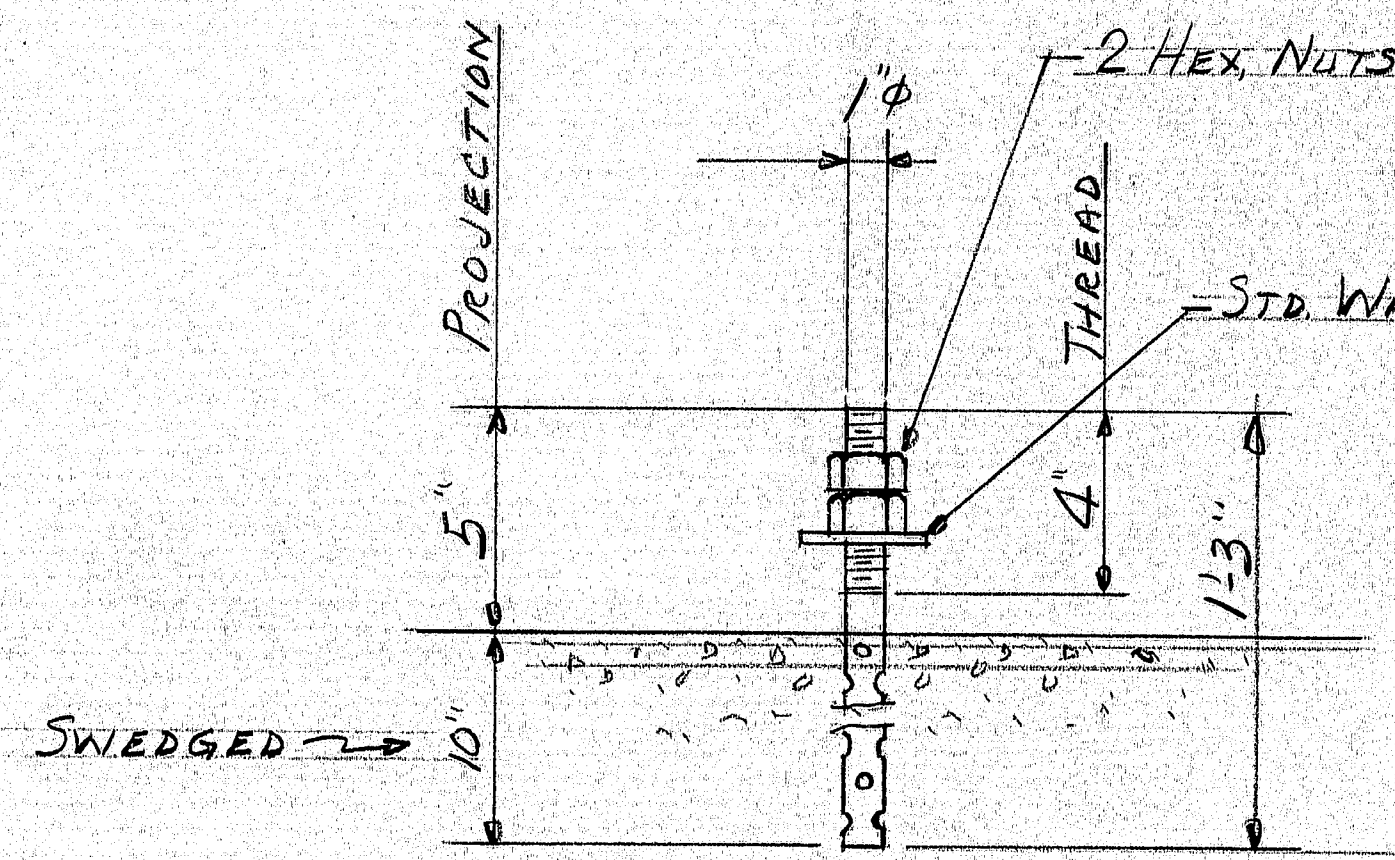
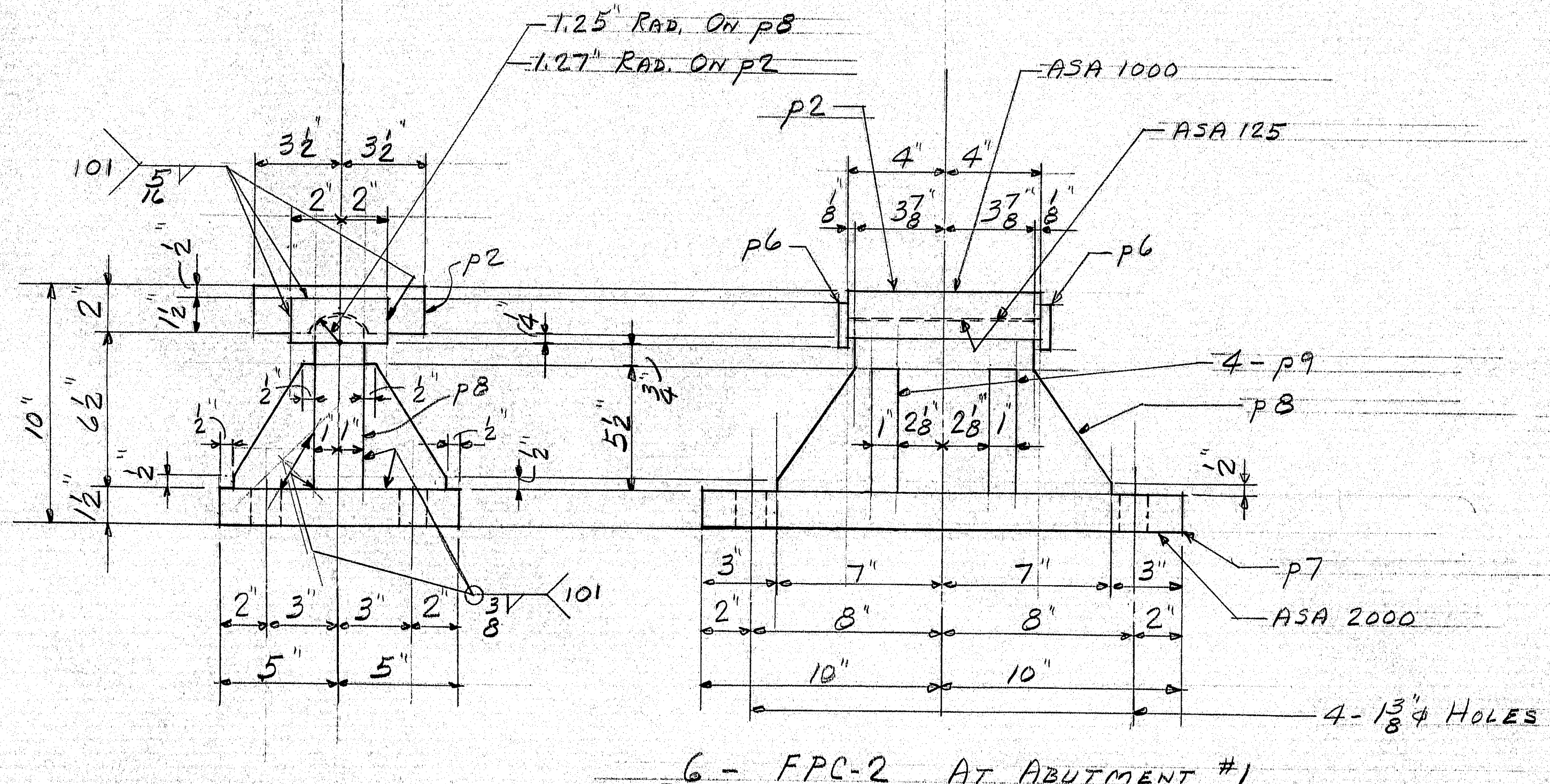
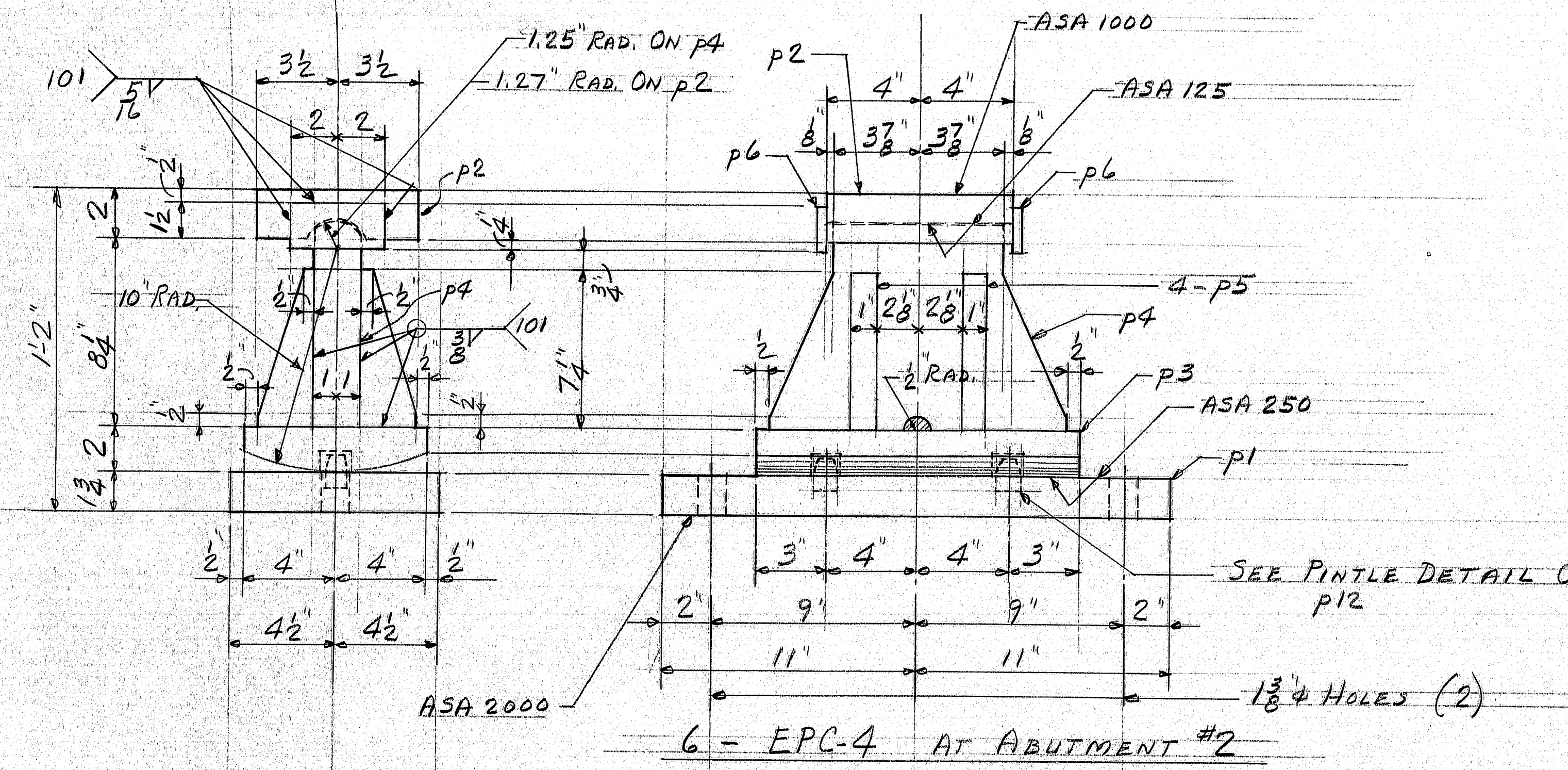


161-147





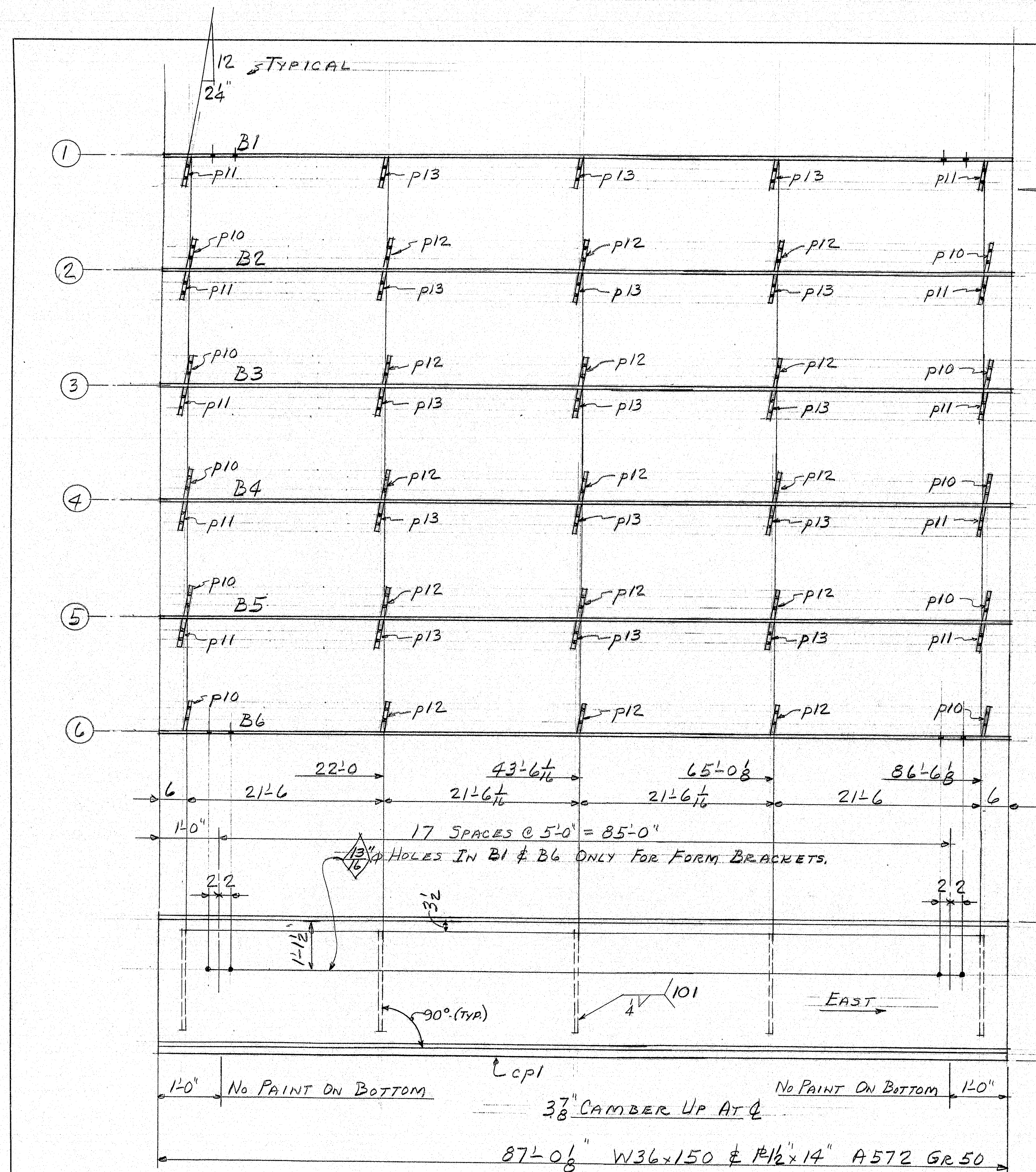
SHIP		BILL OF MATERIAL			JOB NO. J-236		DWG. NO. A-1	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS		
EPC4	6	ASSEMBLY			-			
	6	p1	#1 1/2" x 9"	1 10				
	6	p2	#2" x 7"	0 8				
	6	p3	#2" x 8"	1 2				
	6	p4	#2" x 9 1/4"	1 1				
	24	p5	#1" x 2 1/2"	0 7 1/4				
	12	p6	#3/8" x 1 3/4"	0 4				
	12	p12	BAR 1" #	0 1 1/2				
FPC2	6	ASSEMBLY			-			
	6	p7	#1 1/2" x 10"	1 8				
	6	p2	#2" x 7"	0 8				
	6	p8	#2" x 7 1/2"	1 2				
	24	p9	#1" x 3 1/2"	0 5 1/2				
	12	p6	#3/8" x 1 3/4"	0 4				
ABI	36	Bar	1" #	1 3				
	72	1" HEAVY HEX NUT			} A325-TYPE 1			
	36	1" STD. WASHER						
PROJ. NO. I-95-9 (92) 296								
PAINT: T.T.P. 615 TYPE II - ONE COAT, EXCEPT AS NOTED								
ORANGE - 4 MILS WET								
2 COATS ORANGE 4 MILS WET PER COAT ON								
ASA 250 SURFACE ONLY.								
BLAST CLEAN SPG (COMMERCIAL BLAST)								
STEEL: A.S.T.M. A36								
COAT TOP 1" DOWN ON P2 WITH BOILED LINSEED OIL (NO PAINT)								
NO PAINT ON ASA 125 SURFACE, COAT WITH WHITE LEAD TALLOW.								
CUSTOMER ORDER NO.								
REFERENCE DRAWINGS: 18 OF 30								
HOLES: AS NOTED								
FIELD CONN.								
PAINT: PER STATE OF MAINE SPECS.								
BEARING PEDESTALS (12)								
ANCHOR BOLTS (36)								
MEGQUIER & JONES CORP.								
1156 BROADWAY								
SOUTH PORTLAND, MAINE 04106								
BRIDGE I-95 NB. OVER FOXCROFT RD.								
HOULTON, MAINE								
CUSTOMER: CIANBRO CORP.								
ARCHITECT: MAINE D.O.T.								
JOB NO. J-236								
DWG. NO. A-1								

FINAL

36 - ABI  
ANCHOR BOLTS

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BILL OF MATERIAL						JOB NO. J-236	DWG. NO. 5-1
SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS	
B1	1		W36x150	87' 0 1/8"		A572 GR. 50	
B2	1		Do.	87' 0 1/8"			
B3	1		Do.	87' 0 1/8"			
B4	1		Do.	87' 0 1/8"			
B5	1		Do.	87' 0 1/8"			
B6	1		Do.	87' 0 1/8"			
	6	cpl	#1/2"x14	87' 0 1/8"			

10	p10	BAR 8x3/8	2	3	A36
10	p11	Do.	2	3	
15	p12	Do.	2	3	
15	p13	Do.	2	3	

FB-4	80	5/8" CARRIAGE BOLT	1/2	TO FILL FORM HOLES	
				BLACK	

PAINT TTP-615R TYPE II  
ORANGE 4 MILS WET

ITEM 504.70

PROJ. NO. I-95-9 (92) 296

BLAST CLEAN SP6 (COMMERCIAL BLAST)

CUSTOMER ORDER NO.

REFERENCE DRAWINGS: 14 OF 30

HOLES: 1/8" & UNLESS NOTED

FIELD CONN: 3/8" A325 BOLTS TYPE I

PAINT: PER STATE OF MAINE SPEC.

BEAMS (6)

MEGQUIER & JONES CORP.

1156 BROADWAY  
SOUTH PORTLAND, MAINE 04106

BRIDGE I-95 N.B. OVER FOXCROFT RD.  
HOULTON, MAINE

CUSTOMER: CIANBRO CORP.

ARCHITECT: MAINE D.O.T.

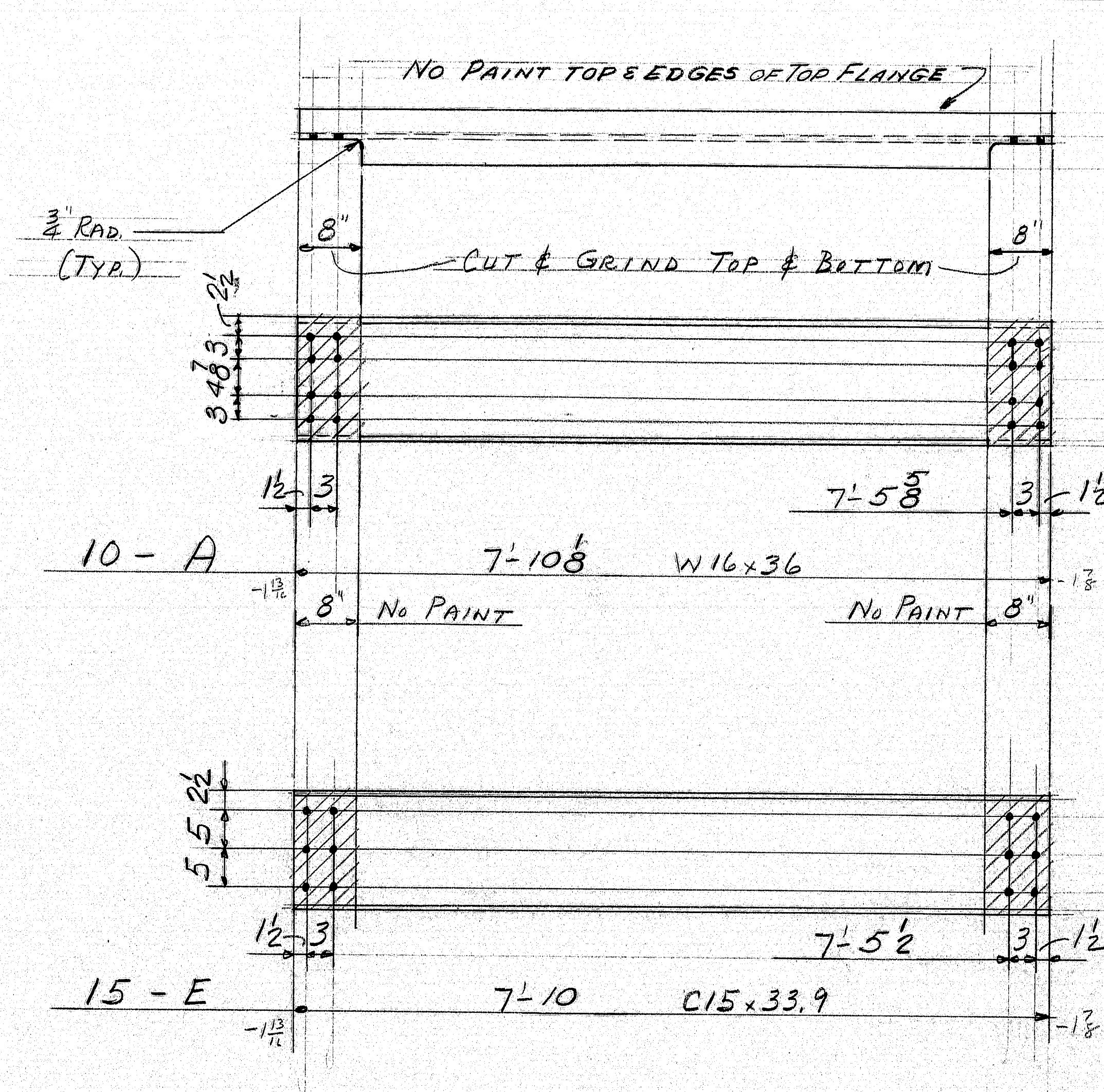
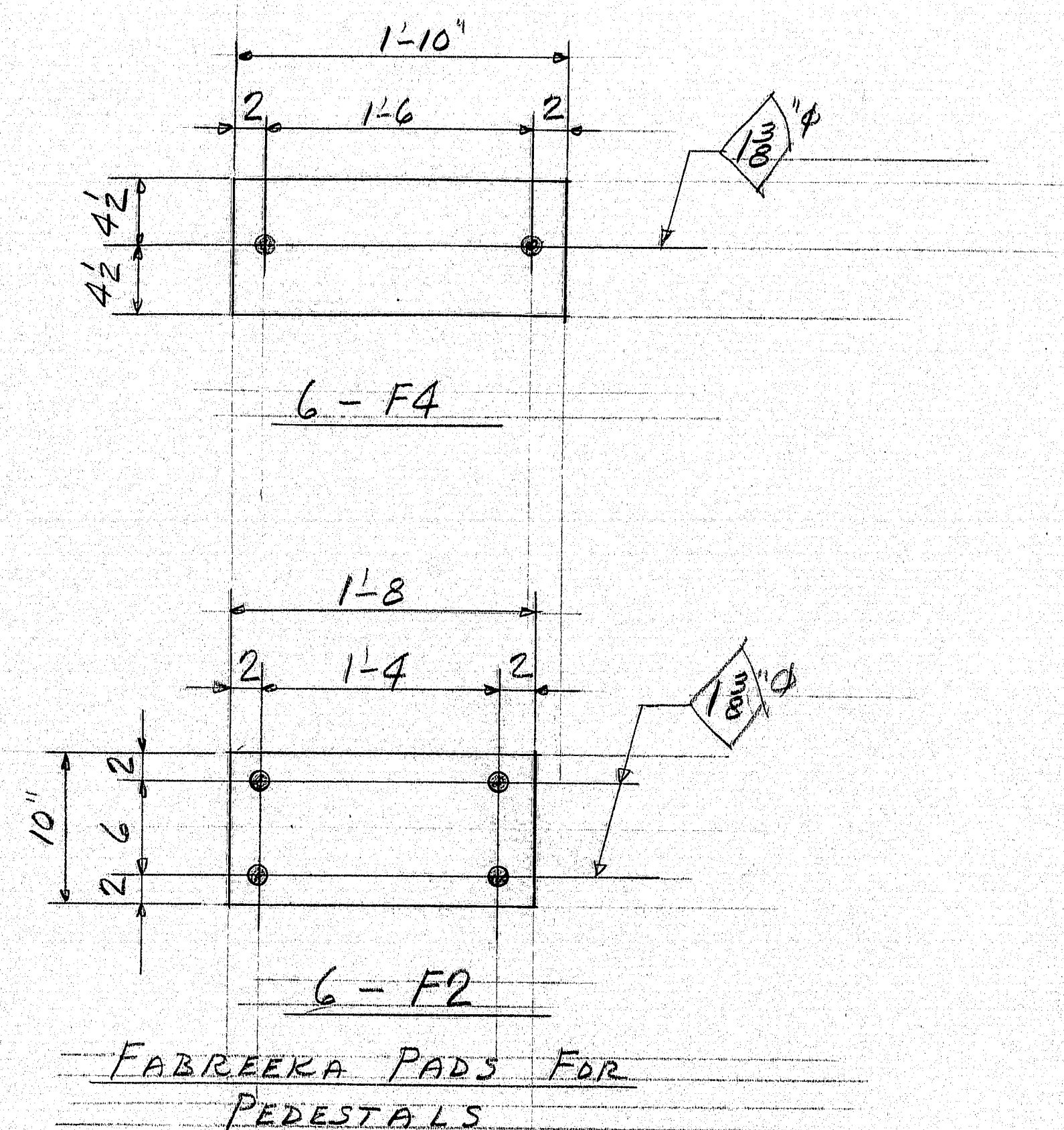
JOB NO. J-236

DWG. NO. 5-1

APPR.	11-20-79	1-8-80
APPR.		
SHOP	1-7-80	1-21-80
F. & O.	1-21-80	
DRAWN	11-16-79	D.R.
CHECKED	12-22-79	PLF
REVISION	1-2-80	PLF
REVISION	1-21-80	PLF
REVISION		

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SHIP	BILL OF MATERIAL				JOB NO. J-236	DWG. NO. S-2
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
A	10		W16x36	7' 10 1/8"		A36
E	15		C15x33.9	7' 10"		A36
FABRIKKA PADS:						
F4	6		9x8	1' 10"	}	PA#
F2	6		10x8	1' 8"		
FIELD BOLTS FOR DIAPHRAGMS:						
FB-1	164		3/4" BOLT	0 2	FOR A	} A325 TYPE 1
FB-2	184		Do.	0 24	FOR E	
FB-3	348		3/4" WASHER			
PAINT: TYP. 65% TYPE II						
ORANGE 4 MILS WET						
ITEM 504.70						
PROJ. NO. I-95-9 (92) 296						
BLAST CLEAN SFG (COMMERCIAL BLAST)						
CUSTOMER ORDER NO.:						
REFERENCE DRAWINGS: 8D 113-78						
HOLES: 1/8" UNLESS NOTED						
FIELD CONN: 3/4" A325-TYPE I						
PAINT: PER STATE OF MAINE SPEC.						
DIAPHRAGMS (25)						
MEGQUIER & JONES CORP.						
1156 BROADWAY						
SOUTH PORTLAND, MAINE 04106						
BRIDGE I-95 N.B. OVER FOXCROFT RD.						
HOULTON, MAINE						
CUSTOMER CIANERO CORP.						
ARCHITECT MAINE D.O.T.						
JOB NO. J-236						
DWG. NO. S-2						

APPR.	11-20-79	1-8-80
APPR.	1-7-80	
SHOP	1-21-80	
DRAWN	11-16-79	D.R.
CHECKED	12-8-79	PLF
REVISION	1-2-80	PLF
REVISION		
REVISION		

BRIDGE I-95 N.B. OVER FOXCROFT RD.  
HOULTON, MAINE

CUSTOMER CIANERO CORP.  
ARCHITECT MAINE D.O.T.

JOB NO. J-236

DWG. NO. S-2

FINAL

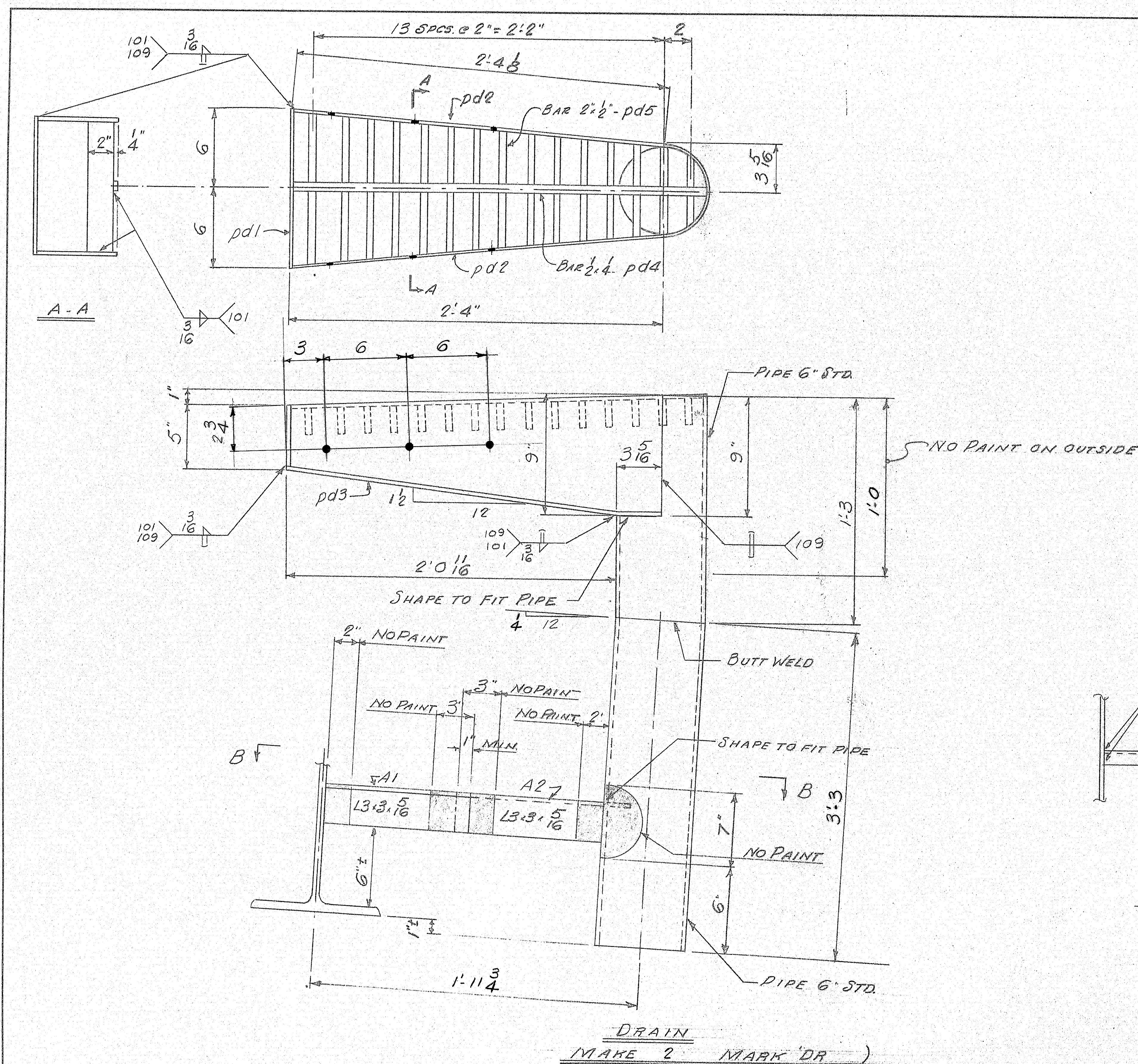
FINAL

161-150









SHIP		BILL OF MATERIAL		JOB NO. J-236		DWG. NO. S4	
MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS	
DR	2		SHOP ASSEMBLY				
	2	pd1	R4x4 3/4	0	118		
	4	pd2	R4x9	2	48		
	2	pd3	R4x12	2	48	BEND & FIT	
	2	pd4	BAR 2 1/4	2	63		
	2	pd5	BAR 2 1/2	12	0	CUT TO FIT	
	2	SHOP PIPE 6" STD		1	3	ASTM A53 GRADE B	
	2	SHOP PIPE 6" STD		3	3	ASTM A53 GRADE B	
A1	2		L3x3x5/16	1	0	A572 Gr B	
A2	2		L3x3x5/16	1	0	A572 Gr B	
			SUBSTITUTE L4x4x5/16				

ITEM No 502.20  
PROJECT No. I-95-9 (92) 296  
A36 STEEL EXCEPT AS NOTED  
BLAST CLEAN SPS (COMMERCIAL BLAST)

CUSTOMER ORDER NO.  
REFERENCE DRAWINGS: BD 104-77  
HOLES: 1/2" Ø  
FIELD CORN: WELD  
PAINT: T.P. 65 TYPE 2 ORANGE-4 MILS. WET

DRAINS (2)

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

BRIDGE I-95 NB OVER FOXCROFT RD.  
HOULTON, MAINE

CUSTOMER: CYANBRO CORP.  
ARCHITECT: MAINE DEPT. OF TRANSPORTATION

APPR.	11-20-79	1-8-80
APPR.		
SHOP	1-7-80	
F. & O.	1-21-80	
DRAWN	1-19-79 D.R.	
CHECKED	1-2-80 P.L.F.	
REVISION	1-2-80 P.L.F.	
REVISION	1-2-80 P.L.F.	

JOB NO. J-236 DWG. NO. S4

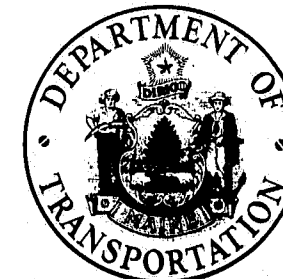
161-152







STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



BUREAU OF HIGHWAYS  
HOULTON  
AROOSTOOK COUNTY  
MAINE FEDERAL AID INTERSTATE  
INTERSTATE 95-N.B. BRIDGE  
OVER  
FOXCROFT ROAD  
PROJECT NO. I-95-9(92)296  
TOTAL LENGTH 0.017 MILES

SPECIFICATIONS

DESIGN: AASHTO, Specifications for Highway Bridges, 1977; and Interim Specifications, 1978.

CONTRACT: State of Maine, State Highway Commission, Standard Specifications, Highways and Bridges, Revision of June 1968.

DESIGN LOADING

LIVE LOAD ----- HS 25 As Modified for Interstate Highways

MATERIALS

CONCRETE: Slope Protection ----- Class Y  
Wearing Surface ----- Class AA  
All Other ----- Class A  
REINFORCING STEEL ----- ASTM A615, Grade 60  
STRUCTURAL STEEL:  
Beams ----- ASTM A572, Grade 50  
Diaphragms, Bearings & Armored Joint ----- ASTM A36  
Drains ----- ASTM A53 and A36  
High Strength Bolts ----- ASTM A325  
All Other ----- ASTM A36

BASIC ALLOWABLE STRESSES

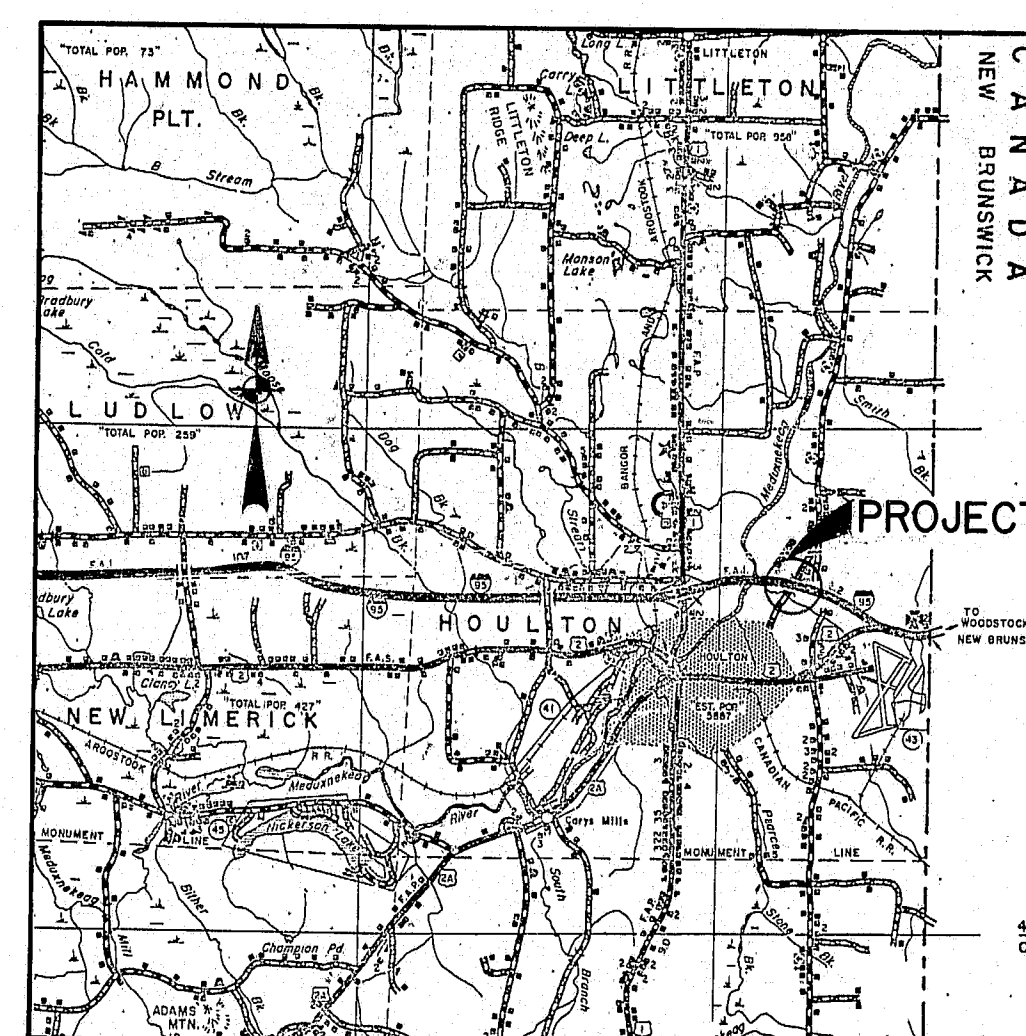
CONCRETE -----  $f_c = 1200 \text{ psi}$ ,  $n = 9$   
REINFORCING STEEL -----  $f_s = 24,000 \text{ psi}$   
STRUCTURAL STEEL:  
ASTM A572 -----  $f_s = 27,000 \text{ psi}$   
ASTM A36 -----  $f_s = 20,000 \text{ psi}$   
ASTM A53 -----  $f_s = 20,000 \text{ psi}$   
ASTM A325 -----  $f_v = 19,000 \text{ psi}$

NOTE

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (REVISION OF JUNE 1968) AND SUPPLEMENTS THERETO, EXCEPT AS MODIFIED ON THE PLANS AND IN THE SPECIAL PROVISIONS.

TRAFFIC DATA

A.D.T. 580 1980  
A.D.T. 880 2000  
D.H.V. 150  
T. (%) 10  
D. (%) 100  
V. 70 mph



LOCATION MAP  
SCALE IN MILES

INDEX OF SHEETS

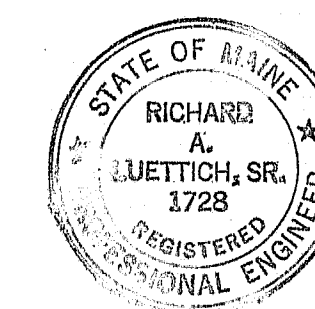
TITLE SHEET	1
QUANTITIES	2
GENERAL PLAN	3
FOUNDATION SURVEY	4
PROFILE AND CONSTRUCTION LIMITS	5
CROSS SECTIONS-FOXCROFT ROAD	6 & 7
CONCRETE SLOPE PROTECTION	8
ABUTMENT NO. 1	9
ABUTMENT NO. 2	10
ABUTMENT DETAILS	11
CONCRETE END POSTS	12
APPROACH SLABS AND CULVERT END STRUCTURES	13
STRUCTURAL STEEL FRAMING PLAN AND BLOCKING	14
SUPERSTRUCTURE	15
REINFORCING STEEL SCHEDULE	16 & 17

STANDARD DETAILS

BD101-74 BEARING PEDESTALS, APRIL '74, REV. 6-14-78	18
BD104-77 ARMORED JOINT, DRAINS, ETC., FEB. 1977, REV. 3-1-77	19
BD113-78 DIAPHRAGMS & CROSSFRAMES, JUNE 1978	20
BD114-77 ALUMINUM BRIDGE RAILING, 2-BAR, DEC. '77, REV. 1-78	21
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AUGUST 1969 ⑤ GUARD RAIL, ETC., REV. 6-1-78	26
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AUGUST 1969 ⑦ WARNING SIGNS, ETC., REV. 3-22-77	28
AUGUST 1969 ⑧ FIELD OFFICE, ETC., REV. 3-16-73	29

RIGHT OF WAY MAP	30
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APPROVED:



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
COMMISSIONER  
BUREAU DIRECTOR AND CHIEF ENGINEER

DATE

3/1/79

3/1/79

UNITED STATES  
DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
REGION I

APPROVED:

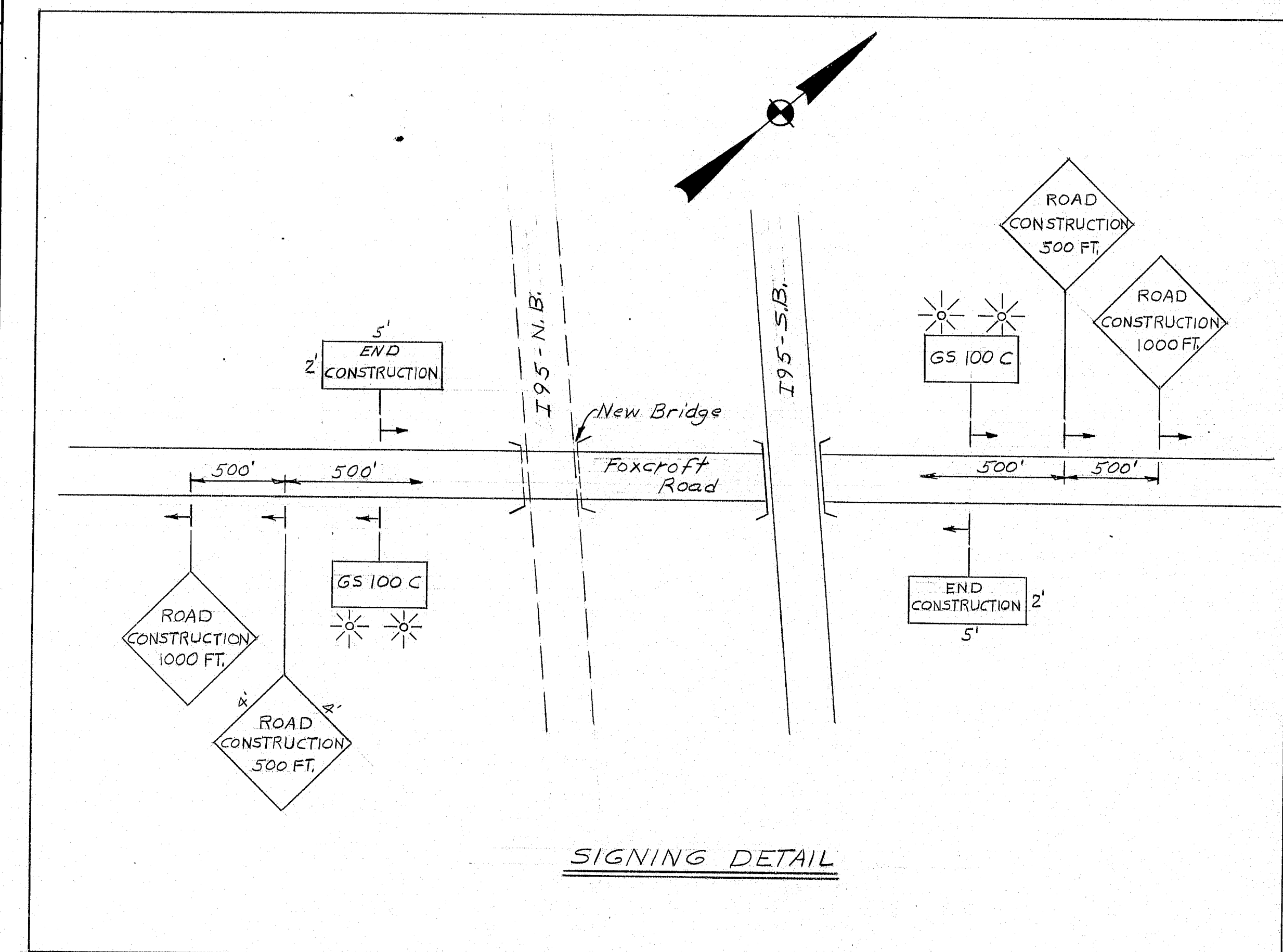
DIVISION ADMINISTRATOR DATE

176-81



ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.25	Granular Borrow	14,000	C.Y.
203.26	Gravel Borrow	300	C.Y.
206.06	Str. Earth Excav. Drainage & Minor Str. Below Grade	50	C.Y.
206.07	Str. Rock Excav. - Drainage and Minor Str.	5	C.Y.
206.08	Str. Earth Excav. - Abuts. and Ret. Walls	975	C.Y.
206.09	Str. Rock Excav. - Abuts. and Ret. Walls	30	C.Y.
304.10	Aggregate Subbase Course - Gravel	575	C.Y.
460.22	Hot Bit. Pavement	10	Ton
502.21	Structural Concrete, Abuts. and Ret. Walls	610	C.Y.
502.260	Structural Concrete, Roadway and Sidewalk Slabs on Steel Bridges (Foxcroft Road)	NEC.	L.S.
502.290	Structural Concrete, Wearing Surface on Bridges (Foxcroft Road)	NEC.	L.S.
502.310	Structural Concrete, Approach Slabs (Foxcroft Rd.)	NEC.	L.S.
502.32	Structural Concrete, Culvert Endwalls	20	C.Y.
503.12	Reinforcing Steel, Fab. and Delivered	66,700	Lb.
503.13	Reinforcing Steel, Placing	66,700	Lb.
504.700	Structural Steel, Fab. and Delivered (Foxcroft Rd.)	NEC.	L.S.
504.710	Structural Steel, Erection (Foxcroft Rd.)	NEC.	L.S.
505.080	Shear Connectors (Foxcroft Road)	NEC.	L.S.
506.141	Field Painting New Structural Steel	NEC.	L.S.
507.14	Aluminum Bridge Railing, Type "A"	138	L.F.
512.07	French Drains (Stones Only)	22	C.Y.
513.09	Slope Protection - Portland Cement Concrete	295	S.Y.
514.06	Curing Box for Concrete Cylinders	1	Each
515.20	Protective Coating for Concrete Surfaces	500	S.Y.
603.17	18 Inch Culvert Pipe, Option 1	123	L.F.
603.20	30 Inch Culvert Pipe, Option 1	123	L.F.
604.09	Catch Basins Type B1	2	Each
606.26	Terminal Ends - Single Rail	4	Each
606.35	Guard Rail Delineator Posts	4	Each
606.53	Guard Rail Type 3 - Single Rail	273	L.F.
606.60	Guard Rail Type 3 - Circular - Greater than 15 foot Radius	30	L.F.
609.13	Vertical Bridge Curb - Type 1	135	L.F.
615.07	Loam	200	C.Y.
616.08	Sodding	80	S.Y.
618.14	Seeding, Method Number 2	35	Unit
618.15	Temporary Seeding	25	Lb.
619.12	Mulch	85	Unit
629.05	Labor, Straight Time	20	M.Hr.
* 631.13	Bulldozer (inc. op.)	10	Hour
* 631.17	Truck - Small (inc. op.)	10	Hour
* 631.22	Front End Loader (inc. op.)	10	Hour
* 632.08	Warning Lights	2	Group
* 637.07	Sprinkling	20	M.G.
* 637.08	Calcium Chloride	2	Ton
639.09	Field Office, Type B	1	Each
* 656.50	Baled Hay, in place	10	Each
* 656.51	Sandbags, in place	10	Each
* Undetermined location			

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
657.20	Seed and Application, Method A	30	Unit
659.10	Mobilization	NEC.	L.S.
660.21	On-the-Job Training (81d)		M.Hr.
Estimated Quantities for Lump Sum Items (Foxcroft Road)			
502.260	Structural Concrete, Roadway and Sidewalk Slabs on Steel Bridges	135	C.Y.
502.290	Structural Concrete, Wearing Surface on Bridges	40	C.Y.
502.310	Structural Concrete, Approach Slabs	31	C.Y.
504.700	Structural Steel, Fab. and Delivered	129,800	Lb.
504.710	Structural Steel, Erection	129,800	Lb.
505.080	Shear Connectors	1,296	Lb.
506.141	Field Painting New Structural Steel	129,800	Lb.



