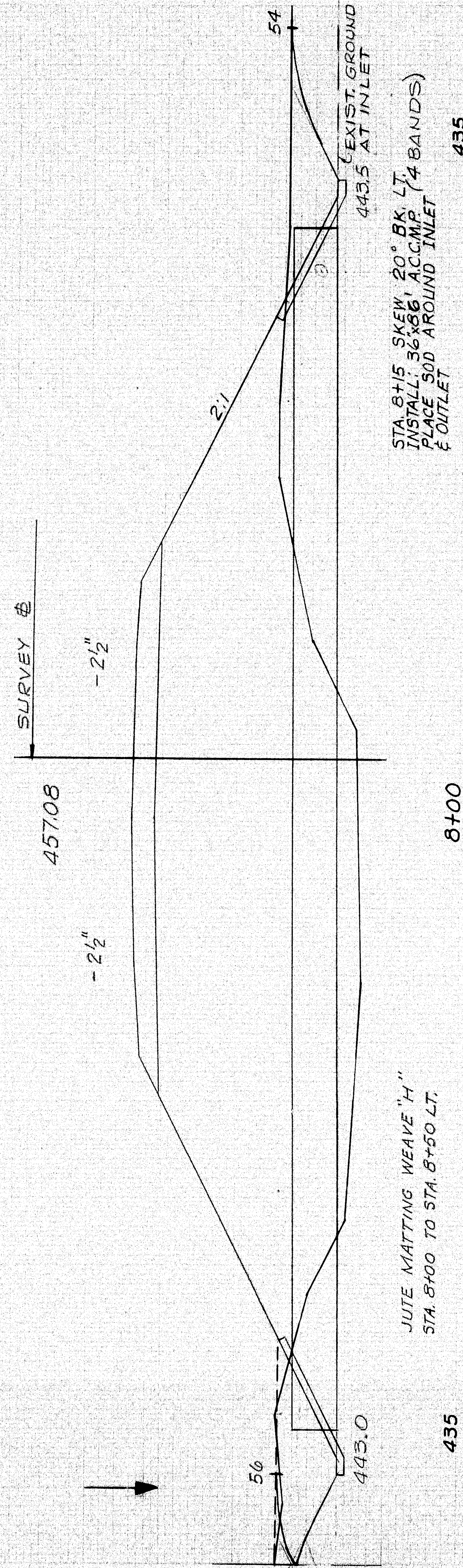
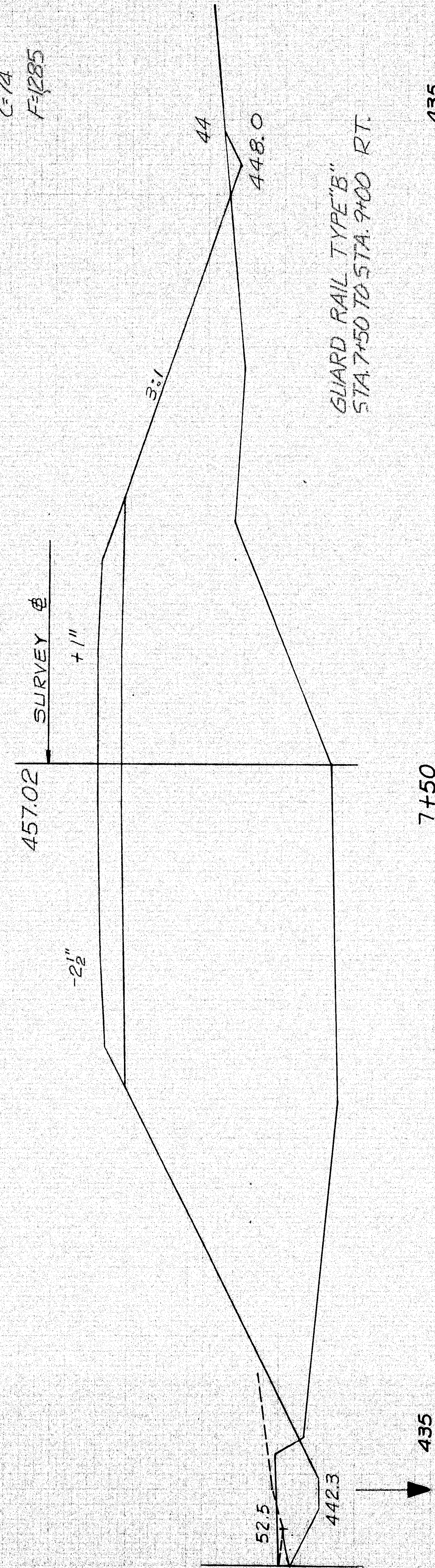


S.H.C. & C.E.A. 1-9-55  
 S.H.C. & C.E.A. 1-9-55  
 S.H.C. & C.E.A. 1-9-55



JUTE MATTING WEAVE "H"  
 STA 8+00 TO STA 8+50 LT.



GUARD RAIL TYPE "B"  
 STA 7+50 TO STA 9+00 RT.



JUTE MATTING WEAVE "H"  
 STA 7+00 TO STA 8+30 RT.

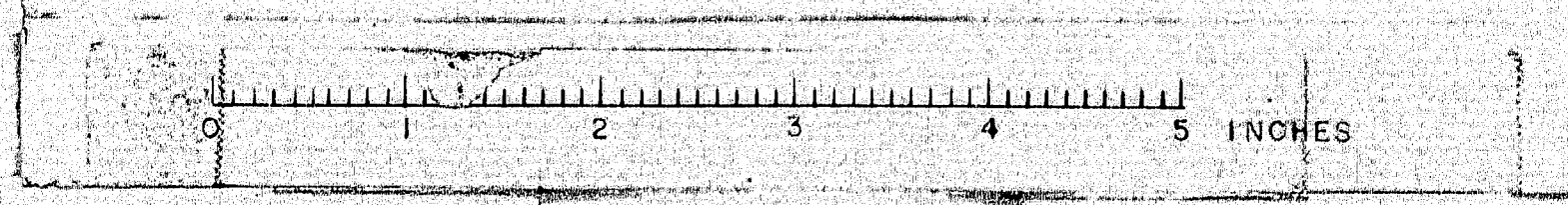
-8" @ 6+40  
 +8" @ 6+40



STA. 6+50 RT.  
 CONSTRUCT 16' DRIVE

STA. 6+36 TO STA 6+44 - 42' RT.  
 INSTALL 15"x28" CMP. (1 BAND)

S.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-9-55-9(43)	38	45



6+50 TO 8+00



4



10+00

 $9+50$ 

9+00



3+50

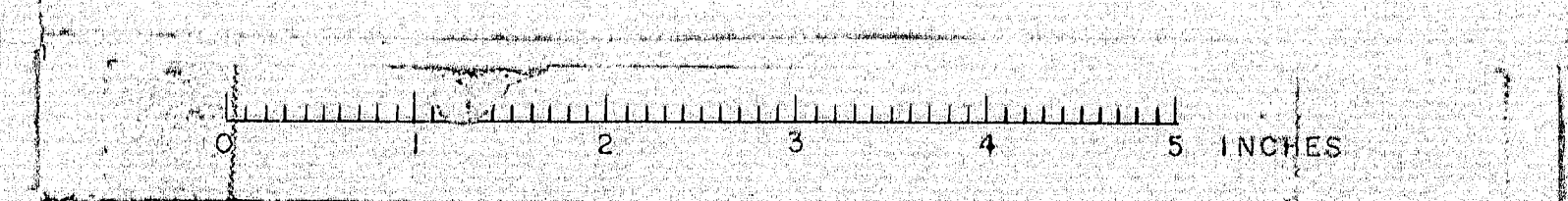
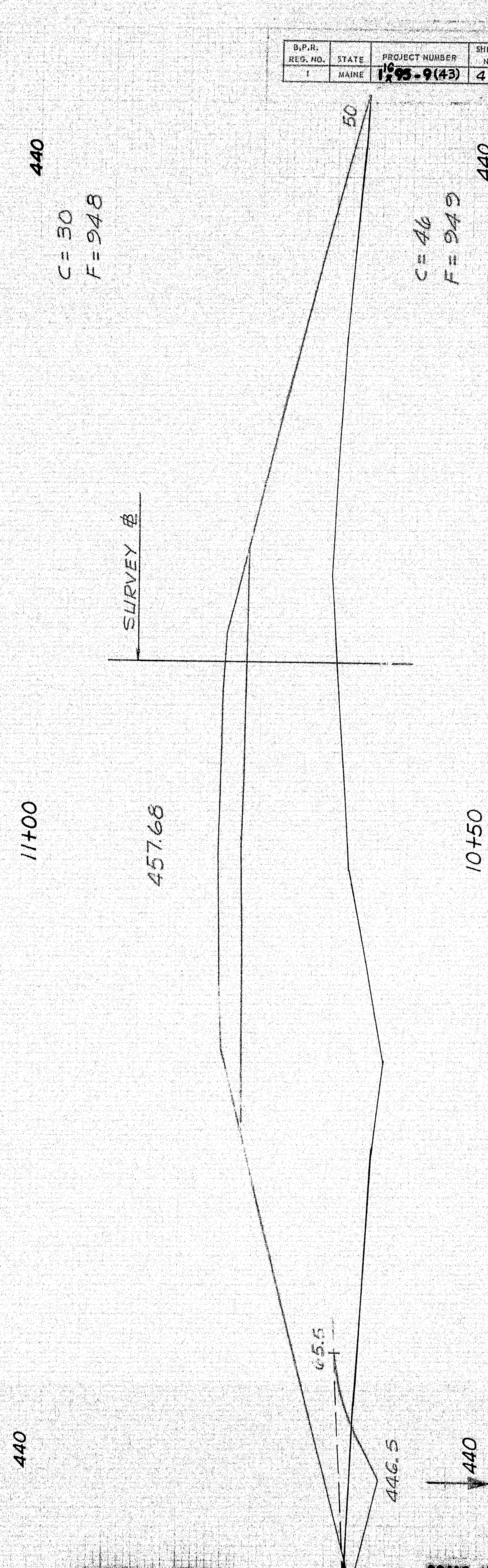
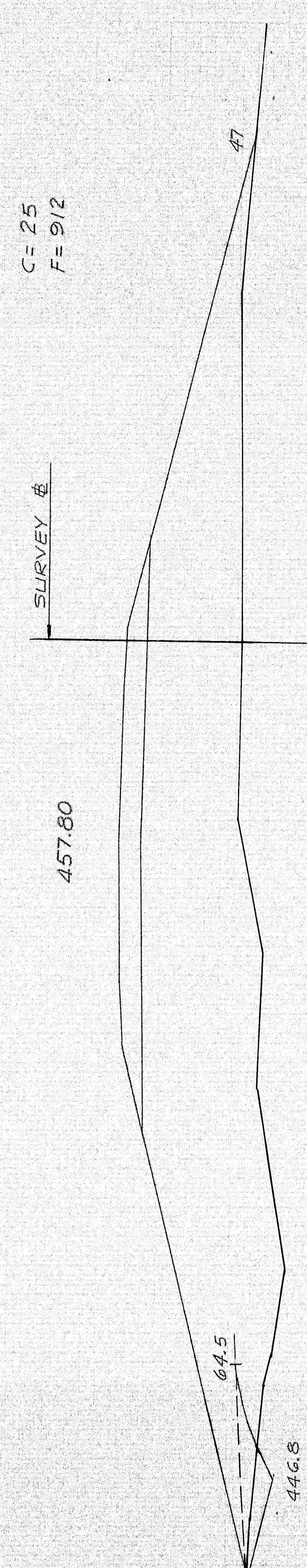
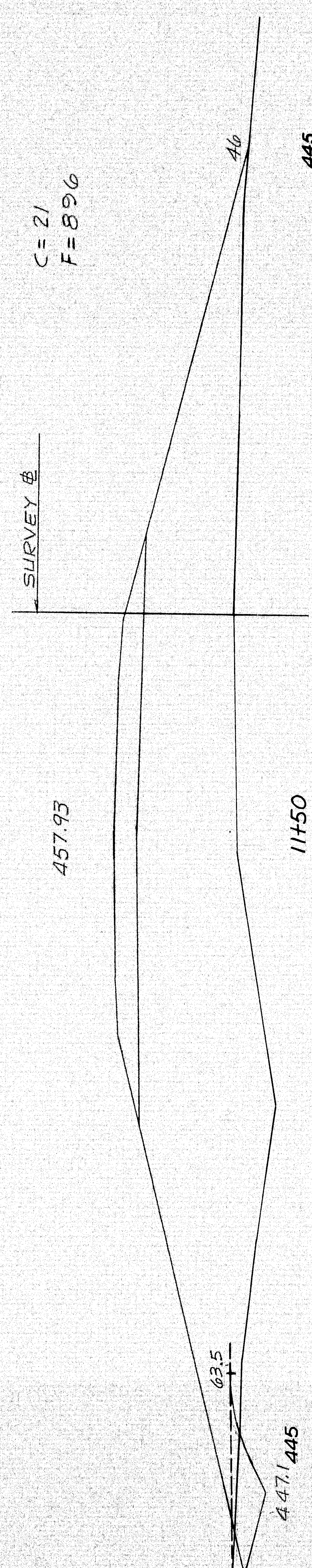
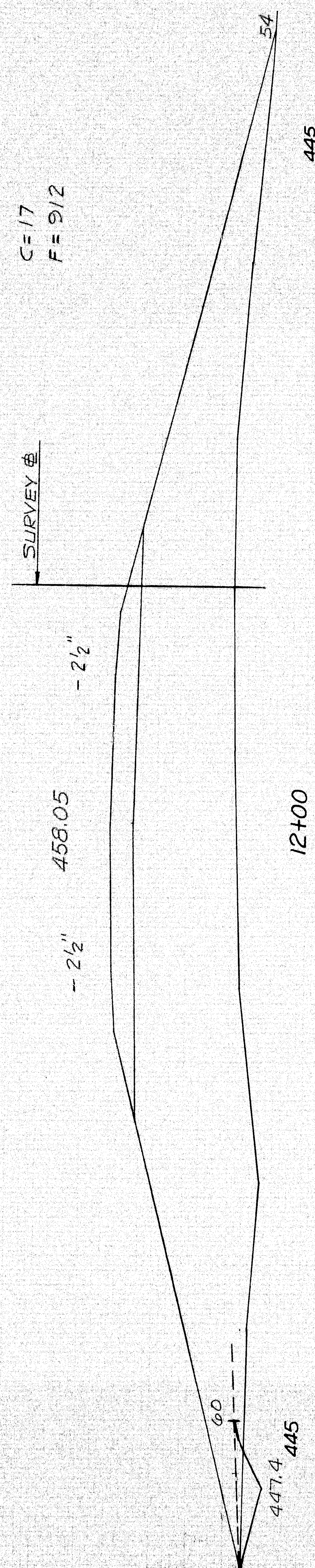
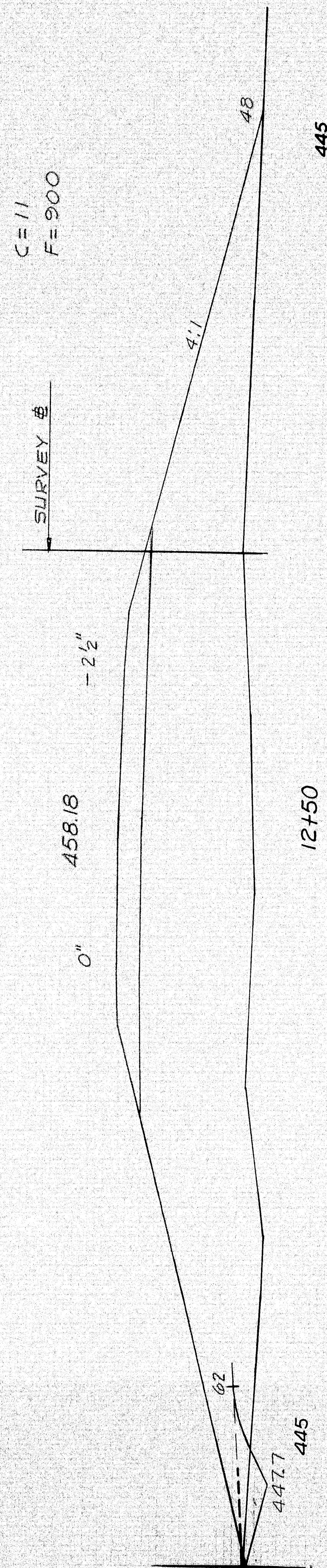
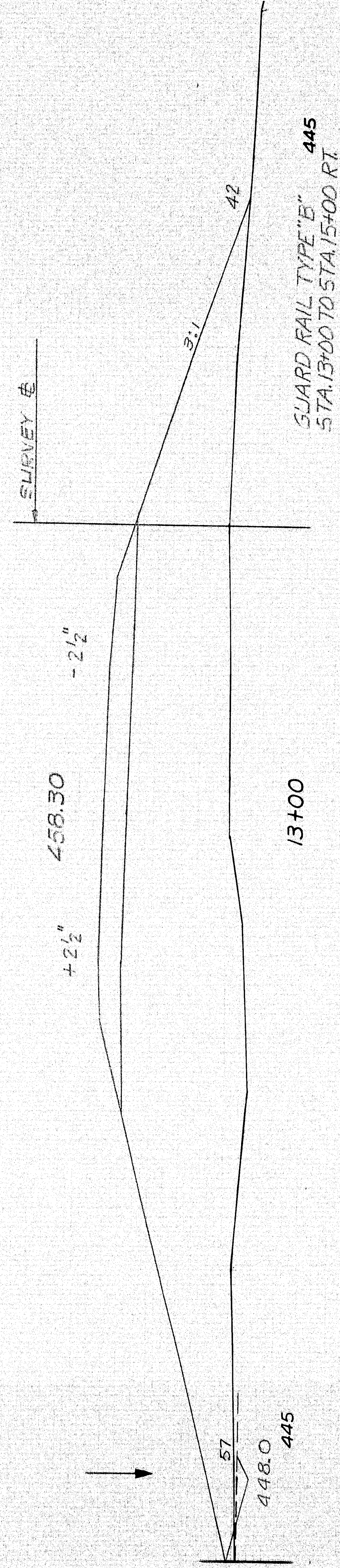
**SCALE 1" = 5'**

81.1 X-SECT STA. 8+50 10+00



S. H. S. & C. E. A.  
S. A. M. H.  
S. E. A.

4



B.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	109-9(43)	40	45

ISLAND FALLS (43) SECTION

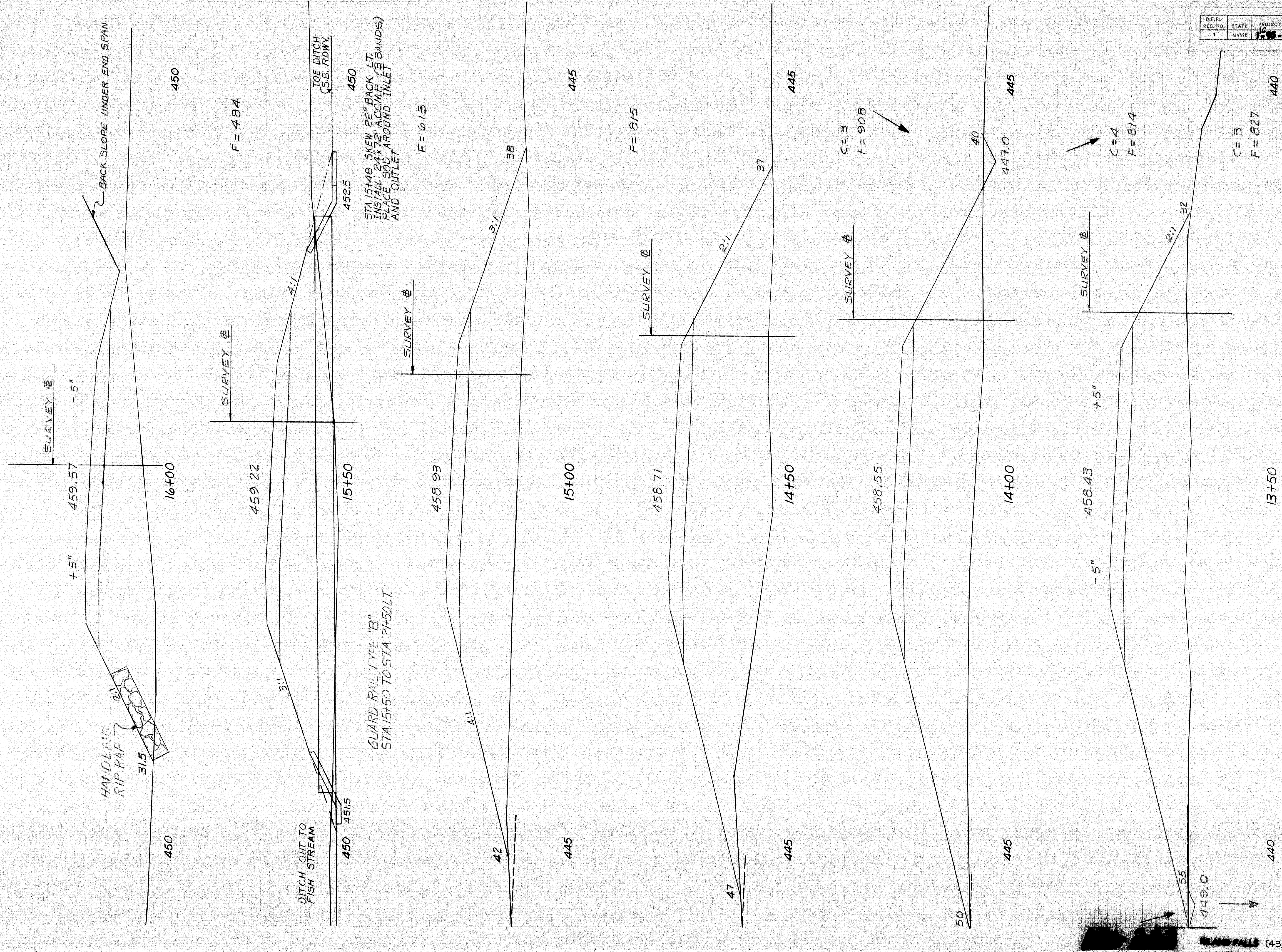
SCALE 1" = 8'

SECTION STA 10+50 TO 13+00



S.H. C. & C.E.A.  
 1-6-66  
 2-3-66  
 3-3-66  
 3-3-66

4



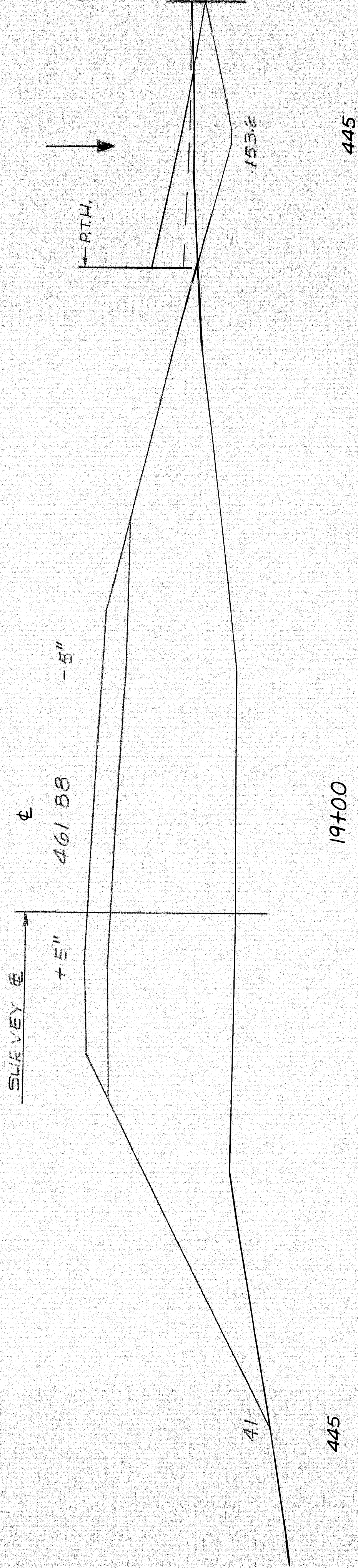
D.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	13-9(43)	41	45

SCALE 1" = 5'

81.1' x 50.0' STA. 13+50 TO 16+00



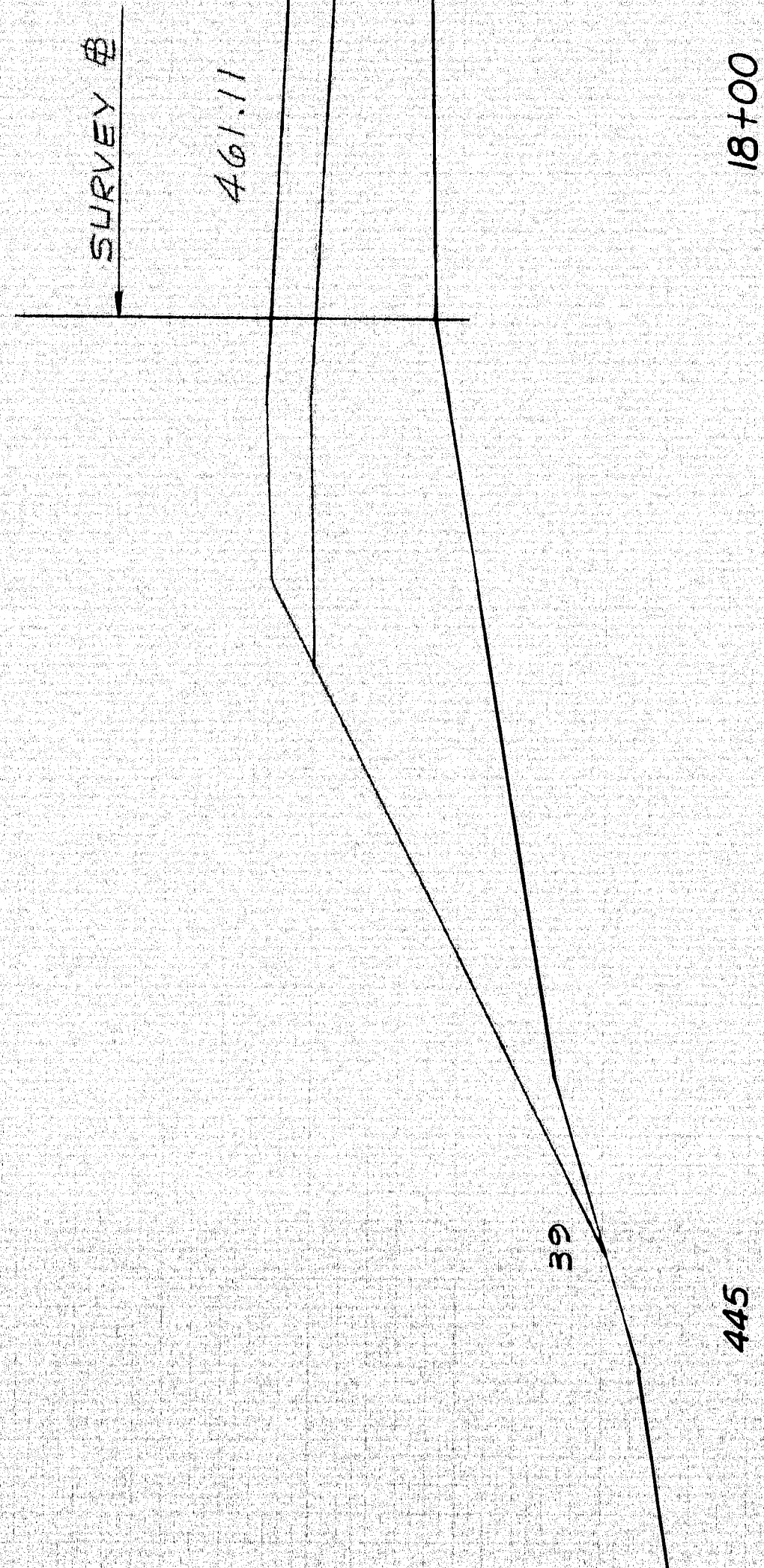
S.H.S. & C.E.A. 1:50  
S.H.S. & C.E.A. 1:50  
S.H.S. & C.E.A. 1:50



445

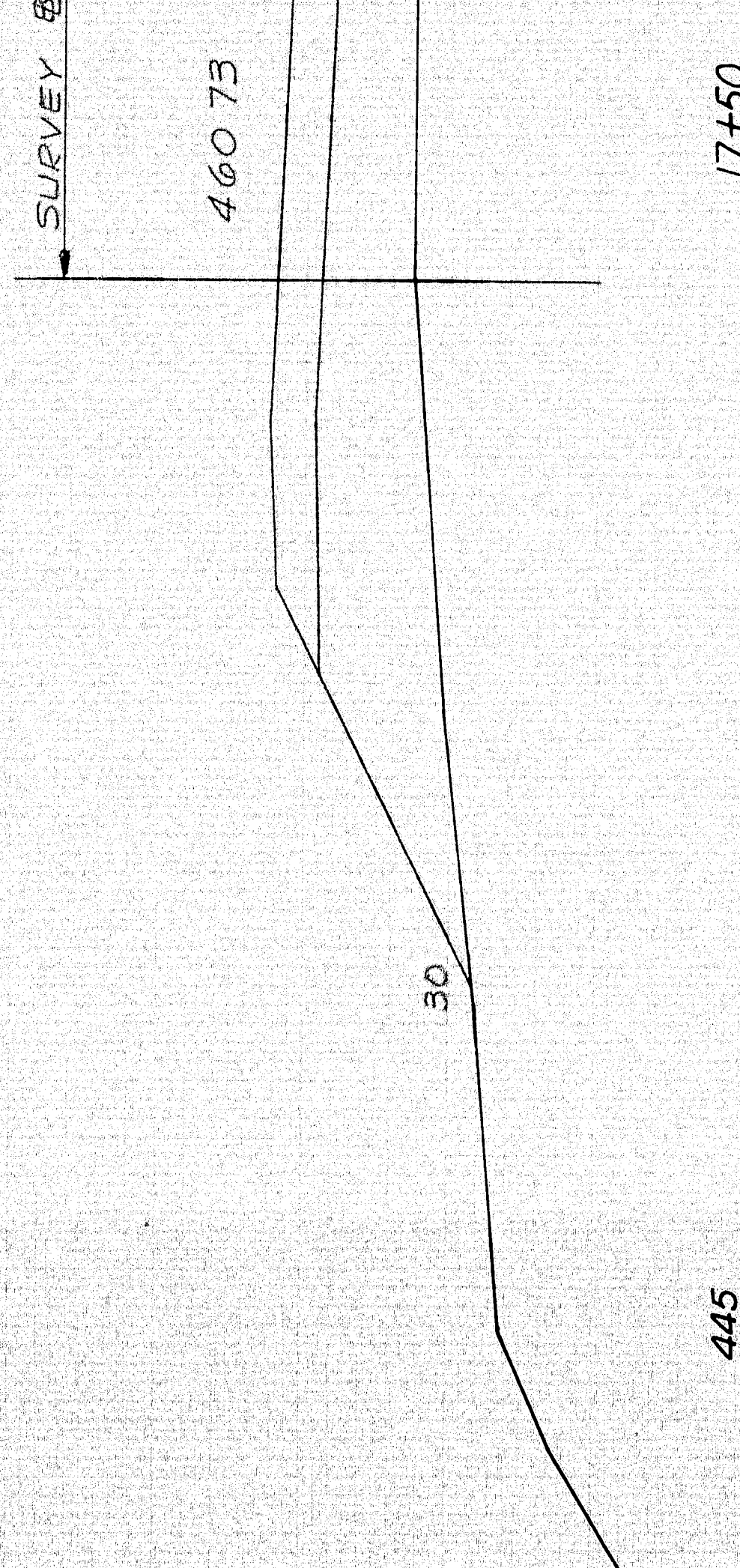
Sta. 18+50 to Sta. 19+00 - 45' RT  
Install 18" x 32" ACCUM. (2 Bands)  
Note: All ACCUM. And 2 Bands To  
Be Relaid From Sta. 5.110 Marginal  
Road. Place Sod Around Inlet And  
Outlet.

C = 36  
F = 619



445

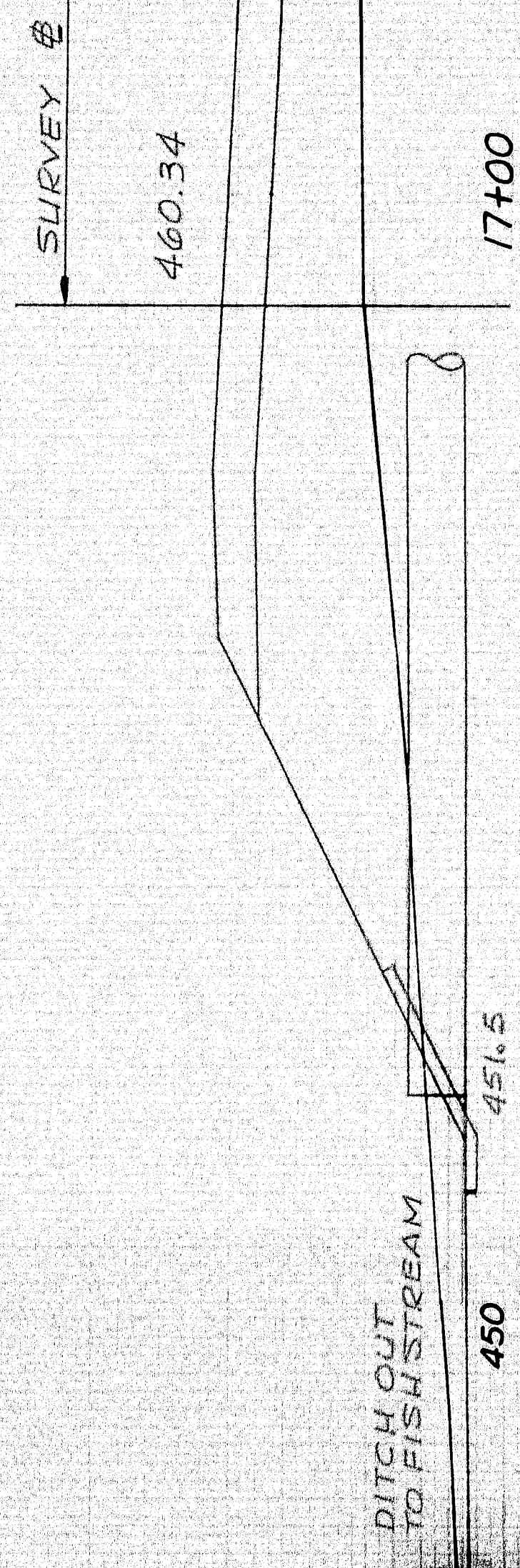
C = 34  
F = 343



445

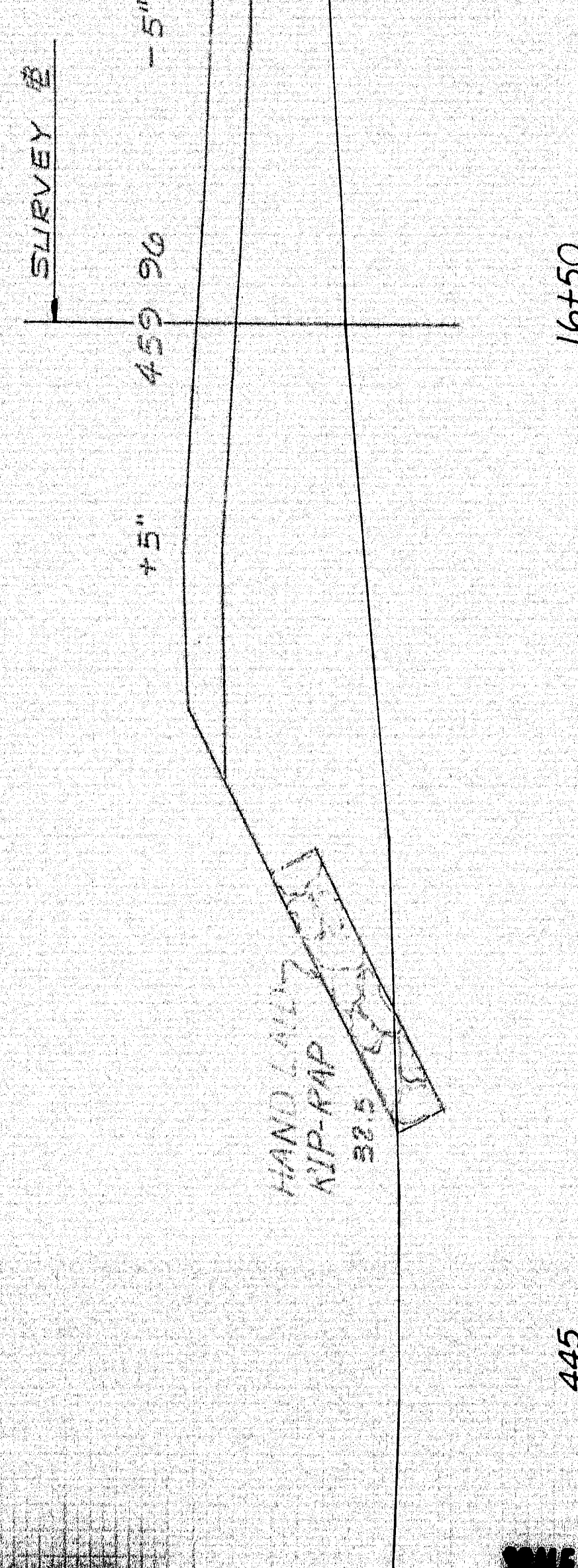
F = 315

STA. 17+12 (SKEWED 29° SK LT)  
INSTALL 24" x 80" ACCUM. (2 BANDS)  
PLACE SOD AROUND INLET & OUTLET



450

F = 375



445

F = 412

HAND Laid  
KIP-KAP  
32.5

BACKSLOPE UNDER END SPAN

ISLAND FALLS (43)

