

STATE OF INDIANA
INDIANA STATE HIGHWAY COMMISSION

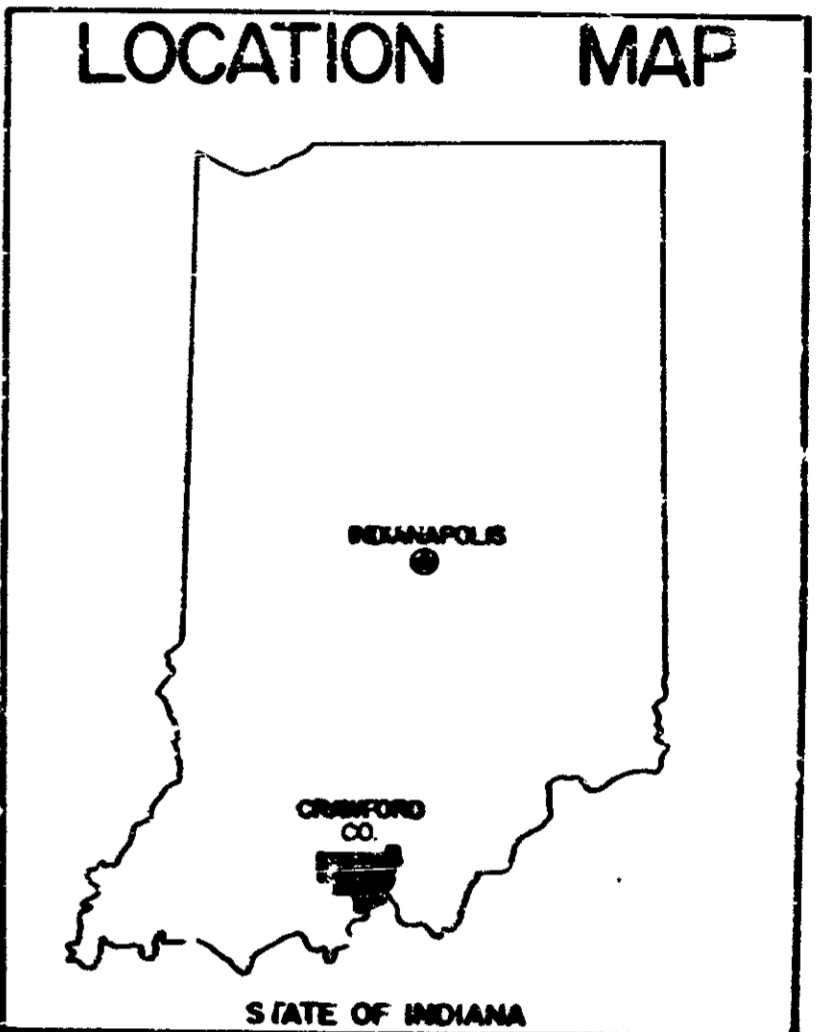
PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

I PROJECT NO. 64-3 (30)86 PE.
(33)86 R/W
(39)86 PAVING

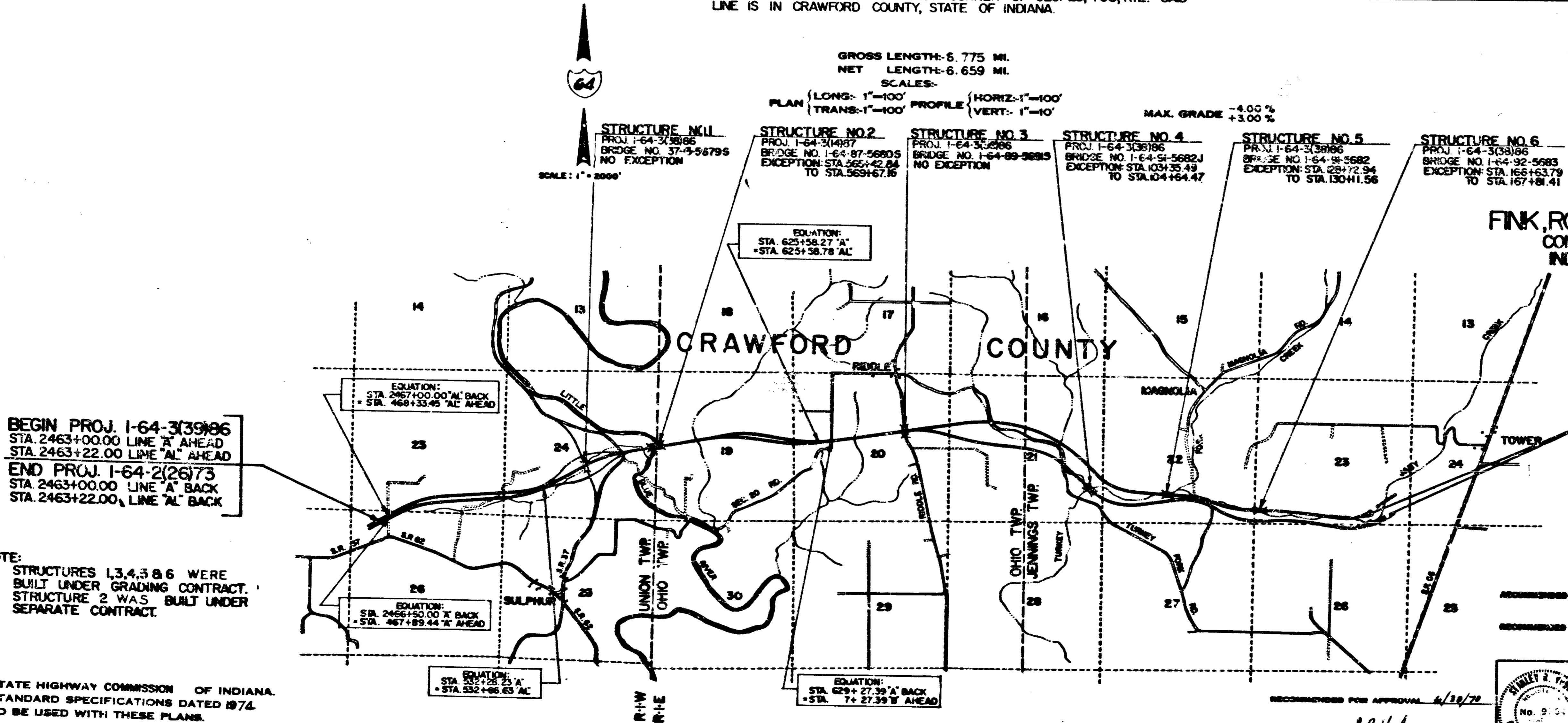
BEGINNING AT A POINT APPROXIMATELY 989.7' EAST AND APPROXIMATELY 444.4' SOUTH OF THE NORTHWEST CORNER OF SEC. 26, T.3S, R.1W, AND RUNNING IN AN EASTERLY DIRECTION A DISTANCE OF 35,777.0' TO A POINT ON THE SOUTH SEC. LINE AND APPROXIMATELY 1790.0' WEST OF THE SOUTHEAST CORNER OF SEC. 23, T.3S, R.1E. SAID LINE IS IN CRAWFORD COUNTY, STATE OF INDIANA.

FEDERAL AID DISTRICT NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1-64-3(39)86	1970	1	71

DESIGN DATA		
A.D.T. (1960)	6368	V.P.D.
A.D.T. (1980) PROJECTED	12010	V.P.D.
D.H.V. (1960)	1651	V.P.H.
DIRECTIONAL DISTRIBUTION		
TRUCKS D.H.V. 10% A.D.T. 20%	52%	
DESIGN SPEED	70	M.P.H.
ACCESS CONTROL	FULL	



NOTE: These Plans have been revised Nov. 1960 to include the Special Criteria of "Highway Design and Operational Practices Related to Highway Safety" dated February, 1960.



FINK, ROBERTS & PETRE, INC.
CONSULTING ENGINEERS
INDIANAPOLIS, INDIANA

CERTIFIED Maurice Gair DATE 12-15-67

END PROJ. I-64-3(39)86
STA. 198+50.00 LINE 'B' BACK
STA. 201+50.00 LINE 'BL' BACK
BEGIN PROJ. I-64-3(41)93
STA. 198+50.00 LINE 'B' AHEAD
STA. 201+50.00 LINE 'BC' AHEAD

BEGIN PROJ. I-64-3(39)86
STA. 2463+00.00 LINE 'A' AHEAD
STA. 2463+22.00 LINE 'AL' AHEAD
END PROJ. I-64-2(26)73
STA. 2463+00.00 LINE 'A' BACK
STA. 2463+22.00 LINE 'AL' BACK

NOTE:
STRUCTURES 1,3,4,5 & 6 WERE BUILT UNDER GRADING CONTRACT. STRUCTURE 2 WAS BUILT UNDER SEPARATE CONTRACT.

STATE HIGHWAY COMMISSION OF INDIANA
STANDARD SPECIFICATIONS DATED 1974
TO BE USED WITH THESE PLANS.

APPROVED 7/1/1970
RECOMMENDED FOR APPROVAL [Signature] DATE 6-22-70
RECOMMENDED FOR APPROVAL [Signature] DATE 6-15-70



FEDERAL HIGHWAY ADMINISTRATION DEPARTMENT OF TRANSPORTATION	
APPROVED	DATE
DIVISION ENGINEER	DATE

ROAD FILE -

RECOMMENDED FOR APPROVAL 6/30/70
[Signature]

TYPICAL CROSS SECTION STATIONING

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IND.	IND.	I-64-3(39)06	1970	2A	71

WESTBOUND LANE

STATION TO STATION	LINE	PAVEMENT SECTION N°	MEDIAN SECTION N°
2463+00 to 2464+00	"AL"	5	
2464+00 to 2465+00	"AL"	5 Lt. 2 Rt.	
2465+00 to 2465+00	"AL"	2	
2465+50 to 2467+00.00	"AL"	2 Lt. 16 Rt.	
EQ: 2467+00.00 Line "AL" Back = 4x3 + 33.45 Line "AL" Ahead			
452+53.35 to 473+02.82	"A1"	16	
473+62.82 to 474+15	"AL"	21	
474+15 to 474+50	"AL"	9	
474+50 to 475+25	"AL"	13	
475+25 to 478+25	"AL"	9 Lt. 13 Rt.	
478+25 to 484+25	"AL"	13	
484+25 to 487+25	"AL"	21	
487+25 to 488+95.82	"AL"	21 Lt. 13 Rt.	
488+95.82 to 492+45	"AL"	15	
492+25 to 495+40	"AL"	5	
495+40 to 503+80	"AL"	16	
503+80 to 509+25	"AL"	2 Lt. 5 Rt.	
509+25 to 510+15	"AL"	2	
510+15 to 510+90	"AL"	2 Lt. 5 Rt.	
510+90 to 512+72.74	"AL"	5	
512+72.74 to 527+75	"AL"	18	
527+75 to 532+66.63	"AL"	18	
EQ: 532+66.63 Line "AL" Back = 592+28.23 Line "A" Ahead			
532+28.23 to 533+50	"A1"	10	
533+50 to 542+35.86	"A1"	5	
542+35.86 to 554+81.42	"A1"	13	
554+81.42 to 570+90	"A1"	5	
570+90 to 577+10	"A1"	16	
577+10 to 587+10	"A1"	5	
587+10 to 587+90	"A1"	16	
587+90 to 588+84.88	"A1"	16	
EQ: 588+84.88 Line "A1" Back = 588+84.88 Line "A1" Ahead			
588+84.88 to 590+10.69	"AL"	16	
590+10.69 to 595+75	"AL"	21	
595+75 to 602+82.24	"AL"	21	
602+82.24 to 613+82.77	"AL"	16	
613+82.77 to 619+50	"AL"	18	
619+50 to 625+35	"AL"	6	
625+35 to 625+58.78	"AL"	6 Lt. 10 Rt.	
EQ: 625+58.78 Line "AL" Back = 625+58.78 Line "A" Ahead			
625+58.78 to 626+30	"A1"	5	
626+30 to 629+27.39	"A1"	2	
EQ: 629+27.39 Line "A1" Back = 7+27.39 Line "B" Ahead			
7+27.39 to 10+25	"B1"	2	
10+25 to 22+25	"B1"	5	
22+25 to 26+00	"B1"	2 Lt. 5 Rt.	
26+00 to 29+50	"B1"	5	
29+50 to 33+21.15	"B1"	2	
EQ: 33+21.15 Line "B1" Back = 33+21.15 Line "B1" Ahead			
33+21.15 to 33+35	"B1"	2	
33+35 to 34+75	"B1"	10	
34+75 to 38+00	"B1"	10	
38+00 to 56+28.25	"B1"	20	
56+28.25 to 57+25	"B1"	21	
57+25 to 67+00	"B1"	15	
67+00 to 74+50	"B1"	21	
74+50 to 79+25	"B1"	15	
79+25 to 84+90	"B1"	21	
84+90 to 95+90	"B1"	15	
95+90 to 96+87.75	"B1"	21	
96+87.75 to 99+80	"B1"	19	
99+80 to 100+85	"B1"	16 Lt. 5 Rt.	
100+85 to 105+80	"B1"	10	
105+80 to 107+18.89	"B1"	5	
107+18.89 to 109+85	"B1"	10	
109+85 to 111+40	"B1"	15 Lt. 10 Rt.	
111+40 to 124+61.72	"B1"	15	
124+61.72 to 128+10	"B1"	16	
128+10 to 130+12		Structure - Limits	

STATION TO STATION	LINE	PAVEMENT SECTION N°	MEDIAN SECTION N°
130+12 to 131+95.17	"B1"	5	
131+95.17 to 140+80	"B1"	13	
140+80 to 141+87.83	"B1"	13	
141+87.83 to 144+50	"B1"	5	
144+50 to 148+25	"B1"	5	
148+25 to 151+11.54	"B1"	16	
151+11.54 to 153+35	"B1"	18	
153+35 to 182+11.04	"B1"	10	
182+11.04 to 182+60	"B1"	5	
182+60 to 187+82		Structure - Limits	
187+82 to 189+75	"B1"	5	
189+75 to 171+43.79	"B1"	10 Lt. 5 Rt.	
171+43.79 to 172+10	"B1"	13	
172+10 to 173+75	"B1"	21 Lt. 13 Rt.	
173+75 to 175+30	"B1"	13	
175+30 to 181+28.23	"B1"	21 Lt. 13 Rt.	
181+28.23 to 184+50	"B1"	16 Lt. 5 Rt.	
184+50 to 191+68.88	"B1"	5	
191+68.88 to 199+75	"B1"	10	
199+75 to 201+50	"B1"	18 Lt. 10 Rt.	

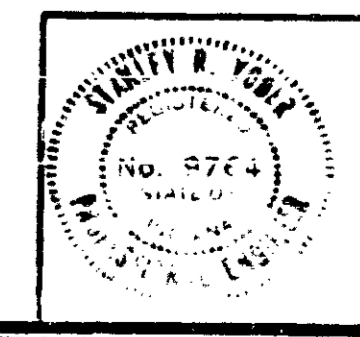
EASTBOUND LANE

STATION TO STATION	LINE	PAVEMENT SECTION N°	MEDIAN SECTION N°
2463+00 to 2465+25	"A"	17	
2465+25 to 2466+60.00	"A"	17	
EQ: 2466+60.00 Line "A" Back = 467+89.44 Line "A" Ahead			
467+89.44 to 471+37.00	"A"	17	
471+37.00 to 473+80	"A"	19	
473+80 to 474+85	"A"	19	
474+85 to 495+48.00	"A"	11	
495+48.00 to 495+80	"A"	4	
495+80 to 495+80	"A"	17	
495+80 to 501+40	"A"	17	
501+40 to 503+20	"A"	17 Lt. 3 Rt.	
503+20 to 505+20	"A"	17 Lt. 4 Rt.	
505+20 to 509+51.62	"A"	4	
509+51.62 to 513+55	"A"	12	
513+55 to 517+55	"A"	20 Lt. 8 Rt.	
517+55 to 518+20	"A"	20 Lt. 12 Rt.	
518+20 to 519+00	"A"	20 Lt. 8 Rt.	
519+00 to 524+15	"A"	20	
524+15 to 527+50	"A"	20	
527+50 to 529+37.73	"A"	20 Lt. 12 Rt.	
529+37.73 to 530+40	"A"	4	
530+40 to 531+50	"A"	4	
531+50 to 532+28.23	"A"	4	
532+28.23 to 538+20	"A"	4	
538+20 to 542+35.86	"A"	4	
542+35.86 to 549+00	"A"	11	
549+00 to 550+25	"A"	19	
550+25 to 551+75	"A"	19	
551+75 to 553+00	"A"	19	
553+00 to 554+81.42	"A"	11	
554+81.42 to 570+50	"A"	4	
570+50 to 577+15	"A"	17	
577+15 to 587+90	"A"	4	
587+90 to 588+40	"A"	4	
588+40 to 588+84.88	"A"	17	
588+84.88 to 595+50	"A"	19	
595+50 to 601+14.05	"A"	19	
601+14.05 to 602+25	"A"	17	
602+25 to 604+75	"A"	17 Lt. 4 Rt.	
604+75 to 608+50	"A"	17	
608+50 to 610+50	"A"	17 Lt. 4 Rt.	
610+50 to 611+17.39	"A"	17	
611+17.39 to 619+75	"A"	20	
619+75 to 620+75	"A"	20	
620+75 to 622+98.78	"A"	8	
622+98.78 to 625+125	"A"	3	
625+125 to 625+58.78	"A"	4	
625+58.78 to 628+30	"A"	4	
628+30 to 629+27.39	"A"	3	
EQ: 629+27.39 Line "A" Back = 7+27.39 Line "B" Ahead			
7+27.39 to 10+25	"B1"	3	
10+25 to 29+10	"B1"	4	
29+10 to 33+21.15	"B1"	5	
33+21.15 to 38+00	"B1"	7	
38+00 to 45+01.88	"B1"	7	
45+01.88 to 59+34.45	"B1"	17	
59+34.45 to 67+16.67	"B1"	20	
67+16.67 to 74+70	"B1"	17	
74+70 to 77+06.80	"B1"	4	
77+06.80 to 78+10	"B1"	11	
78+10 to 80+150	"B1"	11 Lt. 13 Rt.	
80+150 to 89+35	"B1"	19	
89+35 to 92+31.47	"B1"	11	
92+31.47 to 102+99.44	"B1"	4	
102+99.44 to 103+35	"B1"	12	
103+35 to 104+65		Structure - Limits	
104+65 to 105+40	"B1"	12	
105+40 to 112+90	"B1"	20	
112+90 to 123+10.77	"B1"	12	
123+10.77 to 132+29.78	"B1"	4	
132+29.78 to 143+21.05	"B1"	11	
143+21.05 to 145+75	"B1"	4	

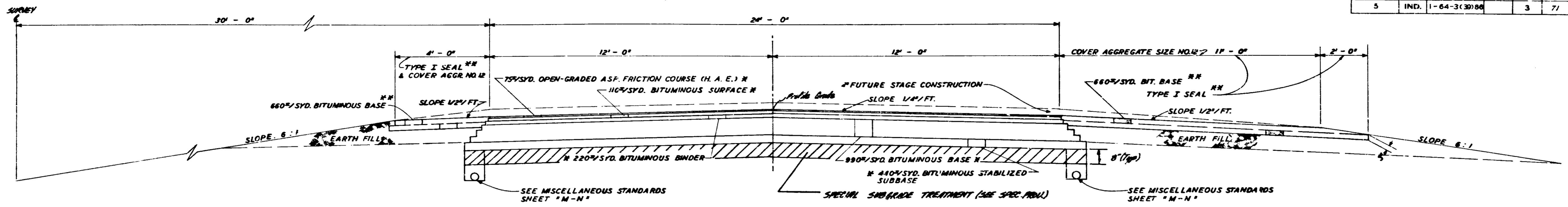
STATION TO STATION	LINE	PAVEMENT SECTION N°	MEDIAN SECTION N°
145+75 to 150+70	"B1"	17	
150+70 to 151+50	"B1"	3	
151+50 to 152+27.09	"B1"	4	
152+27.09 to 153+50	"B1"	12	
153+50 to 159+00	"B1"	20	
159+00 to 159+65	"B1"	12	
159+65 to 162+91.38	"B1"	8	
162+91.38 to 164+10	"B1"	3	
164+10 to 169+00	"B1"	4	
169+00 to 172+28.77	"B1"	17	
172+28.77 to 183+00	"B1"	19	
183+00 to 183+22.10	"B1"	7	
183+22.10 to 192+50	"B1"	3	
192+50 to 193+02.07	"B1"	17	
193+02.07 to 195+30	"B1"	20	
195+30 to 197+00	"B1"	12	
197+00 to 198+50	"B1"	20	

Note: Median Section to be completed with Grading Project.

DETAILS

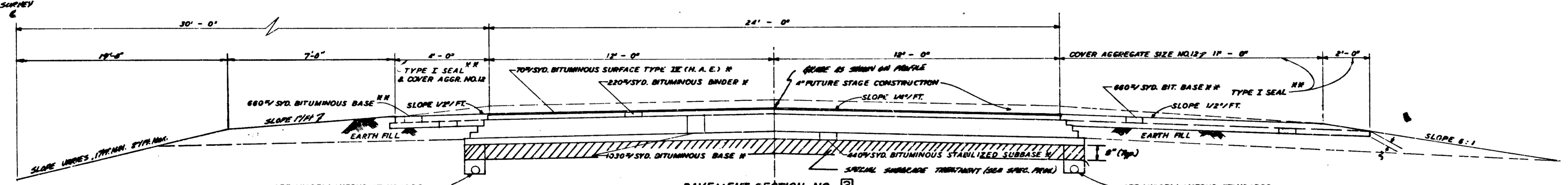


FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1-64-3(30)86		3	71



PAVEMENT SECTION NO. 1
ON TANGENTS AND ON CURVES OF
0° 29.99' OR LESS

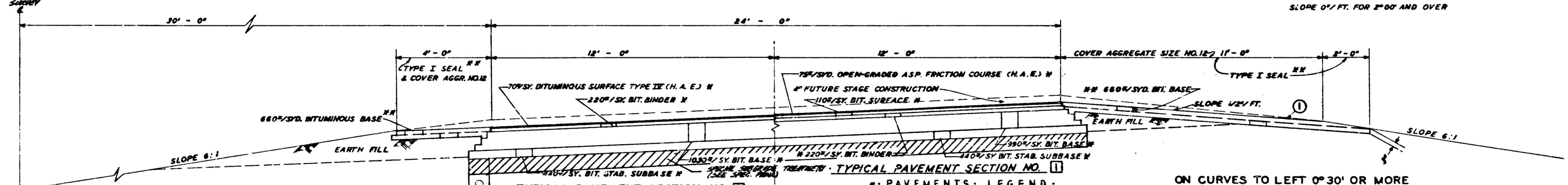
STA. 2463+00 LINE 'A', STA. 2463+22 LINE 'AL' TO STA. 33+21.15 LINE 'B'



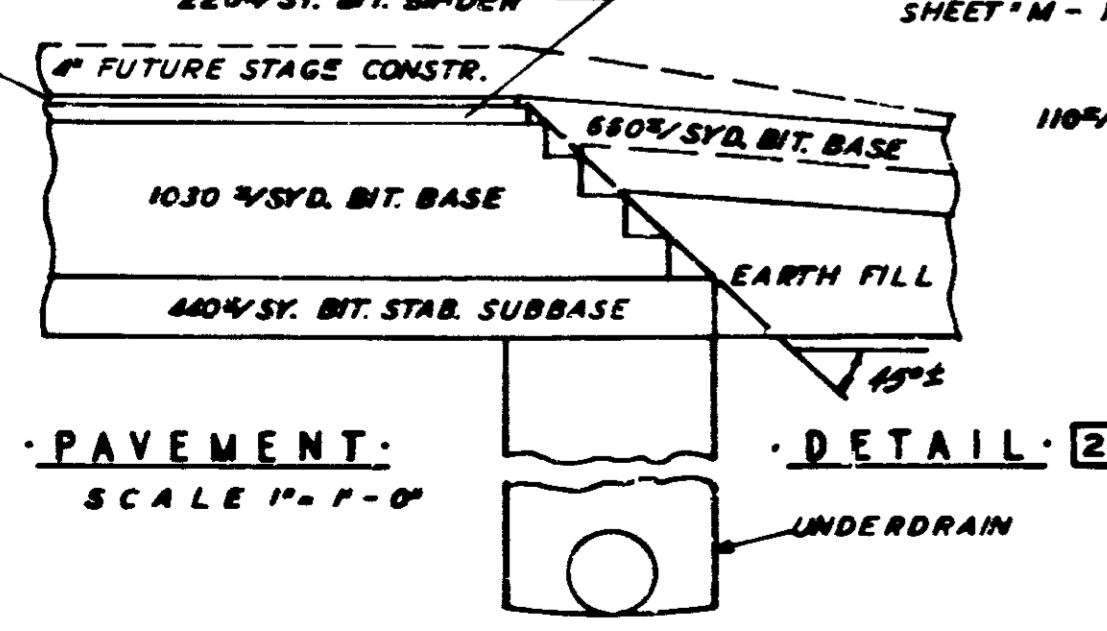
PAVEMENT SECTION NO. 2
ON TANGENTS AND ON CURVES OF
0° 29.99' OR LESS

STA. 33+21.15 LINE 'B' TO STA. 198+50 LINE 'B', STA. 201+50 LINE 'BL'

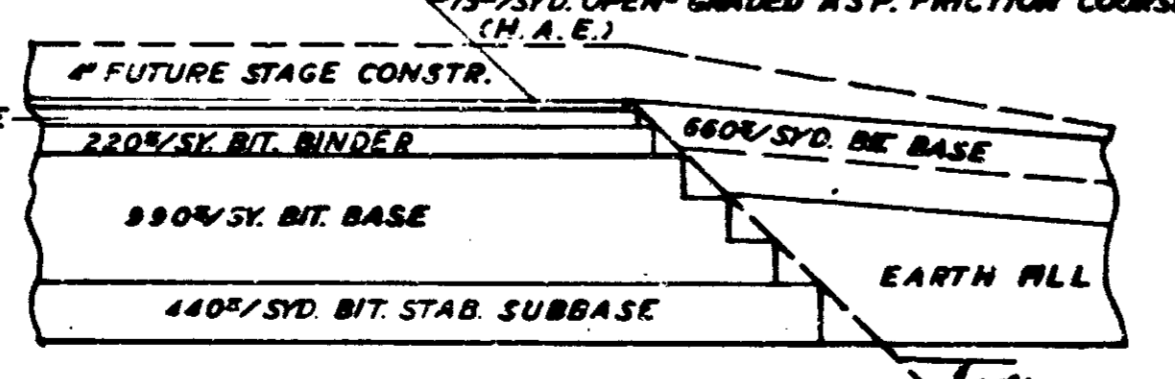
- ① SLOPE 1/2' FT. FOR 0° 30' TO 1° 29.99'
- SLOPE 1/4' FT. FOR 1° 30' TO 1° 59.99'
- SLOPE 0' FT. FOR 2° 00' AND OVER



TYPICAL PAVEMENT SECTION NO. 2
ON CURVES TO LEFT 0° 30' OR MORE
CURVES TO RIGHT REVERSED



PAVEMENT DETAIL 2
SCALE 1" = 1'-0"



PAVEMENT DETAIL 1
SCALE 1" = 1'-0"

- PAVEMENTS LEGEND:
- ① 75% SYD. OPEN-GRADED ASP. FRICTION COURSE (H. A. E.) ON 110% SYD. HOT A. CONC. SURFACE TYPE 'B' ON 220% SYD. HOT A. CONC. BINDER ON 990% SYD. HOT A. CONC. BASE ON 440% SYD. BITUMINOUS STABILIZED SUBBASE OR 75% SYD. OPEN-GRADED ASP. FRICTION COURSE (H. A. E.) ON 110% SYD. HOT A. E. SURFACE TYPE 'B' ON 220% SYD. HOT A. E. BINDER ON 990% SYD. HOT A. E. BASE ON 440% SYD. BITUMINOUS STABILIZED SUBBASE
 - ② 70% SYD. BITUMINOUS SURFACE TYPE 'B' (H. A. E.) ON 220% SYD. HOT A. CONC. BINDER ON 1030% SYD. HOT A. CONC. BASE ON 440% SYD. BITUMINOUS STABILIZED SUBBASE OR 70% SYD. BIT. SURFACE TYPE 'B' (H. A. E.) ON 220% SYD. H. A. E. BINDER ON 1030% SYD. H. A. E. BASE ON 440% SYD. BIT. STABILIZED SUBBASE
- SHOULDERS:
- ① 660% SYD. BITUMINOUS BASE (SIZE #3-B) WITH A TYPE I SEAL AND COVER AGGREGATE (SIZE 12)
 - ② 660% SYD. BITUMINOUS BASE (SIZE #3-B) WITH A TYPE I SEAL AND COVER AGGREGATE (SIZE 12)

TYPICAL CROSS SECTIONS

SCALE: 1" = 2'-0"

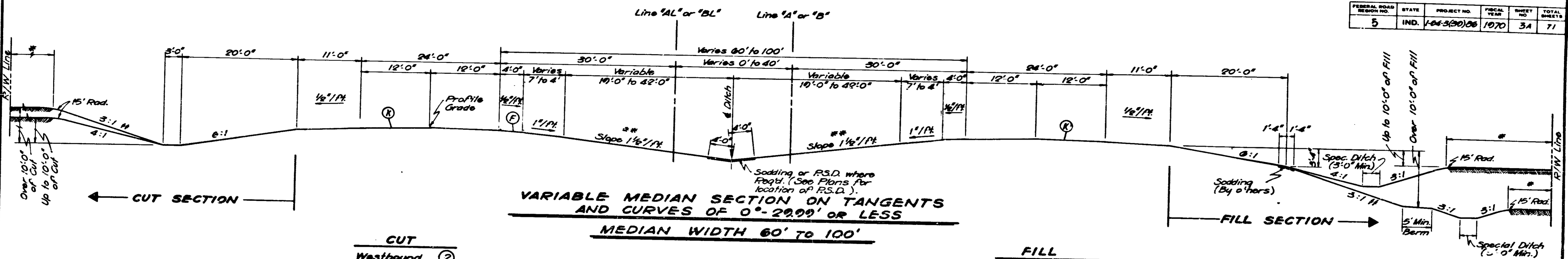
RECOMMENDED FOR APPROVAL 12-11-78

Byron R. Burch
STATE OF INDIANA



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
1-64-3(30)86		3	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1-64-3(20)06	1970	3A	71



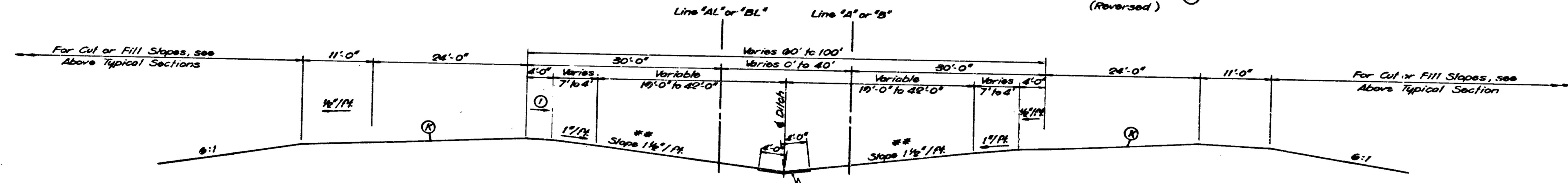
CUT

Westbound	(2)
Eastbound (Reversed)	(3)

FILL

Eastbound	(4)
Westbound (Reversed)	(5)

VARIABLE MEDIAN SECTION ON TANGENTS AND CURVES OF 0°-29.99° OR LESS
MEDIAN WIDTH 60' TO 100'



	CUT	FILL
Westbound Curve Lt.	(6)	(10)
Eastbound Curve Rt. (Reversed)	(7)	(11)

	CUT	FILL
Eastbound Curve Lt.	(8)	(12)
Westbound Curve Rt. (Reversed)	(9)	(13)

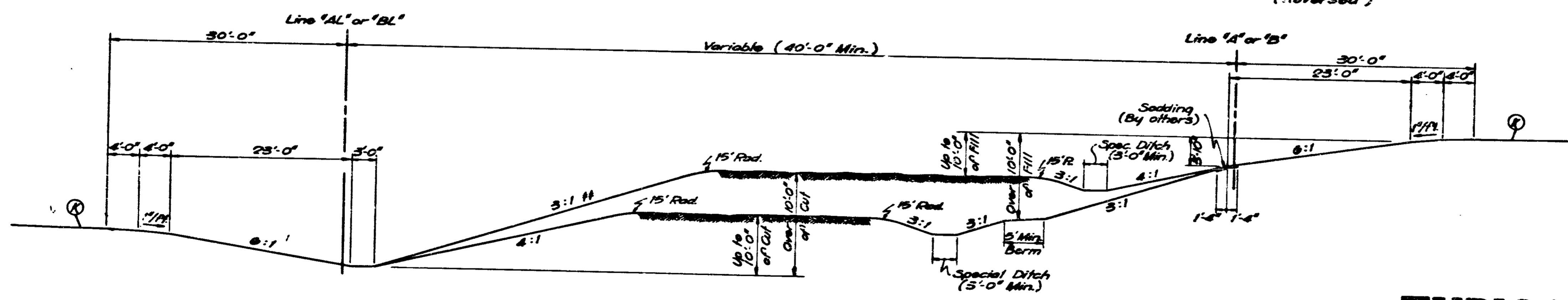
VARIABLE MEDIAN SECTION ON CURVES TO RIGHT OF 0°-30° OR MORE (CURVES TO RIGHT REVERSED)
MEDIAN WIDTH 60' TO 100'

LEGEND

- (F) Bituminous Shoulder
- (N) Underdrain - For Details see Misc. Sfd. Sheet "4N"
- (A) For Pavement & Shoulder Detail see Sheet No. 3

- * Minimum distance to R/W Line to be 3'-0" in Fill and 5'-0" in Cut.
- ** Minimum Slope 1'/ft. Maximum Slope 2'/ft. for Special Center Ditch.
- *** For Axis of Superelevation, see Special Detail in the Plans.
- †† This slope may be reduced to a 2:1 Min. where R/W conditions warrant.
- ① Slope 1/2'/ft. for 0°-30' to 1°-29.99' Slope 1/4'/ft. for 1°-30' to 1°-59.99' Slope 0'/ft. for 2°-00' and Over.

NOTE: For Stationing, see "Typical Cross Section Stationing" Table.