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

195 NORTHBOUND  
OVER  
FOX CROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY

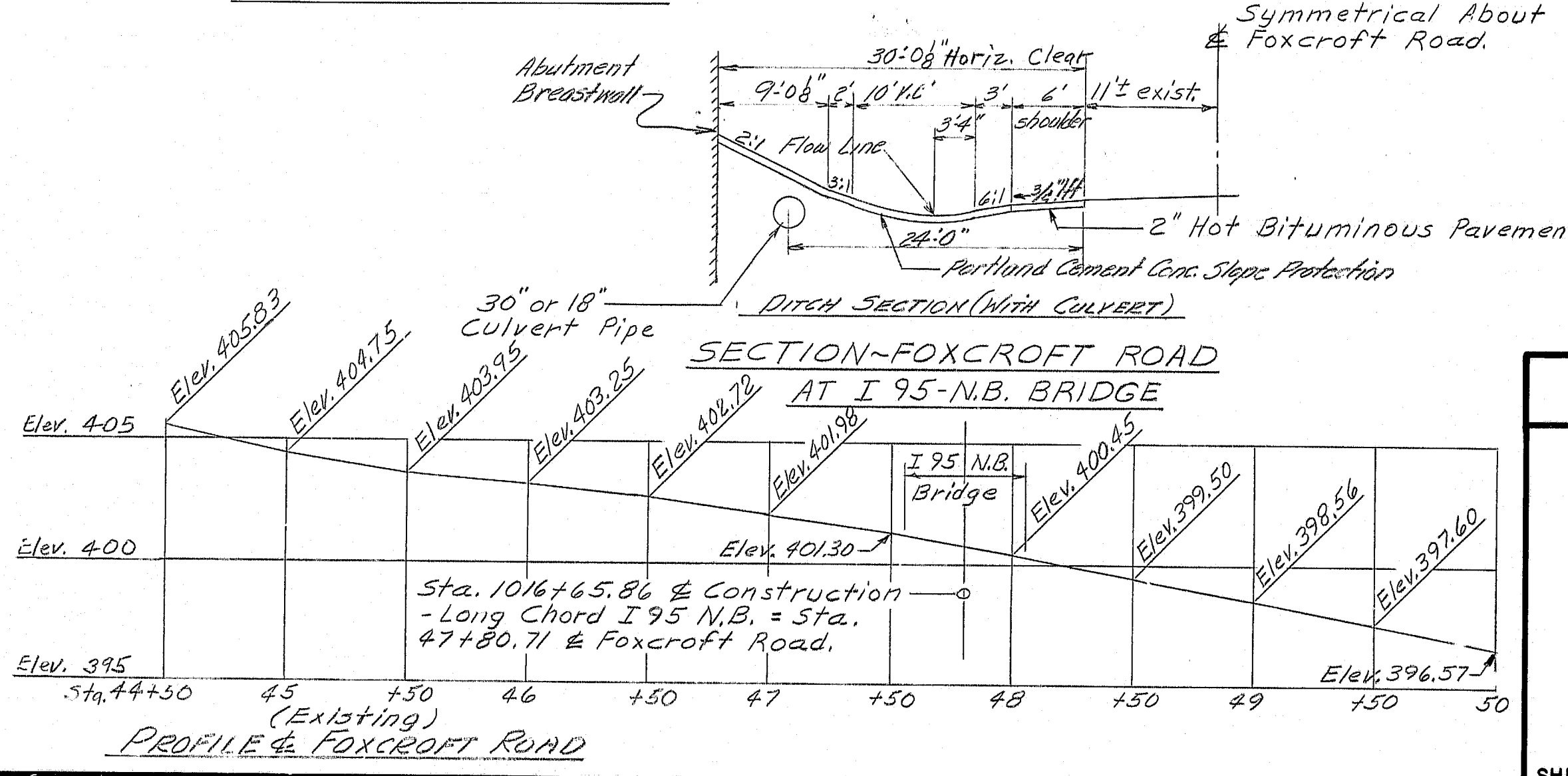
QUANTITIES

SHEET 2 OF 30 AUGUSTA, MAINE MAY 1979

176-82



Ref.: Survey Book No. 95-4591



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

I95 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY

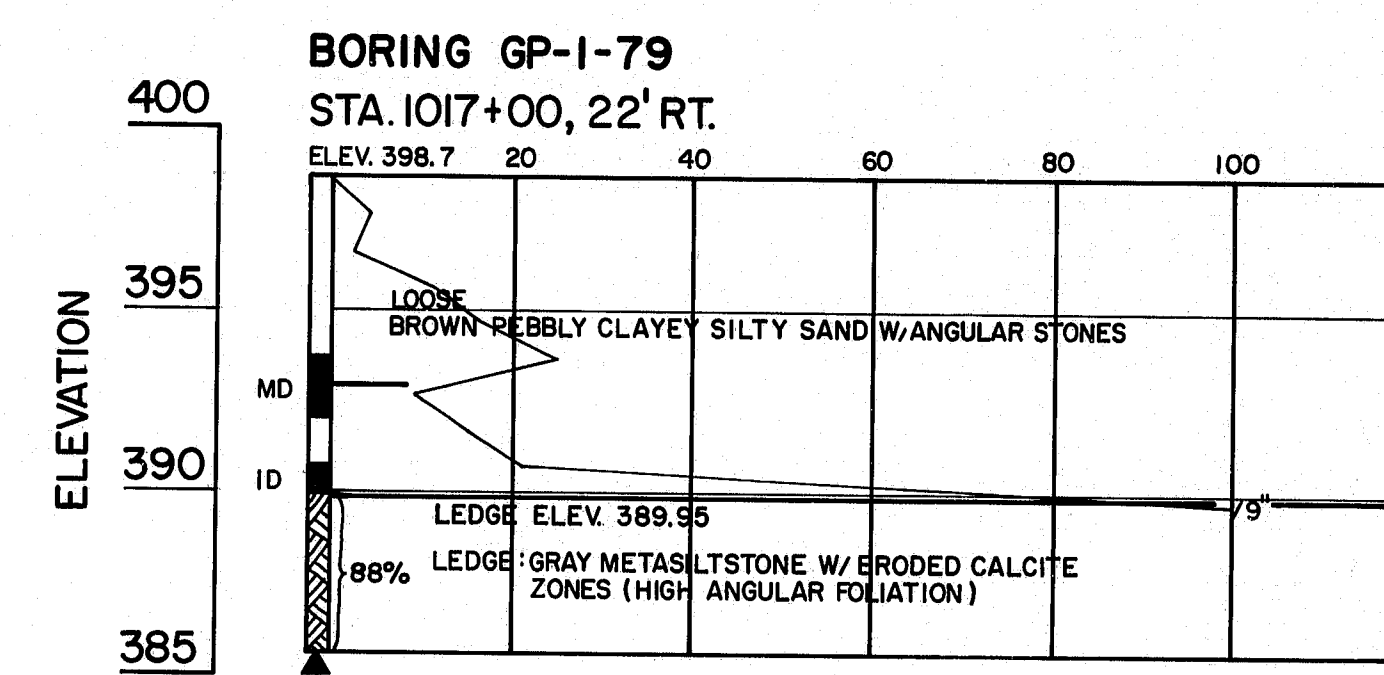
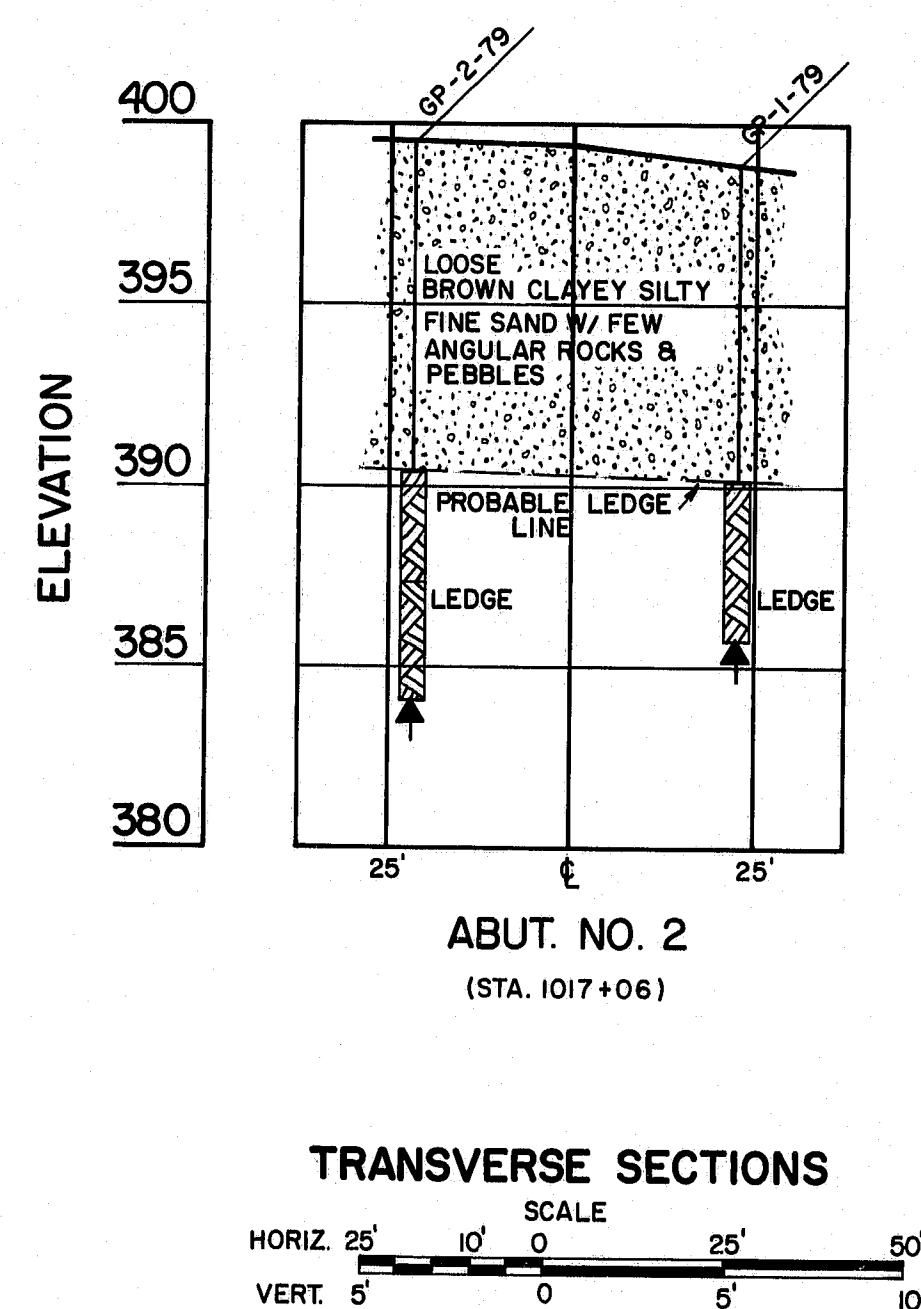
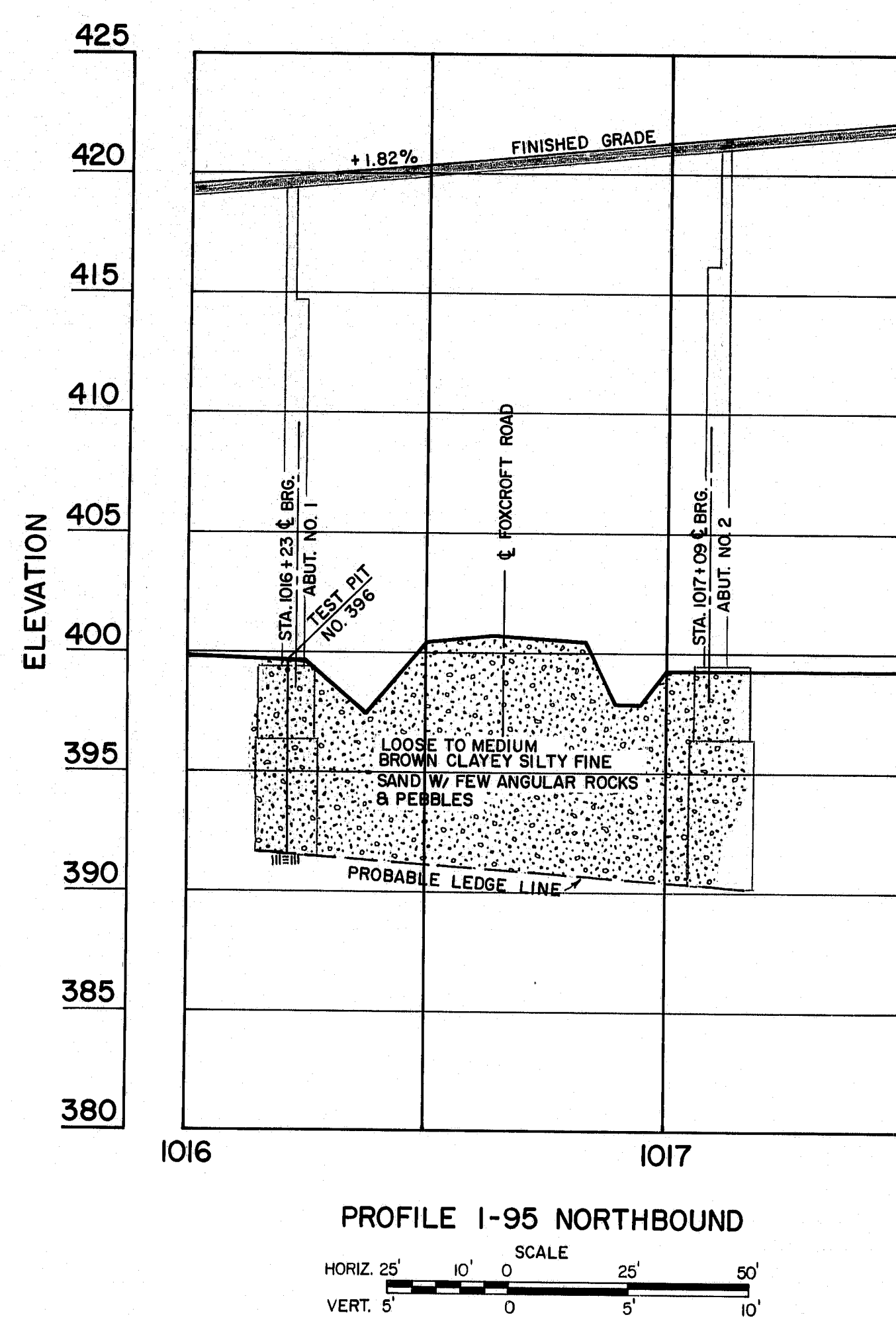
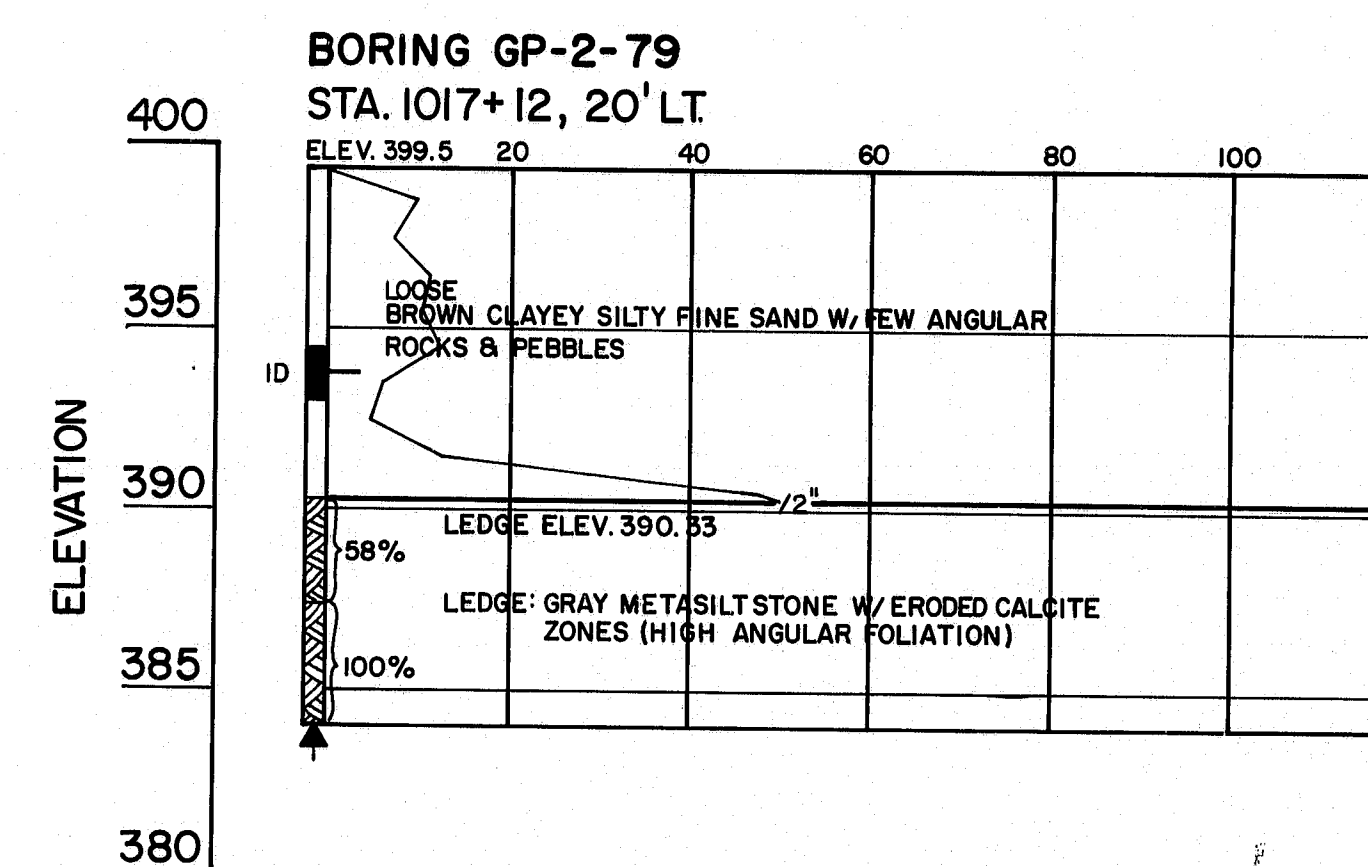
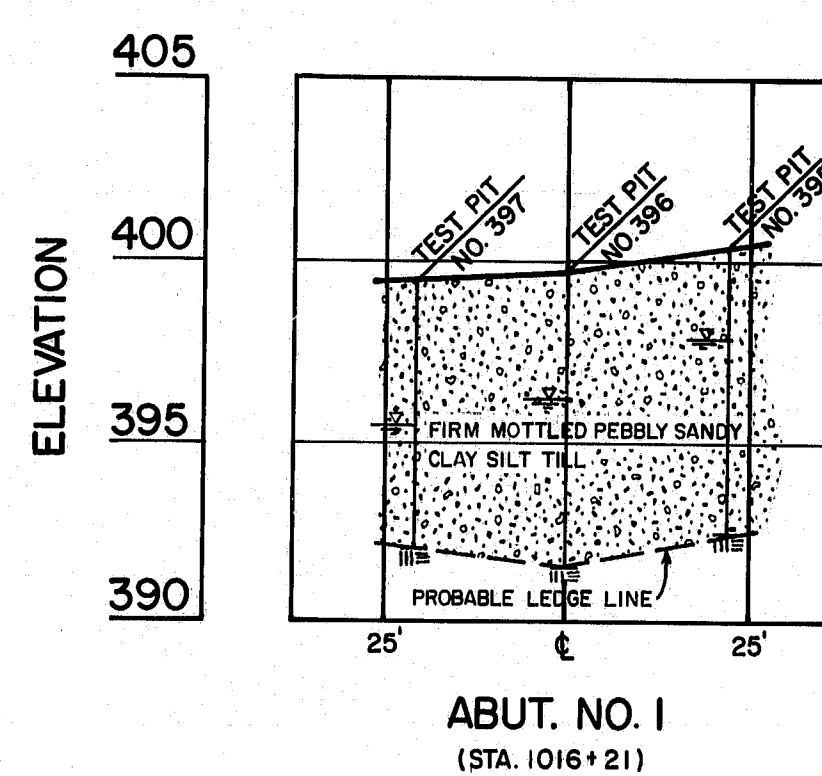
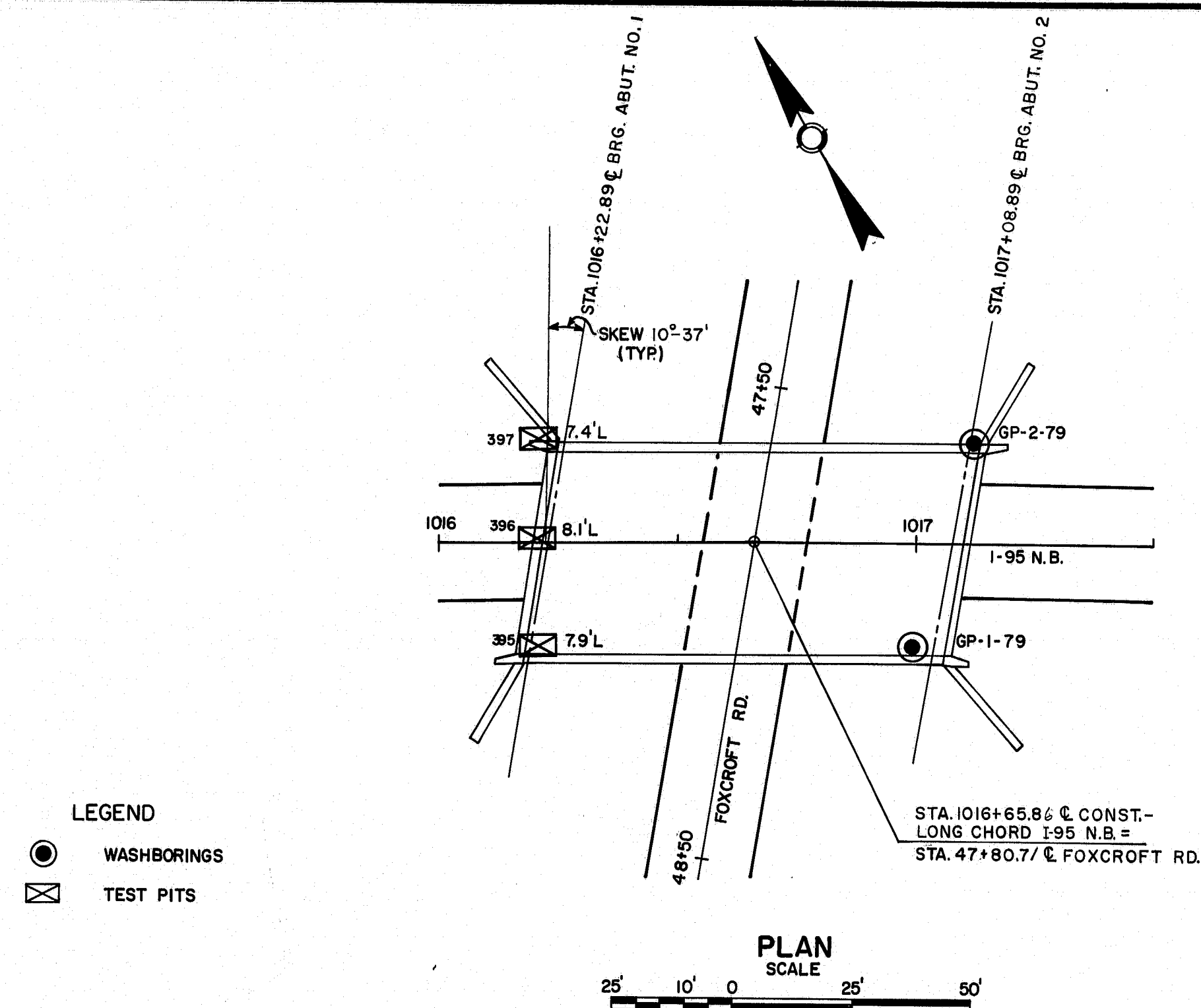
GENERAL PLAN

SHEET 3 OF 30 AUGUSTA, MAINE MAY 19 1964

176-83



F.R.W.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	4	30



#### BORING NOTES

- All samples and vane are made ahead of casing
- Water elevation
- Number of blows required to drive extra heavy casing one foot with 400 ft. lbs. of energy per blow
- Location of sample or sample attempt
- Number and type of dry sample
- S & H Sampler # 1290's
- Unsuccessful sample attempt and type of sampler
- Number of blows required to drive spoon or tubing one foot with 350 ft. lbs. of energy per blow
- Bottom of boring (may not be bottom of soil strata)
- Locations cored by diamond bit and per cent recovery of rock

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**I-95 NORTHBOUND  
OVER  
FOX CROFT ROAD**

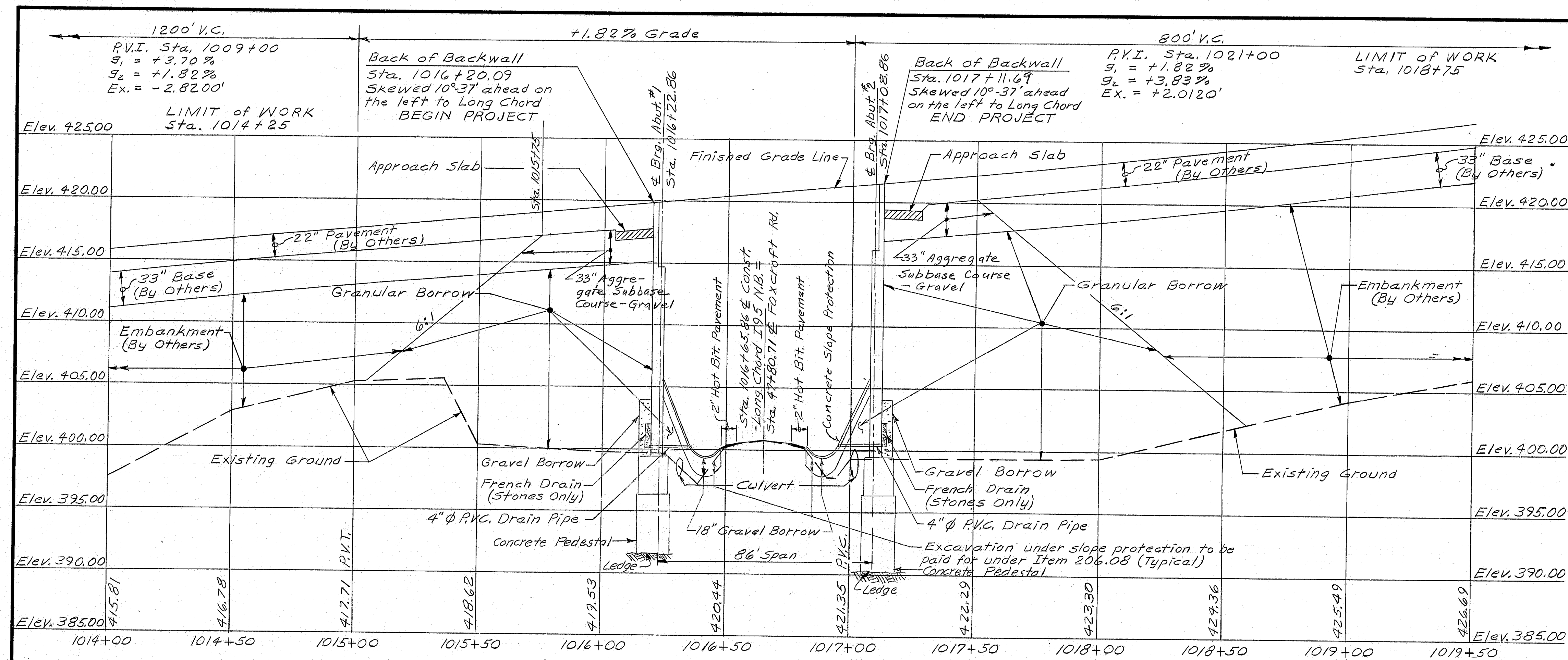
IN THE TOWN OF  
**HOULTON**  
**AROOSTOOK COUNTY**

FOUNDATION SURVEY

SHEET 4 OF 30 AUGUSTA, MAINE MAY 1999

176-84

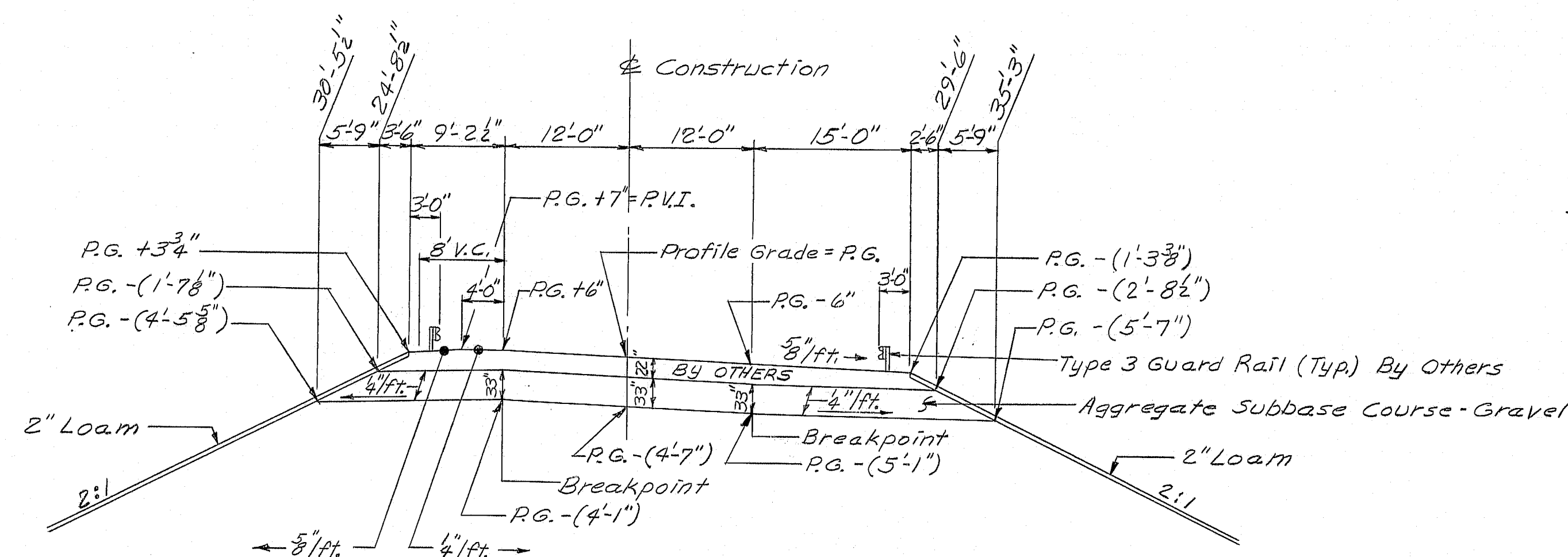




PROFILE & CONSTRUCTION I-95 N.B.

#### GENERAL CONSTRUCTION NOTES

- Slopes shall be loamed unless otherwise directed by the Engineer.
- Seeding - Method No. 2 and Mulch all slopes as directed by the Engineer.
- Loam depth is 2" nominal.
- The Utilities Involved in this contract are:  
Water - Houlton Water Co.  
Telephone - New England Tel. & Tel. Co.
- All Utilities Facilities shall be adjusted by the respective utilities unless noted.
- Do not excavate for Gravel Borrow under slope protection at the sides of Foxcroft Road where existing material is suitable as determined by the Engineer.
- Stones which cannot be rolled or compacted into the surface of the shoulder shall be removed by hand raking. No separate payment will be made for hand raking and the cost will be considered to be incidental to Item 304.10.
- For easements, construction limits and right of way lines refer to RIGHT OF WAY MAP.
- Excavation for Culvert End Structures and cut slopes along Foxcroft Road will be paid for under Item 206.08, Structural Earth Excavation - Abutments and Retaining Walls.



For construction between Sta. 1015+75 and Abut. No. 1 & for construction between Abut. No. 2 and Sta. 1017+50.

TYPICAL INTERSTATE SECTION

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	5	30

#### REFERENCES

- See Abutment Sheets 9 and 10.
- See Approach Slab Sheet 13.
- See Slope Protection Sheet 8.

As Built 1980  
Maine & Day

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

195 NORTHBOUND  
OVER  
FOX CROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
PROFILE & CONSTRUCTION LIMITS

SHEET 5 OF 30 AUGUSTA, MAINE MAY 1999

196-85

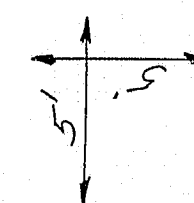
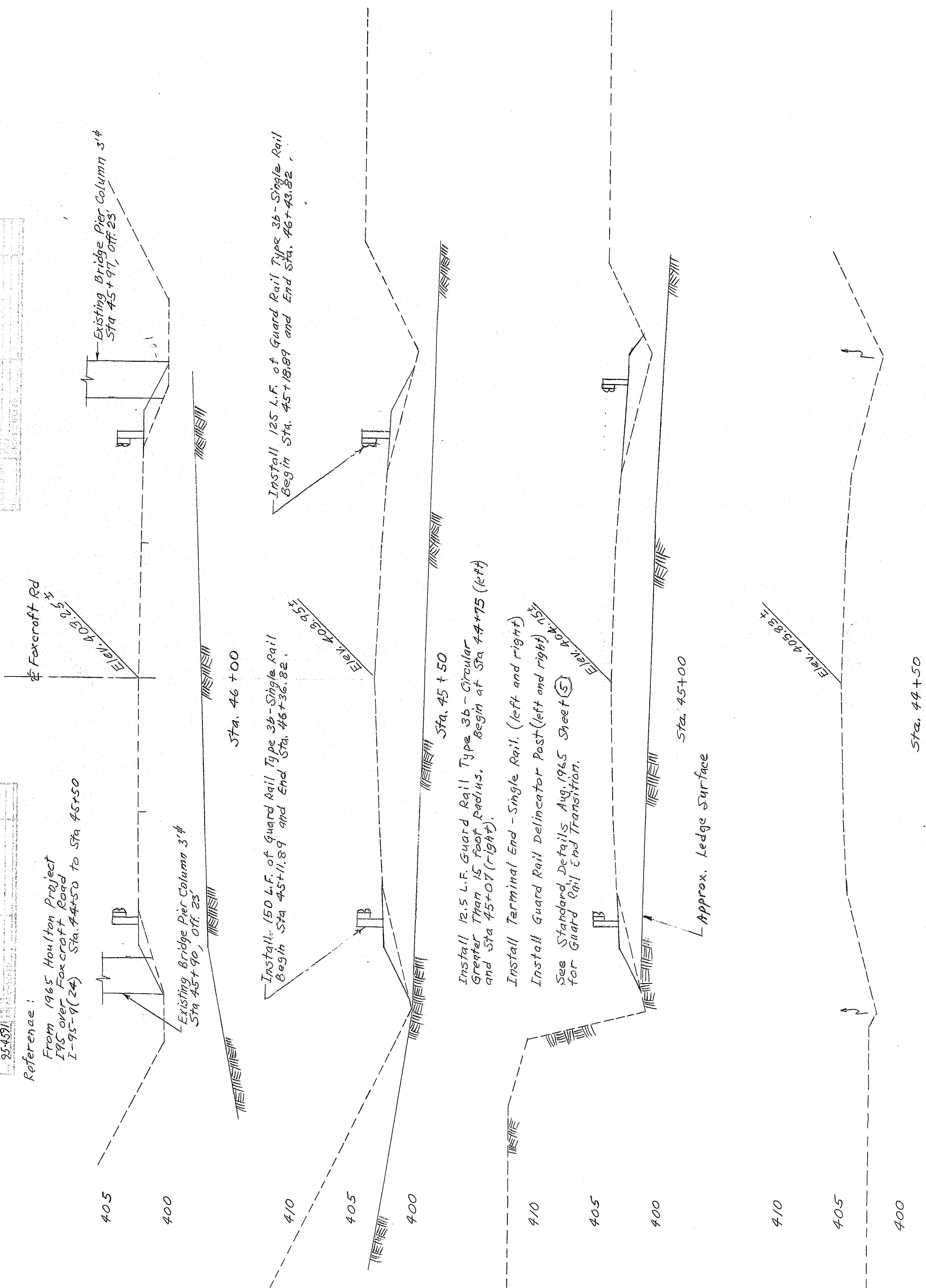


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Template check L.A.W. 5-79

## Referenzen:

From 1965 Houlton Project  
I-95 over Foxcroft Road  
I-95-9(24) Sta. 44+50 to Sta 45+50



"As Built 1980"  
Mammie L. Day

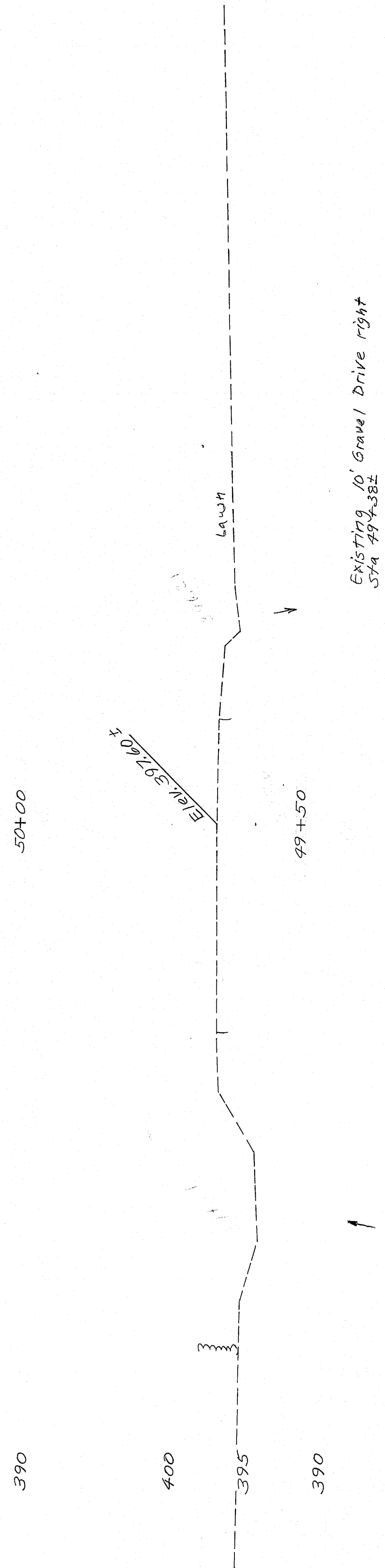
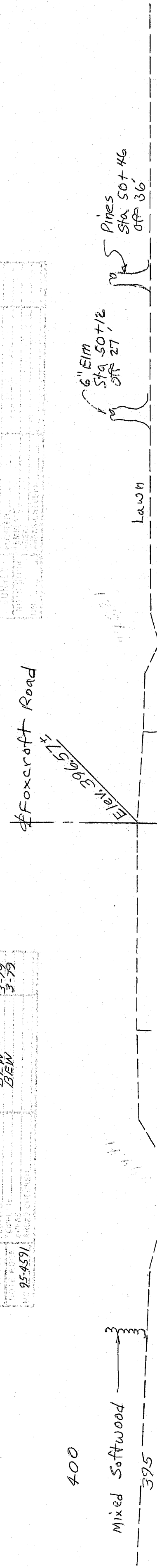
FWS A REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEET
5	MASS.	95-9(92)	6	30

	50	40	30	20	10	\$ Foxcroft Road 10	20	30	40	50
			Sta. 42+50 To Sta. 46+00							

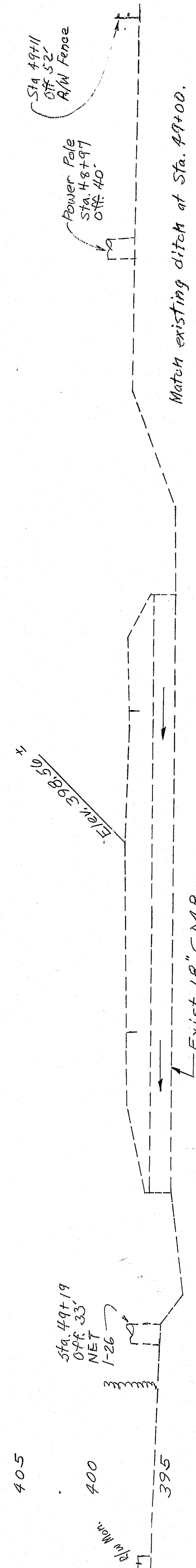


Template Check - L.A.W. 5-79

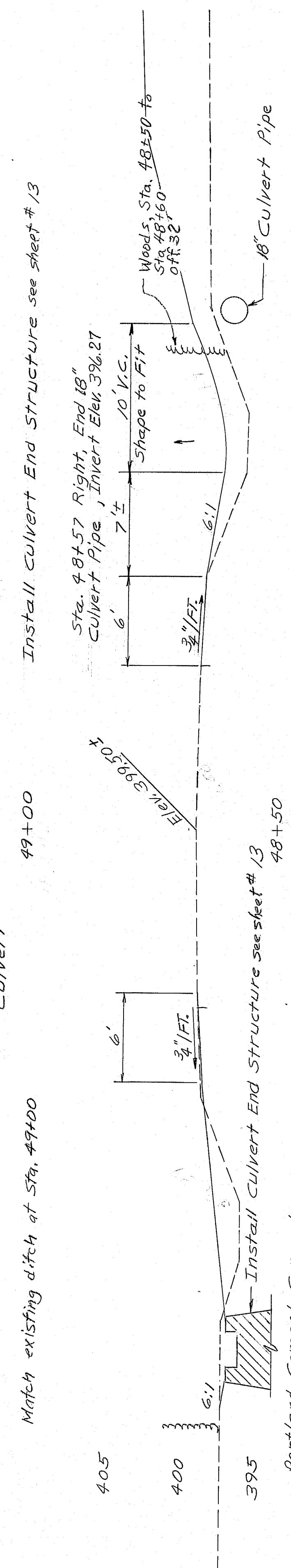
DATE	5-79
BY	5-79
CHKD	5-79
APP'D	5-79



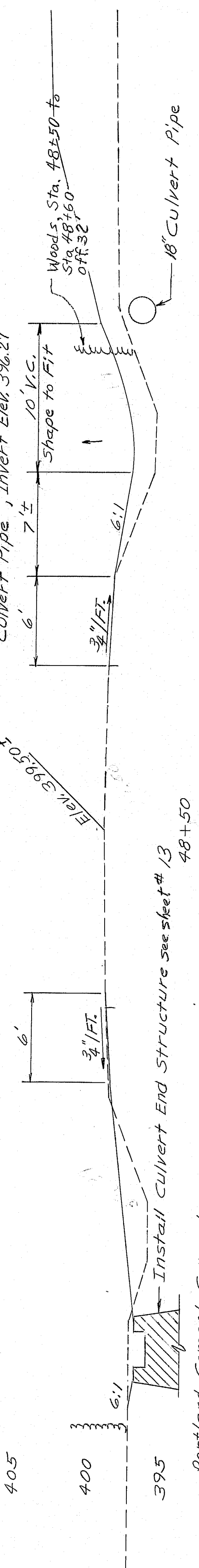
Existing 10' Gravel Drive Right  
Sta. 49+38.2



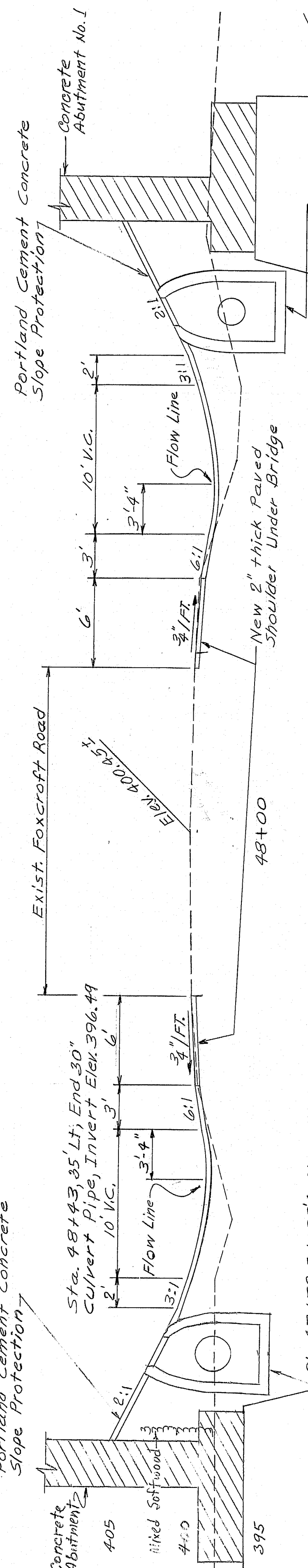
Match existing ditch at Sta. 49+00.



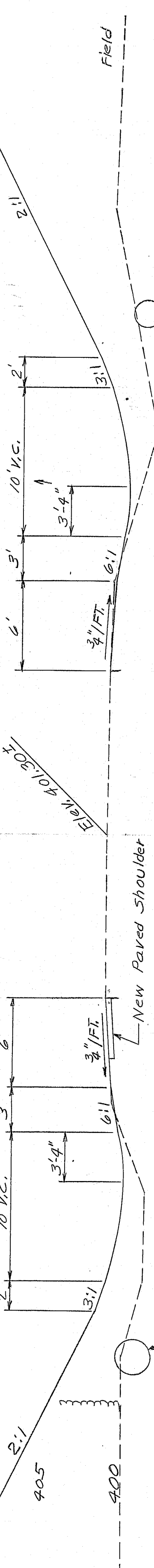
Install Culvert End Structure see sheet # 13



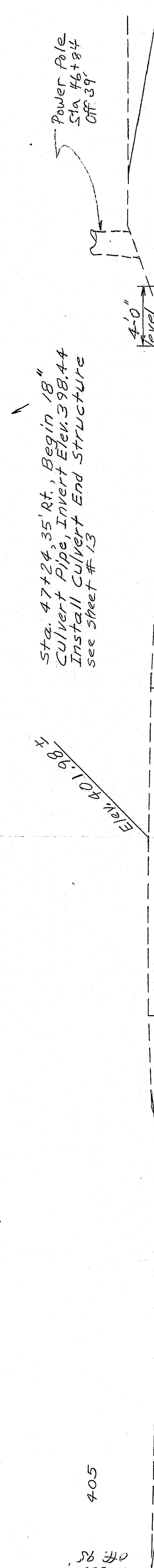
Match existing ditch at Sta. 49+00.



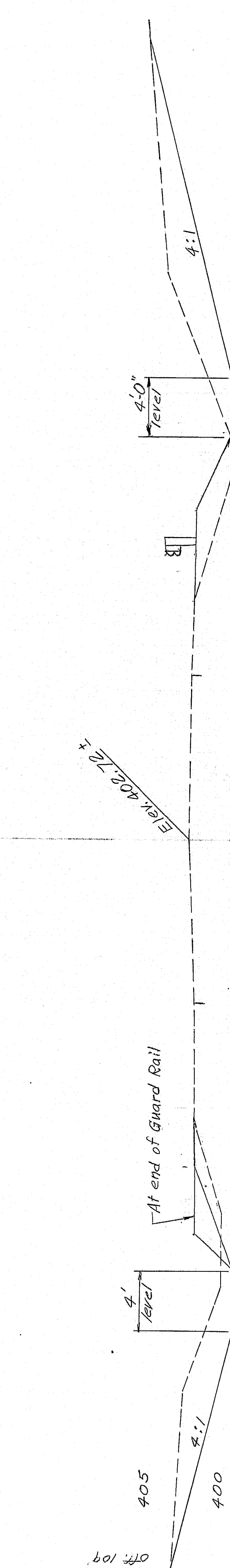
Sta. 47+90.5, 35' Right, Install 18" Type B-1 Culvert Pipe, Invert Elev. 396.44  
See Standard Details, Aug. 1969, sheet 1, Outlet Pipe



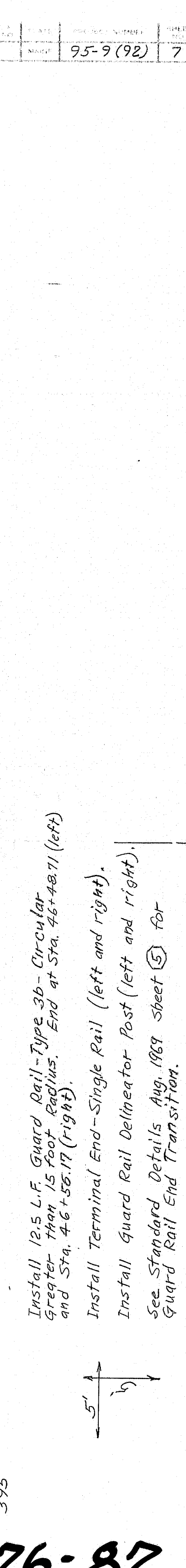
Sta. 47+24.35, 35' Left, Install Catch Basin Type B-1 See Standard Details, Aug. 1969, sheet 1, Inlet Pipe  
Invert Elev. 396.58



Sta. 47+24.35, 35' Left, Install 18" Type B-1 Culvert Pipe, Invert Elev. 396.44  
See Standard Details, Aug. 1969, sheet 1, Inlet Pipe



Sta. 46+50.5, 35' Left, Install 18" Type B-1 Culvert Pipe, Invert Elev. 396.44  
See Standard Details, Aug. 1969, sheet 1, Inlet Pipe



Install 12.5' L.E. Guard Rail - Type 3b - Circular  
Guard Rail, 4' L.E. Posts, End at Sta. 46+48.71 (left)  
and Sta. 46+58.17 (right).  
Install Terminal End - Single Rail (left and right).  
Install Guard Rail Delineator Post (left and right).  
See Standard Details Aug. 1969 sheet 15 for  
Guard Rail End Transition.

176-87

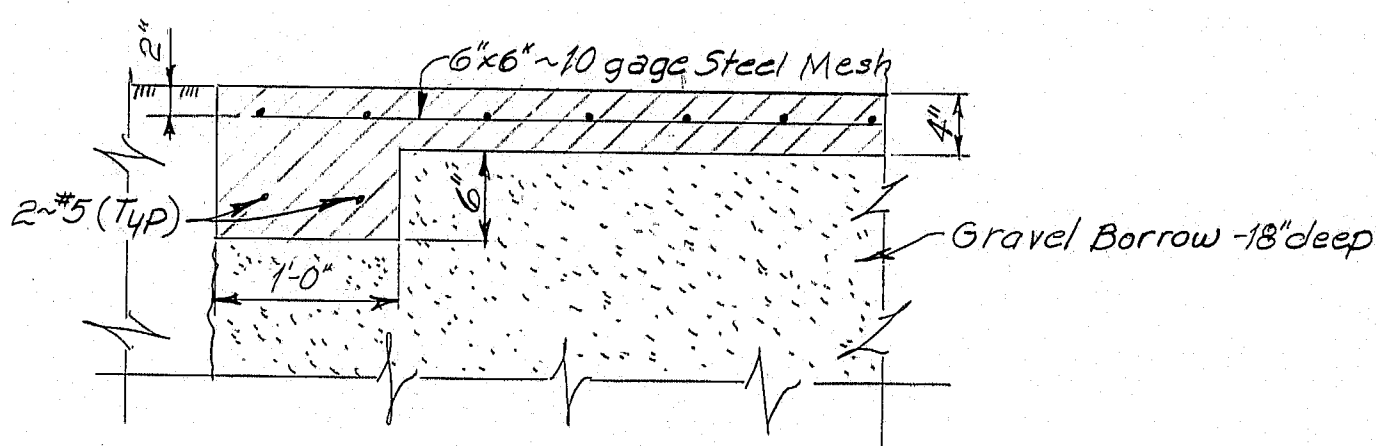
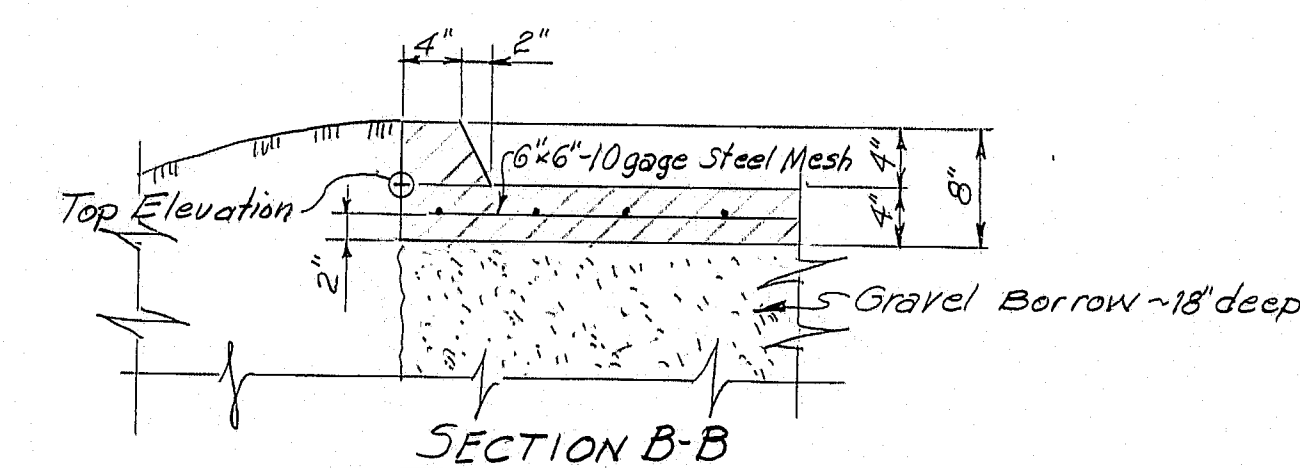
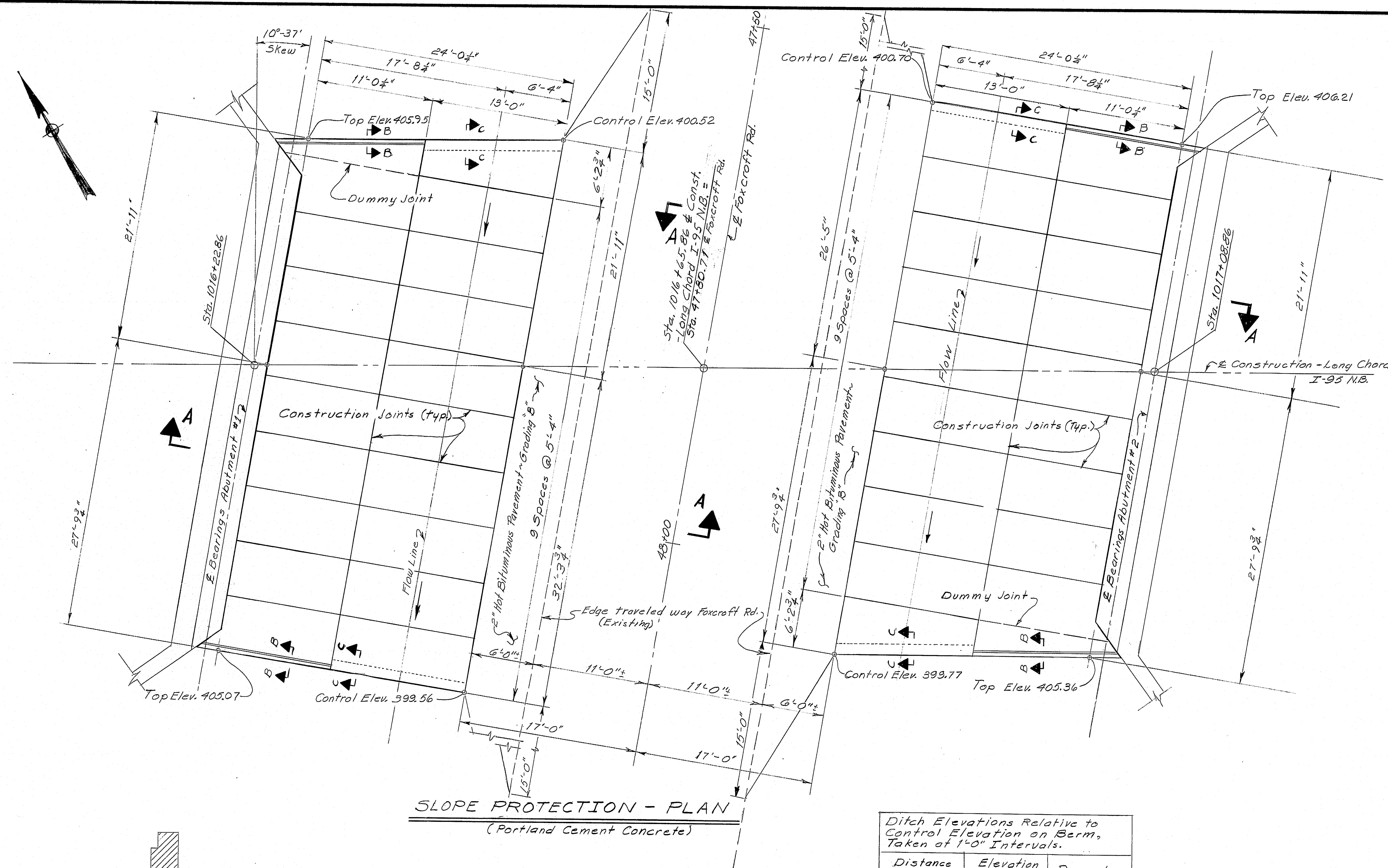
"As Built 1980"  
Hamm & Dy

Foxcroft Road

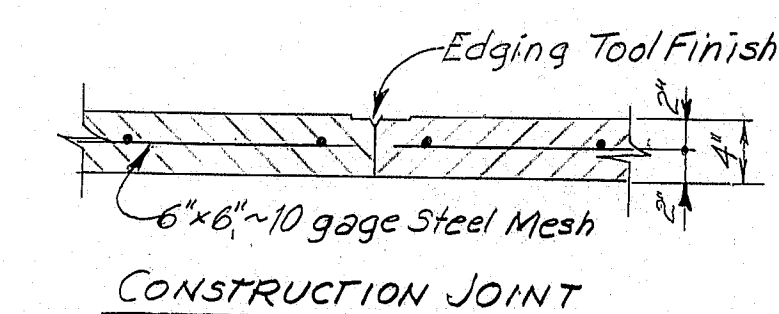
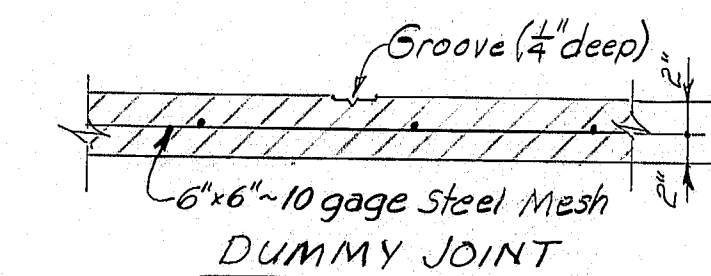
DATE	5-79
BY	5-79
CHKD	5-79
APP'D	5-79

Sta. 46+50 to Sta. 50+00





Payment for 2-#5 bars shall be considered incidental to Concrete Slope Protection item.



#### NOTES

1. Steel mesh shall not pass through any construction joint.
2. Break the bond in construction joints by a method approved by the Engineer.
3. Portland Cement Concrete for slope protection shall be Class X.

"As Built 1980"  
Maurice P. Day

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

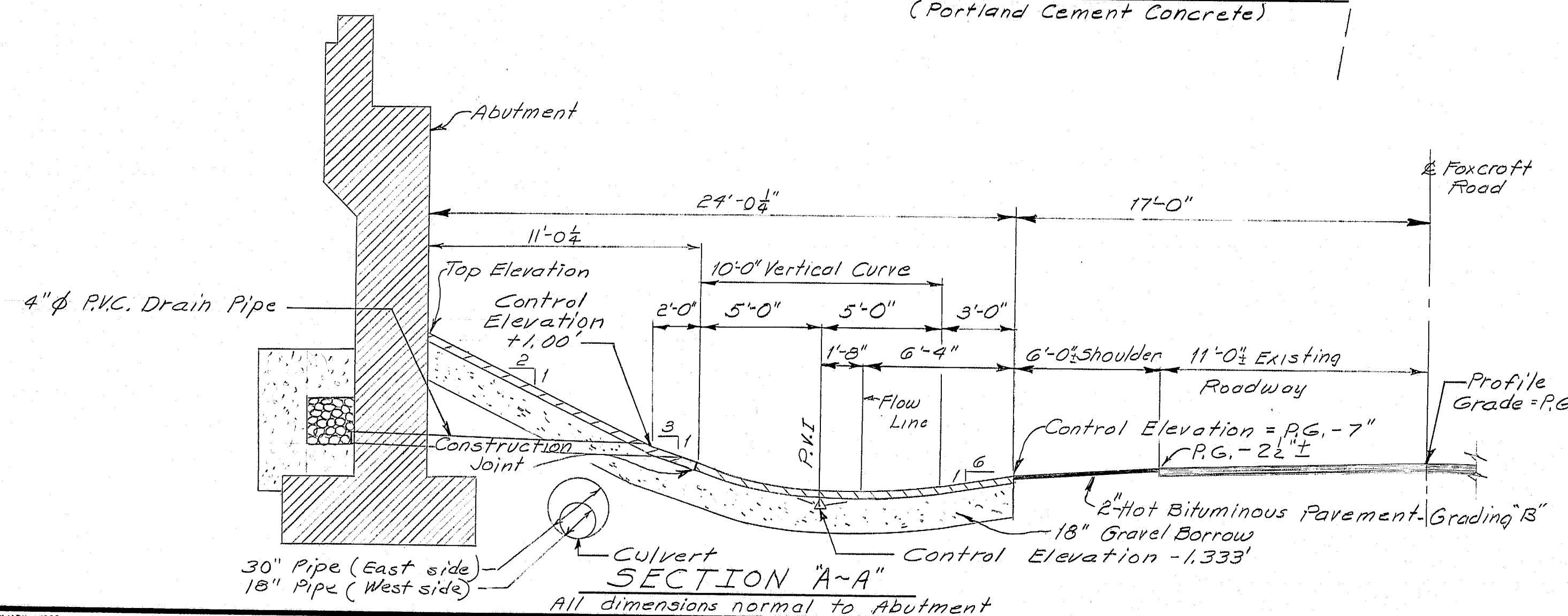
195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
CONCRETE SLOPE PROTECTION

SHEET 8 OF 30 AUGUSTA, MAINE MAY 1979

176-88

Ditch Elevations Relative to Control Elevation on Berm, Taken at 1'-0" Intervals.

Distance feet	Elevation feet	Remarks
0	0.00	Berm
1	-0.17	
2	-0.34	
3	-0.50	P.V.C.
4	-0.64	
5	-0.74	
6	-0.78	
6.33	-0.78	Flow Line
7	-0.77	
8	-0.71	
8.33	-1.333	P.V.I.
9	-0.60	
10	-0.45	
11	-0.24	
12	+0.02	
13	+0.33	P.V.I. & C.I.
14	+0.66	
15	+1.00	
24'-0 1/2"	+5.51	Top of Slope

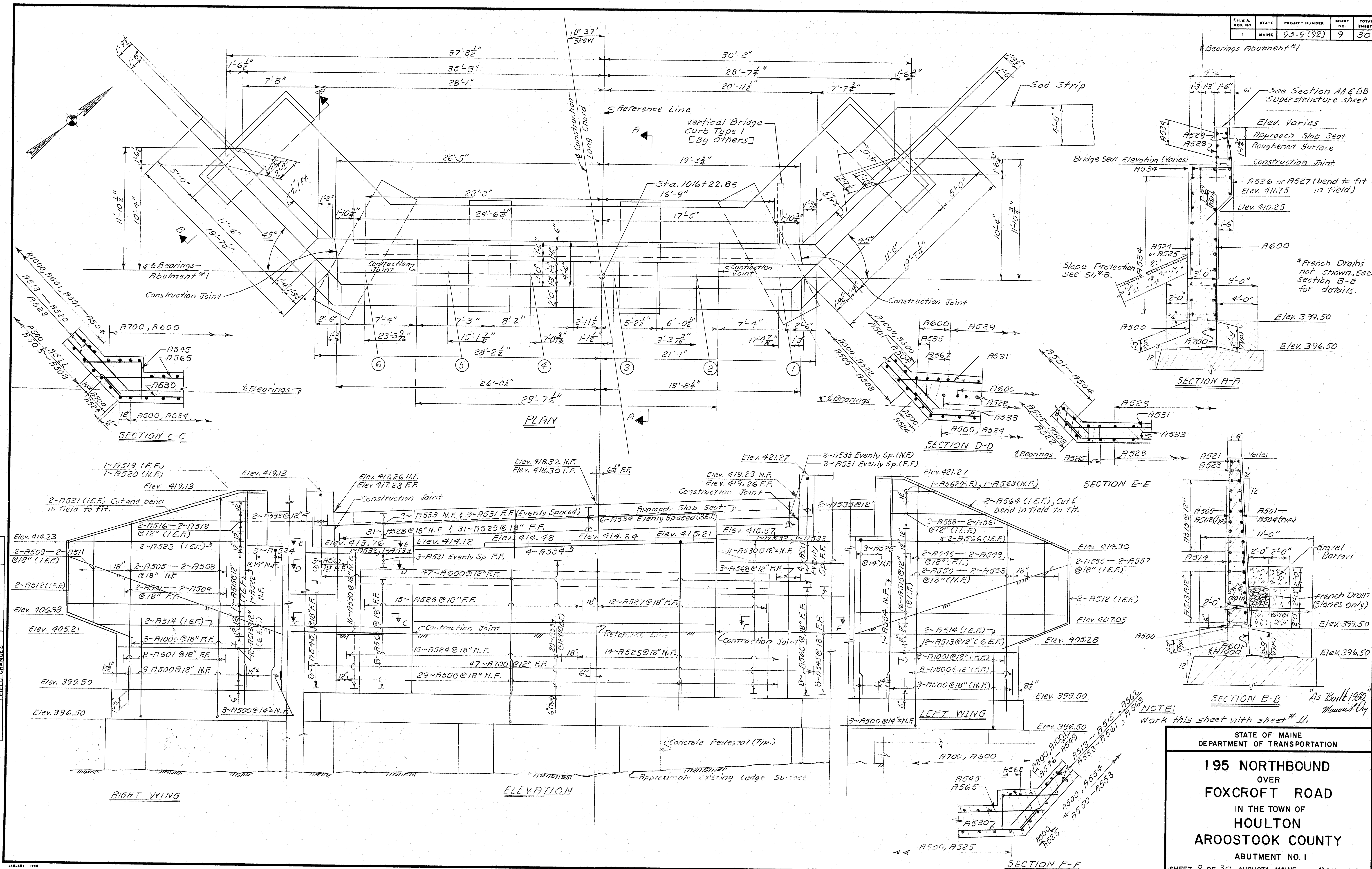


PROJECT DESIGN ENGINEER	CDH	BY	DATE
DESIGN - DETAILED	CDH	L. Wilson	2-79
CHECKED	CDH	W. G.	5/79
REVISIONS			
FIELD CHANGES			

JANUARY 1980



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	95-9 (92)	9	30

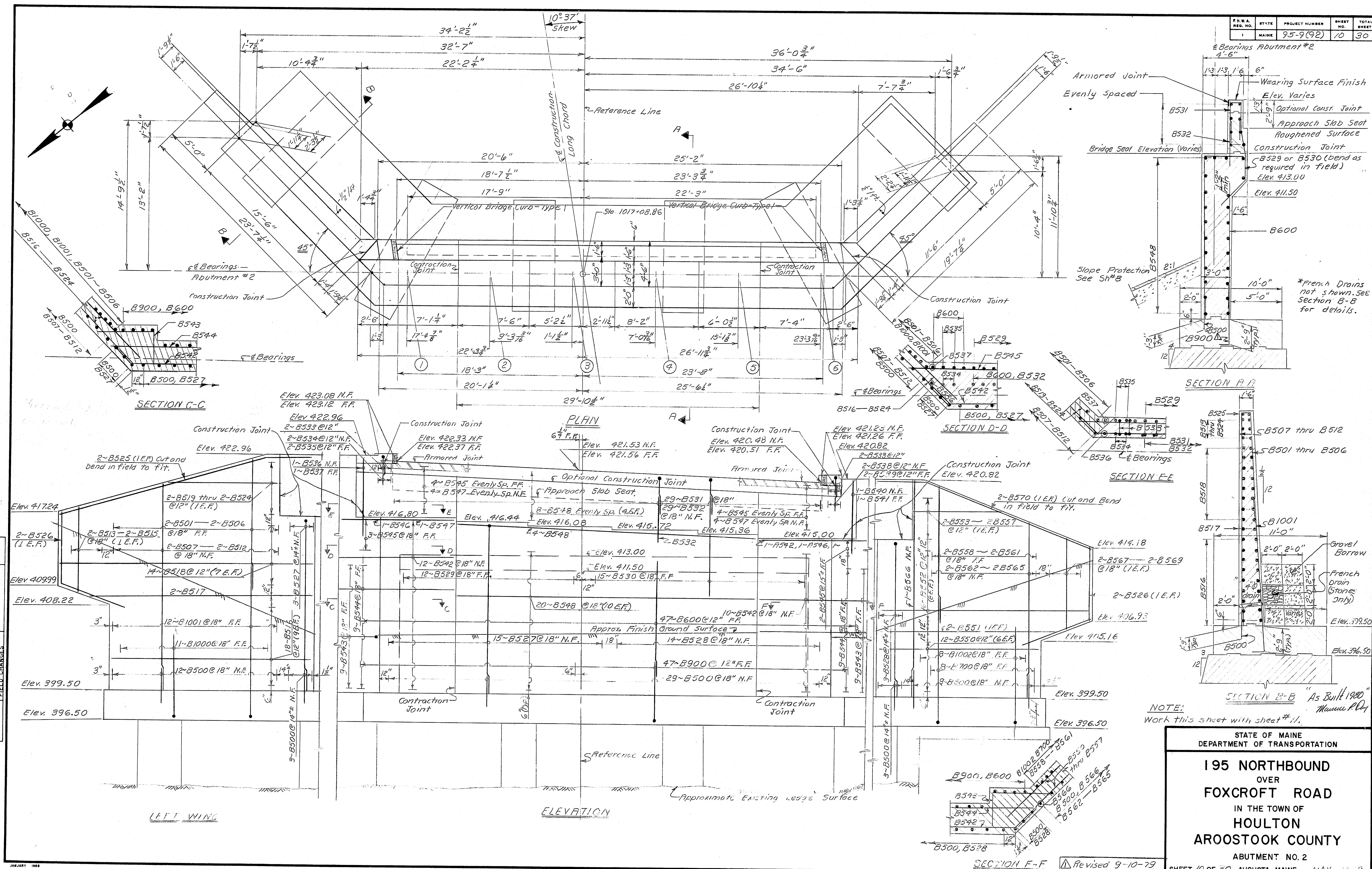


PROJECT DESIGN ENGINEER	DATE
CDH	2-79
CHECKED	REVISIONS
MMK	5/79
FIELD CHANGES	

176-89



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	95-9(92)	10	30



PROJECT DESIGN ENGINEER	DATE	BY
DESIGN - DETAILED	1-79	C.D.H. J. DUBOIS
CHECKED		
REVISIONS		
FIELD CHANGES		



F.R.W.A. SHEET NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	11	30

### ABUTMENT NOTES

1. Chamfer all exposed edges of concrete a consistent dimension between  $\frac{1}{2}$ " and  $\frac{3}{4}$ " inclusive, unless otherwise indicated.
2. Reinforcing steel shall have 2 inches cover unless otherwise indicated.
3. Place reinforcing steel in bridge seats to clear anchor bolts. Break bond at vertical contraction joints by a method approved by the Engineer.
4. Polyvinylchloride waterstops as shown on Standard Details BD-104-77 shall be placed in all vertical contraction and construction joints.
5. Waterstops are not required in horizontal construction joints.
6. Protective coating for concrete surfaces shall be applied to the following areas:  
Top of concrete curbs  
Top of abutment backwall—Abutment #2 only  
Top of abutment parapets
7. Place 4" diameter drains in breastwall and wings at 20 foot maximum spacing. Exact location to be determined by the Engineer in the field.
8. Welding of reinforcing steel will be allowed in top 2' of the Abut. No. 2 backwall.
9. Place a 4" wide strip of sod along the abutment wings and down the fall line beyond end of wings to original ground.
10. To allow for the adjustment for movement due to dead load deflections of the superstructure, and to aid in the proper alignment of the joint armor, the concrete which anchors the portion of the joint armor in the top of the abutment backwall shall be placed after all superstructure structural slab concrete is in place, unless other methods, which will provide the proper alignment of the joint armor, are approved by the Engineer.
11. Maximum Toe Pressure = 19 tons/sq. ft.
12. After the abutment ledge foundation is exposed, by the Contractor, the Engineer will designate the limits to which the ledge is to be removed.
13. After the ledge is removed the Contractor shall allow time for the Engineer to evaluate the foundation. The Contractor shall schedule the construction work to allow for this foundation evaluation and any cost of delay of the Contractor's operation due to the evaluations will be considered incidental to contract items.
14. Structural Earth Excavations, Abutments and Retaining Walls, required: below Elevation 391.0 for Abutment #1, below Elevation 389.0 for Abutment #2 will be paid for at  $\frac{1}{2}$  times the contract unit price for item 206.081.
15. The ledge foundation under the pedestals shall be constructed level or shall slope down toward the back of the abutments in a direction normal to the respective abutment and wing walls. The ledge may be stepped to construct the foundation level. In all cases the ledge shall be removed down to sound ledge and the foundation shall be roughened.

