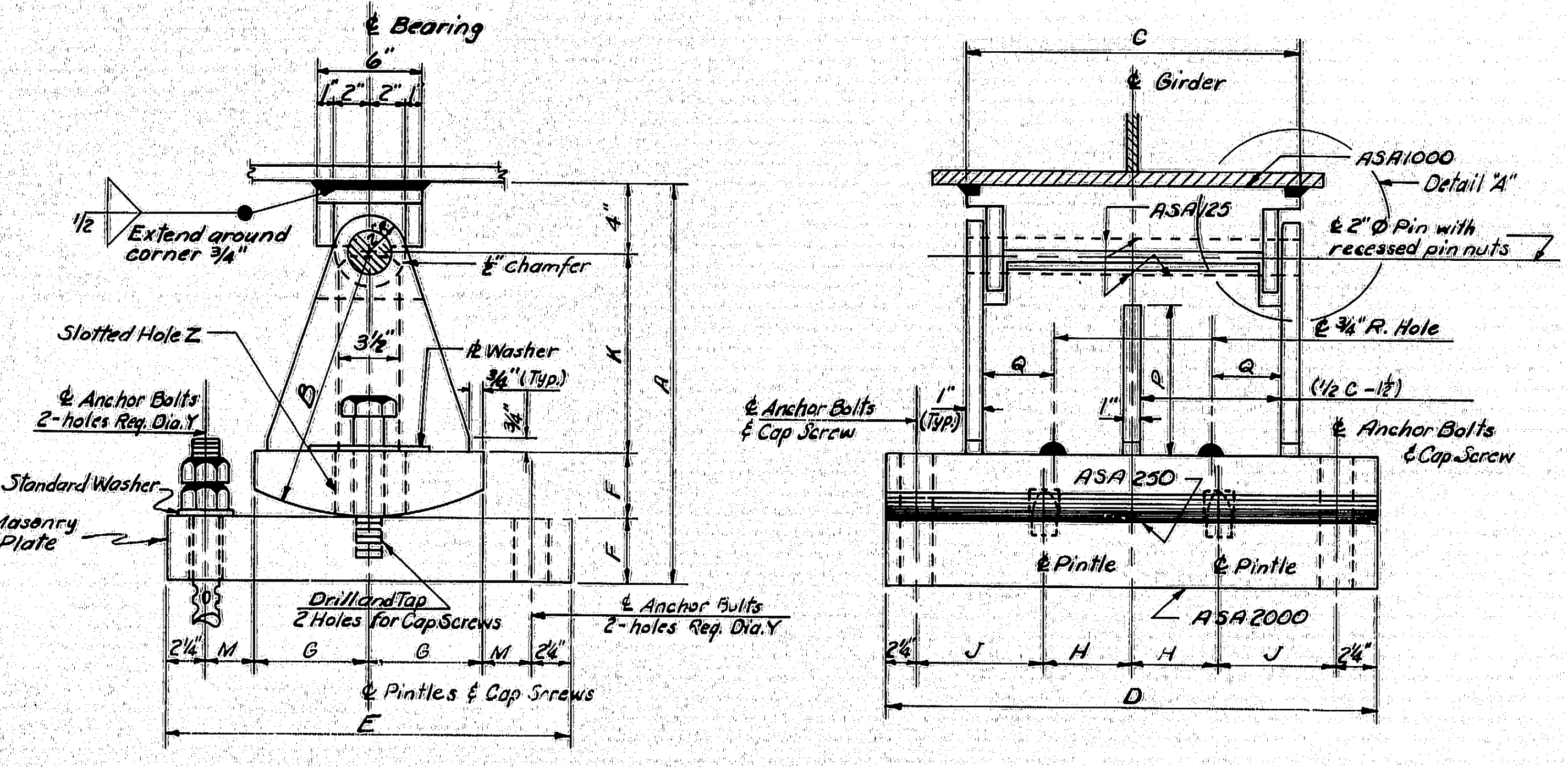
S.H.C. FILE NO. S-16-337

151-150

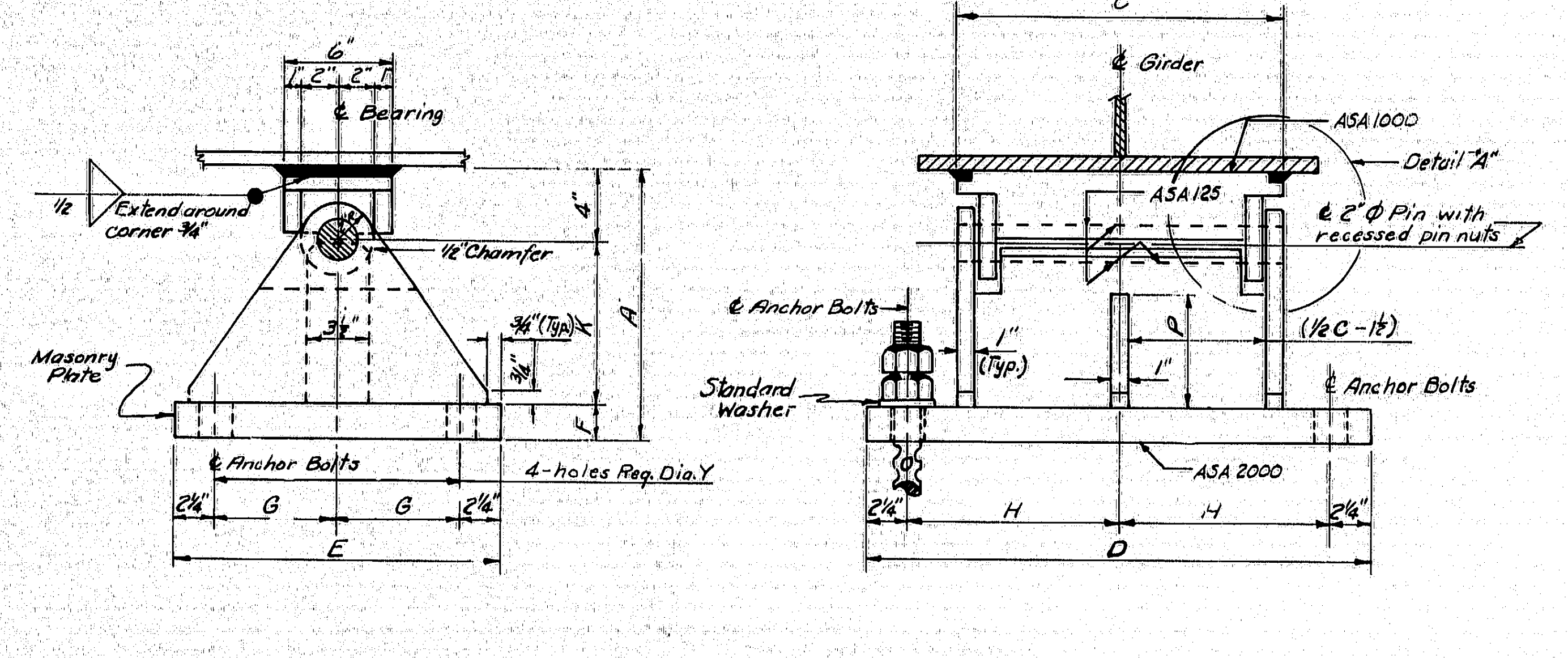
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	14	22



EXPANSION PEDESTAL — EPD

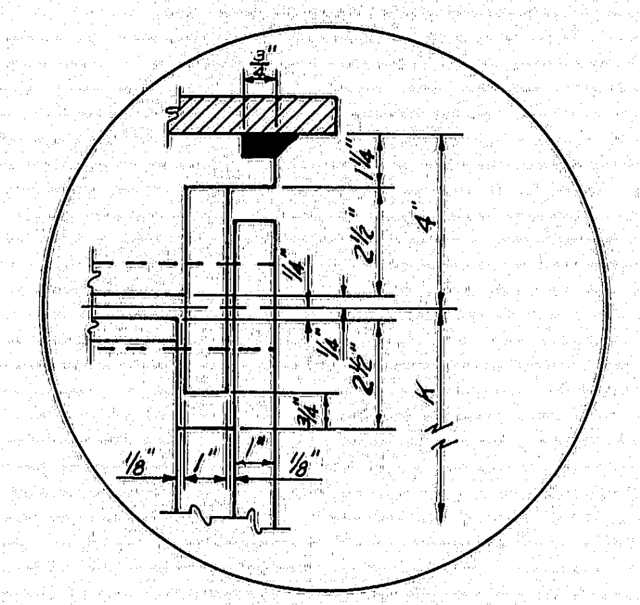


EXPANSION PEDESTAL — EPE

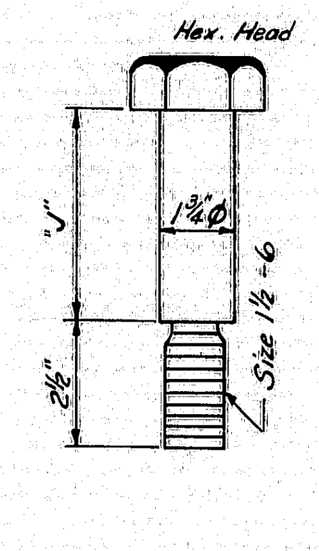


FIXED PEDESTAL — FPD

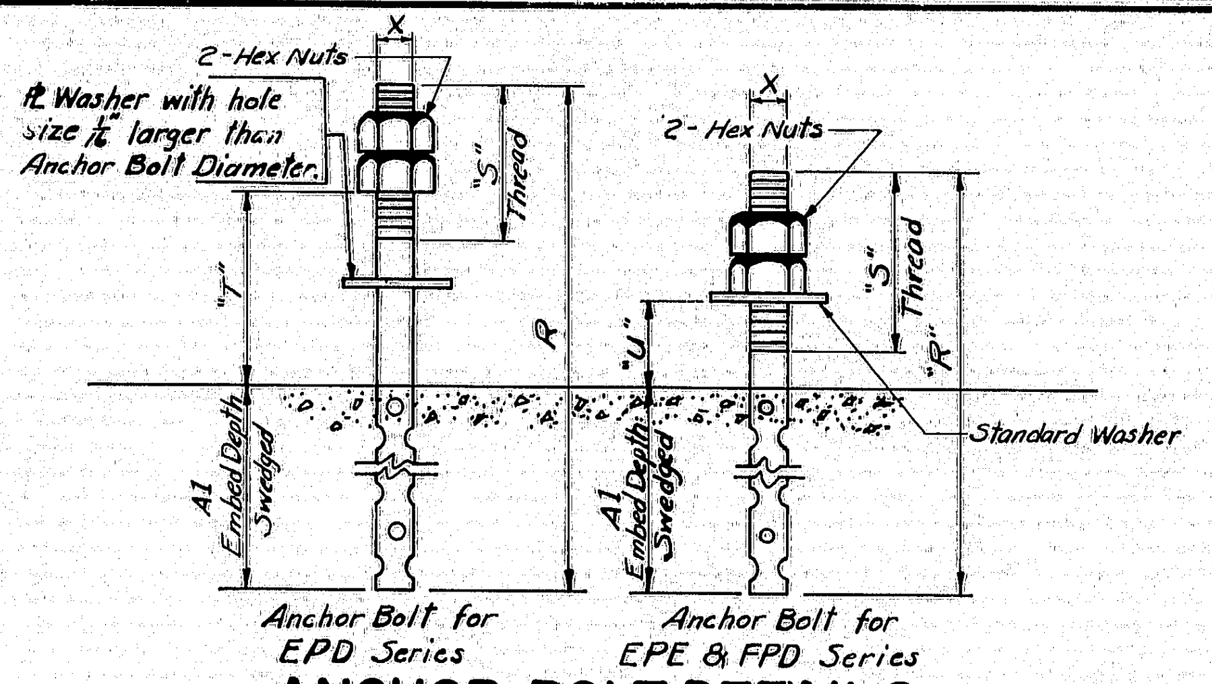
MARK	LOAD	A	B	C	D	E	F	G	H	J	K	M	P	Q	R	S	T	U	V	X-Anchor Bolt Diameter	Y-Masonry Plate Hole Size	Number Anchor Bolts Required	Z-Slotted Hole for Anchor Bolts or Cap Screws	℄ Washer Size for Anchor Bolts or Cap Screws	A1 Embedment Depth	MARK
EPD-1	100K	1'-2¾"	9"	8"	1'-6"	8"	1¾"	3½"	4"	2¾"	7"	½"	—	3"	1'-6"	4"	5"	—	—	1"	1⅜"	2	3"×1⅜"	3"×5"×¼"	10"	EPD-1
EPD-2	100K	1'-2¾"	9"	8"	1'-6"	9"	1¾"	4"	4"	2¾"	7"	½"	—	3"	1'-6"	4"	5"	—	—	1"	1⅜"	2	3"×1⅜"	3"×5"×¼"	10"	EPD-2
EPD-3	100K	1'-2¾"	9"	8"	1'-6"	10"	1¾"	4½"	4"	2¾"	7"	½"	—	3"	1'-6	4"	5"	—	—	1"	1⅜"	2	3"×1⅜"	3"×5"×¼"	10"	EPD-3
EPD-4	100K	1'-5¾"	1'-0"	8"	1'-6"	11"	1¾"	5"	4"	2¾"	10"	½"	—	3"	1'-6	4"	5"	—	—	1"	1⅜"	2	3"×1⅜"	3"×5"×¼"	10"	EPD-4
EPD-5	200K	1'-9½"	1'-3"	10"	1'-8"	1'-0"	2½"	5½"	4"	3¾"	1'-0¼"	½"	—	4"	2'-2"	5"	7"	—	—	1½"	1⅞"	2	4"×1⅞"	4"×7"×¼"	1'-3"	EPD-5
EPD-6	200K	1'-9½"	1'-3"	10"	1'-8"	1'-1"	2½"	6"	4"	3¾"	1'-0¼"	½"	—	4"	2'-2"	5"	7"	—	—	1½"	1⅞"	2	4"×1⅞"	4"×7"×¼"	1'-3"	EPD-6
EPD-7	200K	1'-9½"	1'-3"	10"	1'-8"	1'-2"	2½"	6½"	4"	3¾"	1'-0¼"	½"	—	4"	2'-2"	5"	7"	—	—	1½"	1⅞"	2	4"×1⅞"	4"×7"×¼"	1'-3"	EPD-7
EPD-8	200K	1'-9½"	1'-3"	10"	1'-8"	1'-3"	2½"	7"	4"	3¾"	1'-0¼"	½"	—	4"	2'-2"	5"	7"	—	—	1½"	1⅞"	2	4"×1⅞"	4"×7"×¼"	1'-3"	EPD-8
EPD-9	300K	1'-10"	1'-3"	1'-2"	2'-0"	1'-4"	3"	7½"	5"	4¾"	11¾"	½"	—	6"	2'-4"	5"	9"	—	—	1½"	1⅞"	2	5"×1⅞"	4"×8"×¼"	1'-3"	EPD-9
EPD-10	400K	1'-10¼"	1'-3"	1'-6"	2'-4"	1'-6"	3¼"	8½"	6"	5¾"	11½"	½"	8¾"	3¾"	2'-4"	5"	9"	—	—	1½"	1⅞"	2	5"×1⅞"	4"×8"×¼"	1'-3"	EPD-10
EPE-1	200K	1'-10"	1'-3"	10"	1'-7"	1'-6"	3"	4"	4"	3¼"	1'-0"	2¾"	—	4"	1'-10½"	4½"	—	3"	4"	1½"	1⅞"	4	3½"×1⅞"	4"×4½"×¼"	1'-3"	EPE-1
EPE-2	200K	1'-10"	1'-3"	11"	1'-8"	1'-9"	3"	5½"	4½"	3¼"	1'-0"	2¾"	—	4½"	1'-10½"	4½"	—	3"	4¼"	1½"	1⅞"	4	4"×1⅞"	4"×5½"×¼"	1'-3"	EPE-2
EPE-3	200K	1'-10"	1'-3"	11"	1'-8"	1'-10"	3"	6"	4½"	3¼"	1'-0"	2¾"	—	4½"	1'-10½"	4½"	—	3"	4½"	1½"	1⅞"	4	4"×1⅞"	4"×5½"×¼"	1'-3"	EPE-3
EPE-4	200K	1'-10"	1'-3"	11"	1'-8"	1'-10"	3"	6½"	4½"	3¼"	1'-0"	2¾"	—	4½"	1'-10½"	4½"	—	3"	4¾"	1½"	1⅞"	4	4½"×1⅞"	4"×6"×¼"	1'-3"	EPE-4
EPE-5	200K	1'-10"	1'-3"	11"	1'-8"	2'-0"	3"	7"	4½"	3¼"	1'-0"	2¾"	—	4½"	1'-10½"	4½"	—	3"	5"	1½"	1⅞"	4	4½"×1⅞"	4"×6"×¼"	1'-3"	EPE-5
EPE-6	300K	1'-10"	1'-3"	1'-2"	1'-11"	1'-6"	3"	4"	5"	4¼"	1'-0"	2¾"	—	6"	1'-10½"	4½"	—	3"	4"	1½"	1⅞"	4	2¾"×1⅞"	4"×4½"×¼"	1'-3"	EPE-6
EPE-7	300K	1'-10¼"	1'-3"	1'-2"	1'-11"	1'-8"	3¼"	5"	5"	4¼"	11¾"	2¾"	—	6"	1'-10½"	4½"	—	3¼"	4½"	1½"	1⅞"	4	3"×1⅞"	4"×5"×¼"	1'-3"	EPE-7
EPE-8	300K	1'-10½"	1'-3"	1'-2"	1'-11"	1'-10"	3½"	6"	5"	4¼"	11½"	2¾"	—	6"	1'-11"	4½"	—	3½"	5"	1½"	1⅞"	4	4½"×1⅞"	4"×6"×¼"	1'-3"	EPE-8
EPE-9	300K	1'-10½"	1'-3"	1'-2"	1'-11"	2'-0"	3½"	7"	5"	4¼"	11½"	2¾"	—	6"	1'-11"	4½"	—	3½"	5½"	1½"	1⅞"	4	5"×1⅞"	4"×6½×¼"	1'-3"	EPE-9
EPE-10	300K	1'-10¾"	1'-3"	1'-2"	1'-11"	2'-3"	3¾"	8"	5"	4¼"	11"	3¼"	—	6"	1'-11"	4½"	—	3¾"	6"	1½"	1⅞"	4	5"×1⅞"	4"×7"×¼"	1'-3"	EPE-10
EPE-11	400K	1'-10¼"	1'-3"	1'-7"	2'-4"	1'-7"	3¼"	4½"	5"	6¾"	11¾"	2¾"	9"	4"	1'-10½"	4½"	—	3¼"	4½"	1½"	1⅞"	4	4"×1⅞"	4"×5"×¼"	1'-3"	EPE-11
EPE-12	400K	1'-10¾"	1'-3"	1'-7"	2'-4"	1'-11"	3¾"	6½"	5"	6¾"	11¼"	2¾"	8½"	4"	1'-11"	4½"	—	3¾"	5½"	1½"	1⅞"	4	5"×1⅞"	4"×6"×¼"	1'-3"	EPE-12
EPE-13	400K	1'-11"	1'-3"	1'-7"	2'-4"	2'-4"	4"	8½"	5"	6¾"	11"	3¼"	8¼"	4"	2'-0"	5½"	—	4"	7"	1½"	1⅞"	4	6½"×1⅞"	4"×8"×¼"	1'-3"	EPE-13
EPE-14	600K	2'-1¾"	1'-6"	1'-11"	3'-0"	1'-10"	3¾"	6"	7"	8¾"	1'-2¼"	2¾"	11½"	5"	1'-11"	4½"	—	3¾"	6"	1½"	1⅞"	4	4½"×1⅞"	4"×5½"×¼"	1'-3"	EPE-14
EPE-15	600K	2'-2¼"	1'-6"	1'-11"	3'-0"	2'-5"	4¼"	9"	7"	8¾"	1'-1¾"	3¼"	11"	5"	2'-0"	5½"	—	4¼"	6¾"	1½"	1⅞"	4	6½"×1⅞"	4"×8"×¼"	1'-3"	EPE-15
EPE-16	800K	2'-2"	1'-6"	2'-6"	3'-10"	1'-11"	4"	6½"	10"	10¾"	1'-2"	2¾"	11¼"	6¾"	2'-0"	5½"	—	4"	5¼"	1½"	1⅞"	4	4½"×1⅞"	4"×6"×¼"	1'-3"	EPE-16
EPE-17	800K	2'-2½"	1'-6"	2'-6"	3'-10"	2'-5"	4½"	9"	10"	10¾"	1'-1½"	3¼"	10¾"	6¾"	2'-0"	5½"	—	4½"	7¼"	1½"	1⅞"	4	6½"×1⅞"	4"×8½"×¼"	1'-3"	EPE-17
FPD-1	100K	1'-0"	—	8"	1'-6"	9"	2"	2¼"	6¾"	—	6"	—	—	—	1'-4"	4"	—	2"	—	1"	1⅜"	4	—	Standard	10"	FPD-1
FPD-2	200K	1'-0"	—	10"	1'-8"	1'-2"	2"	4¾"	7¾"	—	6"	—	—	—	1'-9½"	4"	—	2"	—	1½"	1⅞"	4	—	Standard	1'-3"	FPD-2
FPD-3	300K	1'-0"	—	1'-2"	2'-0"	1'-4"	2"	5¾"	9¾"	—	6"	—	—	—	1'-9½"	4"	—	2"	—	1½"	1⅞"	4	—	Standard	1'-3"	FPD-3
FPD-4	400K	1'-3"	—	1'-6"	2'-4"	1'-6"	2"	6¾"	11¾"	—	9"	—	6¼"	—	1'-9½"	4"	—	2"	—	1½"	1⅞"	4	—	Standard	1'-3"	FPD-4
FPD-5	600K	1'-3"	—	1'-11"	3'-0"	1'-10"	3"	8¾"	1'-3¾"	—	8"	—	5¼"	—	1'-10½"	4½"	—	3"	—	1½"	1⅞"	4	—	Standard	1'-3"	FPD-5
FPD-6	800K	1'-3"	—	2'-6"	3'-10"	1'-11"	3"	9¼"	1'-8¾"	—	8"	—	5¼"	—	1'-10½"	4½"	—	3"	—	1½"	1⅞"	4	—	Standard	1'-3"	FPD-6



DETAIL "A"



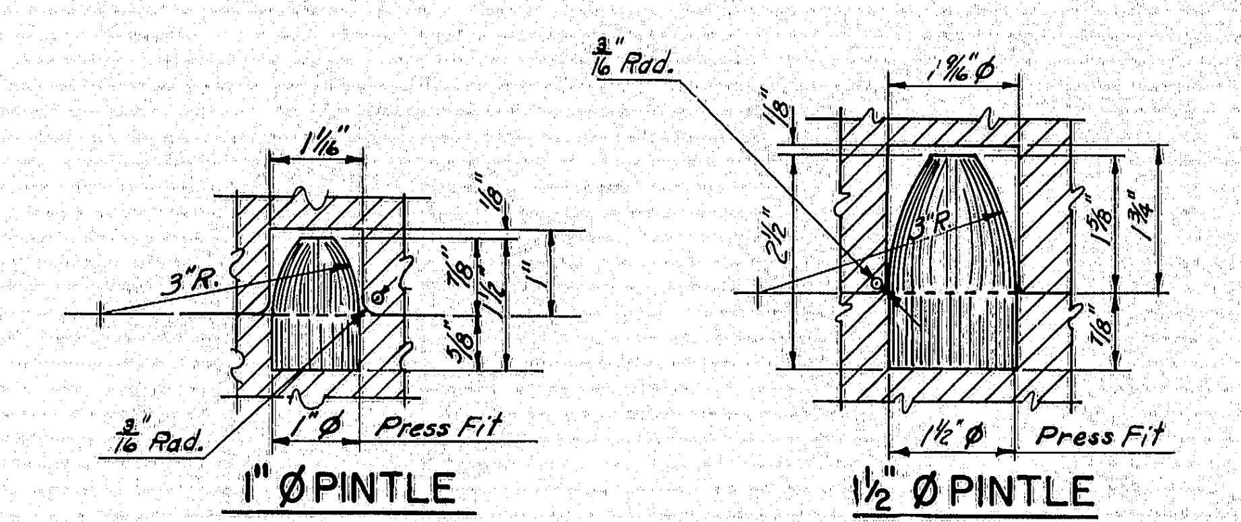
CAP SCREW DETAIL



Anchor Bolt for EPD Series

Anchor Bolt for EPE & FPD Series

ANCHOR BOLT DETAILS



1" Ø PINTLE

1½" Ø PINTLE

PINTLE DETAILS

NOTE:
Use 1"Ø Pintles with 1"Ø Anchor Bolts & 1½"Ø Pintles with 1½"Ø Anchor Bolts.

GENERAL NOTES:

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 a min. slope of ½ inch per foot. No separate payment for this work will be made as it shall be considered incidental to contract items.

Fabricate pedestals with ½" fillet welds.

The diameter of the pin hole shall not exceed that of the pin by more than 1/50 inch.

Pedestals EPD-1 thru EPD-9 and EPE-1 thru EPE-10 have no center stiffeners and have only one drainage hole.

Pedestals EPD-10 and EPE-11 thru EPE-17 have a center stiffener and have two drainage holes.

Pedestals FPD-1 thru FPD-3 have no center stiffeners and have no drainage holes.

Pedestals FPD-4 thru FPD-6 have a center stiffener and no drainage holes.

DESIGN SPECIFICATIONS

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

A.S.T.M. STEEL CLASSIFICATION

All structural steel shall be - A36 except the following:

2"Ø Pin - A36; A235, Class E or A108, Grade 1016 - 1030 inclusive.

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 100-70)

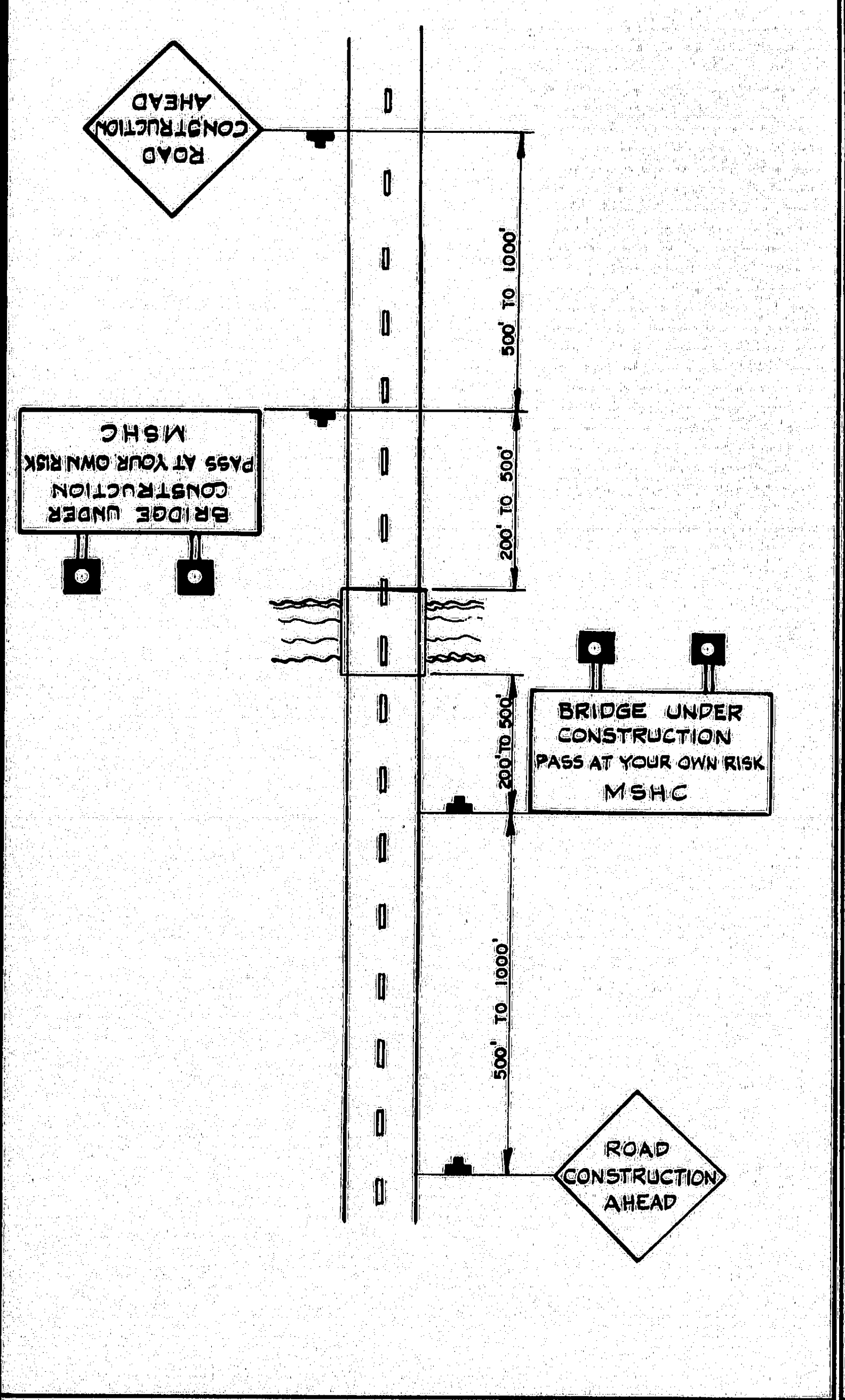
BEARING PEDESTALS

JANUARY 1970

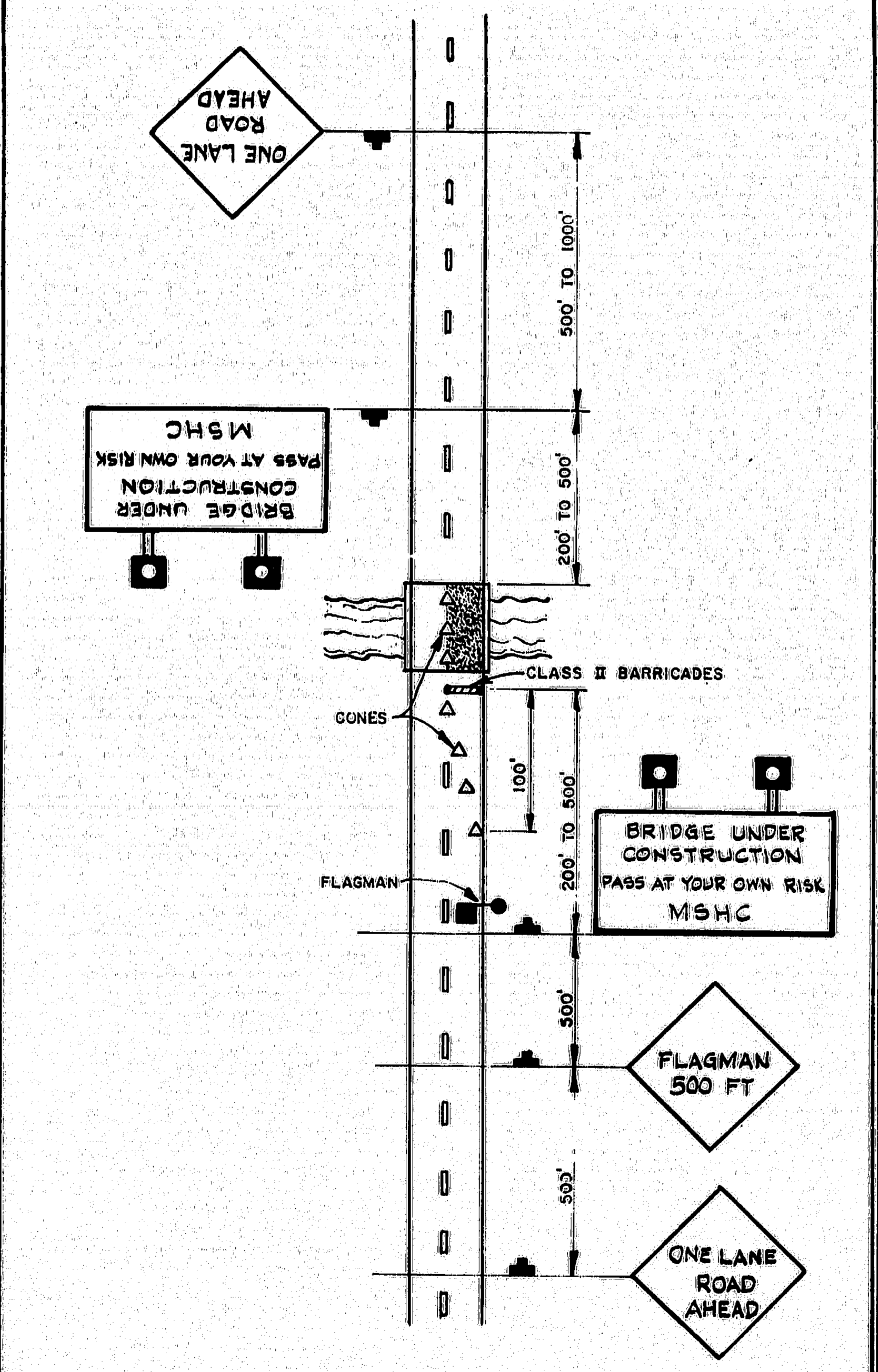
151-151 6221 BERWICK

TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

PROJECT NO.	SHEET NO.	TOTAL SHEETS
6221	15	22



WHEN DETOURS OR LANE CLOSURES ARE NOT REQUIRED.

