

FHWA PROJECT NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
	KANSAS	87 U 0853-01	1980	1	16
472 76 245 812 89000 000 007					
FHWA NO. 87 BRM 6150 (003)					

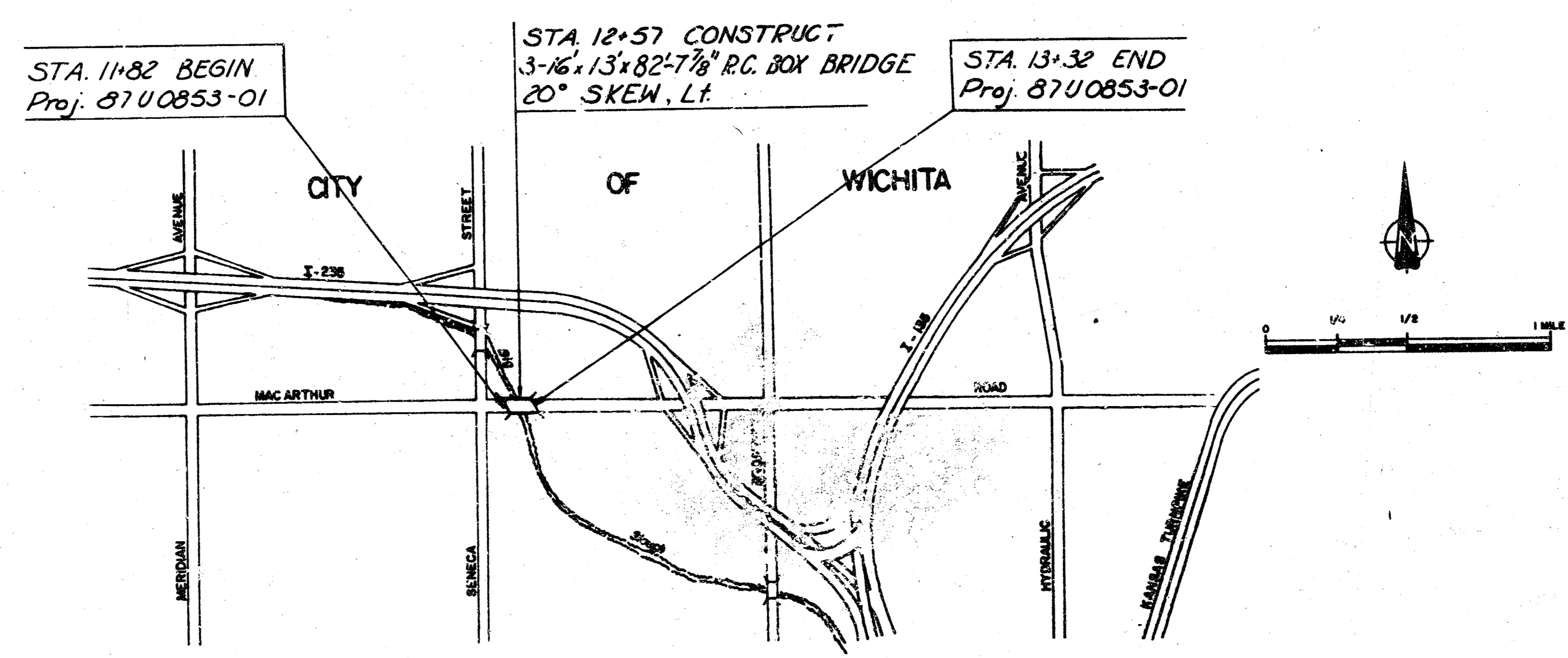
STATE OF KANSAS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT
87 U 0853-01
MAC ARTHUR ROAD BRIDGE
OVER
THE BIG SLOUGH

BRIDGE
GRADING

- INDEX OF SHEETS
- Title Sheet
 - Plan Profile
 - Channel Excavation & Compacted Embankment
 - Steel Plate Guard Fence Details
 - Bridge Details
 - Bridge Excavation
 - Supports and Spacers for Reinforcing Steel
 - Temporary Project Water Pollution Control
 - Summary of Quantities
 - Traffic Control Plan
 - Cross Sections

CITY OF WICHITA PROJECT
472 76 245 81289 000 000 001



DESIGN DESIGNATION
Traffic Count : 9,849 V.P.D., 1983
Traffic Count : 9,170 V.P.D., 2000
Design Speed 40 M.P.H.
Design Load HS-20-44



CONVENTIONAL SIGNS

COUNTY LINE	RETAINING WALL
CORPORATE LIMITS	CENTER LINE OF PROJECT
STATE OR NATIONAL LINE	LEVEE
TOWNSHIP LINE	CULVERTS
SECTION LINE	DROP INLETS
GRANT LINE	ACCESS CONTROL
FENCE LINE	POWER LINE
GUARD FENCE	TELEPHONE OR TELEGRAPH LINE
UNFENCED PROPERTY	MARSH
RIGHT OF WAY LINE	HEDGE
TRAVELLED WAY	TREES
RAILROADS	GRADE ELEVATION

GROSS LENGTH OF PROJECT	150.00	FT.
EXCEPTIONS	0.00	
ADDITIONS	0.00	
NET LENGTH OF PROJECT	150.00	FT. 0.028 MILES
NET LENGTH OF BRIDGES	54.62	FT. 0.10 MILES
NET LENGTH OF ROAD	25.38	FT. 0.08 MILES

NOTE:
The Contractor shall be responsible for preserving property irons. The Contractor shall be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor or a licensed professional engineer in accordance with state laws.

APPROVED BY — DATE 5-10-84
Mike Lindbak
MIKE LINDBAK, P.E.
CITY ENGINEER
CITY OF WICHITA

RECOM. FOR APPROVAL — DATE

CHIEF, BUREAU OF RURAL AND URBAN DEVELOPMENT
KANSAS DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

STATE TRANSPORTATION ENGINEER
KANSAS DEPARTMENT OF TRANSPORTATION

DESIGNED BY — DATE 5-10-84
R. S. DELAMATER & ASSOCIATES INC.
CONSULTING ENGINEERS
WICHITA, KANSAS
R. S. Delamater

RECOM. FOR APPROVAL — DATE

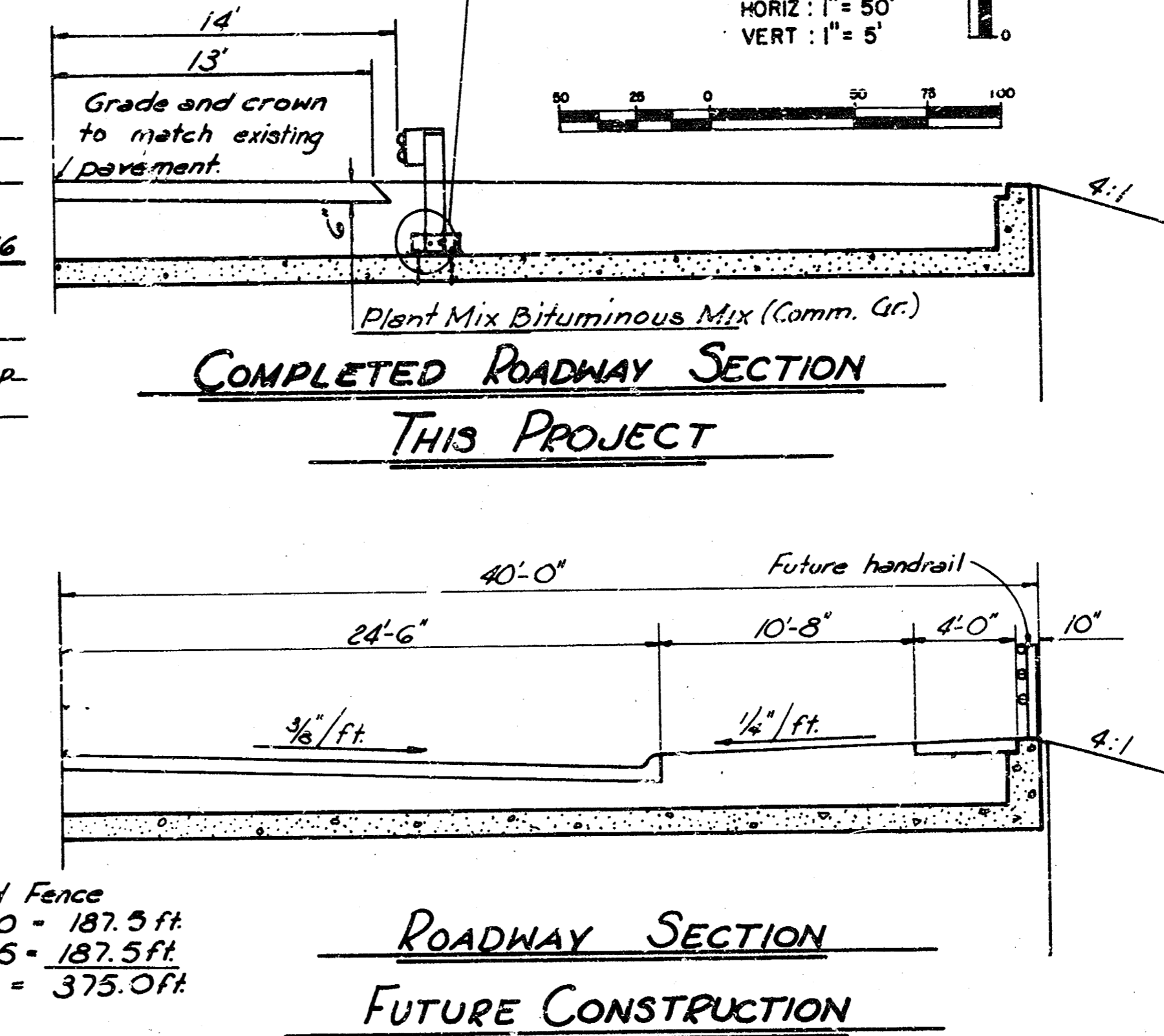
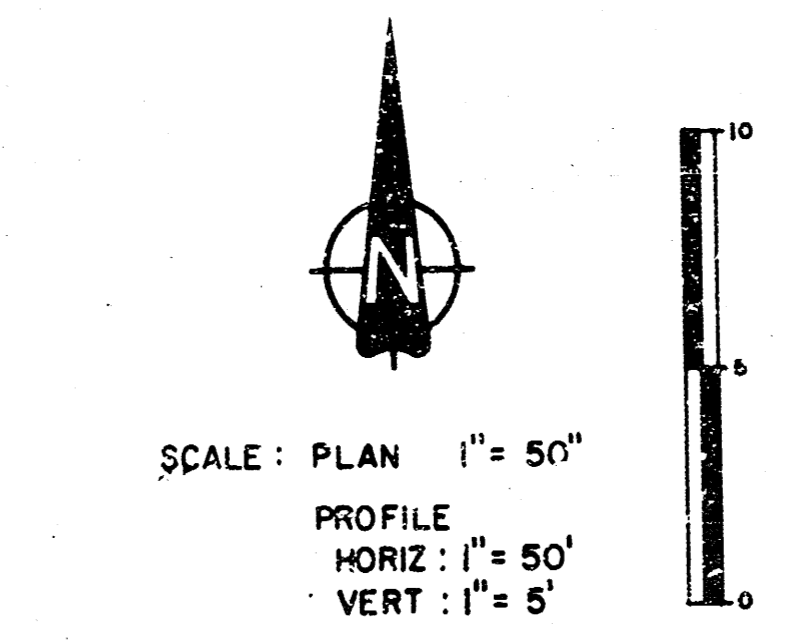
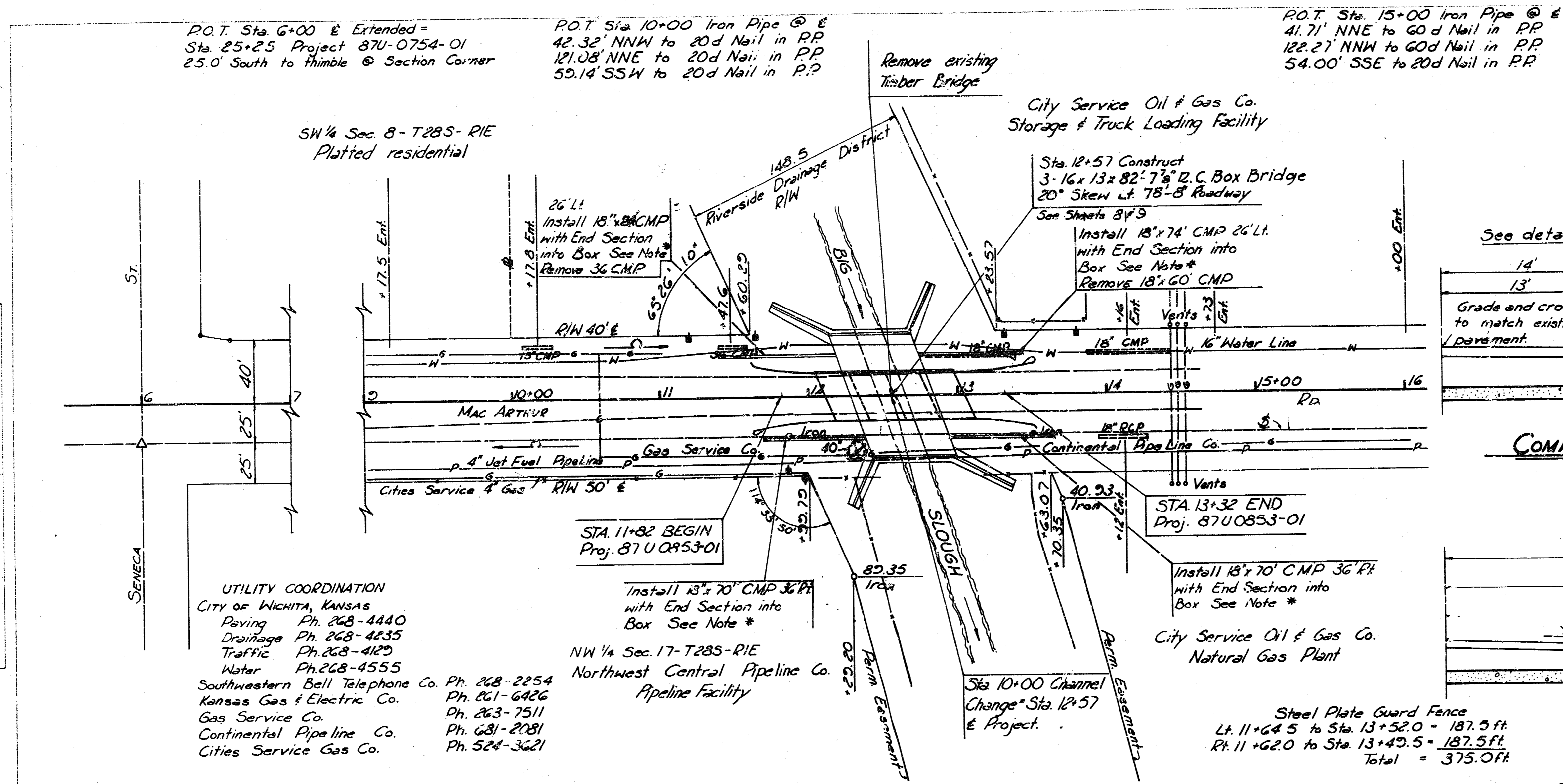
ENGINEER
FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

APPROVED — DATE

DIVISION ADMINISTRATOR
FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

FHWA REG. NO.	STATE	PROJECT NUMBER	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87-U-0853-01	1984	2	16

472 76 245 812 89000 000 007



GENERAL NOTES

Public and private utility facilities shall be moved or adjusted as necessary by the owners to fit the new construction, unless otherwise noted on the Plans or in the proposal.

Publicly owned and maintained street signs will be removed by the Traffic Operations and Maintenance Division of the City of Wichita after installation of project Construction signing. Such signs will be replaced after the project is completed by the same Traffic Operations and Maintenance Division.

Incorporate rock excavation in compacted fill; chunks not over 0.5 cu. ft. ±.

The Contractor shall remove the existing structure* consisting of timber bridge with four spans @ 12 feet. All material to become the property of the Contractor and to be removed from the site. *Structure No. 430400876/150010

See Sheet 3 for Limits of Construction.

CHANNEL CROSS SECTION AT THE BRIDGE

See sheet 3 for limits of common excavation and compacted embankment

B.M. Datum:
0.00 City of Wichita
1187.4 M.S.L.

B.M. #1 City Std. Disc. 86' North & 28.5' West of Section Corner Seneca & Mac Arthur Elev. 90.37*
*Ref. Proj. 87U-0754-01

B.M. #2 R.R. Spike in R.P. 35' Lt. Sta. 11+15 Elev. 89.87

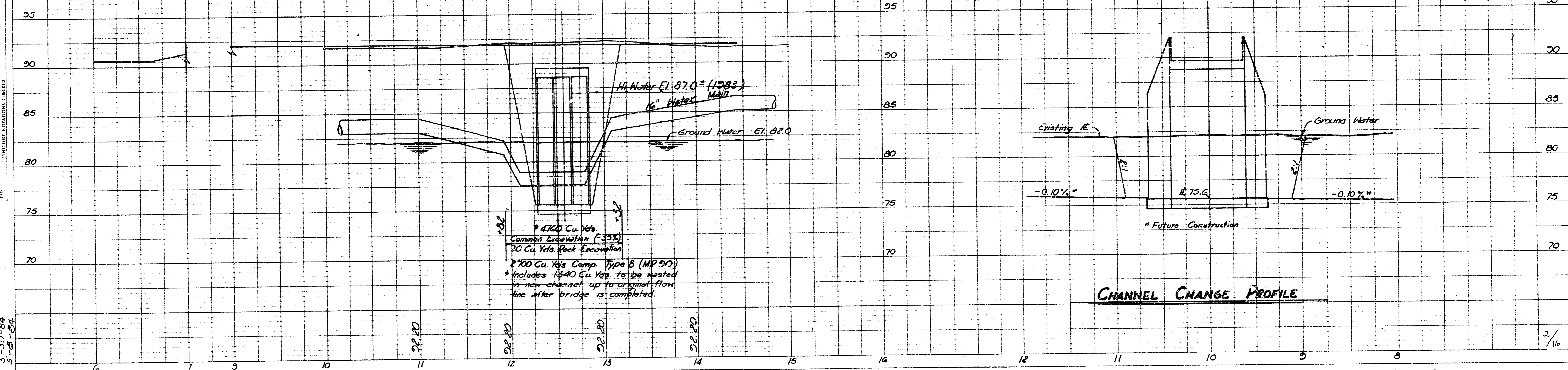
B.M. #3 R.R. Spike in R.P. 37' Lt. Sta. 16+57 Elev. 89.81

*NOTE: Inlet & elevations on all pipes; set 6" below existing ditch grade.

SPECIAL CONSTRUCTION NOTE:

The location of all underground pipelines in the vicinity of the bridge are shown to the best knowledge of the City, from information furnished by the owner. It is possible, however, that there are lines not located exactly as shown; or abandoned lines; or old lines not showing on anyone's records.

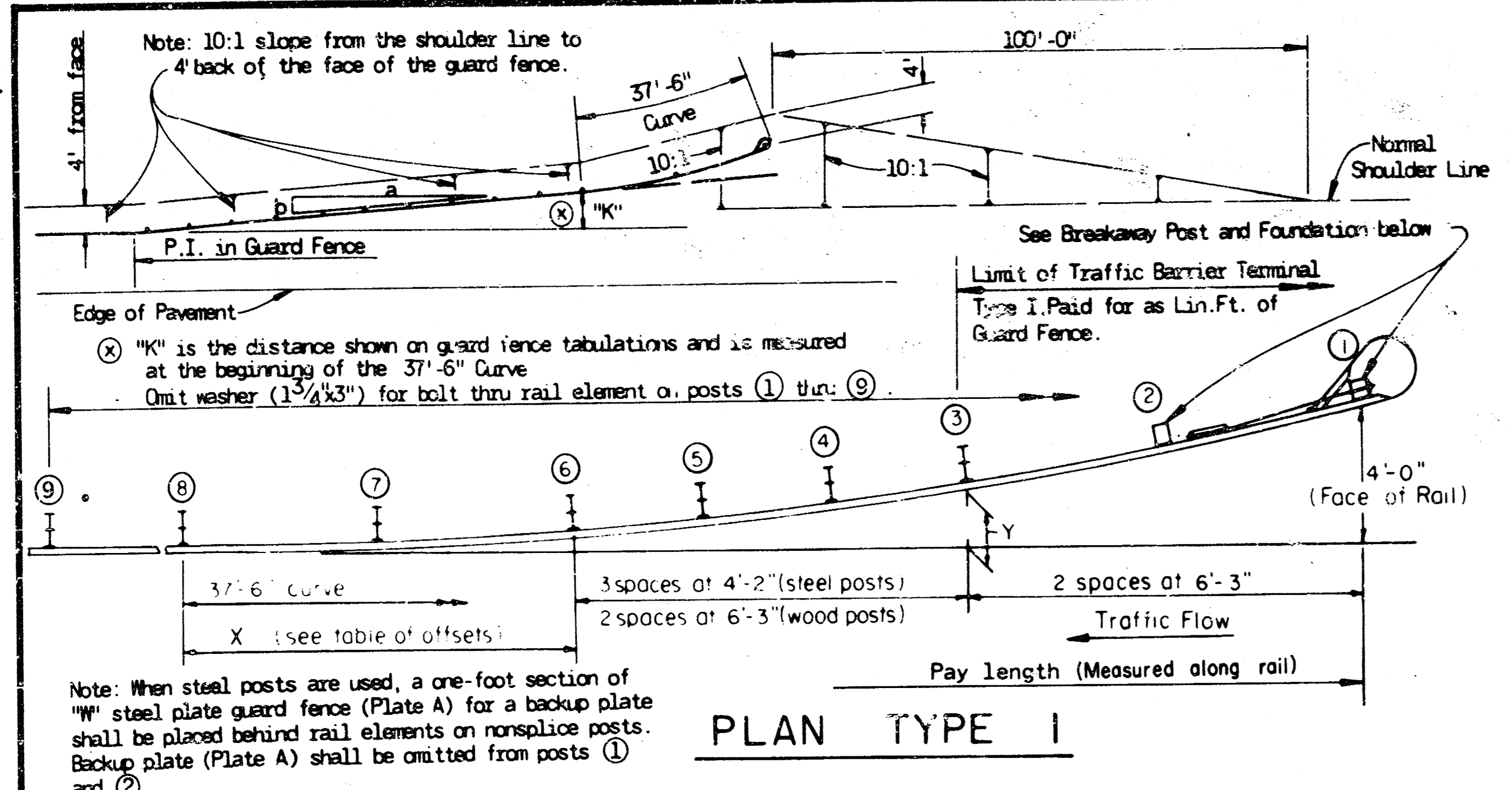
The contractor is therefore especially cautioned to satisfy himself, by contacting the owners, or by any other means available, to verify and establish the location and depth of all affected lines, and that they are moved clear of construction, before starting any channel or bridge excavation.



PLAN
DATE: 5-30-84
DRAWN BY: GRAVIS CHEER
CHECKED BY: [Signature]
SCALE: AS SHOWN

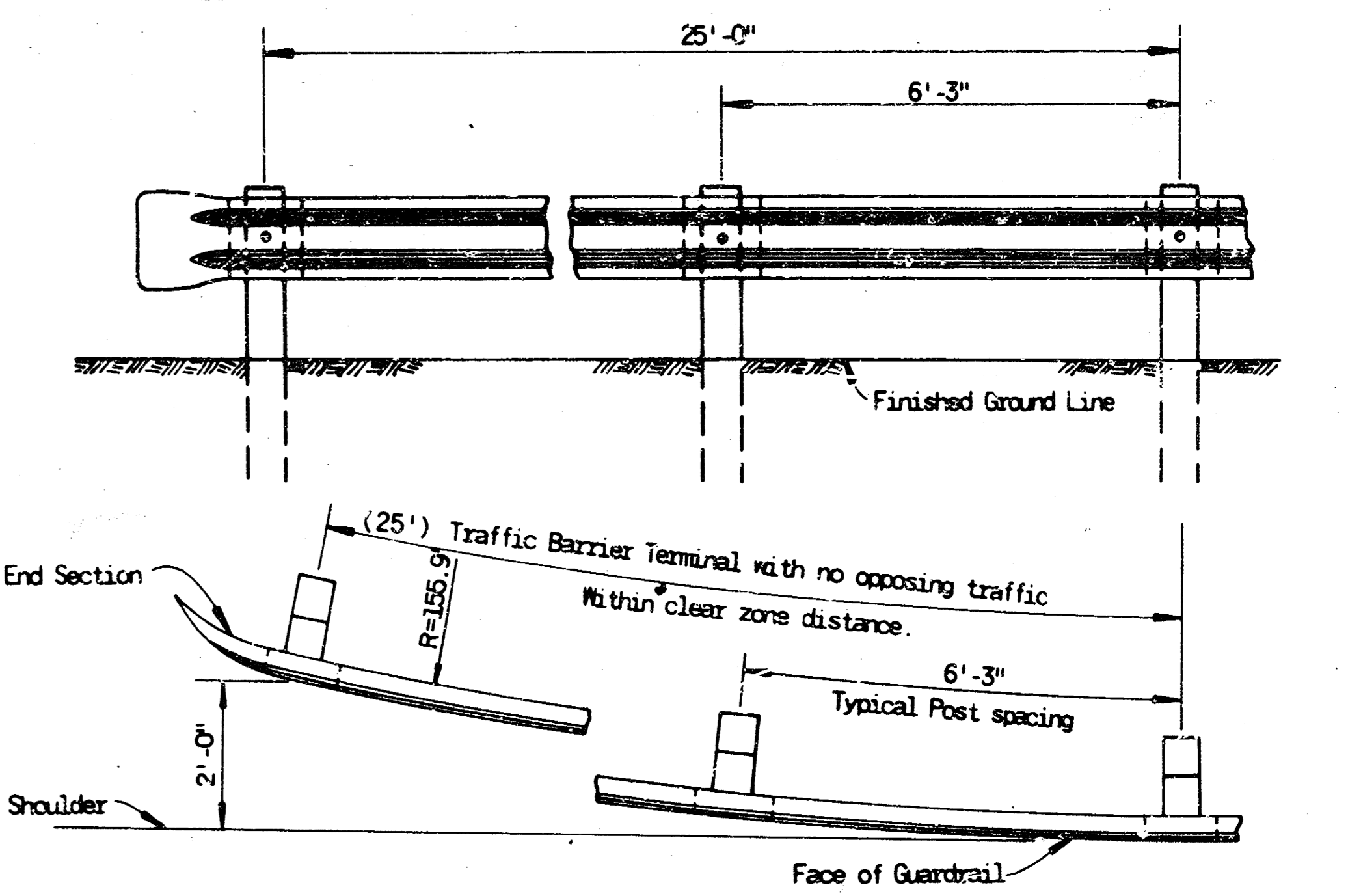
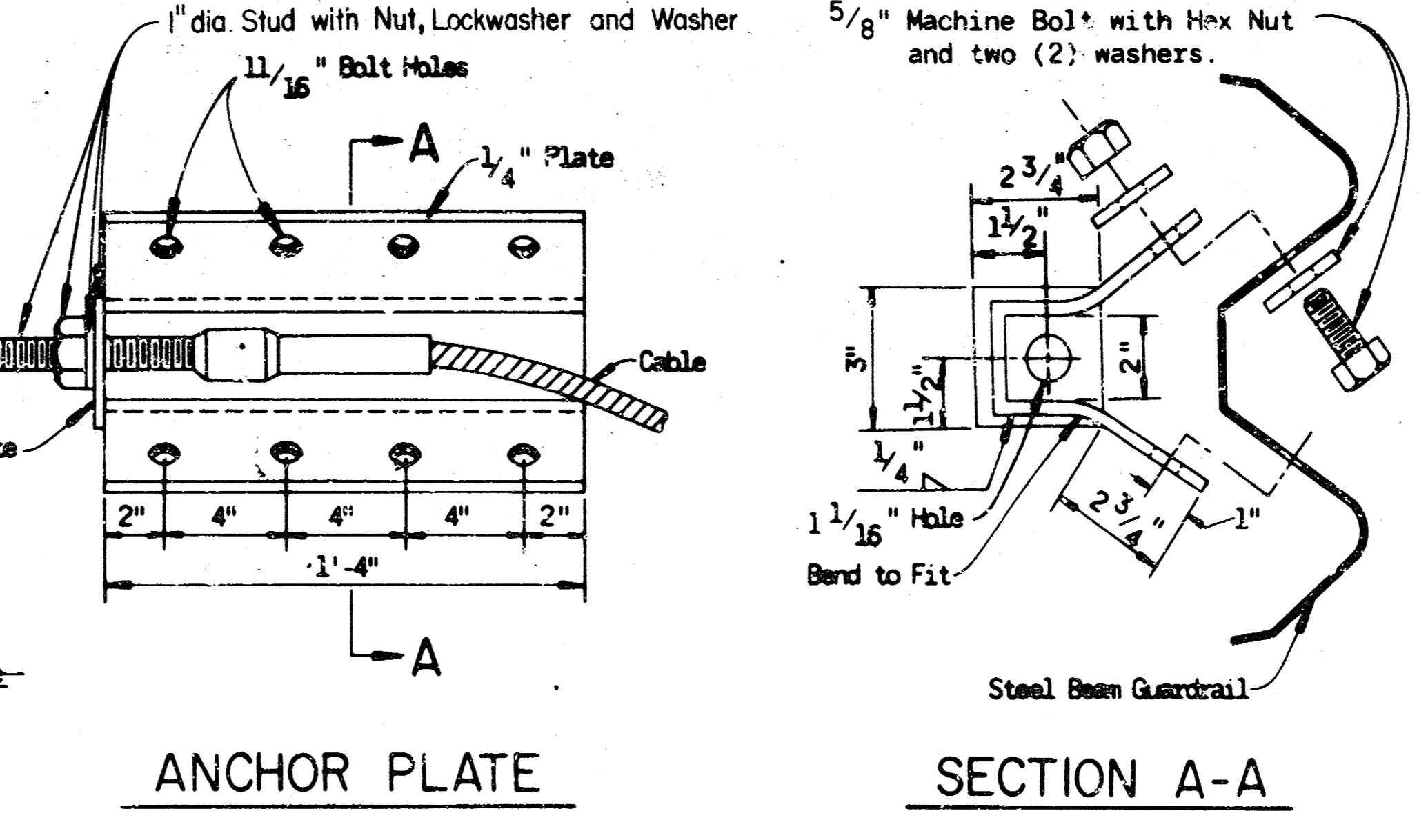
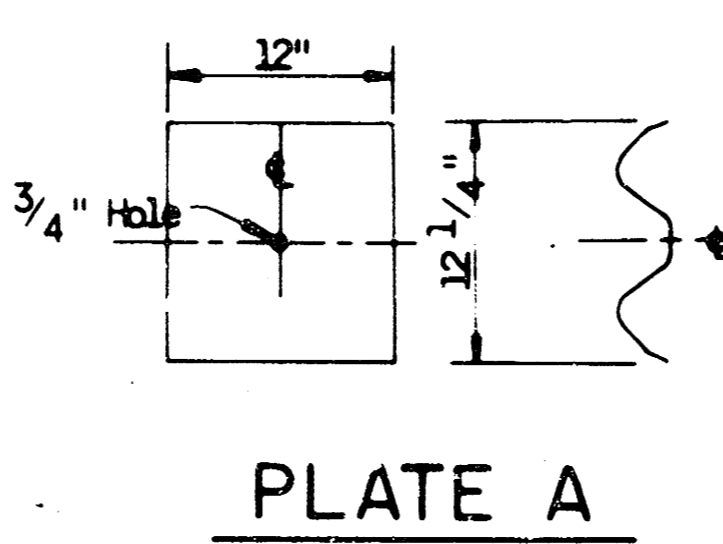
PROFILE
DATE: 5-30-84
DRAWN BY: GRAVIS CHEER
CHECKED BY: [Signature]
SCALE: AS SHOWN

REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
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Offsets to Face of Rail (feet)

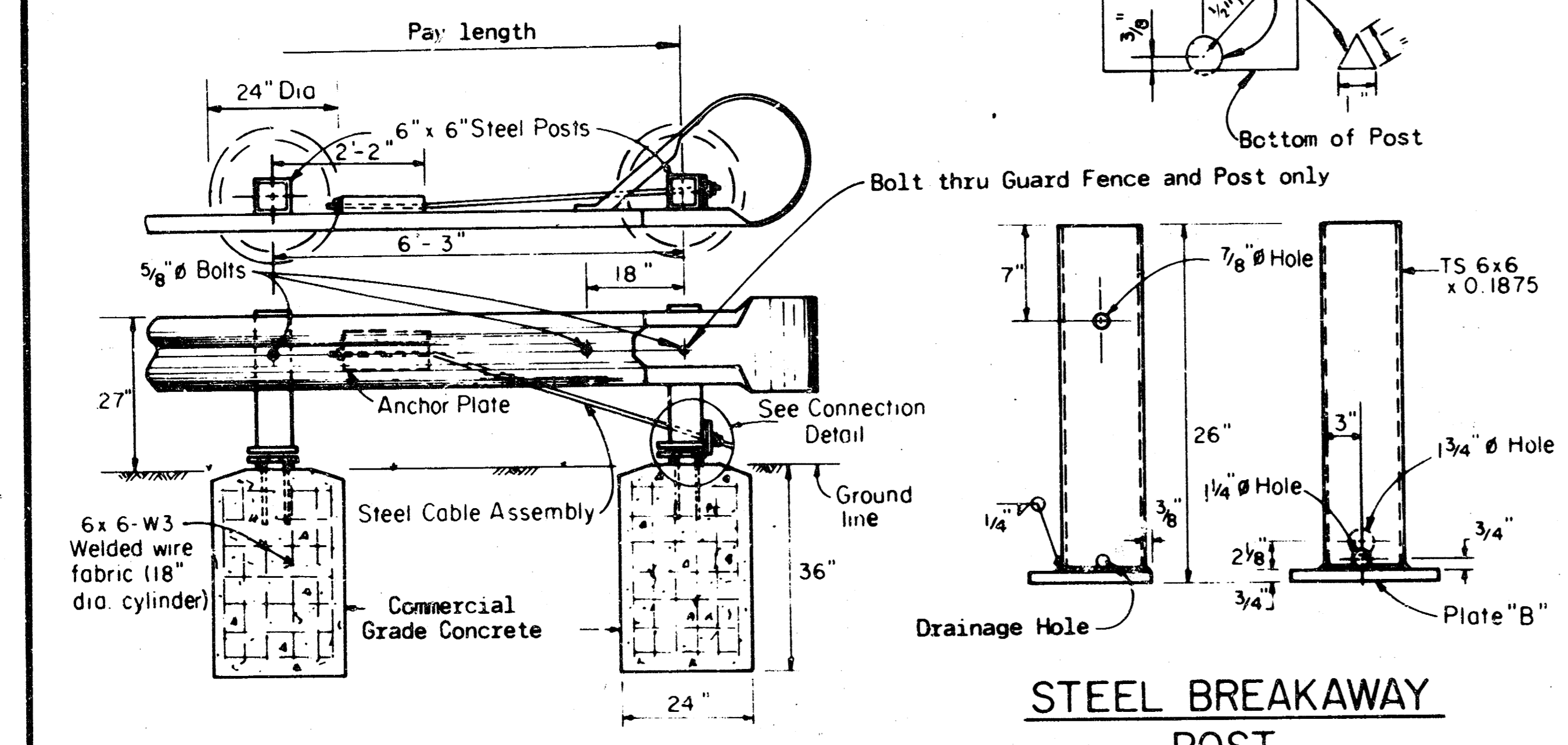
Post	X	Y
1	37.22	4.00
2	31.09	2.79
3	24.92	1.79
4	20.79	1.25
5	16.64	0.80
6	12.49	0.45
7	6.25	0.11
8	0.00	0.00



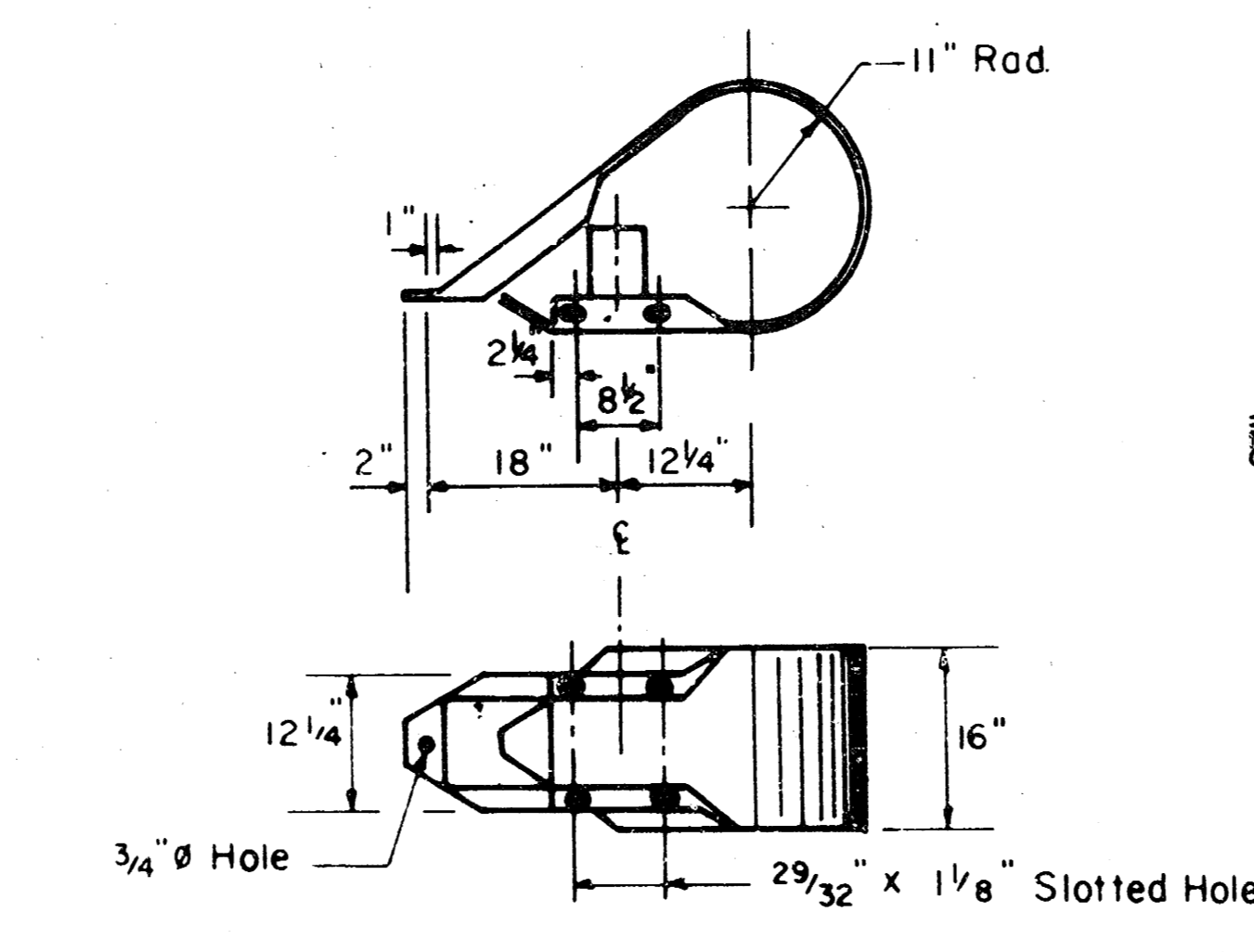
Note: When steel posts are used, a one-foot section of "W" steel plate guard fence (Plate A) for a backup plate shall be placed behind rail elements on non-splice posts. Backup plate (Plate A) shall be omitted from posts ① and ②.

When a rock formation is encountered that in the opinion of the Engineer is sound, the concrete foundation must be keyed a minimum of 6" into the rock and the minimum overall depth of the concrete foundation shall be 24".

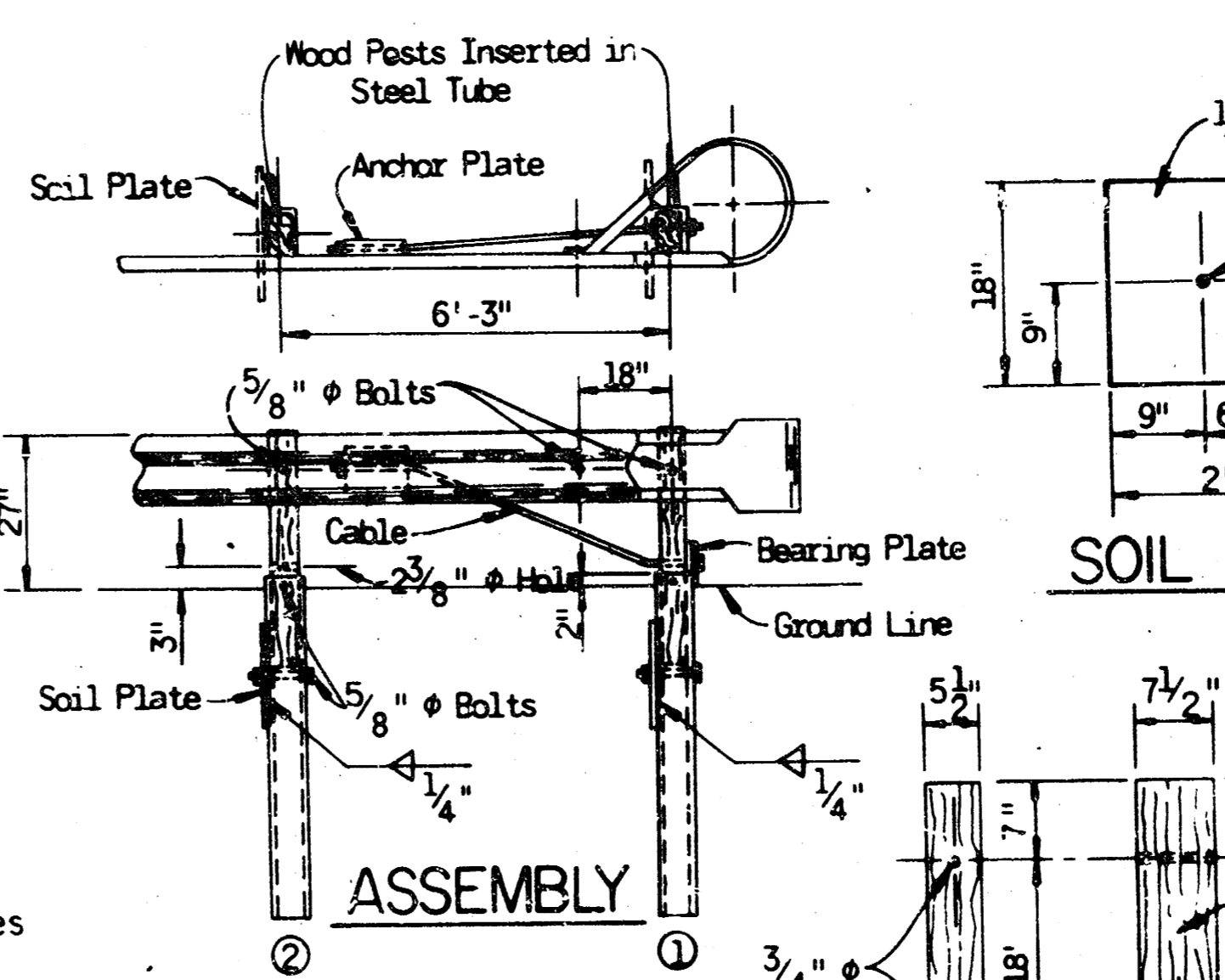
Alternate shapes of drainage holes to be constructed in steel BCT Posts (prior to galvanizing) on both sides parallel to guard fence.



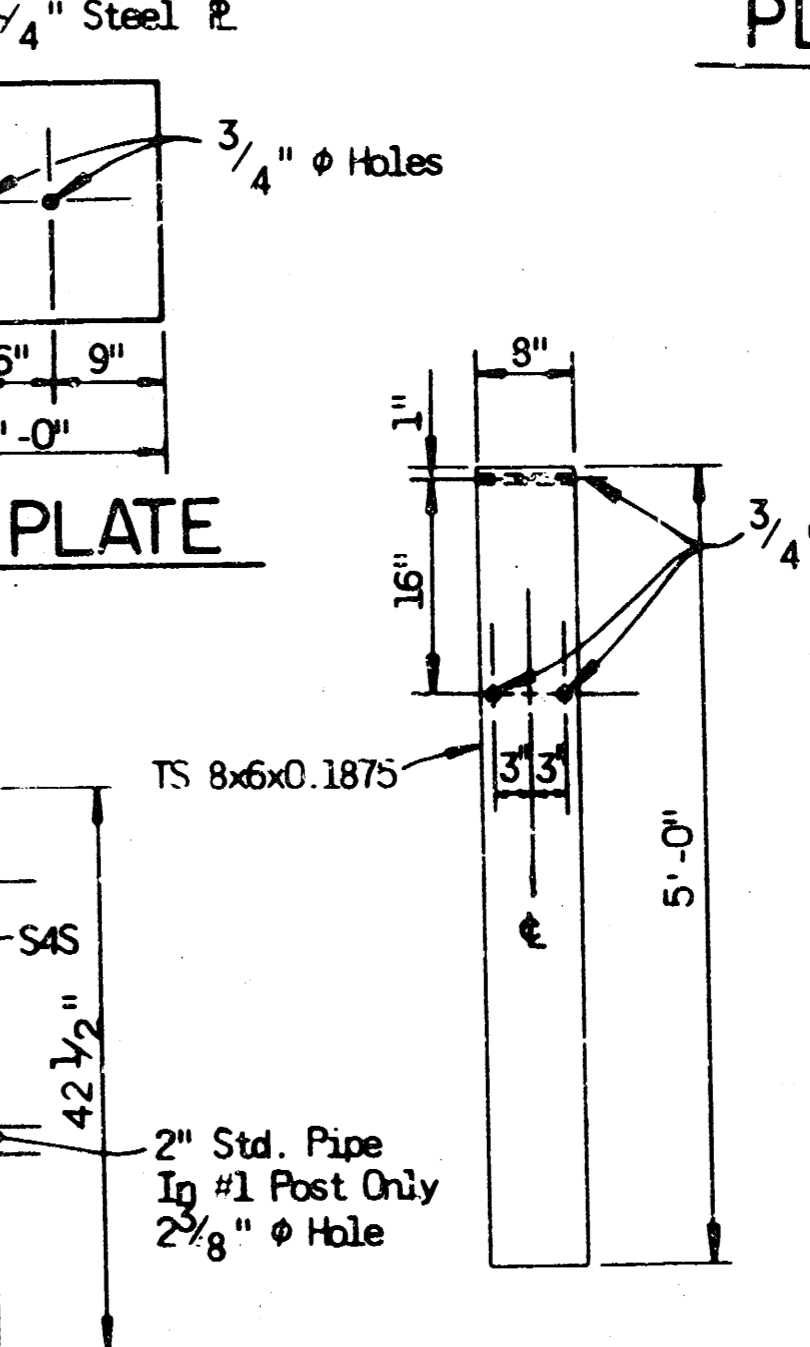
STEEL BREAKAWAY POSTS - CONCRETE FOUNDATIONS
(2 ea.)



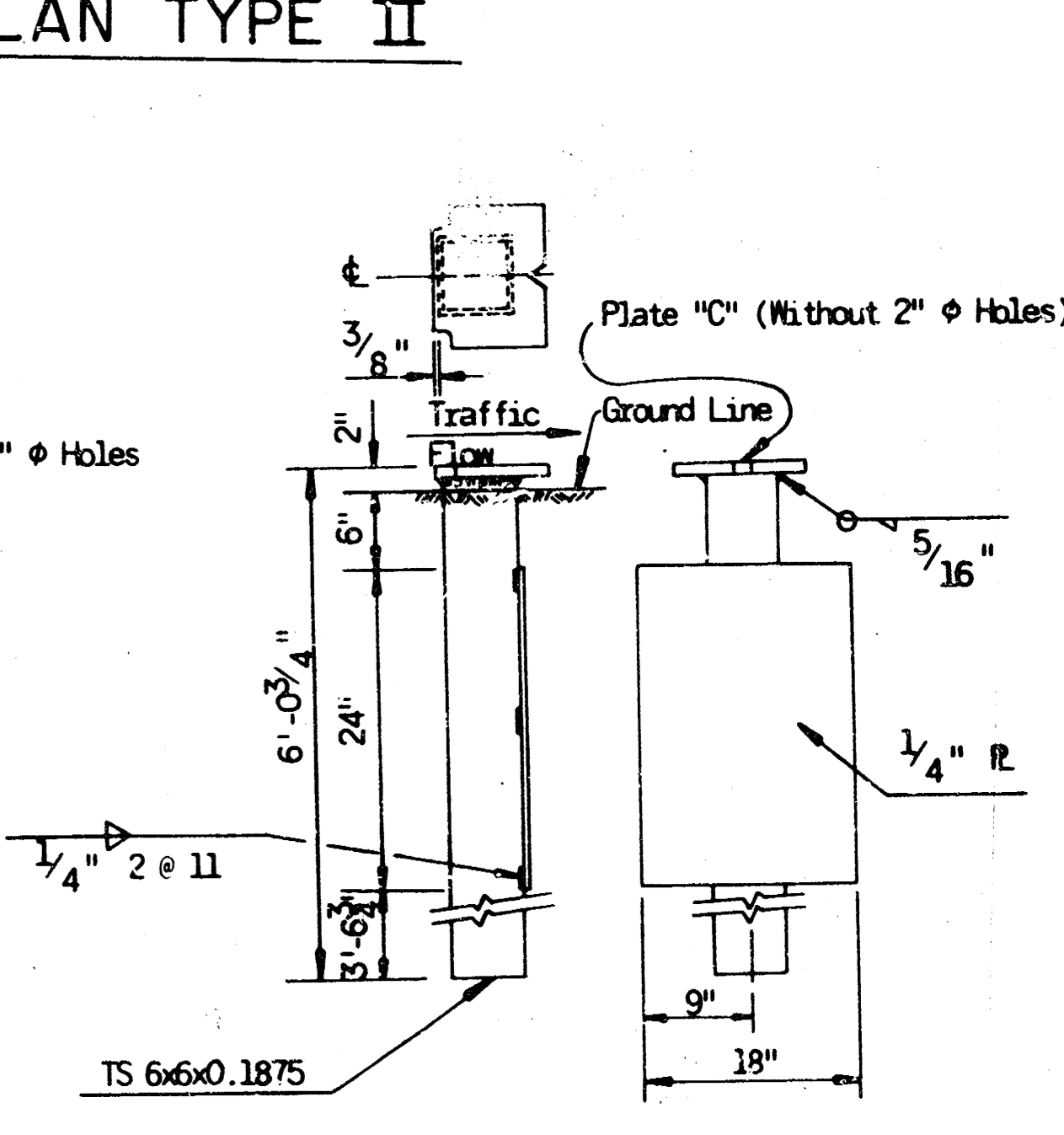
NOSE
(1 ea.)
(Subsidiary to Steel Plate Guard Fence)



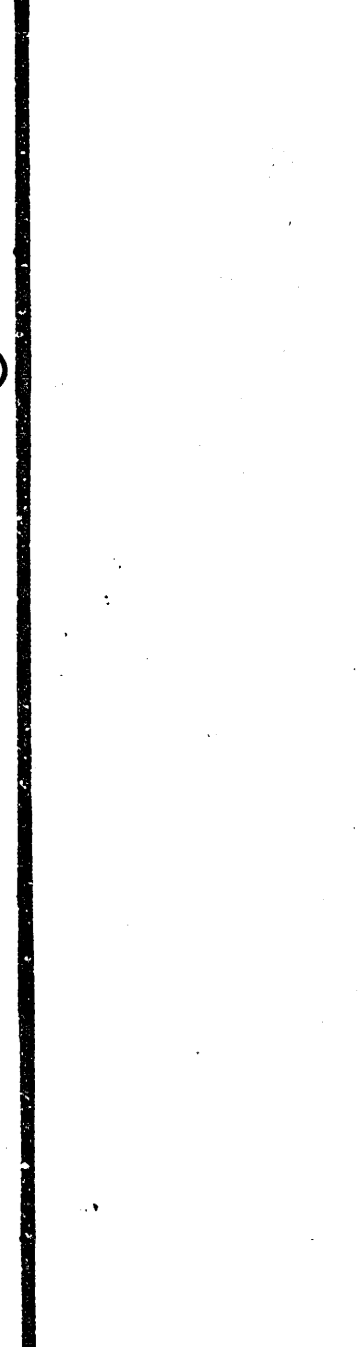
ASSEMBLY
(1 ea.)



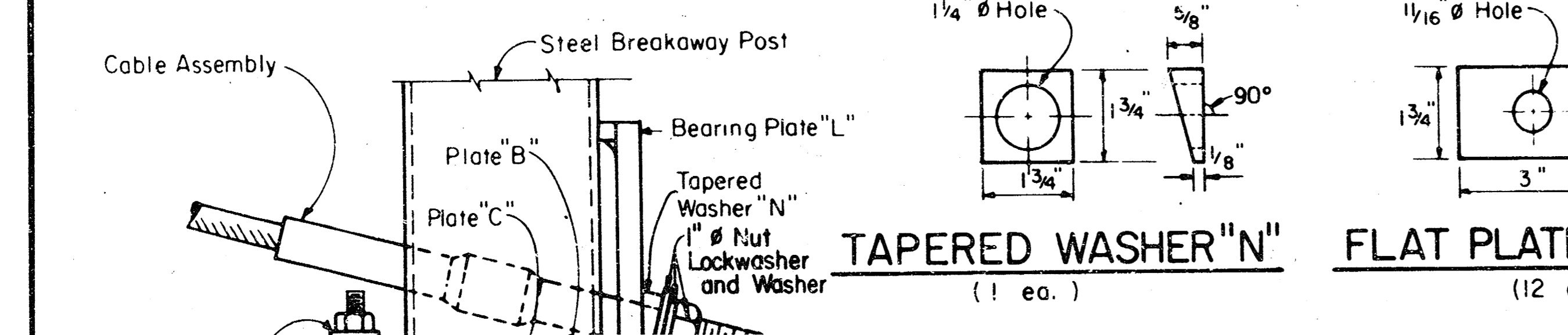
WOOD BREAKAWAY POST
(2 ea.)



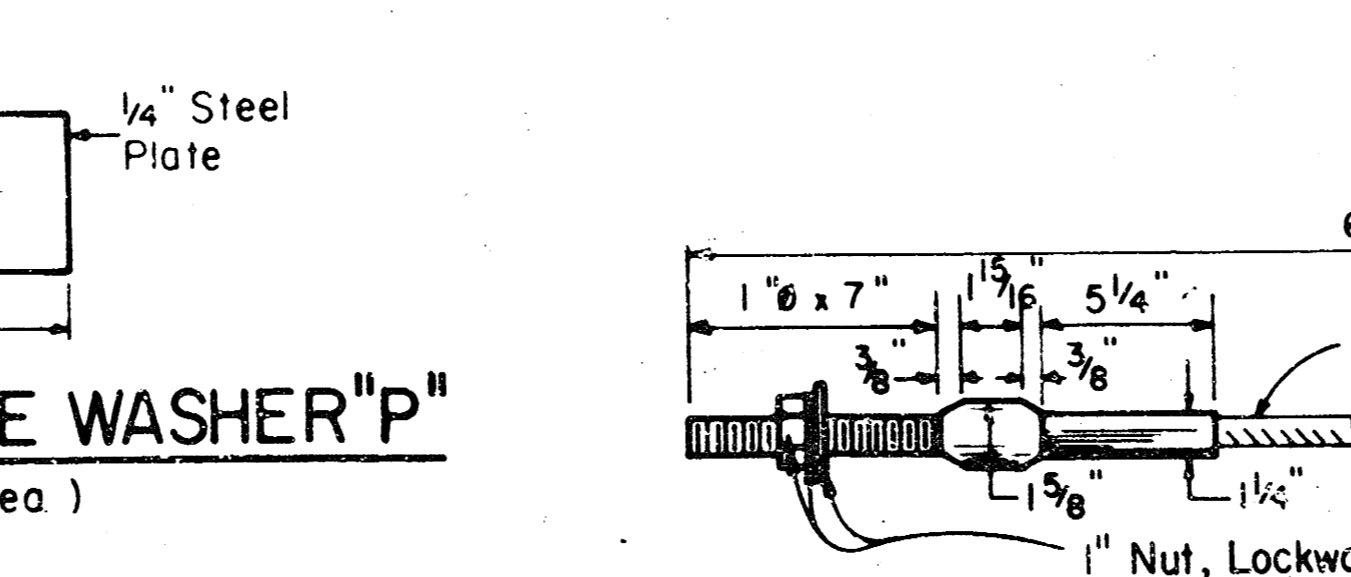
STEEL TUBE
(2 ea.)



