

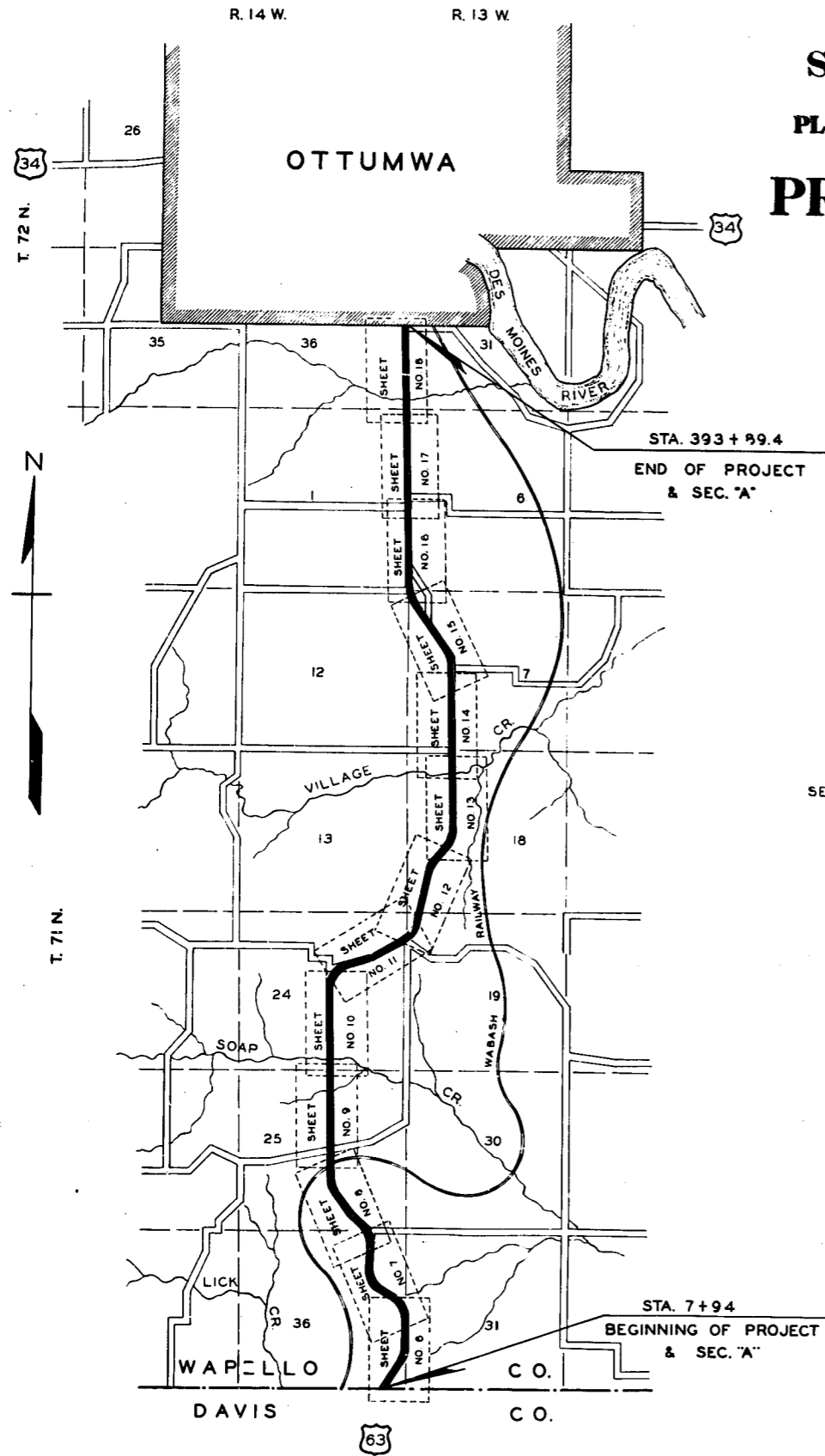
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	42		1	59

1929 PAVING

18 Sheets

STATE OF IOWA
STATE HIGHWAY COMMISSION
 PLAN AND PROFILE OF PROPOSED IMPROVEMENT
 ON THE
PRIMARY ROAD SYSTEM
 FEDERAL AID PROJECT NO. 42
 SECTION A - 1929 PAVING
WAPELLO COUNTY
U.S. ROAD NO. 63 FROM THE DAVIS CO. LINE
NORTH TO OTTUMWA

SCALES: PLAN 1 INCH = 100 FT.
 PROFILE HOR. 1 INCH = 100 FT., VERT. 1 INCH = 10 FT.



STA. 393 + 89.4
 END OF PROJECT
 & SEC. "A"

STA. 7 + 94
 BEGINNING OF PROJECT
 & SEC. "A"

INDEX OF SHEETS

SHEET NO.	TITLE PAGE
1	TITLE PAGE
2	ESTIMATE OF QUANTITIES AND TABULATIONS
3	TYPICAL CROSS SECTIONS AND DETAILS OF IMPROVEMENT
4	DETAILS OF STANDARD PAVING FLUMES
5	DETAILS OF STANDARD BRIDGE APPROACH SECTIONS
6	PLAN AND PROFILE STA. 7+94 TO STA. 38+00
7	" " " " 34+00 " " 66+00
8	" " " " 64+00 " " 96+00
9	" " " " 94+00 " " 126+00
10	" " " " 124+00 " " 156+00
11	" " " " 154+00 " " 186+00
12	" " " " 184+00 " " 216+00
13	" " " " 214+00 " " 246+00
14	" " " " 244+00 " " 276+00
15	" " " " 274+00 " " 306+00
16	" " " " 304+00 " " 336+00
17	" " " " 334+00 " " 366+00
18	" " " " 364+00 " " 393+89.4
19	TO 59 INCLUSIVE, CROSS SECTIONS.

MILEAGE SUMMARY

SECTION "A"

STA. 7+94.0 TO STA. 393+89.4	38,595.4 FT.
EQUATIONS	
STA. 39+53.5 = STA. 39+99.8 SHORTENS LINE	46.3 "
" 55+30.1 = " 55+79.8 " "	49.7 "
" 79+00.7 = " 79+07.7 " "	7.0 "
" 93+13.7 = " 93+17.2 " "	3.5 "
" 190+10.3 = " 189+93.7 LENGTHENS LINE	16.6 "
" 213+05.6 = " 213+09.7 SHORTENS LINE	4.1 "
" 328+95.1 = " 329+12.7 " "	17.6 "
NET LENGTH SEC. "A"	38,483.8 " = 7.289 MILES

CONVENTIONAL SIGNS

CITY LIMITS	-----
STATE OR COUNTY LINES	-----
SECTION LINES	-----
FENCE LINES	-----
RIGHT OF WAY LINES	-----
GUARD RAIL	-----
TRAVELED WAY	-----
BASE OR SURVEY LINE	-----
RAILROADS	-----
PRESENT TILE DRAINS	-----
PROPOSED TILE DRAINS	-----
CULVERTS	-----
TELEPHONE, TELEGRAPH OR TRANSMISSION LINES	-----
PRIMARY ROAD NUMBERS	-----
U. S. ROAD NUMBERS	-----

LAYOUT
 SCALE: 2 INCHES = 1 MILE

APPROVED _____ DATE _____
 CHIEF ENGINEER - IOWA HIGHWAY COMMISSION

FED. ROAD DIST. NO.	STATE	FED. AID FUNDING	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	IOWA	42		2	50

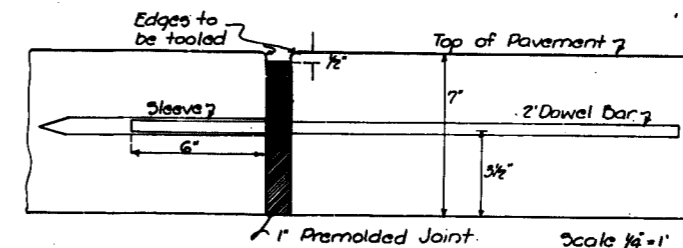
1929 PAVING

TABULATION OF FLUMES

Station	Type	Side	Discharge Type	Conc. Slope Drain		Metal Slope Drain		Flume Barrel
				Lt.	Rt.	Lt.	Rt.	
8+25	A	R	1		55			
11+50	A	L	1	3.5				
17+25	A	L	1	4.0				
31+50	D	L	1	4.0				
41+00	D	R	1		60	150		
56+25	A	R	1		50			
65+10	A	L	1			150		
77+25	D	R	2		80			
77+25	A	L	1					
85+75	A	R	1		80	250		
93+00	A	R	1		3.5			
96+25	A	R	2		20	25		
105+00	A	L	2	90	3.0			
111+30	A	L	2		3	200		
114+90	A	L	2	110				
122+50	A	L	2			140		
127+00	A	R	1	115	3.85			
129+50	A	R	1			200	#160	
141+50	A	R	2	80	5			
148+75	A	R	1	145	5			
154+00	D	R	1		110			12
167+75	D	R	1	11	5.40			
180+70	A	L	2	100				
213+00	A	R	1		10.70			
232+00	A	R	1		8.11.0			
239+25	A	R	1			160	#20230	
240+00	A	R	1	100	6.10.0			
245+50	A	R	1	100	6.9.0			
256+50	A	R	1	50	6.60			
263+00	A	R	1	30	5			
280+10	A	L	1	120				
284+25	A	R	1		5.55			
288+25	A	L	2	85				
290+75	A	L	1			150		
302+25	A	R	2		3.30			
315+00	A	R	1	115	8.11.5			
321+00	A	R	1	80	7.55			
330+00	A	R	1		6.0			
339+50	A	R	1	125	4.95			
115+20	A	R						
122+75	A	R						310
182+00	A	R						180
Total	45 52 Type A 9 Type B			296 268 conc.		292 357 Metal		

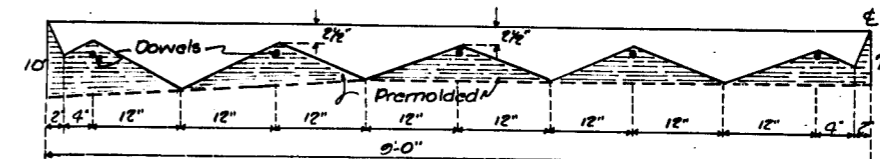
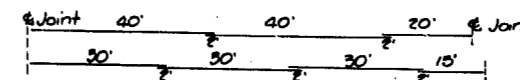
*Grade of paving is to be depressed 1/8" ft at all "B" flumes and type "A" flumes where designated and the depression worked out in 50ft. each way from the low point.

DETAILS OF EXPANSION JOINTS

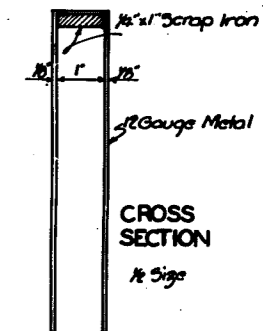


NOTE:-

EXPANSION JOINTS TO BE PLACED 96' 4" OR 99' 4" CENTER TO CENTER JOINT SPACING PERMITS USE OF 30 OR 40 STEEL AS SHOWN BELOW.



SUGGESTED DESIGN FOR INSTALLATION SHIELD Scale: 1"=1'



CROSS SECTION

DATA FOR SUPERELEVATED CURVES

P.I. Station	Δ	D	Superelevation in Inches per Ft. of Width	S
6+28.1	82° 30'	8°	3/8	125
19+85.5	51° 47'	6°	3/8	125
35+05.6	39° 52'	6°	3/8	125
50+62.0	63° 38'	6°	3/8	125
68+87.2	66° 38'	10°	1"	125
76+25.0	34° 08'	6°	3/8	125
90+88.6	27° 55'	6°	3/8	125
157+25.4	70° 19'	10°	1"	125
184+80.1	56° 24'	6°	3/8	125
210+75.5	35° 12'	7°	3/8	125
221+20.7	46° 35'	10°	1"	125
282+20.4	55° 10'	8°	1"	125
305+35.0	55° 30'	3°	3/8	80

ITEMS AT BRIDGES

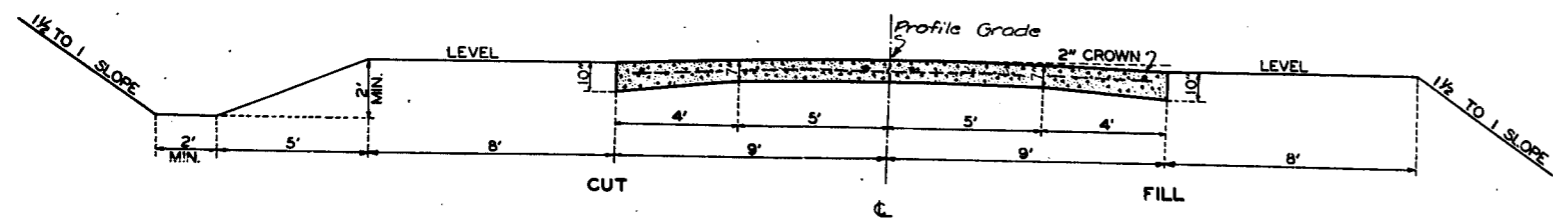
Station	Size	Type	Series	Resurfacing of Dr. floor by	Expansion plate to be furnished by	Expansion plate to be set by
94+22	156.7x20'	Wood Bridge	-	wood floor	-	-
128+51.5	80x20'	Pony truss	x	Dr. contractor	Old plate	Rd. contractor
246+	80x20'	Pony truss	x	Rd. contractor	Rd. Contr.	Rd. contractor
355+45	16x21'	Conc. slab	-	Dr. contractor	-	-
367+79.5	20x21'	Conc. slab	-	Rd. contractor	-	-

ESTIMATE OF QUANTITIES

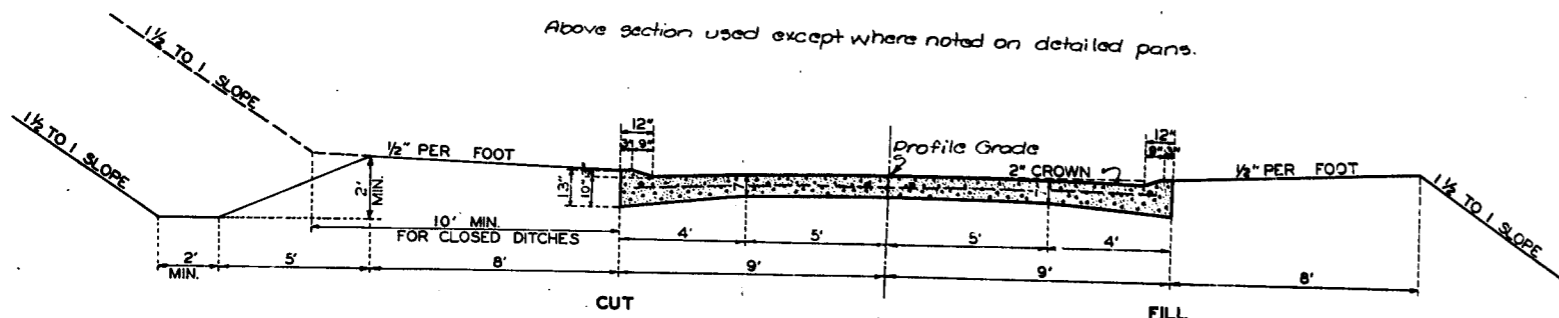
EXCAVATION Cu.Yds				Paving Sq.Yds.	FLUMES		CONCRETE FOOTING Cu.Yds	Drive & Cross Rd. culv Pipes Lin. Ft. 24"
Earth		Rock			Type A	Type D		
From Roadway and Borrow	From Channel Change	Loose	Solid					
127,356	1900	100	100	76,561.1	52	0	20	300

Total earth excavation = 129,256 Cu.Yds.
 *See sheet No. 14. 1900 Cu.Yds to be used in roadway.
 *Above quantities shown for the purpose of receiving comparative bids.
 *Includes 102.5 Sq.Yds for widening at bridges, etc.

