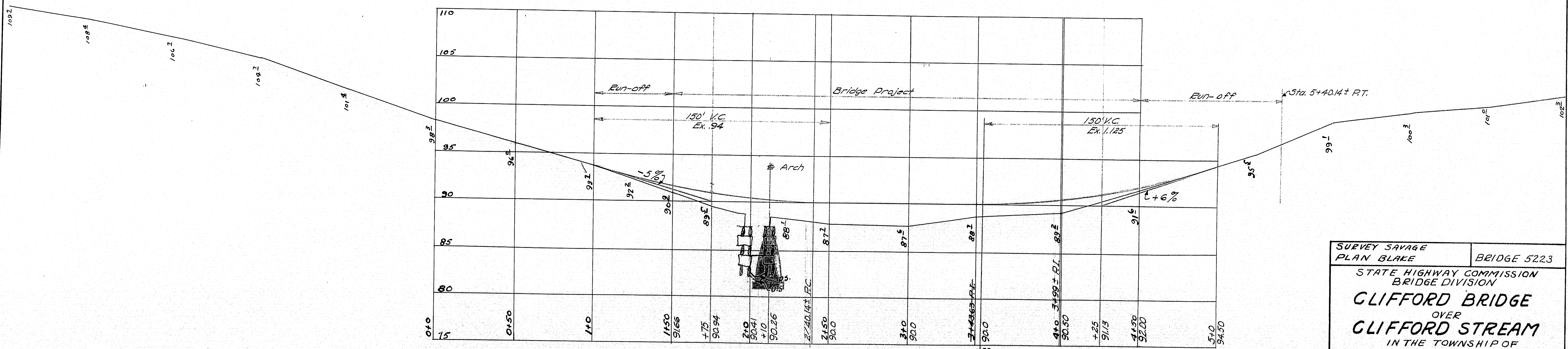
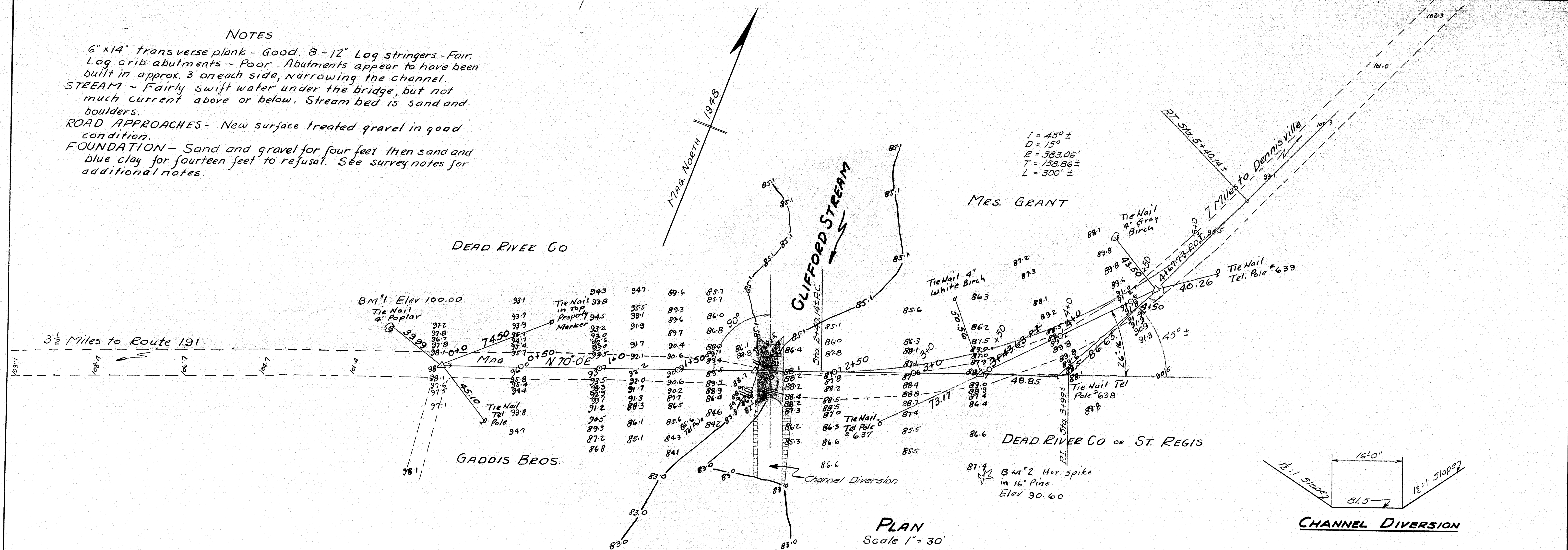


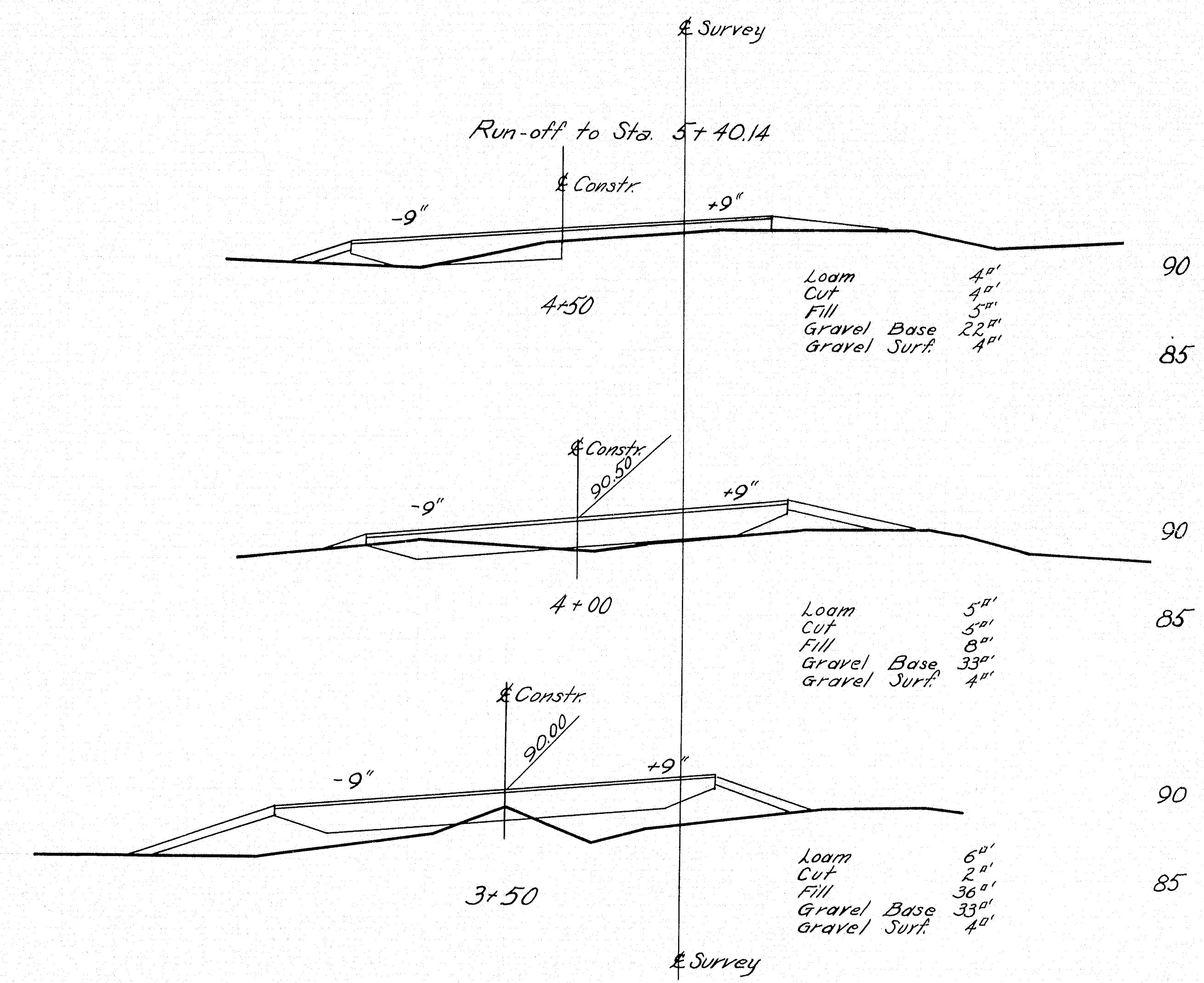
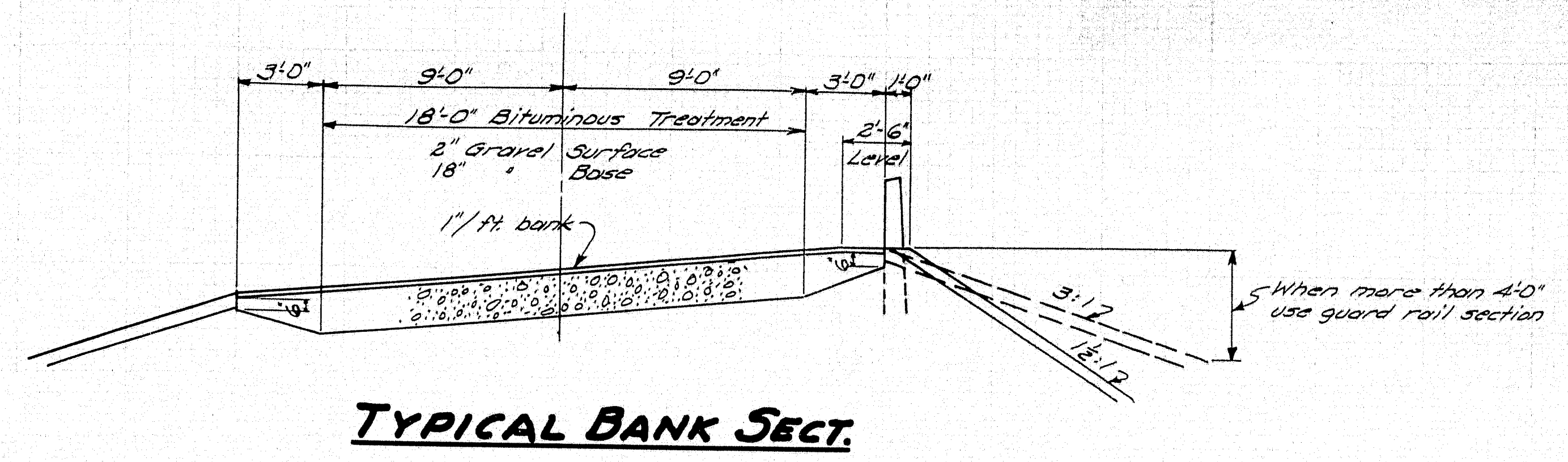
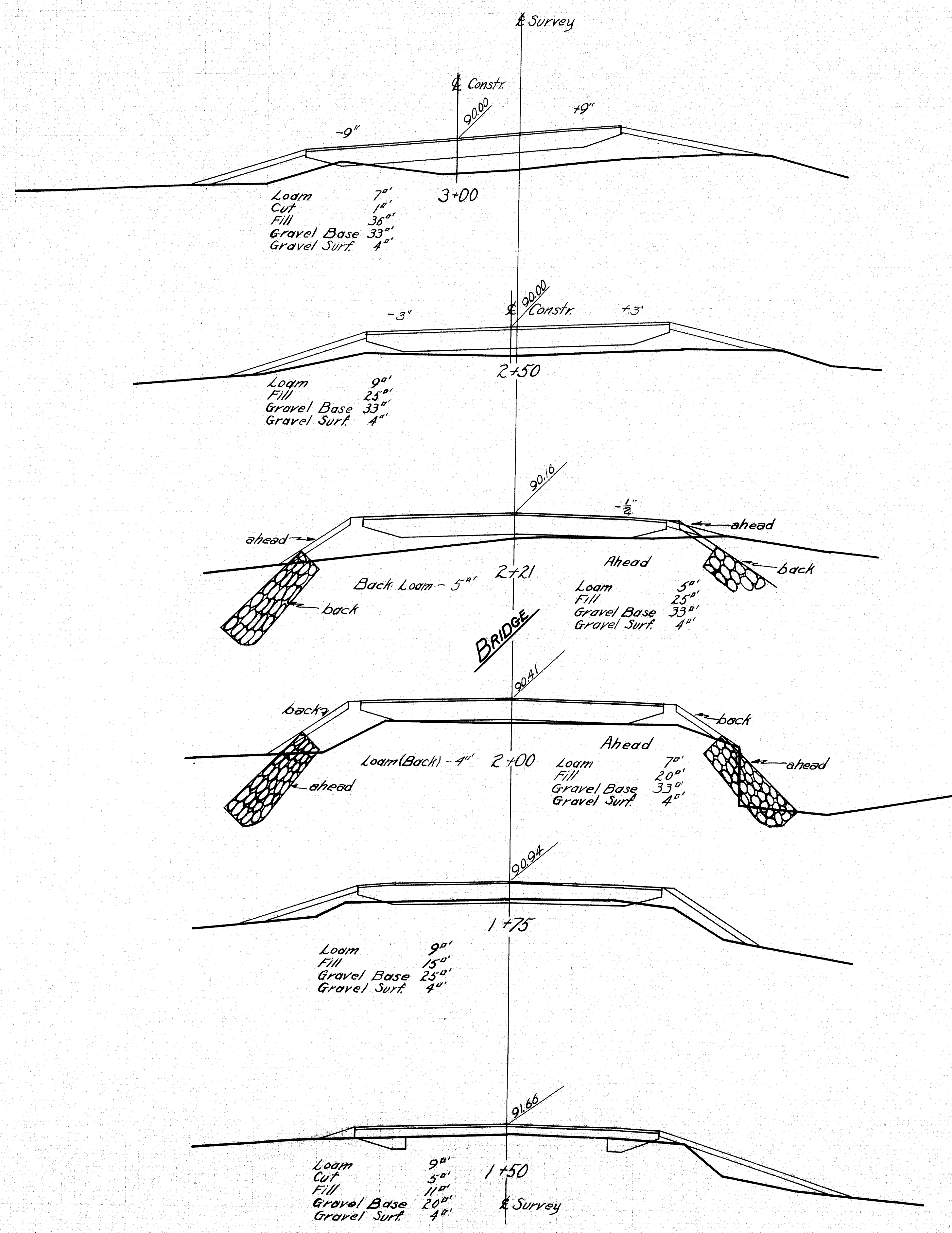
NOTES

6" x 14" transverse plank - Good. 8-12" Log stringers - Fair.
Log crib abutments - Poor. Abutments appear to have been
built in approx. 3' on each side, narrowing the channel.
STREAM - Fairly swift water under the bridge, but not
much current above or below. Stream bed is sand and
boulders.
ROAD APPROACHES - New surface treated gravel in good
condition.
FOUNDATION - Sand and gravel for four feet then sand and
blue clay for fourteen feet to refusal. See survey notes for
additional notes.



