

CONVENTIONAL SIGNS & ABBREVIATIONS

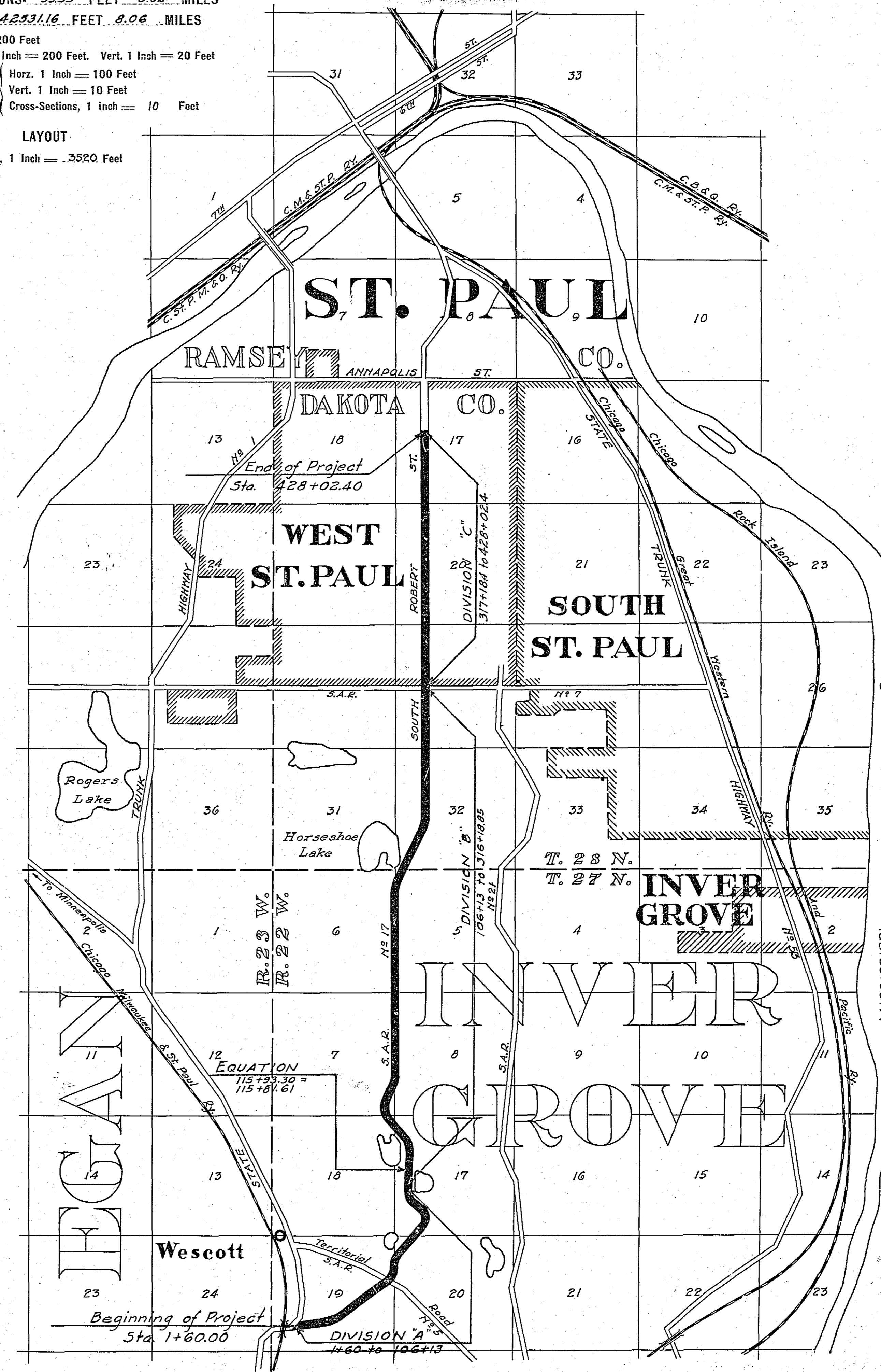
STATE LINE	-----	EXCAVATION	.....	E
COUNTY LINE	-----	EMBANKMENT	.....	F
TOWNSHIP LINE	-----	OVERHAUL	.....	H
SECTION LINE	-----	SURFACING	.....	S
CITY, VILLAGE, OR BOROUGH	-----	GUARD RAIL	.....	GR
FENCE LINE	-----	INTERSECTION ANGLE	.....	A
RIGHT-OF-WAY LINE	-----	RADIUS	.....	R
TRAVELLED WAY	-----	ELEVATION	.....	EL
RAILROADS	-----	VERTICAL CURVE	.....	VC
RETAINING WALL	-----	BENCH MARK	.....	B.M.
BASE OR SURVEY LINE	-----	SECTIONAL CONCRETE CULVERT	.....	P.C.
LEVEE	-----	CORRUGATED METAL CULVERT	.....	C.M.
GRAVEL PIT	.....	CULVERT HAUL	.....	P.L.H.
SAND PIT	.....	TON MILES	.....	T.M.
CLAY PIT	.....	PLACE	.....	P
ROCK QUARRY	.....	IN PLACE	.....	Imp.
CULVERTS	.....	REPLACE	.....	Rep.
PLAIN	.....	RIGHT	.....	R
With FACEWALLS	.....	LEFT	.....	L
With WINGWALLS	.....	HAND DITCHING	.....	H.D.
DROP INLET	.....	POINT OF CURVE	.....	P.C.
POWER POLE LINE	.....	POINT OF TANGENT	.....	P.T.
TELEPHONE OR TELEGRAPH LINE	.....	POINT OF INTERSECTION	.....	P.I.
MARSH	.....	SPECIAL EXCAVATION	.....	S.E.
HEDGE, BRUSH, OR TIMBER	.....	SPECIAL PLOWING	.....	S.P.
GROUND ELEVATION	.....	TELEPHONE POLE	.....	Tel.P.
GRADE ELEVATION	.....		

OFFICE OF COUNTY SURVEYOR
RAMSEY COUNTY

Plan and Profile of County Project No. 28-88

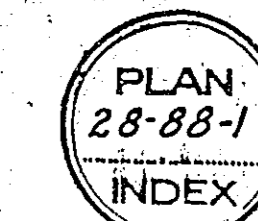
From A point 795' S. and 1650' W. of Cen. of Sec. 192227 To A point 1320' E. and 673.87' N. of W. & Cor. Sec. 17-28-22
Give proper reference to Sections, Township and Range

GROSS LENGTH 42630.71 FEET 8.08 MILES
LENGTH OF EXCEPTIONS 9955 FEET 0.02 MILES
NET LENGTH 42631.16 FEET 8.06 MILES
PLAN 1 Inch = 200 Feet
PROFILE, Horz. 1 Inch = 200 Feet. Vert. 1 Inch = 20 Feet
SCALES WORKING PLANS Horz. 1 Inch = 100 Feet
Vert. 1 Inch = 10 Feet
Cross-Sections, 1 inch = 10 Feet
LAYOUT SCALE 1 Inch = .3520 Feet