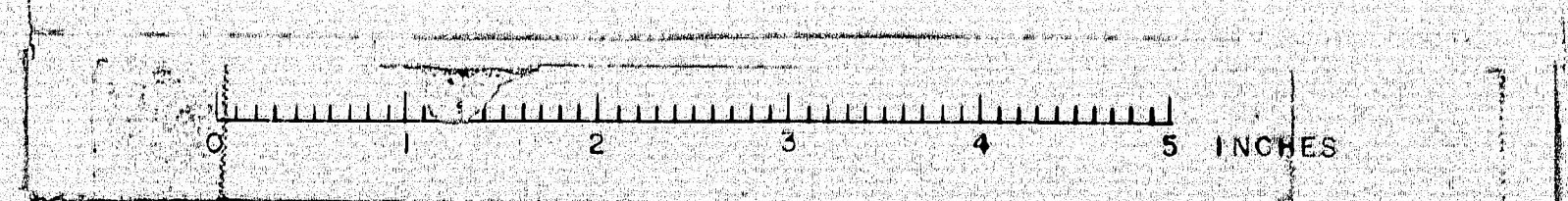
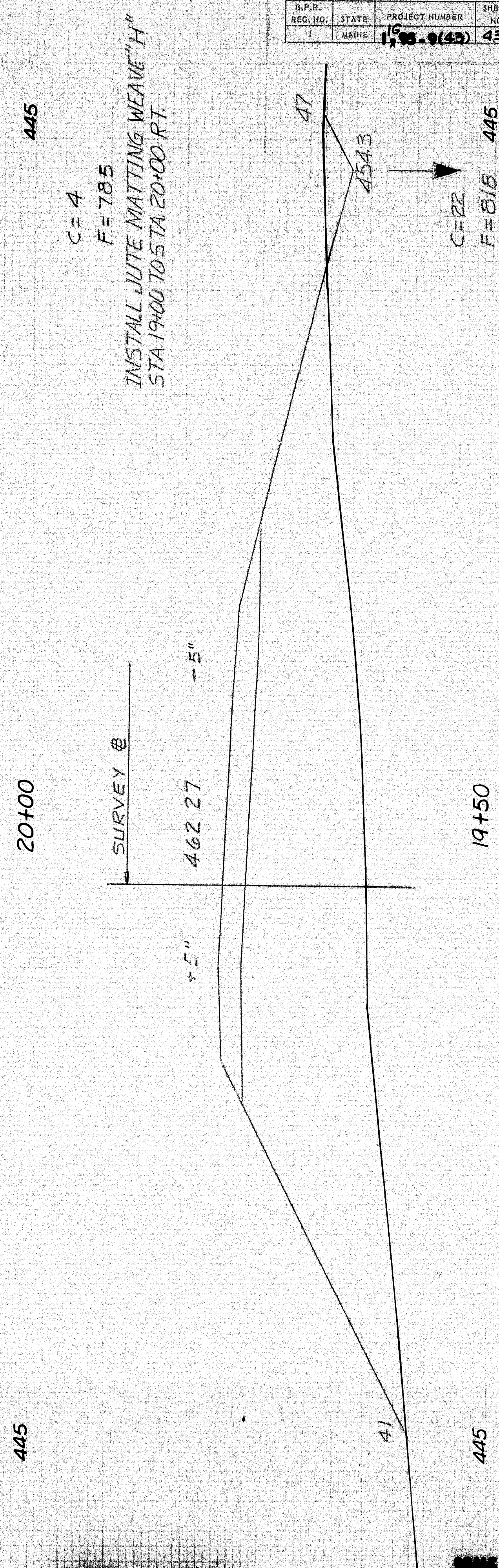
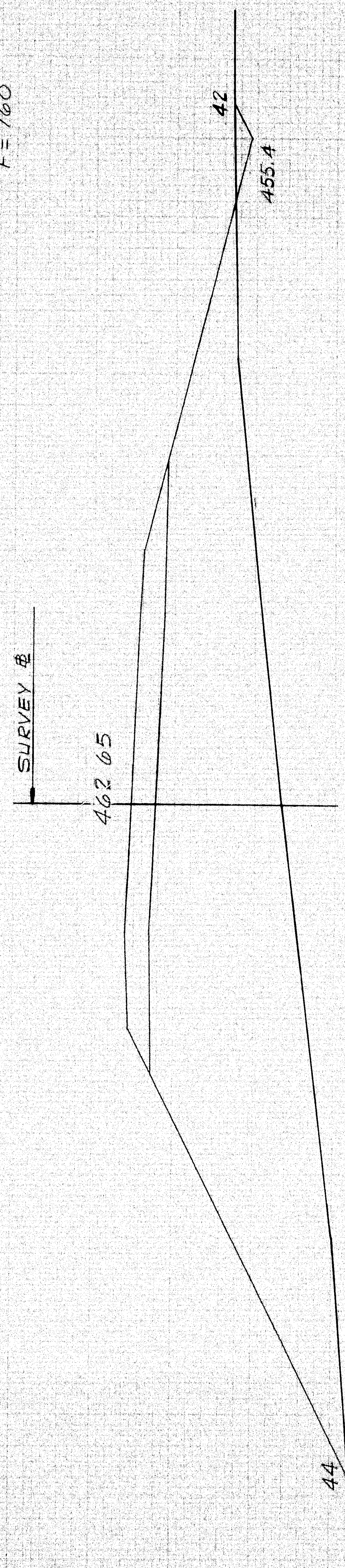
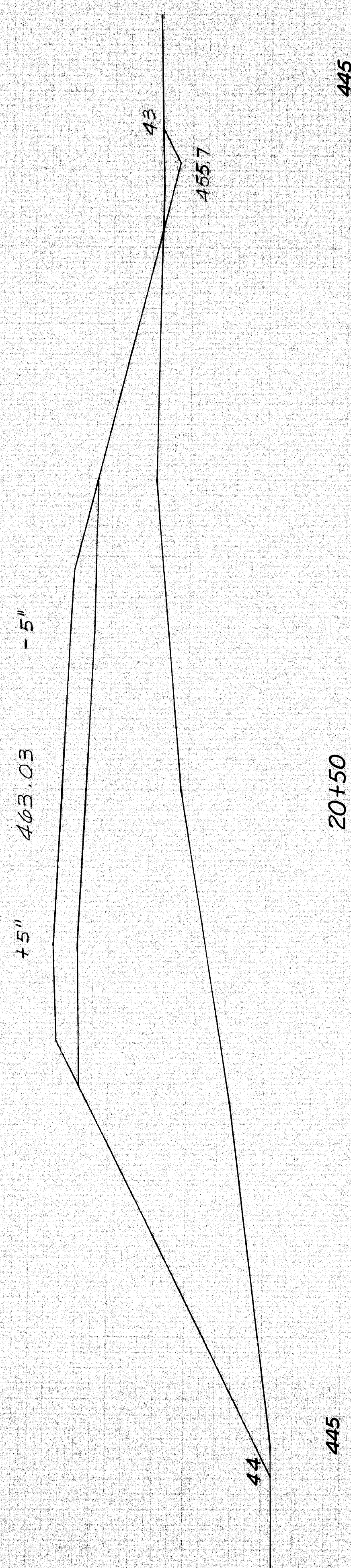
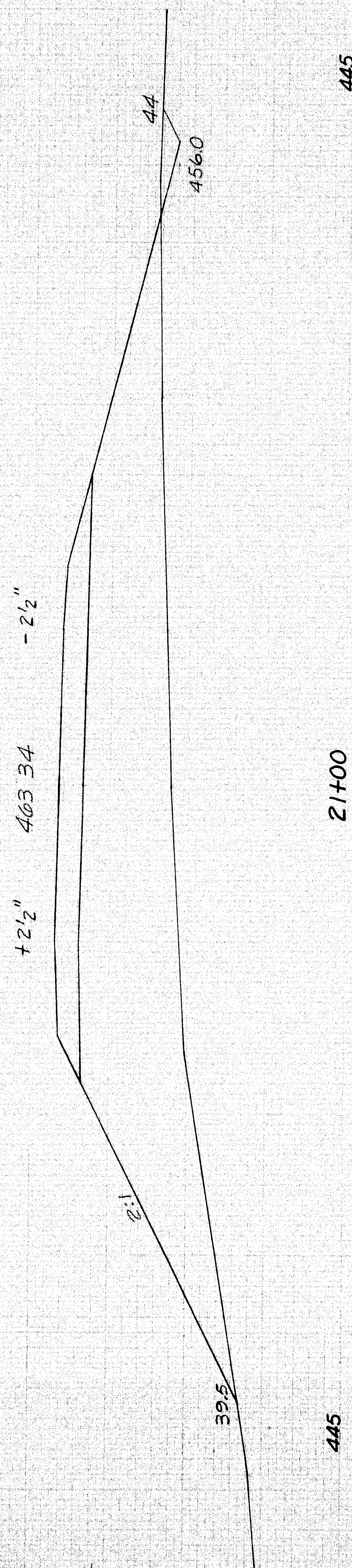
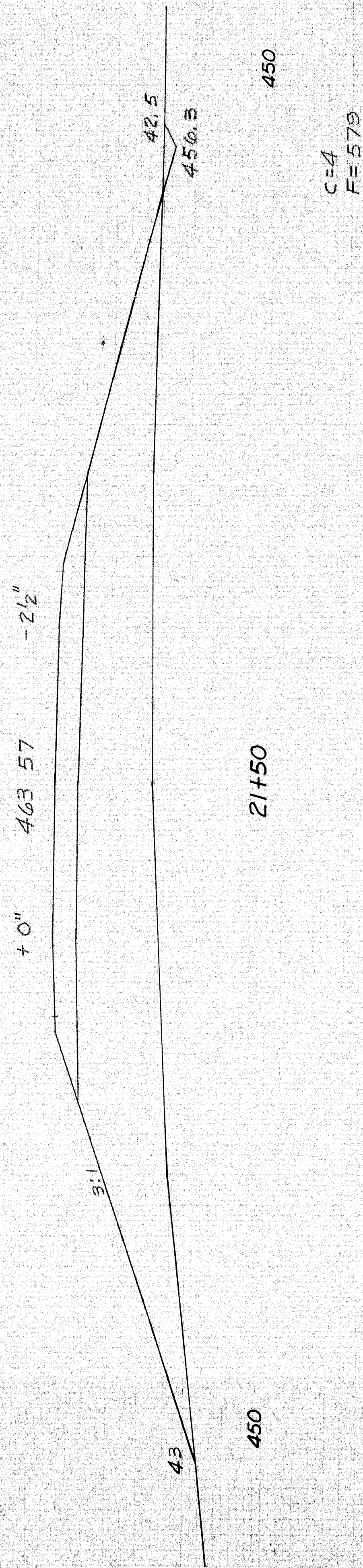
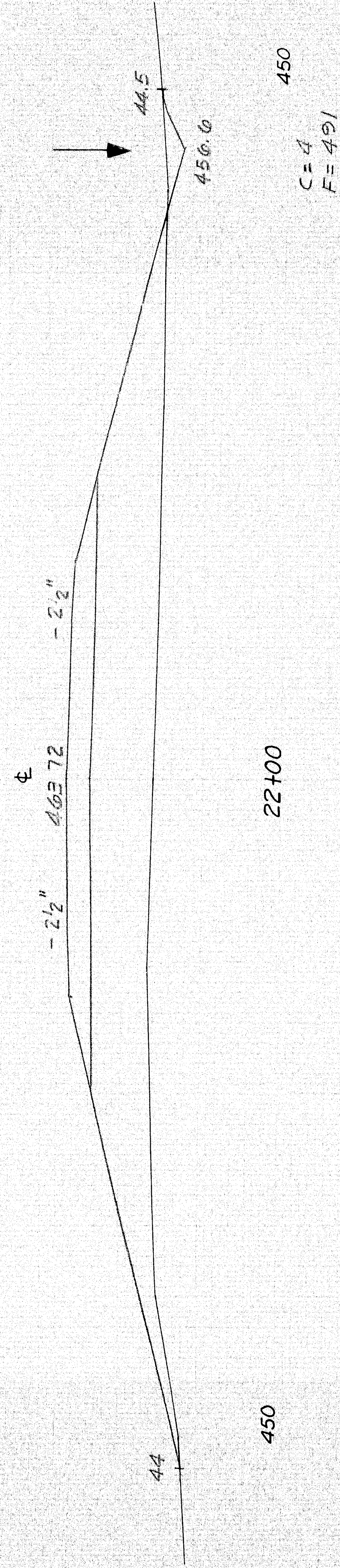
SCALE 1" = 5'

31.1 X 50.0 STA. 16+50 TO 19+00

S.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1-93-9(43)	42	45



S.H.C. & C.E.A. 1-52  
S.H.C. & C.E.A. 2-53  
S.H.C. & C.E.A. 3-53



B.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	10-3-9(43)	43	45

SA 1 x 12 x 12 19+50 TO 22+00



S.H. & S.  
S. H. & S.  
S. H. & S.  
S. H. & S.

4

463.81

LIMIT OF WORK  
STA. 26+00

26+00

455  
C = 48

463.81

34

460.8

455

25+50

463.81

455  
C = 122

NOTE:  
GRAVEL BASE VARIES FROM 18" AT STA. 25+00  
TO EXIST. DEPTH AT STA. 26+00

460.5

455

25+00

463.81

455  
C = 107  
F = 1

460.2

455

24+50

463.81

455  
C = 49  
F = 33

32

459.5

455

24+00

STA 24+02.93 & RELOC. SA-1 BK=  
STA 23+94.20 & EXIST. SA-1 AH=

463.81

455  
C = 30  
F = 227

32

460.0

450

23+50

53

459.2

450  
C = 22  
F = 498

463.81

32.5

459.7

GRUBBING IN FILL  
STA. 23+00 TO STA. 24+00

450

23+00

463.80

450  
C = 20  
F = 539

44.5

458.2

450

22+50

450  
C = 14  
F = 454

0 1 2 3 4 5 INCHES

BLAND FALLS (43) MAP

D.P.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
REG. NO.	MAINE	1098-9(43)	44	45

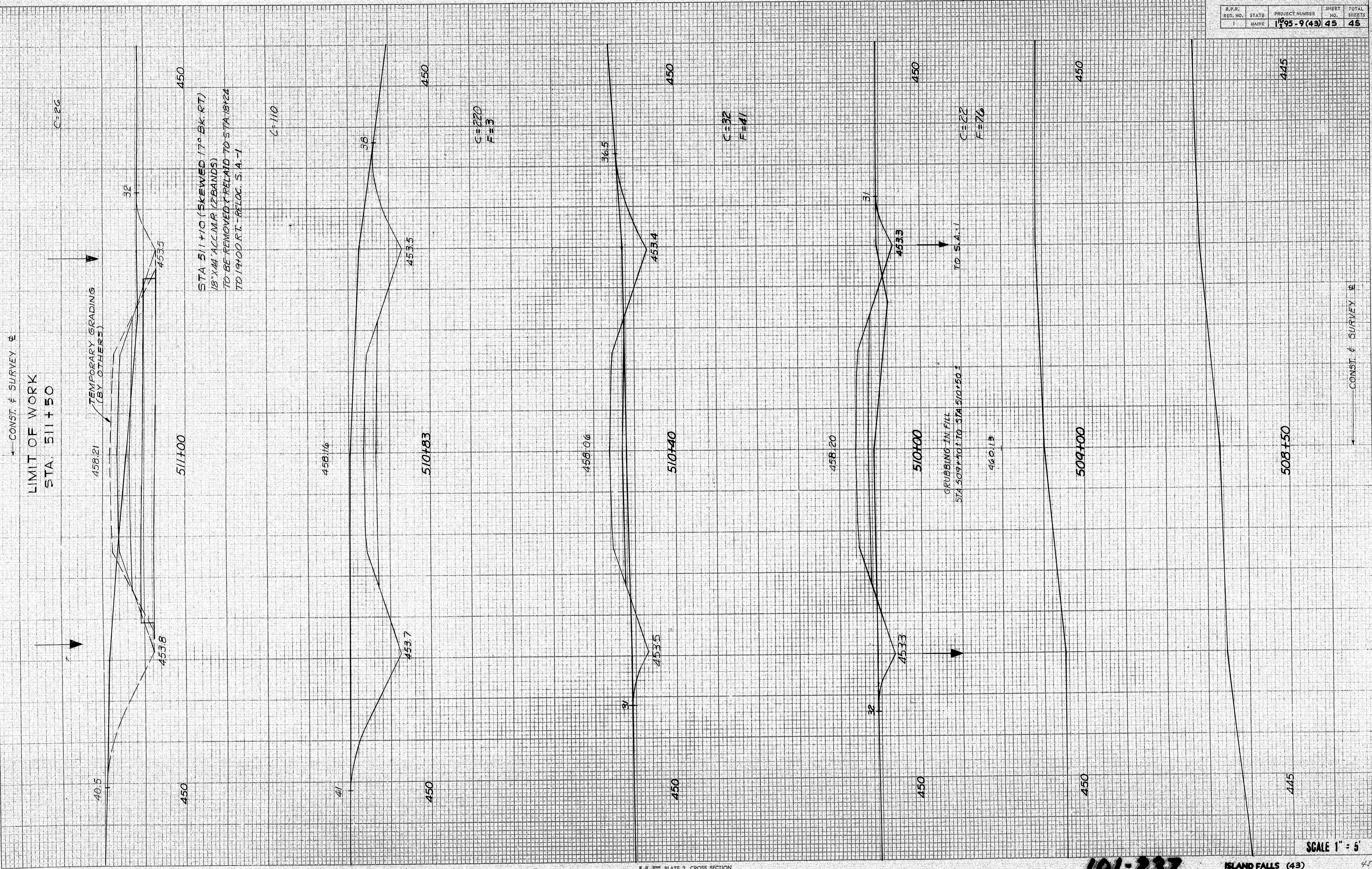
1/4" = 1' X-SECTION 22+50 TO 26+00



S.H.S. & D.D.D. 3-25  
 C.E.A. & H.A. 3-25  
 C.E.A. 3-25

ORIGINAL  
 SURVEY  
 NOTE BOOK

FINAL  
 SURVEY  
 NOTE BOOK



B.R.R.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	1005-9(43)	45	45

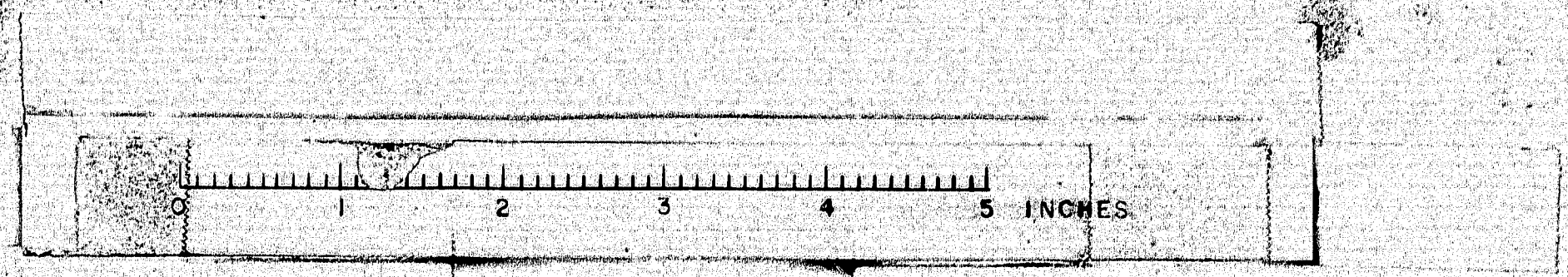
K&E PLATE 3, CROSS SECTION  
 KLUFFEL & ESSER CO.

101-237

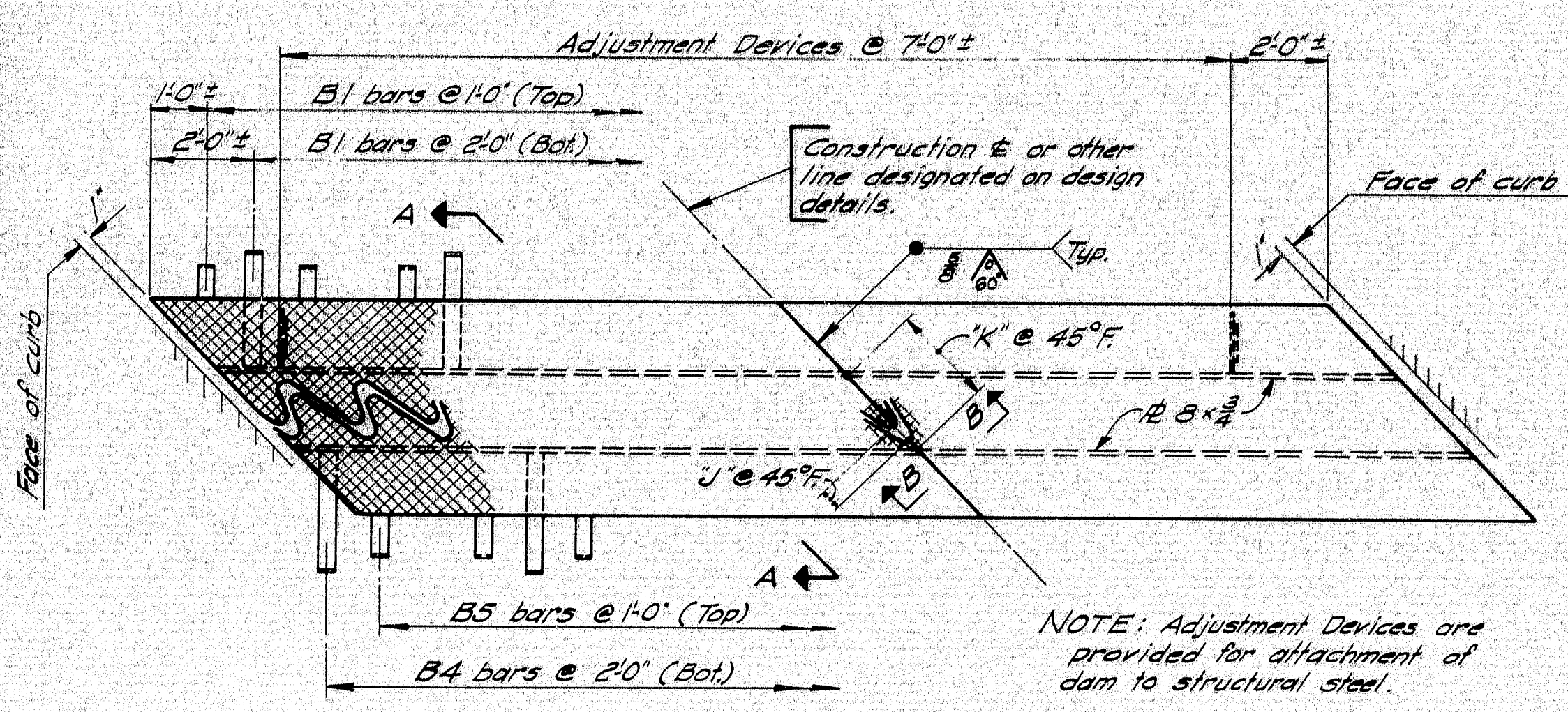
ISLAND FALLS (43)

SCALE 1" = 5'

MARGINAL RD. X-SECT. STA. 508+50 TO 511+00

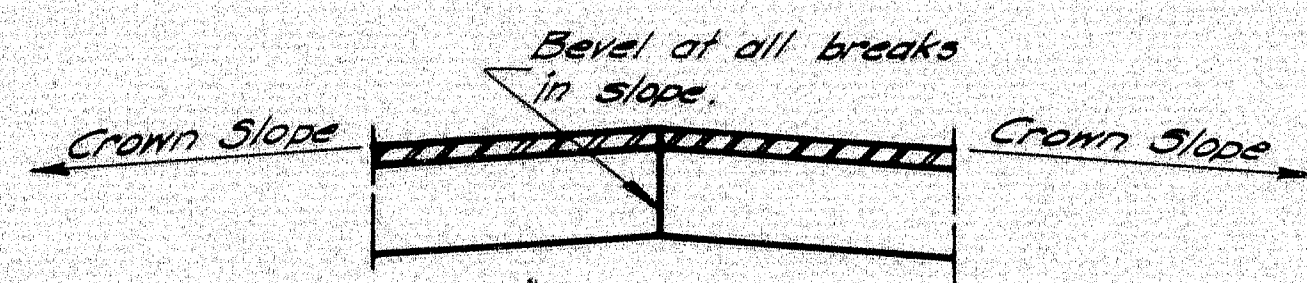






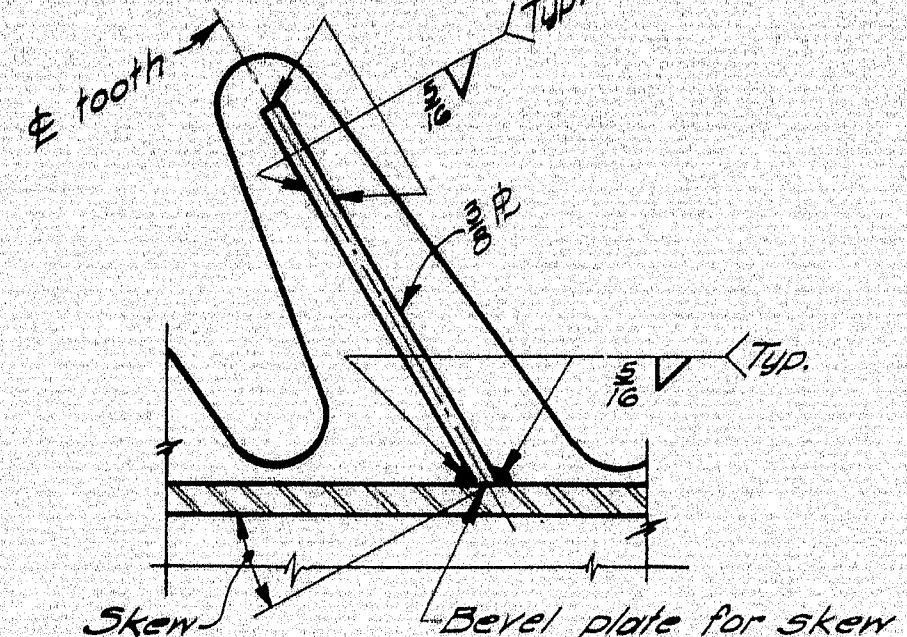
**PLAN**

Right skew indicated



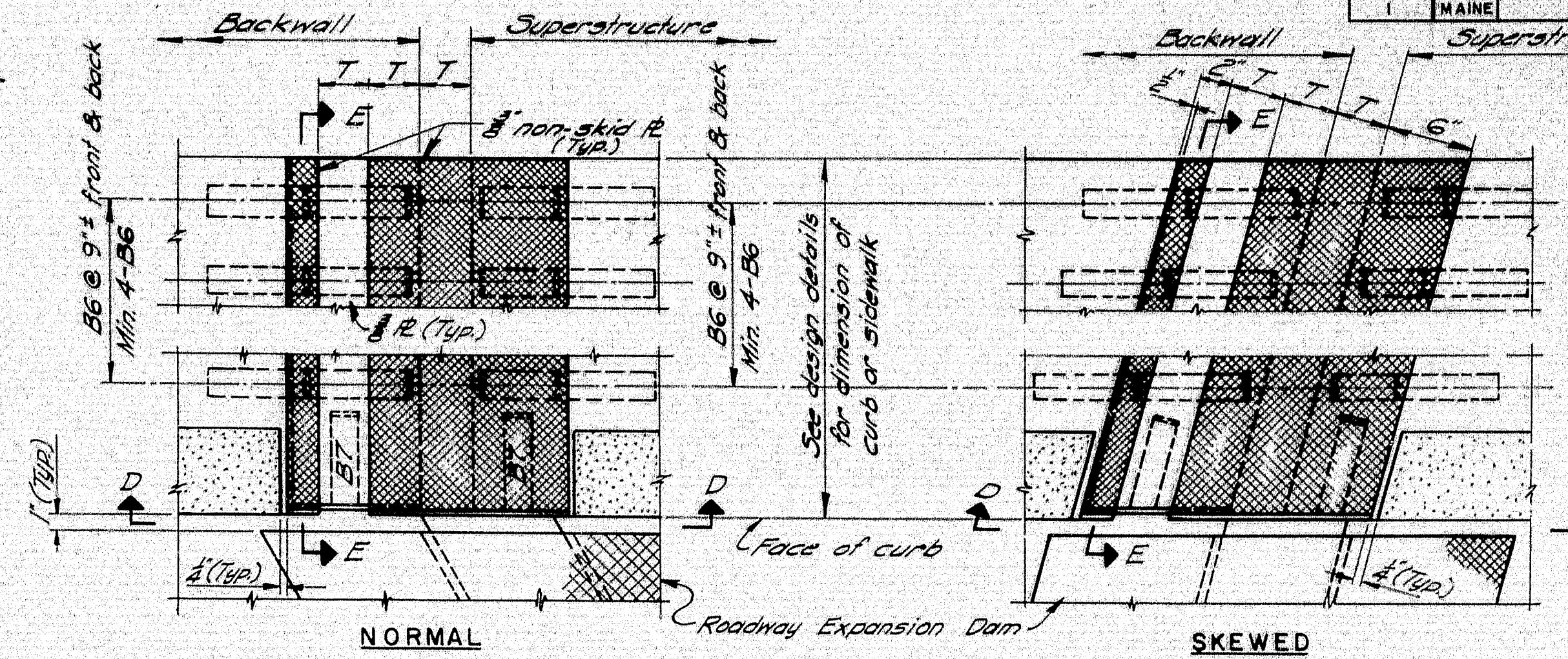
**SECTION B-B**

See design details for construction & to curb dimensions, skew, crown slope, slab thickness, other dimensions & angles that are necessary to complete fabrication details and location of Roadway Expansion Dam.

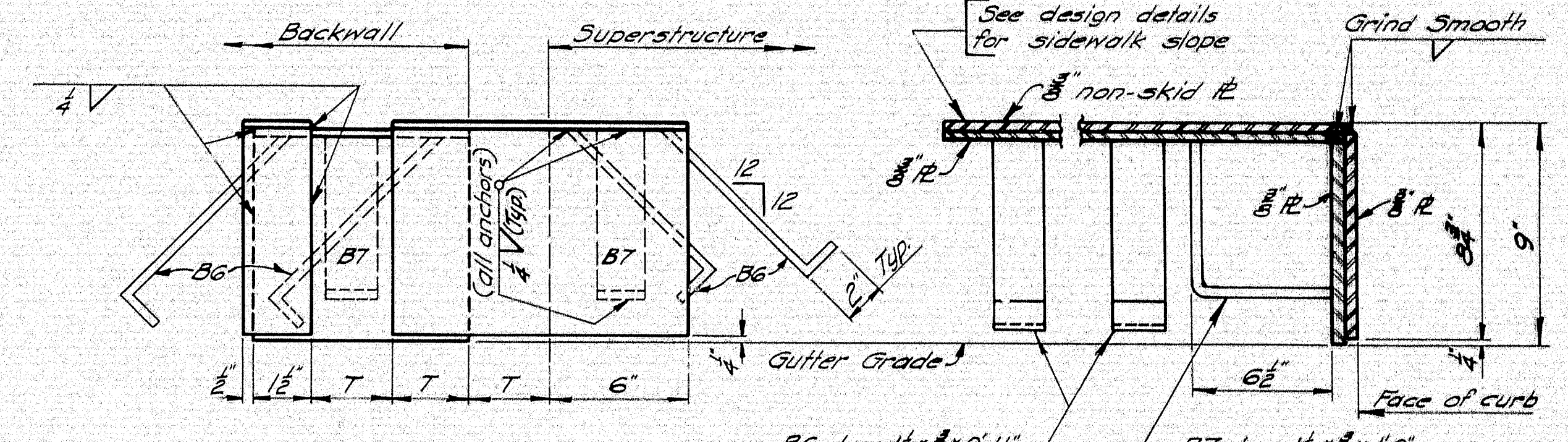


**SECTION C-C**

Skew ~ 0° to 30°-0'



**PLAN**

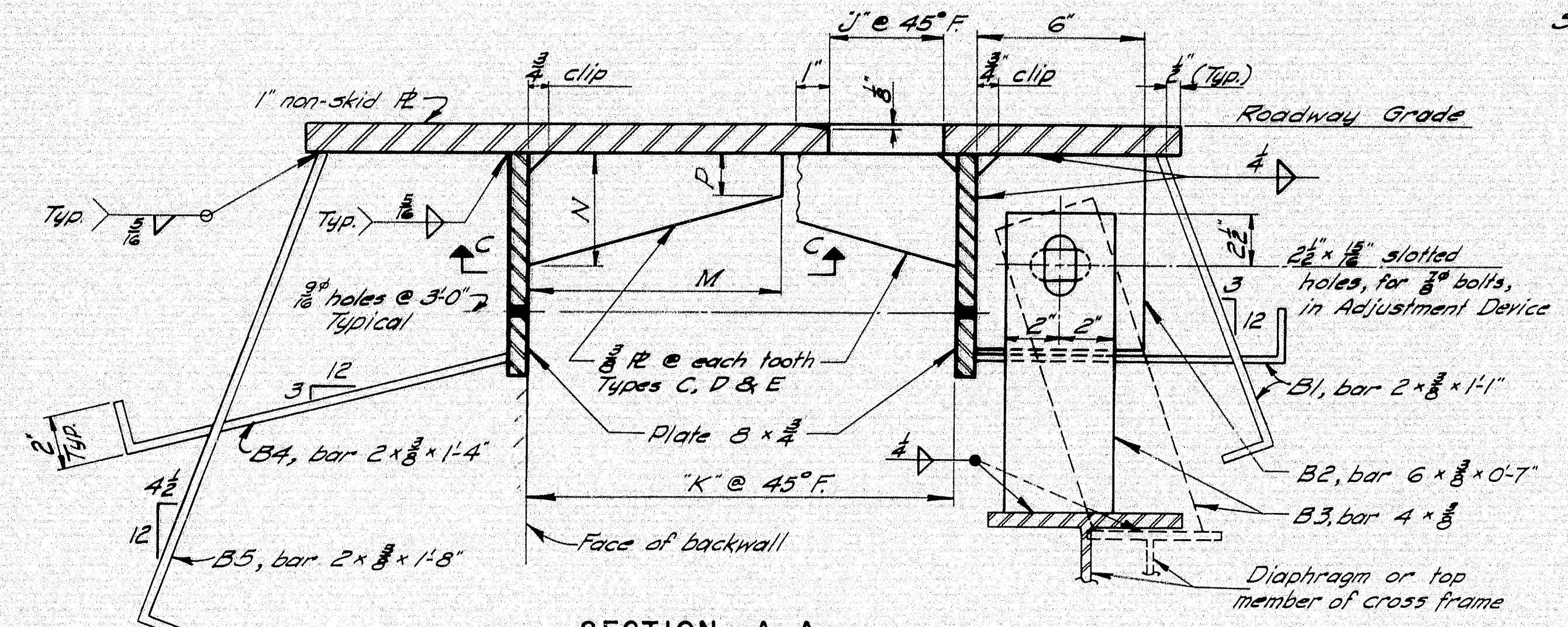


**VIEW D-D**

**SECTION E-E**

TYPE	V	W	X	Y	Z
Exp. Length	100'-280'	280'-440'	440'-600'	600'-760'	760'-920'
T	3"	4"	5"	6"	7"

**CURB AND SIDEWALK EXPANSION DAM - DETAILS**

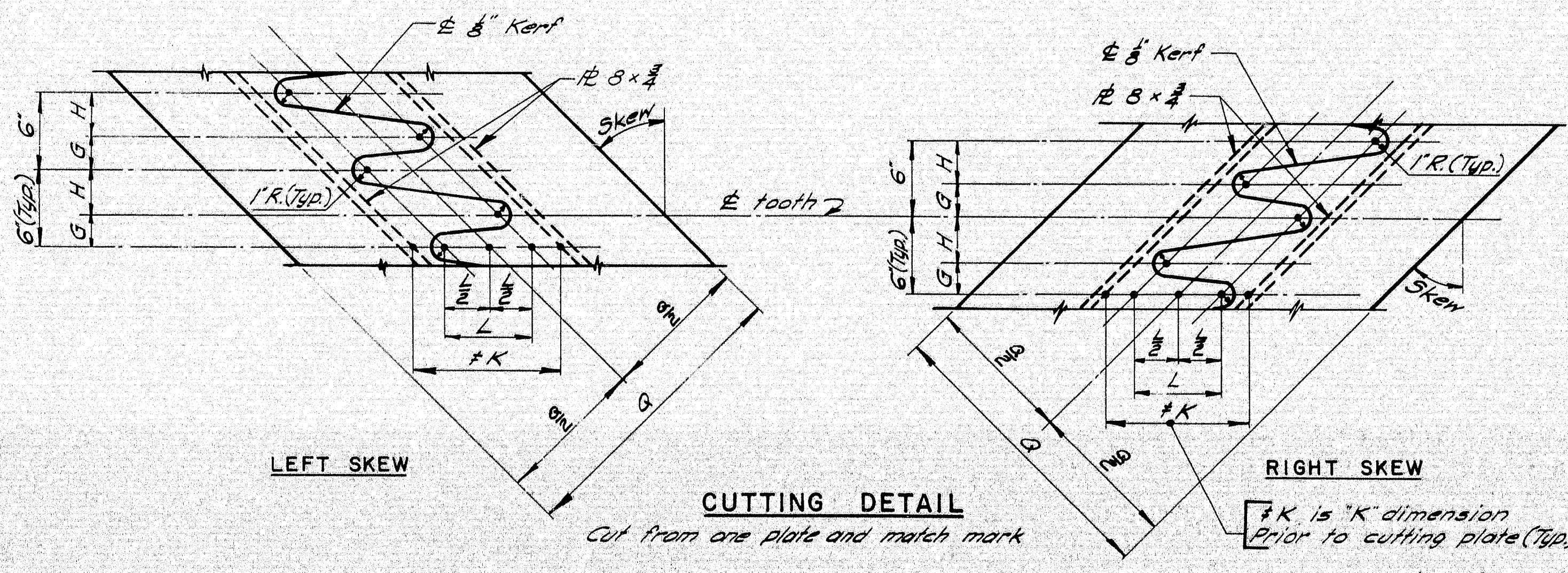


**SECTION A-A**

Bar B5 may be vertical or inclined as indicated, depending on design conditions. After Adjustment Device is in final position weld bars B2 to B3 with 1/4" fillet weld.

**SECTION C-C**

Skew over 30°



**ROADWAY EXPANSION DAM - DETAILS**

TABLE OF DIMENSIONS												
Type	Exp. Length	Skew	# K	L	G	H	K @ 45°	M @ 45°	M	N	P	Q
A	100'-280'	0°-5° incl.	7"	4"	3"	3"	9"	28"	—	—	—	21"
		5°-10°	7 1/2"	4 1/2"	2 1/2"	3 1/2"	9 1/2"	28"	—	—	—	22"
		10°-20°	8"	4 1/2"	2 1/2"	3 1/2"	10"	28"	—	—	—	22"
		20°-30°	8 1/2"	5"	2 1/2"	3 1/2"	10 1/2"	28"	—	—	—	23"
		30°-40°	9"	5 1/2"	2 1/2"	3 1/2"	11"	28"	—	—	—	23"
		40°-50° incl.	11 1/2"	6 1/2"	2 1/2"	3 1/2"	13 1/2"	28"	—	—	—	23"
B	280'-440'	0°-5° incl.	9"	6"	3"	3"	12"	38"	—	—	—	23"
		5°-10°	9 1/2"	6 1/2"	2 1/2"	3 1/2"	12 1/2"	38"	—	—	—	24"
		10°-20°	10"	6 1/2"	2 1/2"	3 1/2"	13"	38"	—	—	—	24"
		20°-30°	10 1/2"	7 1/2"	2 1/2"	3 1/2"	13 1/2"	38"	—	—	—	25"
		30°-40°	12"	8"	2 1/2"	3 1/2"	15"	38"	—	—	—	25"
		40°-50° incl.	13 1/2"	8 1/2"	2 1/2"	3 1/2"	16"	38"	—	—	—	25"
C	440'-600'	0°-10° incl.	11 1/2"	8 1/2"	3"	3"	15 1/2"	48"	9"	4"	1 1/2"	26"
		10°-20°	12"	8 1/2"	2 1/2"	3 1/2"	16"	48"	10"	4"	1 1/2"	26"
		20°-30°	12 1/2"	9"	2 1/2"	3 1/2"	16 1/2"	48"	11"	4"	1 1/2"	26"
		30°-40°	14"	10"	2 1/2"	3 1/2"	18"	48"	11"	4"	1 1/2"	26"
		40°-50° incl.	15 1/2"	10 1/2"	2 1/2"	3 1/2"	19"	48"	12"	4"	1 1/2"	26"
		0°-10° incl.	13 1/2"	10 1/2"	3"	3"	18 1/2"	58"	11"	5"	2"	30"
D	600'-760'	10°-20°	14"	10 1/2"	2 1/2"	3 1/2"	19"	58"	12"	5"	2"	30"
		20°-30°	14 1/2"	11 1/2"	2 1/2"	3 1/2"	19 1/2"	58"	13"	5"	2"	30"
		30°-40°	16"	12"	2 1/2"	3 1/2"	21"	58"	13"	5"	2"	30"
		40°-50° incl.	17 1/2"	13"	2 1/2"	3 1/2"	22"	58"	15"	5"	2"	30"
		0°-10° incl.	15 1/2"	12 1/2"	3"	3"	21 1/2"	68"	13"	6"	2 1/2"	36"
		10°-20°	16"	12 1/2"	2 1/2"	3 1/2"	22"	68"	14"	6"	2 1/2"	36"
E	760'-920'	20°-30°	16 1/2"	13 1/2"	2 1/2"	3 1/2"	22 1/2"	68"	15"	6"	2 1/2"	36"
		30°-40°	18"	14"	2 1/2"	3 1/2"	24"	68"	15"	6"	2 1/2"	36"
		40°-50° incl.	19 1/2"	15"	2 1/2"	3 1/2"	25 1/2"	68"	17"	6"	2 1/2"	36"
		0°-10° incl.	15 1/2"	12 1/2"	3"	3"	21 1/2"	68"	13"	6"	2 1/2"	36"
		10°-20°	16"	12 1/2"	2 1/2"	3 1/2"	22"	68"	14"	6"	2 1/2"	36"
		20°-30°	16 1/2"	13 1/2"	2 1/2"	3 1/2"	22 1/2"	68"	15"	6"	2 1/2"	36"

**GENERAL NOTES**

Expansion Dams to be paid for as Structural Steel.  
If there is conflict between this Standard Detail and the design details, the requirements of the design details shall be followed.  
Steel Classification: A.S.T.M. A36

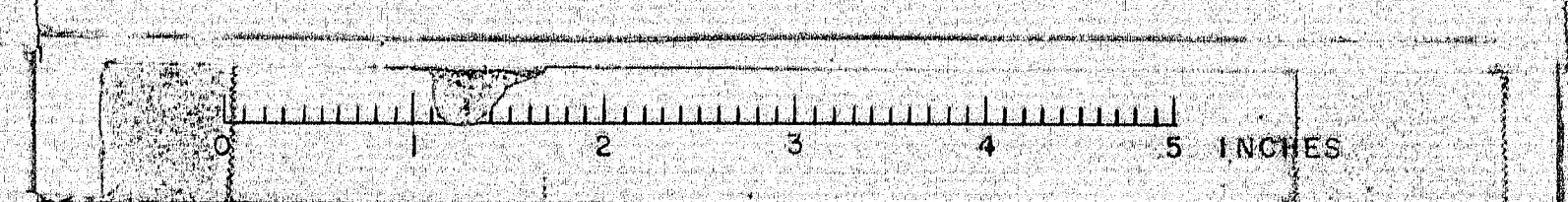
MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

**STANDARD DETAILS**  
(BD 105 - 64)

**EXPANSION DAMS**

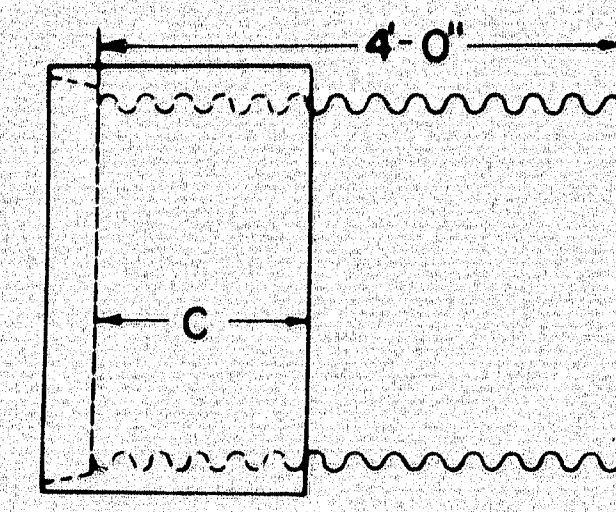
APRIL 1964

101-238 / ISLAND FALLS (43)





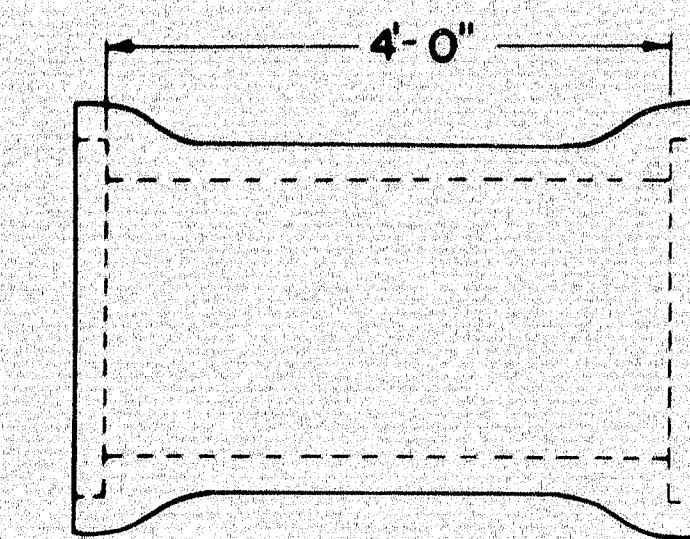
# PIPE CONNECTIONS



**GROOVE END COMBINATION**  
For 24" to 72" inclusive, diameter connection  
between concrete and metal pipe

"C" = 17" min. for sizes 30" to 48" incl.  
"C" = 23" min. for sizes over 48"

Asphalt coated corrugated metal pipe  
shall conform to the latest  
standard specifications