### REFERENCES

1. For details to seal joint between the superstructure and the abutment backwall and parapet, see Superstructure sheet #15.
2. For Abutment Reinforcing see sheet #9 and #10.
3. For Construction and Contraction Joint details see Standard Details BD 104-77.
4. For Armored Joint details see Standard Details BD 104-77.
5. For Approach Slab details see sheet #13.
6. For Bearing Pedestals see Standard Details BD 101-74.
7. For details of Vertical Bridge Curb Type I see Standard Details BD 104-77.

NOTE:  
Work sheets 9, 10 and 11 together.  
"As Built 1980."  
Maurice F. Day

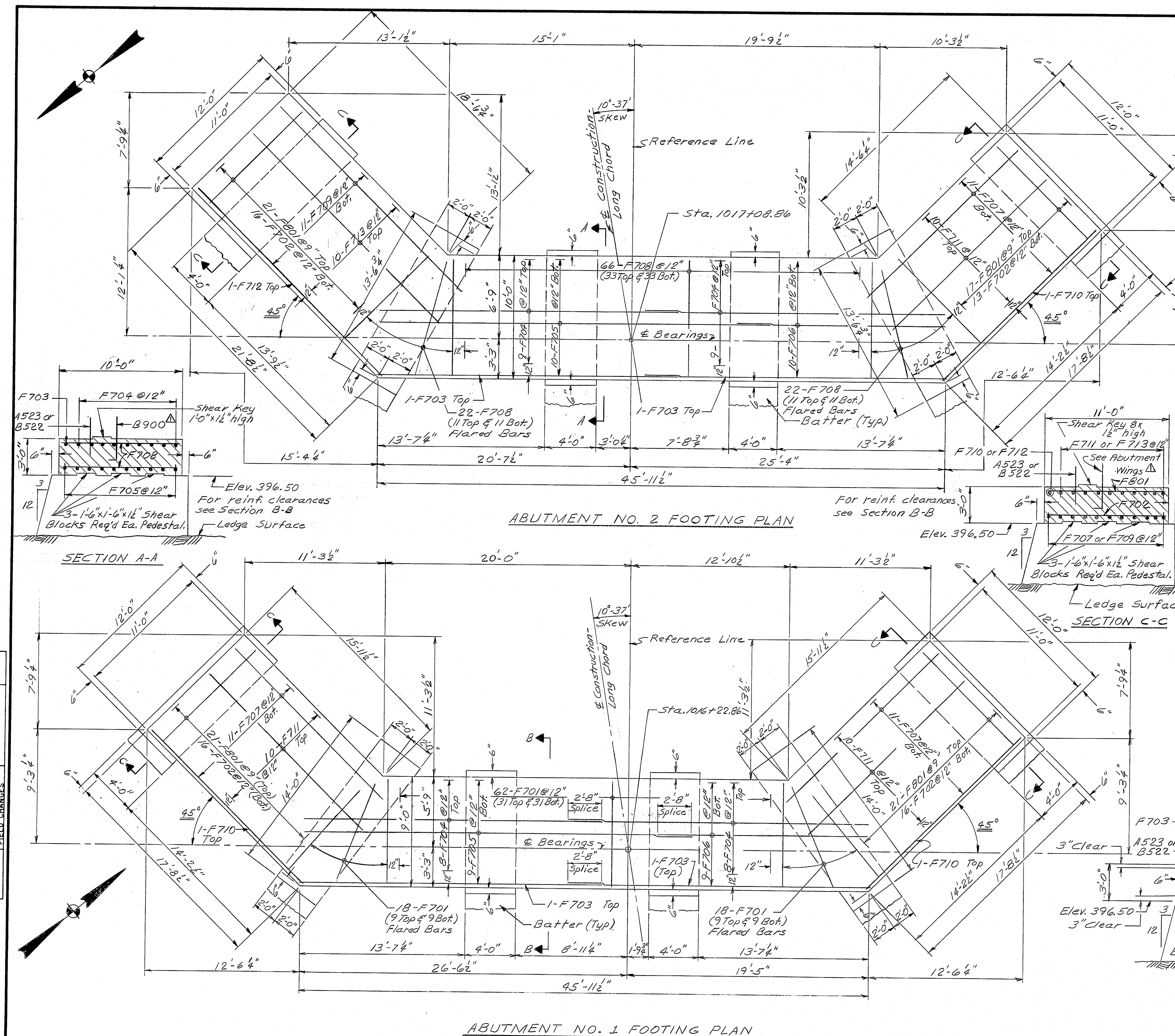
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

195 NORTHBOUND  
OVER  
FOX CROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
ABUTMENT DETAILS

Revised 9-10-79

SHEET 11 OF 30 AUGUSTA, MAINE MAY 1979

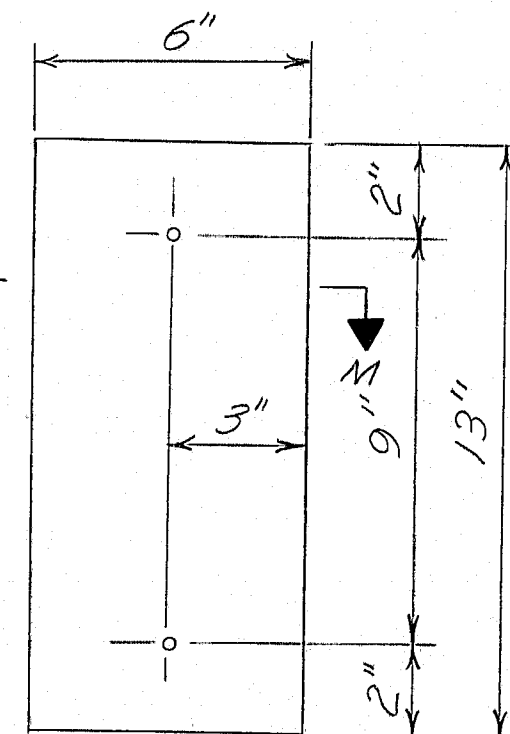
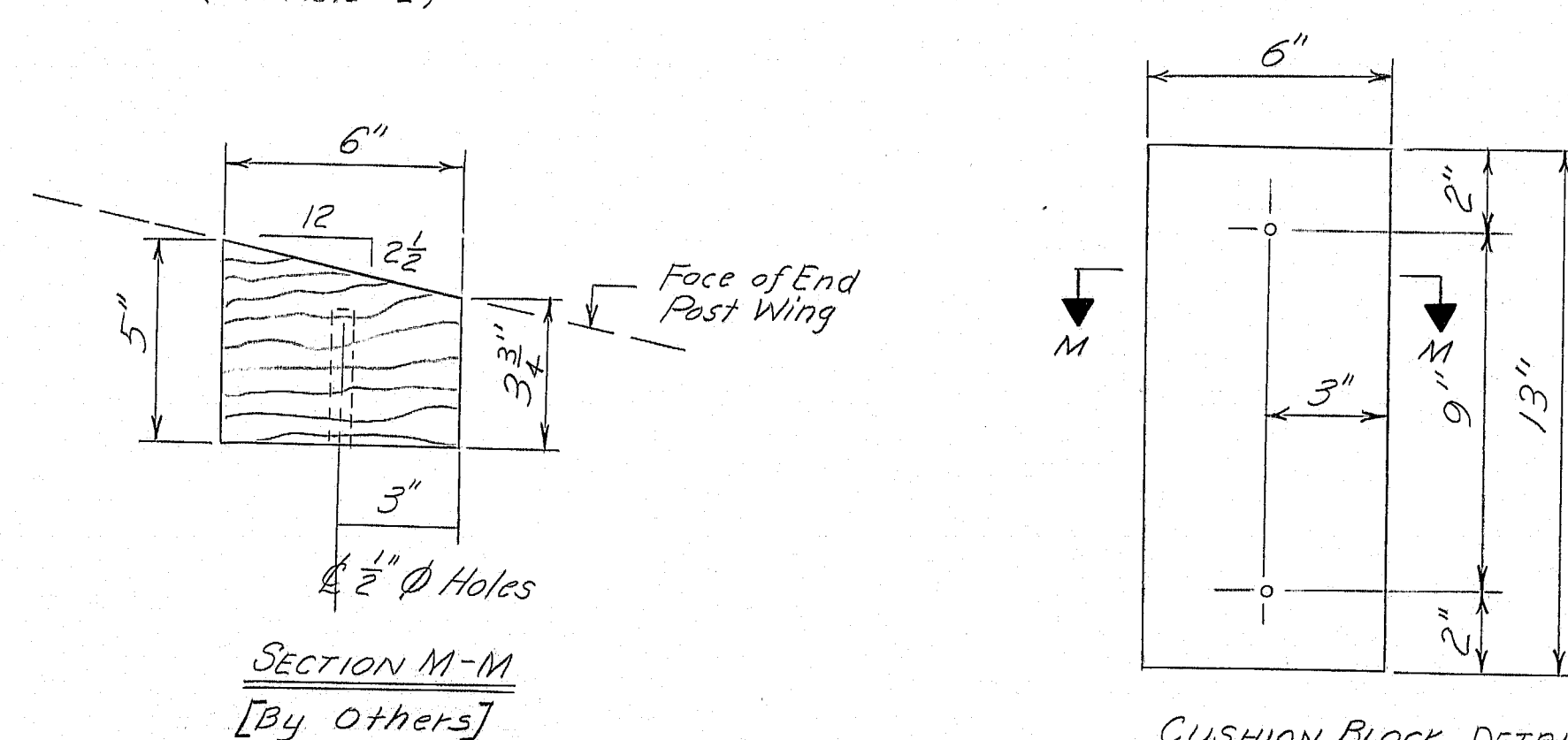
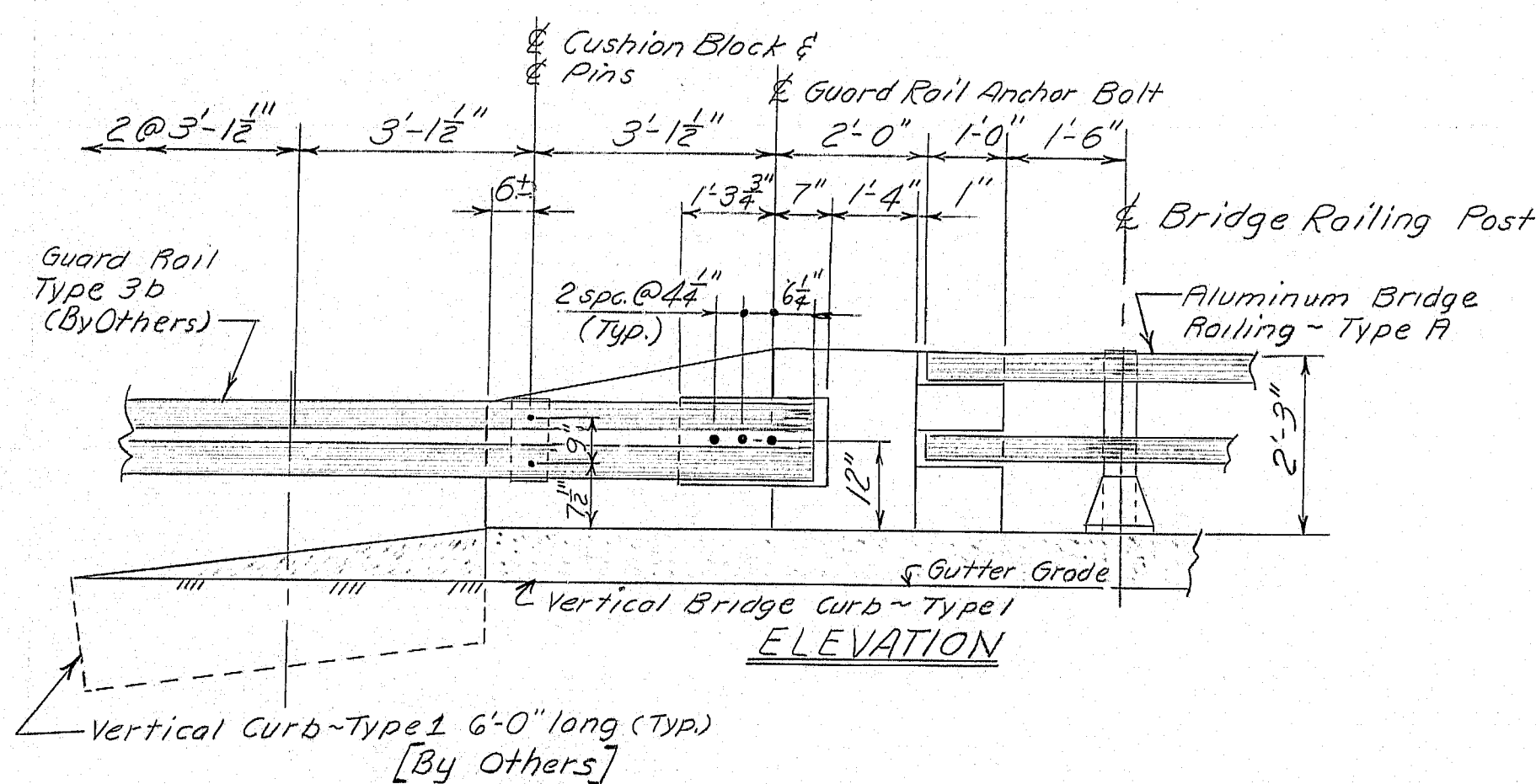
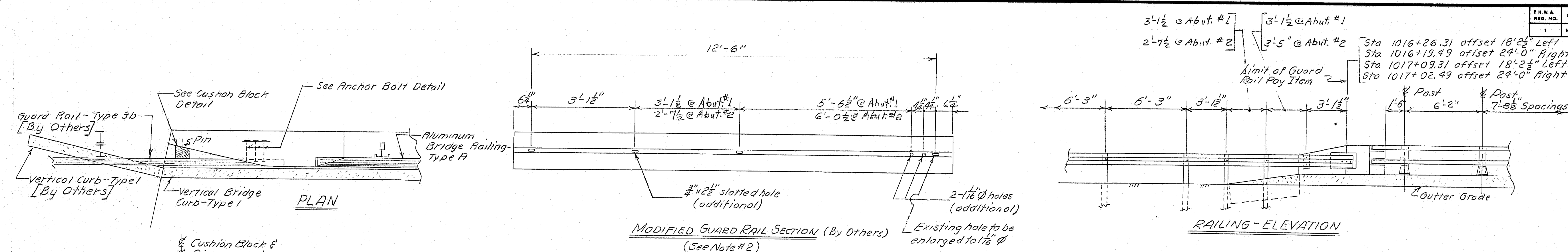
176:91



PROJECT DESIGN ENGINEER	DATE
CDH	9-79
DESIGN - DETAILED	9-79
CHECKED	11-79
REVISIONS	5/79
FIELD CHANGES	
PLANS	

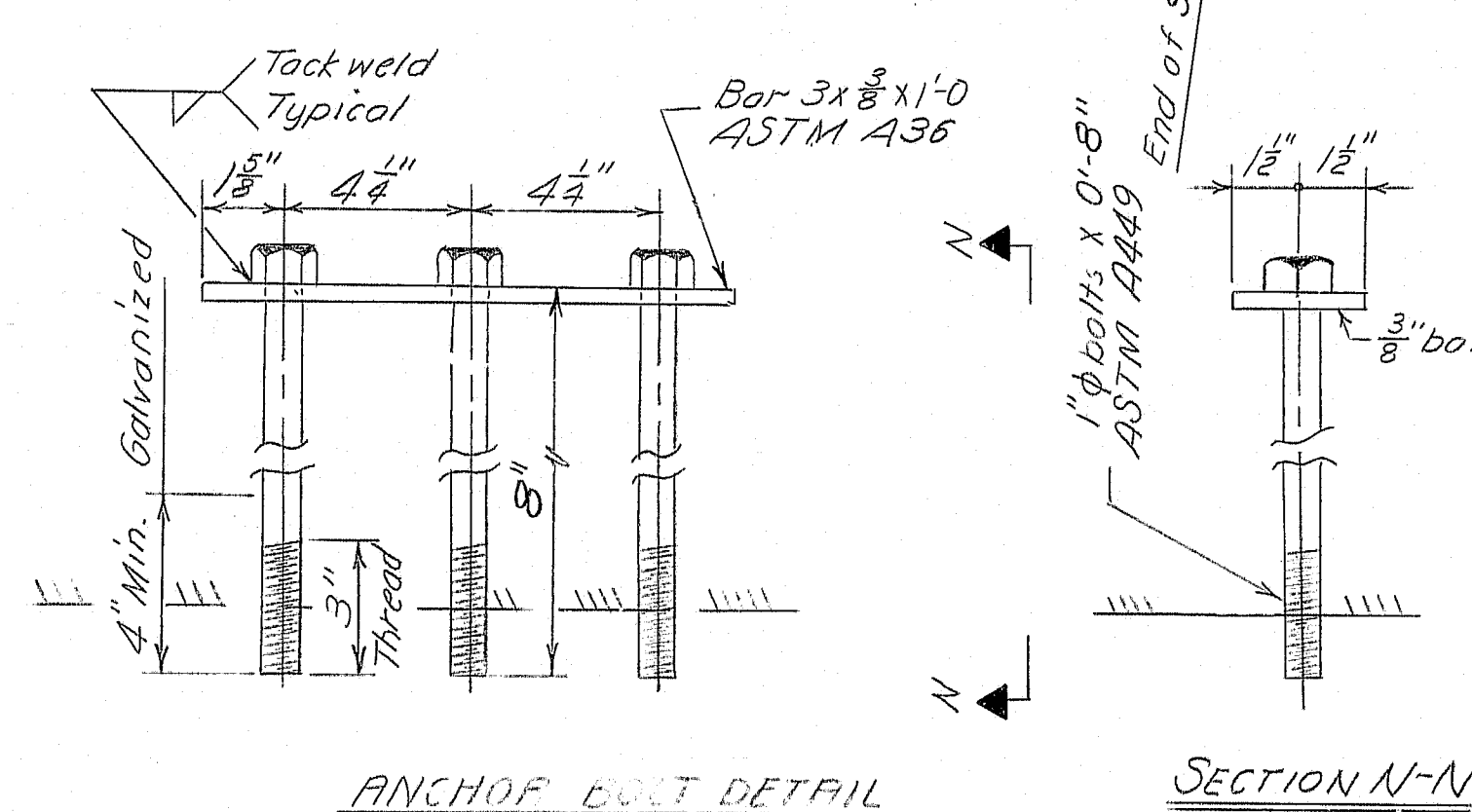
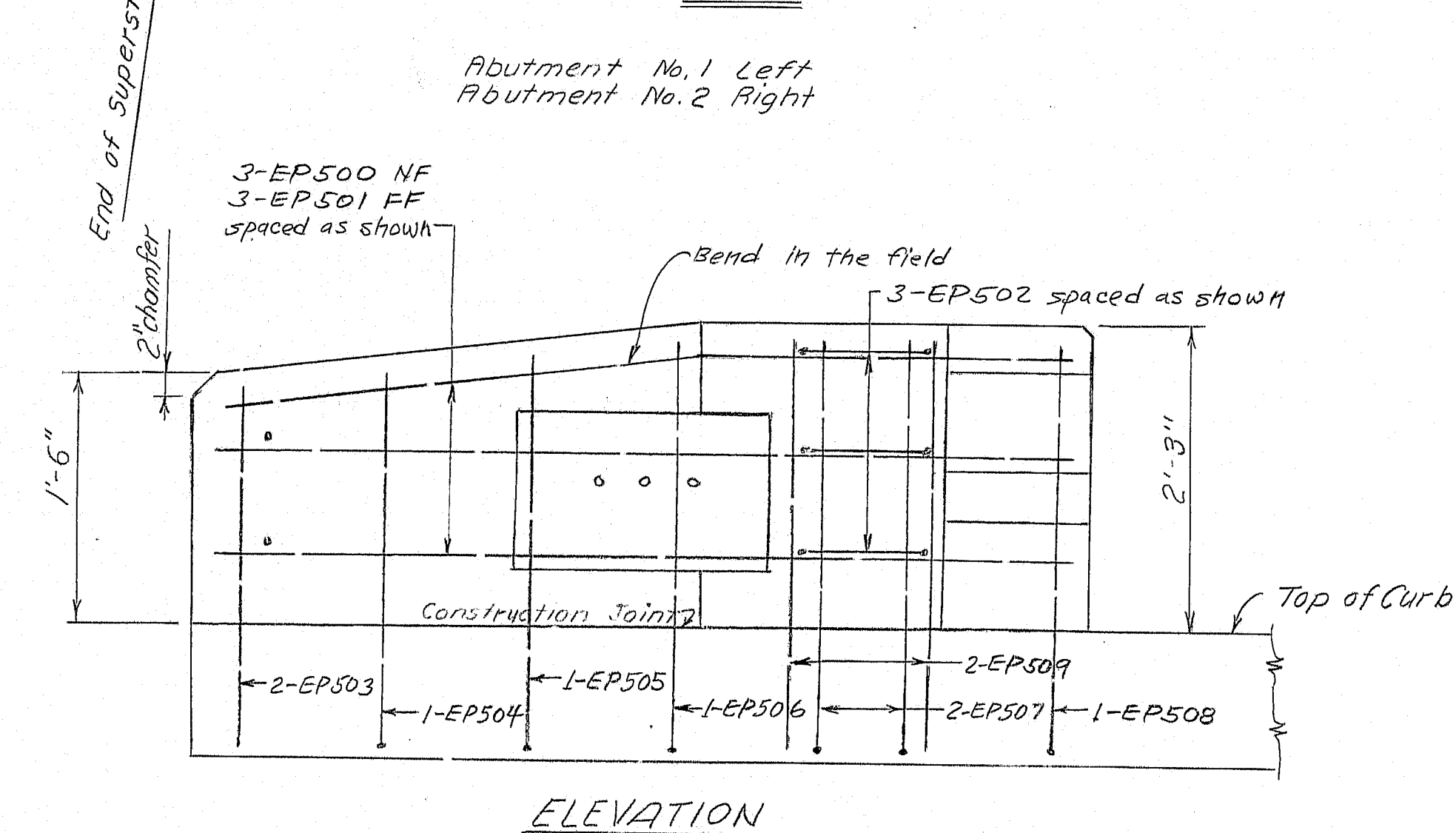
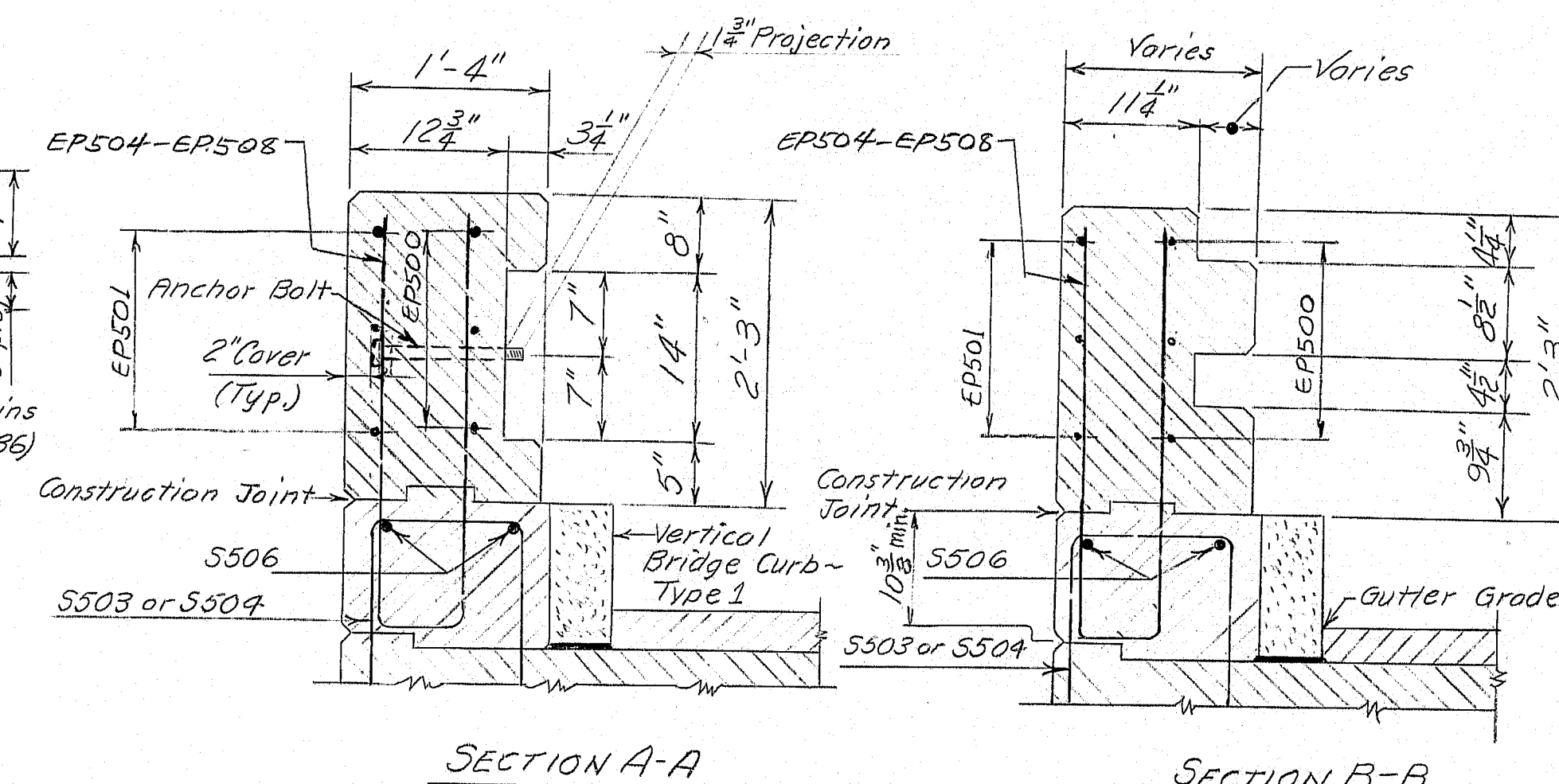
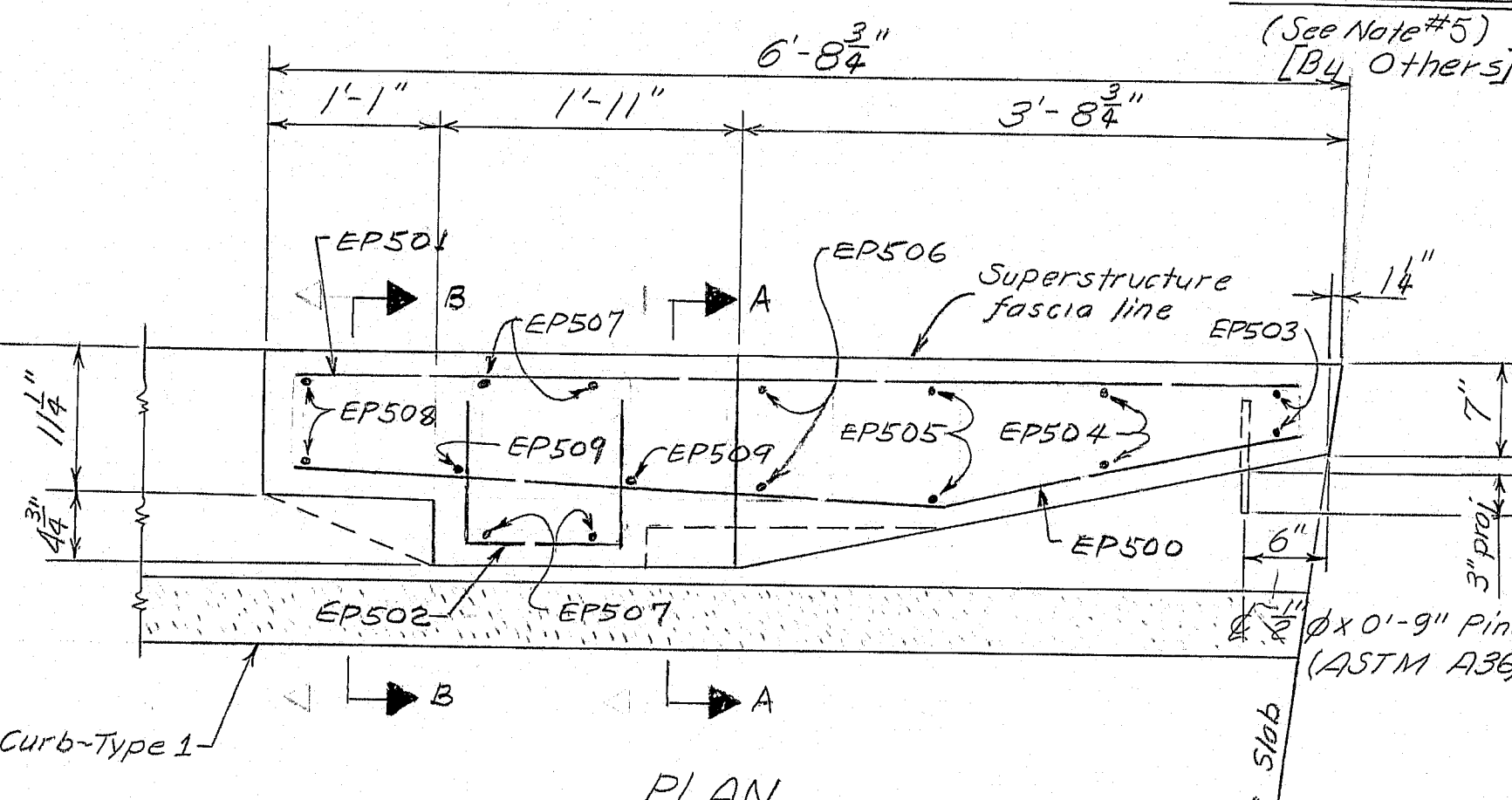
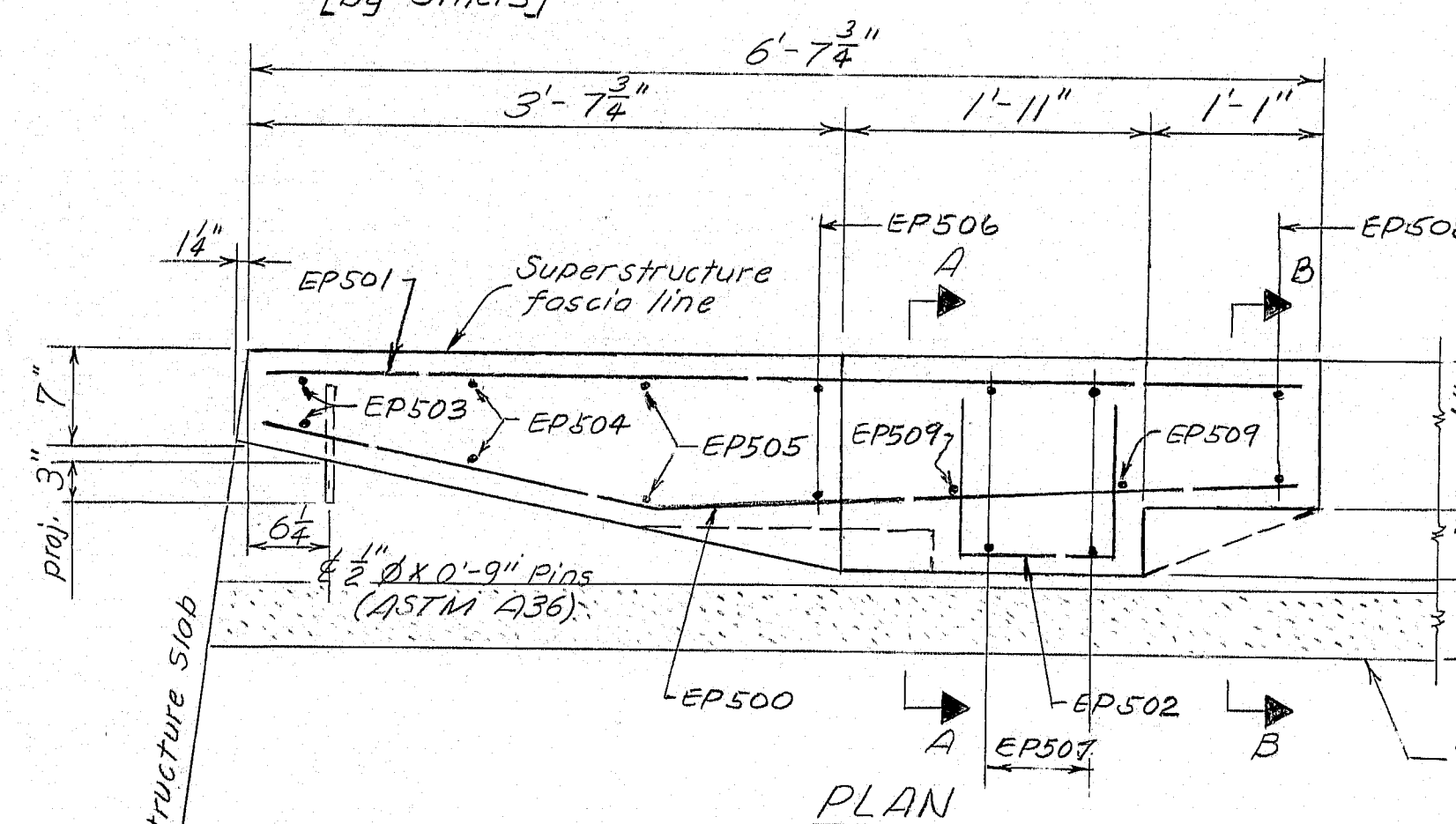


2 1/2" Left



NOTES

- 1) Nuts for 1" anchor bolts to be incidental to guard rail pay items. Nuts shall conform to A.S.T.M. A 307, Grade D.H. and shall be galvanized in accordance with the provisions of R.S. 249.103 - By OTHERS.
- 2) Additional holes in the Modified Guard Rail Section shall be made by drilling, punching, or any other method that produces a neat, clean hole of the required size. Burning of holes will not be allowed. - By OTHERS.
- 3) Chamfer all exposed edges of concrete a consistent dimension between  $\frac{1}{4}$ " and  $\frac{1}{2}$ " inclusive, unless otherwise indicated.
- 4) Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated.
- 5) Custom, block material shall be as specified in subsection 710.07, paragraph 5 and 6 and treated in accordance with the provisions of subsection 606.03(b) Standard Specifications. Payment to be incidental to Guard Rail pay item. - By Others.
- 6) After installation of guard rail is complete, upset the thread on the anchor bolts in three places around each bolt, at the junction of the nut and the exposed thread, with a center punch or similar tool. - By OTHERS.
- 7) Alignment of backwall is not shown and the pictures at Rating - Elevation above, Plan and Elevation in the left corner of this sheet would be slightly different if it were shown.



"As Built 1980"  
Maurice P. Day

## REFERENCES

- Aluminum Bridge Railing-Type A—BD 114-77  
Vertical Bridge Curb—Type (See Curb Section)—BD 104-77  
Vertical Curb—Type — August 1969 (3)—By Others  
Reinforcing Steel Schedule—Sheet # 16 and 17.  
Superstructure Plan—Sheet #15.  
Construction Joint—BD 104-77  
Guard Rail—August 1969 (6)—By Others

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
CONCRETE END POSTS

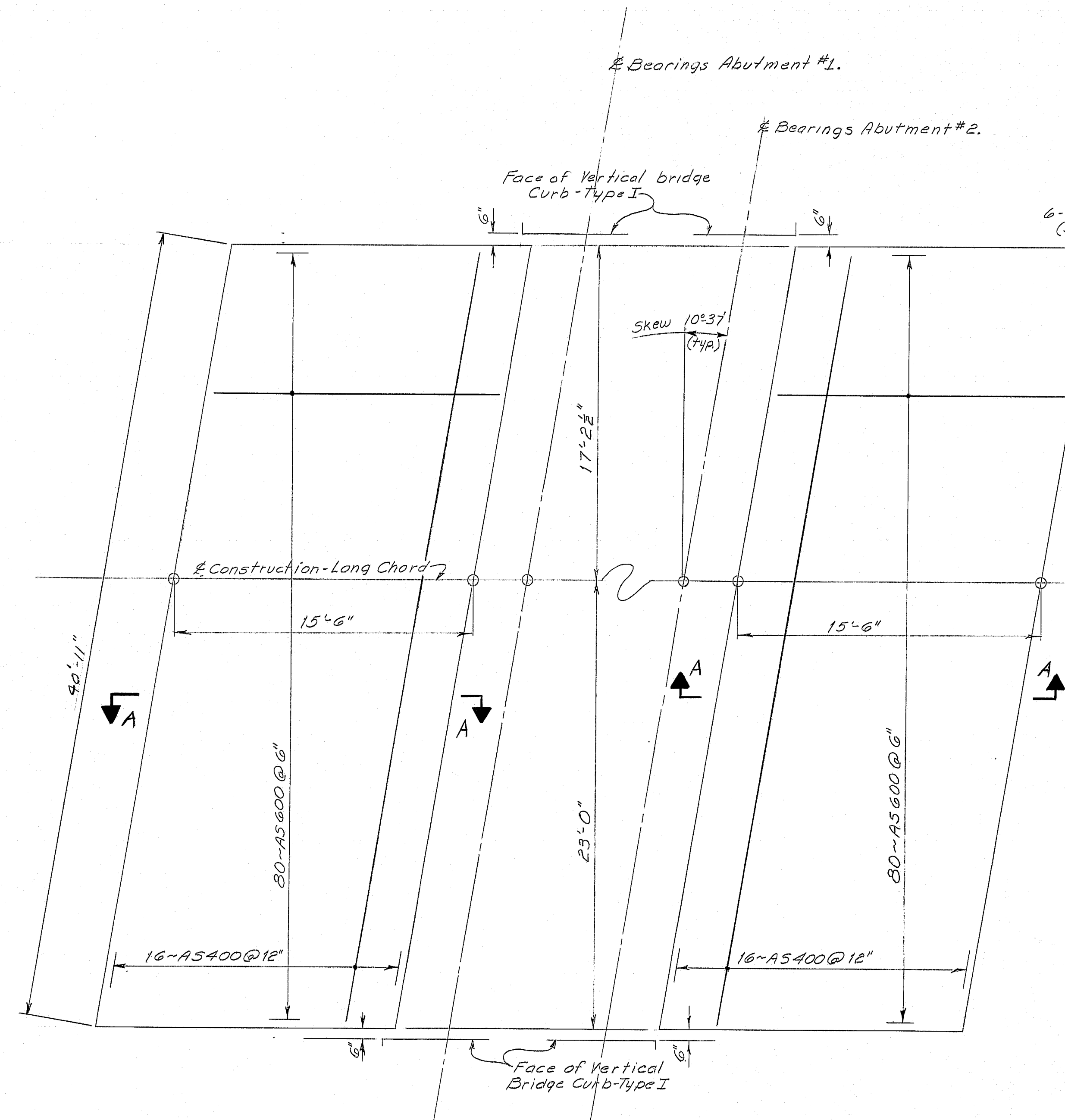
SHEET 12 OF 30 AUGUSTA, MAINE MAY 1979

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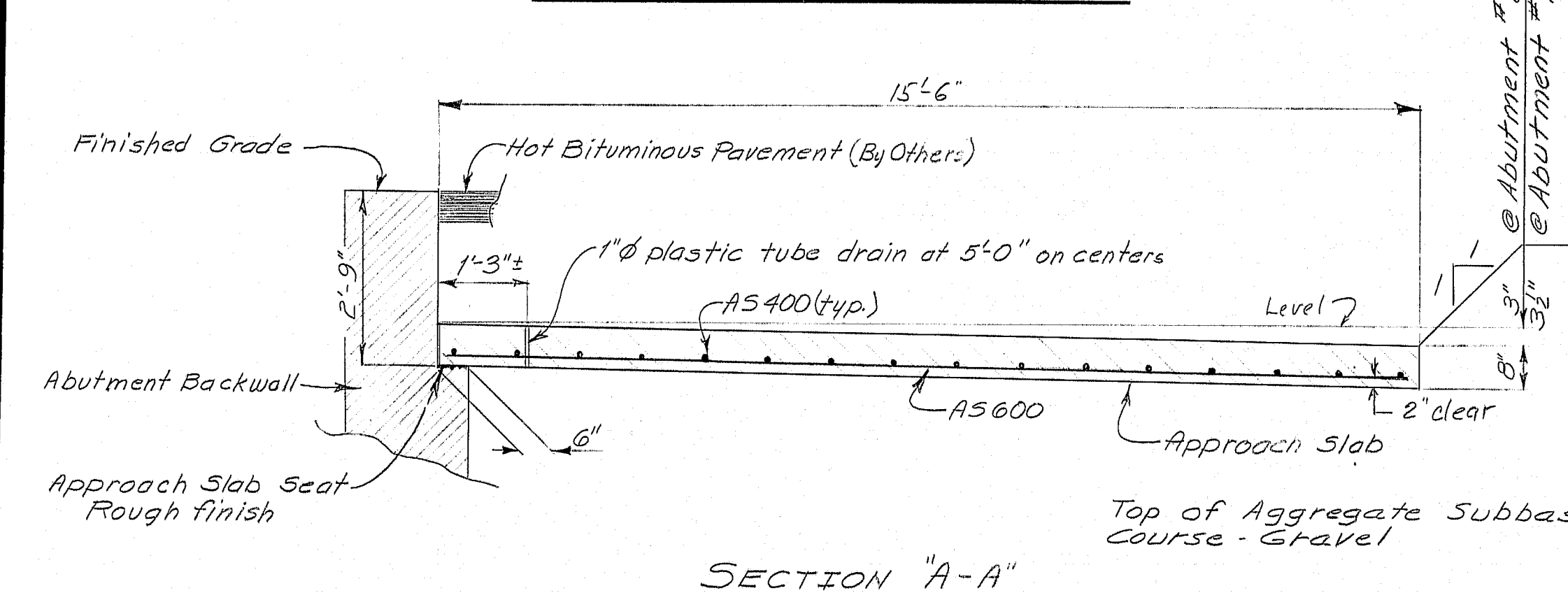
PROJECT DESIGN ENGINEER	CDH	BY	DATE
DESIGN - DETAILED		CDH	J. Mansir 1-79
CHECKED			
REVISIONS		LAO.	5-79
FIELD CHANGES			



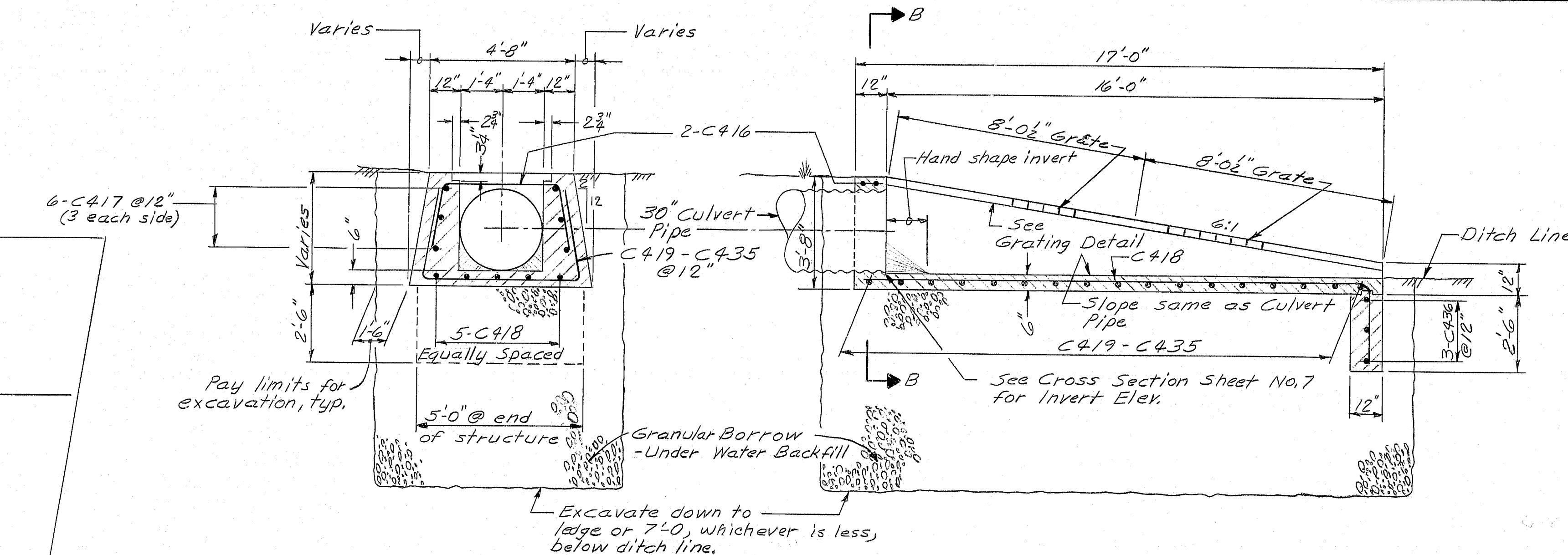
F.R.W.A.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	13	30



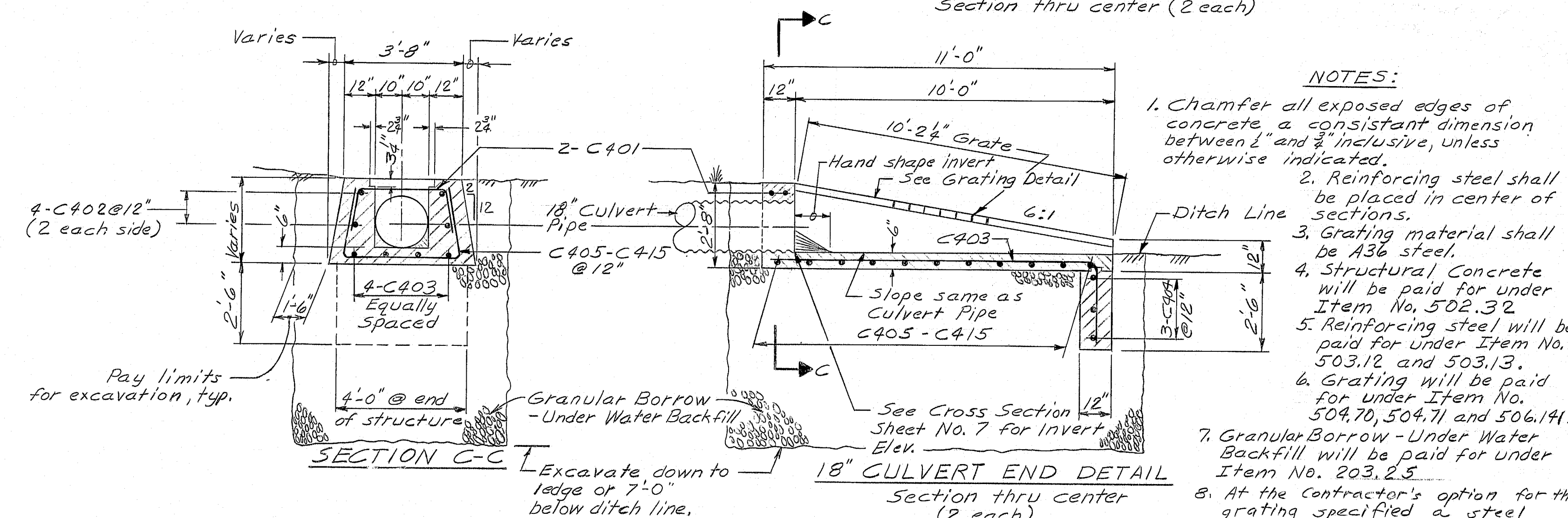
PLAN - APPROACH SLABS



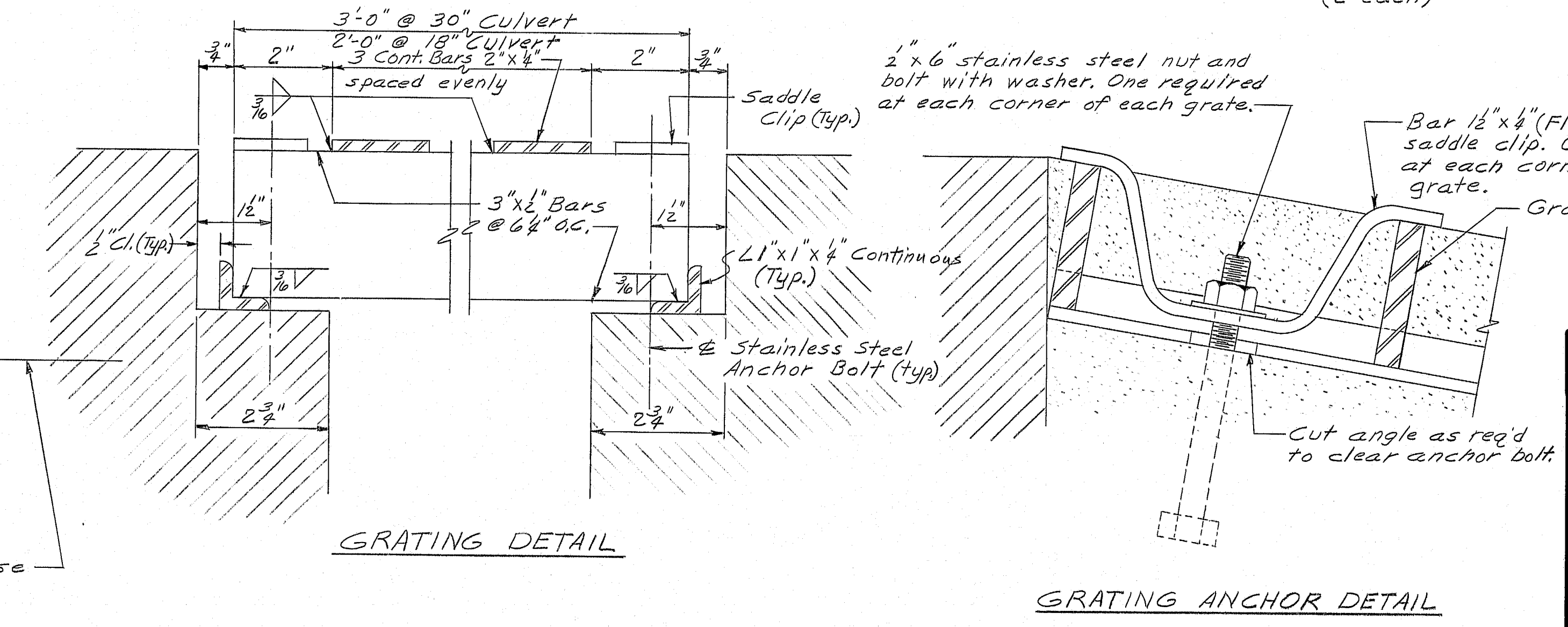
SECTION "A-A"



SECTION B-B



SECTION C-C



GRATING DETAIL

GRATING ANCHOR DETAIL

- NOTES:
1. Chamfer all exposed edges of concrete, a constant dimension between 2" and 3" inclusive, unless otherwise indicated.
  2. Reinforcing steel shall be placed in center of sections.
  3. Grating material shall be A36 steel.
  4. Structural concrete will be paid for under Item No. 502.32.
  5. Reinforcing steel will be paid for under Item No. 503.12 and 503.13.
  6. Grating will be paid for under Item No. 504.70, 504.71 and 506.41.
  7. Granular Borrow - Under Water Backfill will be paid for under Item No. 203.25.
  8. At the Contractor's option for the grating specified a steel bridge grid flooring may be substituted. The flooring shall be H20 loading capacity and be galvanized.