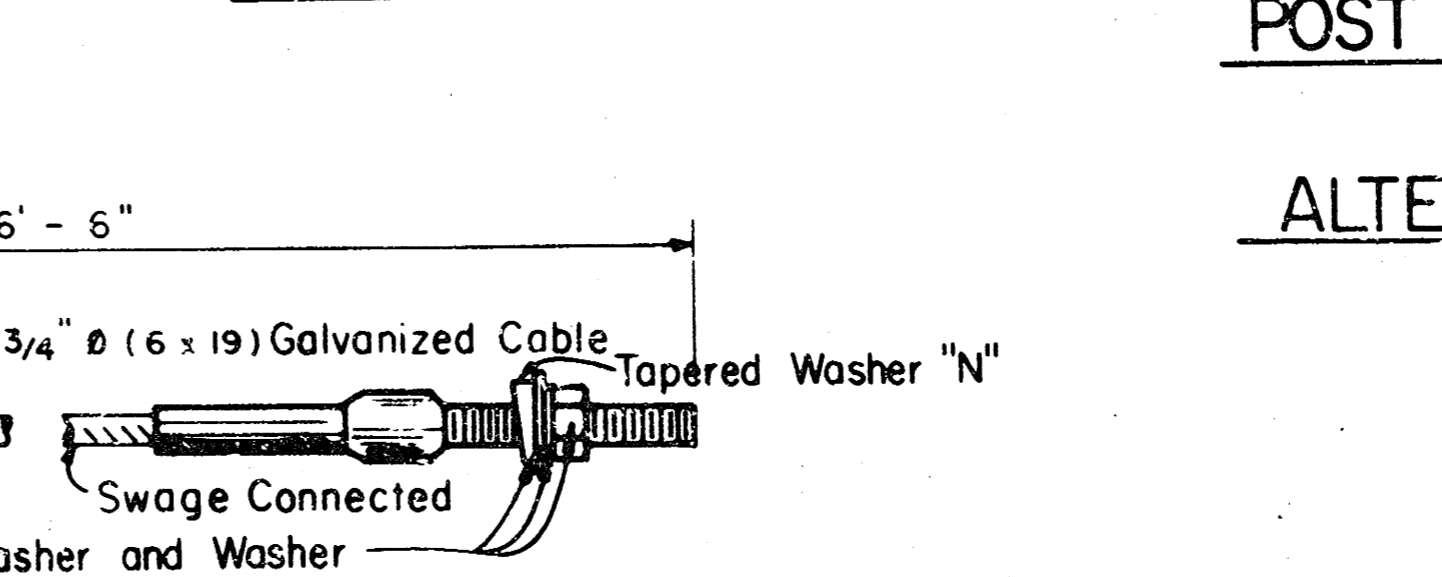
MODIFIED STEEL-POST BCT DESIGNS
(2 ea.)



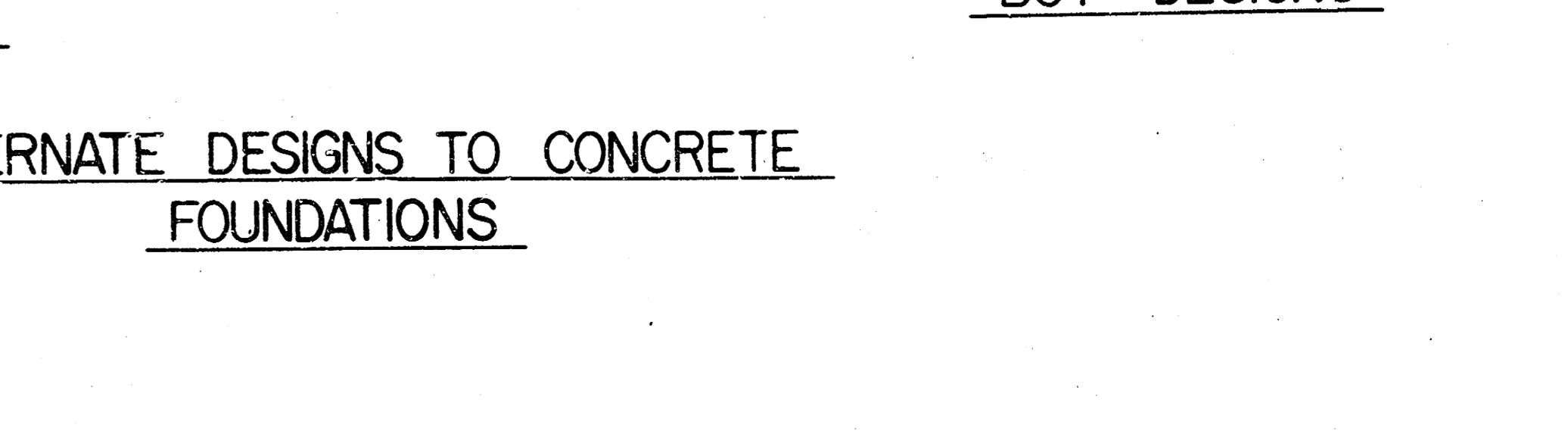
CONNECTION DETAIL
(1 ea.)



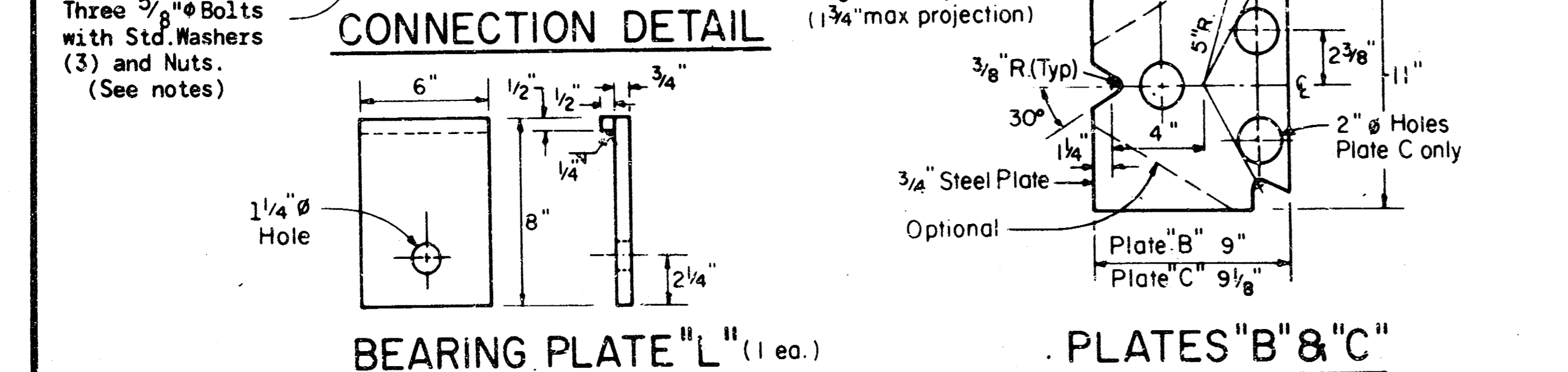
TAPERED WASHER 'N' (1 ea.)
FLAT PLATE WASHER 'P' (12 ea.)



CABLE ASSEMBLY (1 ea.)
(40000 lbs. min. breaking strength)
Tighten cable to full tension.



BEARING PLATE 'L' (1 ea.)
PLATES 'B' & 'C' (2 ea. 'B', 2 ea. 'C')



BEARING PLATE 'L' (1 ea.)
PLATES 'B' & 'C' (2 ea. 'B', 2 ea. 'C')

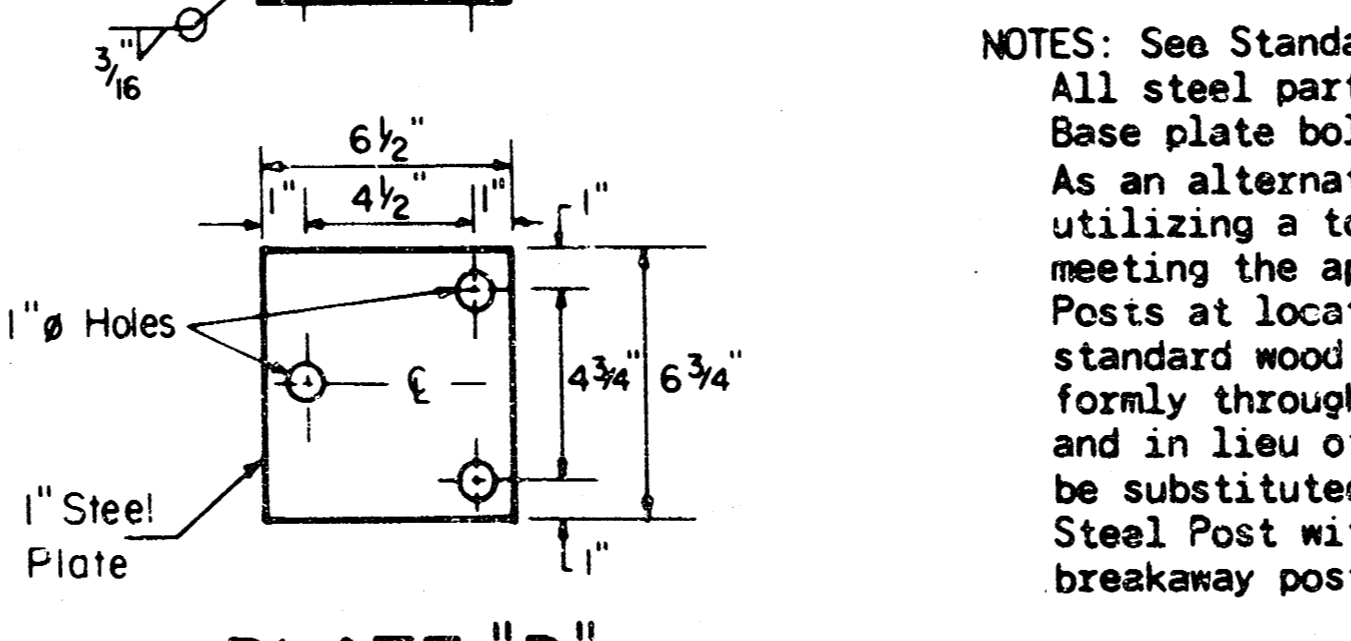


PLATE 'D' (2 ea.)

NOTES: See Standard 608.6 & 608.6A for details of guard rail not shown. All steel parts shall be galvanized after fabrication. Base plate bolts for steel breakaway posts shall conform to ASTM A-325 and shall be torqued to 155-170 ft-lbs. As an alternate to the nut torqued to 155-170 ft-lbs, the Contractor may use a controlled torque nut system utilizing a torque-off groove concept with double hex configuration and elliptically deformable thread section meeting the approval of the Engineer. Posts at locations ① & ② may be steel or wood as shown in the details above. Remaining posts may be either standard wood posts or steel posts, at the option of the Contractor. Post types selected should be applied uniformly throughout a single project. If standard wood posts are used, one post shall be located midway between and in lieu of posts ④ & ⑤. For Terminal Type I, the offset (Y) shall be 1.00 foot. A two-piece assembly may be substituted for the one-piece nose above. Steel Post with plate as shown in alternate design may be used in lieu of concrete footings on terminal barrier breakaway posts.

WOOD POSTS ONLY NO OTHER OPTION

NO.	DATE	REVISIONS	BY	APP'D
7	9-28-80	Soil plate welded to tube	W.L.H.	L.R.P.
6	8-17-81	Added Lockwasher on Cable Assembly	W.L.H.	L.R.P.
5	11-19-80	Added washers omitted post 6 thru 9	W.L.H.	L.R.P.
4	11-7-80	Notes on corr. B.C. to plate washer	W.L.H.	L.R.P.
3	4-24-80	Notes on corr. B.C. to plate washer	W.L.H.	L.R.P.
2	1-29-80	Revised note 1 added 'K' detail	W.L.H.	L.R.P.
1	12-7-79	Added Wood Alt. BCT Post	W.L.H.	L.R.P.

KANSAS DEPARTMENT OF TRANSPORTATION

BARRIER TERMINAL
TYPES I & II

STD. NO. 608.5 D

October 11, 1979 SCALE None APP'D [Signature]
DESIGNED [Signature] QUANTITIES [Signature]
DETAILS [Signature] CHECKED [Signature]

* If guard fence is shown on the plans, the 25 foot section is applicable at both entrance and exit ends of bridges. This section of nested fence and post spacing is also applicable when area of concern is 5' or less from guard fence.

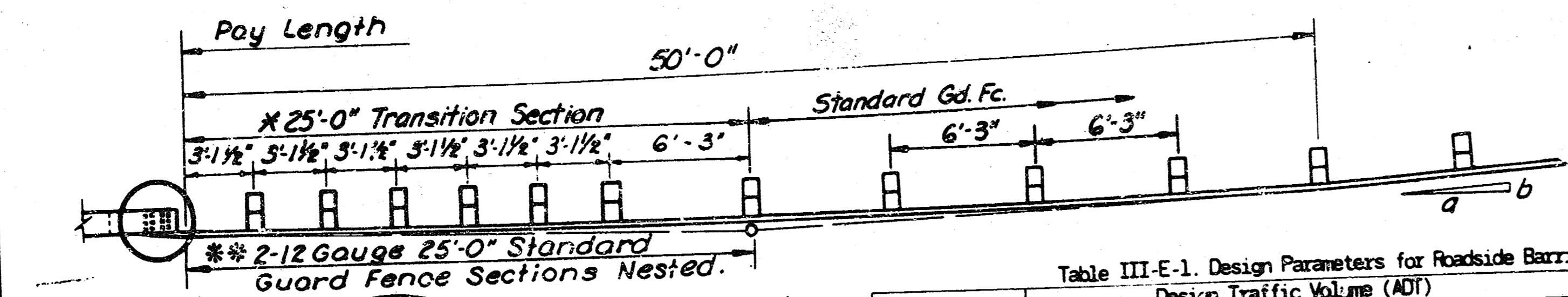
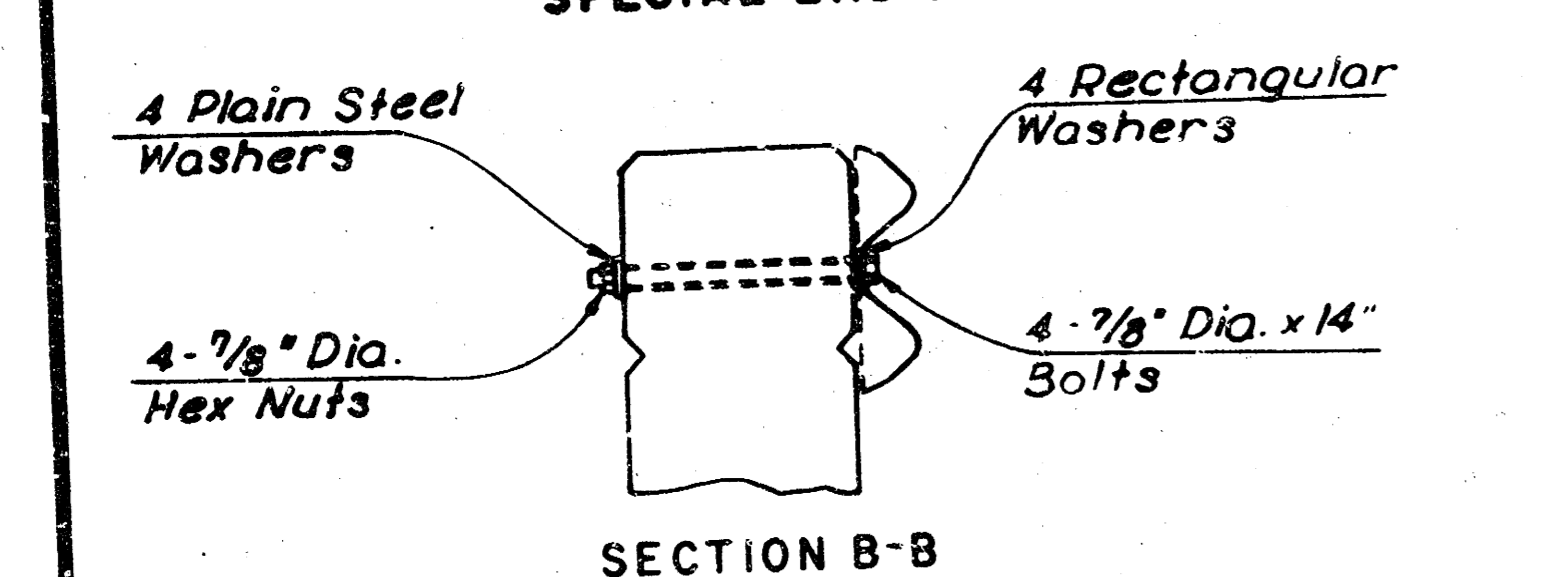
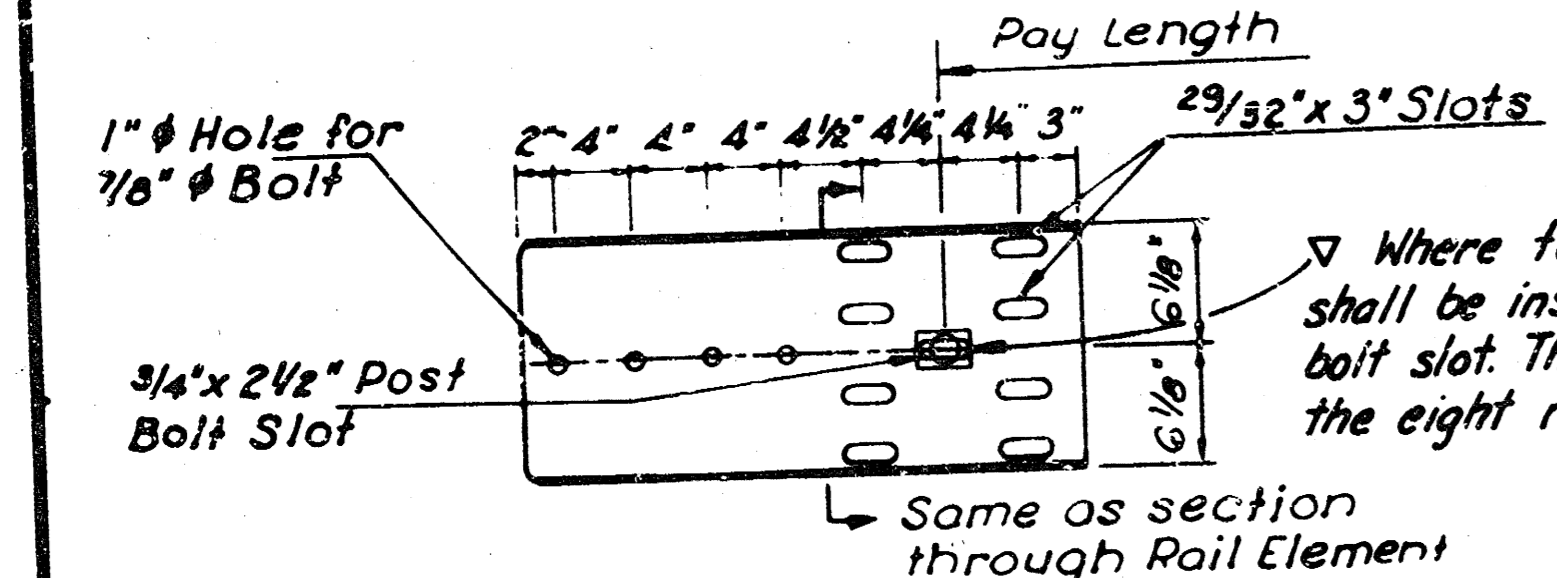
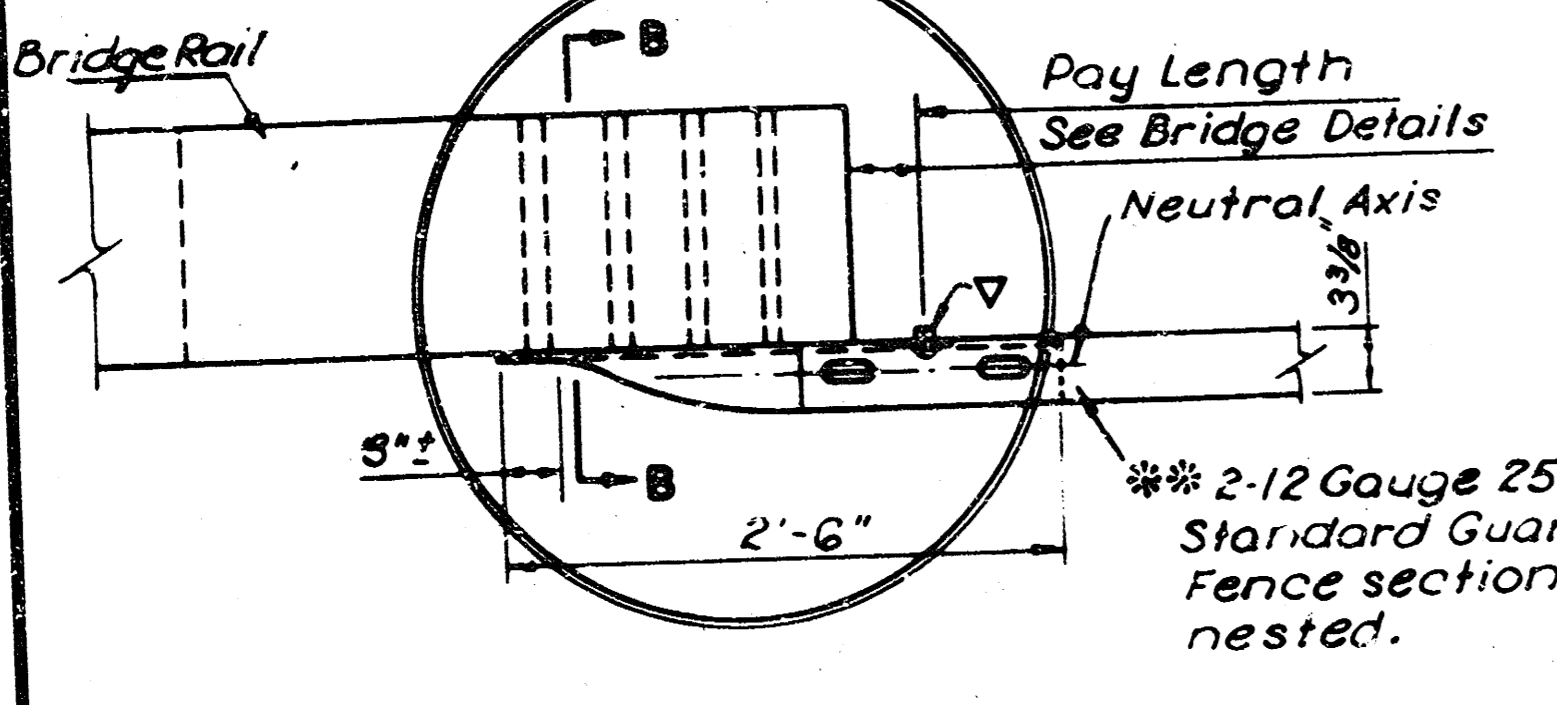
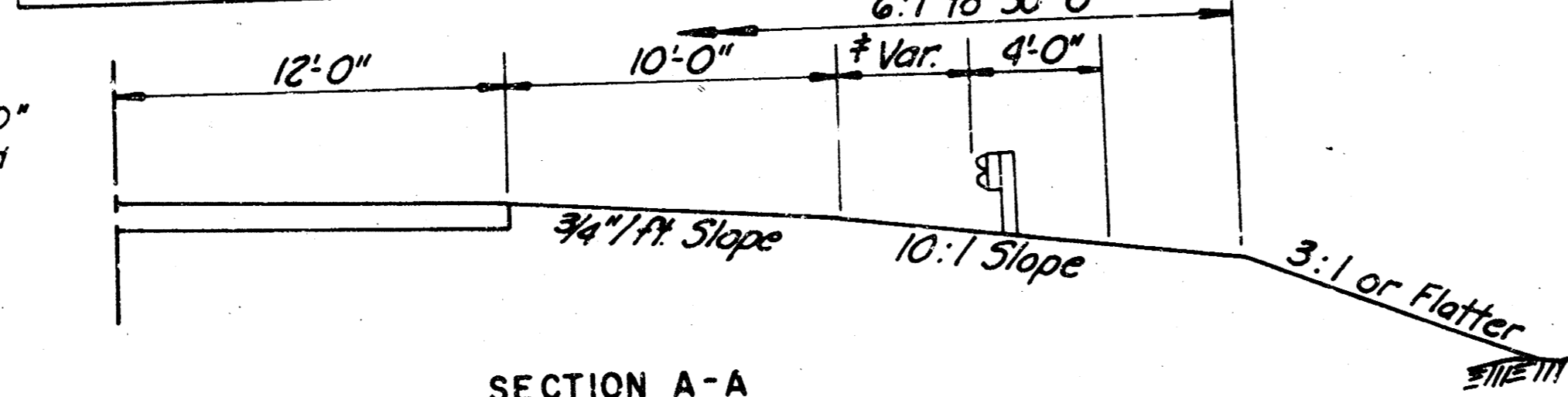