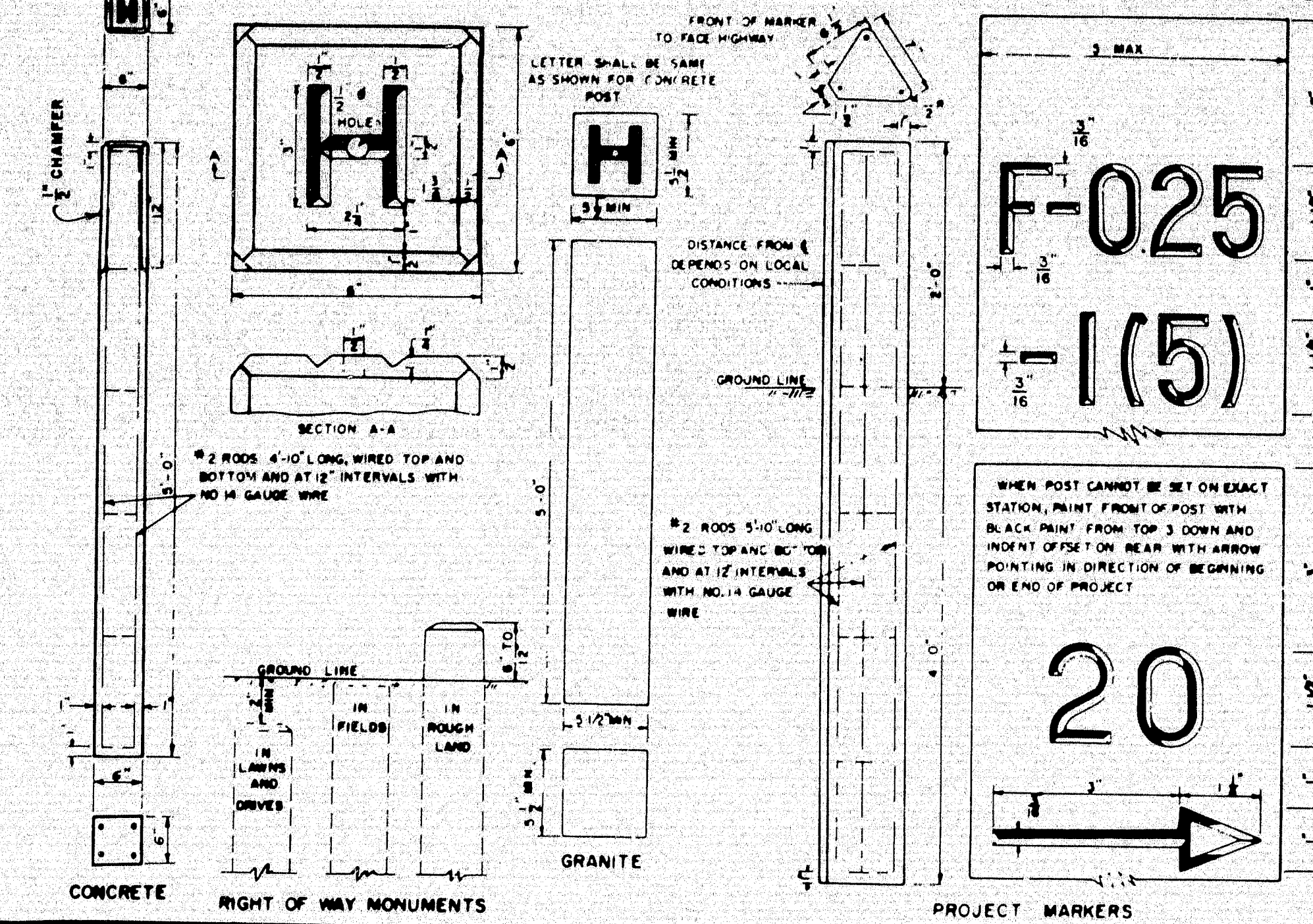


**REINFORCED CONCRETE PIPE CONNECTOR  
DOUBLE BELL**

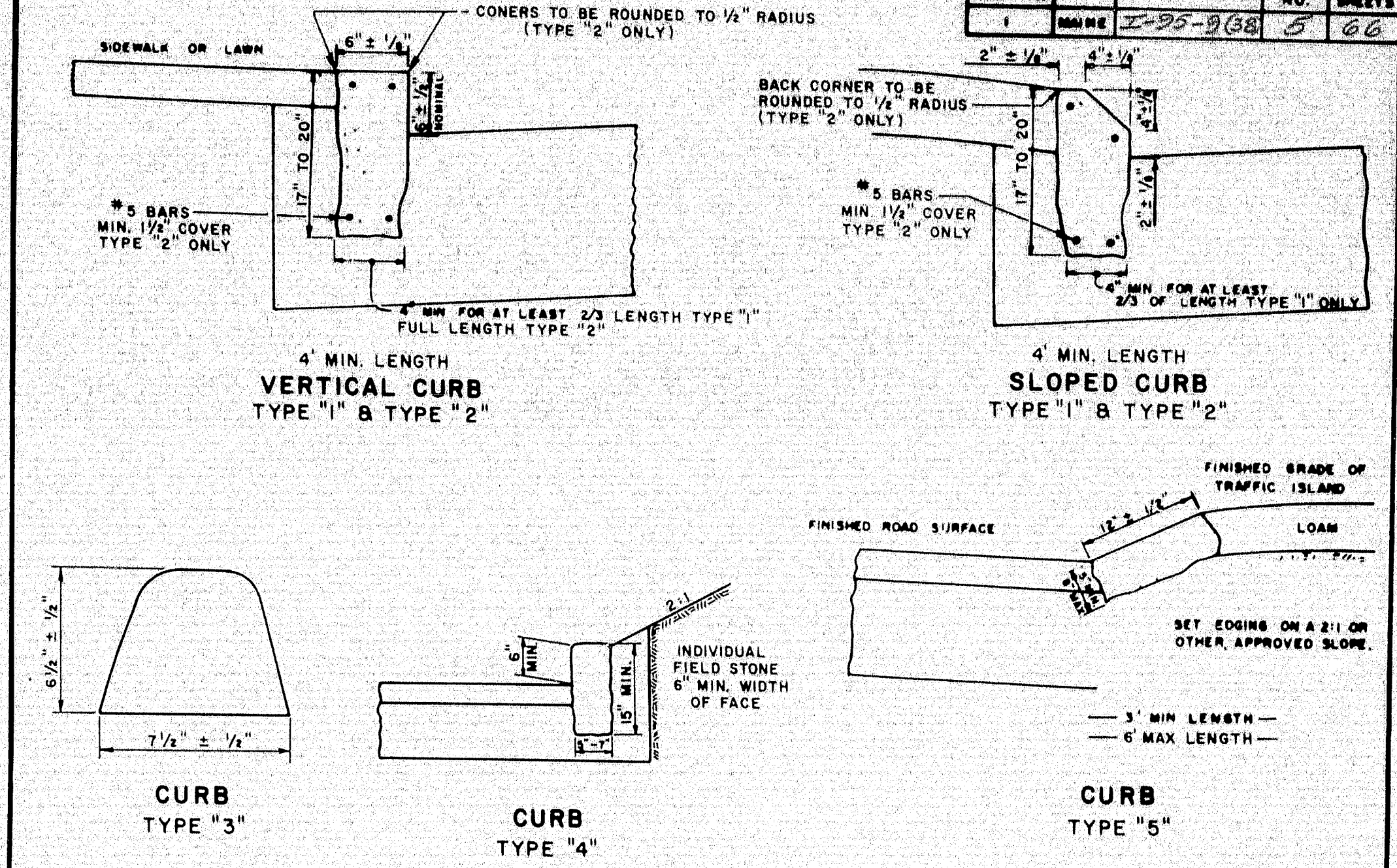
For 12" to 18" inclusive, diameter connection  
between concrete and metal pipe

Reinforced concrete pipe shall  
conform to the latest standard  
specifications

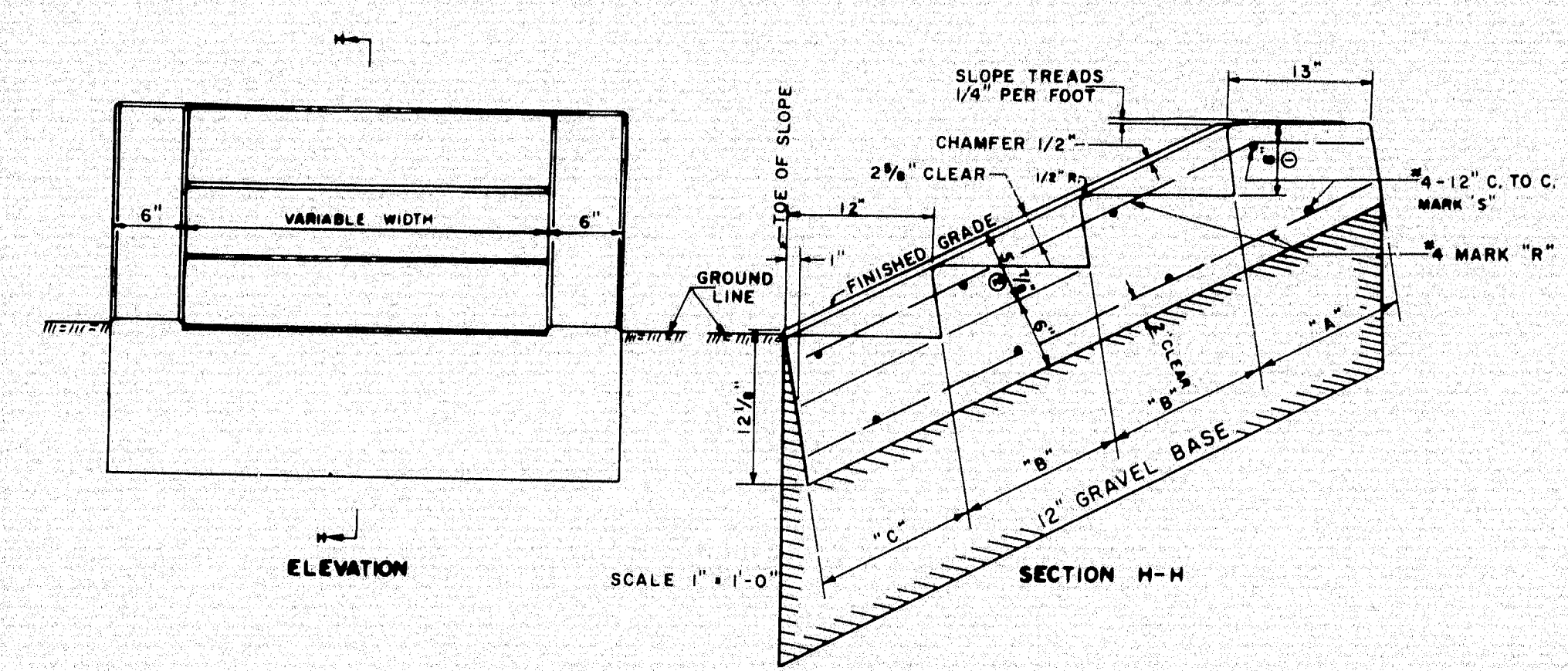
# RIGHT OF WAY MONUMENTS & PROJECT MARKERS



# CURB



# CONCRETE STEPS



CONCRETE CLASS "A"			
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL	
"A" HEADER	.030 CU. YDS.	.015 CU. YDS.	
"B" EA INTER ST.	.030 CU. YDS.	.020 CU. YDS.	
"C" FOOTER	.030 CU. YDS.	.020 CU. YDS.	

## PAY ITEMS

ITEM NO.	DESCRIPTION
204-10	Struct. earth excav. - drain.
204-11	Struct. rocks excav. - drain.
302-14	Gravel for foundations
705-13	Reinforcing steel, delivered
705-14	Reinforcing steel, placed
904-11	Reinforced concrete steps

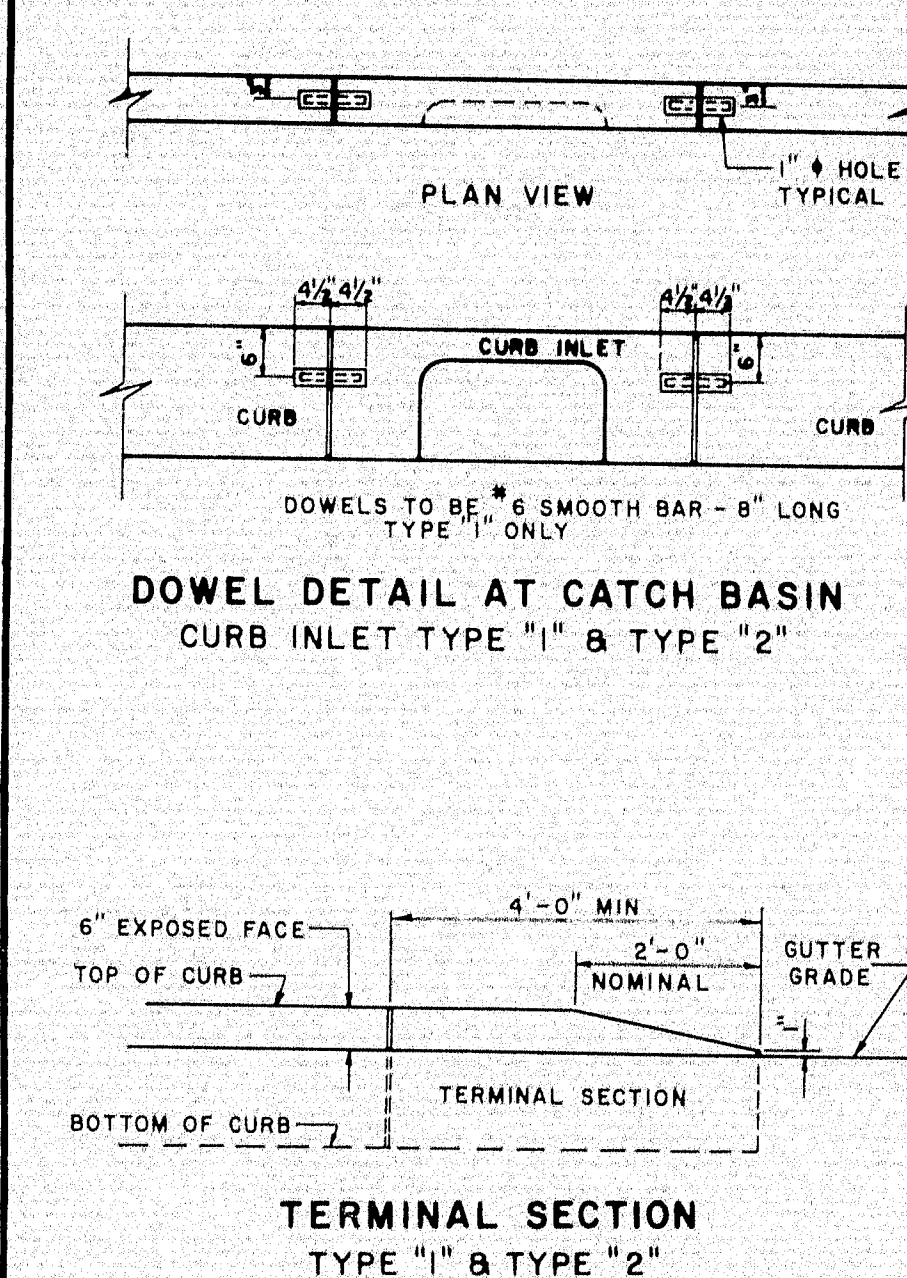
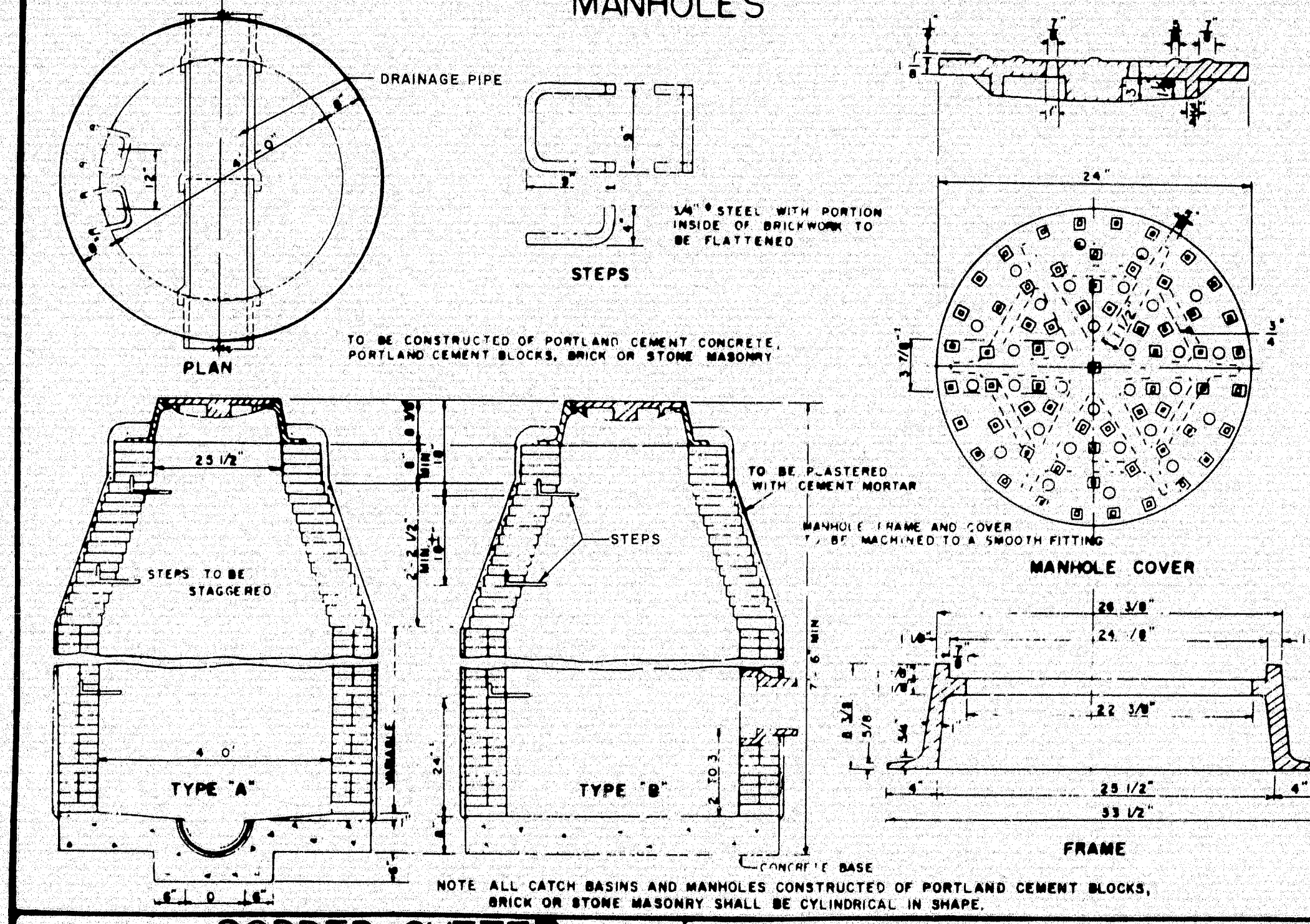
CONCRETE CLASS "A"			
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL	
"A" HEADER	.035 CU. YDS.	.018 CU. YDS.	
"B" EA INTER ST.	.035 CU. YDS.	.024 CU. YDS.	
"C" FOOTER	.035 CU. YDS.	.024 CU. YDS.	

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
"A"	#4	2 EACH PARAPET	11" FOR "A"
"B"	#4	2 EACH PARAPET	13 1/4" FOR EACH "B"
"C"	#4	2 FOR EACH "B"	12" FOR "C"

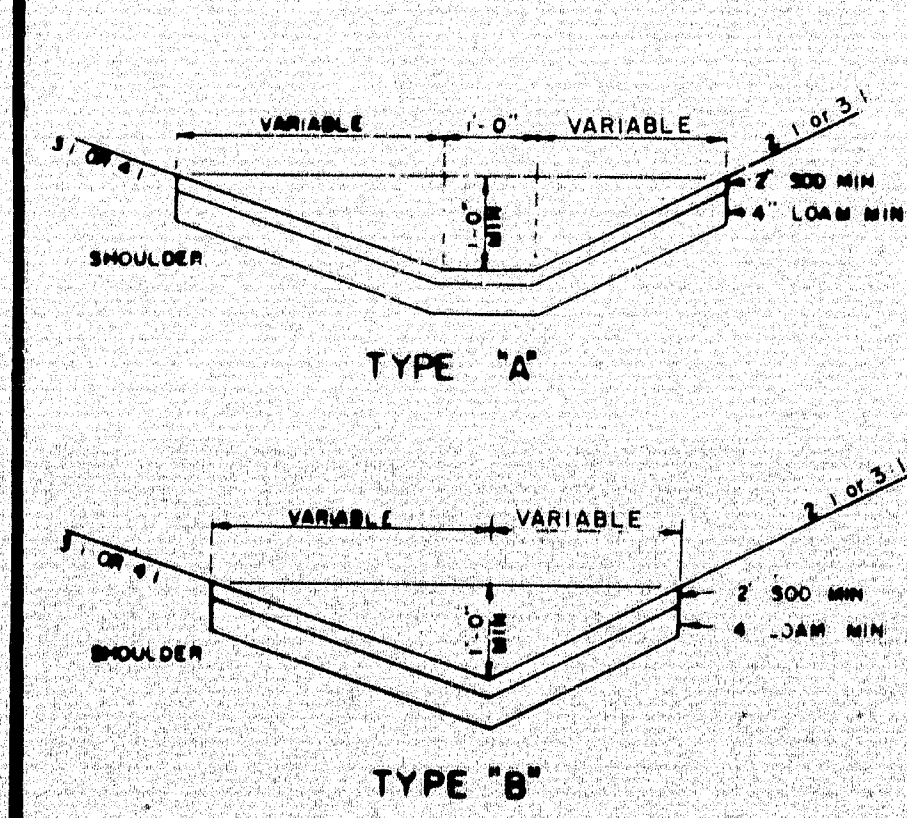
NOTE:  
To determine the quantity of "Structural Excavation"  
for payment refer to the "Standard Specifications"  
section 204-6D, structural earth and rock excavation -  
abutments and retaining wall or piers.

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
"A"	#4	2 EACH PARAPET	11" FOR "A"
"B"	#4	2 FOR EACH "B"	13 1/4" FOR EACH "B"
"C"	#4	2 FOR EACH "C"	12" FOR "C"

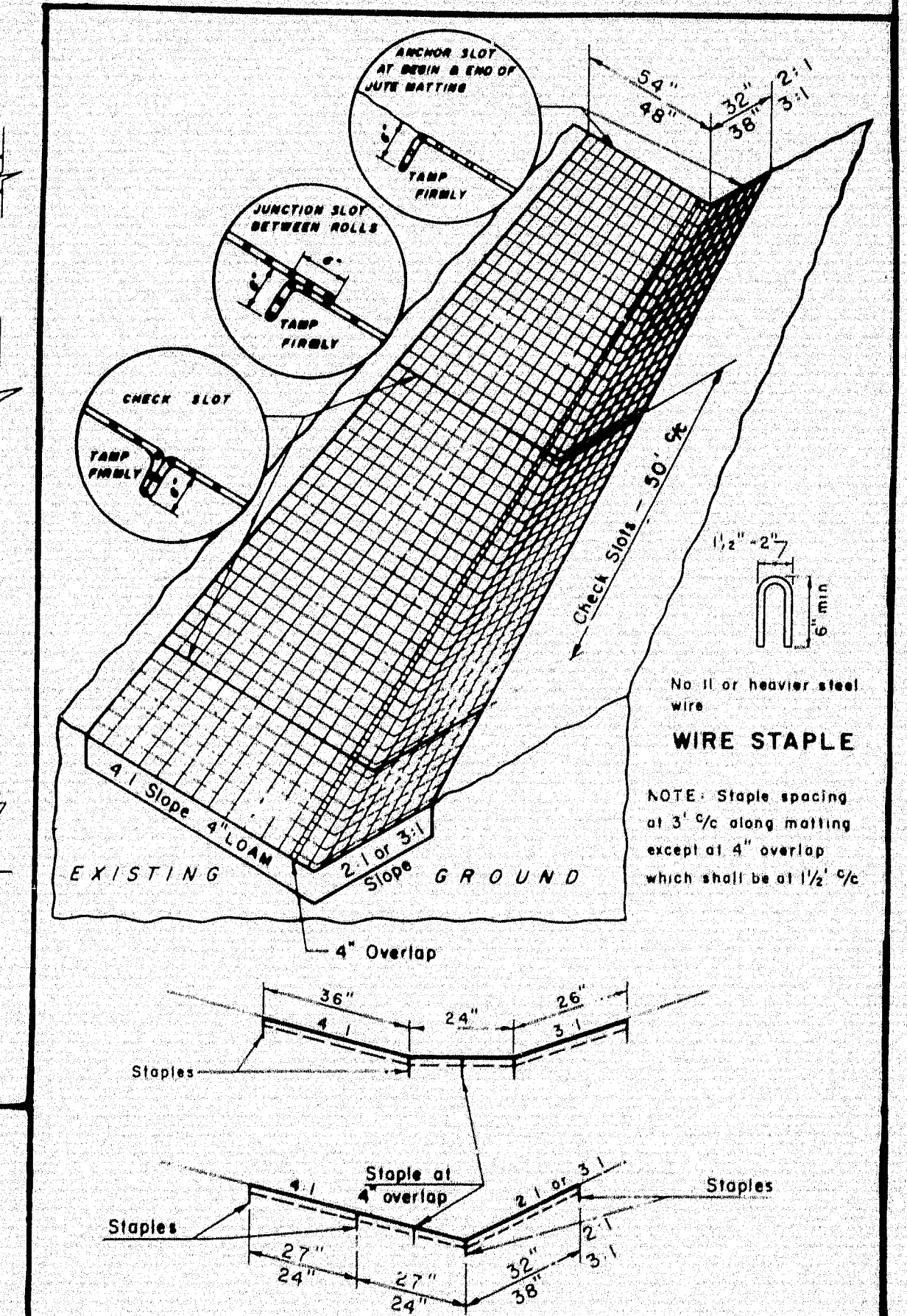
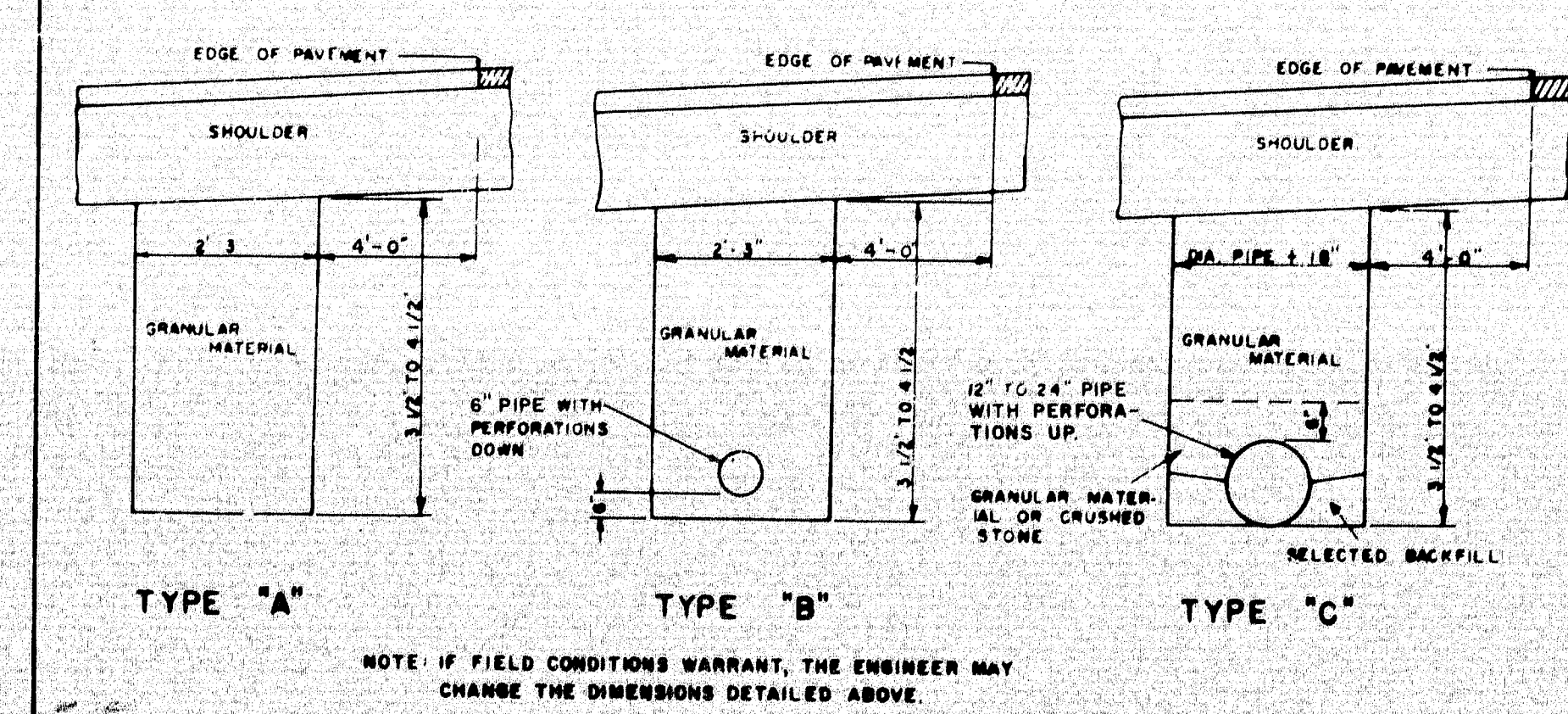
# MANHOLES



# SODDED GUTTER



# UNDERDRAIN



# JUTE MATTING - DITCH SECTION

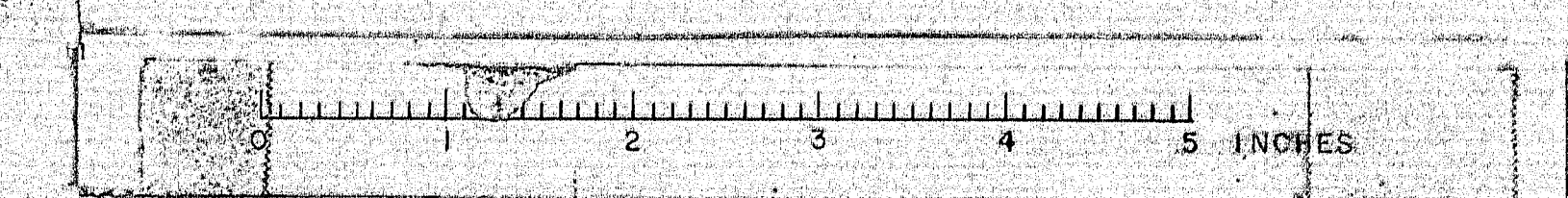
MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

# STANDARD DETAILS

## MISCELLANEOUS ITEMS

Feb.  
3-65

101-239 ISLAND FALLS (43)





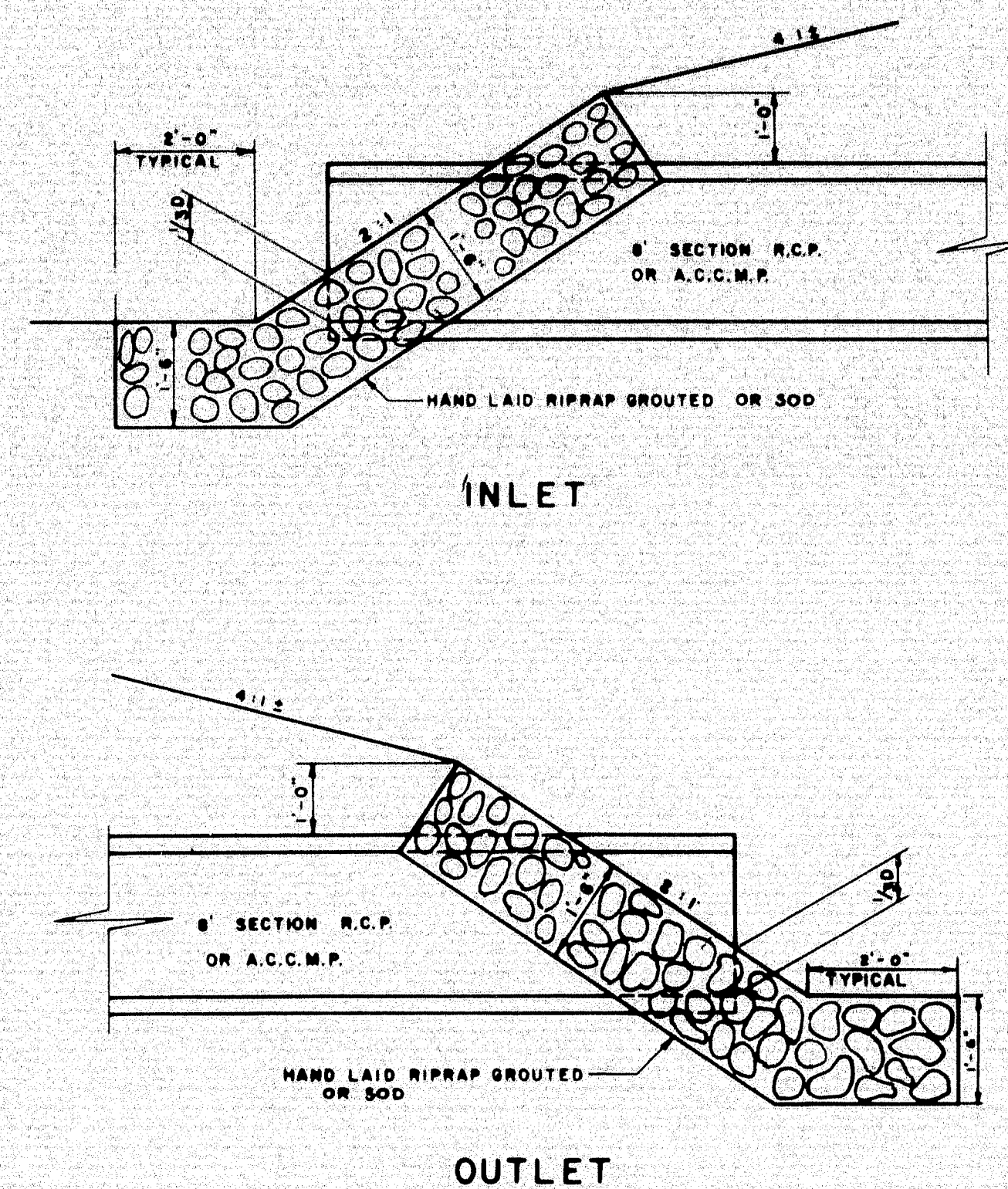
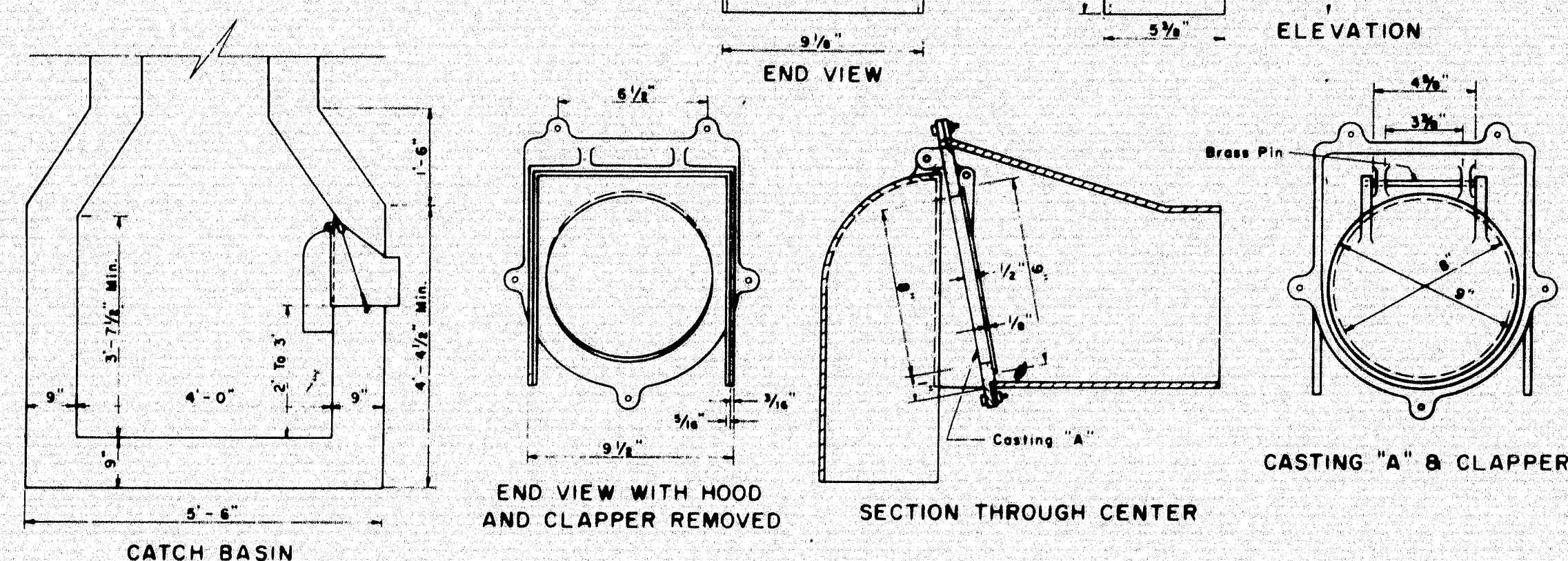
B P R REGION NO.	STATE	FEDERAL AID PROJECT NO	SHEET NO	TOTAL SHEET
1	MAINE			

## DETAIL OF TRAP

To be used with combined system

Other types may be used if approved by the engineer.

Traps shall be installed on the outlets of catch basins or manholes which empty a storm water system into a sanitary sewerage system.