VARIABLE MEDIAN SECTION
MEDIAN WIDTH OVER 100'

PAVING
TYPICAL CROSS SECTIONS

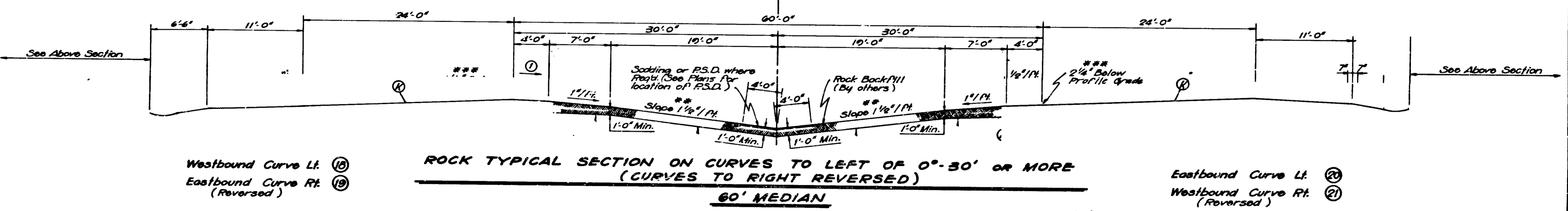
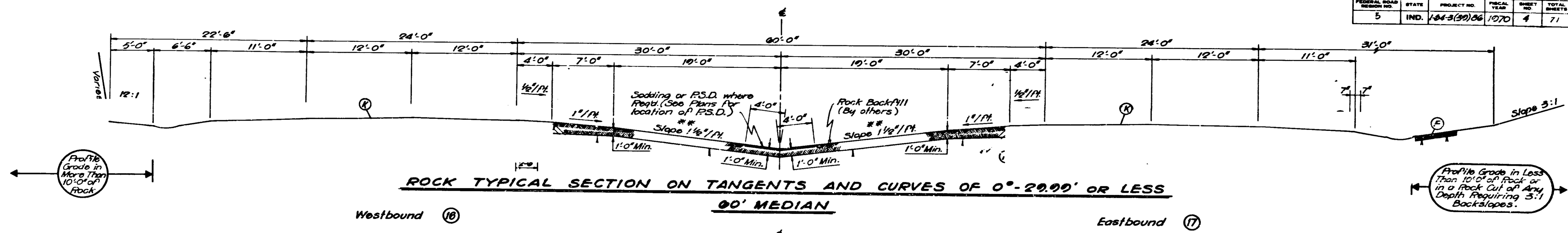
SCALE: 1/8" = 1'-0"

SUBMITTED FOR APPROVAL 6/30/70



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
1-64-3(20)06		3A	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	184-3(99)06	1970	4	71

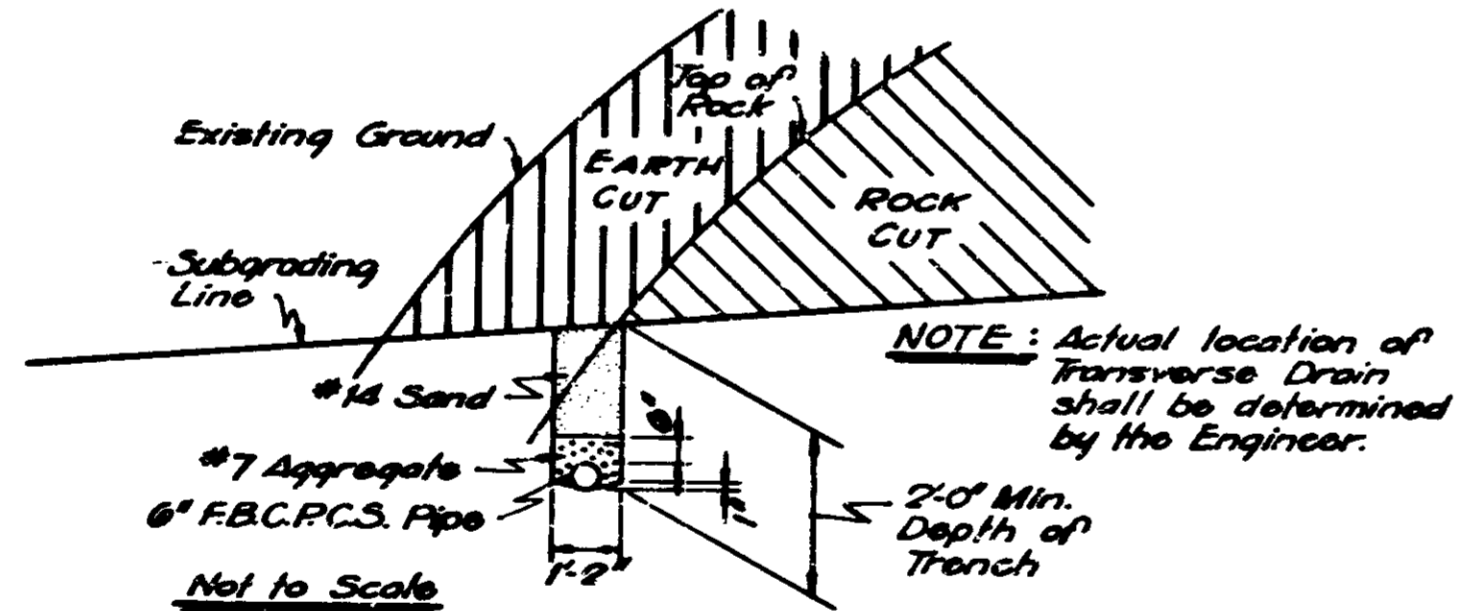


Westbound Curve Lt. 18
Eastbound Curve Rt. 19
(Reversed)

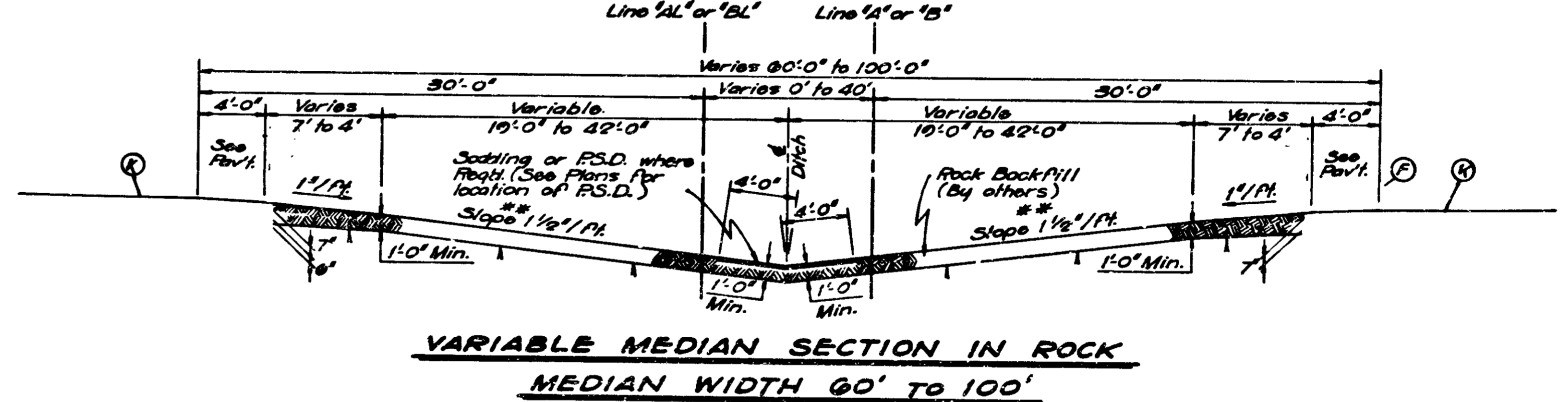
Eastbound Curve Lt. 20
Westbound Curve Rt. 21
(Reversed)

LEGEND

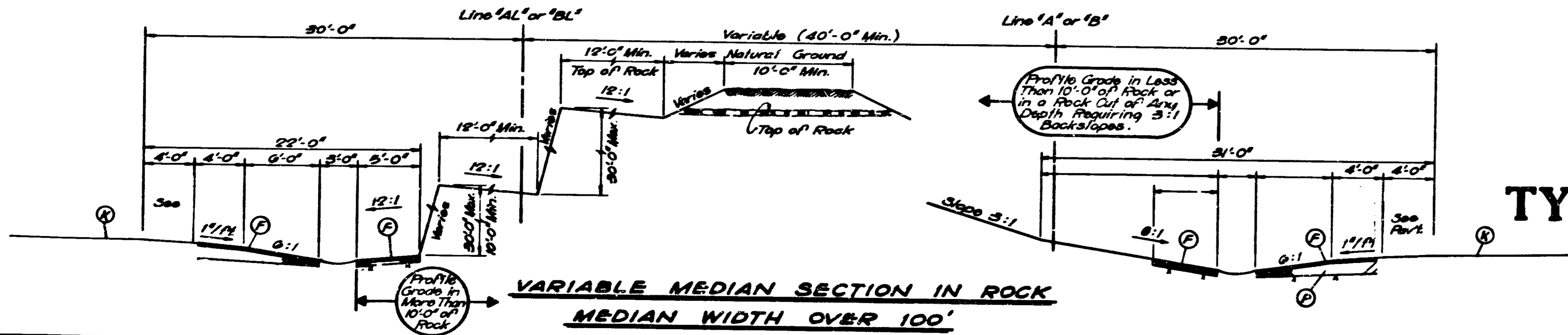
- (F) Bituminous Shoulder
- (K) For Pavement & Shoulder Detail See Sheet No. 3
- (N) Underdrain - For Details, see Misc. Standard Sheet 'MN'
- (T) Designates Surface of Exposed Rock.
- ** Min. Slope 1' / 1' ft
Max. Slope 2' / 1' ft
For Special Center Ditch.
- *** For Axis of Superelevation, see Special Detail in the Plans.
- ① Slope 1/2' / 1' ft. for 0°30' to 1°29.99'
Slope 1/4' / 1' ft. for 1°30' to 1°59.99'
Slope 0' / 1' ft. for 2°00' and Over



TYPICAL TRANSVERSE DRAIN DETAIL AT LOW POINT OF ROCK CUT



VARIABLE MEDIAN SECTION IN ROCK
MEDIAN WIDTH 60' TO 100'



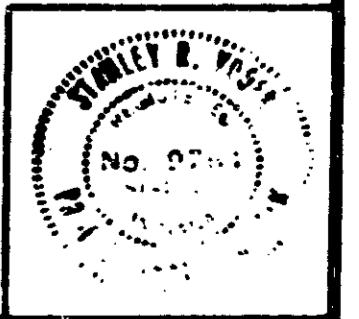
VARIABLE MEDIAN SECTION IN ROCK
MEDIAN WIDTH OVER 100'

NOTE: For Stationing, see 'Typical Cross Section Stationing' Table.

**PAVING
TYPICAL CROSS SECTIONS**

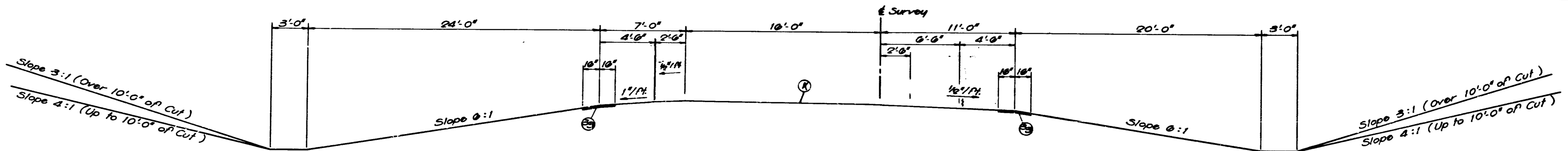
SCALE: 3/16" = 1'-0"

SUBMITTED FOR APPROVAL 4/25/72

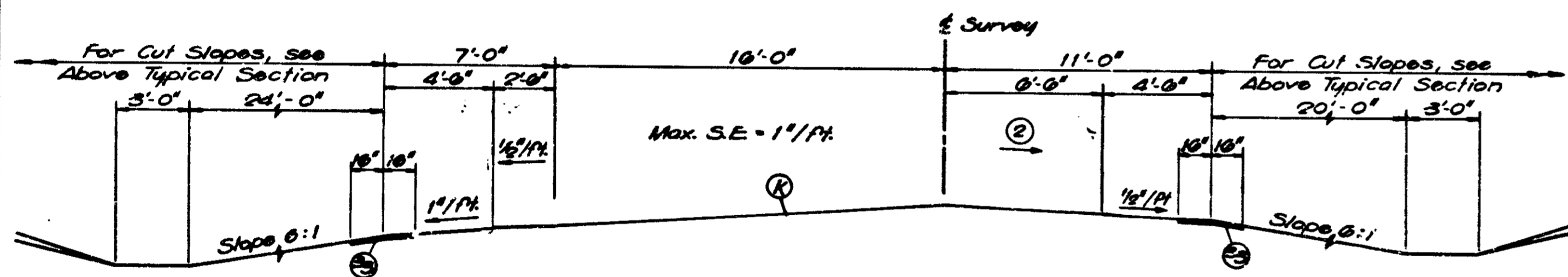


PROJECT NO.	LINE	POST	DATE	FILE
184-3(99)06	6	71		

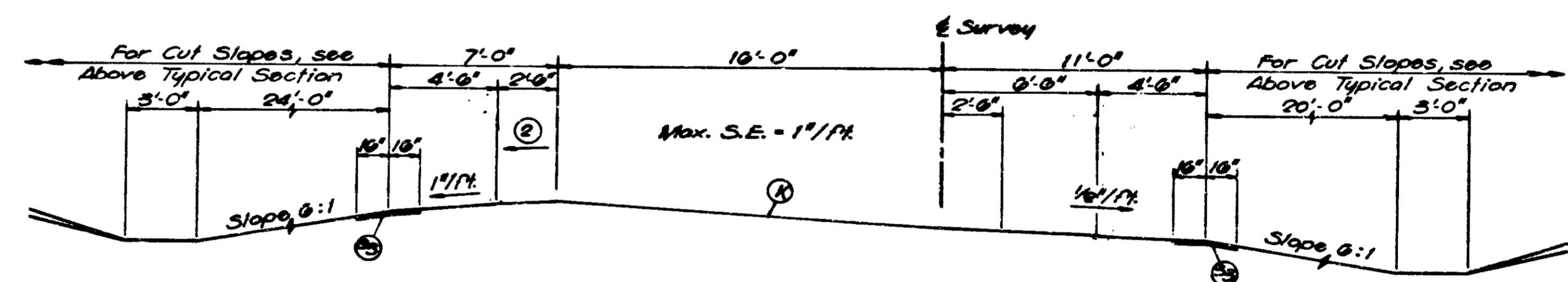
FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	144-5(20)06	1970	5	71



CUT SECTION FOR RAMPS ON TANGENT



CUT SECTION FOR RAMP CURVES SUPERELEVATED TO LEFT



CUT SECTION FOR RAMP CURVES SUPERELEVATED TO RIGHT

S.E.R.
Sta. 13+20 to Sta. 13+65

LEGEND

- Ⓚ For Pavement & Shoulder Detail See Sheet No. 1
- Ⓛ Bituminous Shoulder
- Ⓝ Underdrain - For Details, see Misc. Std. Sheet "M.V."
- Ⓢ Sodding
- Ⓞ Slope 1/4" / Ft. - Rate of S.E. up to 0.04' / Ft.
- Ⓞ Slope 1/8" / Ft. - Rate of S.E. 0.041' / Ft. to 0.08' / Ft.
- Ⓞ Slope 0" / Ft. - Rate of S.E. 0.081' / Ft. and greater.

**S.R. 37 INTERCHANGE RAMPS
PAVING
TYPICAL CROSS SECTIONS**

SCALE: 1/4" = 1'-0"

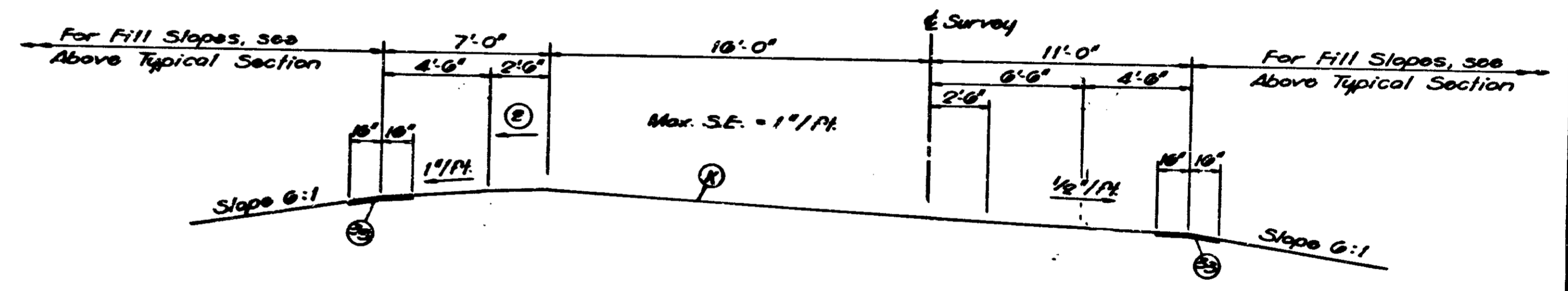
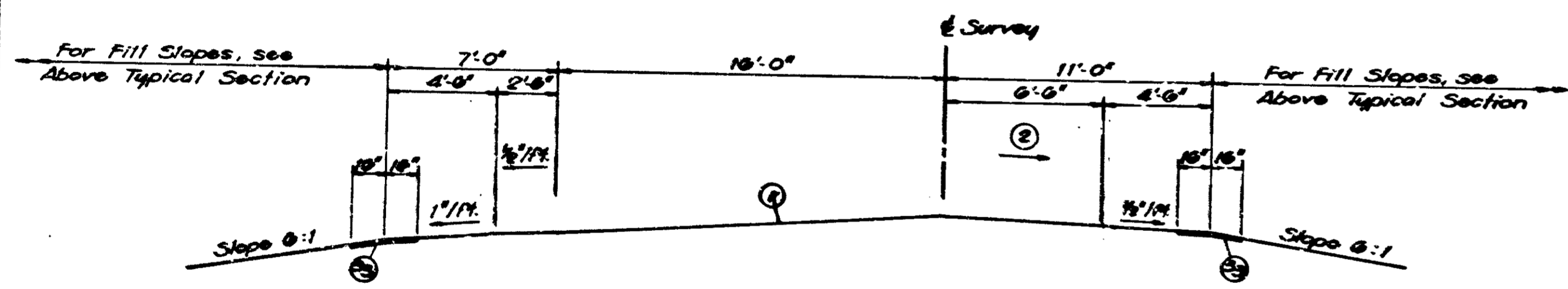
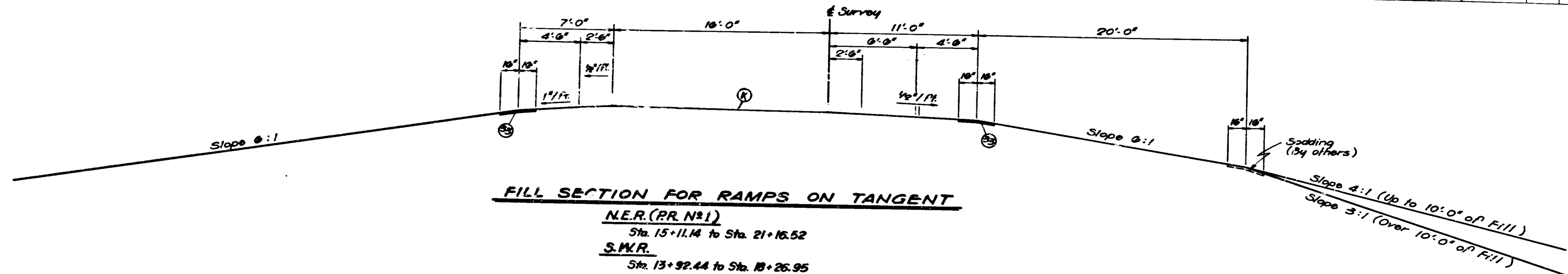
SUBMITTED FOR APPROVAL 6/30/70

J.R. [Signature]



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
144-5(20)06		5	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	144-3(99)06	1970	6	71



LEGEND

- ⓐ For Pavement & Shoulder Detail See Sheet No. 7
- ⓑ Bituminous Shoulder
- ⓒ Underdrain - For Details, see Misc. Std. Sheet "M.N."
- ⓓ Saddling
- ⓔ Slope 1/2" / ft. - Rate of S.E. up to 0.04" / ft.
- ⓕ Slope 1/4" / ft. - Rate of S.E. 0.021" / ft. to 0.06" / ft.
- ⓖ Slope 0" / ft. - Rate of S.E. 0.081" / ft. and greater

**S.R. 37 INTERCHANGE RAMPS
PAVING
TYPICAL CROSS SECTIONS**

SCALE: 1/2" = 1'-0"

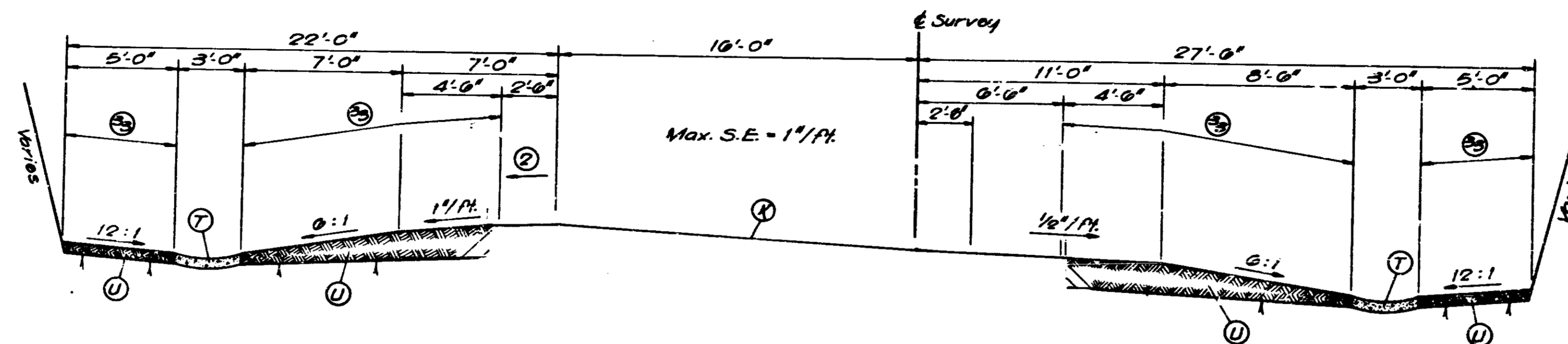
SUBMITTED FOR APPROVAL 6/30/70

J.R. Yoder



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
144-3(99)06		6	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	144-3(30)26	1970	7	71



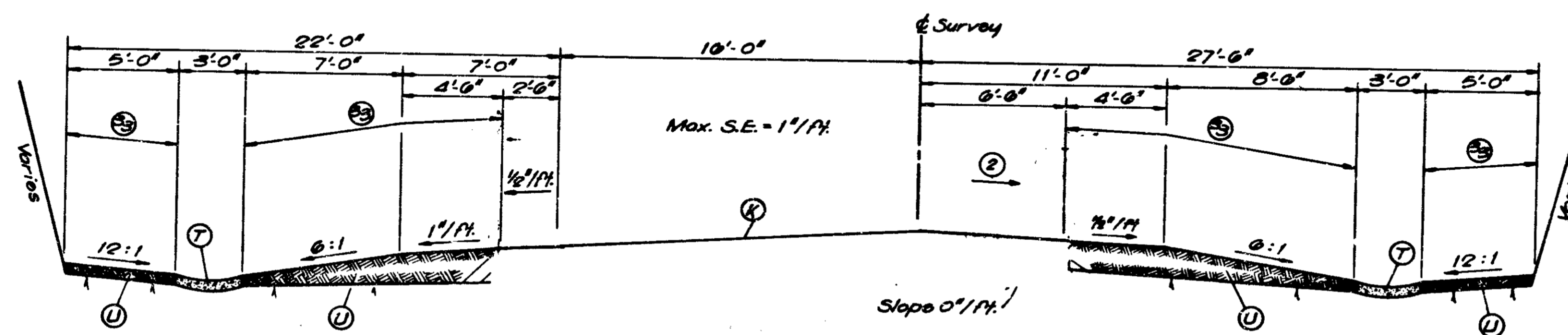
ROCK CUT SECTION FOR RAMPS ON TANGENT OR RAMP CURVES SUPERELEVATED TO RIGHT

N.E.R. (P.R. No. 1)
Sta. 23+67.20 to Sta. 23+85.81
N.W.R.
Sta. 4+61.12 to Sta. 14+79.41
S.E.R.
Sta. 3+87.10 to Sta. 13+20

LEGEND

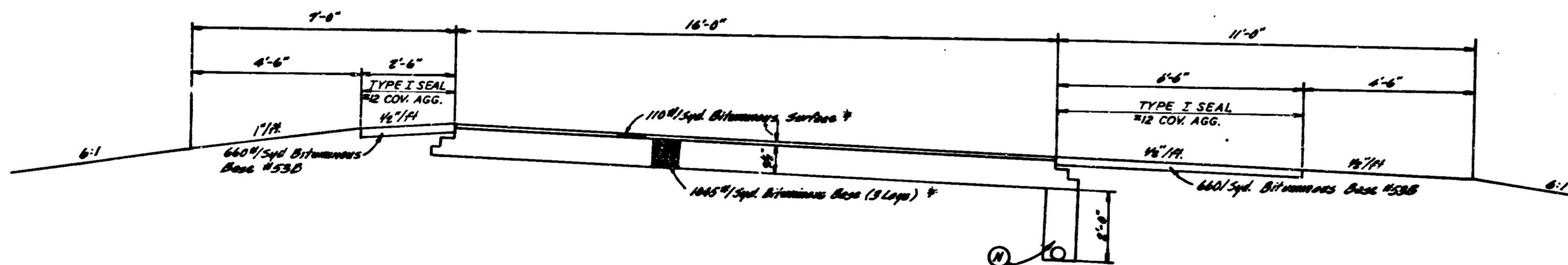
- (K) For Pavement and Shoulder detail See Detail Below
- (F) Bituminous Shoulder
- (T) CONCRETE GUTTER
- (U) Rock Backfill
- (S) Sodding
- (N) Underdrain - For Details, see Misc. Standard Sheet "MN"
- (TT) Designates Surface of Exposed Rock.
- (2) Slope 1/2% or grade of superelevation

* 110#/SYD. HOT ASPHALTIC CONC. SURFACE TYPE B ON 1045#/SYD. HOT ASPHALTIC CONC. BASE
OR
110#/SYD. H. A. E. SURFACE TYPE III ON 1045#/SYD. H. A. E. BASE



ROCK CUT SECTION FOR RAMP CURVES SUPERELEVATED TO LEFT

N.E.R. (P.R. No. 1)
Sta. 21+16.52 to Sta. 23+67.20
N.W.R.
Sta. 1+27.90 to Sta. 4+61.12
S.E.R.
Sta. 1+27.90 to Sta. 3+87.10



RAMP PAVEMENT SECTION
Scale 1" = 2'-0"

S.R. 37 INTERCHANGE RAMPS

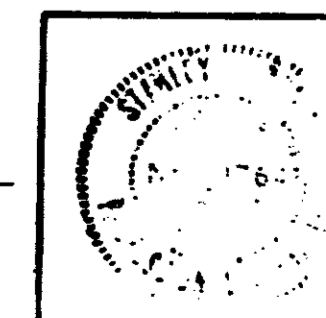
PAVING

TYPICAL CROSS SECTIONS

SCALE: 1/4" = 1'-0"

SUBMITTED FOR APPROVAL 6/30/70

J.R. Under



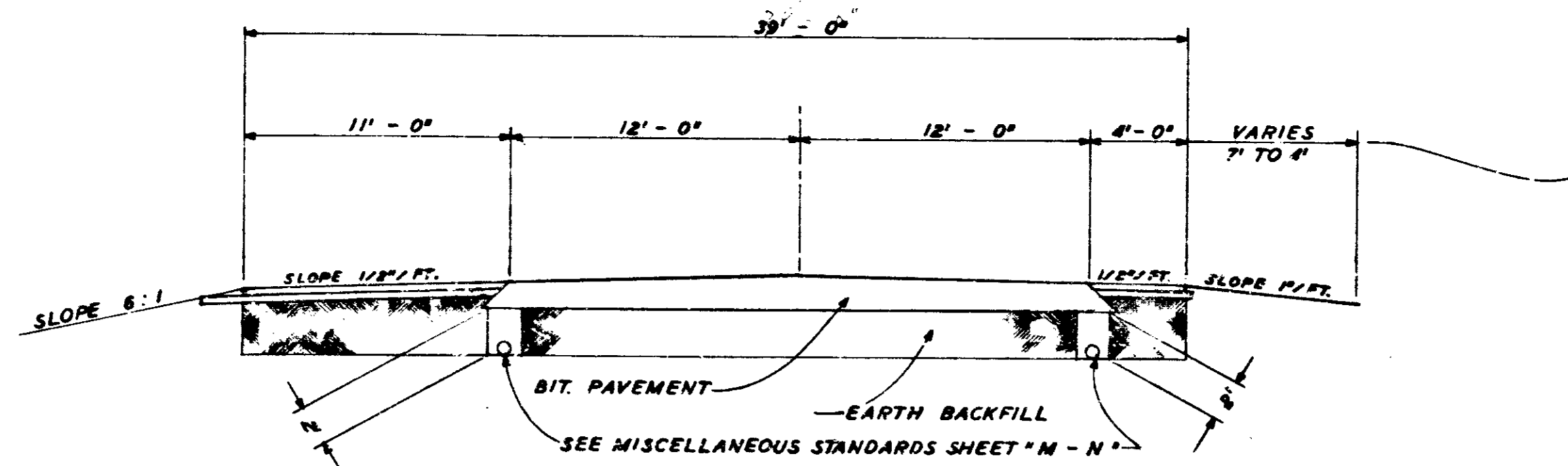
SEPTEMBER 1963

PROJECT NO.	LINE	SHEET	TOTAL SHEETS	FILE
144-3(30)26		7	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1-64-33908		7A	77

SHALE SECTIONS:

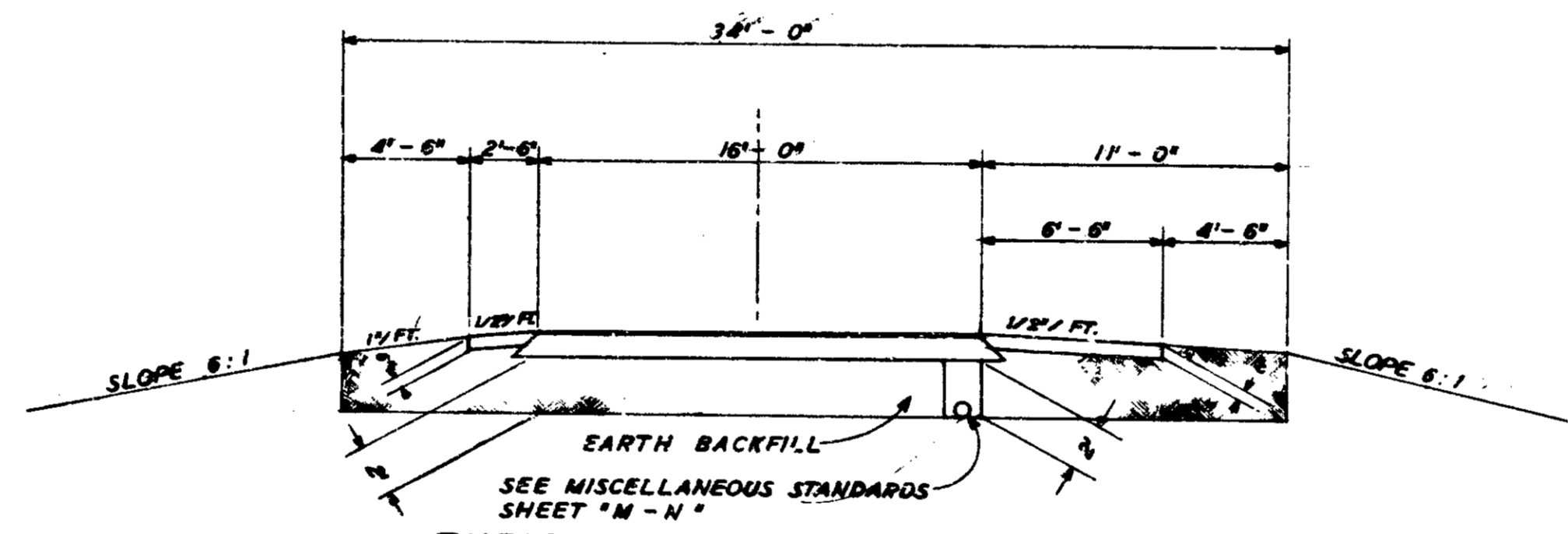
STATION	E. B. LANE	W. B. LANE
471+00 TO 474+00	✓	
469+00 TO 474+00		✓
499+00 TO 509+00		
513+00 TO 525+00		
520+00 TO 527+00		
506+00 TO 618+00	✓	
40+00 TO 53+00	✓	✓
63+00 TO 68+50		
71+00 TO 74+50	✓	
79+00 TO 88+50	✓	
96+00 TO 103+00	✓	
106+00 TO 110+00	✓	✓



TYPICAL SHALE UNDERCUT SECTION
MAINLINE

SHALE SECTIONS:

STATION	
5+00 TO 8+00	N. W. R.
6+00 TO 13+00	S. E. R.