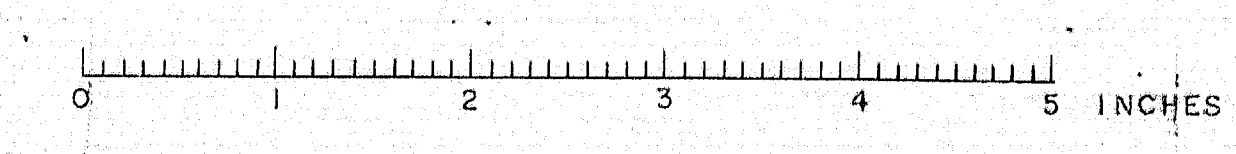
SURVEY SAVAGE
PLAN BLAKE
BRIDGE 5223
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
CLIFFORD BRIDGE
OVER
CLIFFORD STREAM
IN THE TOWNSHIP OF
MARION
WASHINGTON COUNTY
SURVEY
SHEET 1 OF 3 AUGUSTA, ME. APRIL, 1948

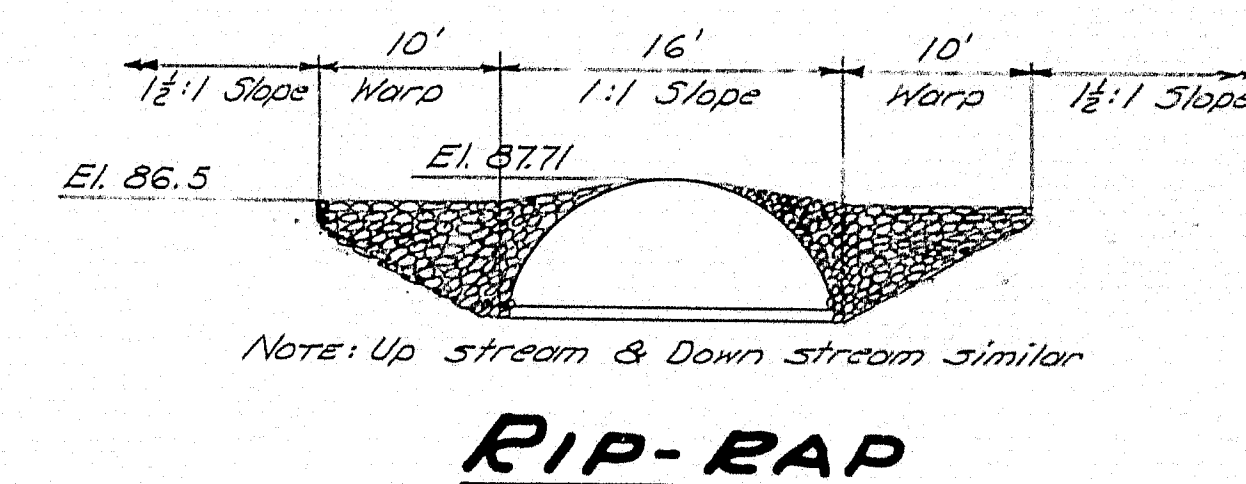
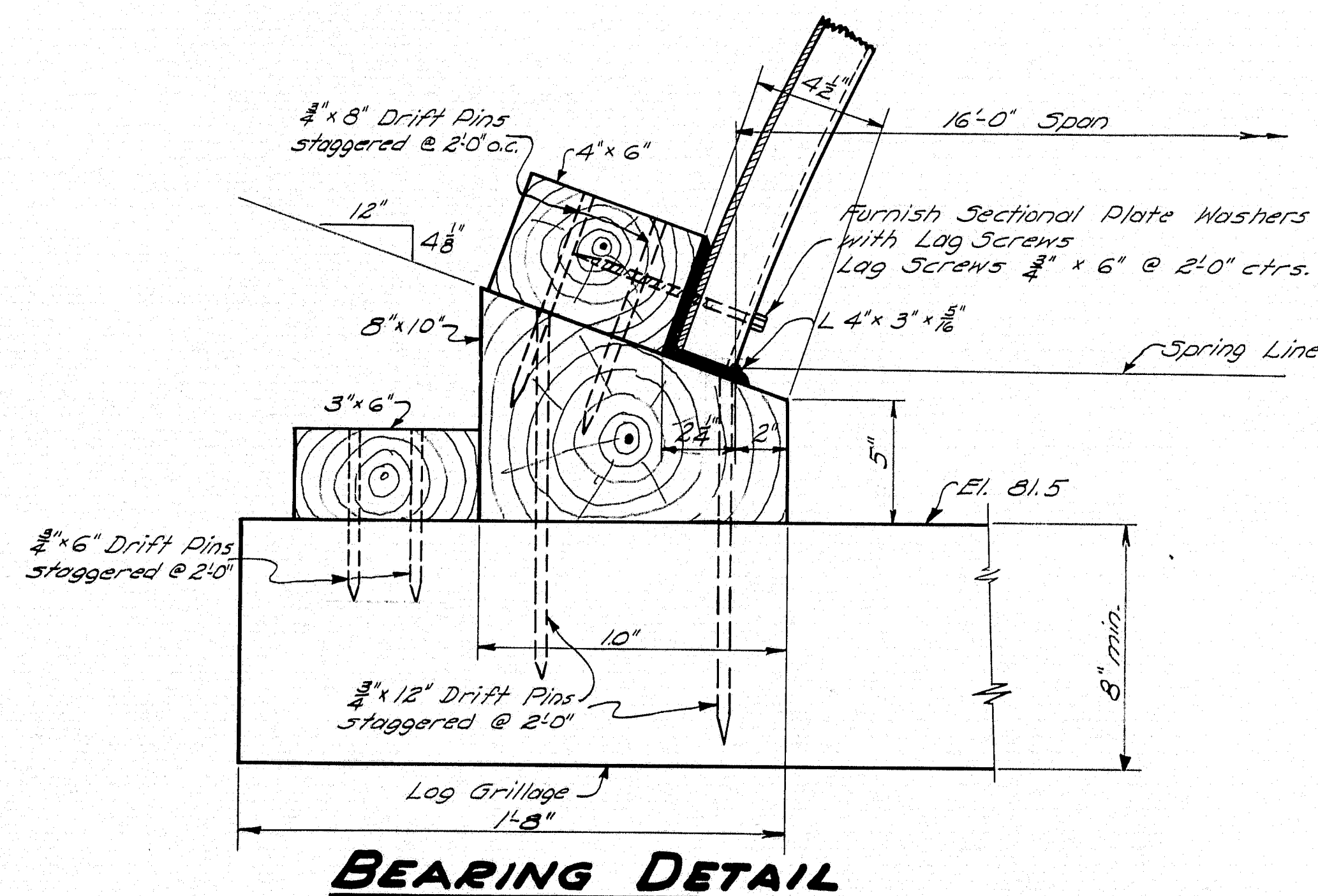
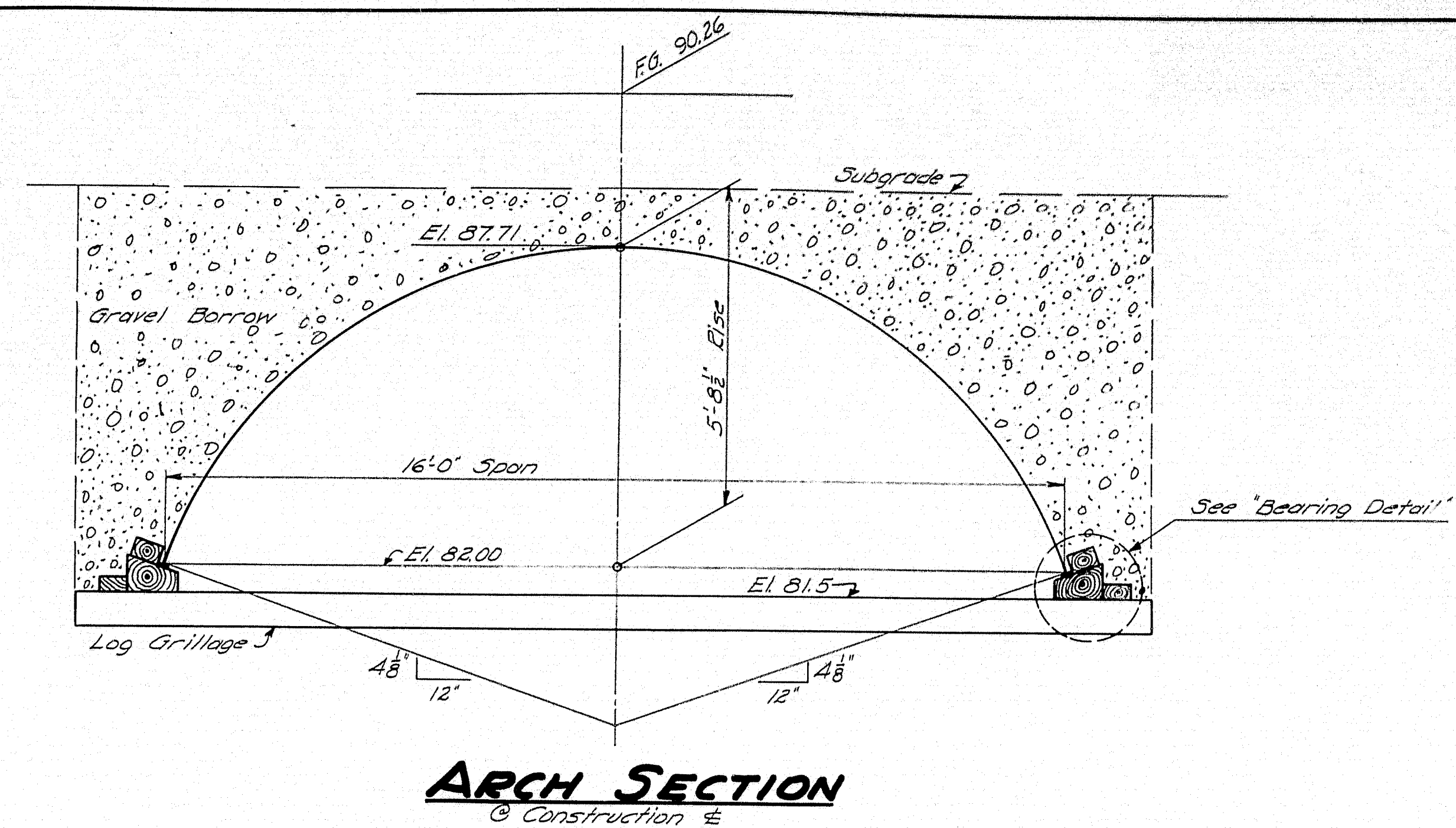
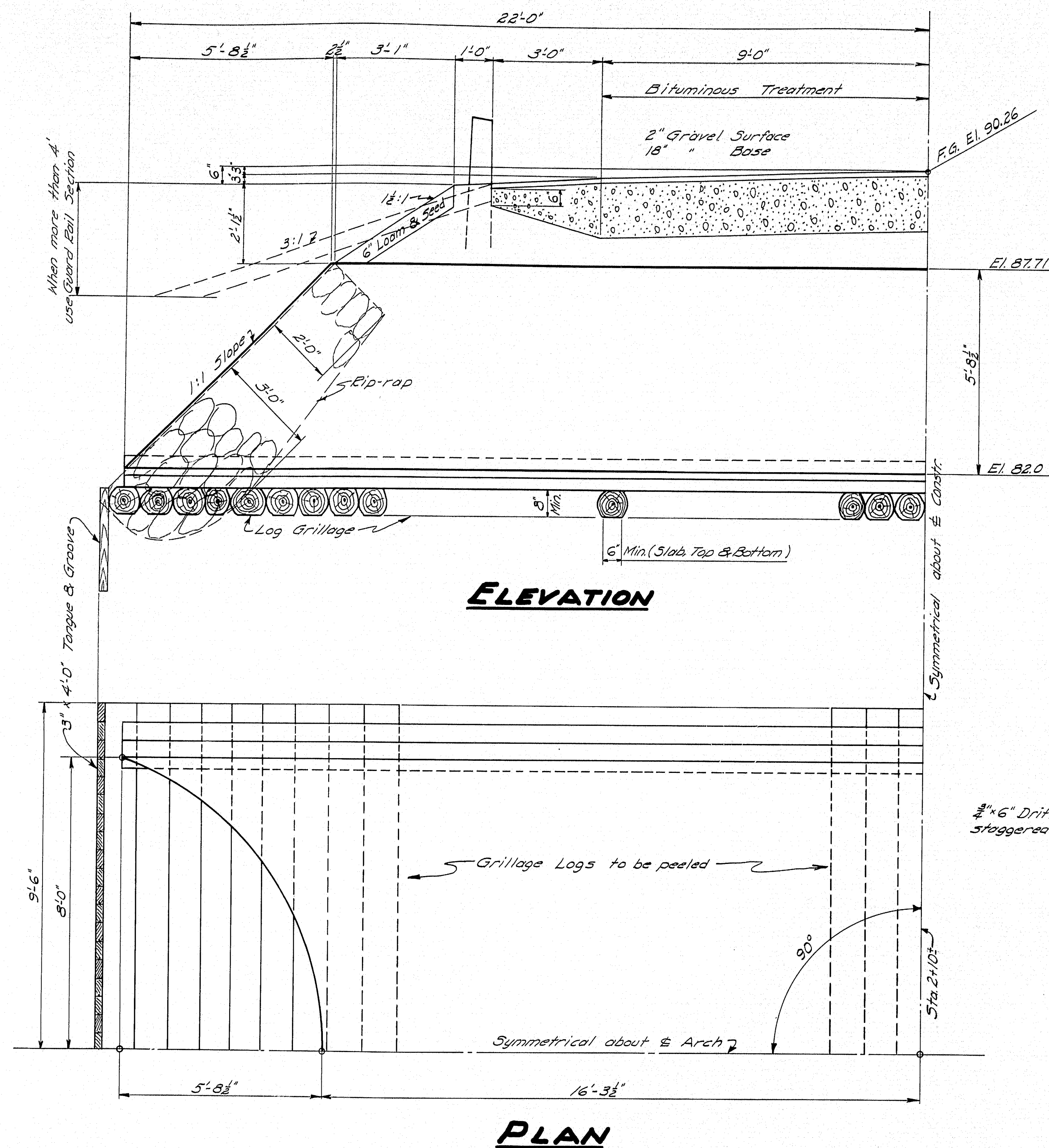
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Note: Do not excavate for gravel base where existing material is suitable.

PLAN - CLARK	BRIDGE - 5223
CHECK - e.a.s.s.	
STATE HIGHWAY COMMISSION BRIDGE DIVISION	
CLIFFORD BRIDGE	
OVER	
CLIFFORD STREAM	
IN THE TOWNSHIP OF	
MARION	
WASHINGTON COUNTY	
CROSS SECTIONS	
SHEET 2 OF 3 AUGUSTA, MAINE JULY 1949	





ARCH MATERIAL

One Sectional Plate Arch, having a minimum section modulus of .081 per inch of horizontal projection, and a minimum thickness of plates 7 gage, to dimensions shown, including lag screws and angles.

Span and Rise may be varied slightly if approved by the Engineer. If such change is made the Engineer shall be given the information for any dimension change involved.