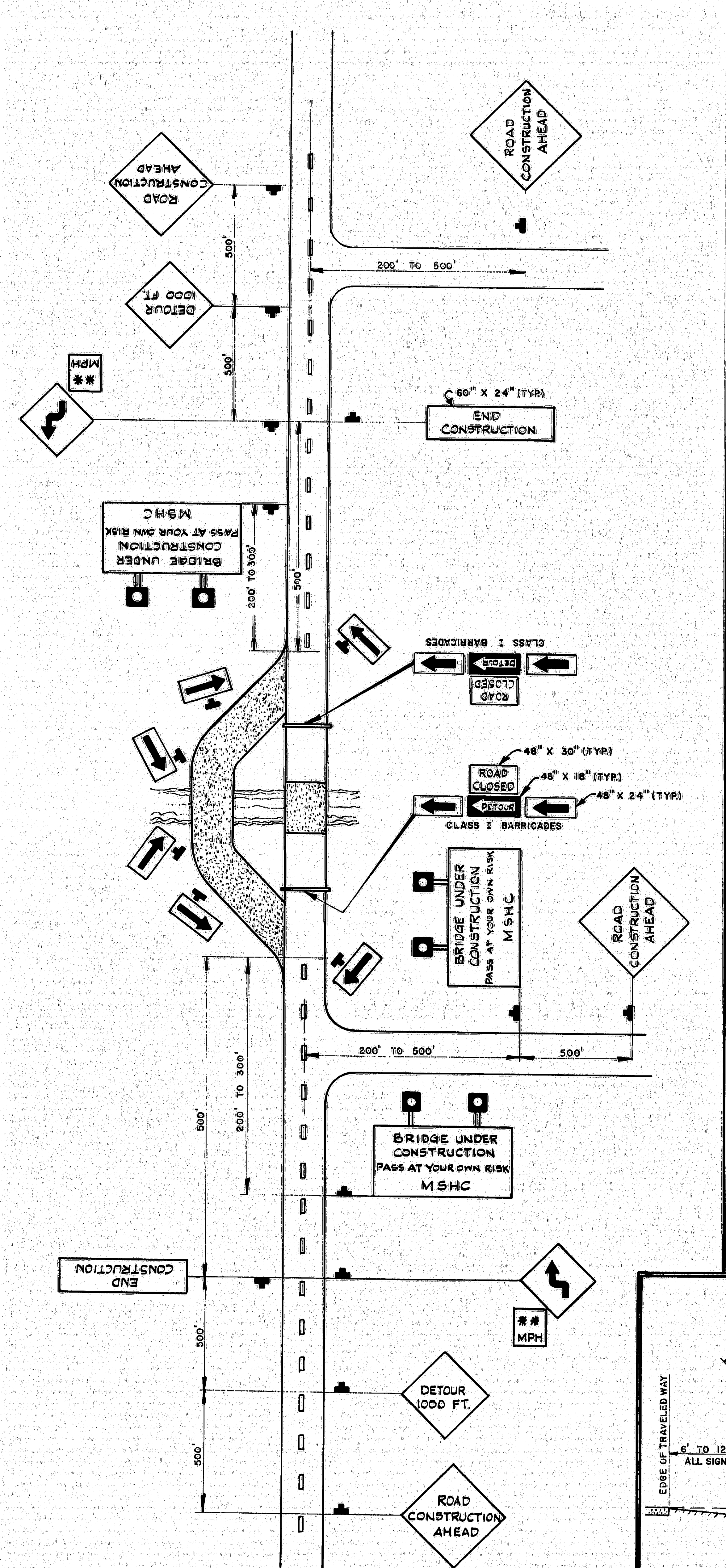


MINOR OPERATIONS OF SHORT DURATION REQUIRING LANE CLOSURE

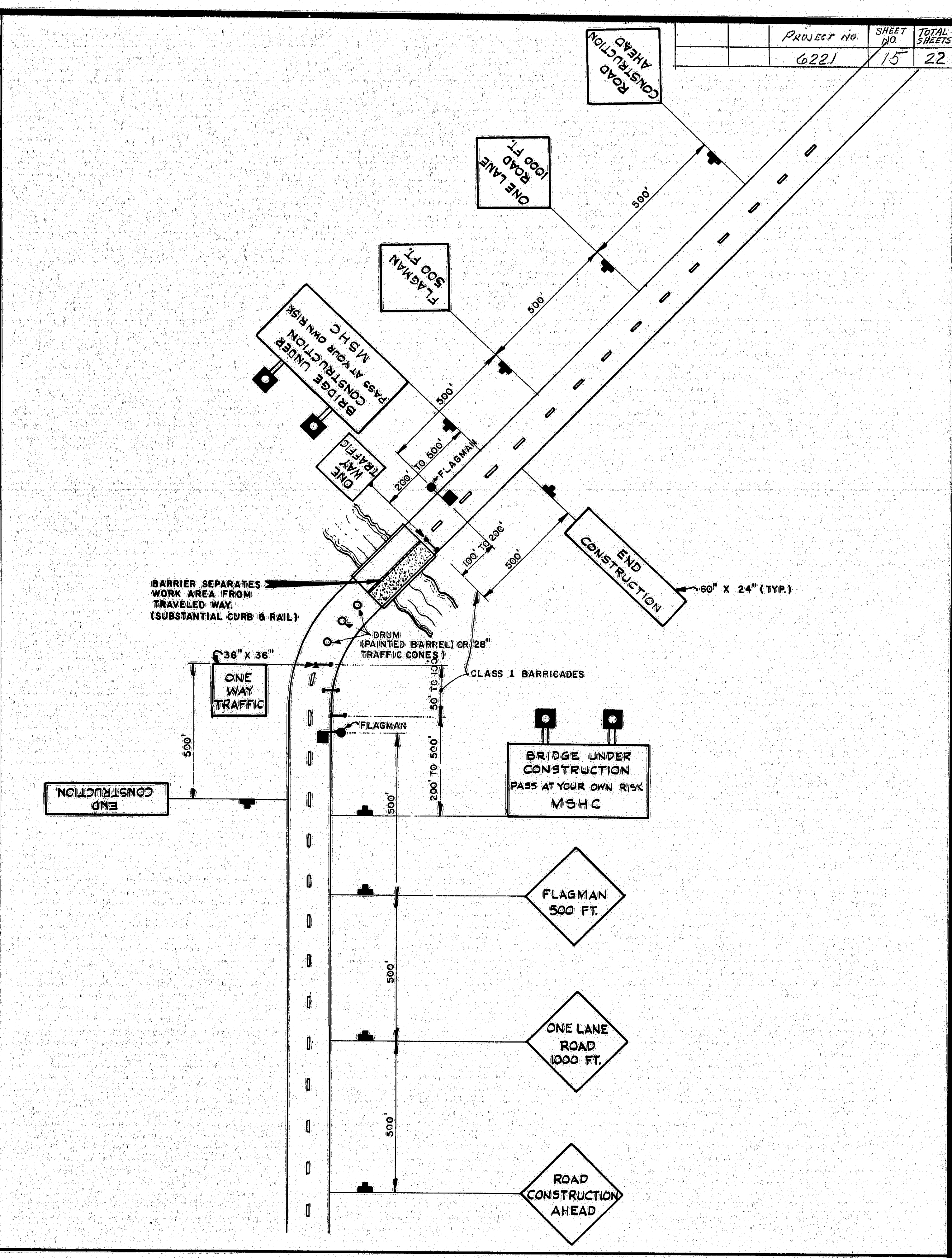
GENERAL NOTES

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 SHC "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 L-S-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 5 B-16 OF THE MANUAL.
11. FOR SIGN SIZES NOT SHOWN ON PLANS SEE "TYPICAL INSTALLATION - ALL SIGNS."

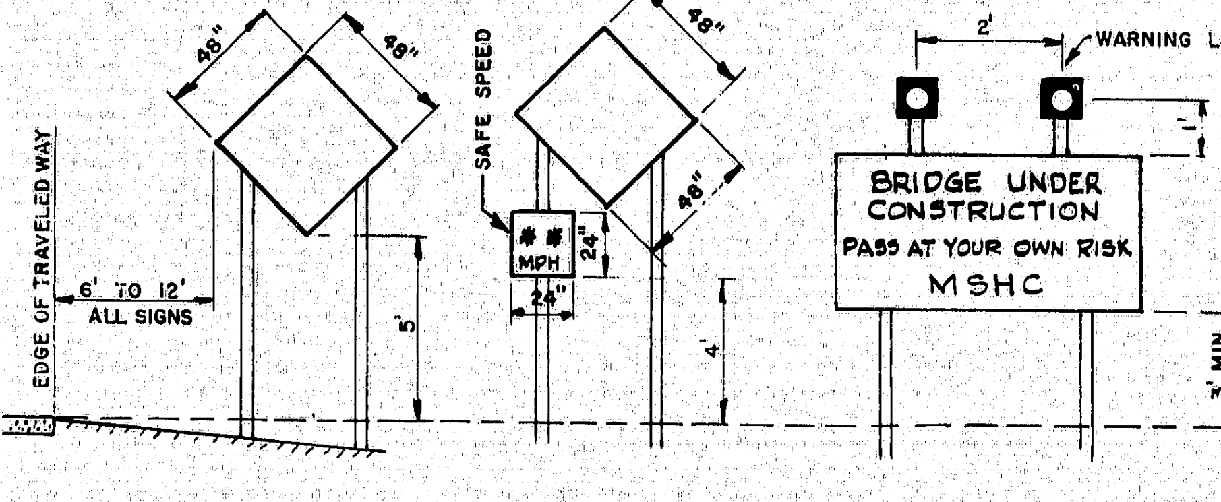
BRUNING 44-131



FOR ALL TRAFFIC CONDITIONS WHEN DETOURS ARE REQUIRED



MAJOR OPERATIONS OF LONG DURATION REQUIRING LANE CLOSURE



TYPICAL INSTALLATION - ALL SIGNS

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

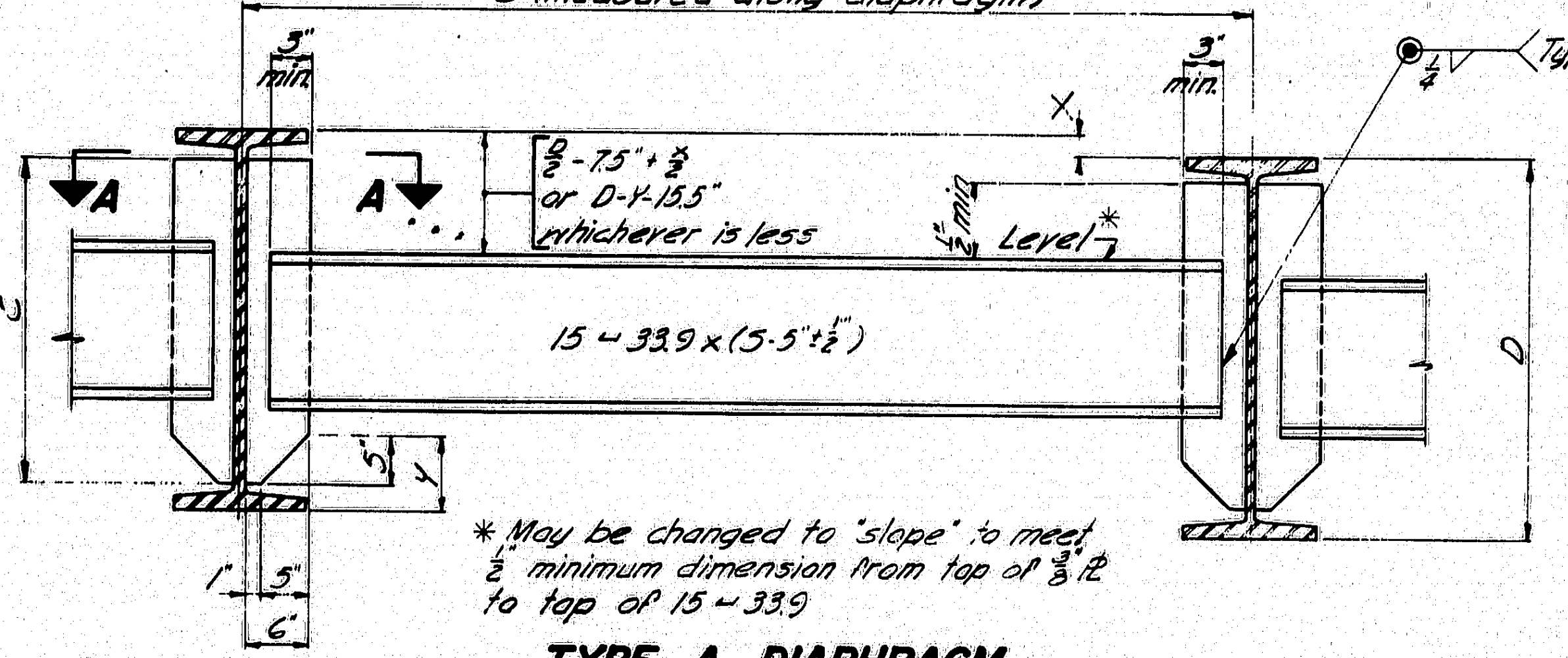
STANDARD DETAILS
(BD 111 - 69)

TRAFFIC CONTROL DEVICES
FOR BRIDGE PROJECTS ON 2-LANE HIGHWAYS

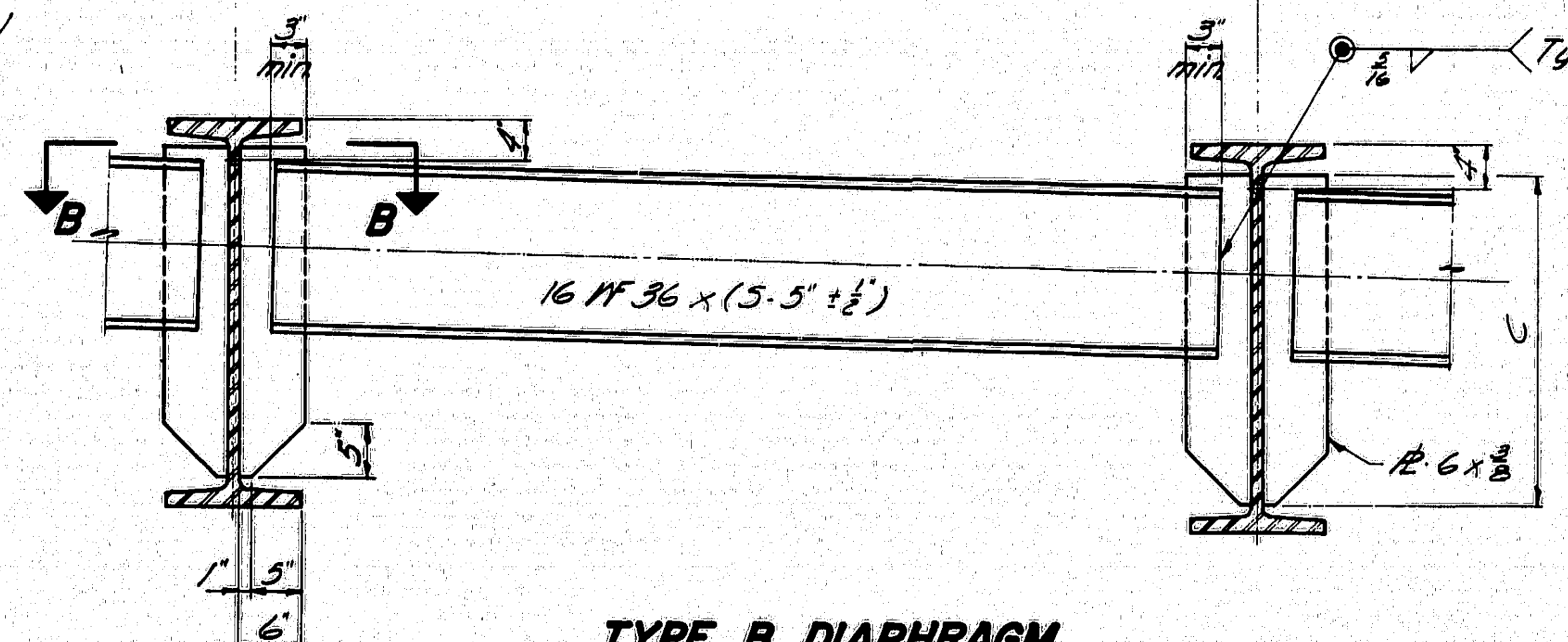
JUNE 1969

151-152 6221 BERWICK

B.P.R. DIV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	16	22

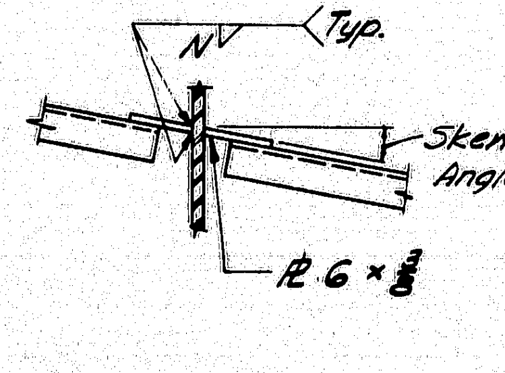

S (measured along diaphragm)
3" min.
Typical
1/4
A
A
D/2 - 7.5" + X/2 or D-Y-15.5" whichever is less
X
1/2" min.
Level*
15 ⌴ 33.9 x (S-5" ± 1/2")
C
D
5"
Y
1"
5"
6"
* May be changed to "slope" to meet 1/2" minimum dimension from top of 3/8" ℞ to top of 15 ⌴ 33.9

TYPE A DIAPHRAGM



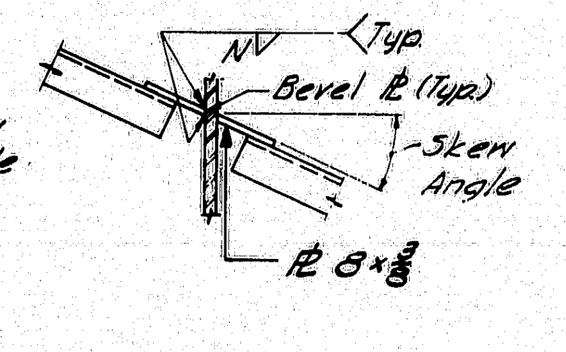
TYPE B DIAPHRAGM

Welding 6 x 3/8 plates to web same as for Type A Diaphragm.



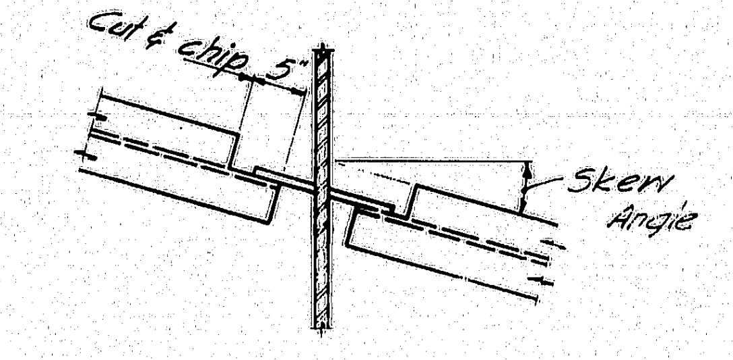
SECTION A-A

Skew Angle 0° to 10°-00'



SECTION A-A

Skew Angle over 10°-00' to 20°-00'

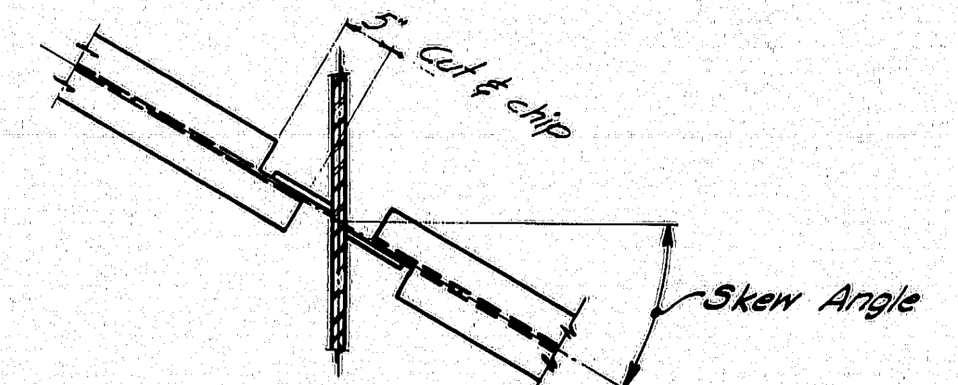


SECTION B-B

Skew Angle 0° to 10°-00'

NOTE

See design details for diaphragm type, location and skew.

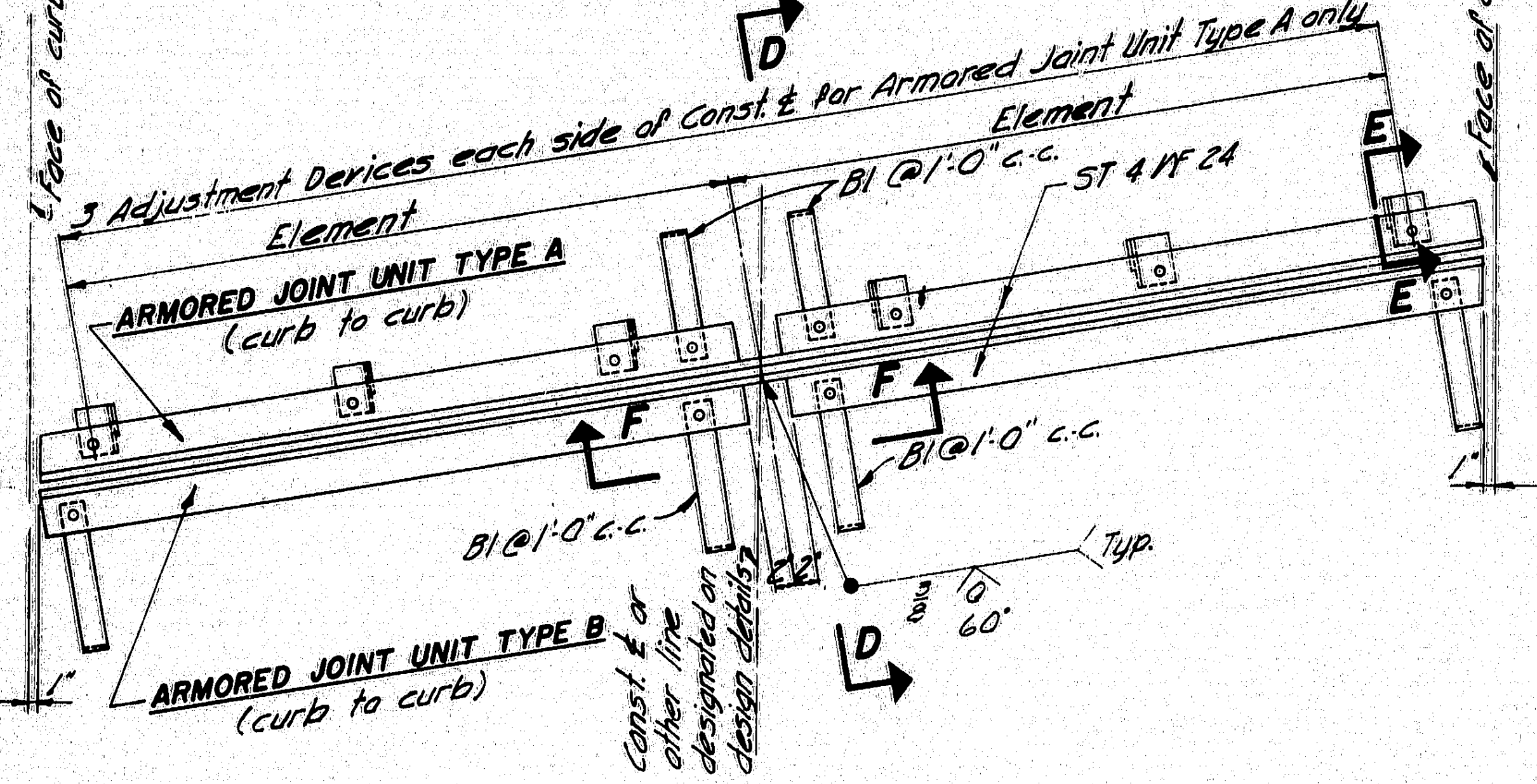


SECTION B-B

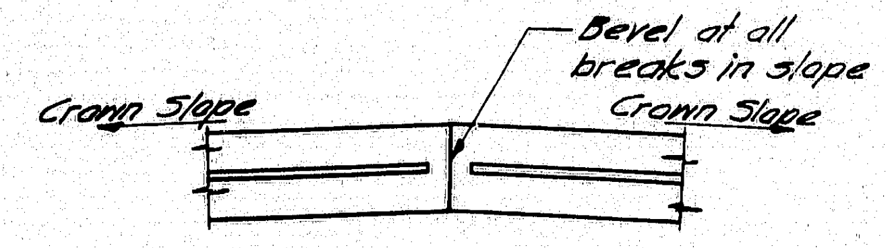
Skew Angle over 10°-00'

FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM PLATES		
BEAM	C	N
27 WF 84 to 114 incl.	1'-11"	1/4"
30 WF 99 to 132 incl.	2'-2"	1/4"
33 WF 118 to 152 incl.	2'-5"	1/4"
36 WF 135 to 194 incl.	2'-7"	1/4"
36 WF 230 to 300 incl.	2'-6"	5/16"

DIAPHRAGMS


℄ Face of curb
℄ Face of curb
D
D
3 Adjustment Devices each side of Const. ℄ for Armored Joint Unit Type A only
Element
Element
B1 @ 1'-0" c.c.
ST 4 WF 24
E
E
ARMORED JOINT UNIT TYPE A (curb to curb)
F
F
B1 @ 1'-0" c.c.
B1 @ 1'-0" c.c.
2"
Typ.
60°
1"
1"
ARMORED JOINT UNIT TYPE B (curb to curb)
Const. ℄ or other line designated on design details

PLAN



SECTION F-F

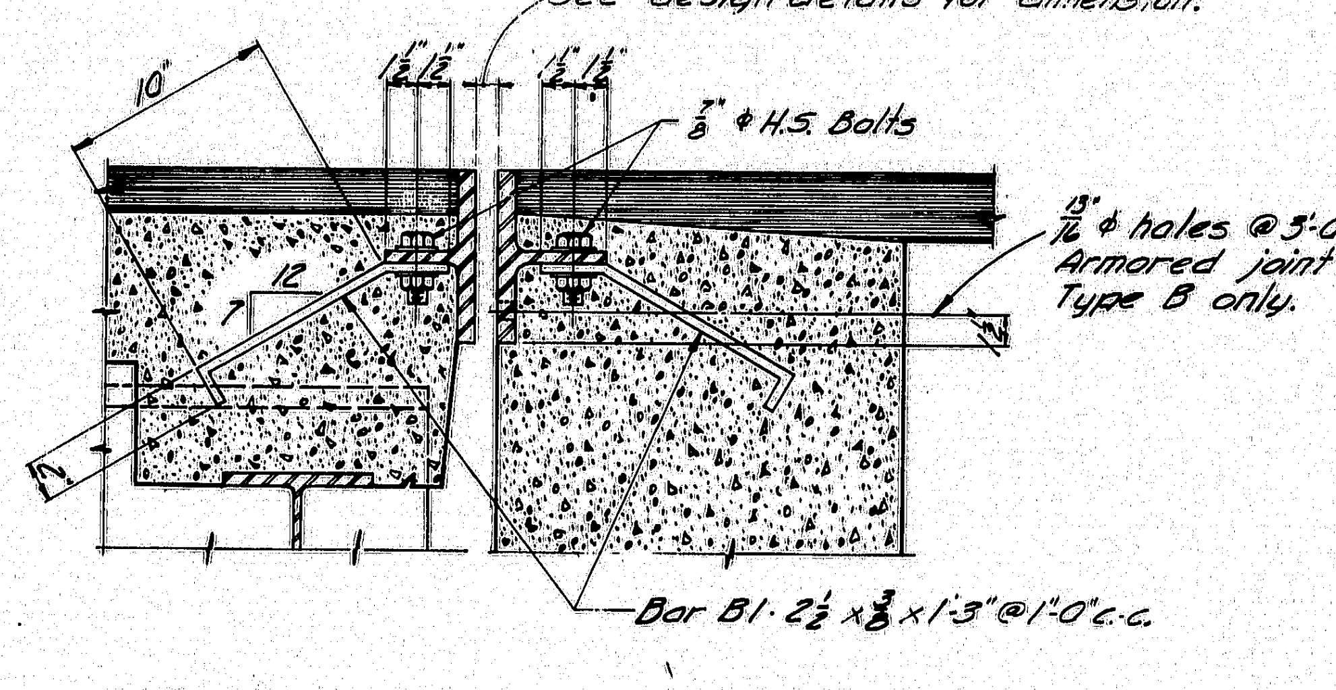
Note: See design details for Constr. ℄ to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

NOTE

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

ARMORED JOINT

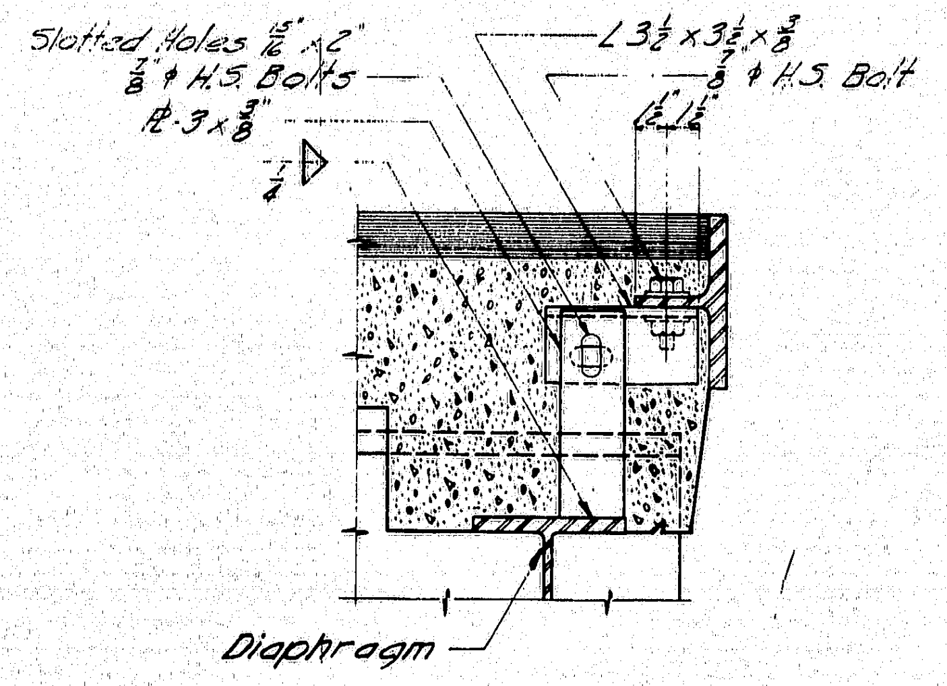
An armored joint consists of two armored joint units. See note 1.


See design details for dimension.
10"
1 1/2" 1 1/2"
1 1/2" 1 1/2"
7/8" ϕ H.S. Bolts
12
7
2"
13/16" ϕ holes @ 3'-0" c.c. Armored joint Unit Type B only.
Bar B1 · 2 1/2 x 3/8 x 1'-3" @ 1'-0" c.c.