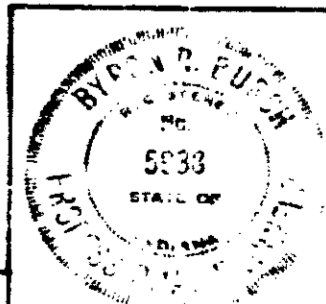
TYPICAL SHALE UNDERCUT SECTION
RAMP

TYPICAL CROSS SECTIONS

SCALE: 1" = 5'

RECOMMENDED FOR APPROVAL 12-9-74

James L. Burch
STATE ENGINEER



SEPTEMBER 1963

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
1-64-33908		7A	77	

COUNTY	TOWNSHIP	SECTION	INDEX	OWNER	ACRE
CRAWFORD	UNION	13	15A	CLYDE ROBERTS	2
			16	THOMAS & NELLIE MILBY	2.75
			15B	GREY ASH ET AL	9.50
			13C	NORMAN BURKSWORTH	0.50
			4B	DENOLA FAULKNER	0.50
			23	EVERETT & ESTELLA TIMBERLAKE	10
			12B	GEORGE & MALLIE RAINEY	1
			12C	WILLIAM & MARTENIA SMITH	1.82
			24	GRANT SATTERFIELD	10
			19	ELMER & ALICE HOUSE	10
			3	EDMUND ALLINGER	3
			4	ELMER & ALICE HOUSE	15
			9A	SHEPHERD & BERTHA WRIGHT	4
			9B	JOHN & ROSA STROUT	4
			10B	THOMAS & ARZELLA COLLINS	6
			11	RUSSELL & TERESIA UNDERHILL	2
			23B	VERSEL D WRIGHT	16.75
			12B	SAMUEL D WRIGHT	2
			14	J.C. LONGEST & LEO LAND	0.25
			15	GRANT SATTERFIELD	10
			20	GRESHAM RITCHIE	25.50
			35	GENE & JOAN RITCHIE	6.50
			6A	SYLVIA SCHULTZ	4
			11	ROBERT & MINNIE FISCHER	9
			17	RL SCHROEDER	12

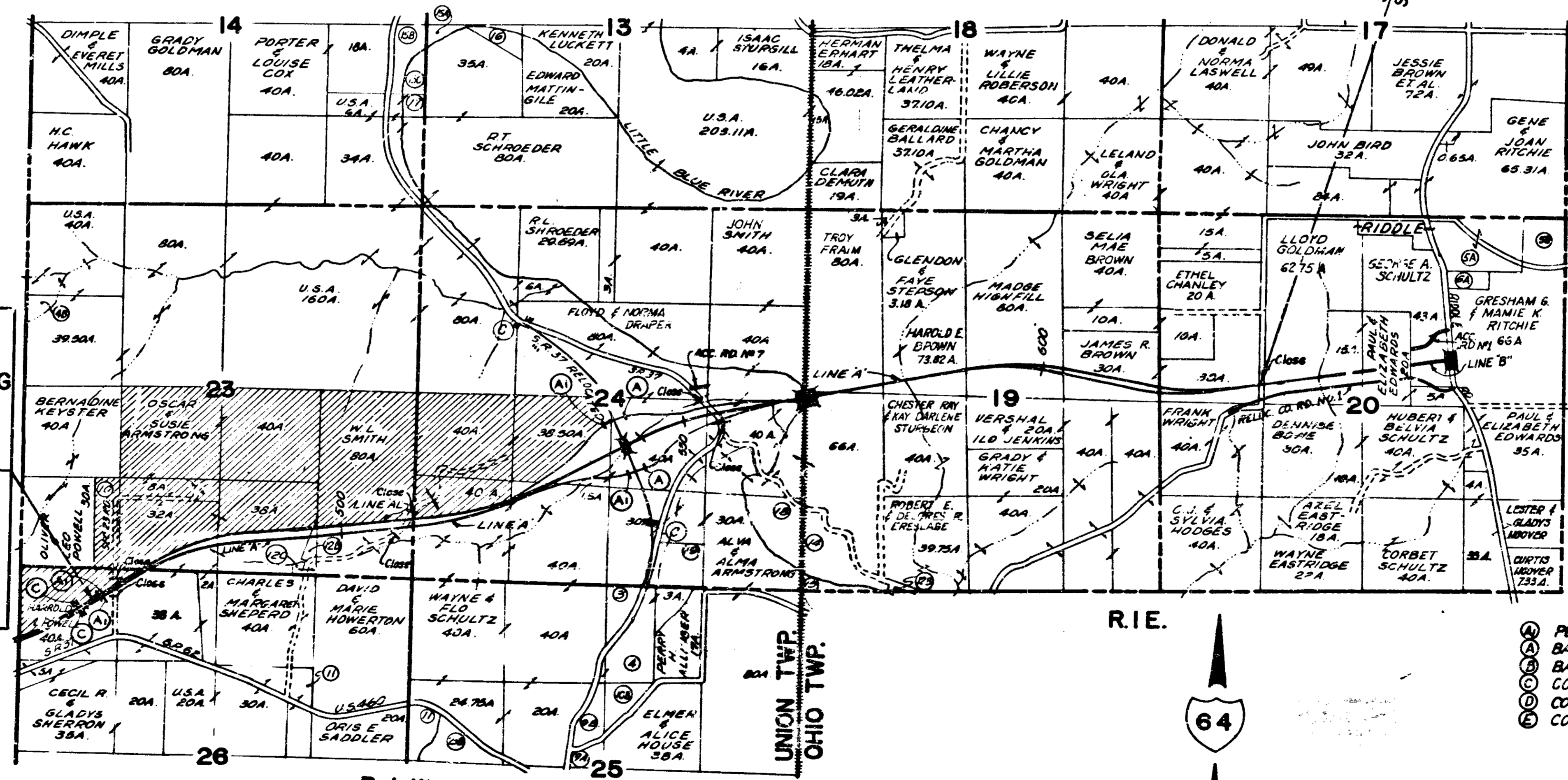
LEGEND
 LANDLOCKED (NO ACCESS PROVIDED)

END 104(b)5 SECTION A14.1-A14.2
 BEGIN 104(b)5 SECTION A14.2-A14.3

STA. 629+27.39 A BACK
 STA. 7+27.39 B AHEAD

(30)96 PE.
 (33)86 R/W
 (38)86 GRADING
 (39)86 PAVING
 BEGIN PROJECT I-64-3
 STA. 2463+00.00 'A' AHEAD
 STA. 2463+22.00 'AL' AHEAD

(5)73 PE.
 (10)73 R/W
 (22)82 GRADING
 (26)73 PAVING
 END PROJECT I-64-2
 STA. 2463+00.00 'A' BACK
 STA. 2463+22.00 'AL' BACK



LEGEND
 (A) PERMANENT BARRICADE, TYPE III 4
 (B) BARRICADE, TYPE III 4
 (C) BARRICADE, TYPE B 0
 (D) CONSTRUCTION SIGN TYPE A 24
 (E) CONSTRUCTION IDENTIFICATION SIGN 0
 (F) CONSTRUCTION SIGN TYPE B 0

C R A W F O R D C O.

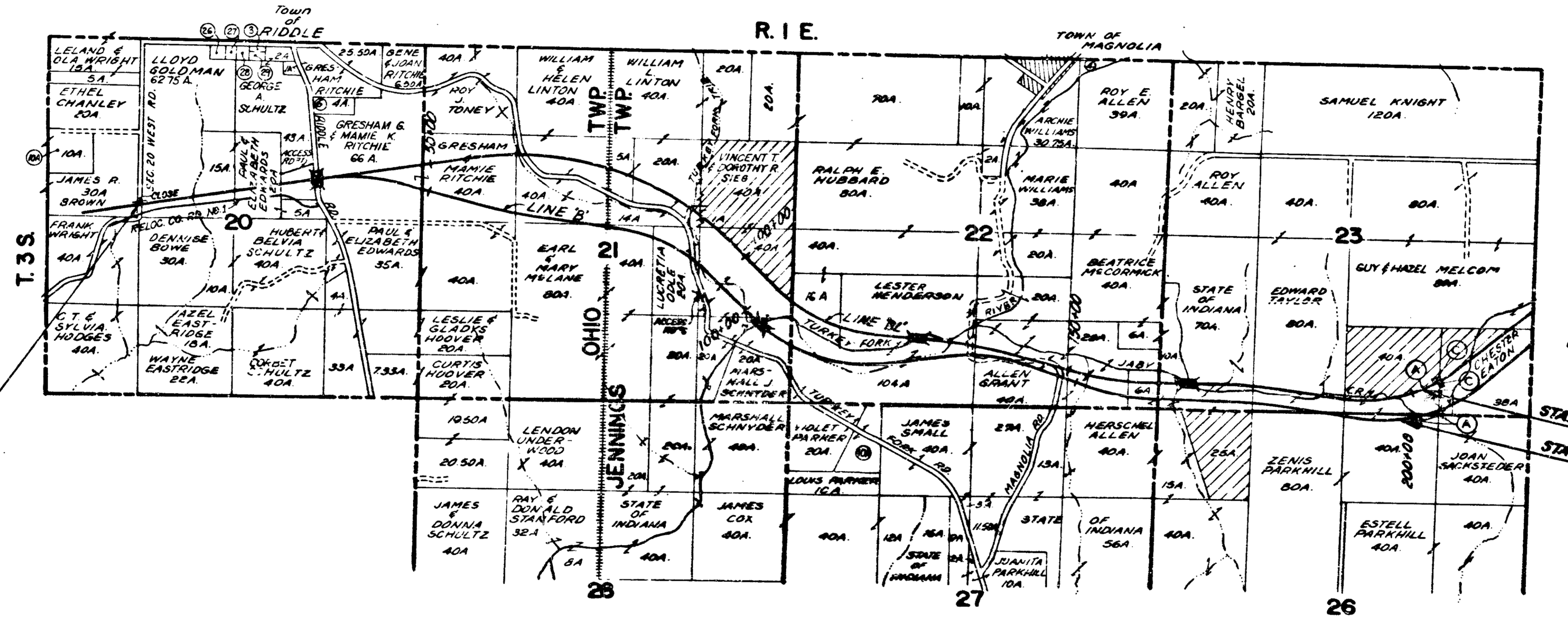
PROJECT I-64-3(39)86 R/W
 PLAT I
 FOR ROAD DESIGN
 SCALE: 1" = 1000'

FIRST PHASE

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
IND	IND	I-64-3(37)86	1970	9	71



LEGEND
 LANDLOCKED (NO ACCESS PROVIDED)



STA. 7+27.39 'B' AHEAD
 STA. 6+29+27.39 'A' BACK

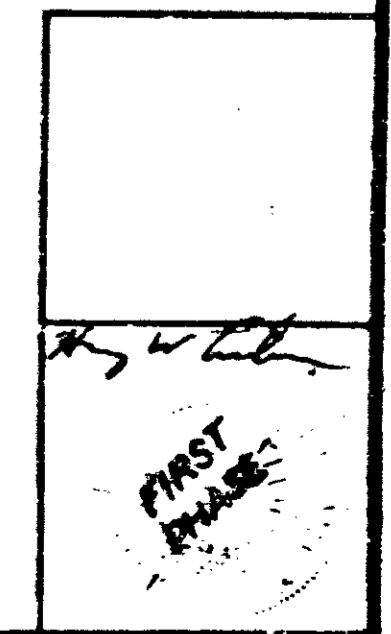
BEGIN 104(b)5 SECTION A14.2 - A14.3
 END 104(b)5 SECTION A14.1 - A14.2

C R A W F O R D C O.

END PROJECT I-64-3 (38)86 GRADING
 (39)86 PAVING
 END 104(b)5 SECTION A14.2 - A14.3
 BEGIN PROJECT I-64-3 (40)93 GRADING
 (41)93 PAVING
 BEGIN 104(b)5 SECTION A14.3 - A14.4.1

COUNTY	TOWNSHIP	SECTION	INDEX	OWNER	ACRES
CRAWFORD	OHIO	20	3	U.B. CHURCH	0.33
..	..	20	26	HERMAN CHANLEY	1
..	..	20	27	CEMETERY	0.50
..	..	20	28	..	0.50
..	..	20	29	..	0.50
..	..	20	104	SHELIA MAE BROWN	19
..	..	20	6	SYLVIA SCHULTZ	4
..	JENNINGS	22	4	H.W. COX	1

PROJECT I-64-3(33)86 R/W
PLAT I
FOR ROAD DESIGN
 SCALE: 1" = 1000'

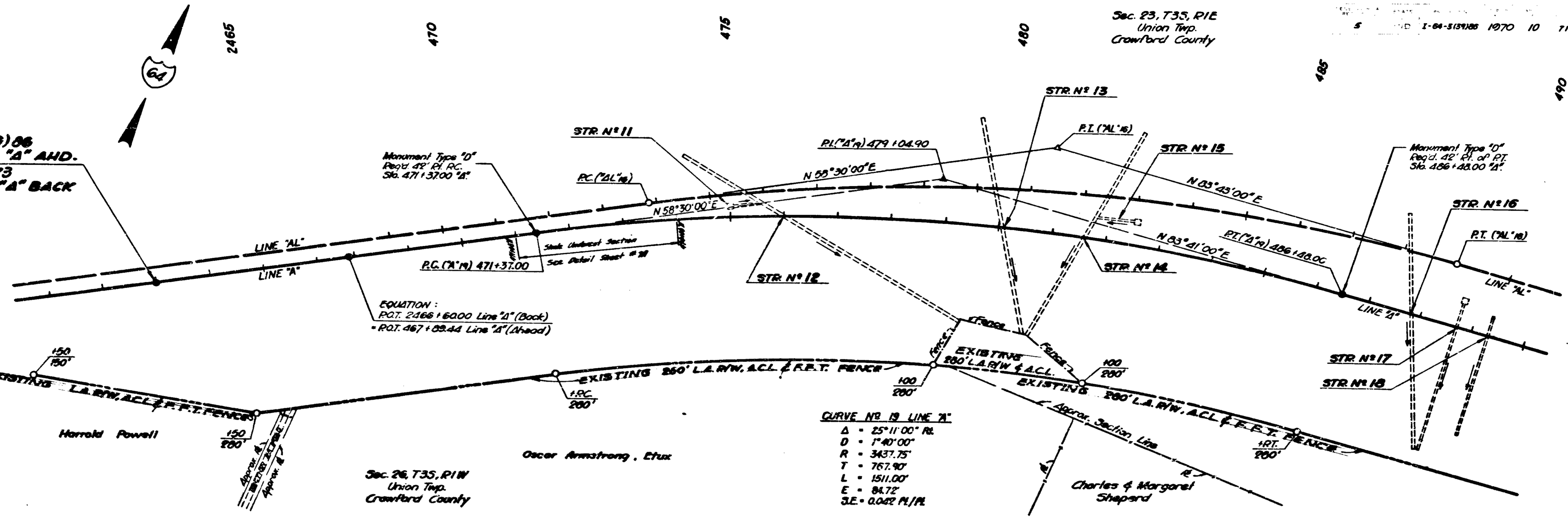


PROJECT NO.	SHEET NO.	TOTAL SHEETS
I-64-3(37)86	9	71

Sec. 23, T3S, R1E
Union Twp.
Crawford County

1-64-3(39)06
1-64-2(26)73

BEGIN PROJ. 1-64-3(39)06
STA. 2463+00.00 LINE "A" AND.
END PROJ. 1-64-2(26)73
STA. 2465+00.00 LINE "A" BACK



Monument Type "D"
Revd. 42' P.I. RC.
Sta. 471+37.00

EQUATION:
P.O.T. 2466+60.00 Line "A" (Back)
P.O.T. 467+00.00 Line "A" (Ahead)

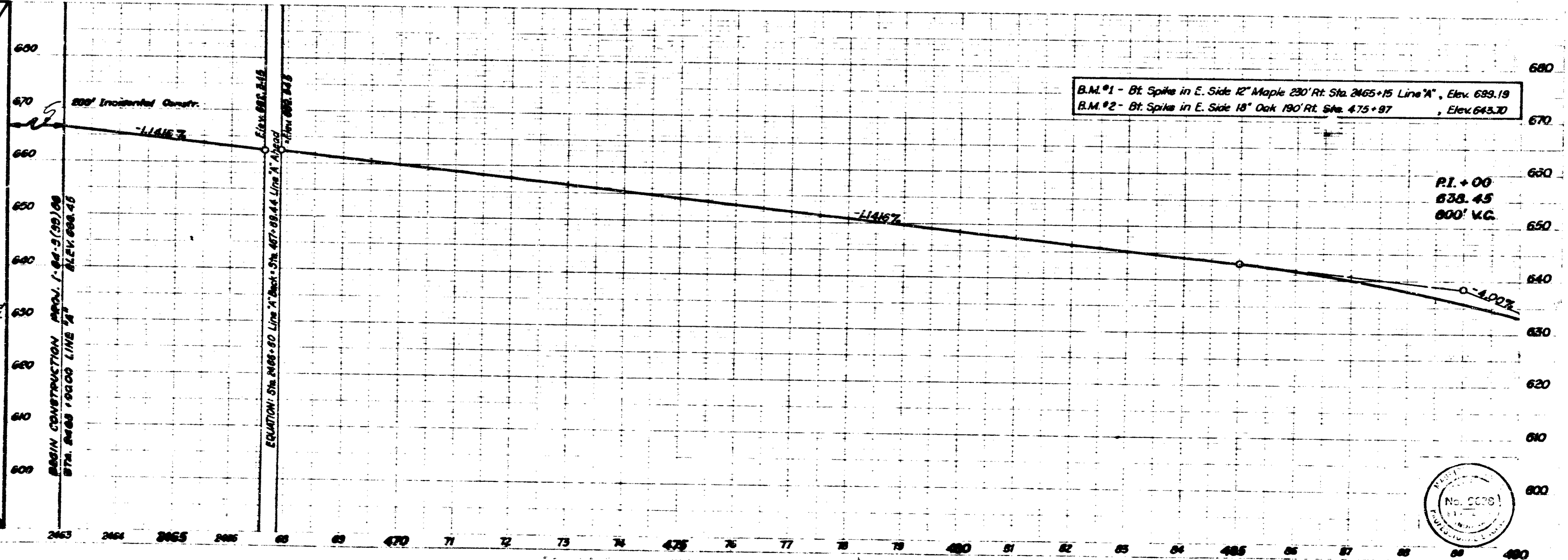
CURVE NO. 19 LINE "A"
Δ = 25°11'00" RL
D = 1°40'00"
R = 3437.75'
T = 767.90'
L = 1511.00'
E = 84.72'
S.E. = 0.002 P.I./P.L.

LEGEND

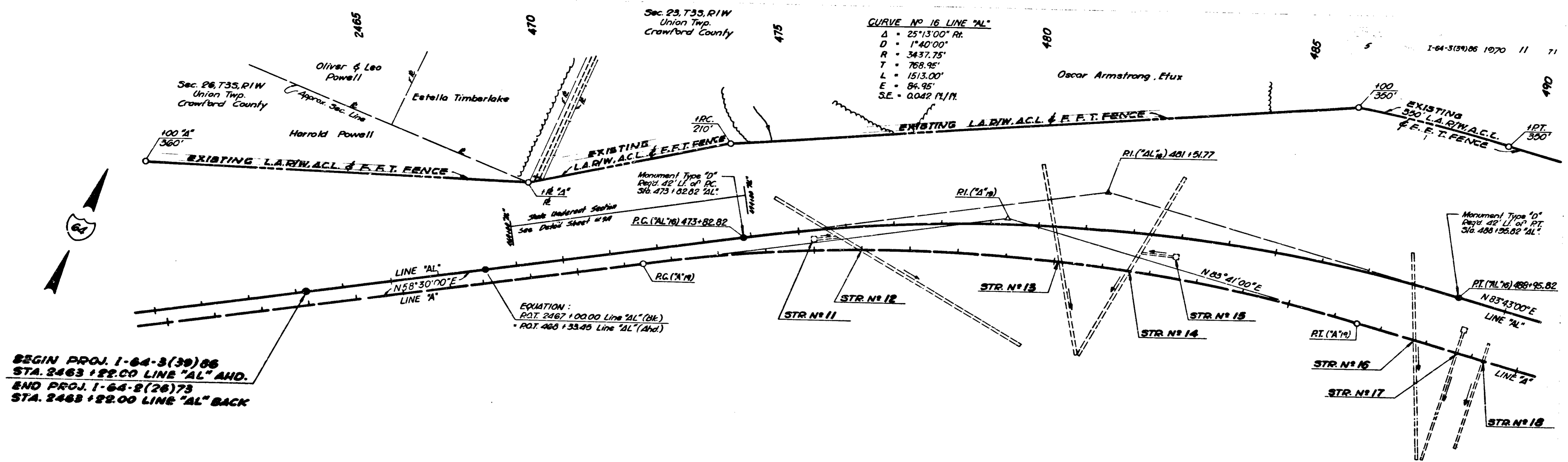
- L.A.R.W. ... Limited Access Right-of-Way
- A.C.L. ... Access Control Line
- R/W ... Right-of-Way
- Right-of-Way Marker

GENERAL NOTES

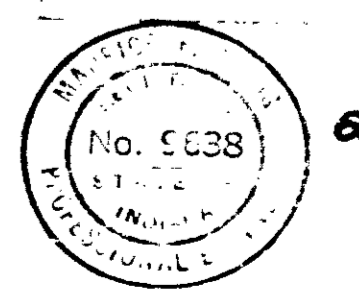
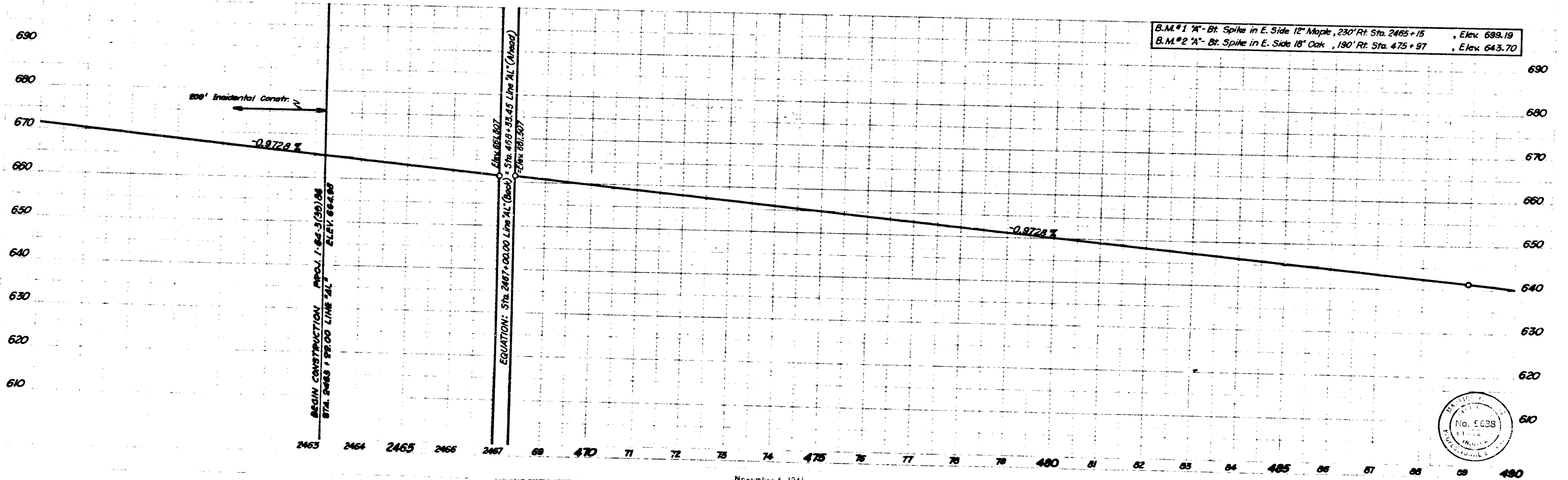
- Typical Mainline Cross Sections as shown on Sheets 2-4 to be used on this Project.
- A 10' RC Pavement shall be used.
- Typical Cross Sections for Ramps as shown on Sheets 5-7 to be used on this Project.
- Indiana State Highway Commission Standard Specifications dated 1963 to be used with this Project.
- Standards under dates listed in the Index on the Title Sheet to be used on this Project.
- Grade line as shown on Profile represents top of Finished Surface.
- The Contractor must accept the plan quantities of Subbase as given on the Estimate of Quantities Sheet.
- A Keyway Joint is to be constructed on Median side of each Pavement.
- All Earth Shoulders, Median Area, Cut and Fill Slopes shall be plain or mulched seeded except where seeding is specified.
- Seeding shall be done as shown on Standard & Typical Cross Sections and on Misc. Sta. Sheet "MB".
- Curves on Mainline shall be super-elevated according to Super-elevation Details for Interstate as shown on Sheet 10-4.
- For "kinds of Pipe" permitted for each size and classification, as shown on the Structures Data Sheet, see Misc. Standard Sheet "MP".
- The minimum grade for "Subsurface Drains" shall be 0.20%. Where the profile grade is less than 0.20%, special grades for Subsurface Drains shall be established by the Engineer.
- The final Cross Sections of the "Grading Contract" shall be the original Cross Sections of the "Paving Contract" except that partial or complete cross sections may be taken if necessary to determine the actual quantities of excavation.
- All Structures shown are for reference only and will be constructed with Grading Project.



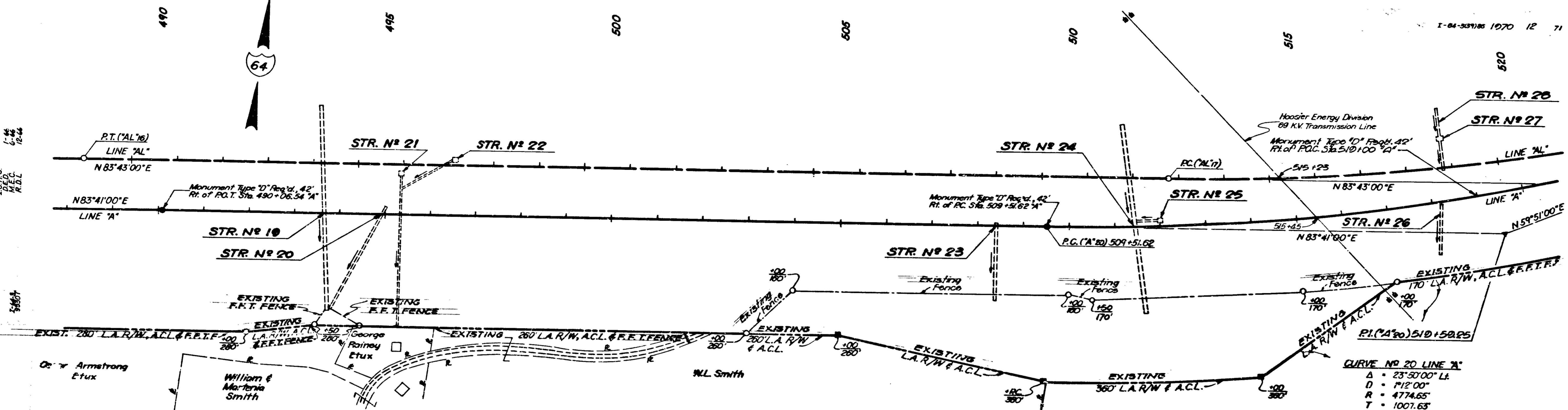
I.S.M.C.
 12-23
 W.E.C.
 R.D.L.
 12-22
 5665



BEGIN PROJ. 1-64-3(39)86
STA. 2463+22.00 LINE "AL" AHD.
END PROJ. 1-64-2(26)73
STA. 2463+22.00 LINE "AL" BACK

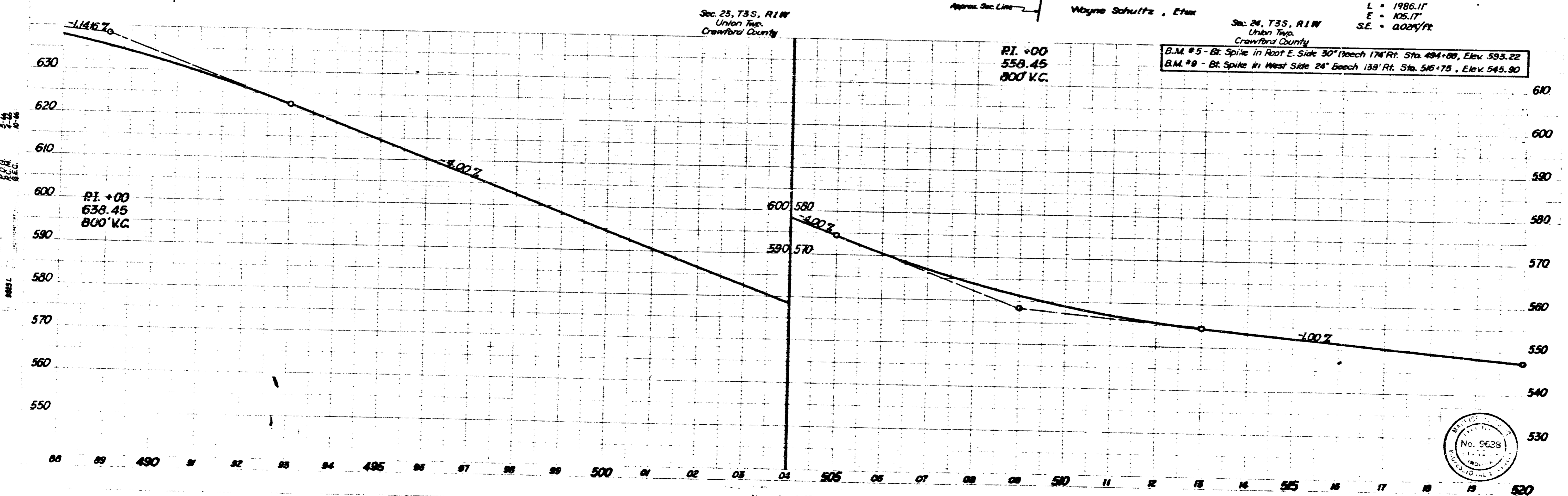


November 6 1961



CURVE NO 20 LINE 'A'
 Δ = 23°50'00" L
 D = 112'00"
 R = 4774.65'
 T = 1007.65'
 L = 1986.11'
 E = 105.17'
 S.E. = 0.025/ft

B.M. #5 - Bt. Spike in Root E. Side 30" Beech 174' Rt. Sta. 494+00, Elev. 593.22
 B.M. #8 - Bt. Spike in West Side 24" Beech 139' Rt. Sta. 516+75, Elev. 545.90



Sec. 23, T3S, R1W
Union Twp.
Crawford County

W.L. Smith

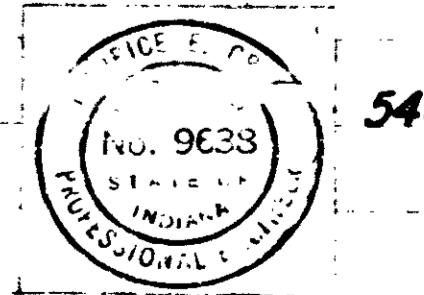
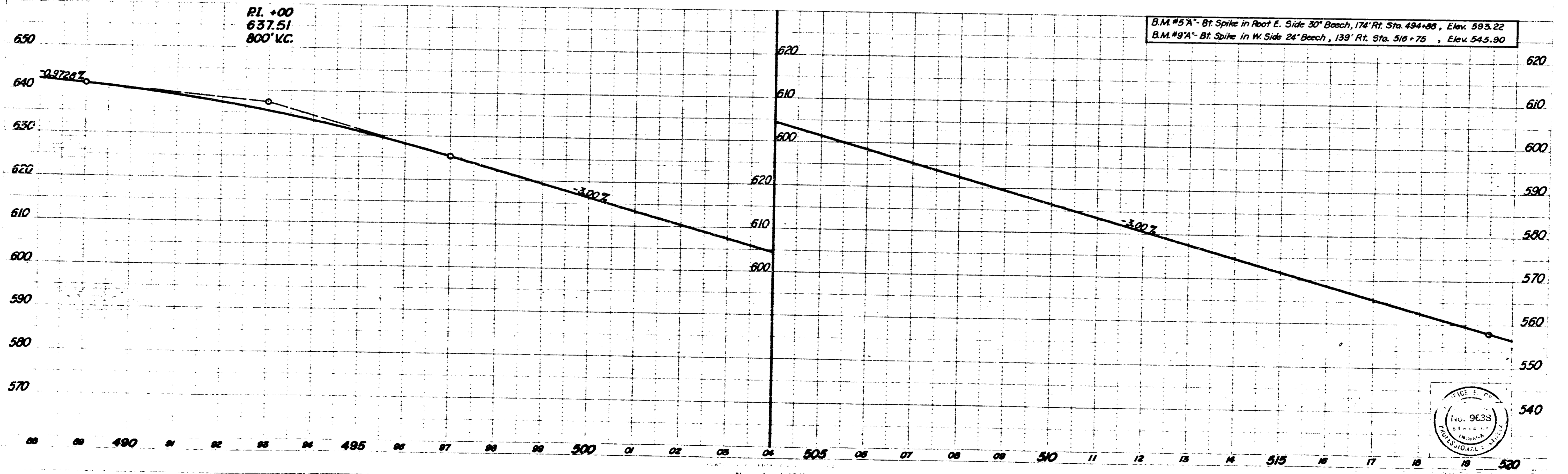
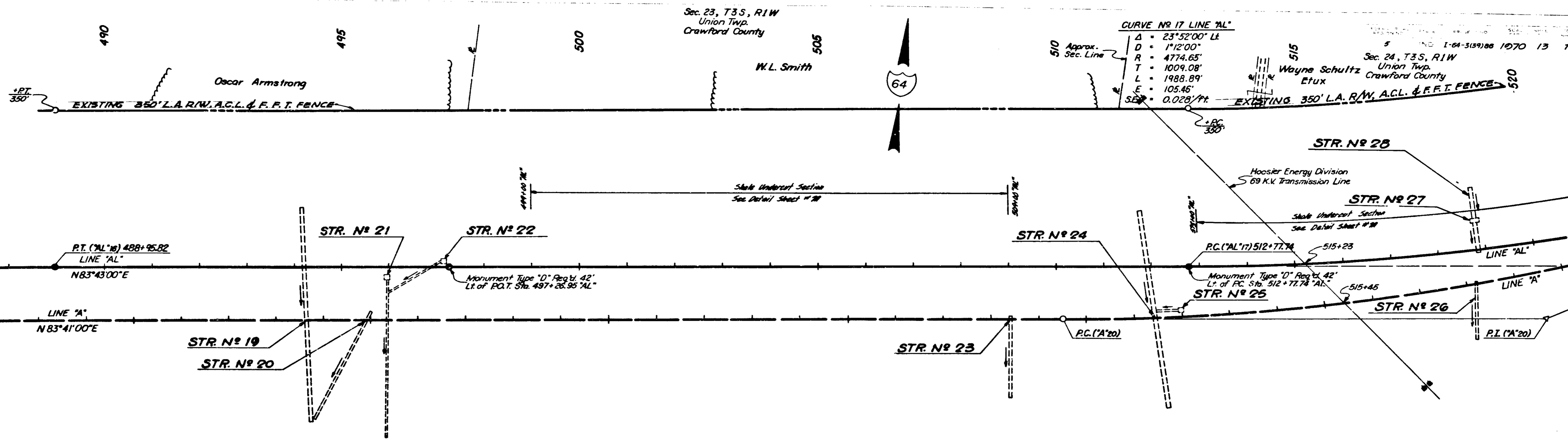
CURVE NO 17 LINE 'AL'