There shall be a minimum of four (4) 1/2" bolts per foot of longitudinal seam.

Loading - H15-44

The length of Arch to be peeled for is to be the average length of the 1/2" and one Spring Line. Estimated length = 38'-3 1/2"

Specifications: A.A.S.H.O. Standard Specifications for Highway Bridges.

PLAN - CLARK	BRIDGE - 5223
CHECK - C.A.B.S.	
STATE HIGHWAY COMMISSION	
BRIDGE DIVISION	
CLIFFORD BRIDGE	
OVER	
CLIFFORD STREAM	
IN THE TOWNSHIP OF	
MARION	
WASHINGTON COUNTY	
ARCH DETAILS	
SHEET 3 OF 3	AUGUSTA, MAINE JULY 1949

47-89

TRAFFIC DATA
 1990 ADT - 160
 2010 ADT - 225
 DHV - 34
 RT - 8
 O - 60
 18 kip E₉ (PRD) - 5
 V - 45 mph

CURVE DATA
 P.I. Sta. 13+25.00
 Δ = 39°00'00"
 D = 6°00'00"
 T = 338.16'
 R = 954.93'
 L = 650.00'
 E = 58.11'

F.W.A. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	004157.00	1	11

SURVEY NOTES

SUPERSTRUCTURE: (Poor Condition)
 Structural Plate Arch, 17' across at bottom, 6.5' from flow line to top of arch. The structure is badly rusted from normal water elevation to bottom.

SUBSTRUCTURE: (Good Condition)
 Structural Plate Arch has 3" wood plank floor, with 4"x8" wood footing, this appears to be in good condition.

STREAM: (Observation by survey party)
 Normal High water: elev. 83.4 Moderate Current
 Extreme High water: elev. 84.4 Sluggish Current
 Normal Low water: elev. 80.9 Sluggish Current
 Fresh Water Stream. Sandy gravelly Type Stream
 Bed material, with rocks, 2' dia. upstream and 1' dia. downstream. No visible signs of ledge in area of arch.

APPROACHES: (Good Condition)
 21' paved roadway with 6' gravel shoulders (built 1964) except in immediate area of arch which has 3 shoulders ±. Pavement and shoulders are in good condition.

UTILITIES:
 Bangor Hydro. Electric Co. - overhead wires.
 New England Tele. Co. - underground cable, up-stream side of road, length of entire project.

NOTE: Local MDOT Patrolmen report that there has been no problem with this structure.

INDEX OF SHEETS

- TITLE SHEET & SURVEY - 1
 - ESTIMATED QUANTITIES - 2
 - CROSS SECTIONS - 3-4
 - STRUCTURAL PLATE PIPE ARCH DETAILS - 5
 - HIGHWAY STANDARDS - 6-10
 - RIGHT OF WAY MAP - 11
- HIGHWAY STANDARDS**
 HD-4 Rev. Feb. 1989 Curb, Ditches and Slopes
 HD-6 Rev. Dec. 1987 Type 3 Guard Rail
 HD-10 Rev. 1989 Maint. of Traffic
 HD-11 Rev. May 1990 Maint. of Traffic
 HD-12 Rev. Apr. 1980 Maint. of Traffic

SPECIFICATIONS

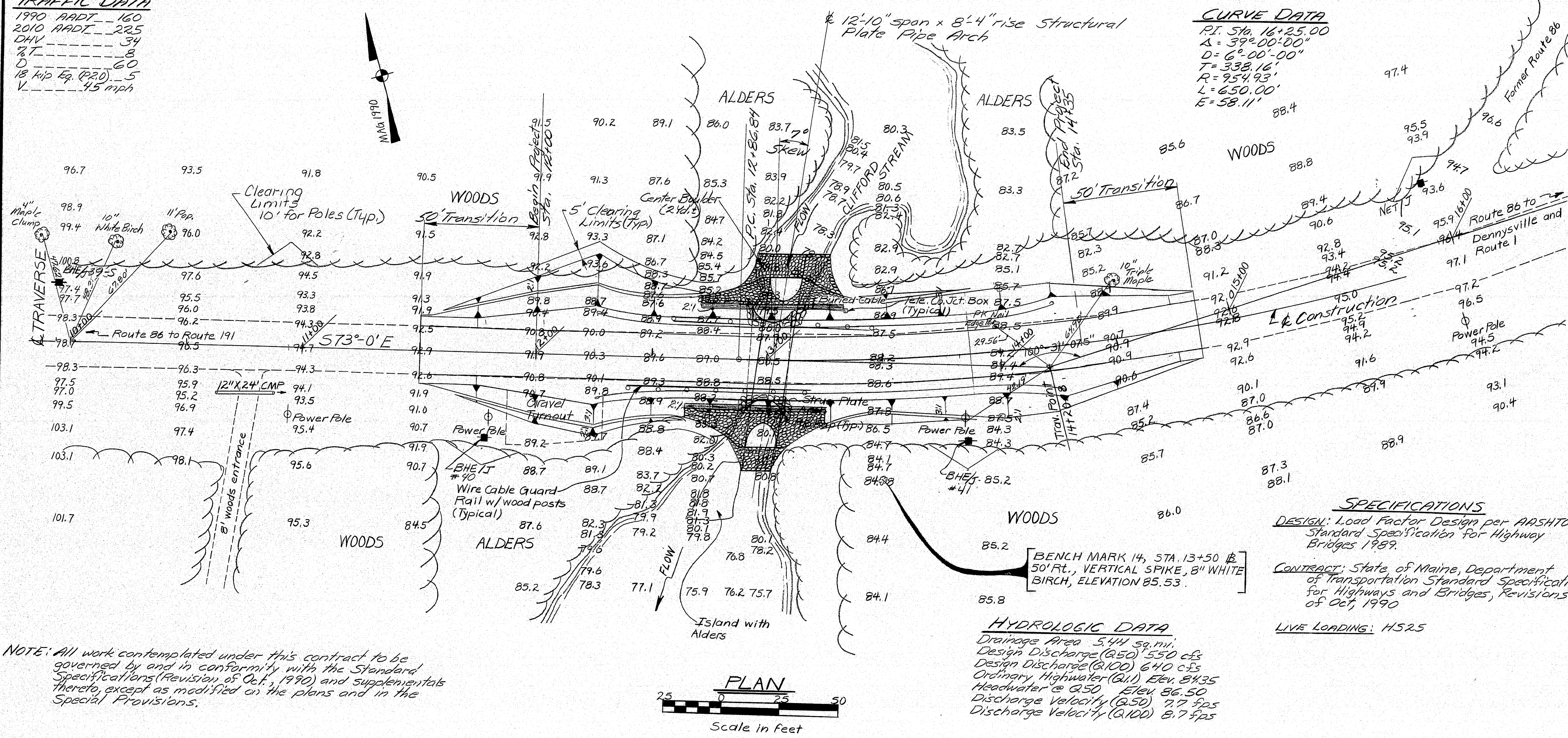
DESIGN: Load Factor Design per AASHTO Standard Specification for Highway Bridges 1989.

CONTRACT: State of Maine, Department of Transportation Standard Specifications for Highways and Bridges, Revisions of Oct. 1990

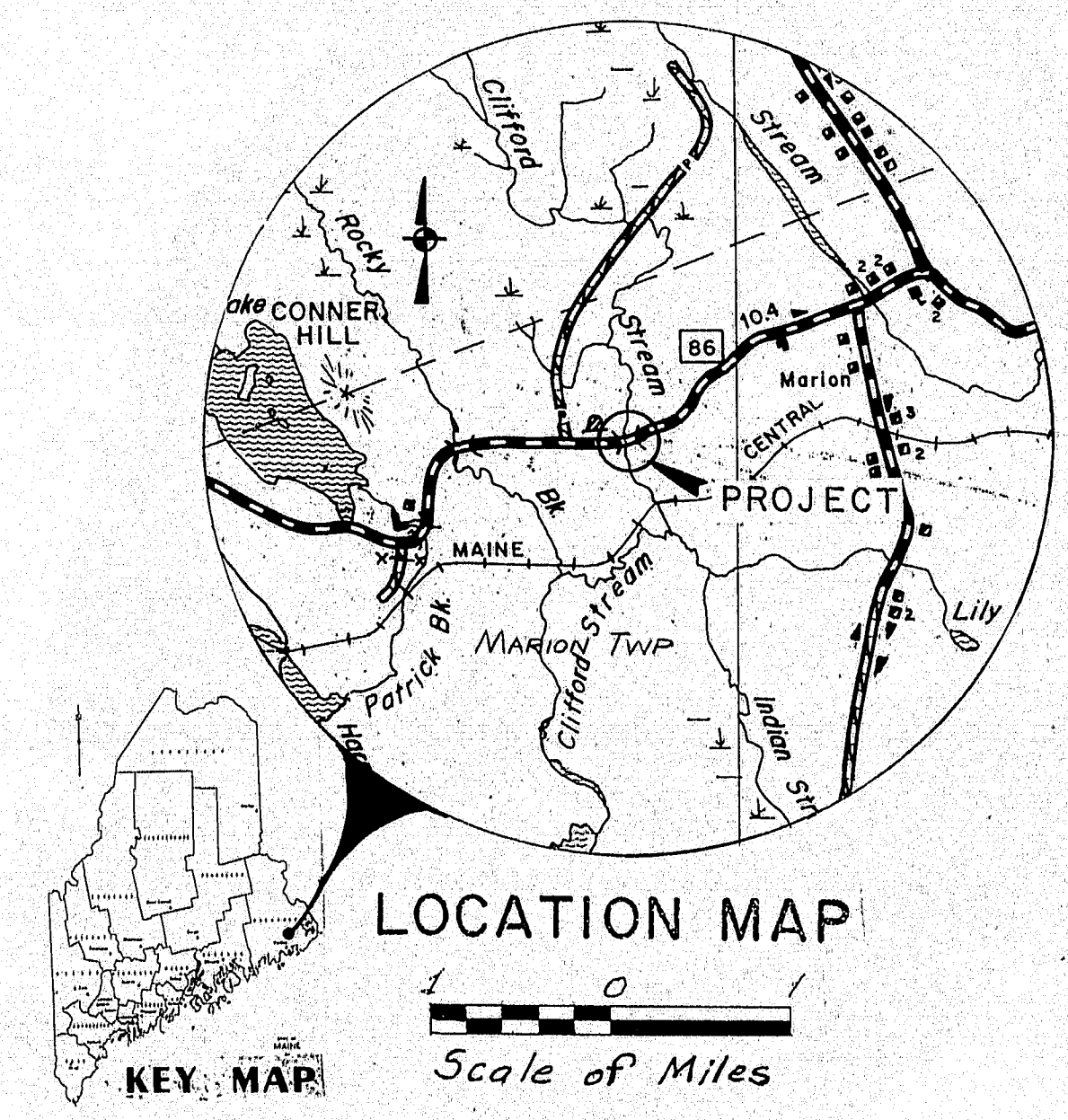
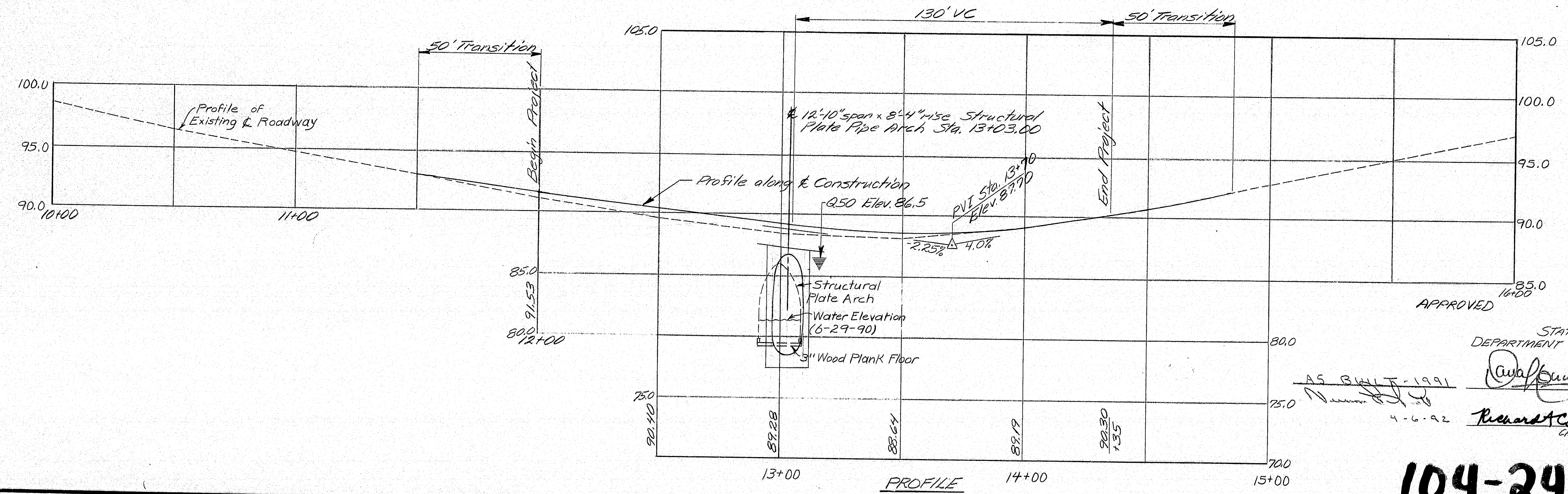
LIVE LOADING: HS20

HYDROLOGIC DATA
 Drainage Area 5.411 sq. mi.
 Design Discharge (Q50) 550 cfs
 Design Discharge (Q100) 640 cfs
 Ordinary Highwater (O.H.W.) Elev. 84.35
 Headwater @ Q50 Elev. 86.50
 Discharge Velocity (Q50) 7.7 fps
 Discharge Velocity (Q100) 8.7 fps

NOTE: All work contemplated under this contract to be governed by and in conformity with the Standard Specifications (Revision of Oct., 1990) and supplementals thereto, except as modified in the plans and in the Special Provisions.



PLAN
 Scale in feet
 0 25 50



LOCATION MAP

Survey Book # 11174 Bridge # 5223

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION

CLIFFORD BRIDGE
 CLIFFORD STREAM
 MARION TOWNSHIP
 WASHINGTON COUNTY
 SURVEY PLAN
 AUGUSTA, MAINE

104-243

PROJECT DESIGN ENGINEER	DATE
BY	12/10/90
CHECKED	12/10/90
REVISIONS	12/10/90
FIELD CHANGES	

PLANNED BY: THOMAS R. NADER, August 1990

Marion Twp.