TYPICAL CROSS SECTIONS

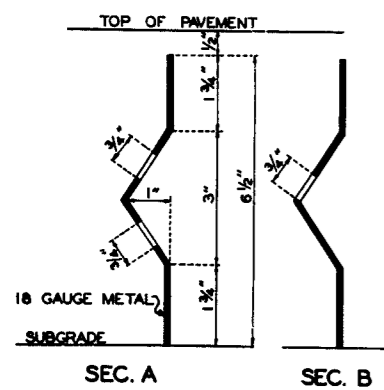


Above section used except where noted on detailed plans.

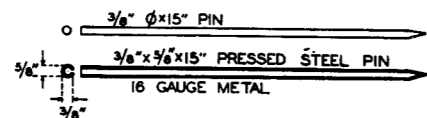
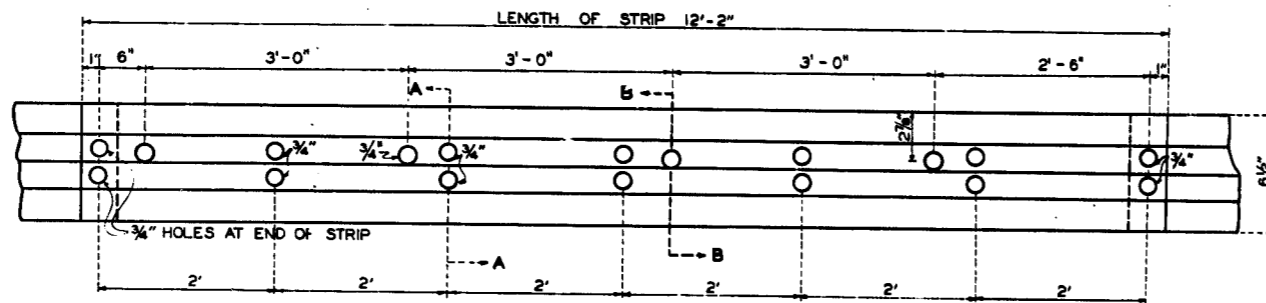


Above section used where noted on detailed plans.
Curb section used where noted on detailed plans.
Closed ditches used where noted on detailed plans.

DETAILS FOR CENTER PARTING STRIP

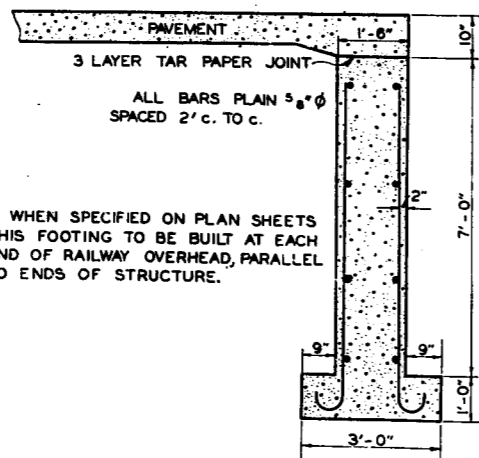


PARTING STRIPS OF CROSS-SECTION OTHER THAN SHOWN WILL BE CONSIDERED AS ALTERNATES.



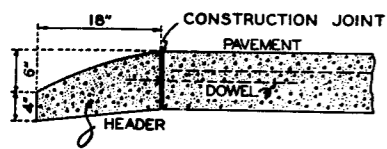
PARTING STRIPS TO BE 18 GAUGE U.S.S.G. SHEET METAL. HOLES TO BE PUNCHED FULL SIZE AS SHOWN. IN ADDITION TO THE PINS SOME MECHANICAL DEVICE SHALL BE USED TO ADEQUATELY SUPPORT THE STRIP AGAINST LATERAL MOVEMENT WHILE CONCRETE IS BEING PLACED. PROVISION SHALL BE MADE FOR HOLDING IN PLACE THE REINFORCING STEEL. EITHER STYLE OF PIN SHOWN WILL BE ACCEPTABLE.

DETAILS OF CONCRETE FOOTING

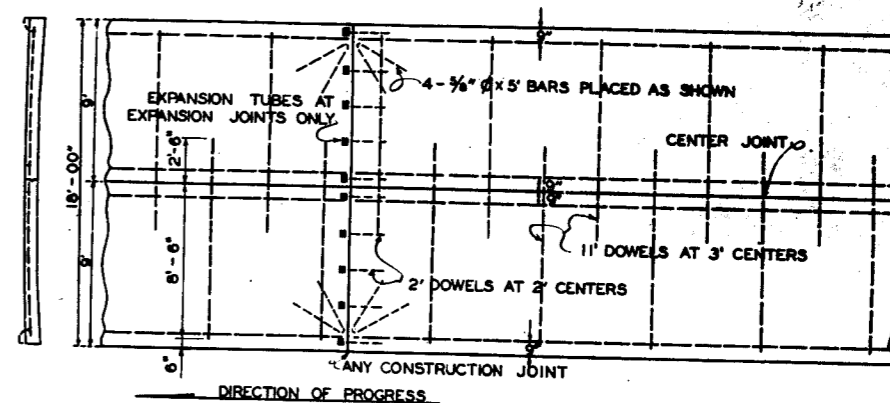


WHEN SPECIFIED ON PLAN SHEETS THIS FOOTING TO BE BUILT AT EACH END OF RAILWAY OVERHEAD, PARALLEL TO ENDS OF STRUCTURE.

DETAILS OF CONCRETE HEADER



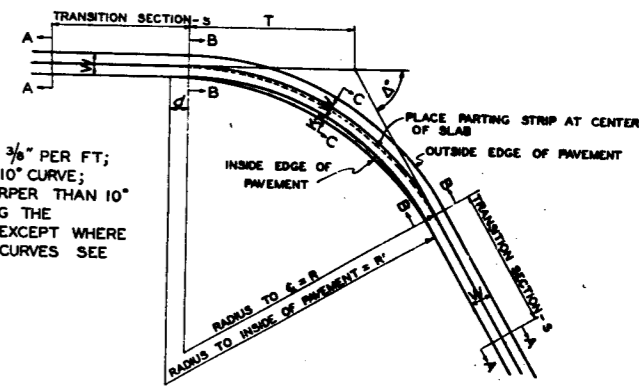
PAVEMENT REINFORCING PLAN



ALL REINFORCING STEEL TO BE PLAIN 3/8" Ø BARS. FOUR LONGITUDINAL BARS TO BE PLACED AS SHOWN, 2 1/2" BELOW TOP SURFACE, 2" LAP TO BE USED AT ALL SPLICES. ALL DOWEL BARS TO BE PLACED IN CENTER OF SECTION. DOWELS AT TRANSVERSE JOINTS TO PROJECT 6" INTO NEW WORK, AND TO BE FITTED WITH EXPANSION TUBES AT EXPANSION JOINTS. LONGITUDINAL REINFORCING STEEL TO END 2" FROM EXPANSION JOINTS.

DOWEL BARS TO BE RIGIDLY HELD IN CORRECT POSITION, SUPPORTED AT 3 POINTS. OUTER END MAY BE FASTENED TO LONGITUDINAL STEEL; INNER END AND CENTER SUPPORTS TO BE OF DESIGN SATISFACTORY TO THE ENGINEER.

DETAILS FOR SUPERELEVATION

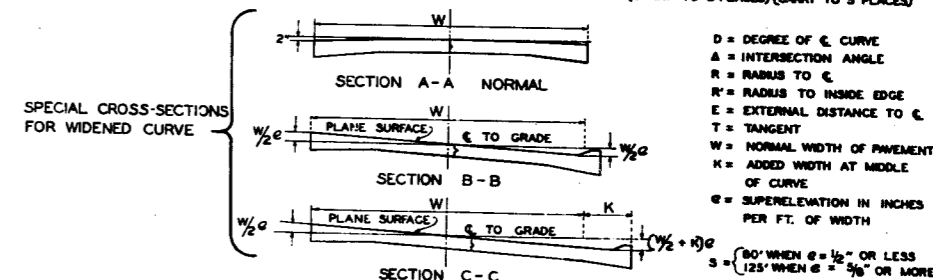


SUPERELEVATION BEGINS AT 2° CURVE WITH 3/8" PER FT.; AND INCREASES UNIFORMLY TO 1" PER FT. AT 10° CURVE; REMAINS AT 1" PER FT. FOR ALL CURVES SHARPER THAN 10°. SUPERELEVATION IS ACCOMPLISHED BY ROTATING THE STANDARD SECTION ABOUT THE CENTER LINE EXCEPT WHERE CURVES ARE TO BE WIDENED. FOR WIDENED CURVES SEE TYPICAL CROSS SECTIONS BELOW.

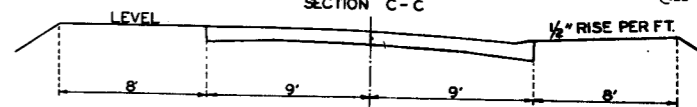
$$K = \frac{d}{0.0036D - 0.0225} \text{ (MIN. 2' & MAX. 6')}$$

$$R = \frac{E^2}{K} \text{ OR } R = \frac{E^2}{d}$$

AREA OF ADDED WIDTH (SHADED PORTION)
 $(R' - R + \frac{1}{2})(R' + R - \frac{1}{2}) \text{ (TAN } \frac{A}{2} - 0.0087267A^2) \text{ SQ. FT.}$
 (CARRY TO 3 PLACES) (CARRY TO 5 PLACES)