INDEX OF SHEETS

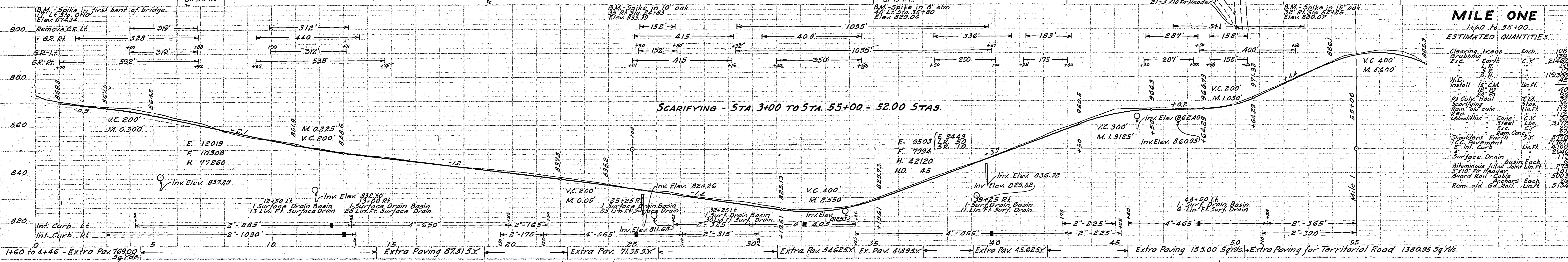
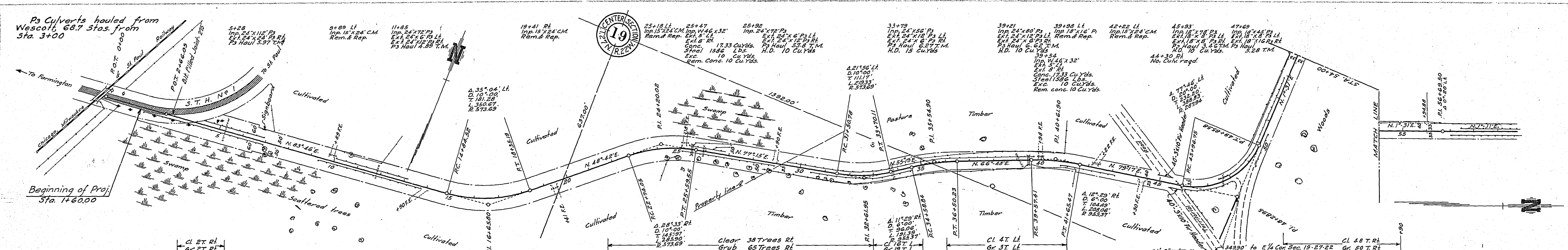
- Sheet No. 1. Title Sheet and Layout Map
- No. 2, 3, 4 Typical Cross-Sections and Statement
- No. 5 Plan and Profile, Sta. 1+60 to Sta. 106+13
- No. 6 " " " " 106+13 to " 213+14
- No. 7 " " " " 213+14 to " 316+18.85
- No. 8 " " " " 317+18.40 to " 428+02.10
- Nos. 9 to 54 incl. Cross Sections
- No. 55 Monolithic Culvert Details
- Nos. 56 to 58 incl. Intersection Details
- No. 59 Pavement Construction Details
- No. 60 Surface Drain Details



Office of Ramsey Co. Engineer
ST. PAUL, MINN.
Date Filed 11-28-27
File No. B

Date of Resolution for Preparation of Plans September 6 1927
Planned by *Paul J. Truett* ASSISTANT ENGINEER
Recommended for Approval *Wm. Mackintosh* CONSTRUCTION ENGINEER
Plans Approved and Recommended for Consideration *Paul J. Truett* COUNTY SURVEYOR
Approved by County Board *Wm. C. Hodgson* CHAIRMAN OF COUNTY BOARD

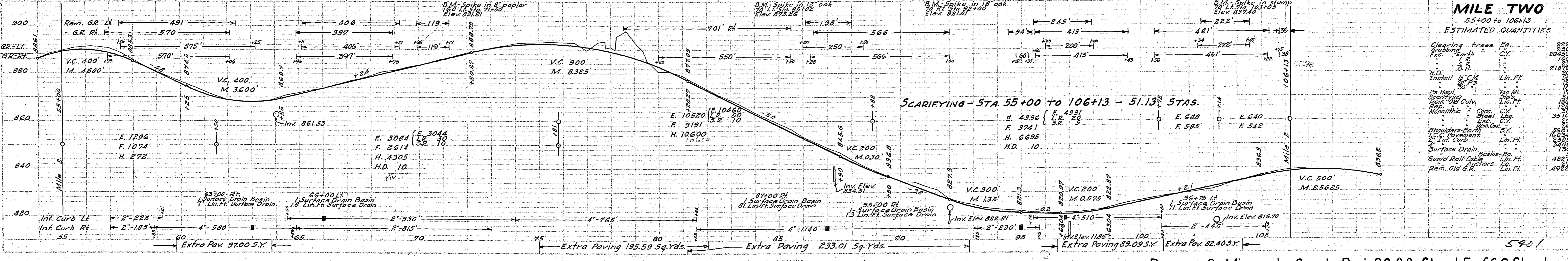
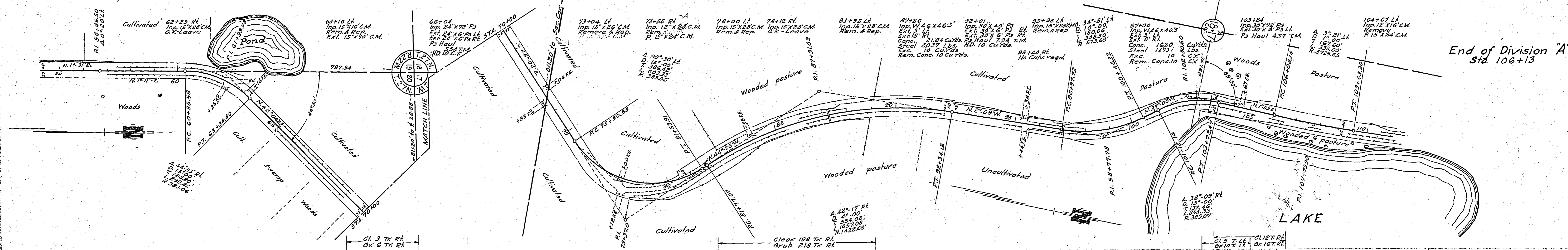
2 T.H. 52



MILE ONE
1460 to 55+00

ESTIMATED QUANTITIES

Clearing trees	Each	108
Grubbing	C.Y.	2140
Exc. earth	C.Y.	1193
Fill	C.Y.	40
H.D. Install	Lin. Ft.	40
Ps Haul	Lin. Ft.	38
Rem. old curb	Lin. Ft.	37
Repl. concrete	Lin. Ft.	37
Manholes	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1



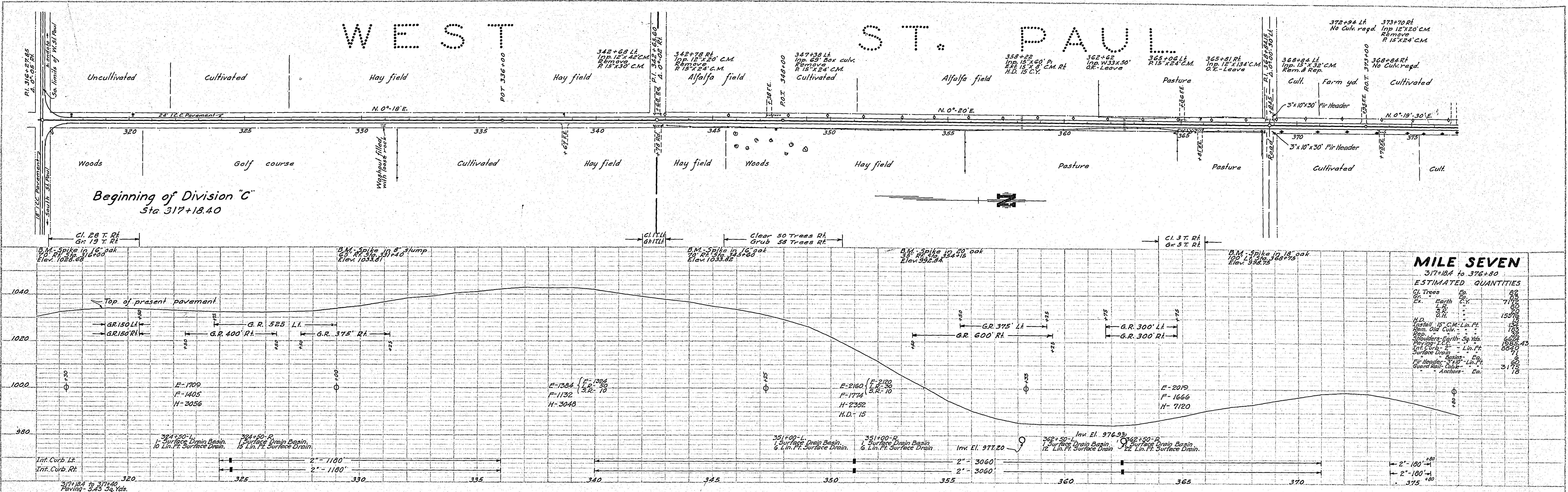
MILE TWO
55+00 to 106+13

ESTIMATED QUANTITIES

Clearing trees	Each	225
Grubbing	C.Y.	2048
Exc. earth	C.Y.	1200
Fill	C.Y.	218
H.D. Install	Lin. Ft.	20
Ps Haul	Lin. Ft.	17
Rem. old curb	Lin. Ft.	16
Repl. concrete	Lin. Ft.	16
Manholes	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1
Shoulders Earth	Each	1
Int. Curb	Each	1
Surface Drain	Each	1