ARMORED JOINT UNIT TYPE A

ARMORED JOINT UNIT TYPE B

SECTION D-D

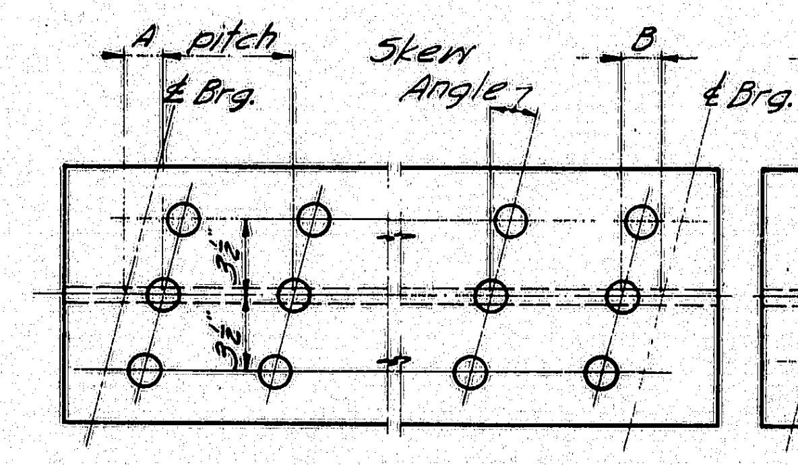


SECTION E-E

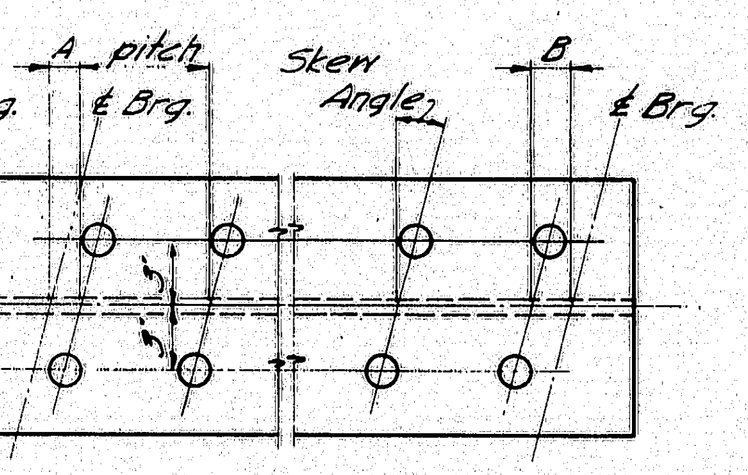
Showing Adjustment Device Armored Joint Unit Type A only - After Unit is in final position weld 3/8 ℞ to angle with 1/4" fillet

SHEAR CONNECTOR NOTE

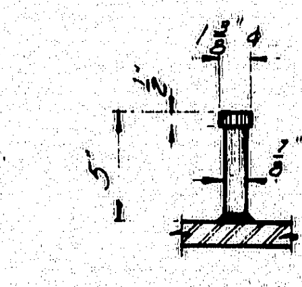
The connectors may be either steel studs or spirally formed bars. At the request of the Contractor a plan for using spirally formed bars will be provided.



TRIPLE STUDS



DOUBLE STUDS

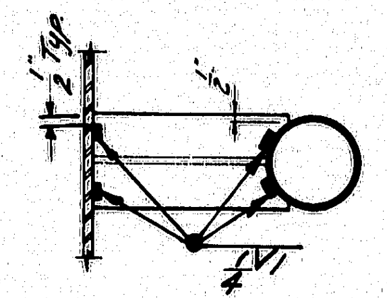


STUD DETAIL

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.

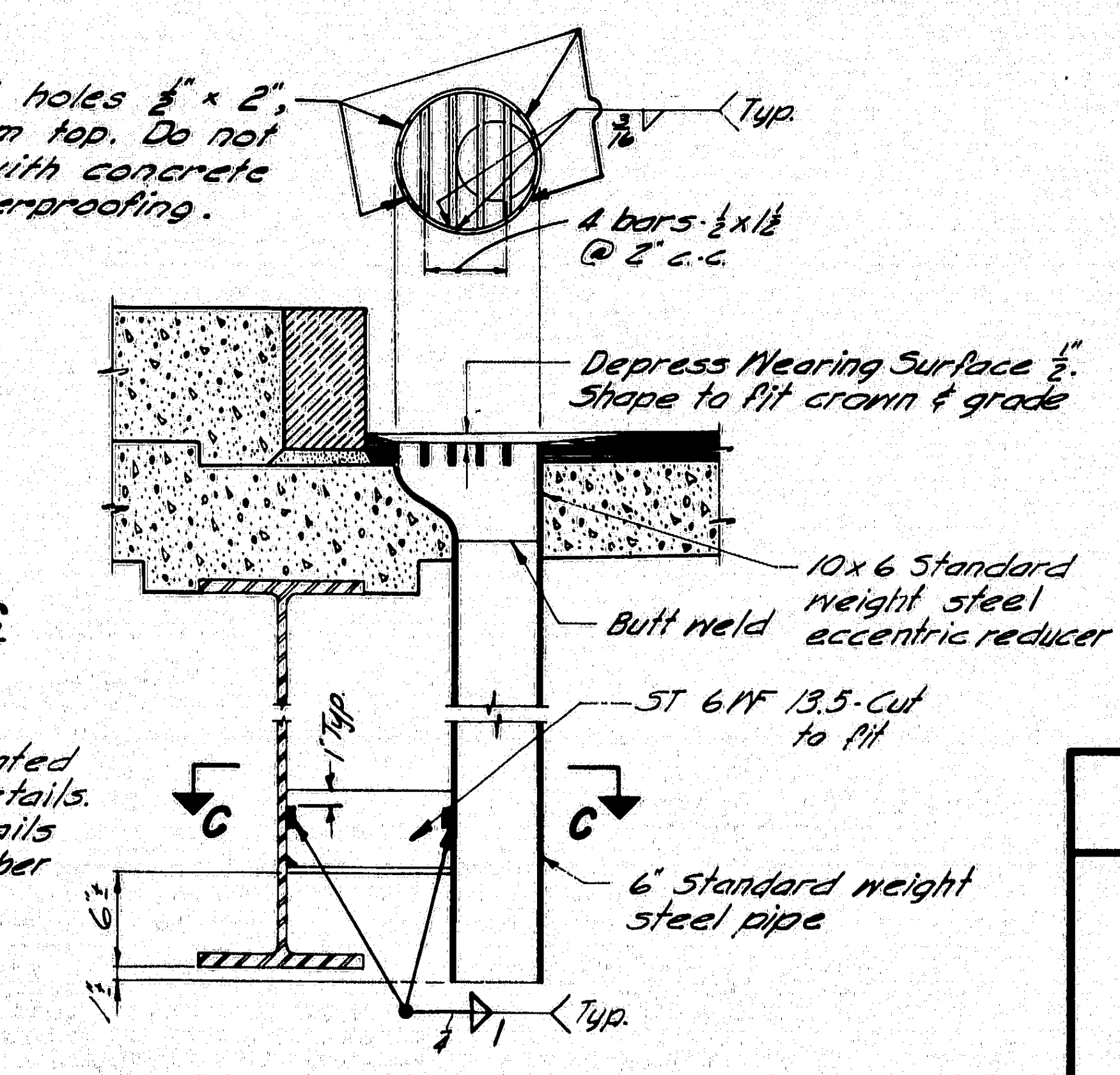
SHEAR CONNECTORS



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.


Cut 4 holes 1/2" x 2", 1 3/4" from top. Do not cover with concrete or waterproofing.
3/16
Typ.
4 bars · 1/2 x 1 1/2 @ 2" c.c.
Depress Wearing Surface 1/2". Shape to fit crown & grade
10 x 6 Standard weight steel eccentric reducer
Butt weld
ST 6 WF 13.5 - Cut to fit
1" Typ.
C
C
6" Standard weight steel pipe
6 1/4"
1 1/4"
1/4
Typ.

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.

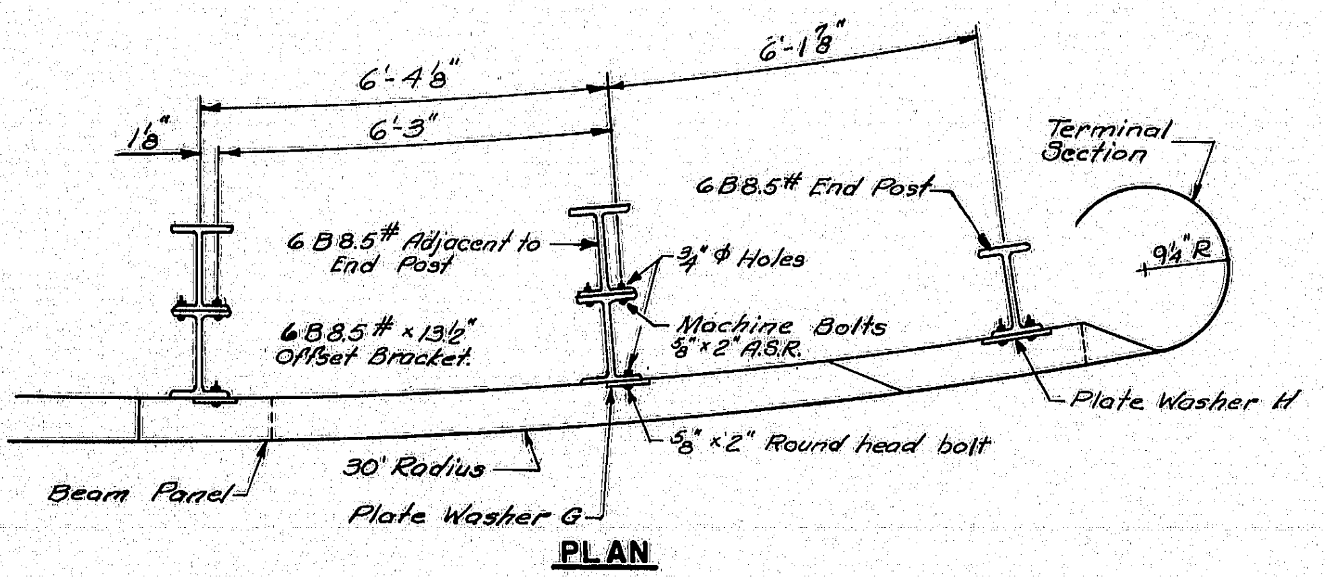
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 104-66)
DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN

SEPTEMBER 1966

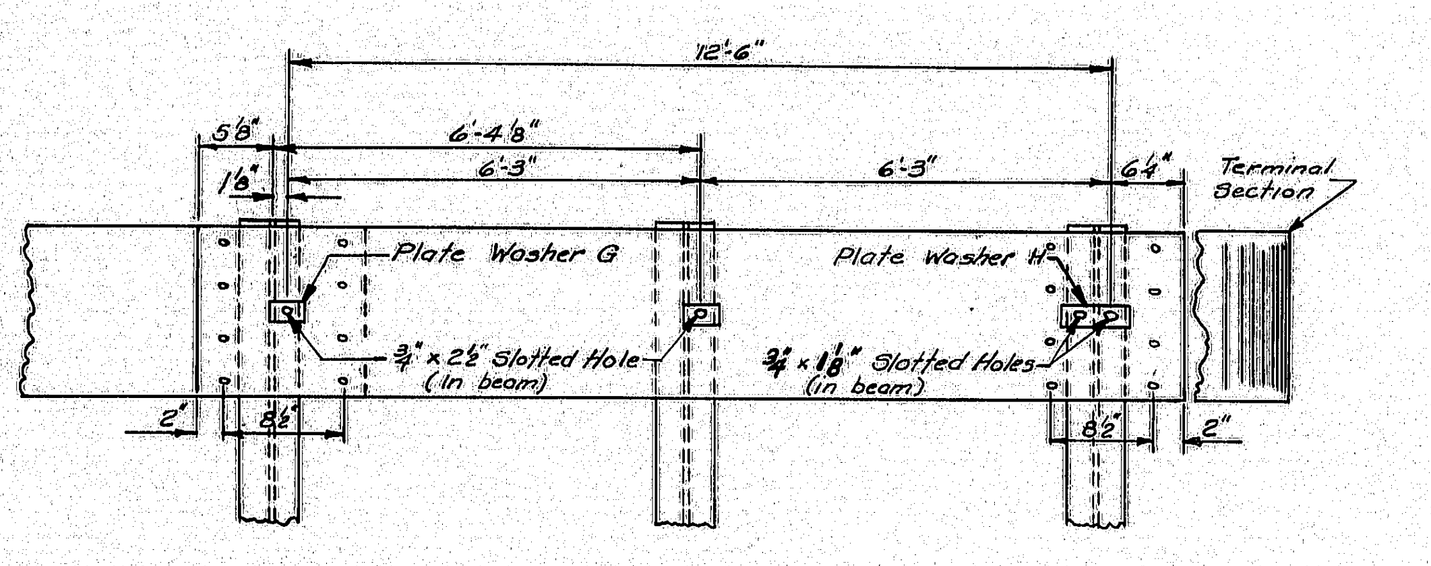
151-153 6221 BERWICK

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	17	22



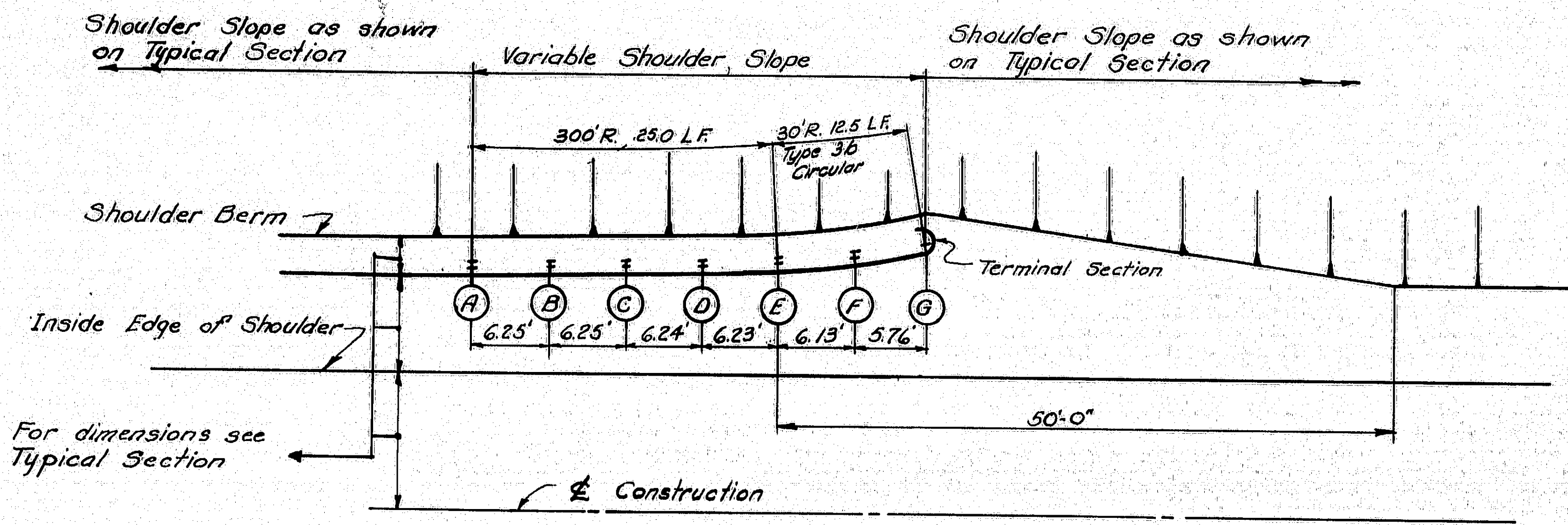
PLAN

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



ELEVATION

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


Shoulder Slope as shown on Typical Section
Variable Shoulder Slope
Shoulder Slope as shown on Typical Section
300'R, 25.0 L.F.
30'R, 12.5 L.F. Type 3b Circular
Shoulder Berm
Terminal Section
A
B
C
D
E
F
G
Inside Edge of Shoulder
6.25'
6.25'
6.24'
6.23'
6.13'
5.76'
50'-0"
For dimensions see Typical Section
℄ Construction

Note:
Offset in feet from the normal face of the Guard Rail.

Post	Offset
A	0.00'
B	0.06'
C	0.26'
D	0.59'
E	1.04'
F	2.20'
G	4.61'

GUARD RAIL END TRANSITION

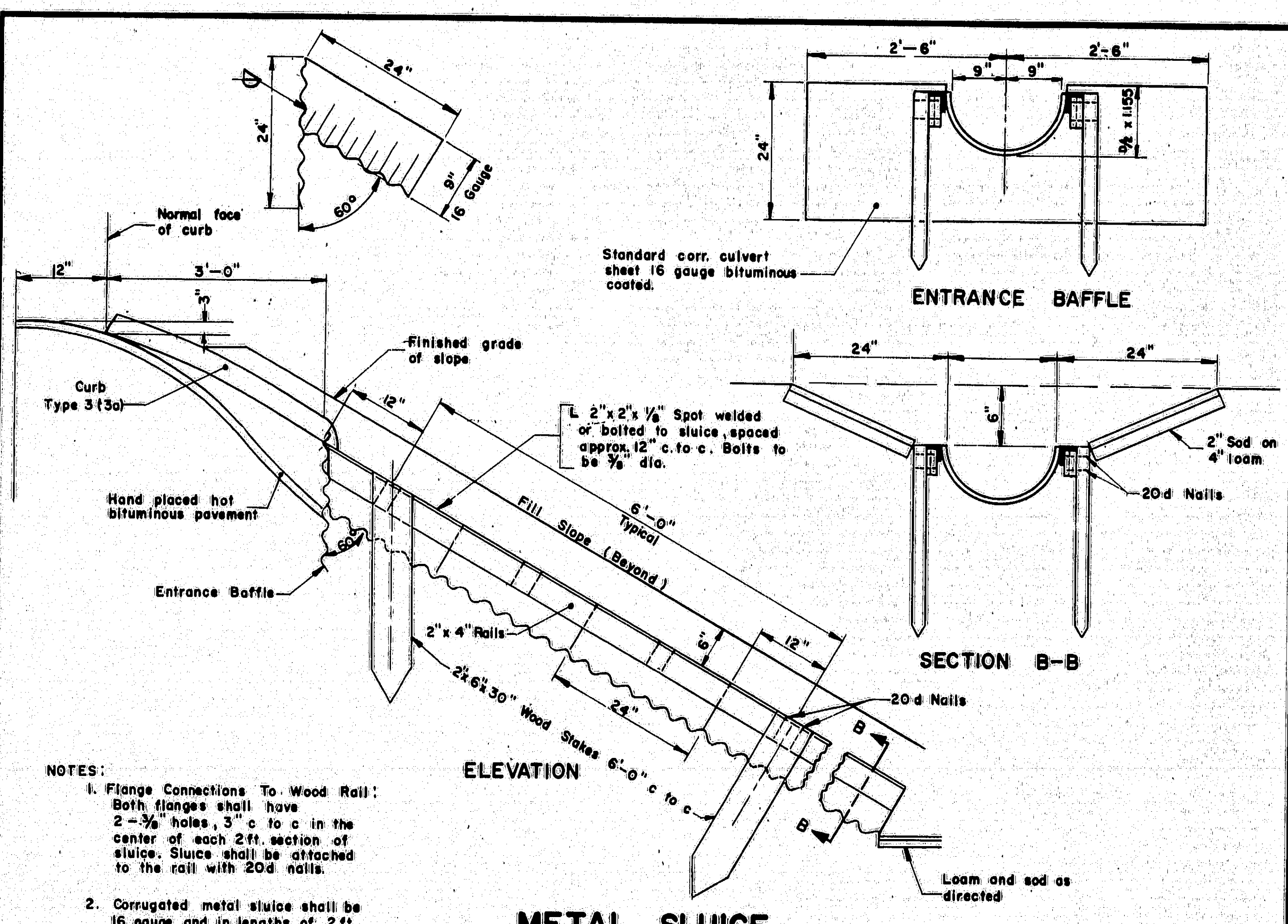
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS
(BD 110-69)
GUARD RAIL-TYPE 3b
(FLARED ENDS)

FEBRUARY 1969

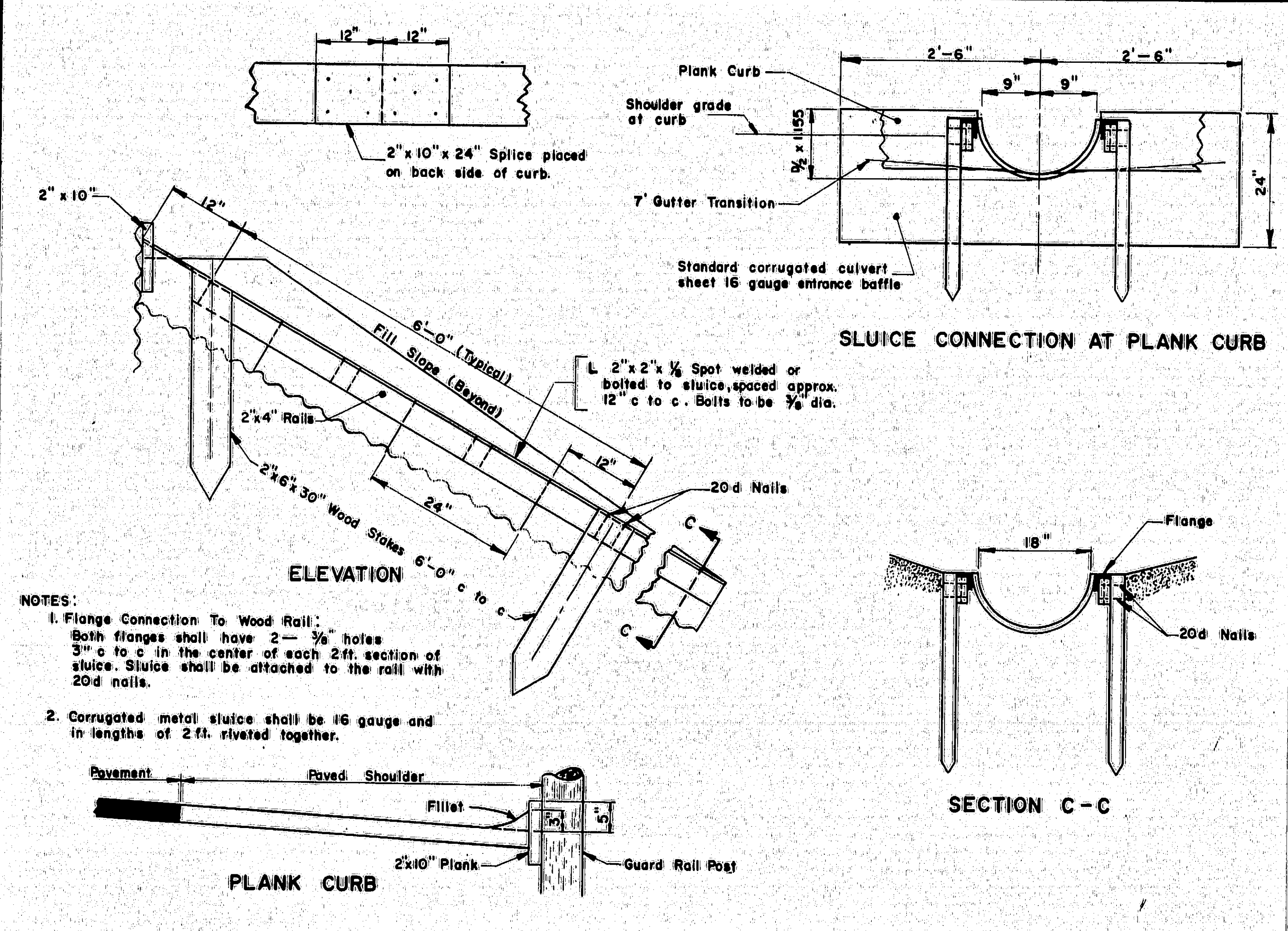
6221 BERWICK 151-154

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
I	MAINE	6221	18	22



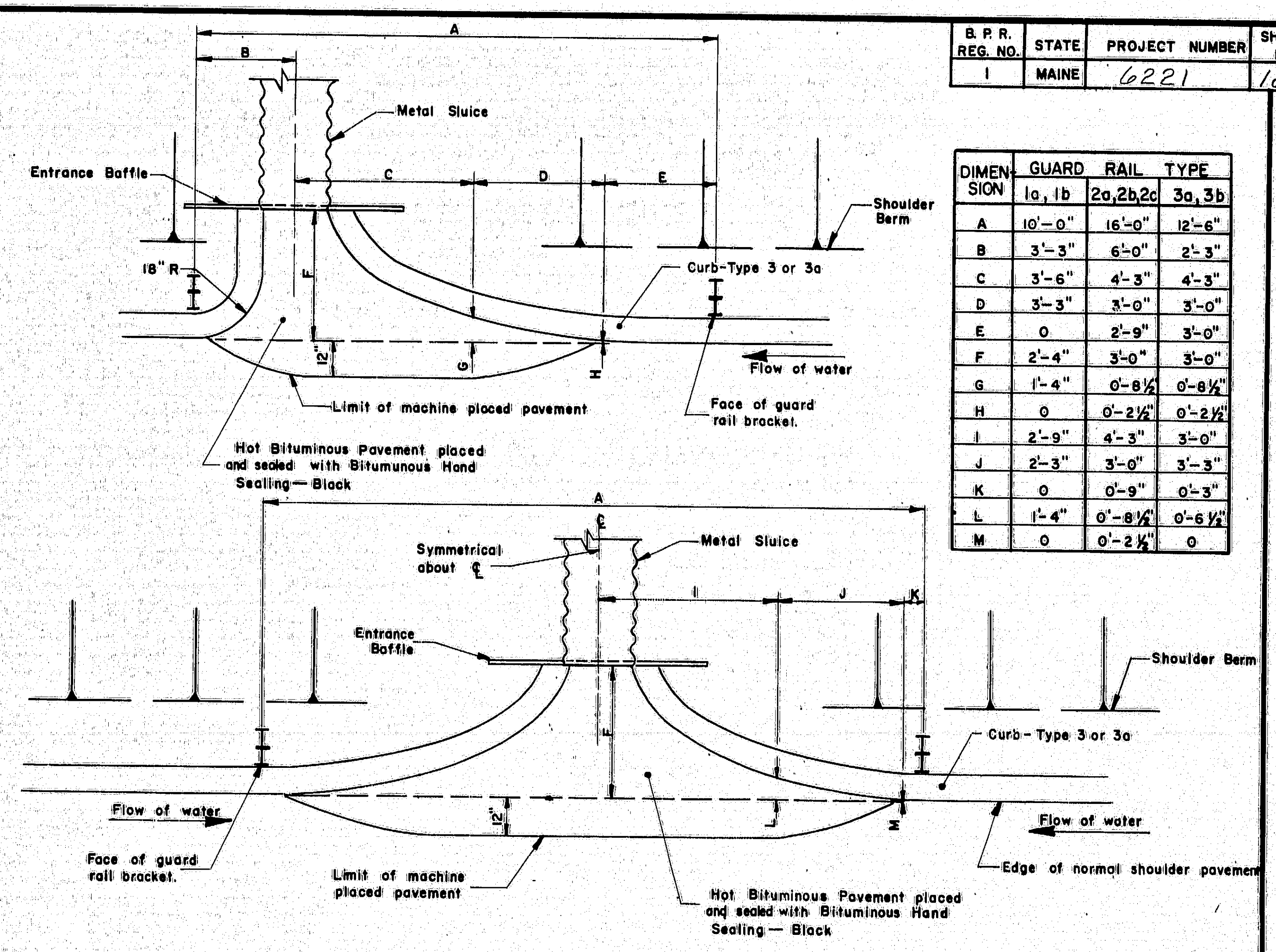
NOTES:
1. Flange Connections To Wood Rail: Both flanges shall have 2 - 3/8" holes, 3" c to c in the center of each 2 ft. section of sluice. Sluice shall be attached to the rail with 20d nails.
2. Corrugated metal sluice shall be 16 gauge and in lengths of 2 ft. riveted together.

METAL SLUICE WITH CURB TYPE 3 or 3a


12"
12"
2" x 10" x 24" Splice placed on back side of curb.
2" x 10"
12"
6'-0" (Typical)
Fill Slope (Beyond)
L 2" x 2" x 1/8" Spot welded or bolted to sluice, spaced approx. 12" c to c. Bolts to be 3/8" dia.
2" x 4" Rails
2" x 6" x 30" Wood Stakes 6'-0" c to c
24"
12"
20d Nails
C
C
ELEVATION
Pavement
Paved Shoulder
Fillet
3"
5"
2" x 10" Plank
Guard Rail Post
PLANK CURB
2'-6"
2'-6"
9"
9"
Plank Curb
Shoulder grade at curb
9 1/2 x 1155
7' Gutter Transition
24"
Standard corrugated culvert sheet 16 gauge entrance baffle
SLUICE CONNECTION AT PLANK CURB
18"
Flange
20d Nails
SECTION C-C

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


A
B
Metal Sluice
Entrance Baffle
C
D
E
Shoulder Berm
18" R
F
Curb-Type 3 or 3a
12"
G
H
Flow of water
Limit of machine placed pavement
Face of guard rail bracket.
Hot Bituminous Pavement placed and sealed with Bitumunous Hand Sealing — Black
A
Symmetrical about ℄
Metal Sluice
I
J
K
Entrance Baffle
Shoulder Berm
F
Curb - Type 3 or 3a
Flow of water
12"
L
M
Flow of water
Face of guard rail bracket.
Limit of machine placed pavement
Hot Bituminous Pavement placed and sealed with Bituminous Hand Sealing — Block
Edge of normal shoulder pavement

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'-8 1/2"	0'-8 1/2"
H	0	0'-2 1/2"	0'-2 1/2"
I	2'-9"	4'-3"	3'-0"
J	2'-3"	3'-0"	3'-3"
K	0	0'-9"	0'-3"
L	1'-4"	0'-8 1/2"	0'-6 1/2"
M	0	0'-2 1/2"	0

SLUICE ENTRANCE DETAIL

CIRCULAR

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

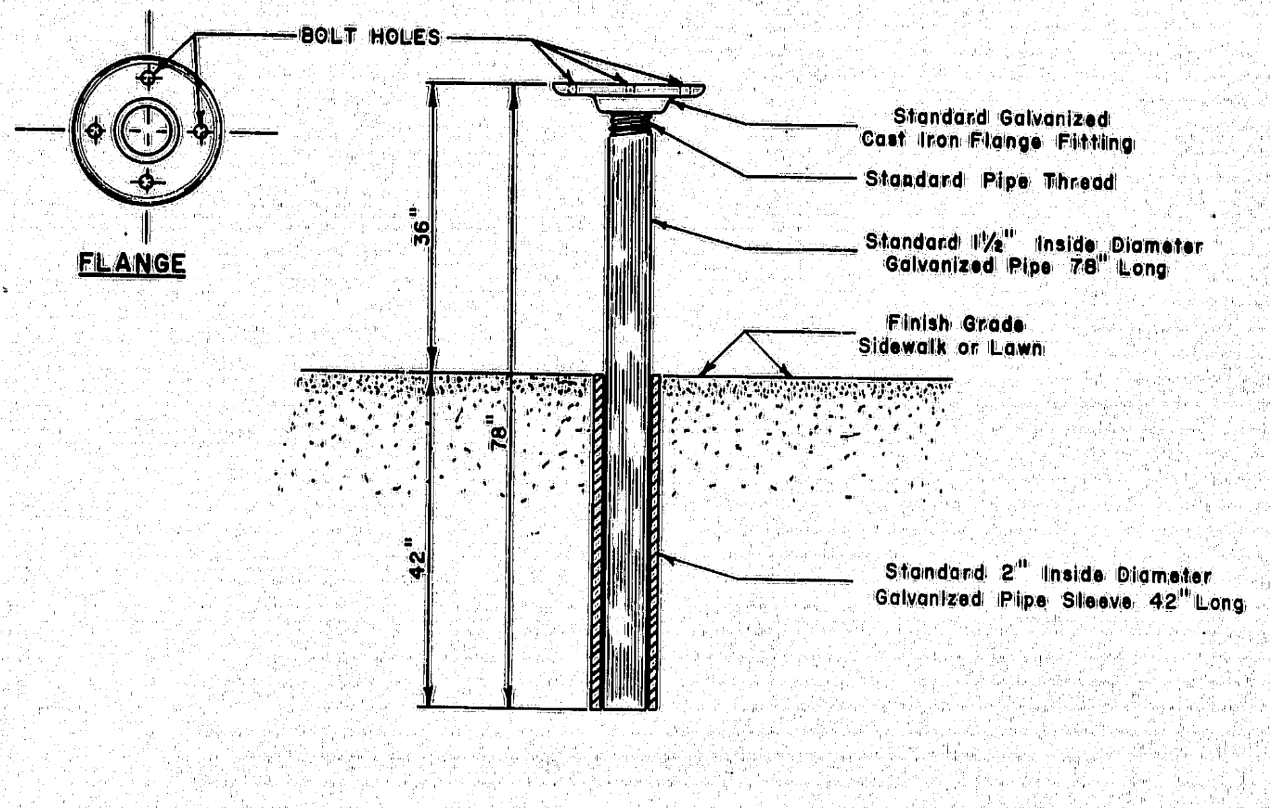
PIPE ARCH

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

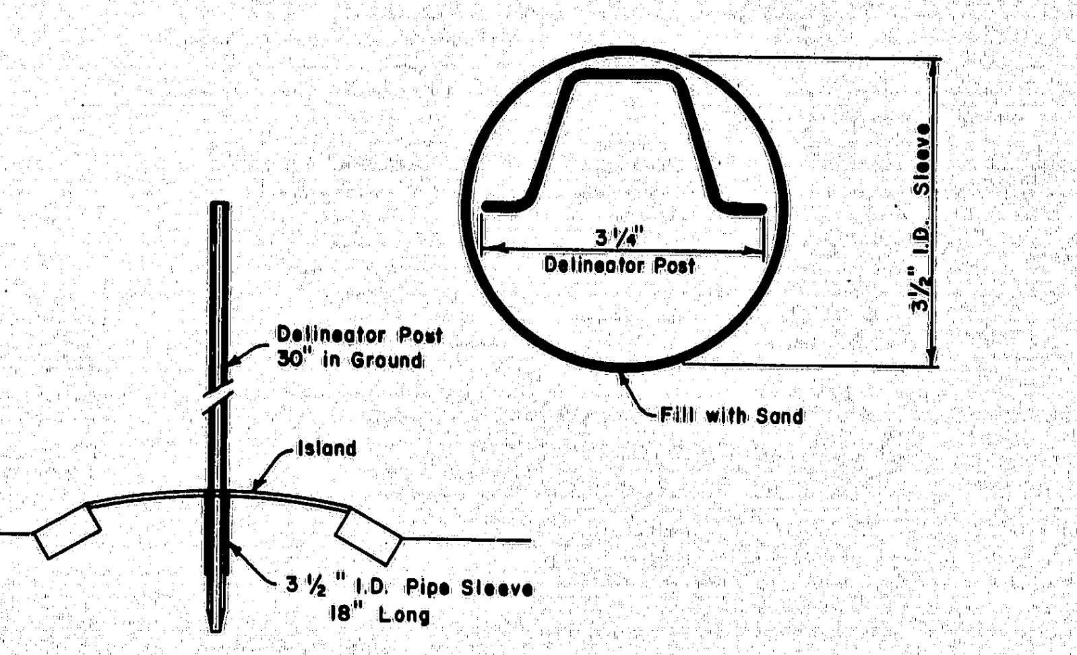
CMP = Corrugated Metal Pipe
BCCMP = Bituminous Coated Corrugated Metal Pipe
CAP = Corrugated Aluminum Pipe

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.