Δ = 23°52'00" Lt
D = 1'12'00"
R = 4774.65'
T = 1009.08'
L = 1988.89'
E = 105.46'
SE = 0.028'/ft

5 1-64-3159)88 1070 13 71

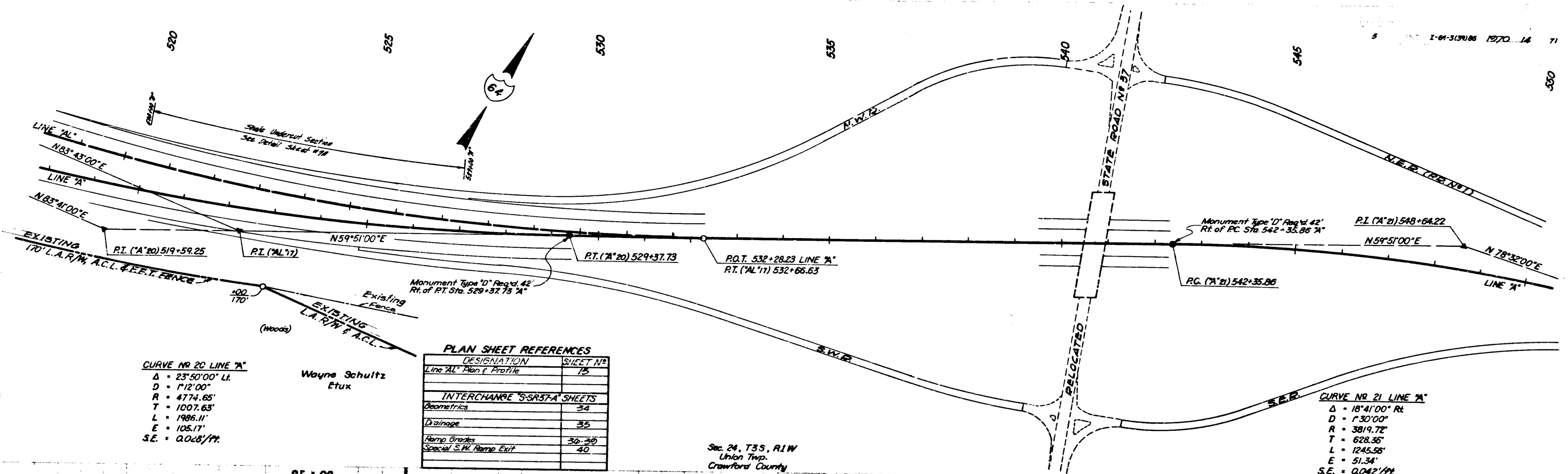
Sec. 24, T3S, R1W
Union Twp.
Crawford County

Wayne Schultz
Etux



November 6 1961

1-64-3159)88 'AL' 13 71



CURVE NO 20 LINE 'A'
 $\Delta = 23^{\circ}50'00''$ Lt.
 $D = 1'12'00''$
 $R = 4774.65'$
 $T = 1007.63'$
 $L = 1986.11'$
 $E = 105.17'$
 $S.E. = 0.048'/ft.$

Wayne Schultz
 Etux

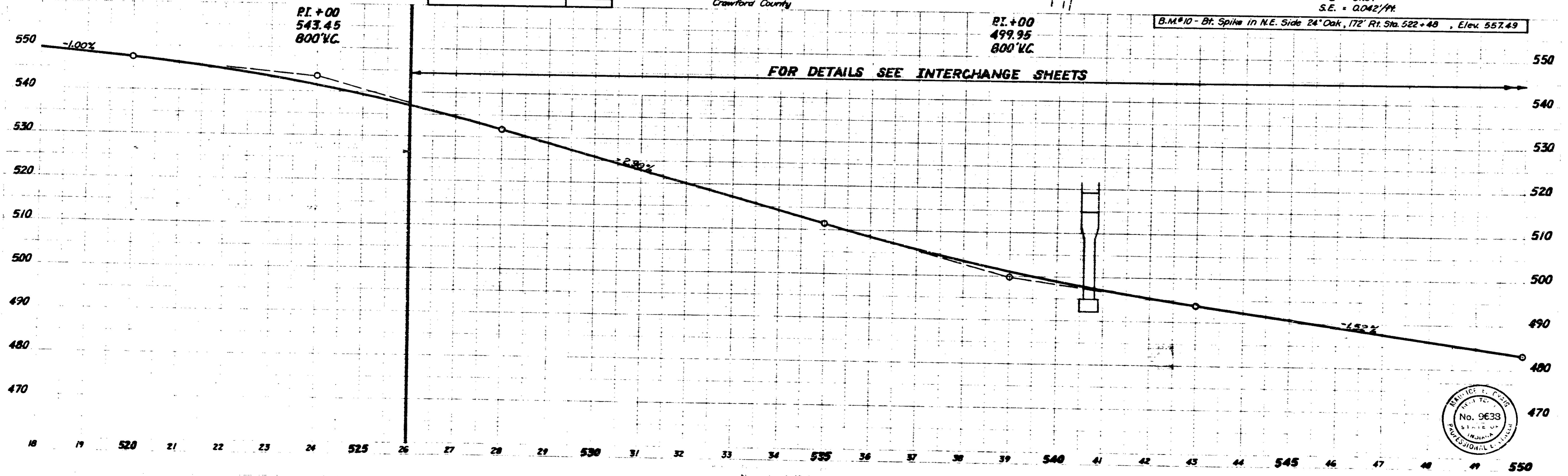
PLAN SHEET REFERENCES

DESIGNATION	SHEET NO.
Line 'AL' Plan & Profile	75
INTERCHANGE 'S-SR37-A' SHEETS	
Geometrics	34
Drainage	35
Ramp Grades	36-39
Special S.W. Ramp Exit	40

Sec. 24, T35, R1W
 Union Twp.
 Crawford County

CURVE NO 21 LINE 'A'
 $\Delta = 18^{\circ}41'00''$ Rt.
 $D = 1'30'00''$
 $R = 3819.72'$
 $T = 628.36'$
 $L = 1245.56'$
 $E = 51.34'$
 $S.E. = 0.042'/ft.$

B.M.#10 - Bt. Spike in N.E. Side 24' Oak, 172' Rt. Sta. 522+48, Elev. 557.49

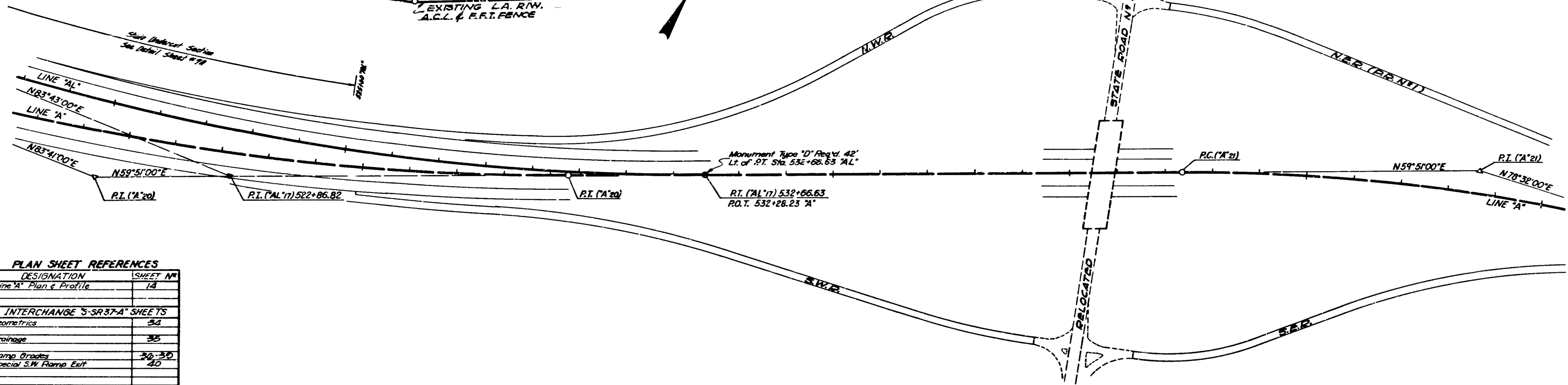


CURVE NO. 17 LINE "AL"
 $\Delta = 23^{\circ}52'00''$ Lt.
 $D = 1'12'00''$
 $R = 4774.65'$
 $T = 1009.08'$
 $L = 1988.89'$
 $E = 105.46'$
 $S.E. = 0.028'/ft.$

Sec. 24, T3S, R1W
 Union Twp.
 Crawford County

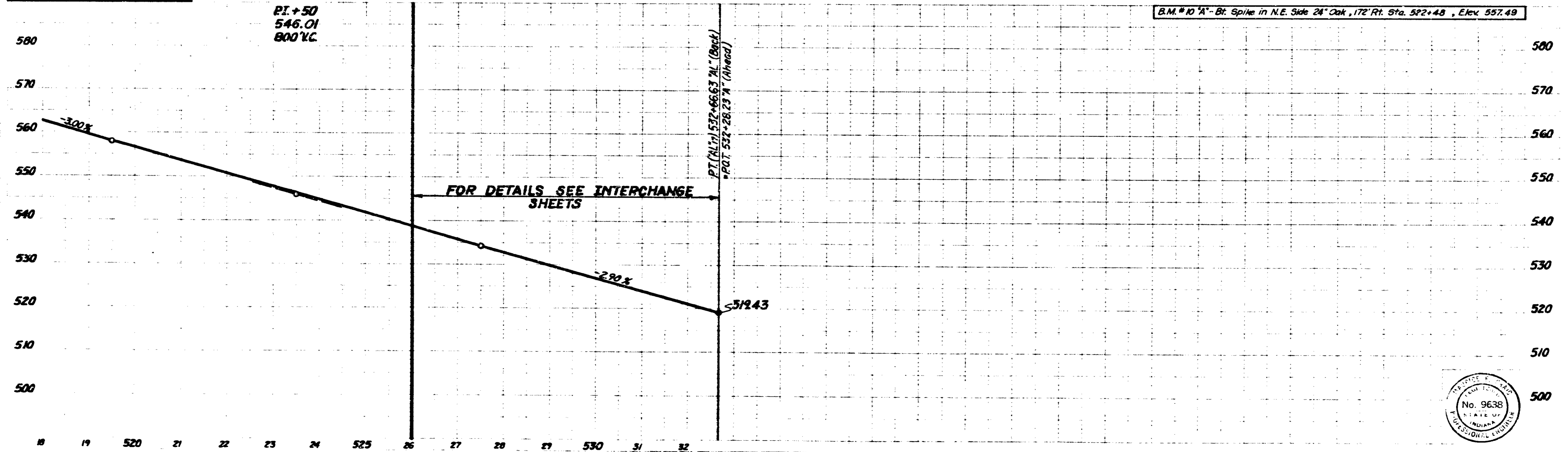
EXISTING W.L. Smith
 350 L.A. R/W, A.C.L. & E.F.T. FENCE

EXISTING L.A. R/W.
 A.C.L. & E.F.T. FENCE



PLAN SHEET REFERENCES

DESIGNATION	SHEET NO.
Line "A" Plan & Profile	14
INTERCHANGE S-SR37-A SHEETS	
Geometrics	34
Drainage	35
Ramp Grades	36, 37
Special S.W. Ramp Exit	40

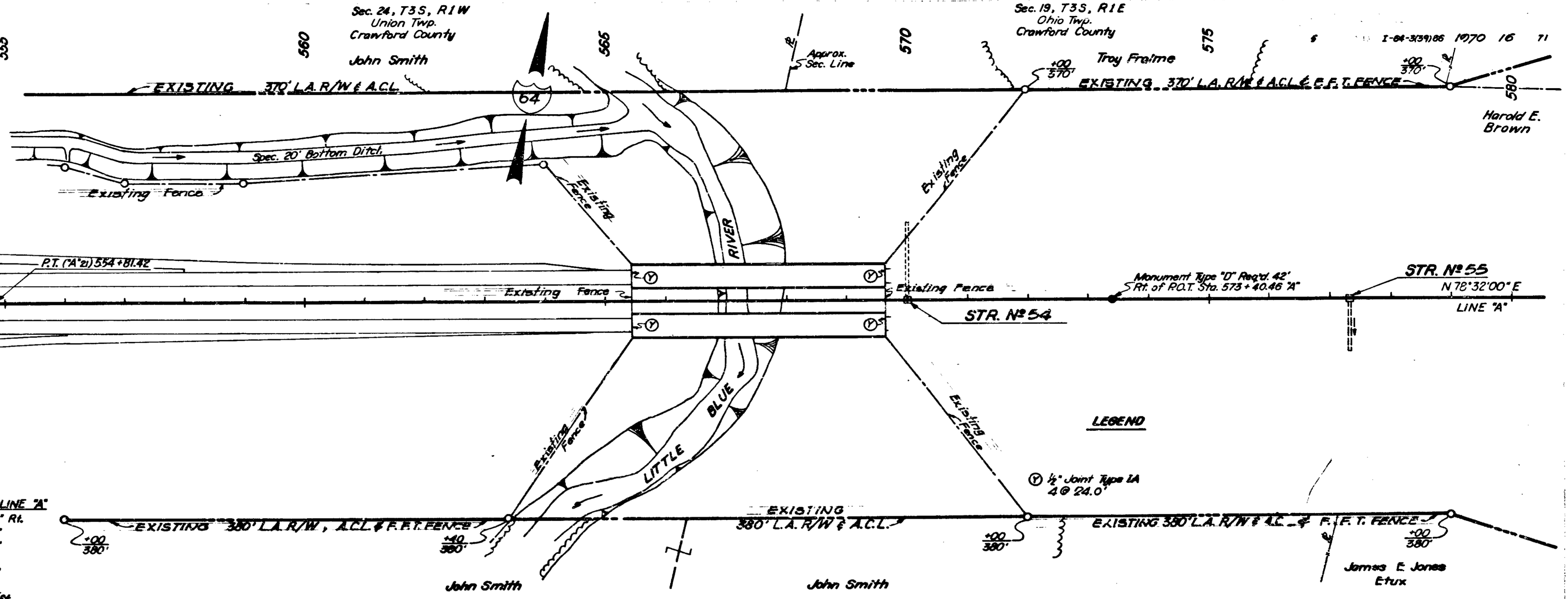


550 555 560 565 570 575 580

Sec. 24, T35, R1W Union Twp. Crawford County John Smith

Sec. 19, T35, R1E Ohio Twp. Crawford County Troy Fraime

Harold E. Brown



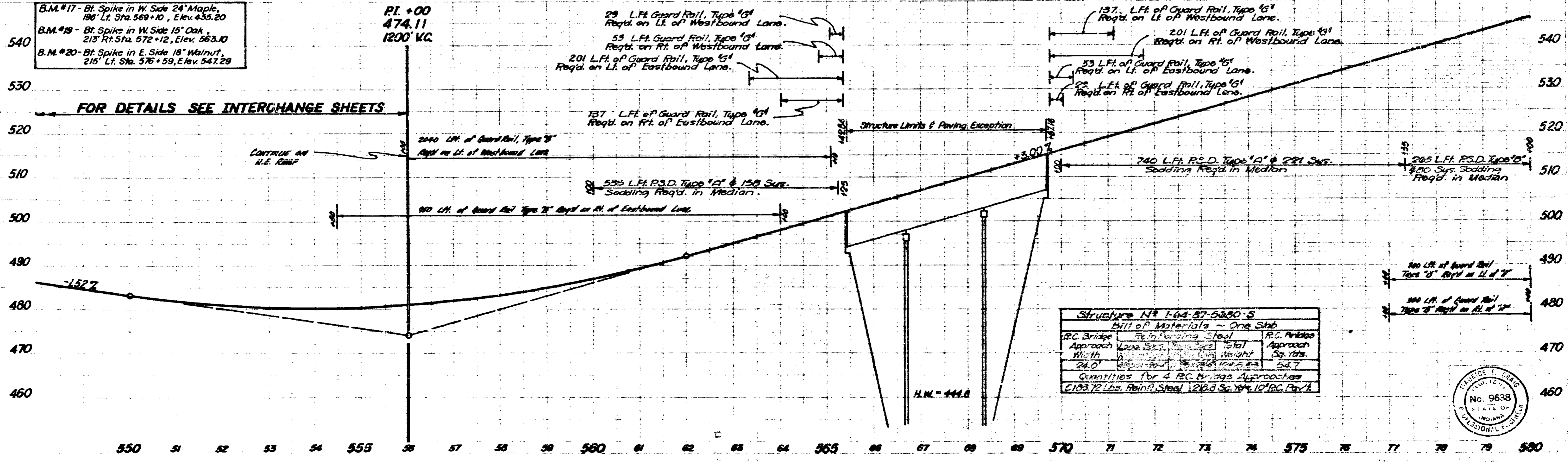
INTERCHANGE 'S-SR37-A' SHEETS

Geometrics	32
Drainage	35
Ramp Grades	30-35

CURVE NO 21 LINE 'A'

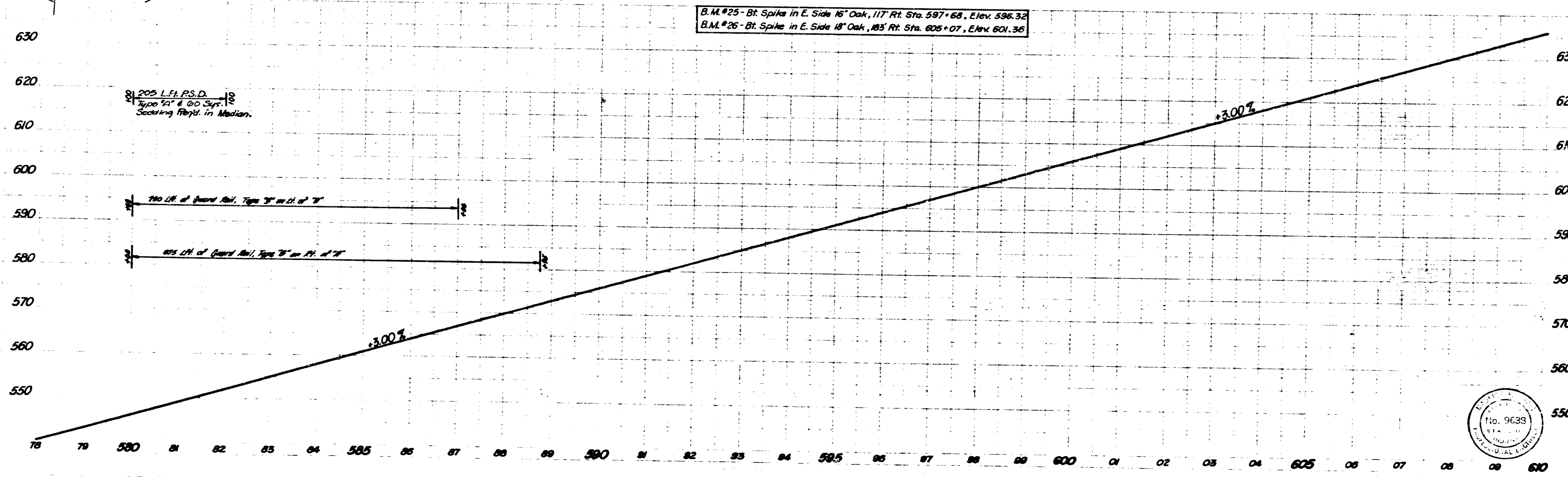
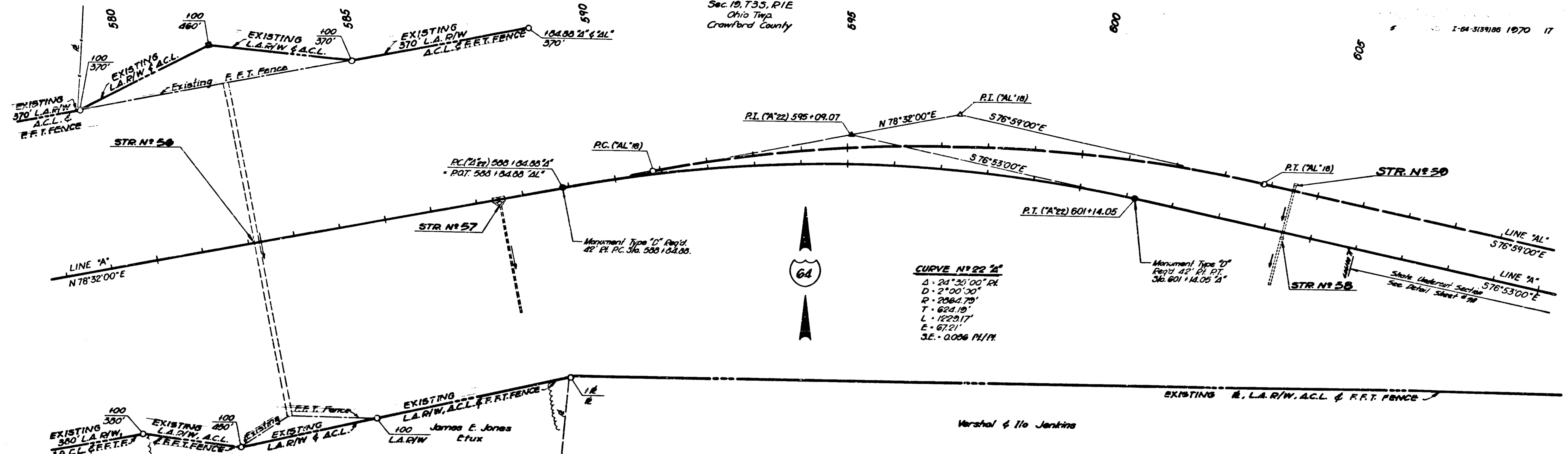
Δ = 18°41'00" Rt.
 D = 1'30'00"
 R = 3819.72'
 T = 628.36'
 L = 1245.55'
 E = 51.34'
 S.E. = 0.046'/ft.

B.M. #17 - Bt. Spike in W. Side 24" Maple, 196' Lt. Sta. 569+10, Elev. 435.20
 B.M. #19 - Bt. Spike in W. Side 15" Oak, 213' Lt. Sta. 572+12, Elev. 563.10
 B.M. #20 - Bt. Spike in E. Side 18" Walnut, 215' Lt. Sta. 576+59, Elev. 547.29



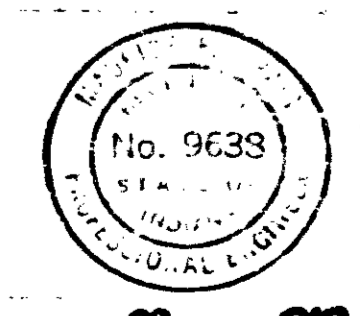
Sec. 10, T35, R1E
Ohio Twp.
Crawford County

I-64-3139185 1070 17 71



November 6 1961

I-64-3139185 17 71



580

585

Sec. 10, T35, R1E
Ohio Twp.
Crawford County

Madge High #111

EXISTING 370' L.A.R/W, A.C.L. & F.F.T. FENCE

James R. Brown

EXISTING 370' L.A.R/W, A.C.L. & F.F.T. FENCE



Harold E. Brown

590

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

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+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

+P.C. 370'

+P.T. 370'

Monument, Type "D" Reg'd 42'
Lt. of P.C. Sta. 590+70.63 "AL"

Monument, Type "D" Reg'd 42'
Lt. of P.T. Sta. 603+82.24 "AL"

P.C. ("A"22) 588+84.88 "A"
= P.O.T. 588+84.88 Line "AL"

P.C. ("AL"10) 590+70.63

P.I. ("A"22)

P.I. ("AL"10) 597+36.60

6" Group "K" Pipe
to be placed on
this Contract

60+25 @ 24'

P.T. ("A"22)

P.T. ("AL"10) 603+82.24

6" Group "K" Pipe
Placed on Grading
Contract

STR. N° 50

60+25 @ 24'

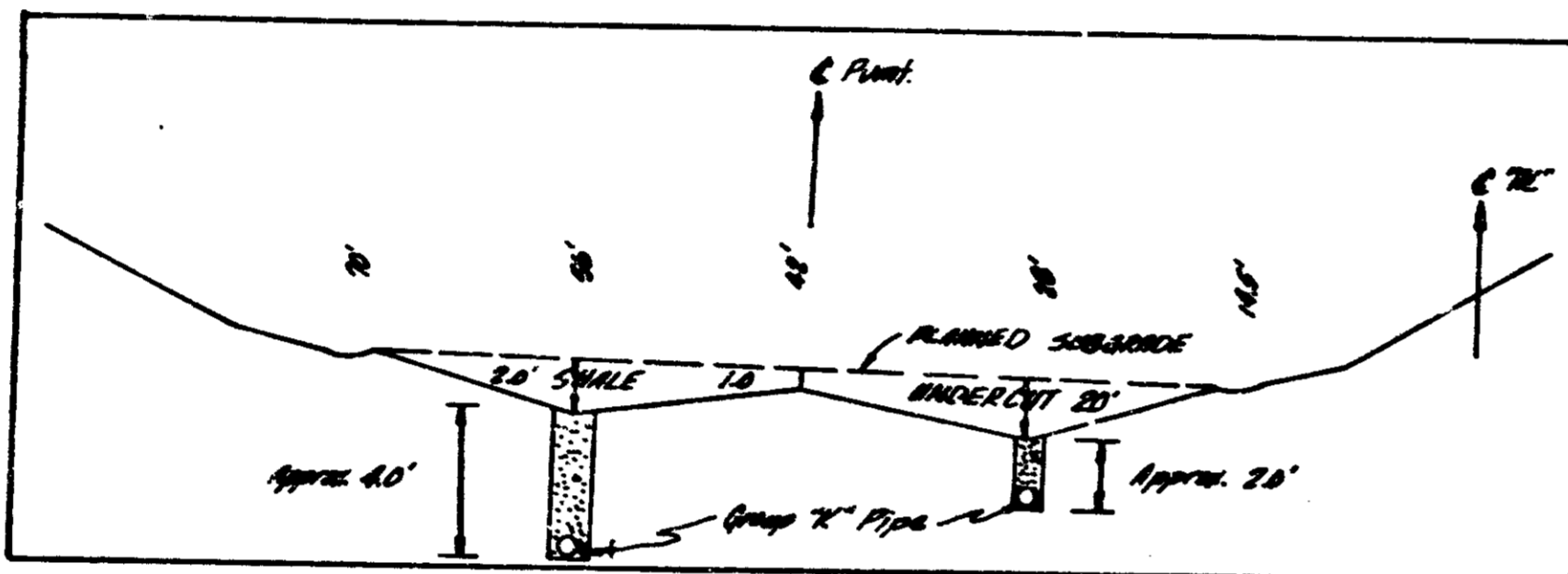
60+25 @ 24'

LINE "AL"
576°59'00"E

LINE "A"
576°53'00"E

STR. N° 58

LINE "A"
N78°32'00"E

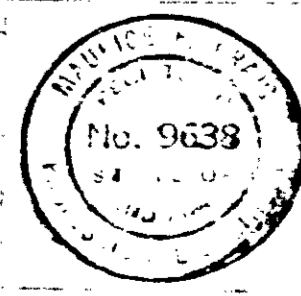
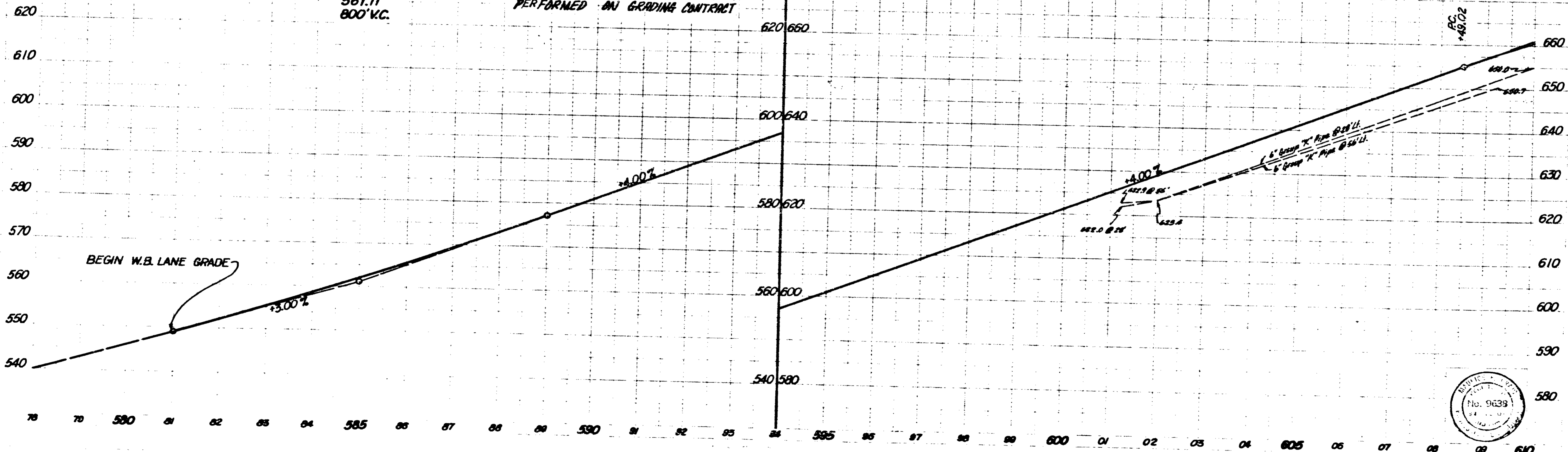


CURVE NO 10 LINE "AL"

- Δ = 24°29'00" Rt.
- D = 1°52'00"
- R = 3069.42'
- T = 665.97'
- L = 1311.61'
- E = 71.42'
- S.E. = 0.0491/Ft.

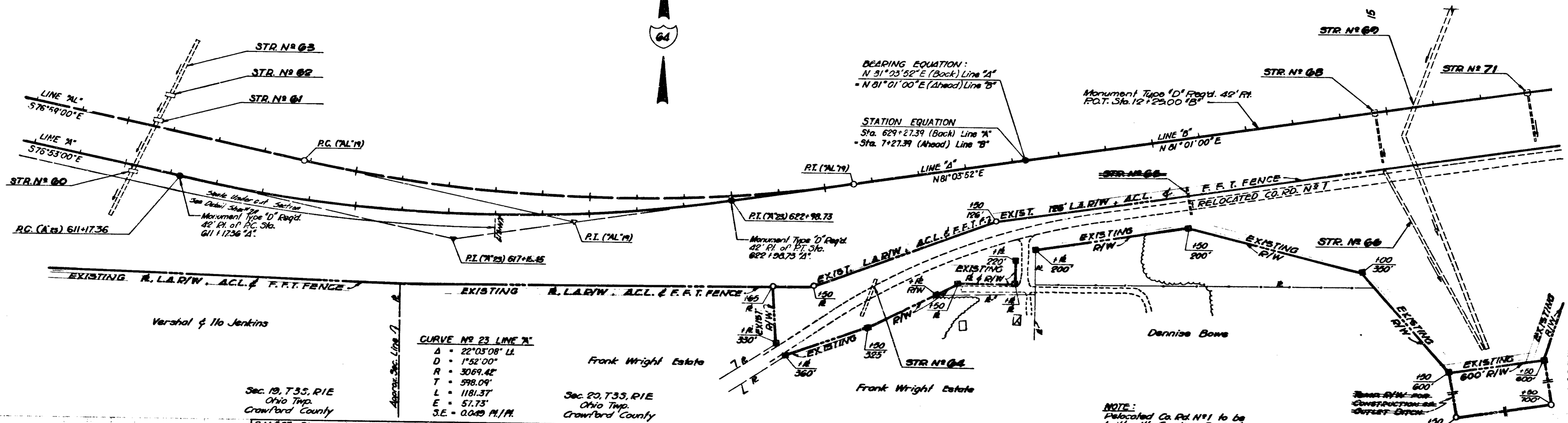
P.I. +00
561.11
800' V.C.

TYPICAL SECTION SHALE UNDERCUT
PERFORMED ON GRADING CONTRACT



November 6 1961

I-64-3139)86 1070 18 71



CURVE NO 23 LINE 'A'

Δ	22°03'08" LL
D	1°52'00"
R	3089.42'
T	598.09'
L	1181.37'
E	57.73'
S.E.	0.0089 M./P.