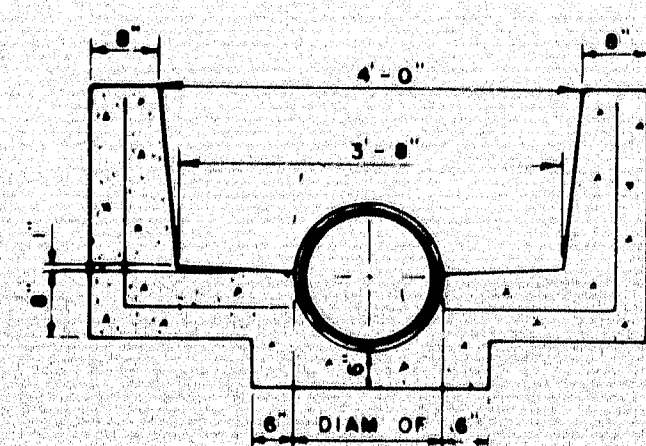
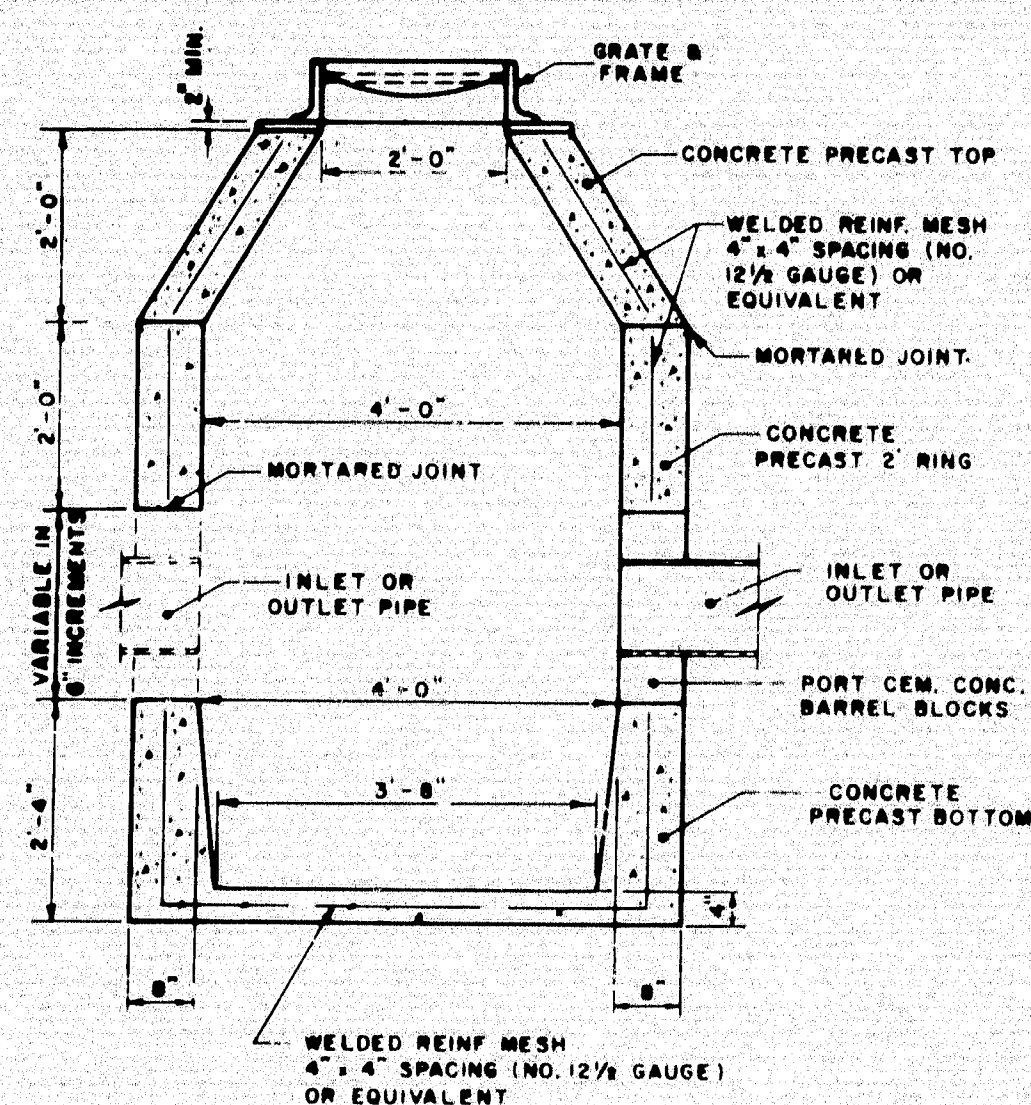


**NOTE:  $D_1 = D_2$**

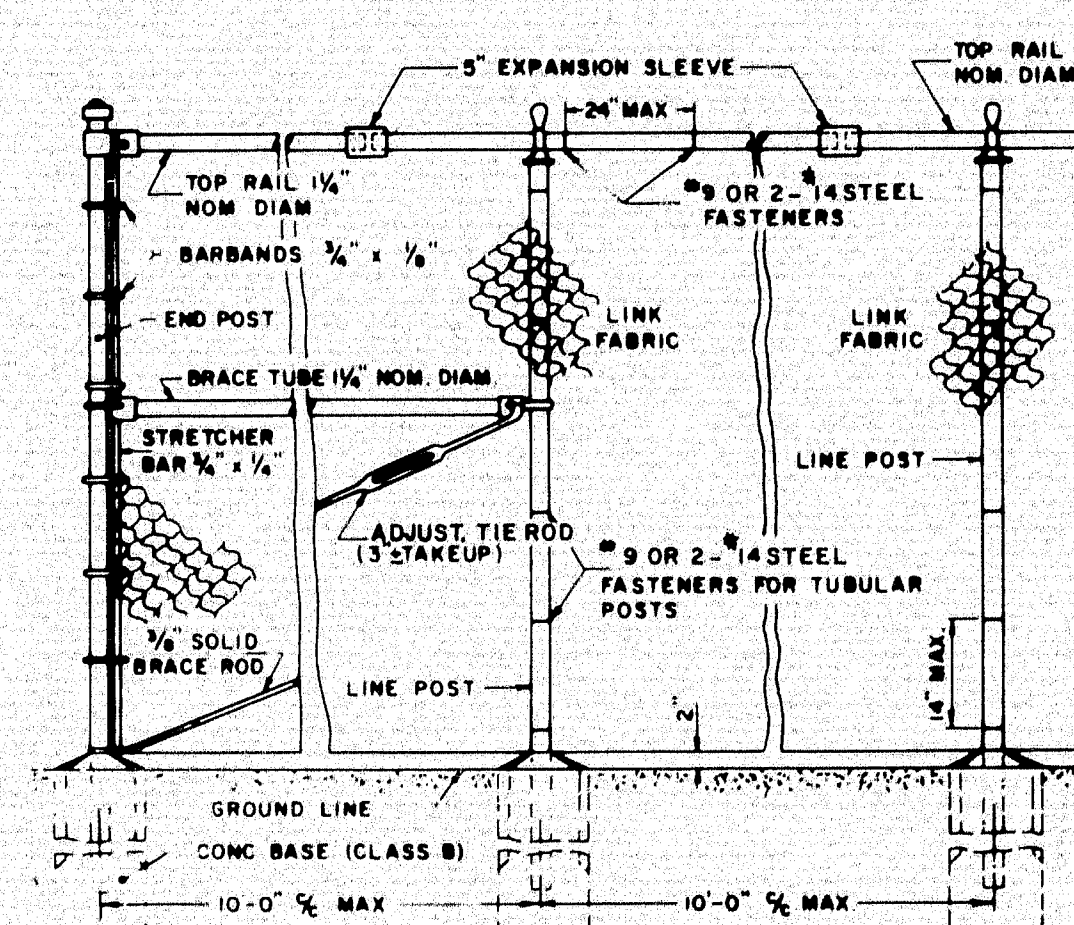
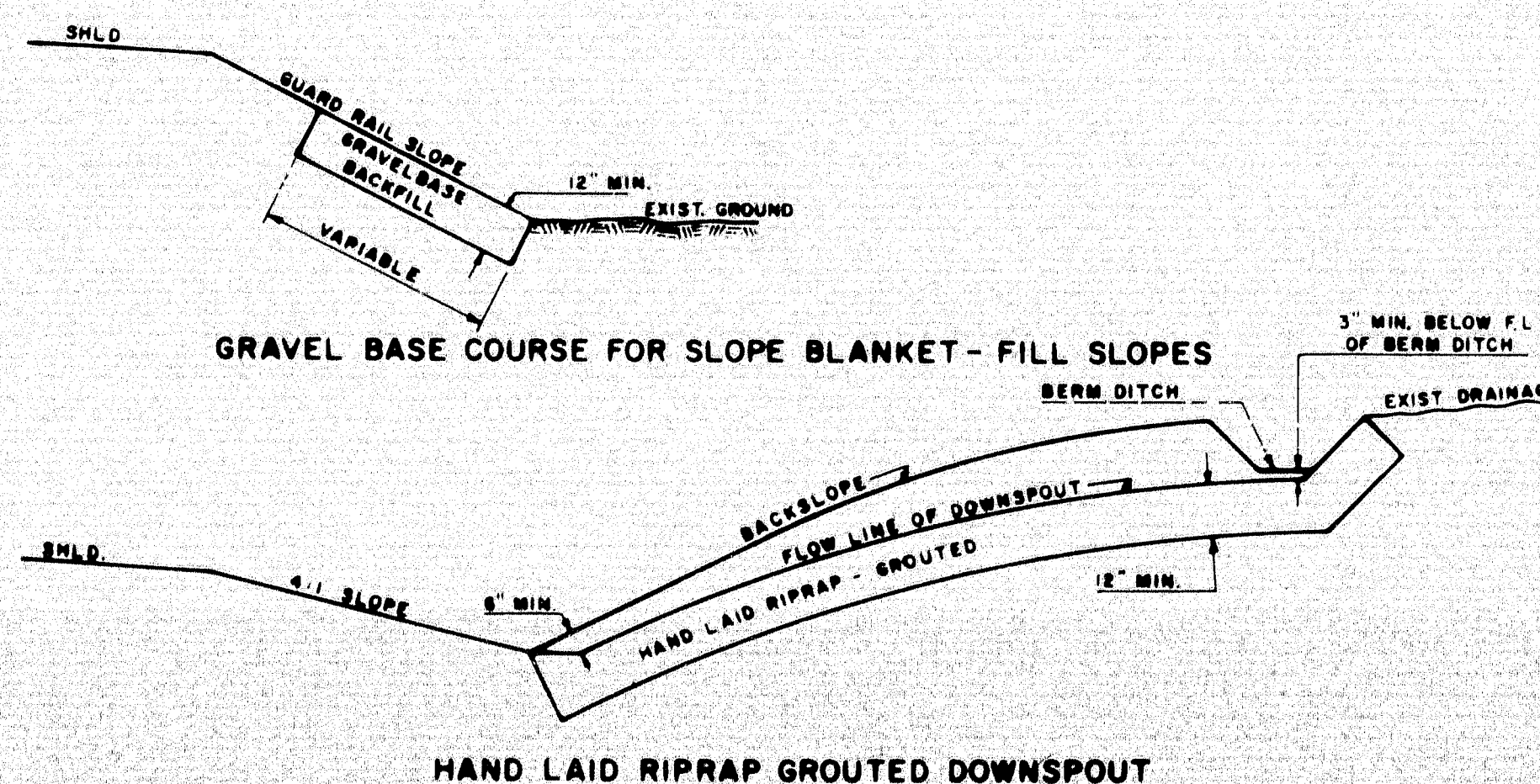
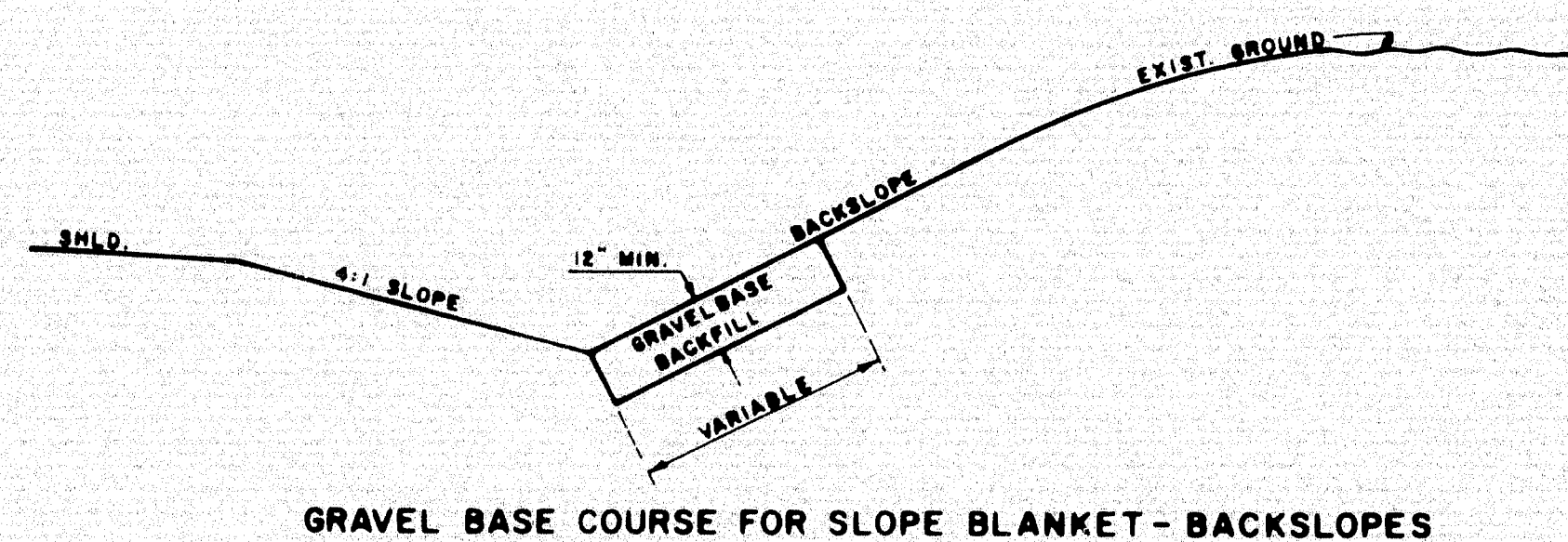
**NOTE** CULVERTS INSTALLED UNDER 2:1 SLOPES SHALL HAVE THE RIP-RAP LAID ON A 2:1 SLOPE AND NO DITCH TRANSITIONS ARE REQUIRED

NOTE: EXCAVATION TO GRADE CULVERT INLETS AND OUTLETS BETWEEN THE 4:1 AND 2:1 SLOPE AND EXCAVATION FOR THE RIPRAP, IN CUT AREAS ONLY, WILL BE PAID FOR UNDER ITEM NO. 204-10 STRUCTURAL EARTH EXCAVATION-DRAINAGE

**TYPICAL RIPRAP DETAIL FOR R.C.P. OR A.C.C.M.P.**



NOTE:  
THE THREE SECTIONS DETAILED BELOW SHALL  
BE USED WHEN DIRECTED BY THE ENGINEER  
OR AS SHOWN ON THE PLANS



NOTE  
ROUND BASES MAY BE  
SUBSTITUTED FOR THE  
SQUARE BASES SHOWN  
BY USING FIBRE TUBULAR  
FORMS. SUBSTITUTIONS  
SHALL BE AS FOLLOWS  
13 1/2" ID ROUND FOR 12"  
SQUARE OR 15" SQUARE

LINE, GATE AND  
END POST BASE

## " CHAIN LINK FENCE

## REINFORCED PORTLAND CEMENT CONCRETE SIDEWALK

**NOTE**  
Sidewalk shall conform to  
standard specifications  
section 904

Welded Steel Wire Fabric  
6" x 6" 10/10  
Approx Weight 21 lbs per  
100 sq ft

MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

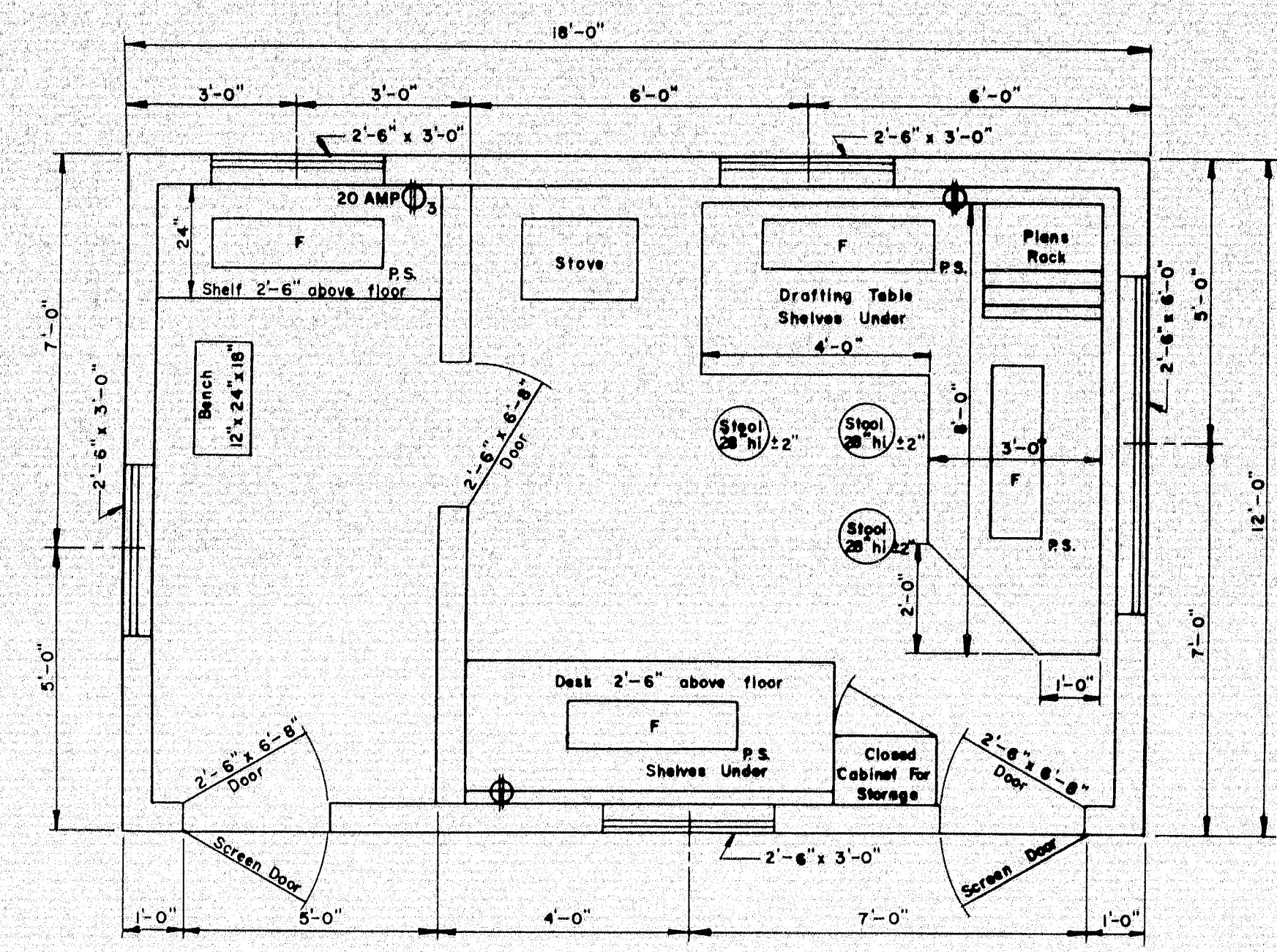
## STANDARD DETAILS

DETAIL OF TRAP, REINFORCED  
PORTLAND CEMENT CONCRETE SIDEWALK,  
CHAIN LINK FENCE, TYPICAL  
RIPRAP DETAIL & PRECAST CATCH  
BASINS & MANHOLES

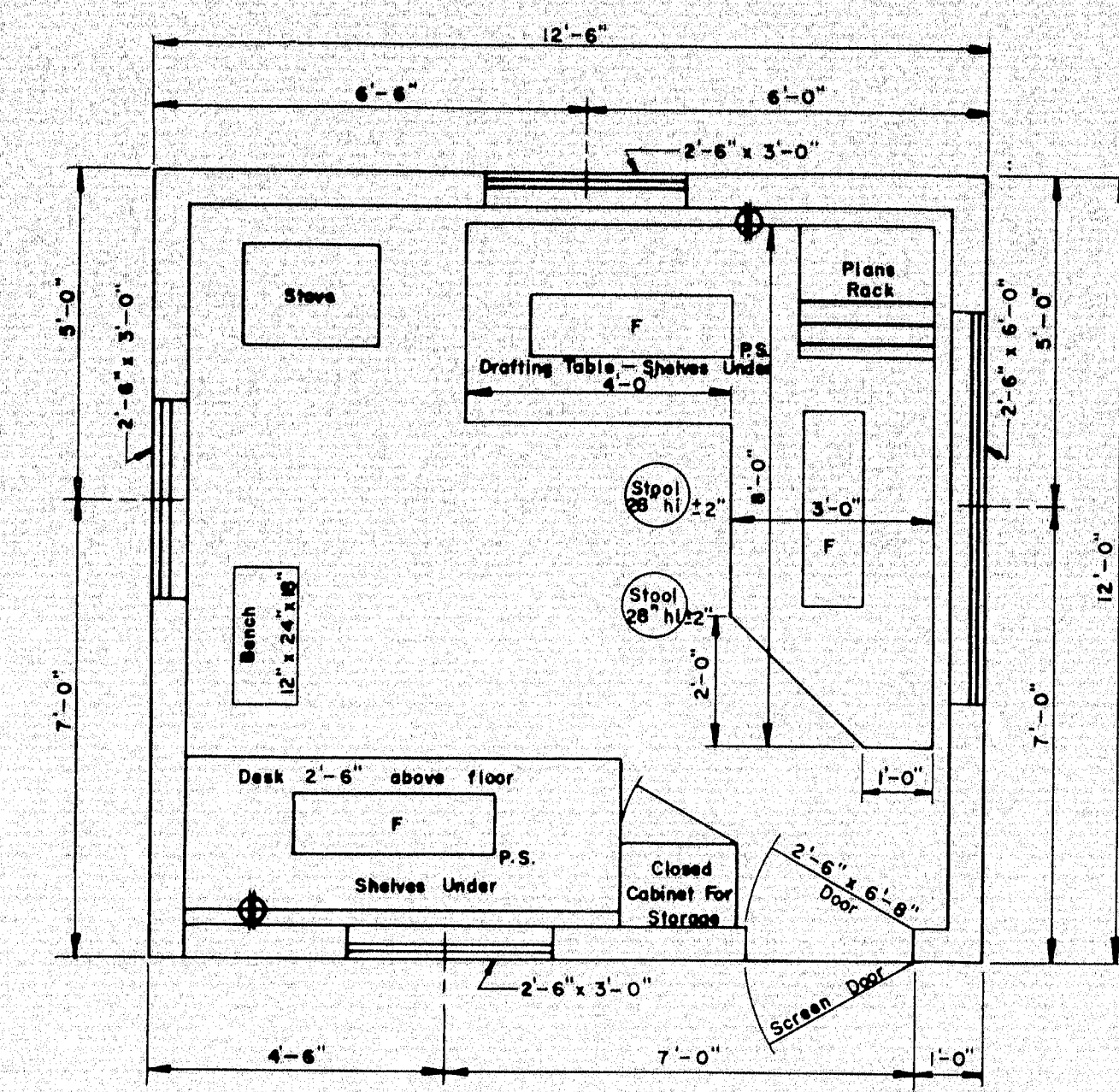
Feb.  
4-65

101-240 ISLAND FALLS (43)

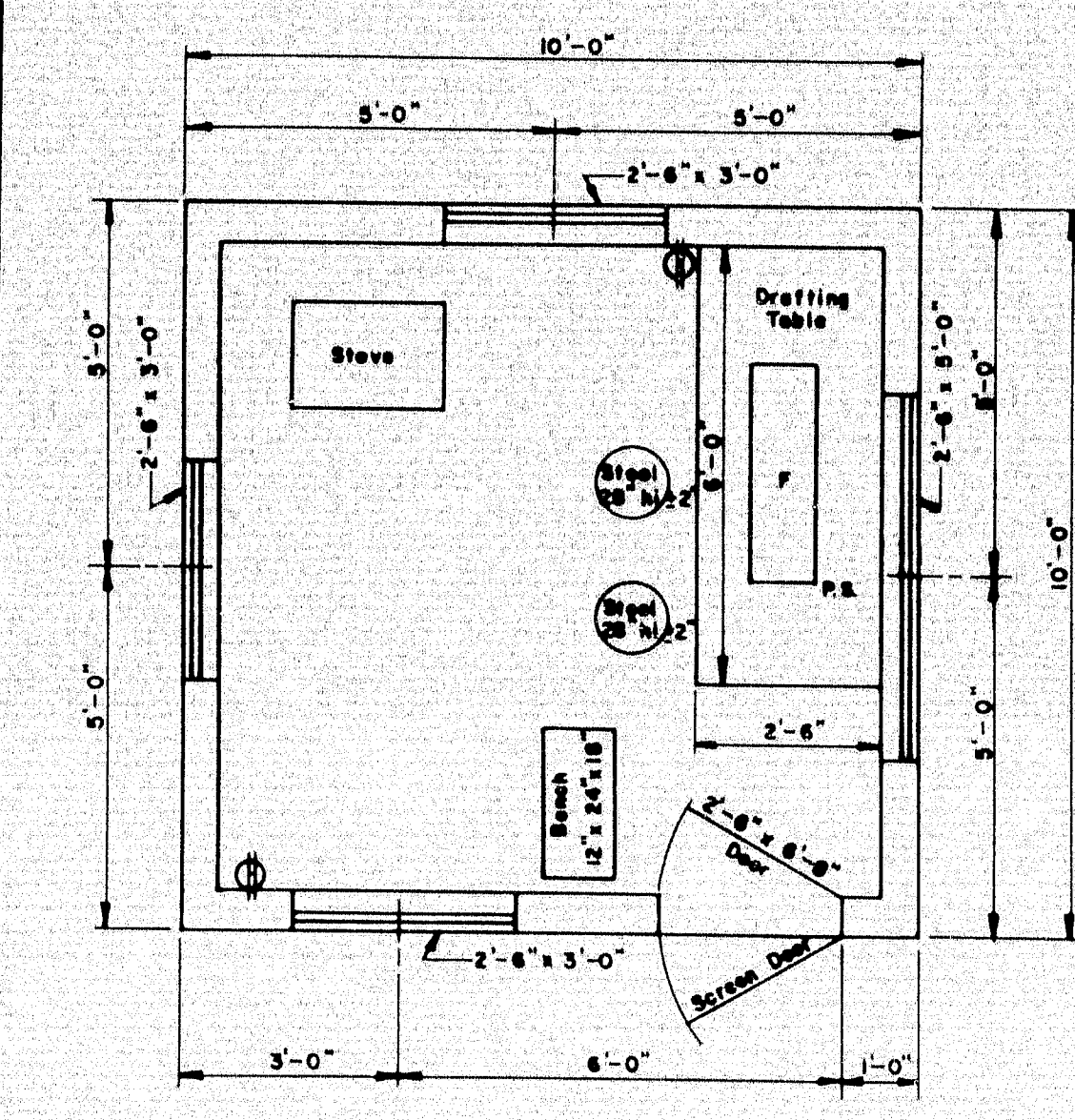




FLOOR PLAN  
TYPE "A"

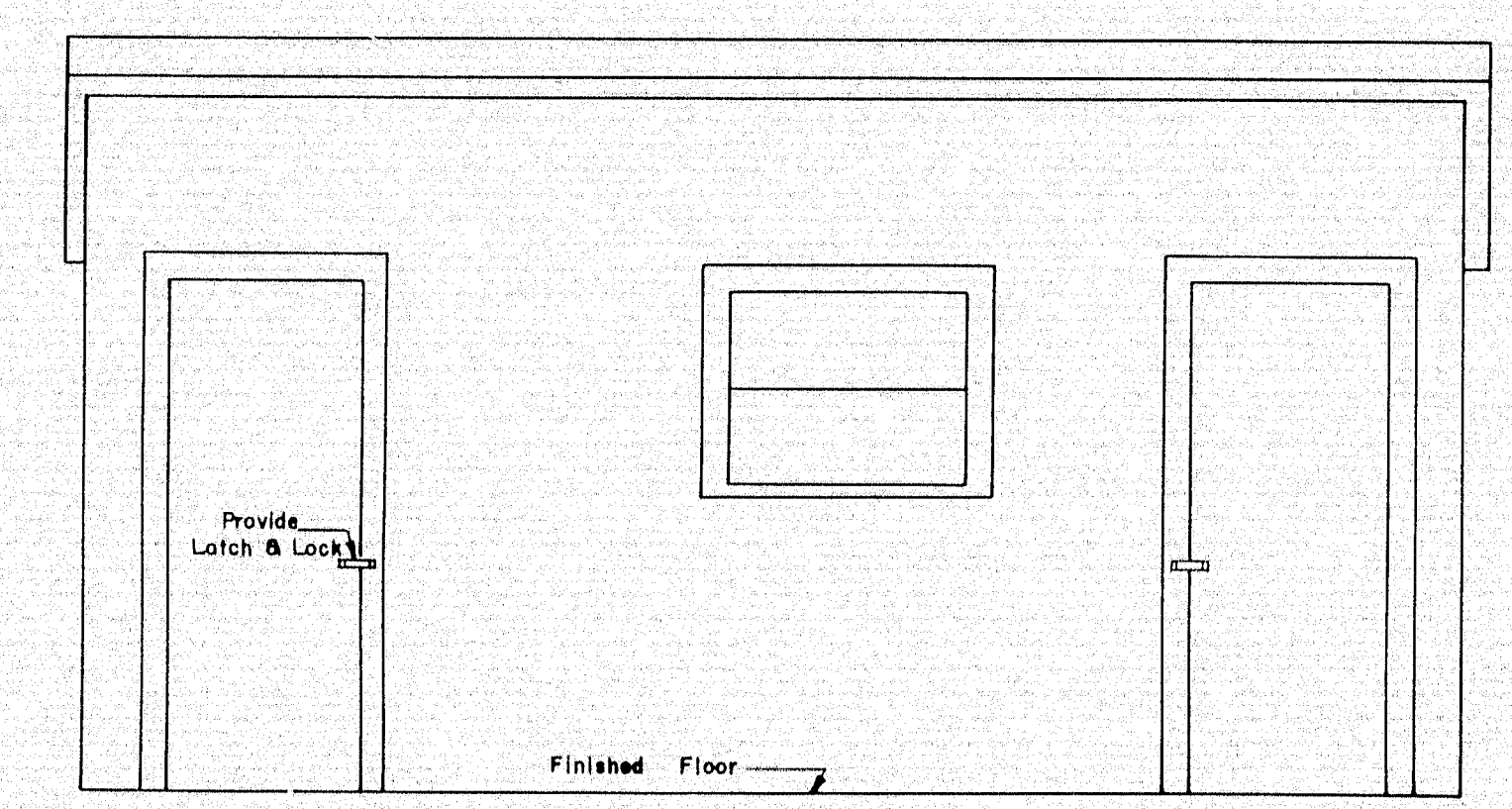


FLOOR PLAN  
TYPE "B"

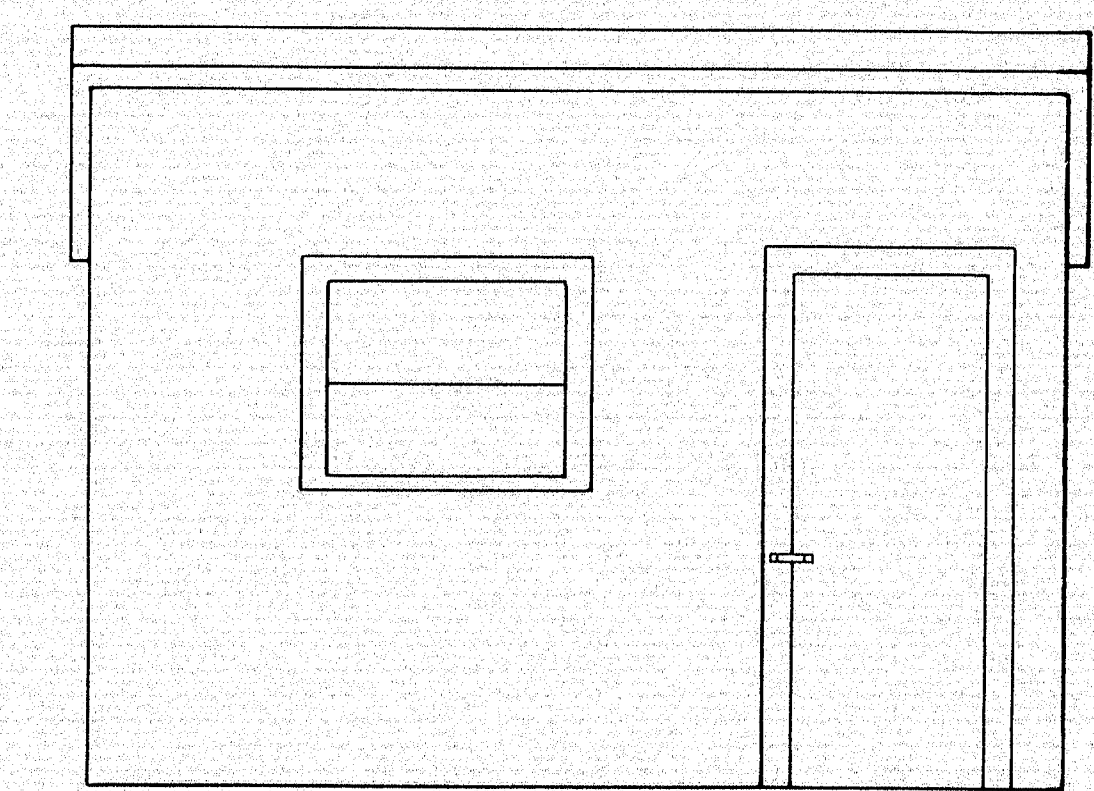


FLOOR PLAN  
TYPE "C"

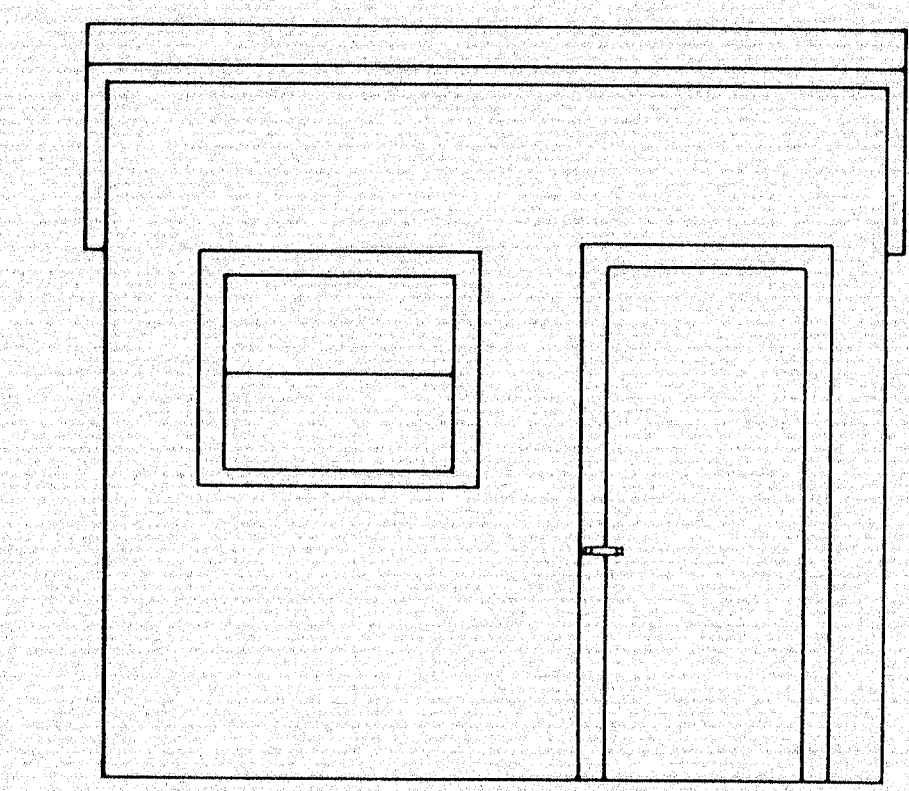
- GENERAL NOTES**
- Drafting table shall be 3'-4" high at front edge and placed 2" from studs to allow prints to hang down behind table when in use.
  - Shelves under desk shall be constructed to receive 1 1/2" x 14" x 25" transfiles.
  - Windows shall be double hung.
  - Stovepipe shall not be in direct contact with combustible material; the pipe shall be surrounded with at least 4" 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.
    - ⊕ 3 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.



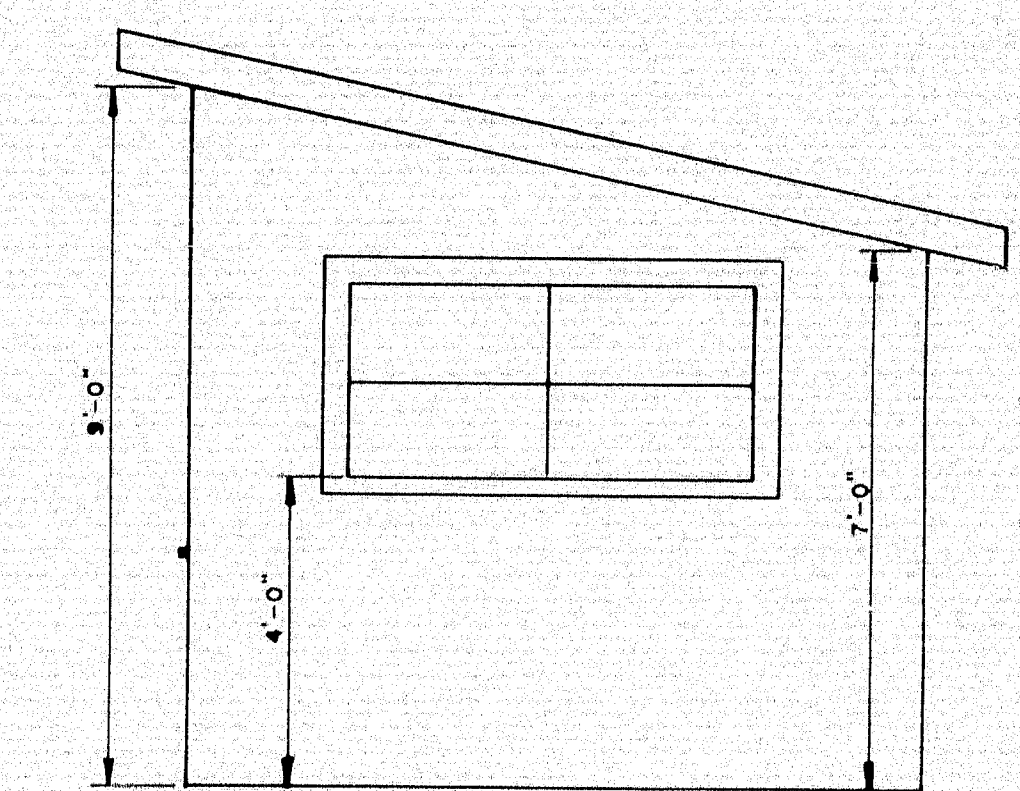
FRONT ELEVATION  
TYPE "A"



FRONT ELEVATION  
TYPE "B"



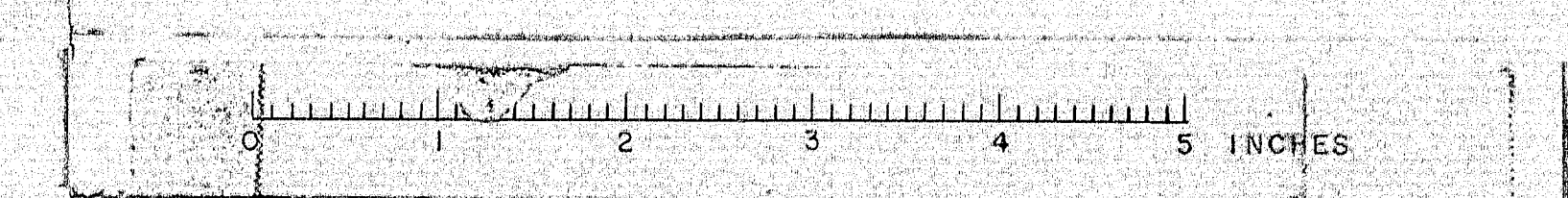
FRONT ELEVATION  
TYPE "C"



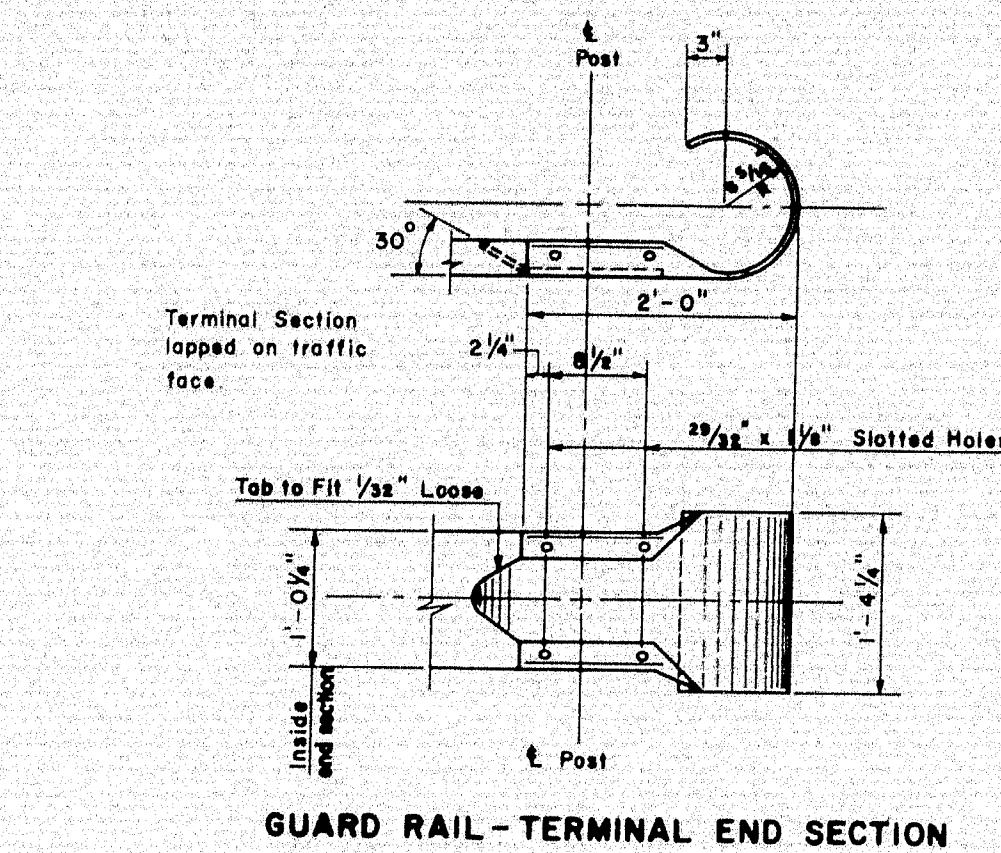
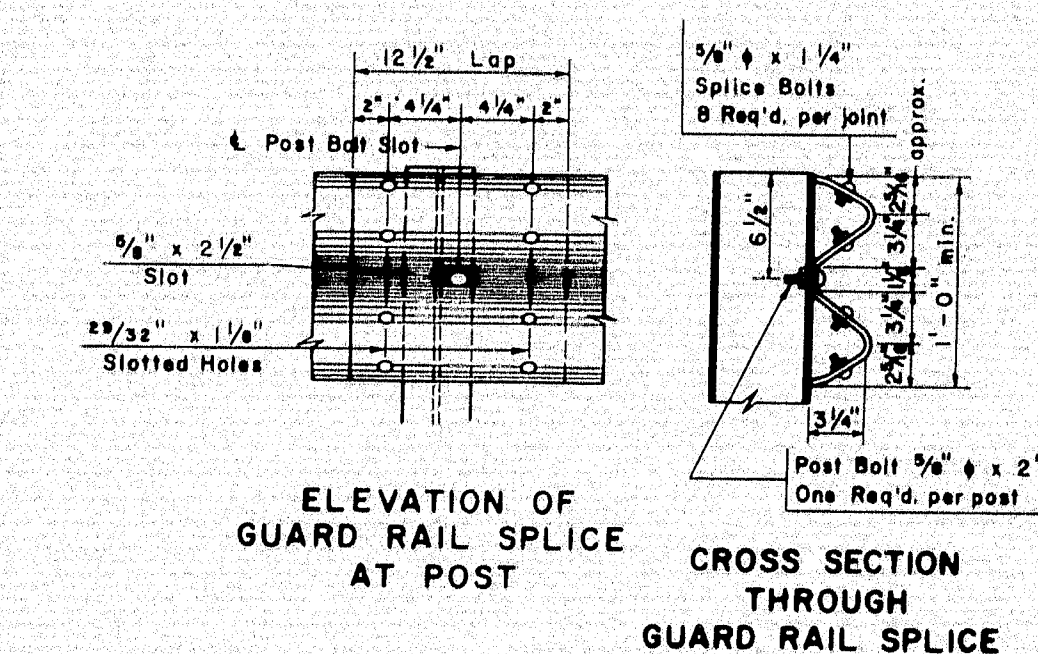
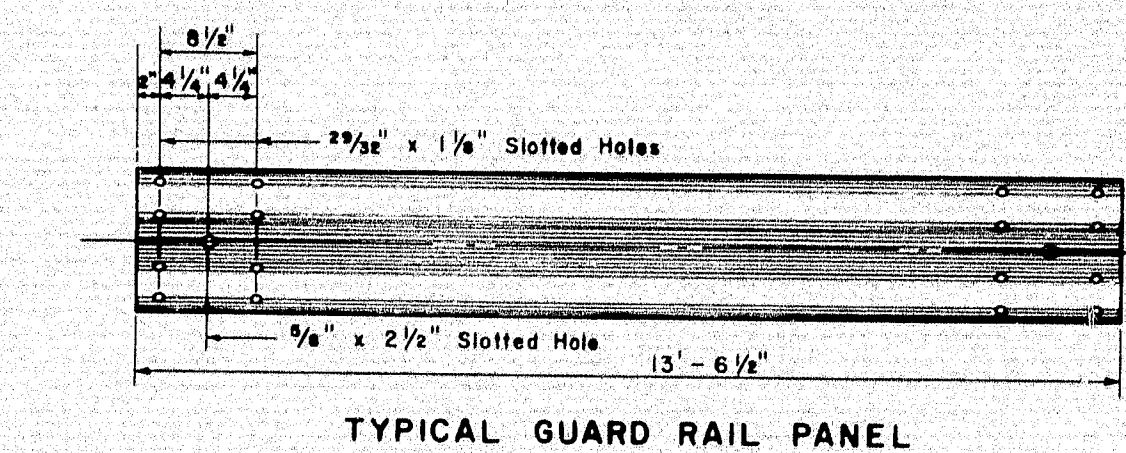
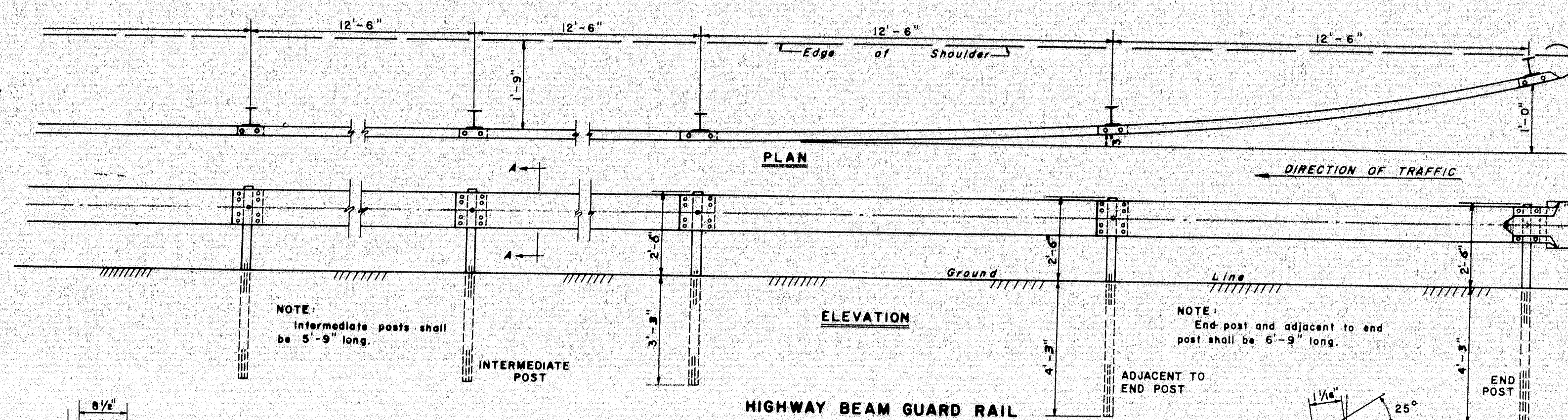
SIDE ELEVATION  
TYPES "A" "B" & "C"