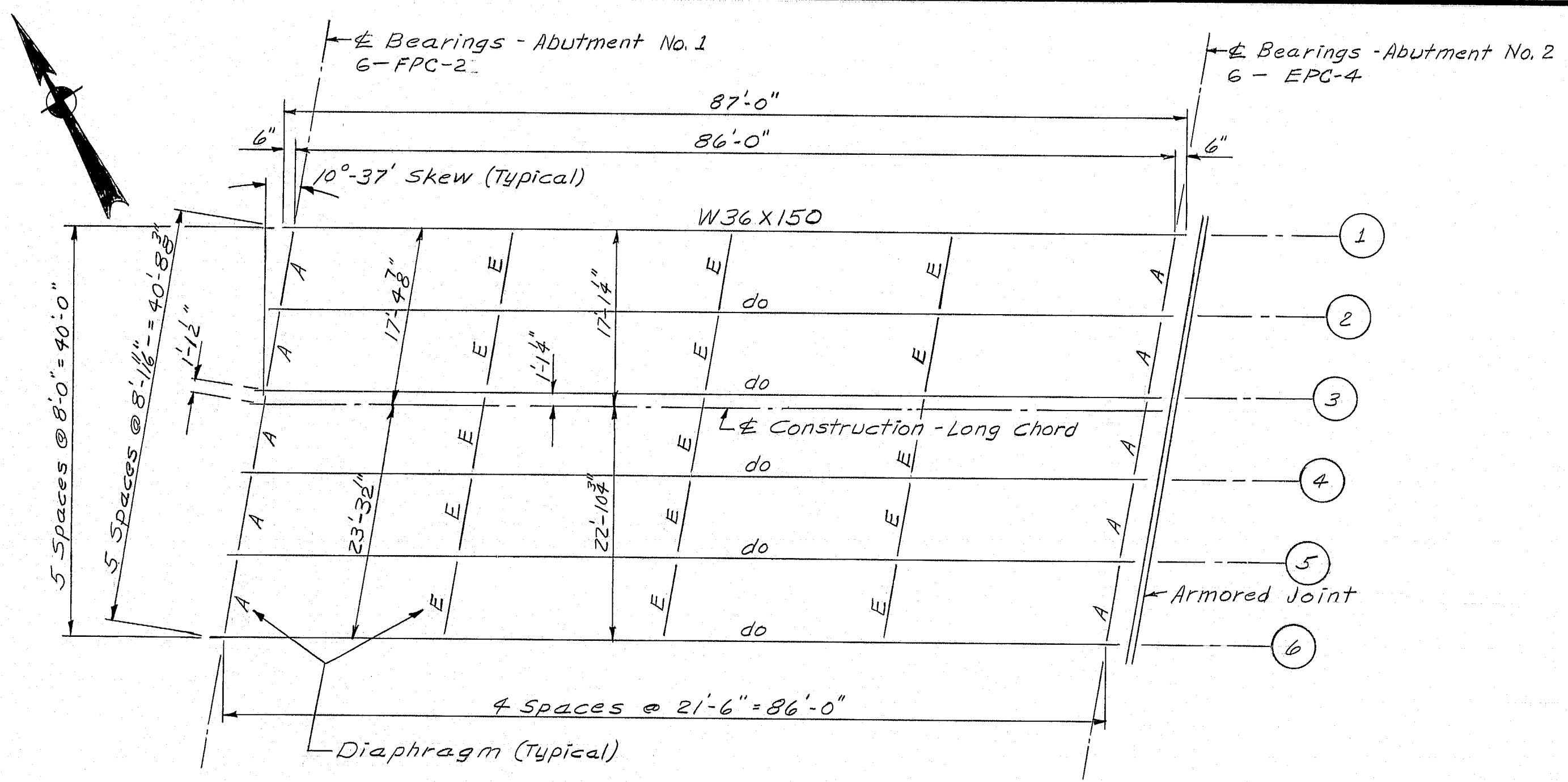
"As Built 1980"  
Maurice J. Day

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
APPROACH SLABS & CULVERT END STRUCT.  
SHEET 13 OF 30 AUGUSTA, MAINE MAY 1979

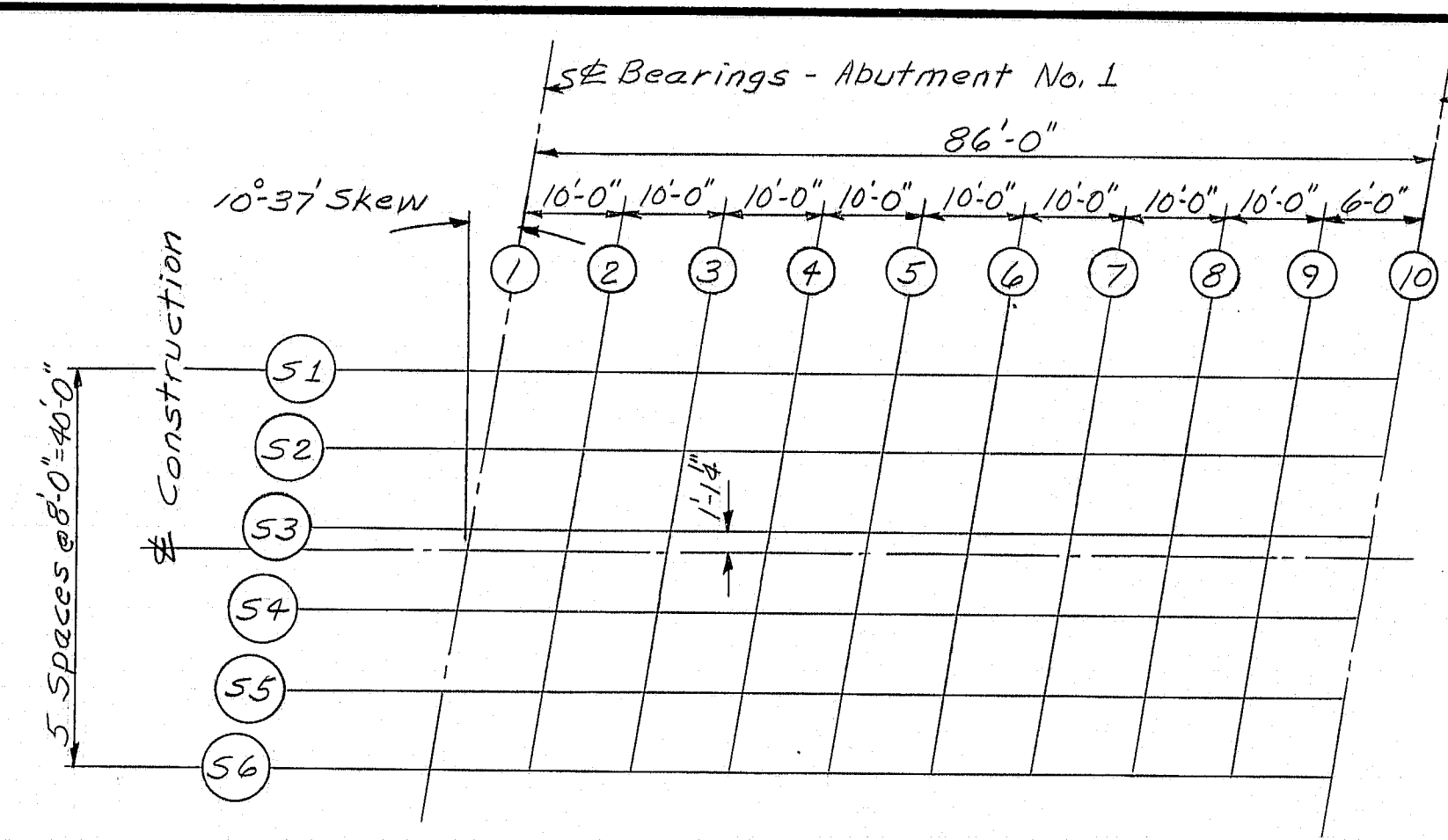
176-93

PROJECT DESIGN ENGINEER	DATE
CDH	7-79
DESIGN-DETAILED	BEW
REVISIONS	1-11
FIELD CHANGES	5-77





FRAMING PLAN



BLOCKING LAYOUT

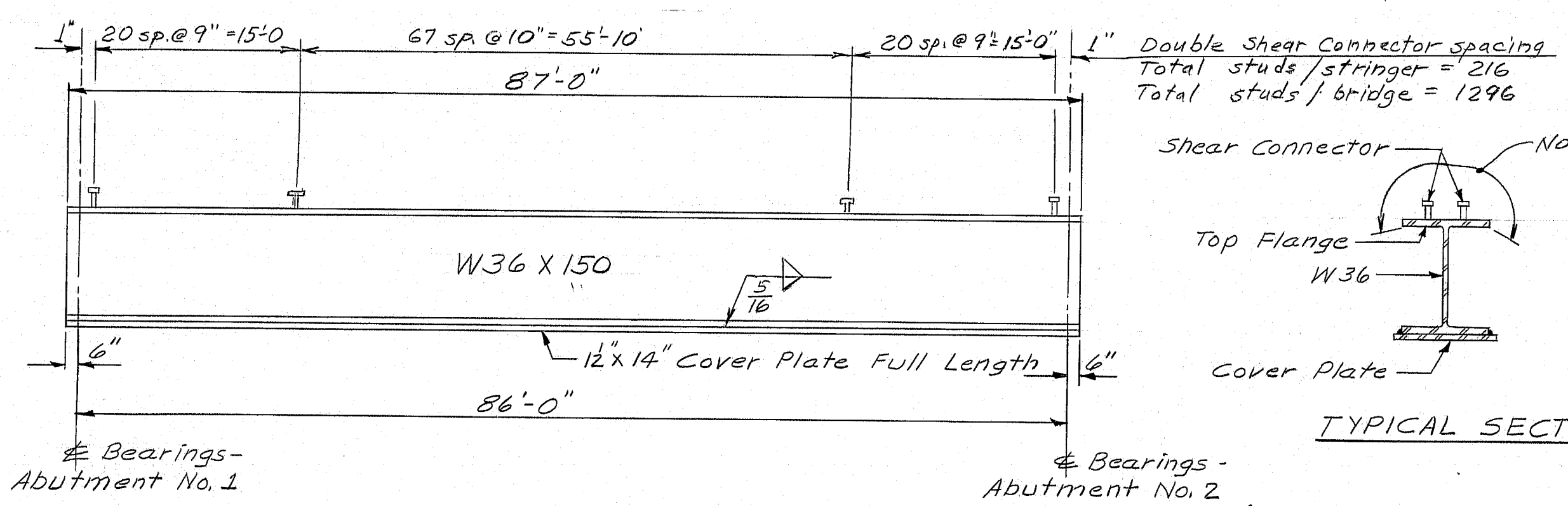
BOTTOM OF SLAB ELEVATIONS										
Span Points	1	2	3	4	5	6	7	8	9	10
Stringers	419.68	419.96	420.23	420.47	420.68	420.86	421.00	421.11	421.19	421.24
	419.32	419.60	419.87	420.11	420.32	420.50	420.64	420.75	420.83	420.88
	418.95	419.24	419.51	419.75	419.96	420.14	420.28	420.39	420.47	420.52
	418.59	418.88	419.15	419.39	419.60	419.78	419.92	420.03	420.11	420.16
	418.23	418.52	418.79	419.03	419.24	419.42	419.56	419.67	419.75	419.80
	417.87	418.16	418.43	418.67	418.88	419.06	419.20	419.30	419.39	419.44

GENERAL NOTES

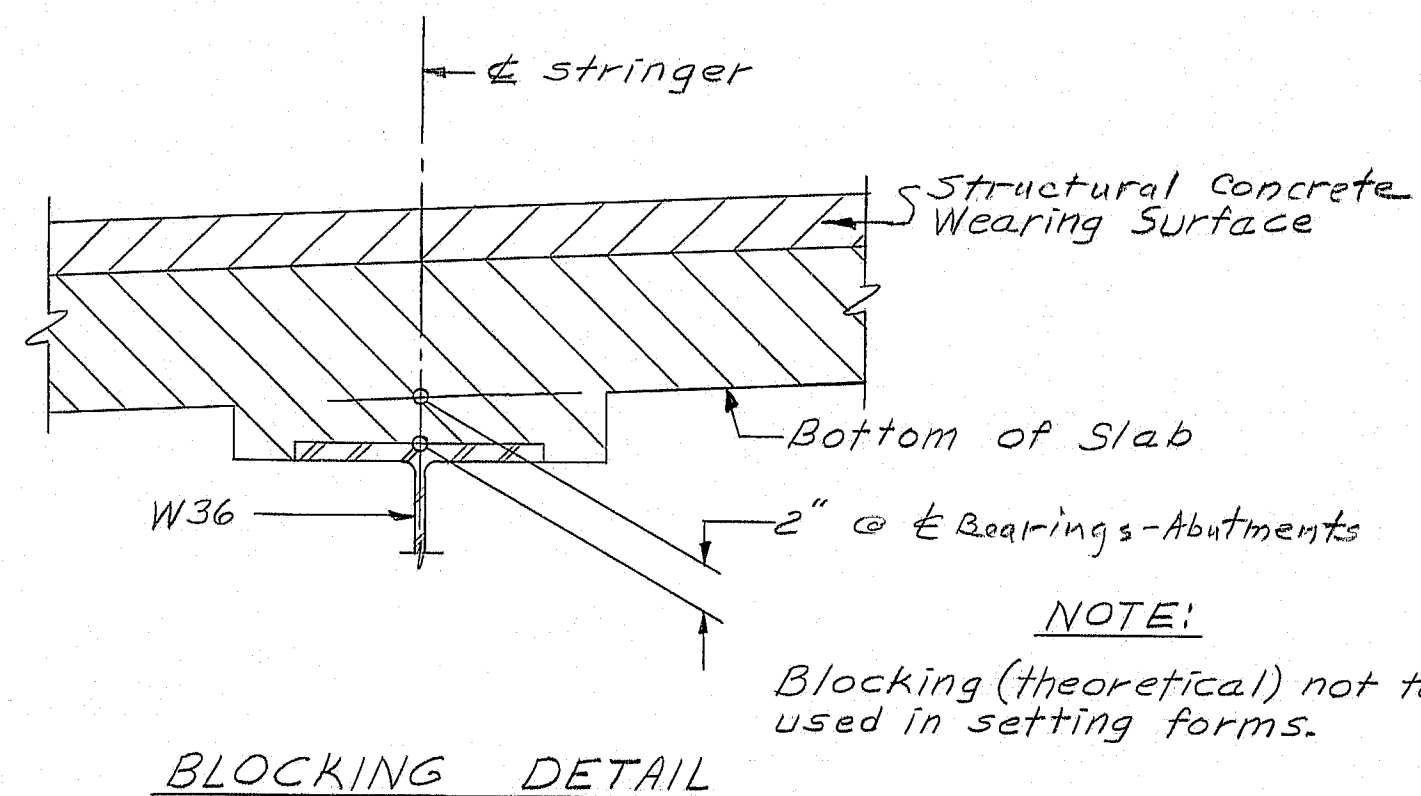
1. Camber each beam  $\frac{3}{8}$ " up. The camber is to compensate for all dead load deflections and for the grade of the finished grade profile.
2. Diaphragm connection plates may be either plumb or normal to the top flange.
3. BASIC ALLOWABLE STRESSES  
Structural Steel: ASTM A572----- $f_y = 27,000$  psi  
ASTM A36----- $f_y = 20,000$  psi  
ASTM A325----- $f_y = 19,000$  psi
4. MATERIALS  
Structural Steel: Stringers--ASTM A572 Grade 50  
High Strength Bolts--ASTM A325  
All other-----ASTM A36

REFERENCES

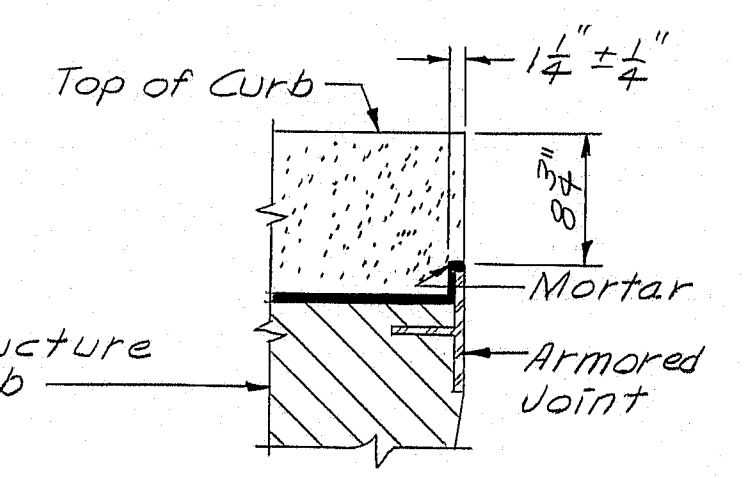
1. For Diaphragms "A" and "E" see BD 113-78.
2. For Armored Joint Details see BD 104-77.
3. For Shear Connector Details see BD 104-77.
4. For Bearing Pedestals see BD 101-74.



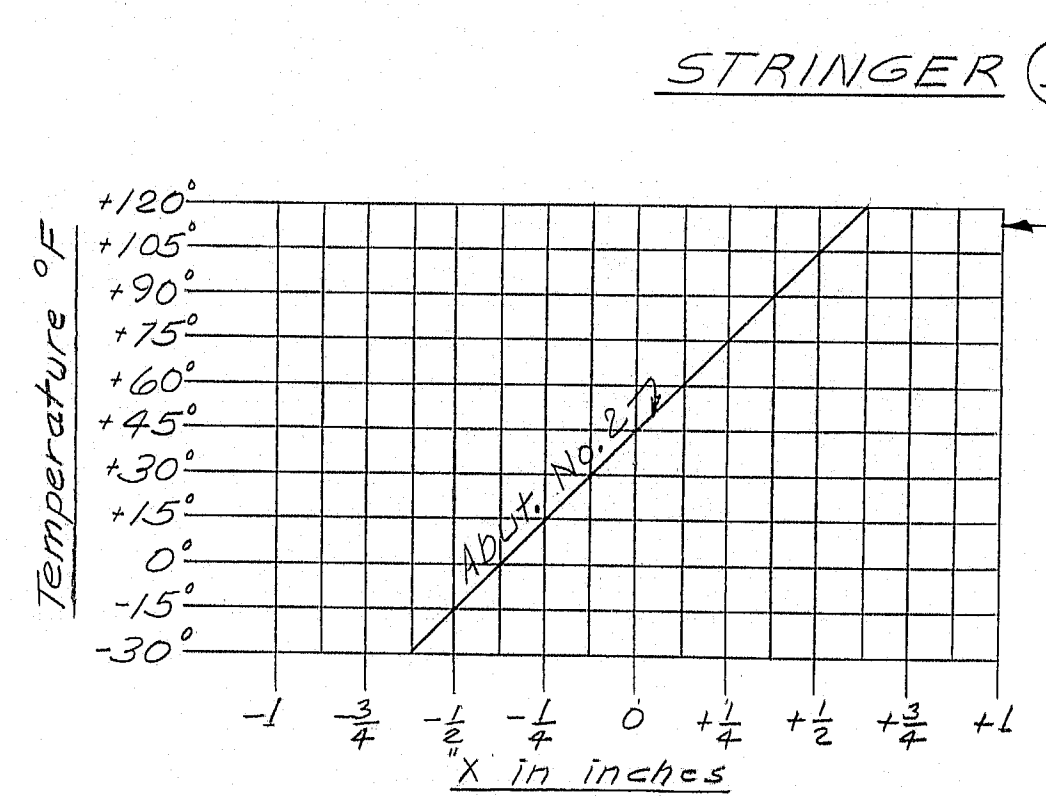
TYPICAL SECTION



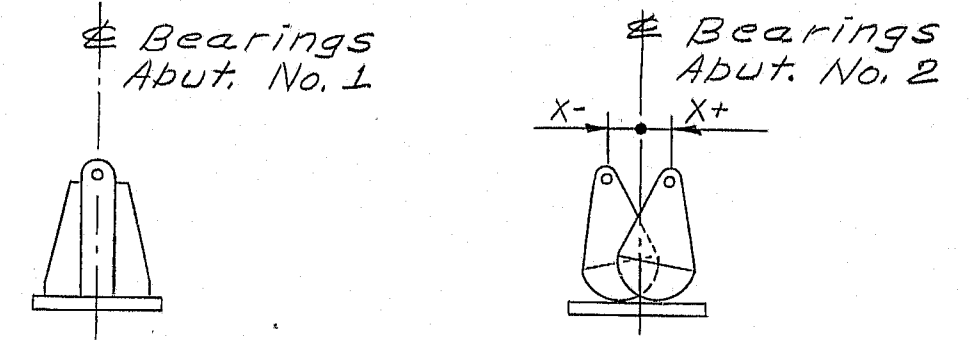
BLOCKING DETAIL



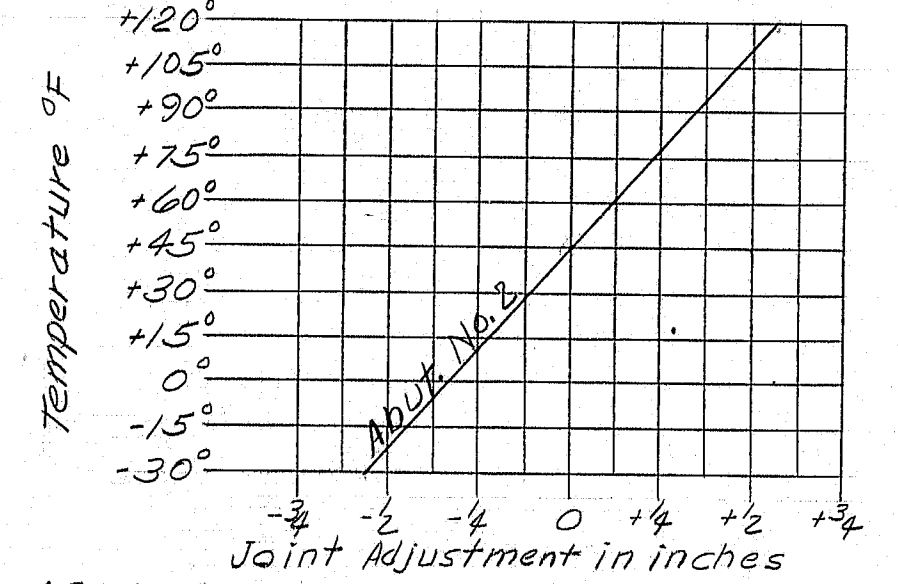
SECTION A-A



BEARING SETTING CHART



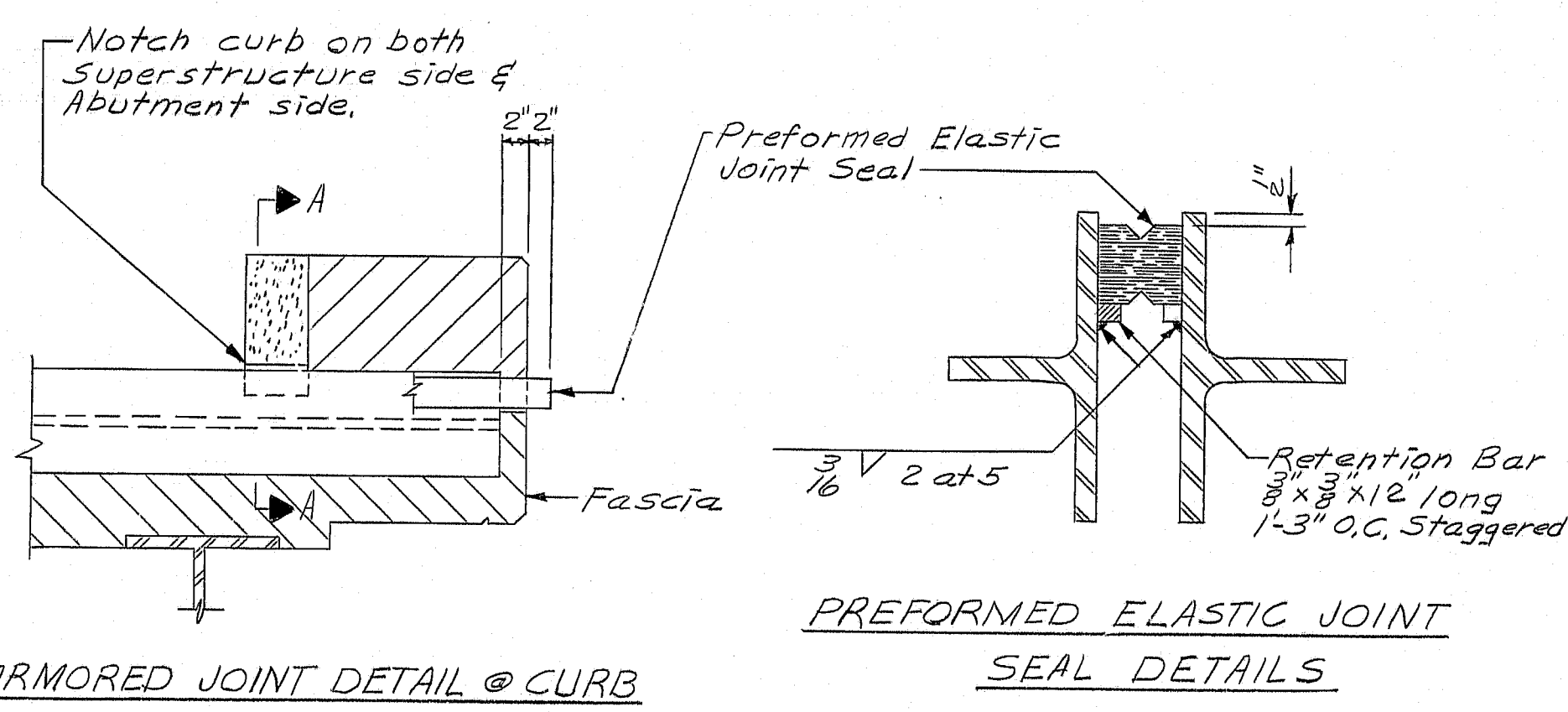
BEARING SETTING DETAIL



ARMORED JOINT ADJUSTMENT CHART

GENERAL ARMORED JOINT NOTES

1. The seal to be furnished shall have a minimum Movement Rating of: 1/8 inch at Abutment No. 2.
2. The joint opening will vary depending on the dimensions of the seal selected by the Contractor. The joint opening shall be set according to the opening shown on the approved 'Armored Joint' shop detail drawings.
3. The seal shall be approved by the Engineer prior to fabrication of the armored joint.
4. The armored joint adjustment chart shows the adjustment of the joint opening to compensate for temperature only. It is anticipated that the joint will open 0 inch at Abutment No. 2 due to placement of superstructure slab. Plus value in chart means adjustment toward backwall.



ARMORED JOINT DETAIL @ CURB

PREFORMED ELASTIC JOINT SEAL DETAILS

"As Built 1980"  
Maurice F. Day

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY

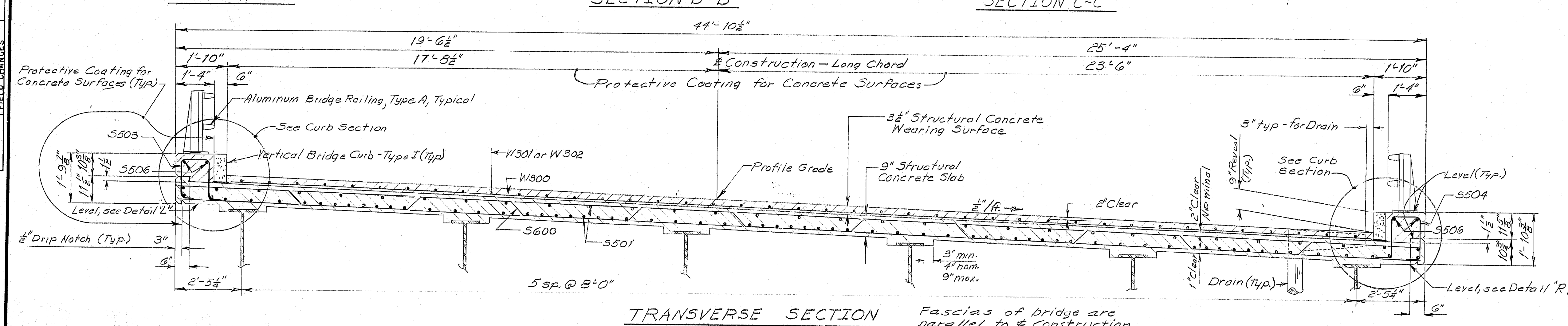
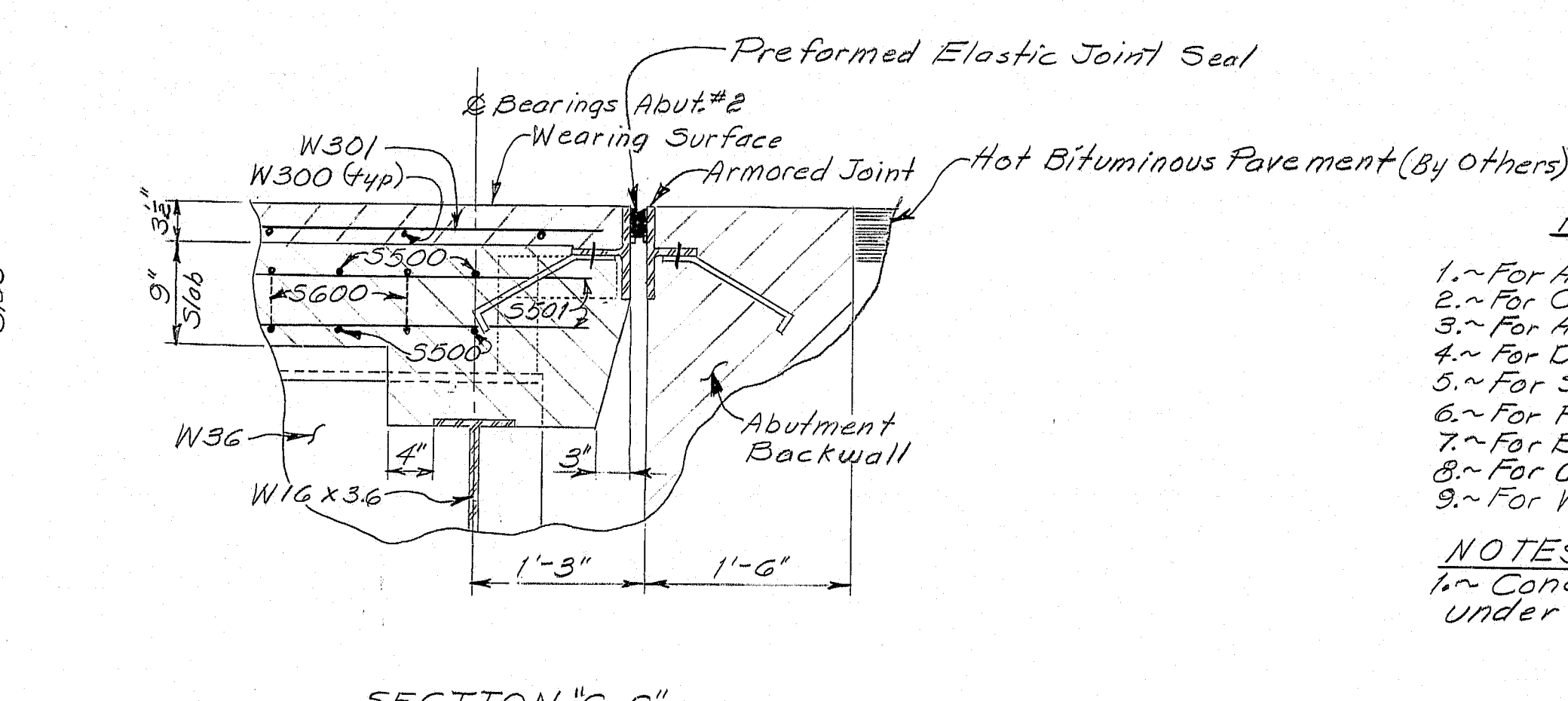
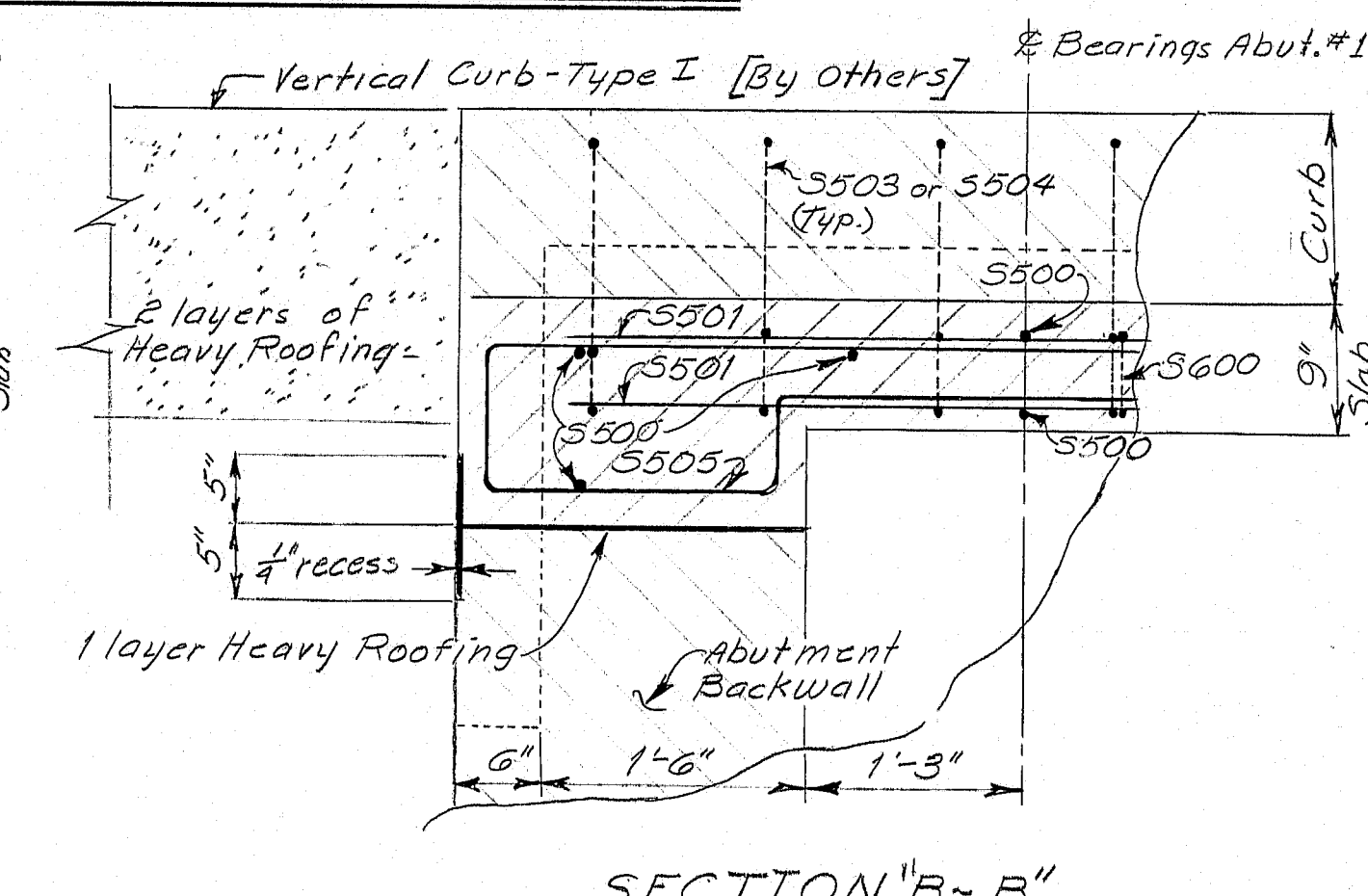
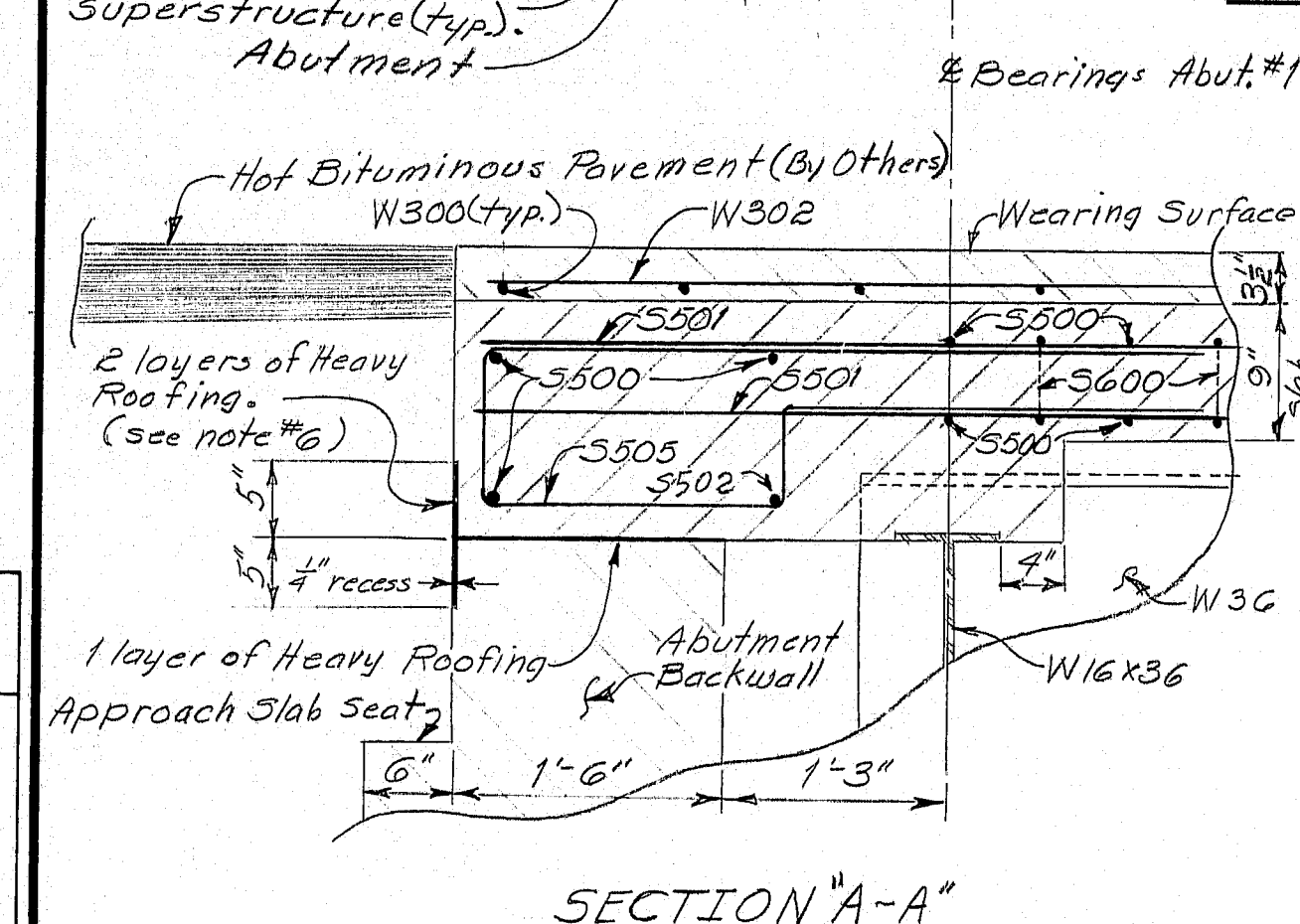
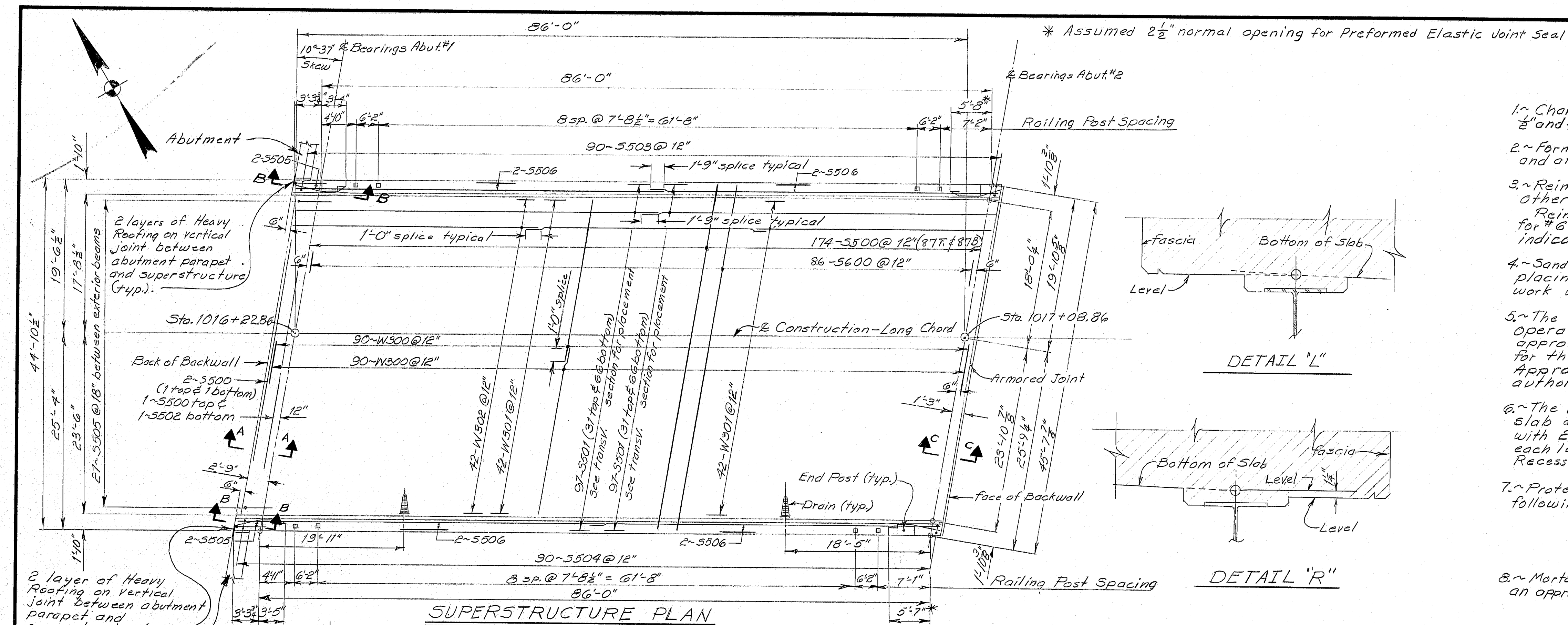
STRUCTURAL STEEL FRMG. PLAN & BLOCKING  
SHEET 14 OF 30 AUGUSTA, MAINE MAY 1979

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PROJECT DESIGN ENGINEER	CDH	BY	DATE
DESIGN - DETAILED	CDH	BM/lor	1-77
CHECKED	CDH	MM/LS	5/79
REVISIONS			
FIELD CHANGES			



PROJECT DESIGN ENGINEER CDW	DATE
DESIGN-DETAILED	1-79
CHECKED	CON. LAW
BY	11/11/79
PLANS	5172
REVISIONS	
FIELD CHANGES	



# GENERAL SUPERSTRUCTURE NOTES

1. Chamfer all exposed edges of concrete a consistent dimension between  $\frac{1}{2}$ " and  $\frac{3}{4}$ " inclusive, unless otherwise indicated.
2. Form a 1" V-groove on the fascias at each construction joint in the slab and at the horizontal joints between the curb and slab.
3. Reinforcing steel shall have a minimum cover of 2 inches unless otherwise indicated. Reinforcing steel splices shall be for #3 bars 1'-0", for #5 bars 1'-9", for #6 bars 2'-3", for all others 3G bar diameters unless otherwise indicated.
4. Sand blast the top of the roadway slab and clean thoroughly before placing Structural Concrete Wearing Surface. Payment for this work will be considered incidental to Item 502.26.
5. The superstructure slab shall be placed in one continuous operation. The Contractor's method of placement shall be approved by the Engineer. The concrete shall be kept plastic for the full length of the structure during placement. Approved set retarding admixtures may be used when authorized by the Engineer.
6. The vertical and horizontal joints between the superstructure slab and the backface of Abutment #1 backwall, shall be covered with 2 layers of Heavy Roofing, 10" wide. Coat the concrete and each layer of roofing as applied with plastic roofing Cement. Recess the area covered  $\frac{1}{4}$ ".
7. Protective Coating for Concrete Surfaces shall be applied to the following areas:
  - concrete wearing surface,
  - concrete curbs,
  - concrete fascias down to 3" drip notch,
  - all exposed surfaces of concrete end posts.
8. Mortar for bedding and for joints in the granite curb shall contain an approved non-shrink additive.

## REFERENCES

1. For Armored Joint see Standard Details BD 104-77.
2. For Curb Section see Standard Details BD 104-77.
3. For Aluminum Bridge Railing see Standard Details BD 114-77.
4. For Drain see Standard Details BD 104-77.
5. For Structural Steel see sheet # 14.
6. For Reinforcing Steel Schedule see sheet # 16 and 17.
7. For Bottom of Slab Elevations see sheet # 14.
8. For Concrete End Post see sheet # 12.
9. For Vertical Curb-Type I see Standard Details, Aug. '69, sh. (3).

## NOTES:

1. Concrete in Concrete End Posts will be paid for under Item 502.26.

"As Built 1980"  
Maurice F. Roy

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
195 NORTHBOUND OVER FOXCROFT ROAD IN THE TOWN OF HOULTON AROOSTOOK COUNTY
SUPERSTRUCTURE
SHEET 15 OF 30 AUGUSTA, MAINE MAY 1979

176-95



[illegible]

Figure 1: Type-Bending Diagrams. This figure contains 18 diagrams labeled A through R, illustrating various bending configurations for structural members. Diagram A shows a continuous beam with multiple supports and loads. Diagrams B through R show various cross-sections and bending moments for different structural elements, including beams, columns, and frames, under various loading conditions.

GENERAL NOTES

- ⚠ Revised 9-10-79

**195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY  
REINFORCING STEEL SCHEDULE  
ET 1/6 OF 30 AUGUSTA MAINE MAY**

176-96

PLANS	CDH	BY	DATE
	DESIGN - DETAIL	CDH	5-79
	CHECKED	MMK, L. HED	5/79
	REVISIONS		
	FIELD CHANGES		



[illegible]

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	17	30

The diagrams are labeled as follows:

- A**: A lap joint with a single row of rivets.
- B**: A lap joint with a double row of rivets.
- C**: A lap joint with a double row of rivets and a central reinforcement plate.
- D**: A lap joint with a double row of rivets and a central reinforcement plate.
- E**: A lap joint with a double row of rivets and a central reinforcement plate.
- F**: A lap joint with a double row of rivets and a central reinforcement plate.
- G**: A lap joint with a double row of rivets and a central reinforcement plate.
- H**: A lap joint with a double row of rivets and a central reinforcement plate.
- I**: A lap joint with a double row of rivets and a central reinforcement plate.
- J**: A lap joint with a double row of rivets and a central reinforcement plate.
- K**: A lap joint with a double row of rivets and a central reinforcement plate.
- L**: A lap joint with a double row of rivets and a central reinforcement plate.
- M**: A lap joint with a double row of rivets and a central reinforcement plate.
- N**: A lap joint with a double row of rivets and a central reinforcement plate.
- O**: A lap joint with a double row of rivets and a central reinforcement plate.
- P**: A lap joint with a double row of rivets and a central reinforcement plate.
- Q**: A lap joint with a double row of rivets and a central reinforcement plate.
- R**: A lap joint with a double row of rivets and a central reinforcement plate.
- S**: A lap joint with a double row of rivets and a central reinforcement plate.
- T**: A lap joint with a double row of rivets and a central reinforcement plate.

Reinforcing Bar: ASTM A615 Grade 60

1. First digit(s) following the letter of the Mark indicates size of reinf. bar.
  - Mark (A 502) bar size - #5
  - Mark (P 1001) bar size - #10
  - Mark (S 603) bar size - #6
2. Letter of Marks A, P, & S locates bars of Abutments, Piers, and Superstructure parts respectively.
3. Abbreviations :
 

N.F.	~ Far Face	R~ Right
N.F.	~ Near Face	L~ Left.
E.F.	~ Each Face	
Abut.	~ Abutment	
do	~ ditto	
vert.	~ Vertical	
horiz.	~ Horizontal	

Δ Revised 9-10-79

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

**195 NORTHBOUND  
OVER  
FOXCROFT ROAD  
IN THE TOWN OF  
HOULTON  
AROOSTOOK COUNTY**

REINFORCING STEEL SCHEDULE  
SHEET 17 OF 30 AUGUSTA, MAINE MAY 1979

176-97



EXPANSION PEDESTAL - EPA

**FIXED PEDESTAL - FPA**

**EXPANSION PEDESTAL - EPB**

FIXED PEDESTAL - FPB

### PINTLE    DETAIL

### ANCHOR BOLT DETAIL

*For EPA & EPB*  
**MASONRY PLATE**

**EXPANSION PEDESTAL - EPC**

FIXED PEDESTAL - FPC

PEDESTALS — ALLOWABLE LOADS & DIMENSIONS														
<i> pedestal</i>	<i>Load</i>	A	B	C	D	E	F	G	H	J	K	L	M	N
<i>EPA</i>	132 <sup>K</sup>	—	—	—	—	—	—	—	—	—	8"	4"	3 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "
<i>FPA</i>	150 <sup>K</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>EPB-1</i>	120 <sup>K</sup>	—	6"	8"	14"	8"	10"	6"	7 $\frac{1}{2}$ "	2"	8"	4"	3 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "
<i>EPB-2</i>	165 <sup>K</sup>	—	7"	10"	14 $\frac{1}{2}$ "	9"	14"	7"	8"	3"	10"	5"	3 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "
<i>EPB-3</i>	224 <sup>K</sup>	—	8"	14"	24"	10"	14"	8"	10"	4 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	5"	4 $\frac{1}{2}$ "	8 $\frac{1}{2}$ "
<i>FPB-1</i>	120 <sup>K</sup>	—	6"	8"	14"	8"	—	—	7 $\frac{1}{2}$ "	2"	—	—	—	—
<i>FPB-2</i>	165 <sup>K</sup>	—	7"	10"	14 $\frac{1}{2}$ "	9"	—	—	8"	3"	—	—	—	—
<i>FPB-3</i>	224 <sup>K</sup>	—	8"	14 $\frac{1}{2}$ "	24"	10"	—	—	10"	5"	—	—	—	—
<i>EPG-1</i>	70 <sup>K</sup>	2 $\frac{1}{2}$ "	6"	8"	14"	8"	1 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	3"	3"	4 $\frac{1}{2}$ "	—	1 $\frac{1}{2}$ "	6"
<i>EPG-2</i>	100 <sup>K</sup>	1 $\frac{1}{2}$ "	8"	8"	14"	8"	1 $\frac{1}{2}$ "	3 $\frac{1}{2}$ "	3"	3"	6 $\frac{1}{2}$ "	—	1 $\frac{1}{2}$ "	6"
<i>EPG-3</i>	130 <sup>K</sup>	1 $\frac{1}{2}$ "	10"	8"	14"	9"	1 $\frac{1}{2}$ "	4"	3"	3"	5 $\frac{1}{2}$ "	—	1 $\frac{1}{2}$ "	7"
<i>EPG-4</i>	160 <sup>K</sup>	1 $\frac{1}{2}$ "	10"	8"	14"	9"	1 $\frac{1}{2}$ "	4"	3"	3"	5 $\frac{1}{2}$ "	—	1 $\frac{1}{2}$ "	7"
<i>EPG-5</i>	190 <sup>K</sup>	1 $\frac{1}{2}$ "	10"	9"	21"	10"	2"	4 $\frac{1}{2}$ "	3"	3"	6 $\frac{1}{2}$ "	—	1 $\frac{1}{2}$ "	8"
<i>EPG-6</i>	220 <sup>K</sup>	1 $\frac{1}{2}$ "	14"	10"	21"	14"	2 $\frac{1}{2}$ "	5"	5"	3"	10 $\frac{1}{2}$ "	—	1"	8"
<i>EPG-7</i>	250 <sup>K</sup>	1 $\frac{1}{2}$ "	14"	14"	14"	14"	2 $\frac{1}{2}$ "	5"	5"	4"	10 $\frac{1}{2}$ "	—	7"	8"
<i>FGP-1</i>	100 <sup>K</sup>	—	—	8"	14"	9"	1 $\frac{1}{2}$ "	2 $\frac{1}{2}$ "	8"	—	6 $\frac{1}{2}$ "	—	—	6"
<i>FGP-2</i>	160 <sup>K</sup>	—	—	8"	14"	10"	1 $\frac{1}{2}$ "	3"	8"	—	6 $\frac{1}{2}$ "	—	—	7"
<i>FGP-3</i>	190 <sup>K</sup>	—	—	8"	20"	10"	1 $\frac{1}{2}$ "	3"	10"	—	6 $\frac{1}{2}$ "	—	—	8"
<i>FGP-4</i>	220 <sup>K</sup>	—	—	10"	24"	14"	1 $\frac{1}{2}$ "	4"	10"	—	6 $\frac{1}{2}$ "	—	—	8"
<i>FGP-5</i>	250 <sup>K</sup>	—	—	10"	24"	14"	2"	4"	10"	—	6 $\frac{1}{2}$ "	—	—	8"

NOTE: At the location of bearing  
#1, the concrete bridge seats  
shall be dressed one inch larger all  
around than size of existing 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 6" and min slope  
of 1 inch per foot. No separate payment  
for this work will be made as it shall  
be considered incidental to contract items.



## DESIGN SPECIFICATIONS

AASHTO, Standard Specifications for  
Highway Bridges 1973, Interims thru 1977

**A A.S.T.M. STEEL CLASSIFICATION**

(When structural steel is specified to be unpainted)  
All structural steel including anchor bolts shall be A588 unpainted.

(When structural steel is specified to be painted)  
All structural steel including anchor bolts shall be A36.