Sec. 19, T35, R1E
Ohio Twp.
Crawford County

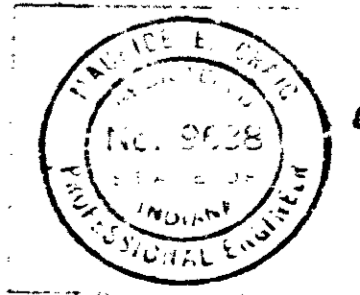
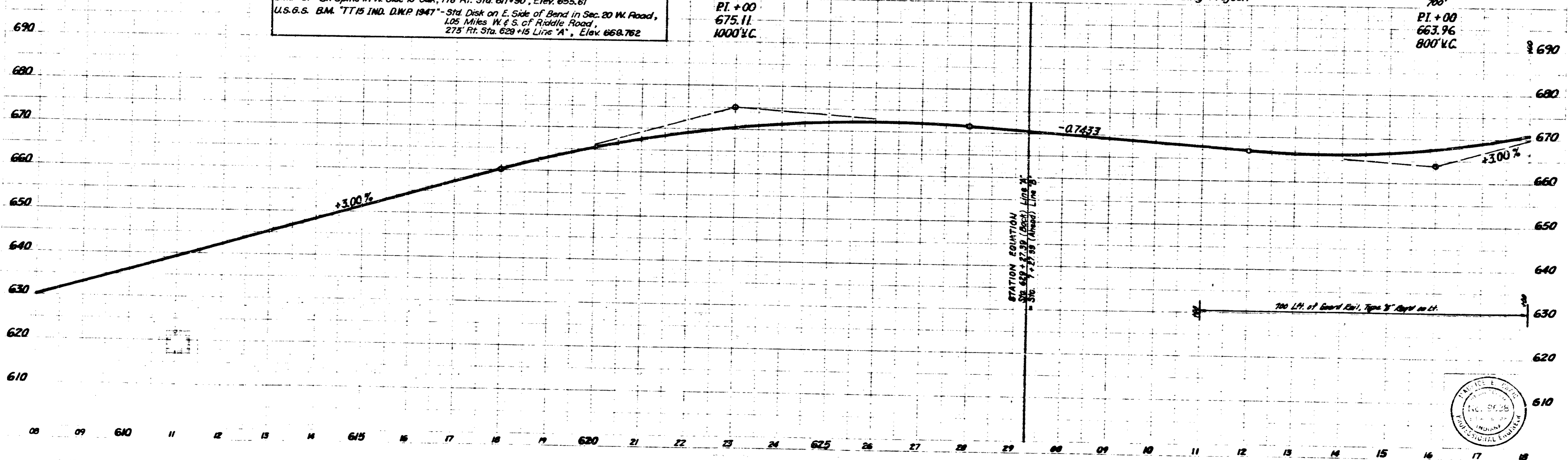
B.M. #27 - Bl. Spike in W. Side 18" Oak, 178' Rt. Sta. 611+90, Elev. 655.61
U.S.G.S. B.M. "TT15 IND. D.M.P. 1947" - Std. Disk on E. Side of Bend in Sec. 20 W. Road, 1.05 Miles W & S. of Riddle Road, 275' Rt. Sta. 629+15 Line "A", Elev. 668.762

DEARING EQUATION:
N 31°23'52"E (Back) Line "A"
- N 81°01'00"E (Ahead) Line "B"

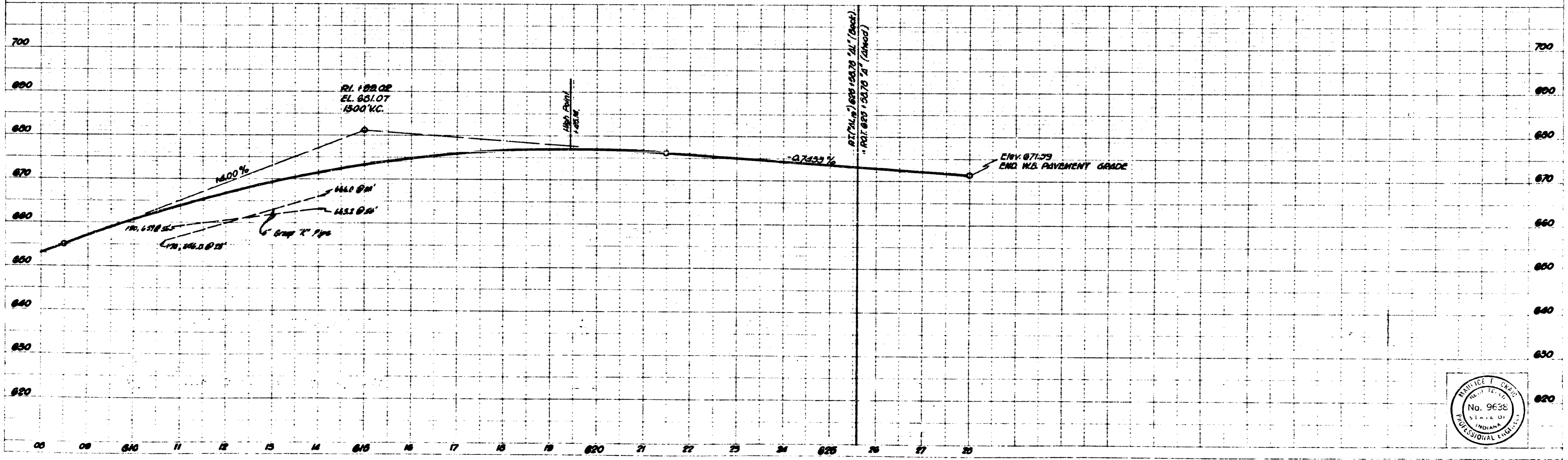
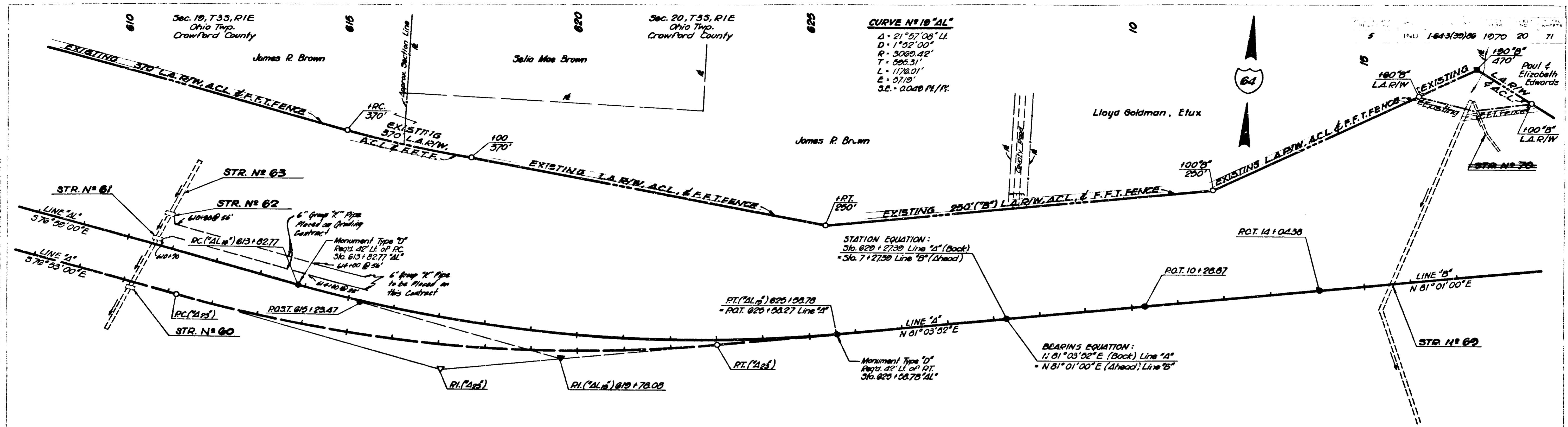
STATION EQUATION
Sta. 629+27.39 (Back) Line "A"
- Sta. 7+27.39 (Ahead) Line "B"

Monument Type "D" Reg'd. 42' Ft.
P.O.T. Sta. 12+25.00 'B'

NOTE:
Relocated Co. Rd. N°1 to be
built with Grading Project.

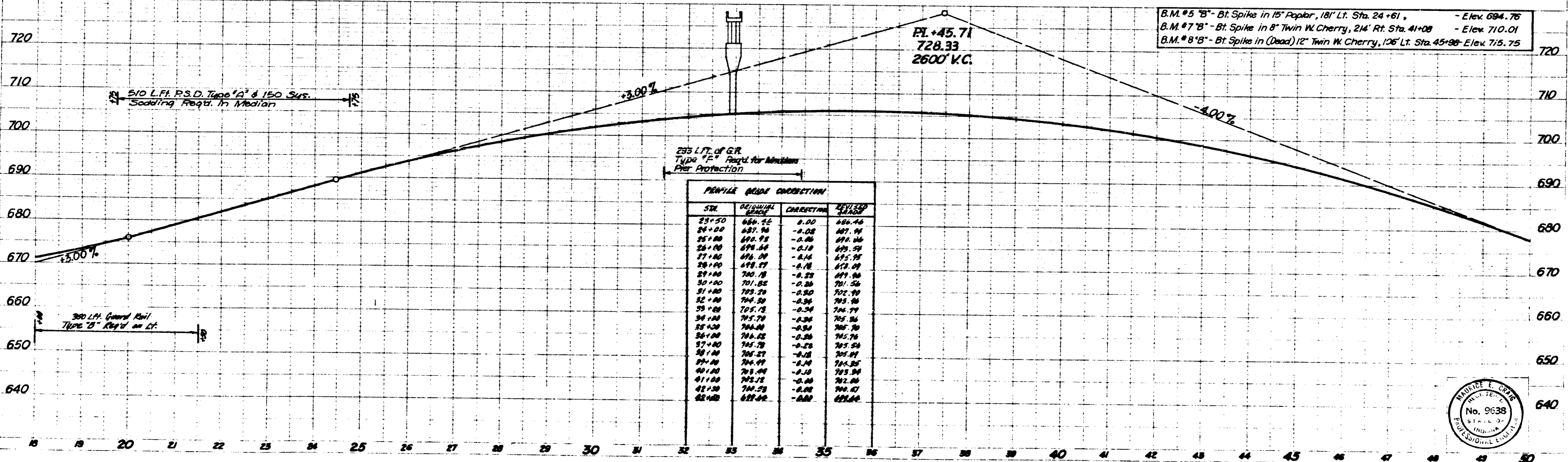
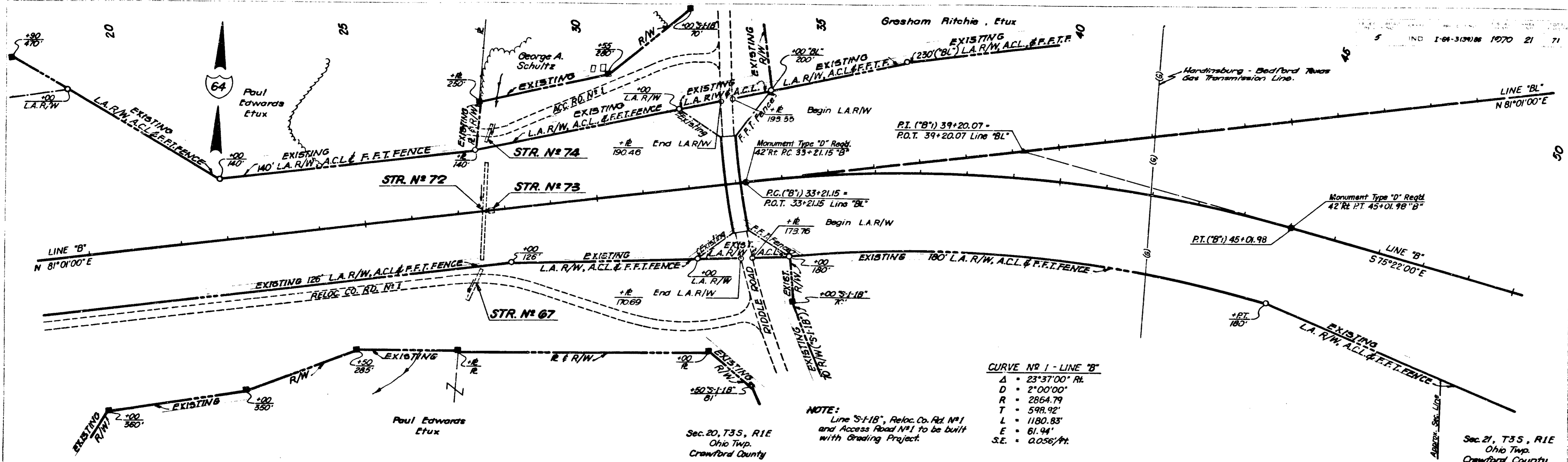


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November 6, 1961

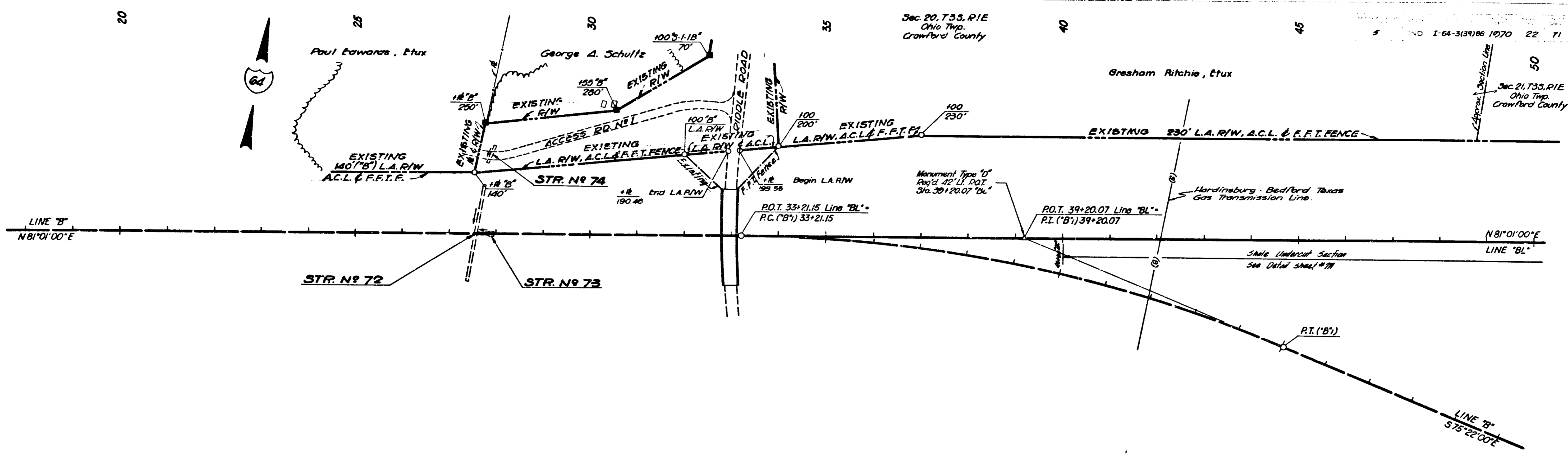
1443(33)08 "AL" 20 71



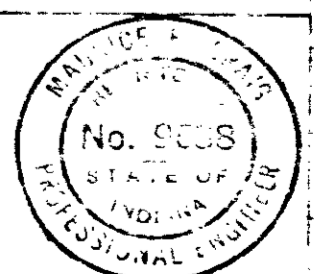
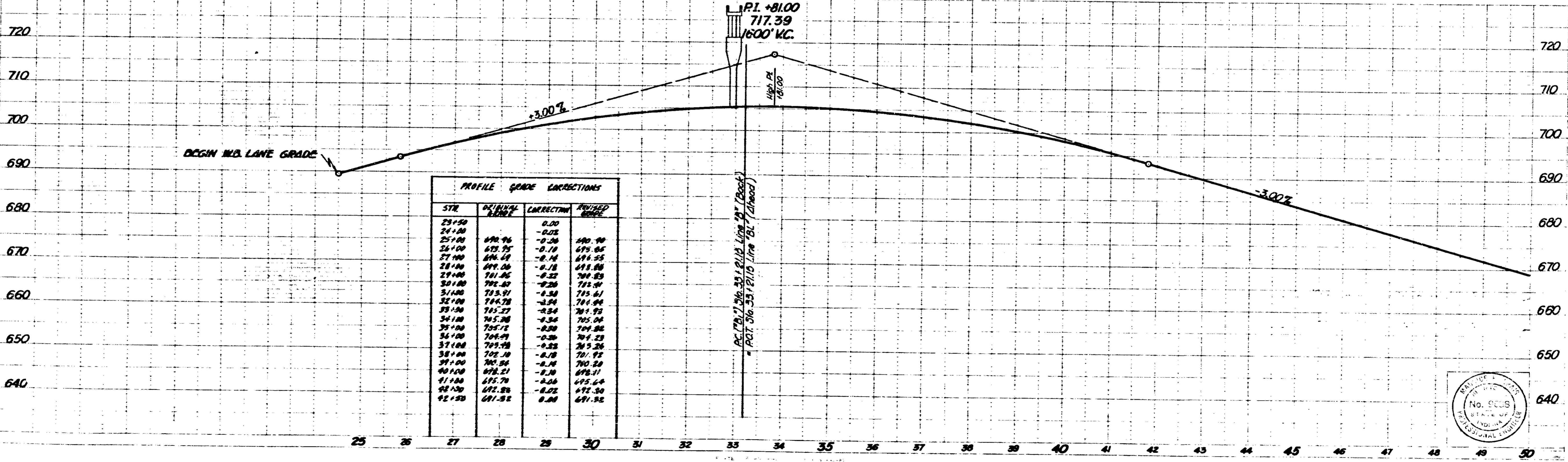
November 6 1961



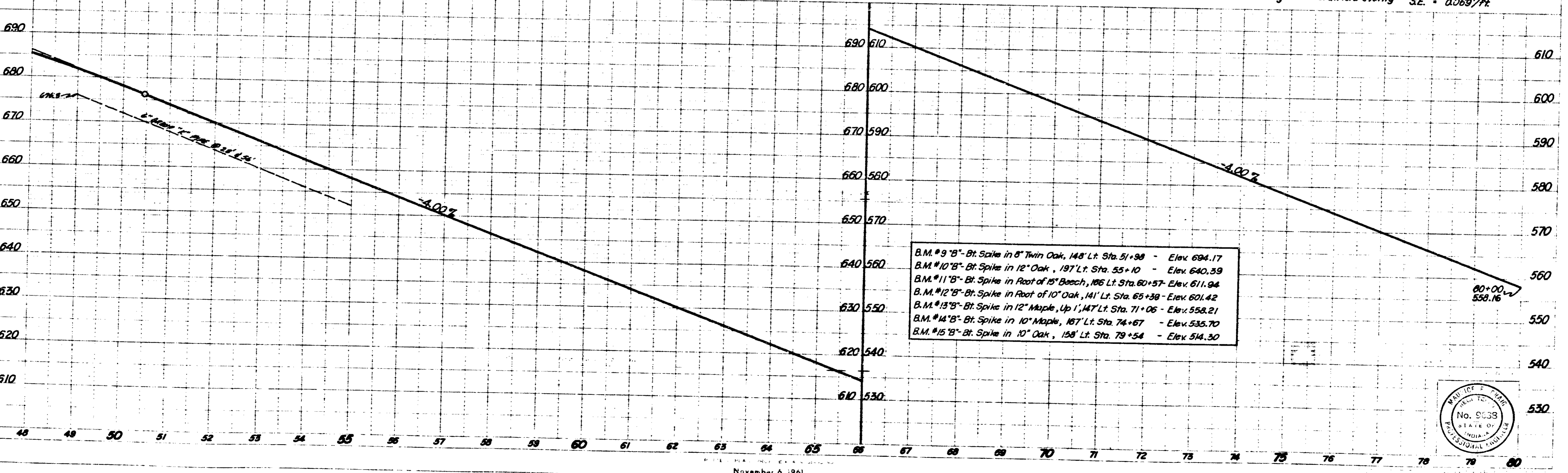
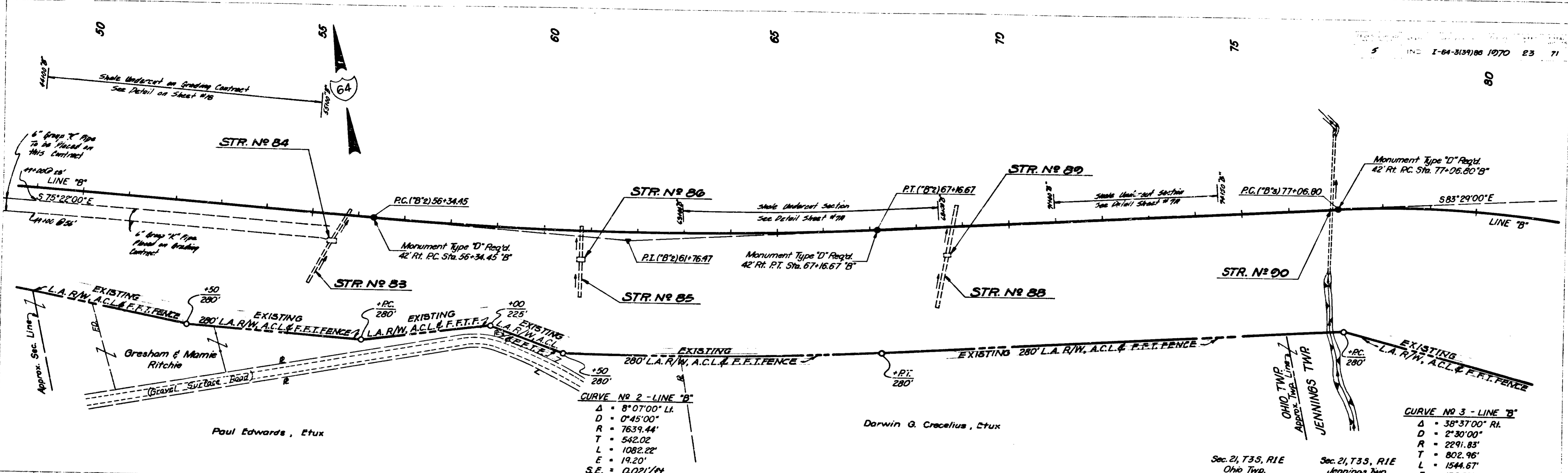
PLAN
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 MEC
 R.D.L.
 12-66
 PLAN
 1-64
 MEC
 R.D.L.
 12-66



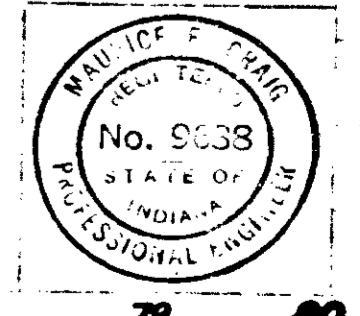
NOTE: Access Road No. 1 and Middle Road to be built with Grading Contract.



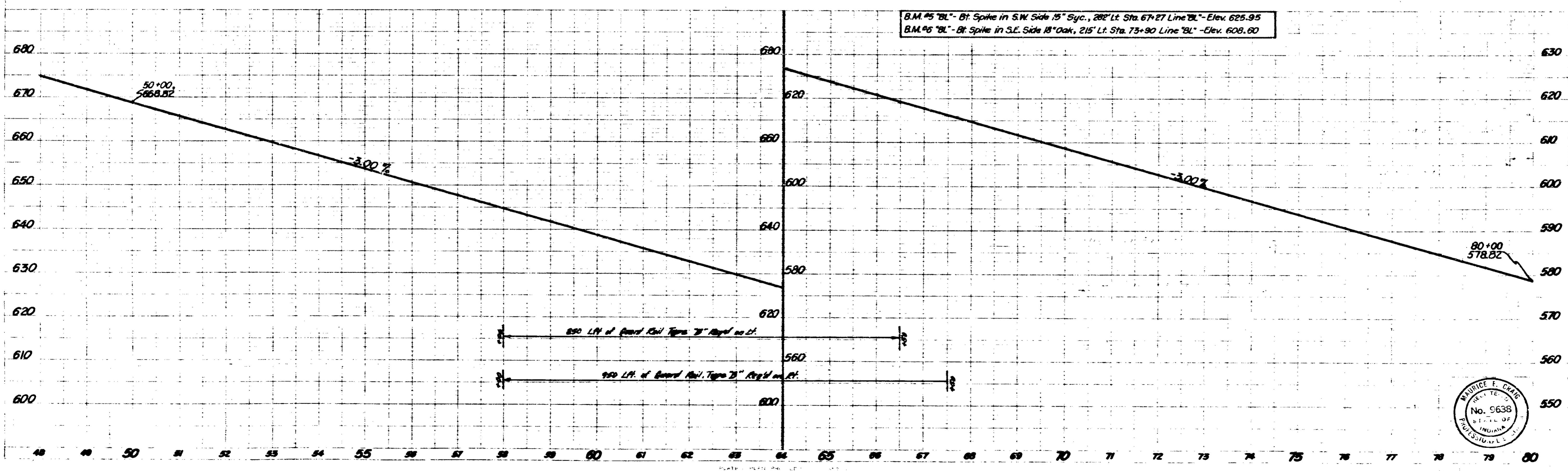
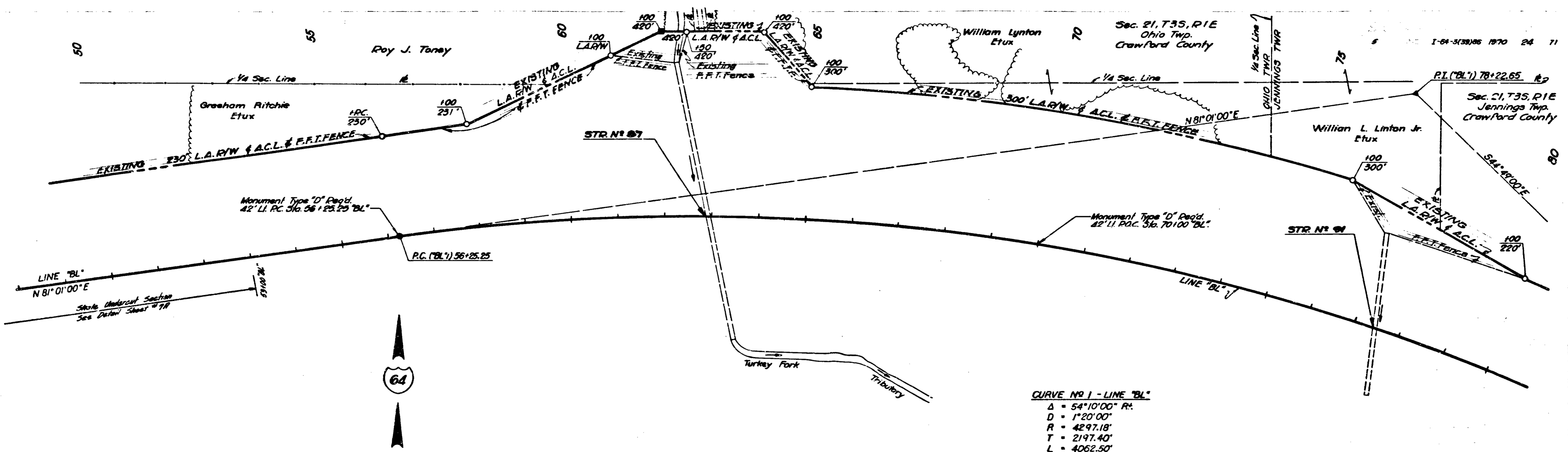
November 6 1961



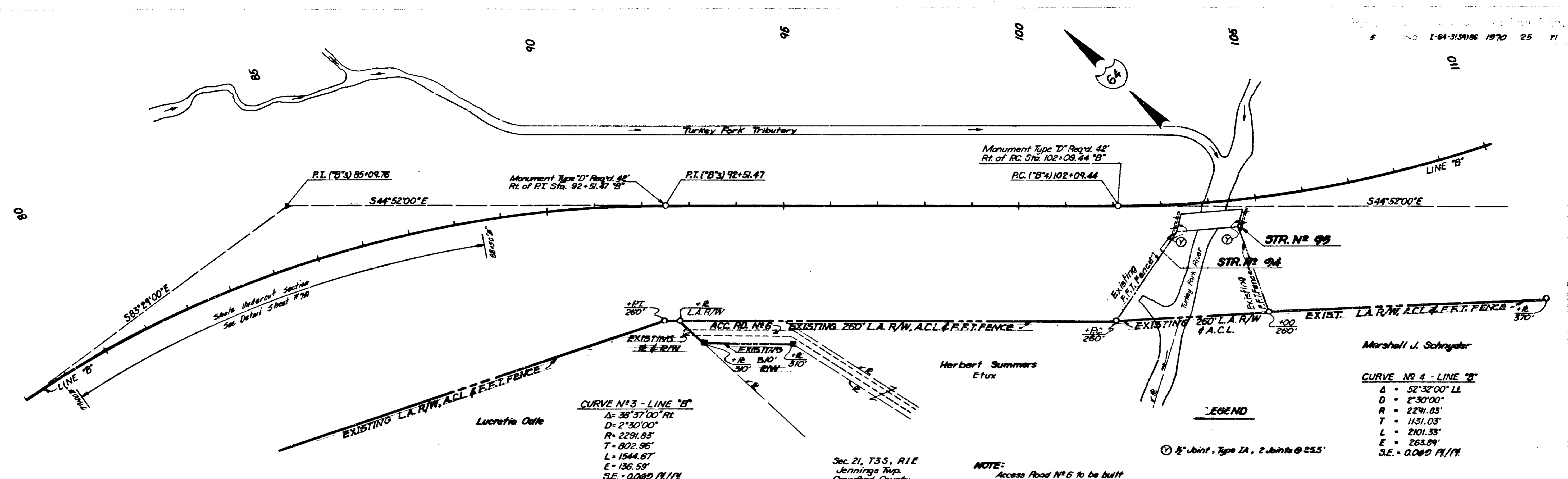
November 6, 1961



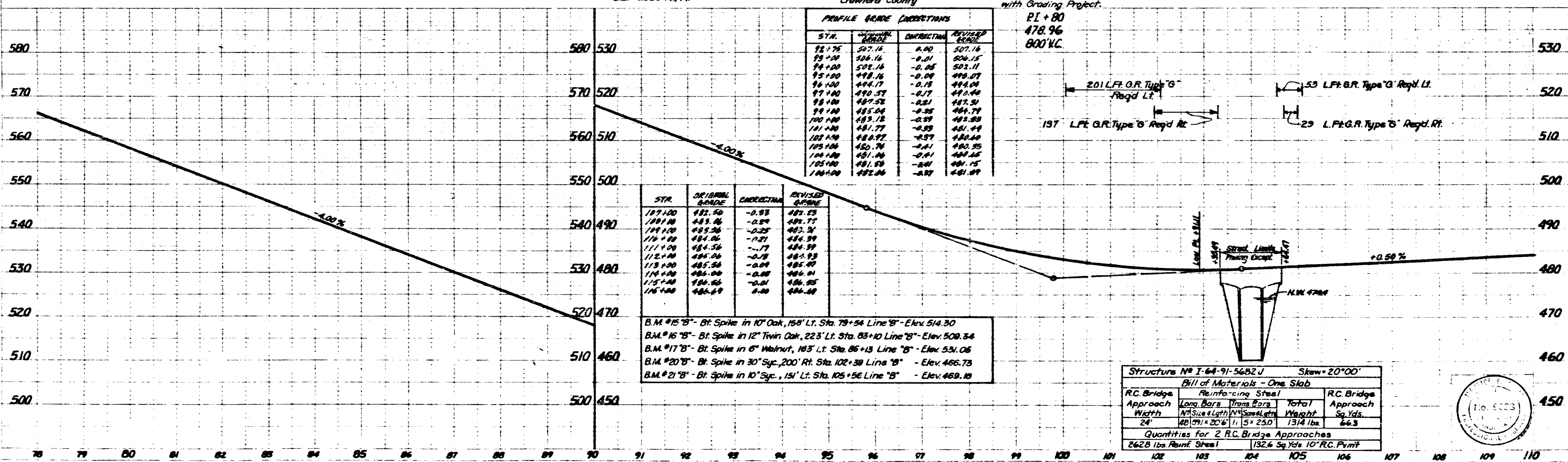
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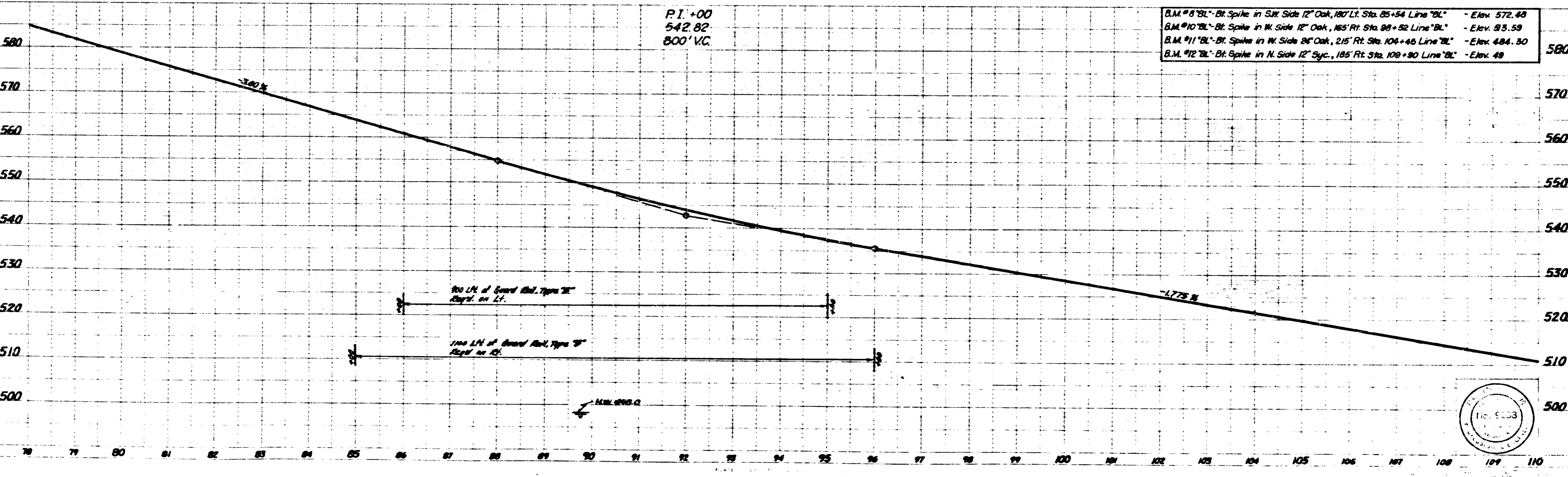
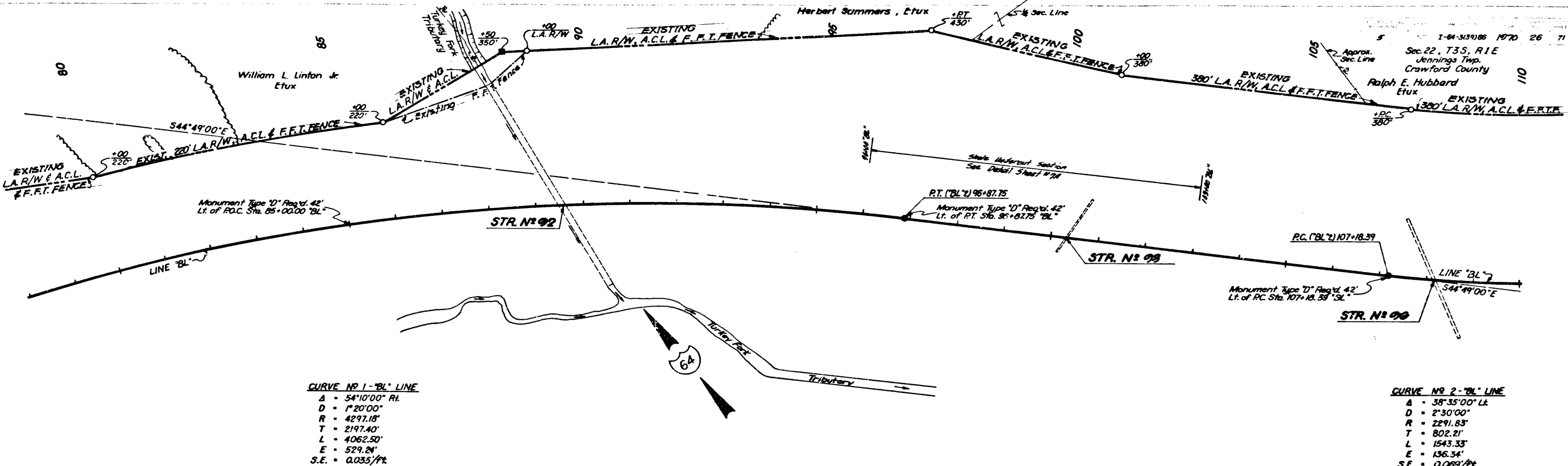