SPECIAL CROSS-SECTION FOR CURVE WITHOUT WIDENING



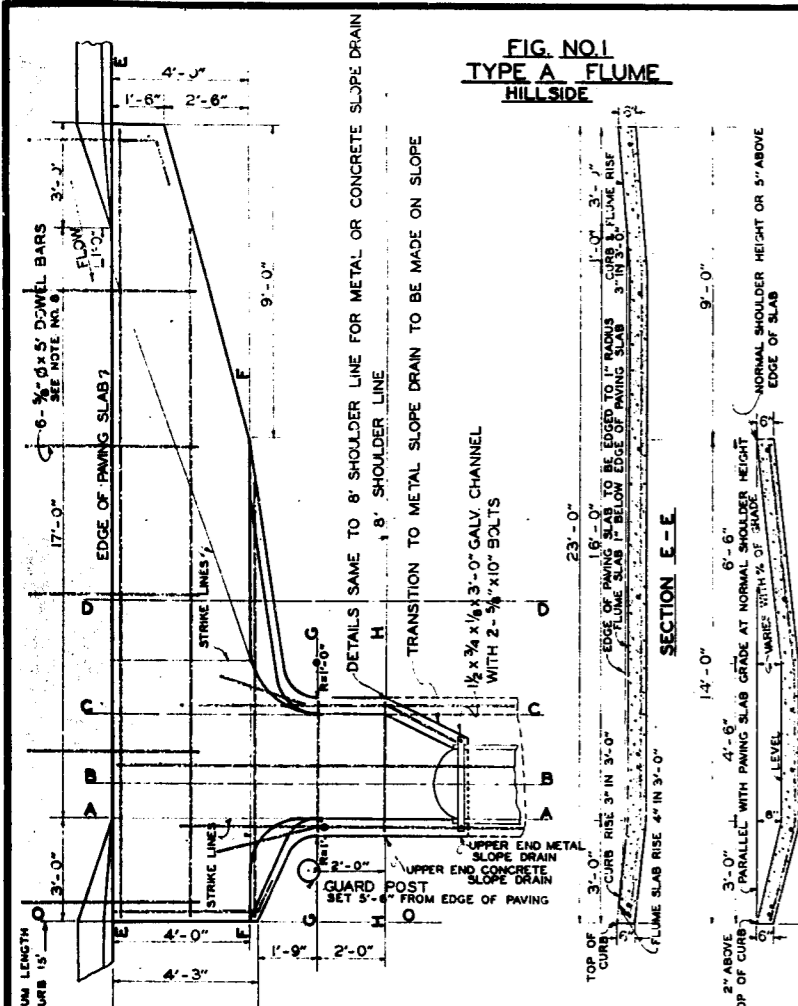


FIG. NO. 1
TYPE A FLUME
HILLSIDE

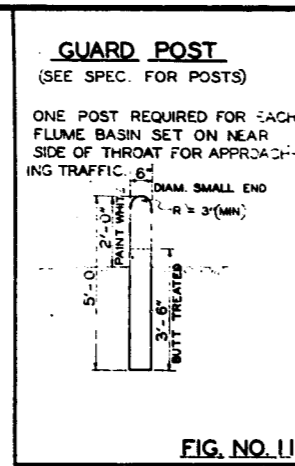


FIG. NO. 11

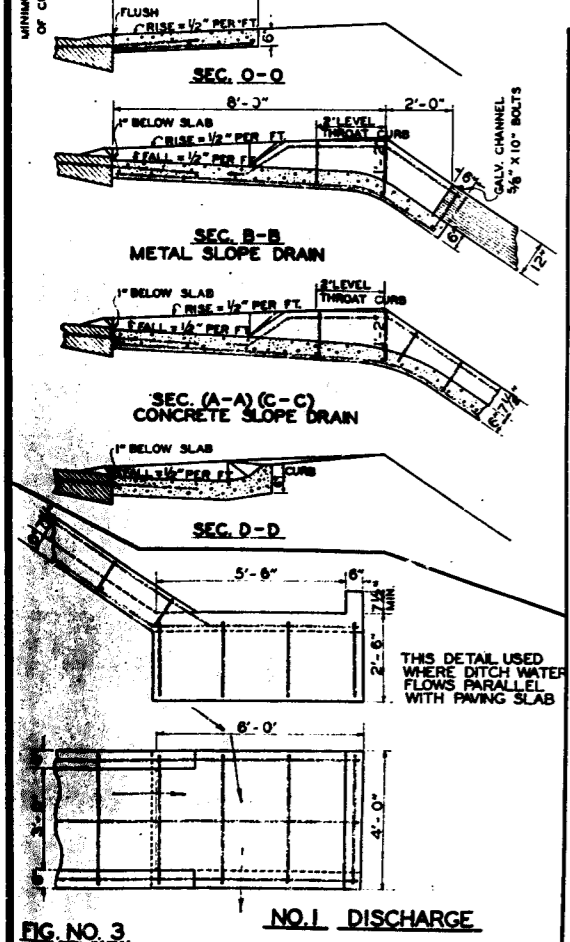


FIG. NO. 3
NO. 1 DISCHARGE

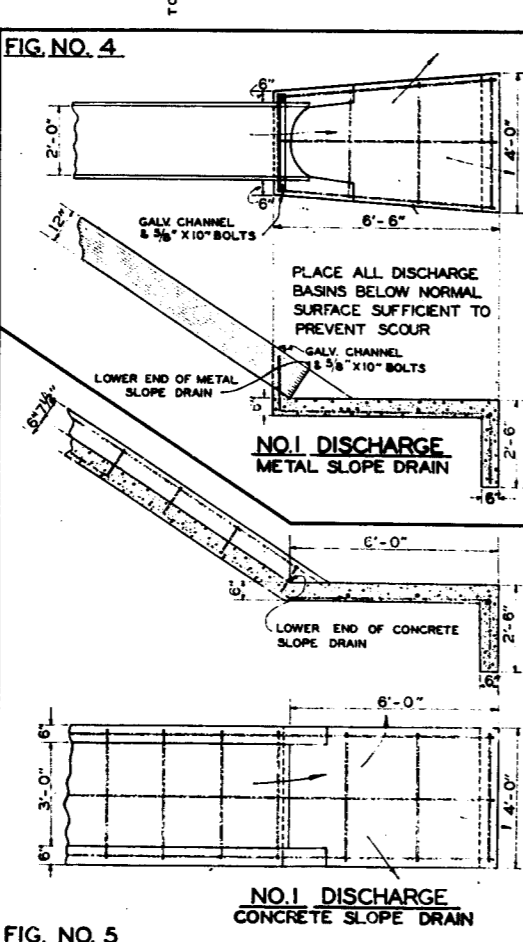


FIG. NO. 4
NO. 1 DISCHARGE
METAL SLOPE DRAIN

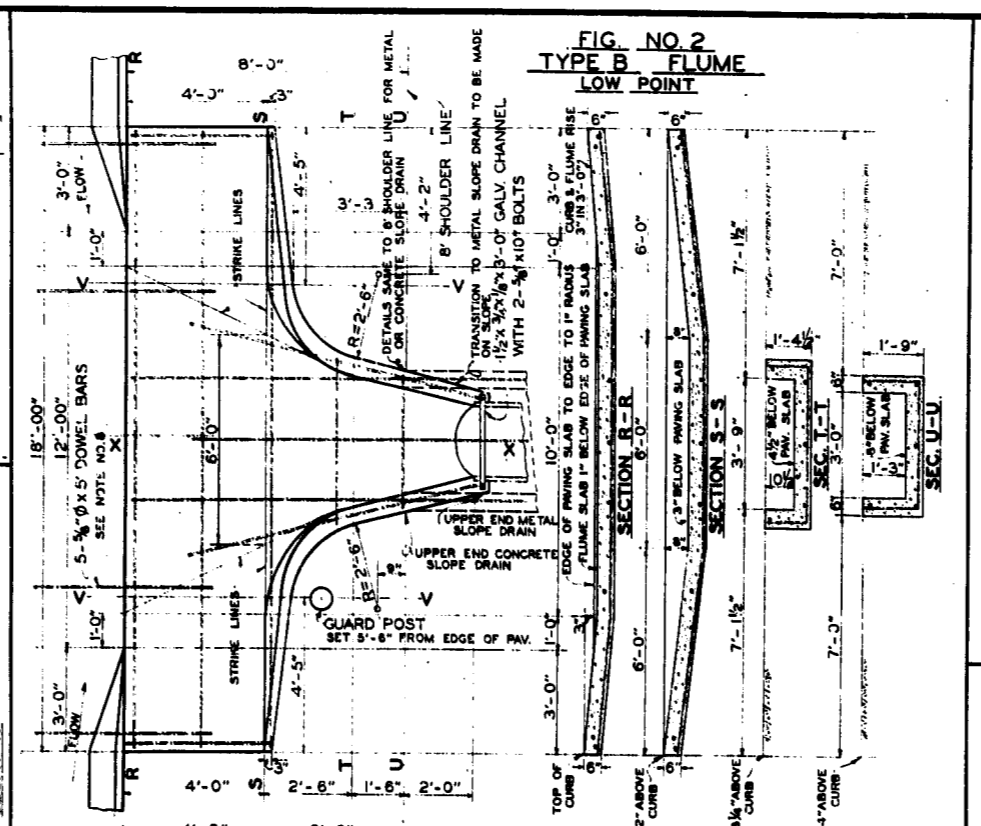


FIG. NO. 2
TYPE B FLUME
LOW POINT

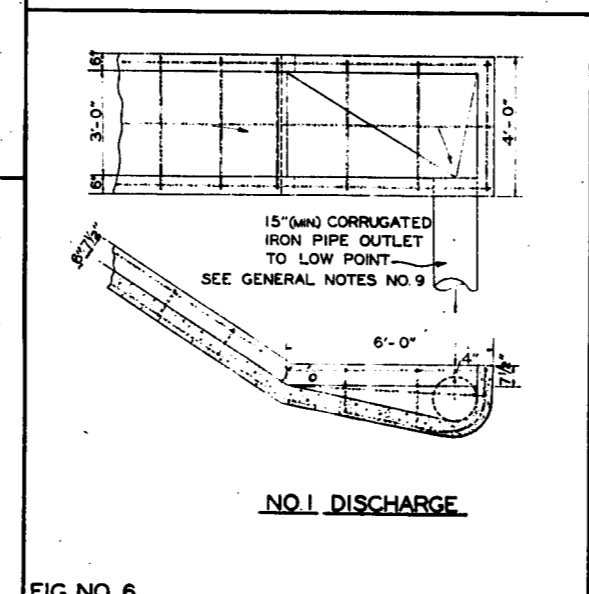
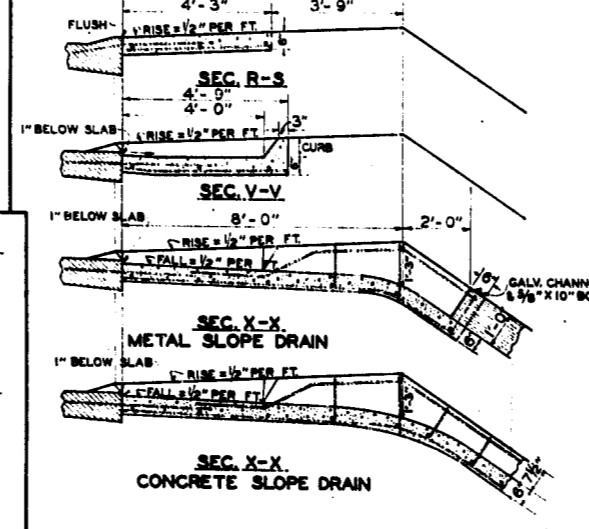


FIG. NO. 6
NO. 1 DISCHARGE

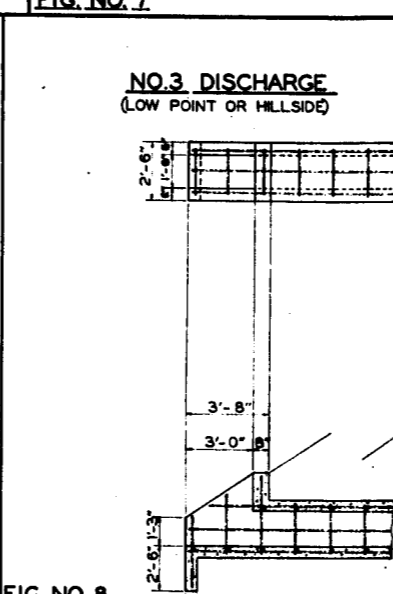
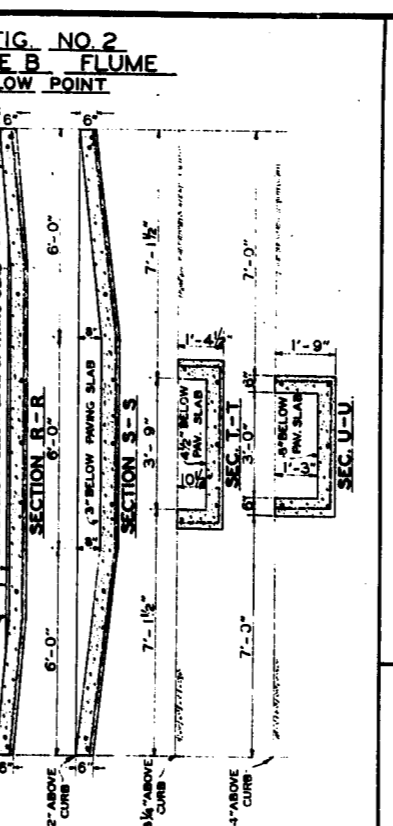


FIG. NO. 8
NO. 3 DISCHARGE
(LOW POINT OR HILLSIDE)