PLAN	SUBMITTED	DATE
NOTED	BY	
REVISIONS		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

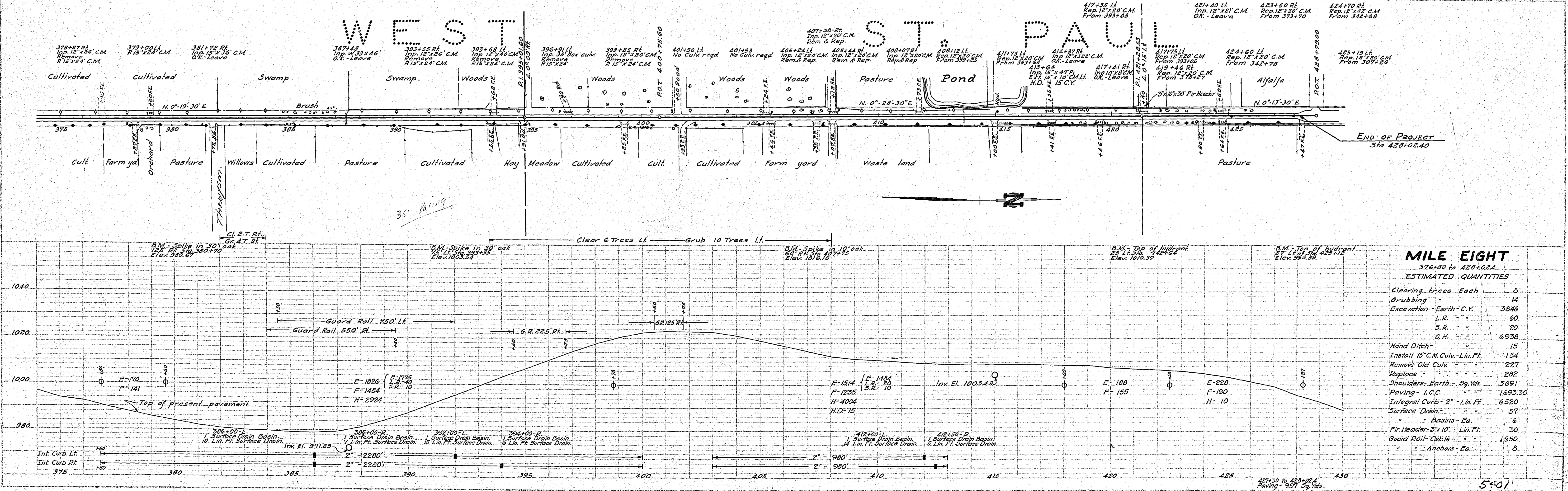
PROFILE	SUBMITTED	DATE
NOTED	BY	
REVISIONS		
1		
2		
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MILE SEVEN
317+00 to 376+00

ESTIMATED QUANTITIES

CL Trees	82
Grubbing	14
Excavation - Earth - C.Y.	3846
L.R.	60
S.R.	20
O.H.	6938
Hand Ditch	15
Install 15" C.M. Culv. - Lin. Ft.	154
Remove Old Culv.	227
Replace	282
Shoulders - Earth - Sq. Yds.	5691
Paving - I.C.C.	1693.30
Integral Curb - 2" - Lin. Ft.	6520
Surface Drain -	57
Basins - Ea.	6
Fir Header - 3" x 10" - Lin. Ft.	30
Guard Rail - Cable	1650
Anchors - Ea.	8



MILE EIGHT
376+00 to 428+02.4

ESTIMATED QUANTITIES

Clearing trees	Each	8
Grubbing		14
Excavation - Earth - C.Y.		3846
L.R.		60
S.R.		20
O.H.		6938
Hand Ditch		15
Install 15" C.M. Culv. - Lin. Ft.		154
Remove Old Culv.		227
Replace		282
Shoulders - Earth - Sq. Yds.		5691
Paving - I.C.C.		1693.30
Integral Curb - 2" - Lin. Ft.		6520
Surface Drain -		57
Basins - Ea.		6
Fir Header - 3" x 10" - Lin. Ft.		30
Guard Rail - Cable		1650
Anchors - Ea.		8

PLATE 2 - PLAN-PROFILE OF P.A.P. U. STANDARD
REINFORCED CONCRETE, NEW YORK

TOTAL QUANTITIES
STA. 1+60 TO 4+46

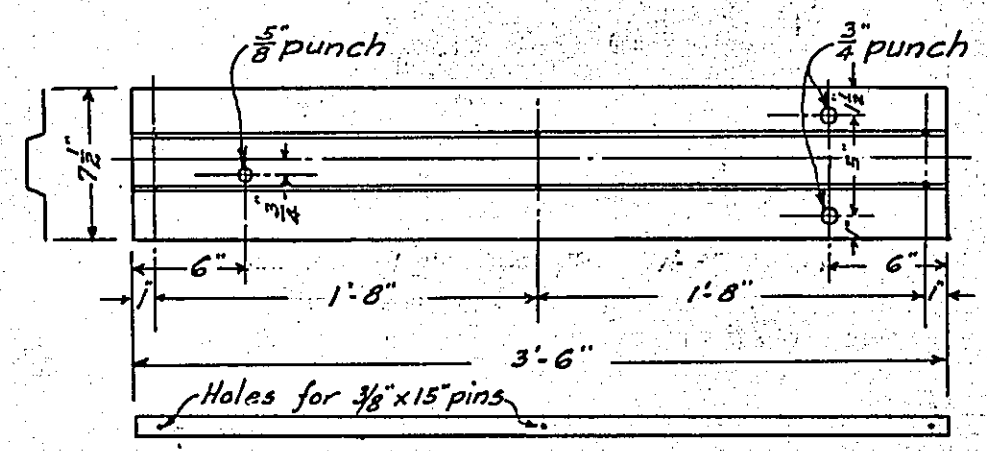
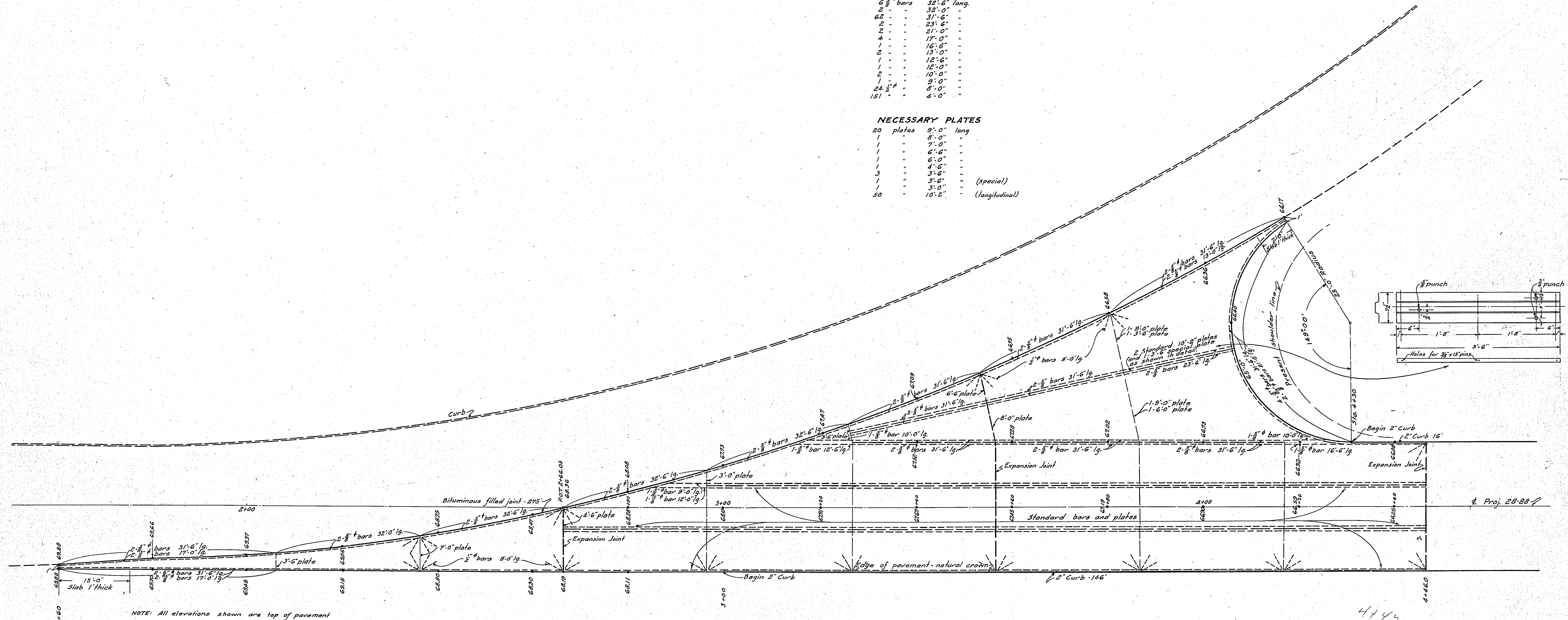
1 C.C. Pavement	769.00 Sq. Yds.
2" Curb	162.00 Lin. Ft.
Bituminous filled joint 275	