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 CHECKED BY: [Signature]



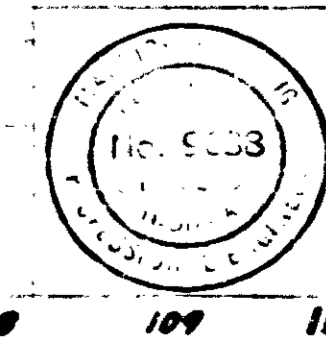
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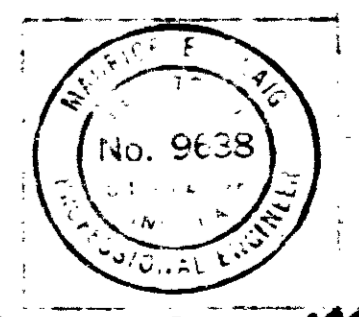
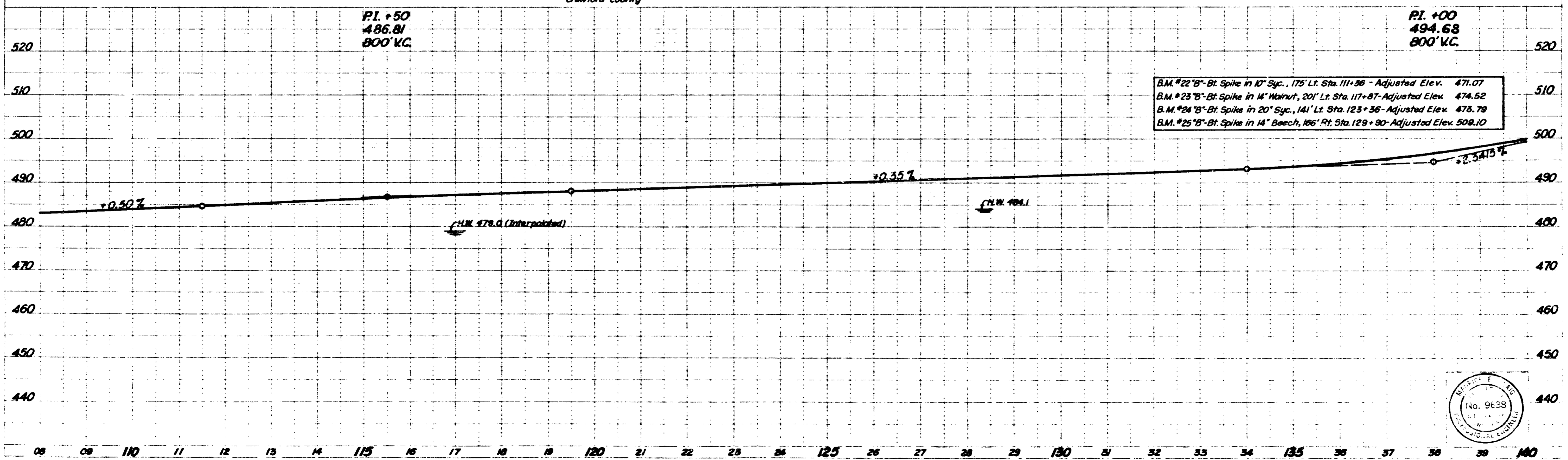
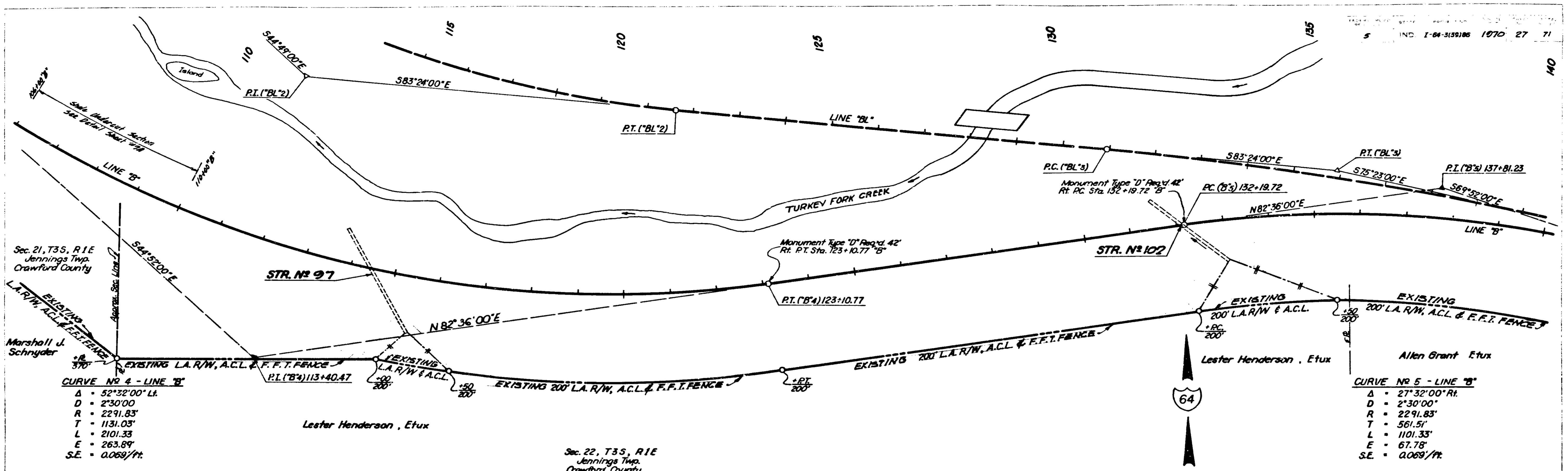




PLAN
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 1-64-313708
 1-64-313708

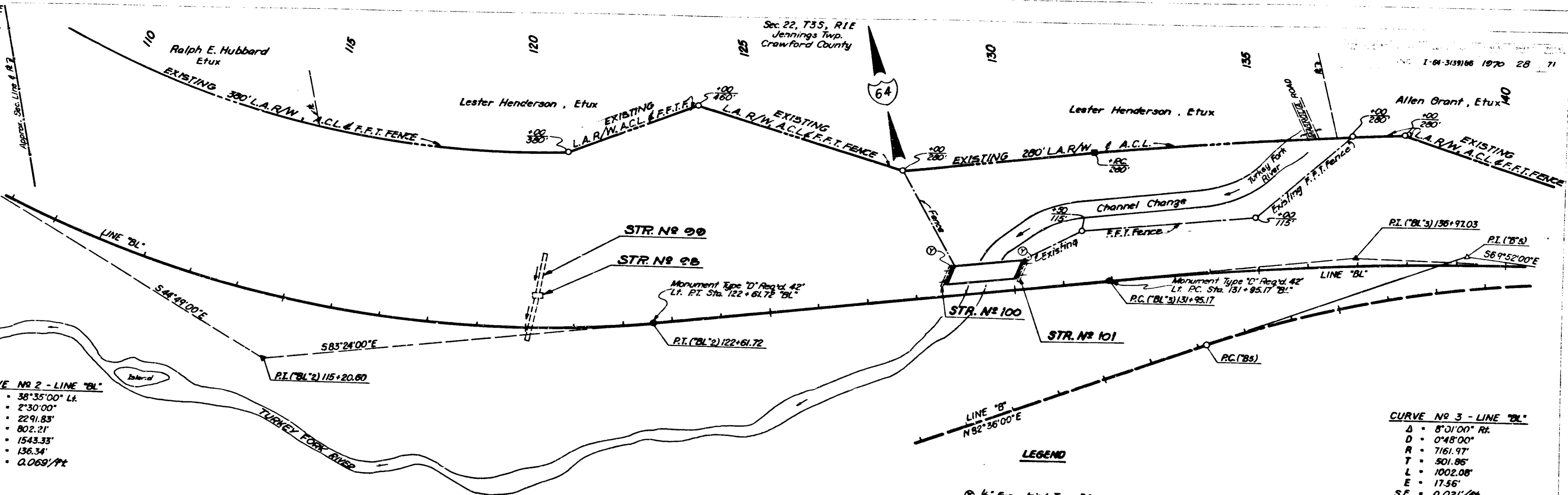
PROFILE
 1-64-313708
 1-64-313708
 1-64-313708





Sec. 21, T35, R1E
Jennings Twp.
Crawford County

Herbert
Summers
Etux



CURVE NO 2 - LINE "BL"
 $\Delta = 38^{\circ}35'00''$ Lt.
 $D = 2^{\circ}30'00''$
 $R = 2291.83'$
 $T = 802.21'$
 $L = 1543.33'$
 $E = 136.34'$
 $S.E. = 0.069'/ft$

CURVE NO 3 - LINE "BL"
 $\Delta = 8^{\circ}01'00''$ Rt.
 $D = 0^{\circ}48'00''$
 $R = 7161.97'$
 $T = 501.95'$
 $L = 1002.08'$
 $E = 17.56'$
 $S.E. = 0.021'/ft$

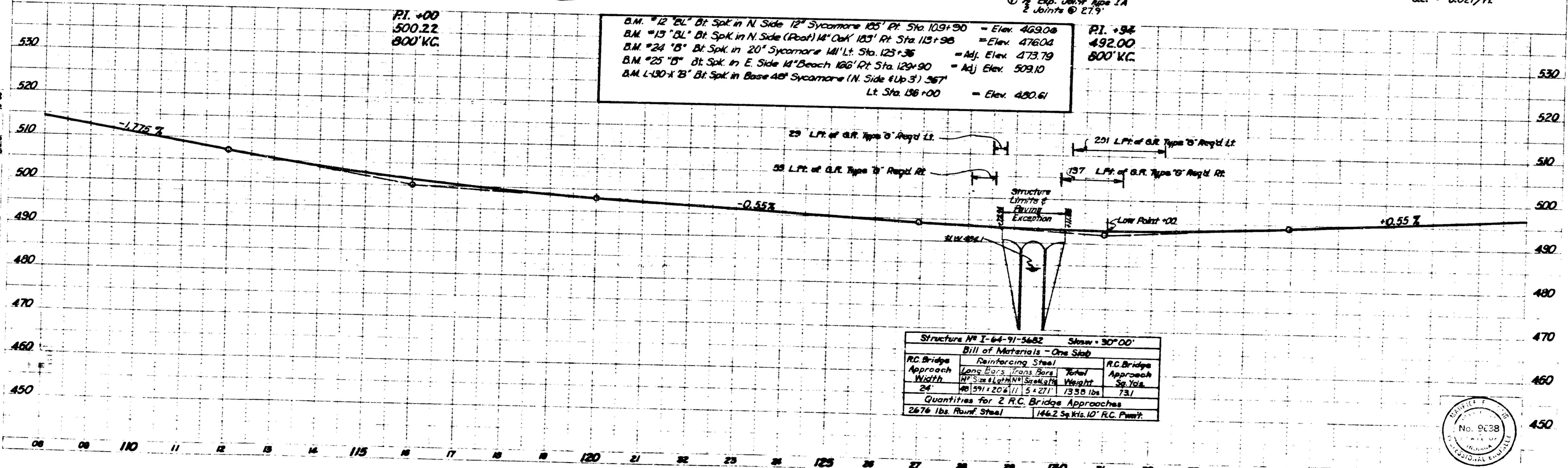
LEGEND

⊙ 1/2" Exp. Joint Type 1A
 ⊕ Joints @ 27.9'

PI. +00
 500.22
 800' K.C.

B.M. #12 "BL" Bl. Spk. in N. Side 12" Sycamore 185' Pt. Sta. 109+90 = Elev. 469.04
 B.M. #13 "BL" Bl. Spk. in N. Side (Roof) 14" Oak 183' Pt. Sta. 113+98 = Elev. 476.04
 B.M. #24 "B" Bl. Spk. in 20" Sycamore 141' Lt. Sta. 125+36 = Adj. Elev. 473.79
 B.M. #25 "B" Bl. Spk. in E. Side 14" Beach 166' Pt. Sta. 129+90 = Adj. Elev. 509.10
 B.M. L-130-X "B" Bl. Spk. in Base 48" Sycamore (N. Side 4' Up 3') 367' Lt. Sta. 136+00 = Elev. 480.61

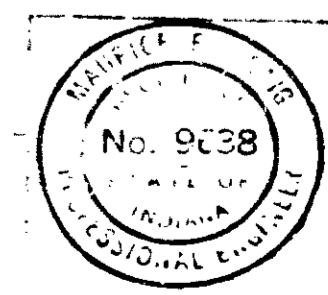
PI. +94
 492.00
 800' K.C.



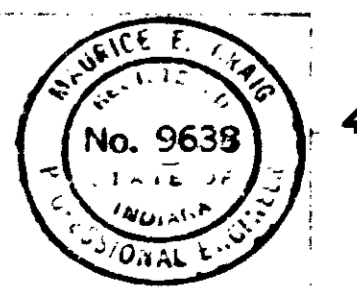
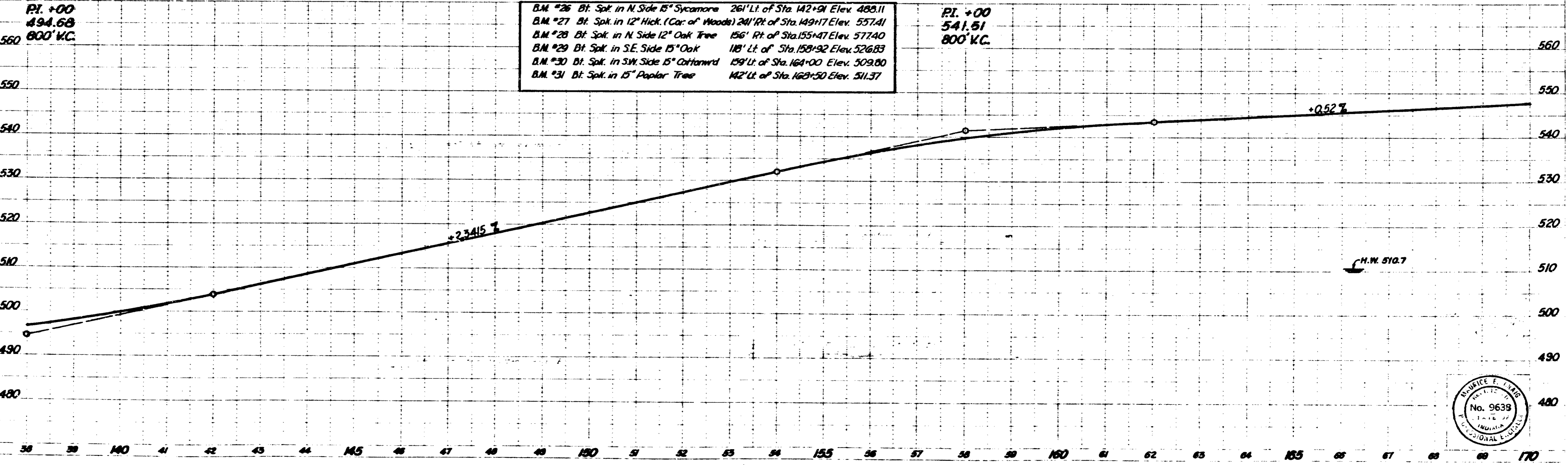
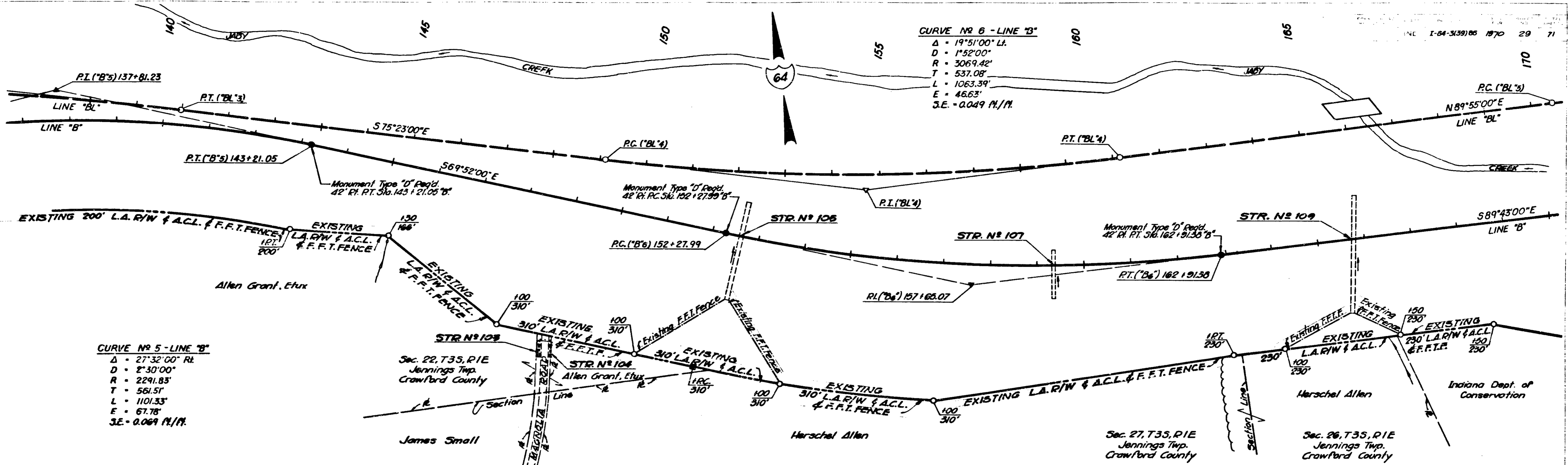
Structure # I-64-91-5682 Span = 30' 00"

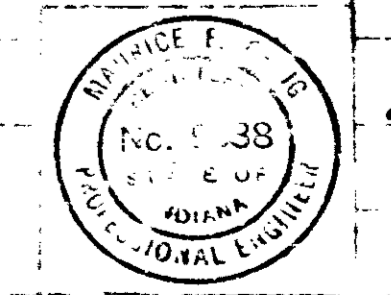
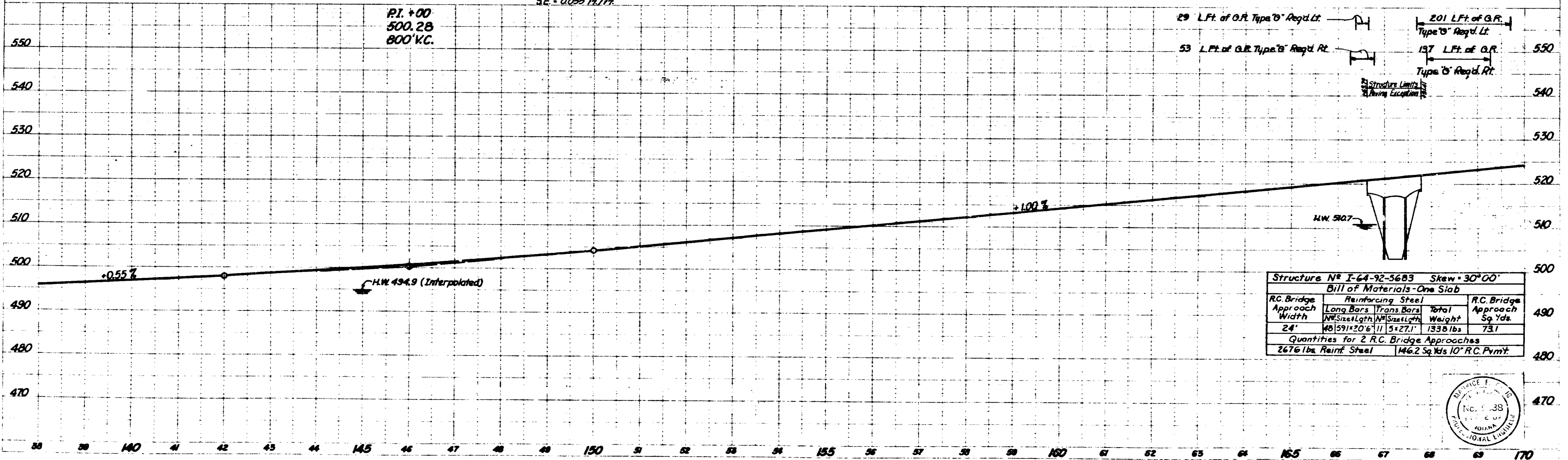
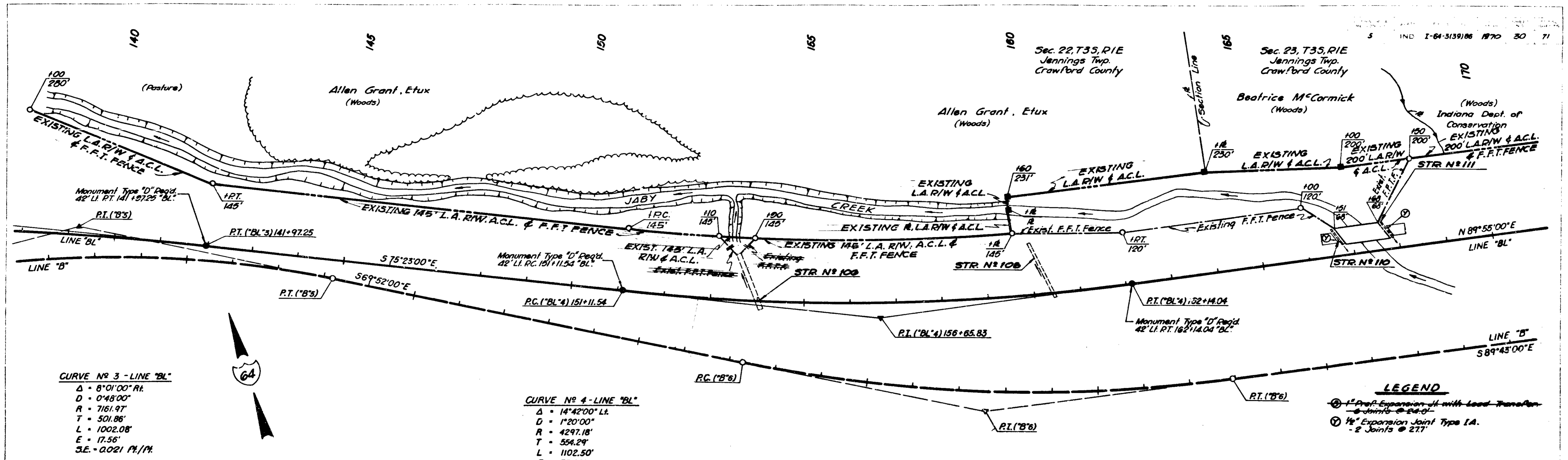
Bill of Materials - One Slab

R.C. Bridge				R.C. Bridge				
Approach				Approach				
Width	Long Bars	Trans Bars	Total Weight	Weight	Sq. Yds.			
24'	#2's	#4's	Sq. Ft.	Weight	Sq. Yds.			
24'	40	591	206	11	5	271	1358 lbs	73.1
Quantities for 2 R.C. Bridge Approaches								
2676 lbs. Reinf. Steel				146.2 Sq. Yds. R.C. Form.				

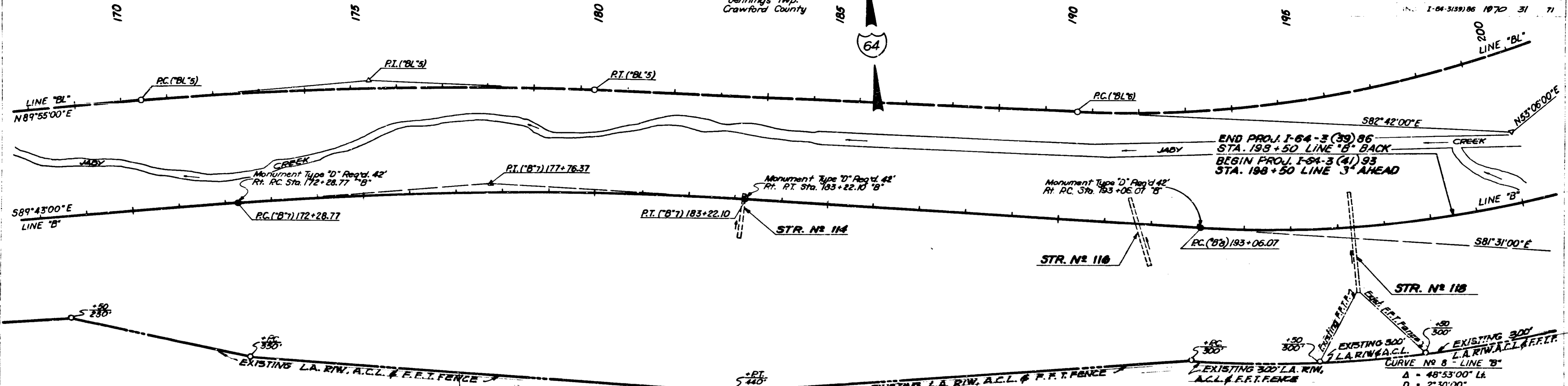


November 6 1961





Sec. 23, T3S, R1E
Jennings Twp.
Crawford County

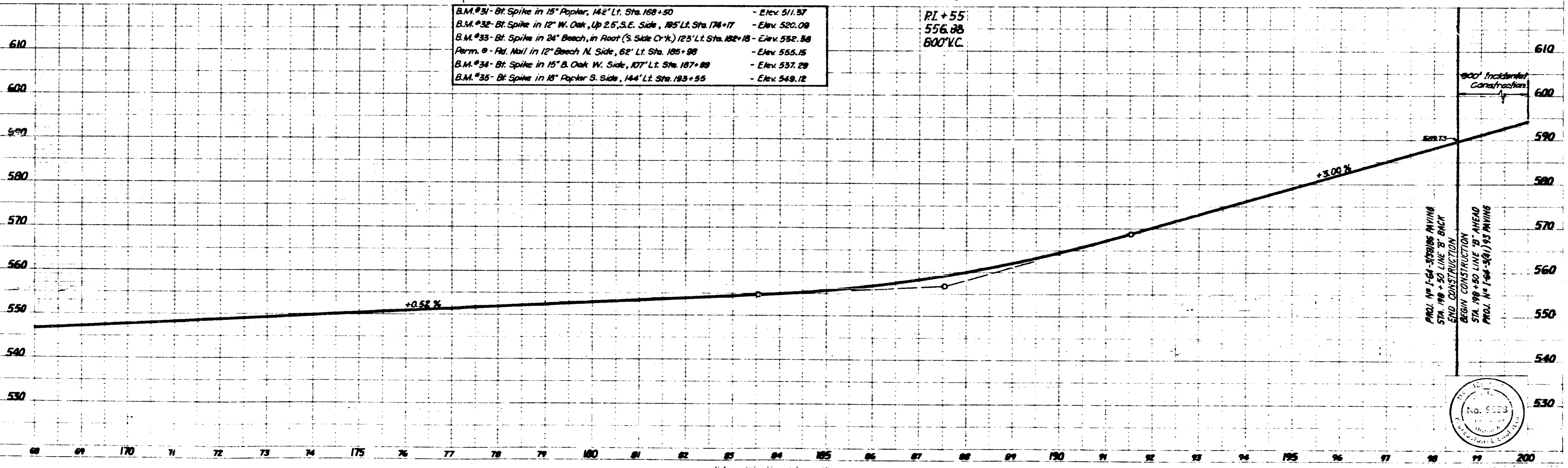


CURVE #7 LINE 'B'
Δ = 8°12'00" Rt. L = 1093.33'
D = 0°45'00" E = 19.60'
R = 7639.44' S.E. = 0.021/ft.
T = 547.60'

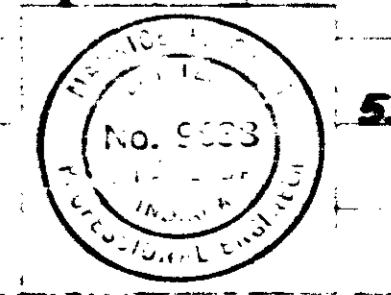
CURVE #8 - LINE 'B'
Δ = 48°53'00" Lt.
D = 2°30'00"
R = 2291.83'
T = 1041.63'
L = 1955.33'
E = 225.60'
S.E. = 0.069/ft.

B.M. #31 - Bt. Spike in 15" Poplar, 142' Lt. Sta. 168+50	- Elev. 511.37
B.M. #32 - Bt. Spike in 12" W. Oak, Up 2.5', S.E. Side, 185' Lt. Sta. 174+17	- Elev. 520.09
B.M. #33 - Bt. Spike in 24" Beech, in Root (S. Side Crk.) 123' Lt. Sta. 182+18	- Elev. 552.38
Perm. 9 - Rd. Nail in 12" Beech N. Side, 62' Lt. Sta. 185+98	- Elev. 555.15
B.M. #34 - Bt. Spike in 15" B. Oak W. Side, 107' Lt. Sta. 187+89	- Elev. 537.29
B.M. #35 - Bt. Spike in 18" Poplar S. Side, 144' Lt. Sta. 193+55	- Elev. 549.12

PI + 55:
556.78
800' V.C.

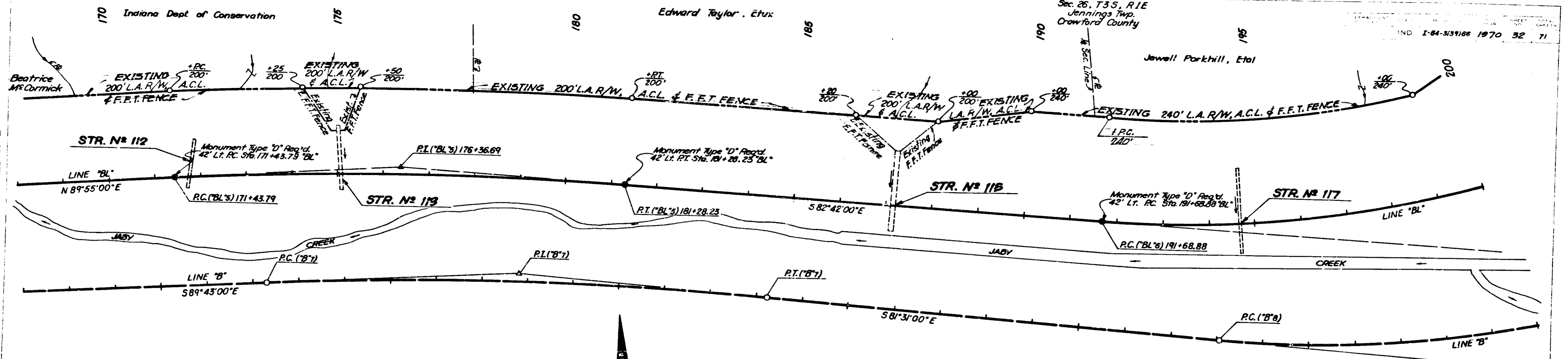


PROJ. # 1-64-3(39)86 PAVING
STA. 198+50 LINE 'B' BACK
END CONSTRUCTION
PROJ. # 1-64-3(41)93 PAVING
STA. 198+50 LINE 'B' AHEAD
BEGIN CONSTRUCTION



PLAN
DATE: 10/15/86
BY: J.M.H.
CHECKED: J.M.H.
SCALE: AS SHOWN

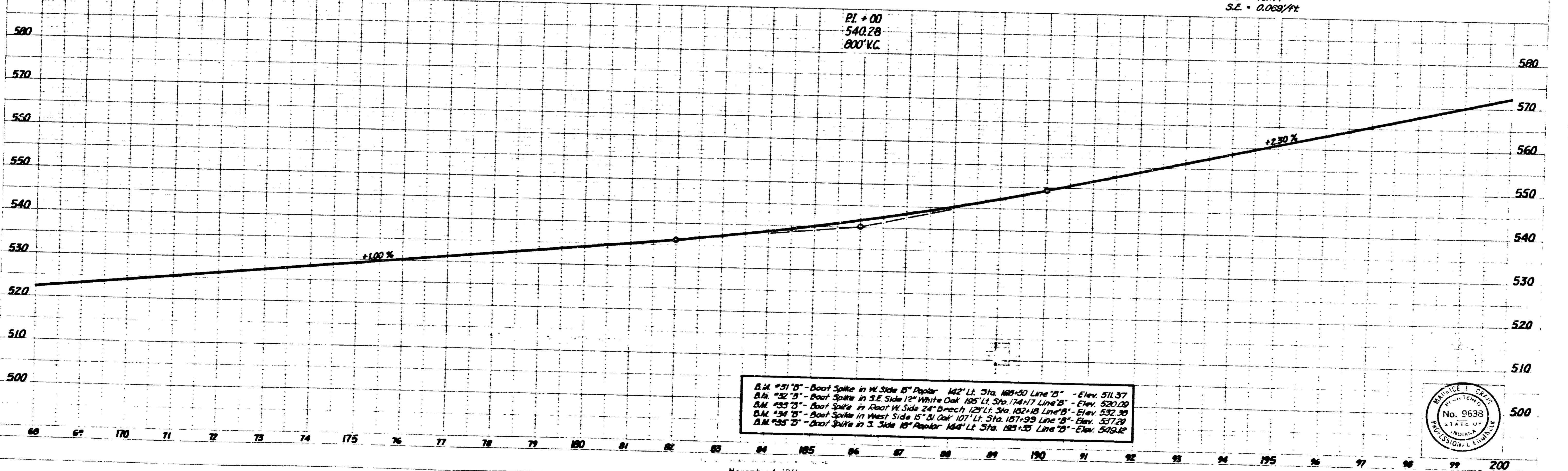
PROFILE
DATE: 10/15/86
BY: J.M.H.
CHECKED: J.M.H.
SCALE: AS SHOWN



CURVE NO 5 - LINE 'BL'
 $\Delta = 7^{\circ}23'00''$ Rt.
 $D = 0^{\circ}45'00''$
 $R = 7639.44'$
 $T = 492.90'$
 $L = 984.44'$
 $E = 15.88'$
 $S.E. = 0.021'/ft$

CURVE NO 6 - LINE 'BL'
 $\Delta = 44^{\circ}12'00''$ Lt.
 $D = 2^{\circ}30'00''$
 $R = 2291.83'$
 $T = 930.62'$
 $L = 1758.00'$
 $E = 181.74'$
 $S.E. = 0.069'/ft$