F.H.V.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	004167.00	2	11

GENERAL CONSTRUCTION NOTES

- 1.- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- 2.- For easements, construction limits, and right-of-way lines refer to Right of Way Map.
- 3.- During construction the road will be closed to traffic for a period specified in the Special Provisions.
- 4.- All embankment material placed below water shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.
- 5.- The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Engineer. Payment for clearing will be incidental to contract items.
- 6.- Place loam, 2" deep, on slopes between Station 11+50.00 and Station 14+85.00.
- 7.- Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Engineer. Payment for shaping and compacting of the existing subbase and layers of new subbase 6" or less thick, in areas where the Engineer directs the Contractor not to excavate to the subgrade line shown on the plans, will be made in accordance with Subsection 104.03, Extra Work.
- 8.- One guardrail delineator post shall be installed at each guardrail end.
- 9.- Breakaway cable terminals shall be installed concurrent with the placement of each section of beam guardrail, unless other approved temporary protection has been authorized.
- 10.- Sodded gutters shall be constructed, after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion.
- 11.- 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.
- 12.- Removal of the existing structural plate arch and wood plank floor will not be paid for separately but will be considered incidental to related contract items.
- 13.- The stream channel shall be diverted and unwatered prior to the excavation for and during the placement of the gravel borrow and installation of the structural plate pipe arch, as directed by the Engineer. Payment will be made under Item 511.0701, Cofferdam.

104-244

STATE OF MAINE DEPARTMENT OF TRANSPORTATION
CLIFFORD BRIDGE CLIFFORD STREAM MARION TOWNSHIP WASHINGTON COUNTY ESTIMATED QUANTITIES
SHEET OF AUGUSTA, MAINE December, 1990

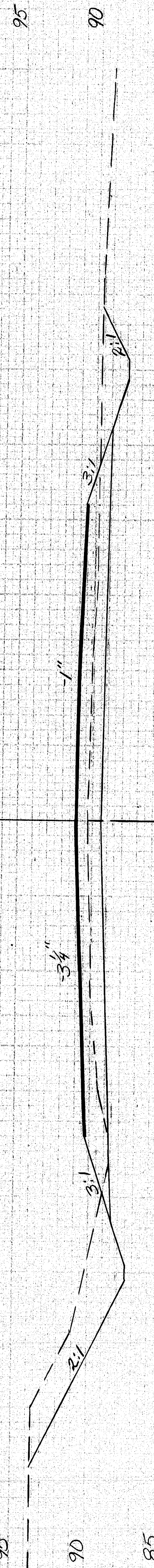
ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.20	COMMON EXCAVATION	500	CY
203.24	COMMON BORROW	25	CY
203.26	GRAVEL BORROW	115	CY
206.061	STRUC EARTH EXCAV.-DRAIN. & MINOR STRUC'S. BELOW GRADE	40	CY
304.10	AGGREGATE SUBBASE COURSE--GRAVEL	645	CY
460.22	HOT BITUMINOUS PAVEMENT	131	TONS
509.1201	154" SPAN 100" RISE STEEL STRUCT. PLT. PIPE ARCH	1	LS
511.0701	COFFERDAM	1	LS
606.35	GUARD RAIL DELINEATOR POST	4	EACH
606.55	GUARD RAIL TYPE 3--SINGLE RAIL	300	LF
606.77	BREAKAWAY CABLE TERMINAL	4	EACH
610.08	PLAIN RIPRAP	180	CY
615.07	LOAM	42	CY
616.08	SODDING	25	SY
618.14	SEEDING METHOD NUMBER 2	7	UNIT
618.15	TEMPORARY SEEDING	5	LB
619.12	MULCH	7	UNIT
627.63	4 INCH SOLID YELLOW PAVEMENT MARKING LINE	900	LF
637.07	SPRINKLING	13	MG
637.08	CALCIUM CHLORIDE	2	TONS
639.19	FIELD OFFICE TYPE B	0.5	EACH
652.31	TYPE I BARRICADE	5	EACH
652.312	TYPE III BARRICADE	1	EACH
652.34	CONE	3	EACH
652.35	CONSTRUCTION SIGNS	500	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	0.5	LS
652.38	FLAGGER	260	MH
656.50	BALED HAY, IN PLACE	40	EACH
656.51	SANDBAG, IN PLACE	40	EACH
656.63	TEMPORARY SILT FENCE	600	LF
659.10	MOBILIZATION	0.5	LS

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
ESTIMATE OF LUMP SUM ITEMS			
509.1201	154" SPAN 100" RISE STEEL STRUCT. PLT. PIPE ARCH	20,000	lbs

PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN-RETAILED	CHECKED
REVISED	FIELD CHANGES
PLANS	

ORIGINAL SURVEY	DATE
2/10/1980	8/78
DATE	

Install 150 L.F. Guard Rail Type 3
Single Rail Begin Sta. 12+50



Install Breakaway Cable Terminal
From Sta. 12+25 to Sta. 12+50



BEGIN PROJECT
12+00

Proposed Pole
Sta. 11+79.35 ft Rt (C)
BHE/J #40

BEGIN TRANSITION
MATCH EXISTING
TEMPLATE
11+50

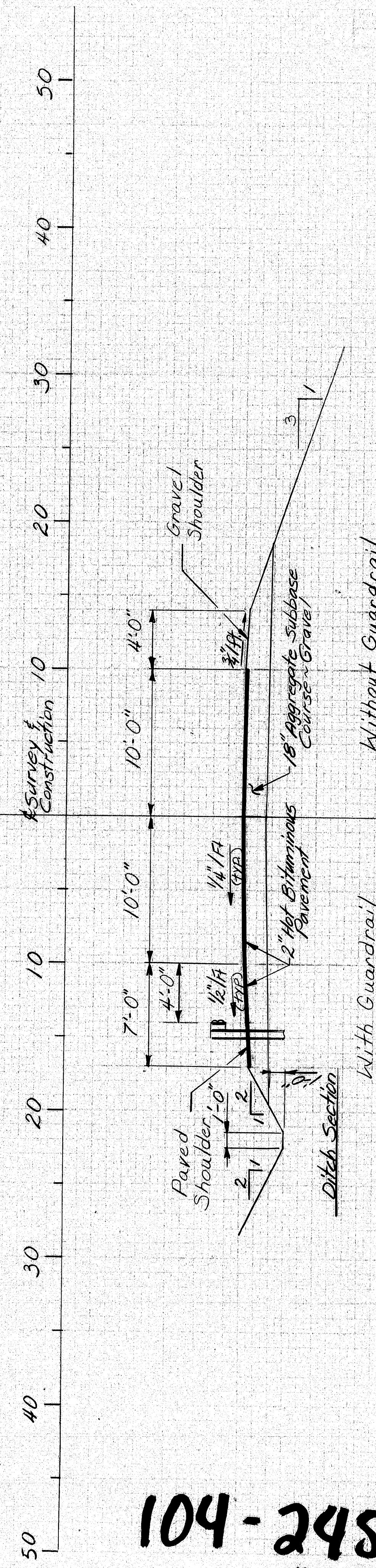
11+00

Proposed Pole
Sta. 10+94.51 ft Lt (C)
BHE/J #39-3

8' Woods Entrance
Shanked Back Right
10+80

12x24' CMP

10+50
Survey
(11/80)



NOTE: In addition to the junction
at 12+81 and 13+32, the sections
in the survey book page 11 show
buried cable the entire length of
the project

TYPICAL APPROACH SECTION

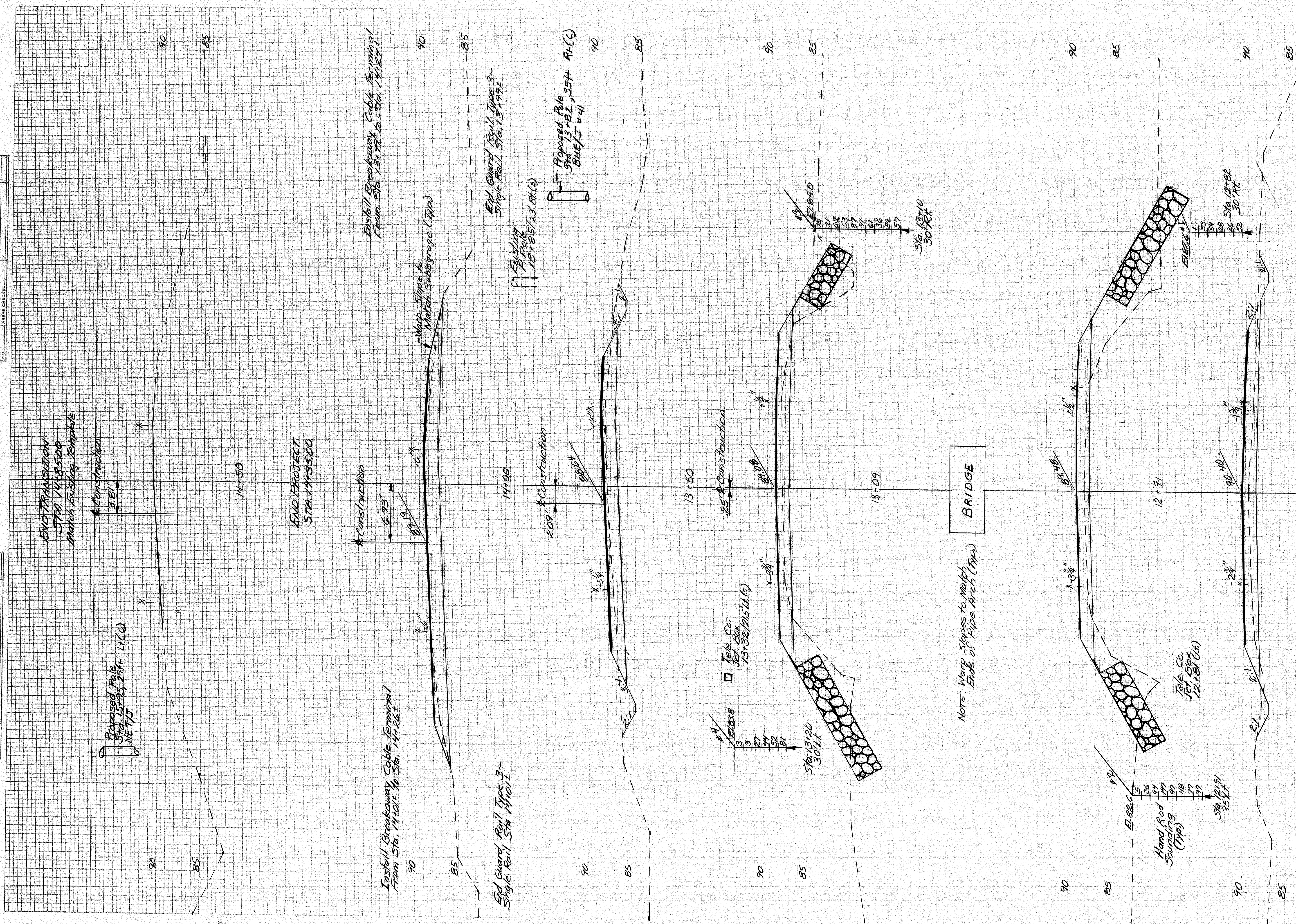
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00415700 3 11
MARION TWP.

104-245

Marion Twp. Sta. 10+50 to 12+25

ORIGINAL SURVEY	REV	DATE
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FINAL SURVEY	REV	DATE
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MARION TWP