	Delete Std. Washer size & change radius	6-14-78
	Change Specifications & Steel Classification	3-1-77
REVISIONS		DATE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

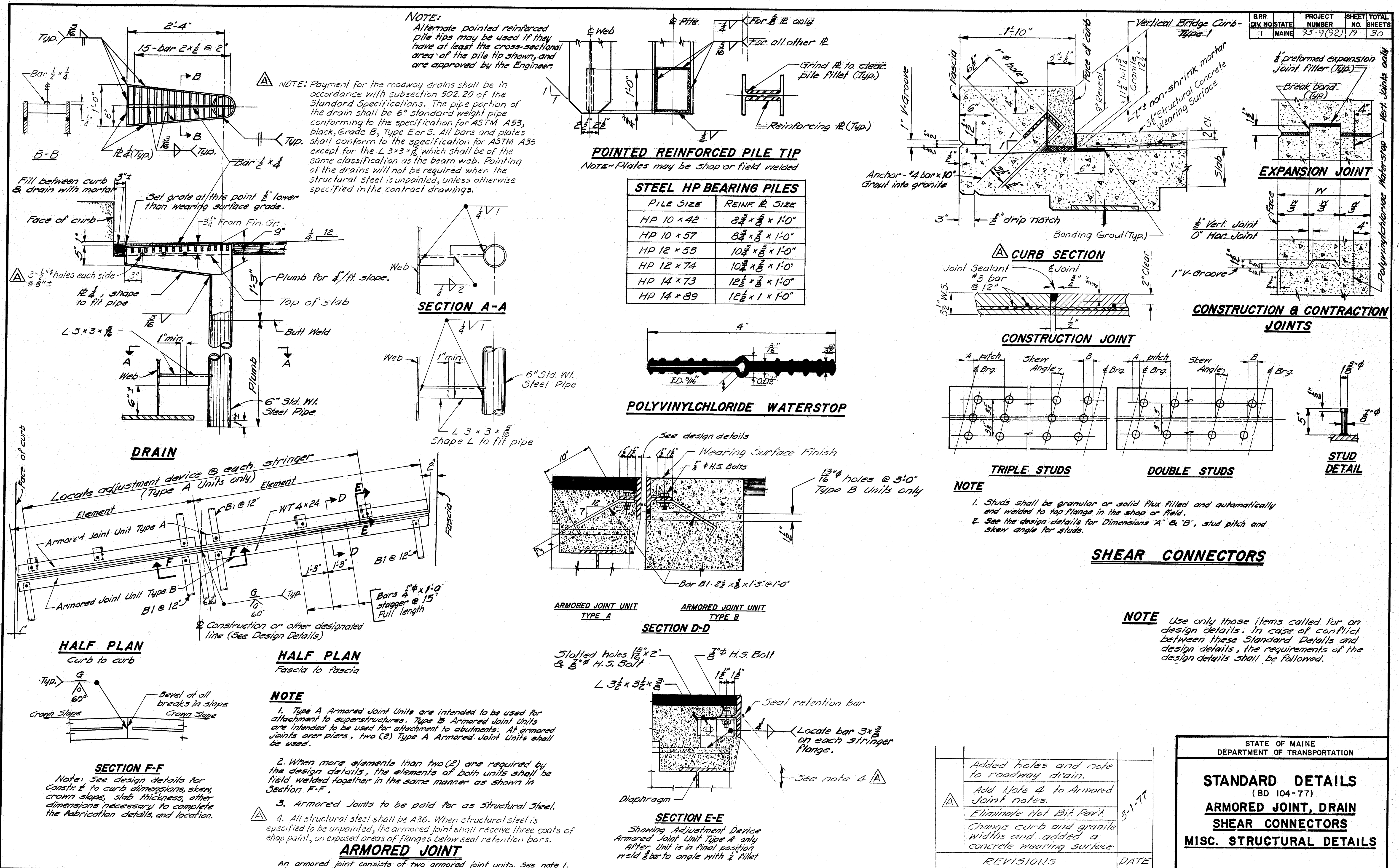
## STANDARD DETAILS

## BEARING PEDESTALS

SHEET 18 OF 30 AUGUSTA, ME. APRIL, 1974

**176-98**







F.N.E.A. REV. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	20	30

# FABRICATION NOTES

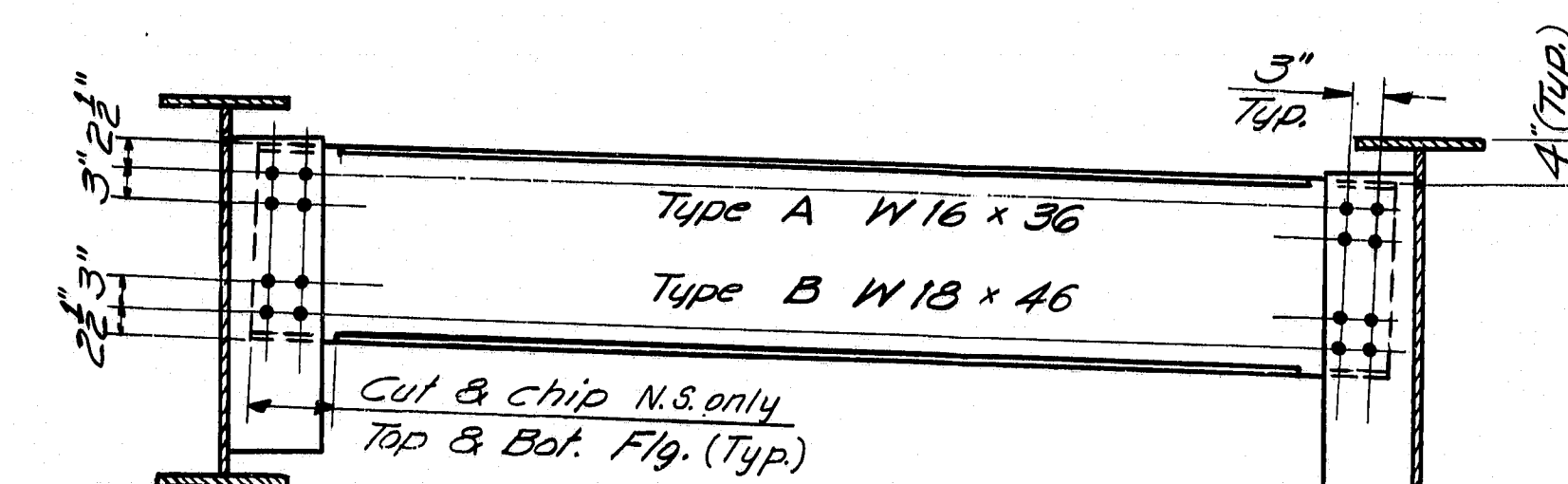
- 1.) All bolts shall be  $\frac{7}{8}$ "  $\phi$  H.S. Bolts. Holes for bolts shall be  $\frac{1}{16}$ "  $\phi$  and edge-distances shall be  $\frac{1}{2}$ " min. unless otherwise shown.
- 2.) Connection Plates and gusset plates shall have a minimum thickness of  $\frac{3}{8}$ " and shall have sufficient width to provide erection clearances. For bearing stiffeners or intermediate stiffeners and for bent connection plates the plate size will be given on the design details.
- 3.) Connection Plates shall be fastened to web plates by fillet welds as shown. All fillet welds shall be the minimum size as specified in A.A.S.H.T.O. Standard Specifications for Highway Bridges, Art. 1.7.26, unless otherwise shown on design plans.
- 4.) Connection Plates shall be  $\frac{3}{8}$ " clear from flanges, except as indicated by notes 5 & 6.
- 5.) Connection Plates on welded beams and girders shall extend to the top flange in areas where the top flange is always in compression.
- 6.) Connection Plates shall extend to the bottom flange at points where lateral bracing is attached and on welded beams and girders in areas where the bottom flange is always in compression.
- 7.) When a connection plate is extended to a flange it shall fit within  $\frac{1}{16}$ " except if the design details show it is to be welded.
- 8.) Bearing Stiffeners at end bearings shall extend to both top and bottom flanges and shall be welded to both flanges. Weld at bottom flange shall be a full penetration weld. Weld at top flange shall be a fillet weld both sides (see Note 3).
- 9.) Bearing Stiffeners at other than end bearings shall extend to both top and bottom flanges, shall be welded to the bottom flange with a full penetration weld and shall fit within  $\frac{1}{16}$ " at top flange.
- 10.) Intermediate Stiffeners shall extend to both top and bottom flanges, shall be welded to the compression flange with a fillet weld on both sides (see Note 3) and shall fit within  $\frac{1}{16}$ " at the tension flange.
- 11.) Use only those items called for on the design details. In case of conflict between these standard details and design details, the design details shall be followed.
- 12.) All dimensions shown as " -  $\pm$  " are variable in order to allow a series of crossframes to have the same slopes and/or dimensions.
- 13.) All connection plates and stiffeners that are extended to a flange shall be clipped  $\frac{3}{8}$ ", except as indicated by note 14.
- 14.) Bearing stiffeners at end bearings shall be clipped 1" at top and bottom. Bearing stiffeners at all other bearings and intermediate stiffeners shall be clipped 1" at the compression flange.
- 15.) For unpainted applications all steel for diaphragms and crossframes shall be A.S.T.M. - A588 or A242. For bridges specified to be painted the steel for diaphragms and connection plates shall be A.S.T.M. - A36, except other steel classifications may be used subject to the approval of the Engineer.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

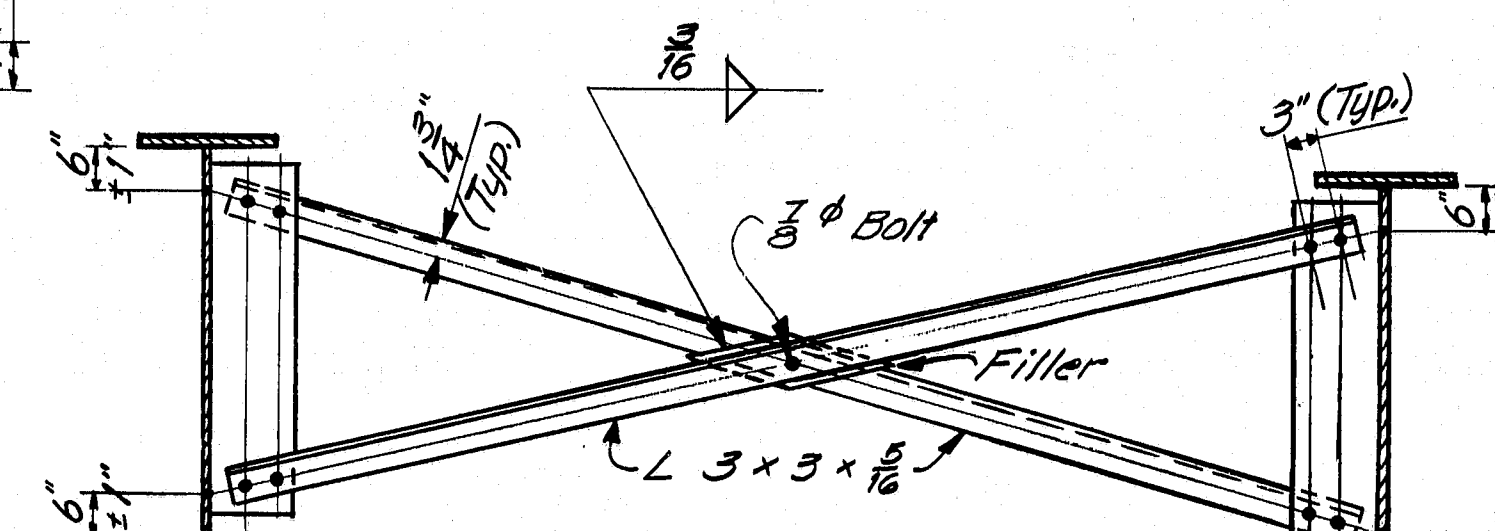
## STANDARD DETAILS (BD 113 - 78) DIAPHRAGMS & CROSSFRAMES

SHEET 20 OF 30 AUGUSTA, MAINE June 1978

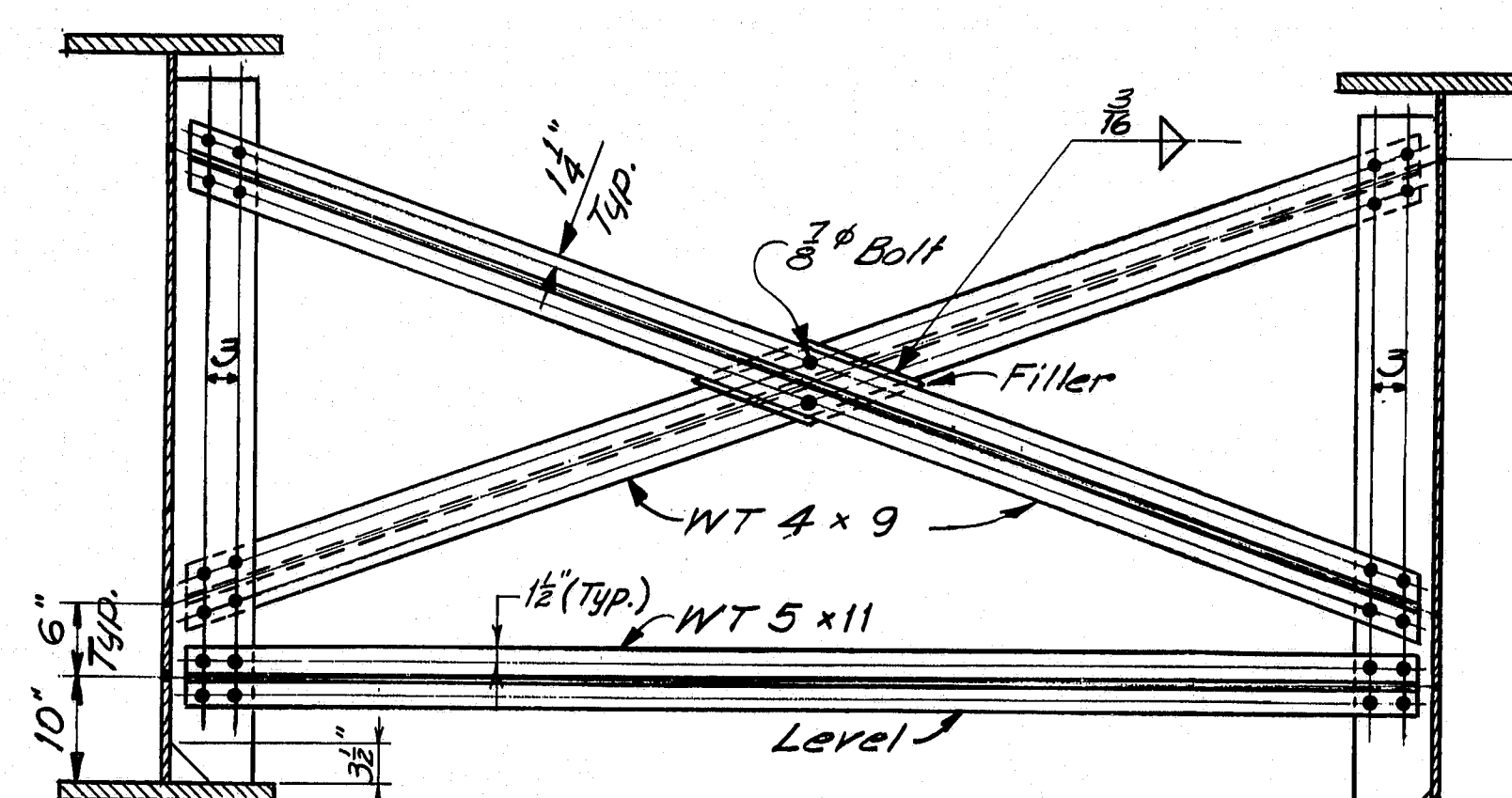
176-100



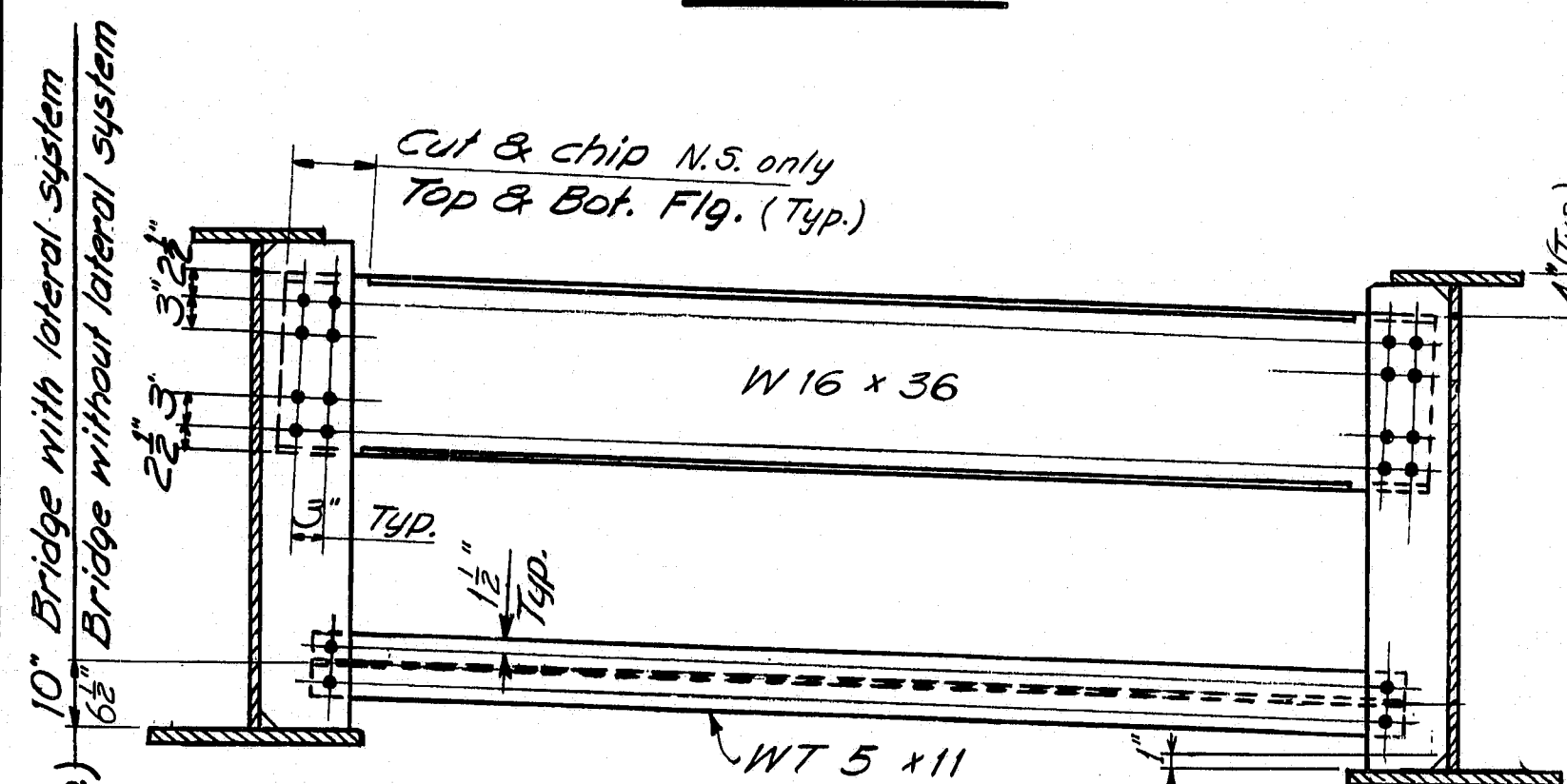
TYPE A & B



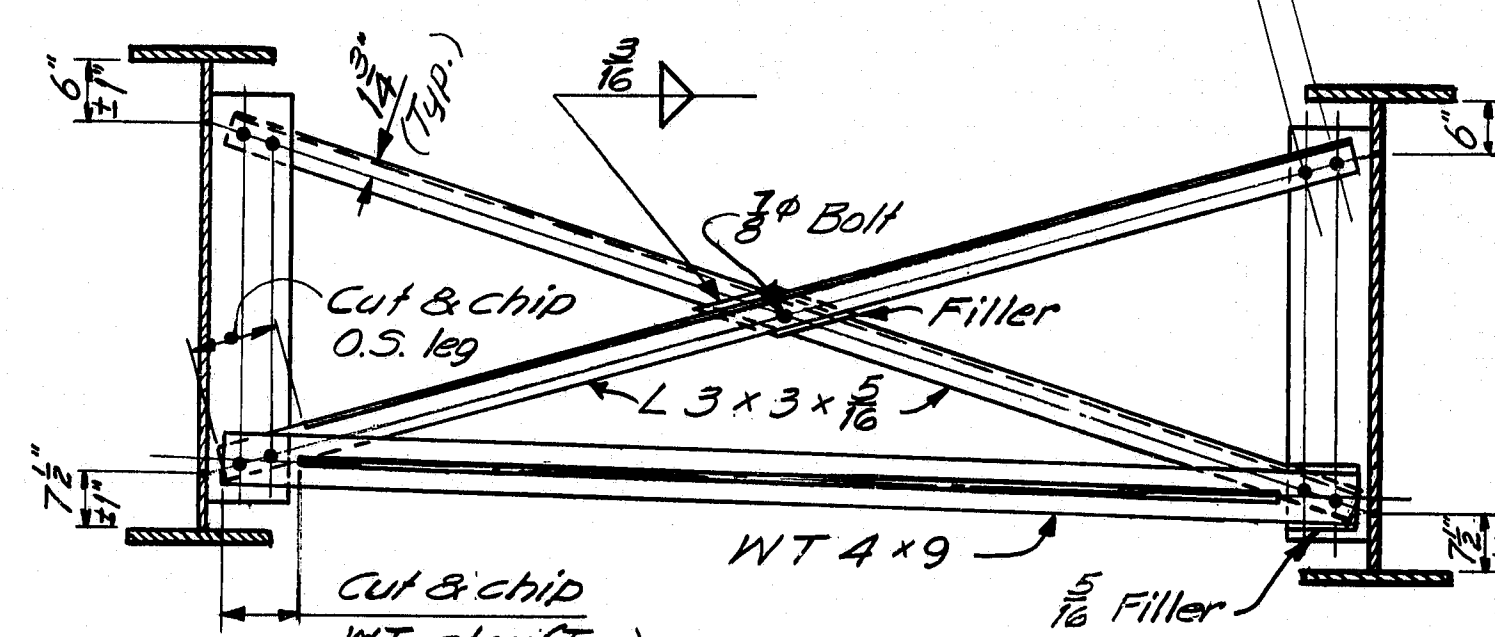
TYPE G



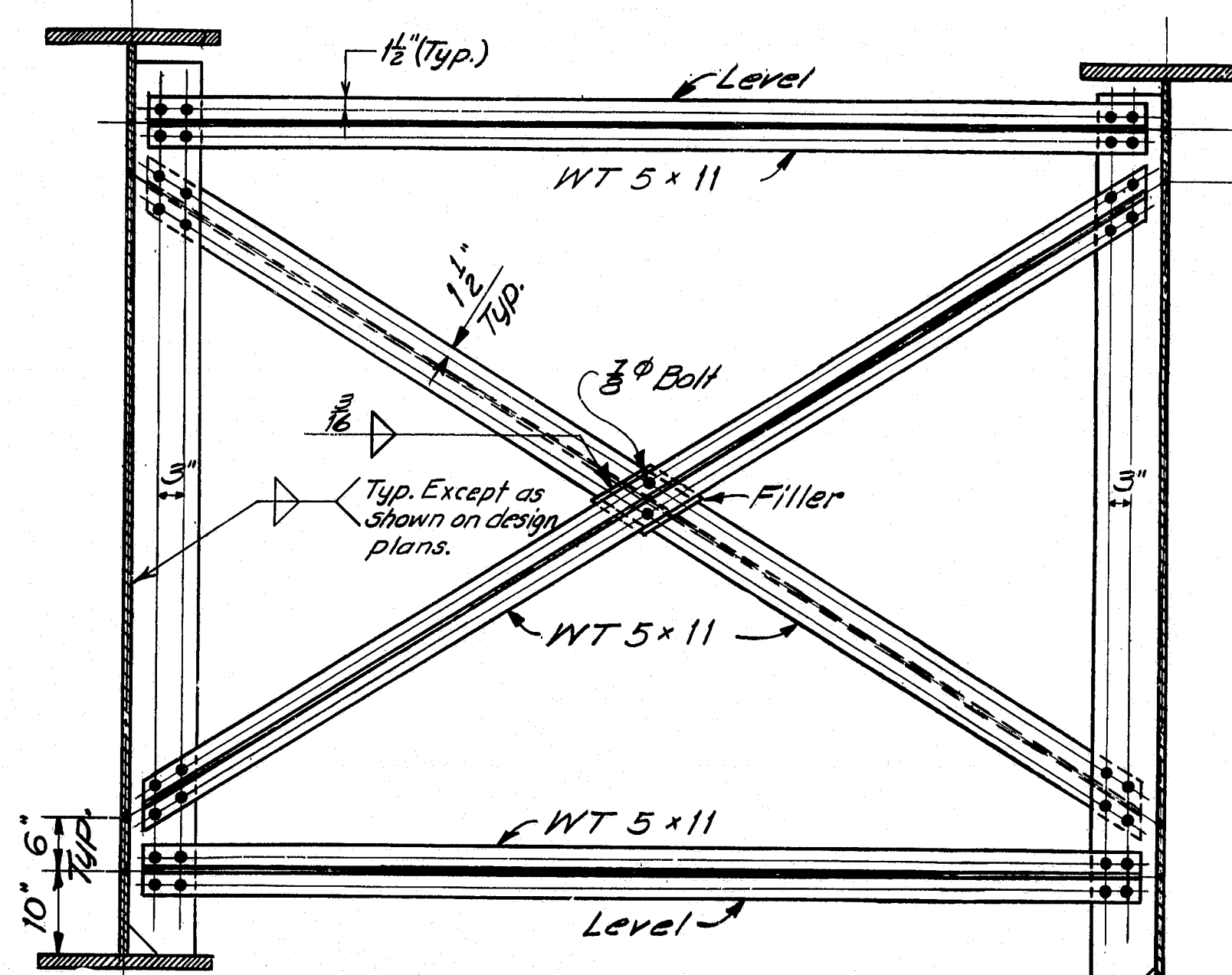
TYPE L



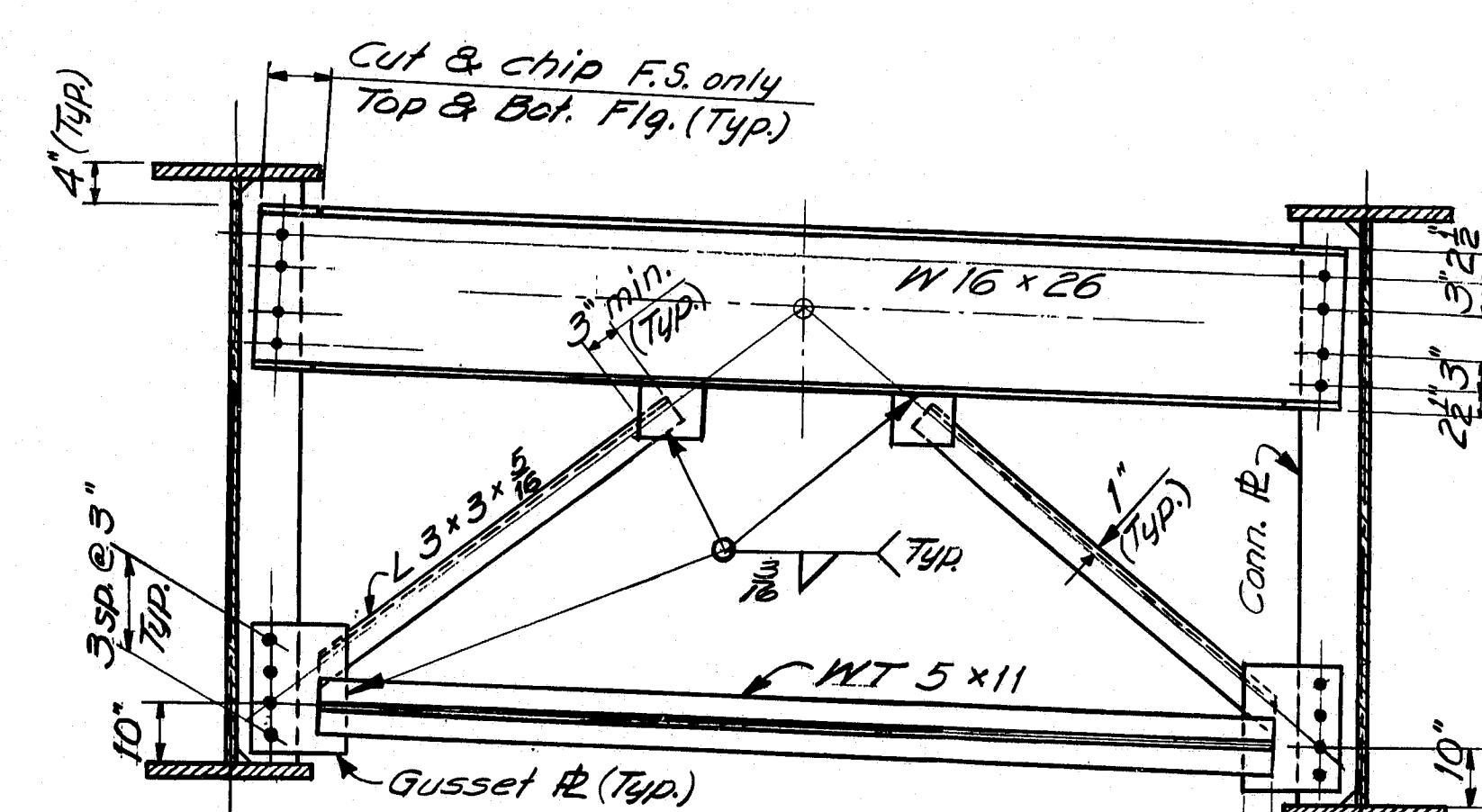
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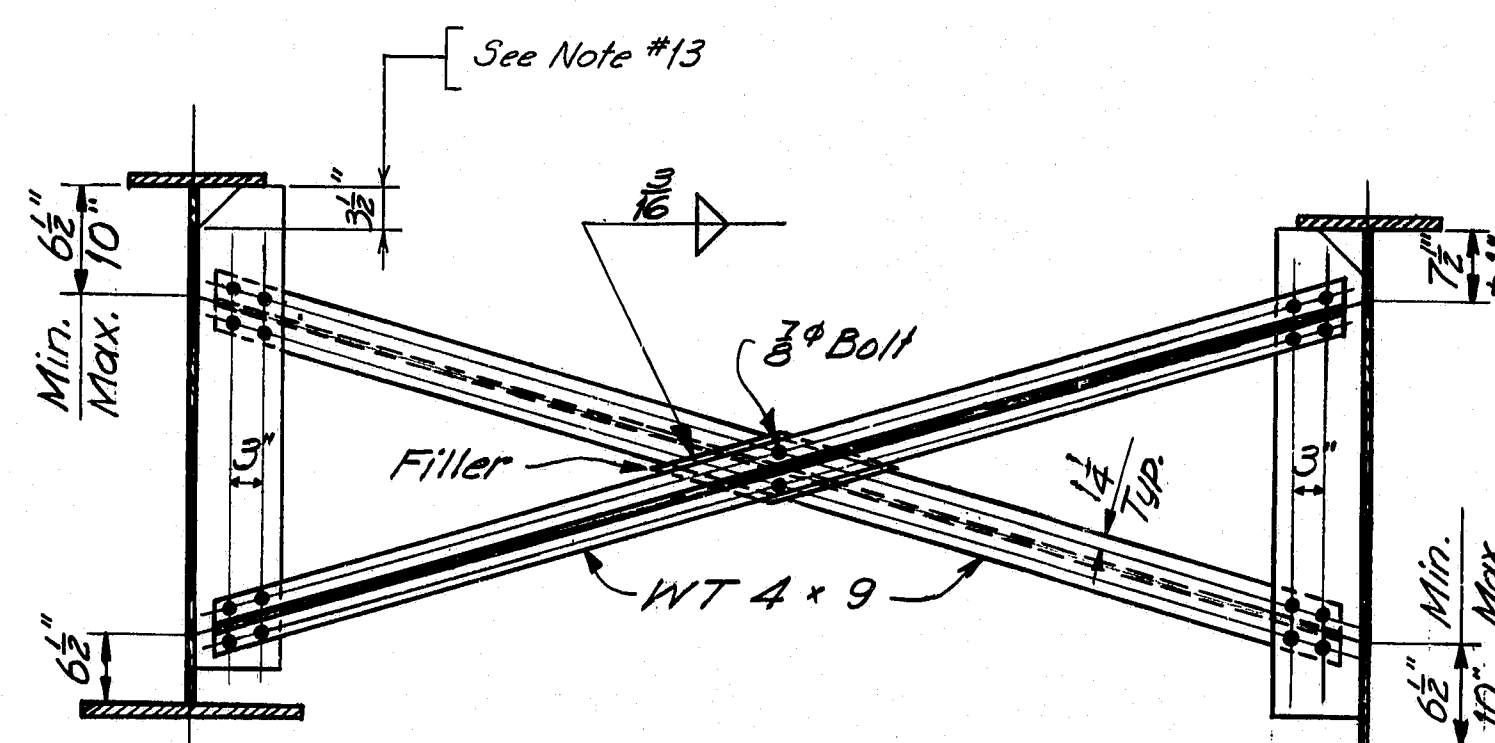
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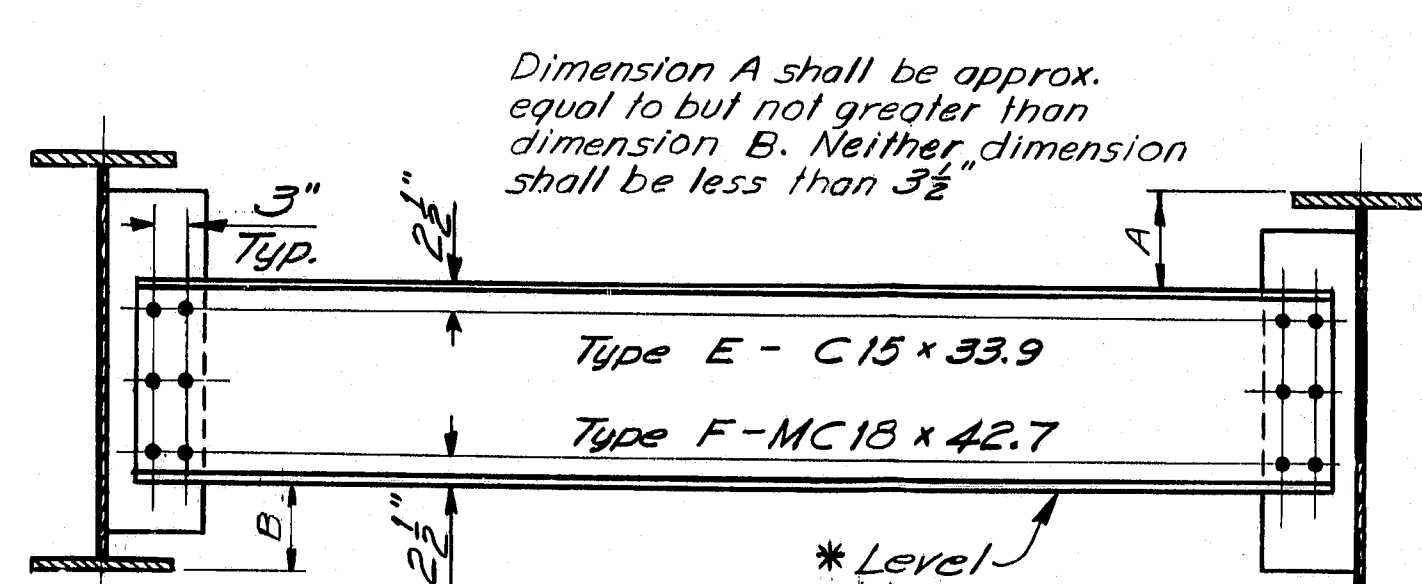
TYPE M



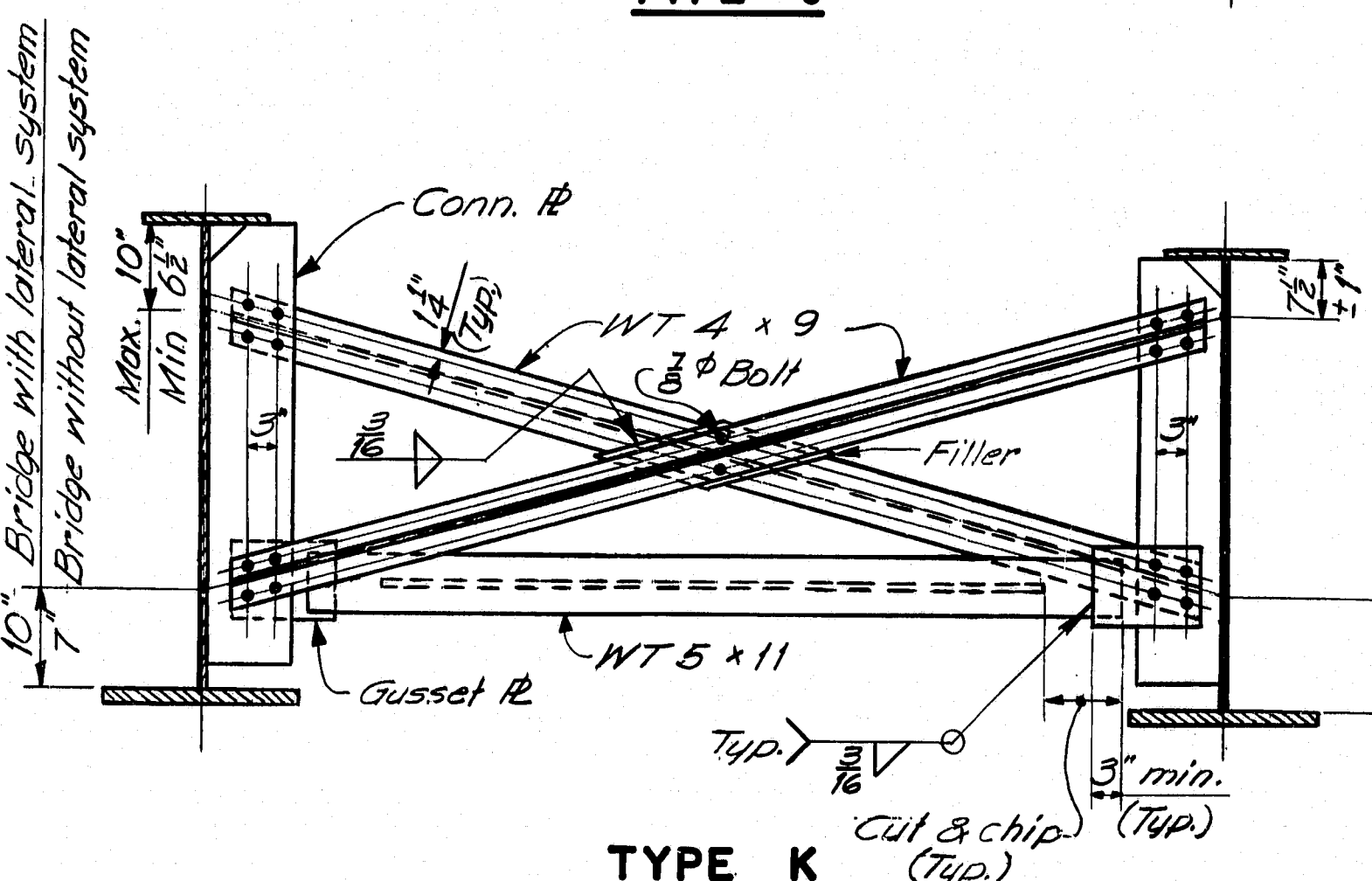
TYPE D



TYPE J



TYPE E & F



TYPE K

PLANS	DESIGN - DETAILED	CHECKED	BY	DATE

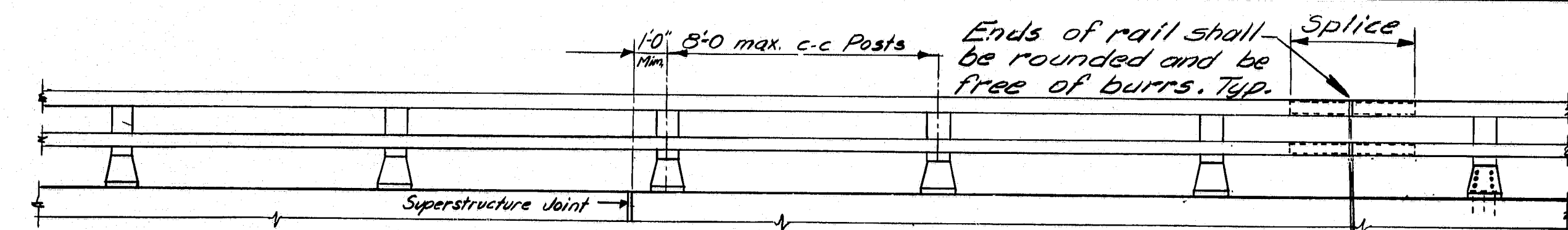
Dimension A shall be approx. equal to but not greater than dimension B. Neither dimension shall be less than 3 1/2"

\* may be sloped to meet the 3 1/2" min. from flange to channel



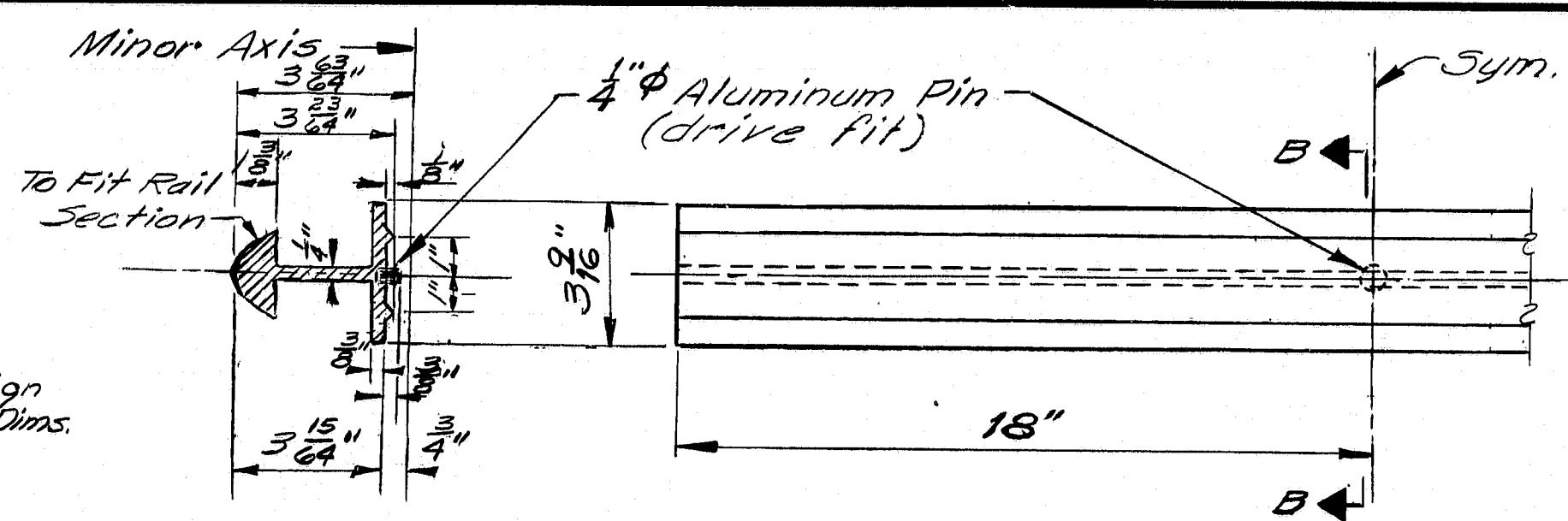
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
MAINE	95-9(92)	21	30

DESIGN SPECIFICATIONS  
AASHTO Standard Specifications  
for Highway Bridges 1973, and  
Interims 1974, '75, '76, '77



RAILING - ELEVATION

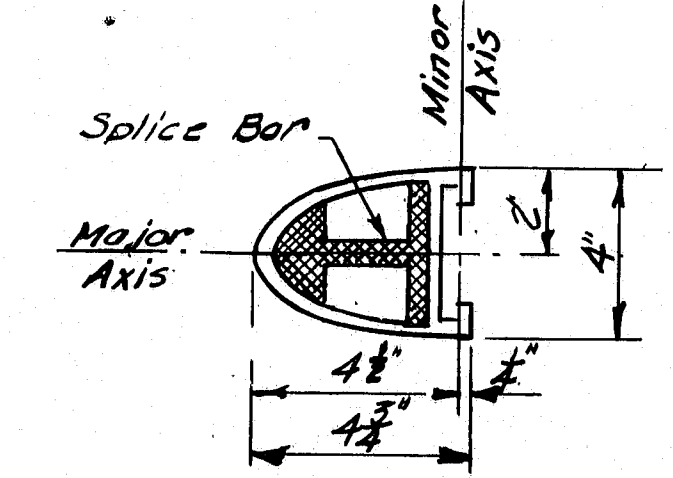
Lengths of rail shall be attached to a minimum of four (4) rail posts wherever possible, and in any case never less than two (2). Rail posts are to be set normal to grade unless otherwise shown on the Bridge Plans.



SECTION B-B

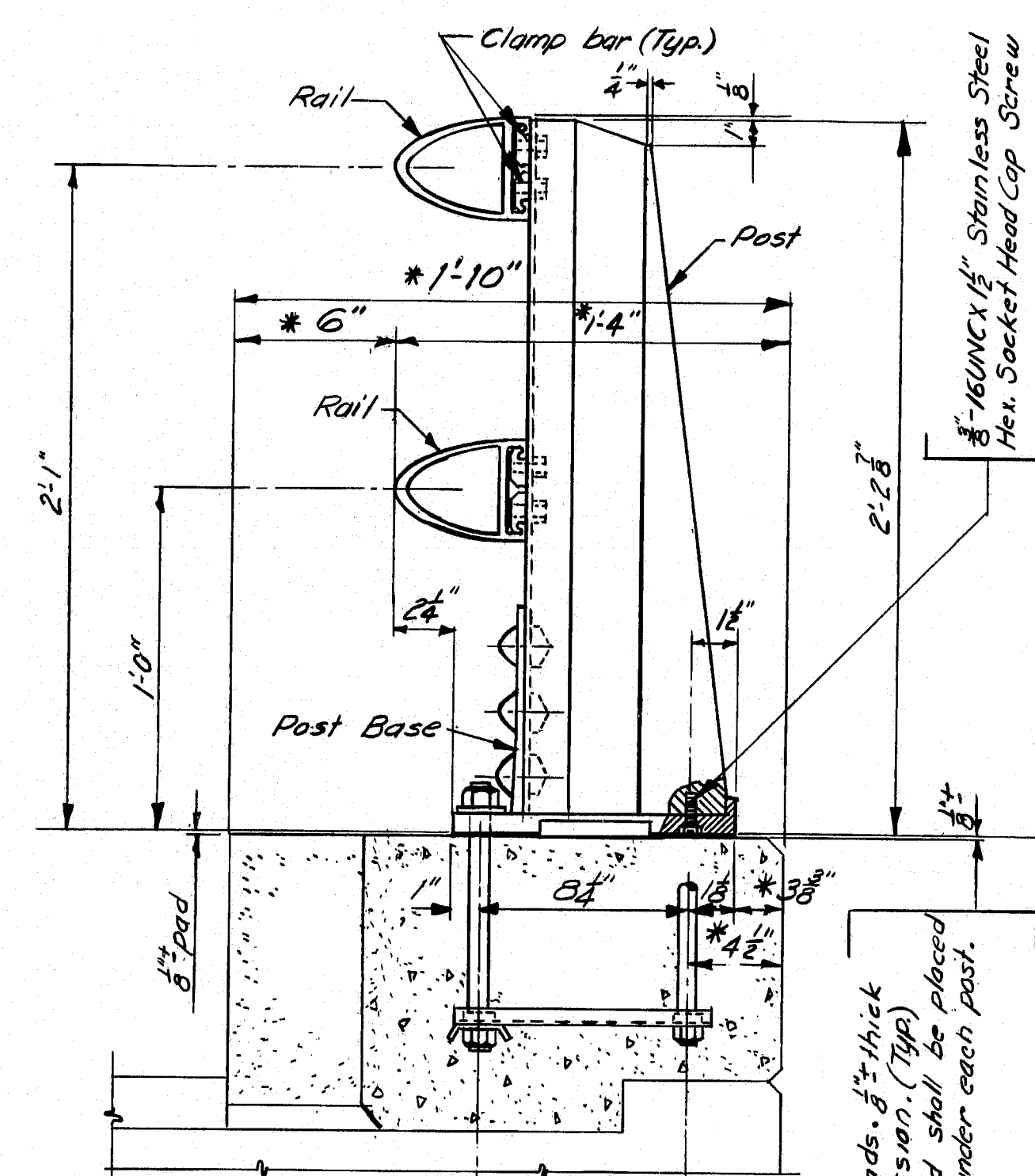
SPLICE BAR

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



RAIL SECTION

See "Rail Detail"



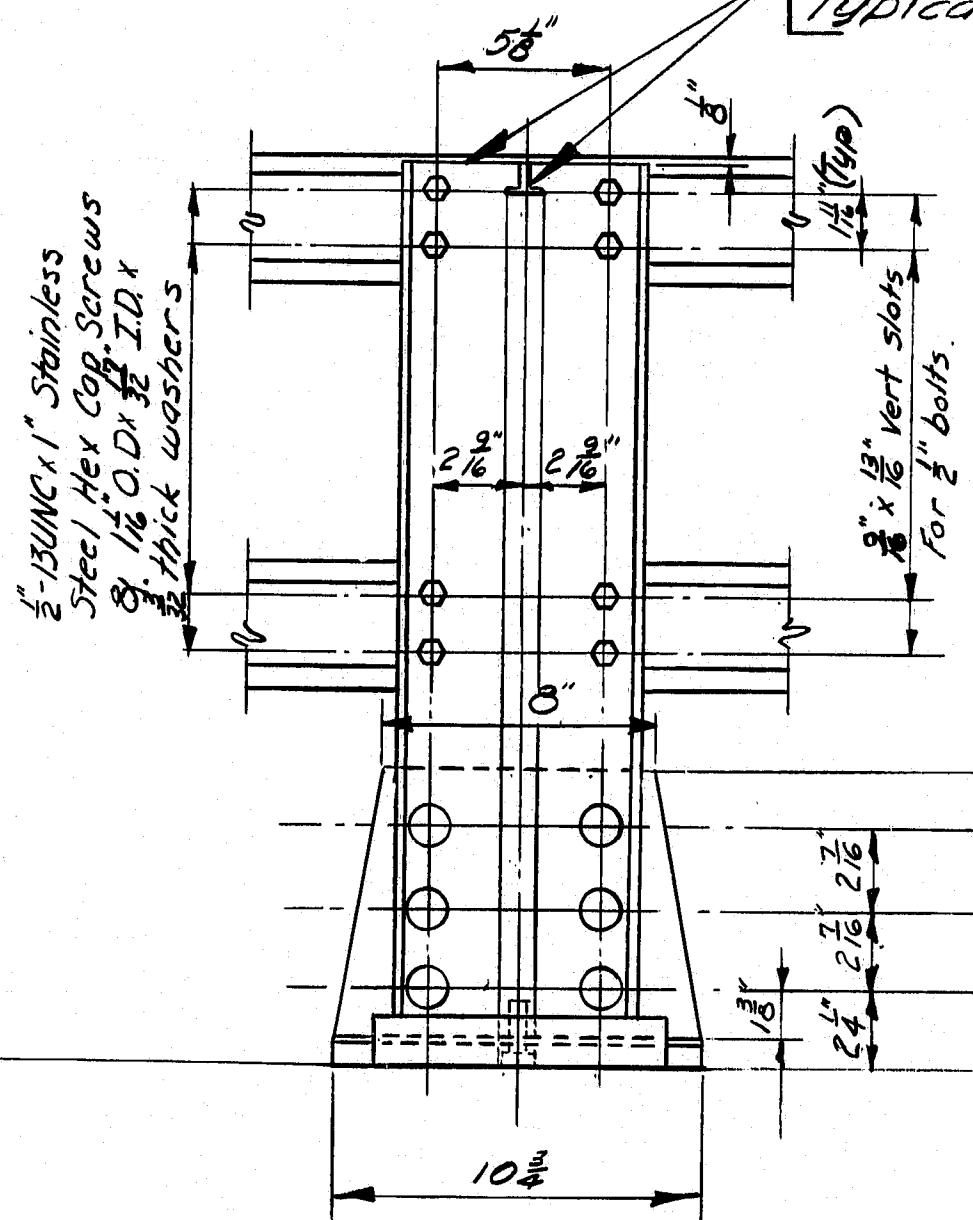
BRIDGE RAILING  
(Assembly)

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

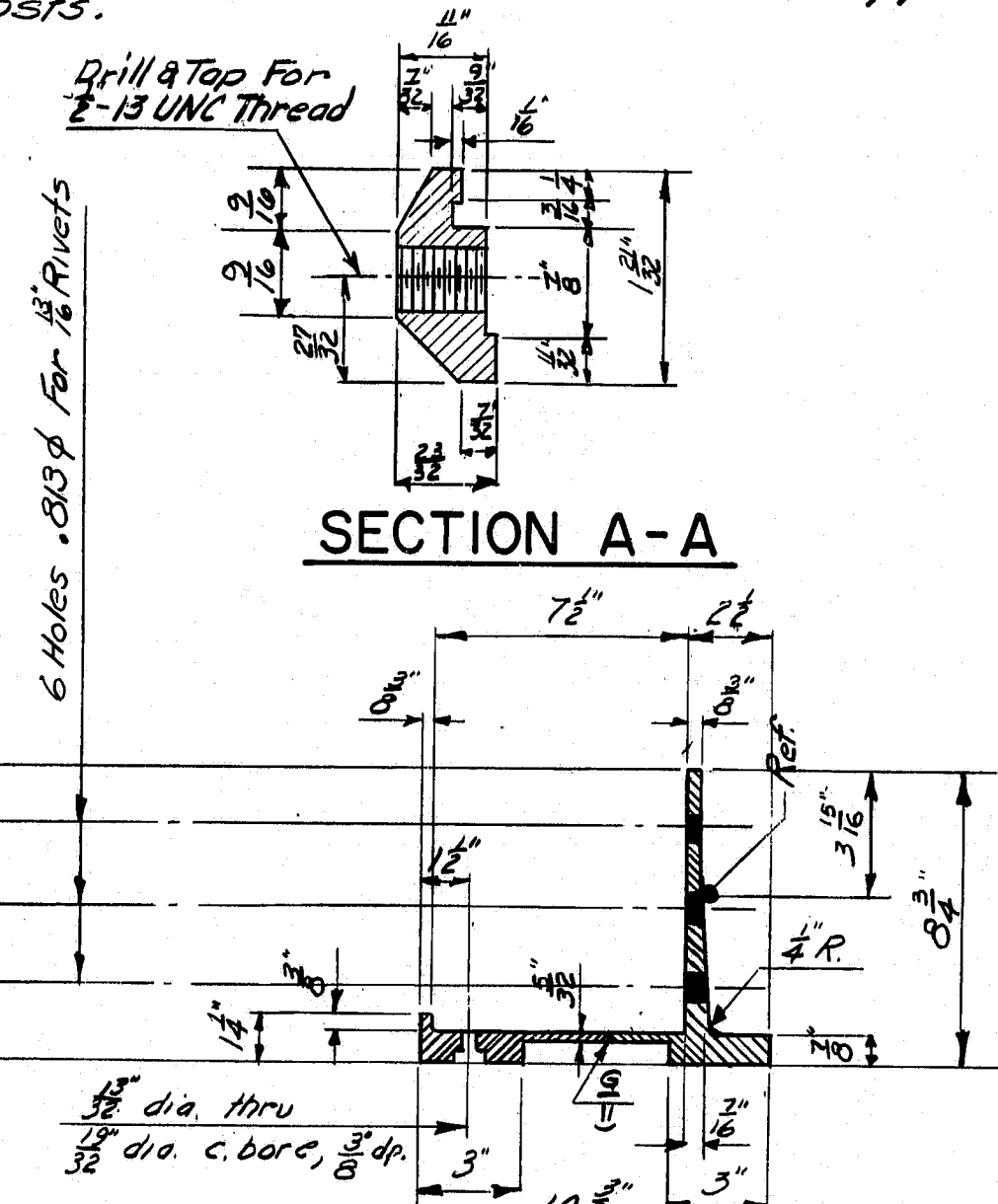
Anchor Bolts

Anchor Bolts

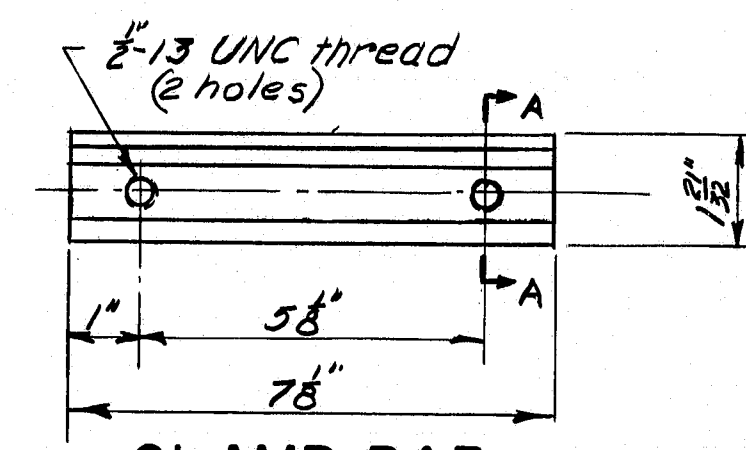
Preformed Pads, 1/2" thick after compression. (Typ.) At least one pad shall be placed at front & back under each post.



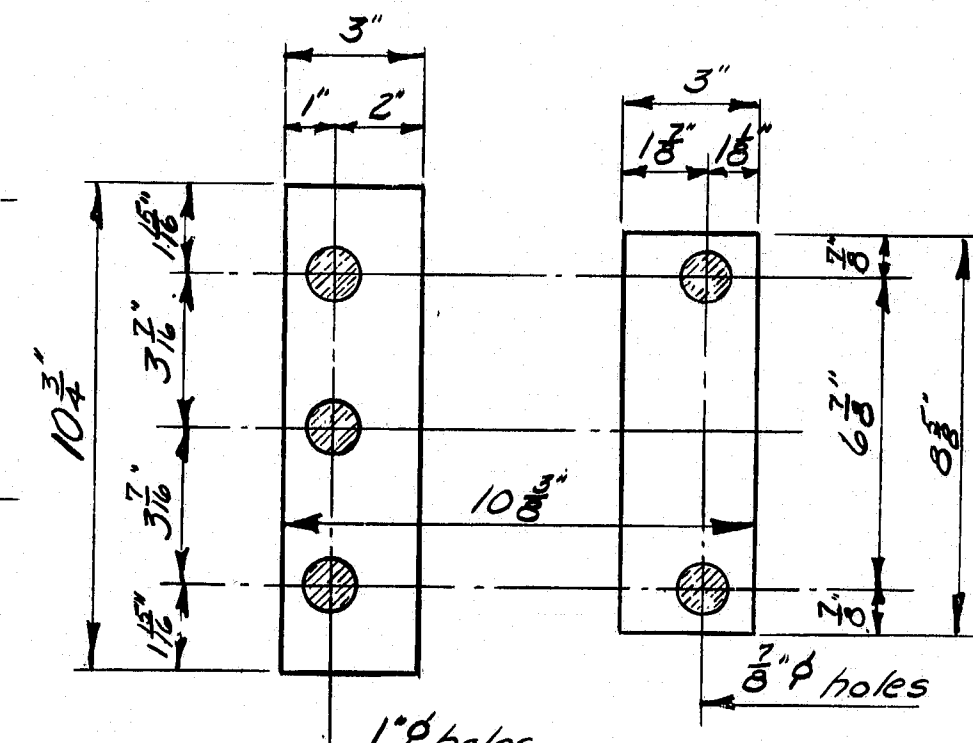
REAR ELEV.