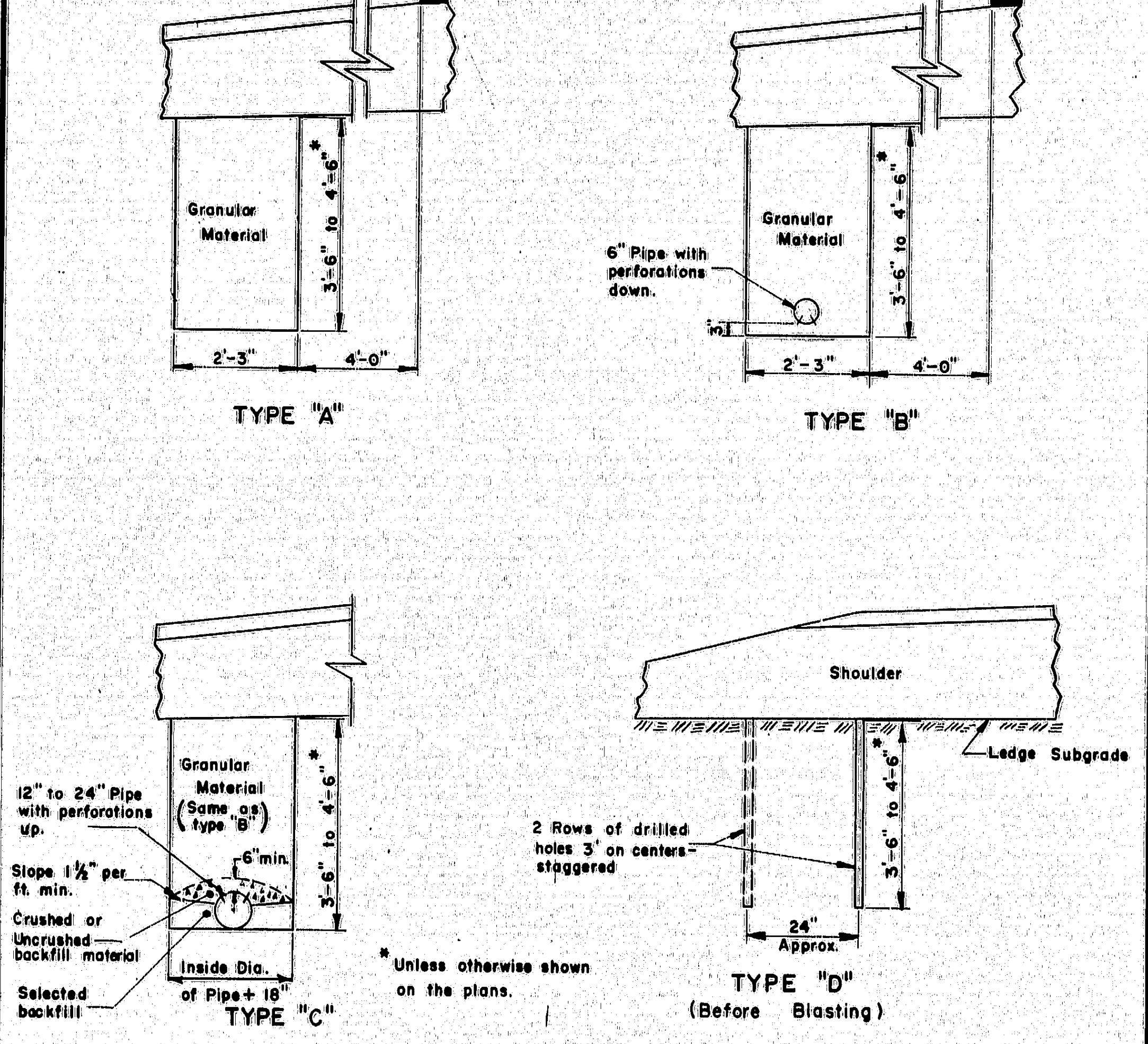
CULVERT PIPE DATA


BOLT HOLES
FLANGE
Standard Galvanized Cast Iron Flange Fitting
Standard Pipe Thread
Standard 1 1/2" Inside Diameter Galvanized Pipe 78" Long
36"
78"
Finish Grade Sidewalk or Lawn
42"
Standard 2" Inside Diameter Galvanized Pipe Sleeve 42" Long

SINGLE POST TYPE 1C

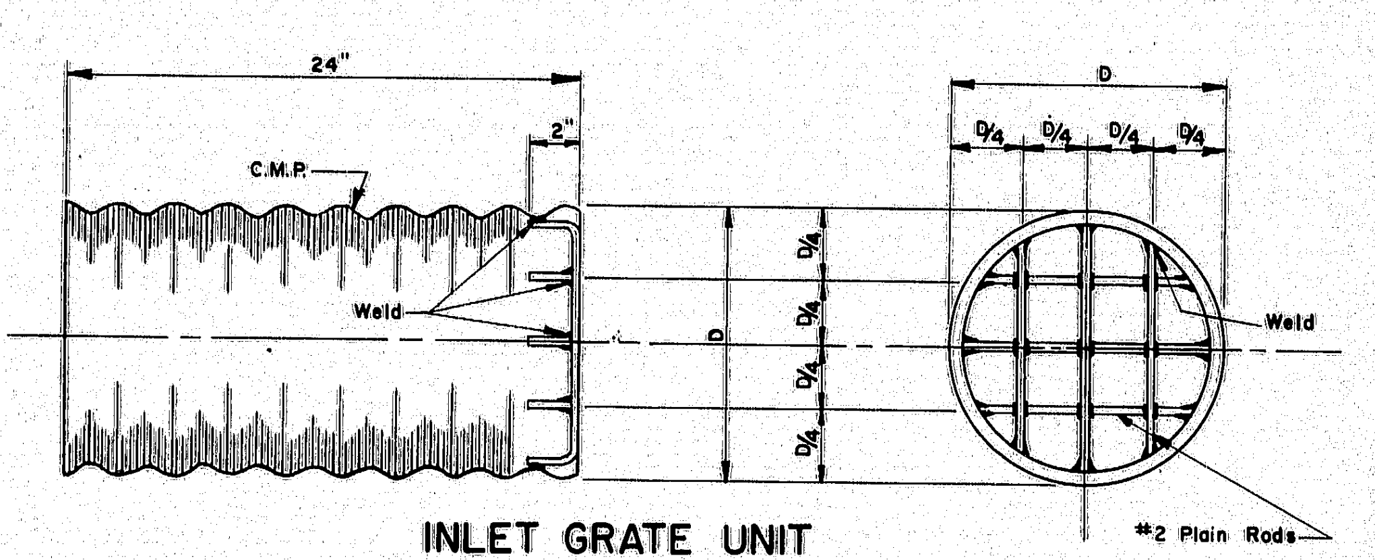

3 1/4"
Delineator Post
3 1/2" I.D. Sleeve
Fill with Sand
Delineator Post 30" in Ground
Island
3 1/2" I.D. Pipe Sleeve 18" Long

PIPE SLEEVE FOR DELINEATOR POST

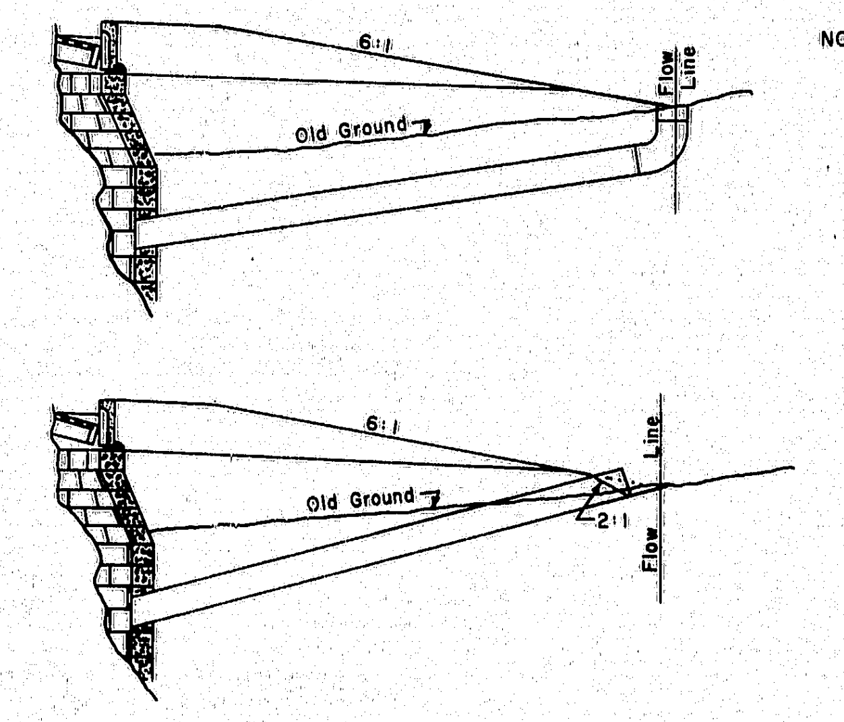

Edge of Pavement
Granular Material
3'-6" to 4'-6" *
2'-3"
4'-0"
TYPE "A"
Edge of Pavement
Granular Material
6" Pipe with perforations down.
3'-6" to 4'-6" *
2'-3"
4'-0"
TYPE "B"
Granular Material (Same as type "B")
12" to 24" Pipe with perforations up.
6" min.
Slope 1 1/2" per ft. min.
Crushed or Uncrushed backfill material
Selected backfill
Inside Dia. of Pipe + 18"
3'-6" to 4'-6" *
TYPE "C"
* Unless otherwise shown on the plans.
Shoulder
Ledge Subgrade
2 Rows of drilled holes 3' on centers-staggered
3'-6" to 4'-6" *
24" Approx.
TYPE "D" (Before Blasting)

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

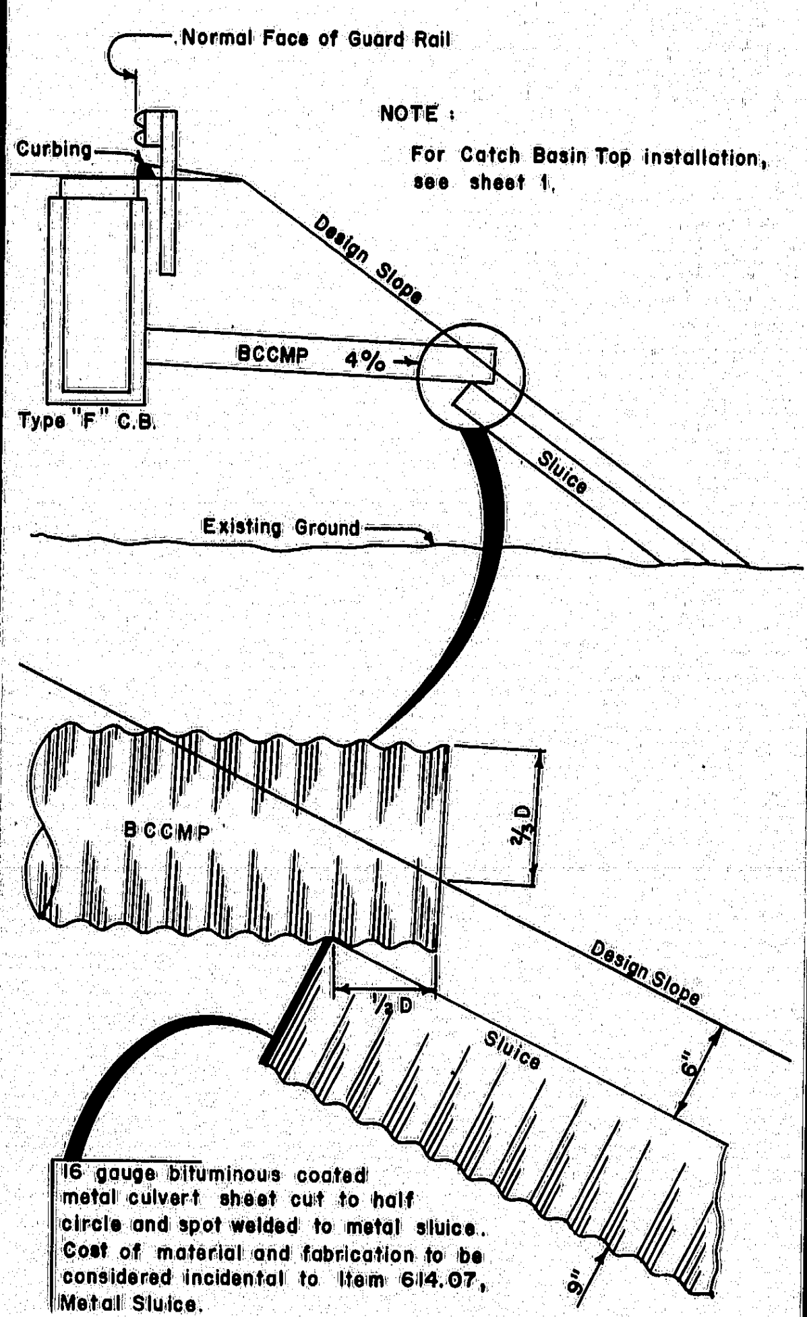
MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

STANDARD DETAILS

METAL SLUICE — UNDERDRAIN —
CULVERT PIPE DATA
CULVERT INLET GRATE

AUG. 1969 ⟨2⟩

151-155 Berwick 6221



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

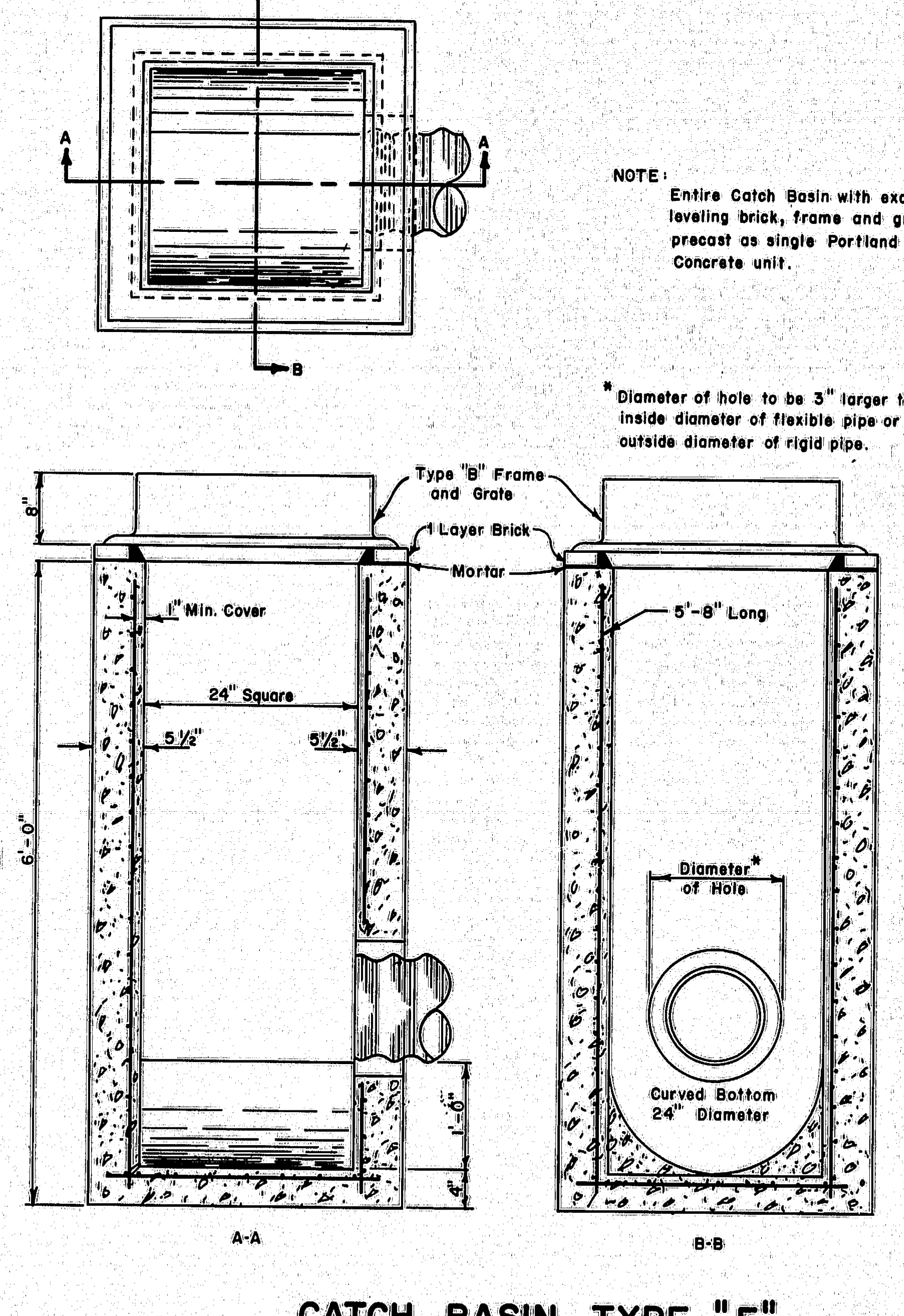
16 gauge bituminous coated metal culvert sheet cut to half circle and spot welded to metal sluice. Cost of material and fabrication to be considered incidental to Item 614.07, Metal Sluice.

TYPE "F" CATCH BASIN WITH OUTLET PIPE

(SLUICE OPTIONAL)

(SEE SHEET NO. 2 FOR STANDARD SLUICE DRAWING)

3-A



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

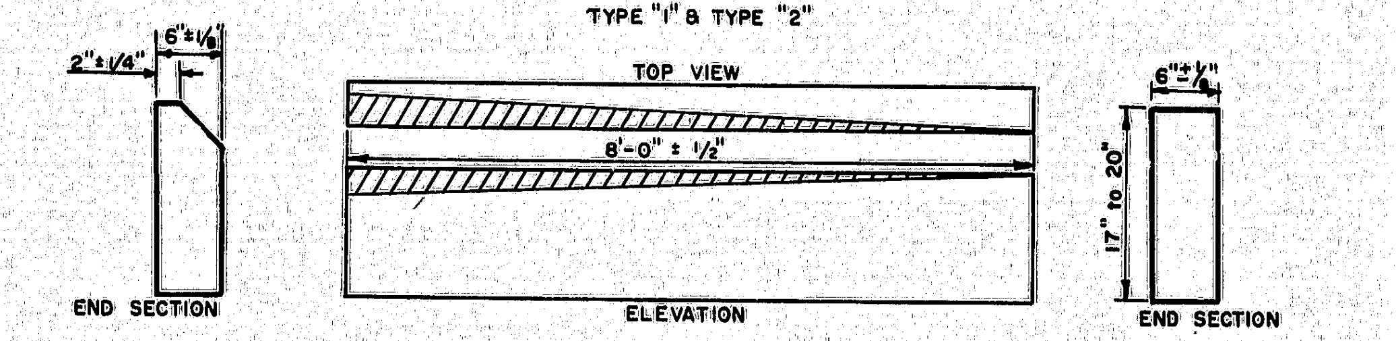
* Diameter of hole to be 3" larger than the inside diameter of flexible pipe or the outside diameter of rigid pipe.

CATCH BASIN TYPE "F"

3-B

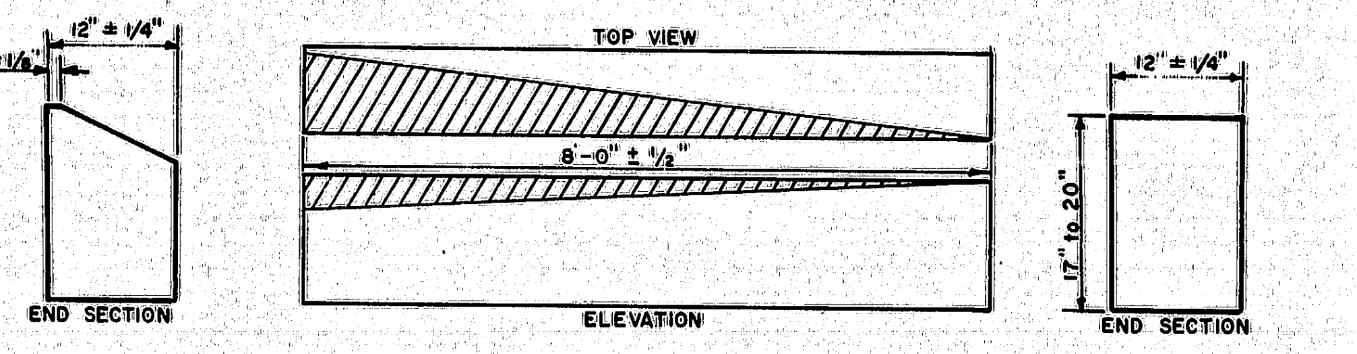
TRANSITION SECTION "A"

Vertical to Sloped
TYPE "1" & TYPE "2"



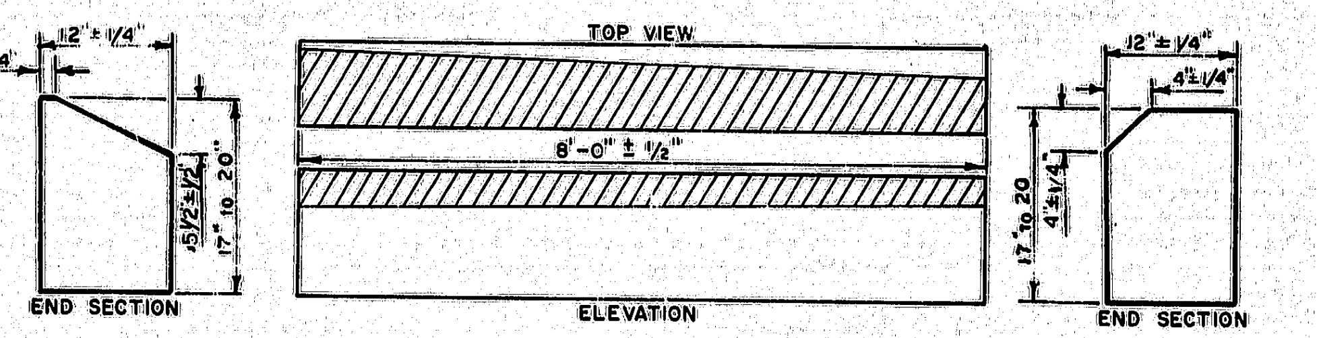
TRANSITION SECTION "B"

Curb type "5" to vertical type "1"
Curb type "6" to vertical type "2"



TRANSITION SECTION "C"

Curb type "5" to sloped type "1"
Curb type "6" to sloped type "2"

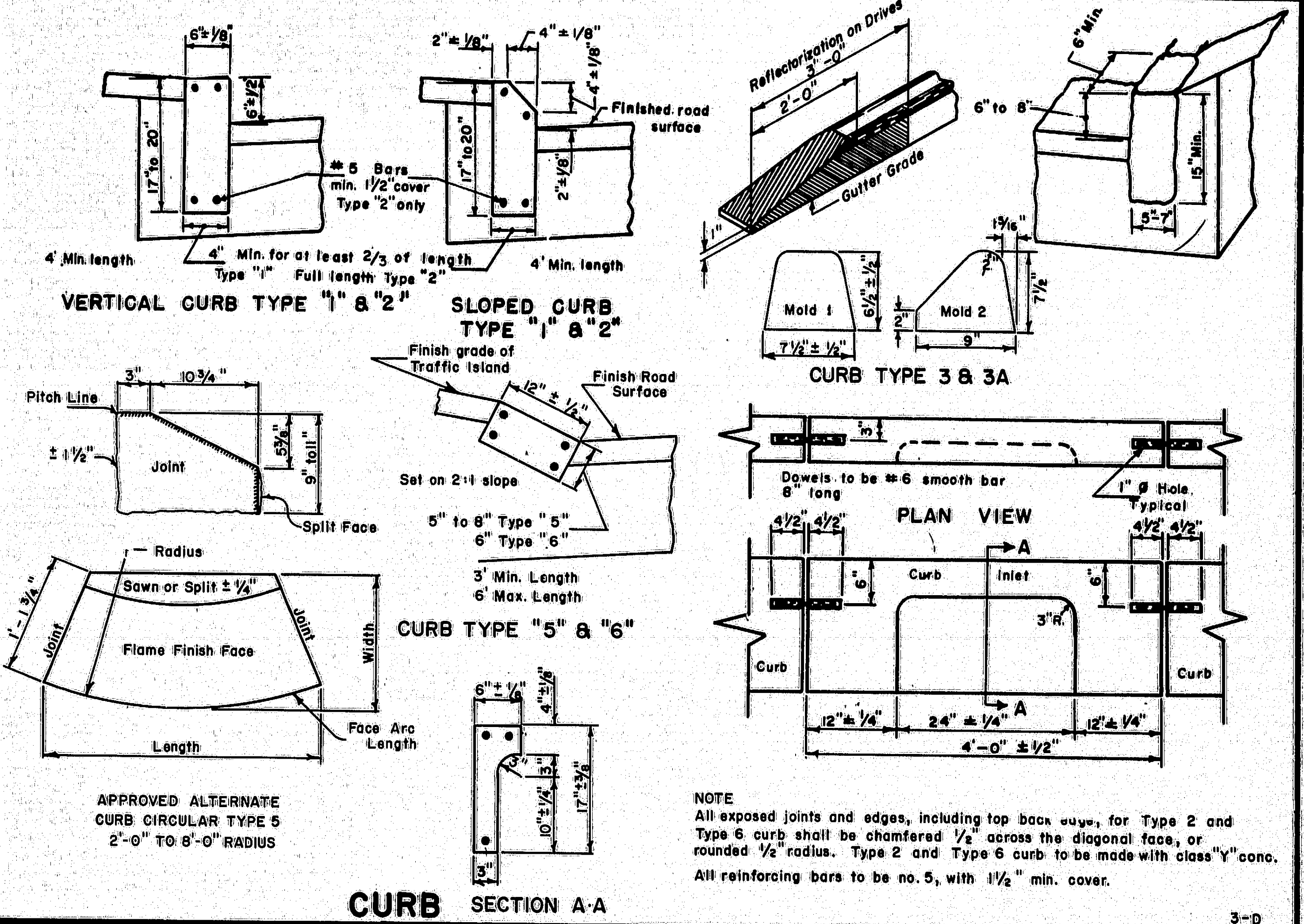


CURB TRANSITION

NOTE – TYPE 2 CURB
Precast concrete curb to be made with class "Y" concrete.
All reinf. bars to be # 5, 1 1/2" min. cover.

3-C

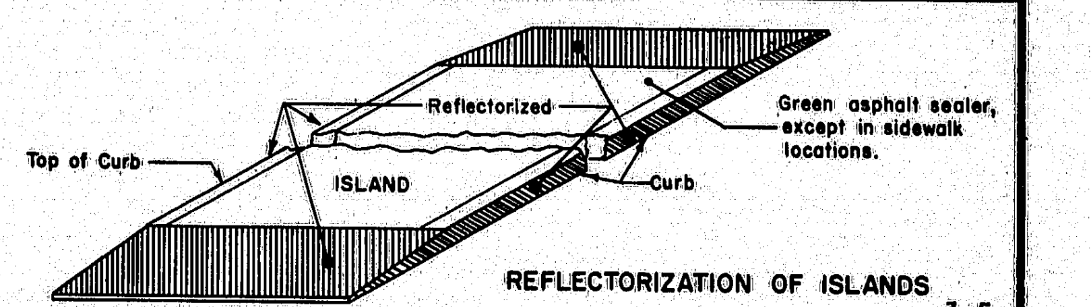
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	19	22



NOTE
All exposed joints and edges, including top back edge, for Type 2 and Type 6 curb shall be chamfered 1/2" across the diagonal face, or rounded 1/2" radius. Type 2 and Type 6 curb to be made with class "Y" conc.
All reinforcing bars to be no. 5, with 1 1/2" min. cover.