Sec. 26, T3S, R1E
 Jennings Twp.
 Crawford County



B.M. #31 'B' - Boat Spike in W. Side 15" Poplar 142' Lt. Sta. 169+50 Line 'B' - Elev. 511.37
 B.M. #32 'B' - Boat Spike in S.E. Side 12" White Oak 195' Lt. Sta. 174+17 Line 'B' - Elev. 520.09
 B.M. #33 'B' - Boat Spike in Root W. Side 24" Beech 123' Lt. Sta. 182+18 Line 'B' - Elev. 532.39
 B.M. #34 'B' - Boat Spike in West Side 15" Bl. Oak 107' Lt. Sta. 187+93 Line 'B' - Elev. 537.29
 B.M. #35 'B' - Boat Spike in S. Side 15" Poplar 144' Lt. Sta. 183+35 Line 'B' - Elev. 549.12



PLAN
 No. 9638
 No. 9638

PROFILE
 No. 9638
 No. 9638

Sec. 23, T3S, R1E
Jennings Twp.
Crawford County

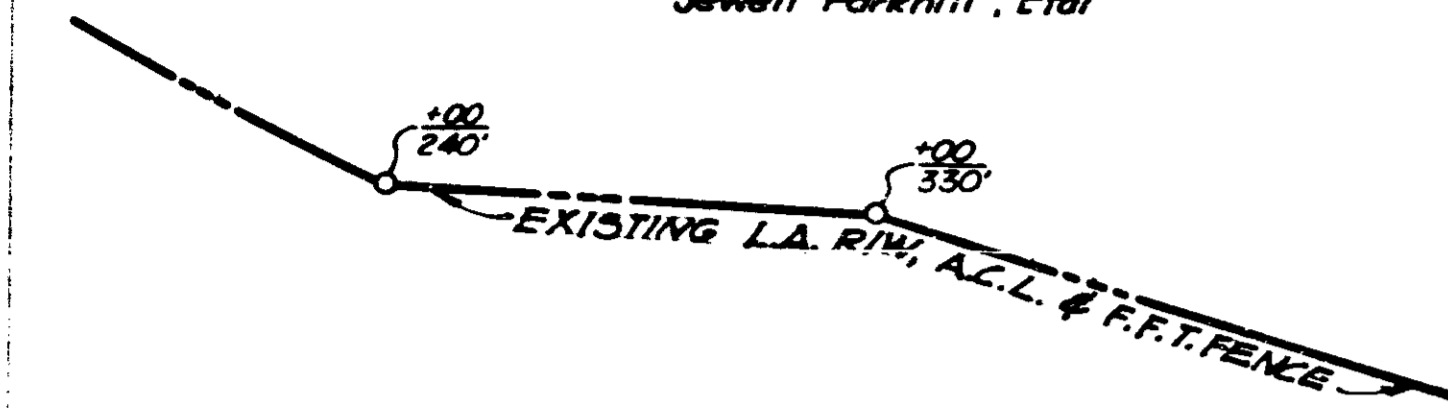
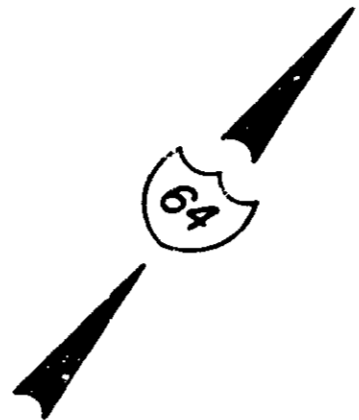
200

205

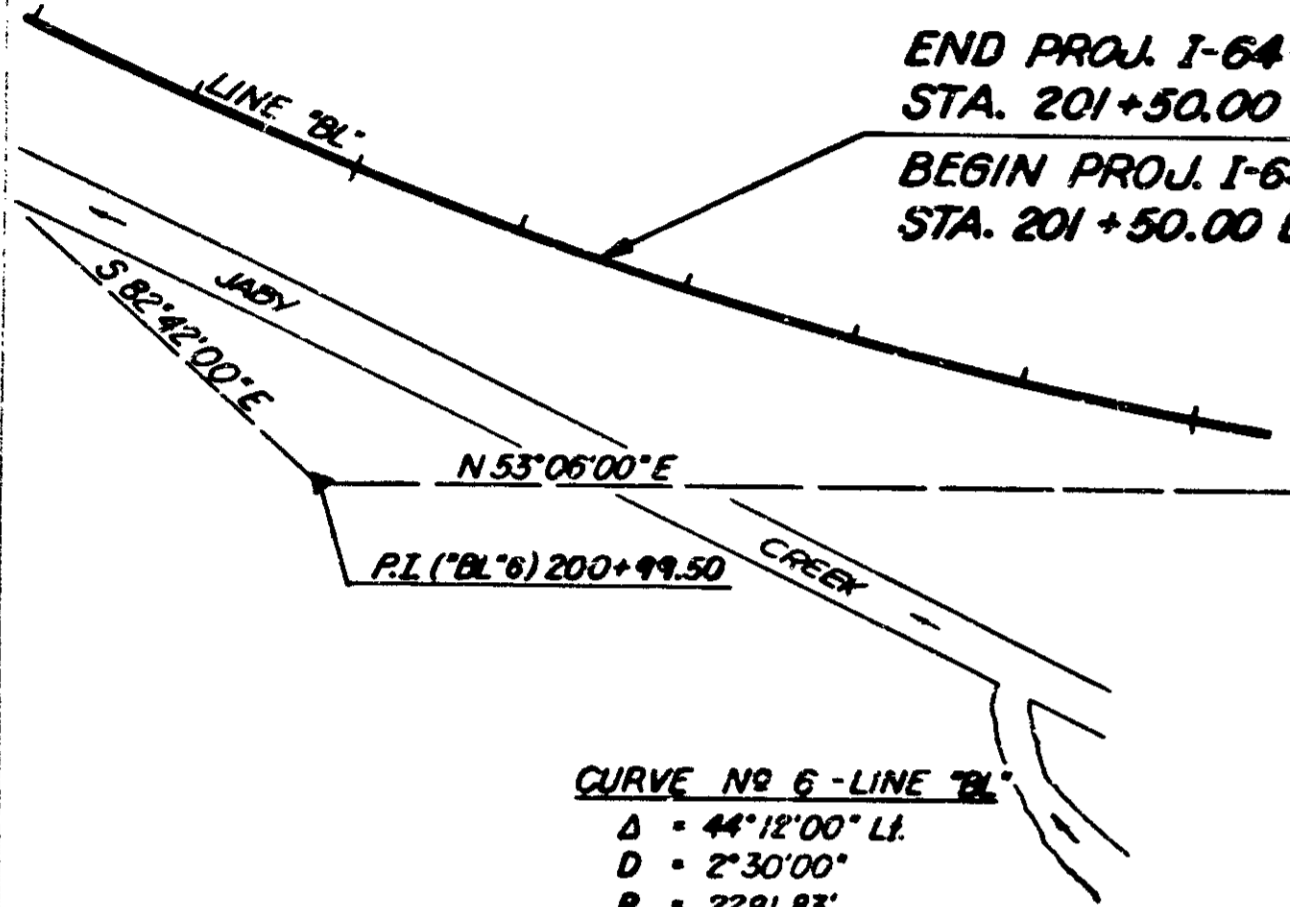
Jewell Parkhill, Etal

NOTE:
Remove 210 Lt. of Temp. Fence
on Eastend of Project.

IND I-64-3(39)86 1970 33 71

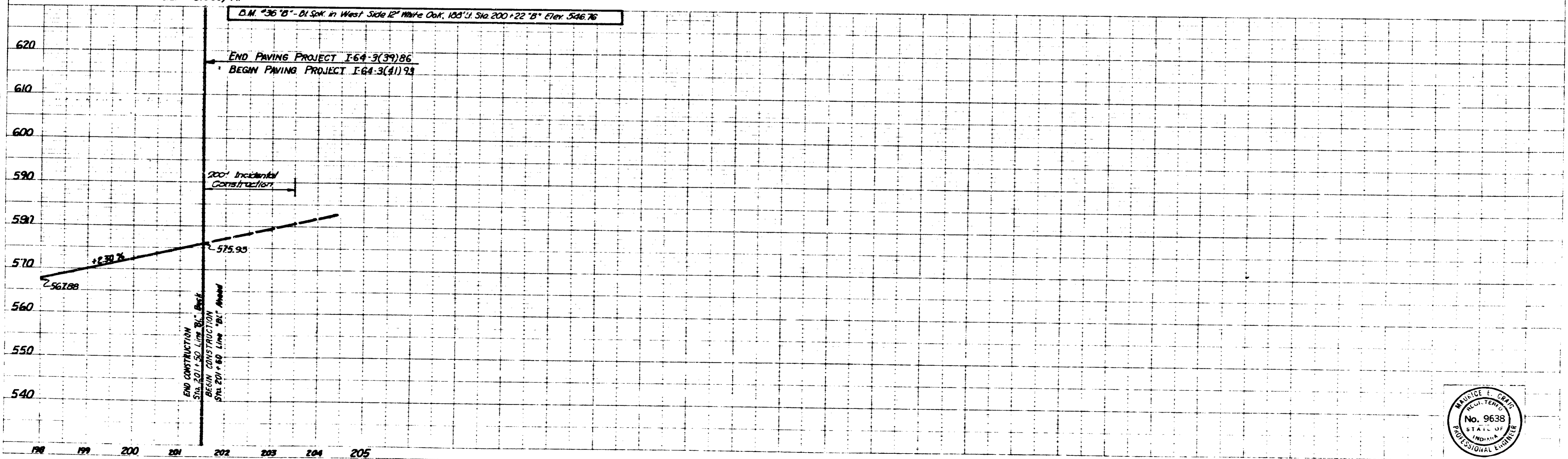


END PROJ. I-64-3(39)86
STA. 201+50.00 LINE "BL" BACK
BEGIN PROJ. I-64-3(41)93
STA. 201+50.00 LINE "BL" AHEAD

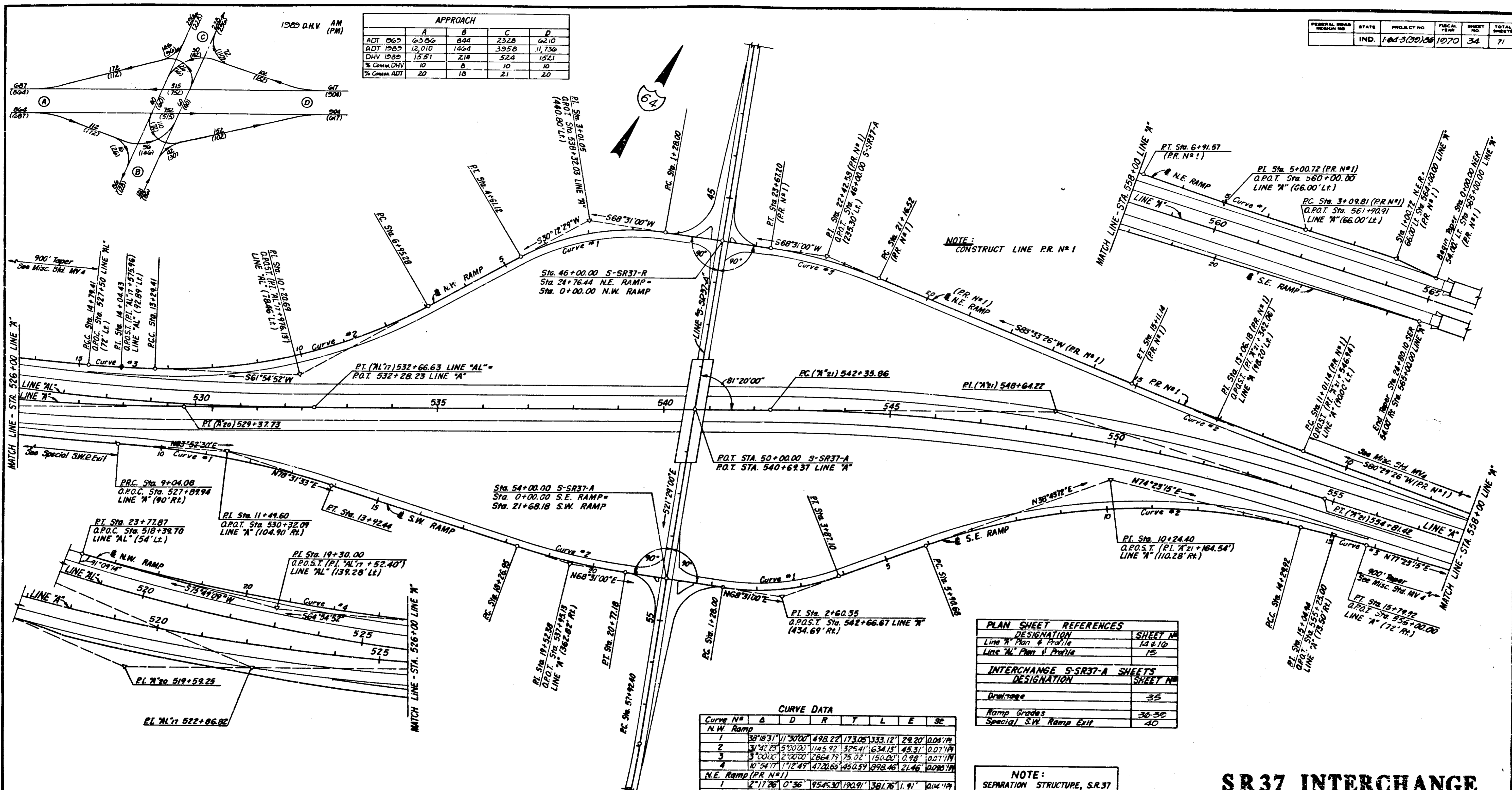


CURVE NO 6 - LINE "BL"
 $\Delta = 44^\circ 12' 00''$ LI.
 $D = 2^\circ 30' 00''$
 $R = 2291.83'$
 $T = 930.52'$
 $L = 1768.00'$
 $E = 181.74'$
 $S.E. = 0.068/ft$

D.M. "36" B" - Bl. Spk. in West Side 12" White Oak, 103' Lt. Sta. 200+22 "B" Elev. 546.76



APPROACH				
	A	B	C	D
ADT 1965	63,866	844	2328	6210
ADT 1985	12,010	1464	3958	11,736
DHV 1985	13,571	214	524	1571
% Comm. DHV	10	8	10	10
% Comm. ADT	20	18	21	20



NOTE: CONSTRUCT LINE P.R. #1

PLAN SHEET REFERENCES	
DESIGNATION	SHEET NO.
Line 'A' Plan & Profile	14 & 10
Line 'M' Plan & Profile	15
INTERCHANGE S-SR37-A SHEETS	
DESIGNATION	SHEET NO.
Drainage	35
Ramp Grades	36-38
Special S.W. Ramp Exit	40

CURVE DATA									
Curve No.	A	D	R	T	L	E	SE		
N.W. Ramp									
1	38°18'31"	113000	498.22	173.05	333.12	29.20	0.04	1/4"	
2	31°42'23"	510000	1145.92	375.41	634.13	45.31	0.07	1/4"	
3	3°00'00"	210000	2864.73	75.02	150.00	0.98	0.07	1/4"	
4	10°54'17"	17249	4720.65	450.59	898.46	21.46	0.08	1/4"	
N.E. Ramp (P.R. #1)									
1	27°17'26"	0136	954.30	190.91	381.76	1.91	0.02	1/4"	
2	2°44'	0140	8594.37	325.04	410.00	2.45	0.02	1/4"	
3	15°02'26"	6000	954.93	126.06	250.68	8.28	0.04	1/4"	
S.E. Ramp									
1	29°17'48"	113000	498.22	173.05	333.12	29.20	0.04	1/4"	
2	35°40'08"	615000	1348.44	433.72	639.26	68.05	0.06	1/4"	
3	3°00'00"	210000	2864.73	75.02	150.00	0.98	0.07	1/4"	
S.W. Ramp									
1	14°39'08"	910000	1909.86	246.52	488.36	13.72	0.05	1/4"	
2	40°00'33"	410000	1032.37	234.43	129.29	3.48	0.03	1/4"	

CURVE DATA									
Curve No.	A	D	R	T	L	E	SE		
Line 'A'									
20	23°50'00"	112000	4774.65	1007.63	1986.11	105.17	0.09	1/4"	
21	18°41'00"	130000	3819.72	626.36	1245.56	51.34	0.06	1/4"	
Line 'M'									
17	23°52'00"	112000	4774.65	1007.63	1986.11	105.17	0.09	1/4"	
S-SR37-A	35°44'49"	910000	1909.86	615.89	1191.57	96.85			

NOTE: SEPARATION STRUCTURE, S.R.37 & RAMP INTERSECTIONS TO BE BUILT UNDER GRADING PROJECT

SR37 INTERCHANGE GEOMETRICS DETAILS

SCALE: 1" = 100'

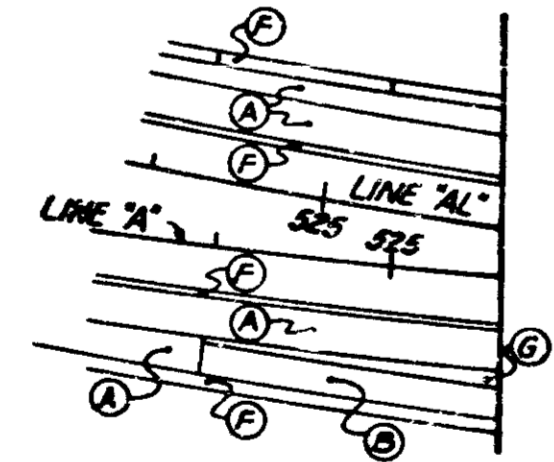
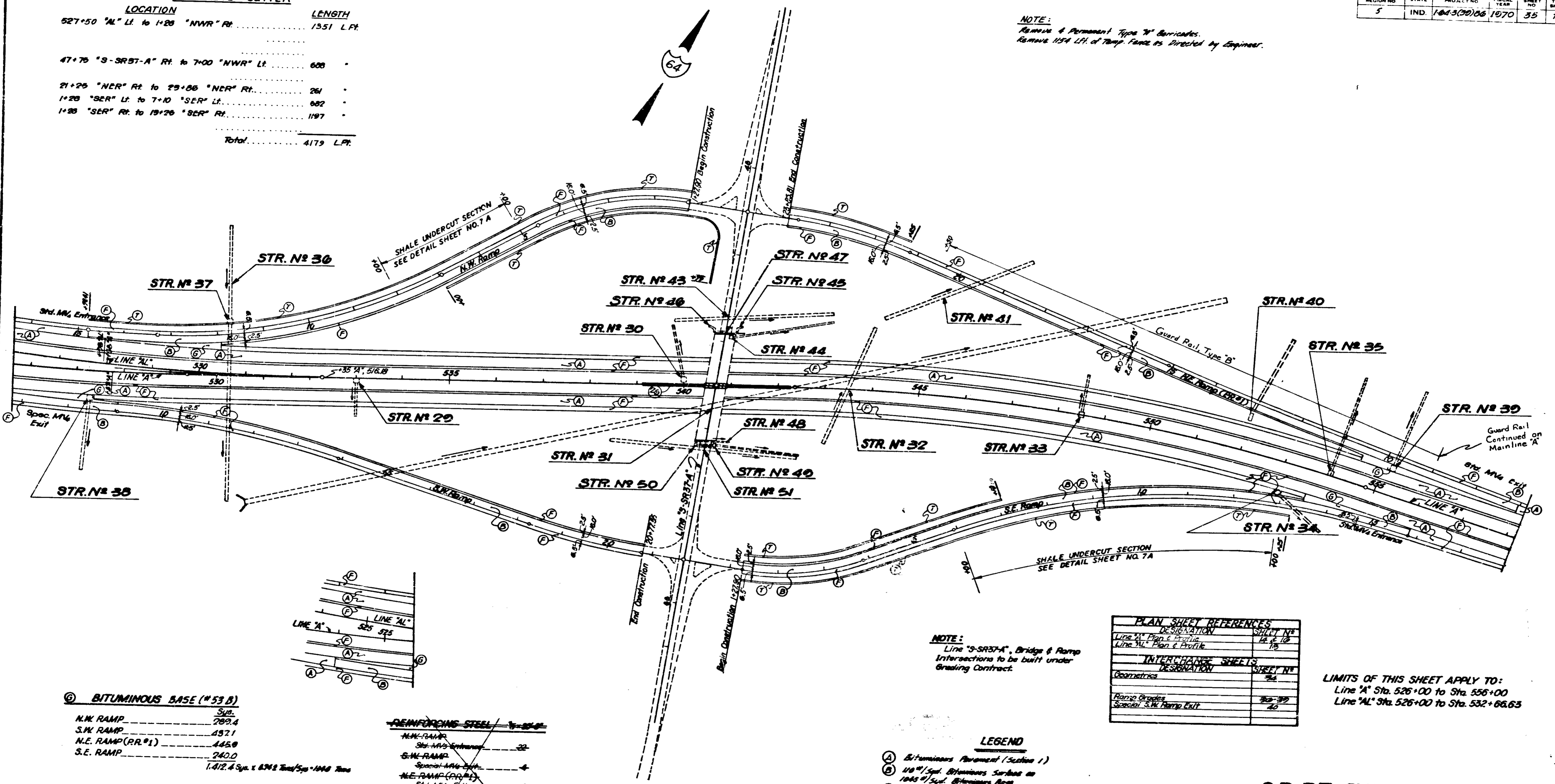


FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	104-3(39)06	1970	35	71

CONCRETE GUTTER

LOCATION	LENGTH
527+50 "AL" Lt. to 1+20 "NWR" Rt.	1351 L.Ft.
47+75 "S-SR37-A" Rt. to 7+00 "NWR" Lt.	608 "
21+25 "NER" Rt. to 23+06 "NER" Rt.	261 "
1+20 "SER" Lt. to 7+10 "SER" Lt.	692 "
1+20 "SER" Rt. to 19+26 "SER" Rt.	1197 "
Total	4179 L.Ft.

NOTE:
 Remove 4 Permanent Type "W" Barricades.
 Remove 1154 L.Ft. of Temp. Fences as Directed by Engineer.



ⓐ BITUMINOUS BASE (#53 B)

N.W. RAMP	Sup.	789.4
S.W. RAMP	4571	
N.E. RAMP (RR #1)	4450	
S.E. RAMP	240.0	

1.412 & 5/8 x 3/4 x 1/4 x 1/4 x 1/4 x 1/4

REINFORCING STEEL

N.W. RAMP	22
S.W. RAMP	4
N.E. RAMP (RR #1)	4
S.E. RAMP	22

52-201-9-1070-1043712-1125 Lbs.

ⓑ GUARD RAIL TYPE "F"
 For Pier Protection in Median 3231 Ft.

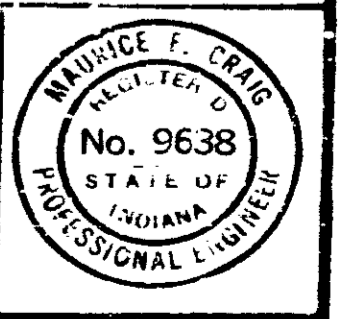
NOTE:
 Line "S-SR37-A", Bridge & Ramp Intersections to be built under Grading Contract.

PLAN SHEET REFERENCES	
DESIGNATION	SHEET NO.
Line "A" Plan & Profile	14, 15, 16
Line "AL" Plan & Profile	14, 15
INTERCHANGE SHEETS	
DESIGNATION	SHEET NO.
Geometries	24
Ramp Grades	30-39
Special S.W. Ramp Exit	40

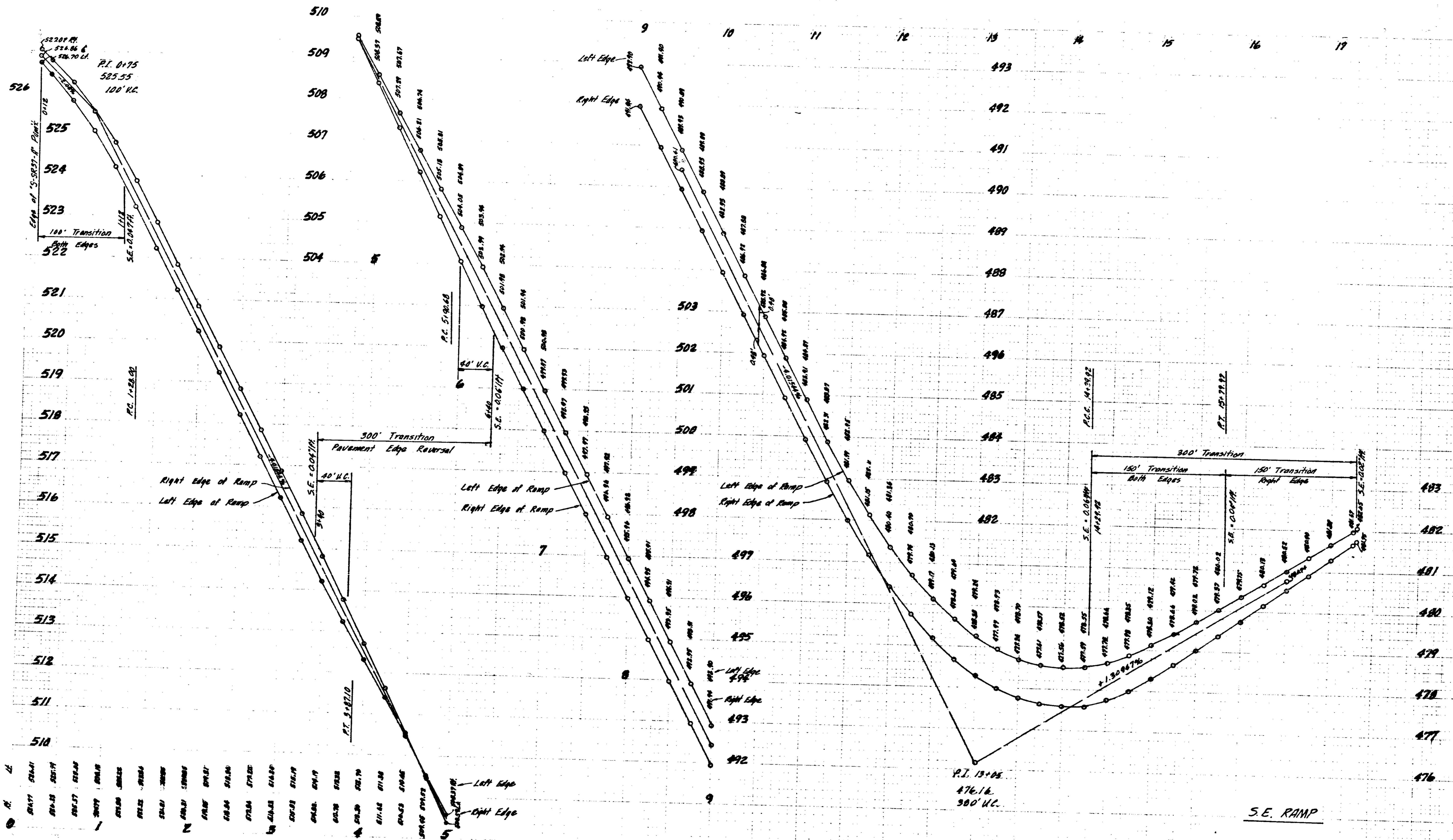
LIMITS OF THIS SHEET APPLY TO:
 Line "A" Sta. 526+00 to Sta. 556+00
 Line "AL" Sta. 526+00 to Sta. 532+66.63

- LEGEND**
- ⓐ Bituminous Pavement (Section 1)
 - ⓑ 1 1/2" Spd. Bituminous Surface on 1045 #5/8 Bituminous Base
 - ⓒ 6" Bituminous Base (No. 50-B)
 - ⓓ #5 #5/8 Bituminous Base (No. 65-B)
 - ⓔ Guard Rail, Type "F"
 - ⓕ Concrete Gutter

**S.R. 37 INTERCHANGE
 CONSTRUCTION & DRAINAGE
 DETAILS**
 SCALE: 1"=100'



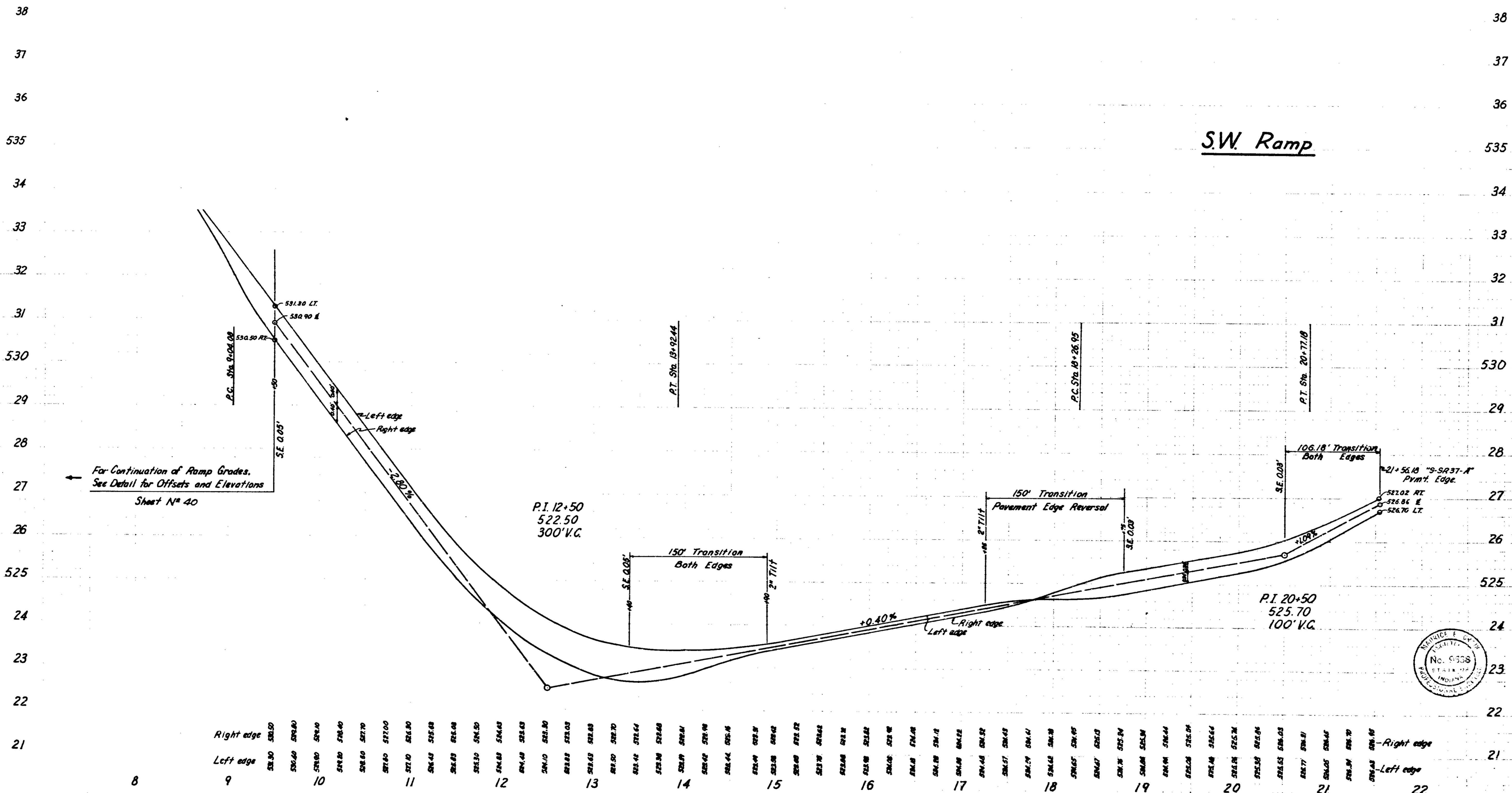
PROJECT NO.	LINE	SH. FT.	TOTAL SHEETS	FILE
104-3(39)06		35	71	



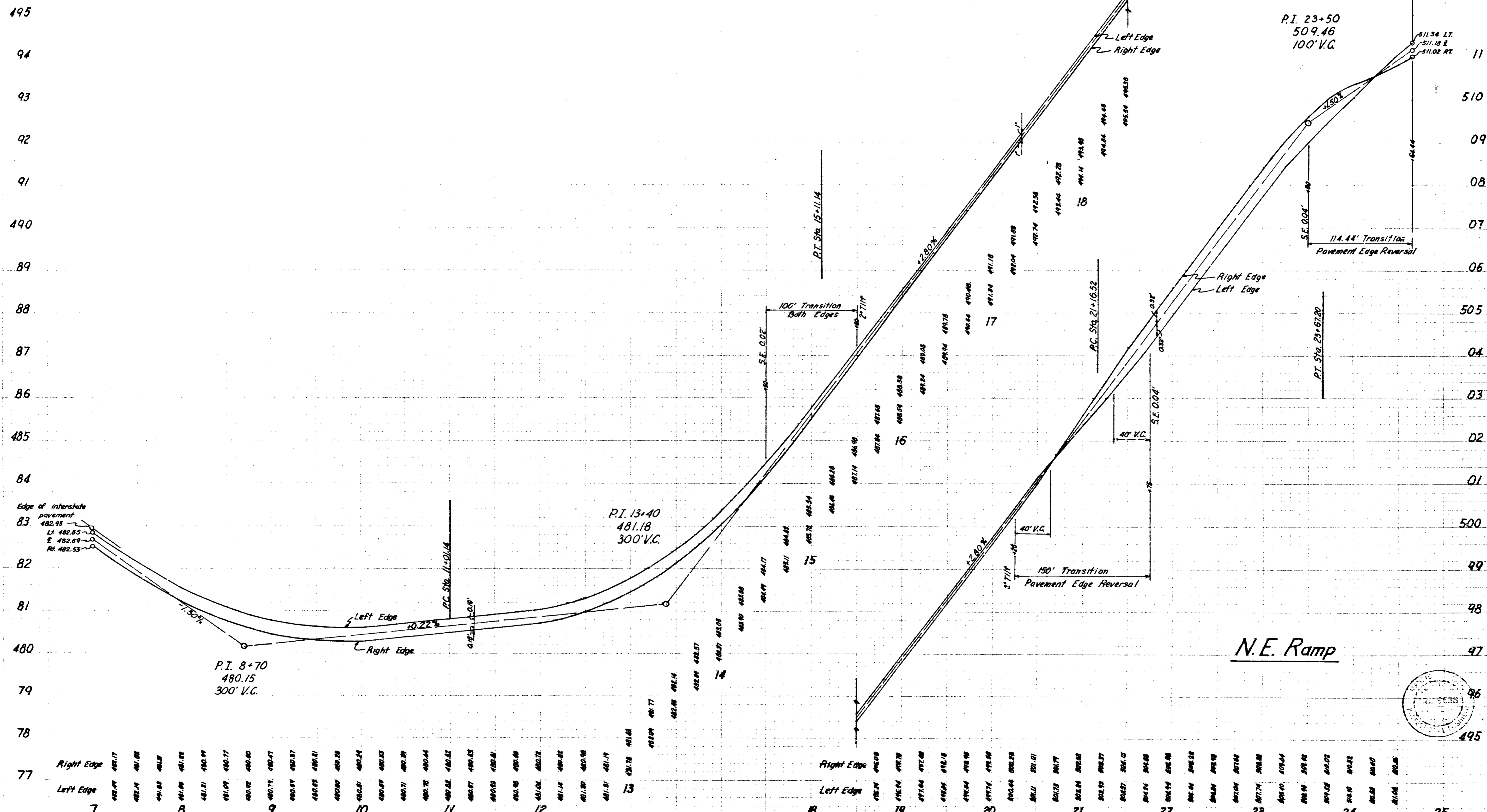
- 526.00
- 525.55
- 525.10
- 524.65
- 524.20
- 523.75
- 523.30
- 522.85
- 522.40
- 521.95
- 521.50
- 521.05
- 520.60
- 520.15
- 519.70
- 519.25
- 518.80
- 518.35
- 517.90
- 517.45
- 517.00
- 516.55
- 516.10
- 515.65
- 515.20
- 514.75
- 514.30
- 513.85
- 513.40
- 512.95
- 512.50
- 512.05
- 511.60
- 511.15
- 510.70
- 510.25
- 509.80
- 509.35
- 508.90
- 508.45
- 508.00
- 507.55
- 507.10
- 506.65
- 506.20
- 505.75
- 505.30
- 504.85
- 504.40
- 503.95
- 503.50
- 503.05
- 502.60
- 502.15
- 501.70
- 501.25
- 500.80
- 500.35
- 499.90
- 499.45
- 499.00
- 498.55
- 498.10
- 497.65
- 497.20
- 496.75
- 496.30
- 495.85
- 495.40
- 494.95
- 494.50
- 494.05
- 493.60
- 493.15
- 492.70
- 492.25
- 491.80
- 491.35
- 490.90
- 490.45
- 489.95
- 489.50
- 489.05
- 488.60
- 488.15
- 487.70
- 487.25
- 486.80
- 486.35
- 485.90
- 485.45
- 485.00
- 484.55
- 484.10
- 483.65
- 483.20
- 482.75
- 482.30
- 481.85
- 481.40
- 480.95
- 480.50
- 480.05
- 479.60
- 479.15
- 478.70
- 478.25
- 477.80
- 477.35
- 476.90
- 476.45
- 476.00