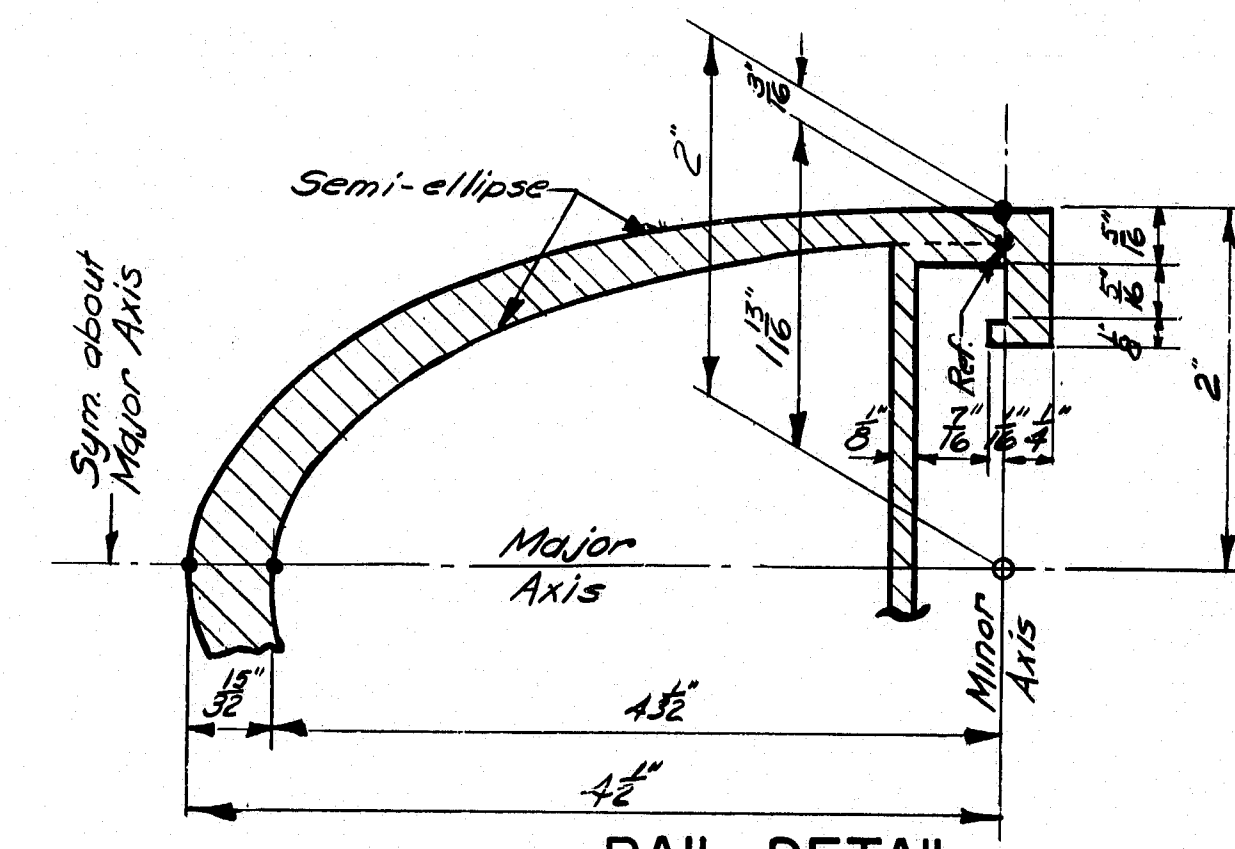
POST BASE SECTION



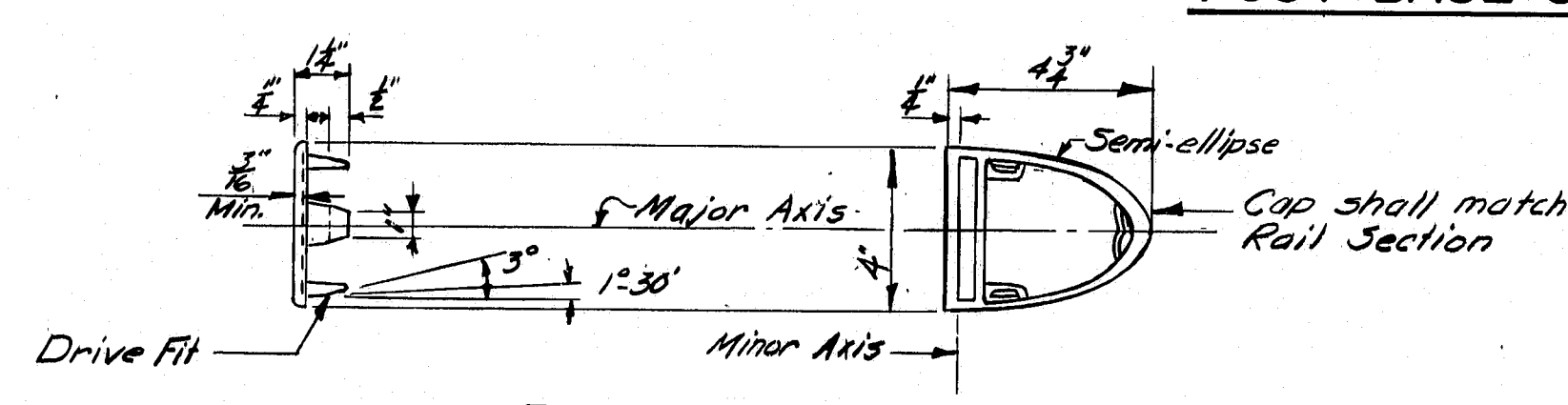
CLAMP BAR



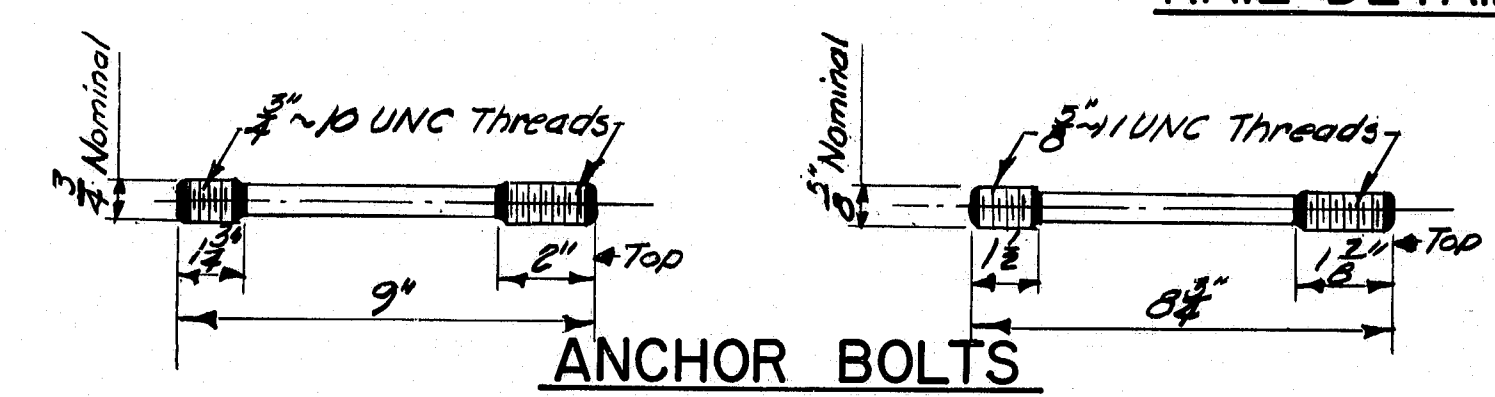
PREFORMED PADS



RAIL DETAIL

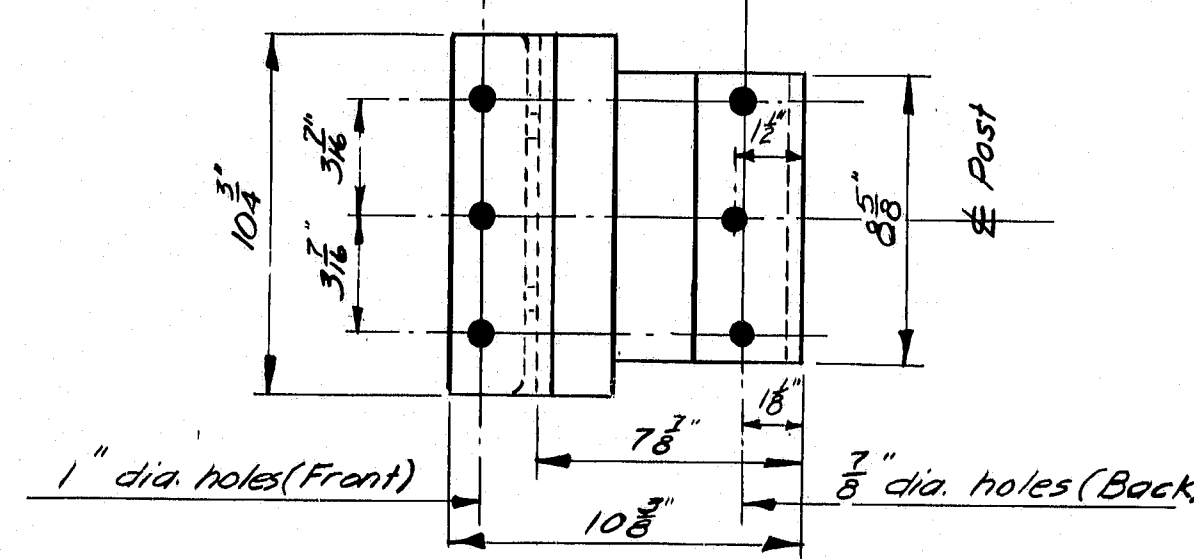


RAIL CAP

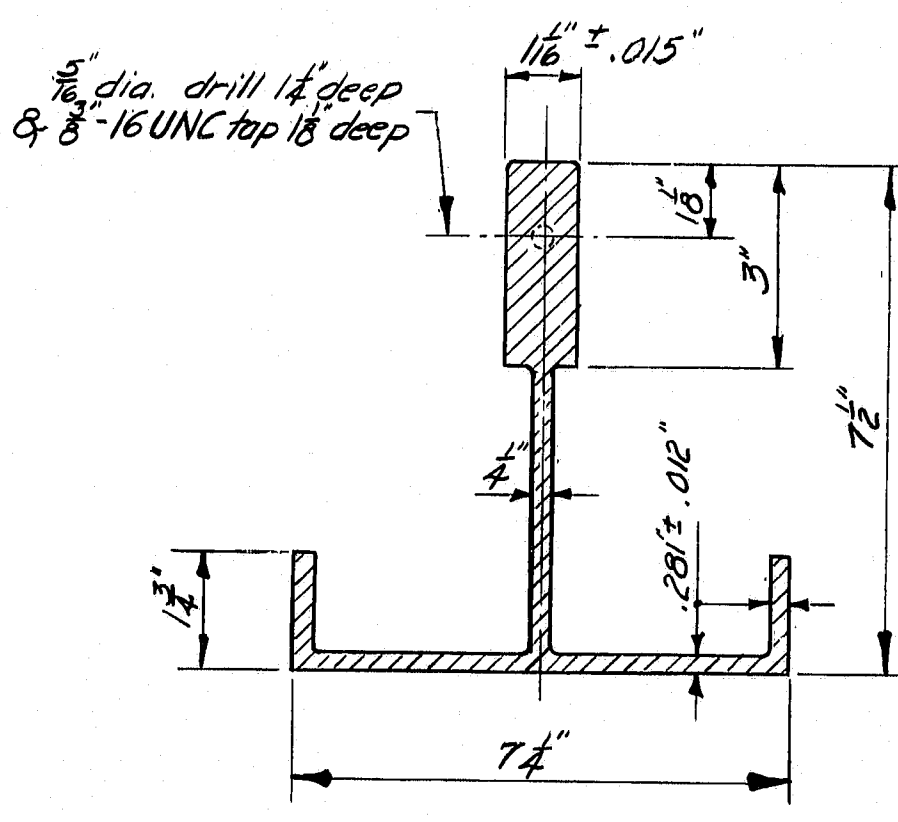


ANCHOR BOLTS

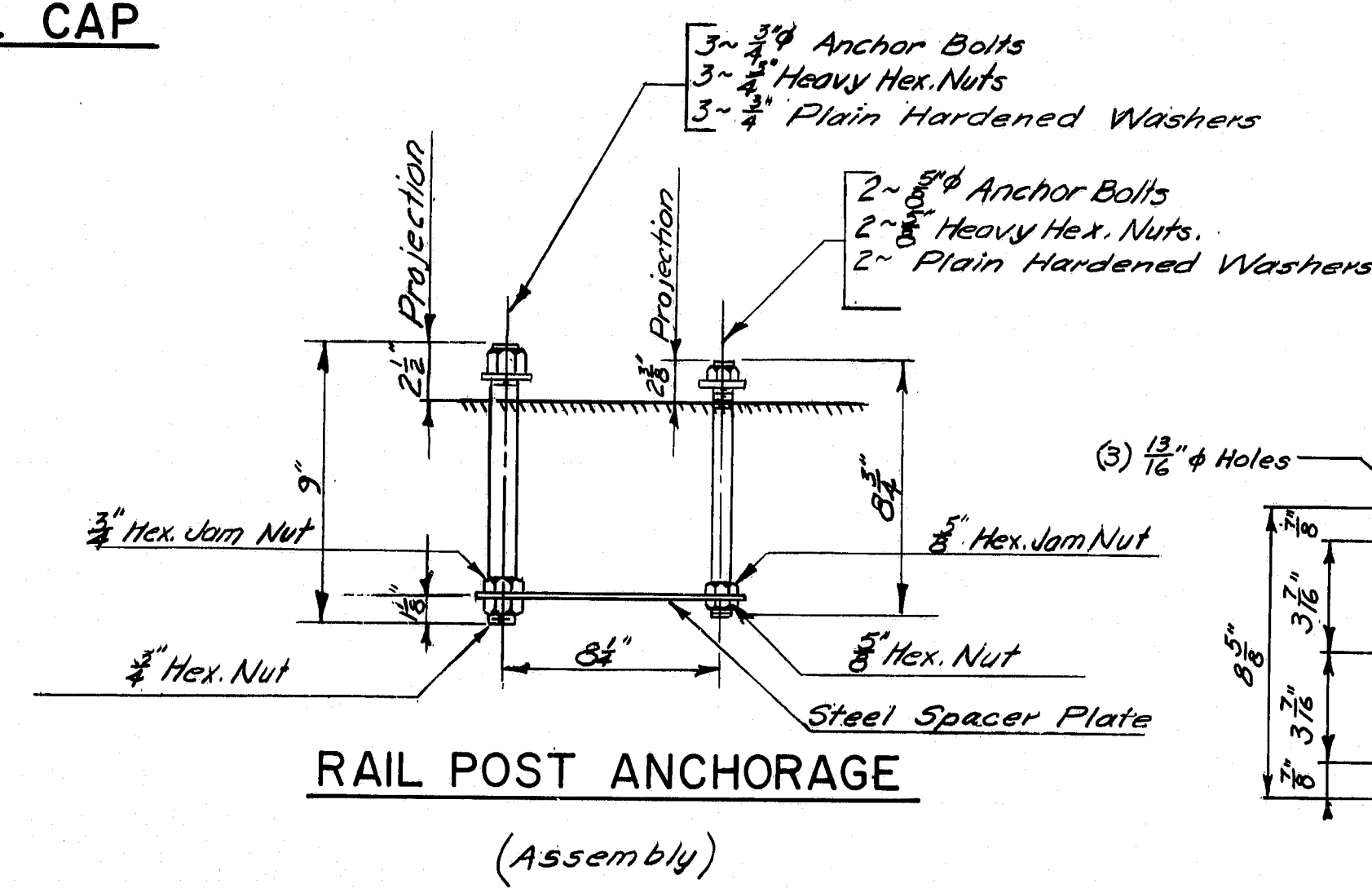
If cut threads are used, body diameter shall be not less than nominal diameter.  
If rolled threads are used, body diameter shall be not less than root diameter of the threads.



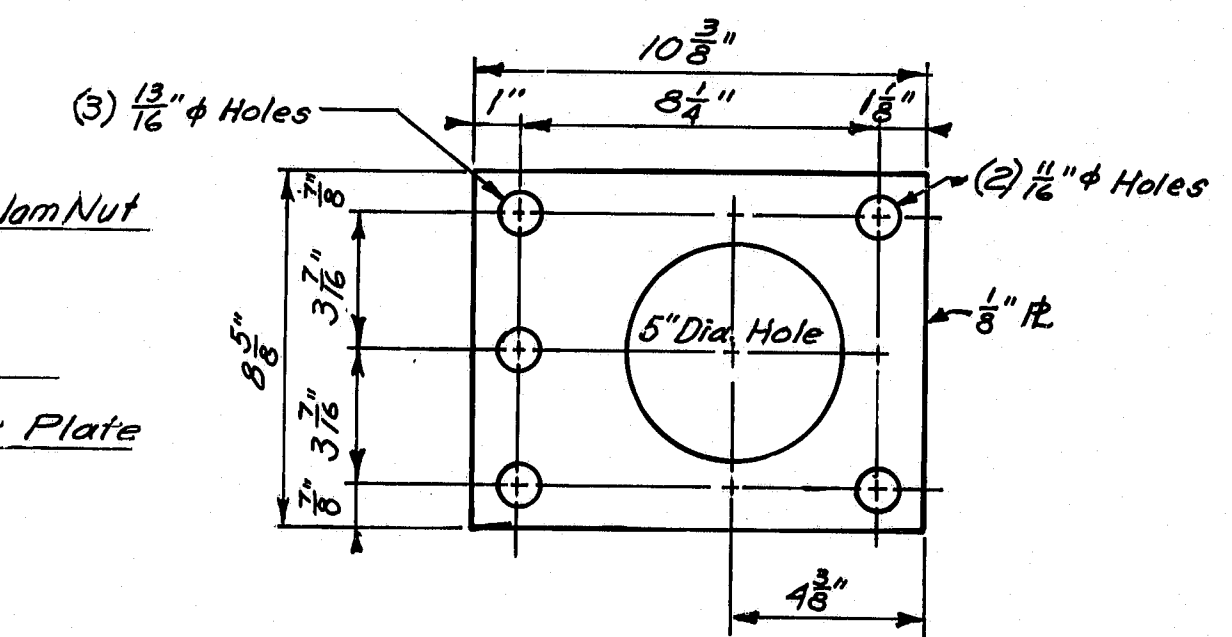
POST BASE  
(Bottom View)



POST SECTION



RAIL POST ANCHORAGE  
(Assembly)



STEEL SPACER PLATE  
(For Anchorage)

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
**STANDARD DETAILS**  
(BD 114-77)  
**ALUMINUM BRIDGE RAILING**  
2-BAR (SEMI-ELLIPSE)  
TYPE "A"  
SHEET OF AUGUSTA, MAINE DEC. 1977

176-101

DESIGN - DETAILED	CHECKED	REVISIONS	FIELD CHANGES
BY DATE	BY DATE	BY DATE	BY DATE
K. Leach 1/8/77	M. Peterson 1/8/77		
PLANS			



F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	95-9(92)	22	30

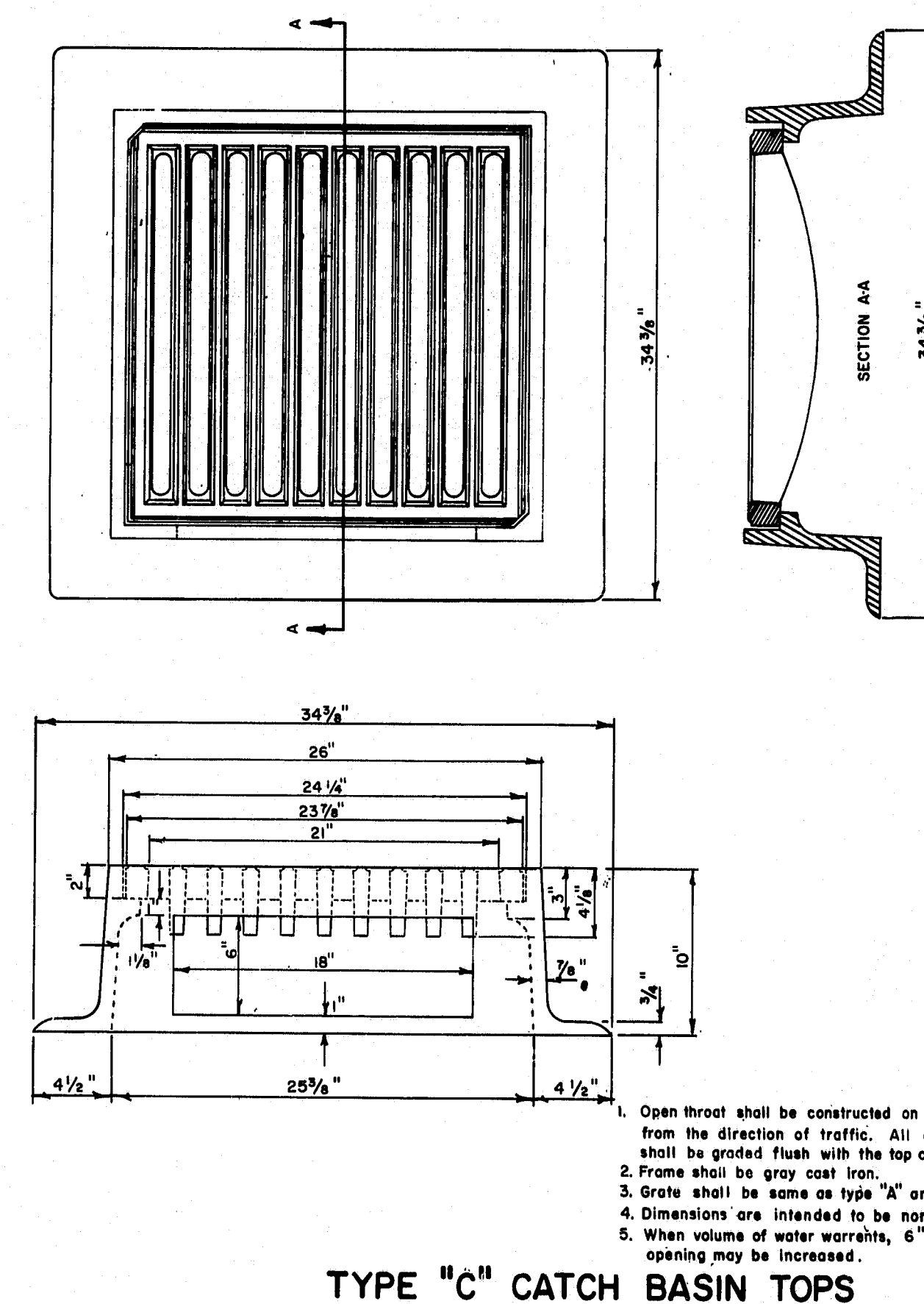
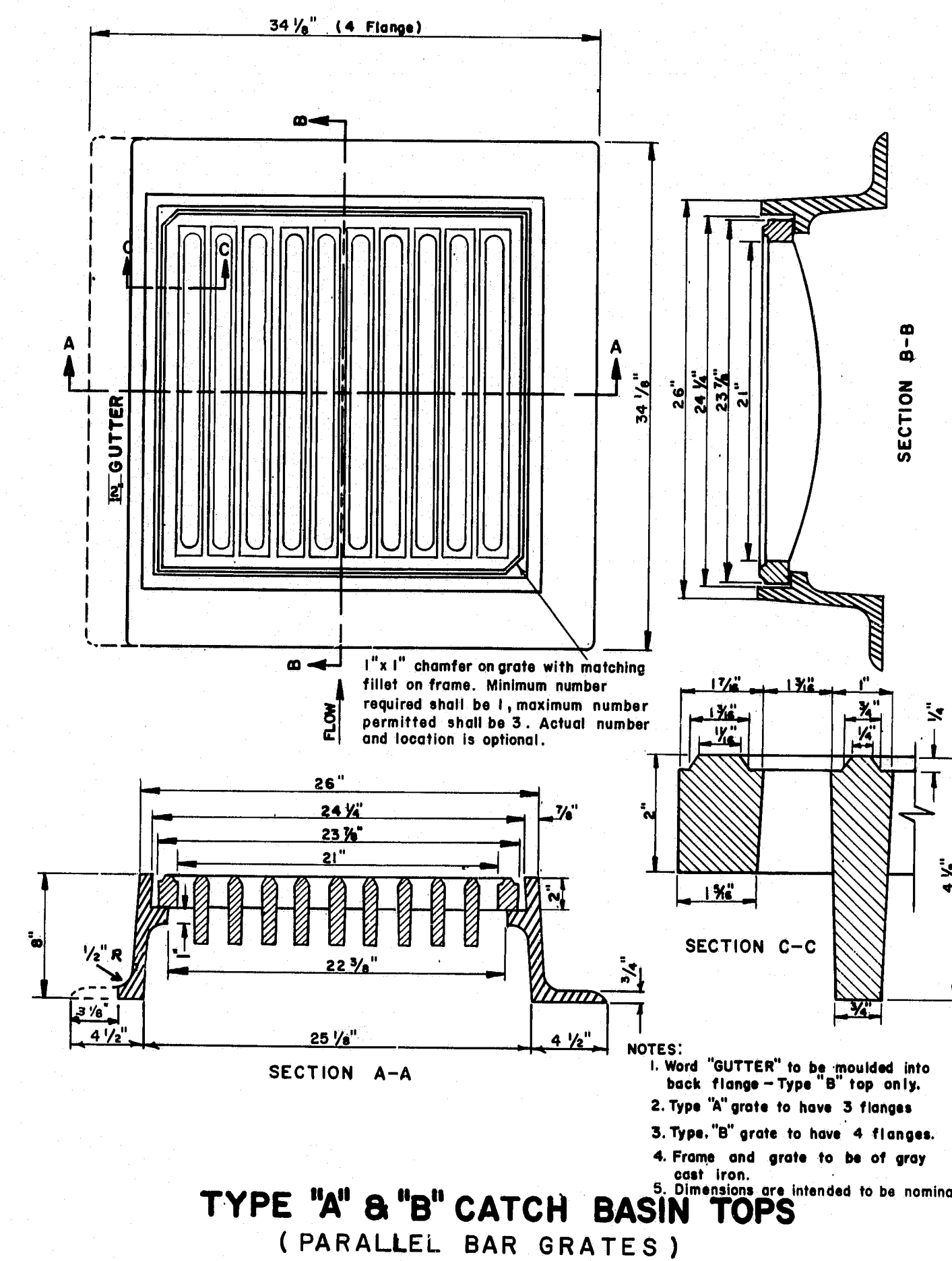
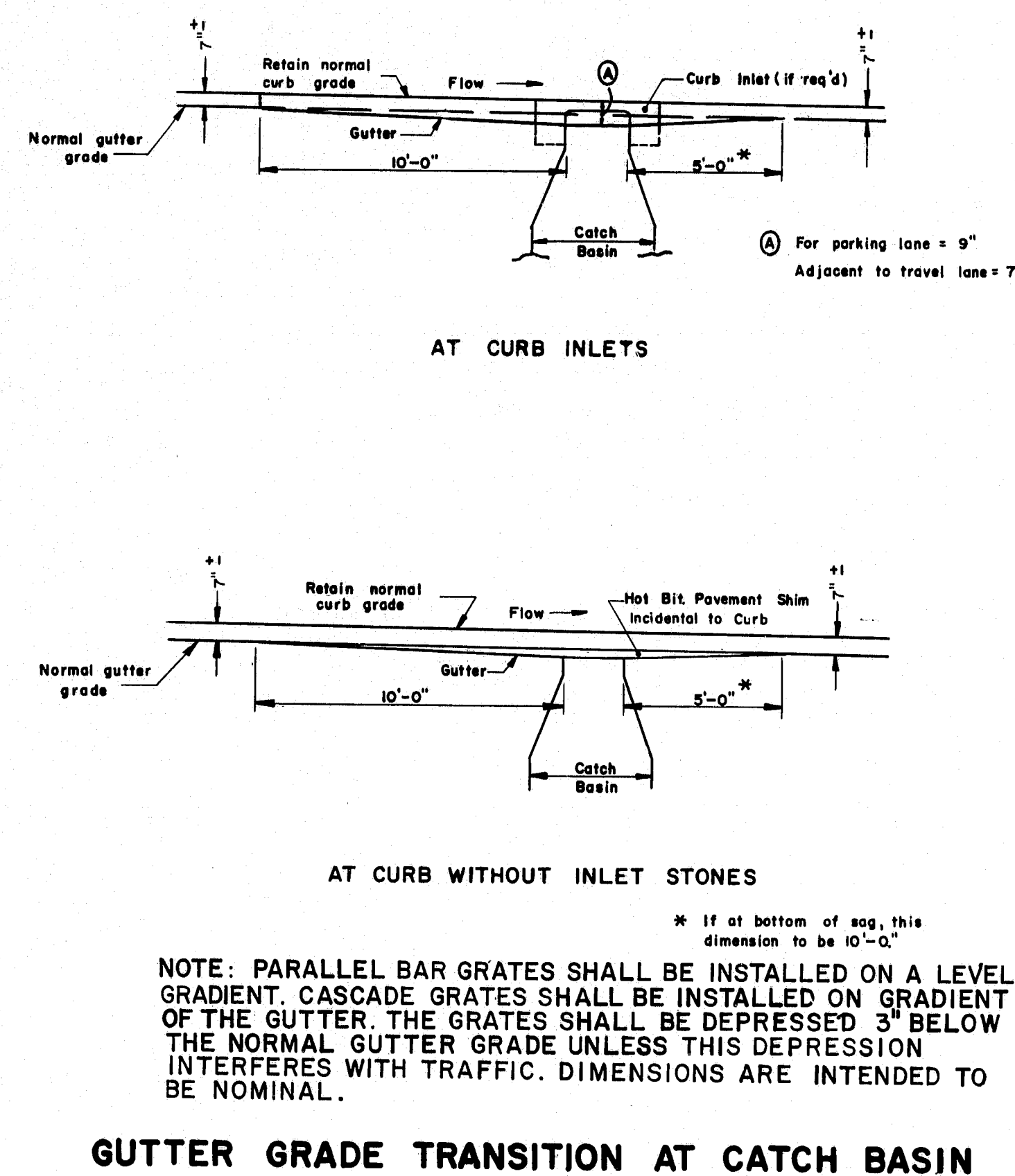
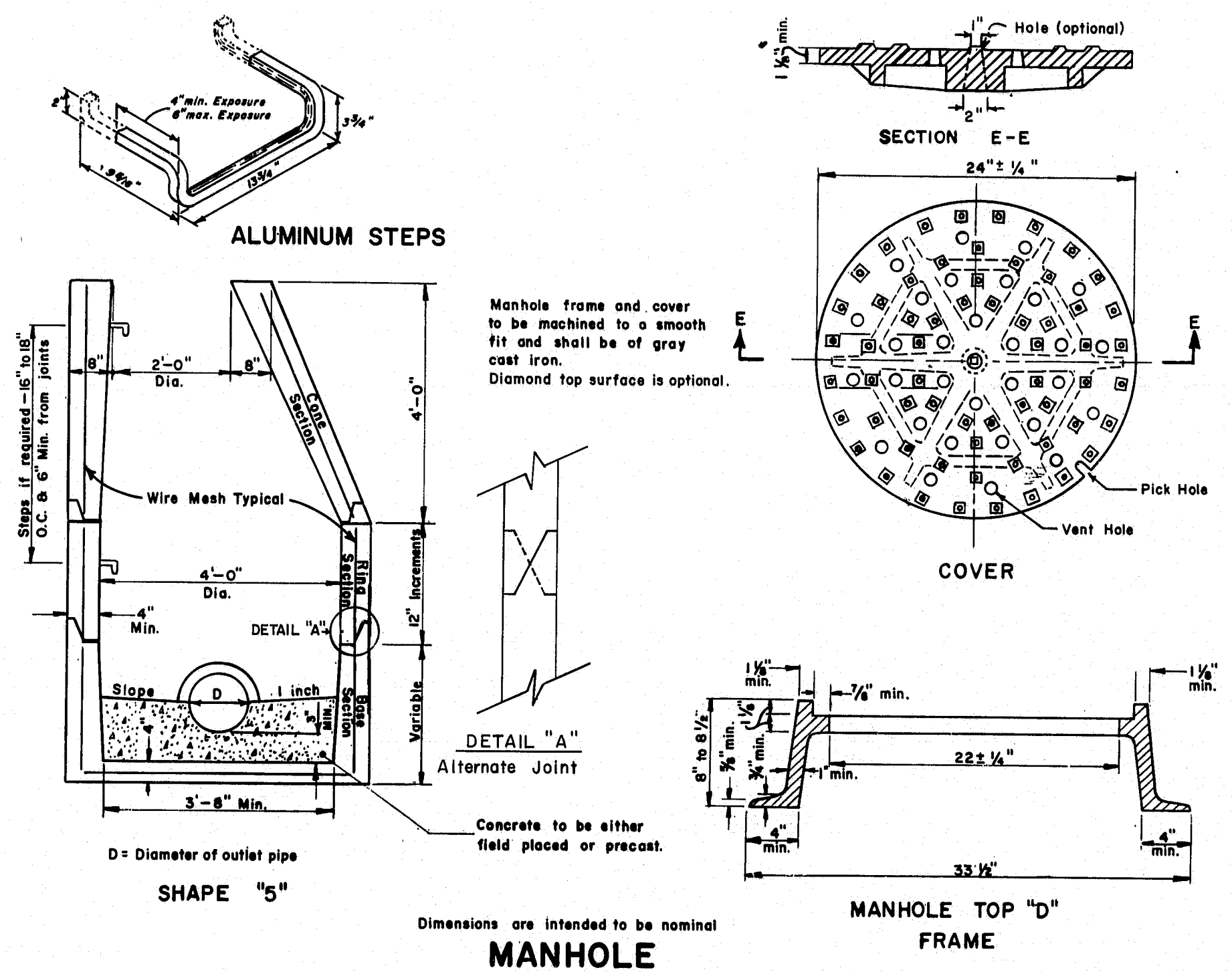
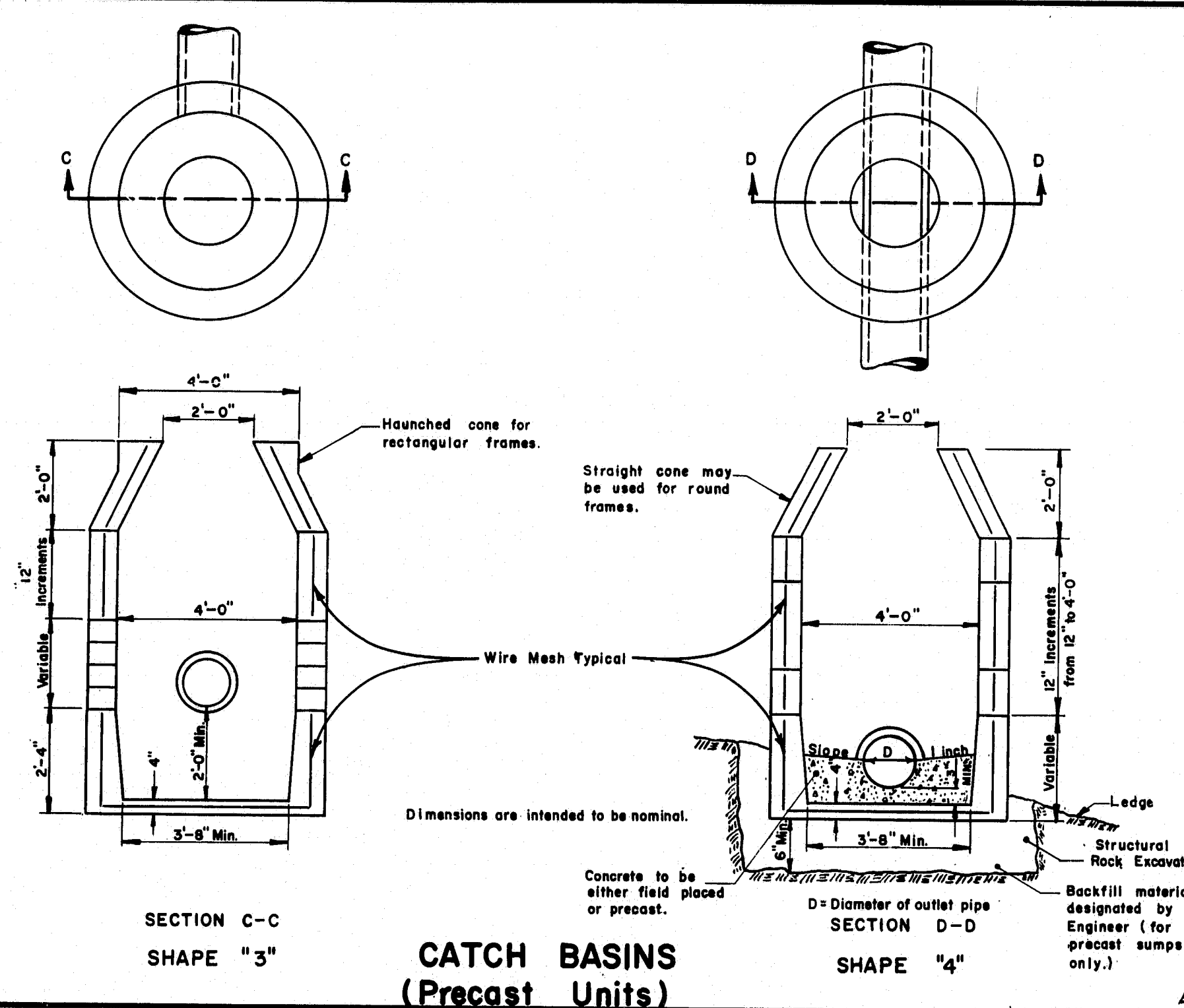
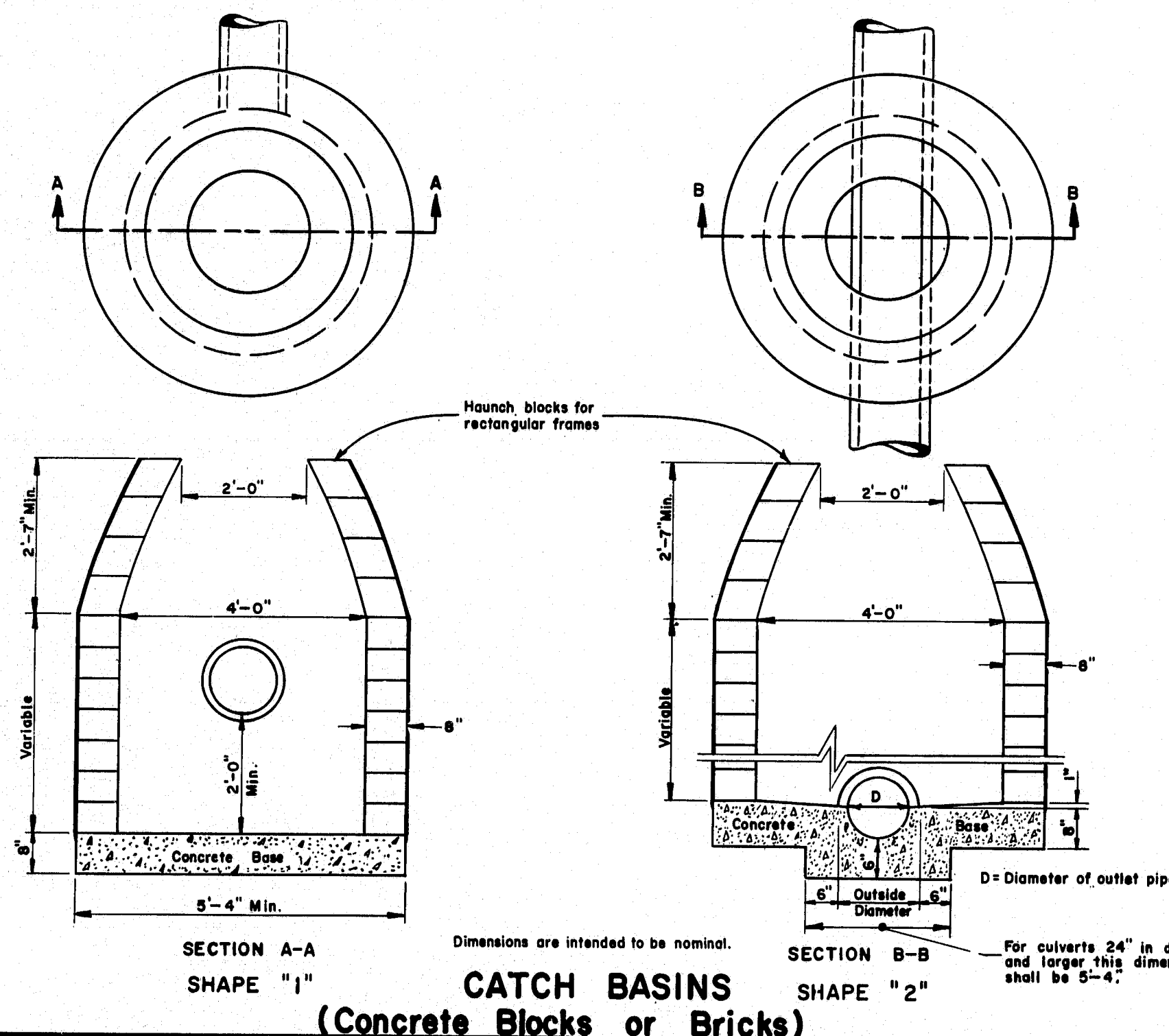
**GENERAL NOTES — ALL CATCH BASINS AND MANHOLES**

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

**GENERAL NOTES — PRECAST CATCH BASINS AND MANHOLES**

- Drain holes in precast sumps to be set over 3" in diameter, and shall be plugged with mortar when constructed.
- All precast sections of less than 8" wall thickness shall have tongue and groove joints.
- Cone and Ring sections wall thickness min. 4", max. 8"

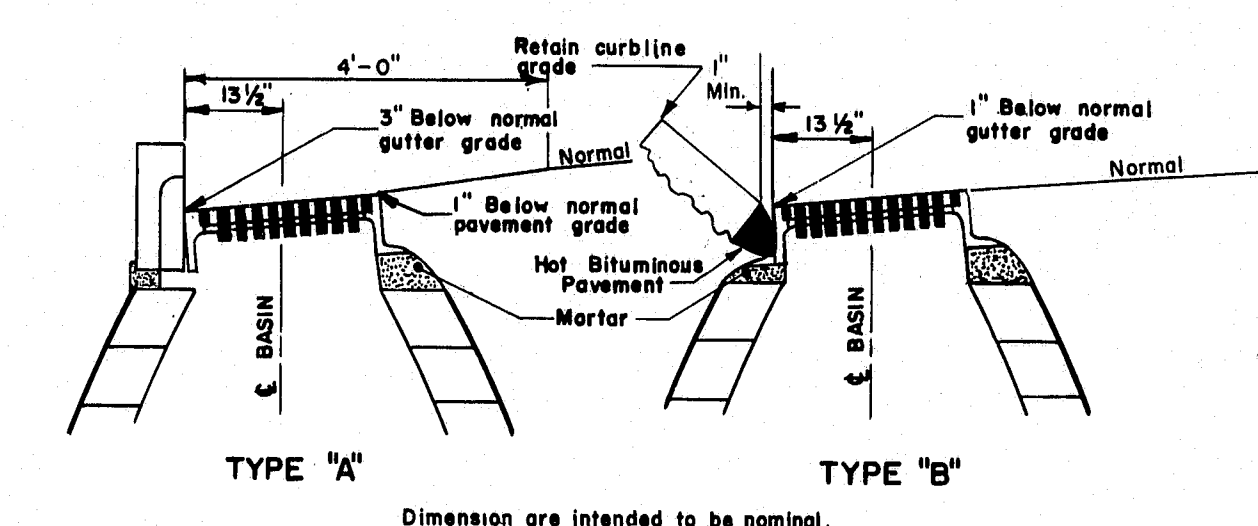
- Minimum wall thickness of sump may be 4" or specified in A.S.T.M. C-478, however, if concrete blocks are used around the inlet and outlet pipes, the wall thickness of sump shall be 8".
- Wall around inlet and outlet pipes may be built of 8" concrete blocks or a precast ring with an opening 2" larger than the outside diameter of the pipe may be used.
- Lift Holes shall be provided.



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

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

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



REVISIONS	
CATCH BASINS	10-21-69
PLATE "E"	4-21-71
PLATE "D-E"	8-26-75
PLATE "C"	10-14-75
PLATE "D-G"	7-13-78

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

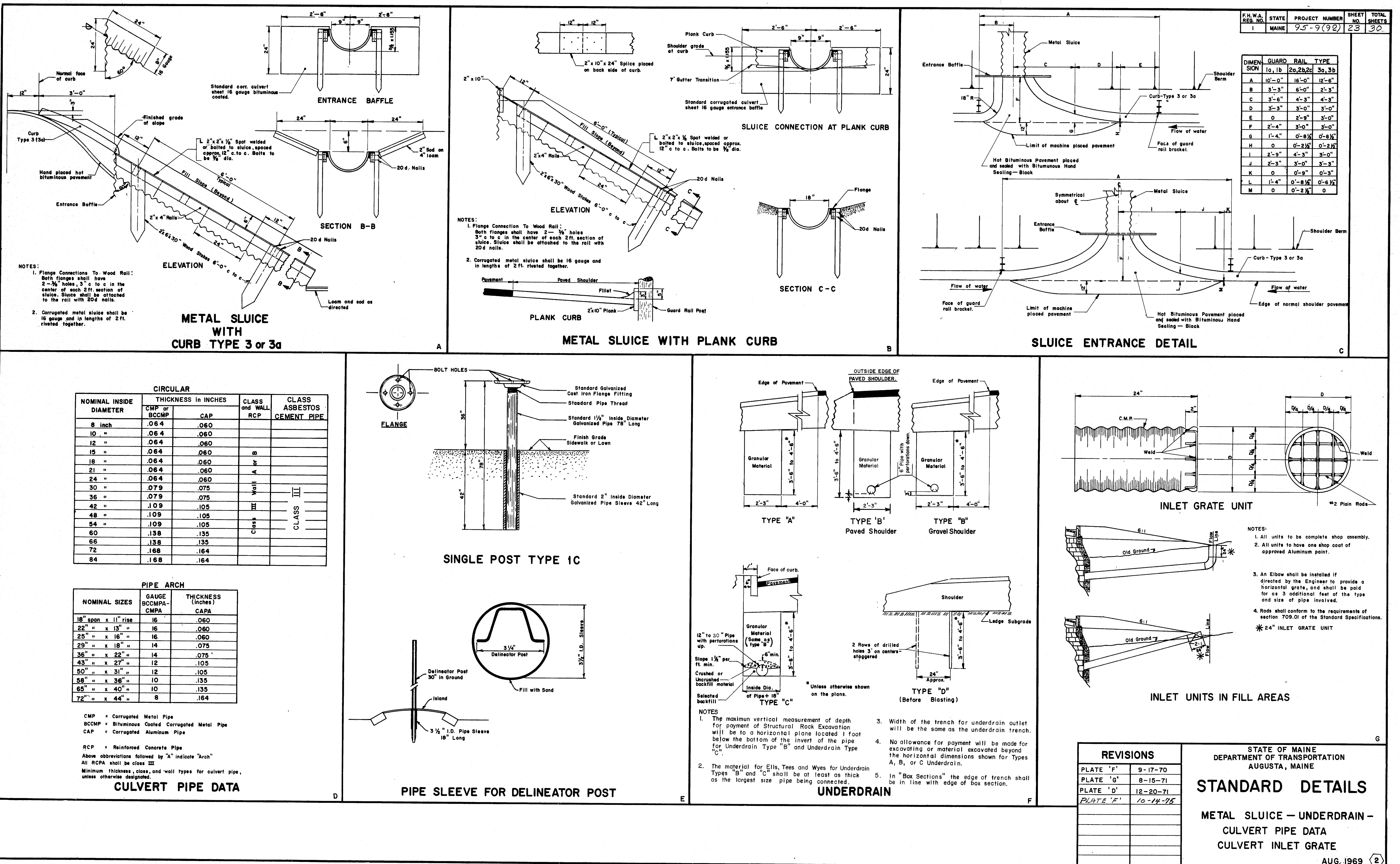
## STANDARD DETAILS

CATCH BASINS  
AND  
MANHOLES

AUG. 1969

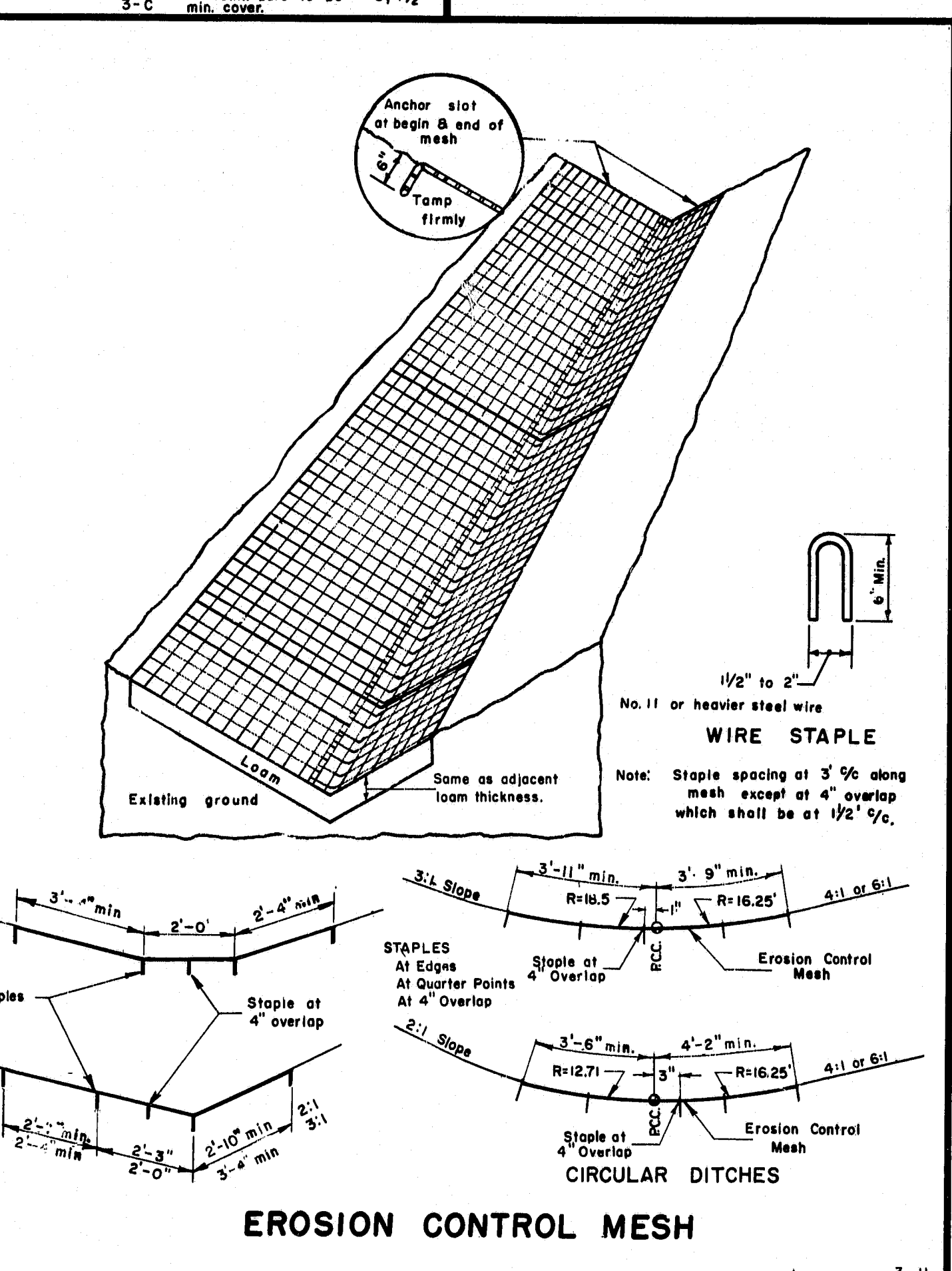
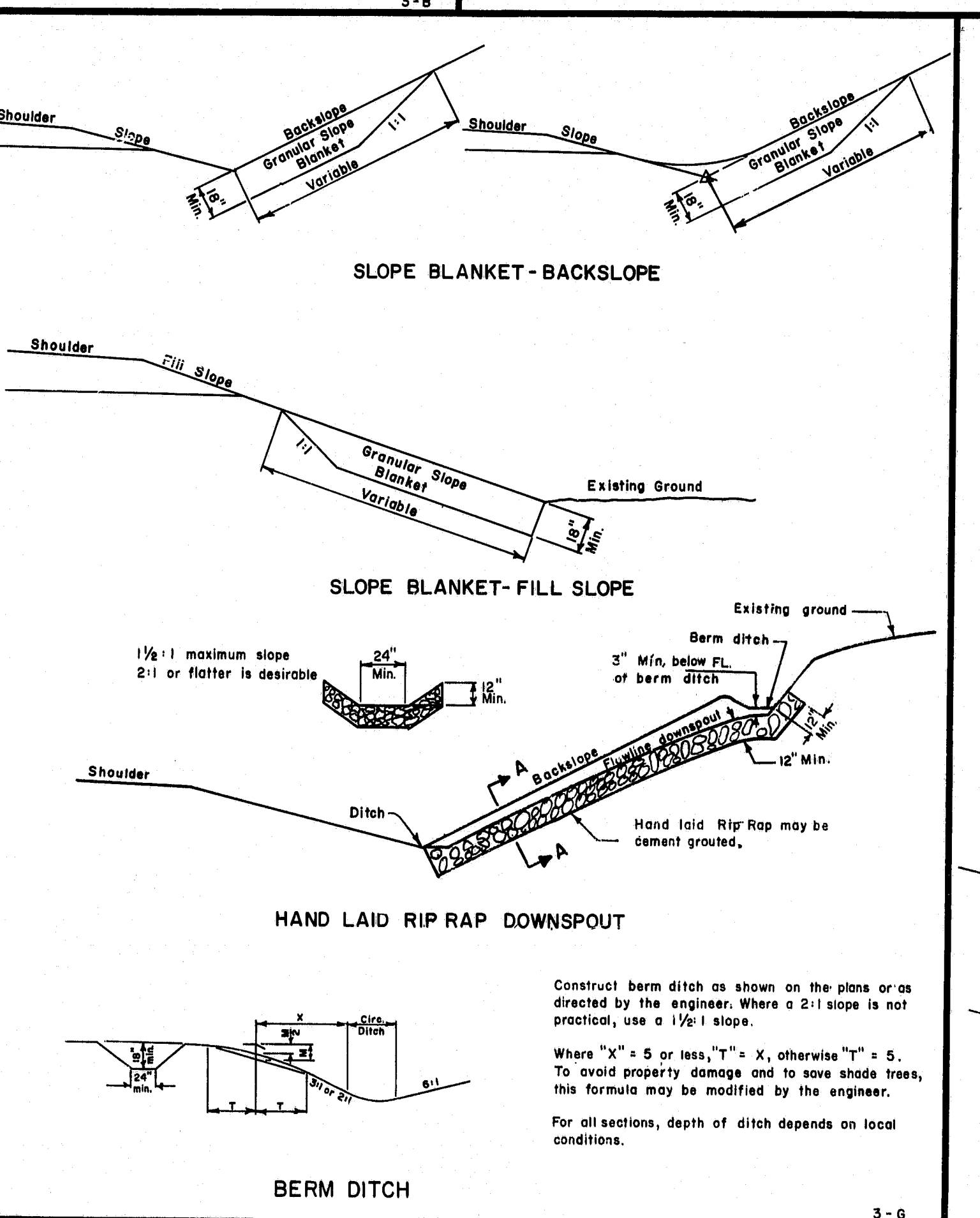
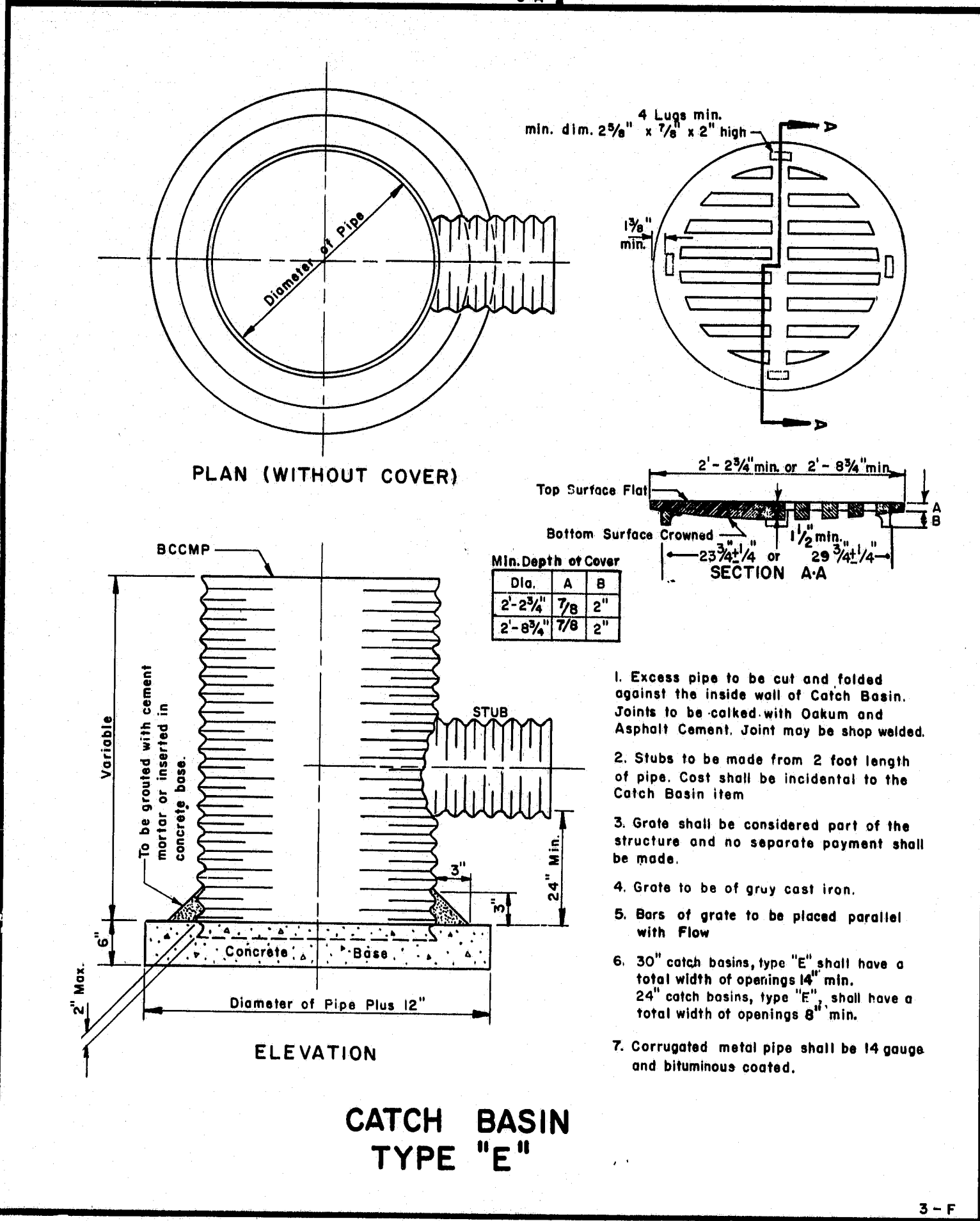
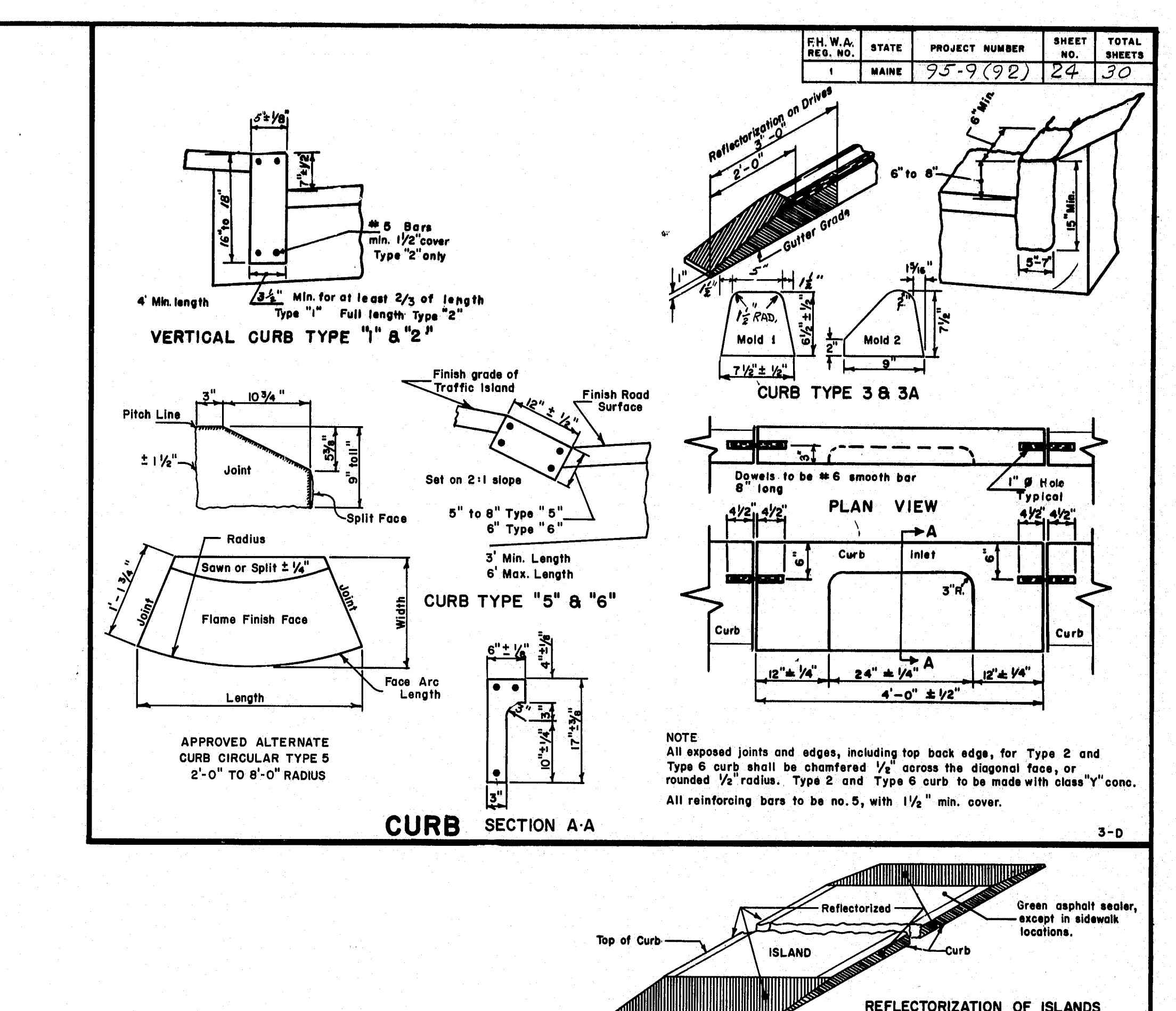
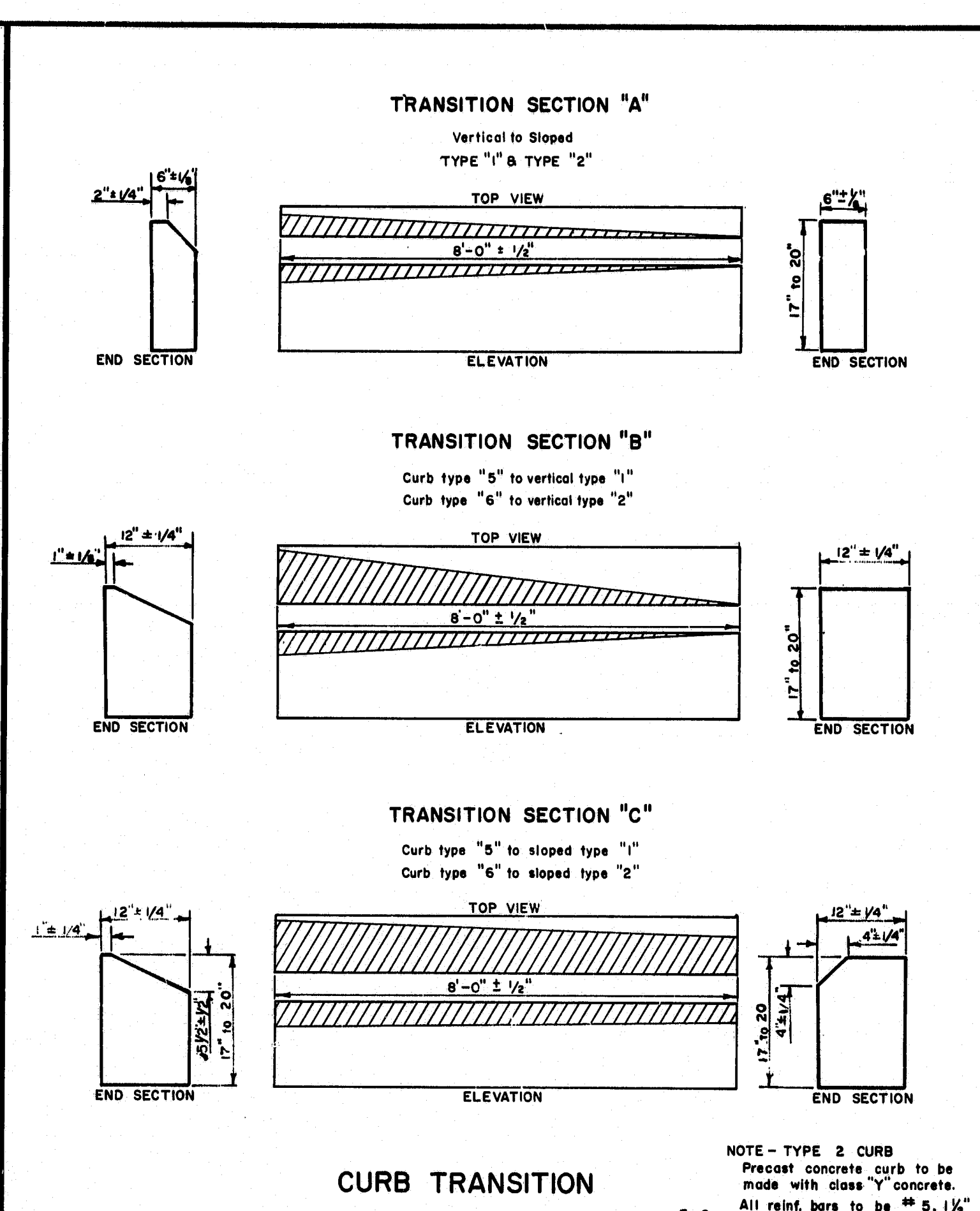
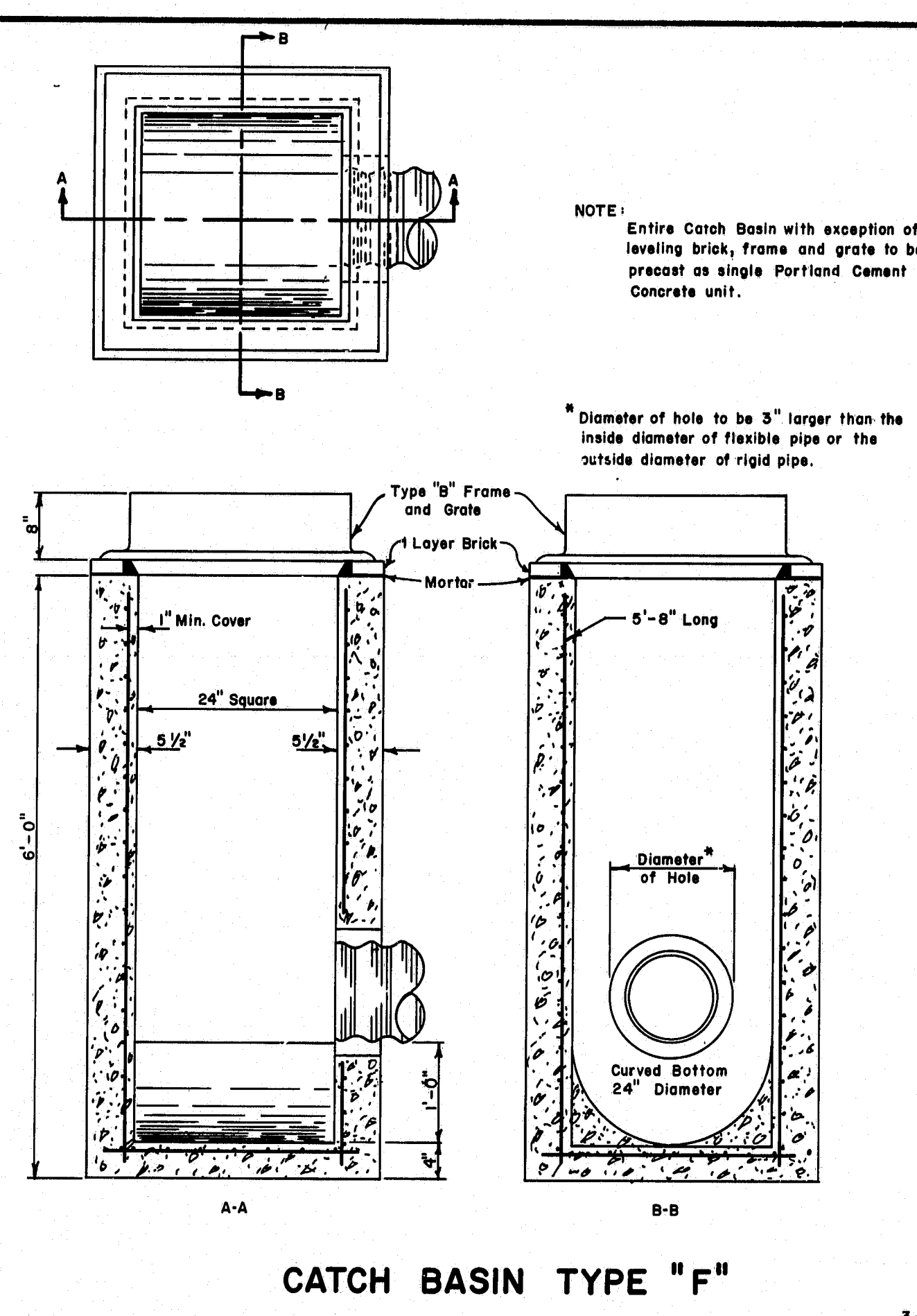
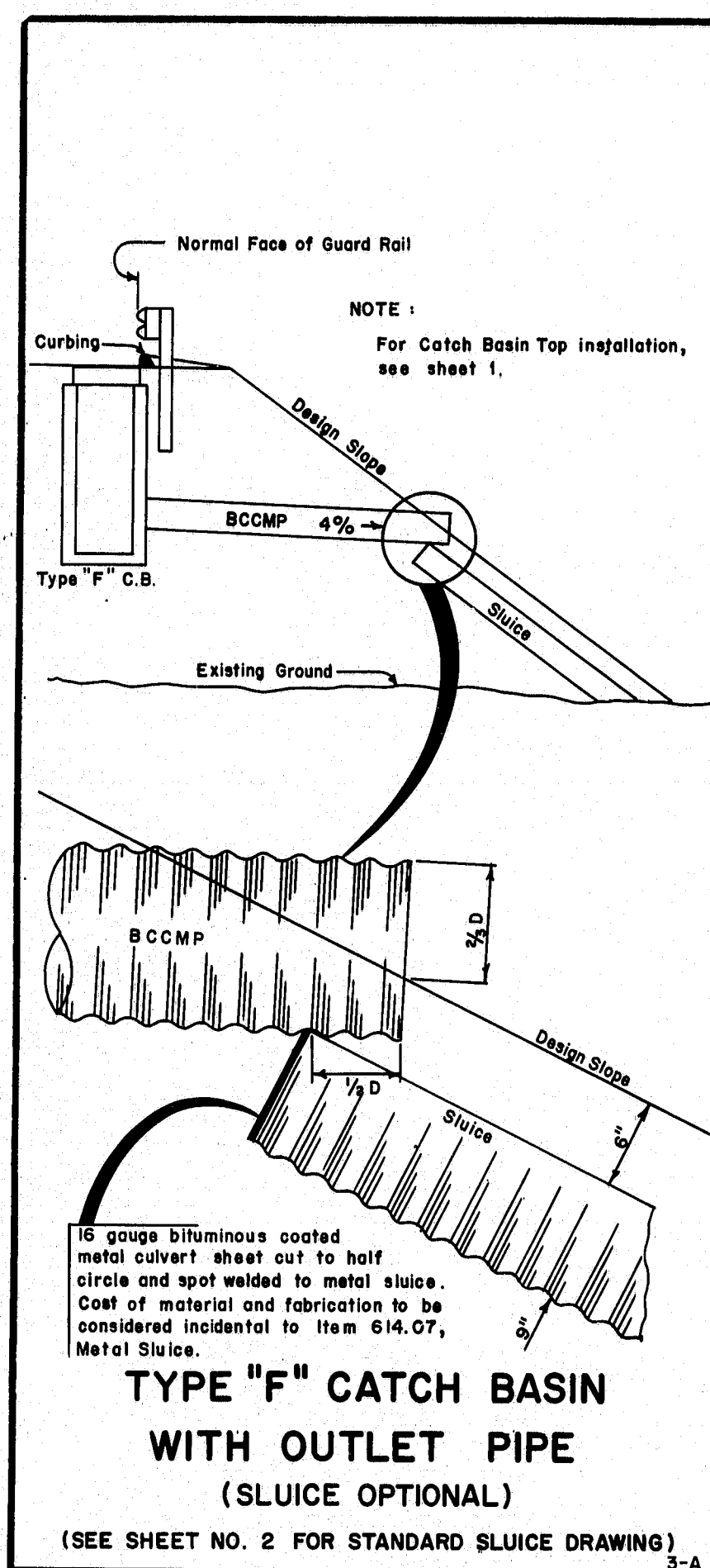
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CURB TYPES (1 & 2), (5 & 6) ON CURVES			
RADIUS OF CURVE	LENGTH	PAID FOR AS	STONE IS CUT OR CAST
0' to 60' Incl.	4' Min.	Circular	To Fit Curve
Over 60' to 160'	4' to 6'	Straight	Straight Pieces
0' to 8' Incl.	2' Min.	Circular	To Fit Curve
Over 8' to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