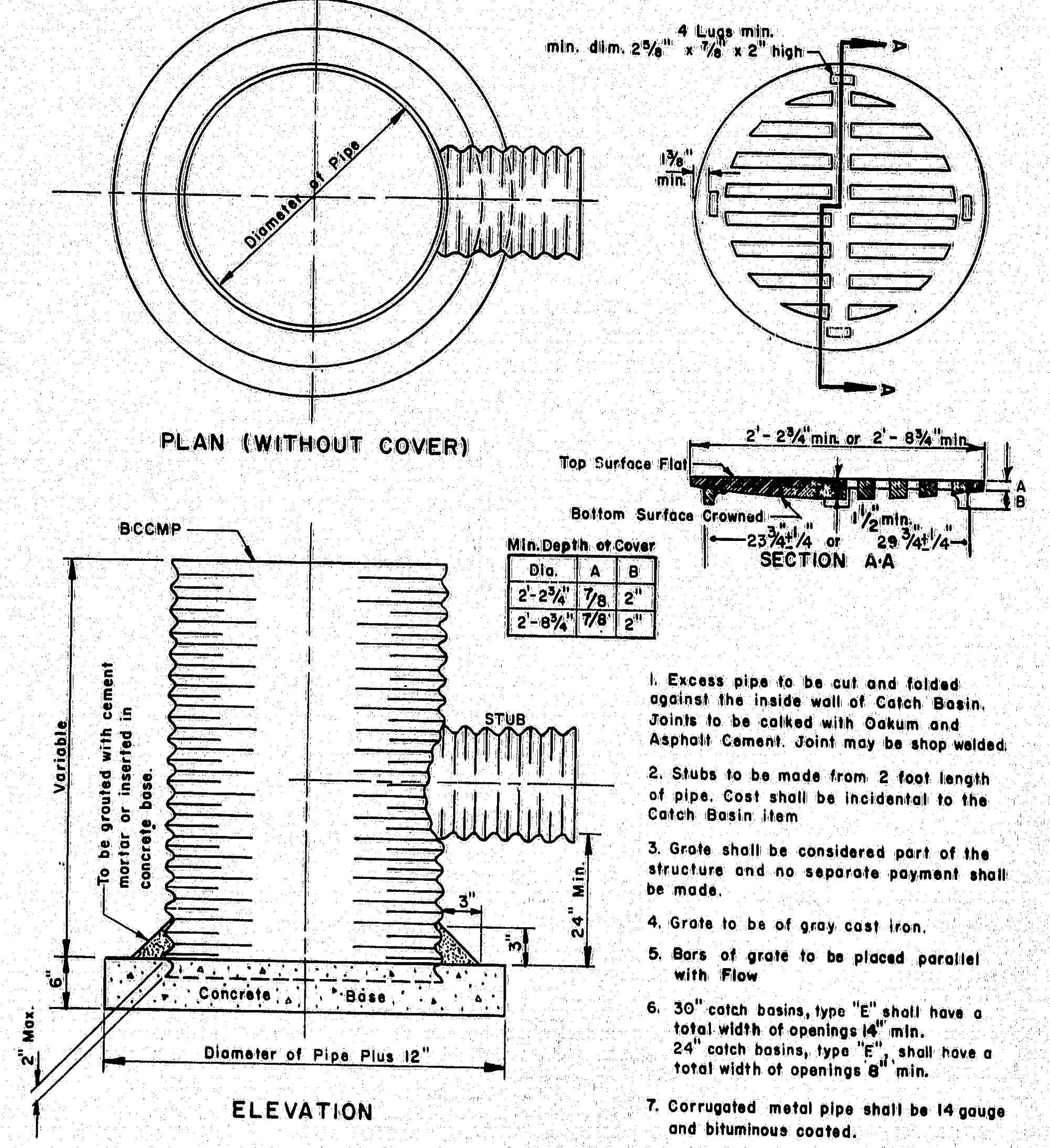
CURB

3-D



REFLECTORIZATION OF ISLANDS

3-E

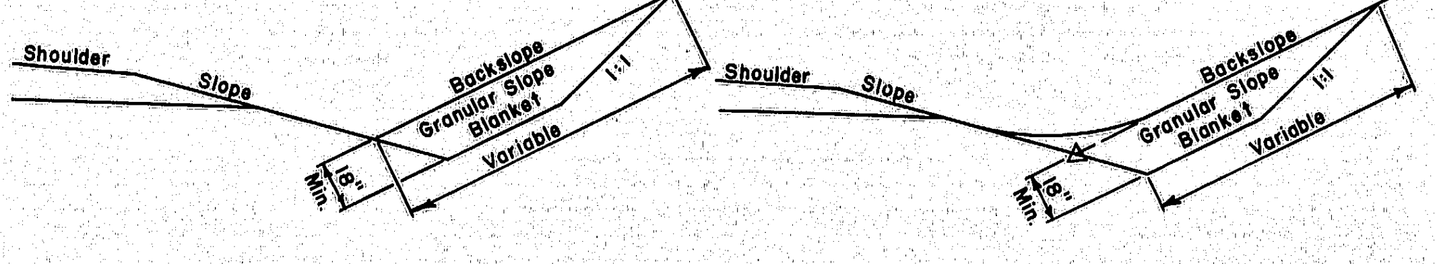

Diameter of Pipe
PLAN (WITHOUT COVER)
4 Lugs min.
min. dim. 2 5/8" x 7/8" x 2" high
1 3/8" min.
2'-2 3/4" min. or 2'-8 3/4" min.
Top Surface Flat
Bottom Surface Crowned
1 1/2" min.
23 3/4" ± 1/4" or 29 3/4" ± 1/4"
A
B
SECTION A-A
BCCMP
Variable
To be grouted with cement mortar or inserted in concrete base.
STUB
3"
3"
24" Min.
6"
Concrete Base
Diameter of Pipe Plus 12"
2" Max.
ELEVATION

Min. Depth of Cover		
Dia.	A	B
2'-2 3/4"	7/8	2"
2'-8 3/4"	7/8"	2"

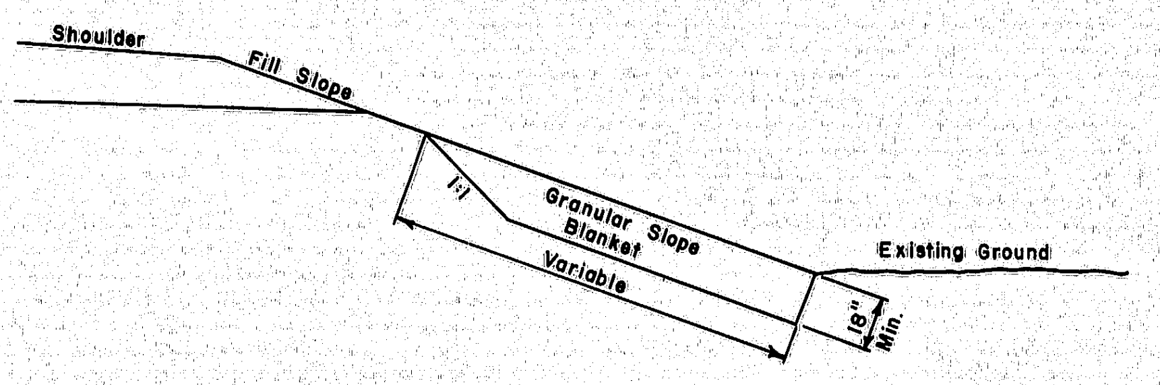
1. Excess pipe to be cut and folded against the inside wall of Catch Basin. Joints to be calked with Oakum and Asphalt Cement. Joint may be shop welded.
2. Stubs to be made from 2 foot length of pipe. Cost shall be incidental to the Catch Basin item.
3. Grate shall be considered part of the structure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

CATCH BASIN TYPE "E"

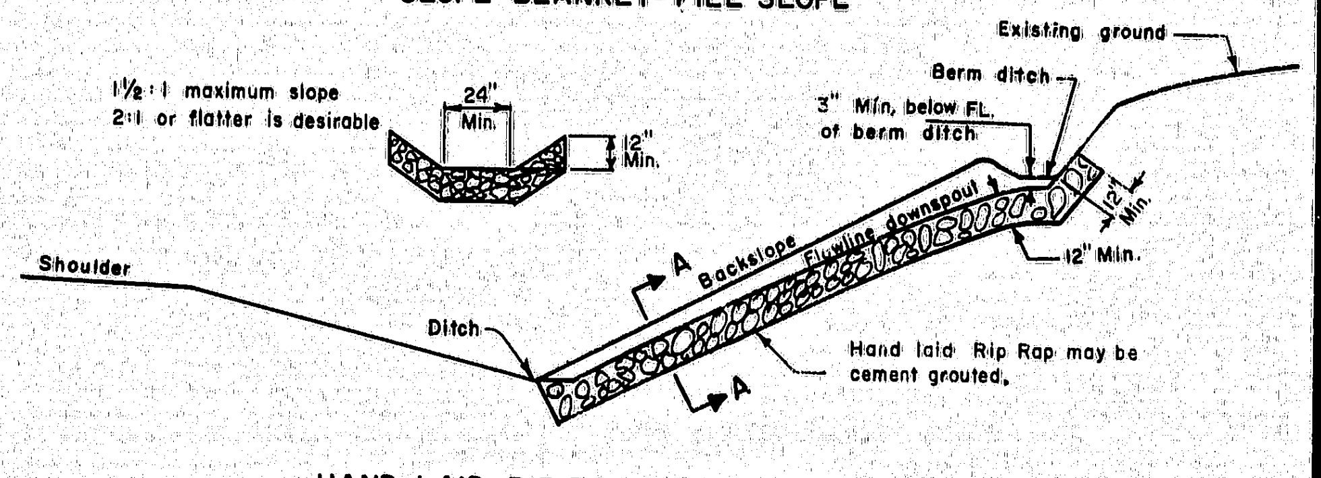
3-F



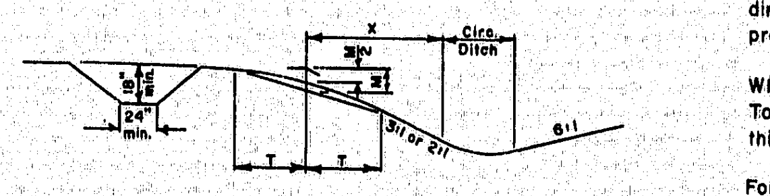
SLOPE BLANKET - BACKSLOPE



SLOPE BLANKET - FILL SLOPE



HAND LAID RIP RAP DOWNSPOUT



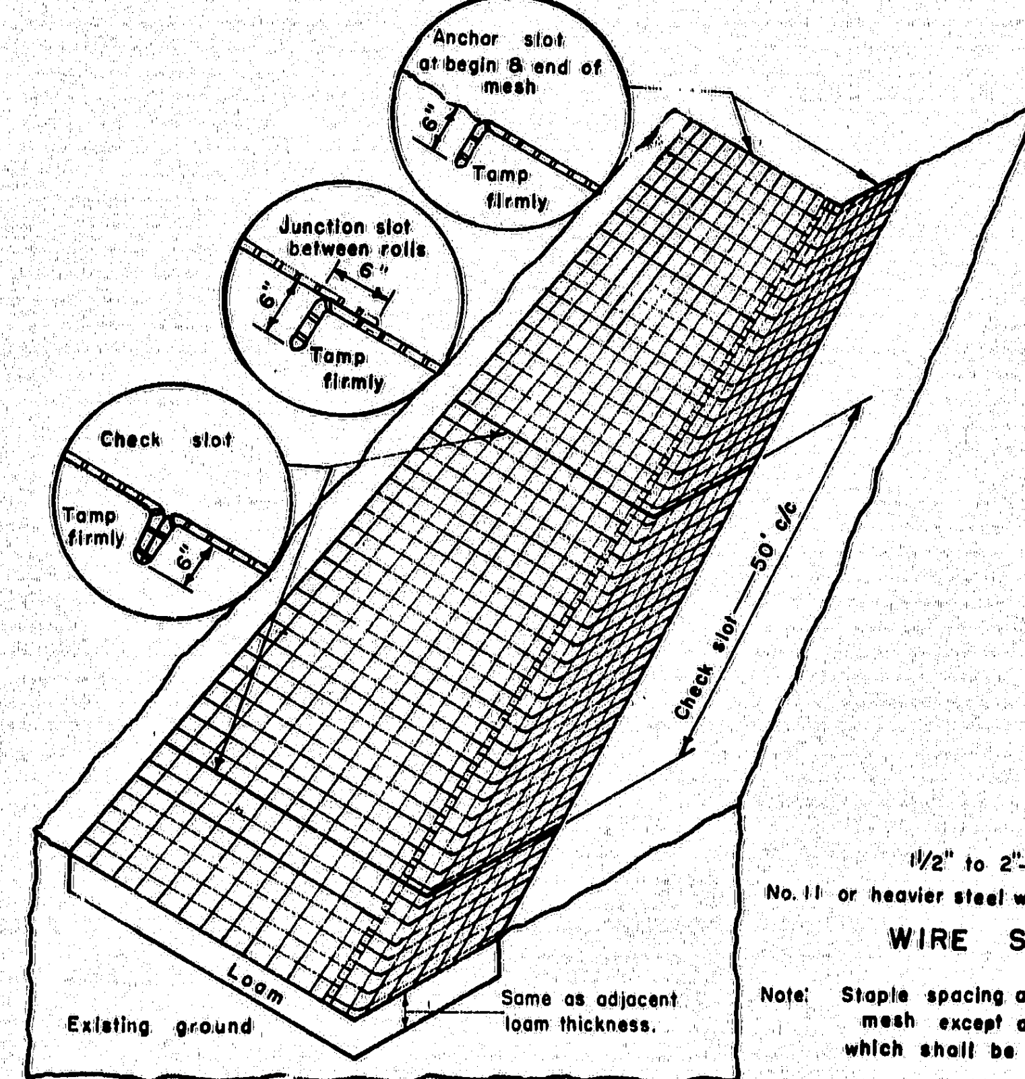
Construct berm ditch as shown on the plans or as directed by the engineer. Where a 2:1 slope is not practical, use a 1 1/2:1 slope.

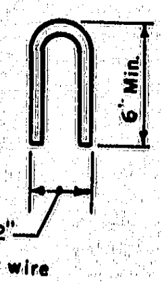
Where "X" = 5 or less, "T" = X, otherwise "T" = 5. To avoid property damage and to save shade trees, this formula may be modified by the engineer.

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

BERM DITCH

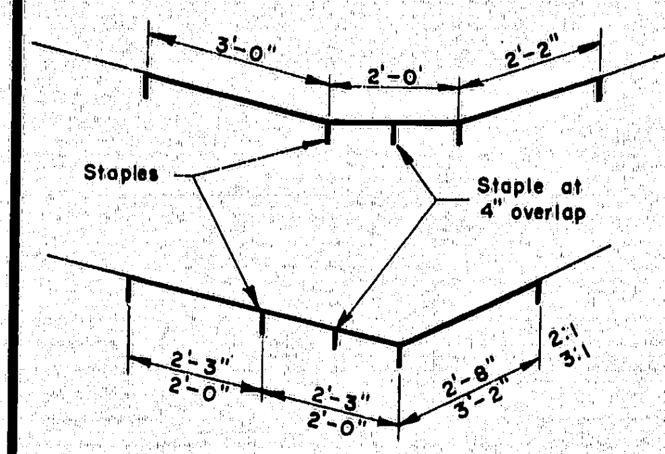
3-G

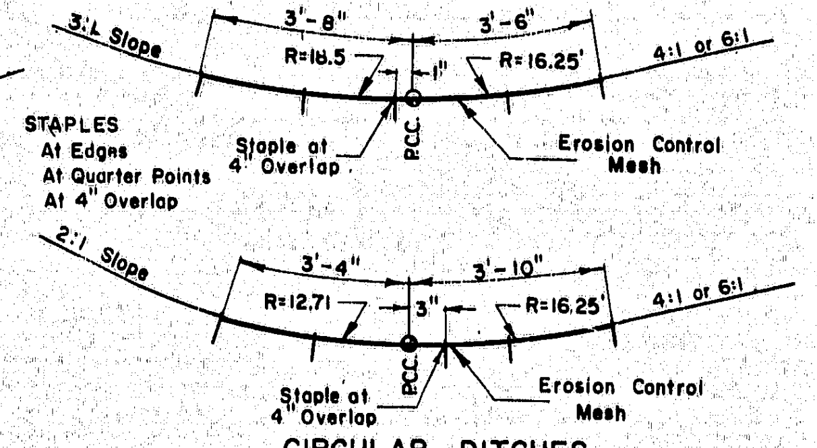

Anchor slot at begin & end of mesh
6"
Tamp firmly
Junction slot between rolls
6"
6"
Tamp firmly
Check slot
Tamp firmly
6"
Check slot — 50' c/c
Loam
Existing ground
Same as adjacent loam thickness.



WIRE STAPLE

Note: Staple spacing at 3' c/c along mesh except at 4" overlap which shall be at 1 1/2' c/c.





CIRCULAR DITCHES

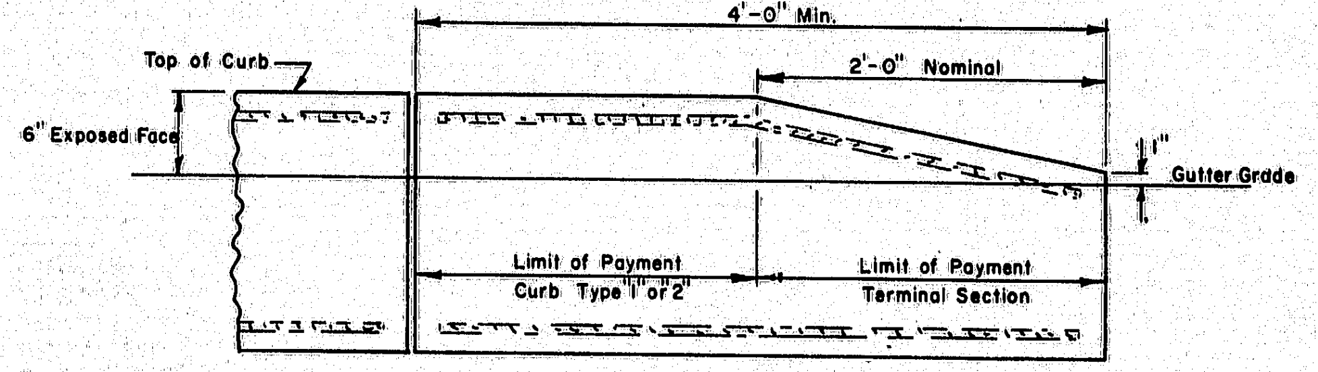
EROSION CONTROL MESH

3-H

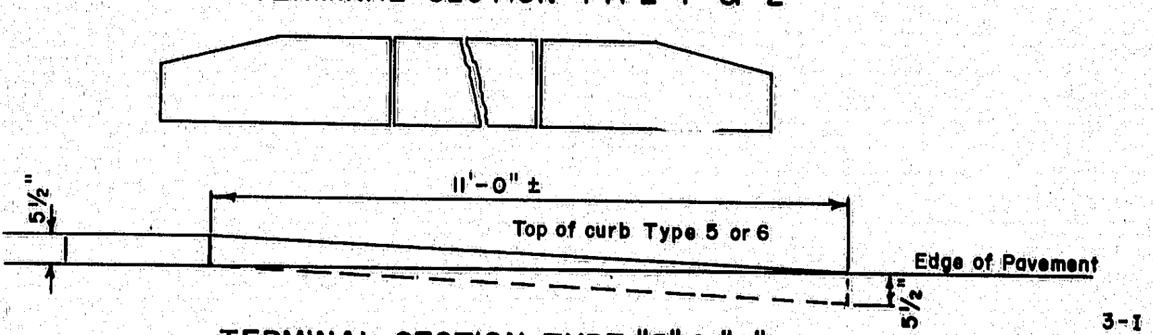
CURB TYPES (1 & 2), (5 & 6) ON CURVES				
TYPE	RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
1 & 2	0' To 60' Incl.	4' Min.	Circular	Arc To Fit Curve
	Over 60' To 160'	4' To 6'	Straight	Straight Pieces
5 & 6	0' To 8' Incl.	2' Min.	Circular	To Fit Curve
	Over 8' To 30' Incl.	12" Min. Chord	Circular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

3-J

TERMINAL CURB SECTION


4'-0" Min.
2'-0" Nominal
Top of Curb
6" Exposed Face
1"
Gutter Grade
Limit of Payment Curb Type "1" or "2"
Limit of Payment Terminal Section

TERMINAL SECTION TYPE "1" & "2"



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

3-I

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

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

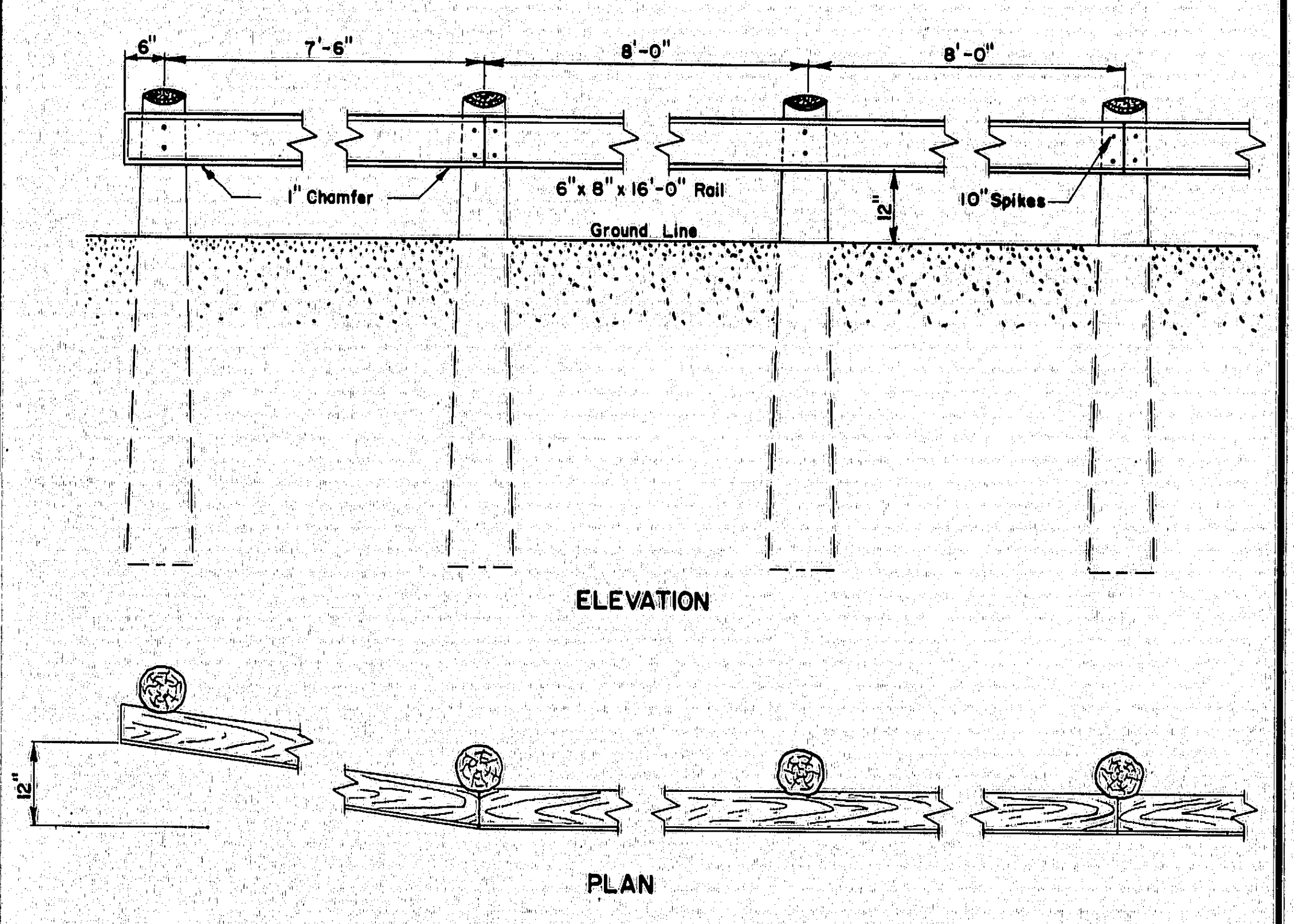
STANDARD DETAILS

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

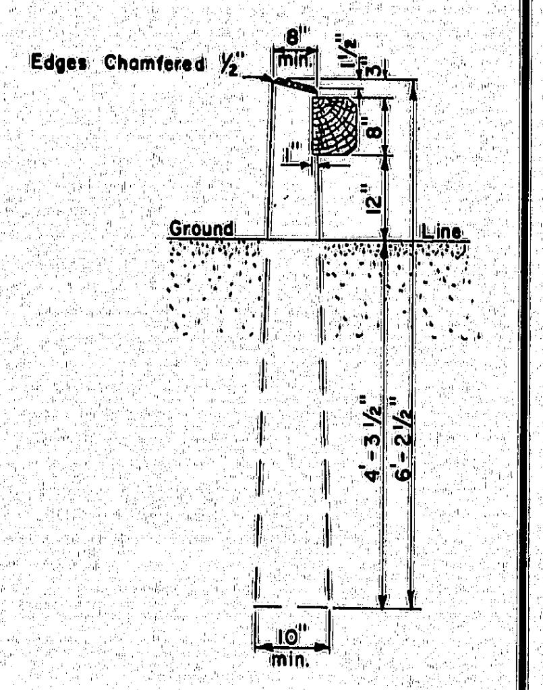
AUG. 1969 ③

151-156 Berwick 6221

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	20	22

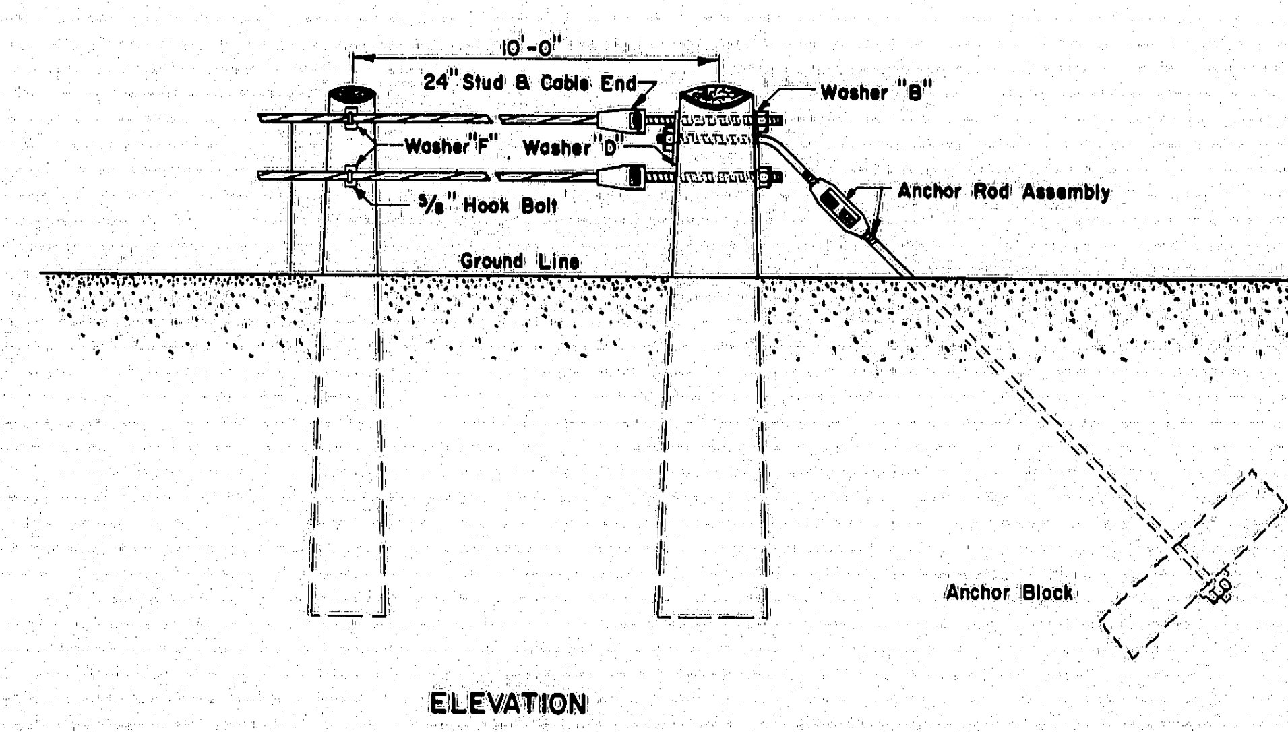


NOTE:
1. This guardrail should not be used adjacent to public highways. Location should be limited to driveways, dead ended roads, etc.
2. Unless otherwise specified, all exposed wood above ground, both posts and rails shall be painted with 2 coats of white paint.

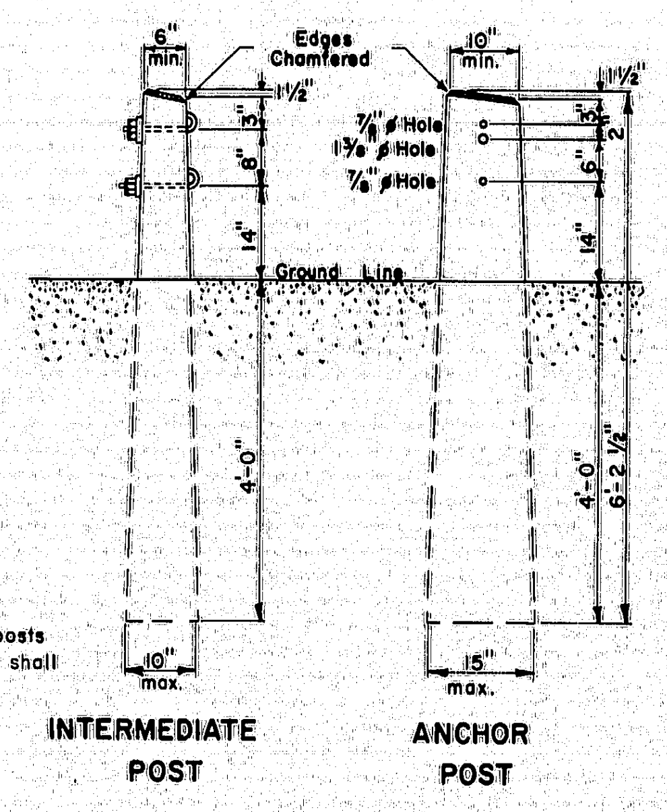


FOR TYPE 6 GUARD RAIL SEE STANDARD DETAIL SHEET 21

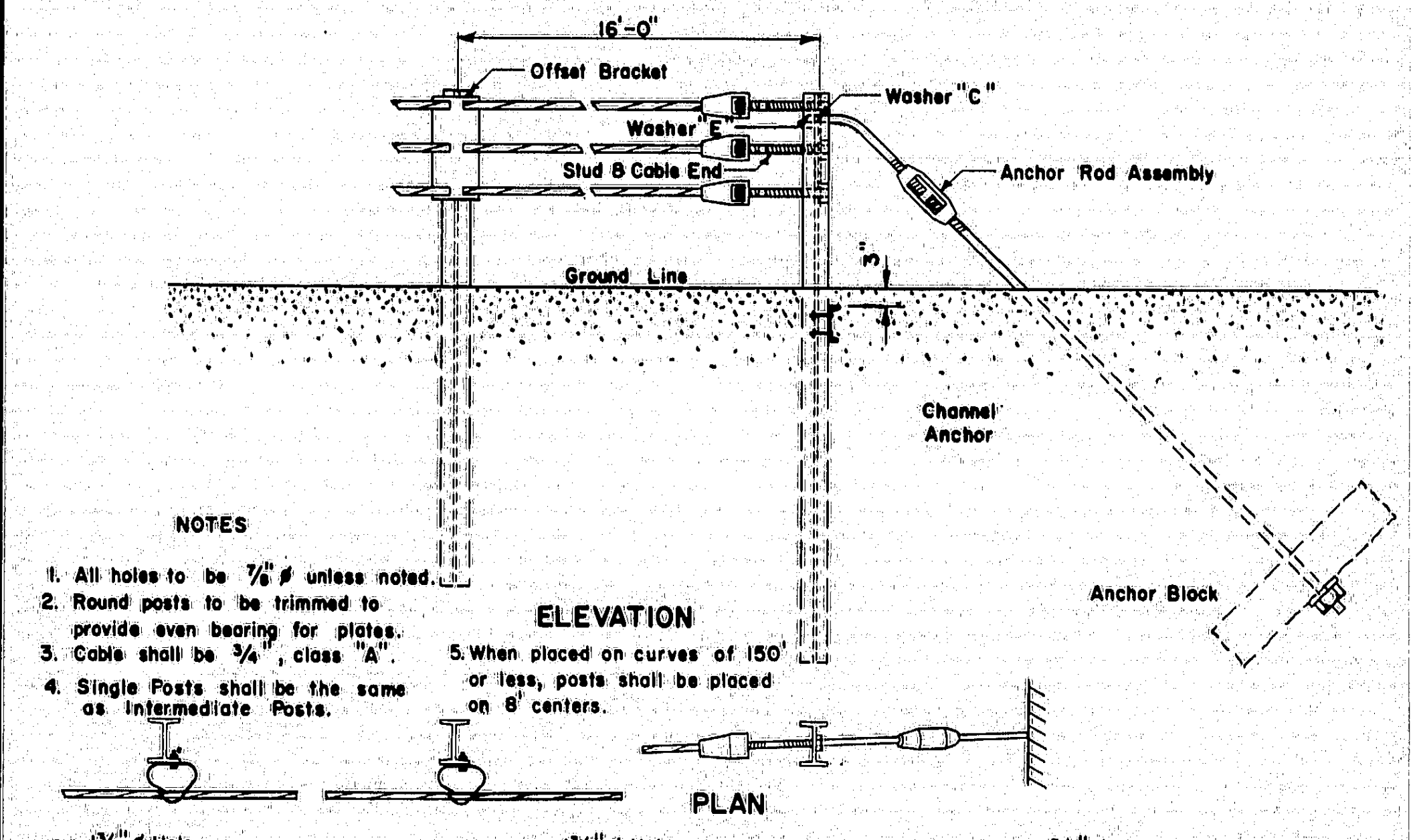
GUARD RAIL type "5"