NECESSARY REINFORCING

6 $\frac{3}{8}$ " bars	32'-6" long.
2 "	32'-0" "
62 "	31'-6" "
2 "	23'-6" "
2 "	21'-0" "
4 "	17'-0" "
1 "	16'-6" "
1 "	13'-0" "
1 "	12'-6" "
2 "	10'-0" "
1 "	9'-0" "
24 $\frac{3}{8}$ " bars	8'-0" "
151 "	4'-0" "

NECESSARY PLATES

20 plates	9'-0" long
1 "	8'-0" "
1 "	7'-0" "
1 "	6'-6" "
1 "	6'-0" "
1 "	4'-6" "
3 "	3'-6" "
1 "	3'-6" (special)
50 "	10'-2" (longitudinal)

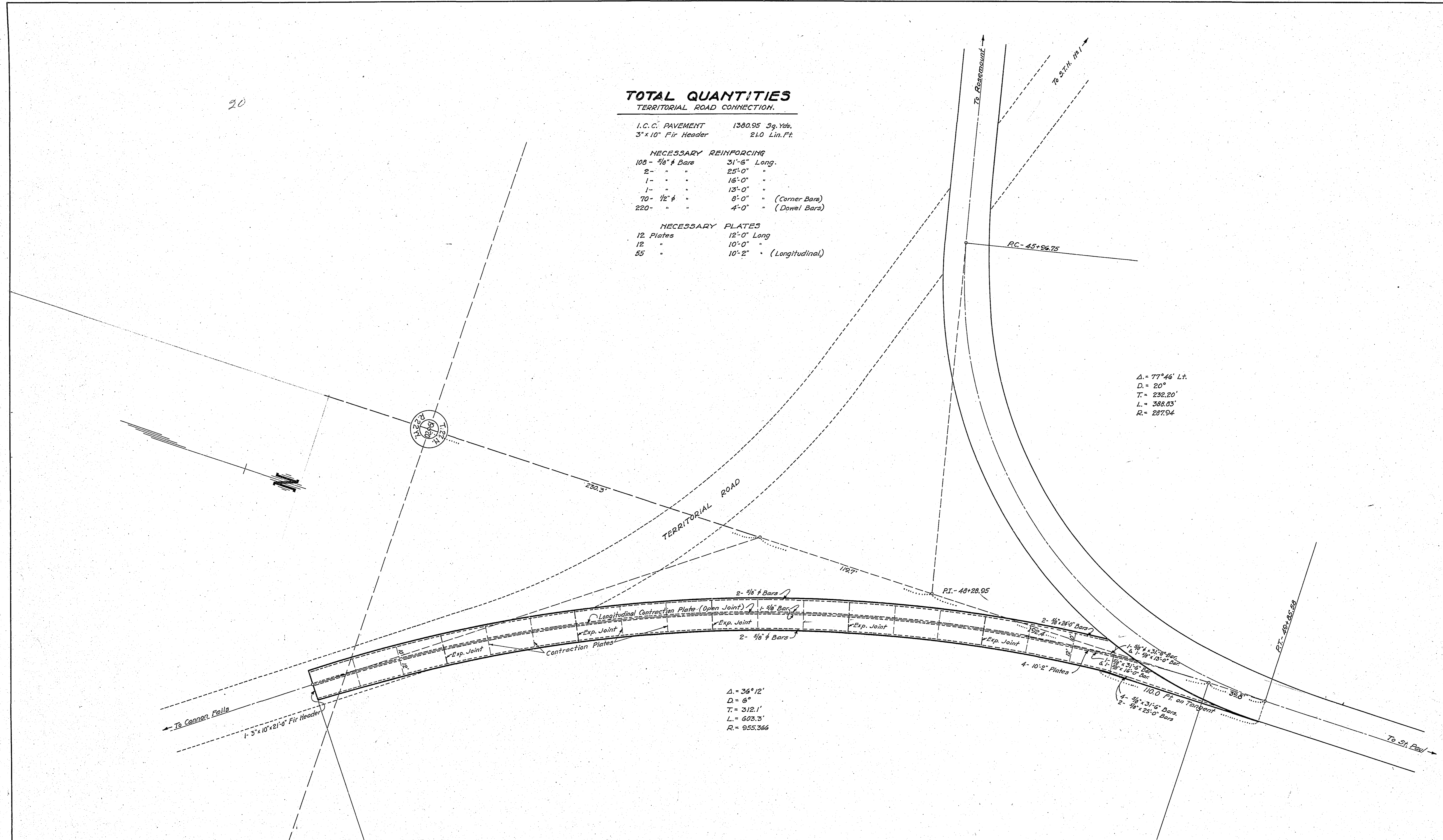


DETAIL OF PAVEMENT INTERSECTION
AT
STATE TRUNK HIGHWAY NO. 1
AND
SOUTH ROBERT ST. CUTOFF
Scale 1"=10'-0"

20

TOTAL QUANTITIES
TERRITORIAL ROAD CONNECTION.