104-246

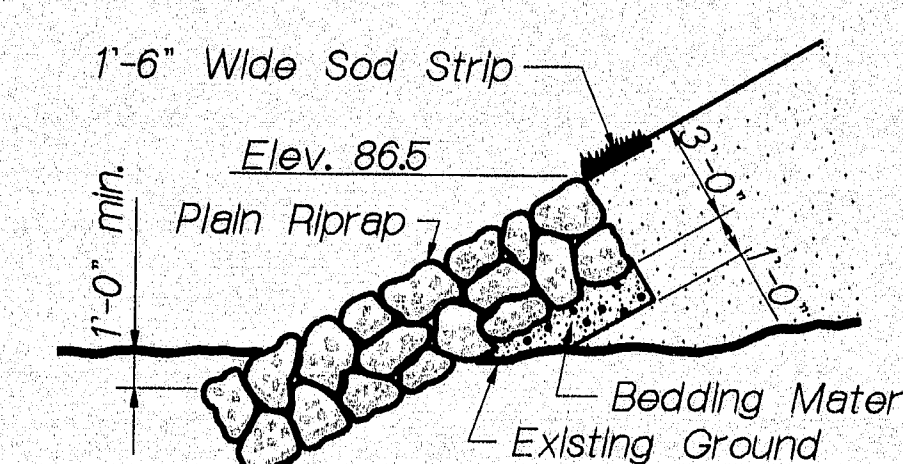
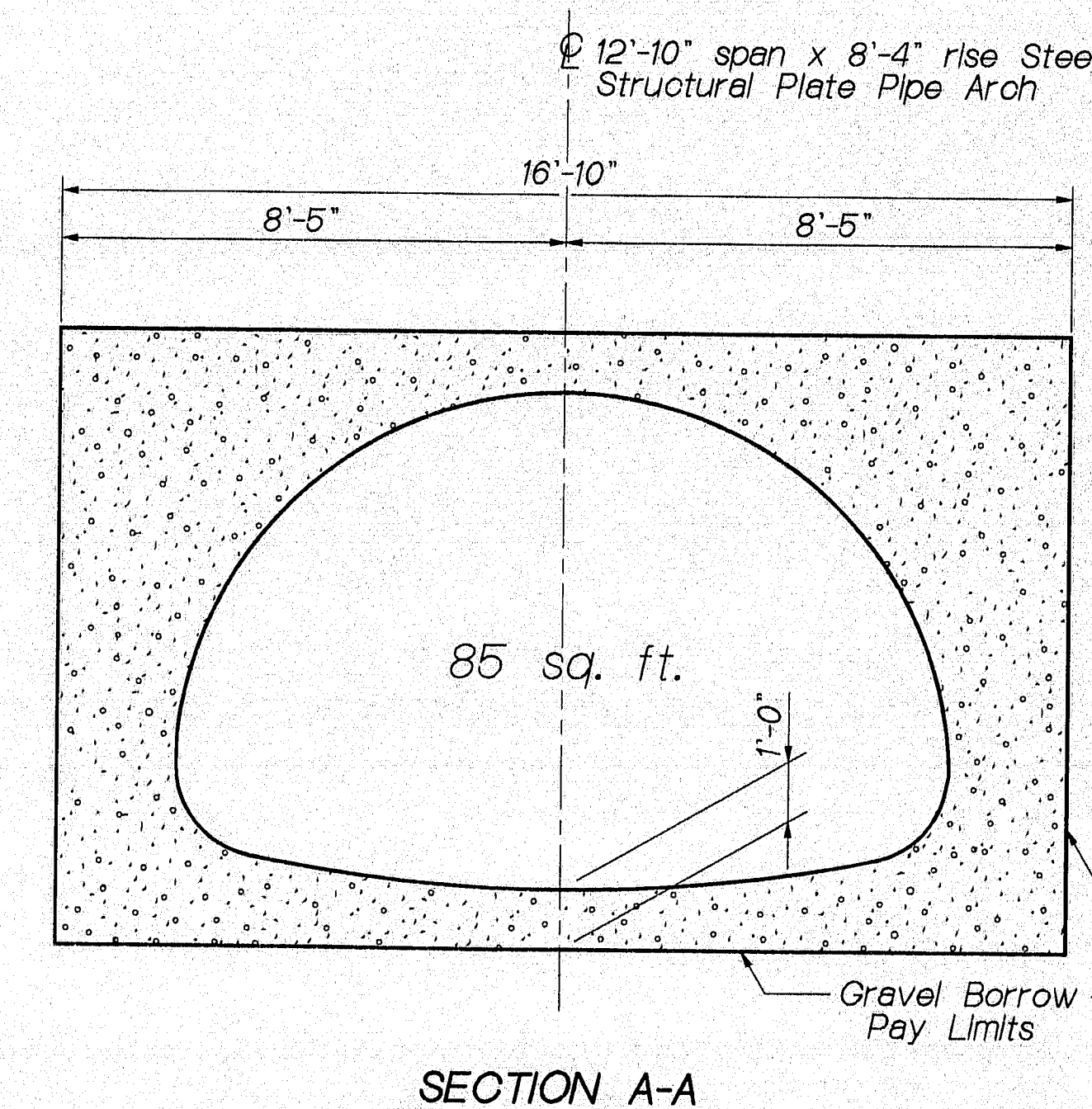
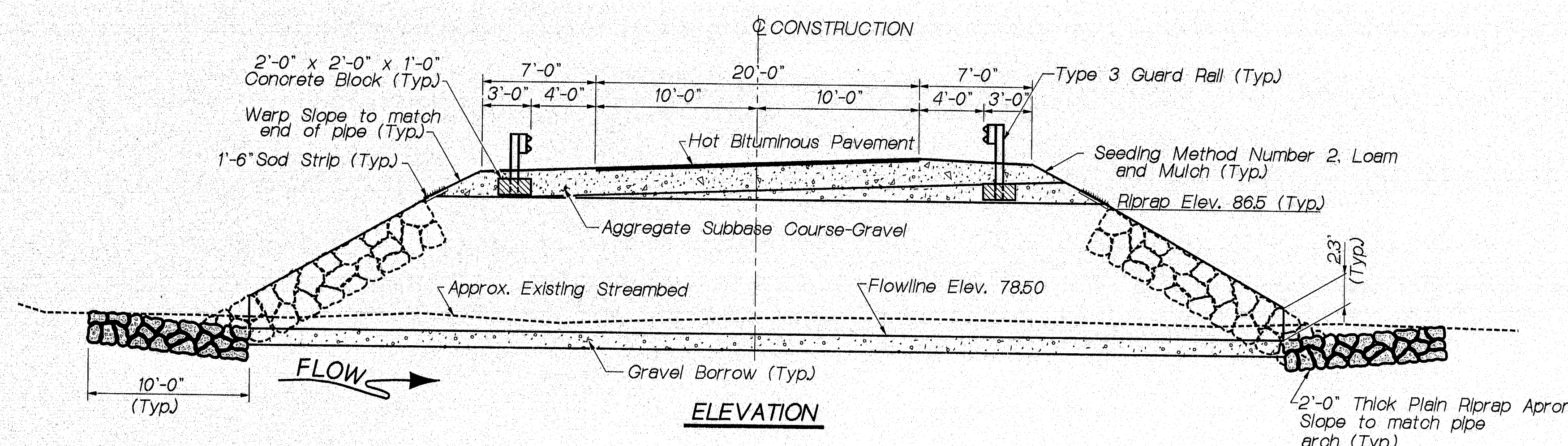
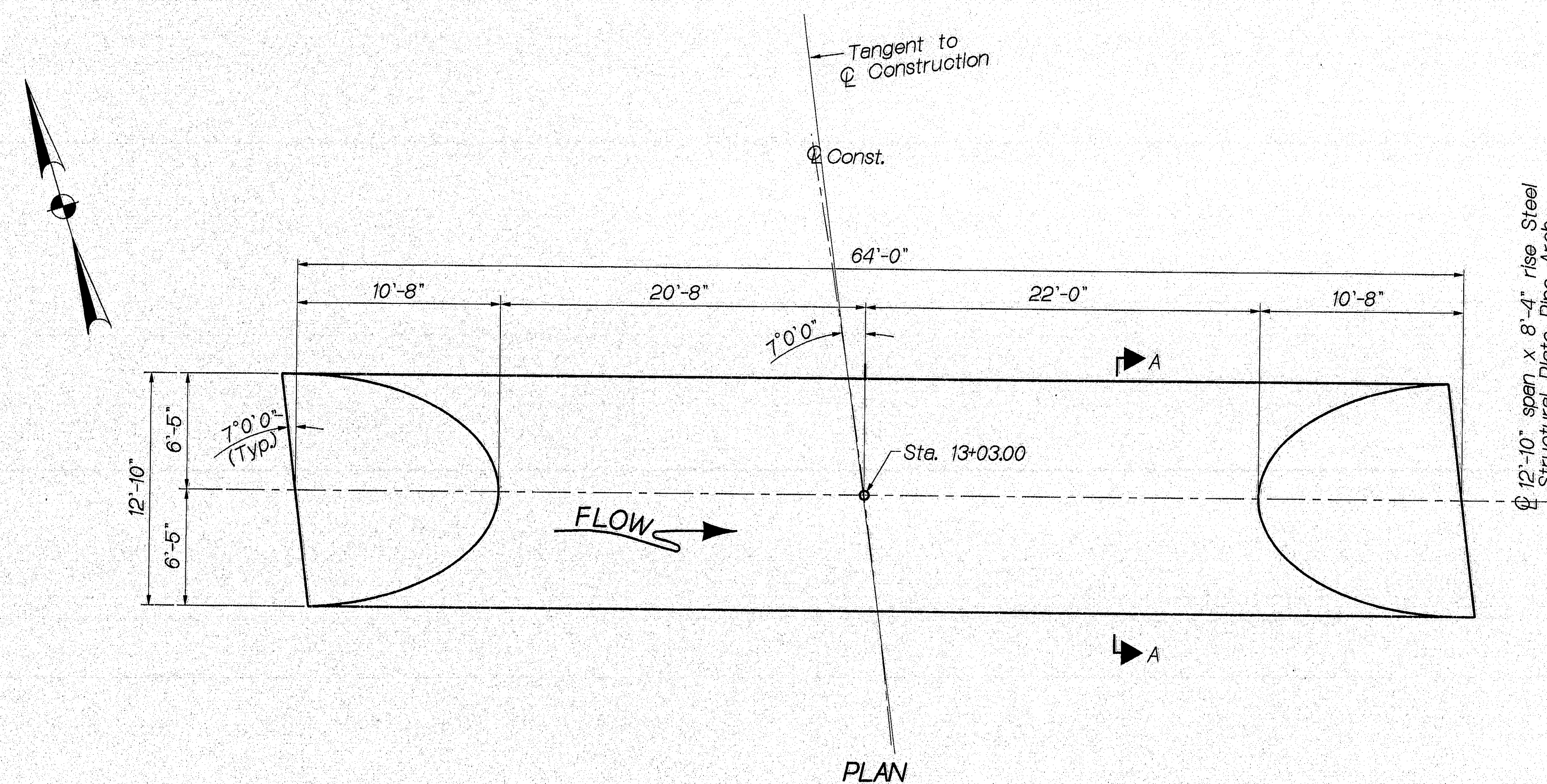
Marion Twp Sta. 12+50 to 14+50

Marion Twp.

F.H.V.A. RES. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	004157.00	5	11

STRUCTURAL PLATE STRUCTURE NOTES

- 1.- One 154 inch span, 100 inch rise Structural Plate Pipe Arch required. Top plates shall be .138 inch, bottom and corner plates shall be .188 inch.
- 2.- Ends shall be cut on a 1.75:1 bevel normal to the end skew shown on the details.
- 3.- Place a 1'-6" wide strip of sod along the top of riprap and over the pipe arch, typical both ends of pipe arch.
- 4.- Riprap adjacent to the pipe shall be carefully placed so as not to damage the pipe and so that the finished slope will match the ends of the pipe. Any extra labor, material or equipment used will be considered incidental to Item 610.08, Plain Riprap.
- 5.- Guardrail posts within the limits of the structural plate structure shall be cut to length in the field, as required to clear the structure by a minimum of 6 inches. Cut posts shall be imbedded 9 inches in a concrete base 2'-0" square by 1'-0" thick. The concrete mix shall be as approved by the Engineer. Any costs for cutting posts and constructing concrete bases will be considered incidental to related guardrail items.



All Bedding Material placed in the embankment slope under the riprap and within 12 inches of the back side of riprap areas shall meet the requirements of Subsection 703.19, Material for Underwater Backfill.