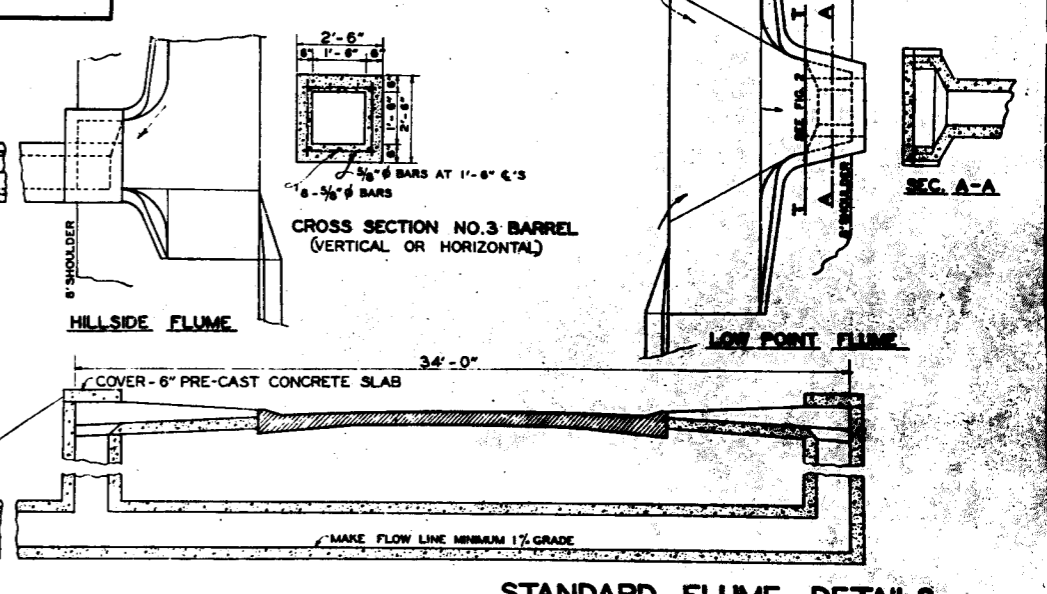
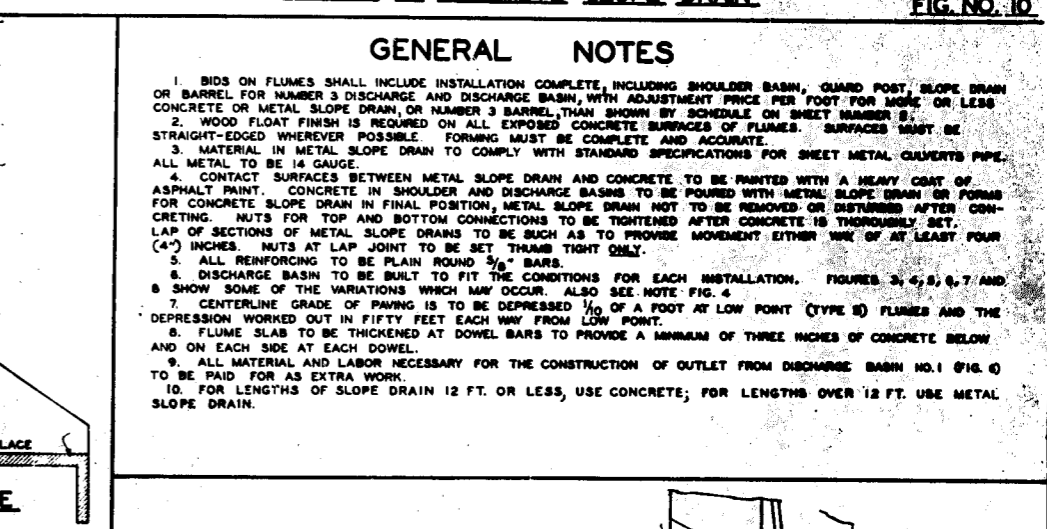
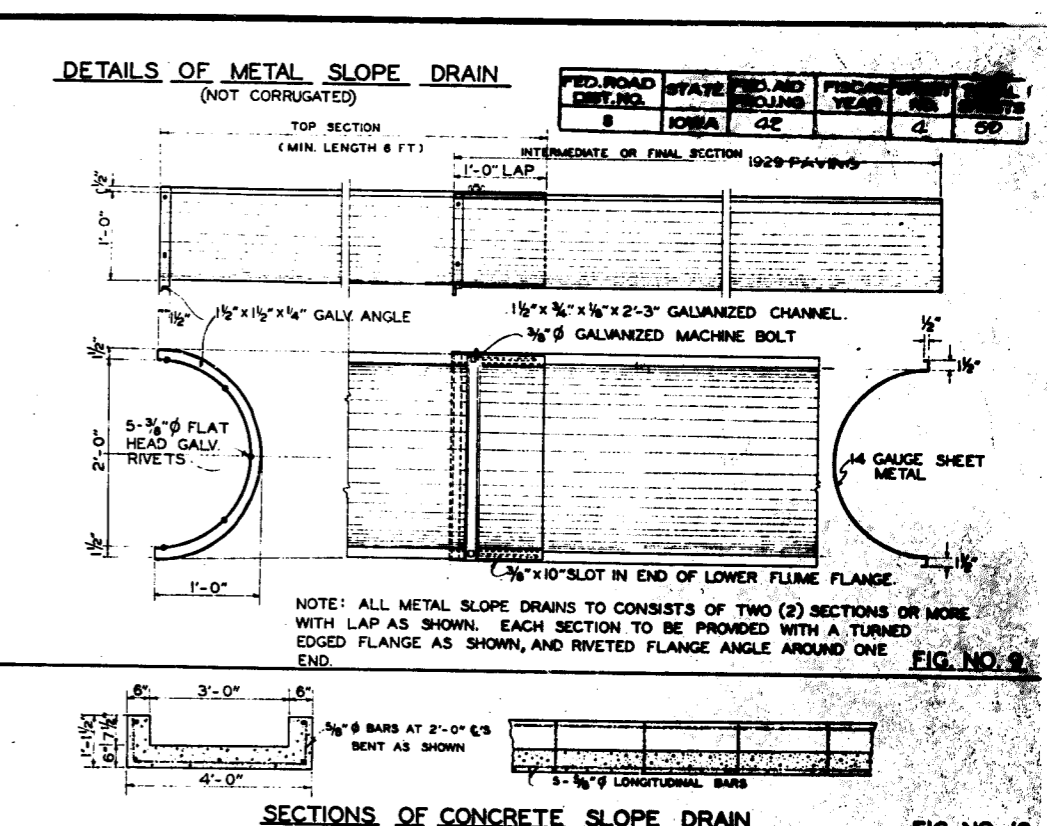


FIG. NO. 9
NO. 3 DISCHARGE
(HILLSIDE FLUME)

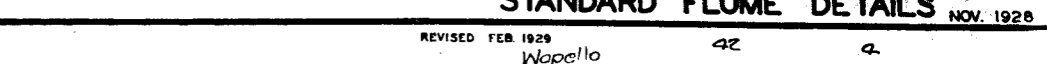
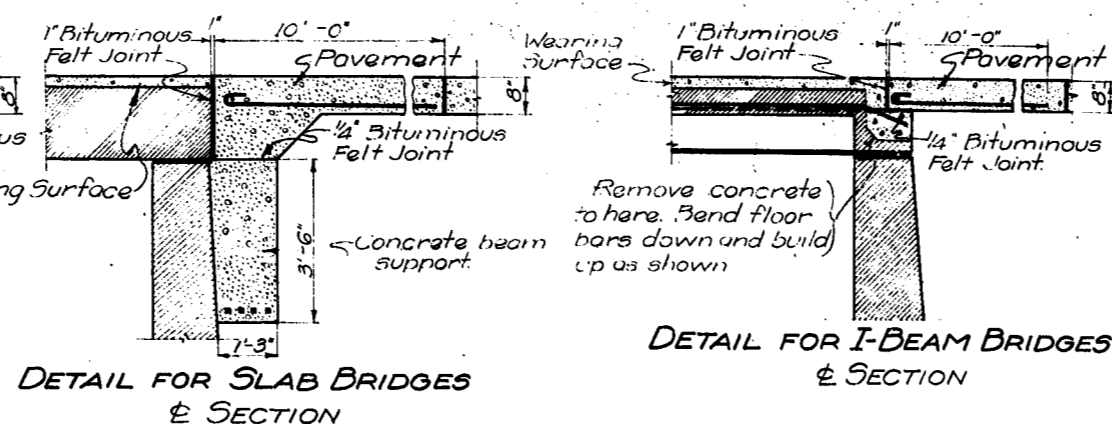
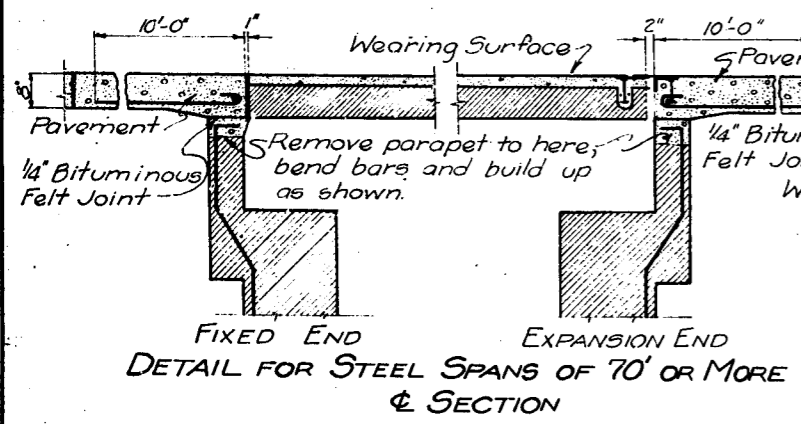
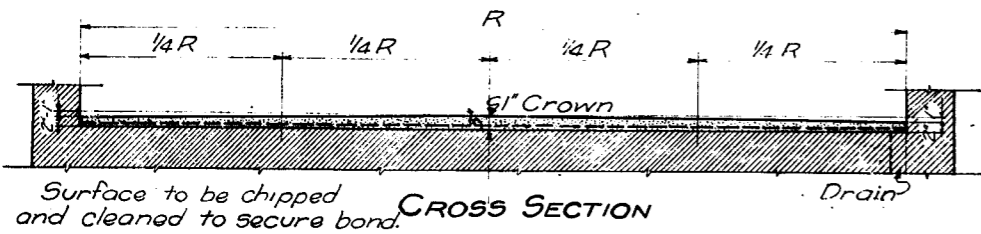
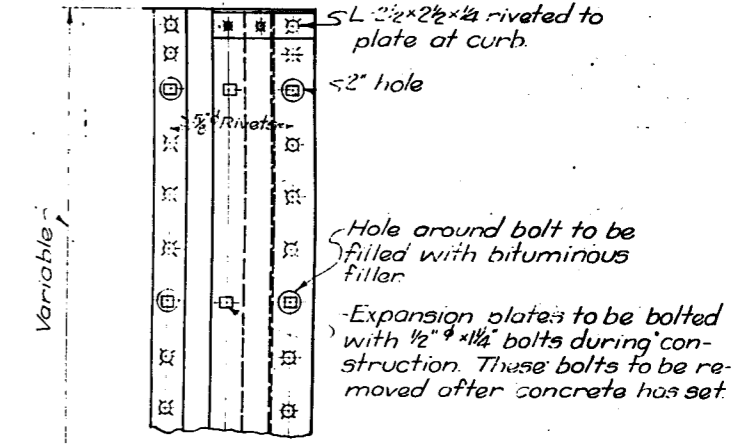
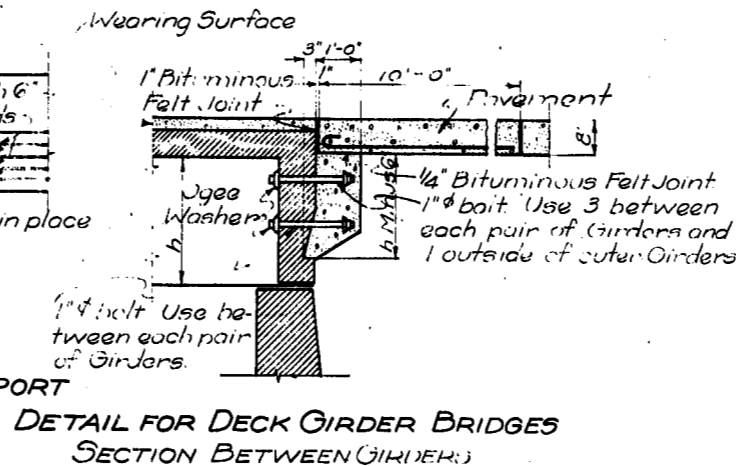
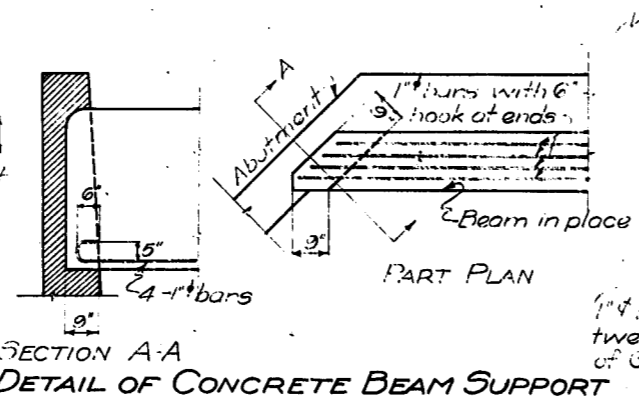
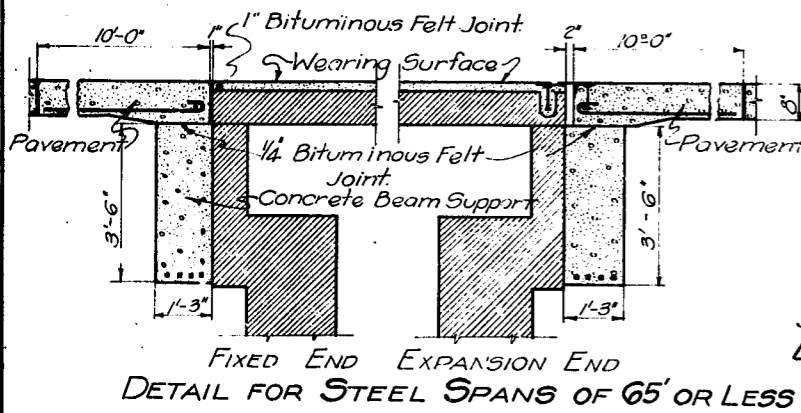
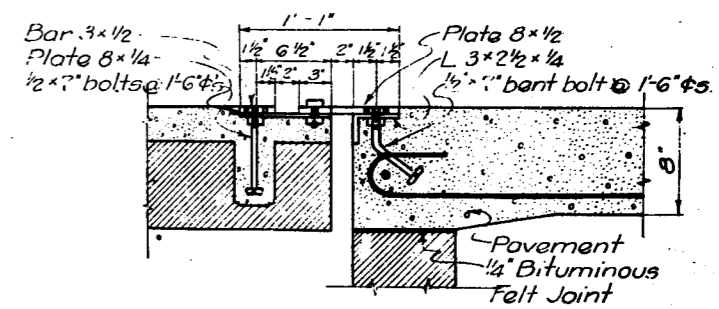


FIG. NO. 10
SECTIONS OF CONCRETE SLOPE DRAIN

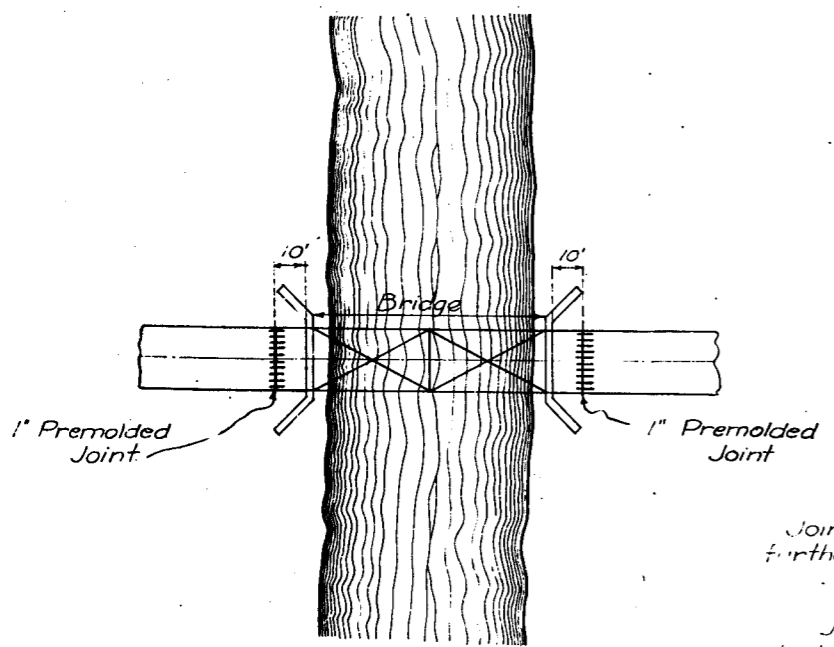
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	IOWA	22		5	57



DETAIL FOR I-BEAM BRIDGES
E SECTION



Pavement Reinforcing
Long 1/2" bars @ 12" #3 Length 10'-6"
with hooks as shown
Trans 1-1/2" bar



Joint to be located at least 10' from bridge, and further if necessary to suit sub-grade conditions.