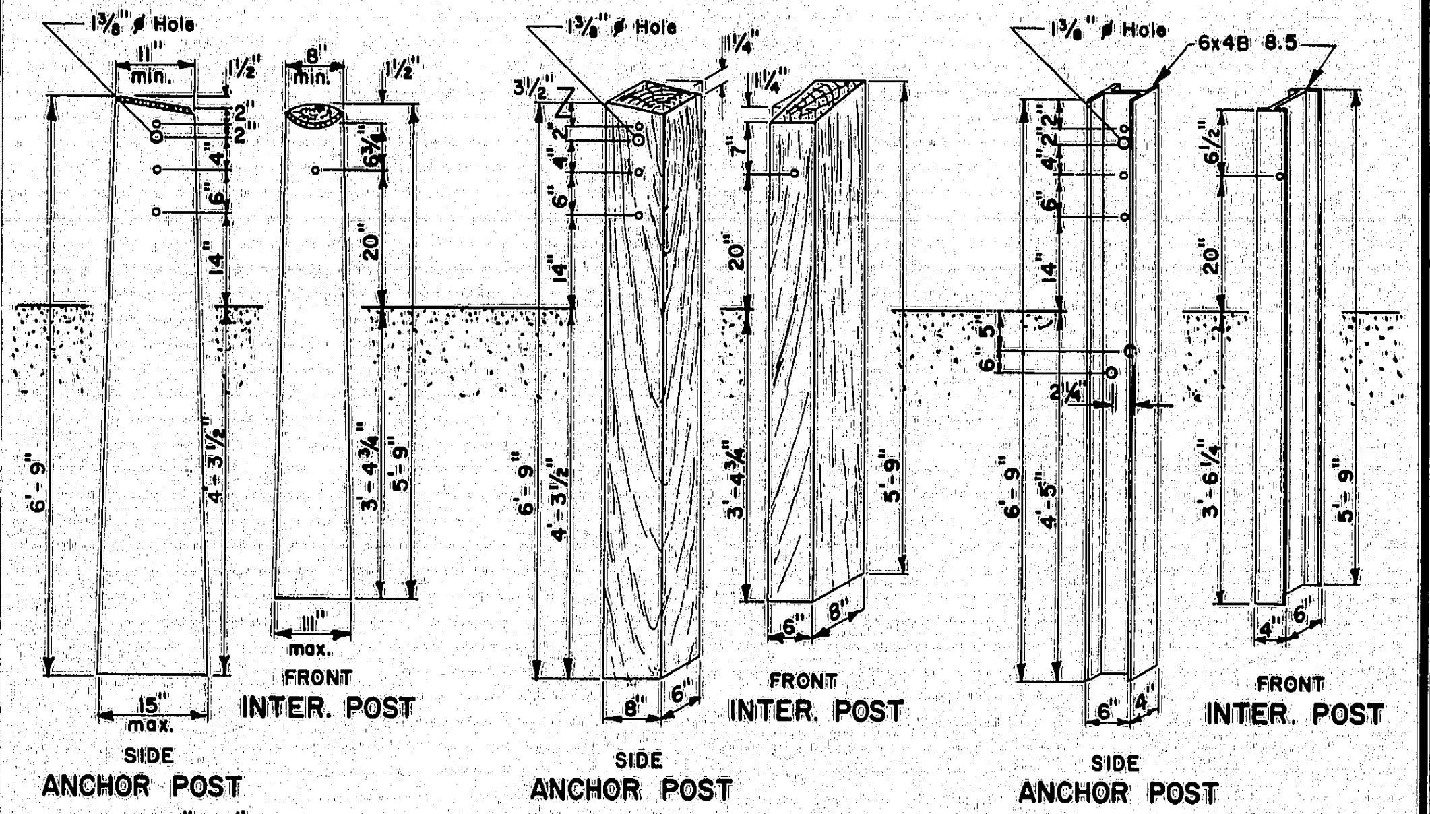
NOTES
1. Anchor posts shall be White Oak.
2. Alignment – see types 2a, 2b and 2c.
3. Posts to be trimmed to provide even bearing for plates.
4. Unless otherwise specified all wood above ground to be painted with 2 coats of white paint, – for type 1a.
5. Single Posts shall be the same as Intermediate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

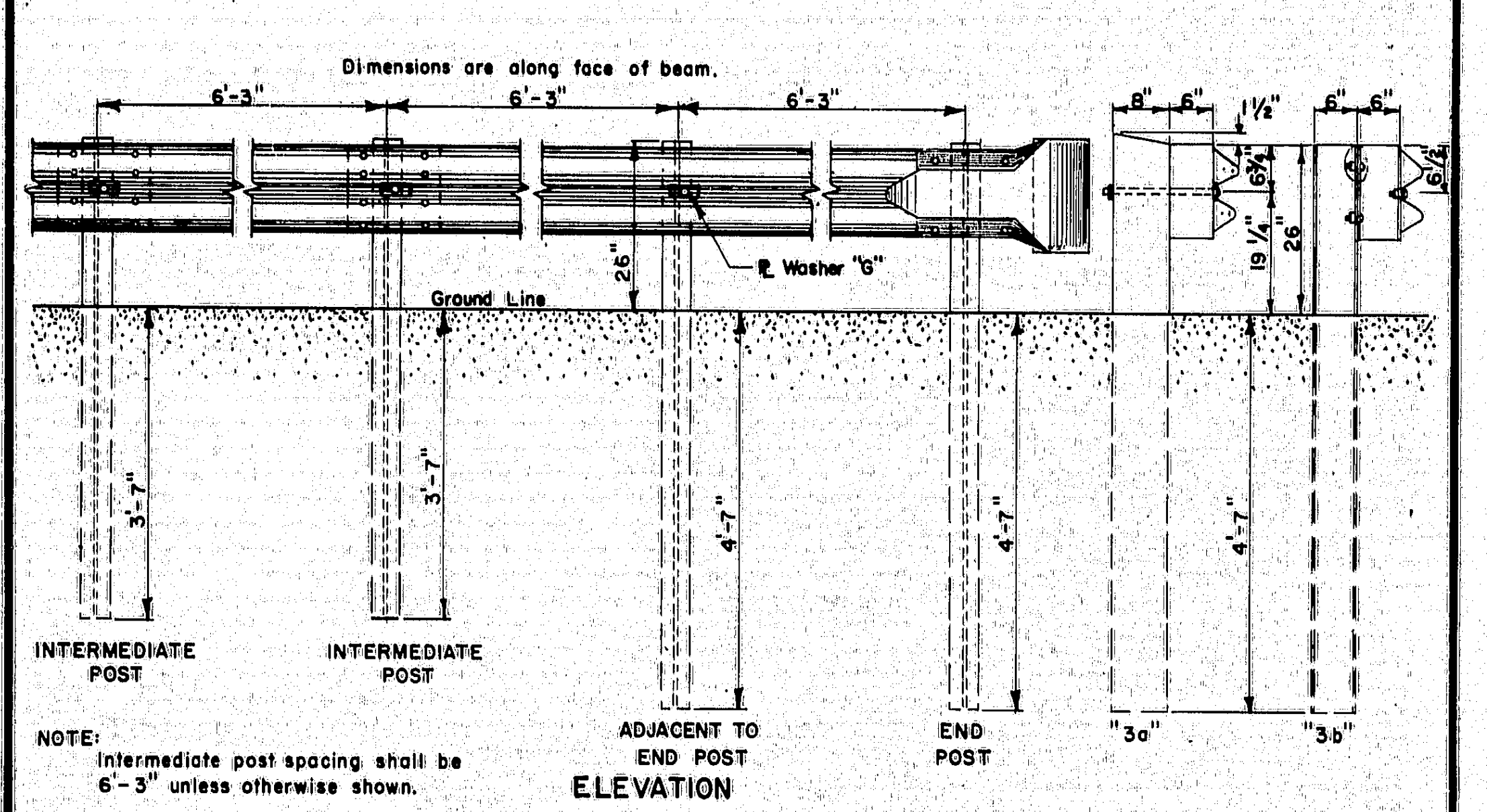


NOTE:
If the Contractor chooses to drive posts, then all posts on the project, whether driven or placed in dug holes shall be set with the larger diameter at the top.

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

FOR BEAM TYPE GUARD RAIL
Beam Type Guard Rail set on radius of 150' or less to be Circular.

Dimensions are along face of beam.

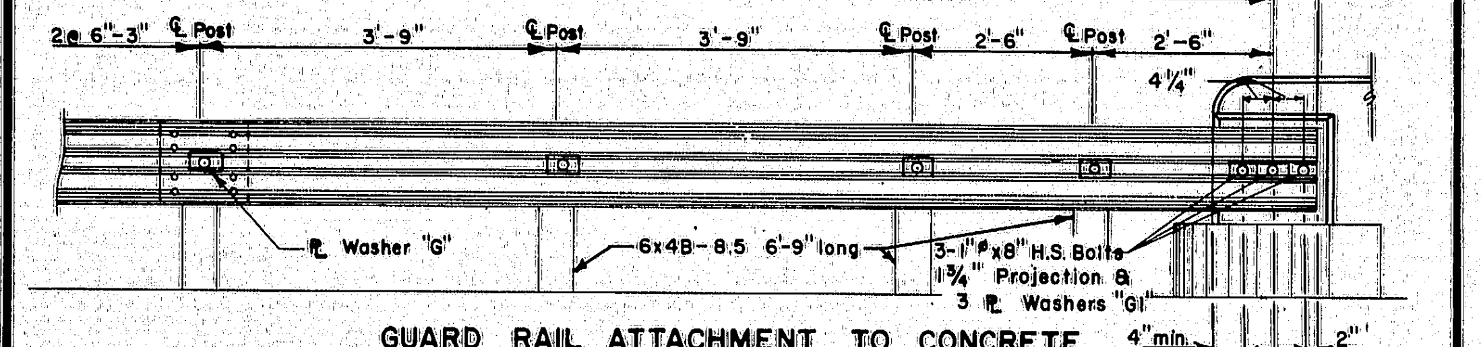


NOTE:
Intermediate post spacing shall be 6'-3" unless otherwise shown.

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

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

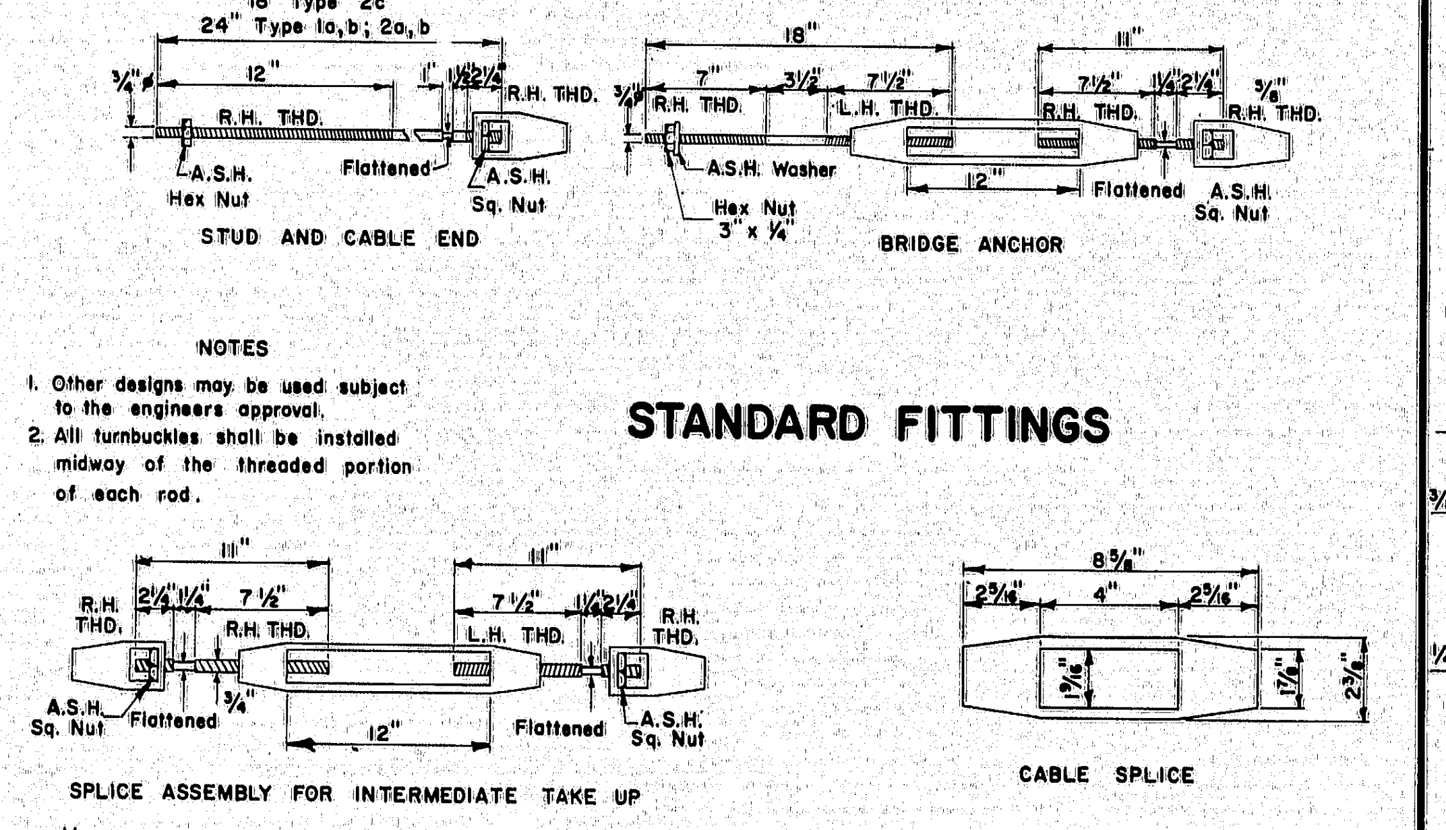
STATIONING ON PLAN-PROFILE SHEETS IS TO ℄ OF MIDDLE WING BOLT



GUARD RAIL ATTACHMENT TO CONCRETE END POST AT BRIDGE END

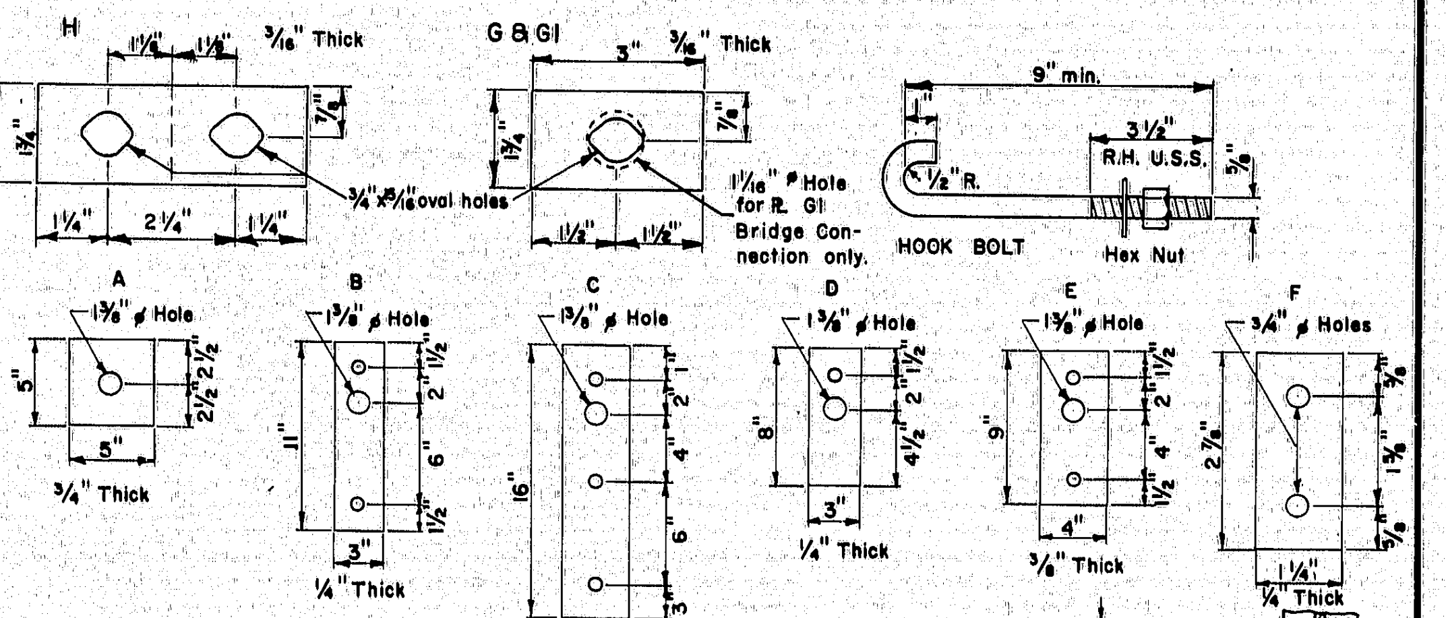
NOTES:
1. Where Bridge expansion is required at Connection, it will be detailed on the Construction Plans.
2. Guard Rail shall be connected to the structure as shown. Payment for the connection to the structure and additional posts shall be incidental to the Guard Rail Item.
3. Splice holes in Guard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

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



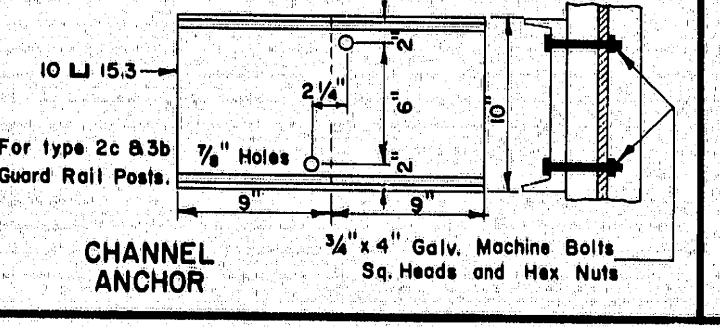
NOTES
1. Other designs may be used subject to the engineers approval.
2. All turnbuckles shall be installed midway of the threaded portion of each rod.

STANDARD FITTINGS

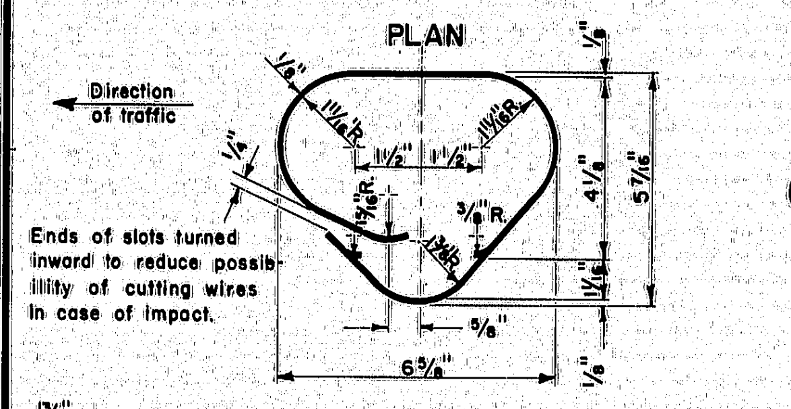


NOTES
1. All holes to be ⅞" ø unless otherwise noted.
2. Holes shall be drilled or punched before galvanizing.

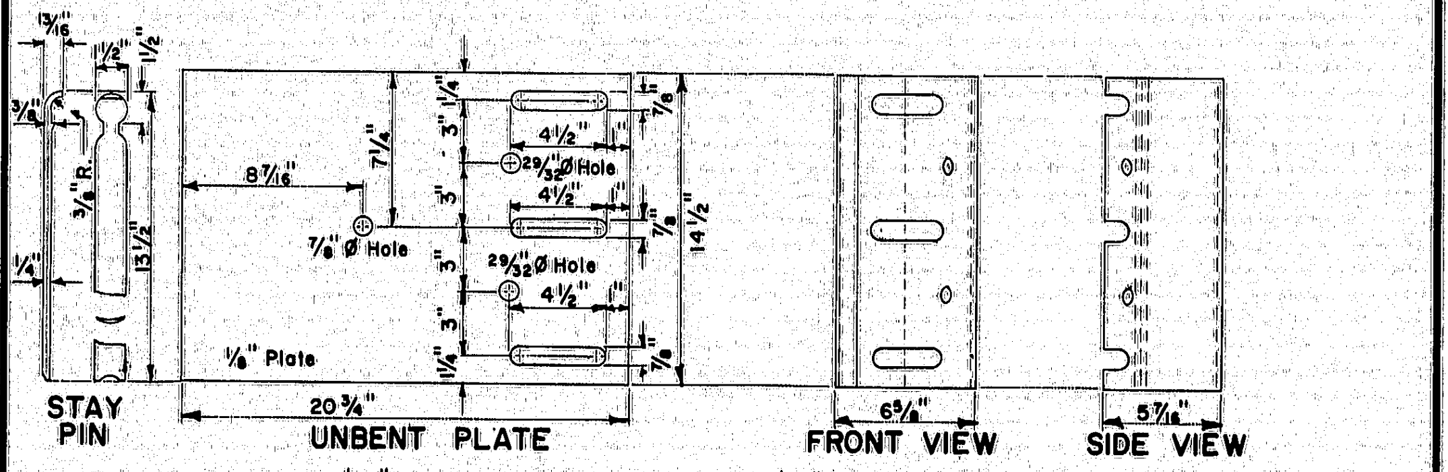
PLATE WASHERS

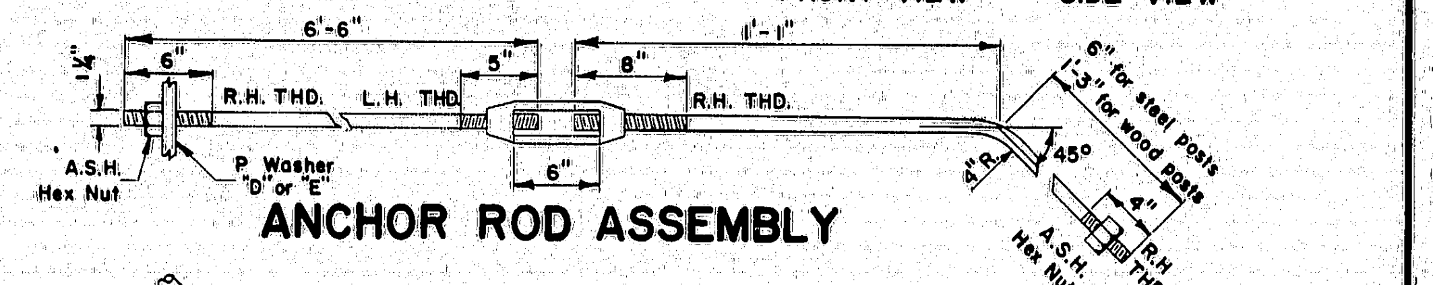

10 ⊔ 15.3
For type 2c & 3b Guard Rail Posts.
⅞" Holes
2¼"
9"
9"
10"
¾" x 4" Galv. Machine Bolts Sq. Heads and Hex Nuts

CHANNEL ANCHOR

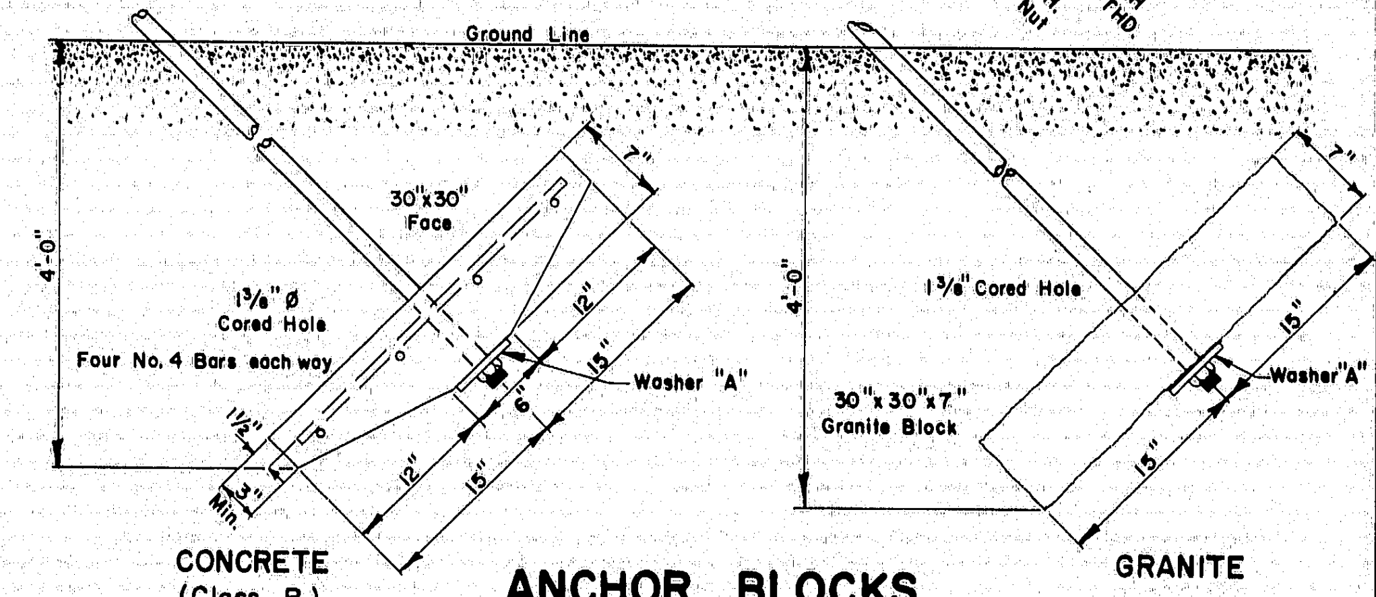

PLAN
Direction of traffic
Ends of slots turned inward to reduce possibility of cutting wires in case of impact.
6⅝"
5⁷⁄₁₆"
4⅛"

OFFSET BRACKET

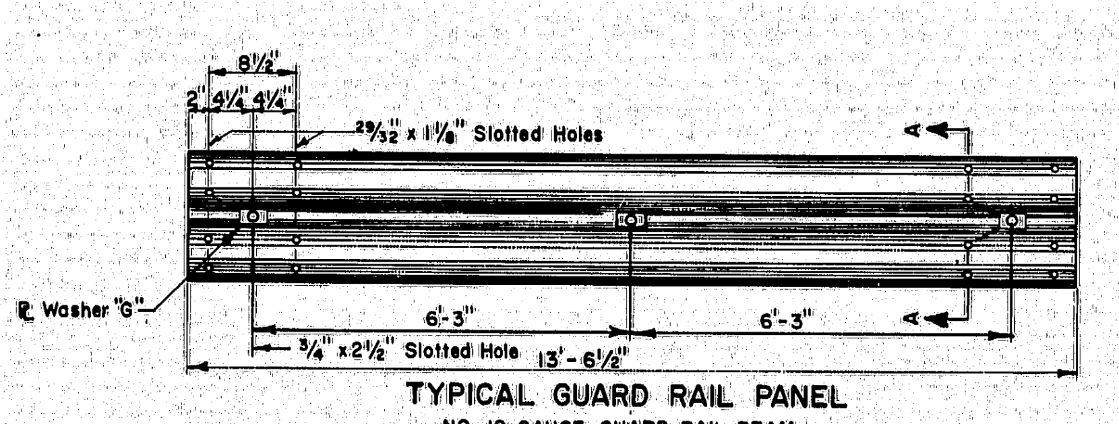




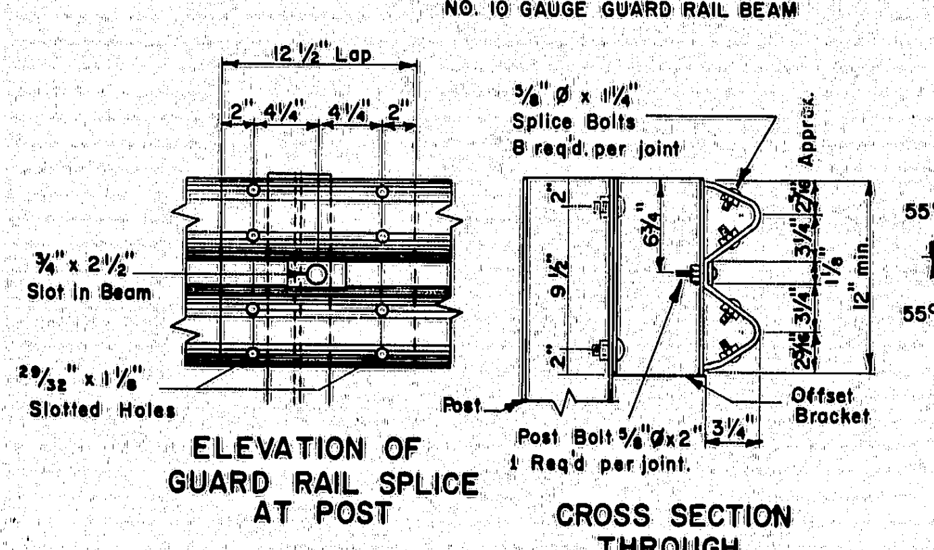
ANCHOR ROD ASSEMBLY



ANCHOR BLOCKS



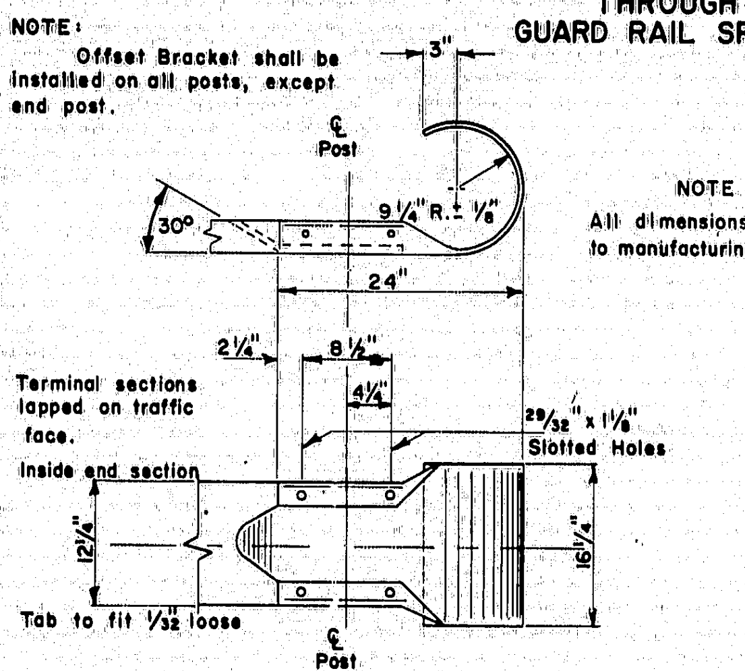
TYPICAL GUARD RAIL PANEL
NO. 10 GAUGE GUARD RAIL BEAM


12½" Lap
⅝" ø x 1¼" Splice Bolts 8 req'd. per joint
¾" x 2½" Slot in Beam
²⁹⁄₃₂" x 1⅛" Slotted Holes
Post
Post Bolt ⅝" ø x 2" 1 Req'd per joint.
Offset Bracket
3¼"

ELEVATION OF GUARD RAIL SPLICE AT POST

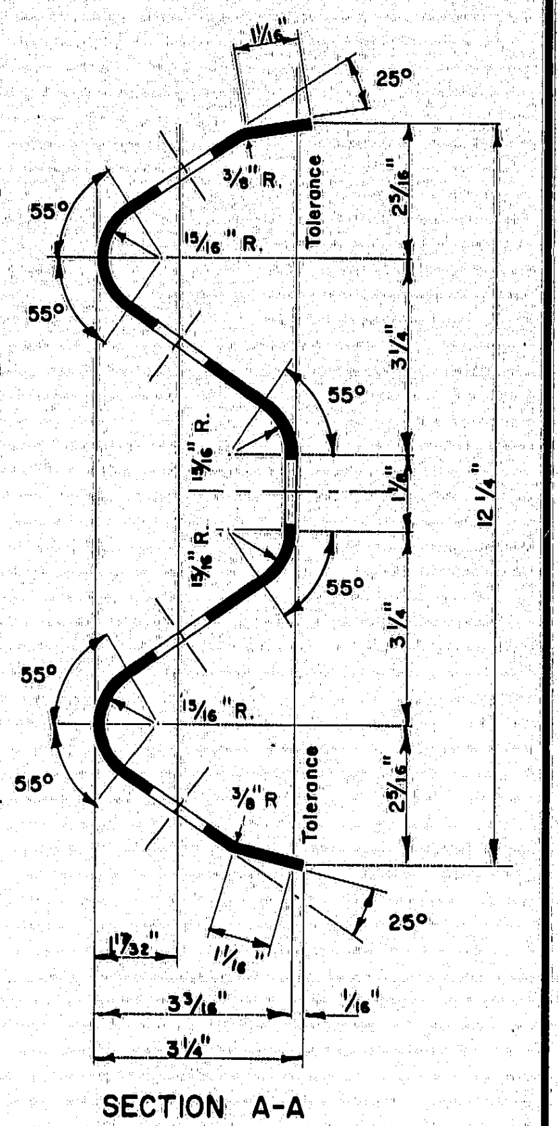
CROSS SECTION THROUGH GUARD RAIL SPLICE

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



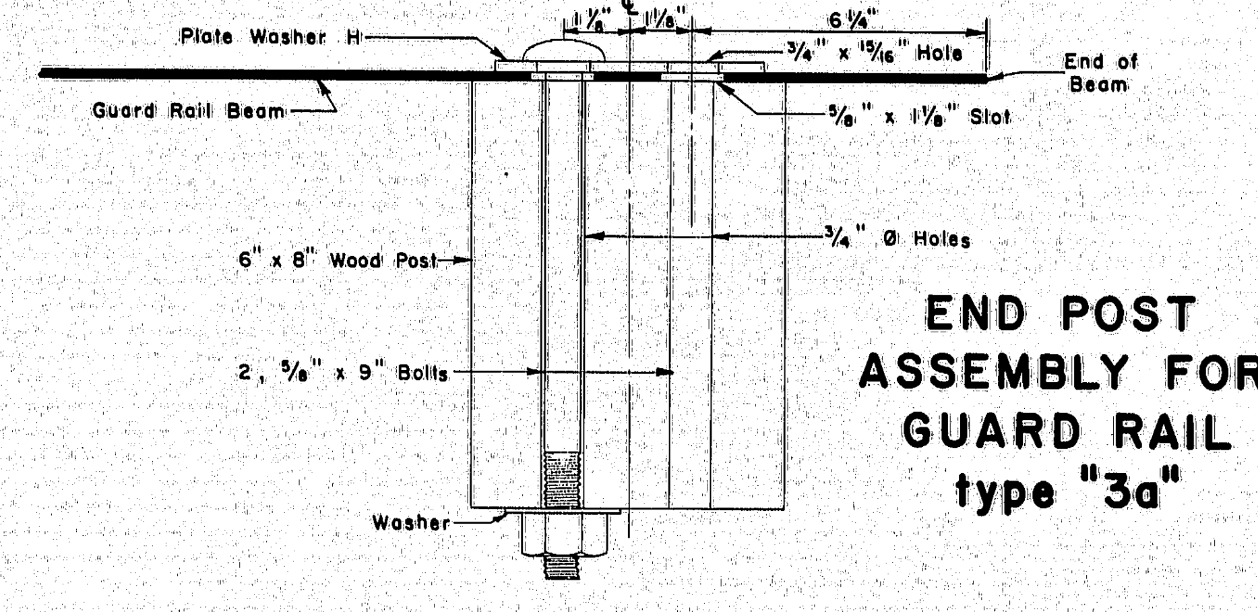
GUARD RAIL - TERMINAL END SECTION

NOTE
All dimensions subject to manufacturing tolerances.