I.C.C. PAVEMENT	1380.95	Sq. Yds.
3" x 10" Fir Header	21.0	Lin. Ft.
NECESSARY REINFORCING		
108 - 5/8" ϕ Bars	31'-6"	Long.
2 - " "	25'-0"	"
1 - " "	16'-0"	"
1 - " "	13'-0"	"
70 - 1/2" ϕ "	8'-0"	(Corner Bars)
220 - " "	4'-0"	(Dowel Bars)
NECESSARY PLATES		
12 Plates	12'-0"	Long
12 " "	10'-0"	"
55 " "	10'-2"	(Longitudinal)



DETAIL OF PAVEMENT INTERSECTION AT SO. ROBERT ST. CUT-OFF AND TERRITORIAL ROAD

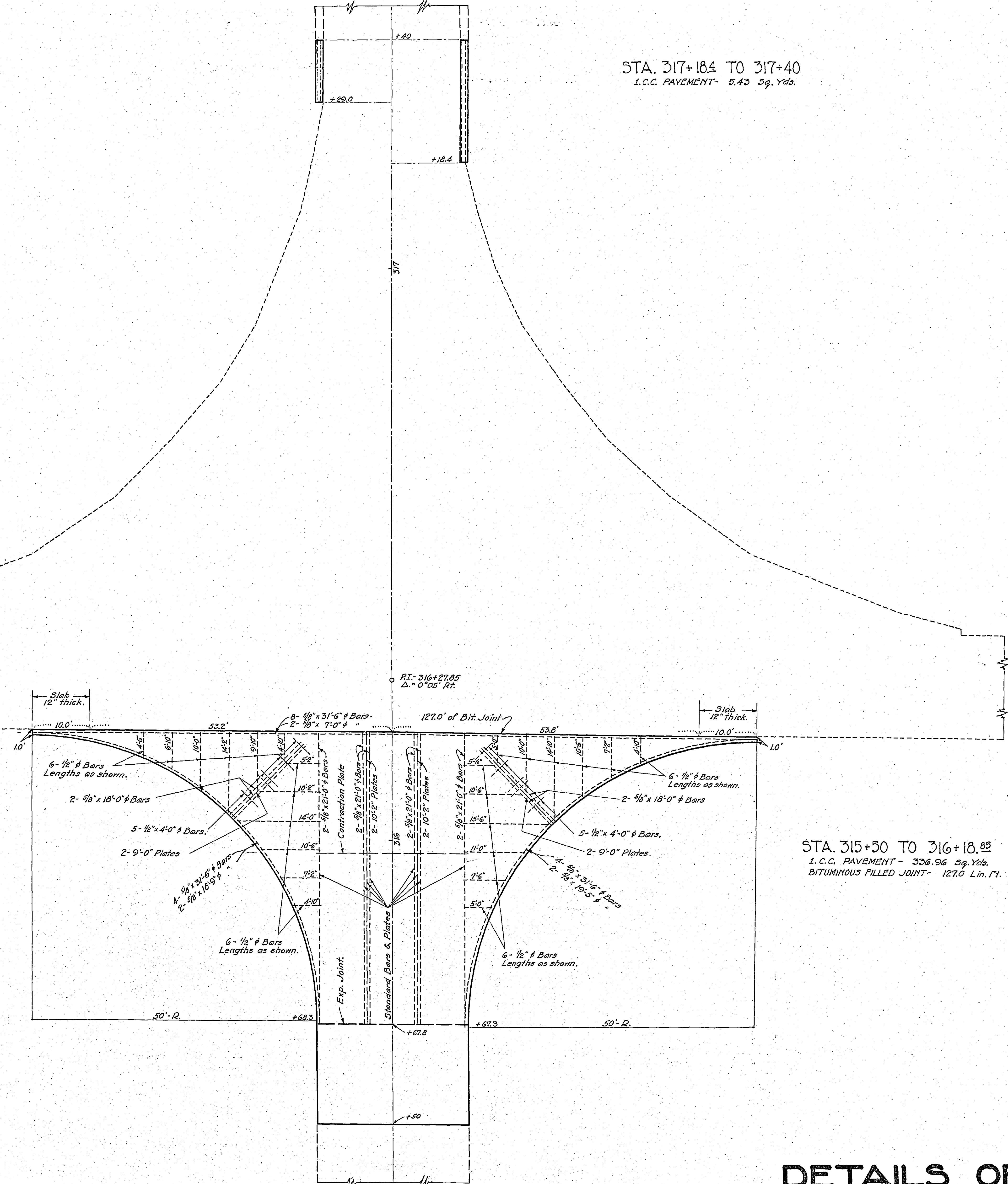
SCALE - 1 IN. = 30 FT.

5401

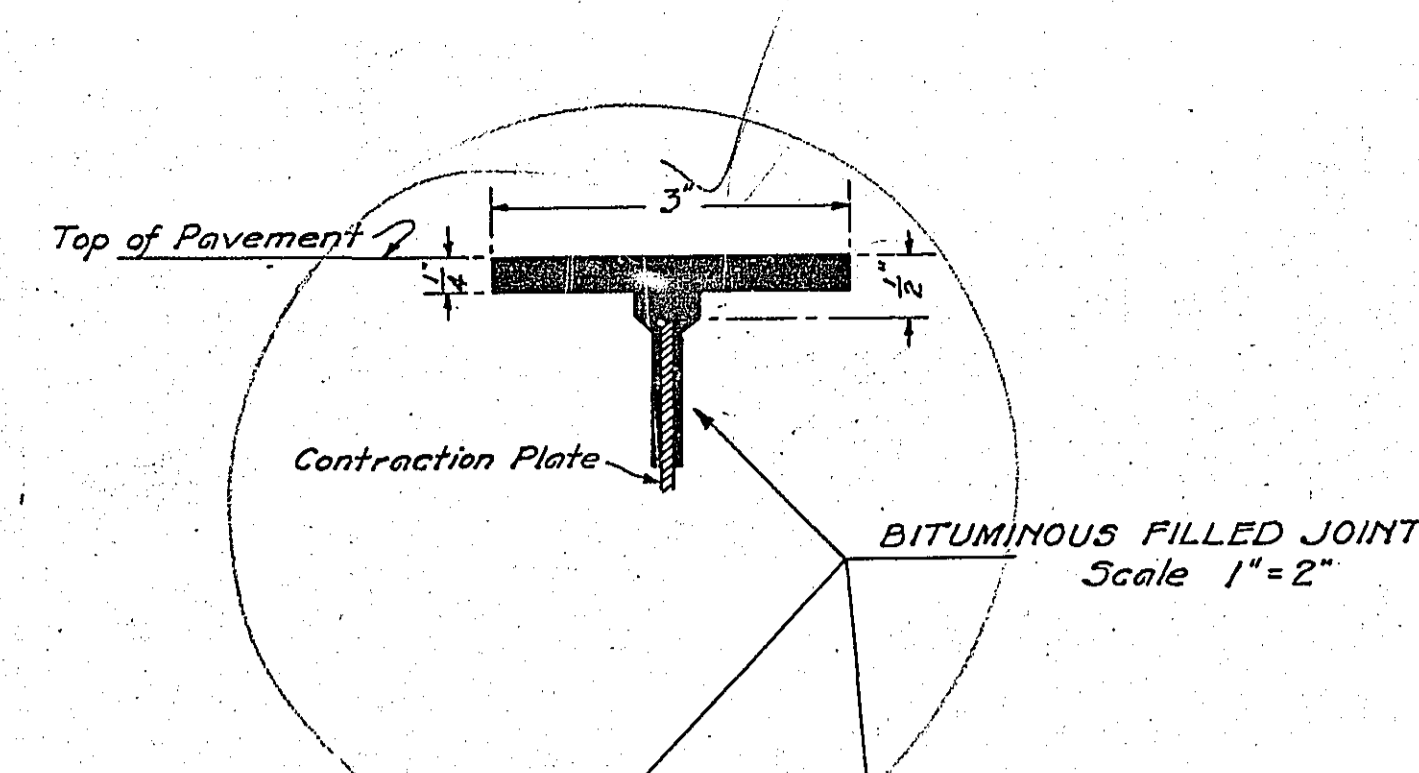
STA. 317+18.4 TO 317+40
 I.C.C. PAVEMENT - 5.43 Sq. Yds.

STA. 427+30 TO 428+02.4
 I.C.C. PAVEMENT - 997 Sq. Yds.