REVISIONS		MAINE STATE HIGHWAY COMMISSION AUGUSTA, MAINE	
		<b>STANDARD DETAILS</b>	
		FIELD OFFICES TESTING LABORATORY	
		AUG. 1965 ©	

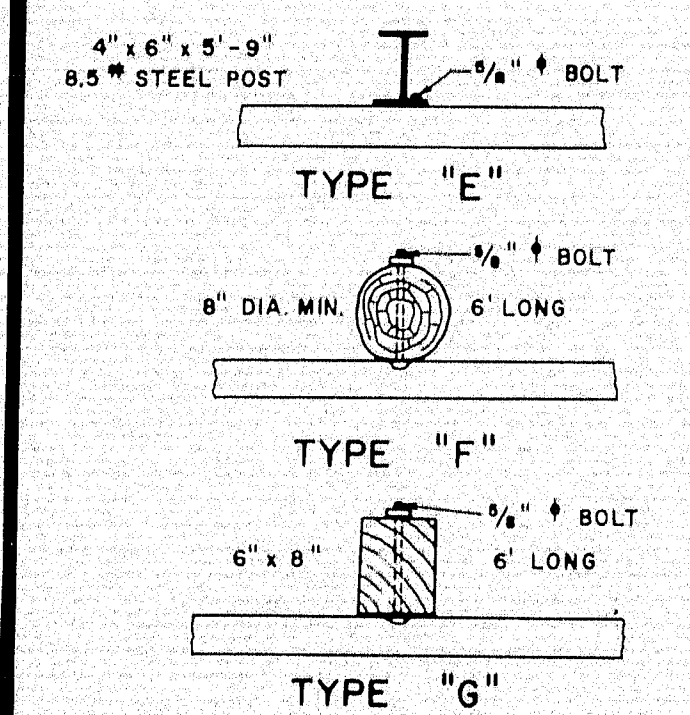
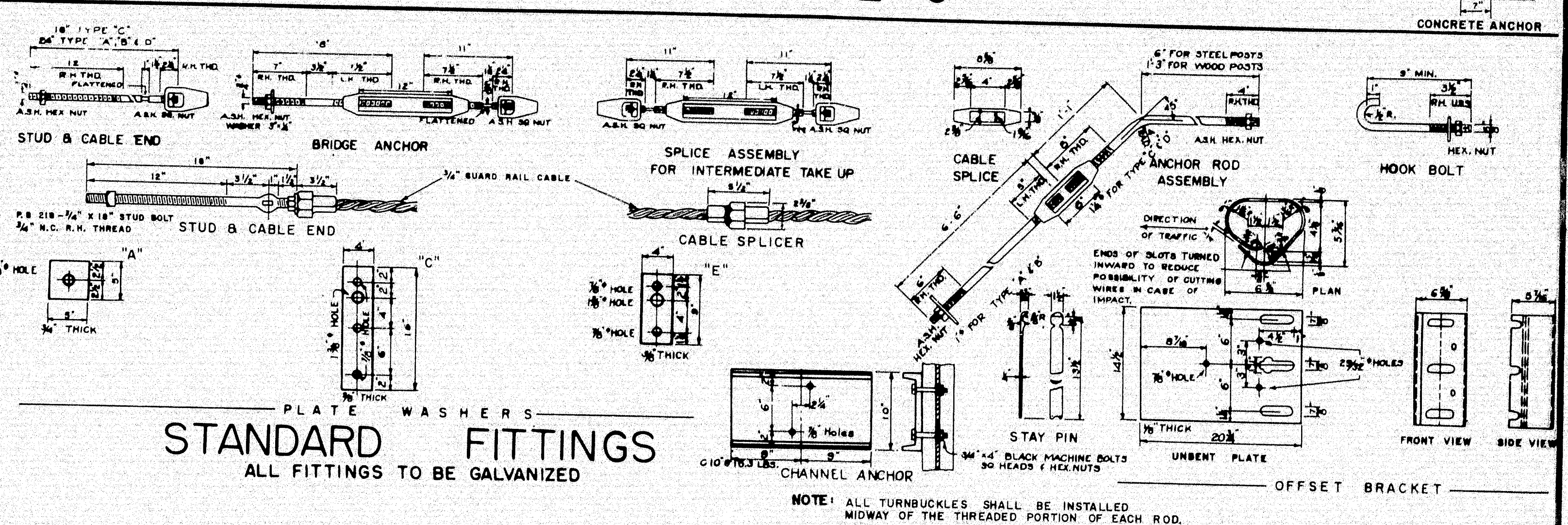
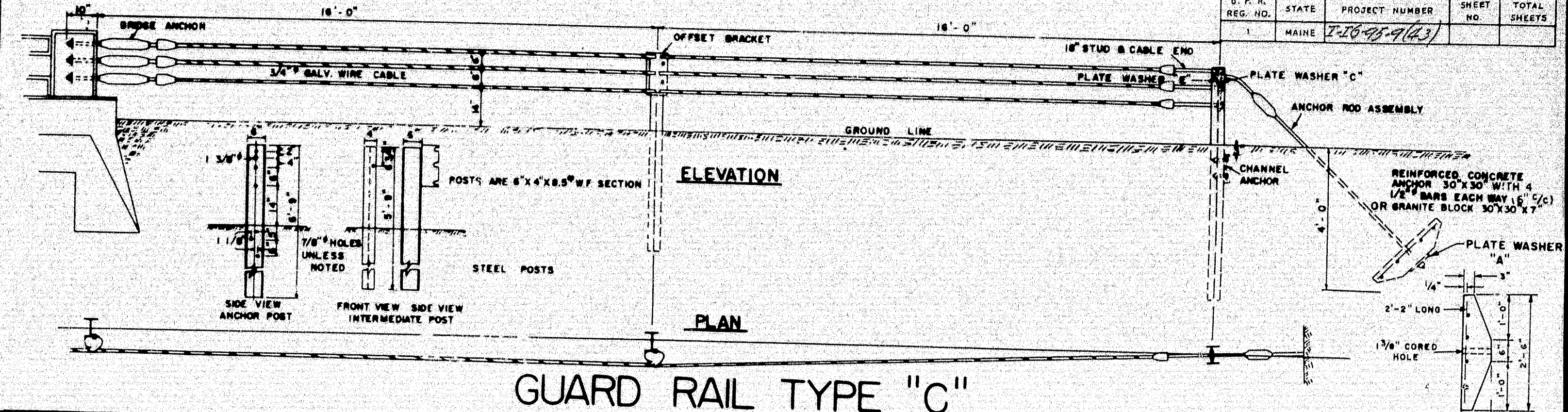
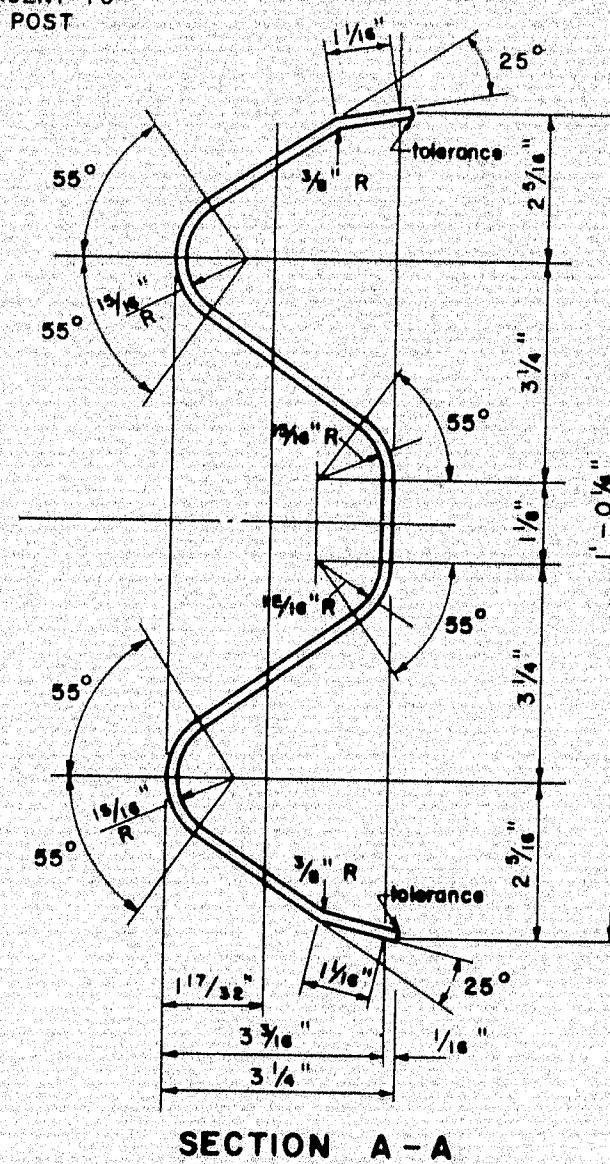
101-241 ISLAND FALLS (49)



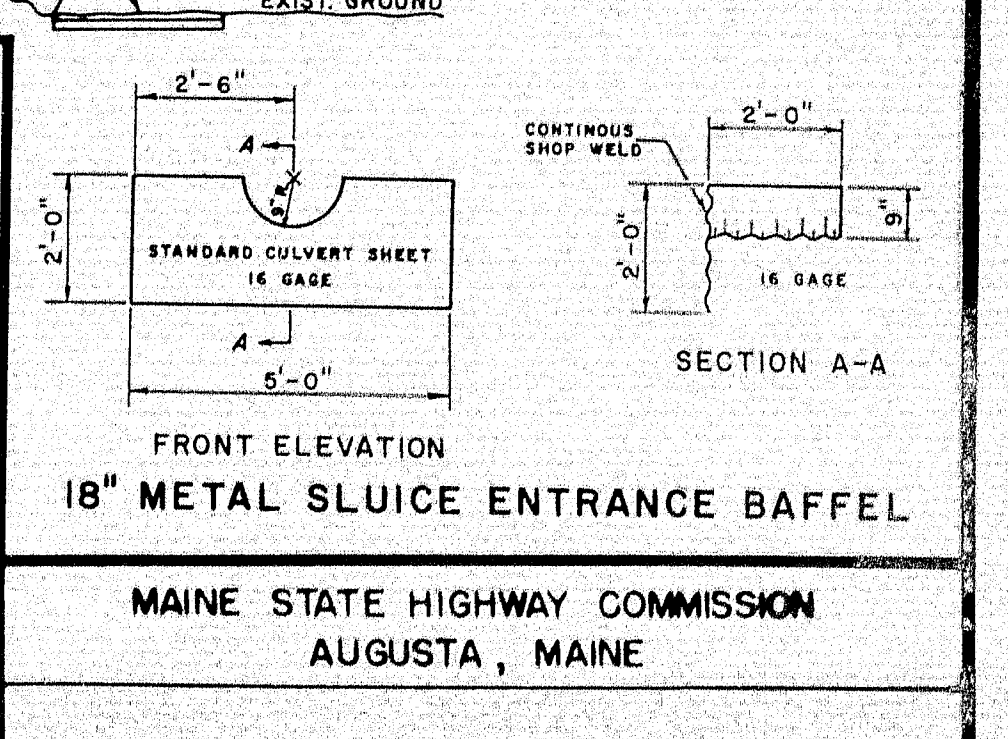
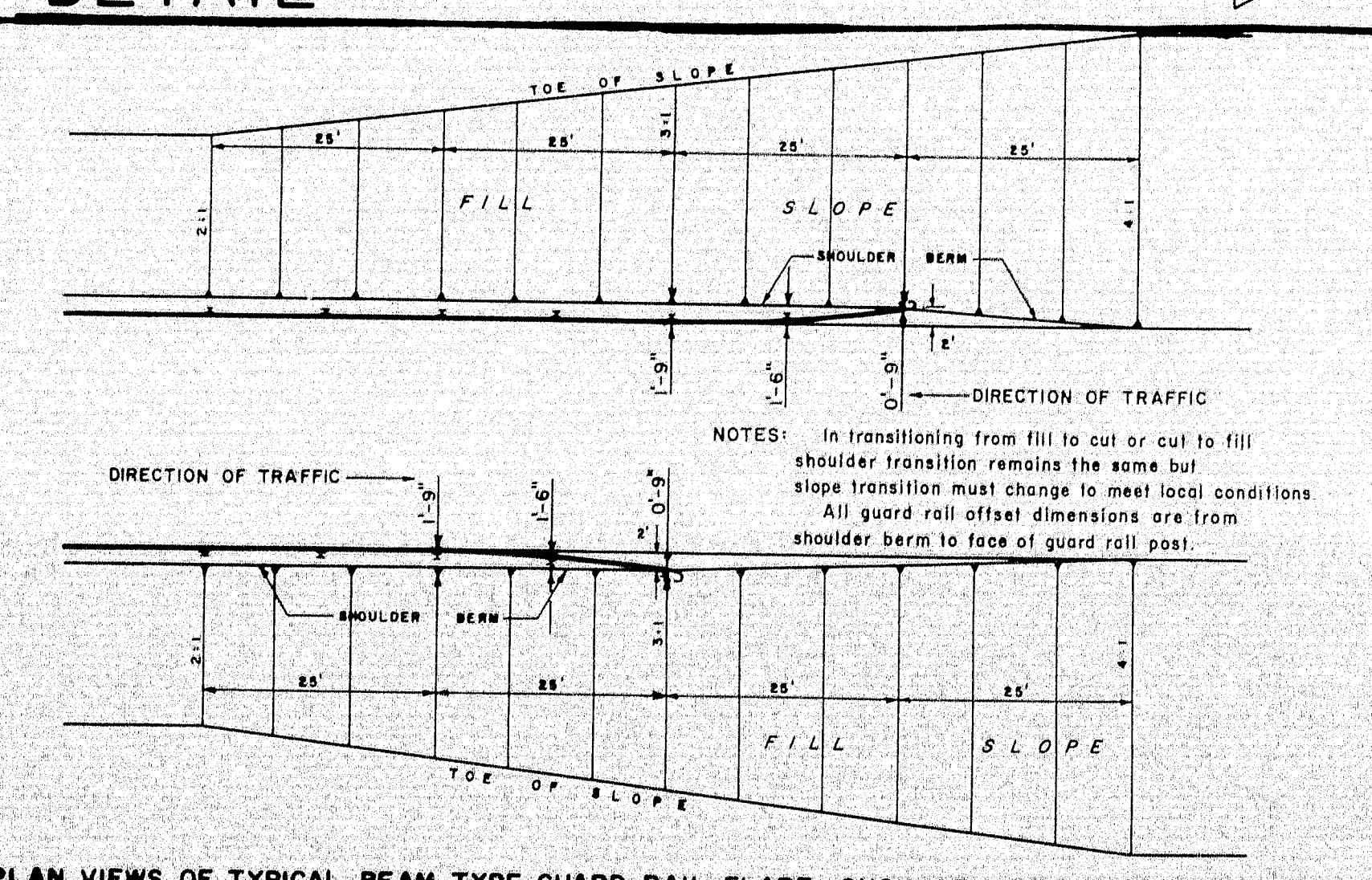
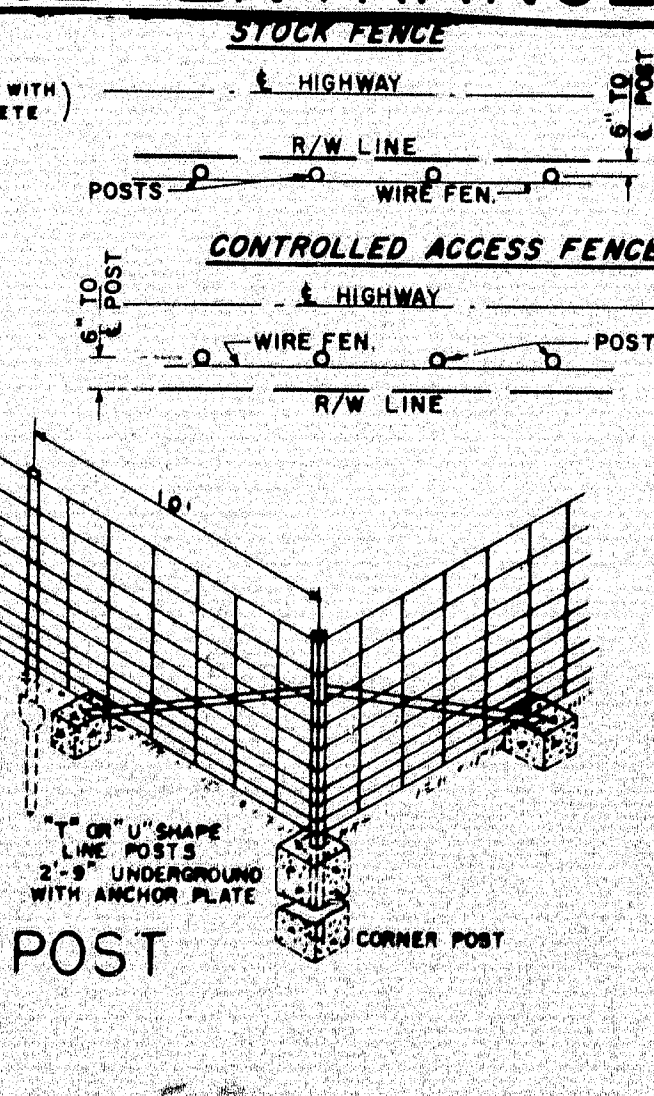
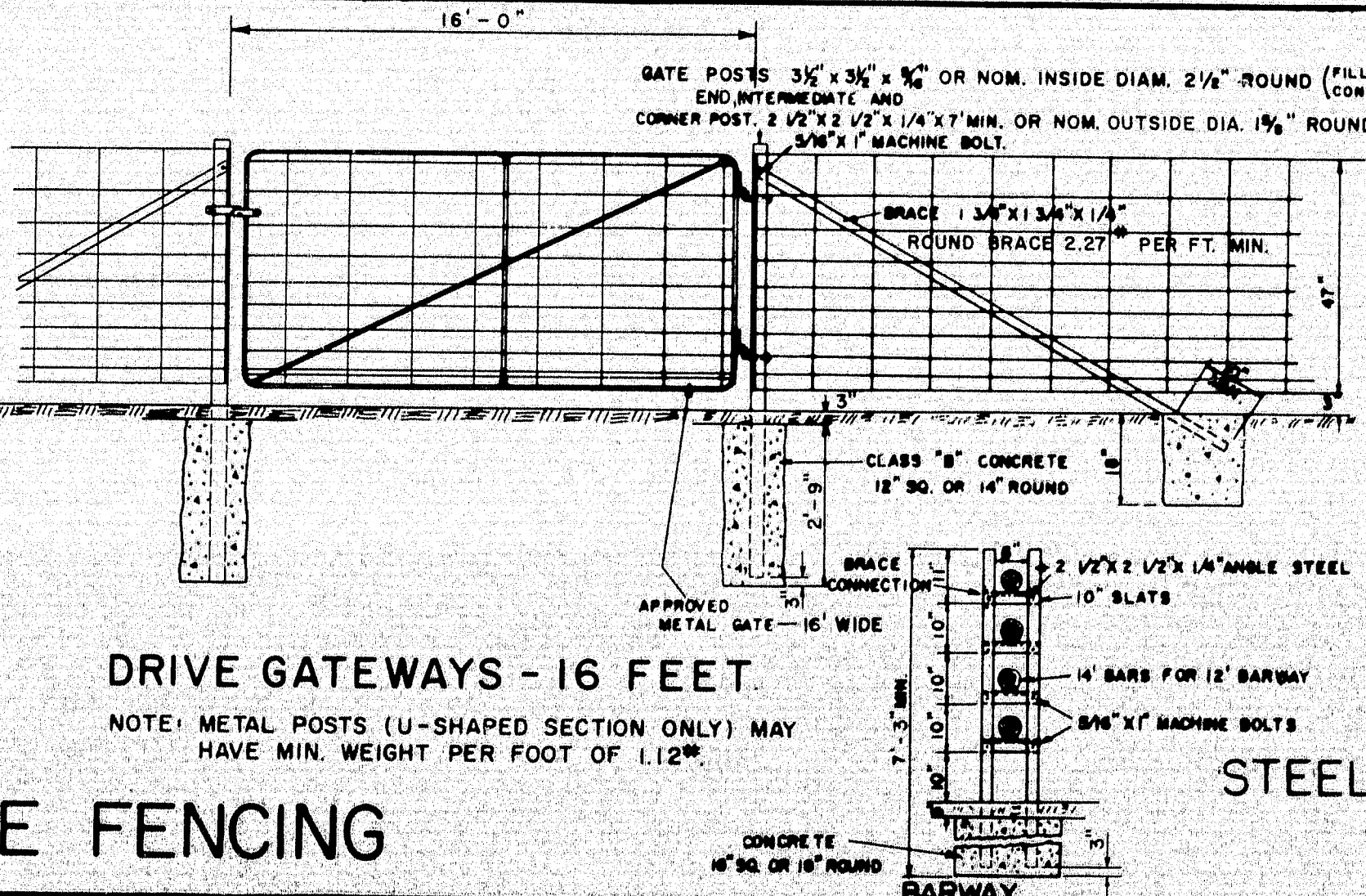
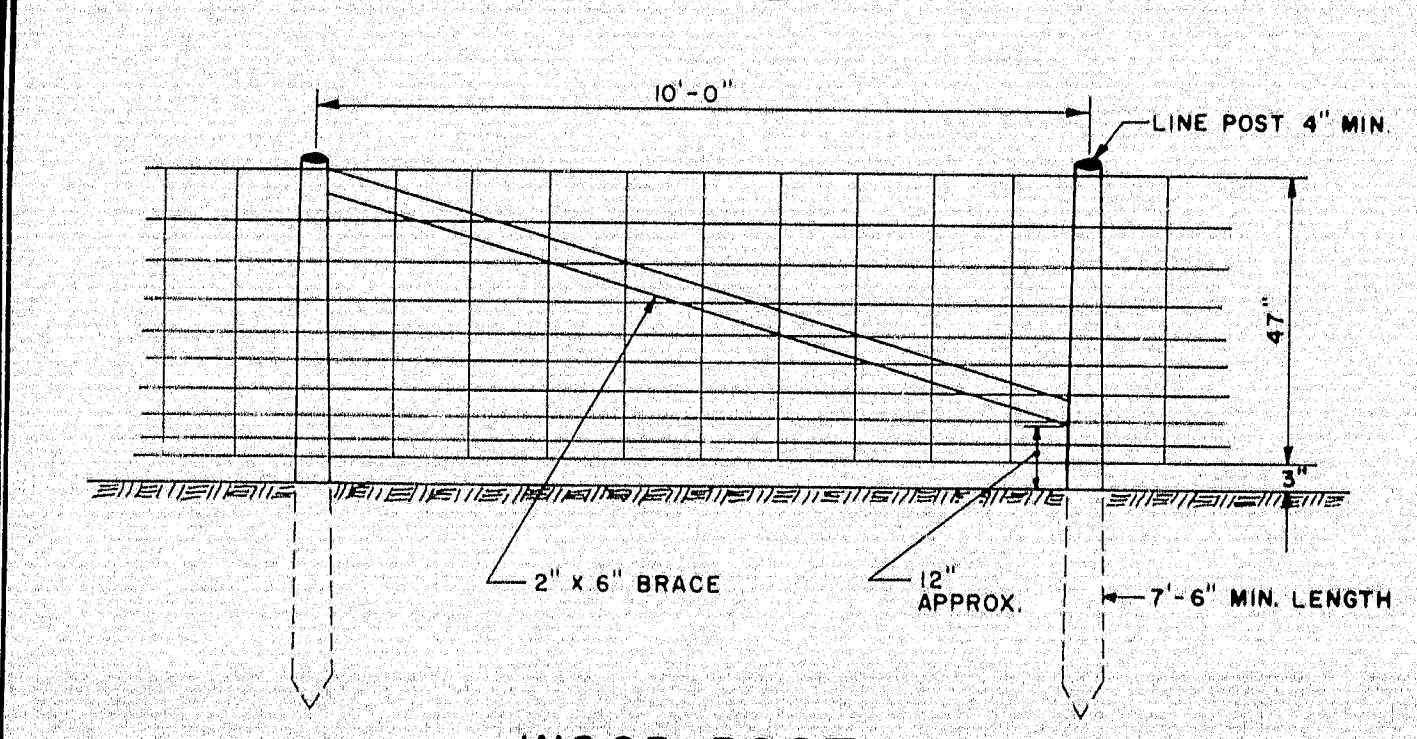
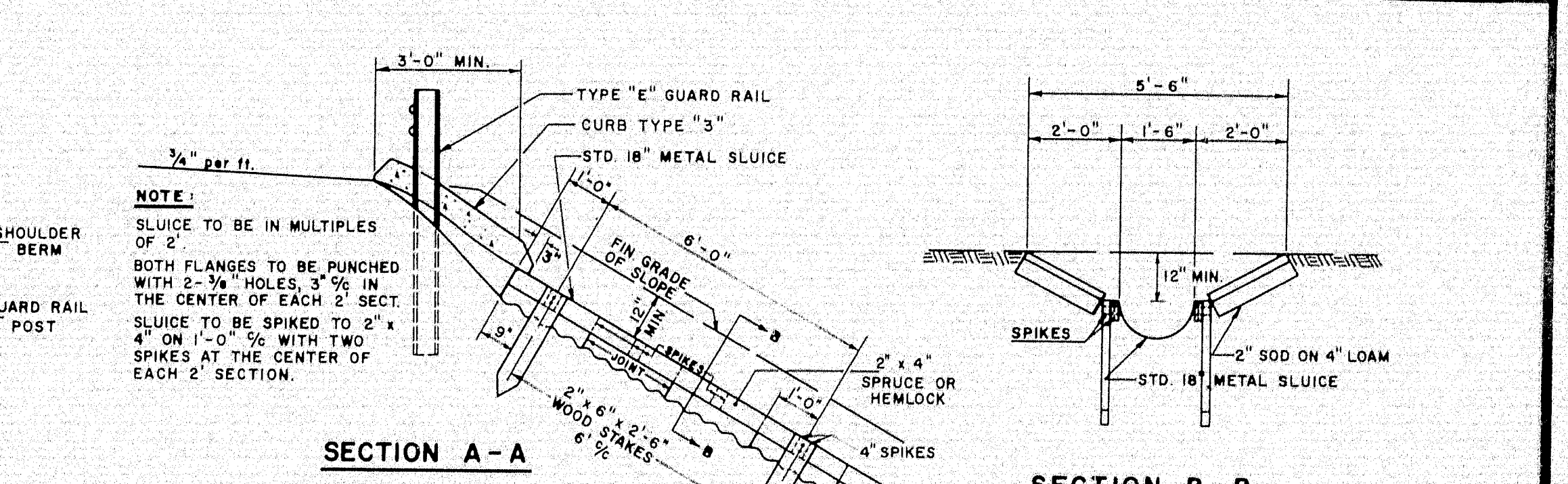
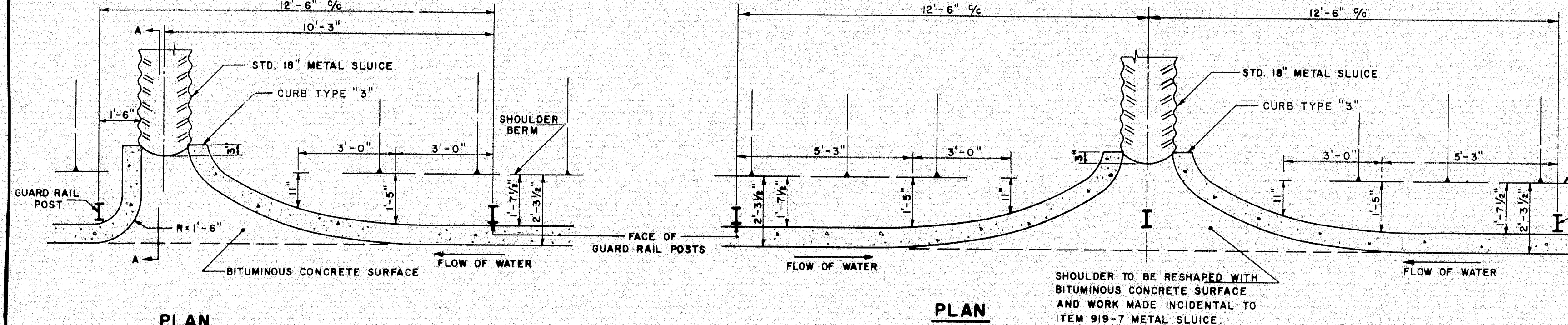




GUARD RAIL TYPE "E" "F" & "G"



NOTE: TOP OF WOODEN POST SHALL HAVE A 1" BEVEL



MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

**STANDARD DETAILS**

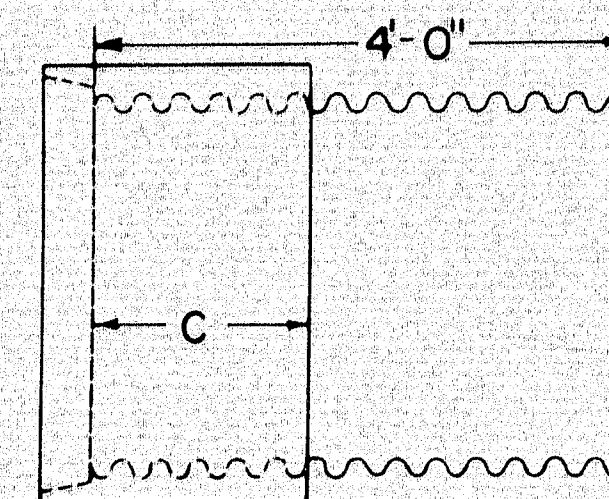
GUARD RAIL & FITTINGS  
WIRE FENCING, METAL SLUICE  
& GUARD RAIL FLARE

MARCH 2-64

101-242 ISLAND FALLS (43)



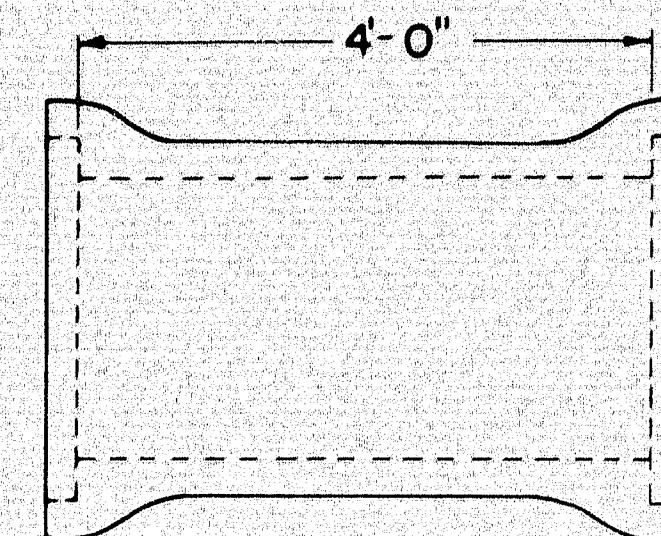
## PIPE CONNECTIONS



**GROOVE END COMBINATION**  
For 24" to 72" inclusive, diameter connection  
between concrete and metal pipe

"C" = 17" min. for sizes 30" to 48" incl.  
"C" = 23" min. for sizes over 48"

Asphalt coated corrugated metal pipe  
shall conform to the latest  
standard specifications

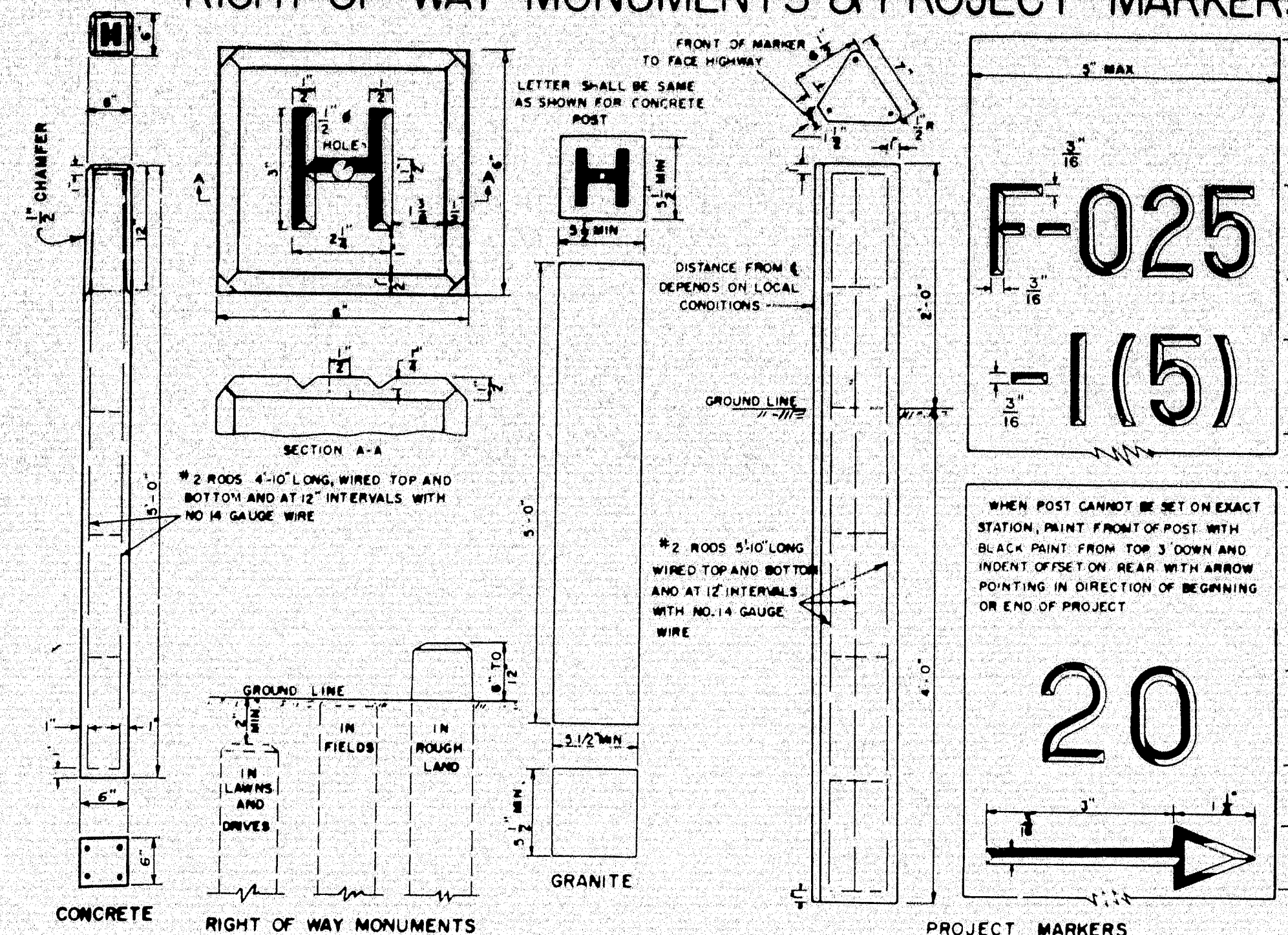


**REINFORCED CONCRETE PIPE CONNECTOR  
DOUBLE BELL**

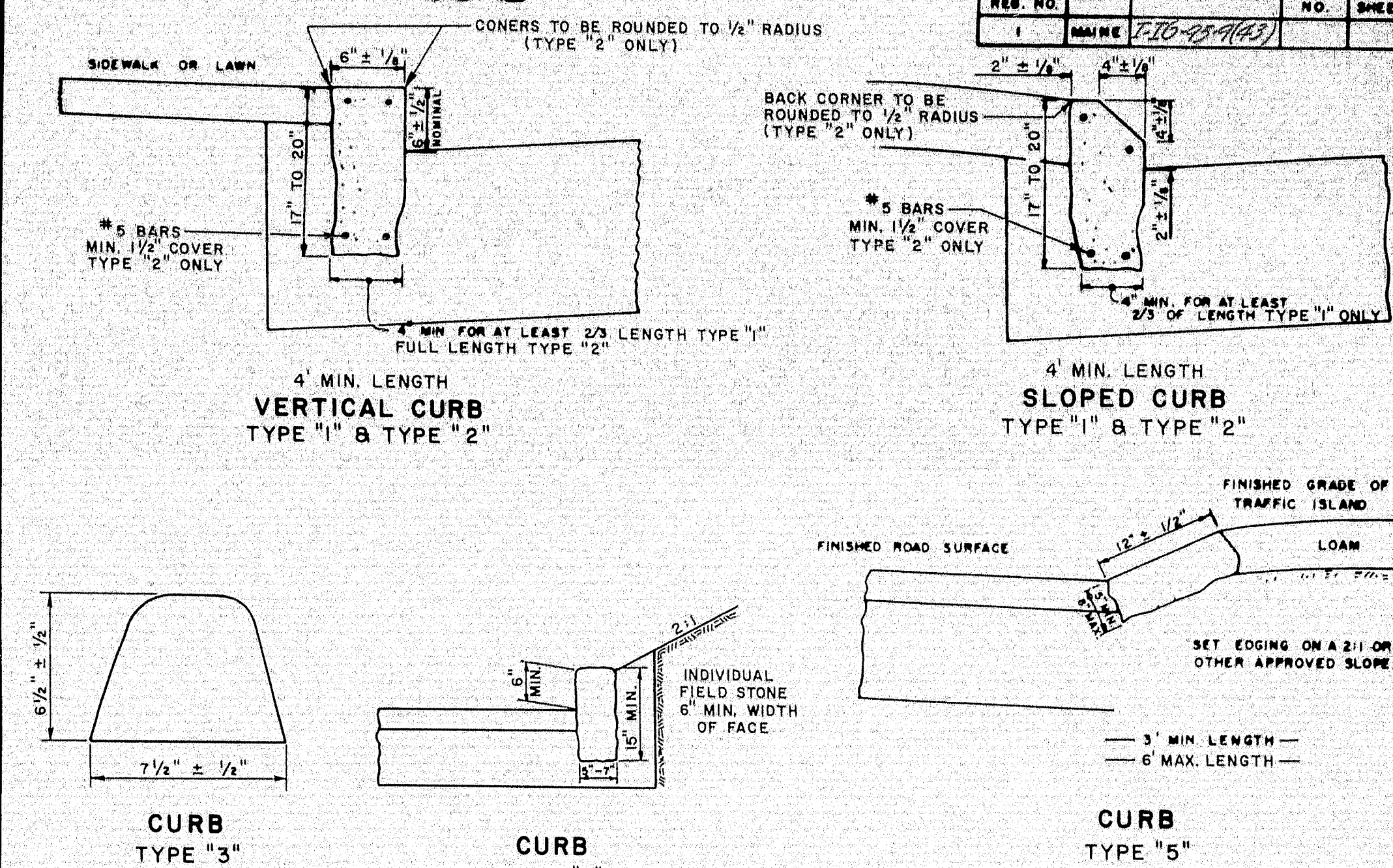
For 12" to 18" inclusive, diameter connection  
between concrete and metal pipe

Reinforced concrete pipe shall  
conform to the latest standard  
specifications

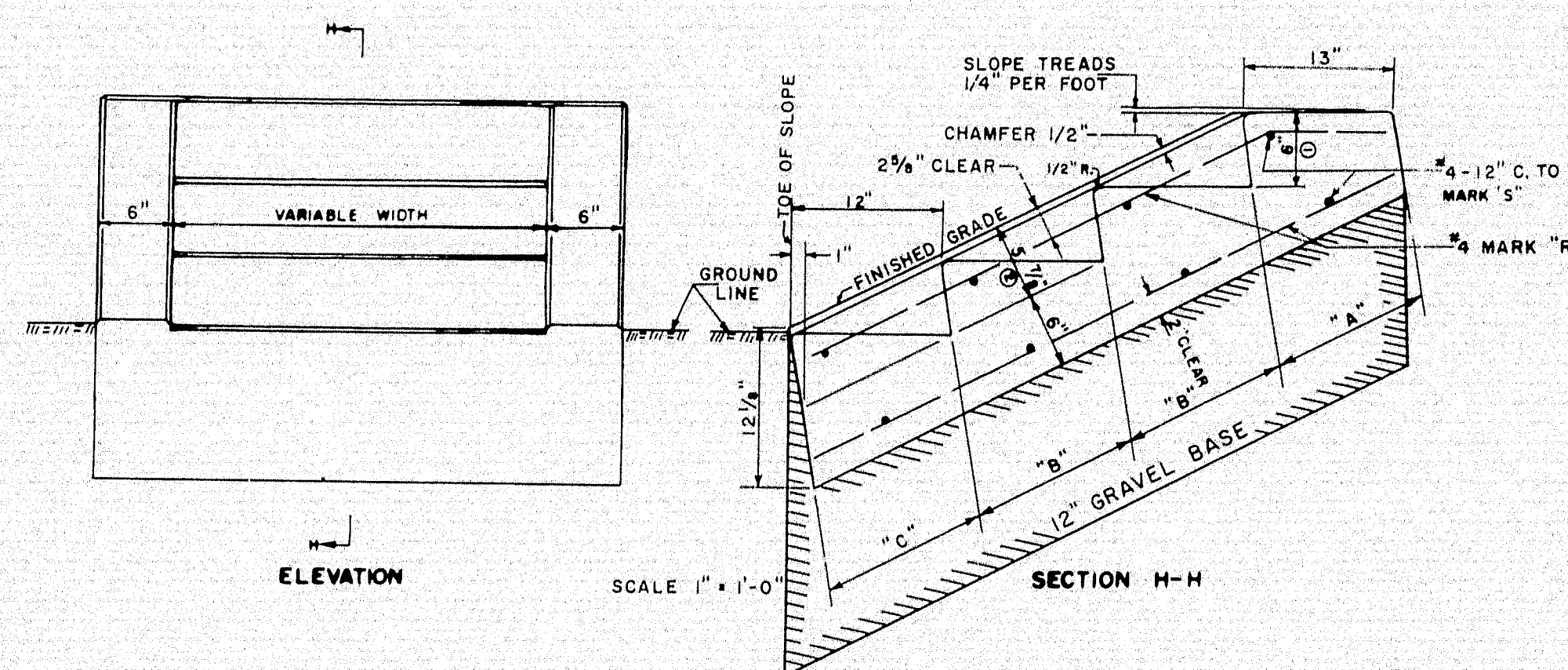
## RIGHT OF WAY MONUMENTS & PROJECT MARKERS



## CURB



## CONCRETE STEPS



CONCRETE CLASS "A"		
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL
"A" HEADER	.030 CU. YDS.	.015 CU. YDS.
"B" EA. INTER ST.	.030 CU. YDS.	.020 CU. YDS.
"C" FOOTER	.030 CU. YDS.	.020 CU. YDS.