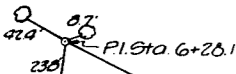
Joints to be doweled as shown on paving detail sheet. Dowels to be supplied with expansion tubes.

General Notes:-
The 8" dimension shown for the various types of bridges may be changed to fit type of pavement used.
Reinforcement placed 1" above old slab, use electric welded wire fabric with rectangular mesh 6"x6" and number 8 (0.162" diam) wires in each direction, minimum weight 30 pounds per 100 sq. ft., American Steel & Wire Company, No. 66-80 or equivalent. Longitudinal joints in reinforcement shall lap at least 6" and transverse joints at least 12".
Approach pavement section and new wearing surface to conform with paving specification used on remainder of work.

Note:-
The details on this sheet are to be used on bridges on paved roads where no provisions has been made for paving.

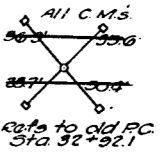
STANDARD DESIGN
SPECIAL BRIDGE DETAILS ON PAVED ROADS
SHOWING
EXPANSION DETAILS AND CONCRETE WEARING SURFACE
IOWA HIGHWAY COMMISSION
MARCH 1923





STA. 7+94
 BEGINNING OF PROJ. AND SEC. A.
 START CONSTRUCTION HERE.
 1929 PAVING.

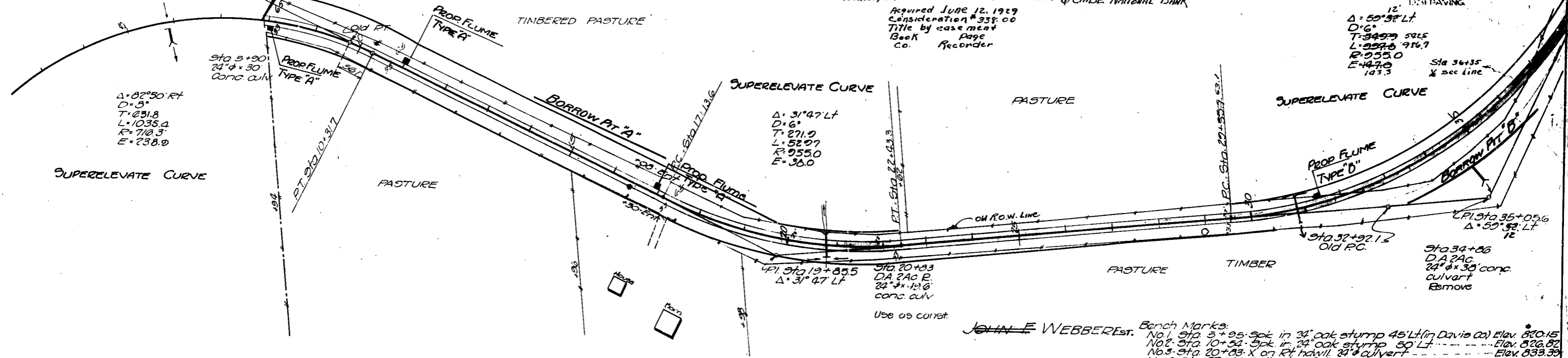
SEC. 36
 GREEN TWP
 T71N.R14W



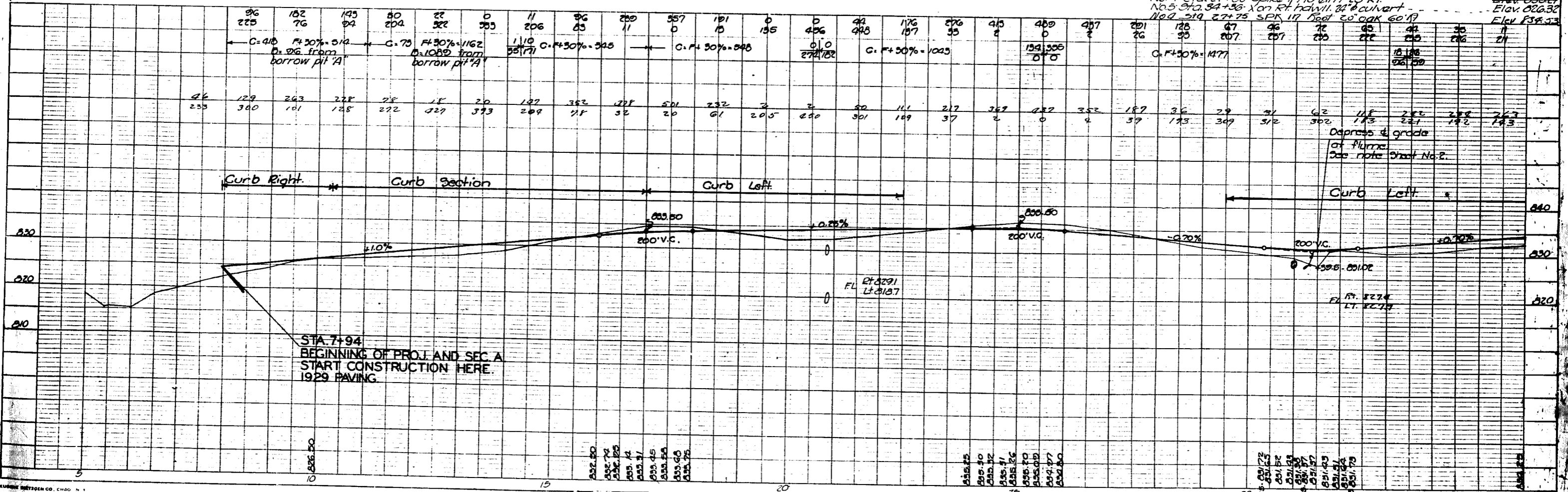
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	FA. 42		6	89

ESTELLA B. JOHN F. WEBBER & CHASE NATIONAL BANK
 Acquired June 12, 1929
 Consideration \$338.00
 Title by case ment
 Book Page
 Co. Recorder

1929 PAVING
 $\Delta = 50^\circ 57' \text{ Lt}$
 $D = 6^\circ$
 $T = 345.9$
 $L = 259.6$
 $R = 255.0$
 $E = 147.0$
 103.3



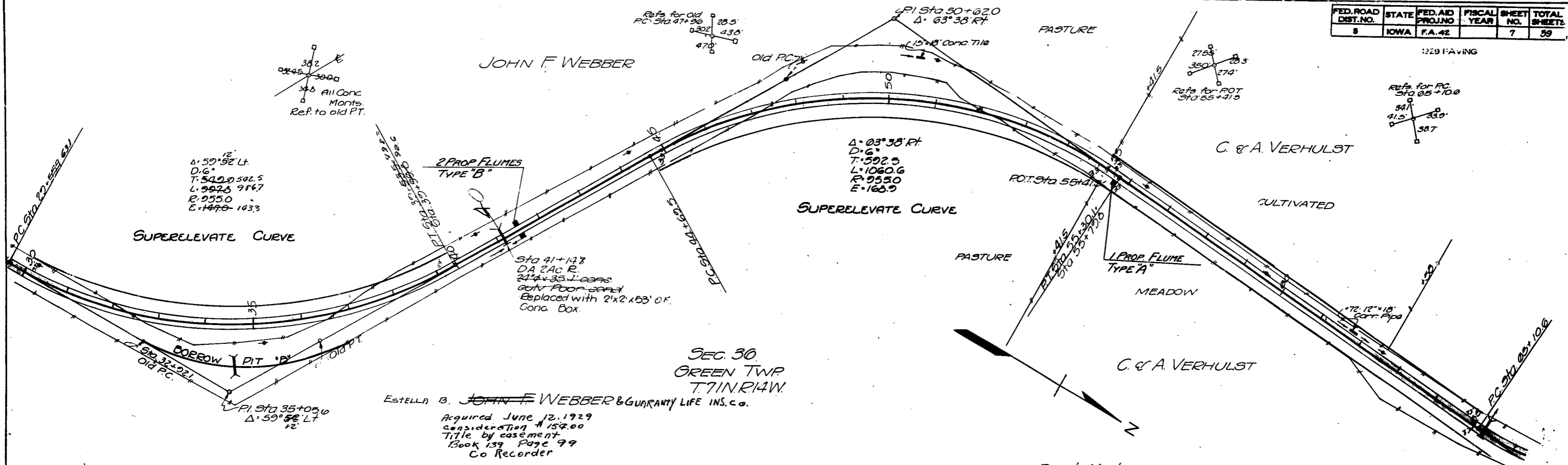
JOHN F. WEBBER Est. Bench Marks:
 No. 1 Sta. 5+95. Spk in 34" oak stump 45' Lt. (in Davis Co) Elev. 820.15
 No. 2 Sta. 10+34. Spk in 24" oak stump 50' Lt. Elev. 826.82
 No. 3 Sta. 20+83. X on Rt. hand. 24" culvert Elev. 833.33
 No. 4 Sta. 27+93. Spk in 18" oak stump 55' Lt. Elev. 835.27
 No. 5 Sta. 34+36. X on Rt. hand. 24" culvert Elev. 826.32
 No. 6 Sta. 27+75. Spk in 17" oak stump 60' Lt. Elev. 834.53



STA. 7+94
 BEGINNING OF PROJ. AND SEC. A.
 START CONSTRUCTION HERE.
 1929 PAVING.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	F.A. 42		7	59

1229 PAVING



SEC. 30
GREEN TWP
T. 71 N. R. 14 W.

ESTELLA B. ~~JOHN F. WEBBER~~ & GUARANTY LIFE INS. CO.
Acquired June 12, 1929
consideration \$152.00
Title by case ment
Book 139 Page 99
Co Recorder

Bench Marks:
No. 6 Sta. 40+25 Two Bent Spikes 24" oak 50' LT Elev. 828.01
No. 7 Sta. 51+36 Top of iron pin 1/4" conc. marker PC Elev. 837.89
No. 8 Sta. 65+26 X on Rt. hdwll. 24" culvert Elev. 826.62

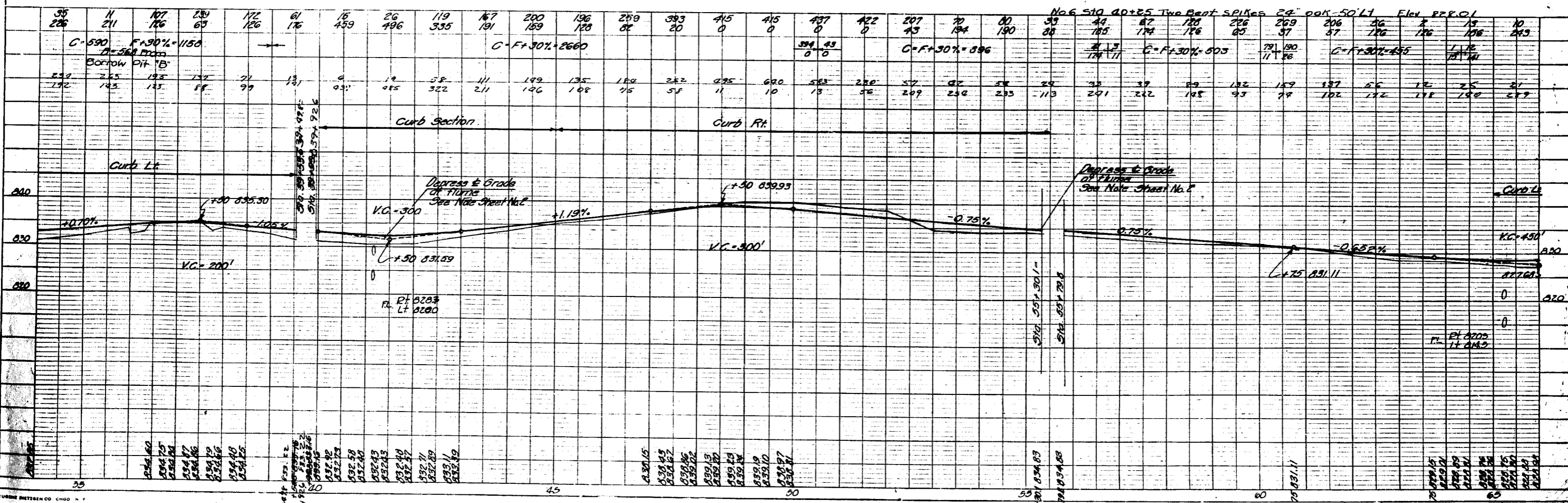
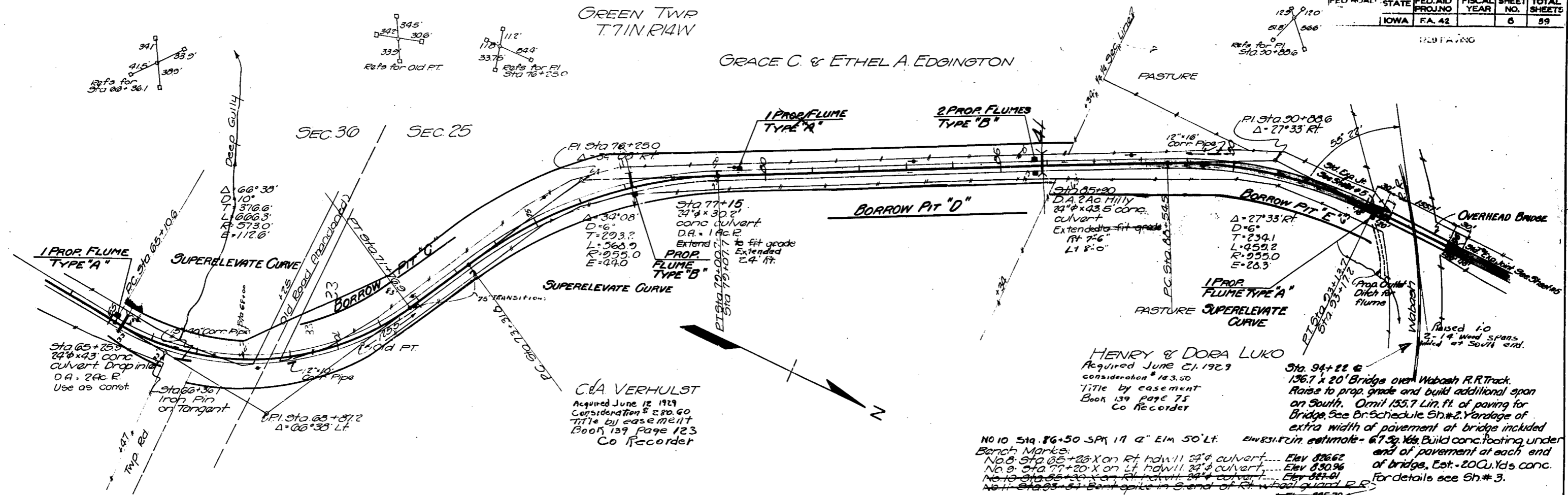