STA. 315+50 TO 316+18.85
 I.C.C. PAVEMENT - 336.96 Sq. Yds.
 BITUMINOUS FILLED JOINT - 127.0 Lin. Ft.

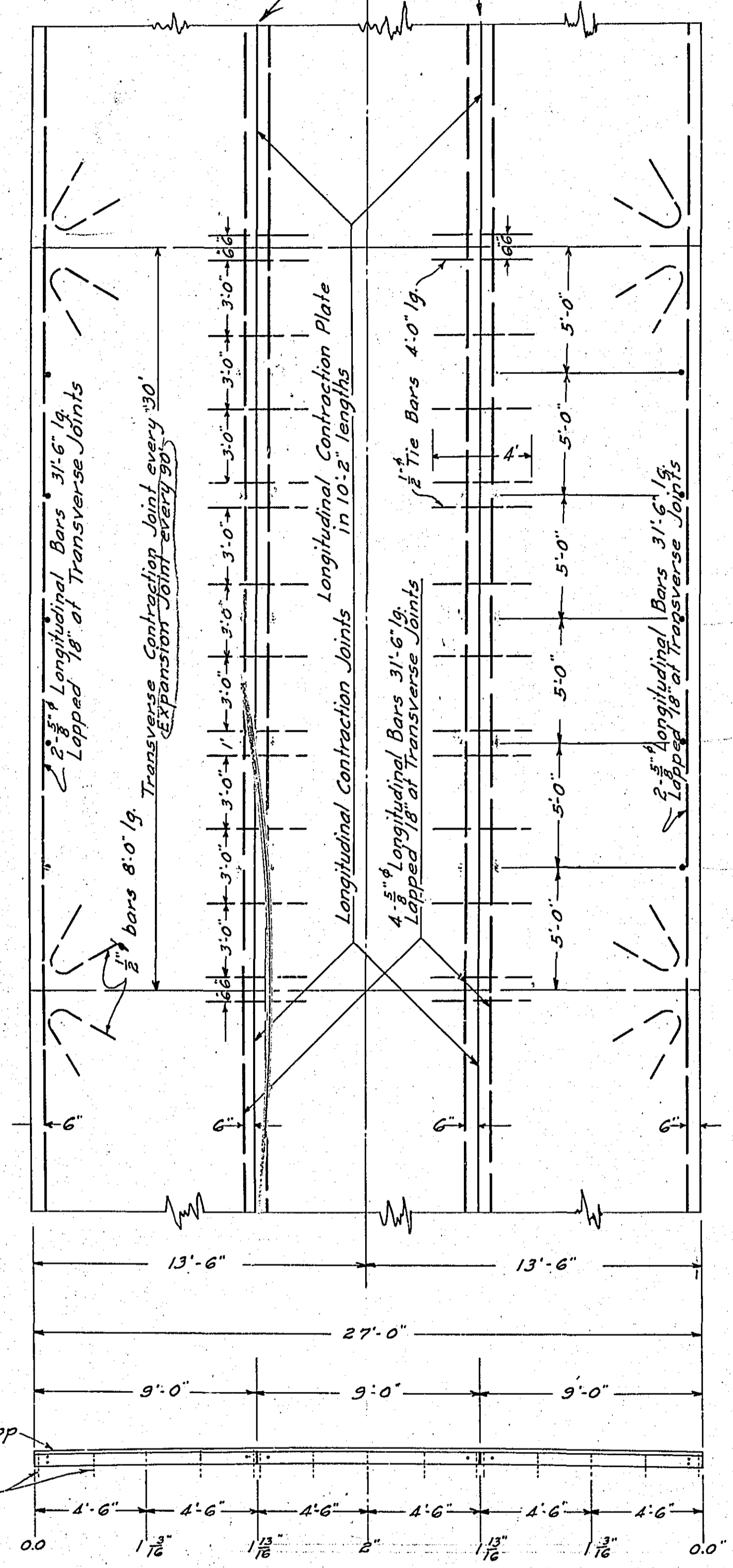


DETAILS OF PAVEMENT INTERSECTIONS 540

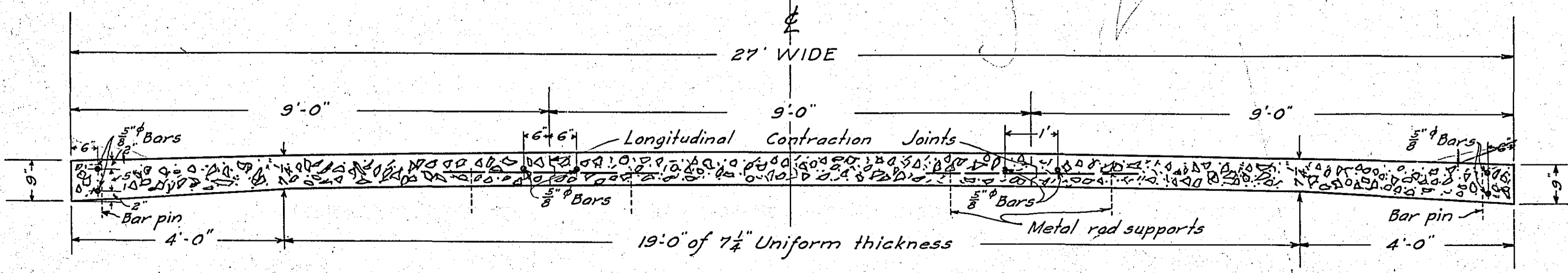
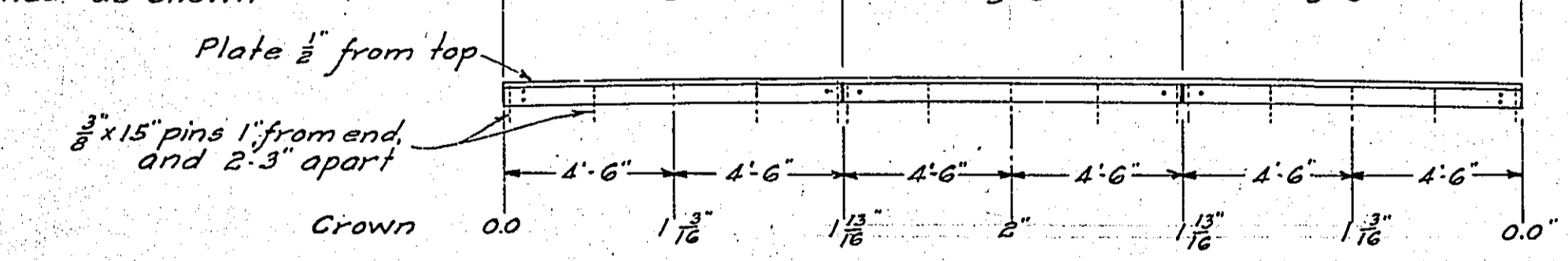


PAVEMENT REINFORCING

Scale 1"=5"