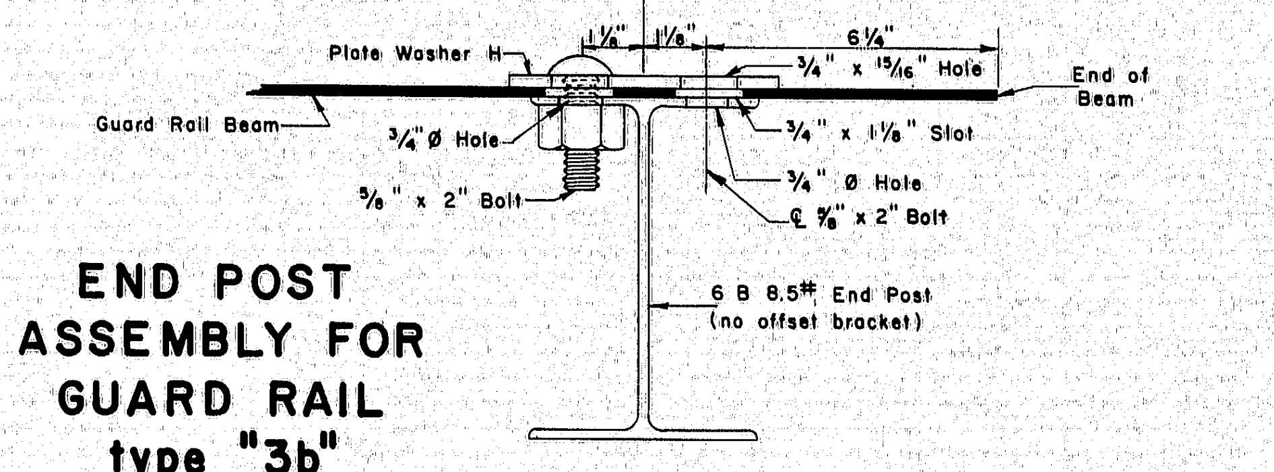


SECTION A-A
TYPE 3a & 3b

GUARD RAIL BEAM DETAIL



END POST ASSEMBLY FOR GUARD RAIL type "3a"



END POST ASSEMBLY FOR GUARD RAIL type "3b"

REVISIONS

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

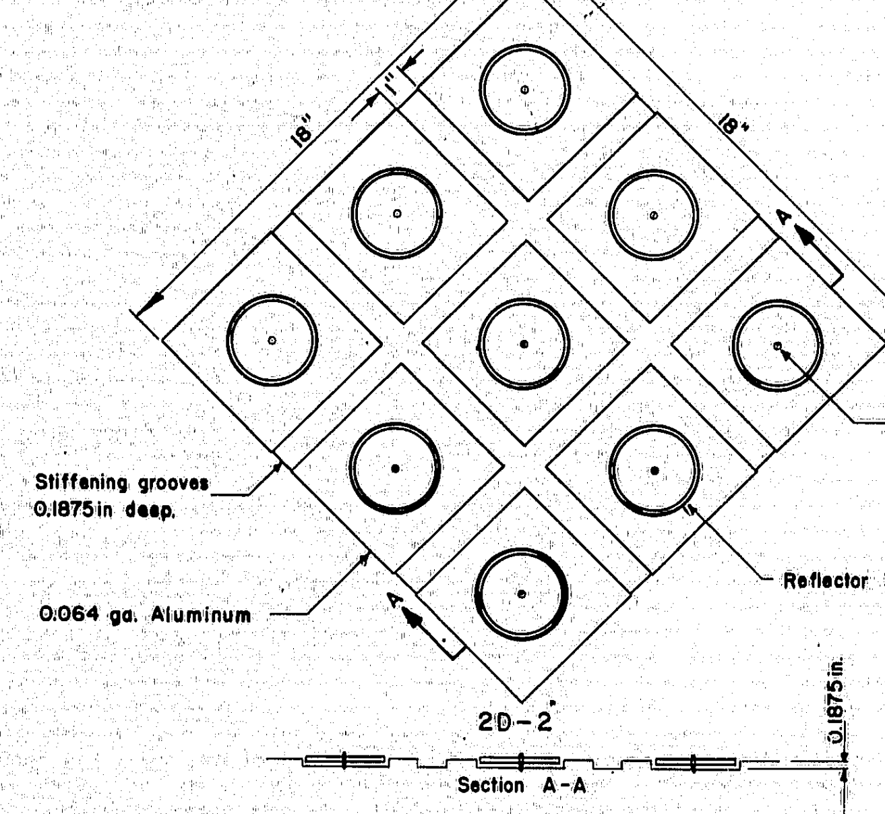
STANDARD DETAILS

GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS and STANDARD FITTINGS

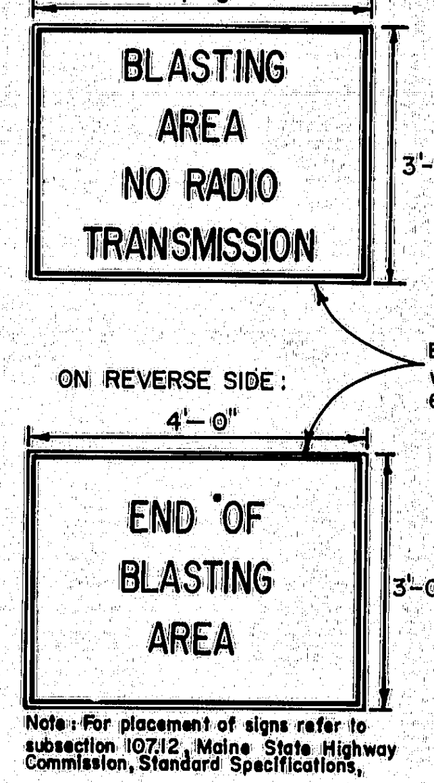
AUG. 1969 ⑥

6221 BERWICK 151-157

B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	21	22

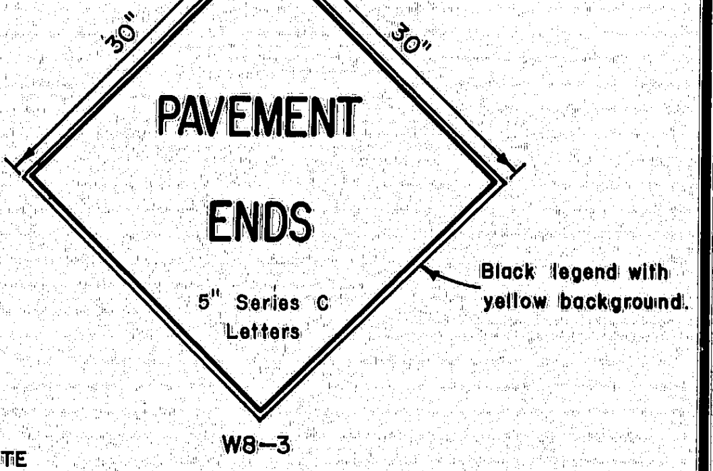

18"
18"
1"
A
A
Reflectors attached to holder plate by 3/16" I.D. aluminum grommet.
Stiffening grooves 0.1875in deep.
0.064 ga. Aluminum
Reflector 3in. diameter.
2D-2
0.1875in.
Section A-A

HAZARD MARKER



Black legend with white background. 6" Series C Letters

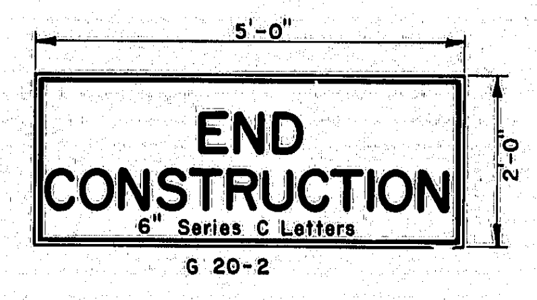
Note: For placement of signs refer to subsection 107.12, Maine State Highway Commission, Standard Specifications,



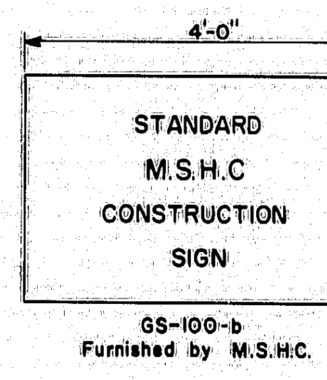
W8-3

GENERAL NOTE
Construction Signs

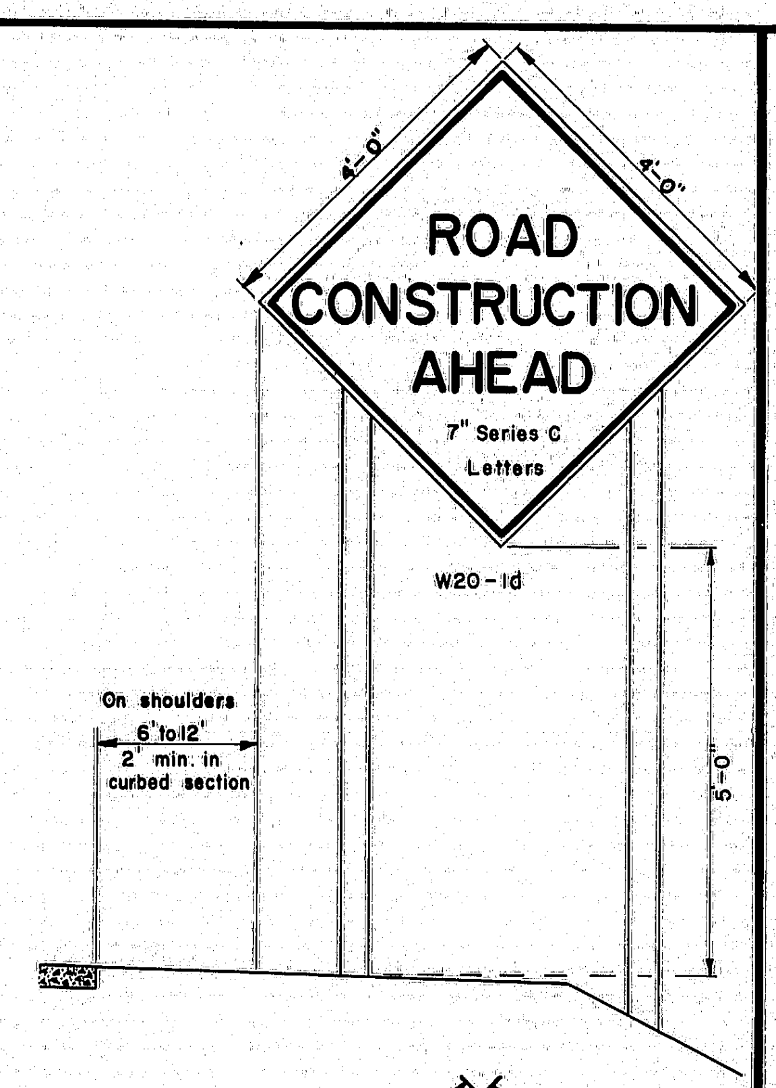
1. Sign Borders: All signs shall have borders conforming to the sizes and spacing as shown below:
   - a. 30"x30" Sign - 3/4" Border, 1/2" Space from sign edge.
   - b. 2' x 5' Sign - 5/8" Border, 3/8" Space from sign edge.
   - c. 3' x 4' Sign - 3/4" Border, 1/2" Space from sign edge.
   - d. 4' x 4'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

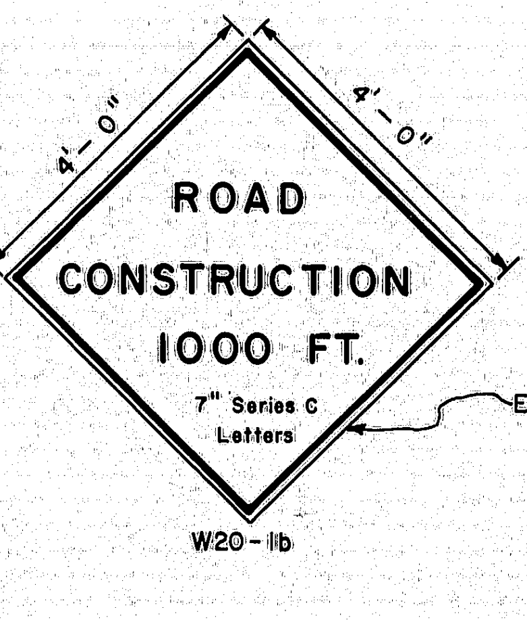


G 20-2



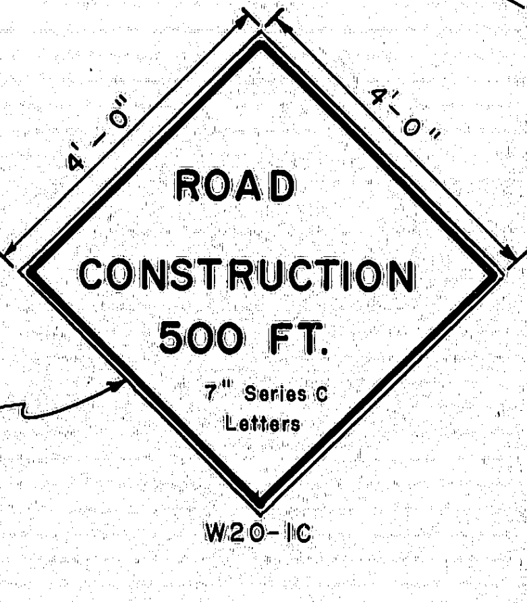
GS-100-b
Furnished by M.S.H.C.





W20-1b

Erected in the same manner as W20-1d



W20-1C

CONSTRUCTION SIGNS

GENERAL NOTES – BARRICADES

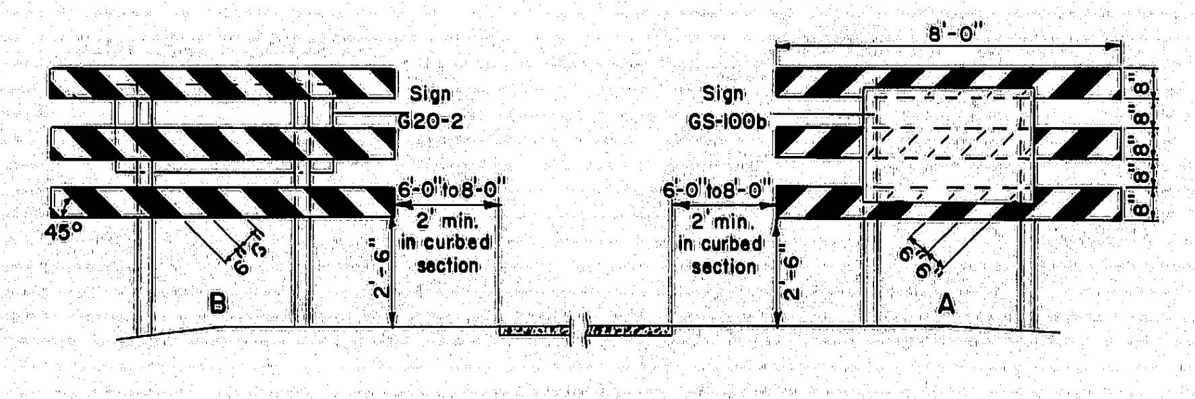
1. Unless otherwise designated, sign designation letters shall refer to the "Manual of Uniform Traffic Control Devices for Streets and Highways", published by the Department of Commerce, Bureau of Public Roads.
2. White stripes shall be of silver reflective sheeting bonded to 0.019 minimum gauge aluminum, 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 W1-6 signs are required, R10-2 or R10-3 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.

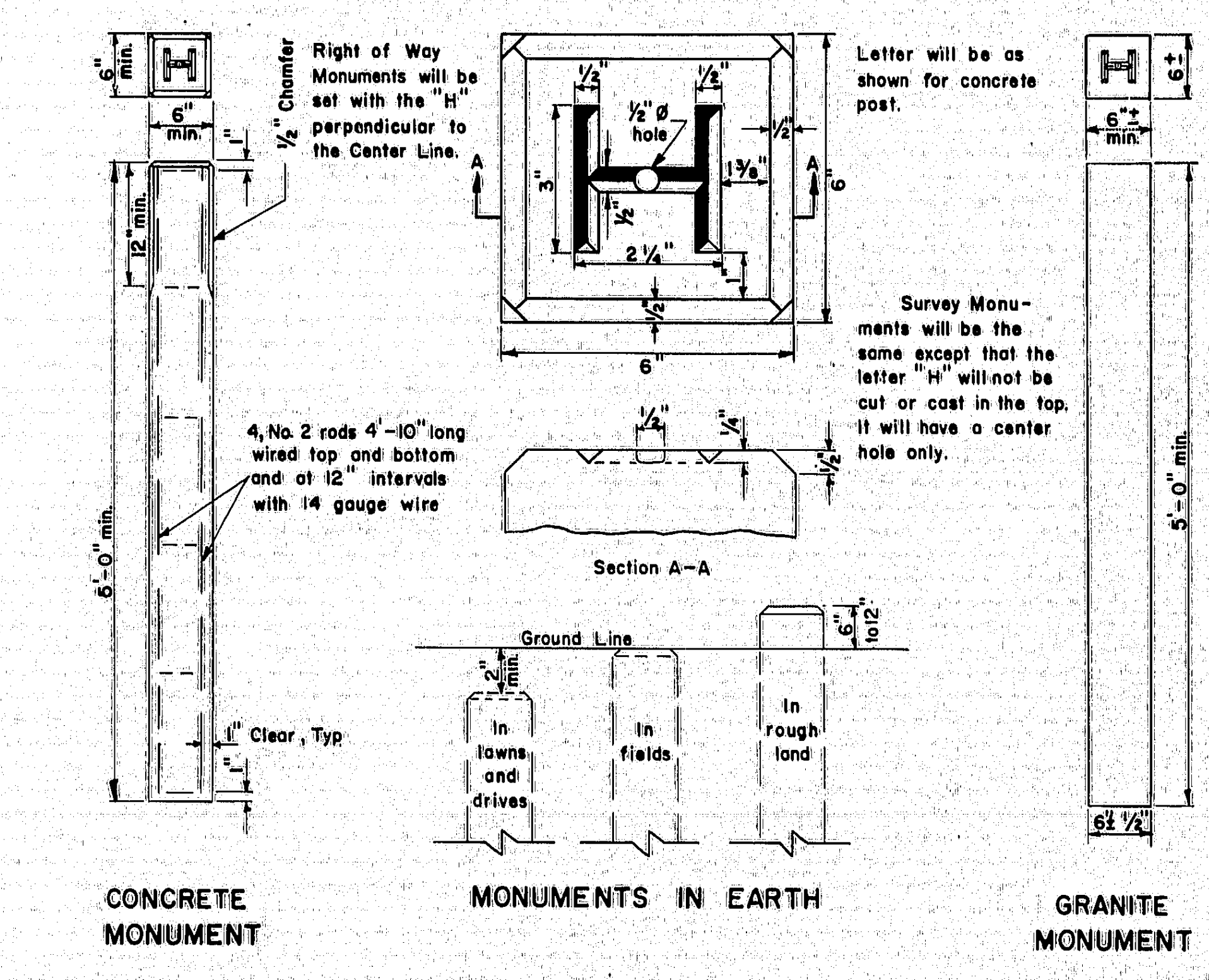
NOTES – WING BARRICADES

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



Right of Way Monuments will be set with the "H" perpendicular to the Center Line.

4, No. 2 rods 4'-10" long wired top and bottom and at 12" intervals with 14 gauge wire

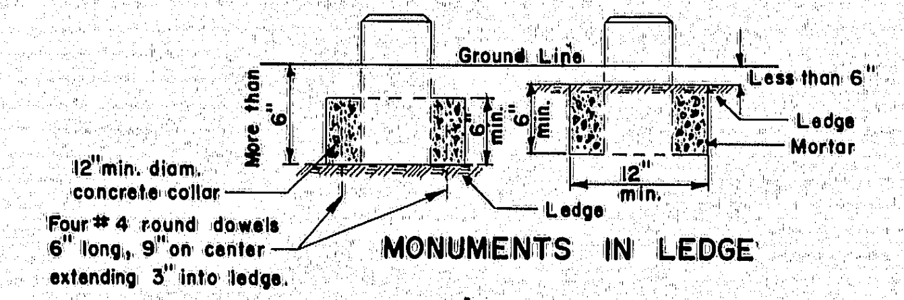
Letter will be as shown for concrete post.

Survey Monuments will be the same except that the letter "H" will not be cut or cast in the top. It will have a center hole only.

CONCRETE MONUMENT

MONUMENTS IN EARTH

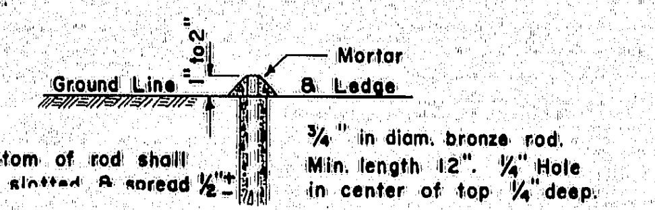
GRANITE MONUMENT



12" min. diam. concrete collar

Four # 4 round dowels 6" long, 9" on center extending 3" into ledge.

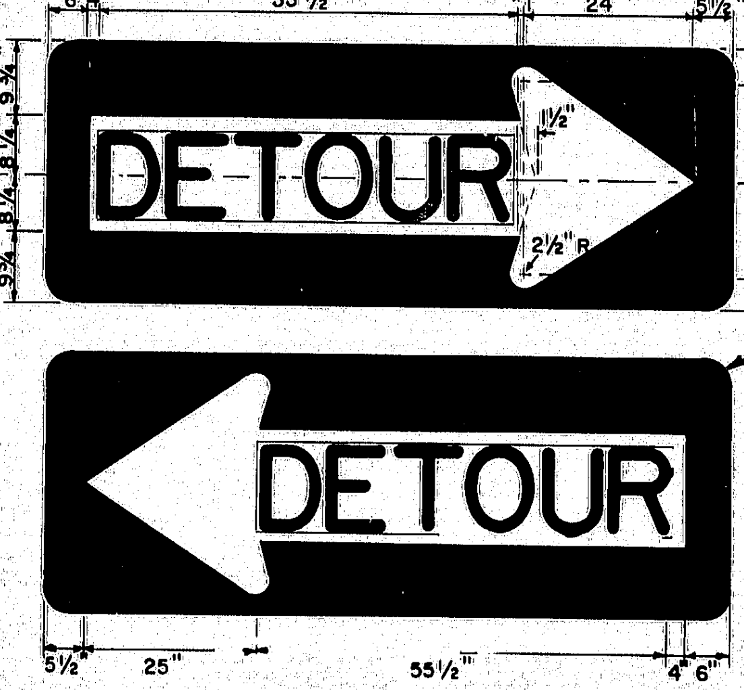
MONUMENTS IN LEDGE



Bottom of rod shall be slotted & spread 1/2" ±

3/4" in diam. bronze rod. Min. length 12". 1/4" Hole in center of top 1/4" deep.

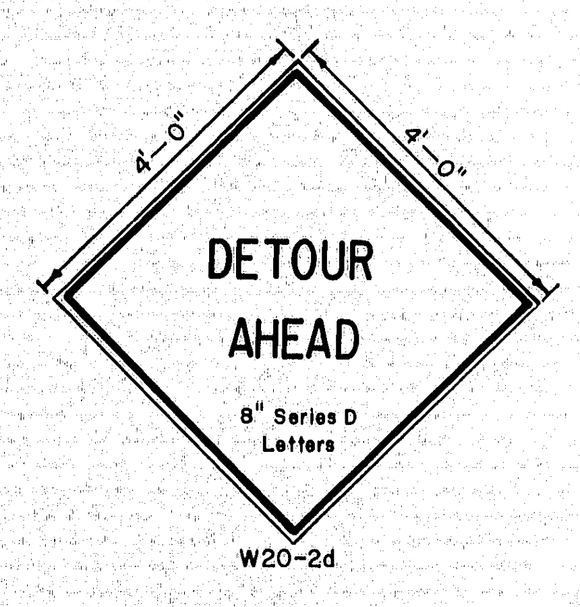
BRONZE PIN MARKERS



12" Series "D" letters
3'x8'

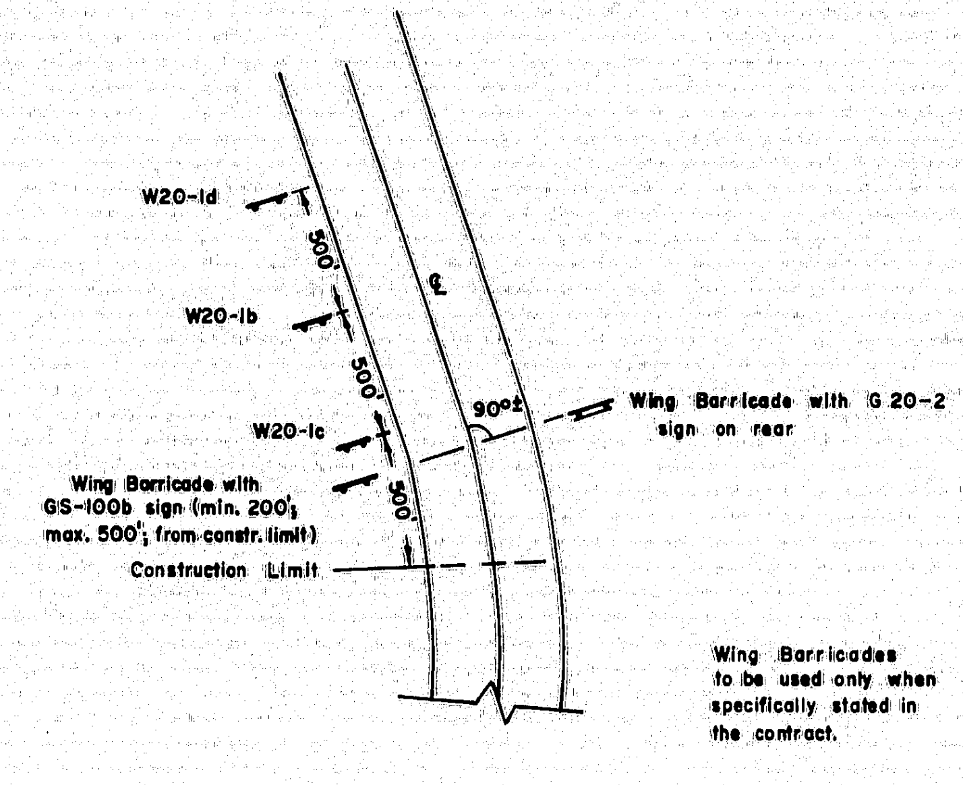
Detachable DETOUR message shall have 1" clearance from letters to edge on all sides.