PLATE I-PLAN-PROFILE

GREEN TWP
T. 7 N. R. 14 W.
GRACE C. & ETHEL A. EDGINGTON



C & A VERHULST
 Acquired June 12 1929
 Consideration \$ 280.00
 Title by easement
 Book 139 page 123
 Co Recorder

HENRY & DORA LUKO
 Acquired June 21 1929
 consideration \$ 123.50
 Title by easement
 Book 139 page 75
 Co Recorder

No 10 Sta. 86+50 SPK 11 2" Elm 50' Lt. Elevation estimate - 67.50 Yds. Build conc. footing under end of pavement at each end of bridge. Est. 20 Cu. Yds. conc. For details see Sh. # 3.
 Bench Marks:
 No. 8 Sta. 65+28 X on Rt. rd. w/ 24" culvert. Elev 826.62
 No. 9 Sta. 77+20 X on Lt. rd. w/ 24" culvert. Elev 830.96
 No. 10 Sta. 86+50 X on Rt. rd. w/ 24" culvert. Elev 827.91
 No. 11 Sta. 93+54 Bent spike in S. end of Rt. rd. w/ 200' guard R.R. Elev 825.78
 Elev 825.63

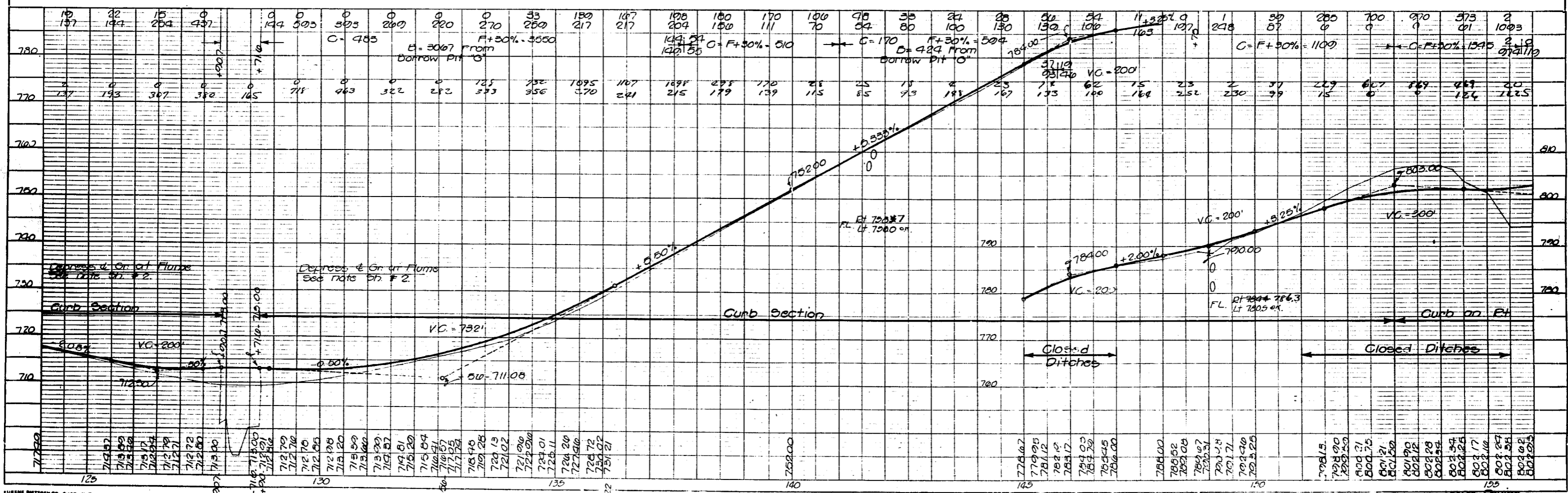
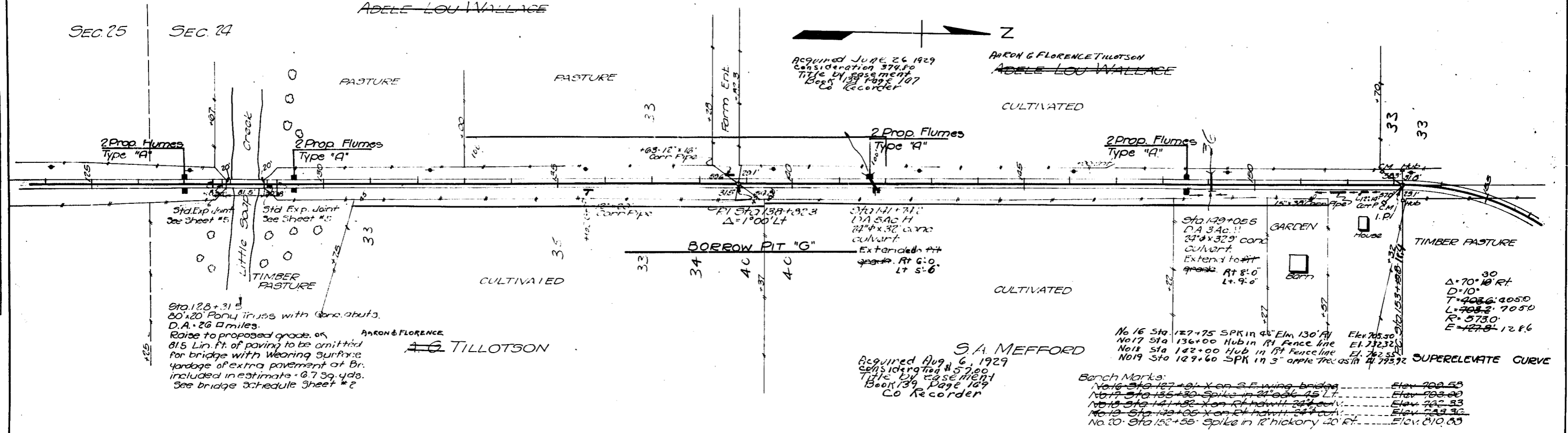
13	10	10	12	28	742	587	253	124	99	80	20	0	0	70	131	148	170	145	146	80	300	220	82	32	317	321	263	06	0	30	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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829.101	828.86	828.81	828.76	828.76	828.65	828.55	828.42	828.33	828.25	828.15	828.02	827.90	827.72	827.51	827.33	827.16	827.03	826.87	826.70	826.50	826.35	826.23	826.12	826.02	825.90	825.72	825.51	825.33	825.16	825.03	824.87	824.70	824.50	824.35	824.23	824.12	824.02	823.90	823.72	823.51	823.33	823.16	823.03	822.87	822.70	822.50	822.35	822.23	822.12	822.02	821.90	821.72	821.51	821.33	821.16	821.03	820.87	820.70	820.50	820.35	820.23	820.12	820.02	819.90	819.72	819.51	819.33	819.16	819.03	818.87	818.70	818.50	818.35	818.23	818.12	818.02	817.90	817.72	817.51	817.33	817.16	817.03	816.87	816.70	816.50	816.35	816.23	816.12	816.02	815.90	815.72	815.51	815.33	815.16	815.03	814.87	814.70	814.50	814.35	814.23	814.12	814.02	813.90	813.72	813.51	813.33	813.16	813.03	812.87	812.70	812.50	812.35	812.23	812.12	812.02	811.90	811.72	811.51	811.33	811.16	811.03	810.87	810.70	810.50	810.35	810.23	810.12	810.02	809.90	809.72	809.51	809.33	809.16	809.03	808.87	808.70	808.50	808.35	808.23	808.12	808.02	807.90	807.72	807.51	807.33	807.16	807.03	806.87	806.70	806.50	806.35	806.23	806.12	806.02	805.90	805.72	805.51	805.33	805.16	805.03	804.87	804.70	804.50	804.35	804.23	804.12	804.02	803.90	803.72	803.51	803.33	803.16	803.03	802.87	802.70	802.50	802.35	802.23	802.12	802.02	801.90	801.72	801.51	801.33	801.16	801.03	800.87	800.70	800.50	800.35	800.23	800.12	800.02	799.90	799.72	799.51	799.33	799.16	799.03	798.87	798.70	798.50	798.35	798.23	798.12	798.02	797.90	797.72	797.51	797.33	797.16	797.03	796.87	796.70	796.50	796.35	796.23	796.12	796.02	795.90	795.72	795.51	795.33	795.16	795.03	794.87	794.70	794.50	794.35	794.23	794.12	794.02	793.90	793.72	793.51	793.33	793.16	793.03	792.87	792.70	792.50	792.35	792.23	792.12	792.02	791.90	791.72	791.51	791.33	791.16	791.03	790.87	790.70	790.50	790.35	790.23	790.12	790.02	789.90	789.72	789.51	789.33	789.16	789.03	788.87	788.70	788.50	788.35	788.23	788.12	788.02	787.90	787.72	787.51	787.33	787.16	787.03	786.87	786.70	786.50	786.35	786.23	786.12	786.02	785.90	785.72	785.51	785.33	785.16	785.03	784.87	784.70	784.50	784.35	784.23	784.12	784.02	783.90	783.72	783.51	783.33	783.16	783.03	782.87	782.70	782.50	782.35	782.23	782.12	782.02	781.90	781.72	781.51	781.33	781.16	781.03	780.87	780.70	780.50	780.35	780.23	780.12	780.02	779.90	779.72	779.51	779.33	779.16	779.03	778.87	778.70	778.50	778.35	778.23	778.12	778.02	777.90	777.72	777.51	777.33	777.16	777.03	776.87	776.70	776.50	776.35	776.23	776.12	776.02	775.90	775.72	775.51	775.33	775.16	775.03	774.87	774.70	774.50	774.35	774.23	774.12	774.02	773.90	773.72	773.51	773.33	773.16	773.03	772.87	772.70	772.50	772.35	772.23	772.12	772.02	771.90	771.72	771.51	771.33	771.16	771.03	770.87	770.70	770.50	770.35	770.23	770.12	770.02	769.90	769.72	769.51	769.33	769.16	769.03	768.87	768.70	768.50	768.35	768.23	768.12	768.02	767.90	767.72	767.51	767.33	767.16	767.03	766.87	766.70	766.50	766.35	766.23	766.12	766.02	765.90	765.72	765.51	765.33	765.16	765.03	764.87	764.70	764.50	764.35	764.23	764.12	764.02	763.90	763.72	763.51	763.33	763.16	763.03	762.87	762.70	762.50	762.35	762.23	762.12	762.02	761.90	761.72	761.51	761.33	761.16	761.03	760.87	760.70	760.50	760.35	760.23	760.12	760.02	759.90	759.72	759.51	759.33	759.16	759.03	758.87	758.70	758.50	758.35	758.23	758.12	758.02	757.90	757.72	757.51	757.33	757.16	757.03	756.87	756.70	756.50	756.35	756.23	756.12	756.02	755.90	755.72	755.51	755.33	755.16	755.03	754.87	754.70	754.50	754.35	754.23	754.12	754.02	753.90	753.72	753.51	753.33	753.16	753.03	752.87	752.70	752.50	752.35	752.23	752.12	752.02	751.90	751.72	751.51	751.33	751.16	751.03	750.87	750.70	750.50	750.35	750.23	750.12	750.02	749.90	749.72	749.51	749.33	749.16	749.03	748.87	748.70	748.50	748.35	748.23	748.12	748.02	747.90	747.72	747.51	747.33	747.16	747.03	746.87	746.70	746.50	746.35	746.23	746.12	746.02	745.90	745.72	745.51	745.33	745.16	745.03	744.87	744.70	744.50	744.35	744.23	744.12	744.02	743.90	743.72	743.51	743.33	743.16	743.03	742.87	742.70	742.50	742.35	742.23	742.12	742.02	741.90	741.72	741.51	741.33	741.16	741.03	740.87	740.70	740.50	740.35	740.23	740.12	740.02	739.90	739.72	739.51	739.33	739.16	739.03	738.87	738.70	738.50	738.35	738.23	738.12	738.02	737.90	737.72	737.51	737.33	737.16	737.03	736.87	736.70	736.50	736.35	736.23	736.12	736.02	735.90	735.72	735.51	735.33	735.16	735.03	734.87	734.70	734.50	734.35	734.23	734.12	734.02	733.90	733.72	733.51	733.33	733.16	733.03	732.87	732.70	732.50	732.35	732.23	732.12	732.02	731.90	731.72	731.51	731.33	731.16	731.03	730.87	730.70	730.50	730.35	730.23	730.12	730.02	729.90	729.72	729.51	729.33	729.16	729.03	728.87	728.70	728.50	728.35	728.23	728.12	728.02	727.90	727.72	727.51	727.33	727.16	727.03	726.87	726.70	726.50	726.35	726.23	726.12	726.02	725.90	725.72	725.51	725.33	725.16	725.03	724.87	724.70	724.50	724.35	724.23	724.12	724.02	723.90	723.72	723.51	723.33	723.16	723.03	722.87	722.70	722.50	722.35	722.23	722.12	722.02	721.90	721.72	721.51	721.33	721.16	721.03	720.87	720.70	720.50	720.35	720.23	720.12	720.02	719.90	719.72	719.51	719.33	719.16	719.03	718.87	718.70	718.50	718.35	718.23	718.12	718.02	717.90	717.72	717.51	717.33	717.16	717.03	716.87	716.70	716.50	716.35	716.23	716.12	716.02	715.90	715.72	715.51	715.33	715.16	715.03	714.87	714.70	714.50	714.35	714.23	714.12	714.02	713.90	713.72	713.51	713.33	713.16	713.03	712.87	712.70	712.50	712.35	712.23	712.12	712.02	711.90	711.72	711.51	711.33	711.16	711.03	710.87	710.70	710.50	710.35	710.23	710.12	710.02	709.90	709.72	709.51	709.33	709.16	709.03	708.87	708.70	708.50	708.35	708.23	708.12	708.02	707.90	707.72	707.51	707.33	707.16	707.03	706.87	706.70	706.50	706.35	706.23	706.12	706.02	705.90	705.72	705.51	705.33	705.16	705.03	704.87	704.70	704.50	704.35	704.23	704.12	704.02	703.90	703.72	703.51	703.33	703.16	703.03	702.87	702.70	702.50	702.35	702.23	702.12	702.02	701.90	701.72	701.51	701.33	701.16	701.03	700.87	700.70	700.50	700.35	700.23	700.12	700.02	699.90	699.72	699.51	699.33	699.16	699.03	698.87	698.70	698.50	698.35	698.23	698.12	698.02	697.90	697.72	697.51	697.33	697.16	697.03	696.87	696.70	696.50	696.35	696.23	696.12	696.02	695.90	695.72	695.51	695.33	695.16	695.03	694.87	694.70	694.50	694.35	694.23	694.12	694.02	693.90	693.72	693.51	693.33	693.16	693.03	692.87	692.70	692.50	692.35	692.23	692.12	692.02	691.90	691.72	691.51	691.33	691.16	691.03	690.87	690.70	690.50	690.35