Table III-E-1. Design Parameters for Roadside Barrier Layout

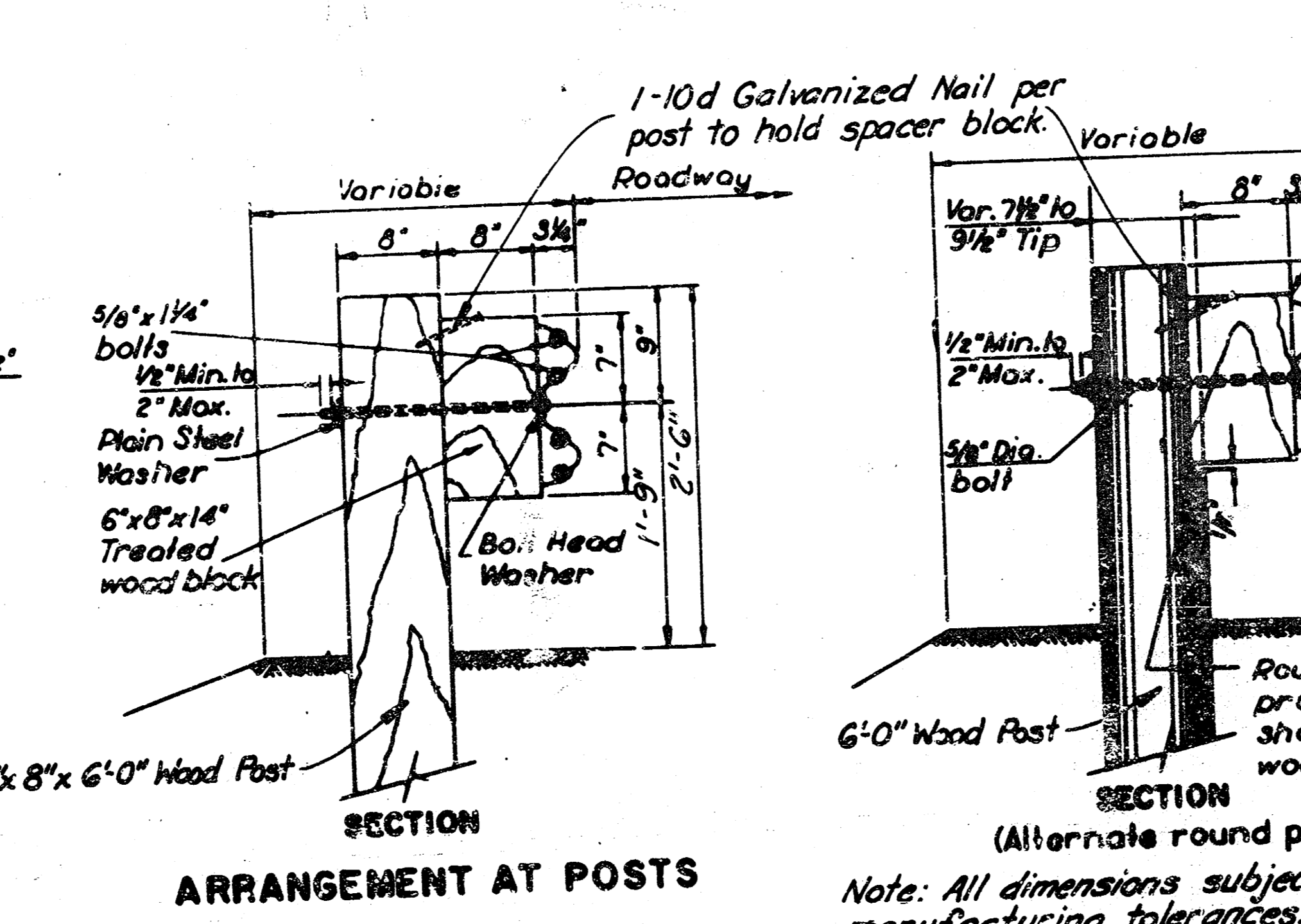
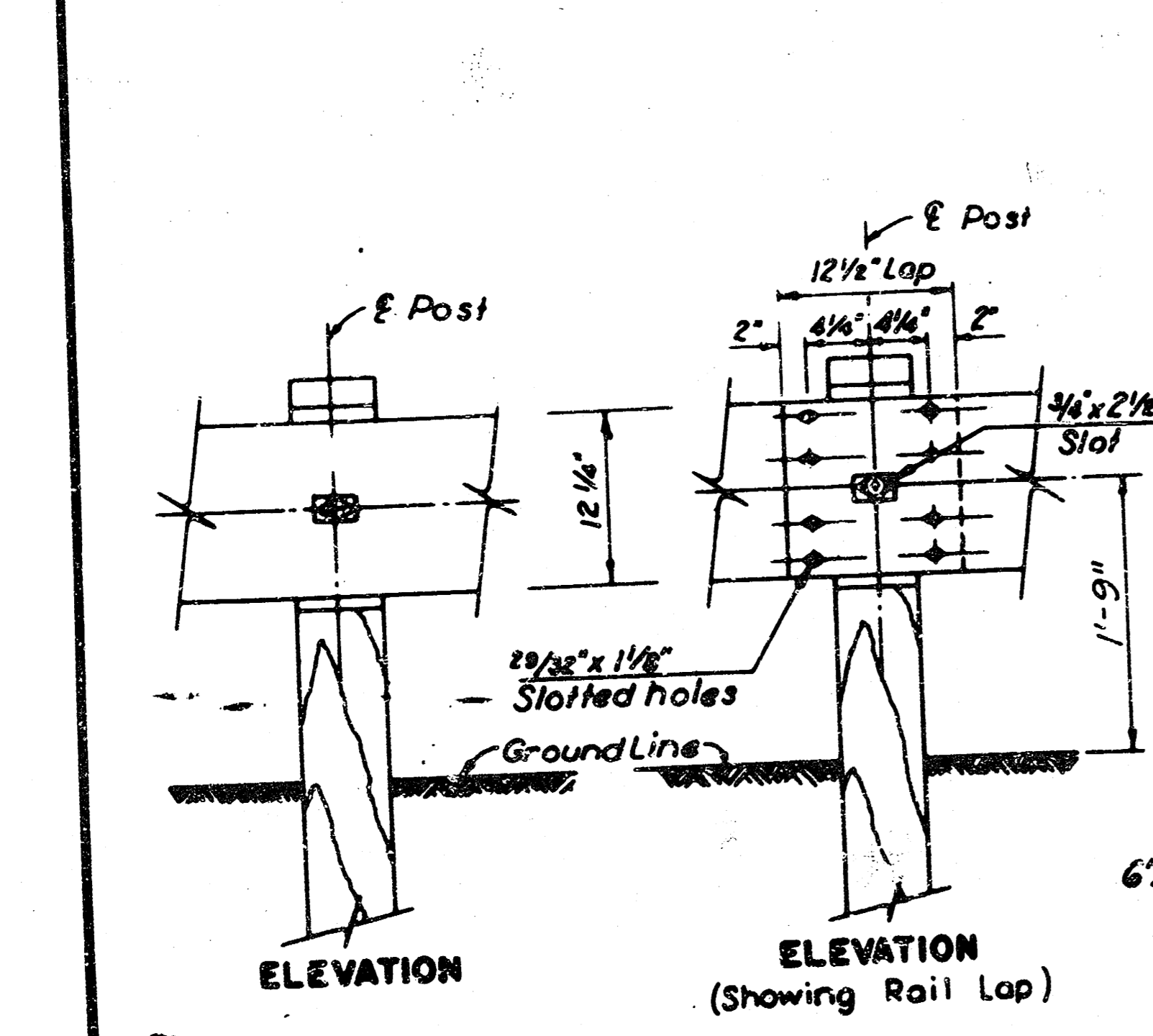
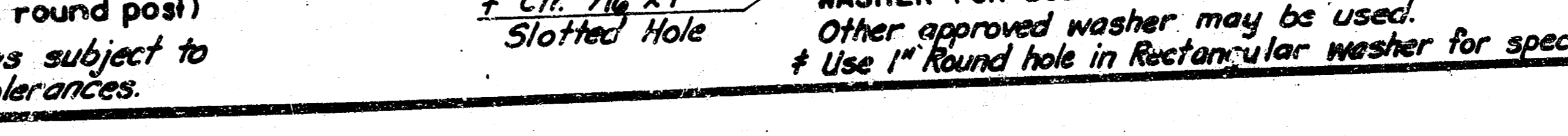
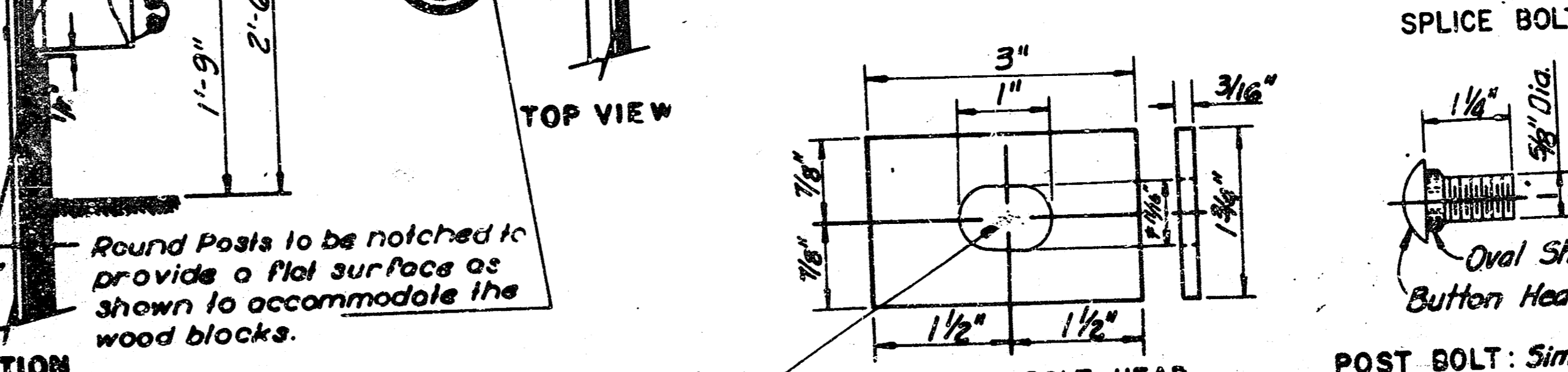
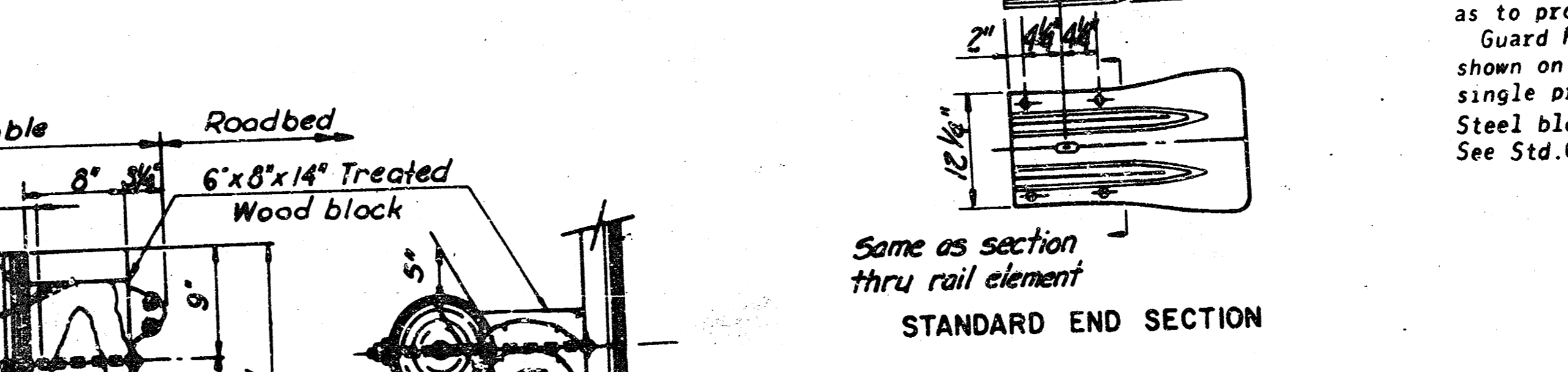
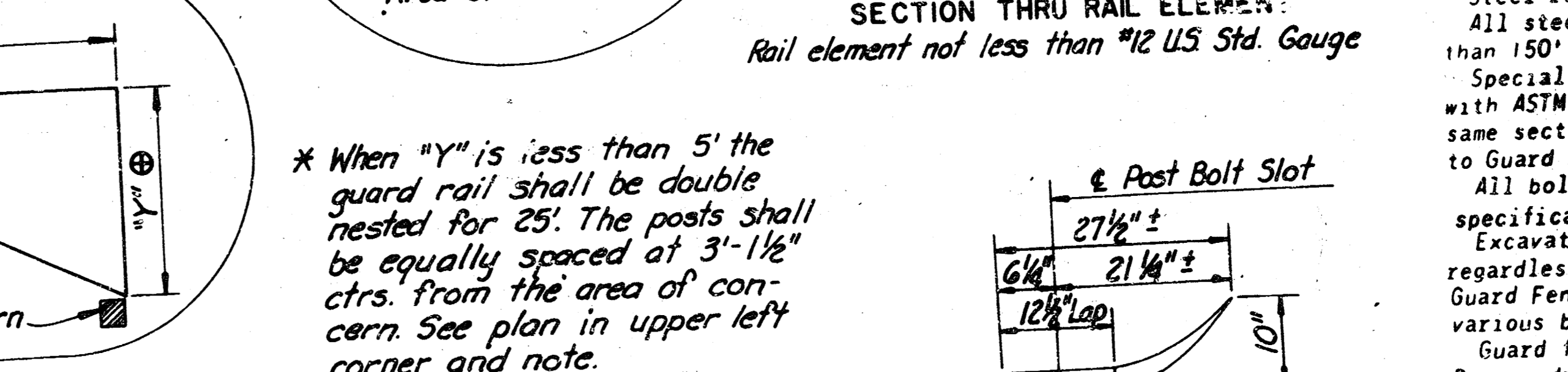
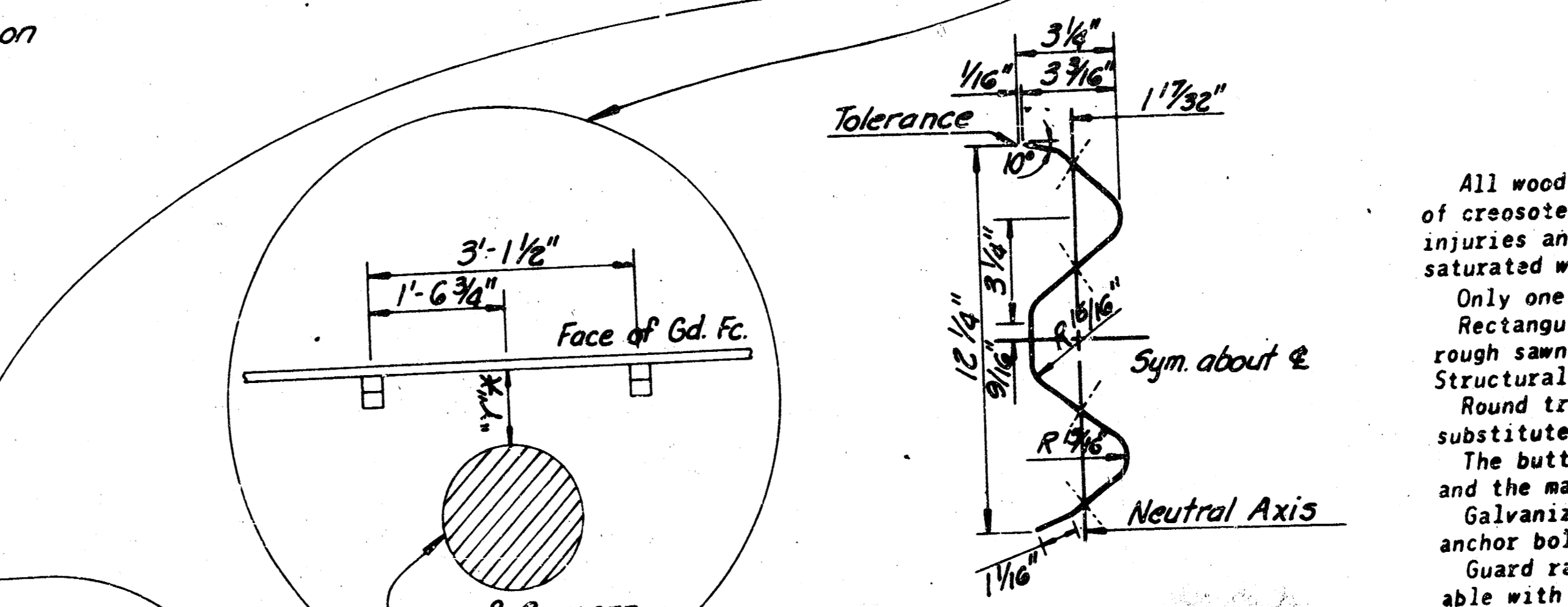
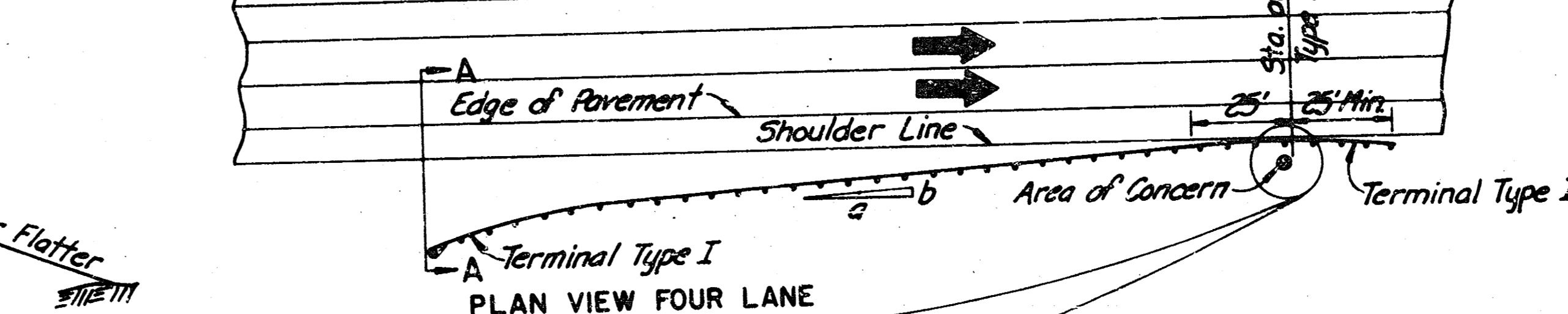
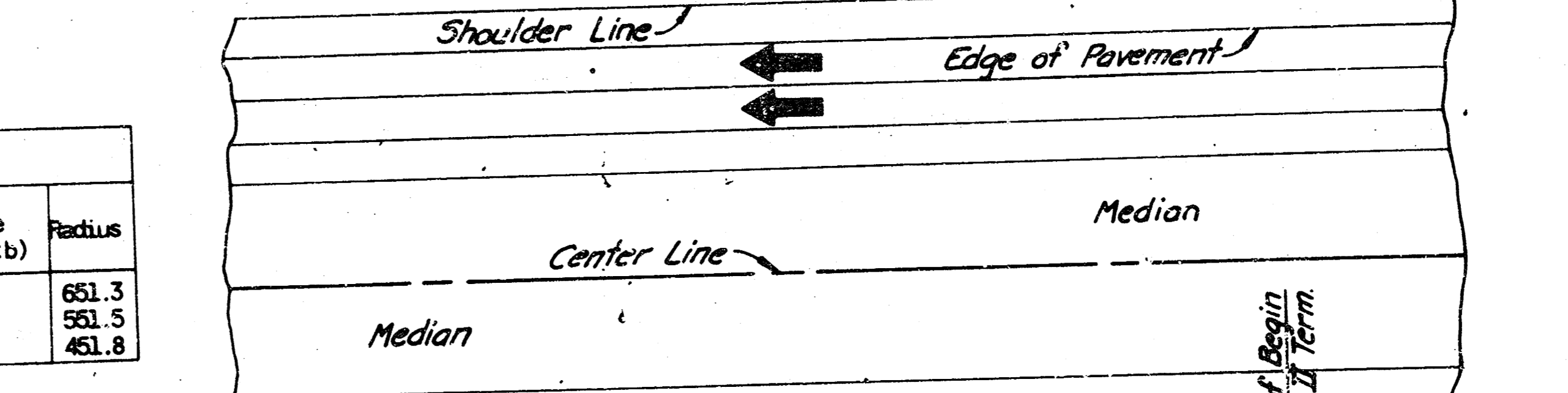
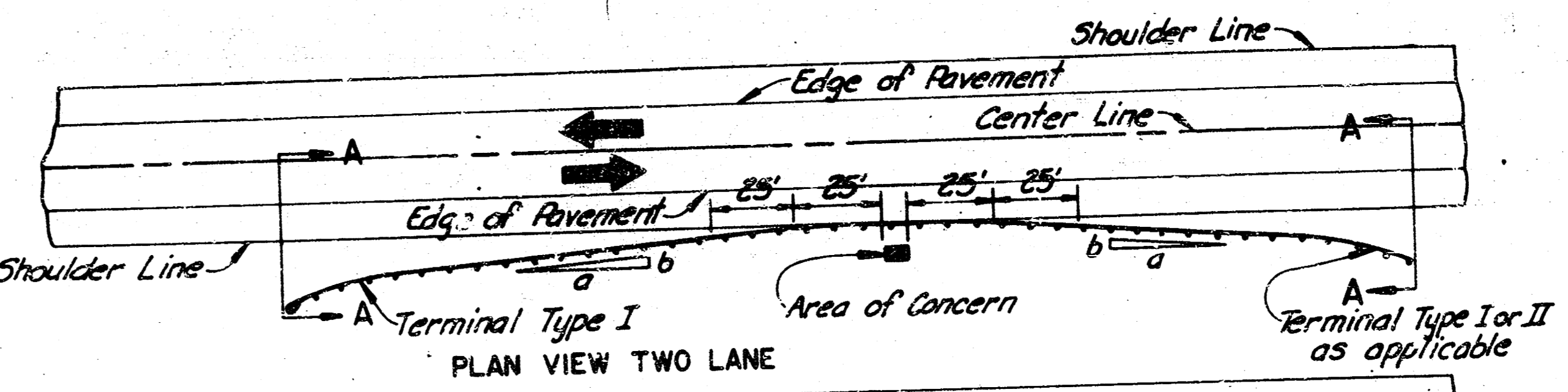
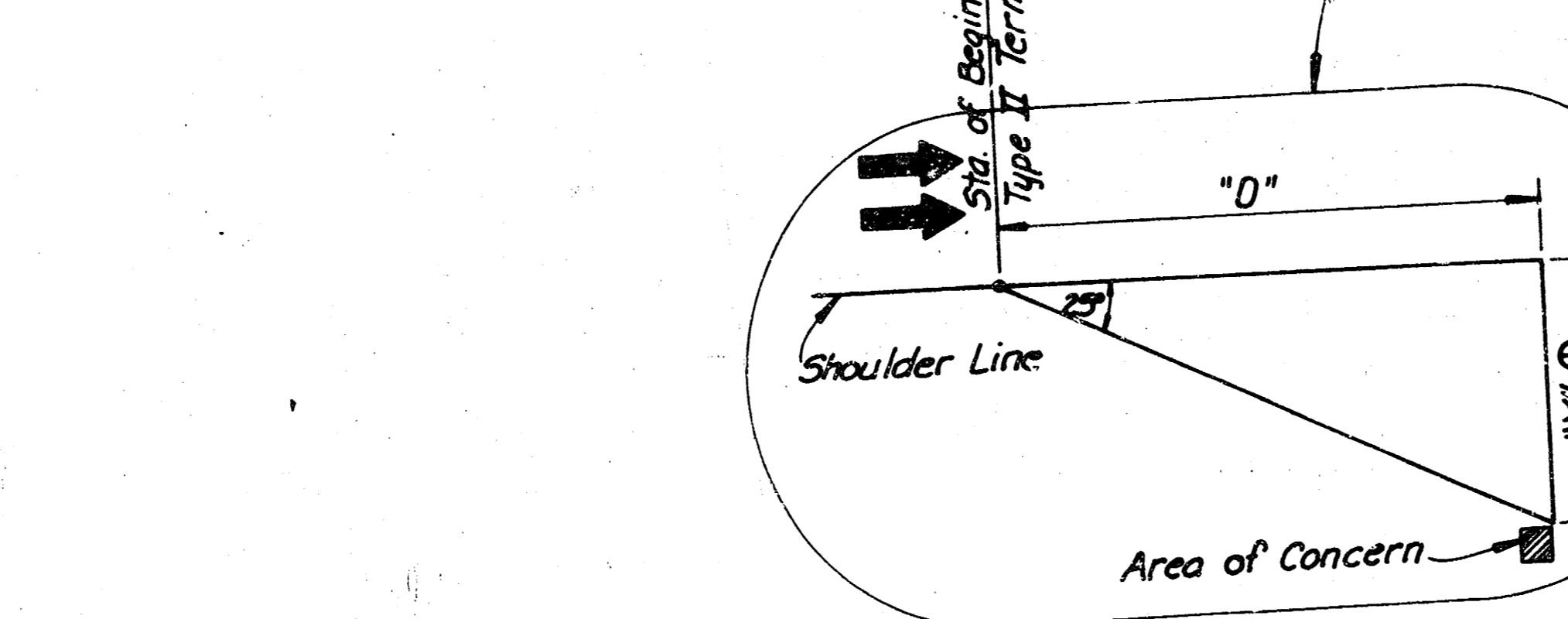
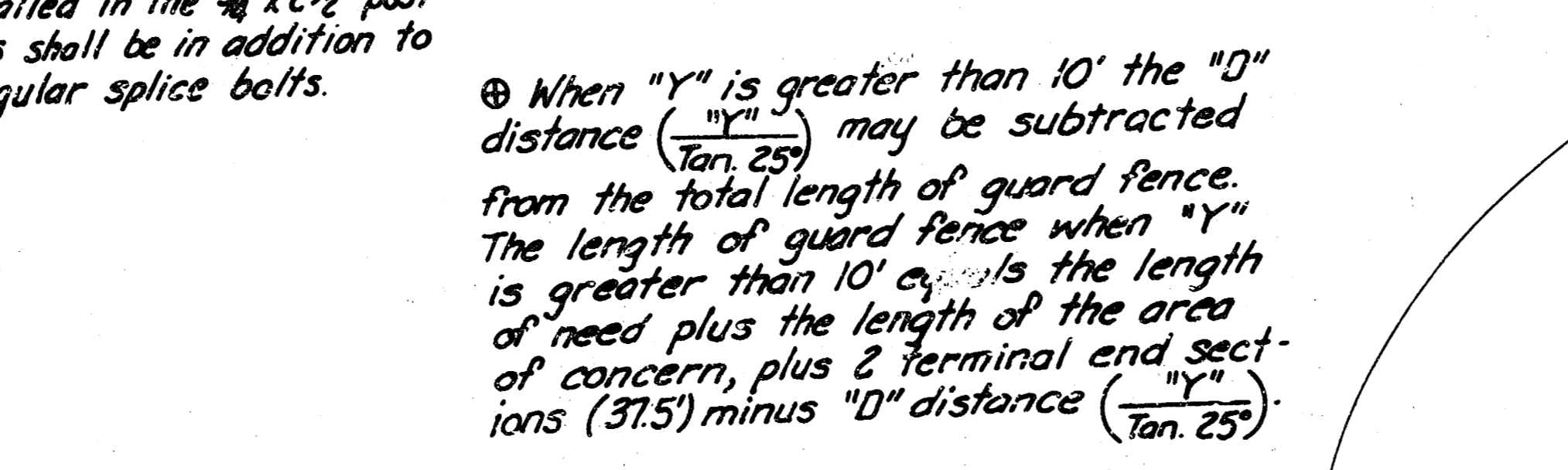
Operating Speed (mph)	Design Traffic Volume (ADT)				Sly Line Offset (ft)	Flare Rate (a:b)	Radius
	Over 6,000	2,000-6,000	800-2,000	Under 250			
60	400	360	330	300	8.0	13	651.3
50	320	290	260	240	6.5	11	561.5
40	240	220	200	180	5.0	9	451.8



One section of the two shall be considered as subsidiary to the bid item "Steel Plate Guard Fence (Galv.)."

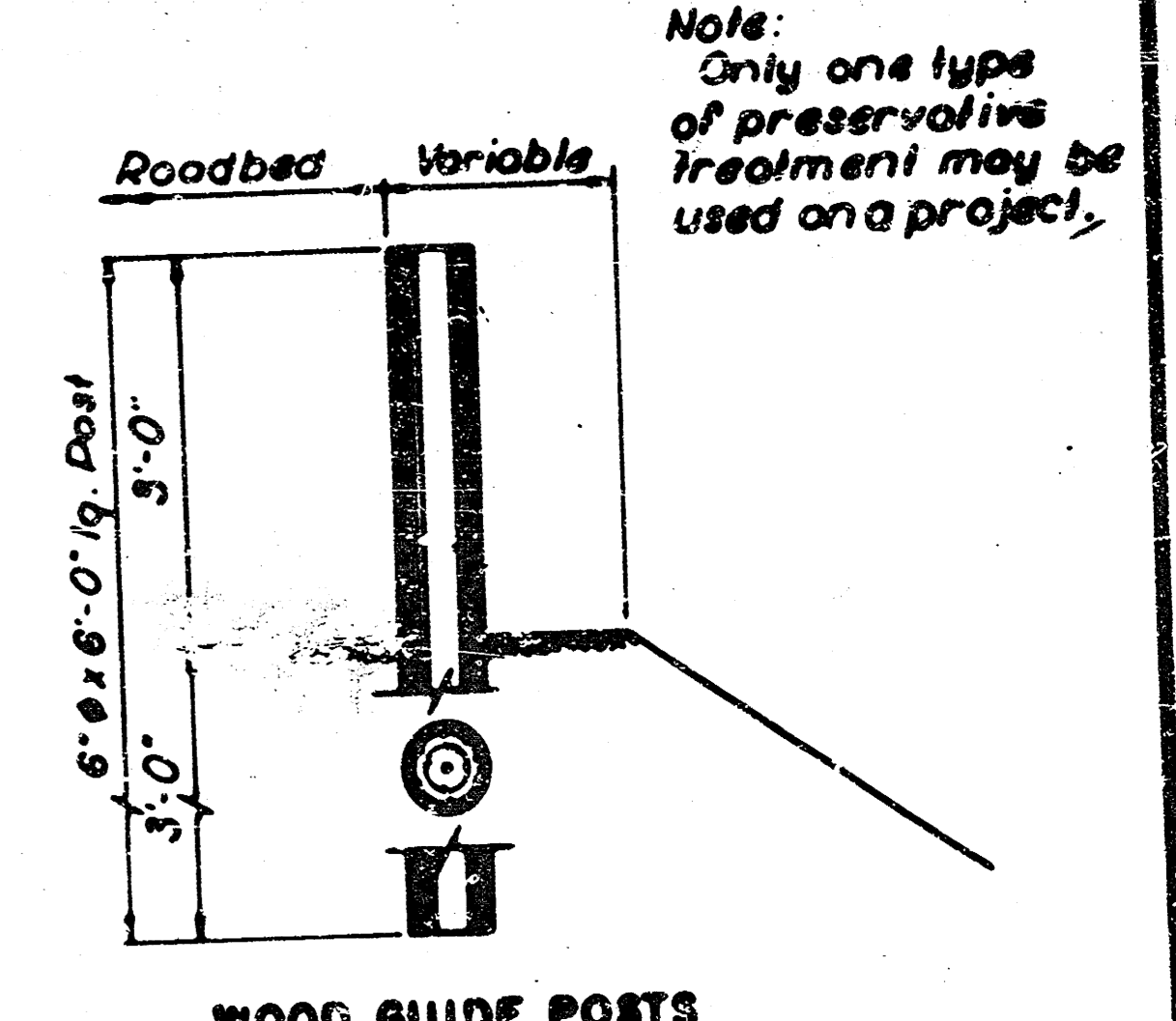


When "y" is greater than 10' the "D" distance (Tan 25°) may be subtracted from the total length of guard fence. The length of guard fence when "y" is greater than 10' equals the length of need plus the length of the area of concern, plus 2 terminal end sections (31.5) minus "D" distance (Tan 25°).