DETOUR SIGN
M5-7(L)

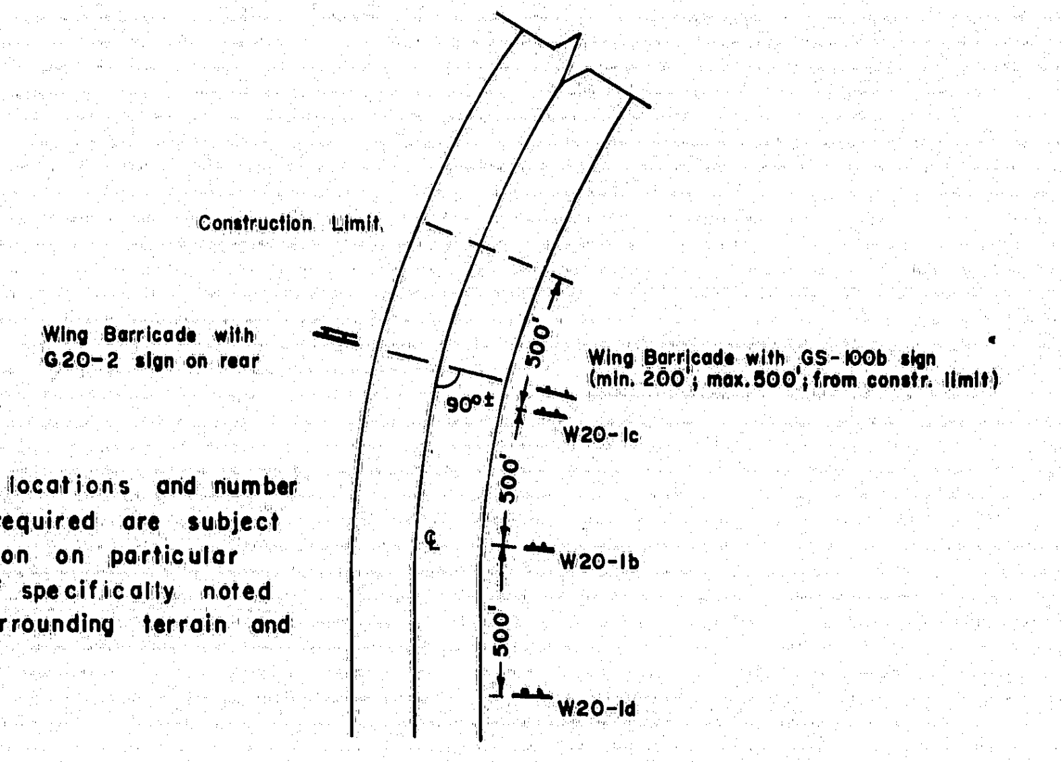


W20-2d

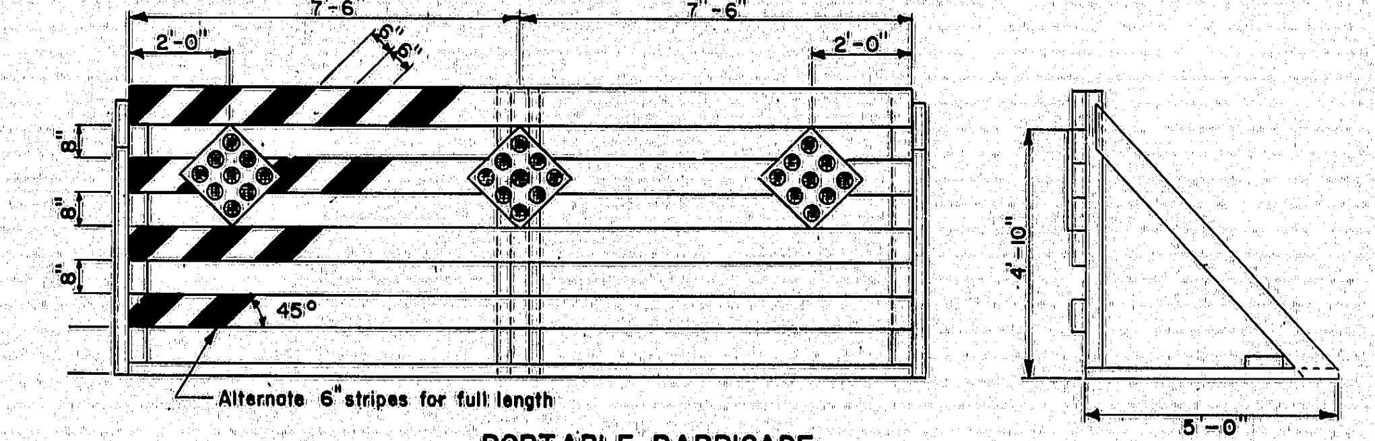
STANDARD SIGN LOCATIONS


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

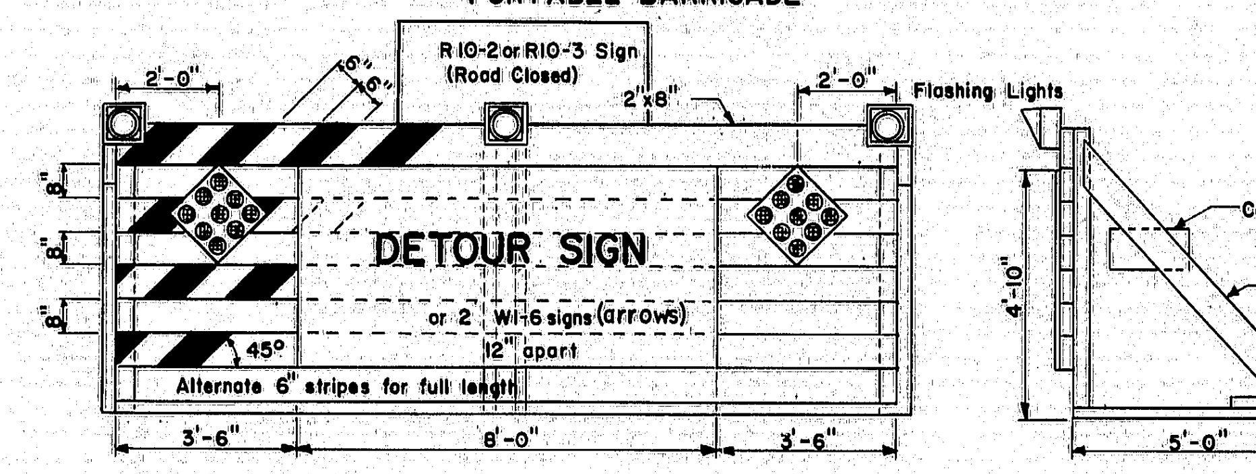
Wing Barricades to be used only when specifically stated in the contract.


Construction Limit.
Wing Barricade with G20-2 sign on rear
Wing Barricade with GS-100b sign (min. 200'; max. 500'; from constr. limit)
500'
90°±
W20-1c
500'
℄
W20-1b
500'
W20-1d

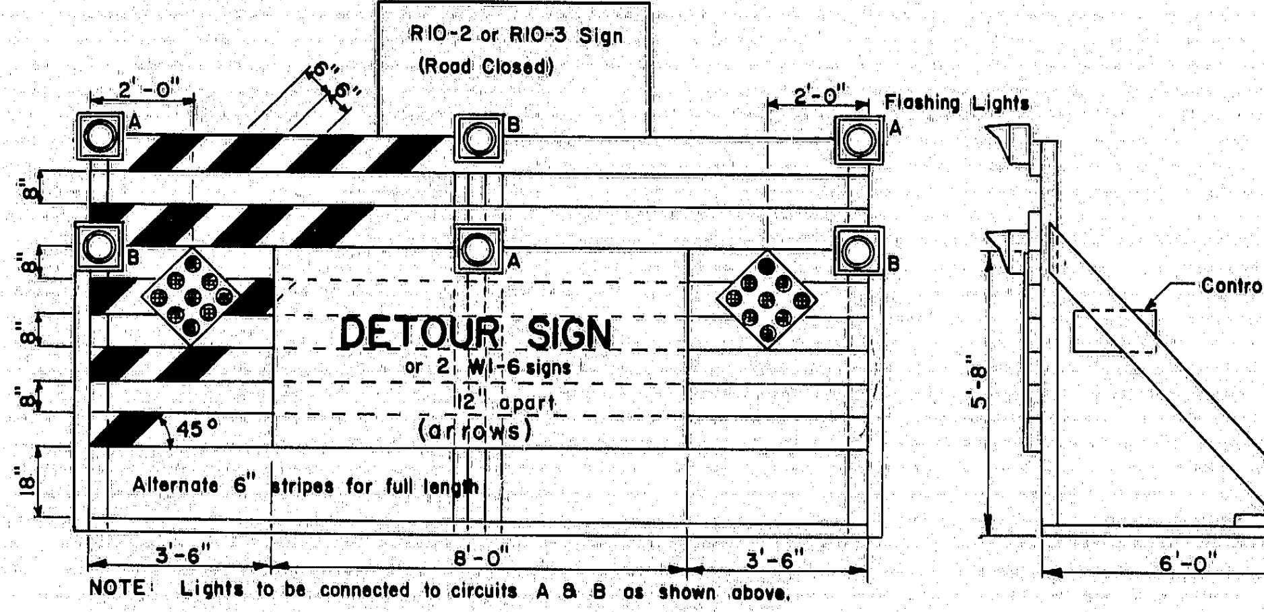
NOTE:
Standard locations and number of signs required are subject to variation on particular projects if specifically noted due to surrounding terrain and land use.



PORTABLE BARRICADE



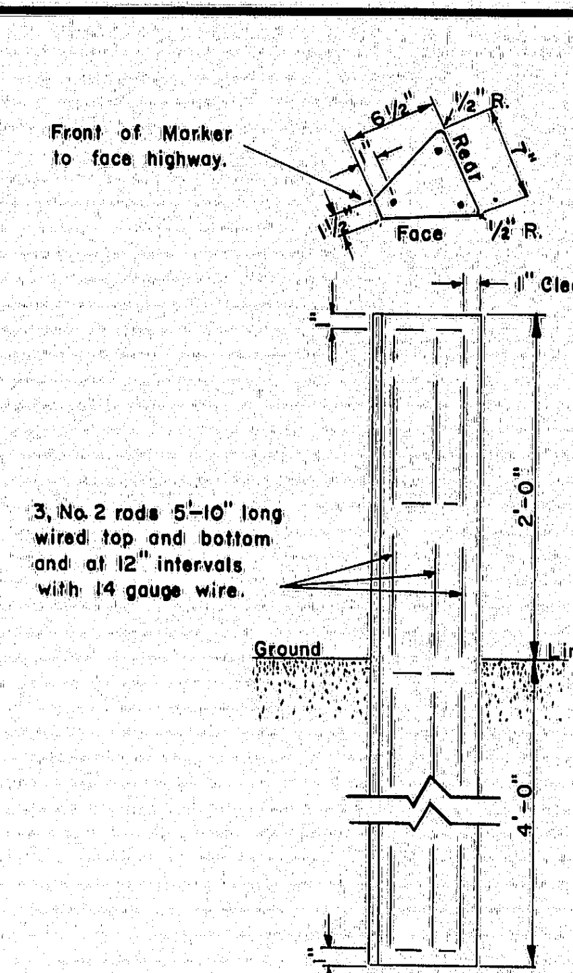
PORTABLE BARRICADE WITH FLASHING LIGHTS (NORMAL SIZE)



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

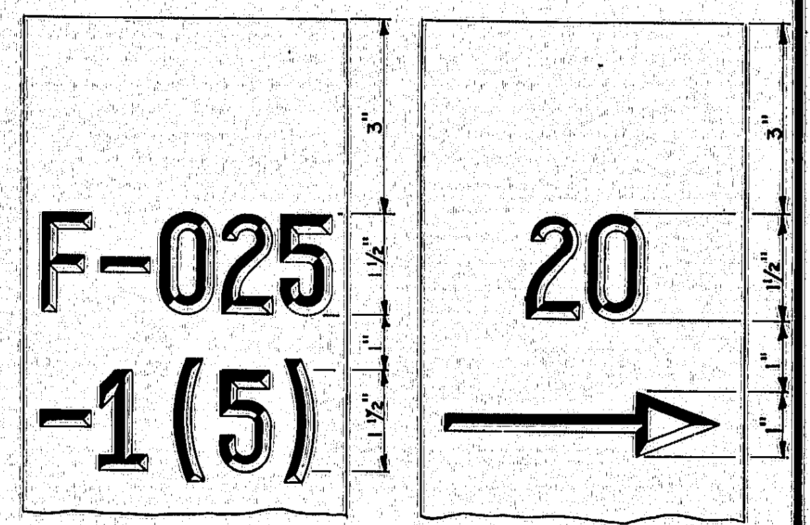
OVERSIZED PORTABLE BARRICADE WITH FLASHING LIGHTS

BARRICADES



Front of Marker to face highway.

3, No. 2 rods 5'-10" long wired top and bottom and at 12" intervals with 14 gauge wire.



FACE VIEW

REAR VIEW

NOTES

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

PROJECT MARKERS

REVISION	
	1-22-70

MAINE STATE HIGHWAY COMMISSION
AUGUSTA, MAINE

BARRICADES
WARNING SIGNS
MONUMENTS
PROJECT MARKERS

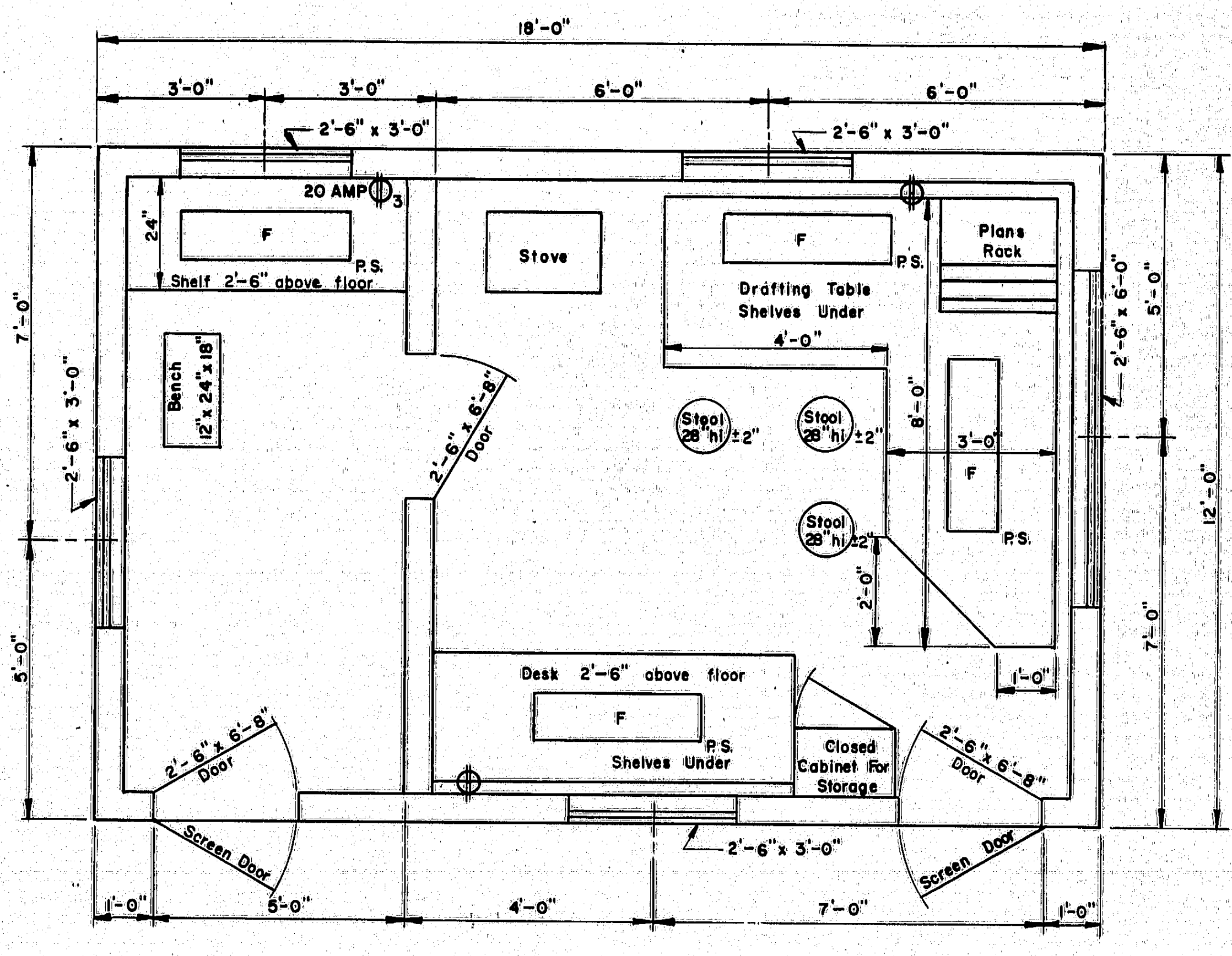
AUG. 1969

(11)

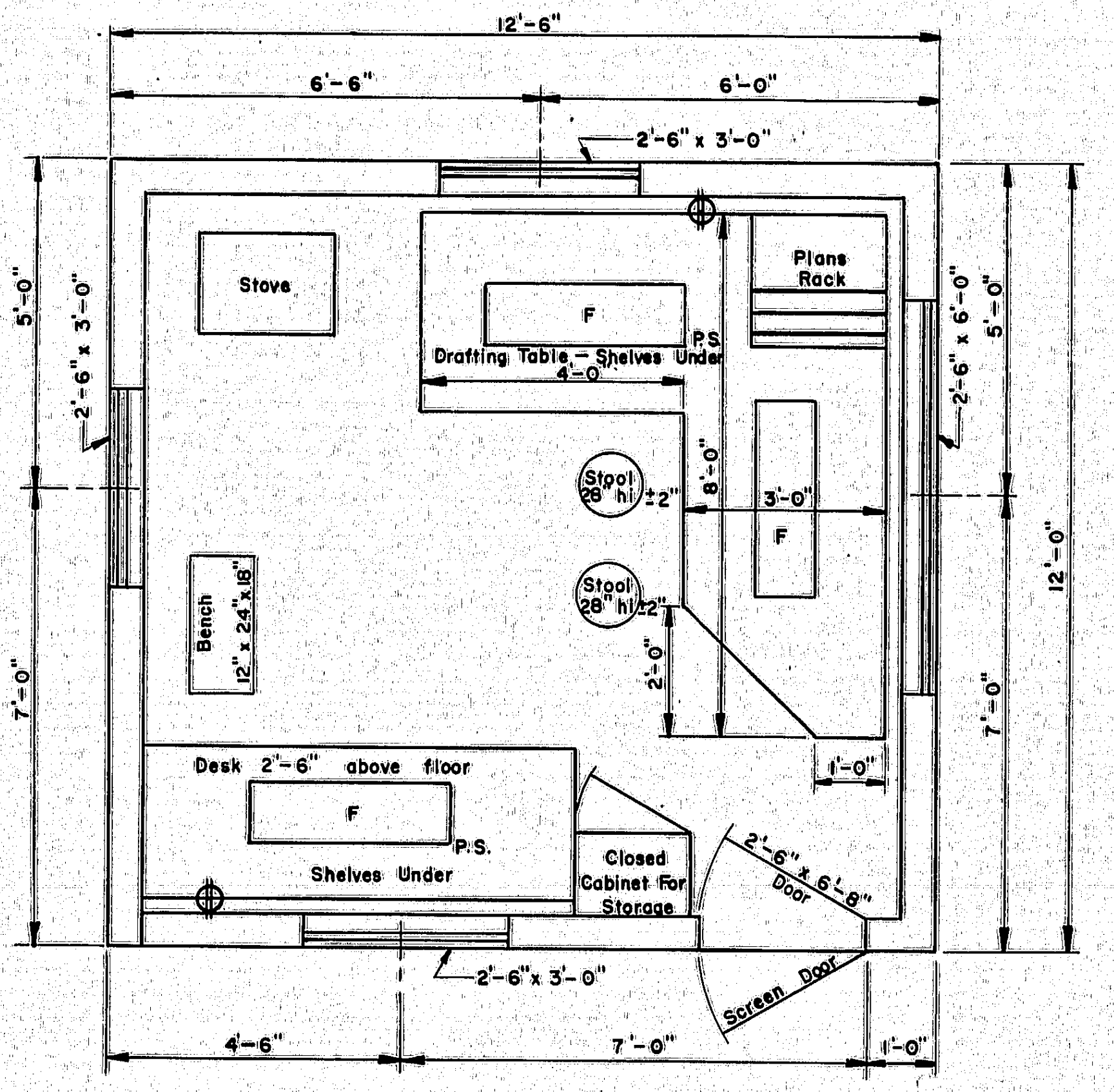
6221 BERWICK 151-158

touraine paints TRUFLEX ☆ SILKY ☆ TRIPLE WHITE ☆ RYPLEX

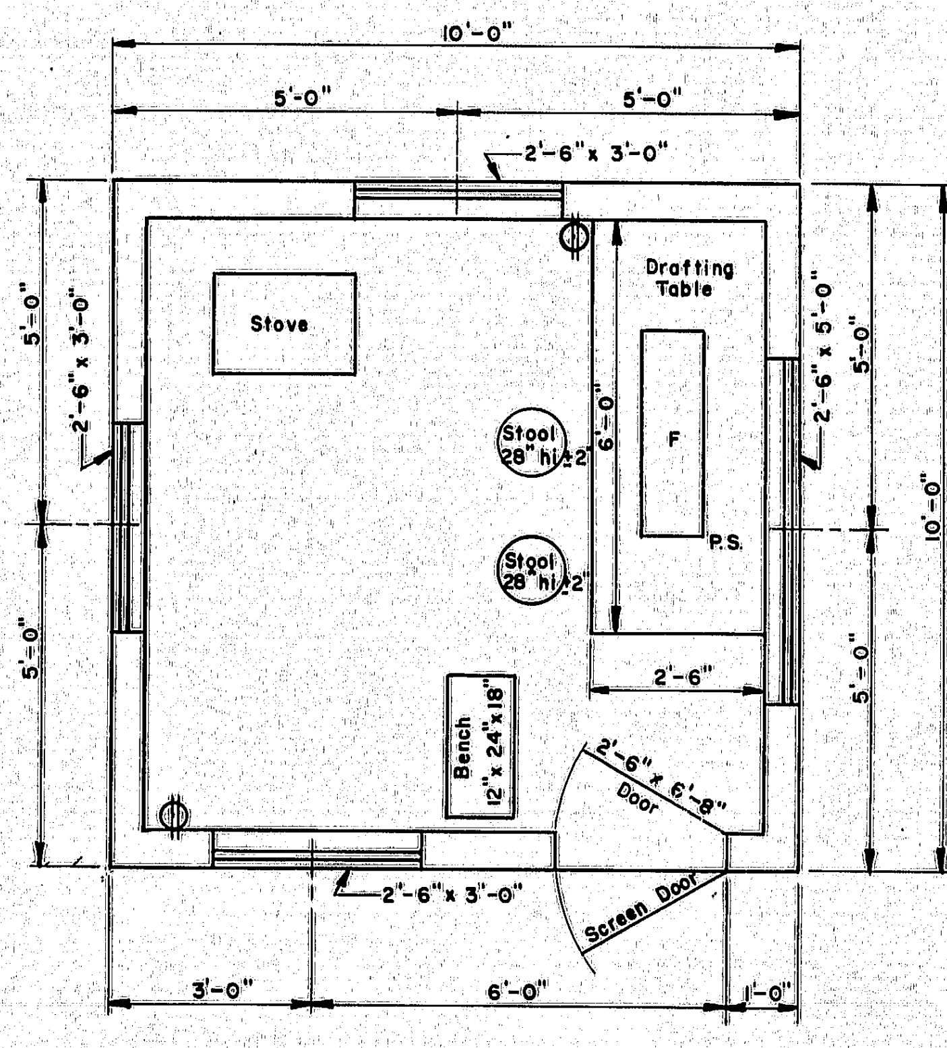
B. P. R. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	6221	22	22



FLOOR PLAN
TYPE "A"



FLOOR PLAN
TYPE "B"

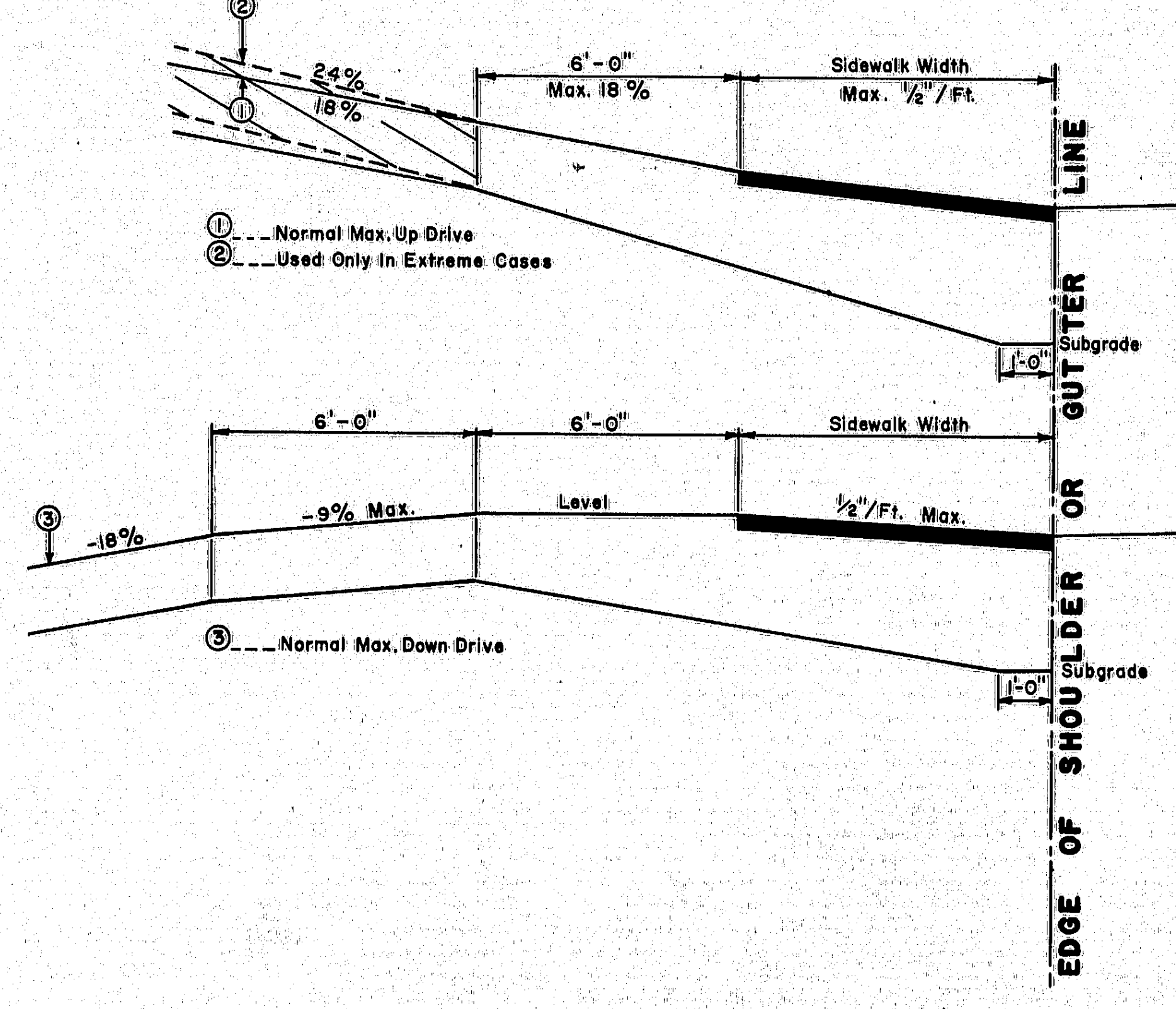


FLOOR PLAN
TYPE "C"

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.
   - ⏀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.

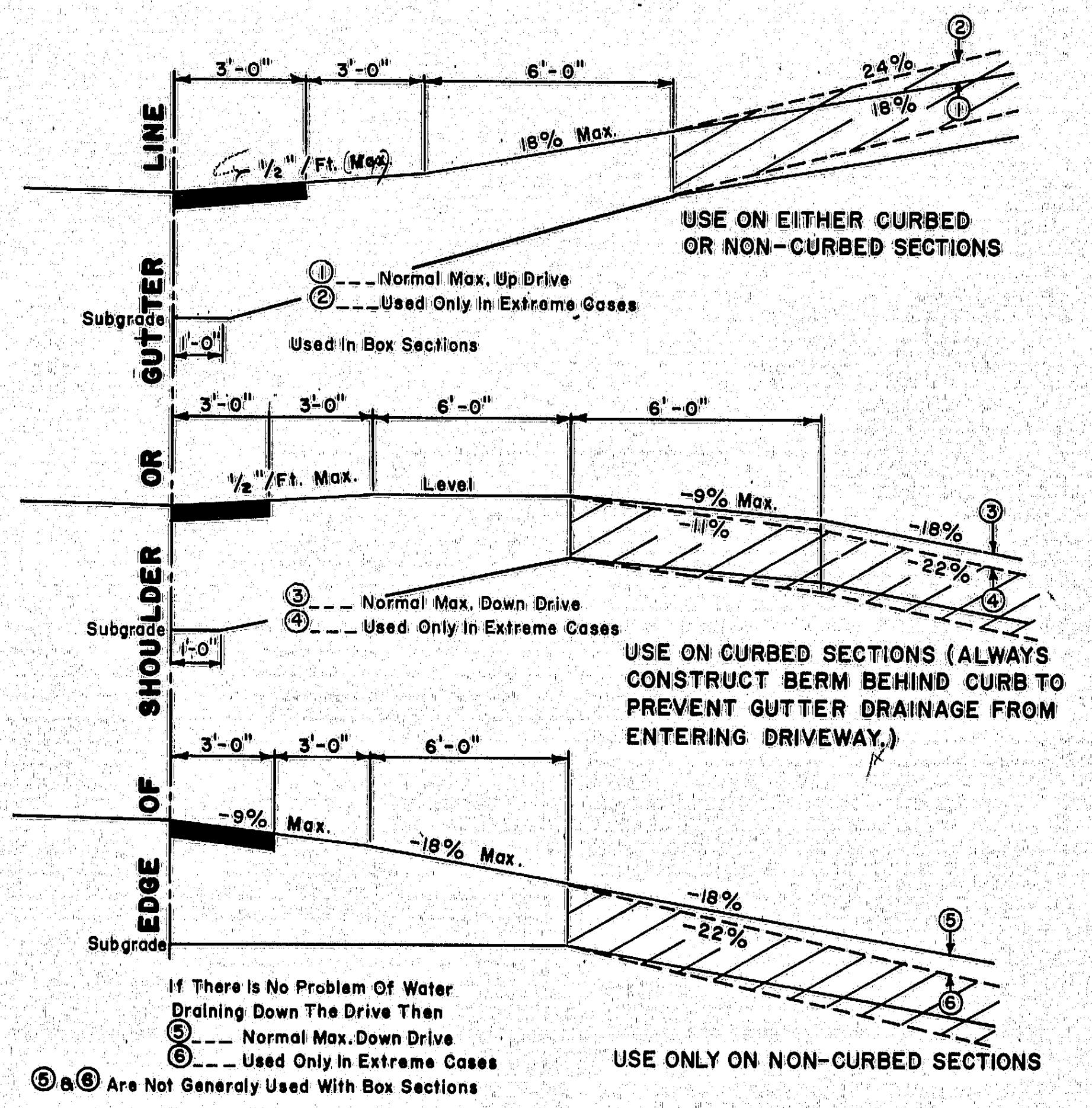
DRIVES ON SIDEWALK SECTIONS



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

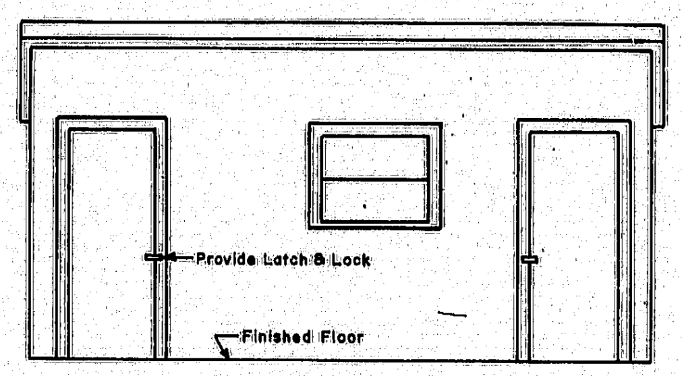
NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter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

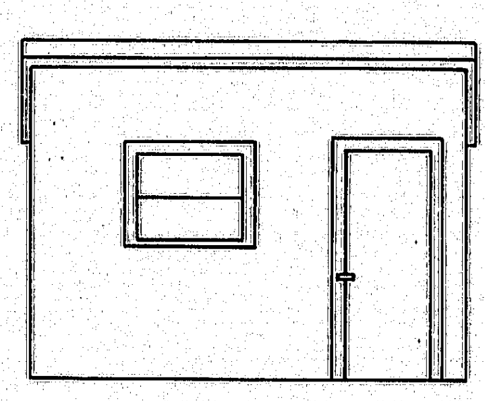

3'-0"
3'-0"
6'-0"
½"/Ft. (Max)
18% Max.
24%
18%
②
①
① Normal Max. Up Drive
② Used Only In Extreme Cases
Used In Box Sections
USE ON EITHER CURBED OR NON-CURBED SECTIONS
Subgrade
3'-0"
3'-0"
6'-0"
6'-0"
½"/Ft. Max.
Level
-9% Max.
-11%
-18%
-22%
③
④
③ Normal Max. Down Drive
④ Used Only In Extreme Cases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

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

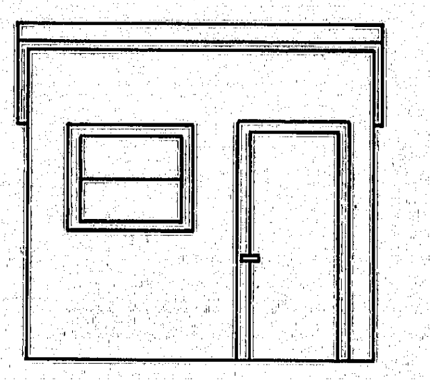
NOTES ON MAXIMUM DRIVEWAY PROFILES
1. These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
2. Generally the majority of drives on a project will be built with flatter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



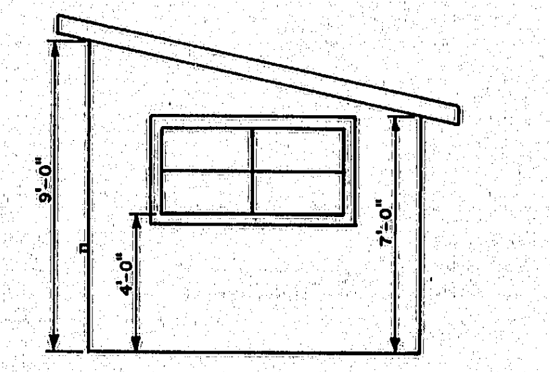
FRONT ELEVATION
TYPE "A"



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

6221 BERWICK 151-159