1929 PAVING

GREEN TWP
T71N R14W

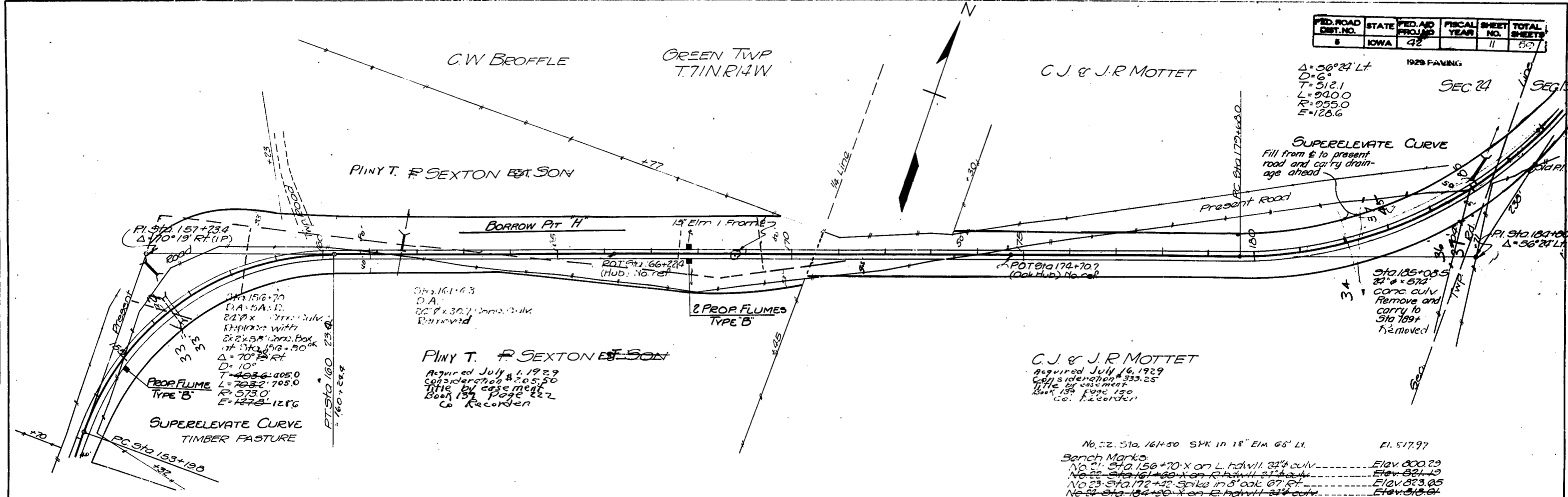
ARON & FLORENCE TILLOTSON
ADELE LOU WALLACE

SEC. 25 SEC. 24

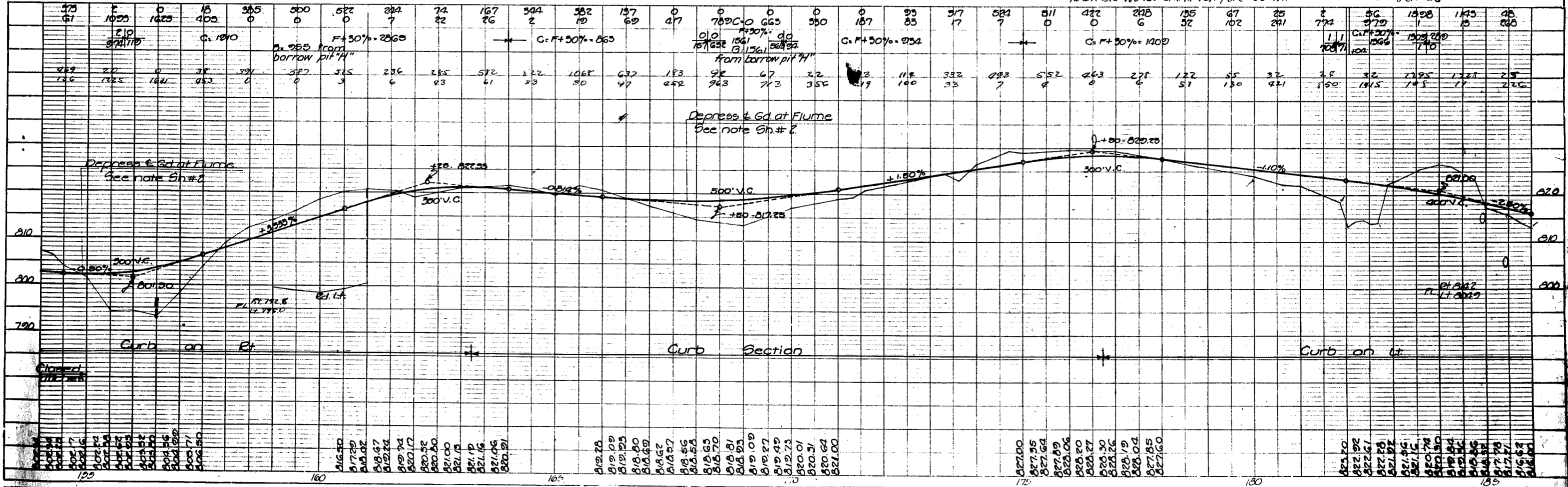


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	IOWA	42		11	52

1929 FAYING
 Δ = 56°24' Lt
 D = 6°
 T = 512.1
 L = 940.0
 R = 255.0
 E = 128.6

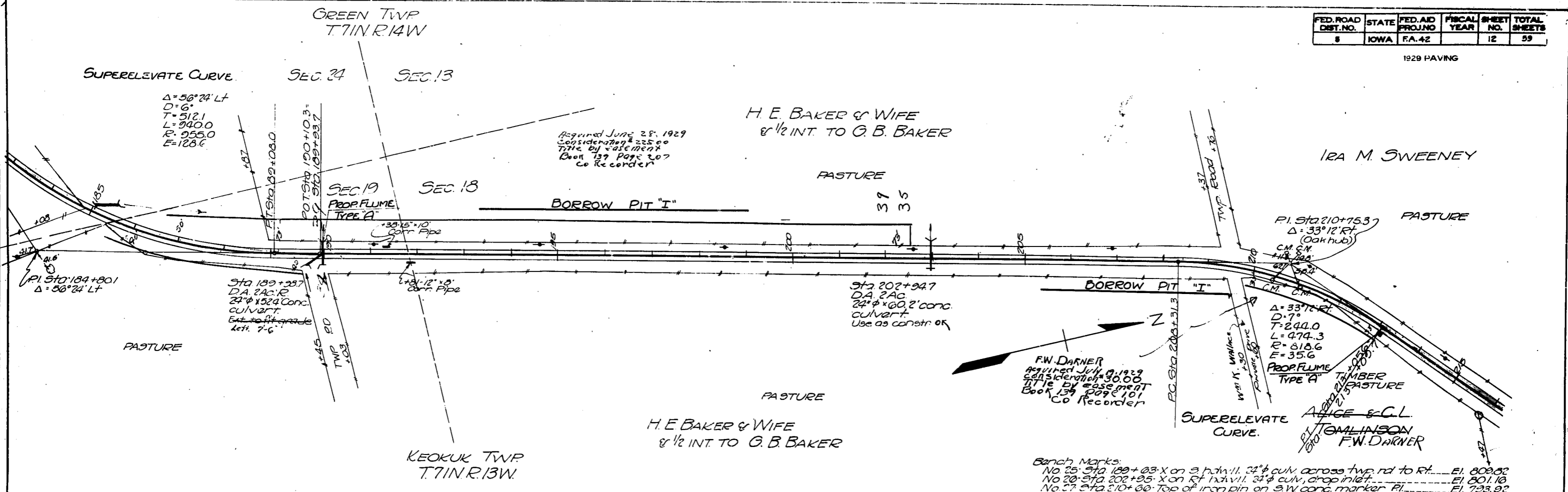


No. 22. Sta. 164+50 SPK in 18" Elm 65' Lt. El. 817.97
 Bench Marks:
 No. 21. Sta. 156+70 X on L. hdvll. 24" culv. ----- El. 800.29
 No. 22. Sta. 161+60 X on R. hdvll. 24" culv. ----- El. 821.19
 No. 23. Sta. 172+40 Spike in 8" oak 67' Rt. ----- El. 823.05
 No. 24. Sta. 184+00 X on R. hdvll. 24" culv. ----- El. 813.61
 No. 24. Sta. 185+50 SPK in Tel. Pole 40' K7. ----- El. 824.58

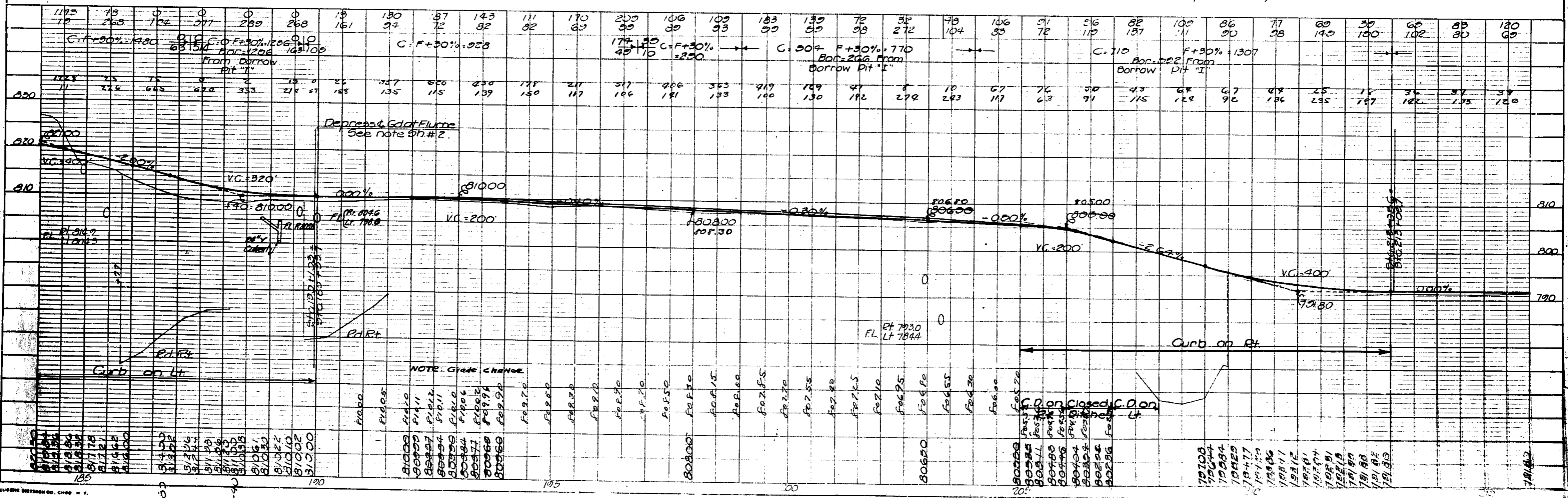


155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185
815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785

1929 PAVING



Bench Marks:
 No. 25. Sta. 189+03. X on S. side of 11. 32" culv. across two rd. to Rt. E1. 809.82
 No. 20. Sta. 202+95. X on Rt. side of 11. 32" culv. drop inlet. E1. 801.16
 No. 27. Sta. 210+00. Top of iron pin on S.W. conc. marker PI. E1. 793.92
 No. 28. Sta. 218+75. Rant. spk. in hickory 30' Rt. E1. 793.69



NOTE: GRADE CHANGE

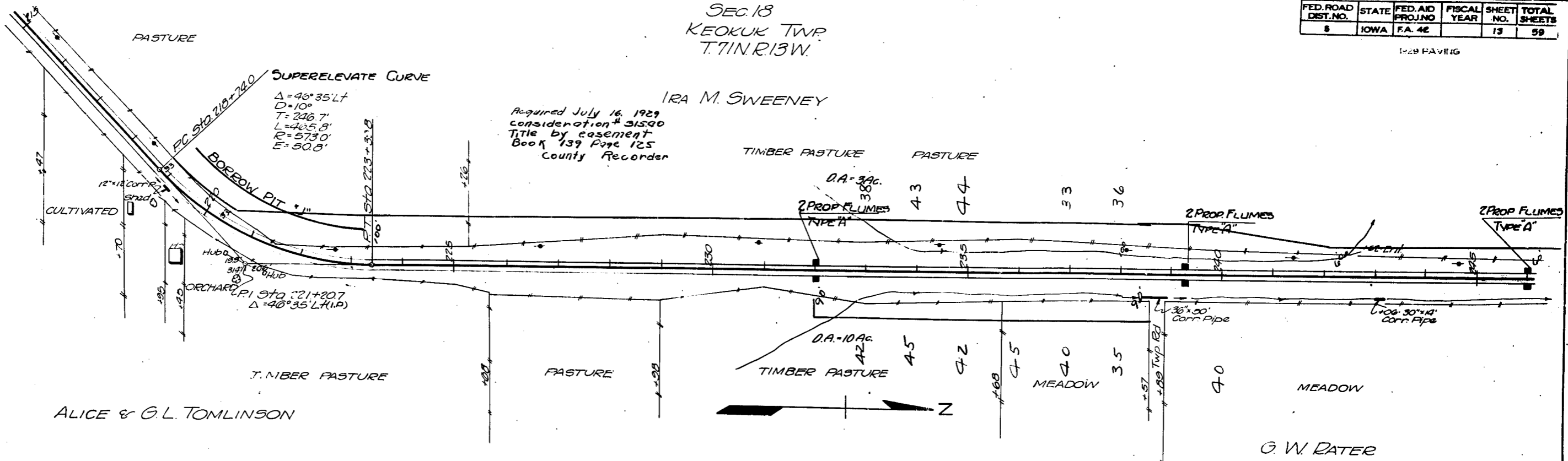
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IOWA	F.A. 42		13	59

1929 PAVING

SEC. 18
KEOKUK TWP.
T. 71N. R. 13W.