WASHER FOR BOLT HEAD. Other approved washer may be used. Use 1" Round hole in Rectangular washer for special end shoe.

FHWA REG. NO.	STATE	PROJECT	DATE	BY	SCALE
7	KANSAS	87 U 0853 01	100	6	16



NOTE: Treated wood posts shall be used. All wood posts shall be given a preservative treatment of creosote or penta-solution as provided in the Specifications. ReflectORIZED material to be applied to the post by the State. Where wood guide posts are to be used as underdrain markers, the top 18" of the posts shall be given 2 coats of aluminum paint and the top 12" of the post shall be given one coat of red lead paint. See Std. No. 650.1 (Underdrains) for typical location when posts are used as underdrain markers.

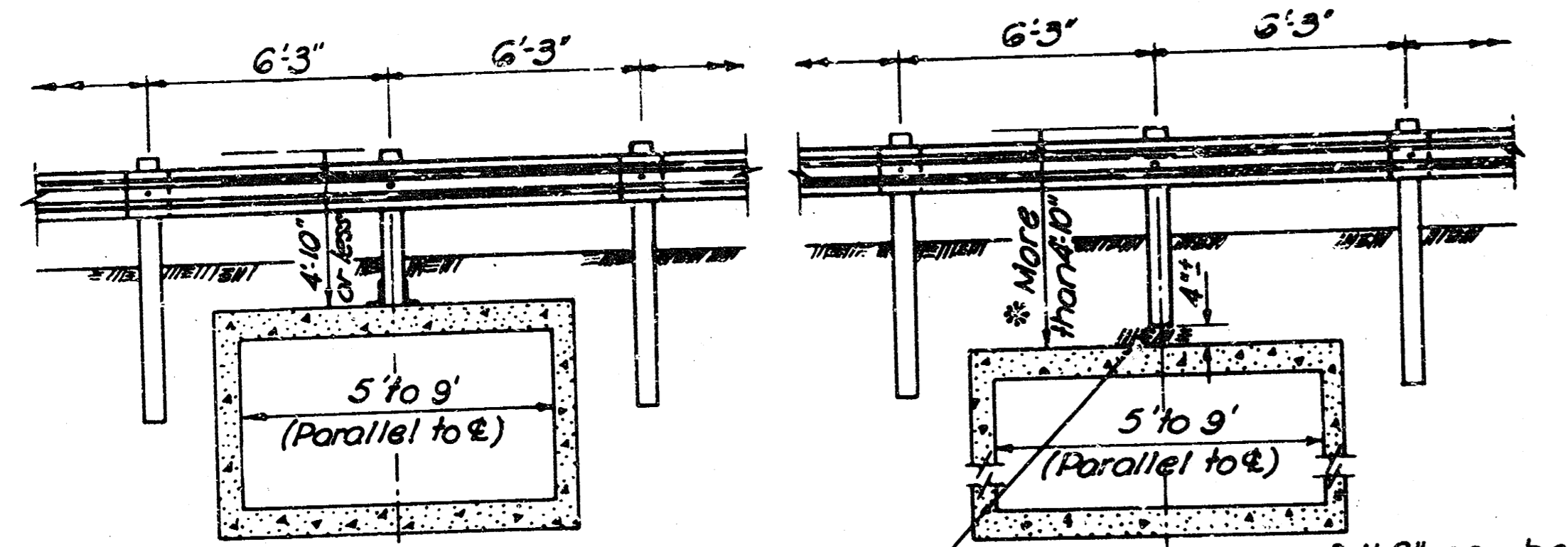
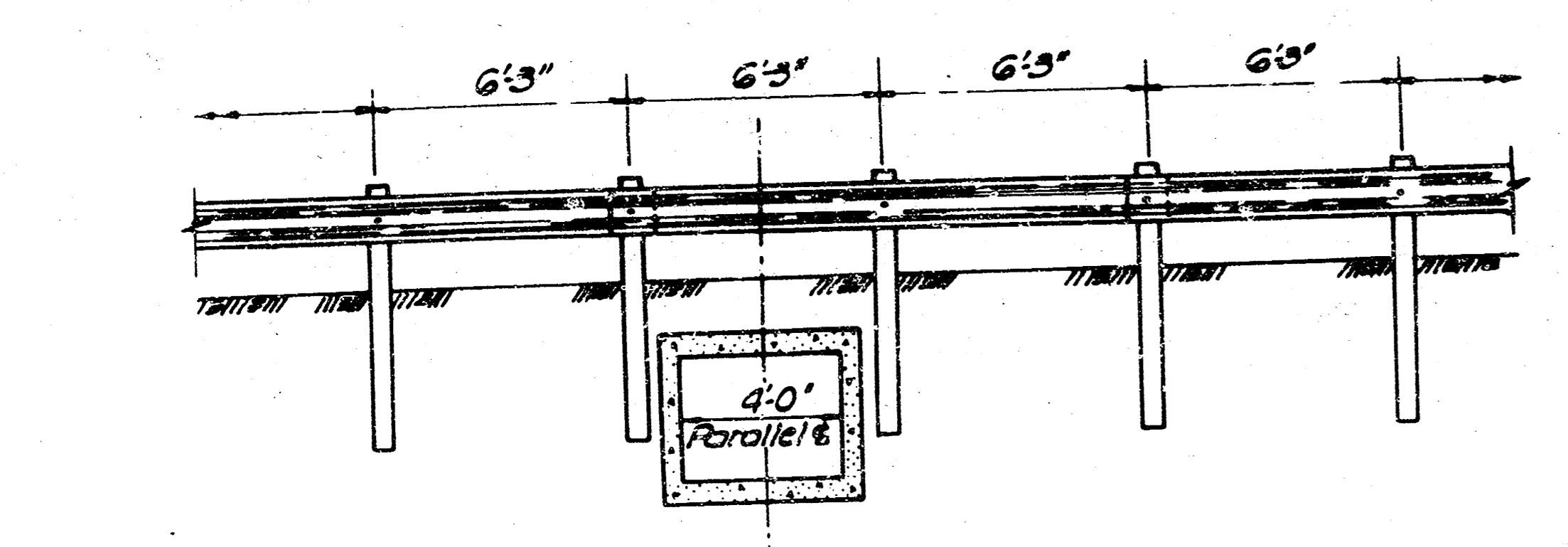
GENERAL NOTE FOR GUARD FENCE

All wood posts and wood blocks shall be given a preservative treatment of creosote or penta-solution as provided in the Specifications. All cuts, injuries and bolt holes in treated posts and wood blocks shall be thoroughly saturated with preservative. Only one type of preservative treatment may be used on a project. Rectangular posts and wood blocks (6" x 8" x 14") may be S4S, or they may be rough sawn and graded in accordance with the "Methods for Establishing Structural Grades of Lumber," ASTM Designation D 245. Round treated wood posts 7 1/2" to 9 1/2" tip diameter, 6'-0" long may be substituted in place of the rectangular post shown. The butt diameter for round posts shall be larger than the tip diameter and the maximum taper from tip to butt shall be 2 inches. Galvanized steel rail plates shall be used. All post rail fittings and anchor bolts shall be galvanized in accordance with Standard Specifications. Guard rail parts furnished under this specification shall be interchangeable with similar parts regardless of the source or manufacturer. Steel rail plates may be furnished in 25' sections. All steel plate guard fence rails to be shop curved when radius is less than 150'. Special End Shoe shall be 10 Gauge steel and galvanized in accordance with ASTM Designation: A 525 with coating class 5 210. The shoe has the same section as through beam guard rail. Special end shoe shall be subsidiary to Guard Fence. All bolts, nuts and washers to be galvanized in accordance with the standard specifications. Excavation of all classes, including rock, shale and other materials regardless of the elevations encountered, required for the erection of Guard Fence and Guide Posts shall be considered as subsidiary to the various bid items for which payment is made. Guard fence posts or Guide Posts may be set by digging or by driving. During driving operations, post caps shall be used, which are so designed as to protect the post from crushing. Guard Fence Posts may be Wood (as shown on this sheet) or Steel (as shown on Std. 608.6A) with no change in type of Post permitted within a single project (except for posts ① & ② of the Type I Terminal). Steel blocks or metal offset brackets will not be permitted on wood posts. See Std. 608.5D for barrier terminals Type I and Type II.

4	8-14-81	Added 3/4" bolt & washer in end shoe	W.L.H. L.R.P.
3	12-18-81	Revised to Standard Specs.	W.L.H. L.R.P.
2	1-25-81	Exception note for BCT Post	W.L.H. L.R.P.
1	10-11-79	New Design Criteria and SCT	W.L.H. L.R.P.

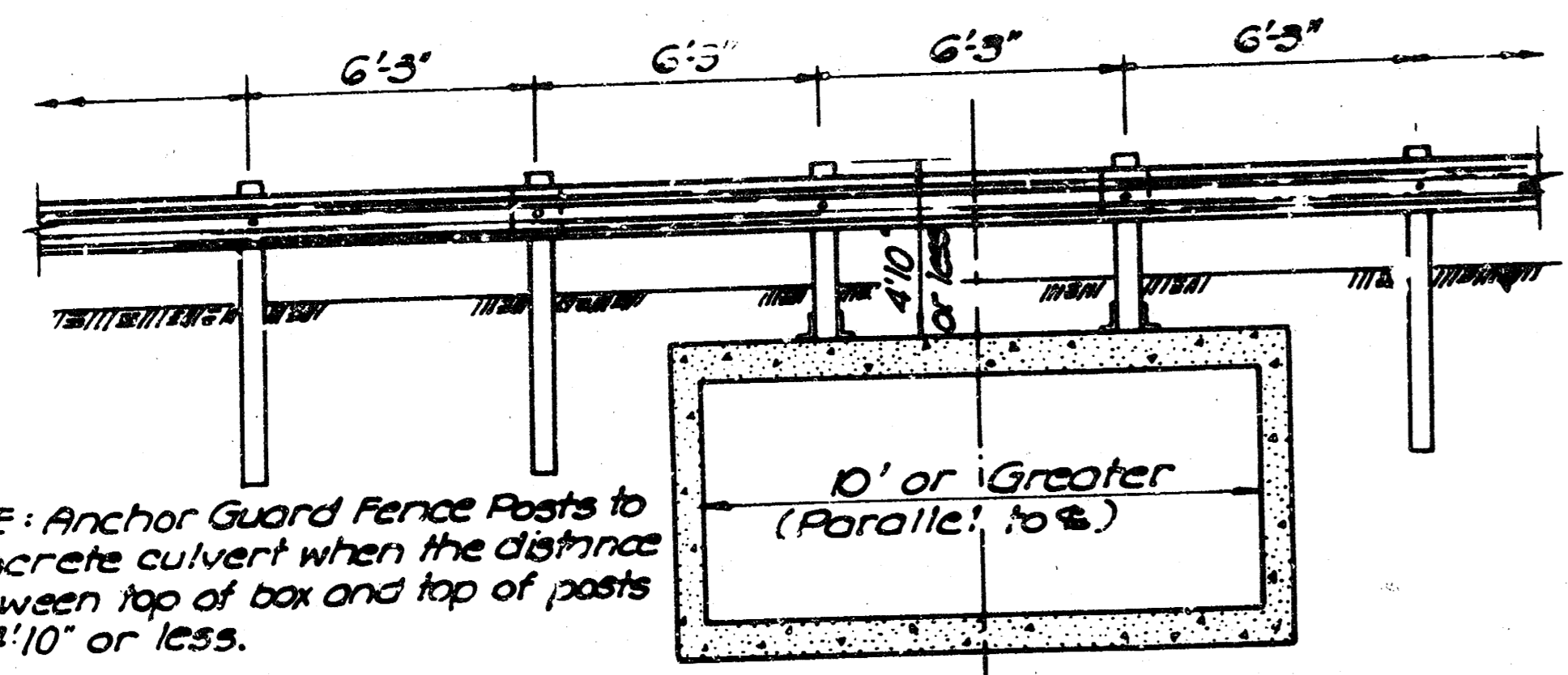
KANSAS DEPARTMENT OF TRANSPORTATION
STEEL PLATE GUARD FENCE WITH WOOD POSTS
WOOD GUIDE POSTS
STD. NO. 608.6

FHWA REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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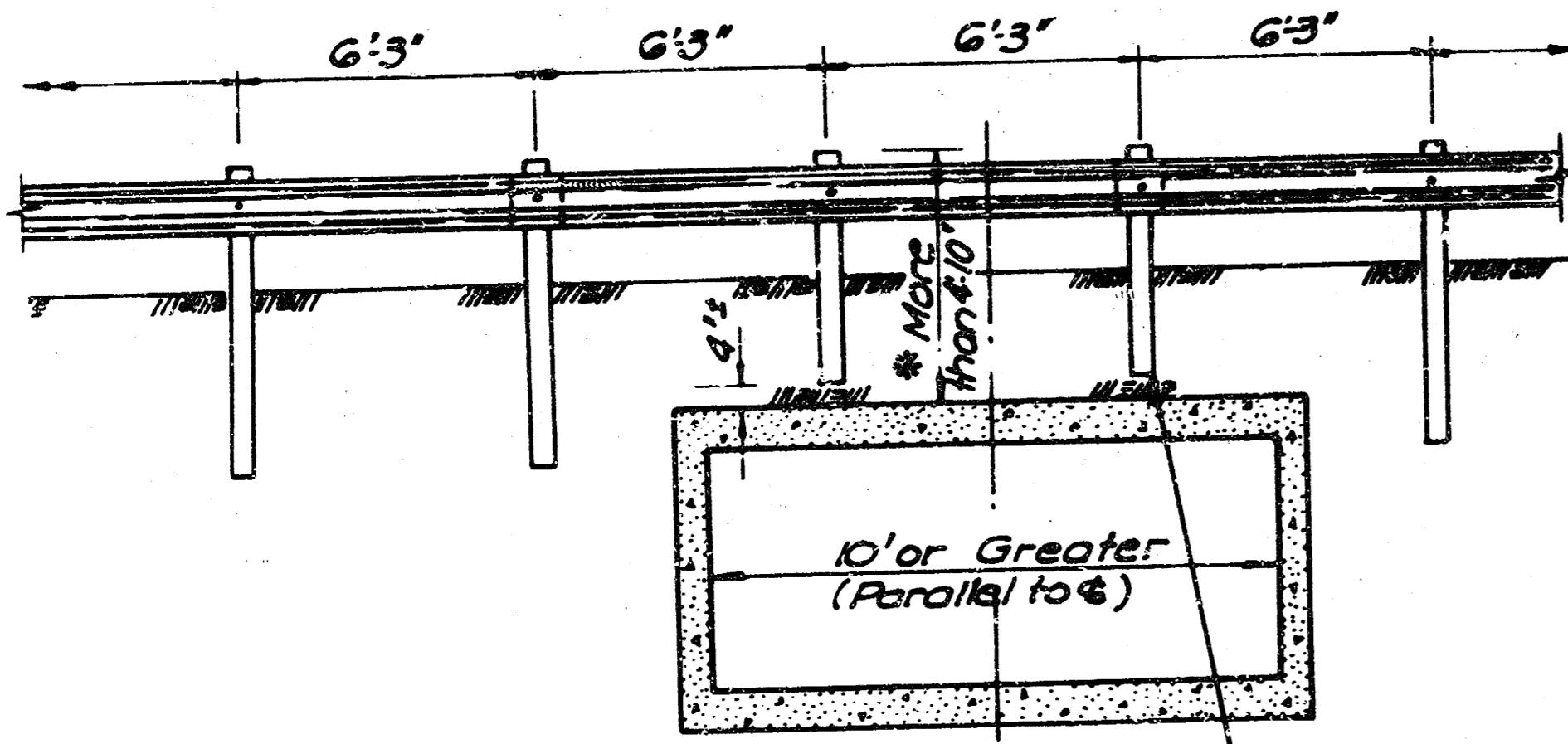


NOTE: Anchor Guard Fence Posts to concrete culvert when the distance between top of box and top of posts is 4'-10" or less.

A maximum length of 1'-6" may be sawn from the lower end of the guard fence post when required.



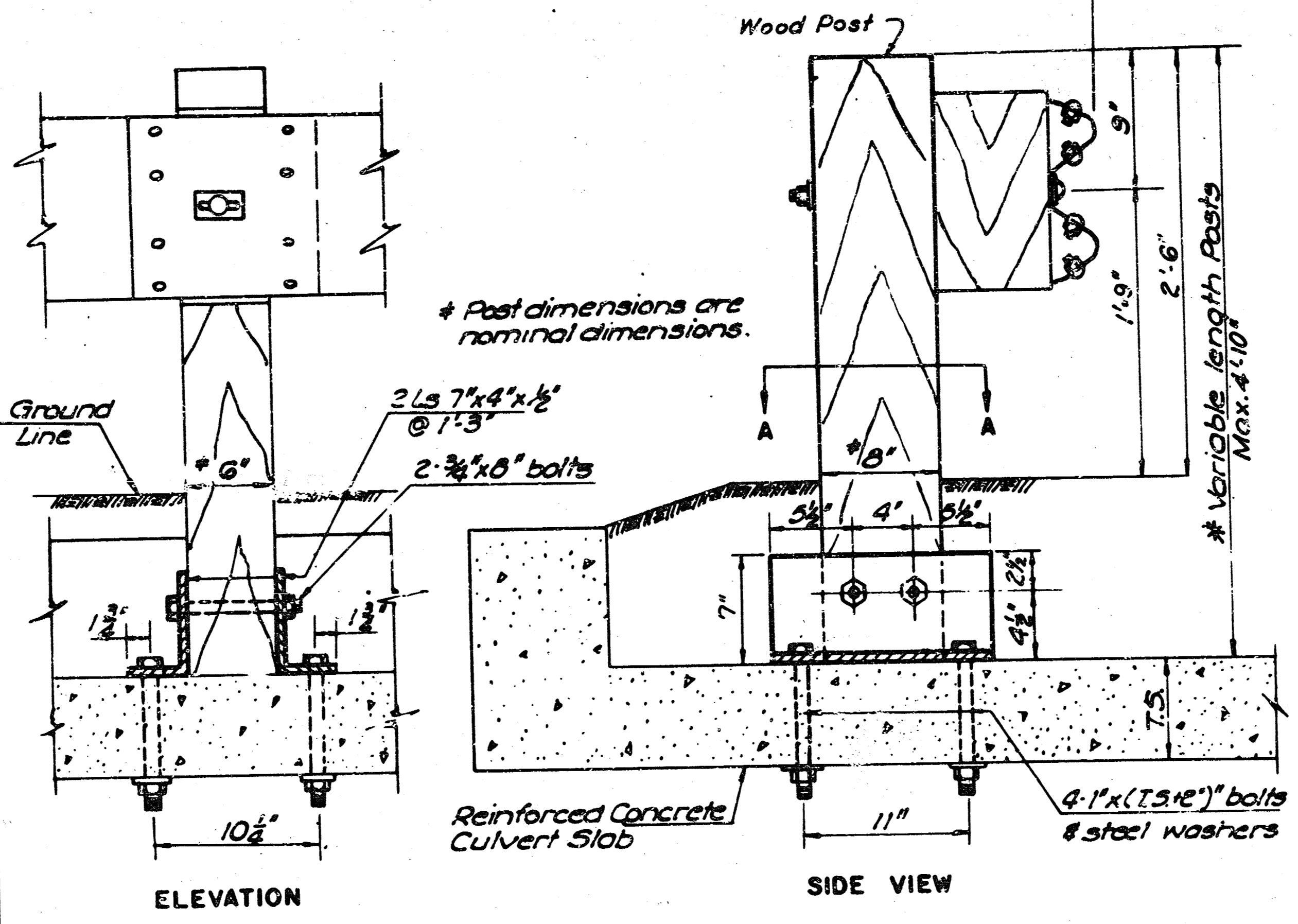
NOTE: Anchor Guard Fence Posts to concrete culvert when the distance between top of box and top of posts is 4'-10" or less.



TYPICAL ELEVATIONS SHOWING STEEL PLATE GUARD FENCE LOCATIONS OVER REINFORCED CONCRETE BOX CULVERTS

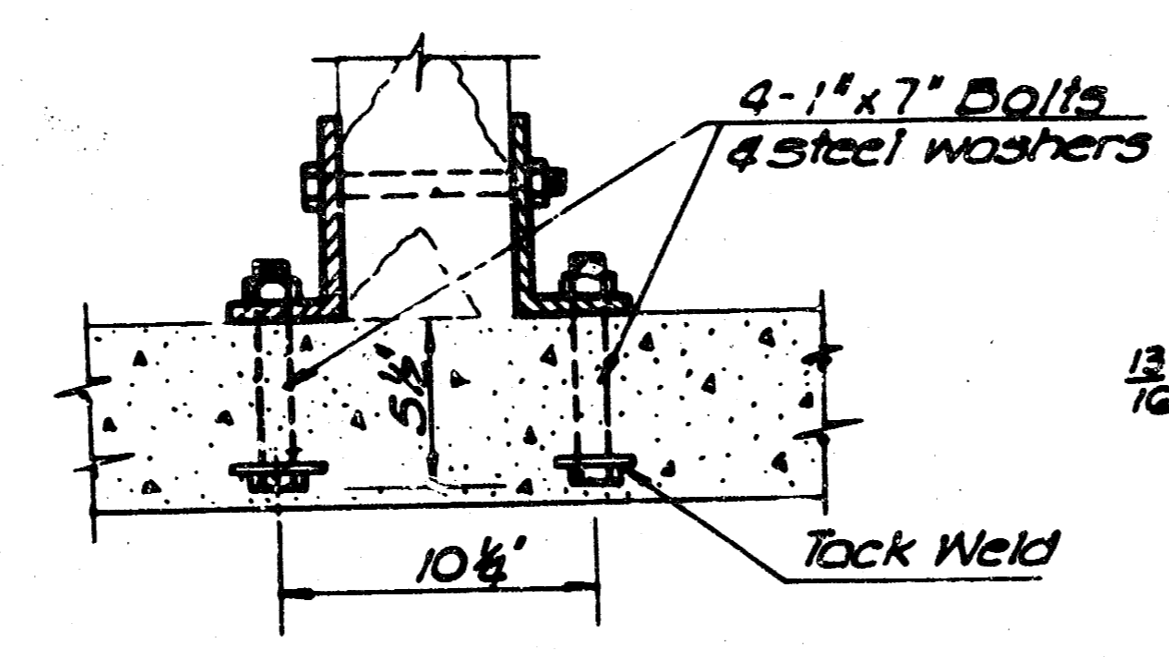
* NOTE: Posts shall be set by digging when the distance between the top of box and top of post is 4'-10" to 10'-0".

* NOTE: The length of Posts shall be determined in the field by the Engineer at the time of installation.

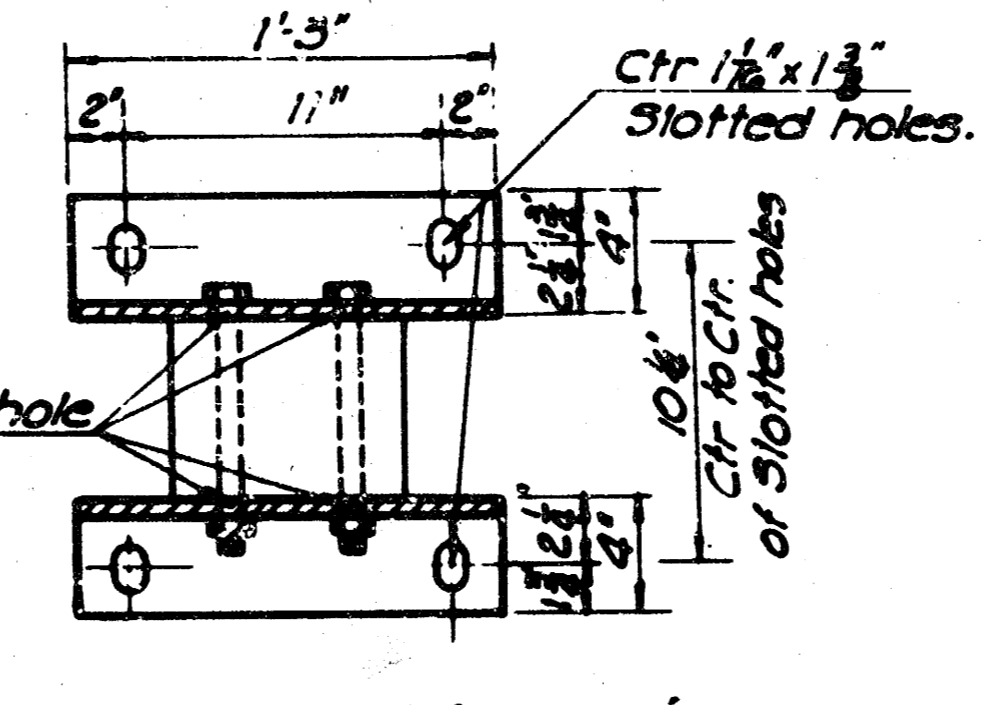


ELEVATION

SIDE VIEW



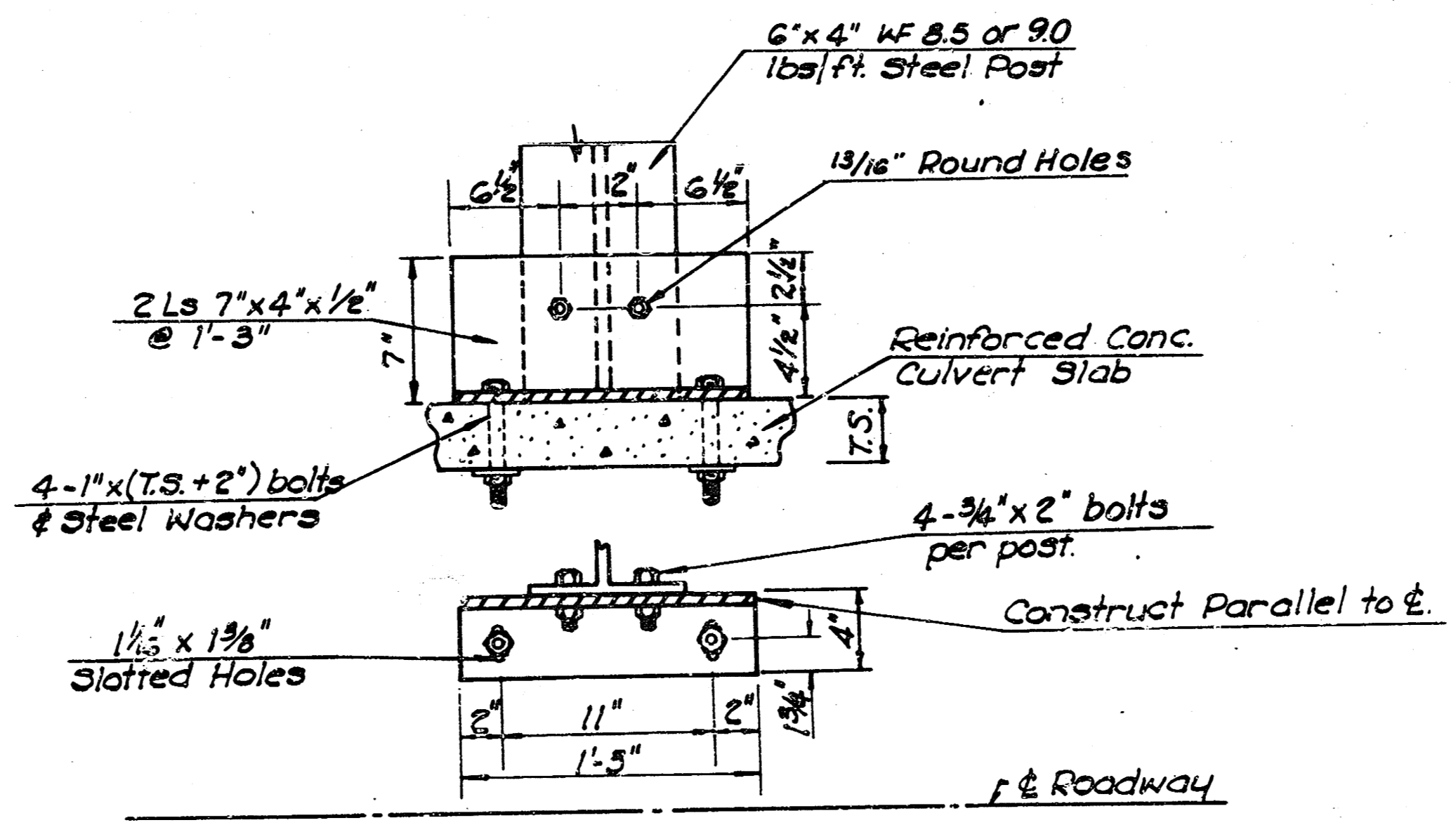
OPTIONAL ANCHOR BOLTS



SECTION A-A

ANCHOR ASSEMBLY DETAILS FOR GUARD FENCE POST ATTACHED TO REINFORCED CONCRETED BOX CULVERTS

NOTE: The contractor installing the guard fence shall furnish and install the anchor assembly to the culvert. The anchor assembly and the installation shall be subsidiary to bid item "Steel Plate Guard Fence (Galv)". All Anchor Assembly parts shall be galvanized in accordance with ASTM Designation: A153.