104-247

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

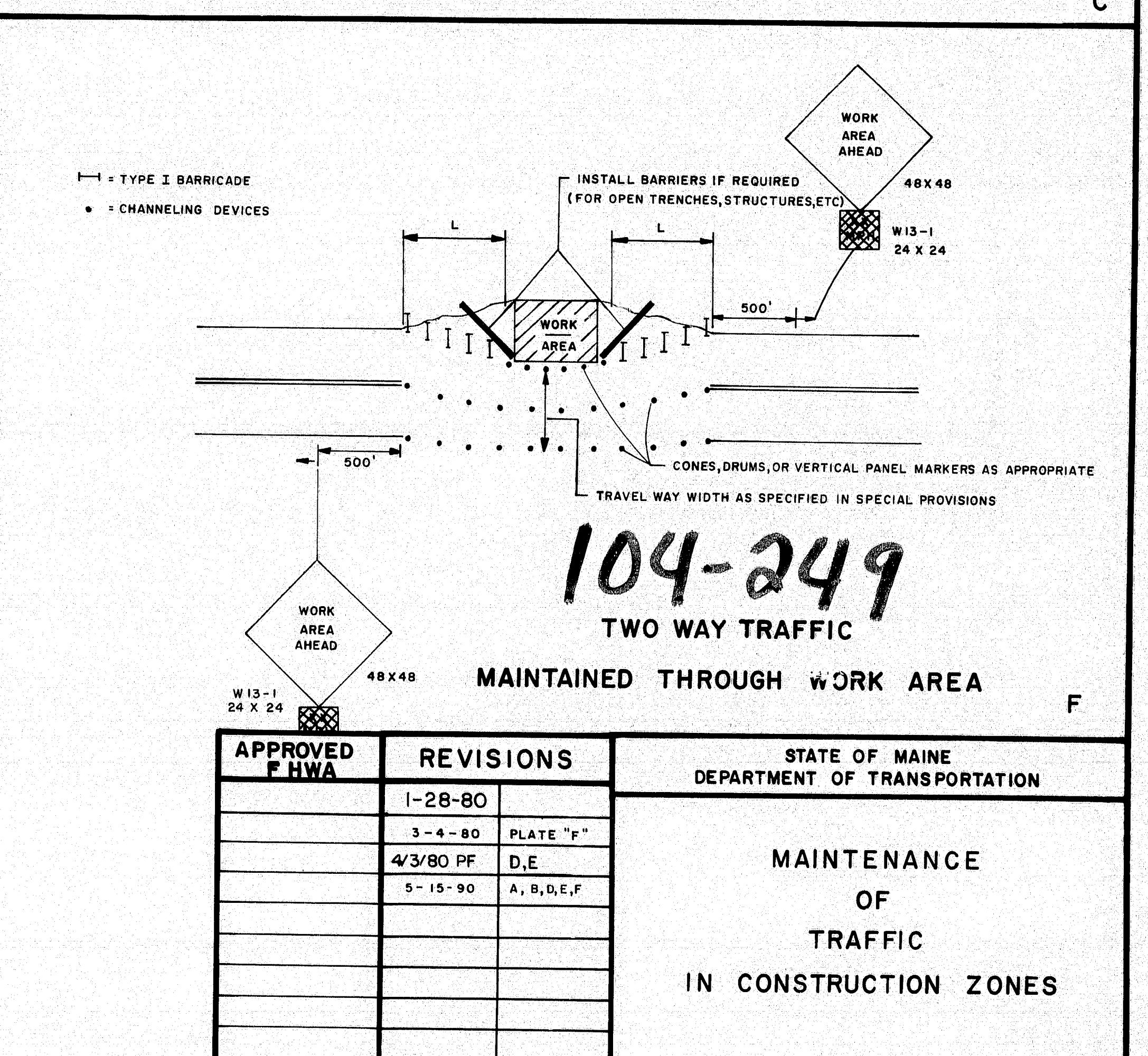
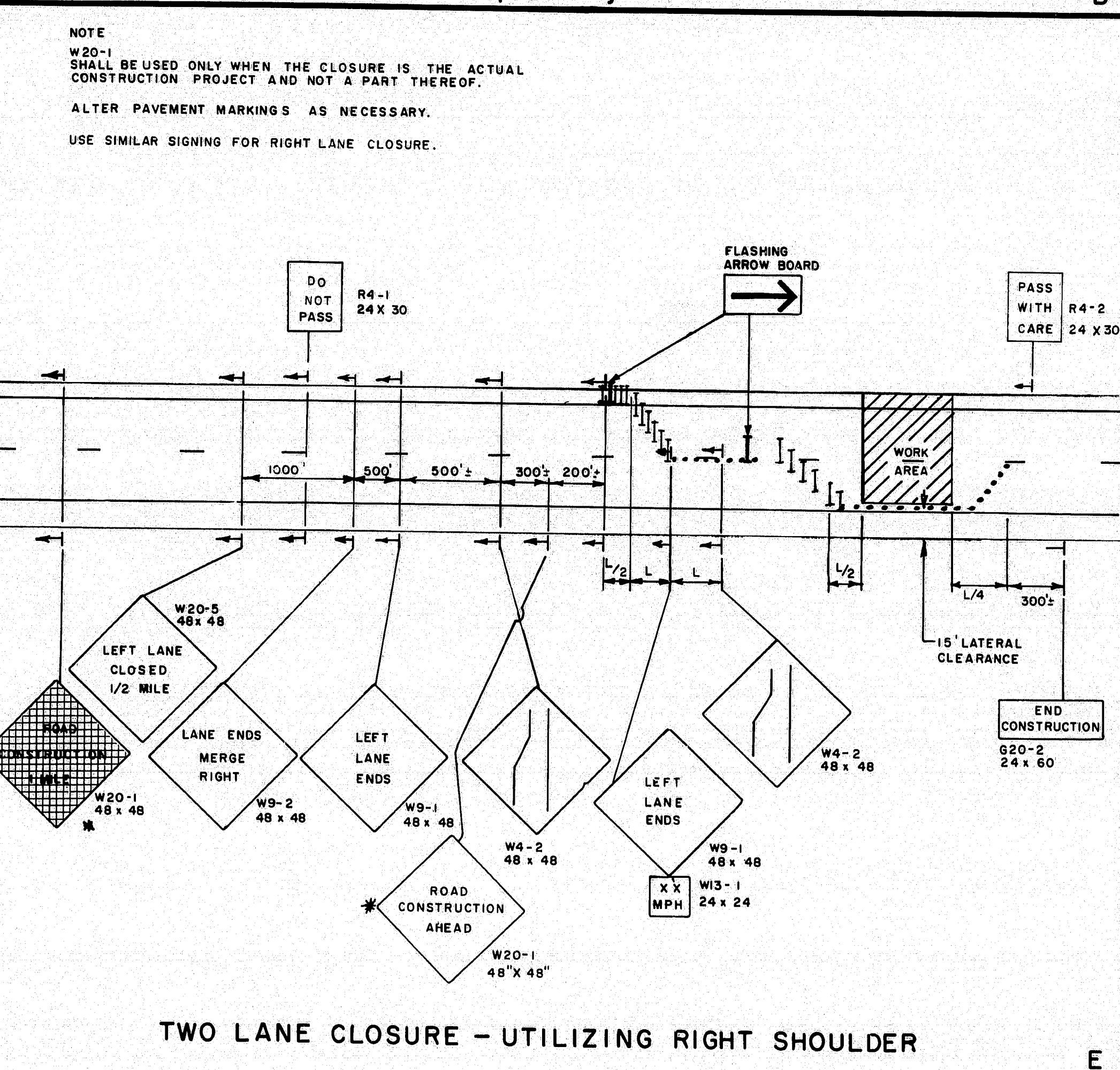
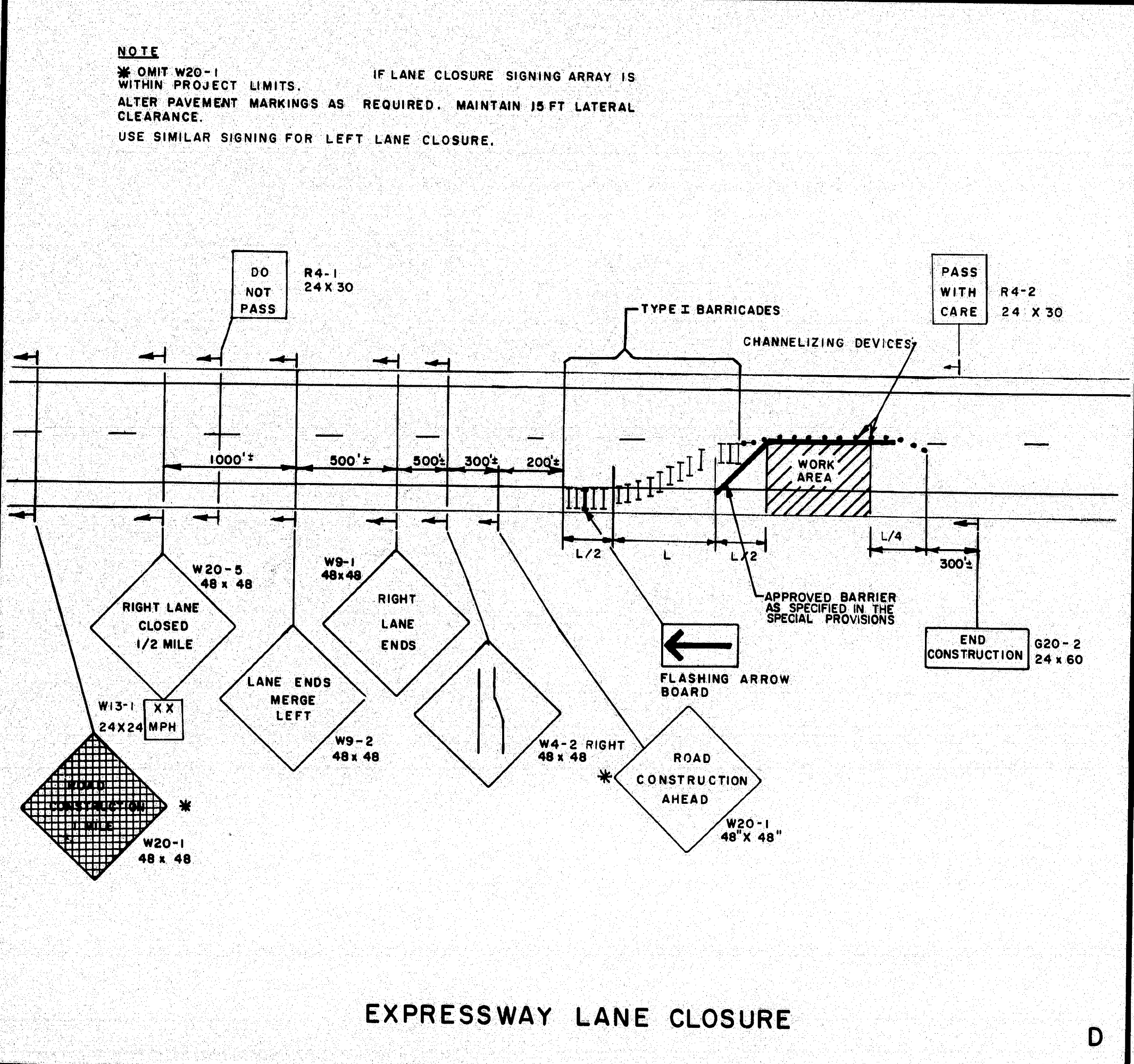
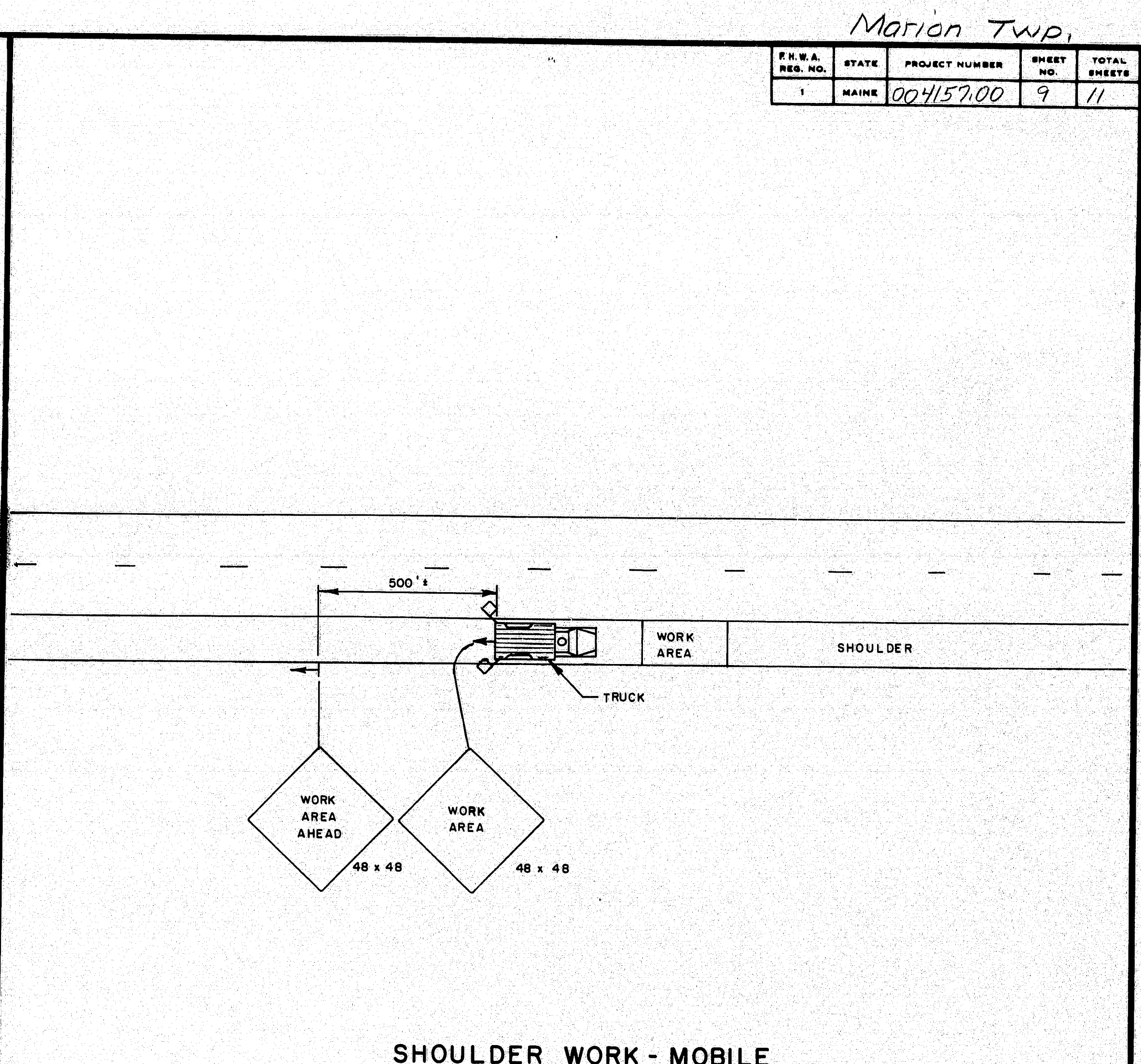
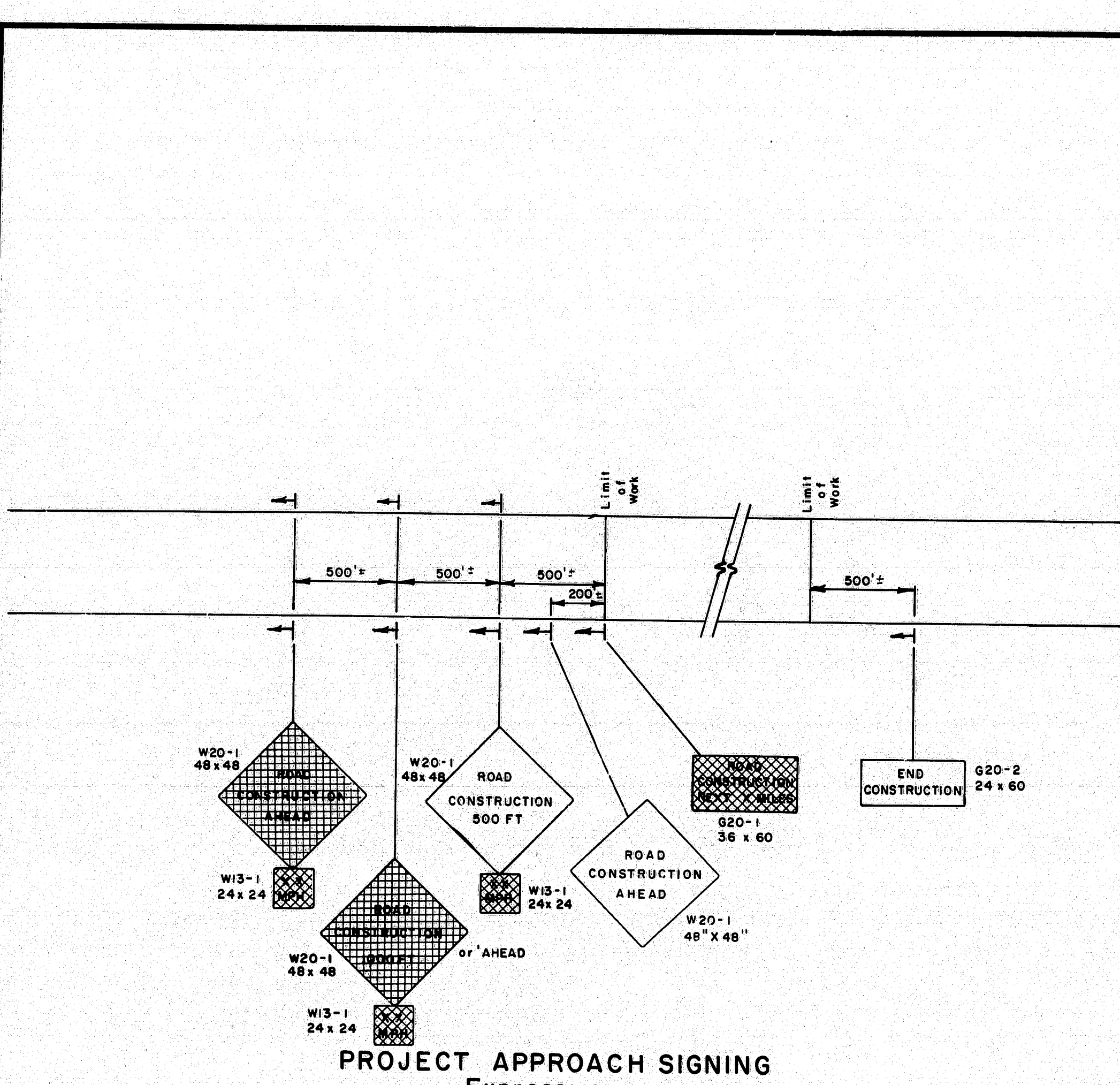
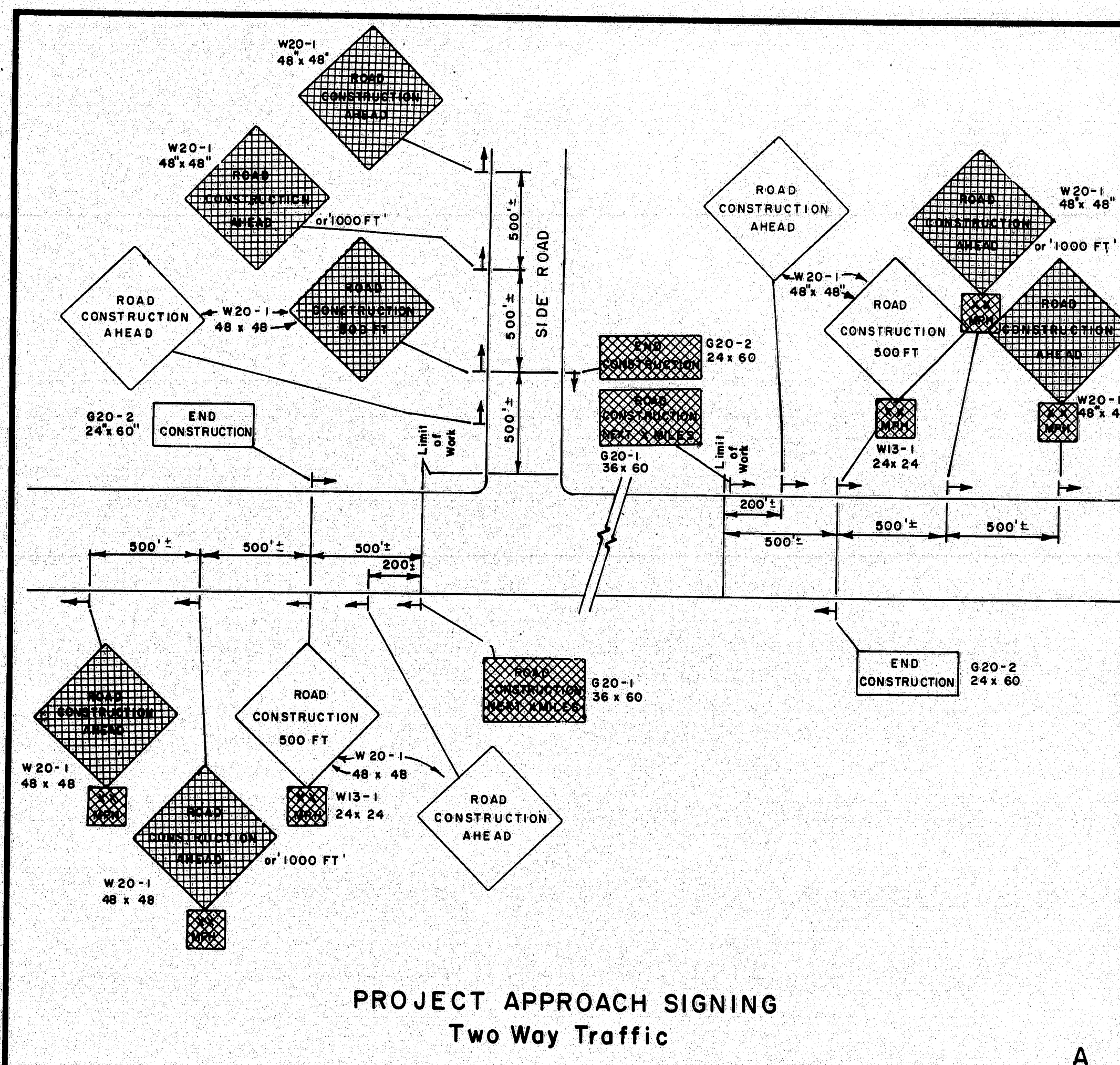
CLIFFORD BRIDGE
CLIFFORD STREAM
MARION TOWNSHIP
WASHINGTON COUNTY
STRUCTURAL PLATE
PIPE ARCH DETAILS

SHEET OF AUGUSTA, MAINE December, 1990

PROJECT DESIGN ENGINEER	BY	DATE
PLANS	DLP	12/00
CHECKED	DLP	
REVISIONS		
FIELD CHANGES		

Marion Twp.