IRA M. SWEENEY

Acquired July 16, 1929
consideration \$315.00
Title by easement
Book 139 Page 125
County Recorder



Bench Marks:
No. 28. Sta. 218+75. Bent spk. in 8" hickory 50 ft. ----- Elev. 793.69
No. 29. Sta. 223+95. Bent spk. in 6" oak 45 ft. ----- Elev. 779.99
No. 30. Sta. 231+65. Bent spk. in 18" oak 75 ft. ----- Elev. 724.63
No. 31. Sta. 238+63. Bent spk. in 36" maple 130 ft. ----- Elev. 680.82
No. 32. Sta. 246+52. X on S.E. wingwall of bridge ----- Elev. 687.40

MRS. J. M. SMITH & Wm. B. STOKER
Acquired July 19, 1929
consideration \$2.00
Title by easement
Book 139 Page 137
Co. Recorder.

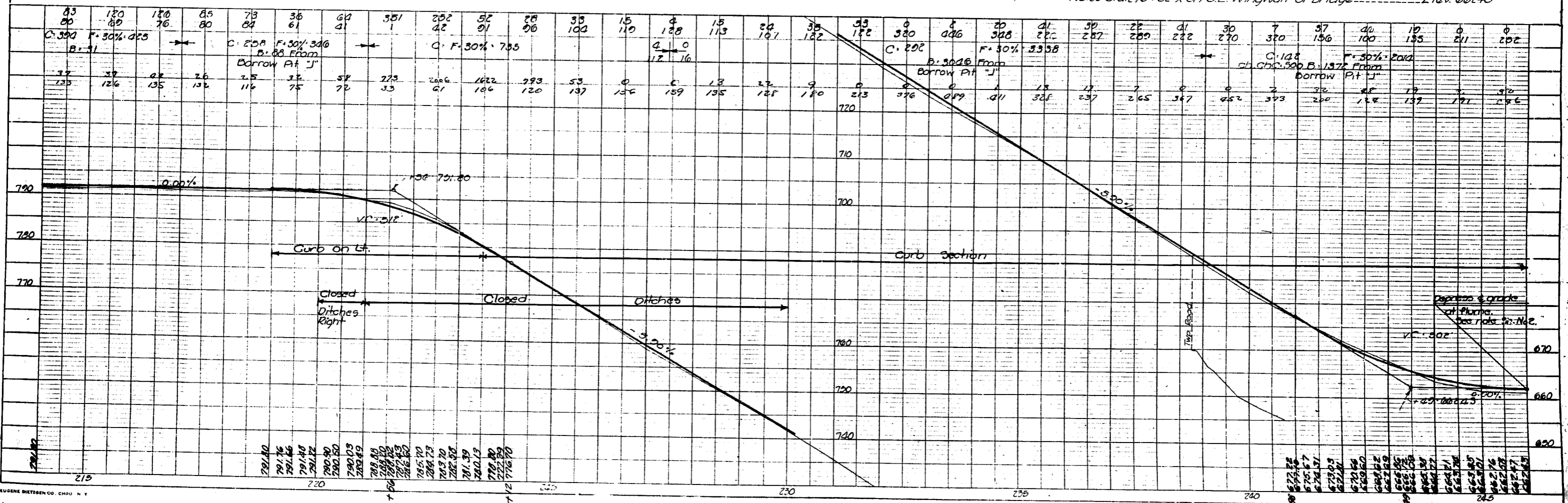


PLATE I-PLAN PROFILE - STANDARD

Wapello County

1929 PAVING

1929 PAVING

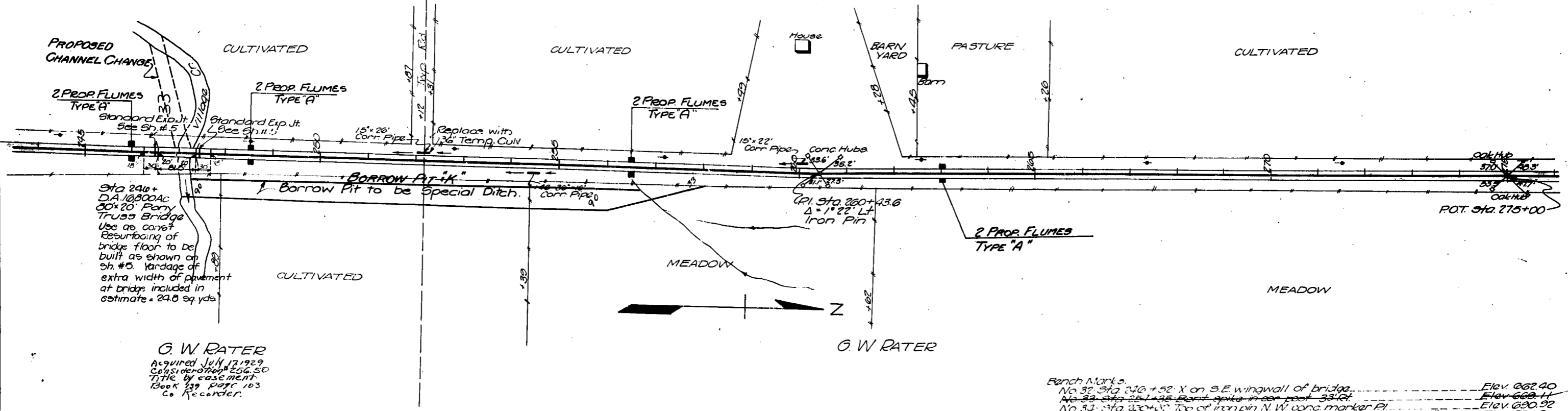
KEOKUK TWP
T71N.R13W

SEC. 18

SEC. 7

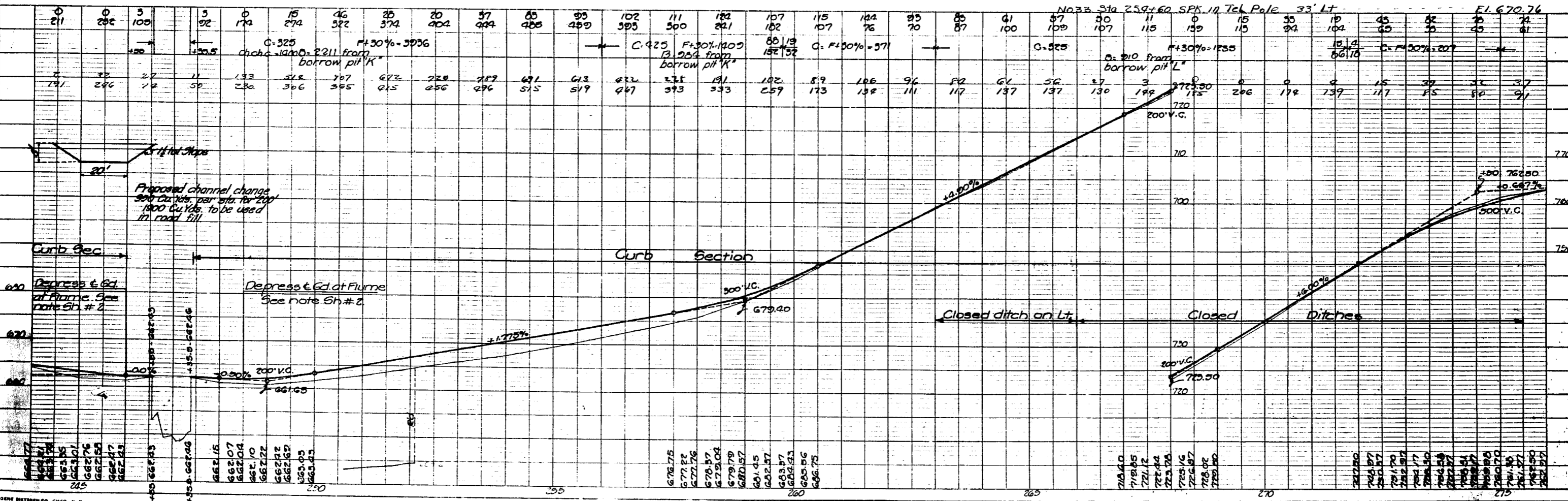
IRA M. SWEENEY

Pipe Culverts
Sta 252+10 36" x 40" Lt.
Sta 254+50 36" x 24" Rt.
Sta 260+00 24" x 20" Lt.
Sta 262+00 24" x 24" Rt.



G. W. RATER
Acquired July 17, 1929
Consideration \$56.50
Title by easement.
Book 139 page 103
Co. Recorder.

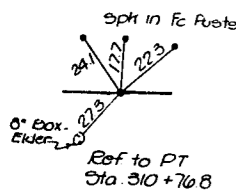
Bench Marks
No. 32 Sta 240+52.4 on S.E. wingwall of bridge - Elev. 662.40
No. 33 Sta 251+35 Bent spike in east post 33' Rt. - Elev. 662.11
No. 34 Sta 260+00 Top of iron pin N.W. long marker P1 - Elev. 690.22
No. 35 Sta 268+75 Bent spike in fence post R opposite T. Pole #160 - Elev. 725.25
No. 36 Sta 259+60 SPK in Tel. Pole 33' Lt. - Elev. 670.76



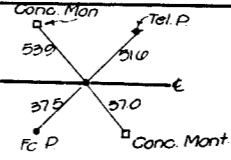
PLAN
NOTE BOOK
NO. 103

PROFILE
NOTE BOOK
NO. 103

ESTABLISHED WIDTH OF RIGHT OF WAY FT.

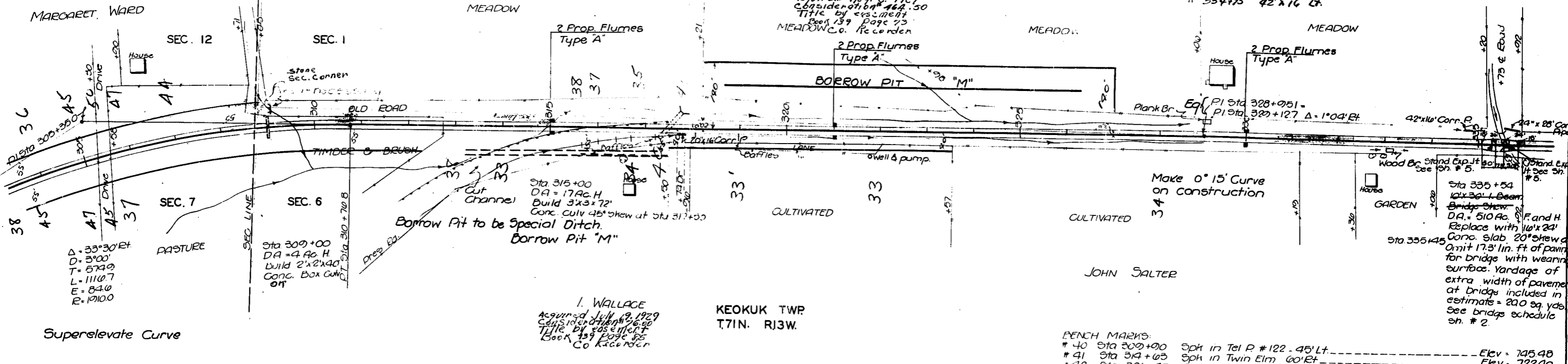
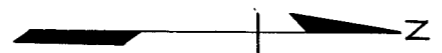


GREEN TWP
T. 71 N.-R. 14 W.



FED. ROAD DIST. No.	STATE	FED. A-3 PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
5	IOWA	F.A. 42		16	59

1929 PAVING



BENCH MARKS:

# 40 Sta 300+00	Sph in Tel P #122 - 45' Lt.	Elev = 745.48
# 41 Sta 314+03	Sph in Twin Elm 60' Rt	Elev = 722.40
# 42 Sta 321+45	Cross on 40' Boxelder 60' Rt	Elev = 688.00
# 43 Sta 335+00	Cross on N End of E. 141' W. on culvert	Elev = 653.87
# 44 Sta 336+00	SPK in Tel Pole 35' Lt.	Elev = 653.65