POST FASTENING DETAIL

See Std. No. G08.G and G08.GA for guard fence alignment.

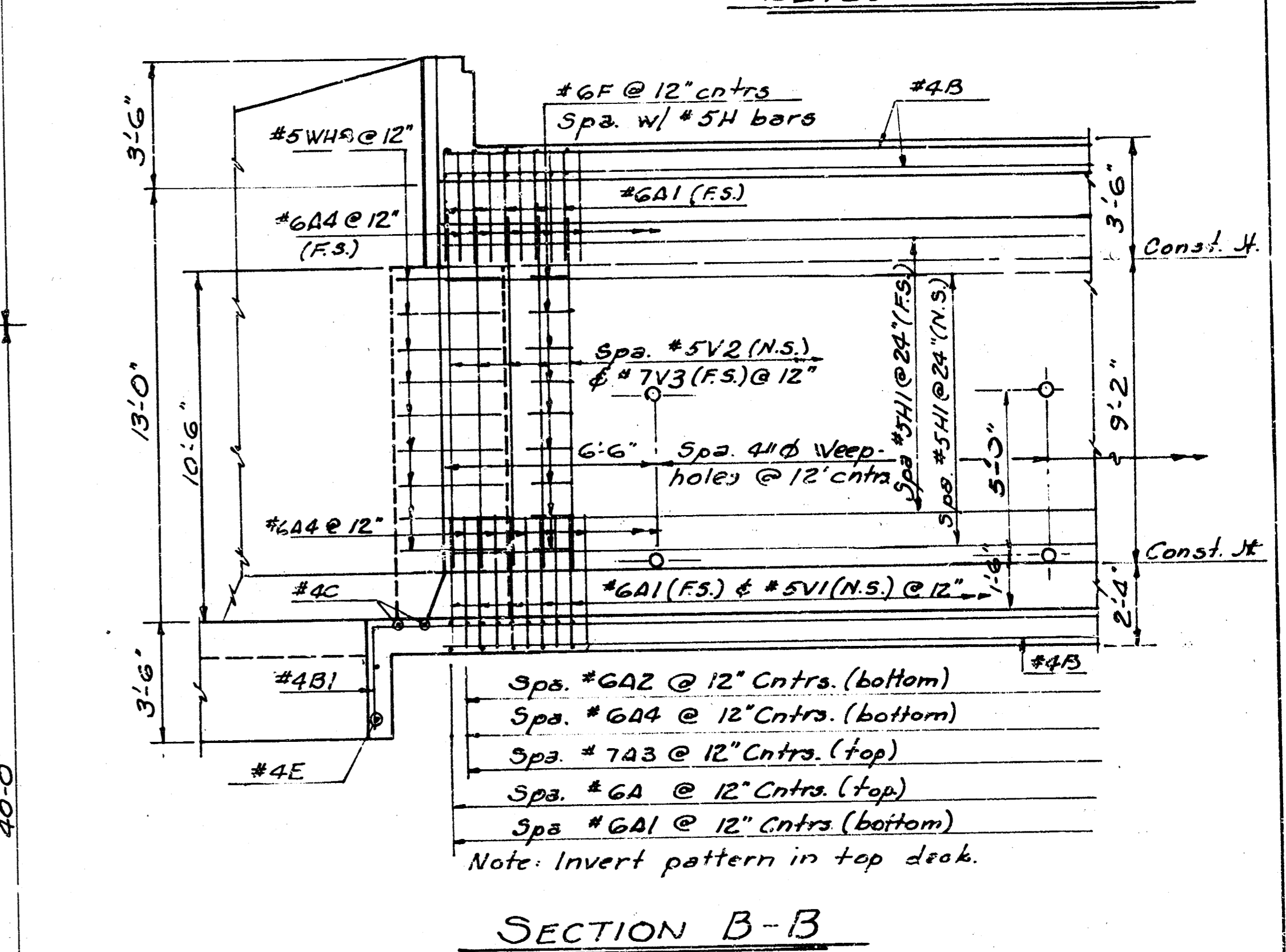
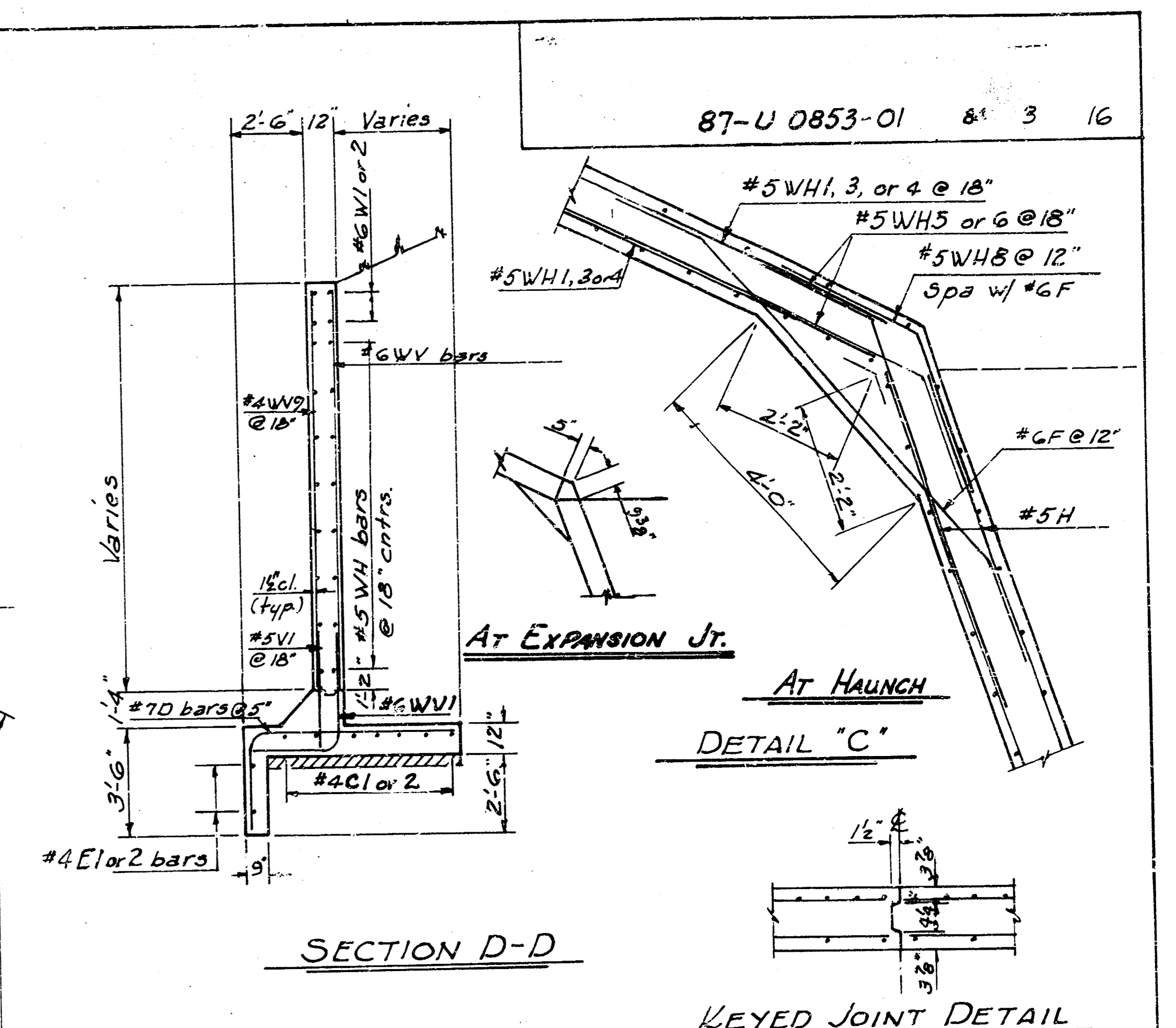
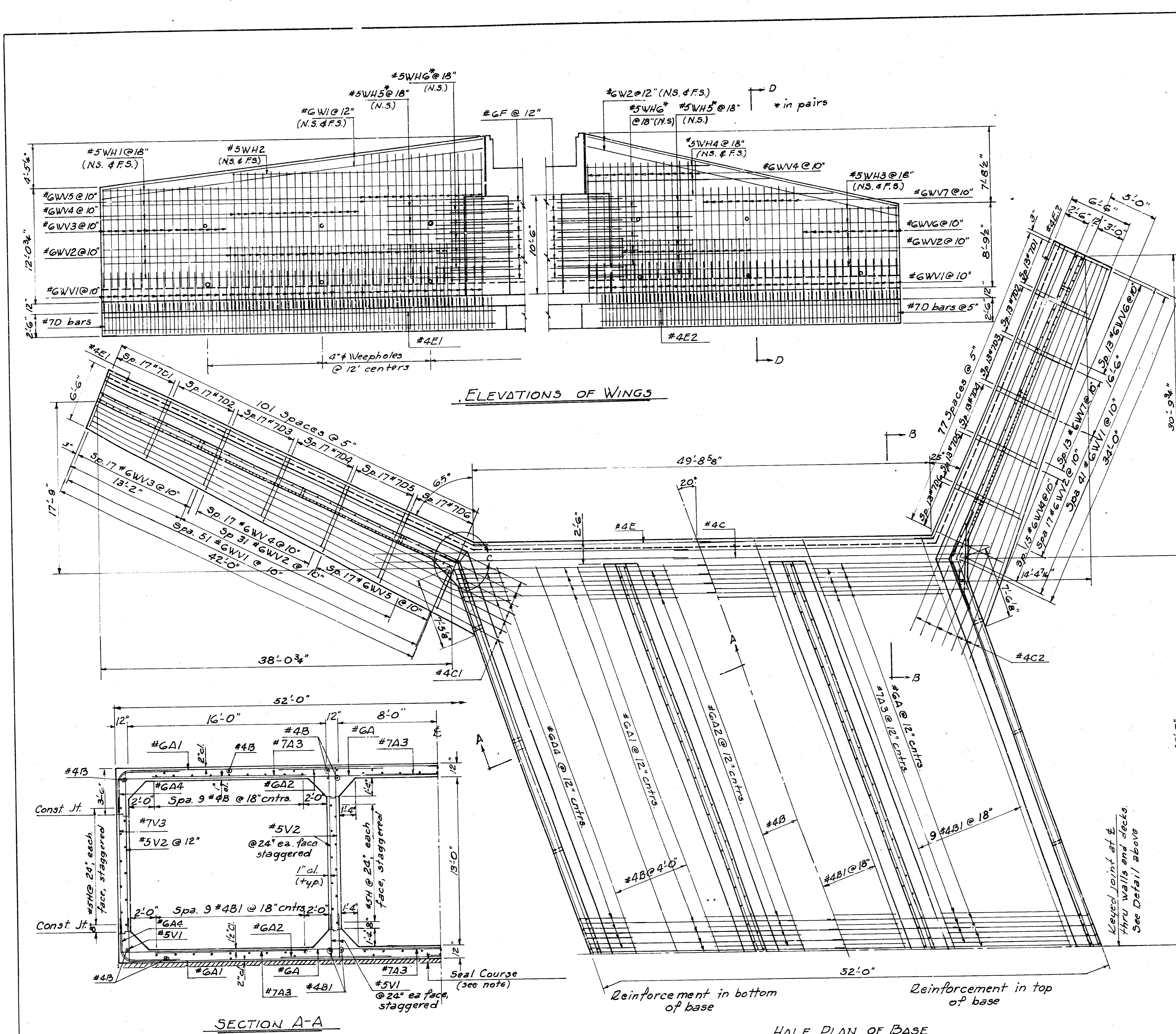
NOTE: ALL REFERENCES TO CULVERTS ON THIS SHEET SHALL APPLY TO R.C. BOX BRIDGES.

NO.	DATE	REVISION	BY	APP'D.
5	8-14-80	Revised to Standard Specs.	W.L.H.	L.R.P.
4	6-30-80	Guard Fence alignment	W.L.H.	L.R.P.
3	6-22-79	Reference to Culvert Bridge note	W.L.H.	L.R.P.
2	4-5-79	Ed. P.C. Center install Anchor Assembly	W.L.H.	L.R.P.
1	10-2-78	Alternate 9.0 lb/ft. post	W.L.H.	L.R.P.

KANSAS DEPARTMENT OF TRANSPORTATION
ALIGNMENT LAYOUTS & DETAILS FOR GUARD FENCE PROTECTION AT CULVERTS

STD. NO. 605A.3
Sept. 15, 1970

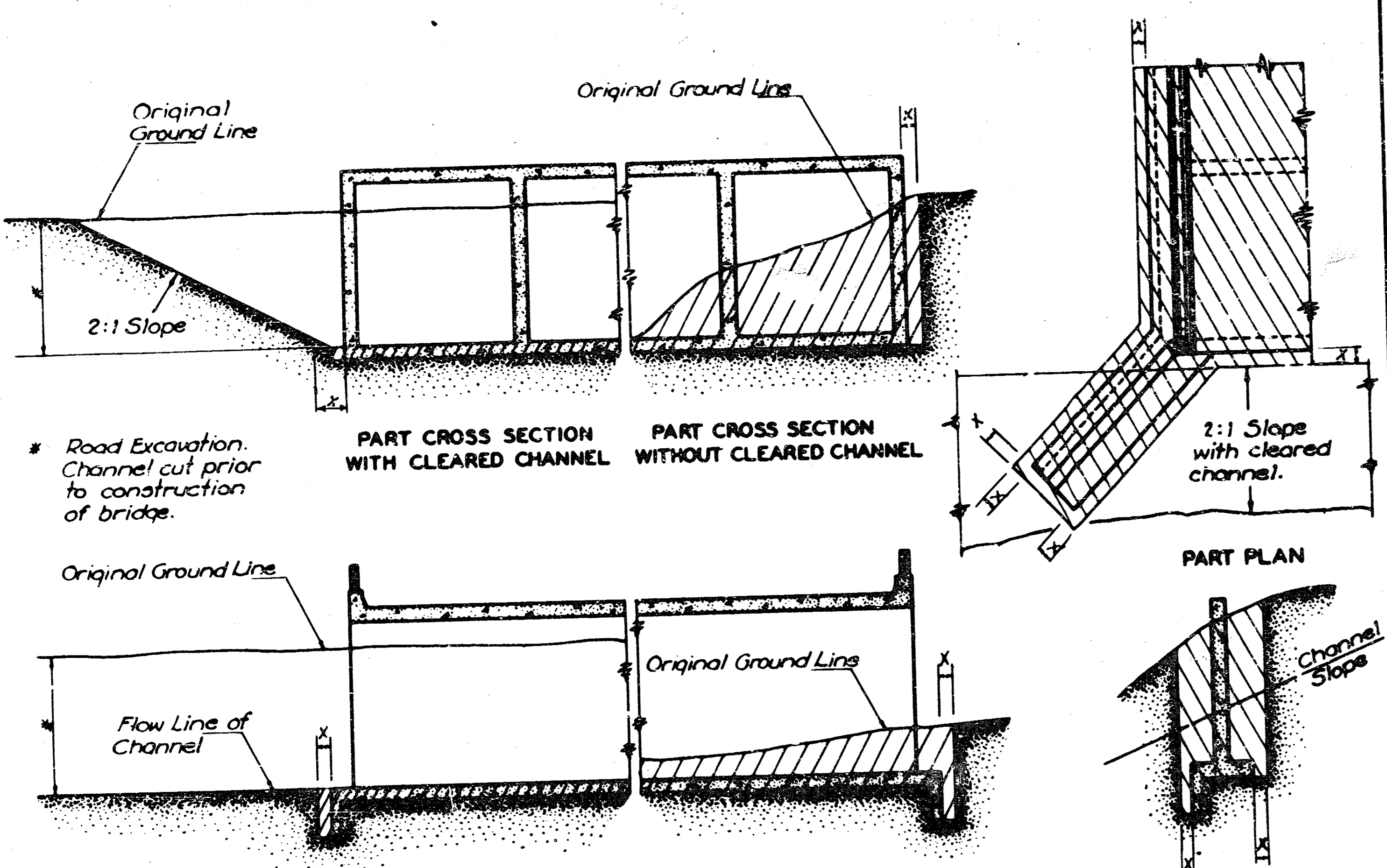
DESIGNER	SCALE	APP'D.	QUANTIFIED	TRACED
DESIGNER	SCALE	APP'D.	QUANTIFIED	TRACED



CITY OF WICHITA
 MacARTHUR ROAD BRIDGE
 OVER THE BIG SLOUGH
 PROJECT 472 78 245 812 68000 000 001
 TRIPLE 16 x 13 x 82-7 7/8" RCBB
 BRIDGE DETAILS I
 R. S. DELAMATER & ASSOCIATES INC.
 CONSULTING ENGINEERS
 WICHITA, KANSAS

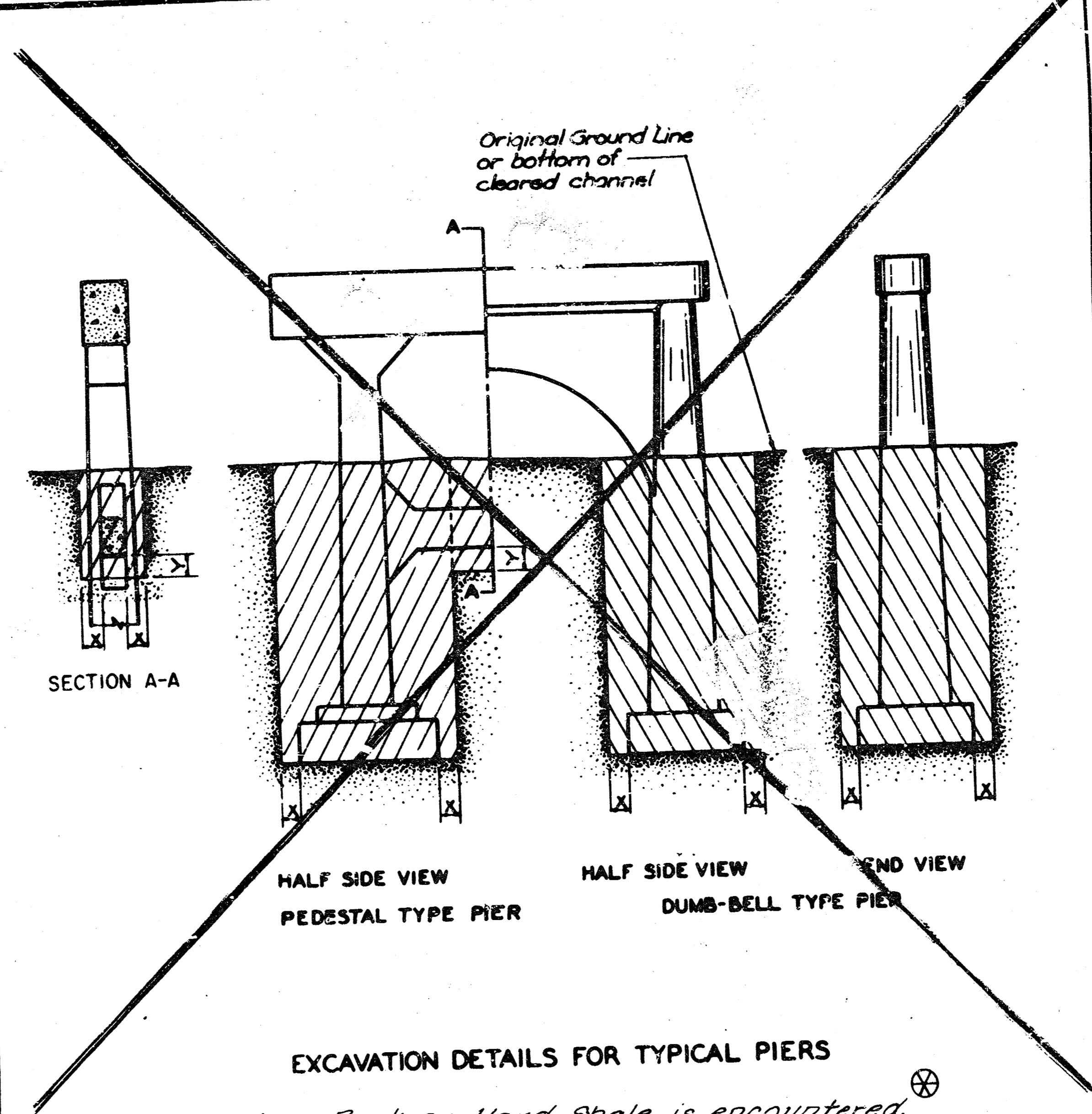
DATE: May, 1984. DRAW NO: 1012-A-6

COUNTY	STATE	PROJECT NO.	YEAR	SHEET	TOTAL SHEETS
7	KANSAS	874 0853-01	1964	10	16



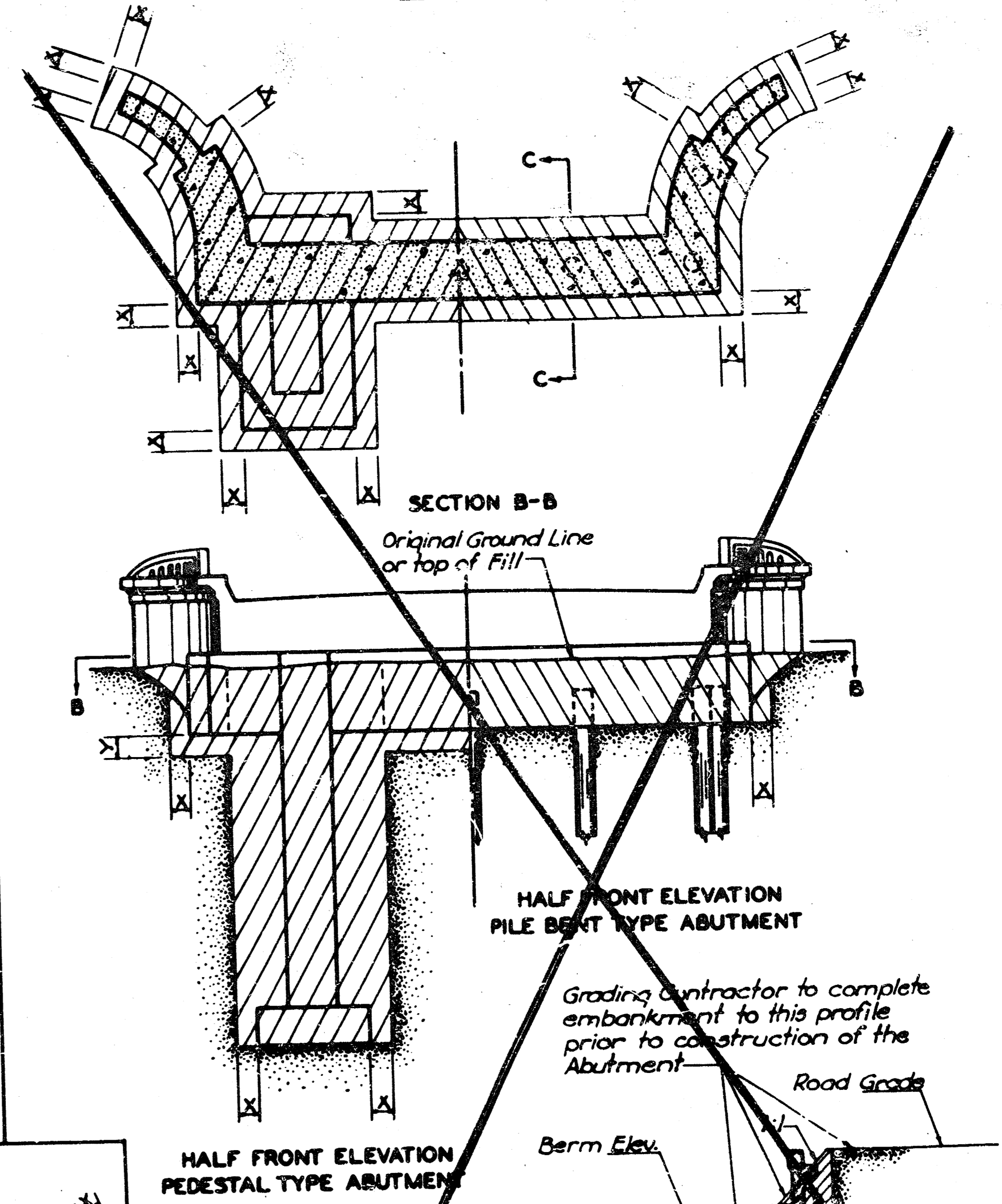
EXCAVATION DETAILS FOR TYPICAL MULTIPLE BOX

NOTE: Class III Excavation (for bridges) shall be only that excavation below the original ground line or the channel slopes as shown, whichever is the lowest.



EXCAVATION DETAILS FOR TYPICAL PIERS

See detail when Rock or Hard Shale is encountered.

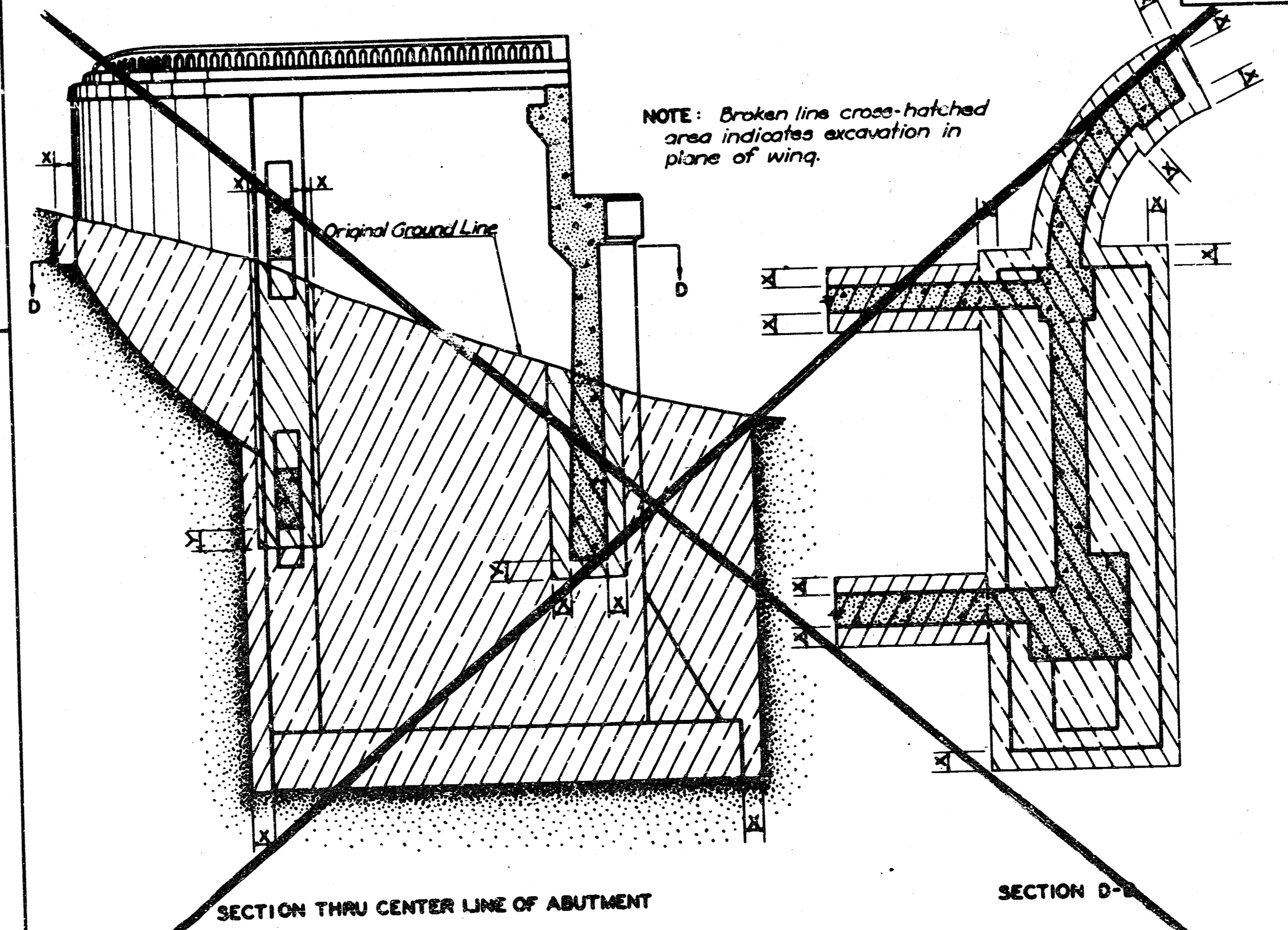


EXCAVATION DETAILS FOR TYPICAL ABUTMENTS

See detail when Rock or Hard Shale is encountered.