### PAY ITEMS

ITEM NO.	DESCRIPTION
204-10	Struct. earth excav. - drain.
204-11	Struct. rocks excav. - drain.
302-14	Gravel for foundations
701-47	Portland cement
705-13	Reinforcing steel, delivered
705-14	Reinforcing steel, placed
904-11	Reinforced concrete steps

CONCRETE CLASS "A"		
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL
"A" HEADER	.035 CU. YDS.	.018 CU. YDS.
"B" EA. INTER ST.	.035 CU. YDS.	.024 CU. YDS.
"C" FOOTER	.035 CU. YDS.	.024 CU. YDS.

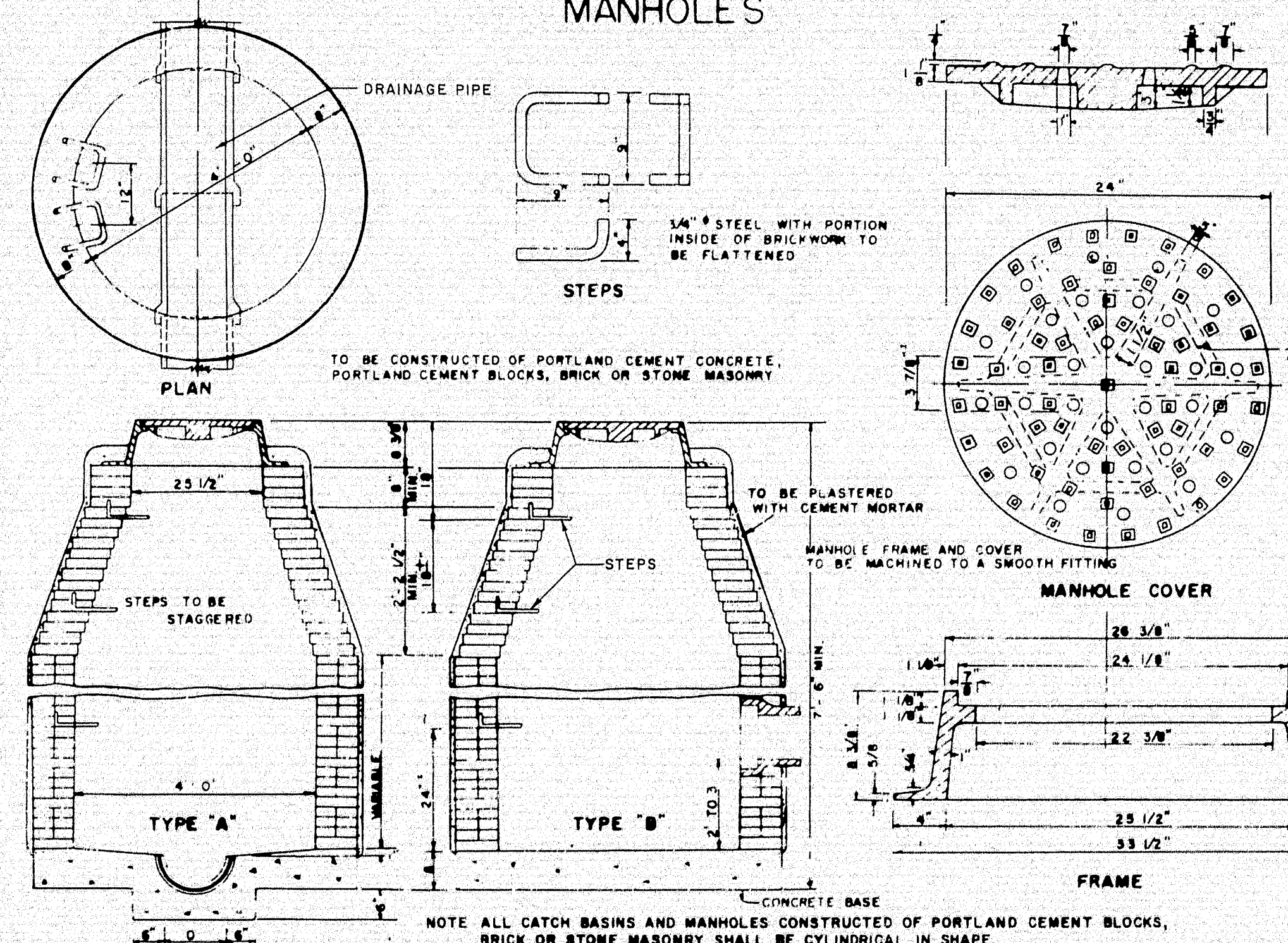
REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	#4	2 EACH PARAPET	11" FOR "A"
		.668 LBS. PER FT.	14 1/2" FOR EACH "B"
			+12" FOR "C"
S	#4	2 FOR "A"	4" EACH PARAPET
		2 FOR EACH "B"	+12" PER FT. OF WIDTH
		2 FOR "C"	

NOTE:

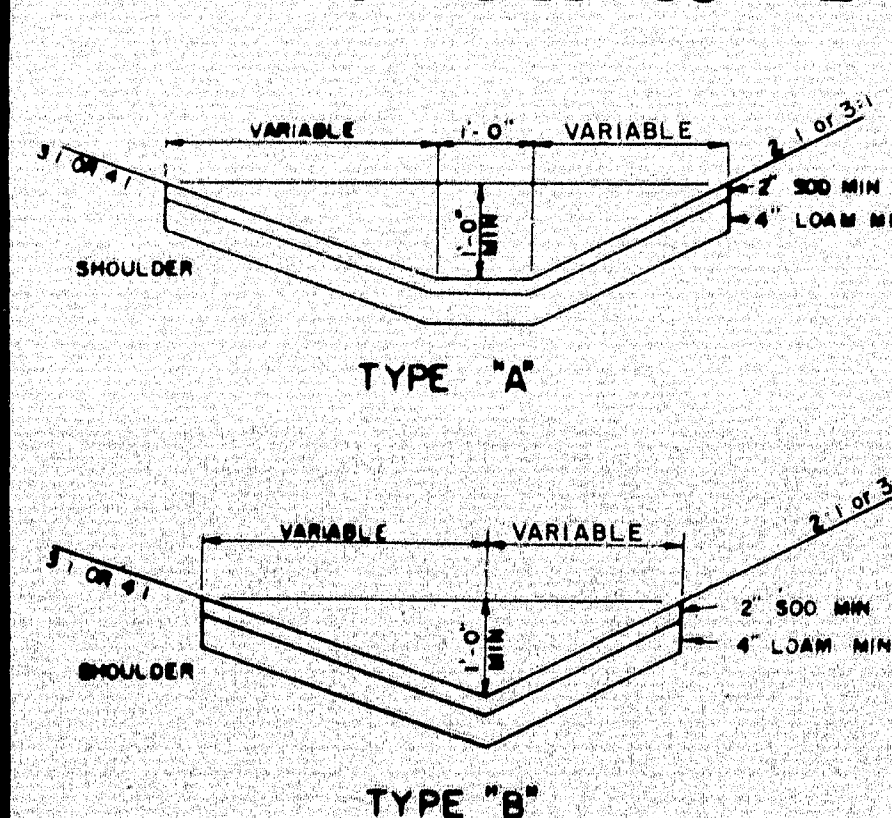
To determine the quantity of "Structural Excavation"  
for payment refer to the "Standard Specifications"  
section 204-6D, structural earth and rock excavation -  
abutments and retaining wall or piers.

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	#4	2 EACH PARAPET	11" FOR "A"
		.668 LBS. PER FT.	14 1/2" FOR EACH "B"
			+12" FOR "C"
S	#4	2 FOR "A"	4" EACH PARAPET
		2 FOR EACH "B"	+12" PER FT. OF WIDTH
		2 FOR "C"	

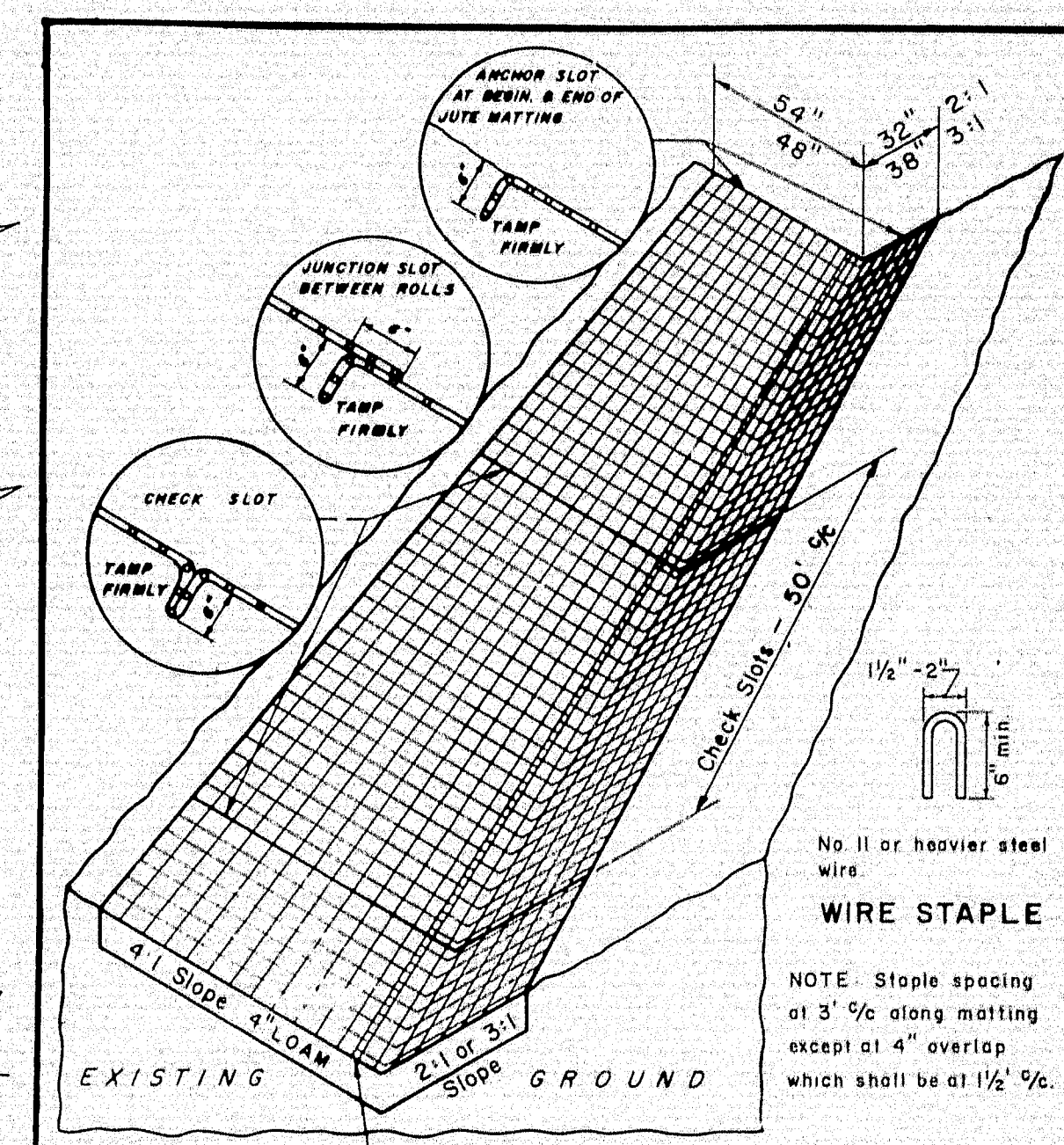
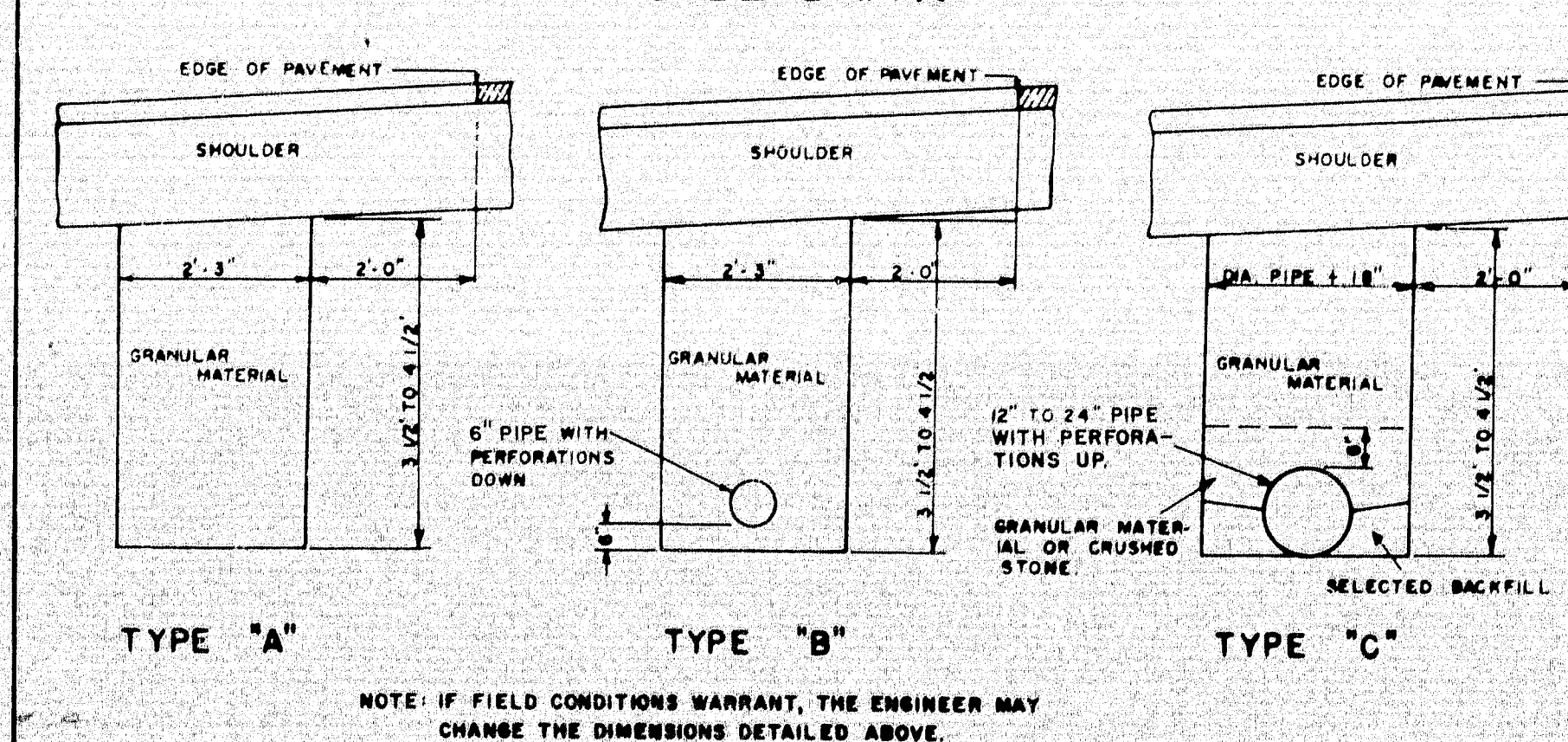
## MANHOLES



## SODDED GUTTER



## UNDERDRAIN



## JUTE MATTING - DITCH SECTION

MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

## STANDARD DETAILS

MISCELLANEOUS ITEMS

MARCH  
3-64

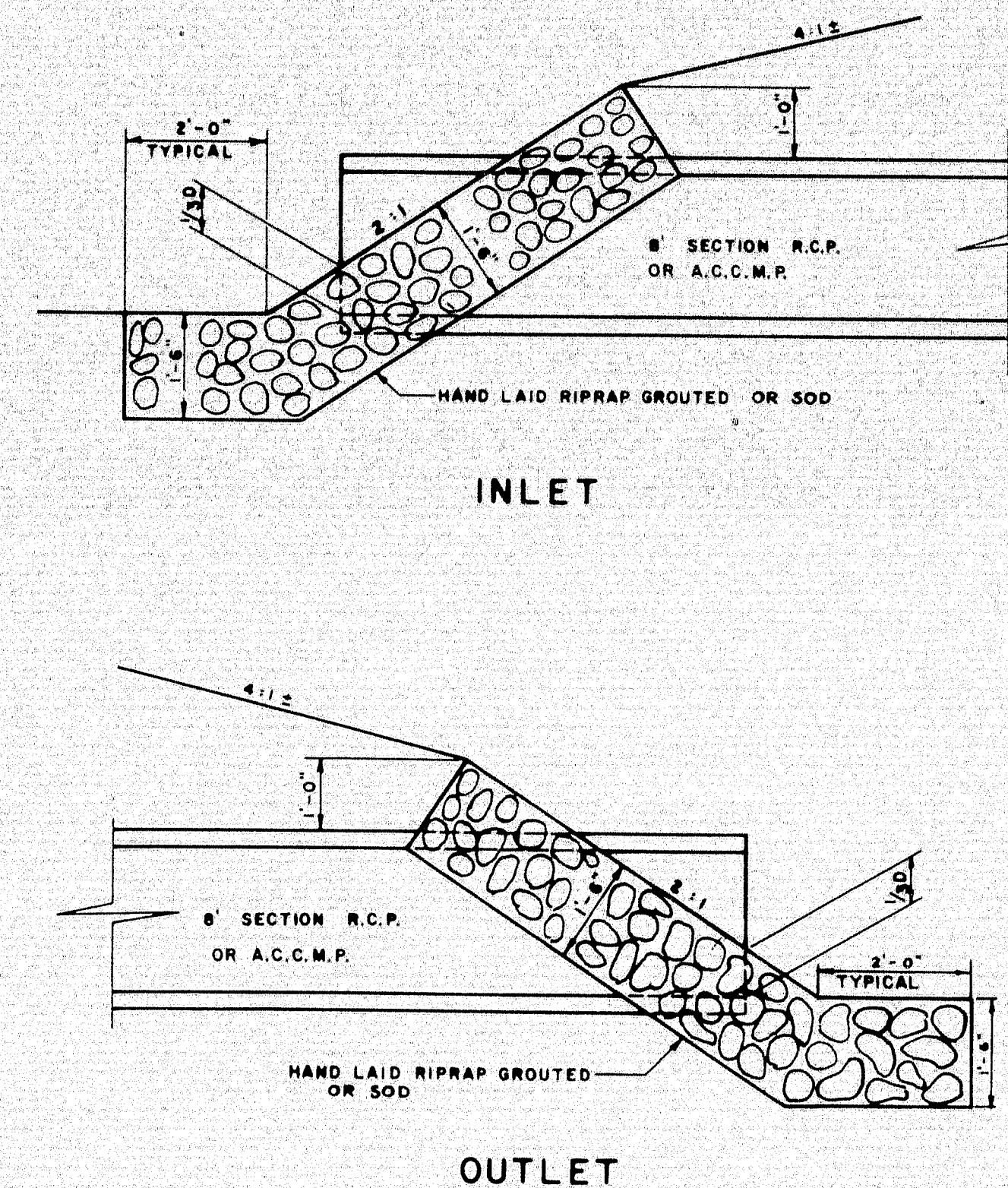
101-243 13LAND FALLS (43)



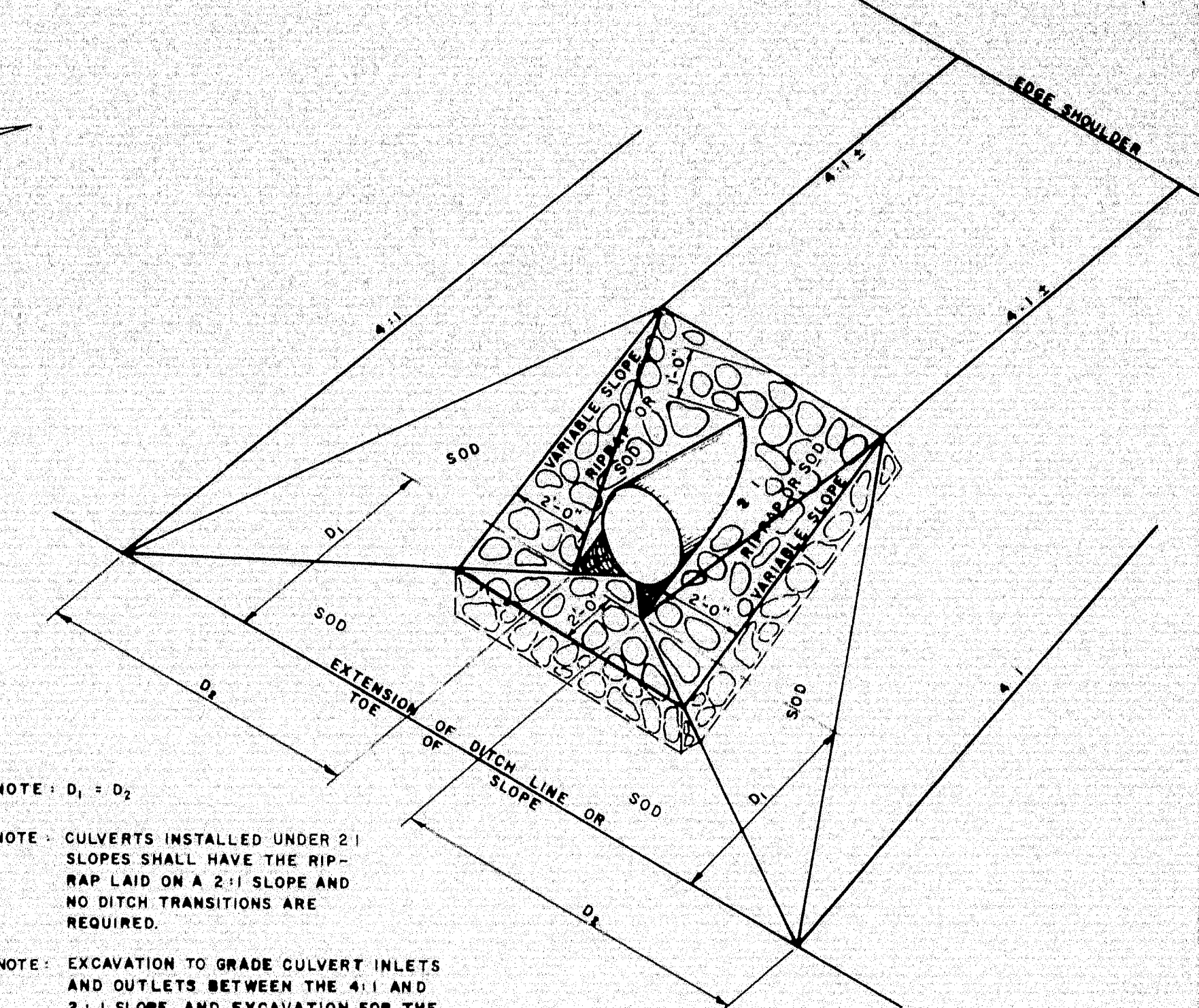
To be used with combined system.

Other types may be used if approved by the engineer.

Traps shall be installed on the outlets of catch basins or manholes which empty a storm water system into a sanitary sewerage system.



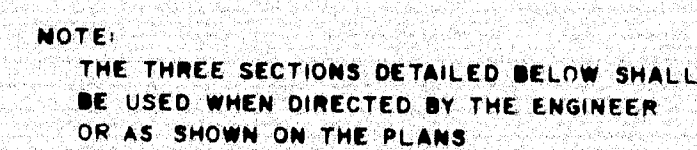
**TYPICAL RIPRAP DETAIL FOR R.C.P. OR A.C.C.M.P.**



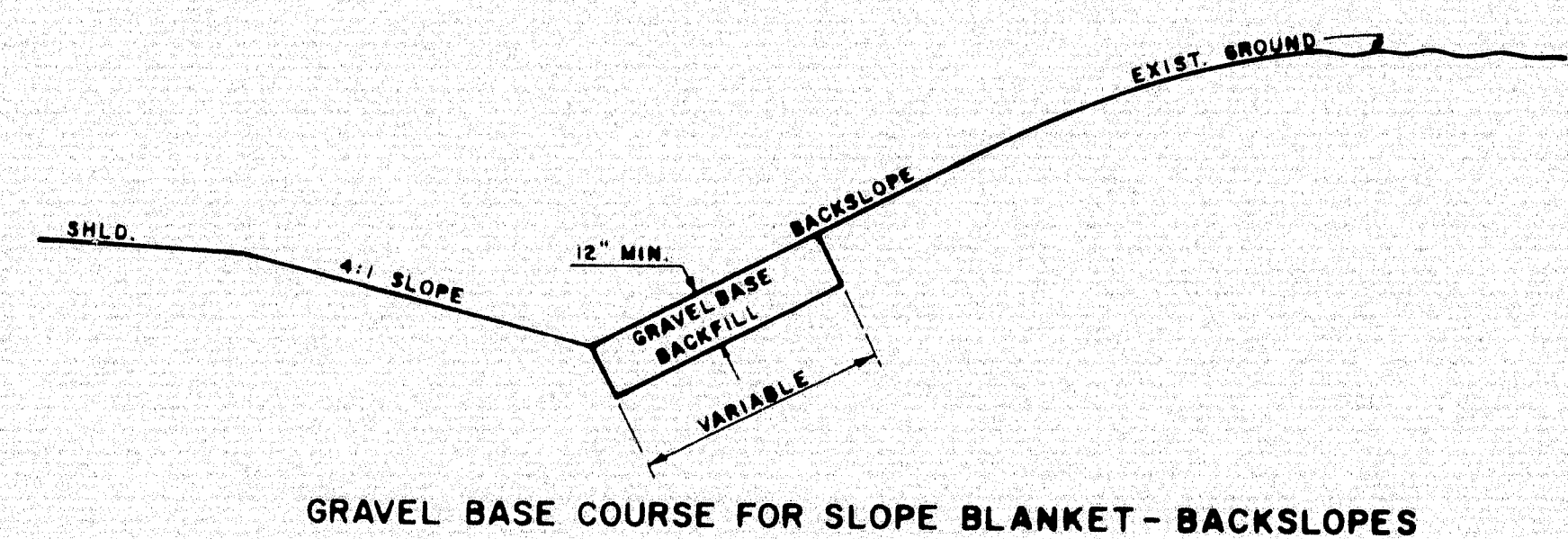
NOTE:  $D_1 = D_2$

NOTE - CULVERTS INSTALLED UNDER 2 SLOPES SHALL HAVE THE RIP-RAP LAID ON A 2:1 SLOPE AND NO DITCH TRANSITIONS ARE REQUIRED.

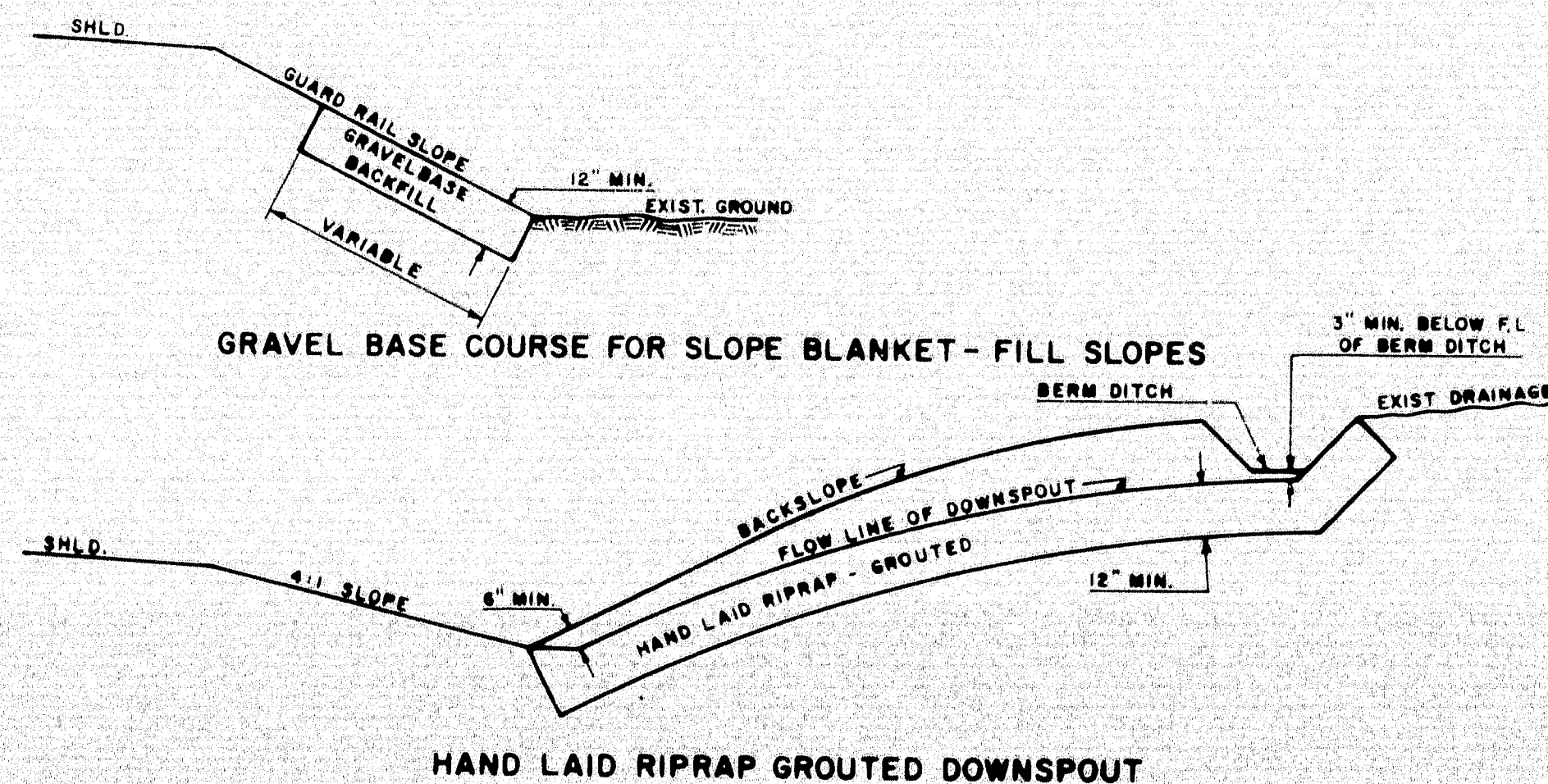
NOTE: EXCAVATION TO GRADE CULVERT INLETS AND OUTLETS BETWEEN THE 4:1 AND 2:1 SLOPE AND EXCAVATION FOR THE RIPRAP, IN CUT AREAS ONLY, WILL BE PAID FOR UNDER ITEM NO. 204-10 STRUCTURAL EARTH EXCAVATION-DRAINAGE



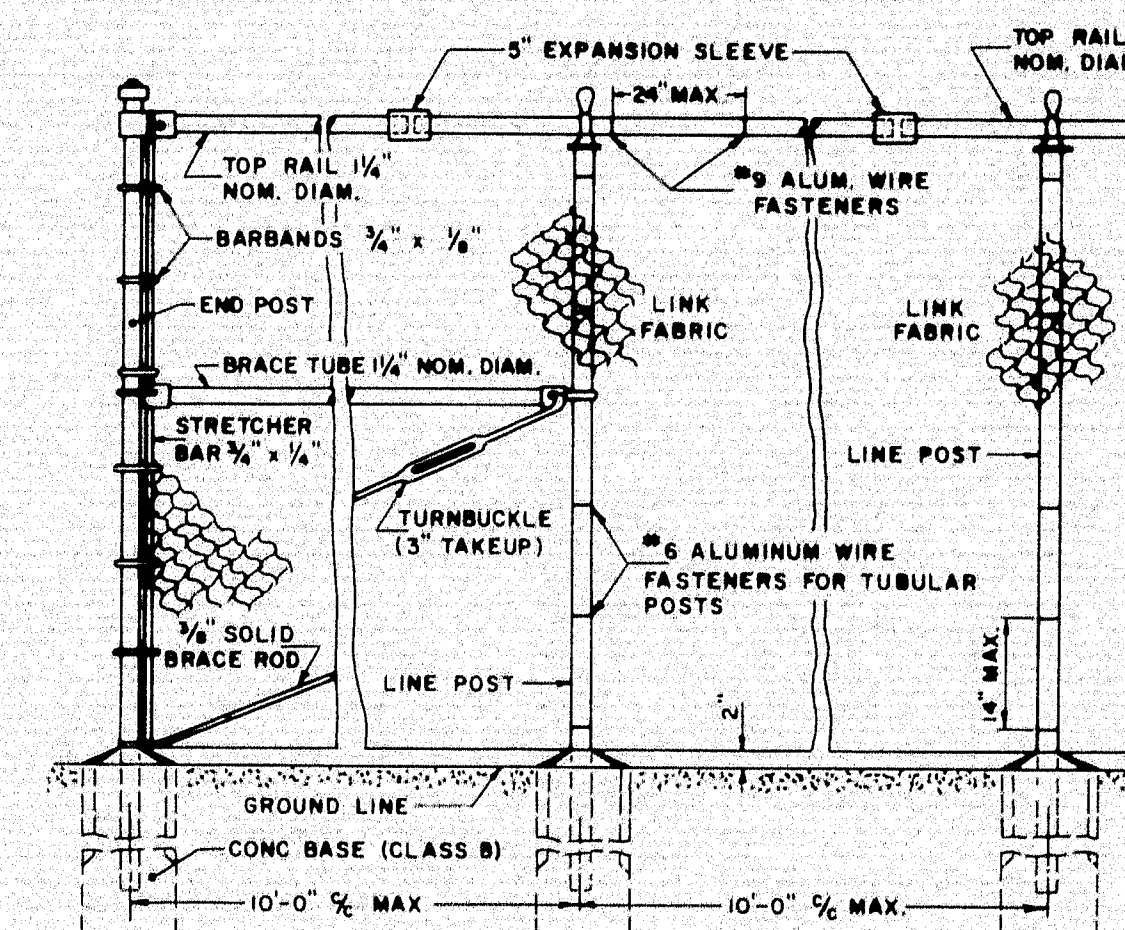
PRECAST PORTLAND CEMENT CONCRETE  
CATCH BASINS  
TYPES C, F, H & I - MANHOLE TYPE B



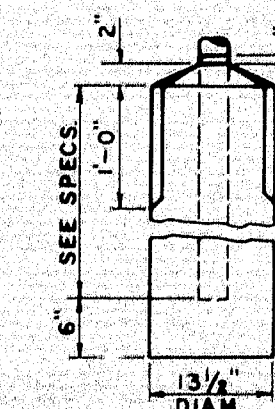
### GRAVEL BASE COURSE FOR SLOPE BLANKET - BACKSLOPES



PRECAST PORTLAND CEMENT CONCRETE  
CATCH BASIN TYPE G  
MANHOLE TYPE A



PORTLAND CEMENT CONCRETE  
(CLASS B)



LINE, GATE AND  
END POST BASE

## " CHAIN LINK FENCE

Diagram illustrating the layout of a 24' x 24' area, divided into a 6' x 6' grid on the left and a 6' x 6' grid on the right, with a 6' x 6' grid in the center. The diagram shows the overall dimensions and the grid structure.

Overall dimensions: 24' x 24'.

Grid dimensions: 6' x 6' (left), 6' x 6' (right), 6' x 6' (center).

Labels: "Variable" (vertical), "Max Joint 6'-0\" (horizontal), "Minimum 8\" Gravel" (bottom).

NOTE  
Sidewalk shall conform to  
standard specifications  
section 904.

Welded Steel Wire Fabric  
6" x 6" 10/10  
Approx Weight 21 lbs. per  
100 sq ft

MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

## STANDARD DETAILS

DETAIL OF TRAP, REINFORCED  
PORTLAND CEMENT CONCRETE SIDEWALK,  
CHAIN LINK FENCE, TYPICAL  
RIPRAP DETAIL & PRECAST CATCH  
BASINS & MANHOLES

MARCH  
-64

101-244 ISLAND FALLS (43)



Technical drawing of a shaft and hub assembly. The shaft has a diameter of  $1\frac{1}{2}''$  and a length of  $1\frac{1}{2}''$ . The hub has an inner diameter of  $1\frac{1}{2}''$  and an outer diameter of  $2\frac{1}{2}''$ . The hub has a thickness of  $\frac{3}{8}''$  and a fillet radius of  $\frac{3}{16}''$ . The shaft has a fillet radius of  $\frac{3}{16}''$ . The fit is labeled "Press Fit".

2 Hex. Nuts

1"  $\phi$

3 1/2" Threaded

1/2" for EPA & EPB

Dimension "F" for EPC & FPC

2 Hex. Nuts

1/2"  $\phi$

4" Threaded

1/3"

10" Embed

Shaded

Top of Masonry

4 1/2"

10" Embed

Shaded

Top of Masonry

For EPA - 2 req'd.  
For EPB - 2 req'd.  
For EPC - 2 req'd.  
For FPA - 2 req'd.  
For EPB - 2 req'd.  
For FPC - 4 req'd.