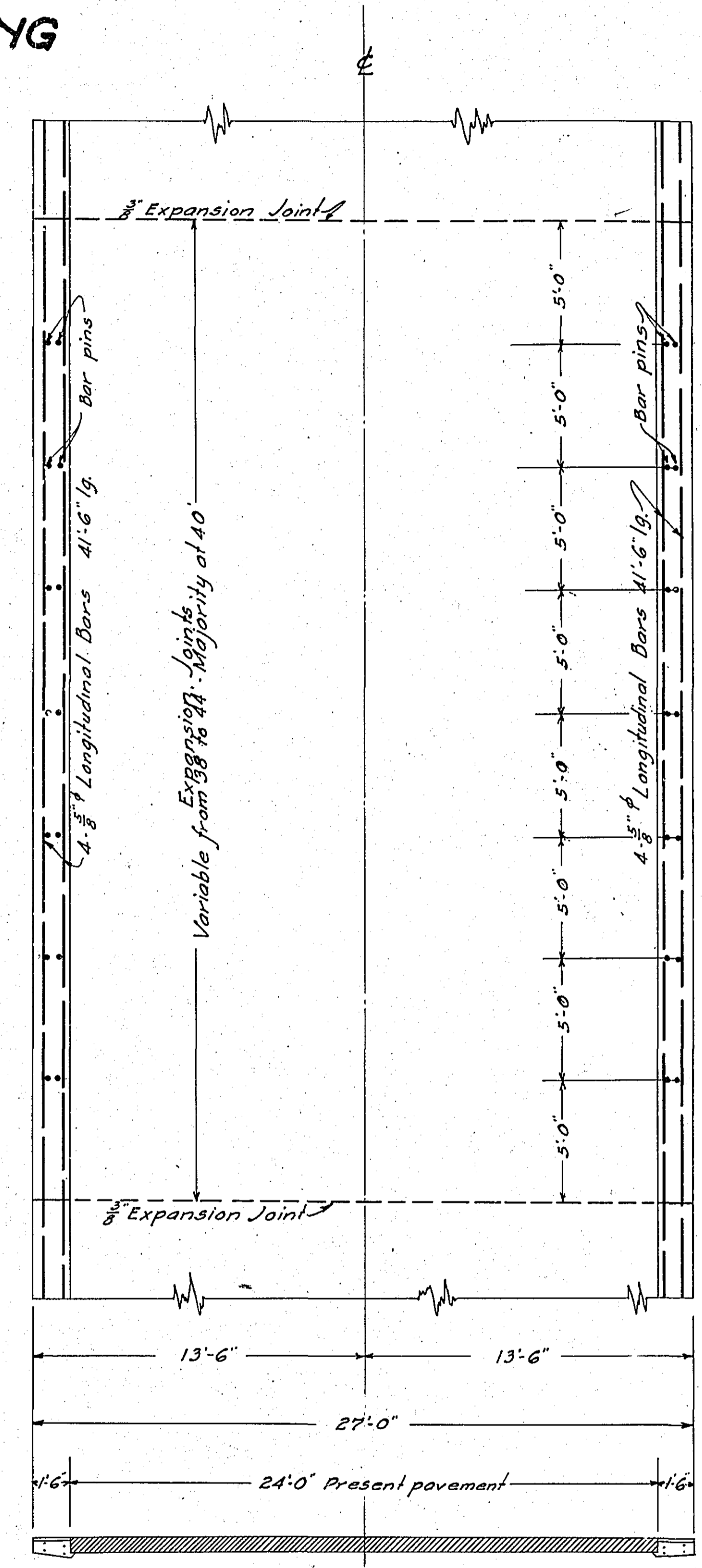


Pavement surface to be crowned as shown



ONE COURSE CONCRETE PAVEMENT

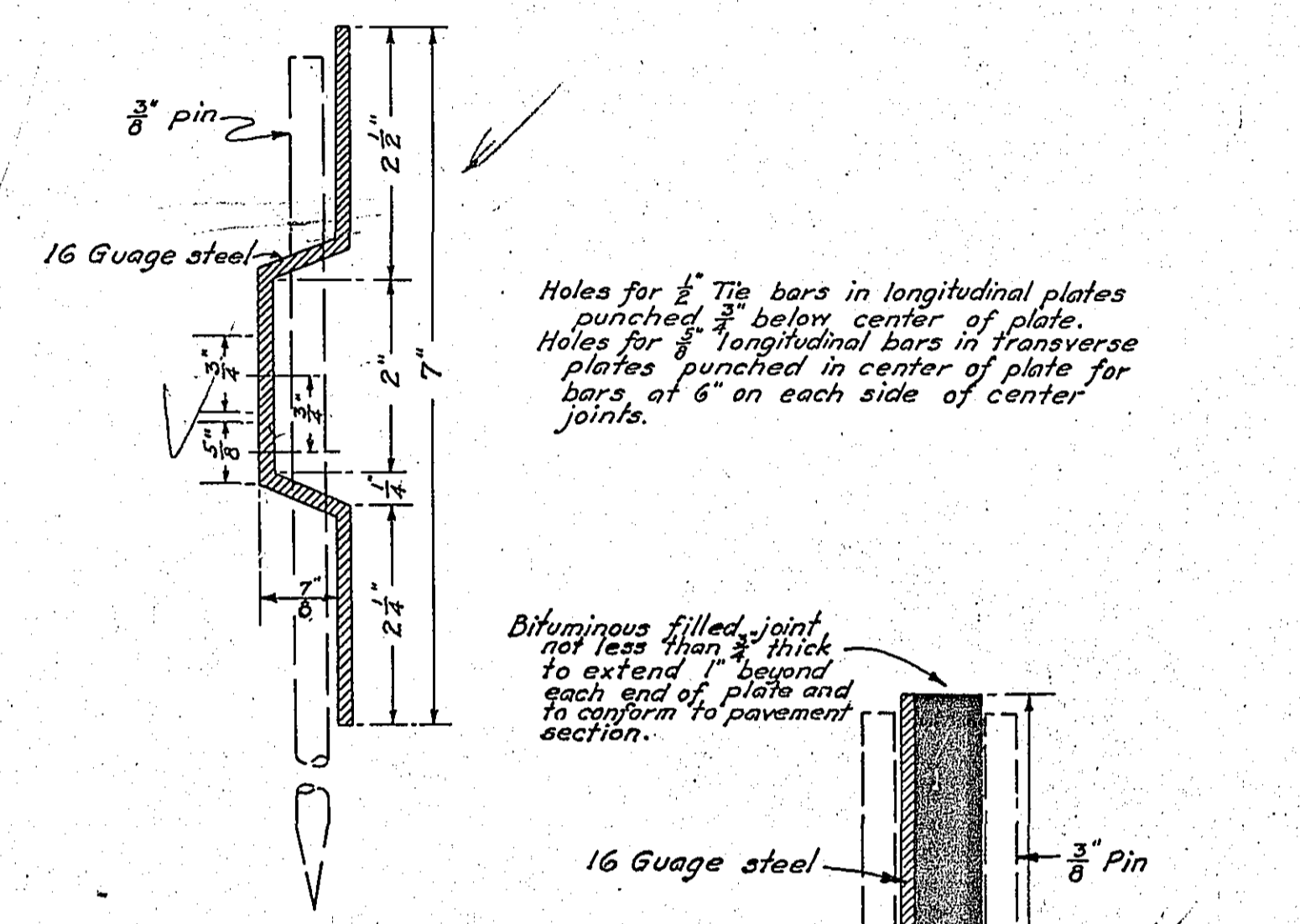
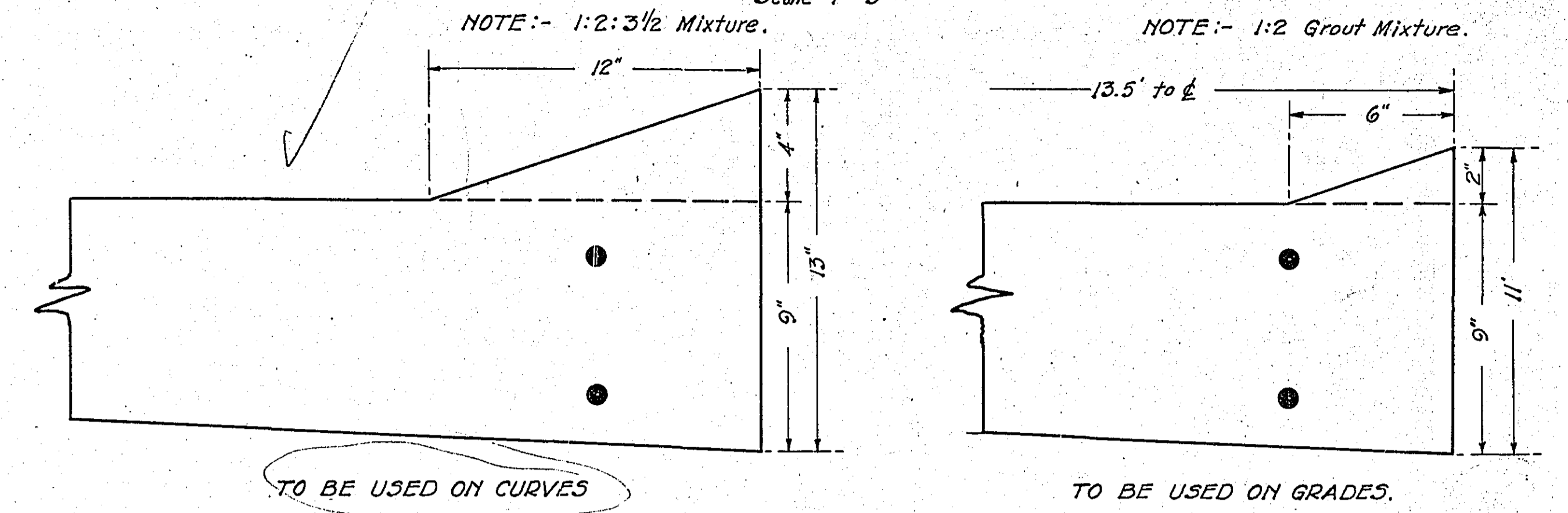
Scale 1"=2"