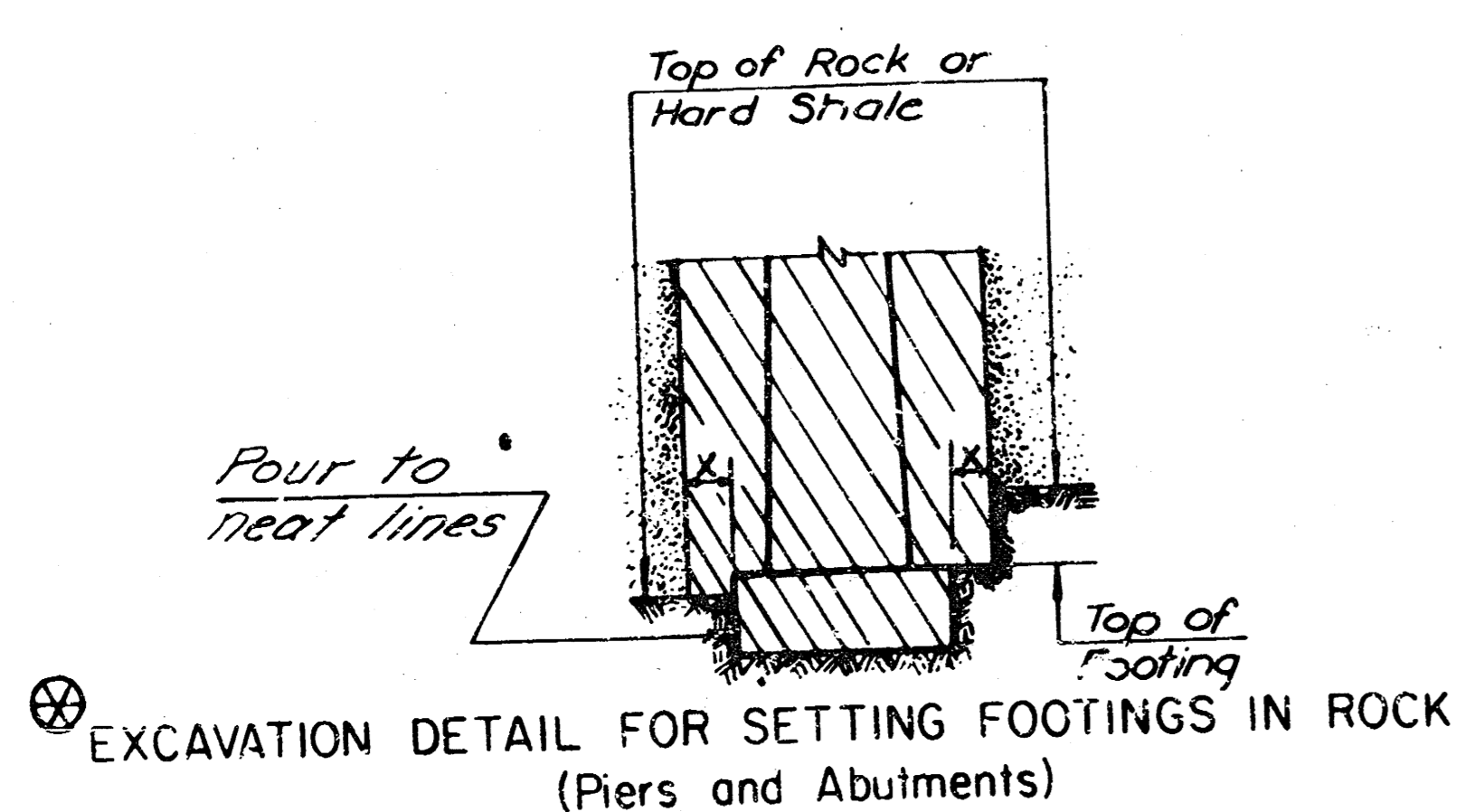
NOTE: Bridge Contractor shall finish the embankment and berms after the construction of the Abutment and dispose of any excess material as directed by the Engineer.

Sides of trenches in hard or compacted soil including embankments shall be shored, sheeted, braced or otherwise supported when the trench is more than 5 feet in depth and 8 feet or more in length. In lieu of the shoring, the sides of the trench above the 5 foot level may be sloped to preclude collapse. The slope for average soils shall be 1:1. If the angle of repose of the soil is less, flatter slopes shall be required.



EXCAVATION DETAILS FOR TYPICAL U-ABUTMENTS

See detail when Rock or Hard Shale is encountered.



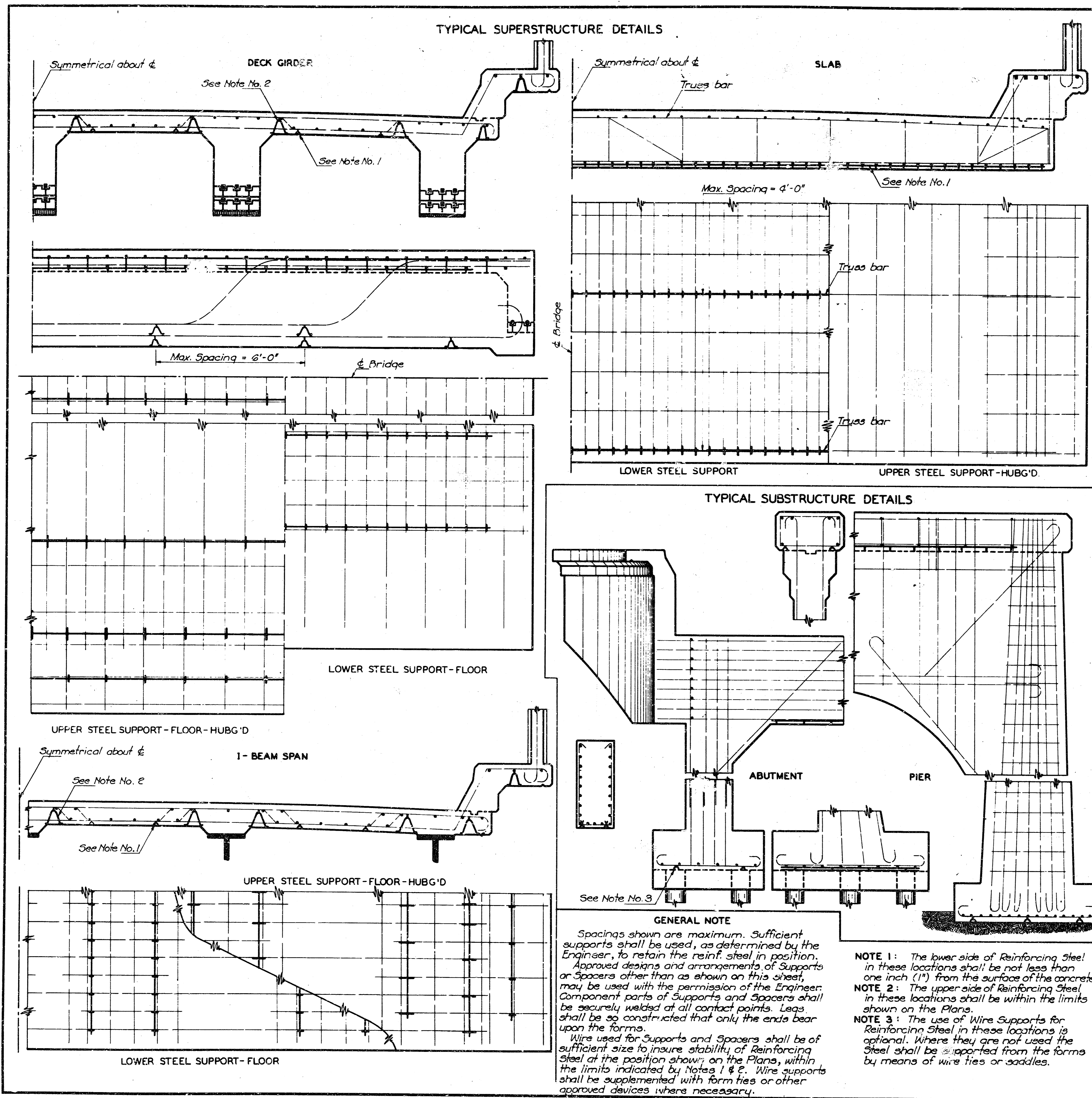
EXCAVATION DETAIL FOR SETTING FOOTINGS IN ROCK
(Piers and Abutments)

NOTE: When Rock or Hard Shale is encountered all excavation below top of this material or the top of the footing, whichever is lower, shall be to neat lines.

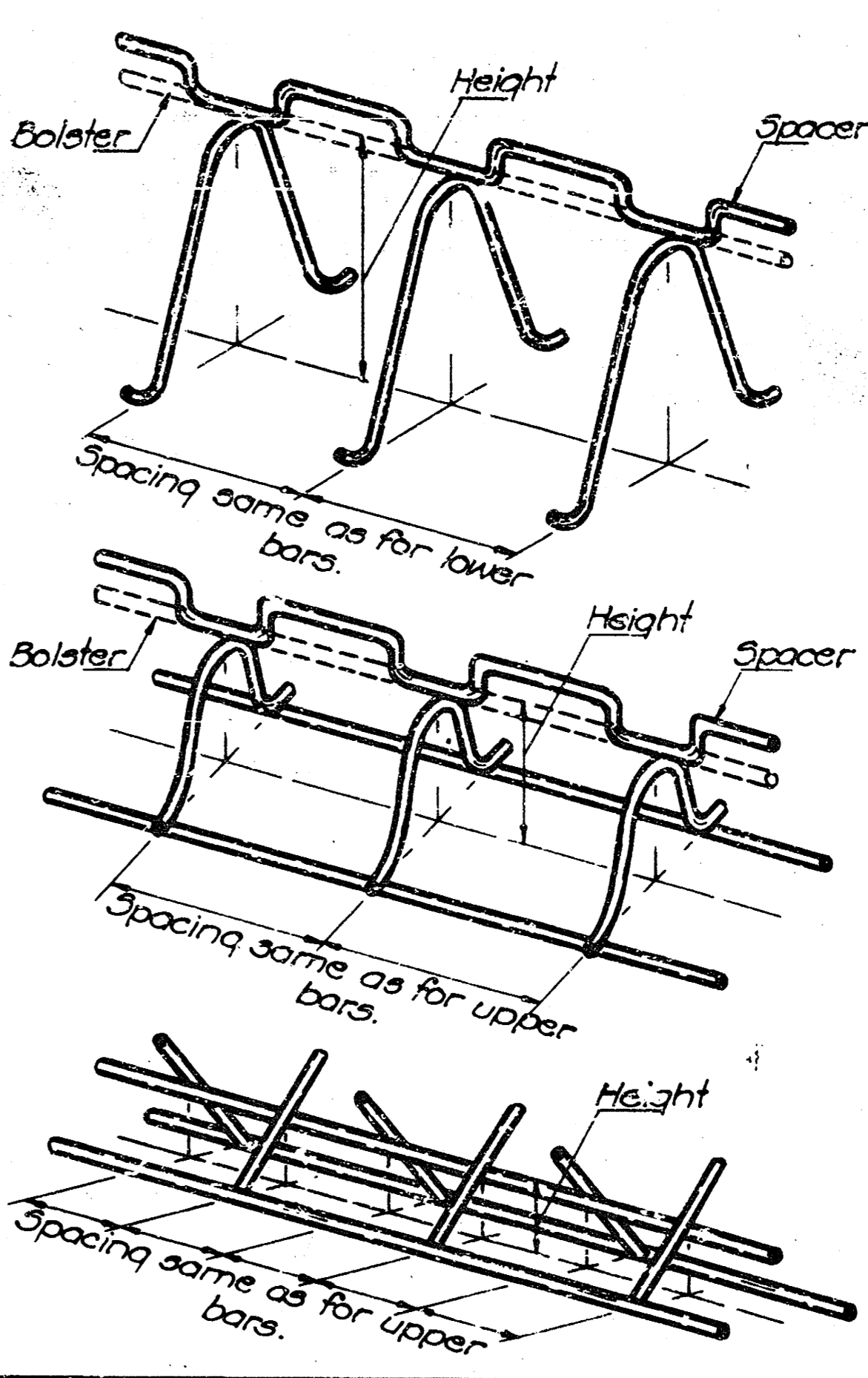
NOTE: All bridge excavation shall be computed on the basis of the cross-hatched areas and boundary lines indicated on this sheet.
Dimension 'X' shall be 2'-0" unless indicated otherwise on the general plans.
Dimension 'Y' shall be 1'-6" unless indicated otherwise on the general plans.

10/12/83	Revised Detail of Rock Excavation	W.A.R.L.A.		
9/3/83	Revised Limits of Rock Excavation	W.A.R.L.A.		
8/6/74	Revised 'X' Dimension	W.A.R.L.A.		
NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
BRIDGE EXCAVATION				
SCALE 1/4" = 1' (For 60" x 96" sheets)				
DESIGNED BY S.A.P. DATE 6-23-63. CHECKED BY W.A.D. DATE 4-12-64.				

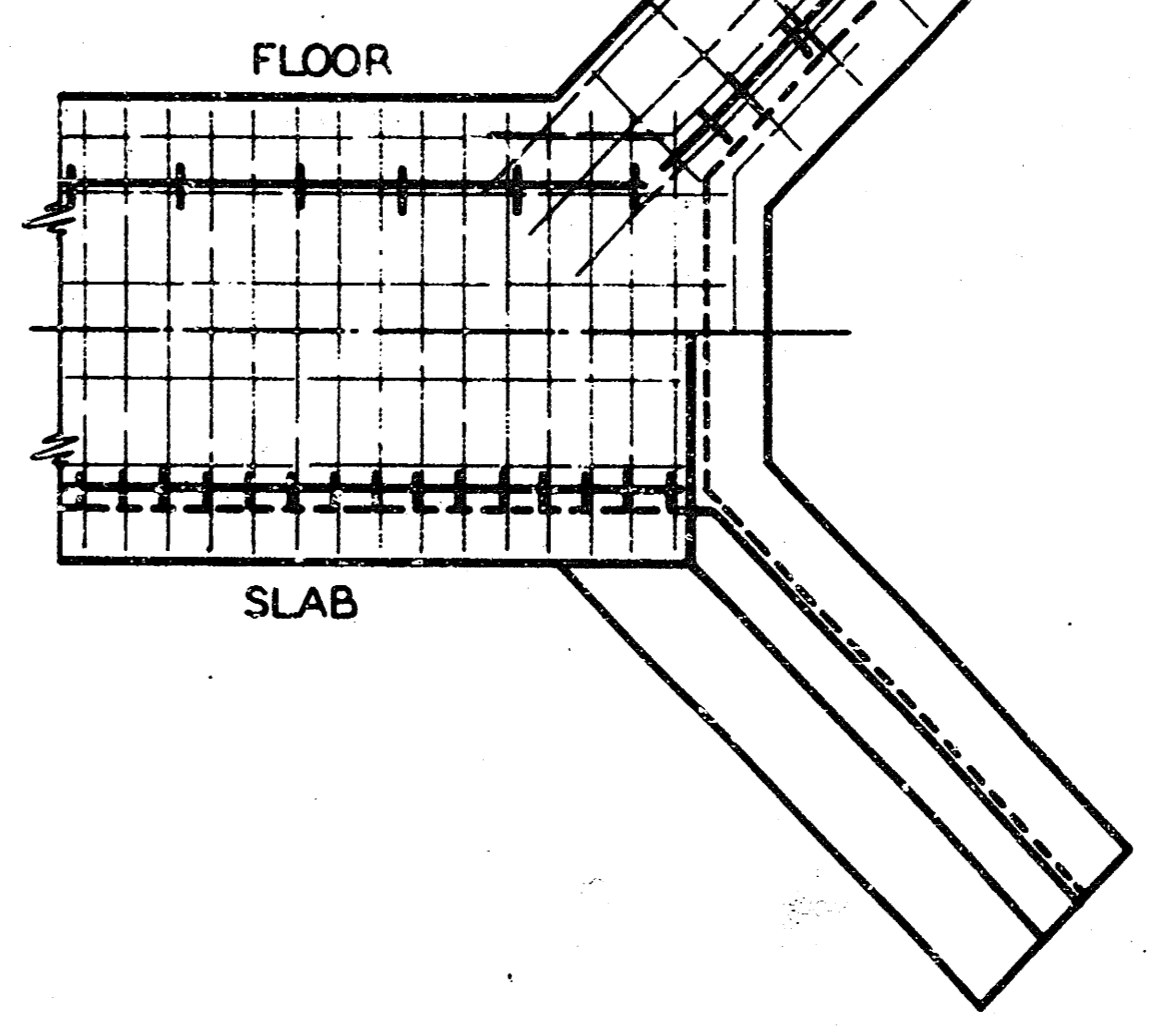
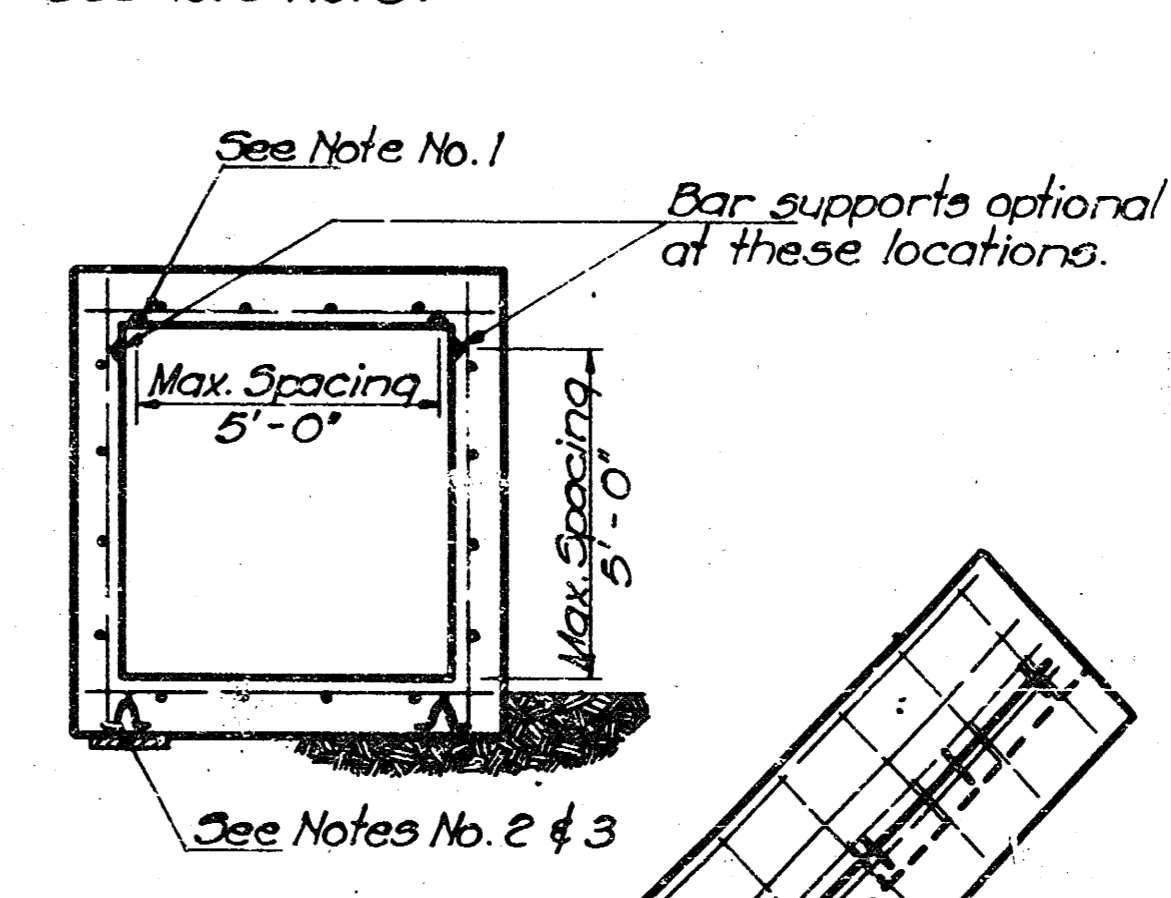
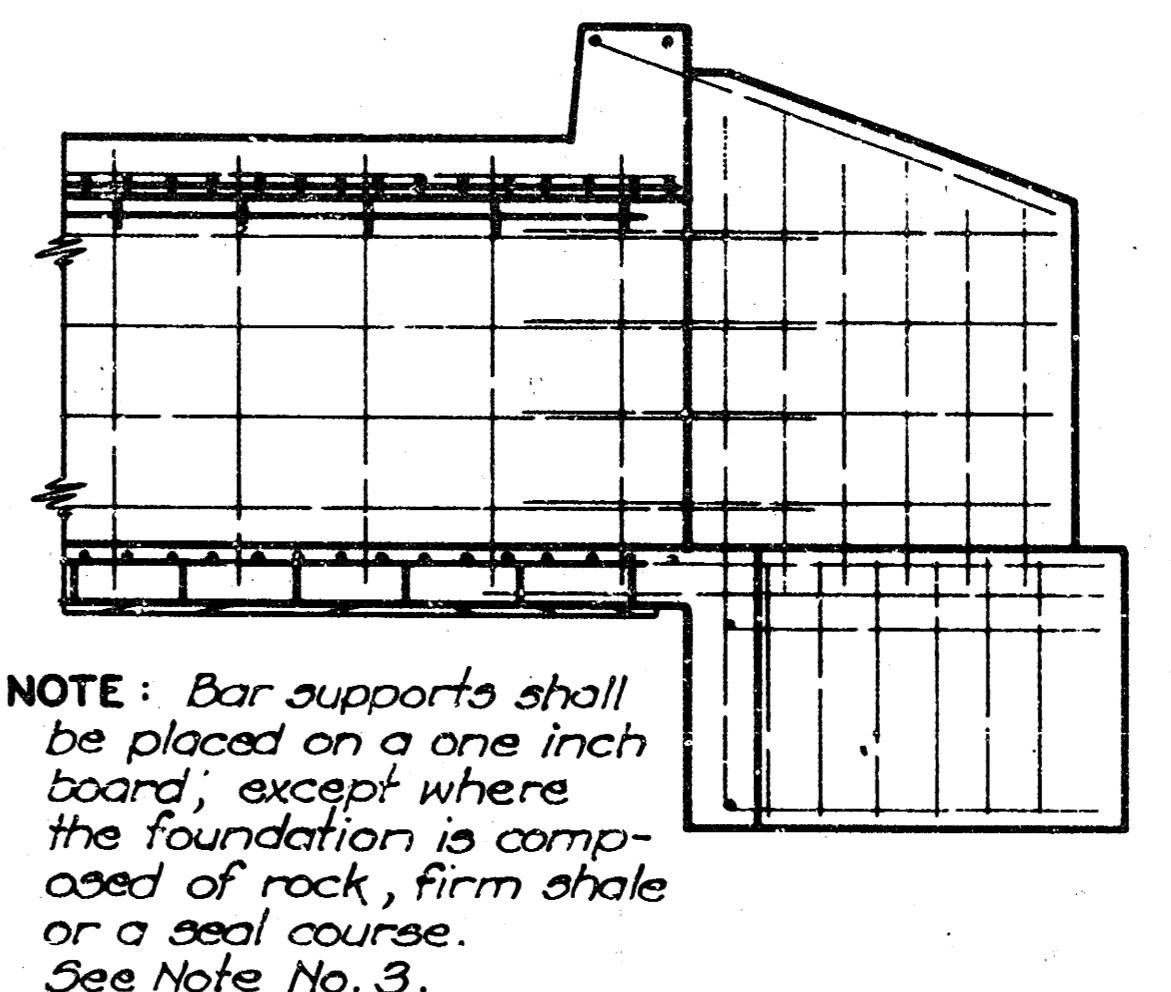
5-30-84



BEAM BAR SPACERS & BOLSTERS

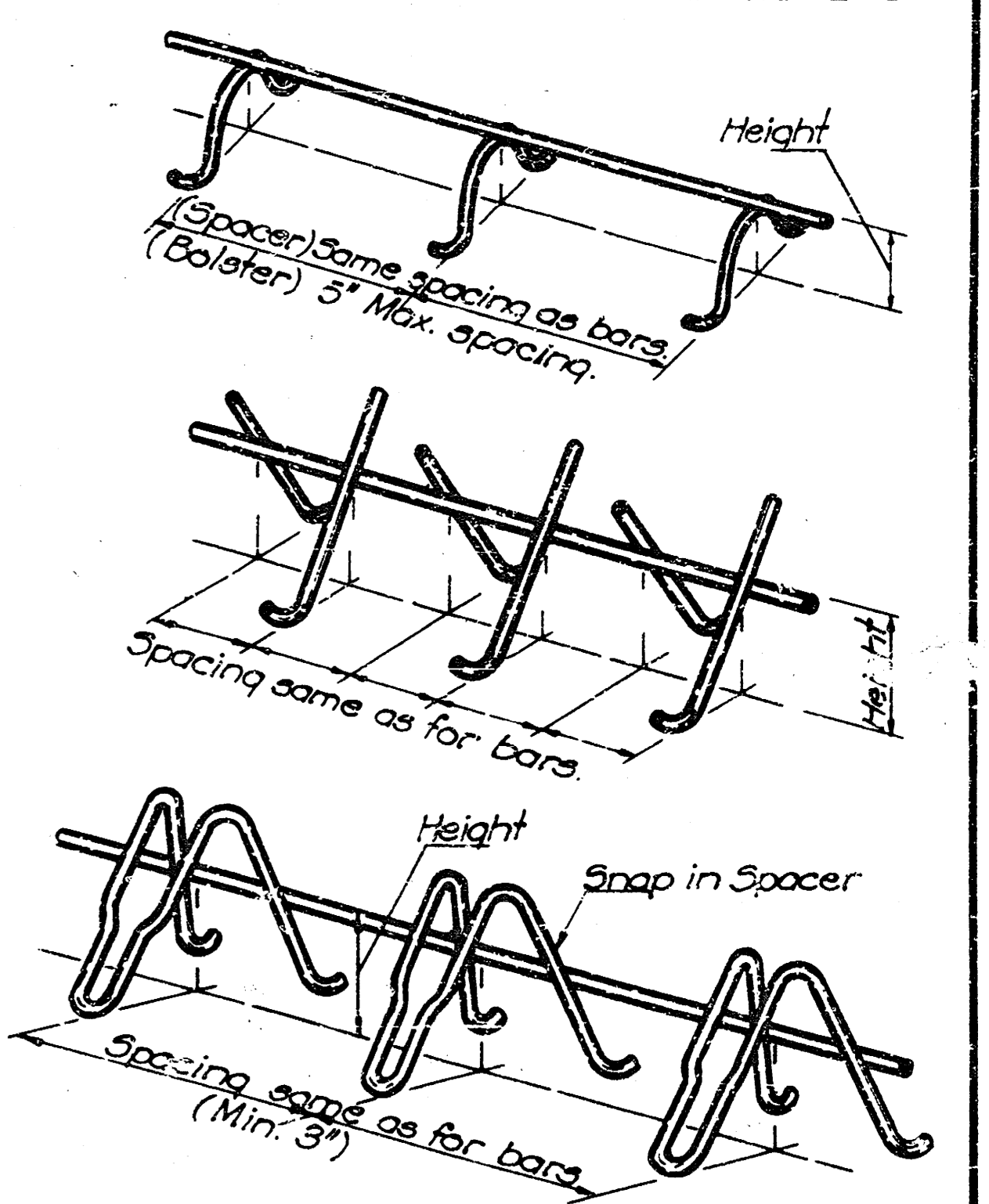


TYPICAL CULVERT DETAILS

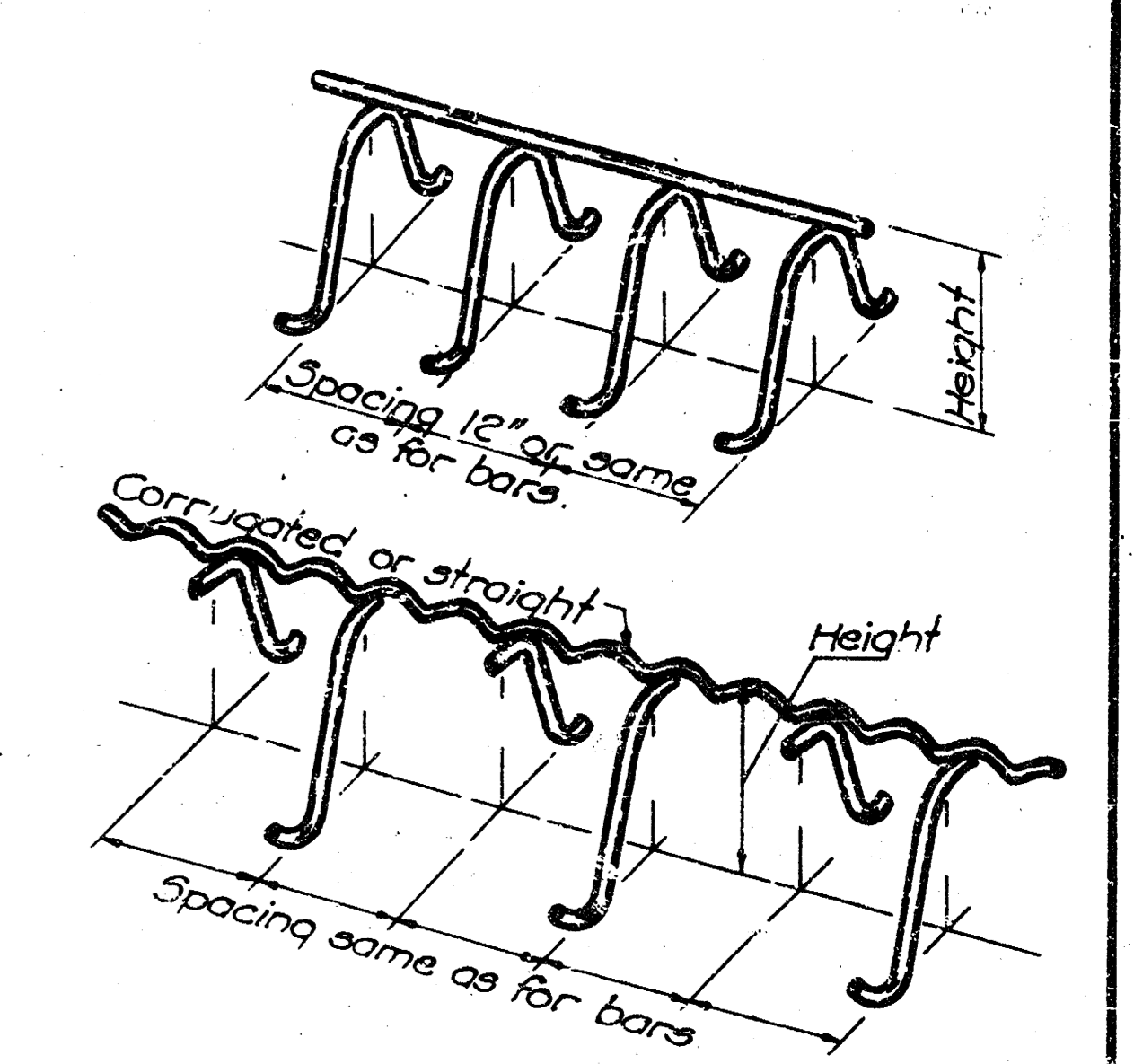


FHWA REGION	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 U 0853-01	1984	11	16