U. P. R. STATE		PROJECT NUMBER	SHEET	TOTAL
REG. NO.			NO.	SHEET
1		MAINE 7-16-98-9(43)		

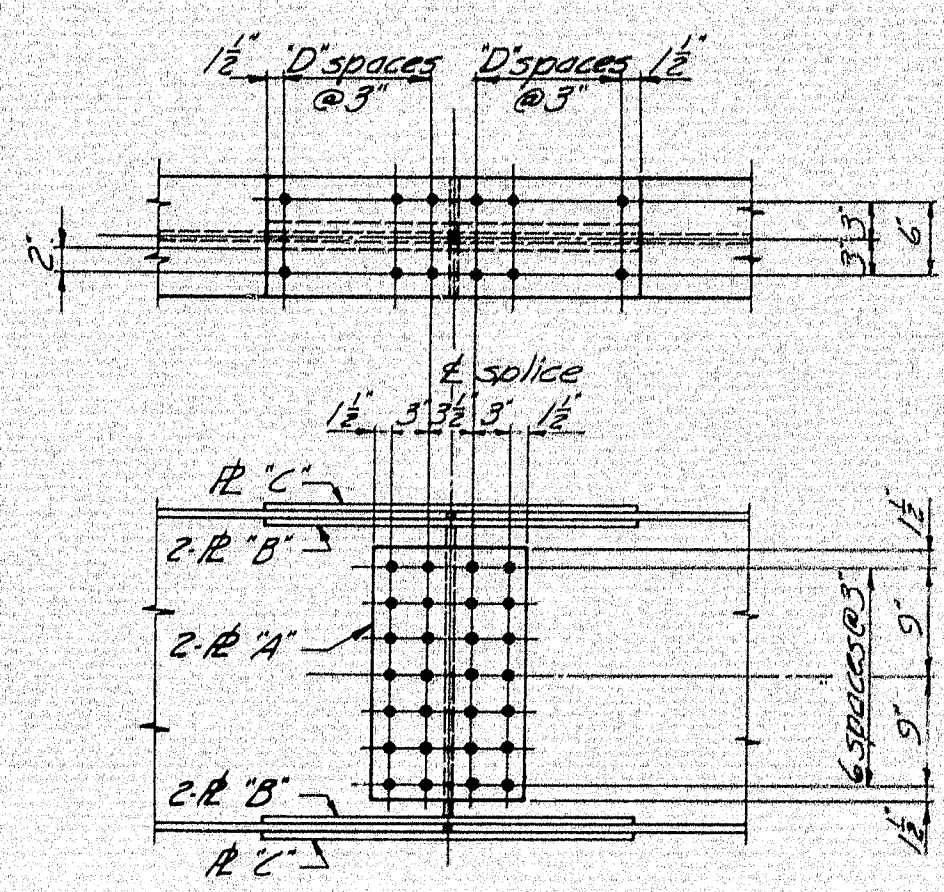
[illegible]

PEDESTALS — ALLOWABLE LOADS & DIMENSIONS														
<i>Pedestal</i>	<i>Load</i>	A	B	C	D	E	F	G	H	J	K	L	M	N
EPA	132 <sup>K</sup>	—	—	—	—	—	—	—	—	8"	4"	3½"	5½"	—
FPA	150 <sup>K</sup>	—	—	—	—	—	—	—	—	—	—	—	—	—
EPB-1	120 <sup>K</sup>	—	6"	8"	14"	8"	10"	6"	7½"	2"	8"	4"	3½"	5½"
EPB-2	165 <sup>K</sup>	—	7"	10"	14"	9"	14"	7"	8"	3"	10"	5"	3½"	6½"
EPB-3	224 <sup>K</sup>	—	8"	11"	24"	10"	14"	7"	10"	4½"	12"	5"	3½"	6½"
FPB-1	120 <sup>K</sup>	—	6"	8"	14"	8"	—	—	7½"	2"	—	—	—	—
FPB-2	165 <sup>K</sup>	—	7"	10"	14"	9"	—	—	8"	3"	—	—	—	—
FPB-3	224 <sup>K</sup>	—	8"	11"	24"	10"	—	—	10"	5"	—	—	—	—
EPC-1	70 <sup>K</sup>	9½"	6"	8"	18"	8"	1½"	3½"	3"	3"	4½"	—	½"	6"
EPC-2	100 <sup>K</sup>	11½"	8"	8"	18"	8"	1½"	3½"	3"	3"	6½"	—	½"	6"
EPC-3	130 <sup>K</sup>	14"	10"	8"	18"	9"	1½"	4"	3"	3"	8½"	—	½"	7"
EPC-4	160 <sup>K</sup>	14"	10"	8"	14"	9"	1½"	4"	4"	3"	8½"	—	½"	7"
EPC-5	190 <sup>K</sup>	14½"	10"	9"	24"	10"	2"	4½"	5"	3"	8½"	—	½"	8"
EPC-6	220 <sup>K</sup>	14½"	14"	10"	24"	14"	2½"	5"	5"	3"	10½"	—	1"	8"
EPC-7	250 <sup>K</sup>	14½"	14"	14"	24"	14"	2½"	5"	5"	4"	10½"	—	1"	8"
FPC-1	100 <sup>K</sup>	—	—	8"	14"	9"	1½"	2½"	8"	—	6½"	—	—	6"
FPC-2	160 <sup>K</sup>	—	—	8"	14"	10"	1½"	3"	8"	—	6½"	—	—	7"
FPC-3	190 <sup>K</sup>	—	—	9"	24"	10"	1½"	3"	10"	—	6½"	—	—	8"
FPC-4	220 <sup>K</sup>	—	—	10"	24"	14"	1½"	4"	10"	—	6½"	—	—	8"
FPC-5	250 <sup>K</sup>	—	—	14"	24"	14"	2"	4"	10"	—	6"	—	—	8"

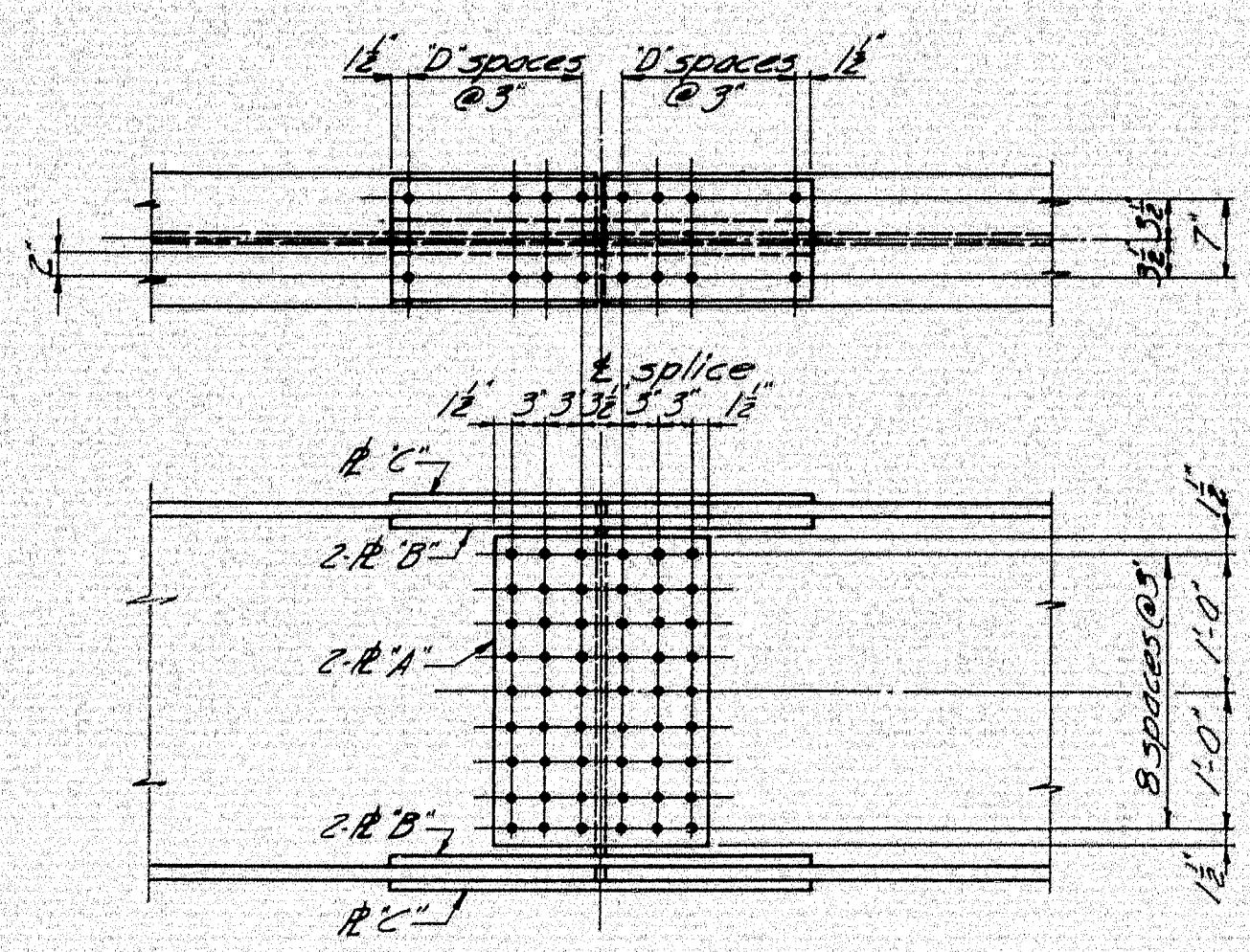
JANUARY 1964

101-245 ISLAND FALLS (43)

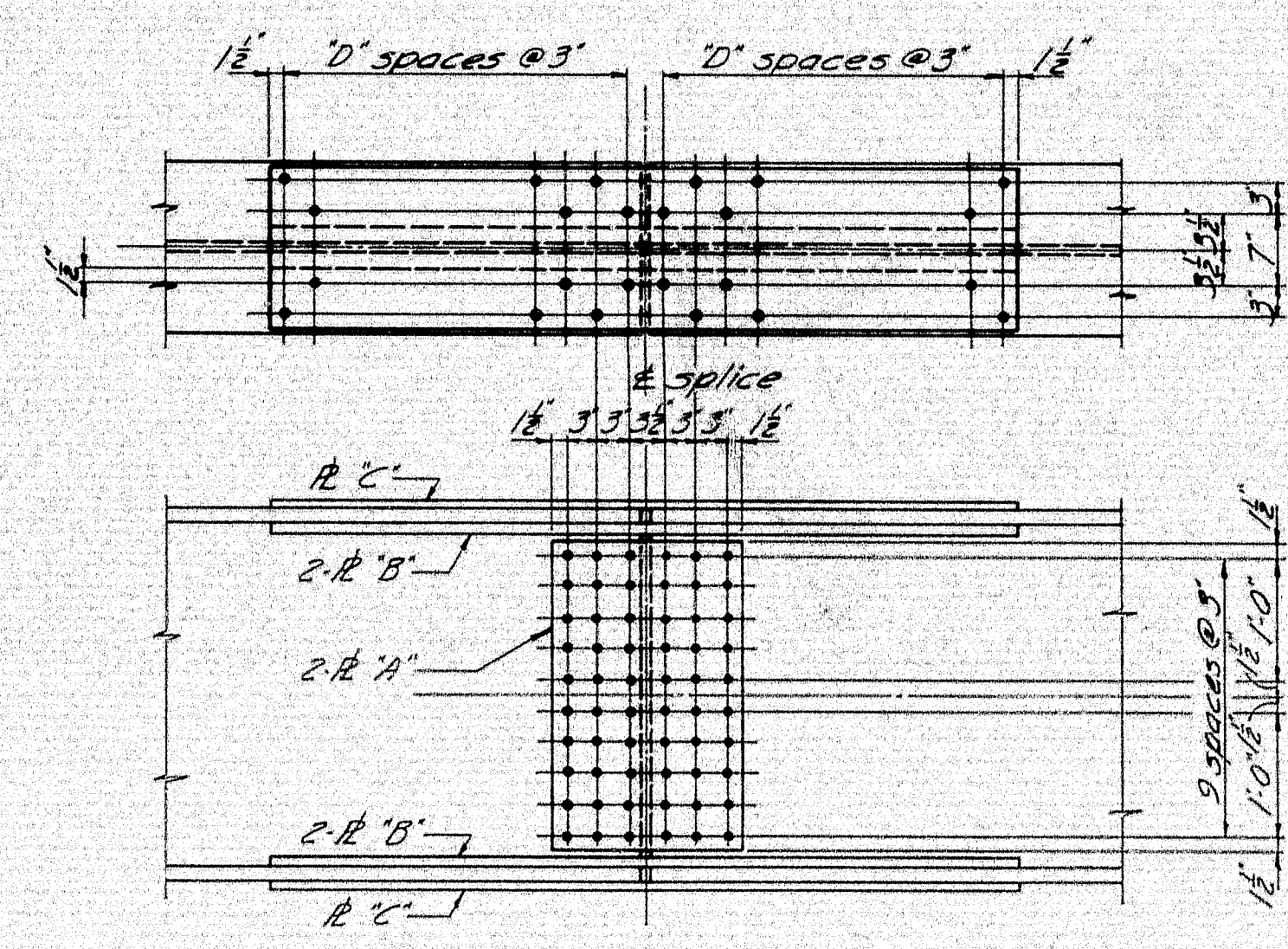




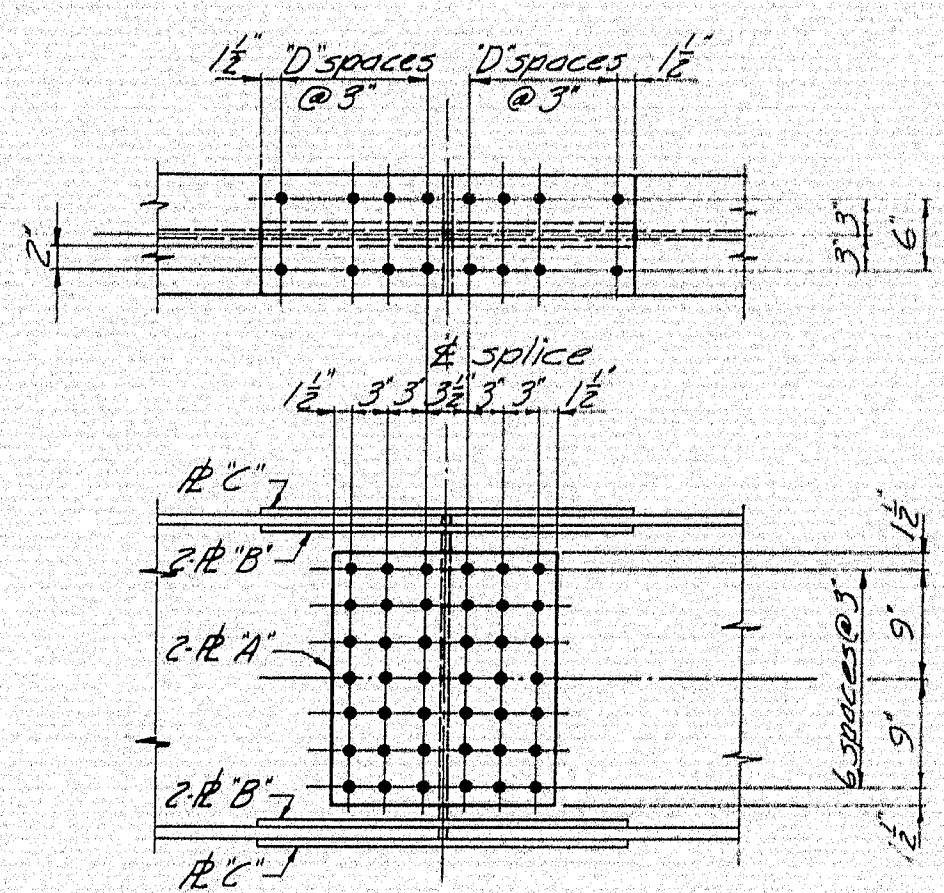
**27 WF 84**



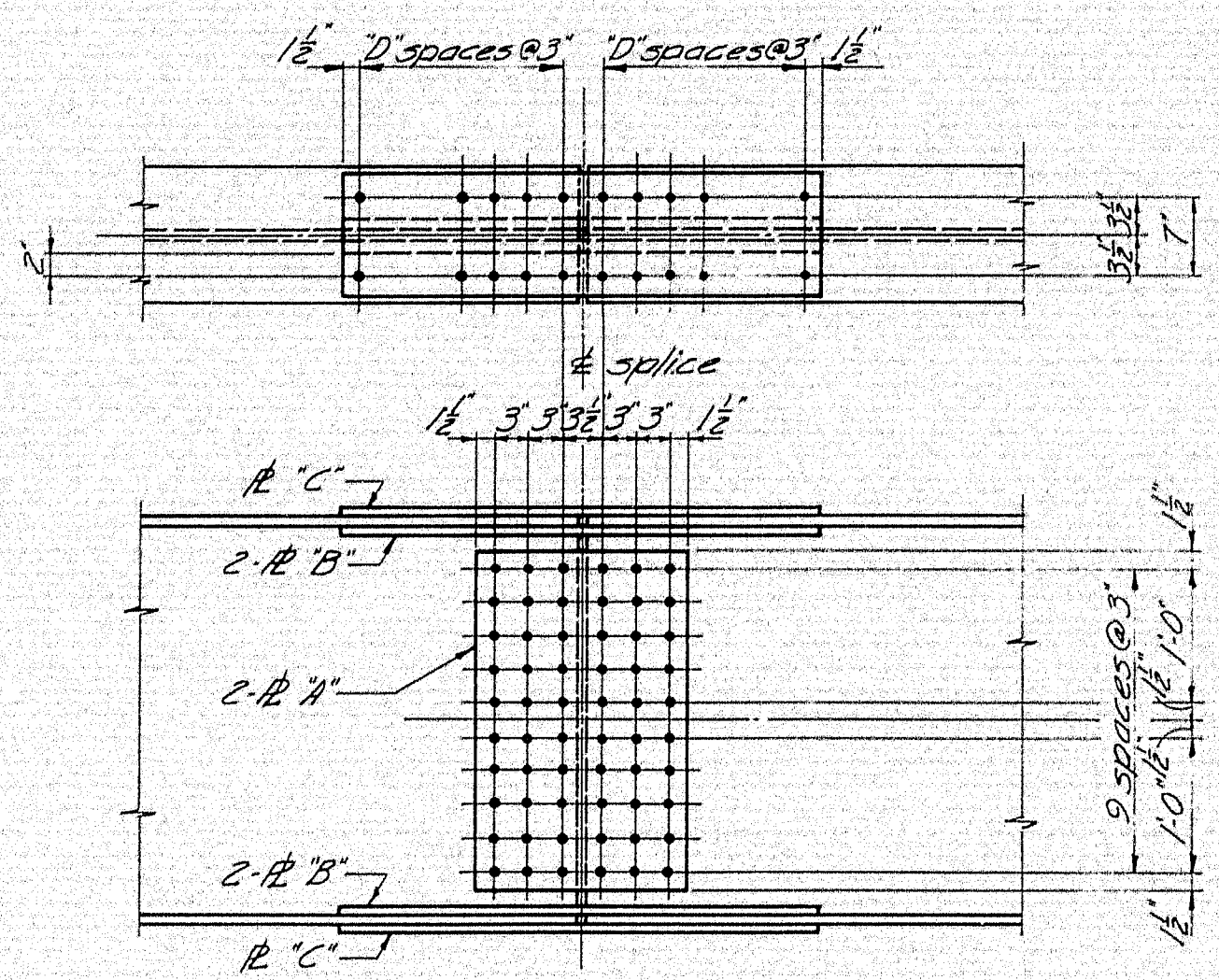
**33 WF 118, 130, 141, 152**



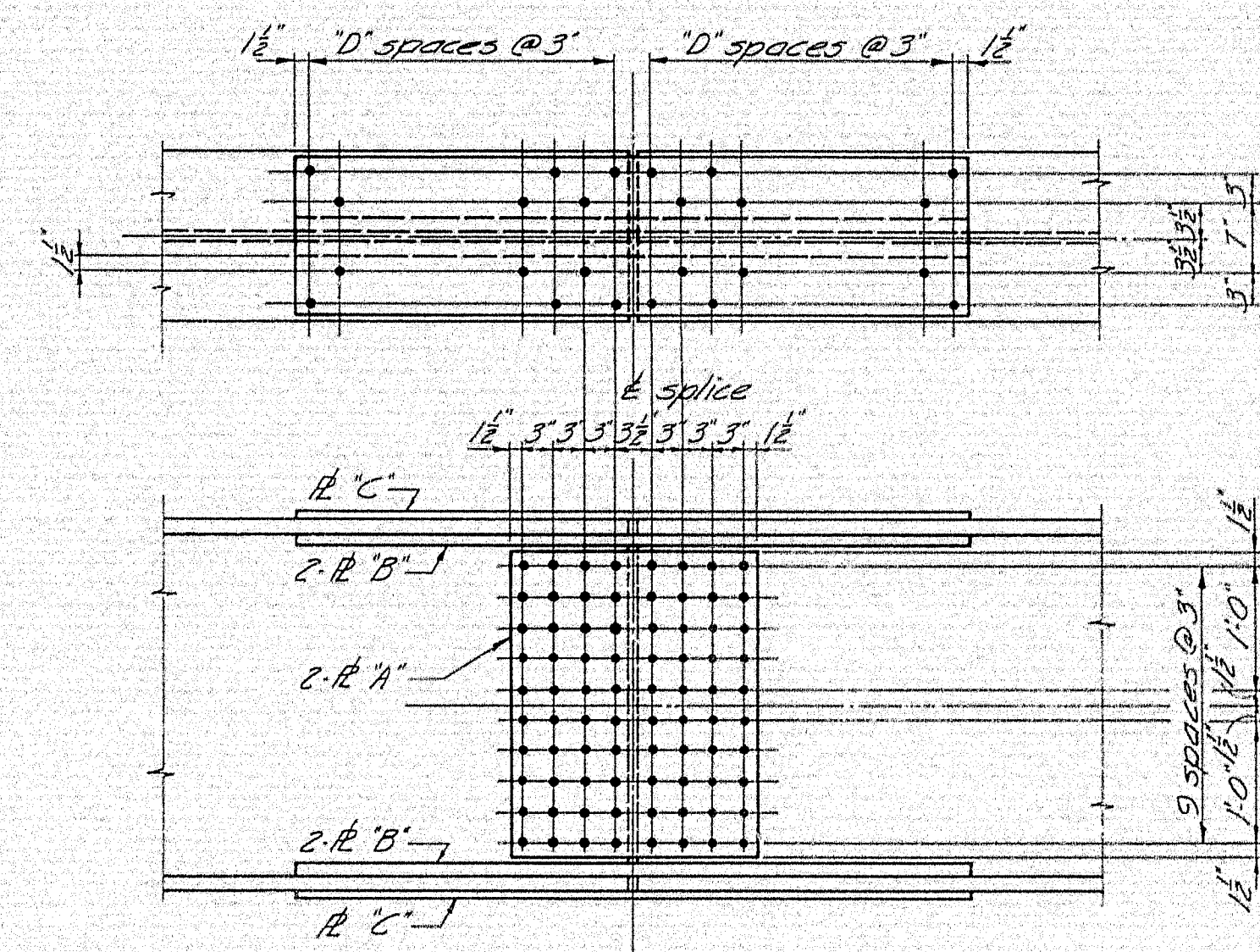
**36 WF 245, 280**



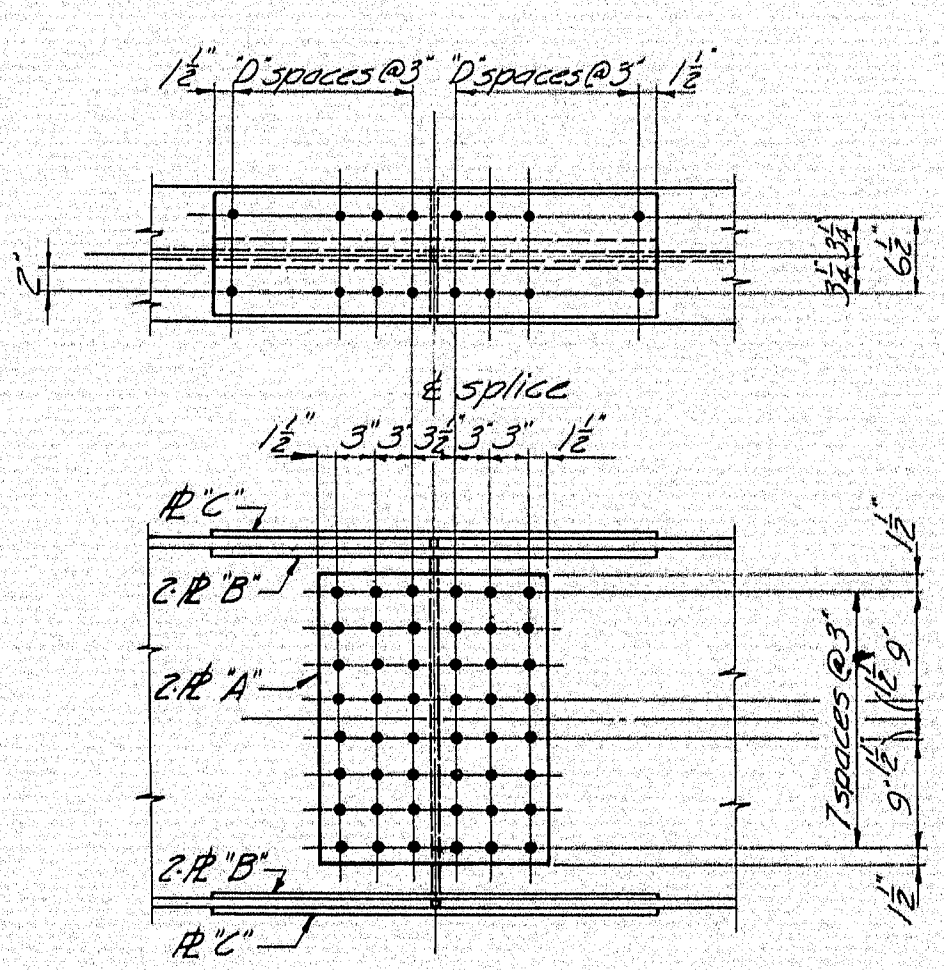
**27 WF 94, 102, 114**



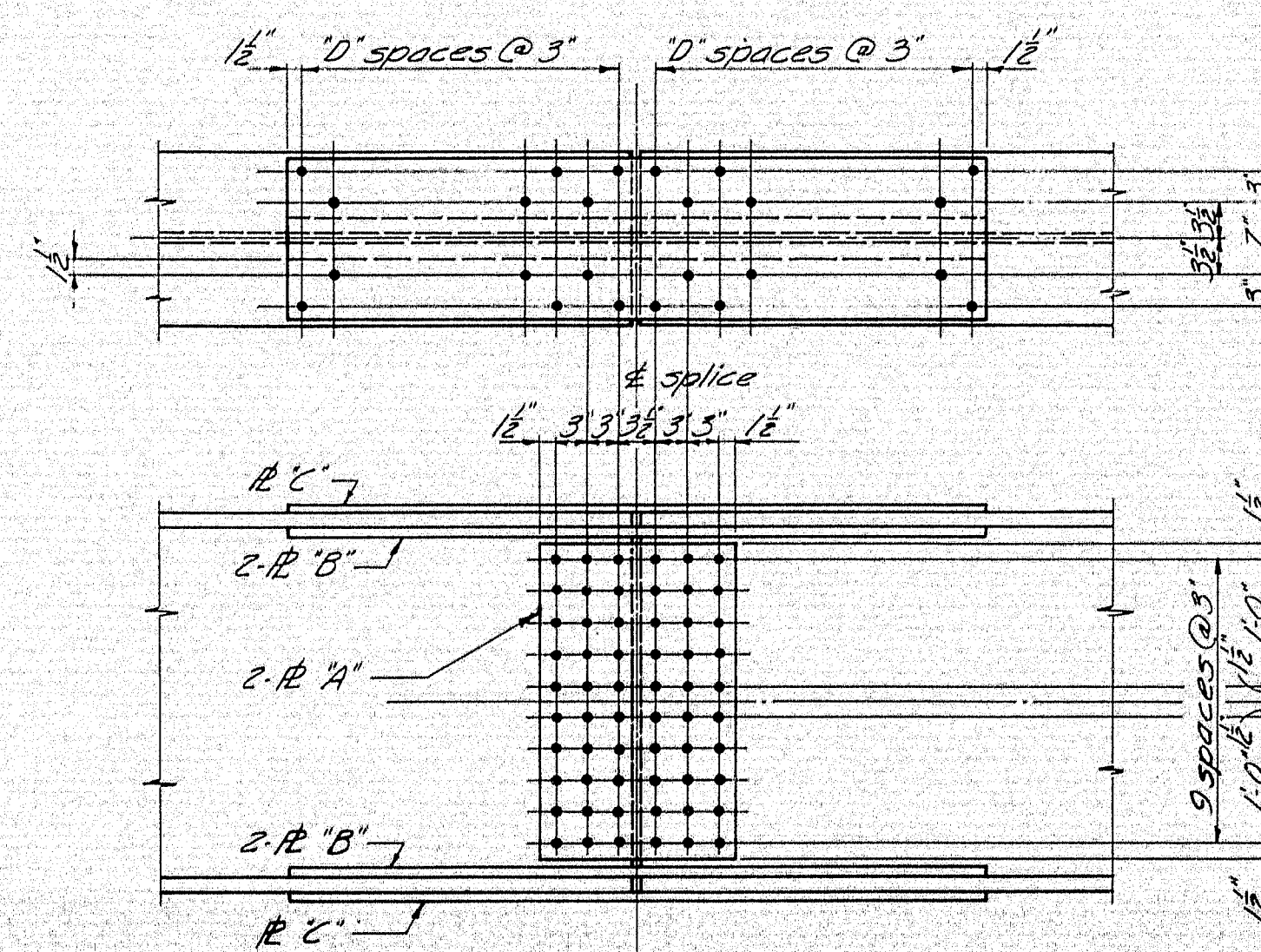
**36 WF 135, 150, 160, 170, 182, 194**



**36 WF 300**



**30 WF 99, 108, 116, 124, 132**



**36 WF 230, 260**

SPlice DESIGN, PLATES AND FLANGE HOLES									
BEAM	BEND. M.	SHEAR	PLATE "A"	PLATE "B"	PLATE "C"	"D"			
27 WF 84	3070 <sup>K</sup>	111 <sup>K</sup>	12 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	3			
27 WF 94	3520 <sup>K</sup>	110 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	3			
27 WF 102	3862 <sup>K</sup>	126 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	4			
27 WF 114	4341 <sup>K</sup>	140 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	4			
30 WF 99	3921 <sup>K</sup>	139 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	3			
30 WF 108	4360 <sup>K</sup>	147 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	4			
30 WF 116	4780 <sup>K</sup>	152 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	4			
30 WF 124	5170 <sup>K</sup>	159 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	4			
30 WF 132	5539 <sup>K</sup>	168 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	10 x 1/2	5			
33 WF 118	5287 <sup>K</sup>	164 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	4			
33 WF 130	5978 <sup>K</sup>	173 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	5			
33 WF 141	6604 <sup>K</sup>	181 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	5			
33 WF 152	7193 <sup>K</sup>	191 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	6			
36 WF 135	6473 <sup>K</sup>	191 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	4			
36 WF 150	7436 <sup>K</sup>	202 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	5			
36 WF 160	8005 <sup>K</sup>	212 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	6			
36 WF 170	8574 <sup>K</sup>	221 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	6			
36 WF 182	9204 <sup>K</sup>	237 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1/2	11 x 1/2	7			
36 WF 194	9838 <sup>K</sup>	253 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	4 x 1	11 x 1/2	8			
36 WF 230	12574 <sup>K</sup>	247 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	6 x 1	16 x 1/2	10			
36 WF 245	13441 <sup>K</sup>	260 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	6 x 1	16 x 1/2	11			
36 WF 260	14330 <sup>K</sup>	276 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	6 x 1 1/2	16 x 1/2	12			
36 WF 280	15351 <sup>K</sup>	291 <sup>K</sup>	18 <sup>1</sup> / <sub>2</sub> x 1/2	6 x 1 1/2	16 x 1/2	13			
36 WF 300	16676 <sup>K</sup>	312 <sup>K</sup>	24 <sup>1</sup> / <sub>2</sub> x 1/2	6 x 1 1/2	16 x 1/2	14			

**GENERAL NOTES**

1. Splice connections to be made with 3/8" φ high tensile strength bolts. Holes to be 1/8" φ.
2. The design bending moment is 90% of the net resisting moment of the beam with an allowable stress of 20,000 p.s.i. The design shear is 75% of the shear strength of the gross section of the web with an allowable stress of 12,000 p.s.i.
3. If beams of different sizes are to be spliced, use splice details shown for the smaller of the beams being spliced unless otherwise directed by design details. See design details for filler plate dimensions.
4. See design details for slopes of beams in order to correctly fabricate bevels at the splices.

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

High Tensile Strength Bolts.....A-325  
Splice Plates.....A-36

**DESIGN SPECIFICATIONS**

AA540 Standard Specifications for Highway Bridges, 1961 with Interim Specifications, 1961 & 1962

MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

**STANDARD DETAILS**  
(BD 103-64)  
**BEAM SPLICES**

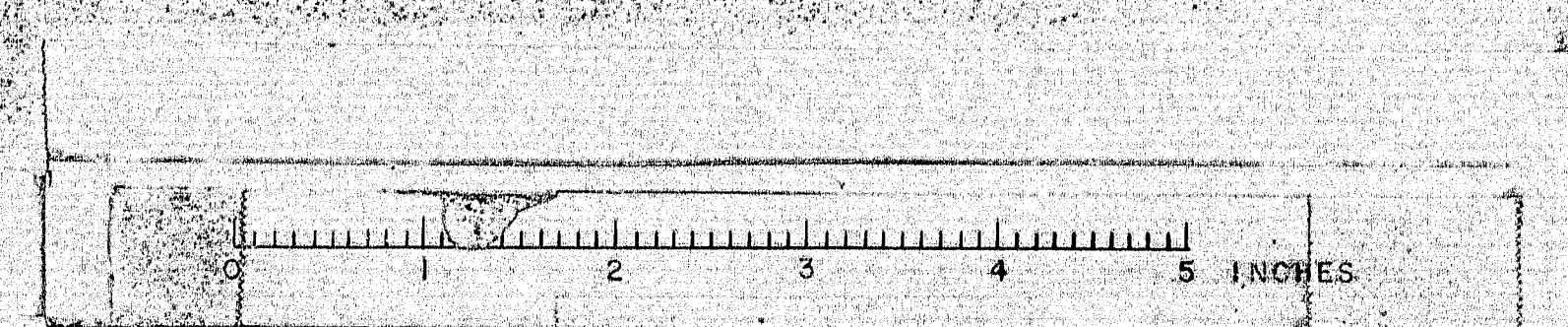
Revised Feb. 1966

JANUARY 1964

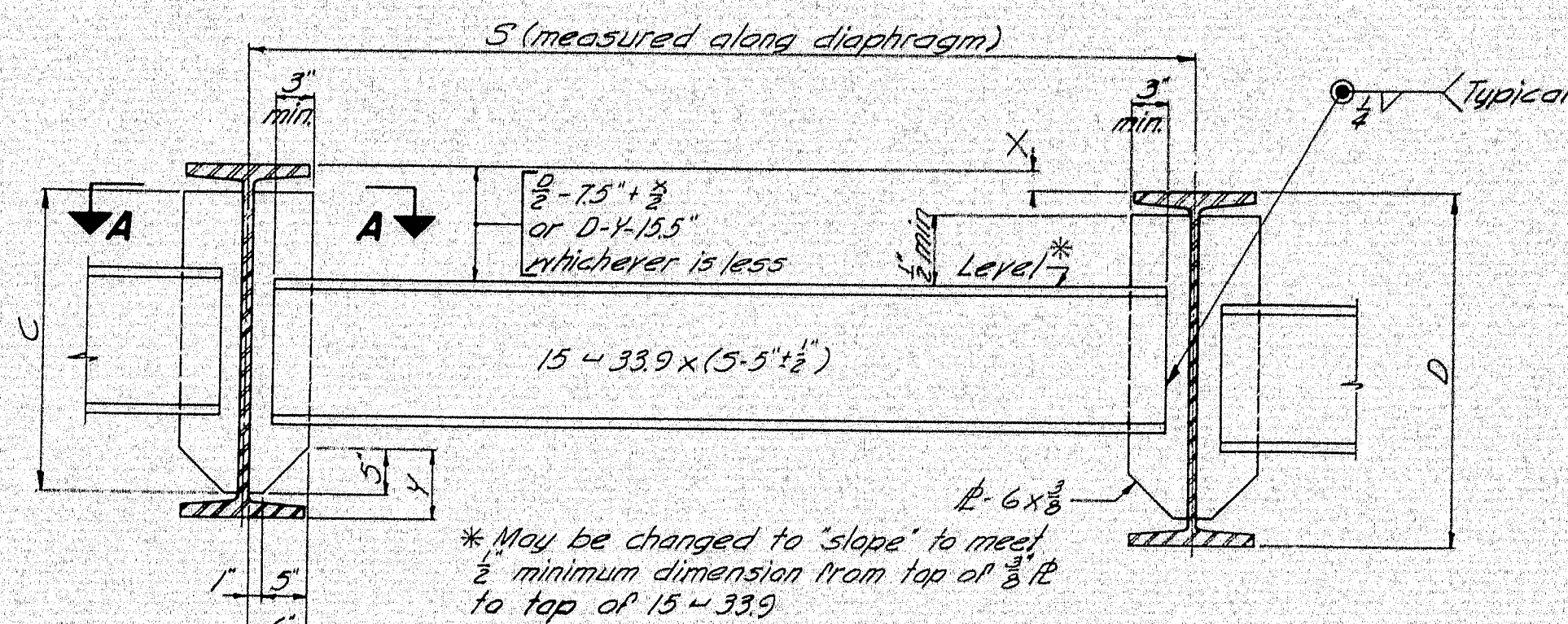
101-246

13LAND FALLS (43)

54







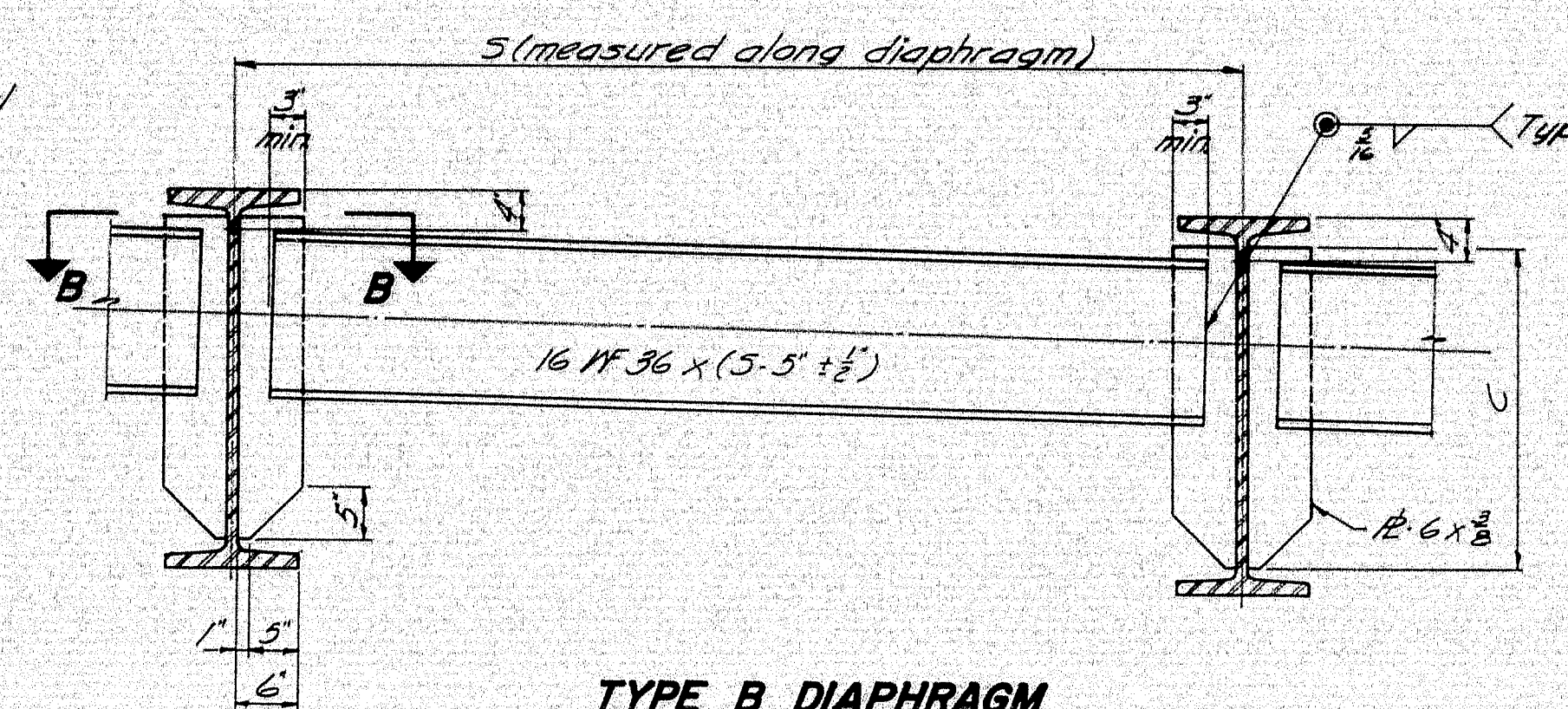
**TYPE A DIAPHRAGM**

**SECTION A-A**  
Sken Angle 0° to 15°-30°

**SECTION A-A**  
Sken Angle over 15°-30° to 30°-00°

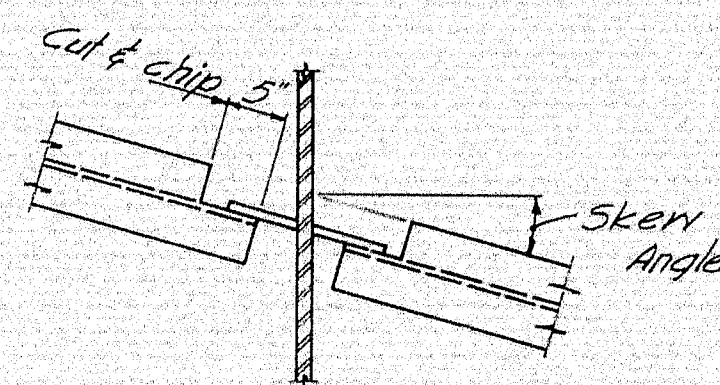
**SECTION A-A**  
Sken Angle over 30°-00°

FILLET WELD SIZE "N" & DIMENSION "C" FOR DIAPHRAGM PLATES		
BEAM	C	N
27" 1/4" 84 to 114 incl.	1-11"	1/4"
30" 1/4" 99 to 132 incl.	2-2"	1/4"
33" 1/4" 118 to 158 incl.	2-5"	1/4"
36" 1/4" 135 to 184 incl.	2-7"	1/4"
36" 1/4" 230 to 300 incl.	2-6"	1/4"



**TYPE B DIAPHRAGM**

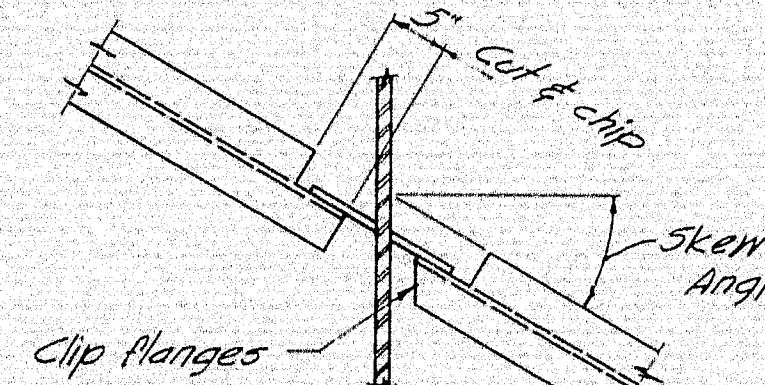
Welding ex 3 plates to web same as for Type A Diaphragm.