F.H.W.A. DIST. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	004157.00	9	11



PROJECT ENGINEER	DATE
BY	
DESIGN - DETAIL	
CHECKED	
REVISIONS	
FIELD CHANGES	

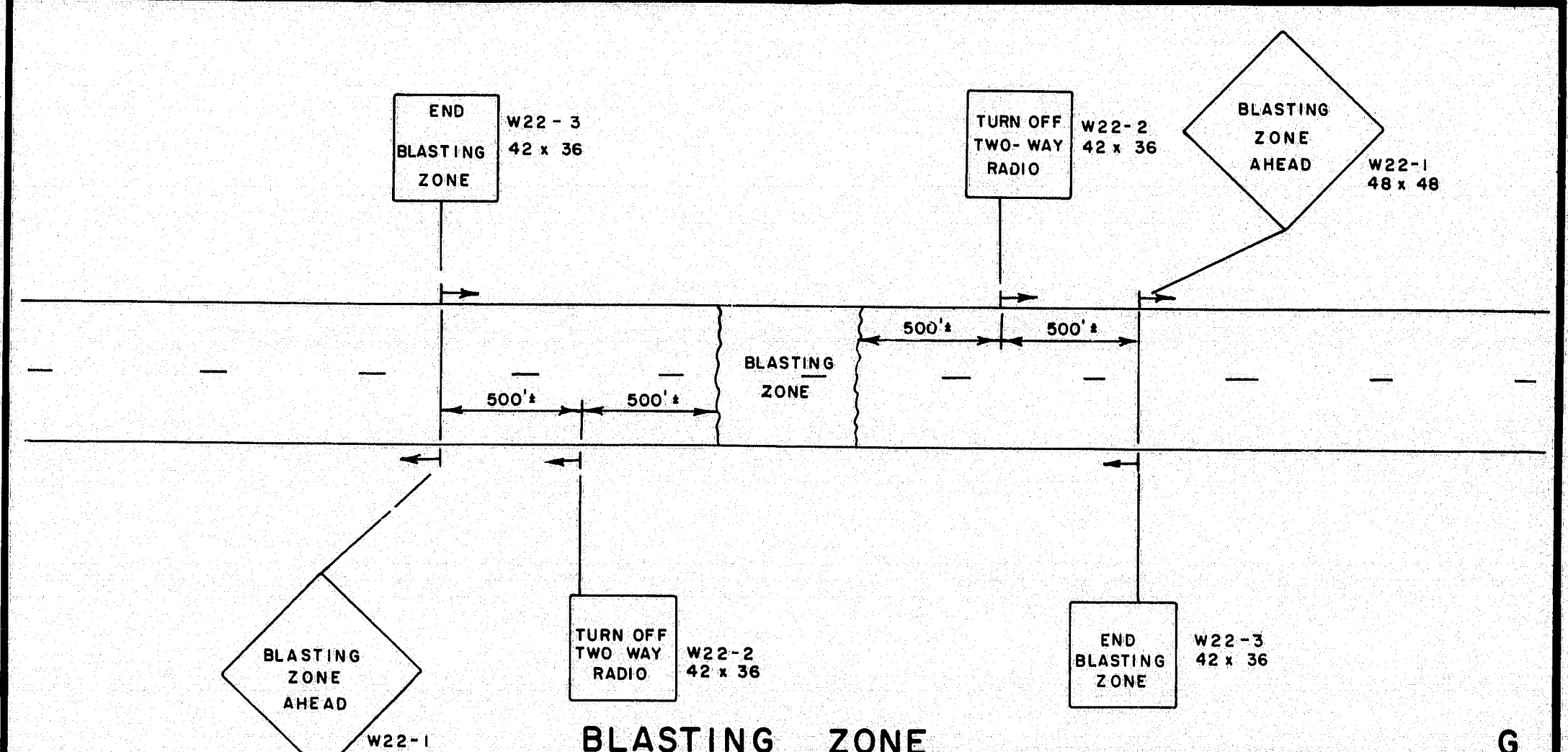
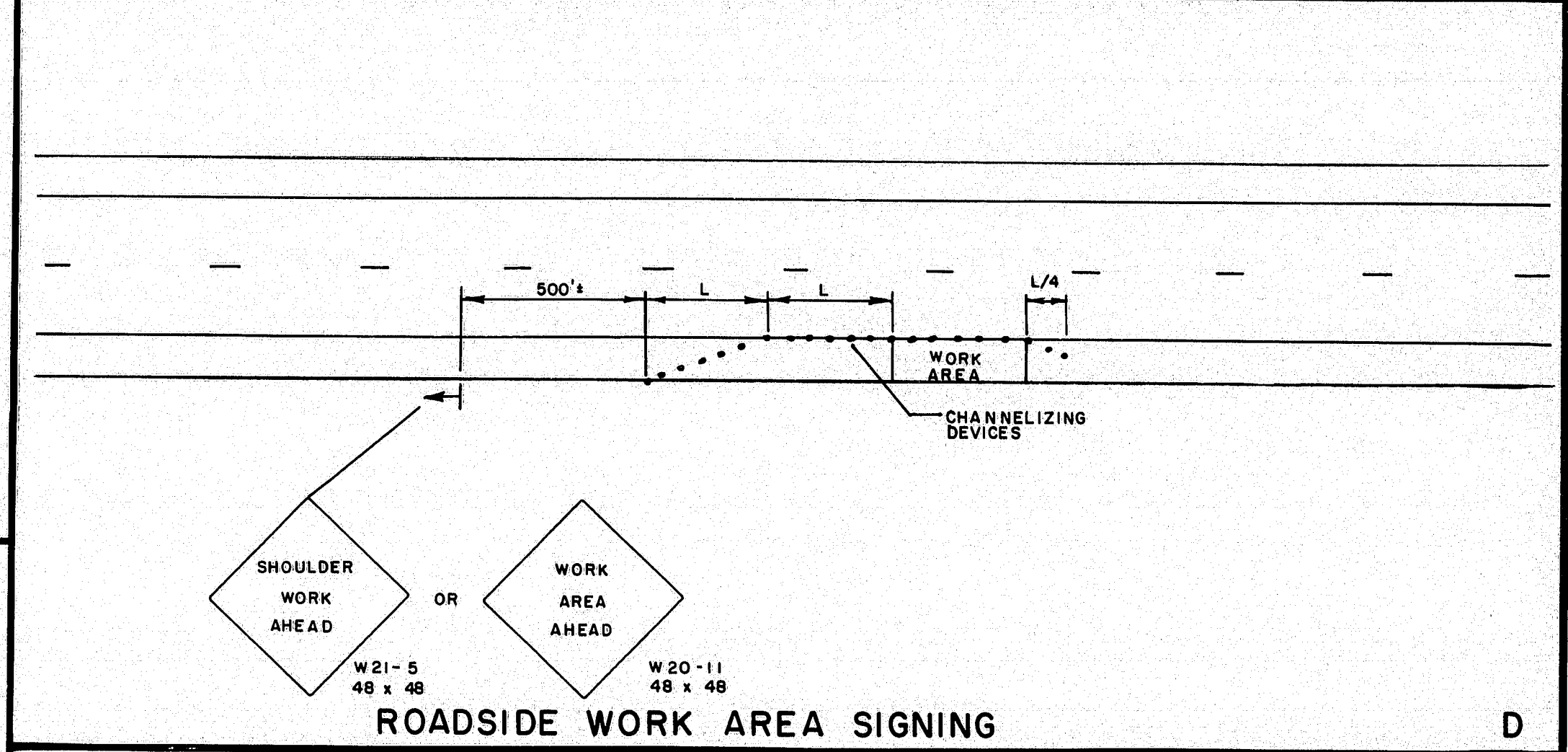
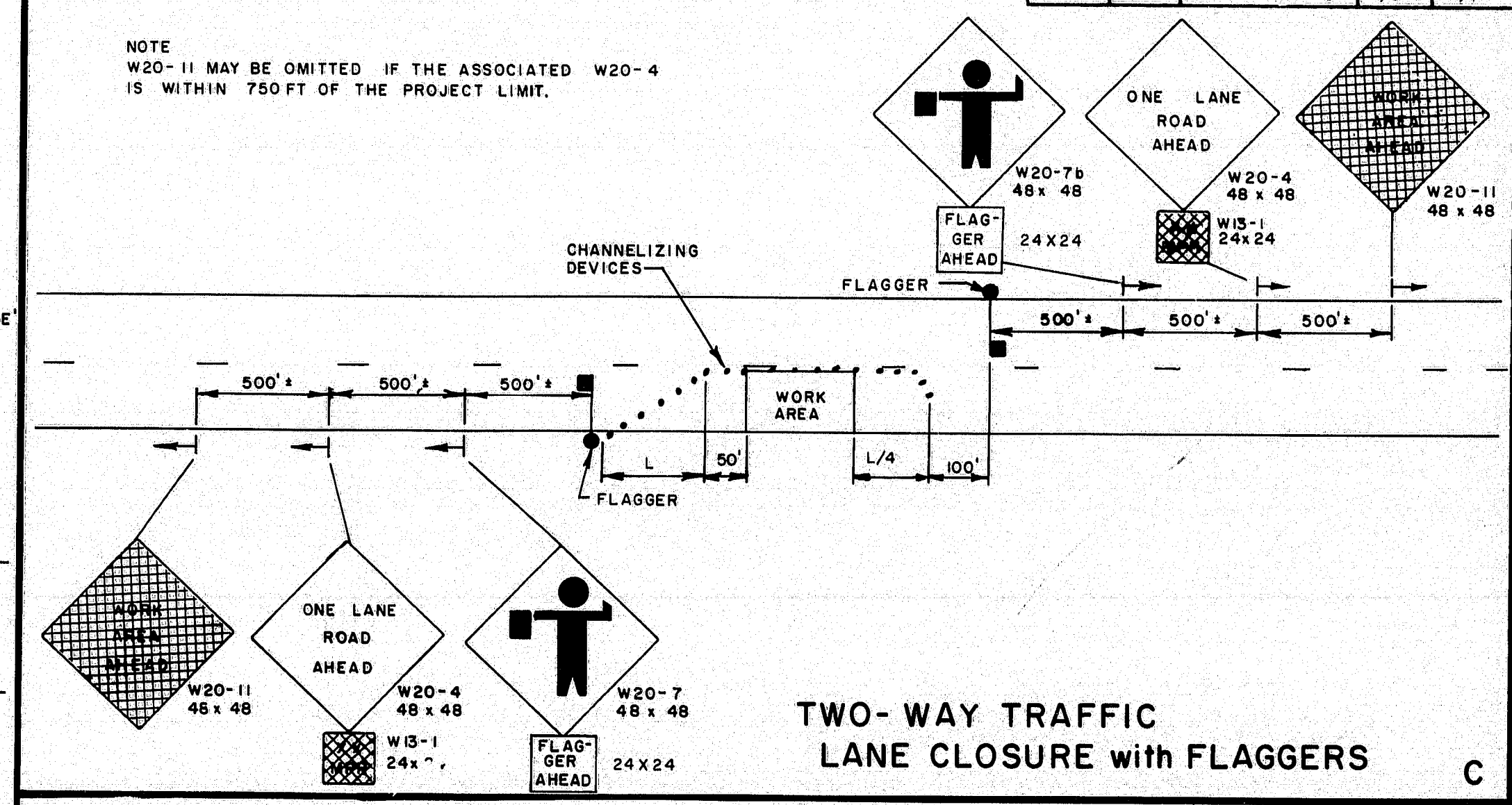
APPROVED F.H.W.A.	REVISIONS
	1-28-80
	3-4-80 PLATE "F"
	4/3/80 PF D.E.
	5-15-90 A, B, D, E, F

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES	
SHEET OF	AUGUSTA, MAINE (HD-11)

Marion Twp.