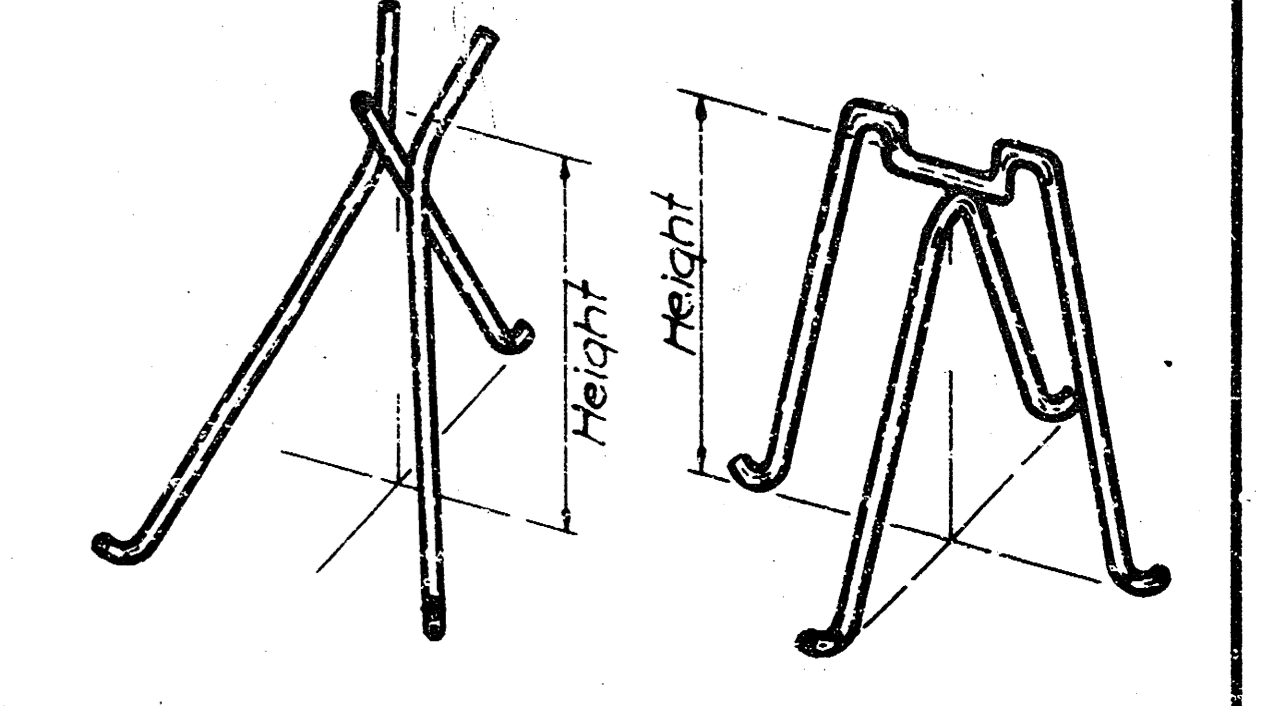
LOW SLAB BAR SPACERS & BOLSTERS



HIGH SLAB BAR SPACERS & BOLSTERS



INDIVIDUAL HIGH BAR CHAIRS



NO.	DATE	REVISIONS	BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION				
SUPPORTS AND SPACERS FOR REINFORCING STEEL				
STD. NO. 610 SCALE No. Scale				
DESIGNED BY: A. S. DATE 7-23-83 DETAIL BY: J. A. P. TRACED BY: J. A. P.				
CHECKED BY: S. C. APPROVED BY: L. H. Linnell DATE 4-17-84				

EARTHWORK				
Sta. to Sta.	Excavation Cu. Yds.	Compaction of Earthwork	Common Rock	MR-20
11+82 to 13+32 Channel Change	70	4,760*	2,700	
Totals				
	70	4,760	2,700	

DRAINAGE STRUCTURES						
Station	Side	Size	Type	Conc. C. "A" Cu. Yds.	Reinf. Steel Lbs.	Erosion Pipe 18" End Section
11+41	Lt.	18"	Erosion		80	1
11+73	Rt.	18"	Erosion		70	1
12+74	Lt.	18"	Erosion		74	1
12+97	Rt.	18"	Erosion		70	1
Totals						
					294	4

RECAPITULATION OF BRIDGE QUANTITIES		
Bridge No. Station	12+57	
Item	Unit	
Class I Excavation	Cu. Yds.	
Class II Excavation	Cu. Yds.	
Class III Excavation	Cu. Yds.	700
Water	M. Gals.	
Class AAA Concrete	Cu. Yds.	699.5
Class A Concrete	Cu. Yds.	56.4*
Reinforcing Steel	Lbs.	95,480
Structural Steel	Lbs.	
Bearing Devices	Lbs.	
Cast Iron	Lbs.	
Untreated Timber Piles	Lin. Ft.	
Treated Timber Piles	Lin. Ft.	
Steel Piles	Lin. Ft.	
Untr. Timber Test Piles	Lin. Ft.	
Steel Test Piles	Lin. Ft.	
Metal Pile Points	Each	1
Foundation Stabilization	Cu. Yds.	
Removal of Exist. Struct.	L. S.	

RECAPITULATION OF ROAD QUANTITIES	
Clearing and Grubbing	L.S. Lump Sum
Removal of Existing Structure	L.S. Lump Sum
Common Excavation	4,760 Cu. Yds.
Rock Excavation (Pavement Removal)	70 Cu. Yds.
Compaction of Earthwork (Type B) (MR-20)	2,700 Cu. Yds.
Granular Backfill	18 Cu. Yds.
Water	1 M. Gals.
* Steel Plate Guard Fence (Galv.)	375 Lin. Ft.
Plant mix Bituminous Mix. (Comm. Grade)	140 Tons
18" Erosion Pipe (CMP)	298 Lin. Ft.
18" End Sections (CMP)	4 Each
Field Office and Laboratory (Type C)	1 Each
Contractor Construction Staking	L.S. Lump Sum
Mobilization	L.S. Lump Sum

FOR INFORMATION ONLY		FOR INFORMATION ONLY	
RECAP OF ROCK EXCAVATION		RECAP FOR LARGE TREES	
Sta. 11+82 to Sta. 13+32 (Pavement Removal)	70 Cu. Yds.	Rt. Sta. 12+30	1 Each
Total		Total	
	70 Cu. Yds.		1 Each

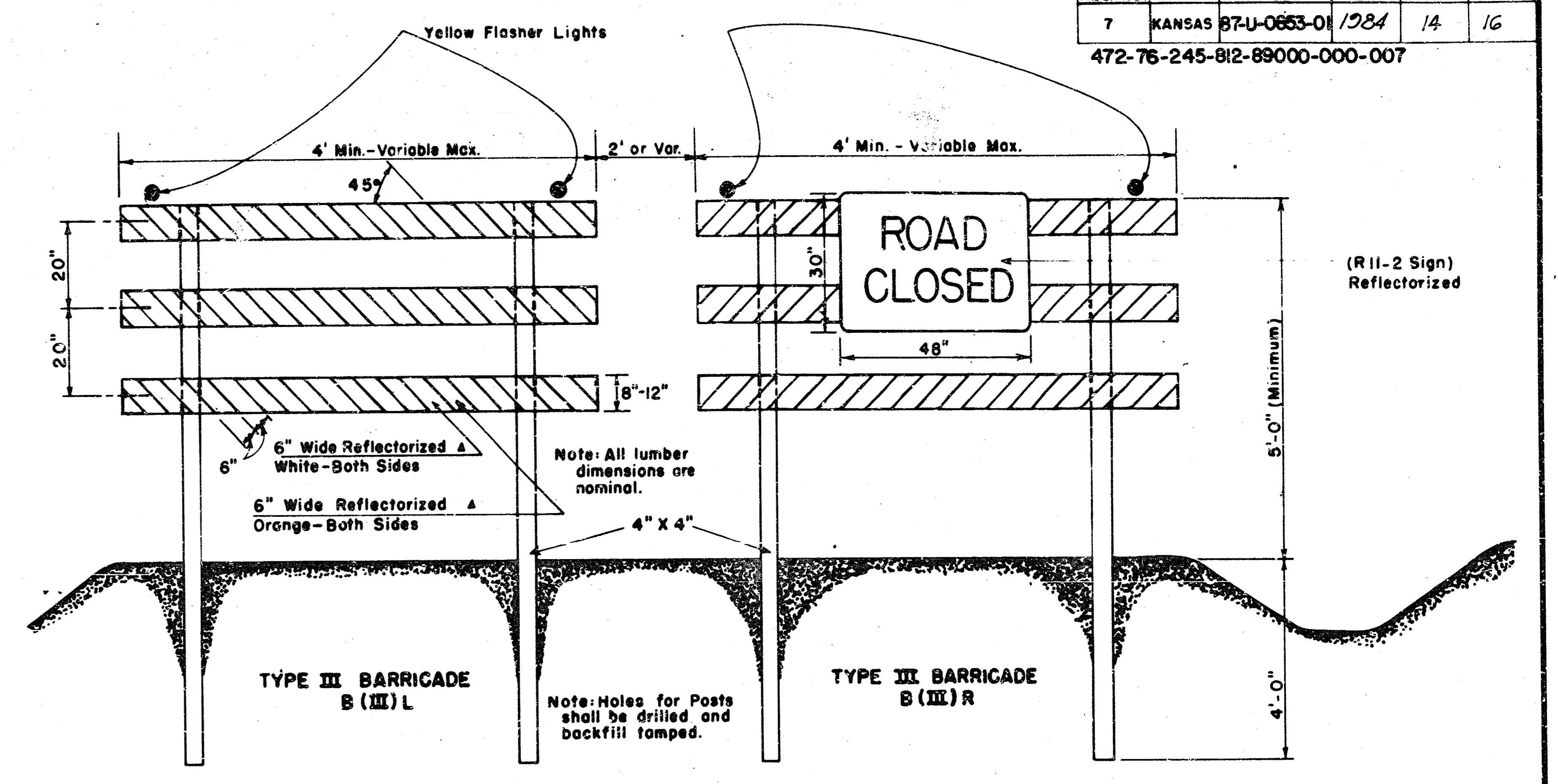
* Wood Posts Only - No Other Option
 Water Pollution Control: See Sheet No. 12
 Traffic Control: See Sheet 14

5-30-84

LIST OF TRAFFIC CONTROL DEVICES									
MARK	ITEM	M U T C D Device No.	Size	No of Construction Signs by Area 0 - 9.25 S.F. 9.26-16.25 S.F. 16.26 S.F. +	Barricades Type I or II 4' - 8' 1/2' - 14'	Flashers Each	Flagger Each	REMARKS	
1		B(III)L	10'			2**			
2		B(III)R	10'			2**			
3		B(III)R	8'		1**				
4		B(I)or(II)	12'		4**				
5	ROAD CLOSED TO THRU TRAFFIC Sign	R11-4	60"x30"	2**					Mount on B(III)
6	ROAD CLOSED 1/2 MILE AHEAD Sign	R11-3	60"x30"	1**					Mount on B(III)
7	ROAD CLOSED 1000' AHEAD Sign	W30-	48"x48"	2**					Mount on B(III)
8	DETOUR Sign	M4-10R/L	48"x18"	2**					Mount on B(III)
9	DETOUR Sign	M4-10R	48"x18"	1**					Mount on B(III)

* By Grading Contractor ** By Bridge Contractor *** By County

RECAPITULATION OF QUANTITIES						
Bid Item	Grading		Bridge		County - Non Pay Item	
	Quantity	Unit	Quantity	Unit	Quantity	Unit
Construction Signs (0-9.25 Sq. Ft.)		Each / Day		Each/Day		
Construction Signs (9.26-16.25 Sq. Ft.)		"		"		
Construction Signs (16.26 Sq. Ft. and Over)		"		"		
Construction Barricades (Type I or II)		"		"		
Construction Barricades (Type III)		"		"		
Construction Warning Lights (Type B - High Intensity)		"		"		
Vertical Panels (Single Type)		"		"		
Vertical Panels (Back to Back Type)		"		"		
Traffic Control			Lump	Sum		

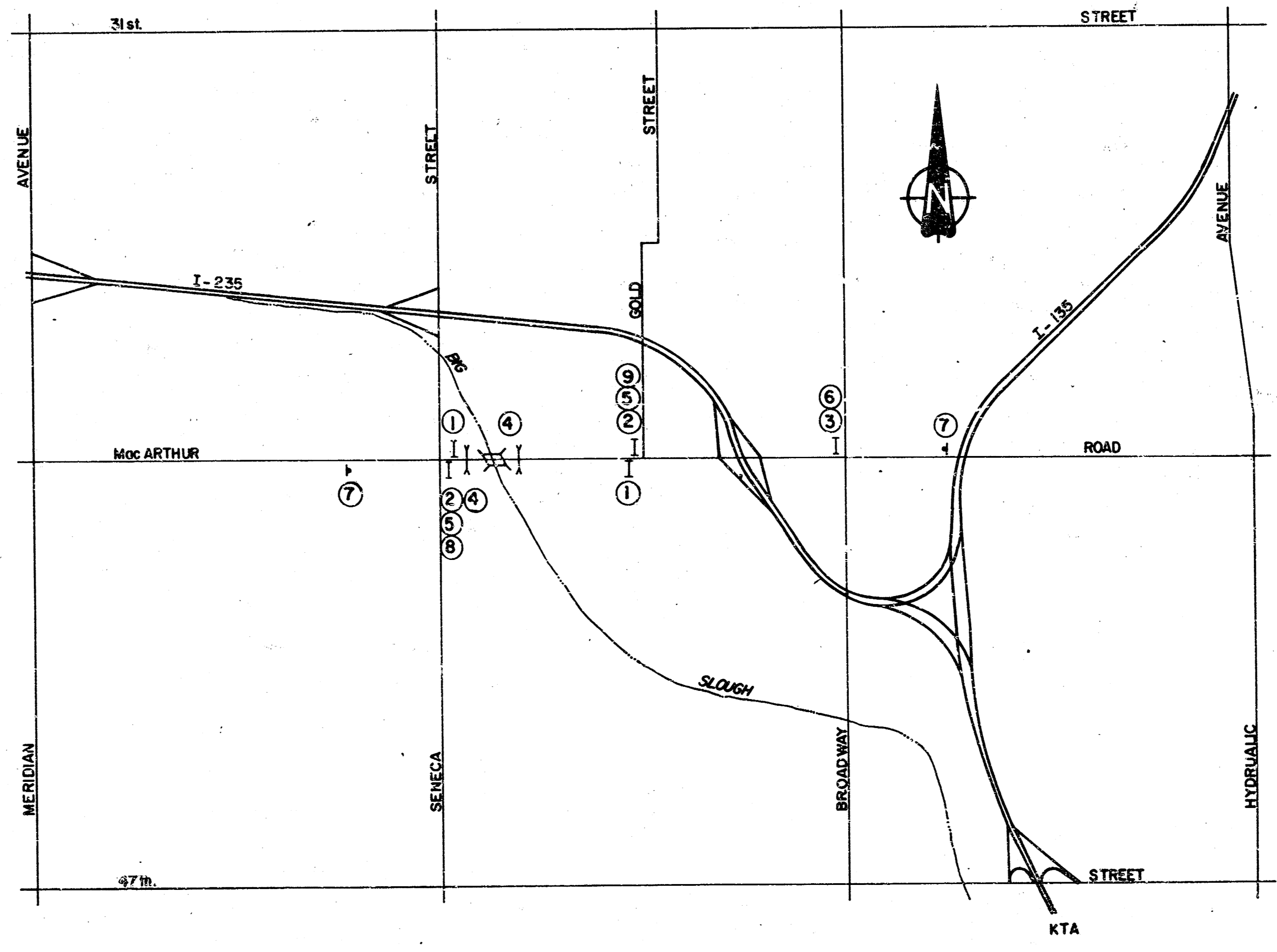


FIXED BARRICADE
Scale 1" = 2'

The entire area of orange and white shall be reflectorized with reflective sheeting or other reflective processes as approved by the Engineer.

GENERAL NOTES

- All Traffic Control Devices and installation or use thereof shall conform with MUTCD.
- Barricades are to be set at locations shown on the Traffic Control Plan sheet or as directed by the Engineer. Sufficient barricades shall be erected to adequately cover the roadway width, but may be staggered to provide access for local traffic. The barricades may be fixed by erection as shown, may be mounted on approved skids anchored by wire or sandbags or may be mounted in sand filled drums striped in conformance with MUTCD.
- The unit bid price for traffic control devices shall be full payment for providing, installing, moving, replacing, maintaining, removing and clearing all traffic control devices as required or as directed by the Engineer.
- Regardless of number of signs, any additional signs ordered by the Engineer will be furnished at the unit price bid for the appropriate size classification.
- Yellow Construction Warning Lights are ~~not~~ required on all barricades and signs.
- Uniformed flagger, when used, will be subsidiary to other bid items.
- The County shall, when responsible for certain traffic control devices, designate a county employee who will have the responsibility for signing and traffic control as noted on the Traffic Control Plan and shall be available 24 hours a day to repair, replace, remove, relocate, clean and maintain any traffic control devices required or as directed by the Engineer. The Engineer will be advised of the name, address and/or telephone number of the person given this responsibility. The county shall conduct periodic field inspections as required by the Engineer to see that the devices are in place and in satisfactory condition.
- All signs shall be mounted on 4"x4" wood posts, other than those attached to Type III Barricades.



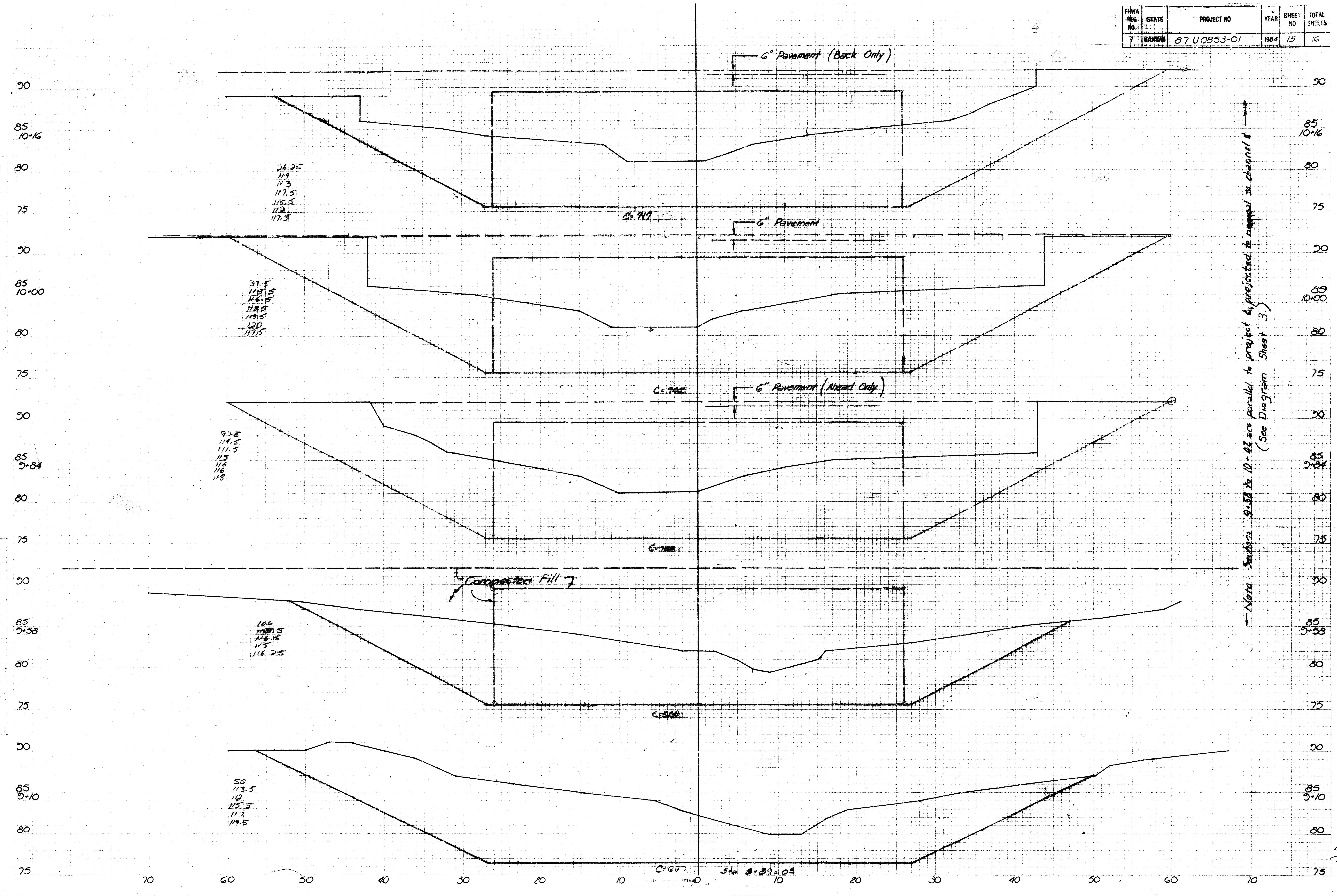
NO.	DATE	REVISIONS	BY	APP'D.
2	12-22-81	Ref. to Flashing Lights Revised	VLS	ADM
1	6-16-81	Reflective Process Note Added	VLS	ADM

KANSAS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL PLAN

ST'D. NO. 760.1S

SHEET NO. OF	SCALE AS SHOWN	APP'D. A. J. M. C.	12-7-81
DESIGNED ADM	DETAILED VLS		
DESIGN CK. ADM	DETAIL CK. ADM		

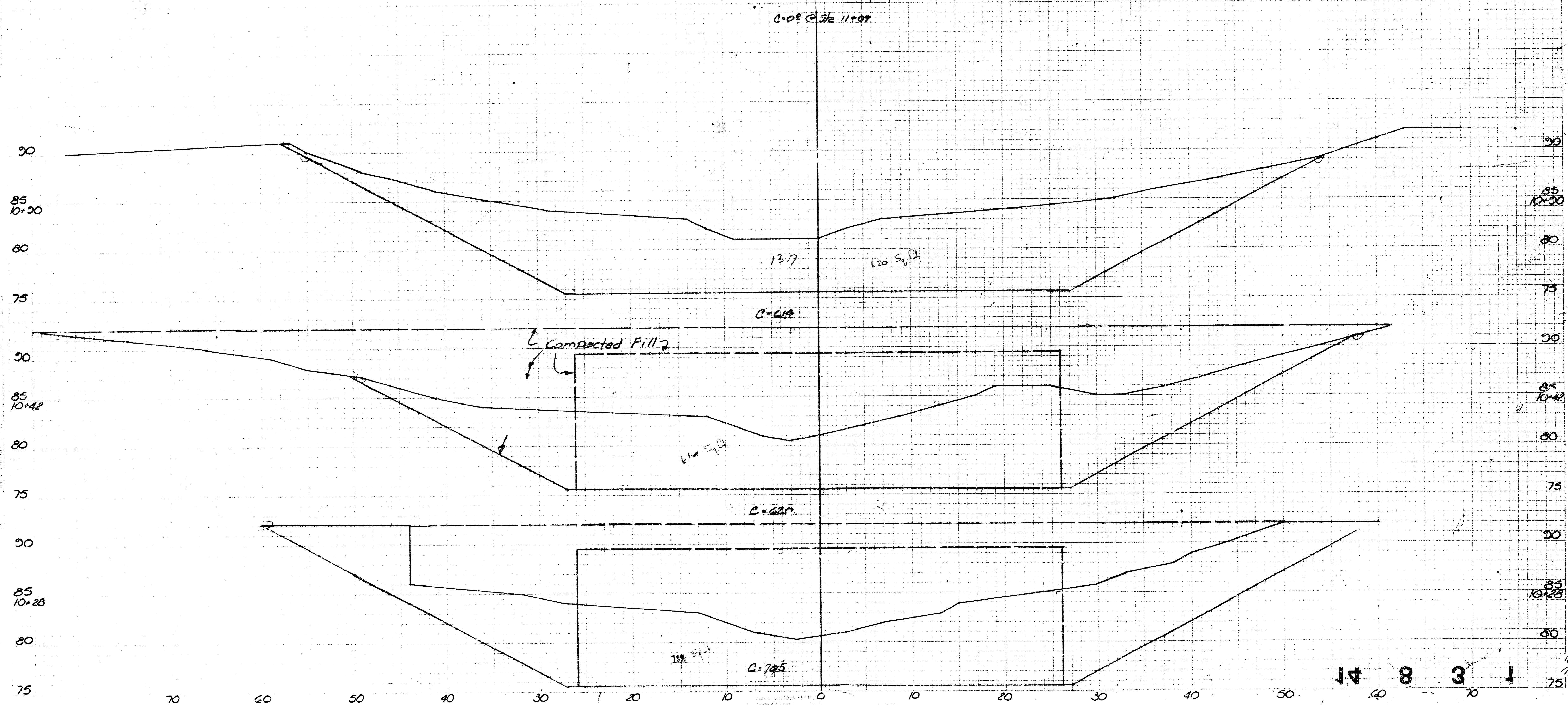
RWA NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 U0853-01	1984	15	16



Notes: Stations 9+58 to 10+82 are parallel to project & preadjusted to channel to channel of
 (See Diagram Sheet 3.)

1 2 3 4

FEDERAL ROAD DIST. NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	8710253-01	1954	16	16



14 8 3 1

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