**SECTION B-B**  
Sken Angle 0° to 25°-00°

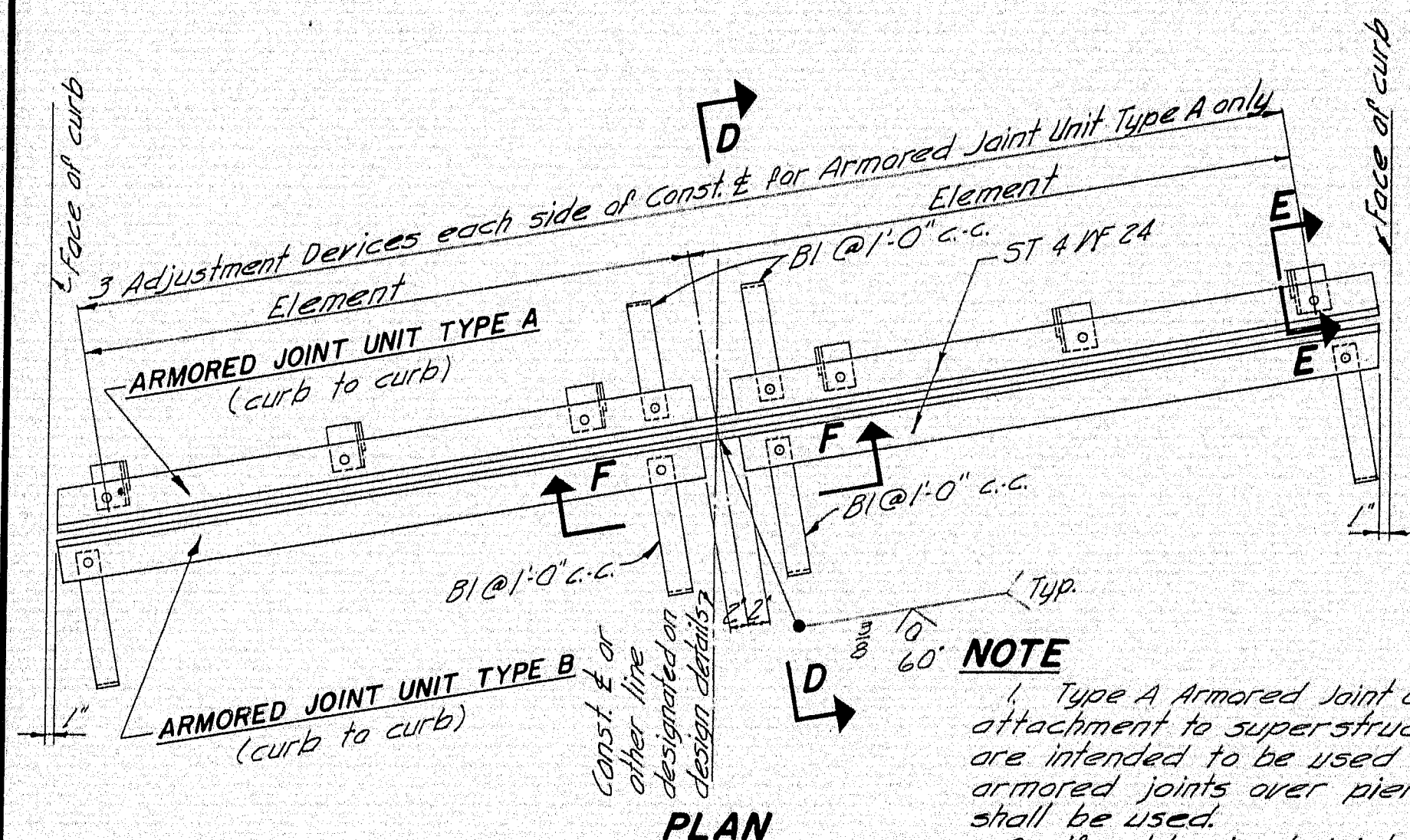
**NOTE**

See design details for diaphragm type, location and skew.



**SECTION B-B**  
Sken Angle over 25°-00°

**DIAPHRAGMS**



**PLAN**

**SECTION F-F**

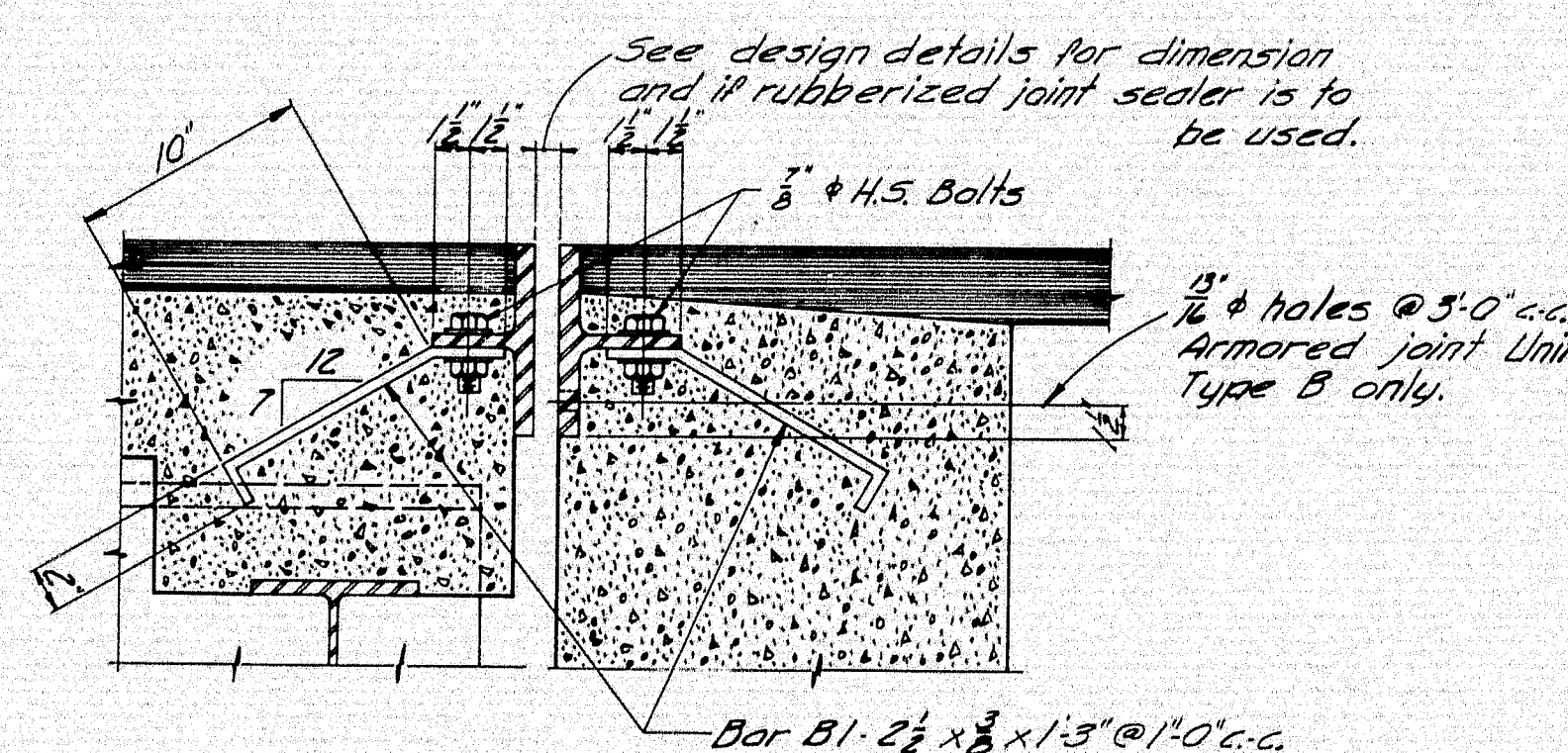
Note: See design details for Const. & to curb dimensions, skew, crown slope, slab thickness, other dimensions necessary to complete the fabrication details, and location.

**NOTE**

1. Type A Armored Joint Units are intended to be used for attachment to superstructures. Type B Armored Joint Units are intended to be used for attachment to abutments. At armored joints over piers, two Type A Armored Joint Units shall be used.
2. If rubberized joint sealer is called for on the design details the area to which it is to be banded shall not be painted and it shall be supported on non-bituminous material. At the Contractor's option the supporting material may be left in place or be removed. If the supporting material is left in place, it shall be compressible in accordance with specification AA540 M153-54. In either case band between the supporting material and the rubberized joint sealer shall be prevented by a 1" minimum thickness of Poly-urethane foam.
3. 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'.
4. Armored Joints to be paid for as Structural Steel.

**ARMORED JOINT**

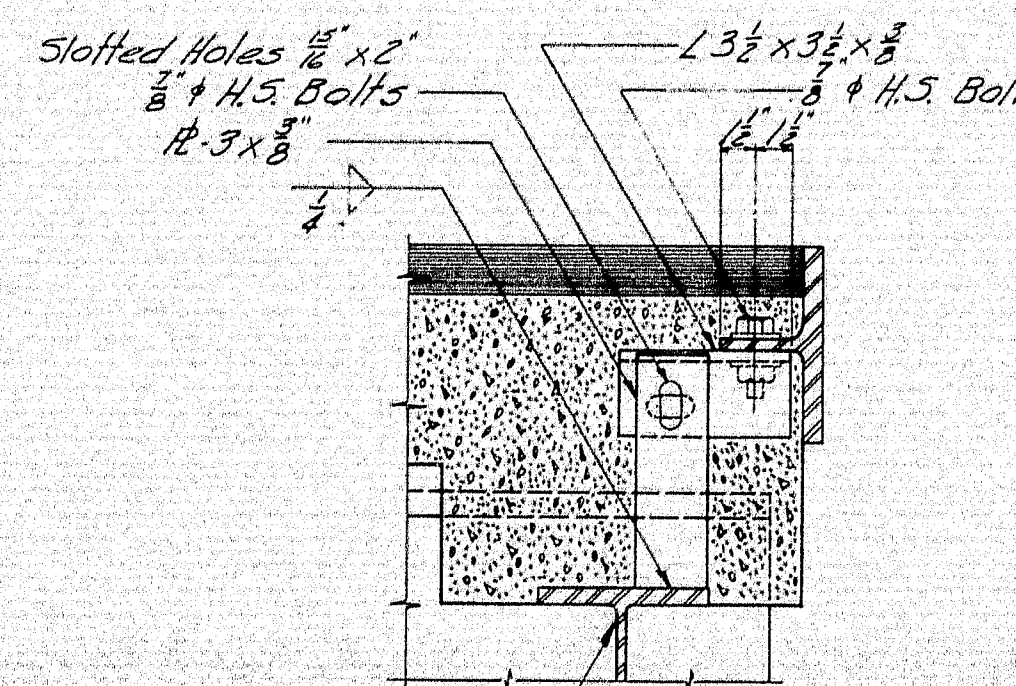
An armored joint consists of two armored joint units. See note 1.



**ARMORED JOINT UNIT TYPE A**

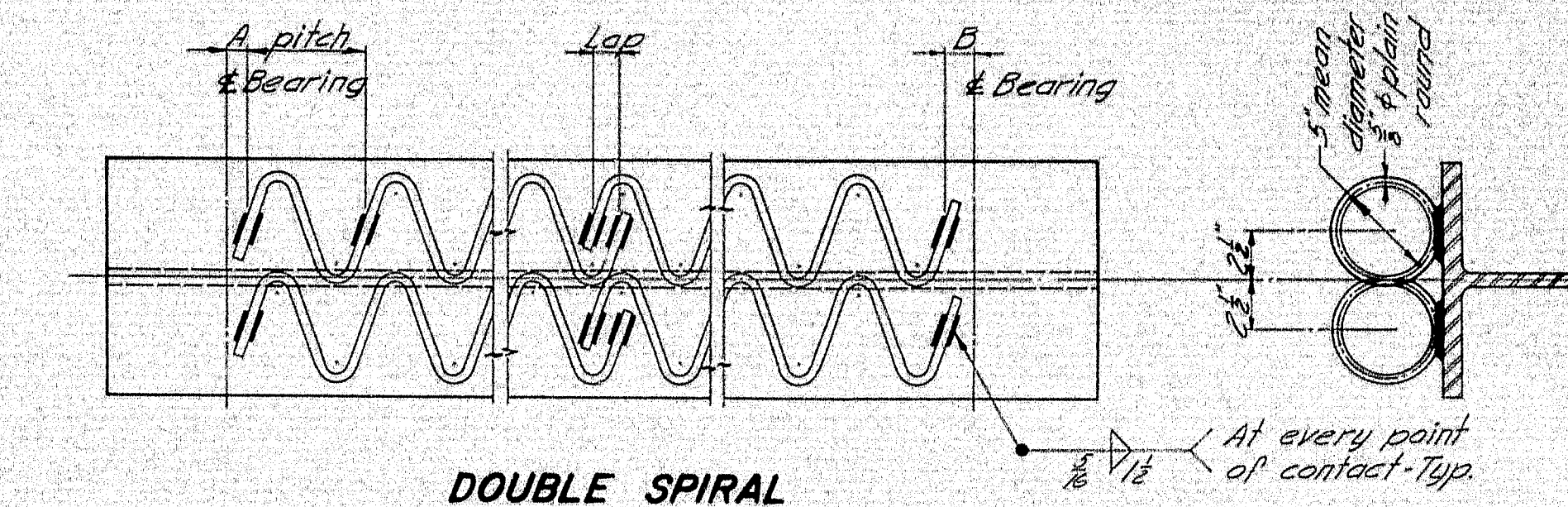
**ARMORED JOINT UNIT TYPE B**

**SECTION D-D**

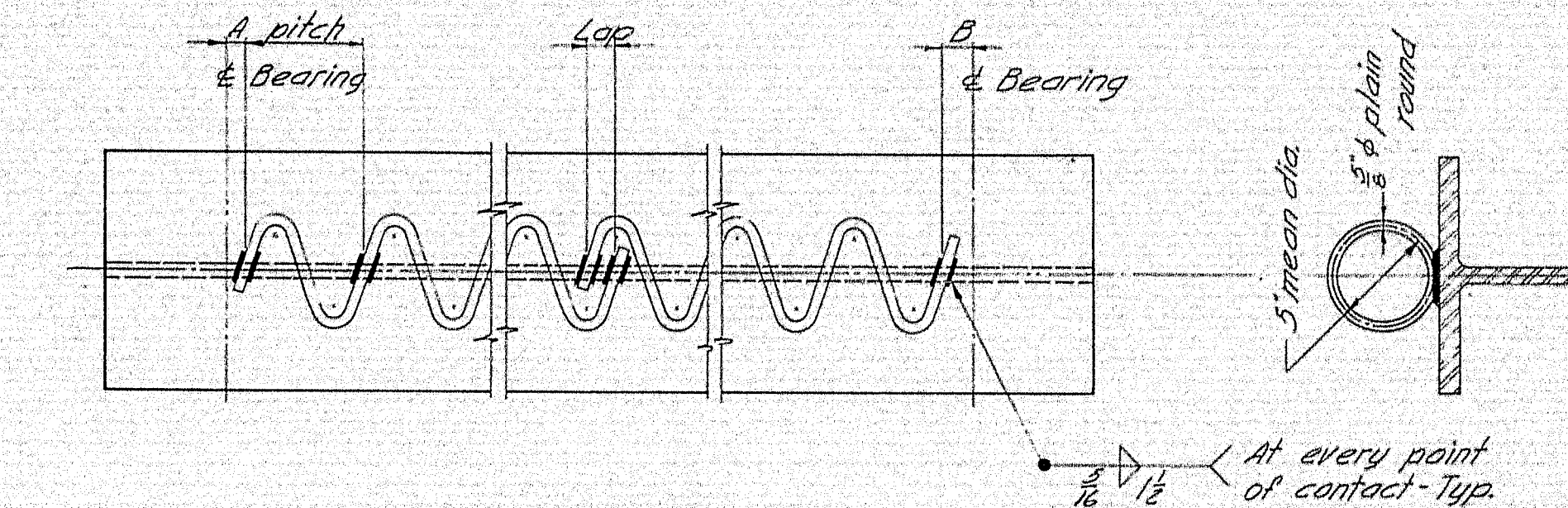


**SECTION E-E**

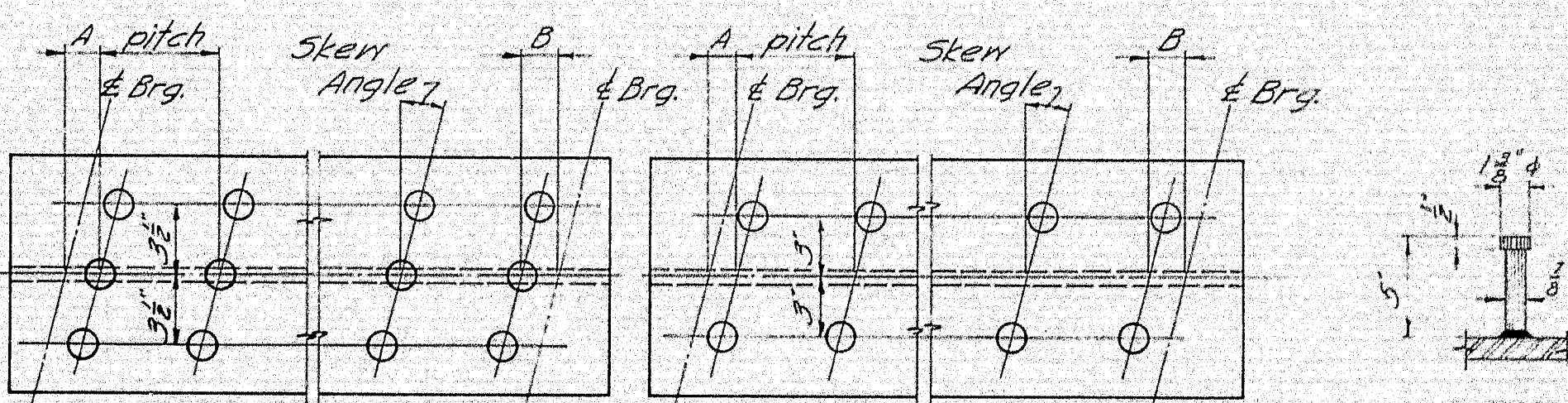
Showing Adjustment Device Armored Joint Unit Type A - After Unit is in final position weld 3/8" to angle with 1/2" fillet



**DOUBLE SPIRAL**



**SINGLE SPIRAL**



**TRIPLE STUDS**

**DOUBLE STUDS**

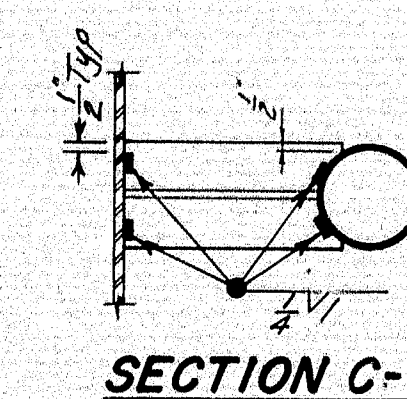
**STUD DETAIL**

**NOTE**

1. Spiral reinforcing or studs may be used at the option of the Contractor.
2. If studs are used they shall be granular or solid flux filled and automatically end welded to the top flange in the shop or field.
3. Studs are a patented product. If the Contractor elects to use them, he shall pay the royalty and payment to the contractor will be included in the lump sum price for Shear Connectors.
4. See the design details for Dimensions 'A' and 'B', spiral and stud pitch and Skew Angle for Studs.

**SHEAR CONNECTORS**

Cut 4 holes 1/2" x 2", 1/8" from top. Do not cover with concrete or waterproofing.



**NOTE**

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

**DRAIN**

Revised Nov 1964, Welding Drain Support

**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.

**STANDARD DETAILS**

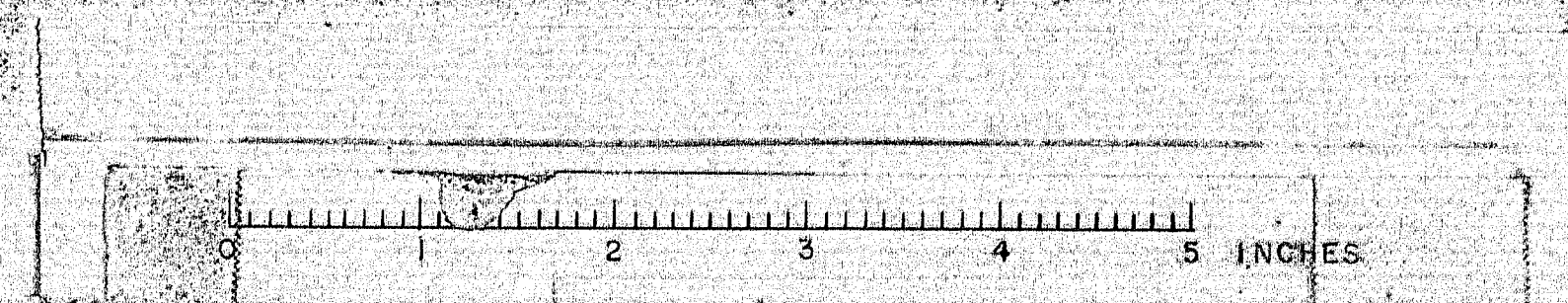
(BD 104-64)

**DIAPHRAGMS, ARMORED JOINT, SHEAR CONNECTORS, DRAIN**

MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

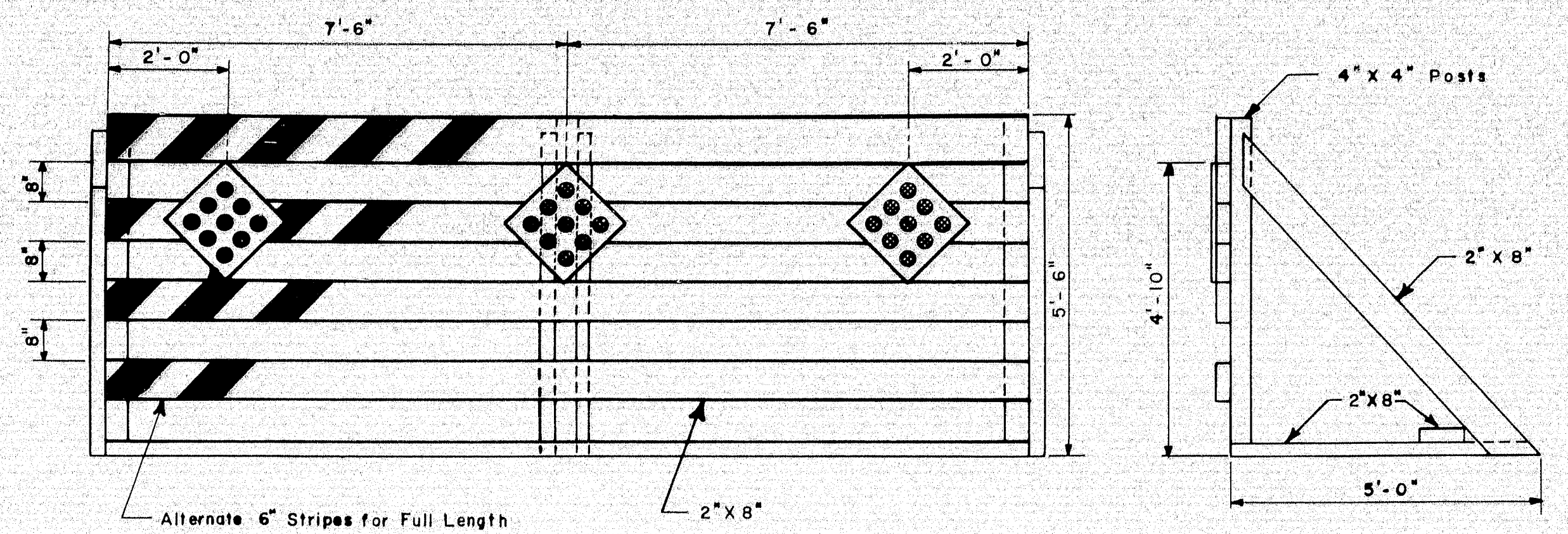
JANUARY 1964

101-247/SLAND FALLS (43)

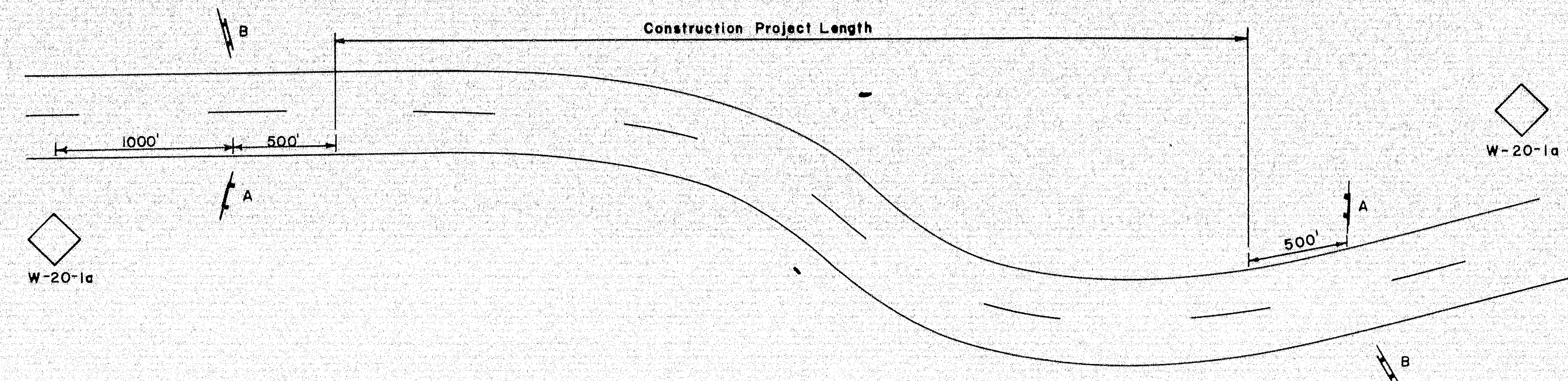
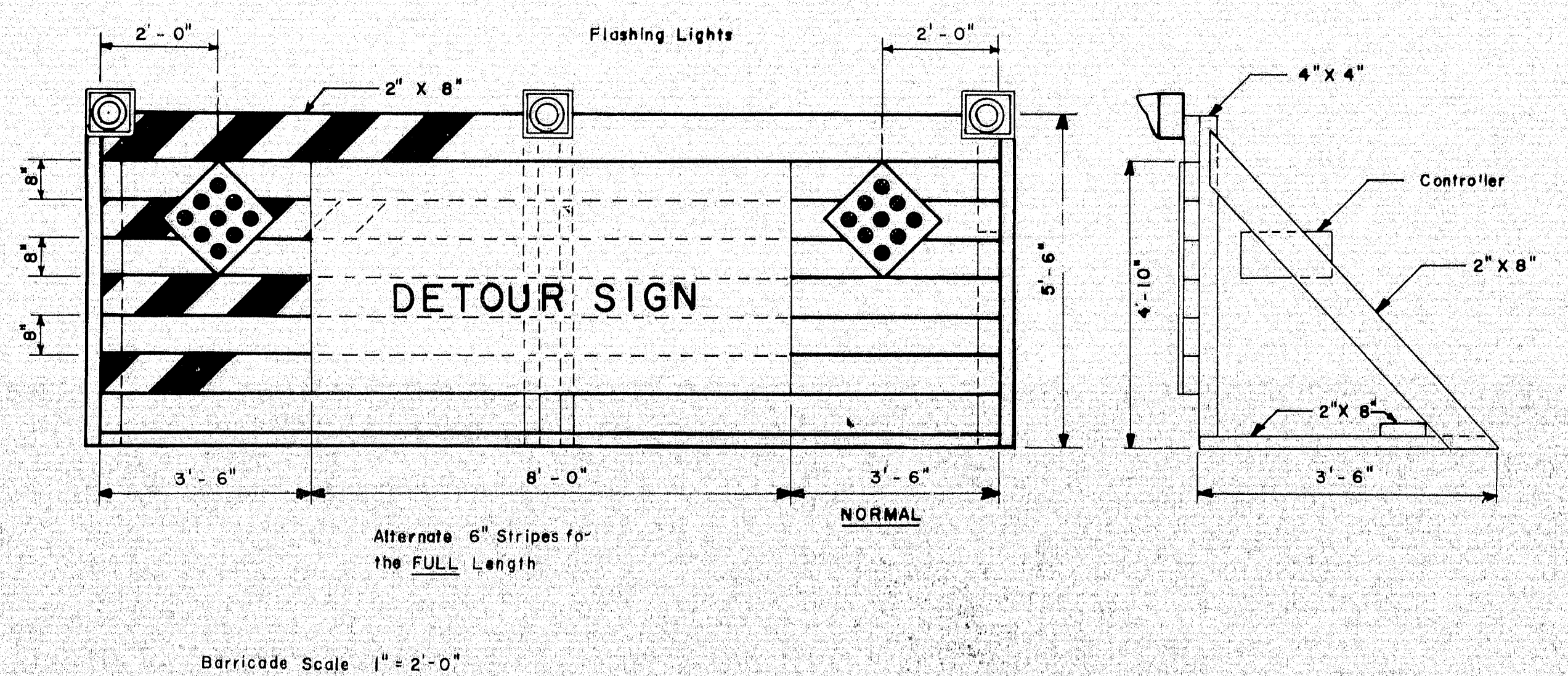
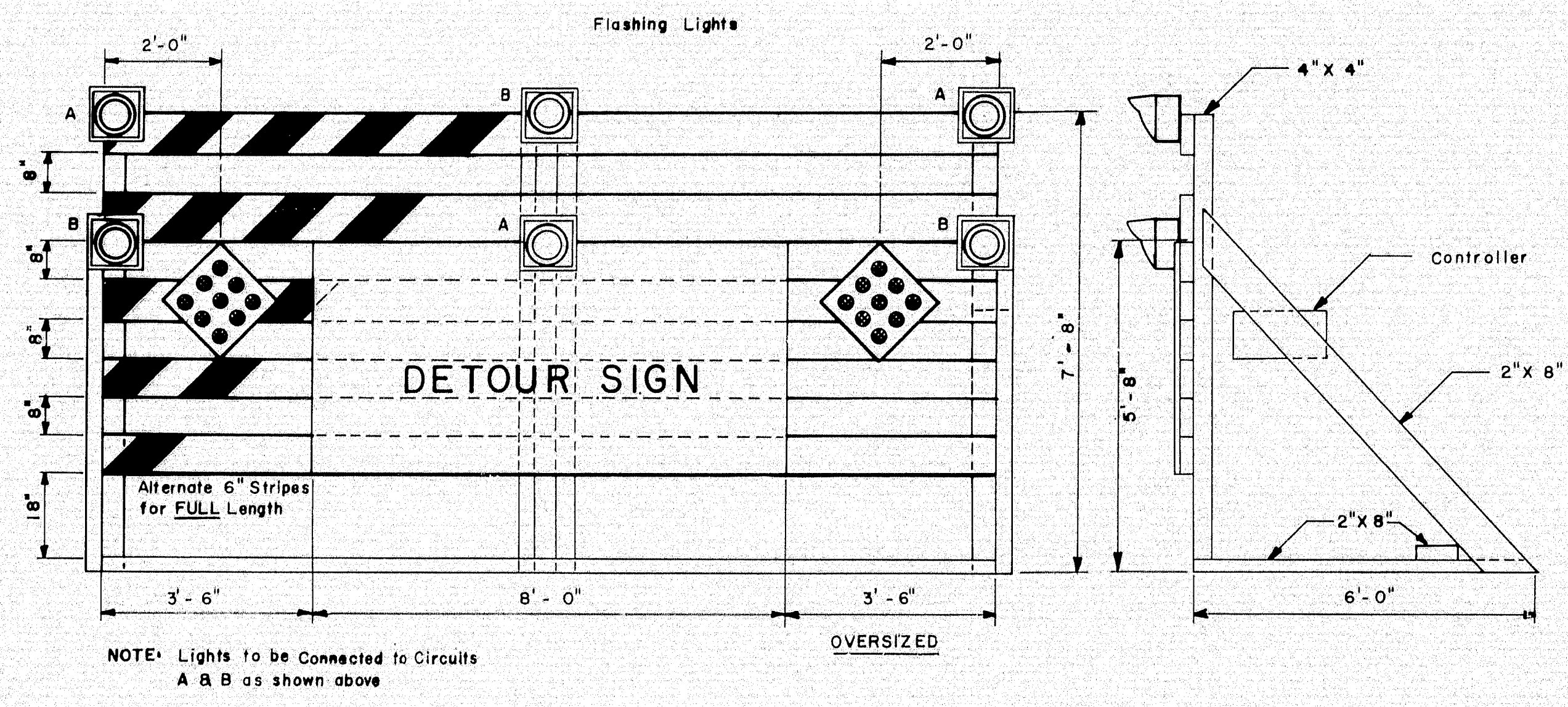




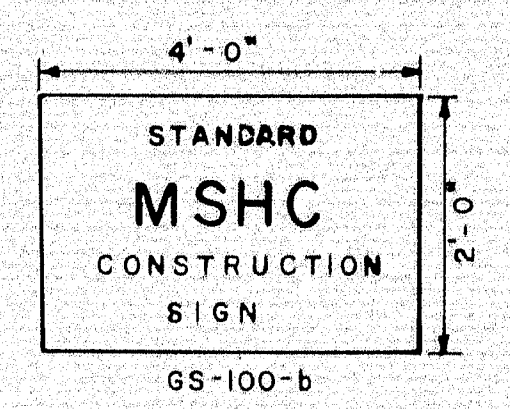
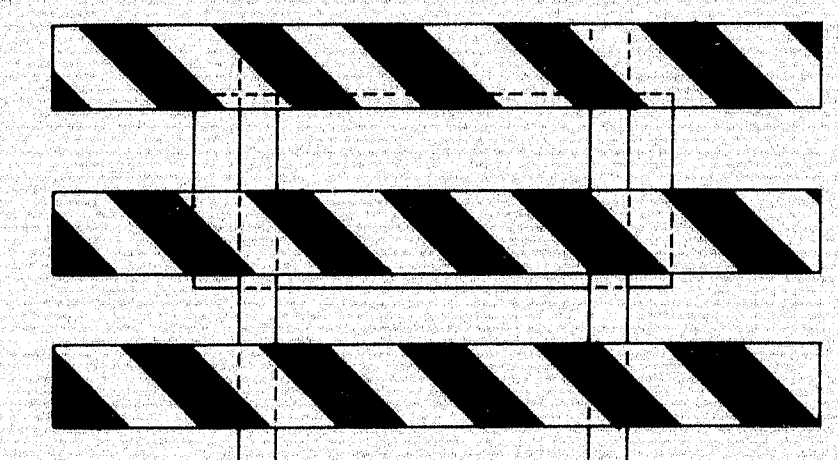
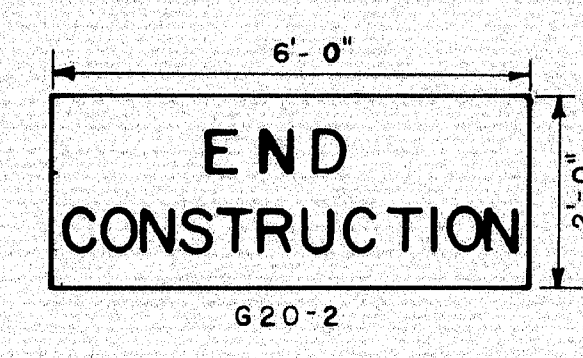
# PORTABLE BARRICADE



# PORTABLE BARRICADES WITH FLASHING LIGHTS AND DETOUR SIGN



# WING BARRICADES

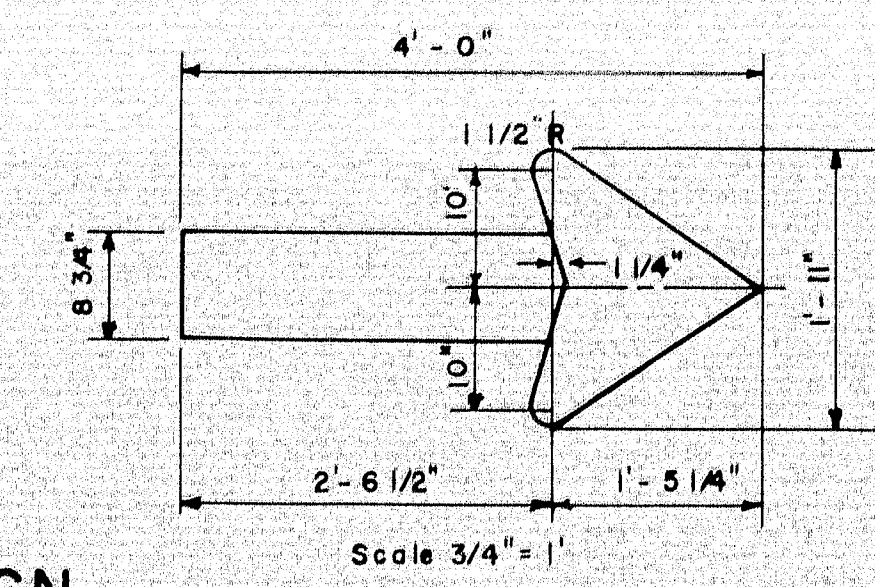
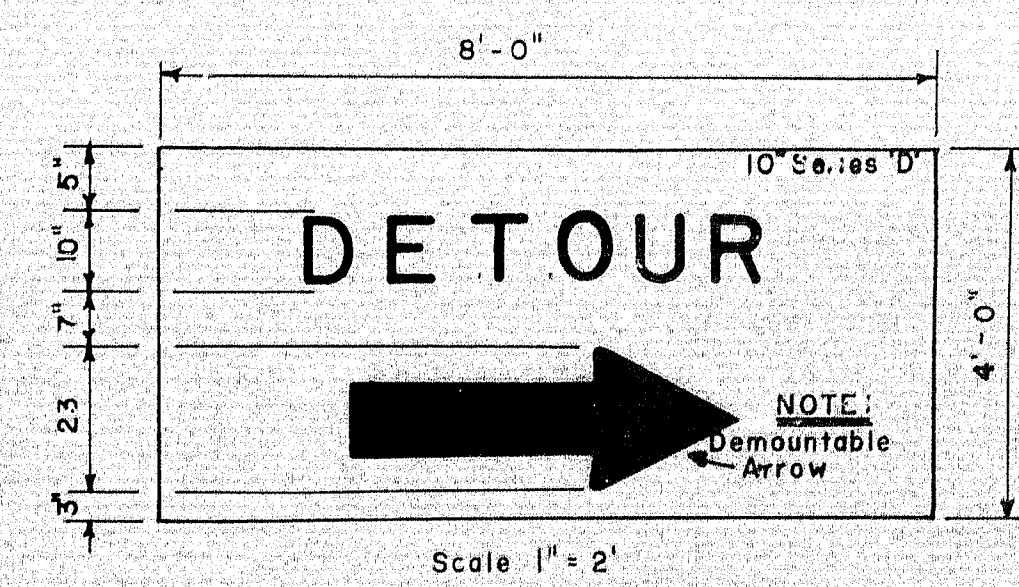
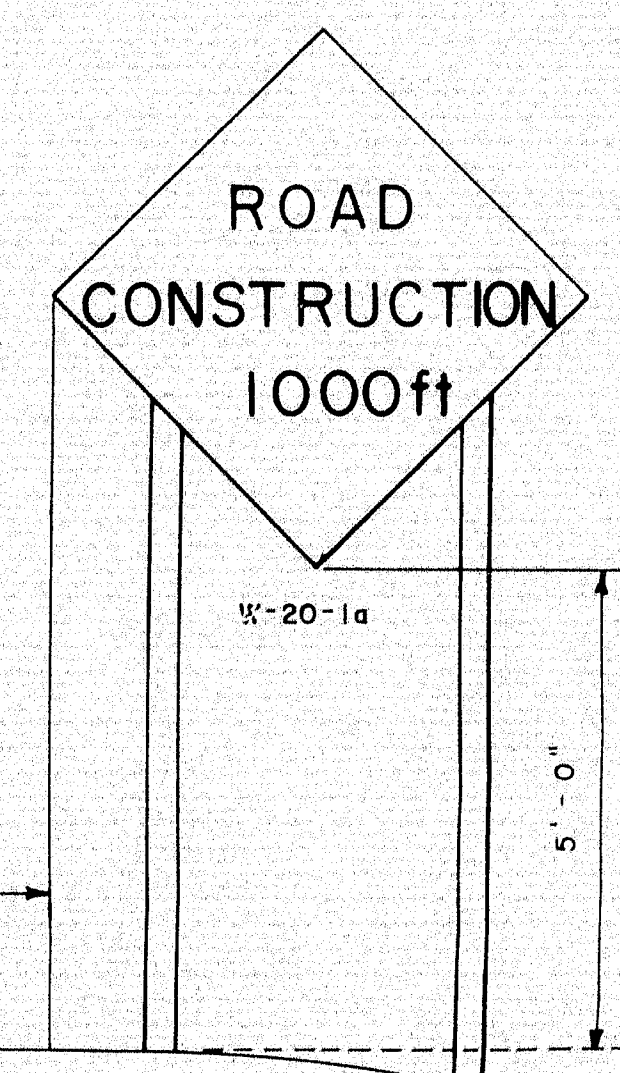


## GENERAL NOTES PORTABLE BARRICADES

1. Lumber sizes for use on barricades shall be 2" x 8" except for posts which shall be 4" x 4"
2. DETOUR sign shall be 5/8" thick plywood
3. The word "DETOUR" shall be painted or screened in black on a background of yellow reflective sheeting.
4. The demountable arrow shall be of 1/4" plywood painted black and attached securely by not less than three bolts.
5. 6" Stripes of silver reflective sheeting on an aluminum backing of not less than 0.019 gage shall be securely attached to a black painted background to form the alternate stripes
5. Flashing lights shall be mounted to permit rotation to face oncoming traffic.
7. Hazard markers shall consist of nine (9) acrylic plastic prismatic center mount type reflectors assembled to an 18" diamond aluminum holder plate.
8. Location of service and meter to be determined after power source has been decided

## GENERAL NOTES WING BARRICADES

1. Lumber sizes for use on WING Barricades shall be 1" x 8" except for posts which will be 4" x 4"
2. 6" Stripes of silver reflective sheeting on an aluminum backing of not less than 0.019 gage shall be securely attached to a black painted background to form the alternate stripes.
3. Signs G20-2, W20-1a, and GS-100-b will be furnished by the State Highway Commission
4. Location of signs and barricades will be determined by the engineer.
5. Lighting when specified under special provisions shall be mounted on the wing barricades.
6. Wing barricades shall not be used, unless specifically called for in the special provisions.



MAINE STATE HIGHWAY COMMISSION  
AUGUSTA, MAINE

# STANDARD BARRICADE DETAIL

SCALE: AS NOTED

101-248 ISLAND FALLS (43)