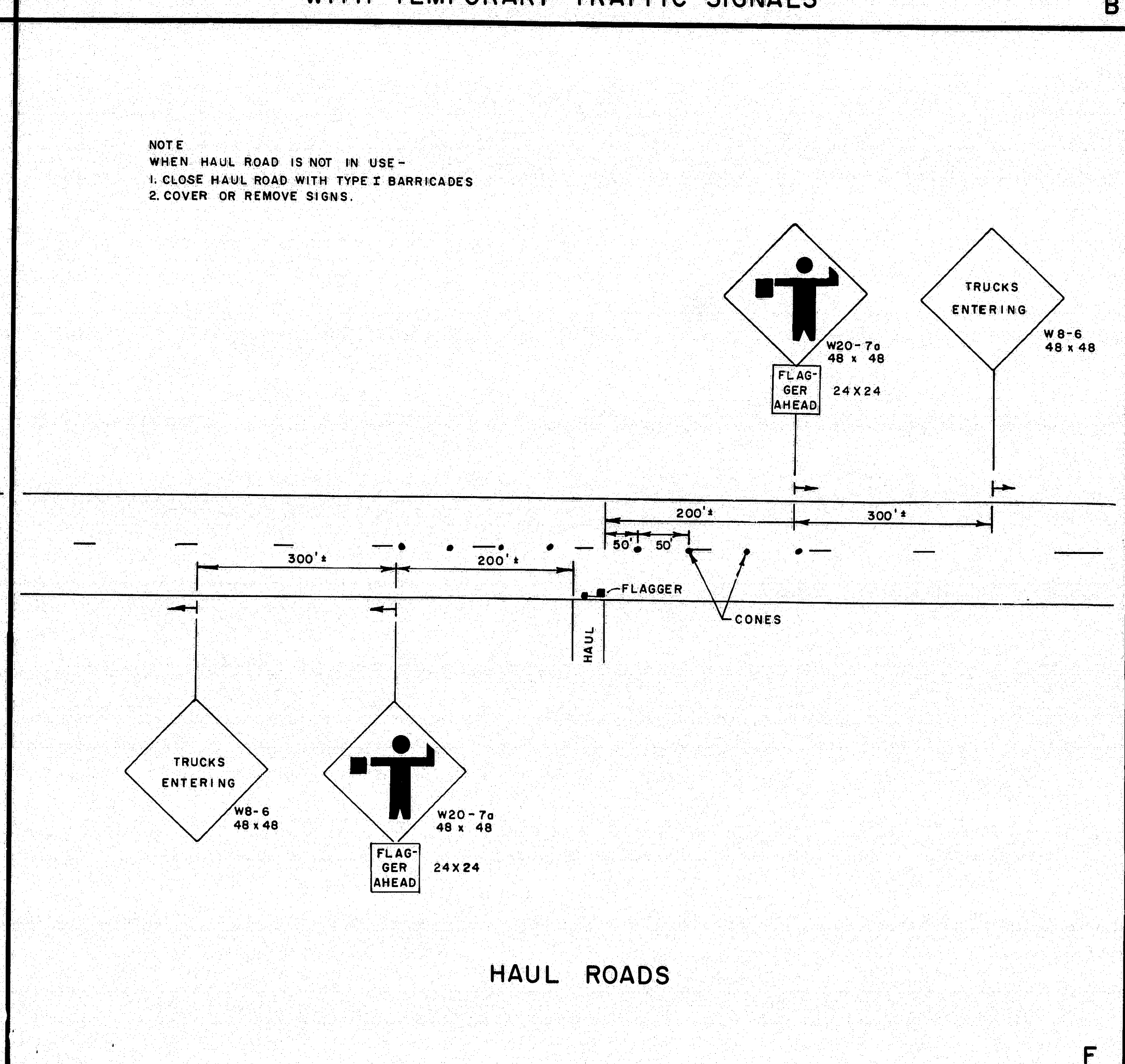
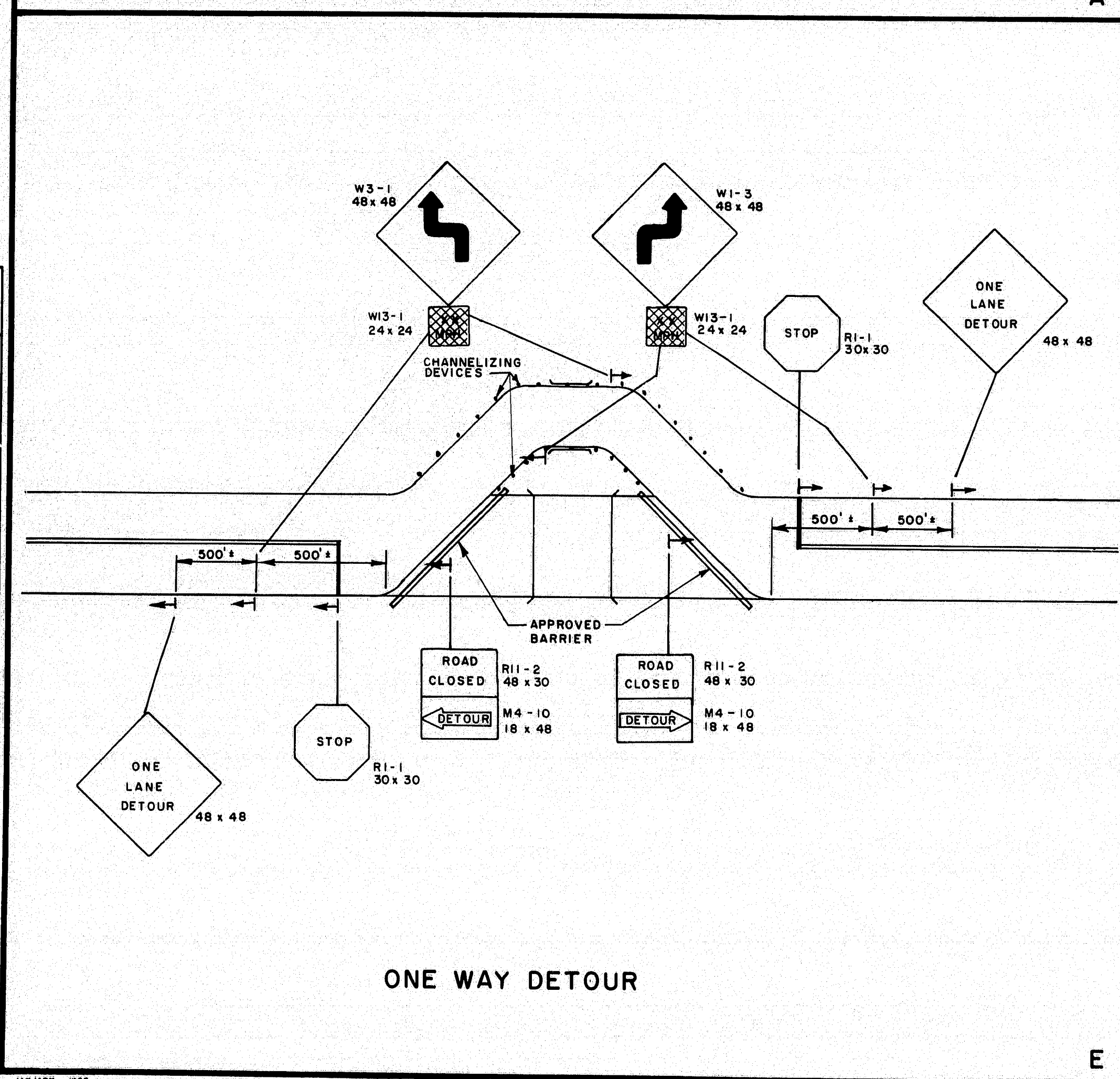
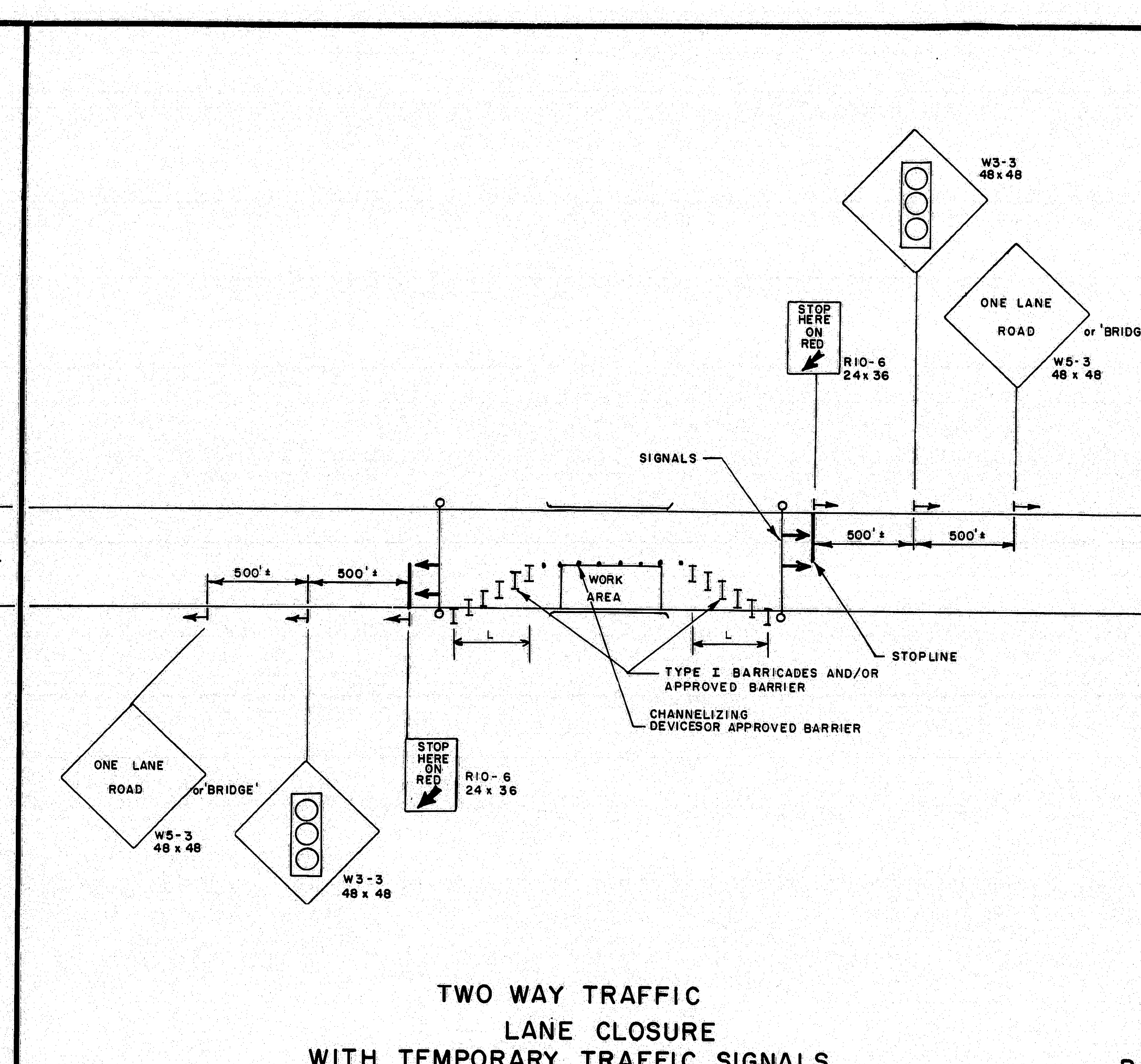
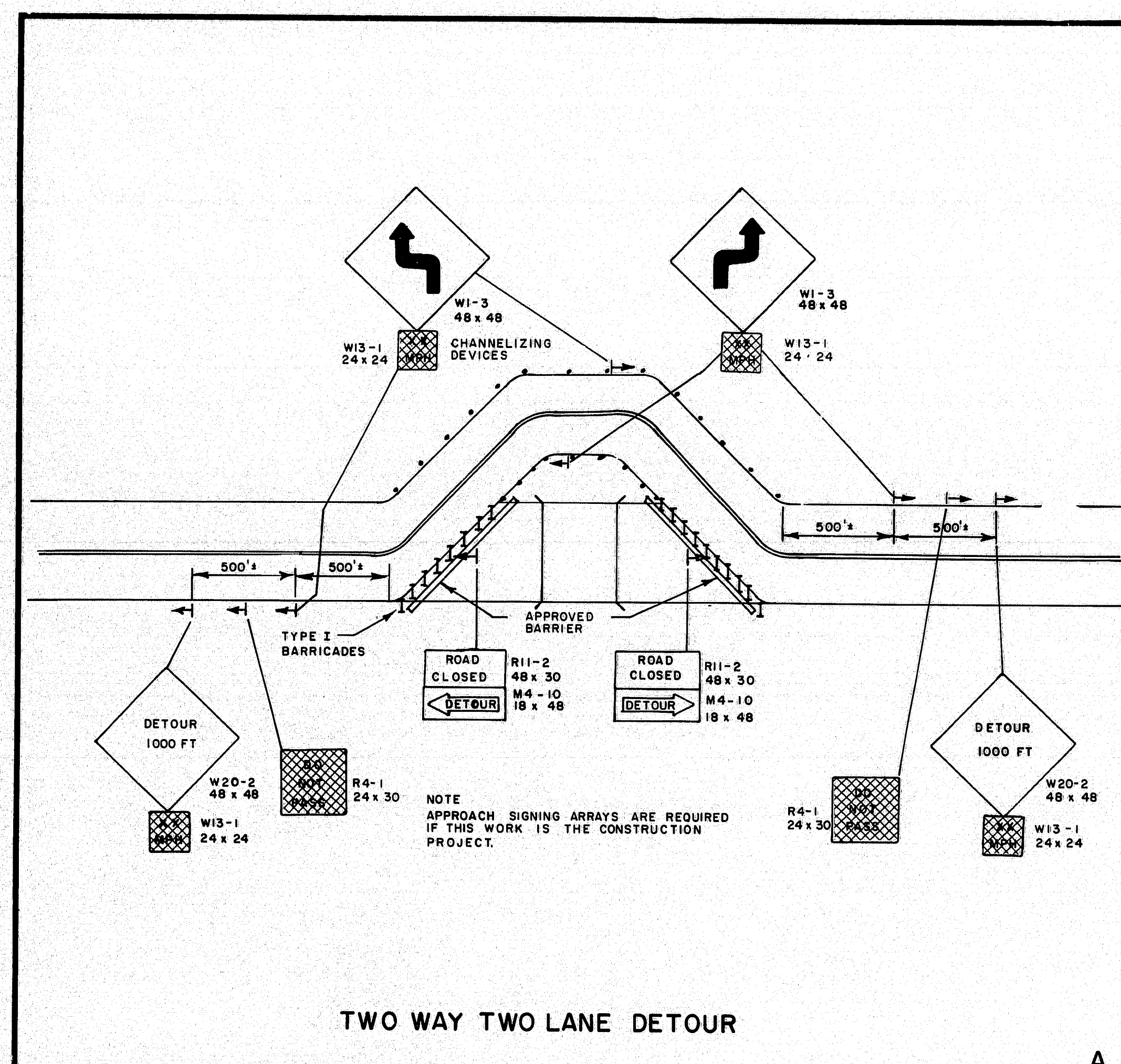
F.N.E.A. PROJ. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	004157.00	10	11

NOTE
W20-11 MAY BE OMITTED IF THE ASSOCIATED W20-4
IS WITHIN 750 FT OF THE PROJECT LIMIT.



REVISIONS				STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
4/3/80	PF	B, C, D		MAINTENANCE OF TRAFFIC IN CONSTRUCTION ZONES	
				SHEET OF AUGUSTA, MAINE (HD-12)	

104-250



PROJECT DESIGN ENGINEER	DATE
BY	
DESIGN - DETAILED	
CHECKED	
REVISIONS	
FIELD CORRECTIONS	

PLANS

JANUARY 1983

ITEM	FIGURED	PLOTTED	CHECKED	REVISIONS			
BASE LINE		T. L. B.		NO.	DATE	DESCRIPTION	BY
TOPOGRAPHY		T. L. B.					
R/W LINES							
AREAS							
EXIST. R/W		T. L. B.					

[illegible]

EXISTING R/W
WASHINGTON COUNTY RECORDS
VOLUME 3, PAGE 421, 1850
4 RODS
ALSO SEE: S.H.C. FILE NO. S-15-145

[illegible]

BRIDGE NO. 2625

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY MAP

STATE AID HIGHWAY NO. 1
MARION TOWNSHIP WASHINGTON COUNTY

STATE PROJECT NO. 004157.00

APPROVED: _____

DATE: JANUARY 1991

SCALE: 1 INCH = 25 FEET

DANA F CONNORS
COMMISSIONER

SHEET NO. 1 OF 1 SHEET
D.O.T. FILE NO. 15-238

RICHARD A. COLEMAN CHIEF ENGINEER