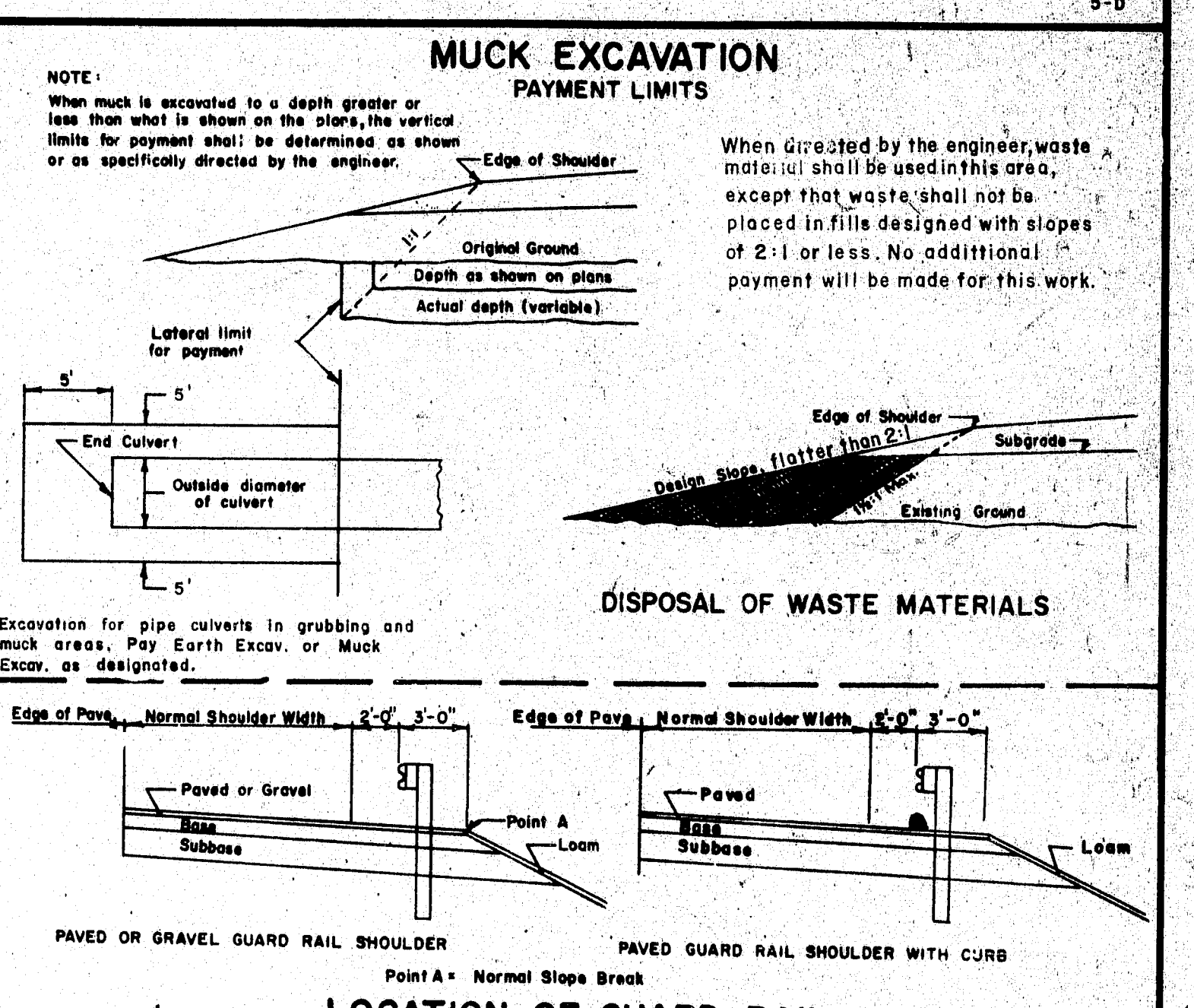
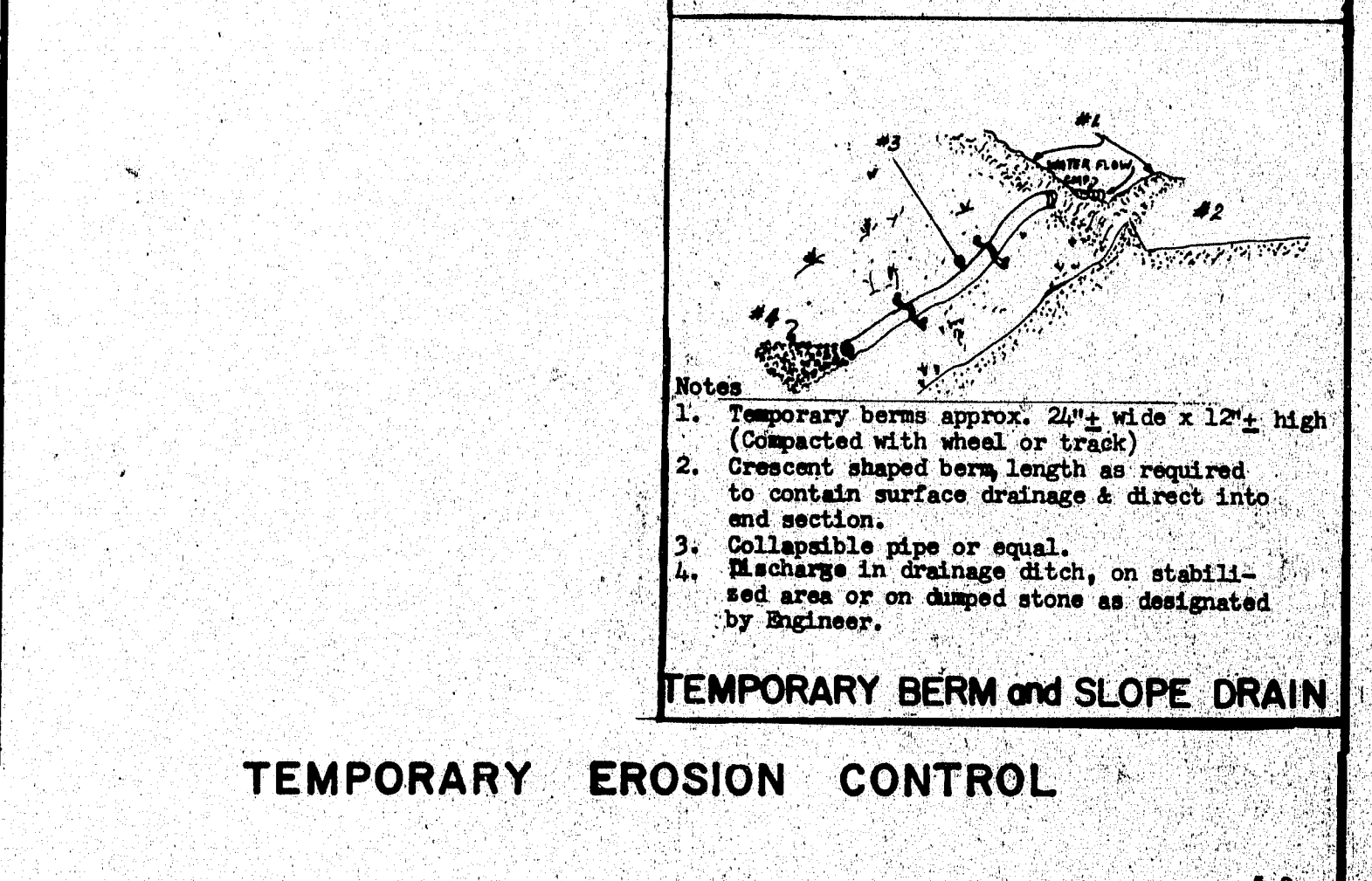
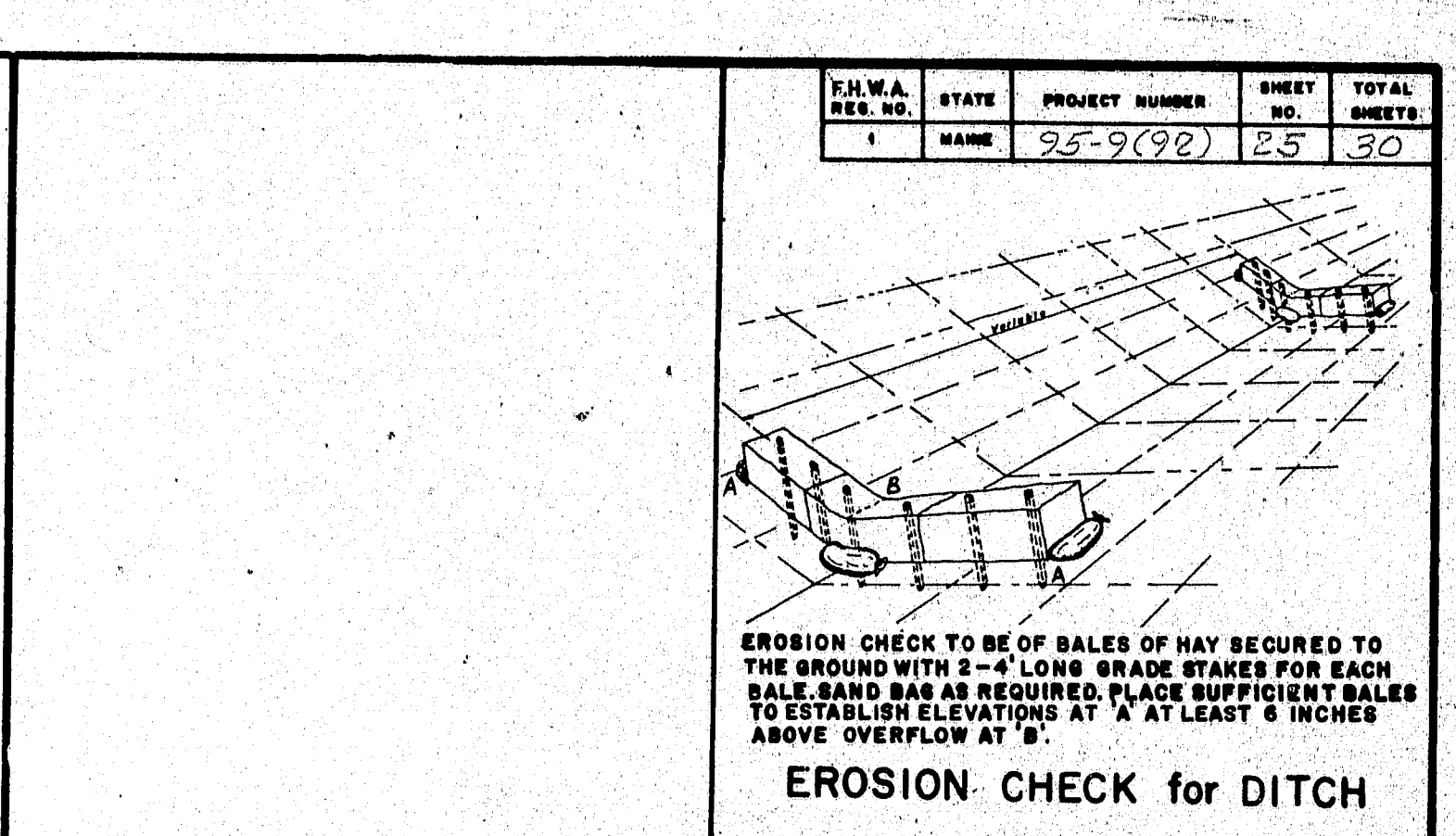
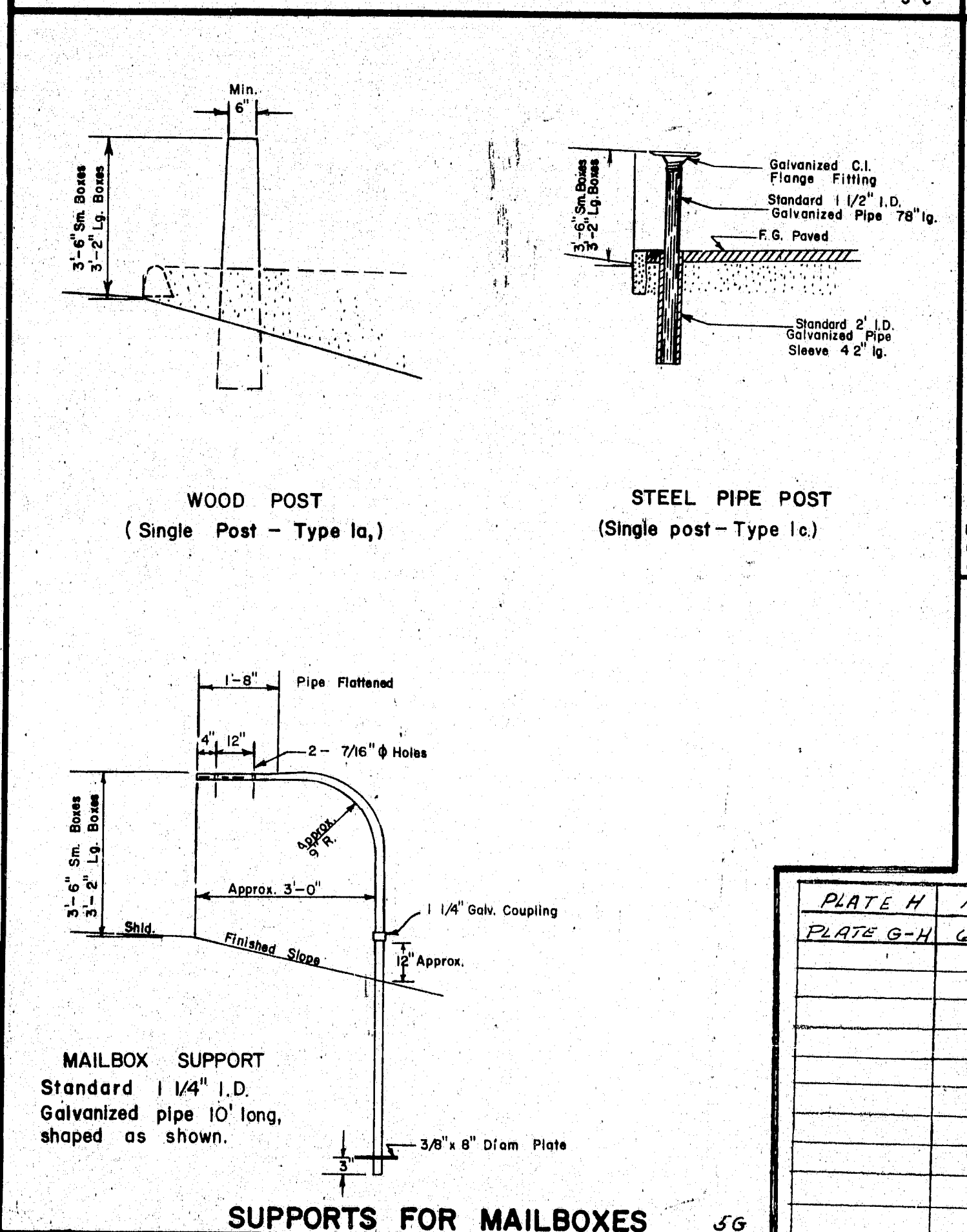
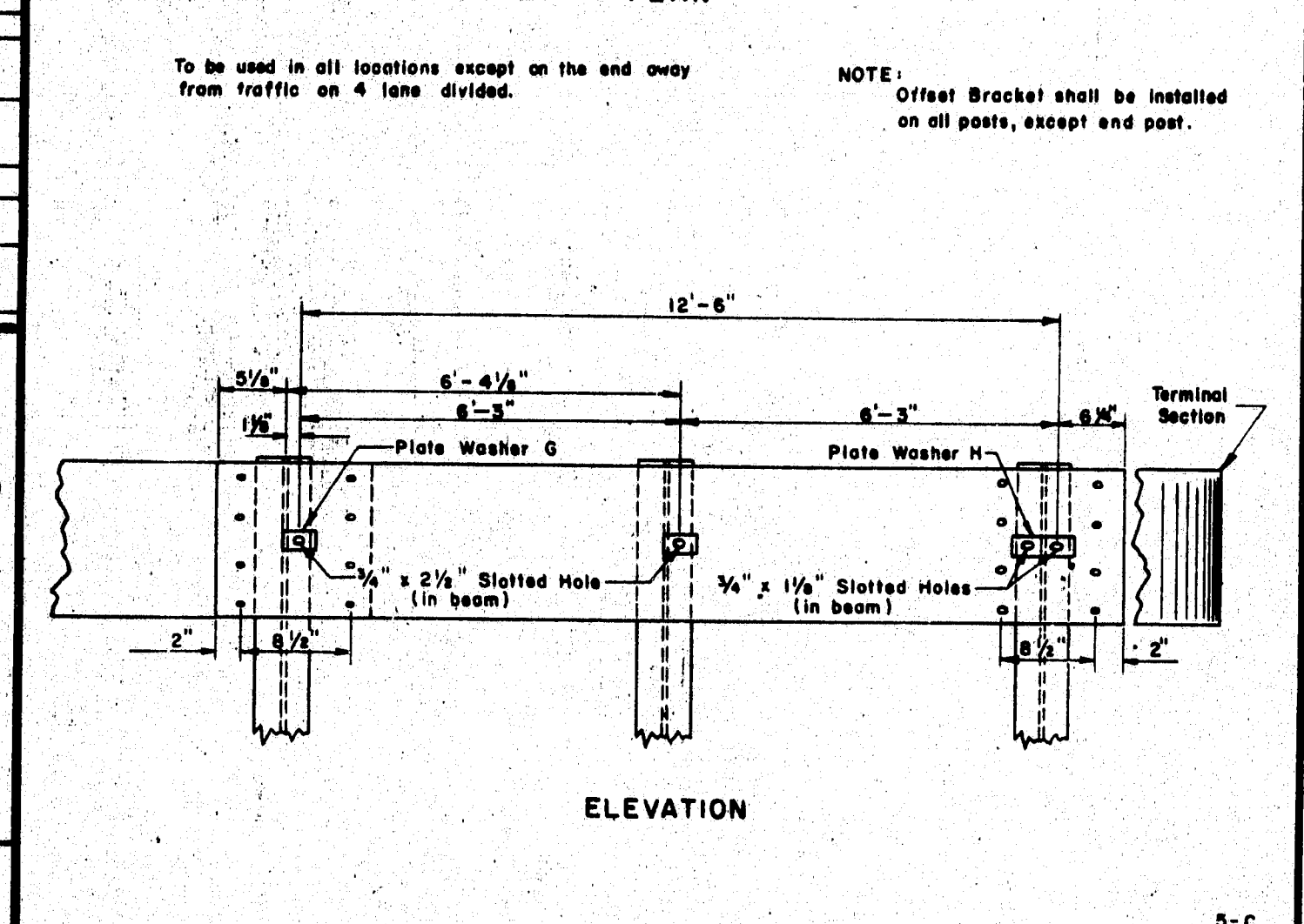
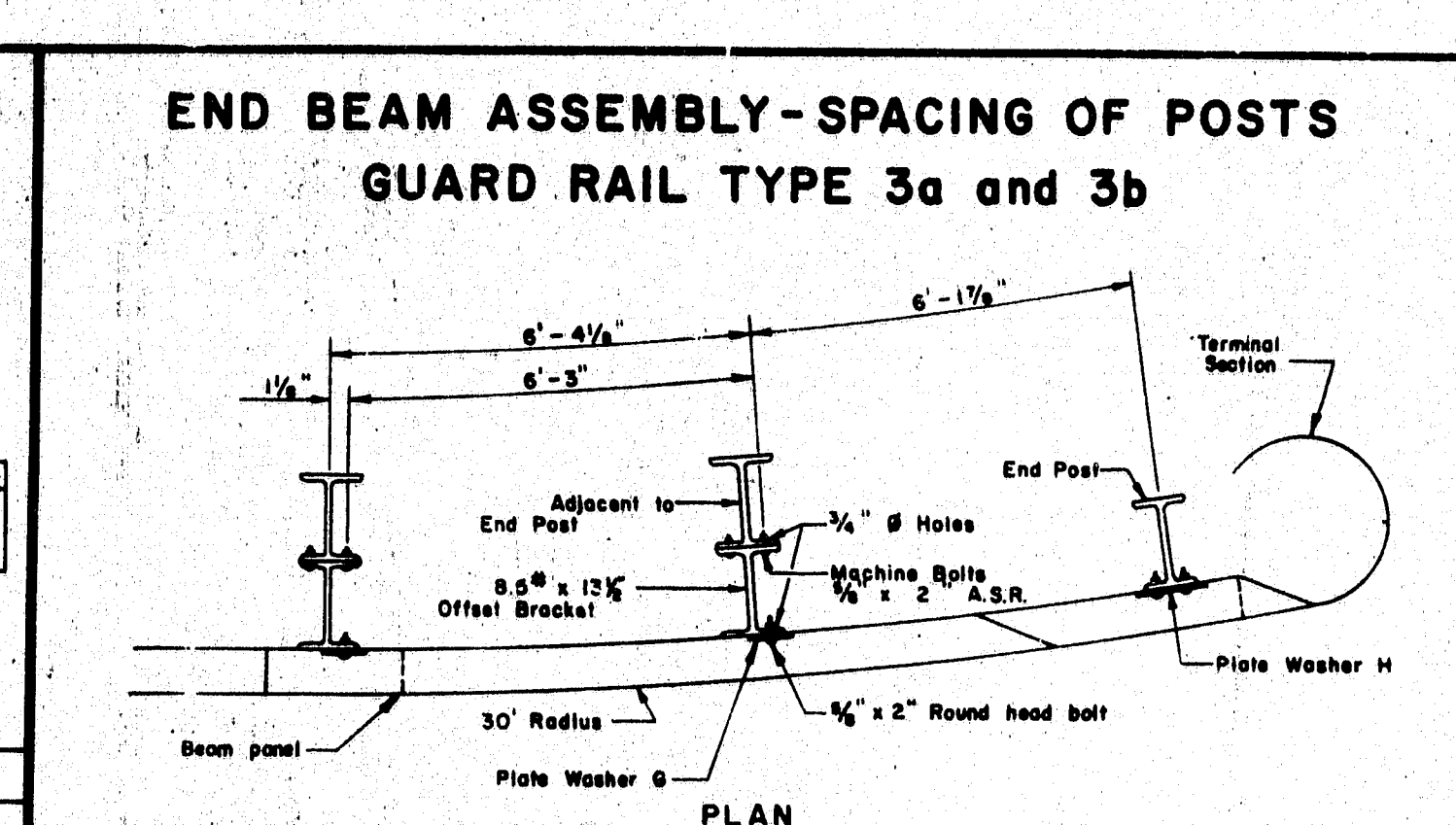
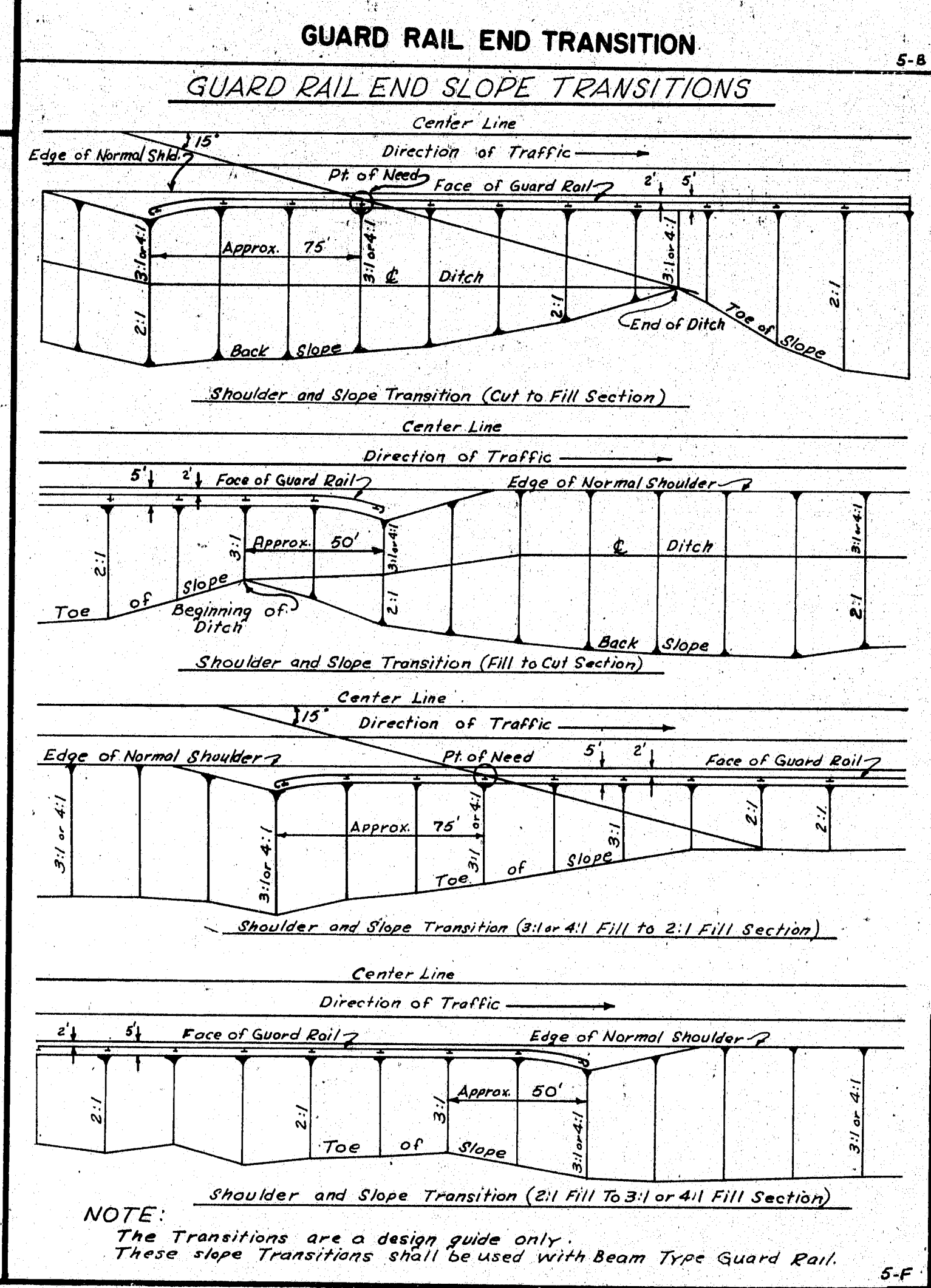
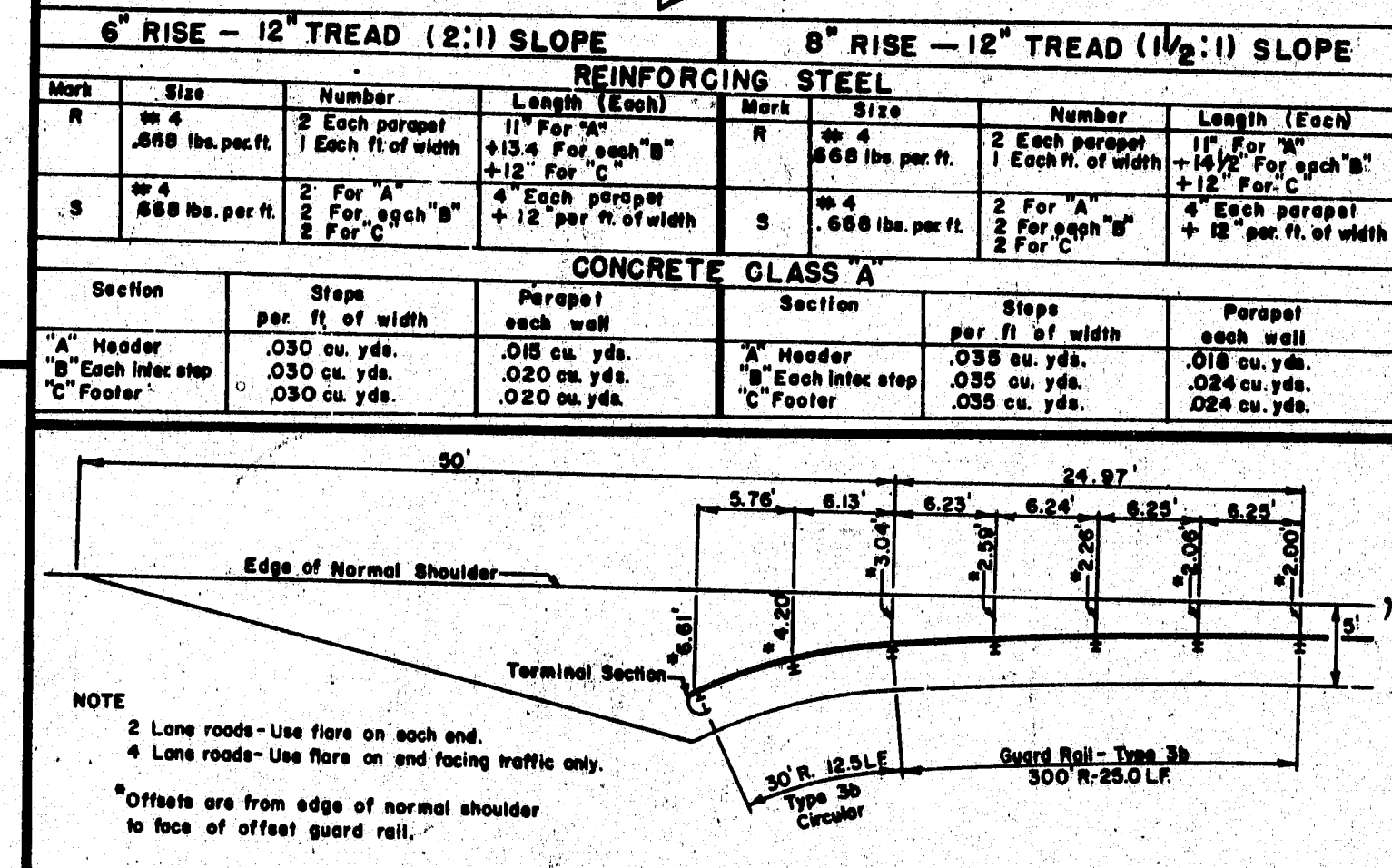
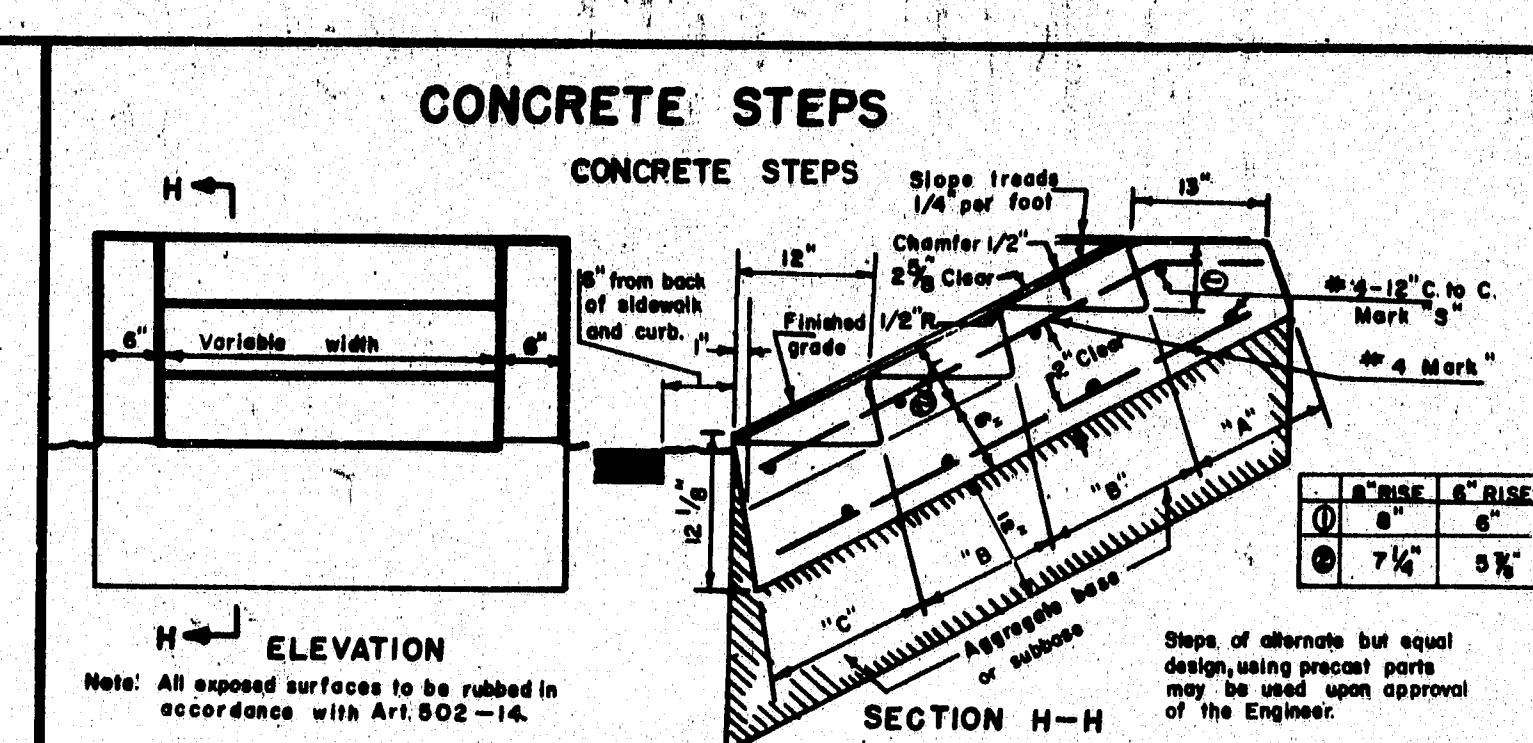
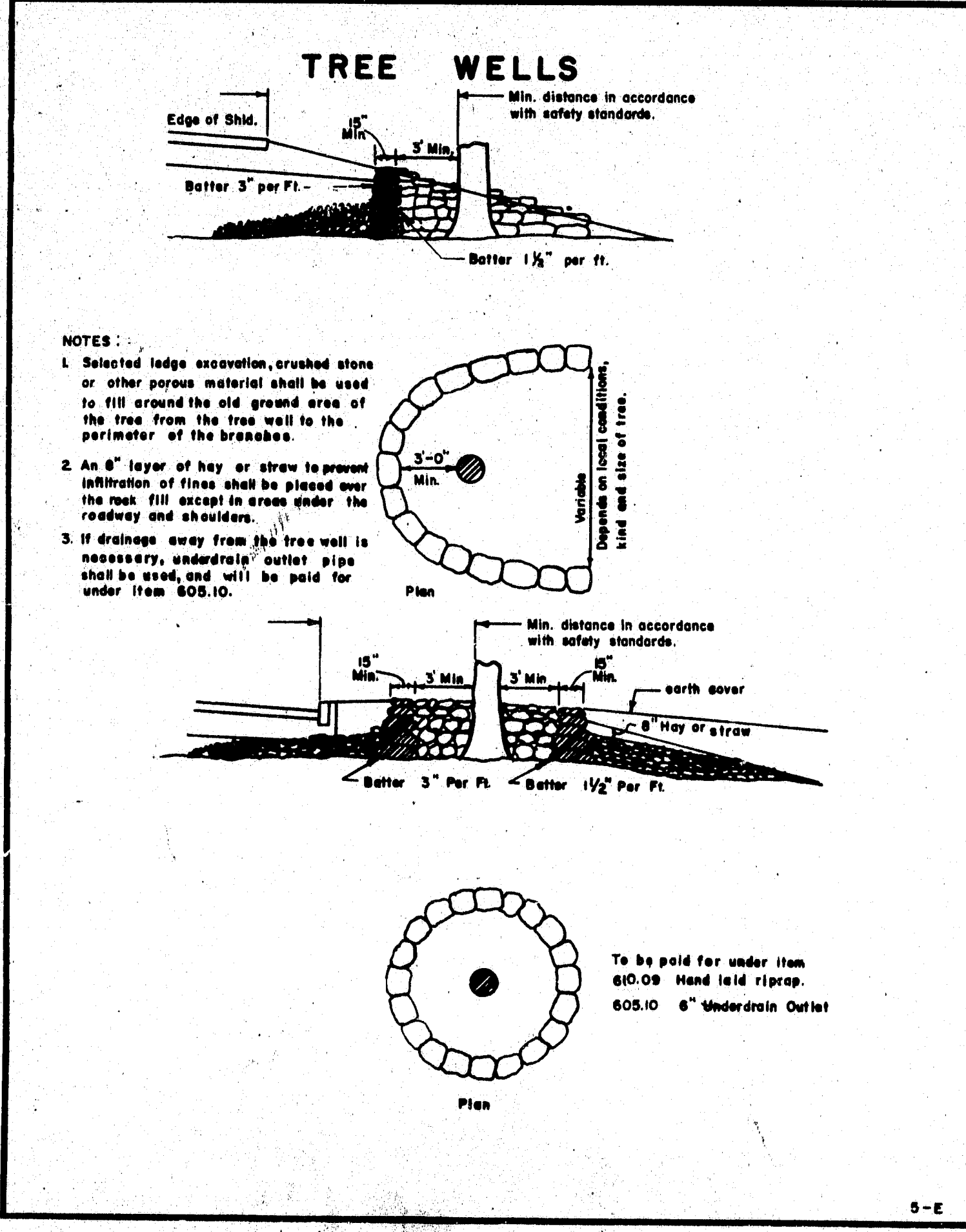
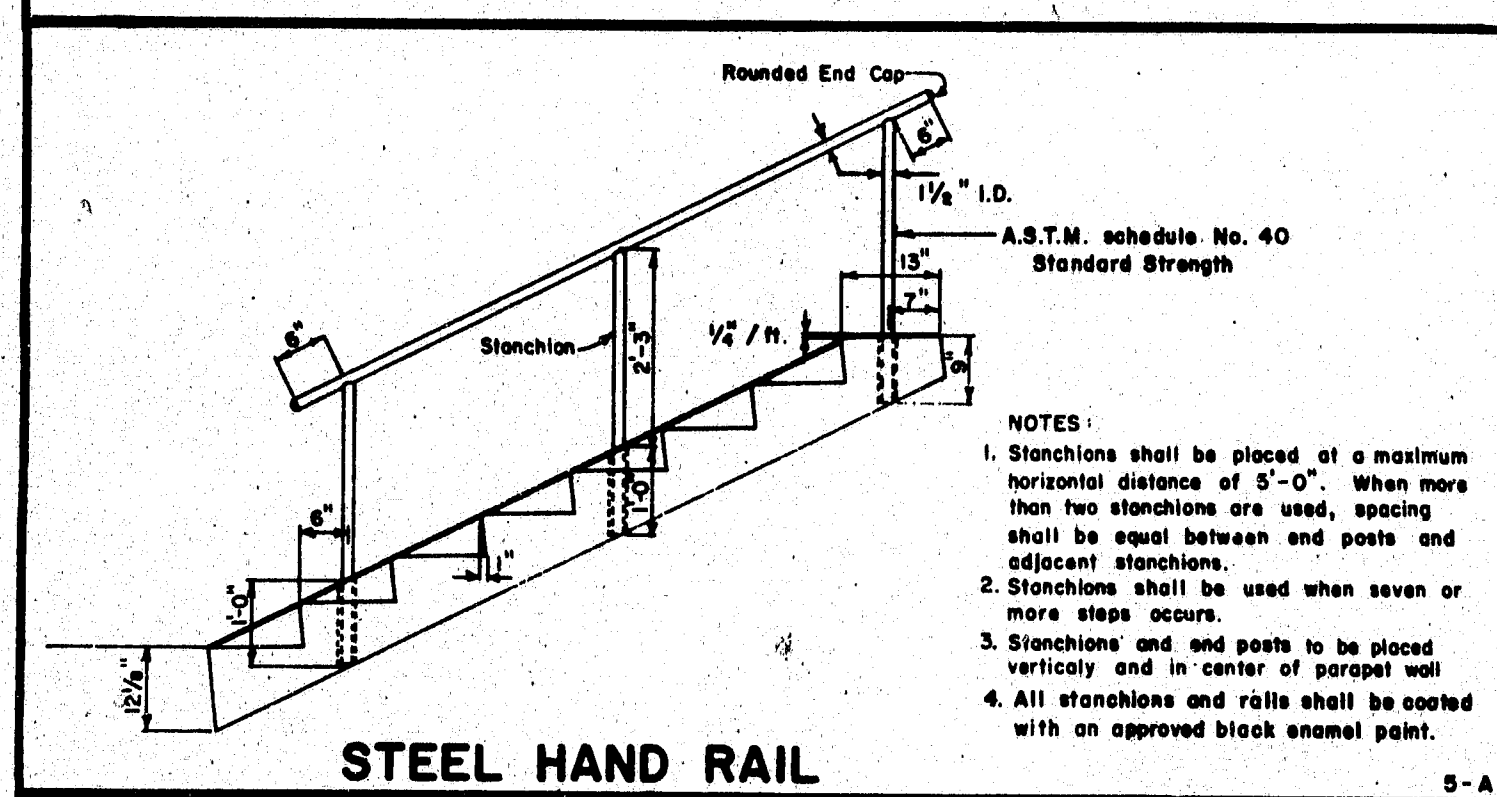
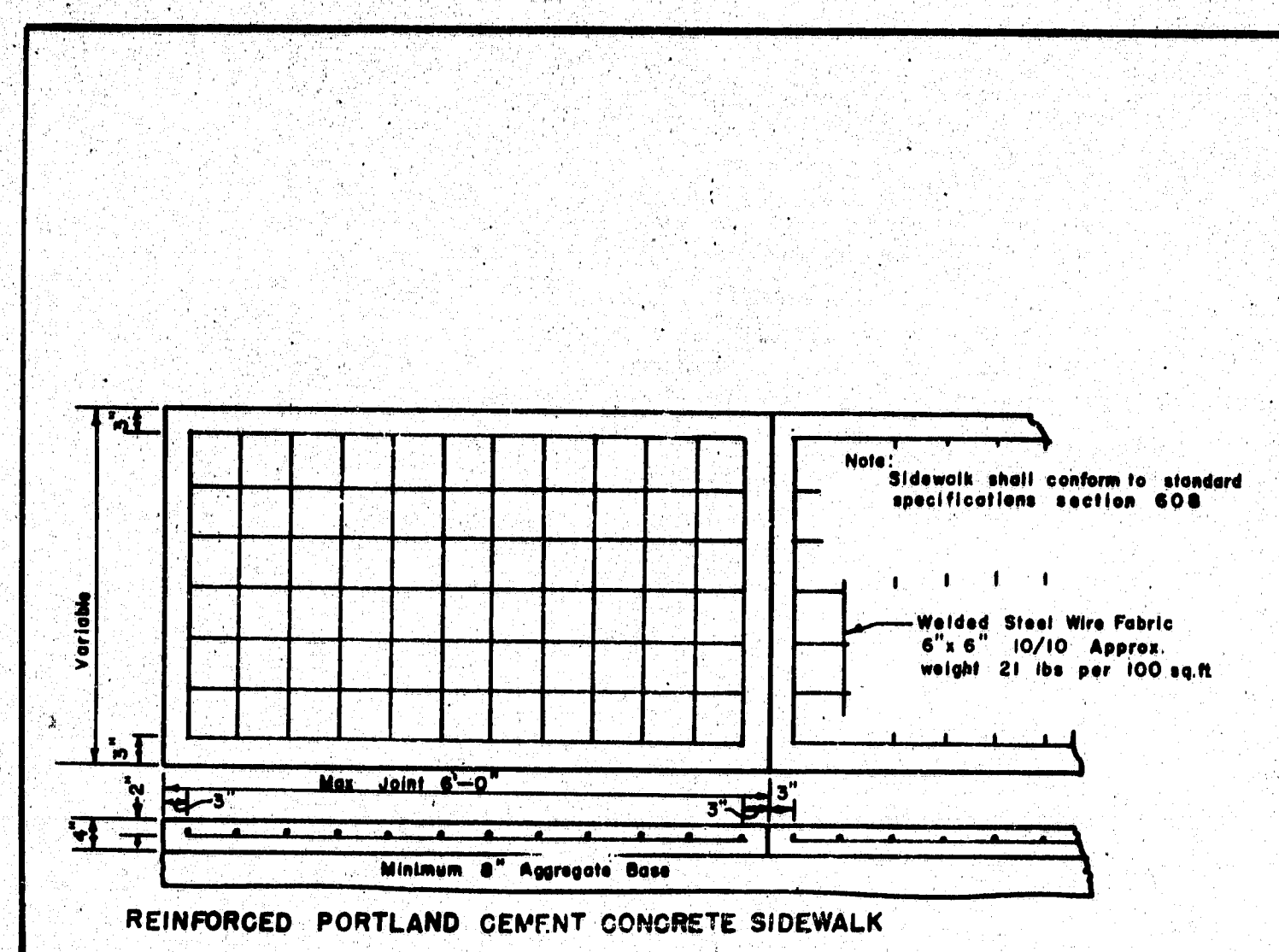
TERMINAL CURB SECTION	
TERMINAL SECTION TYPE "1" & "2"	TERMINAL SECTION TYPE "5" & "6"
Top of Curb	Top of Curb
6" Exposed Face	6" Exposed Face
Limit of Payment	Limit of Payment
Curb Type 1 or 2	Curb Type 5 or 6
Terminal Section	Terminal Section

REVISIONS		STATE OF MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	
Plate 3-G	12-23-69	<b>STANDARD DETAILS</b> CURB, DITCHES AND SLOPES, AND CATCH BASINS TYPE "E"	AUG. 1969
Plate 3-F	5-27-70		
Plate 3-J	7-15-70		
PLATE 3H	3-4-71		
PLATE 3H	8-28-73		
PLATE 3H	6-26-75		
PLATE D	8-8-75		
PLATE D-I	11-24-75		
PLATE 3D	7/31/79		

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LOCATION OF GUARD RAIL		REVISIONS	
PLATE H	11-3-77	PLATE 5-A	12-24-69
PLATE G-H	6-1-78	PLATE 5B	1-27-71
		PLATE 5H	5-12-71
		PLATE 5G	1-19-72
		PLATE 5D	6-7-72
		PLATE 5D+C	10-22-74
		PLATE A,B,F,H	3-18-75
		PLATE 5H	6-26-75
		PLATE G	10-14-75