NOTE: All reinforcing steel, and placing of same shall be included in the bid price per square yard of pavement.

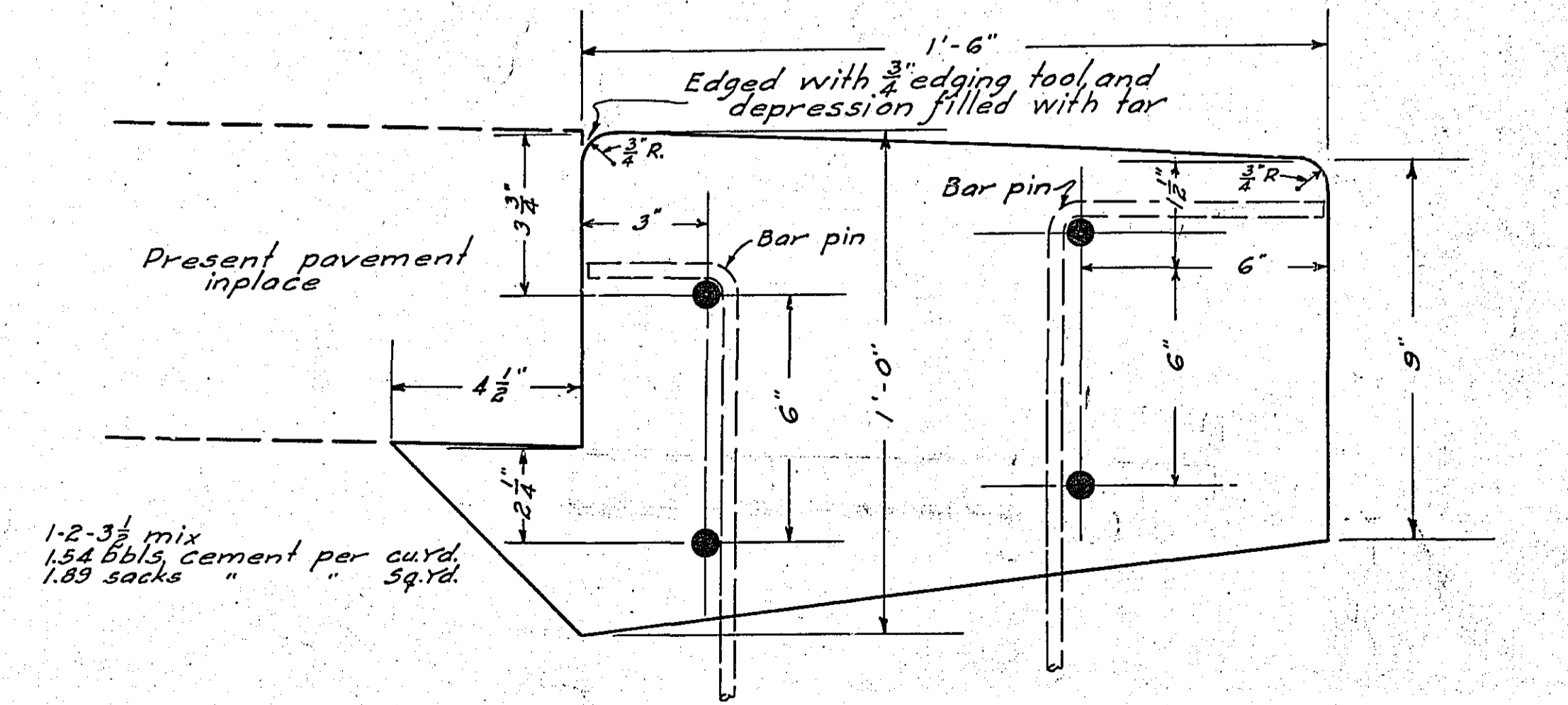
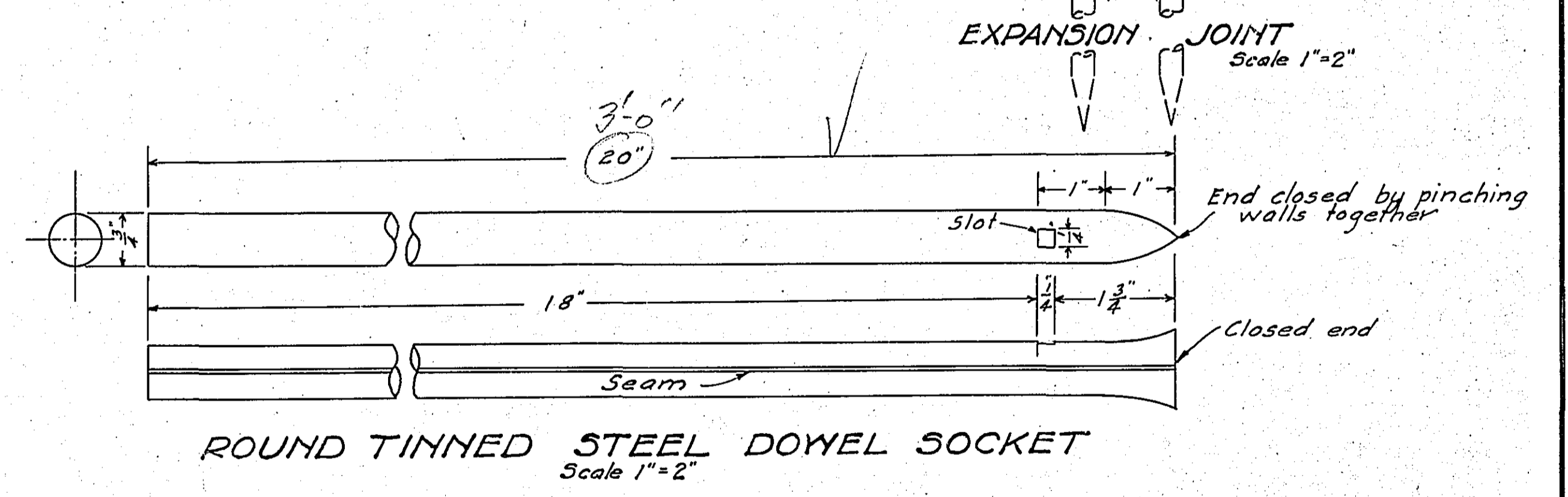
CURB SECTIONS

Scale 1"=5"



NOTE: Where necessary bars shall be cut, or spliced so as to meet joints in present pavement. Bars to be lapped 18" at joints, and 24" at splices.

NOTE: Only 3" pre-moulded elastite joint to conform to widened section required of all joints. Round lined steel dowel sockets to be used on bars at all joints.



ONE COURSE CONCRETE PAVEMENT

Scale 3"=1"

PAVEMENT CONSTRUCTION DETAILS