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

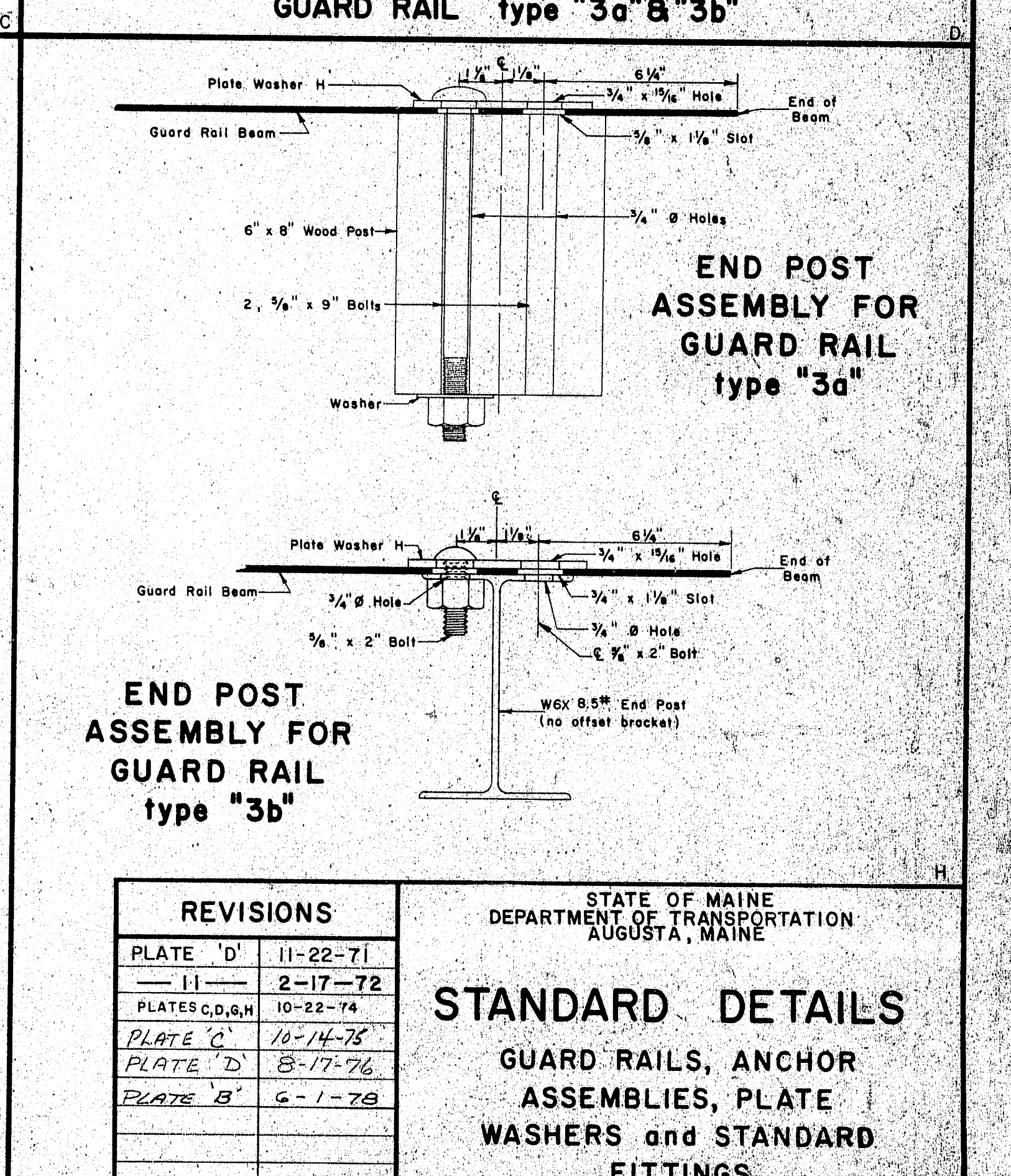
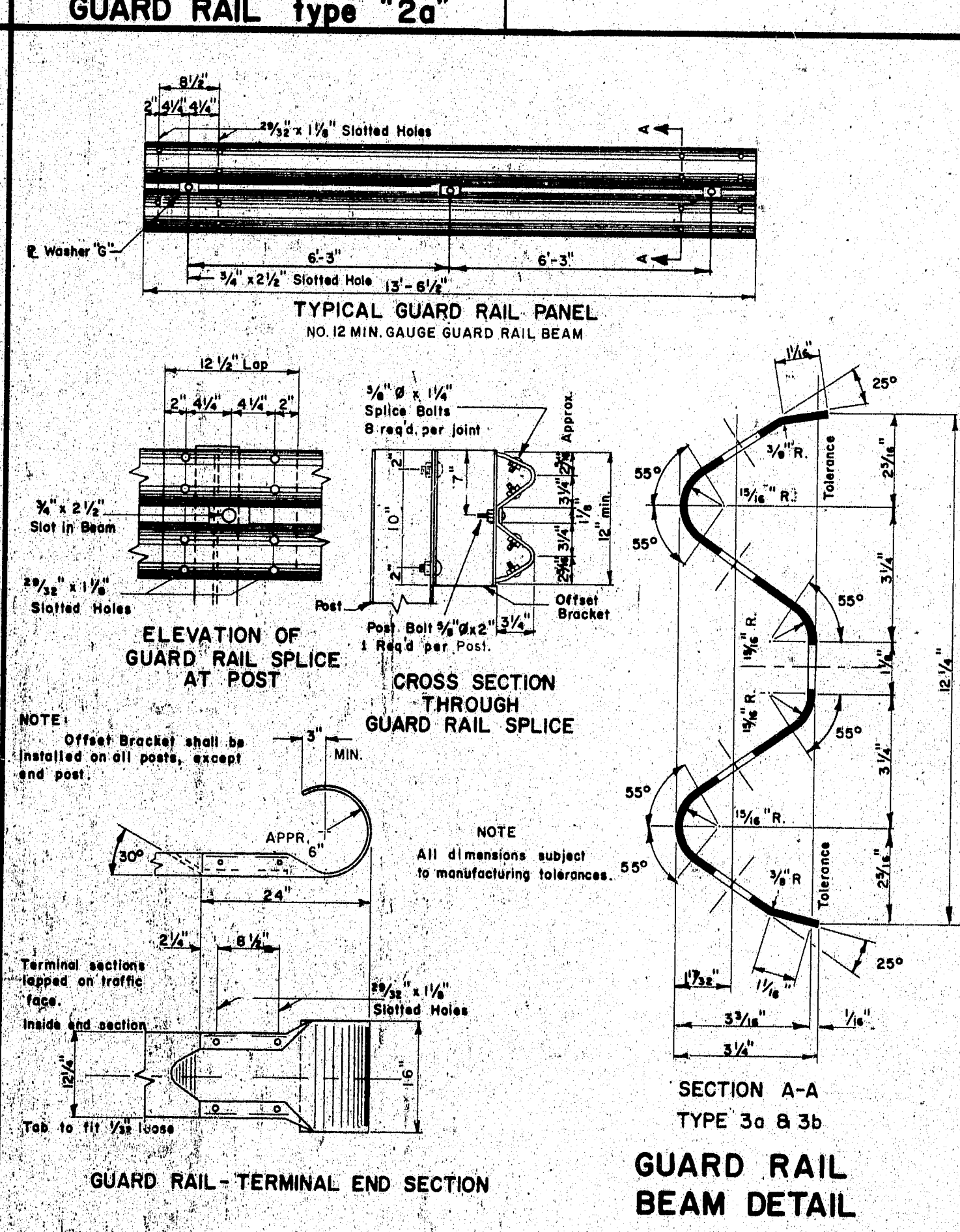
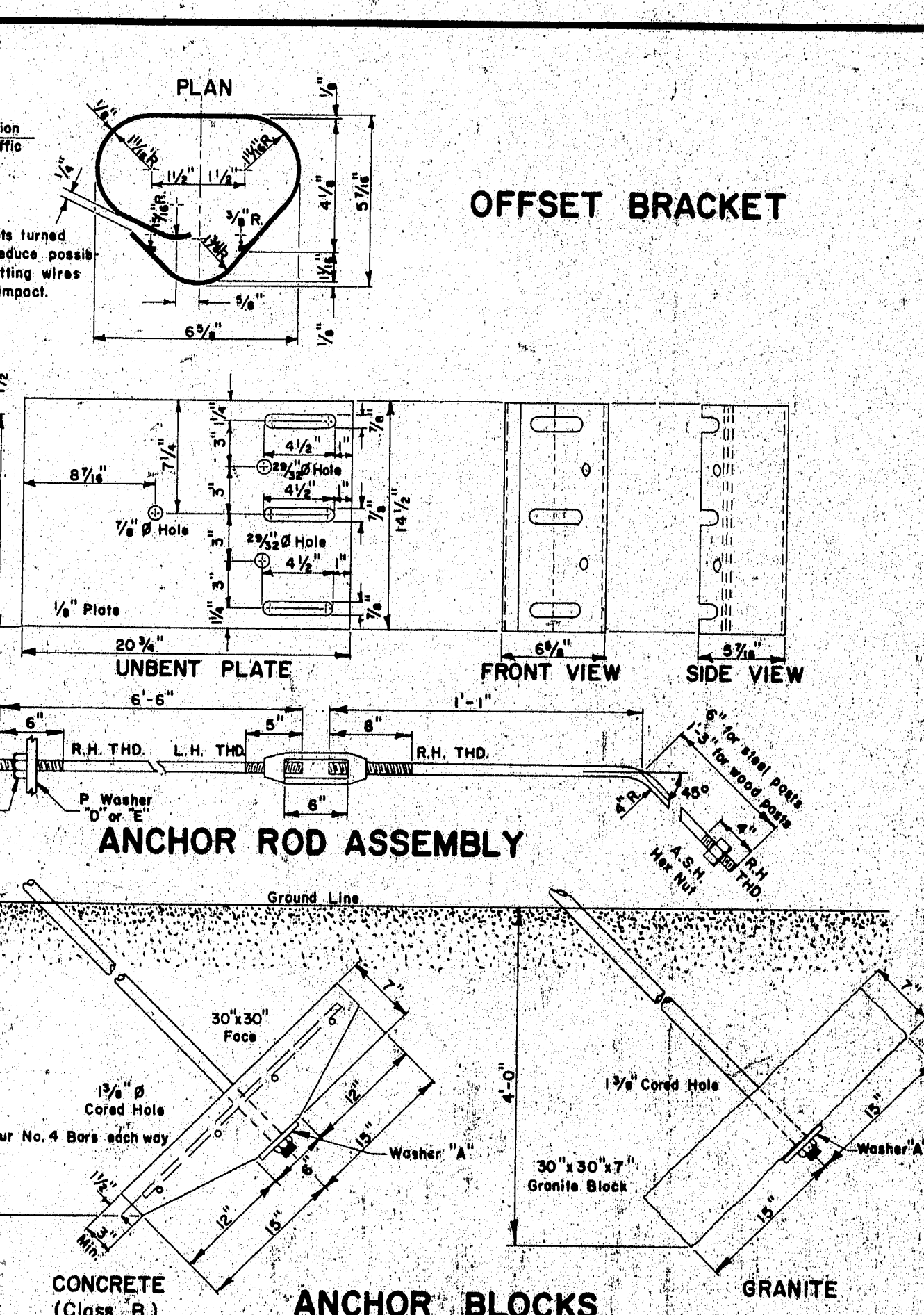
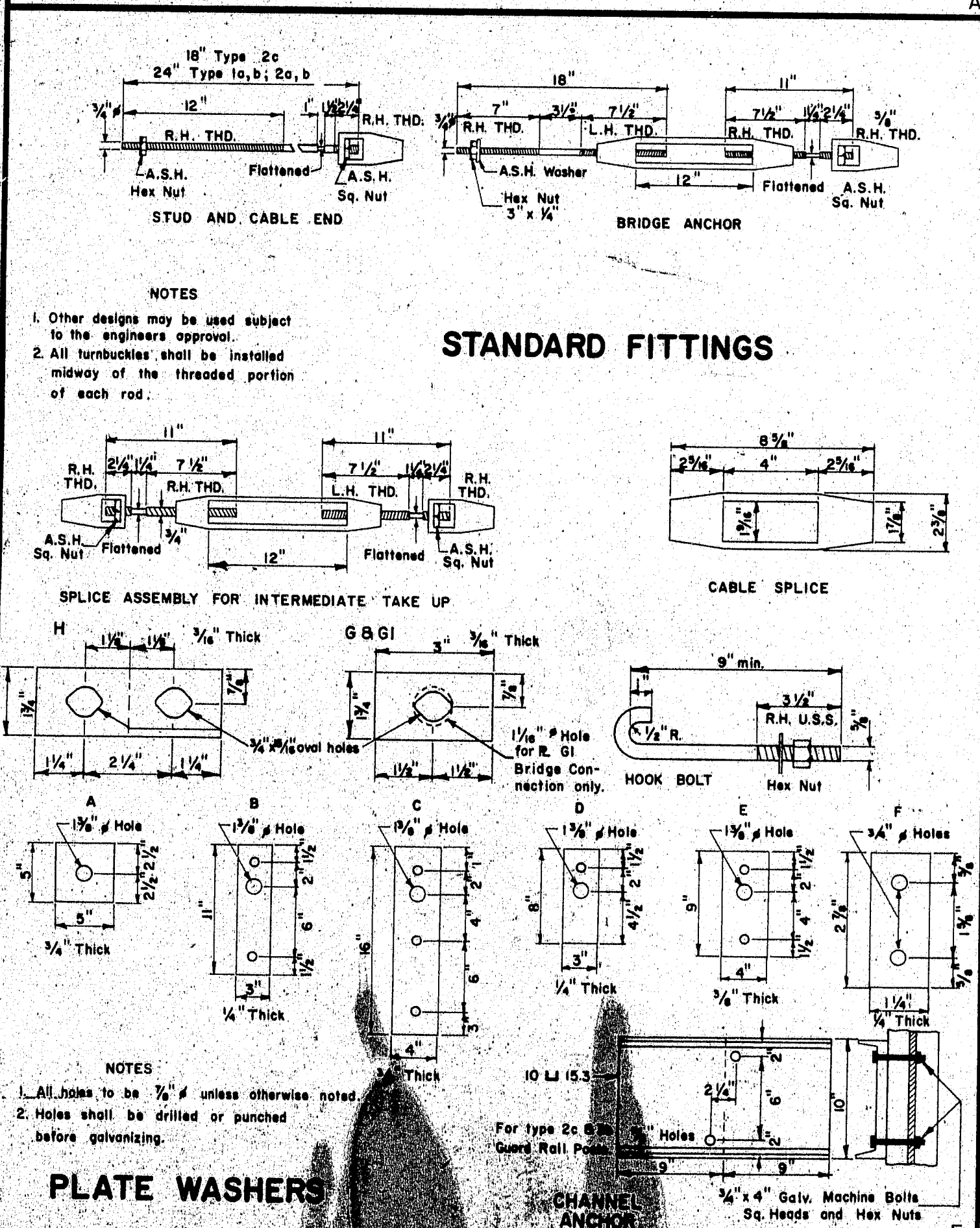
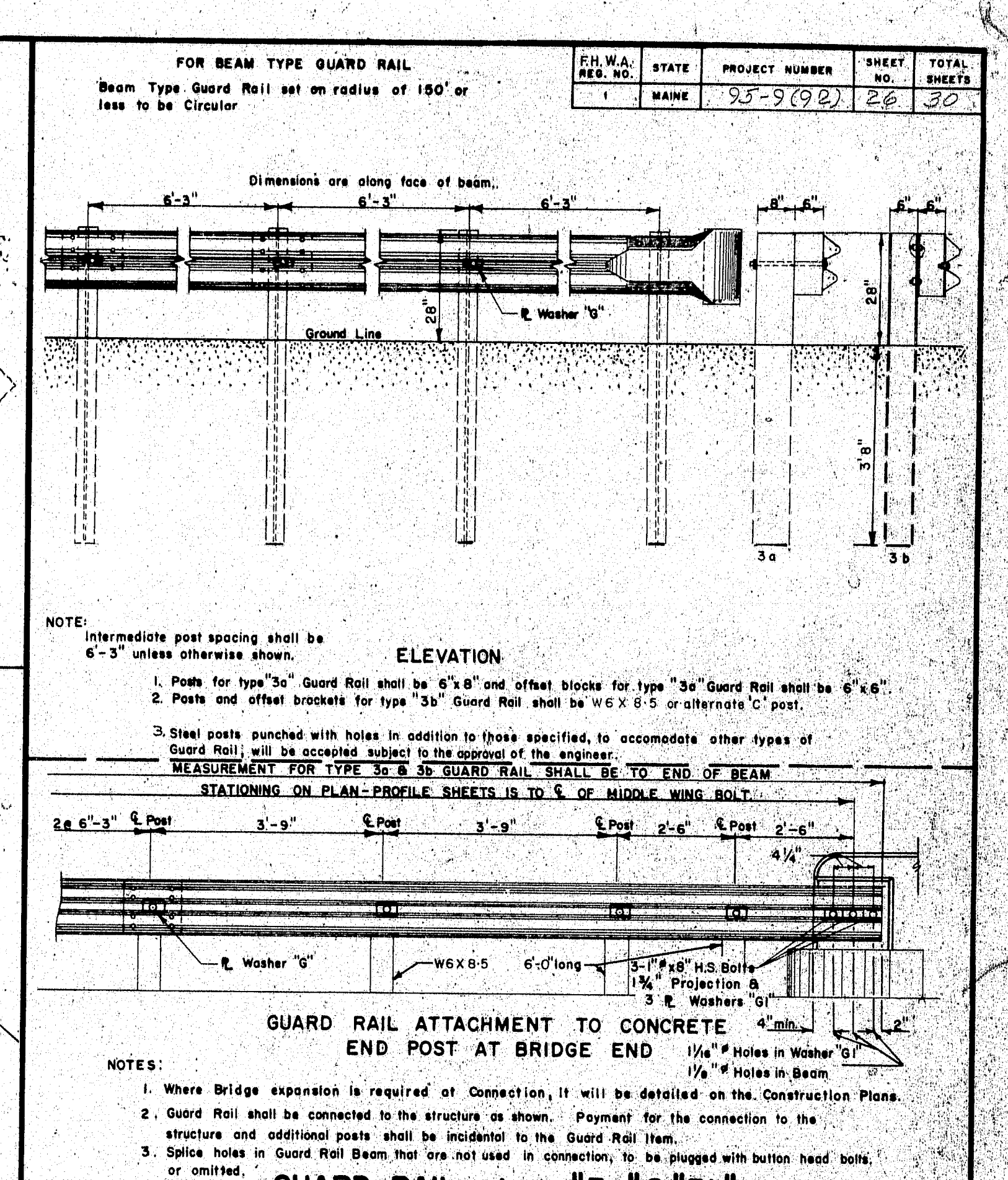
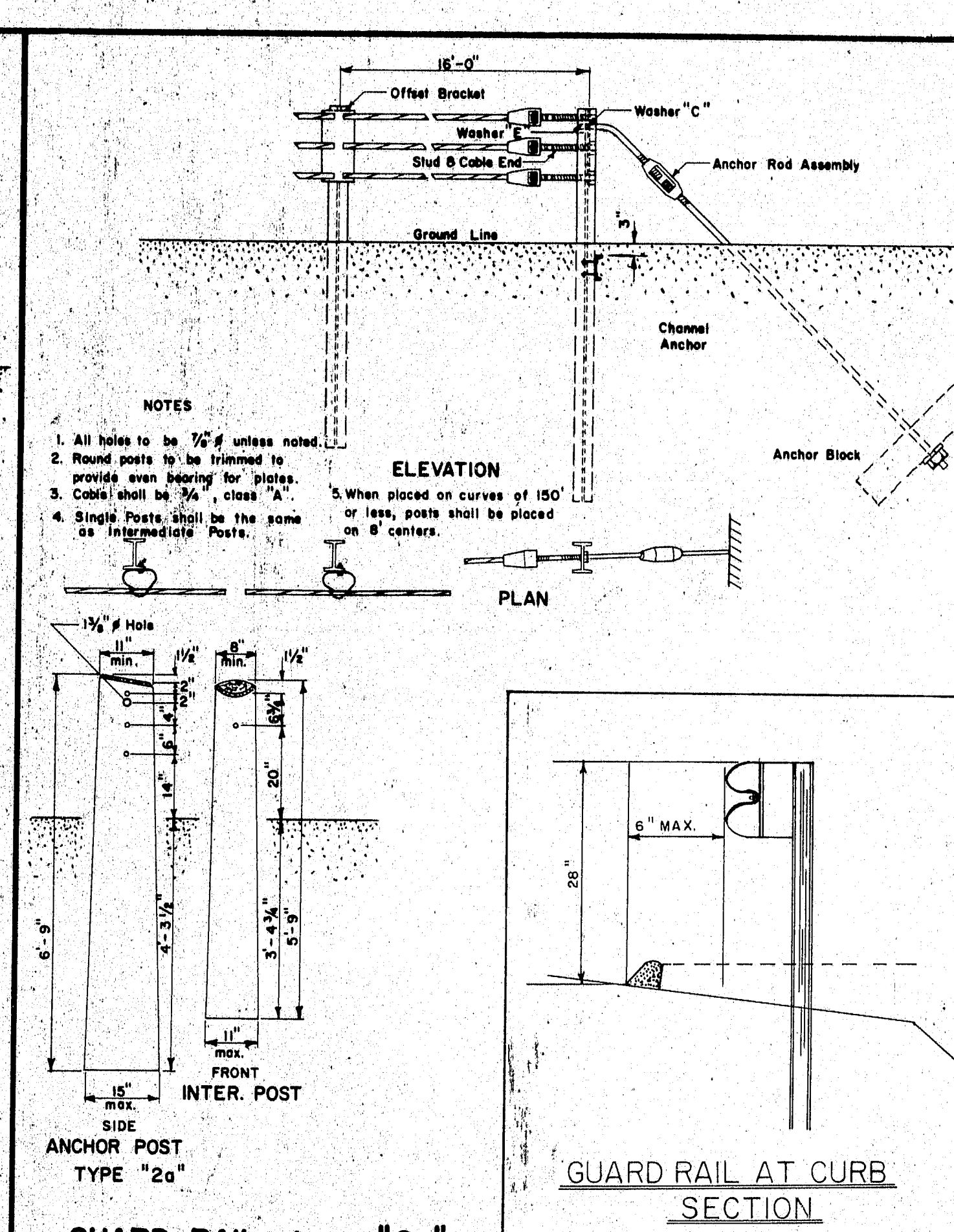
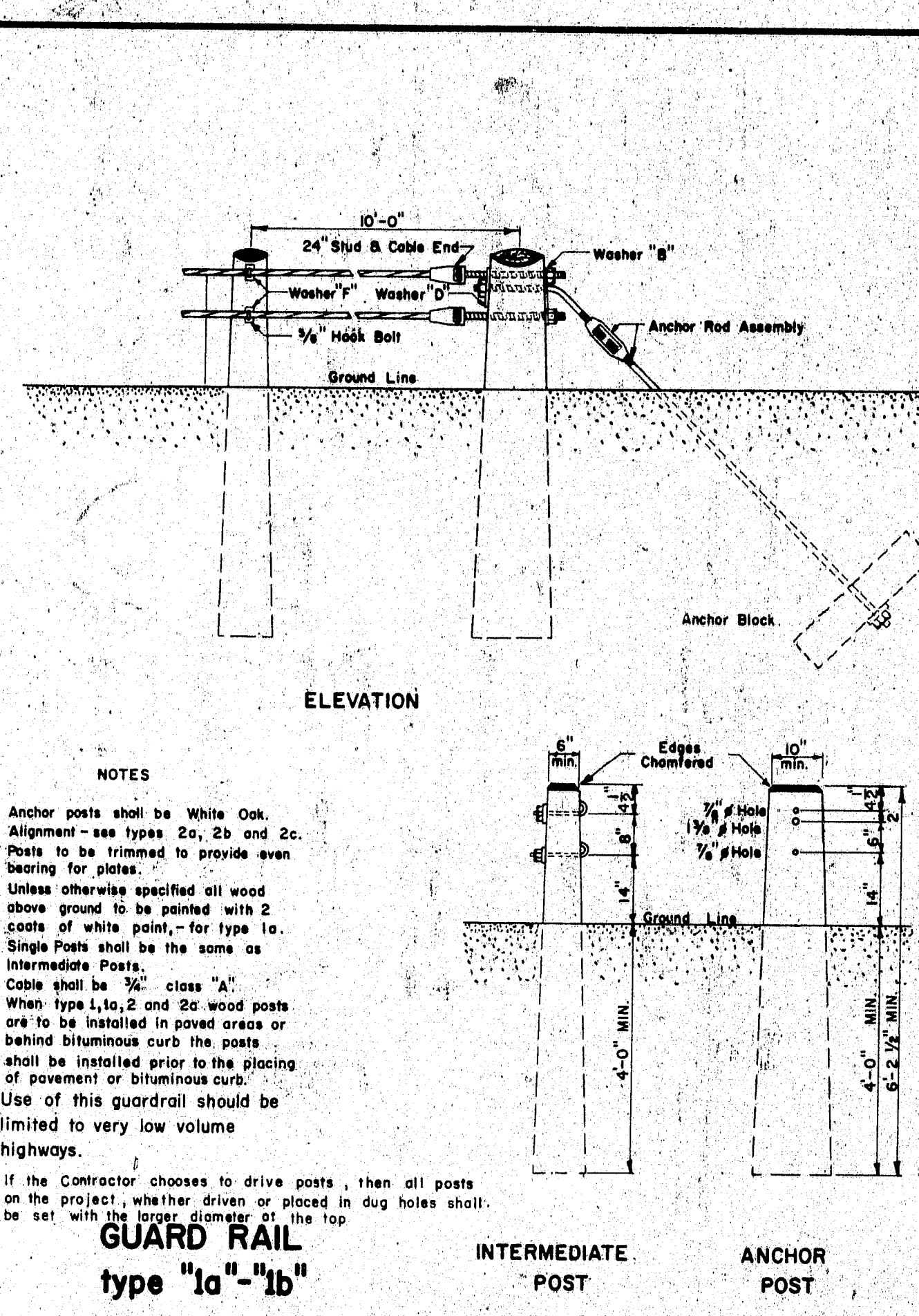
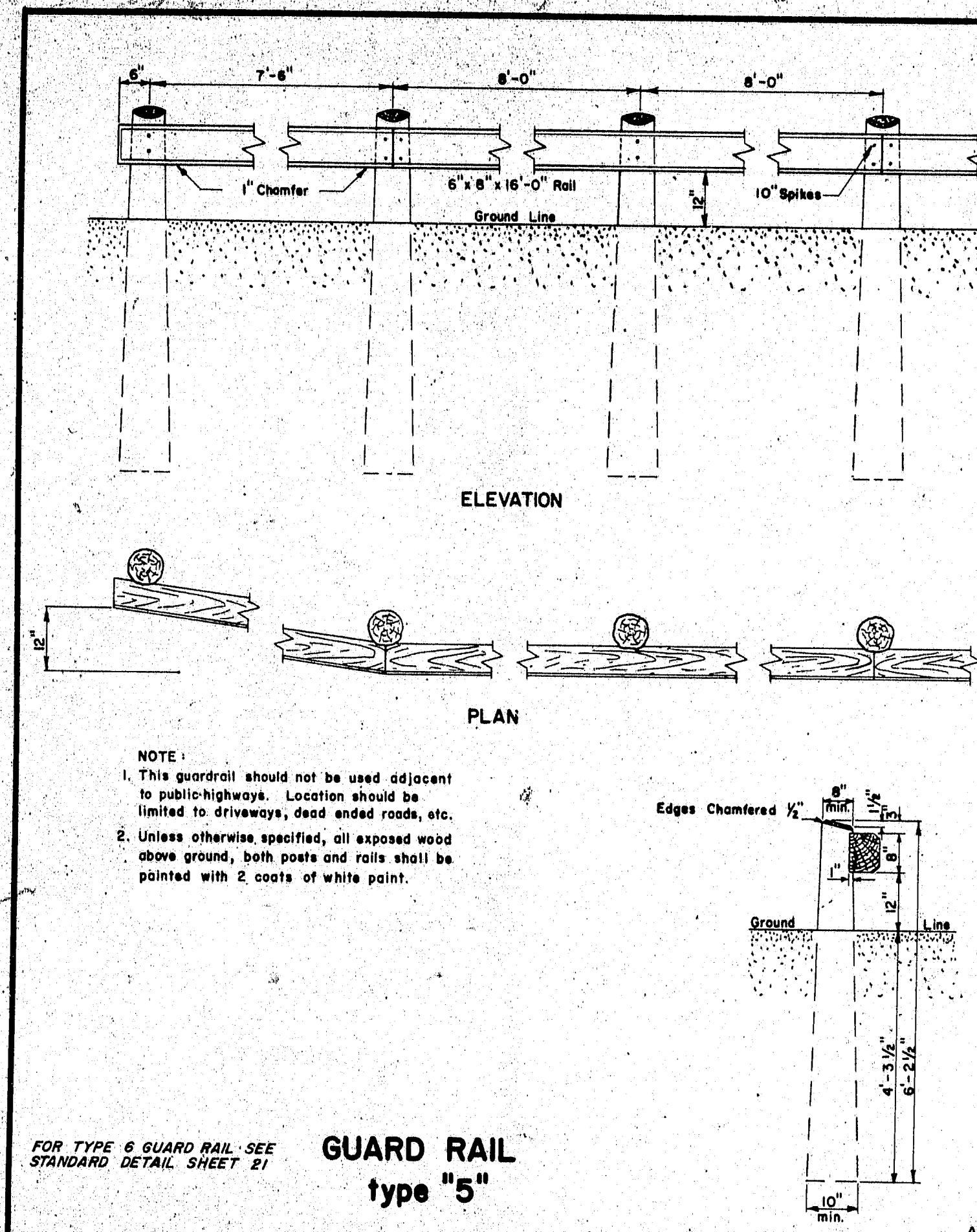
**STANDARD DETAILS**

GUARD RAIL, MUCK EXCAVATION  
CONCRETE STEPS & SIDEWALK  
GUYING TREES  
TREE WELLS, EROSION CONTROL,  
MAILBOX SUPPORTS.

AUG. 1969

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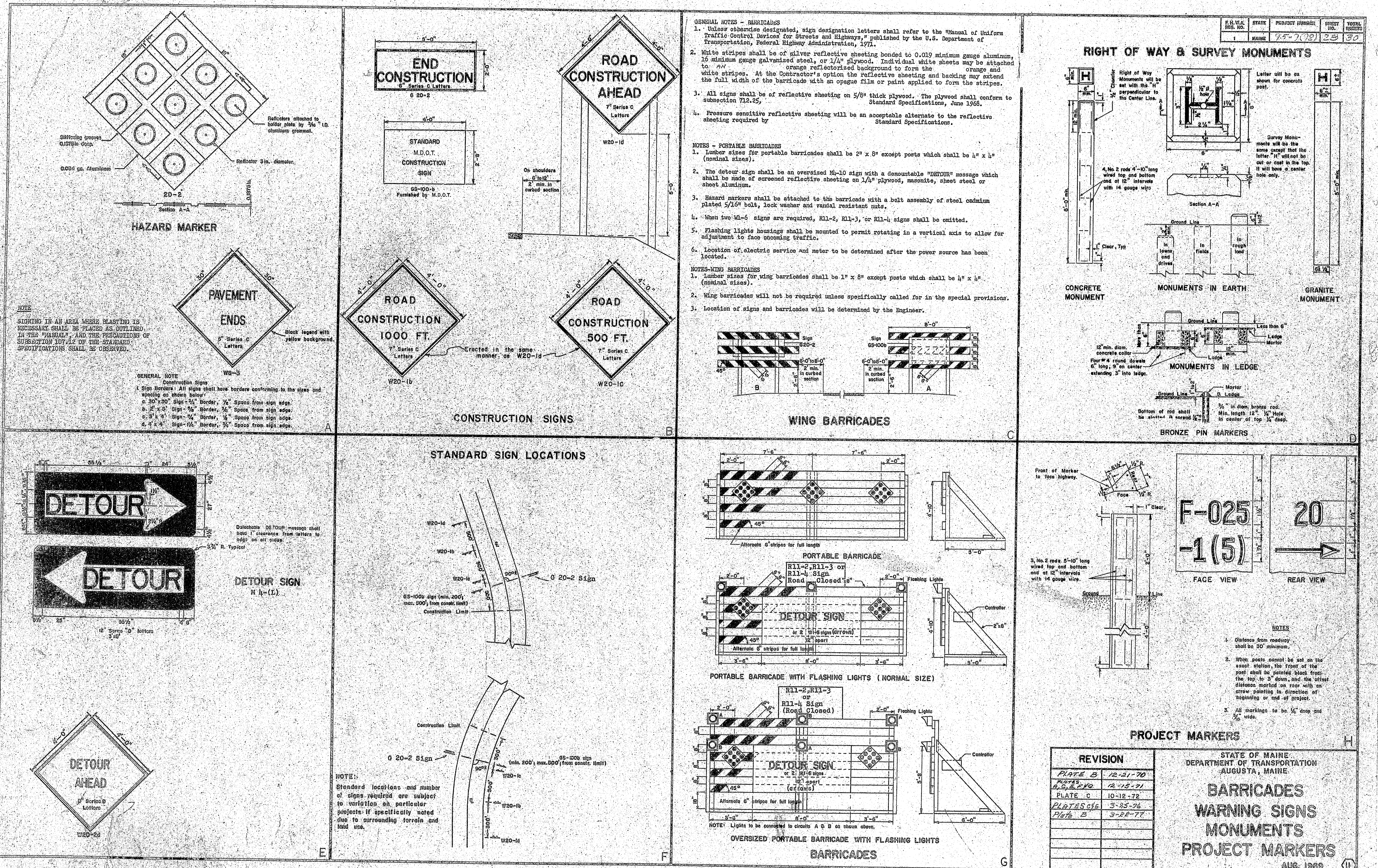
REVISIONS		STATE OF MAINE DEPARTMENT OF TRANSPORTATION AUGUSTA, MAINE	
PLATE 'D'	11-22-71	<b>STANDARD DETAILS</b> GUARD RAILS, ANCHOR ASSEMBLIES, PLATE WASHERS AND STANDARD FITTINGS	
PLATE 'C'	10-14-78		
PLATE 'D'	8-17-76		
PLATE 'B'	6-1-78		
PLATE 'A'	2-17-72		
PLATE 'E'	10-22-74	AUG. 1969	

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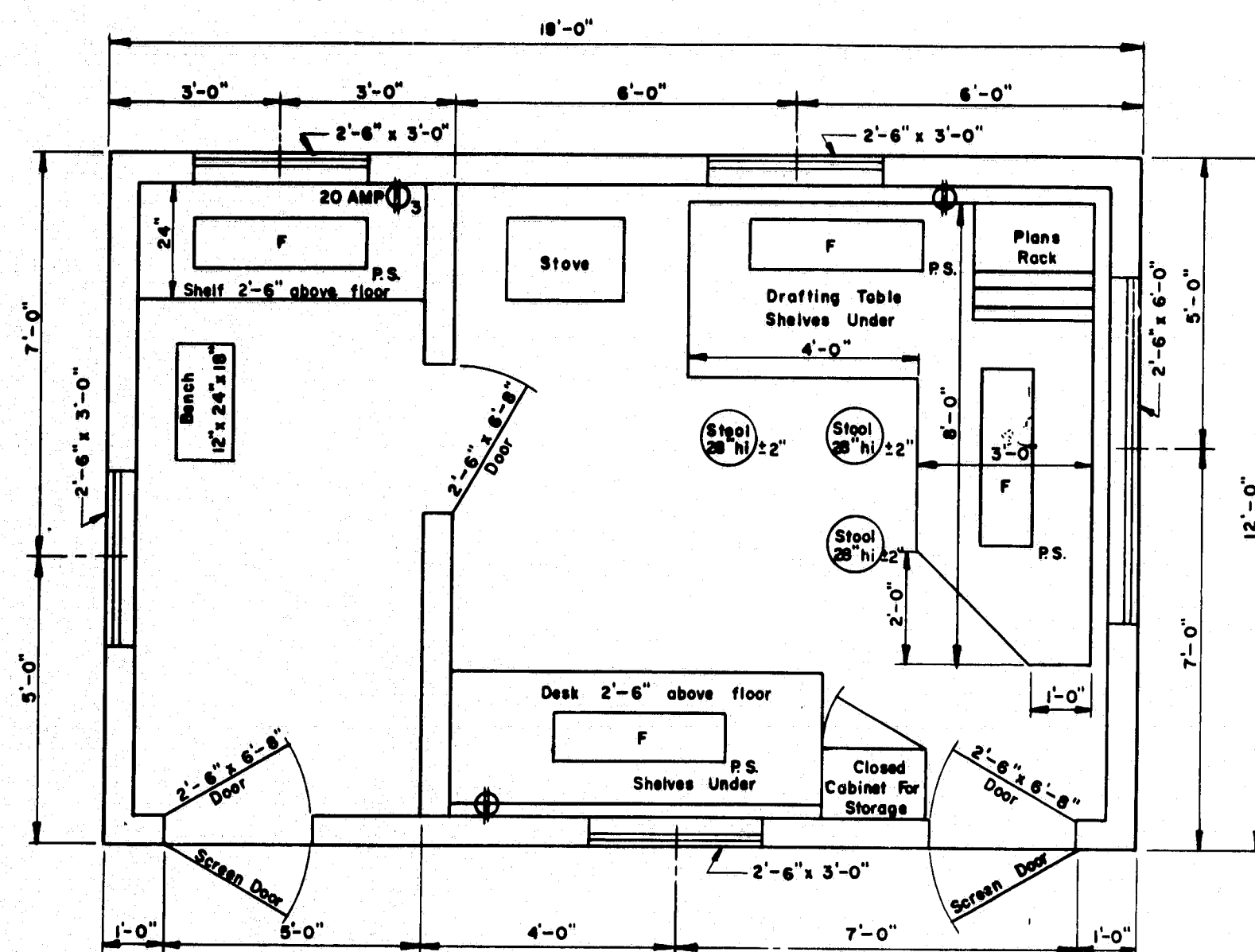




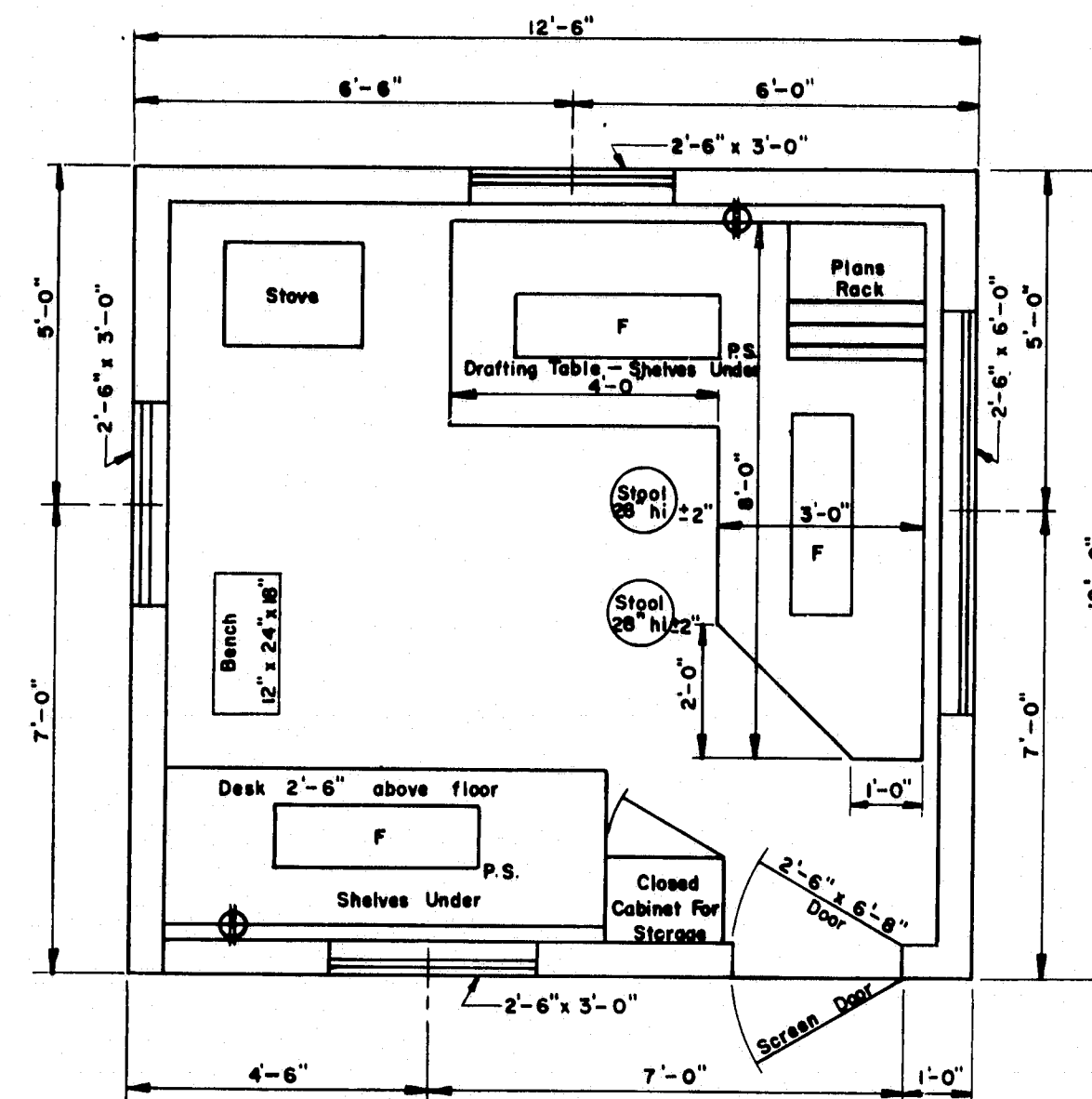




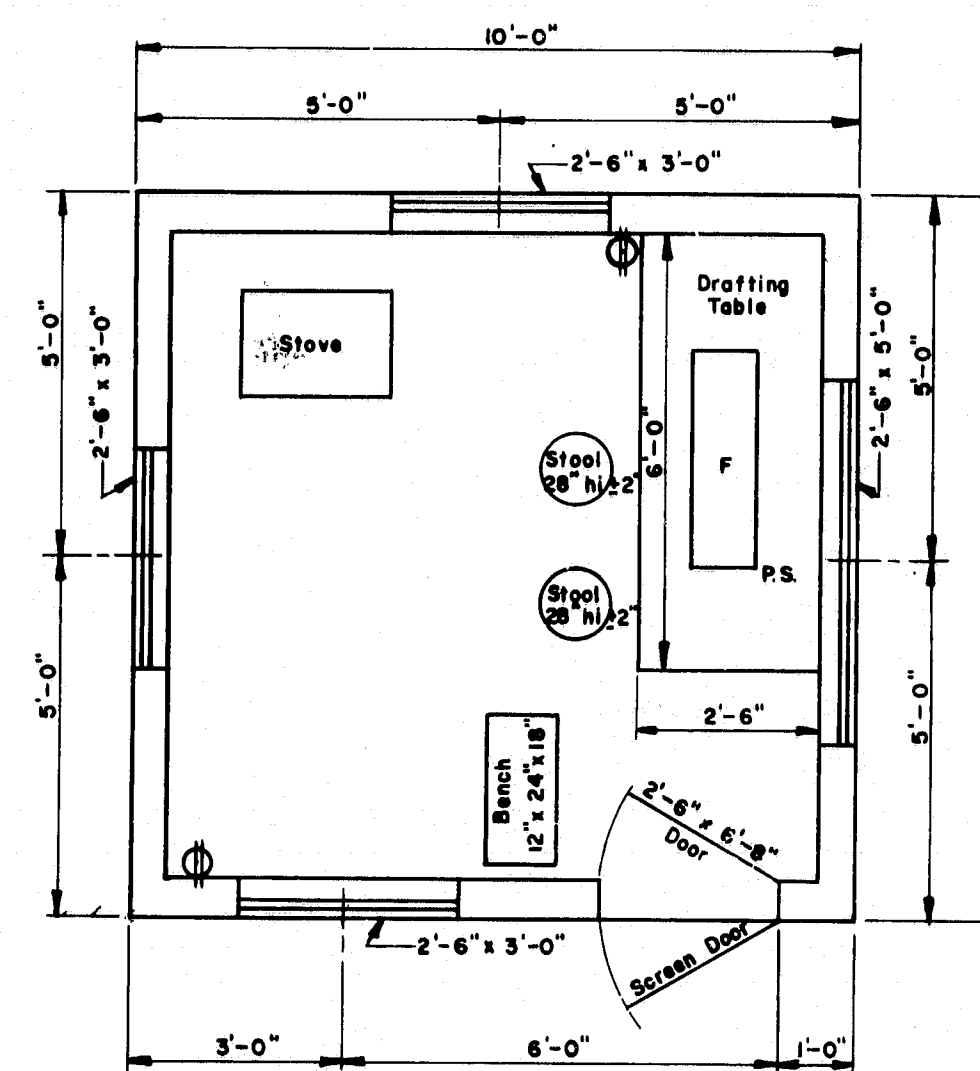




FLOOR PLAN  
TYPE "A"

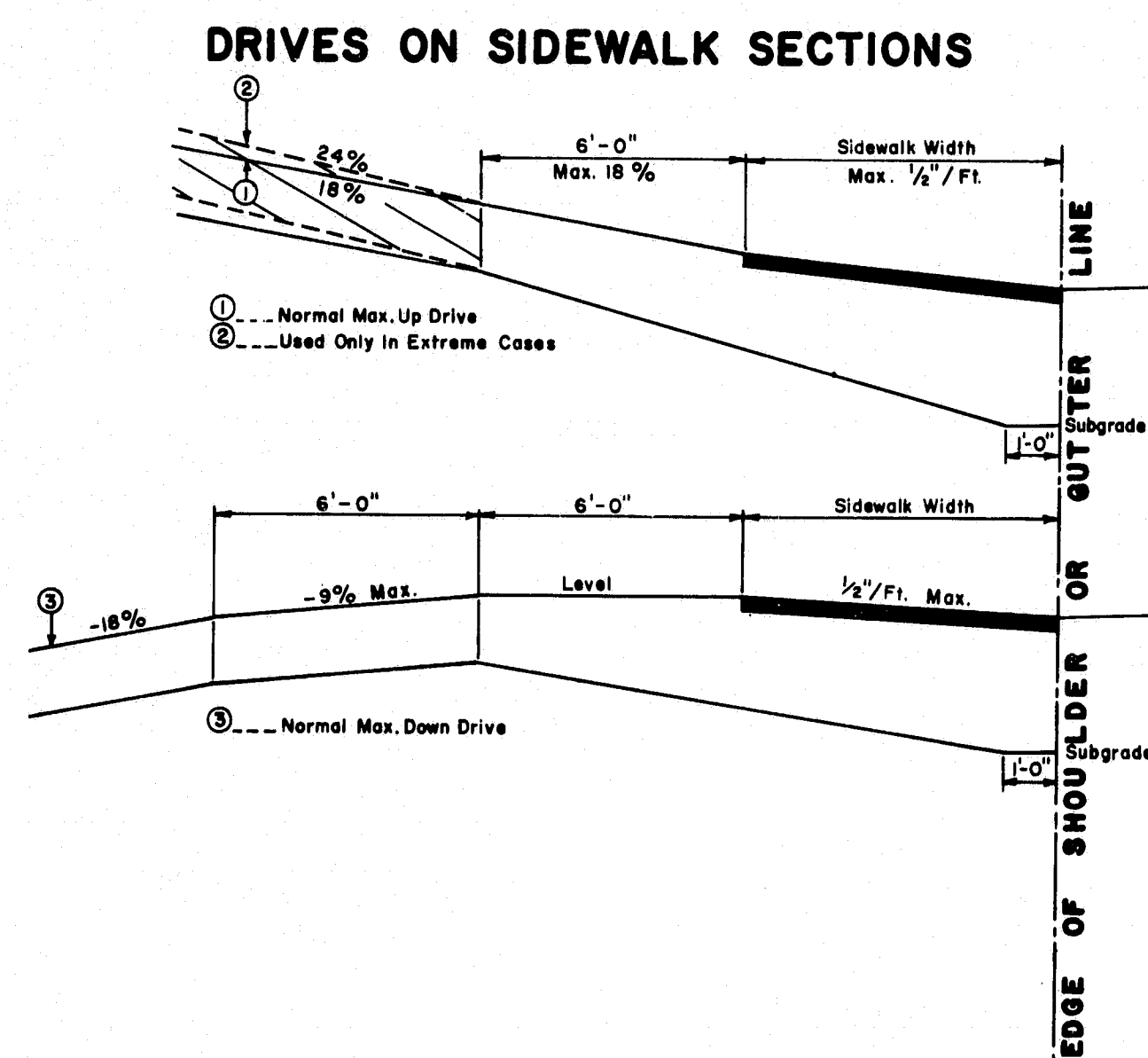


FLOOR PLAN  
TYPE "B"

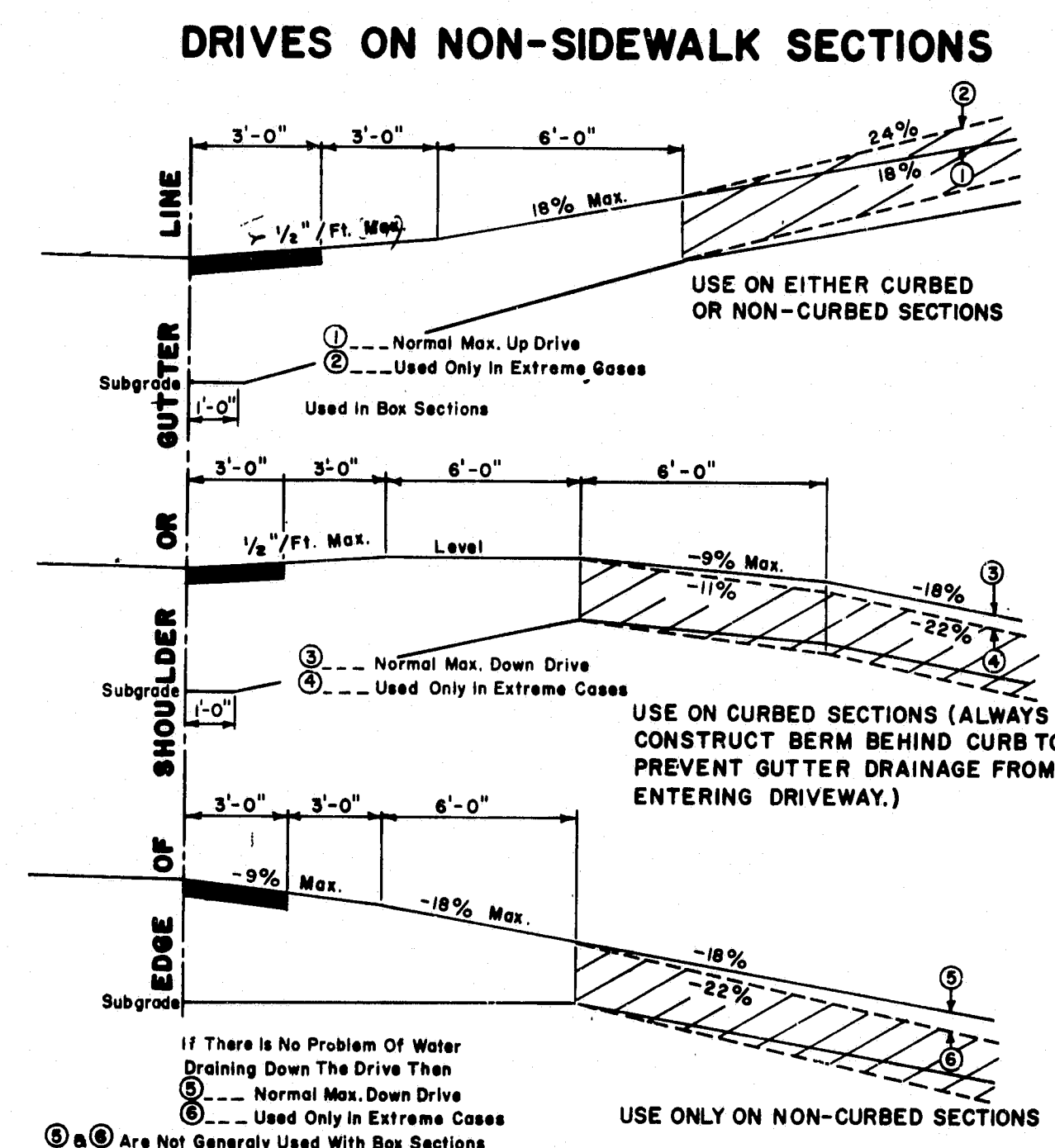


FLOOR PLAN  
TYPE "C"

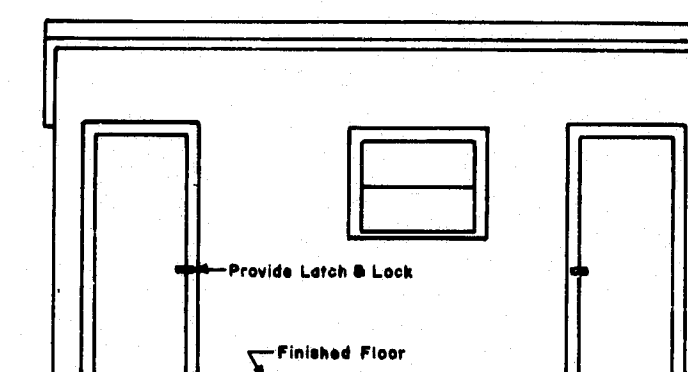
- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
  - Shelves under desk shall be constructed to receive 11 1/2" x 14" x 25" transfiles.
  - Windows shall be double hung.
  - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 6" of fireproof material.
  - Continuous 110 volt 60 cycle electric service shall be supplied.
  - The engineer may rearrange the items shown on the plan views during construction of the field office.
  - 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
  - SYMBOLS:
    - F Fluorescent lights (2 light, rapid start 48" strips and 40 watt bulbs.)
    - P.S. Pull switch
    - ⊕ Duplex wall outlet—15 amp unless otherwise noted.
    - ⊕ Triplex Wall Outlet
  - 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 furnished with water at all times.



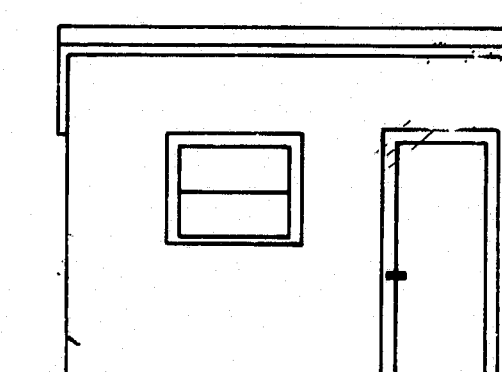
- GENERAL NOTES**
- The sidewalk width shall be paved in all cases.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
  - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
  - 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.



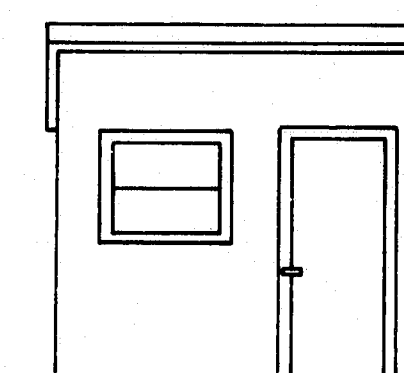
- GENERAL NOTES**
- The first 3' shown as pavement shall be paved only when abutting a paved area.
  - All residential or commercial drives 10% and over shall be paved.
- NOTES ON MAXIMUM DRIVEWAY PROFILES**
- These profiles are a guide for the majority of cases, but should be field checked when the main line grade is steep (4% to 6% or greater) or the angle of approach to the drive is unusual.
  - Generally the majority of drives on a project will be built with flatter profiles than these maximum cases.
  - 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.



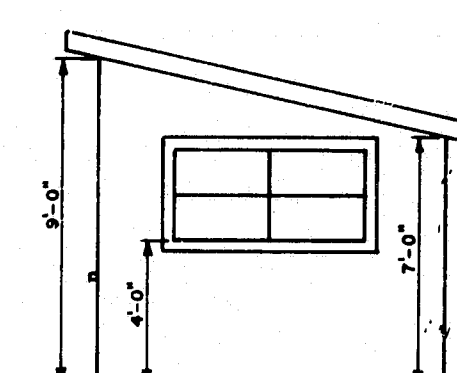
FRONT ELEVATION  
TYPE "A"



FRONT ELEVATION  
TYPE "B"



FRONT ELEVATION  
TYPE "C"



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

REVISIONS		
PLATE	D'E	3-16-73

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
AUGUSTA, MAINE

**STANDARD DETAILS**

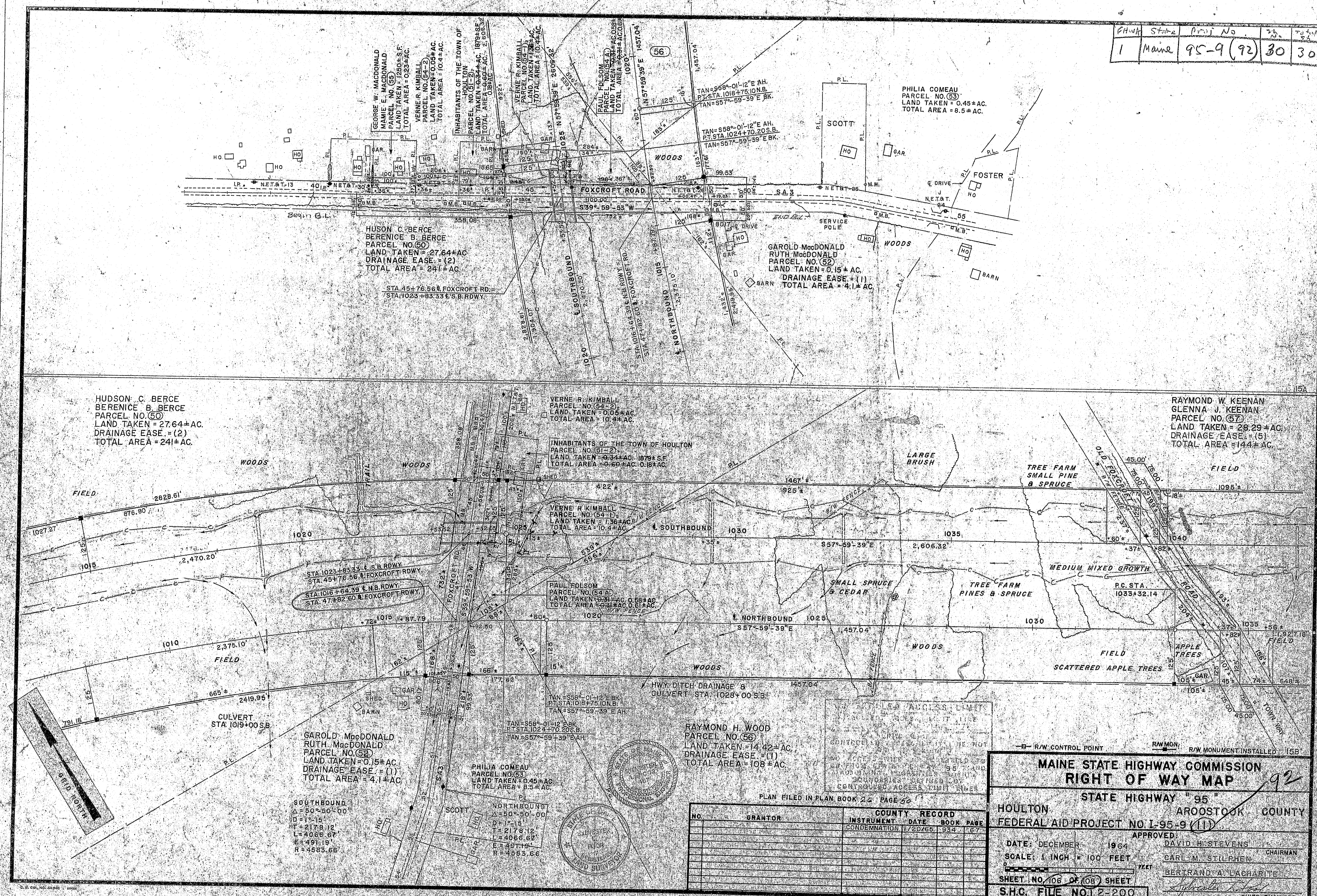
DRIVEWAY DETAILS  
FIELD OFFICES  
TESTING LABORATORY

AUG. 1969

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Sheet	State	Proj. No.	30	30
1	Maine	95-9(92)	30	30



NO.	DATE	DESCRIPTION	BY
1	12/1/64	FILED	C.A.
2	12/1/64	FILED	C.A.
3	12/1/64	FILED	C.A.
4	12/1/64	FILED	C.A.
5	12/1/64	FILED	C.A.
6	12/1/64	FILED	C.A.
7	12/1/64	FILED	C.A.
8	12/1/64	FILED	C.A.
9	12/1/64	FILED	C.A.
10	12/1/64	FILED	C.A.

**MAINE STATE HIGHWAY COMMISSION**  
**RIGHT OF WAY MAP**  
 STATE HIGHWAY "95"  
 HOULTON, AROOSTOOK COUNTY  
 FEDERAL AID PROJECT NO. 1-95-9(11)  
 DATE: DECEMBER 1964  
 SCALE: 1 INCH = 100 FEET  
 SHEET NO. 108 OF 108 SHEET  
 S.H.C. FILE NO. 2-200

APPROVED: DAVID H. STEVENS, CHAIRMAN  
 CARL M. STILPHEN  
 BERTRAND A. LACHARITE  
 G.H.P. ENGINEER