MAY 1969

ELEV. 476.16
 TOTAL
 5
 71
 LINE S.E. RAMP



LEVEL BOOK NO. 9326L
 SHEET NO. 57
 DATE 1-4-1970
 LINE S.W. Ramp



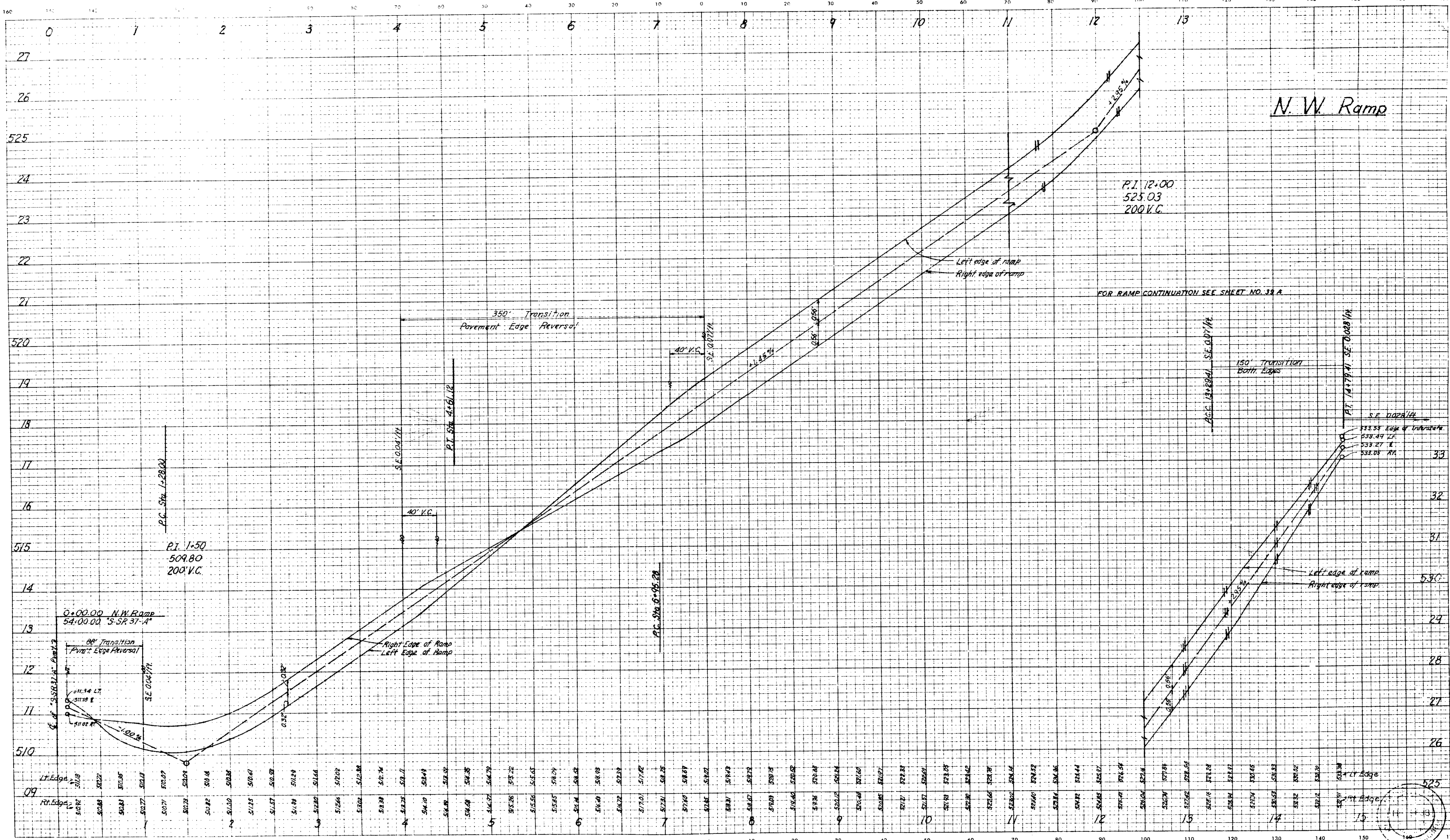
N.E. Ramp



November 6 1961

LEVEL BOOK NO. 13724	FILE
IND 164-360	1970
4	71
LINE N.E. Ramp	

CROSS SECTIONS
Scale 1 inch = 10 feet



N.W. Ramp

P.I. 12+00
525.03
200' V.C.

FOR RAMP CONTINUATION SEE SHEET NO. 39 A

AGE 12+20.41 S.E. 0.071%

150' Transition Both Edges

AGE 12+79.41 S.E. 0.0281%

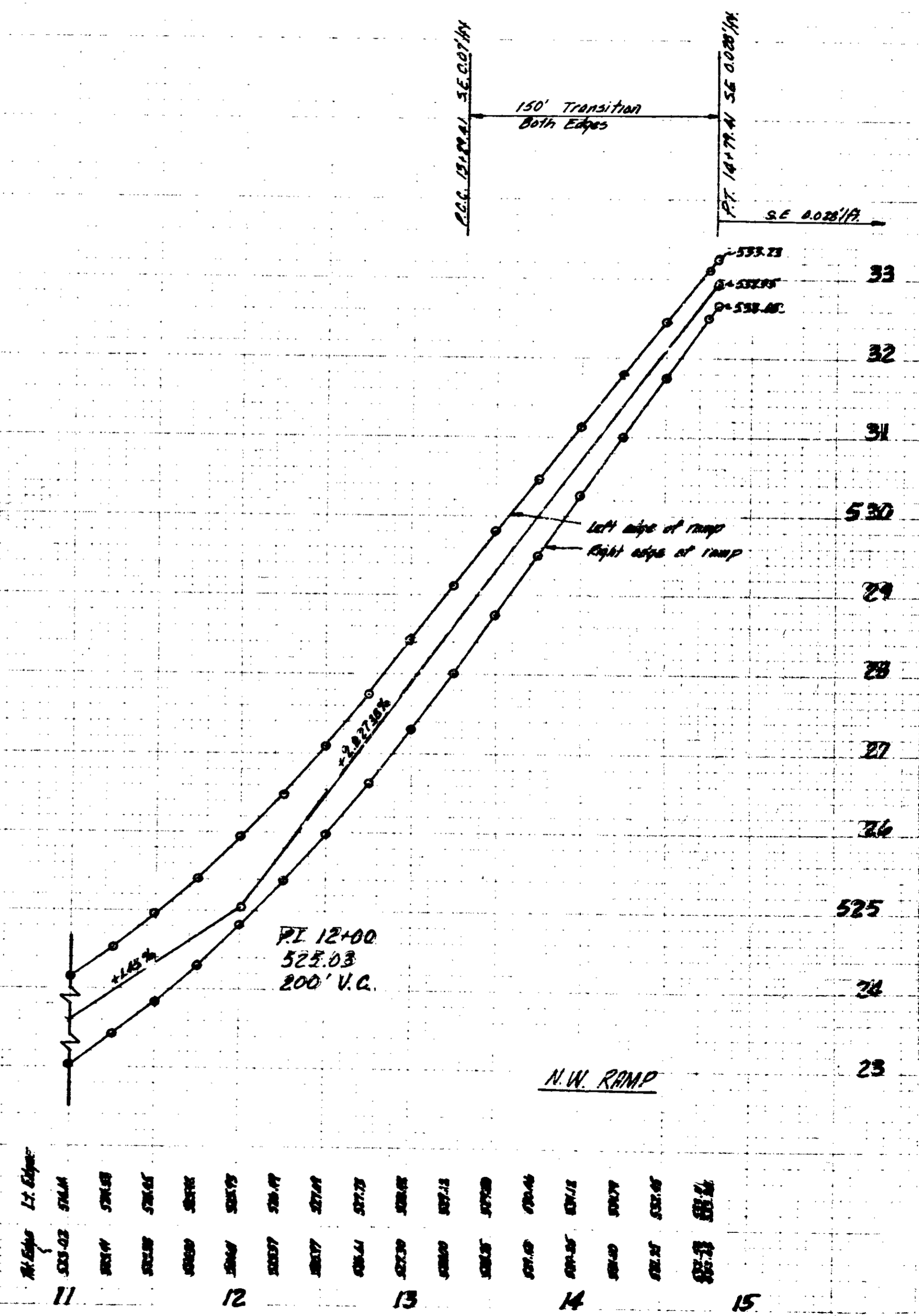
S.E. 0.0281%
533.33 Edge of Infrastructure
533.49 LT
533.27 E
533.05 RT

Left edge of ramp
Right edge of ramp

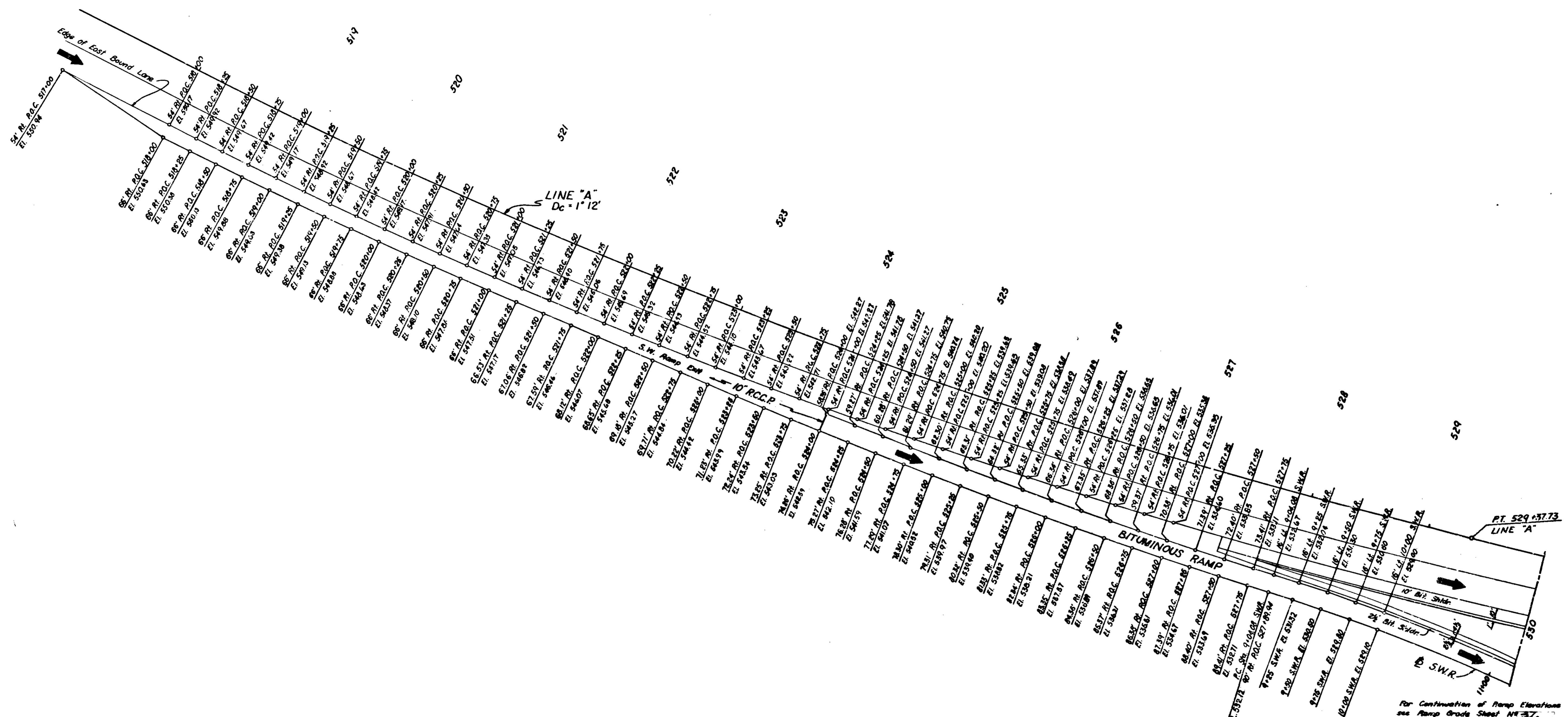
Left Edge
Right Edge

LEVEL BOOK NO. 9326L		SHEET NO. 30		TOTAL SHEETS 71	
FEDERAL ROAD REGION NO. 4	STATE IND.	PROJECT NO. 7-64-3(39)06	FISCAL YEAR 1970	SHEET NO. 30	TOTAL SHEETS 71
LINE N.W. Ramp					

November 6, 1961

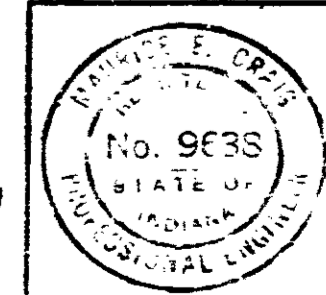


FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	IND.	1-64-3(39)26	1970	40	71



**OFFSETS & ELEVATIONS
FOR
SPECIAL S.W.R. EXIT
DETAILS
S.R. 37 INTERCHANGE**

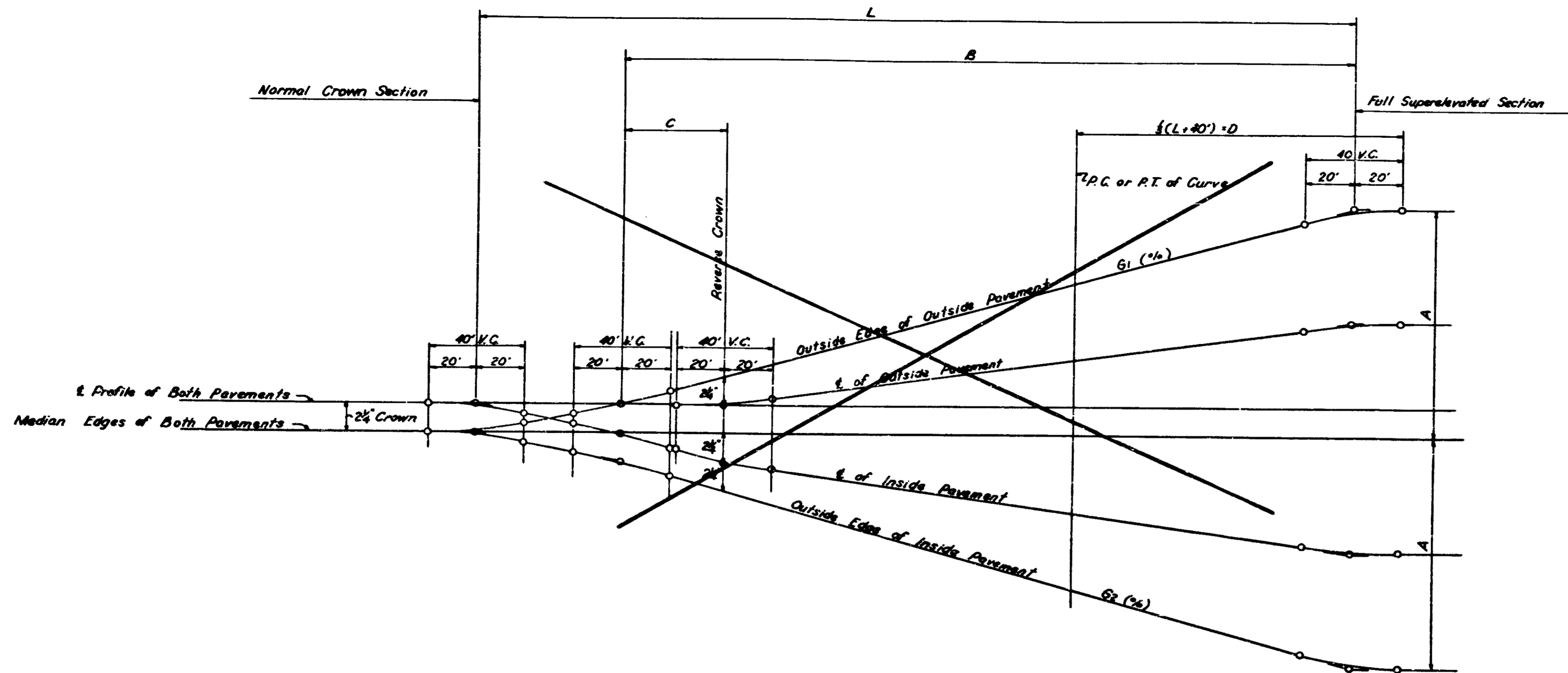
SCALE: 1" = 40'



November 6, 1964

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
1-64-3(39)26		40	71	

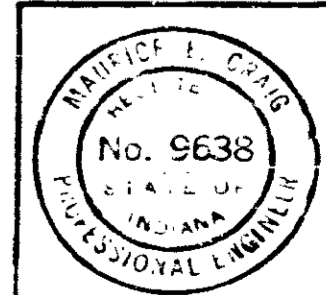
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	IND.	1-4-3(39)06	1970	41	71



LINE	CURVE No.	Degree of Curve	Rate of Super-elevation	A	B	C	D	L	61 (%)	62 (%)	P.C. Station	P.T. Station	Curve No.
A	19	1°-40'	0.049	1.008	232.16	53.23	118.67	480.00		.3532	471+37.00	486+48.00	19 "A"
AL	16	1°-40'	0.053	1.008	232.16	53.23	118.67	480.00	.3532		473+82.82	488+95.82	16 "AL"
A	20	1°-12'	0.038	0.672	190.25	73.90	101.00	250.00	.2544		509+51.62	529+37.73	20 "A"
AL	17	1°-12'	0.038	0.672	190.25	73.90	101.00	250.00	.2544		512+77.74	532+66.63	17 "AL"
A	21 (EBL)	1°-30'	0.049	1.008	220.55	50.56	112.50	480.00	.3718	.3718	542+35.86	554+81.42	21 "A"
A	22	2°-00'	0.057	1.344	260.77	42.41	125.00	590.00		.4433	588+84.88	601+8.05	22 "A"
AL	18	1°-52'	0.053	1.176	249.12	47.40	121.67	480.00	.3966		590+78.63	603+82.24	18 "AL"
A	23	1°-52'	0.053	1.176	249.12	47.40	121.67	480.00	.3966		611+17.36	622+98.78	23 "A"
AL	19	1°-52'	0.049	1.176	249.12	47.40	121.67	480.00	.3966	.3966	613+82.77	625+58.78	19 "AL"
B	1	2°-00'	0.057	1.344	260.77	42.41	125.00	590.00		.4433	33+21.15	45+01.98	1 "B"
B	2	0°-45'	0.029	0.504	116.73	69.45	80.00	200.00	.2707		56+34.45	67+16.67	2 "B"
BL	1	1°-20'	0.038	0.840	205.16	59.16	108.33	250.00	.3178		77+08.80	92+51.47	1 "BL"
B	3	2°-30'	0.073	1.656	299.65	38.38	137.50	433.00		.4899	102+09.44	122+61.72	3 "B"
B	4	2°-30'	0.069	1.656	299.65	38.38	137.50	433.00	.4899		107+18.39	122+61.72	4 "B"
BL	2	2°-30'	0.073	1.656	299.65	38.38	137.50	433.00	.4899		132+19.72	143+21.05	2 "BL"
B	5	2°-30'	0.073	1.656	299.65	38.38	137.50	433.00	.4899		131+19.72	141+19.72	5 "B"
BL	3	0°-45'	0.029	0.504	116.73	69.45	80.00	200.00	.2707		131+19.72	141+19.72	3 "BL"
B	6	1°-52'	0.053	1.176	249.12	47.40	121.67	480.00	.3966		158+27.99	162+91.98	6 "B"
B	7	0°-45'	0.029	0.504	116.73	69.45	80.00	200.00	.2707		172+28.77	183+22.10	7 "B"
BL	4	1°-20'	0.038	0.840	205.16	59.16	108.33	250.00	.3178		151+11.54	162+14.04	4 "BL"
BL	5	0°-45'	0.029	0.504	116.73	69.45	80.00	200.00	.2707	.3178	171+43.79	181+28.23	5 "BL"
B	8	2°-30'	0.073	1.656	299.65	38.38	137.50	433.00	.4899		193+06.07	212+61.40	8 "B"
BL	6	2°-30'	0.073	1.656	299.65	38.38	137.50	433.00	.4899		191+88.88	209+26.88	6 "BL"
A	21 (EBL)	1°-30'	0.053					480.00			542+35.86	554+81.42	21 "A (EBL)"

For other super-elevation details
See figure "B" Sheet No. 52-A
Note: Future third lane is not to be considered
in super-elevating pavements.

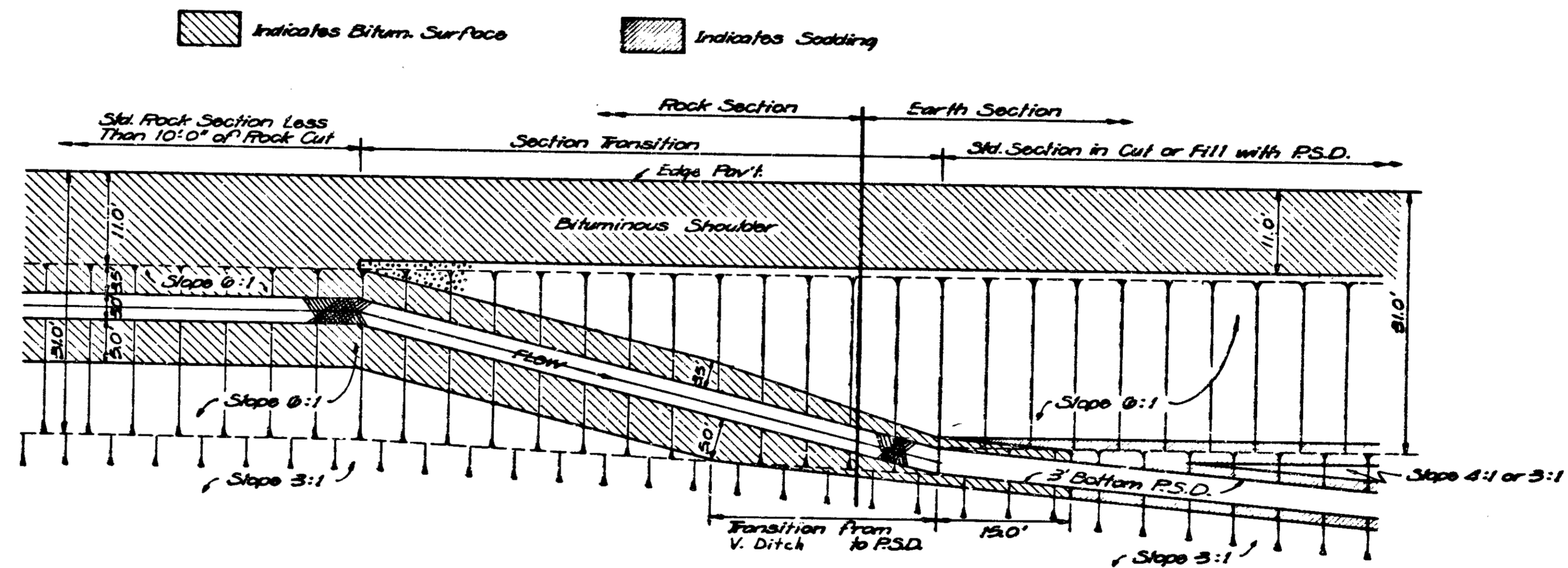
SUPERELEVATION DETAILS FOR INTERSTATE



FEDERAL ROAD DIVISION NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1843 30000	1970	42	71

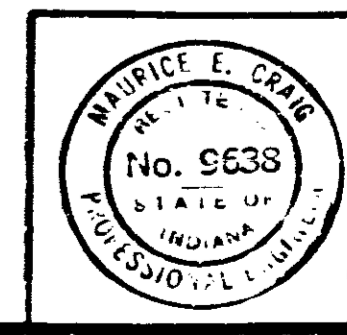
PAVED SIDE DITCH														
STA. TO STA.	LOCATION	LUGS	CUT-OFF WALL	TYPE								SOO	SOODED LENGTH	
				A	B	C	D	E	F	G	H			
560+00 to 565+25	Line "A" in Median	Each	2	535										
570+00 to 577+35	Line "A" in Median		1	740										
577+35 to 580+00	Line "A" in Median				205									
580+00 to 582+00	Line "A" in Median		1	205										
10+75 to 24+75	Line "B" in Median		2	510										
Undistributed Quantity														
				2110	795	500	500	200	200	200	200	200	1394	4645
TOTALS														
				8000	1000	500	500	200	200	200	200	200	2063	

UNDISTRIBUTED QUANTITIES		
PSD TYPE	QUANTITY	SAD - SIDS
J	200	60
K	200	60
L	200	60
M	200	60



PLAN VIEW OF DITCH TRANSITION FROM ROCK CUT LESS THAN 10 FT. TO EARTH CUT OR FILL WITH PSD.
Scale: 1"=10.0'

DETAILS



PROJECT NO.	DATE	SHEET NO.	TOTAL SHEETS	FILE
1843-30000		42	71	

FEDERAL ROAD DIVISION NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	IND.	1-64-3 02/06	1970	43	71

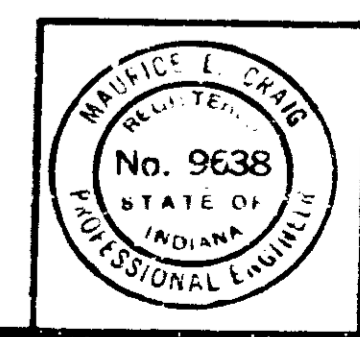
LINE	LOCATION		6" GROUP "K" PIPE LFT.		6" OUTLETS					AGGREGATE FOR UNDERDRAINS CYS	DELINEATOR POSTS EACH	SODDING SQ. YDS	REMARKS
	FROM STATION	TO STATION	LEFT	RIGHT	TEE	90° ELBOW	45° ELBOW	FBCSP LFT.	STATION				
	"AL" Westbound	2463+22	476+00 *		145			1	42				
"	2465+00	474+25 *	792				1	29	474+45	74	1	2	
"	476+00	484+00		800			1	42	484+30	76	1	2	Median Side.
"	484+00	495+00		1100			1	42	495+30	103	1	2	Median Side.
"	495+00	512+78		1778			1	42	513+08	164	1	2	Median Side.
"	484+25	492+50	825				1	29	492+70	77	1	2	
"	495+00	511+25	1625				1	29	511+45	149	1	2	
"	512+50	518+65	615				1	29	518+85	58	1	2	
"AL" Westbound	518+65 "AL"	*11+70 "NWR"		1195			1	17		109			Connect to Str. N ^o 37.
"NWR"	5+35	11+70		635			1	20		59			Transverse drain to Lt. at Sta. 5+35.
"NWR"	1+27.90	5+35	408				1			37			Connect to drain in place at Sta. 1+27.90.
"AL" Westbound	527+50 "AL"	*539+00 "A"	1189		1		1	42	539+30	111	1	2	
"A" Westbound	532+25	539+00		675			1	28		63			Median Side, Transverse drain to Lt. at Sta. 539+00.
"	539+00	548+00		900			1	70	548+30	87	1	2	Median Side, Transverse drain to Lt. at Sta. 548+00.
"	548+00	554+00		600						54			Median Side, Connect to Str. N ^o 34.
"NER"	7+00	13+50	650							59			Connect to Str. N ^o 33.
"NER"	7+00	20+70		1370						123			Connect to Str. N ^o 32.
"NER"	20+70	23+85.81	316				1	42	20+40	32	1	2	
"A" Westbound	554+00	565+40		1140						103			Median Side, Connect to Str. N ^o 35.
"	570+20	577+50		730			1	37		69			Median Side, Transverse drain to Lt. at Sta. 570+20.
"	577+50	586+50		900			1	70	577+20	87	1	2	Median Side, Transverse drain to Lt. at Sta. 577+50.
"	570+20	577+15	695				1	29	570+00	65	1	2	
"	586+50 "A"	604+60 "AL"		1810			1	37		166			Median Side, Transverse drain to Lt. at Sta. 586+50.
"	586+50 "A"	604+60 "AL"	1810				1	29	586+30	166	1	2	
"AL" Westbound	604+60	613+83		923	1			12		84			Median Side, Connect to Str. N ^o 59.
"	604+60	610+75	615				1	37		59			Transverse drain to Rt. at Sta. 604+60.
"AL" Westbound	610+75	619+45	870							78			Connect to Str. N ^o 62.
Sub-Totals			10410	15701	4	9	14	754		2419	14	28	
Totals This Sheet			26177 **		4	9	14	754		2419	14	28	

* See Station Equation.

** Includes Tees and Elbows.

Note: All C.S. Pipe to be 18 Gauge.
Additional Length Allowance:
5 Lft for each tee connection.
2 Lft for each elbow.

DETAILS



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS
1-64-3/06		43	71

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	IND.	1643 2786	1970	44	71

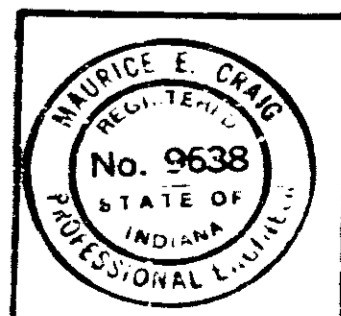
LINE	LOCATION		6" GROUP "K" PIPE LFT.		6" OUTLETS					AGGREGATE FOR UNDERDRAINS CYS	DELINEATOR POSTS EACH	SODDING SQ. YDS.	REMARKS	
	FROM STATION	TO STATION	LEFT	RIGHT	TEE	90° ELBOW	45° ELBOW	FBCCSF LFT.	STATION					
	"A" Eastbound	2463+00	471+37 *	708				1	42					471+67
"	2463+00	475+25 *		1096			1	29	475+45	101	1	2		
"	486+48	495+35	887				1	42	495+65	84	1	2	Median Side.	
"	495+35	505+35	1000				1	42	505+65	94	1	2	Median Side.	
"	495+50	504+25		875			1	42	504+55	83	1	2		
"	505+35	512+70	735				1	42	513+00	70	1	2	Median Side.	
"	512+70	518+00	530				1	42	518+00	51	1	2	Median Side.	
"	518+00 "A"	11+25 "SWR"		1211			1	42	11+55 "SWR"	113	1	2		
"SWR"	11+25	17+80		655	1			29	13+50	62	1	2	Low Point at Sta. 13+50.	
"SWR"	17+80	20+77.55	298				1	42	17+50	31	1	2		
"A" Eastbound	518+00	530+00	1200				1	28		111			Median Side, Transverse drain to Rt. at Sta. 530+00.	
"	524+00	530+00		600	1			58		59			Transverse drain to Rt. at Sta. 530+00, Connect to "SWR" under-drain at Sta. 11+25.	
"	530+00	542+36	1236				1	1	70	542+66	118	1	2	Median Side, Transverse drain to Rt. at Sta. 542+36.
"	548+75	554+20		545			1	30		52			Transverse drain to Rt. at Sta. 554+20, Connect to "SER" under-drain at Sta. 14+00.	
"SER"	1+27.90	4+60	332				1	20		32			Transverse drain to Rt. at Sta. 4+60.	
"SER"	4+60	15+80		1120	2			29	14+00	103	1	2	Low Point at Sta. 14+00.	
"A" Eastbound	554+81	565+40	1059				1	56		100			Median Side, Transverse drain to Lt. at Sta. 554+81.	
"	570+20	577+80	760				1	37		72			Median Side, Transverse drain to Rt. at Sta. 570+20.	
"	570+20	577+50		730	1		1	29	570+00	68	1	2		
"	577+80	588+85	1105				1	1	70	577+50	106	1	2	Median Side, Transverse drain to Rt. at Sta. 577+80.
"	588+25	602+25		1400			1	29	588+05	129	1	2		
"	601+14	603+50	236		1		1	37		25			Median Side, Transverse drain to Rt. at Sta. 601+14.	
"	603+50	610+00	650				1	28		61			Median Side, Transverse drain to Rt. at Sta. 603+50.	
"	603+50	610+00		650	1		1	42	603+20	62	1	2		
"	610+00	621+00		1100	1		1	29	609+80	102	1	2		
"	610+00	626+02	1602				1	37		148			Median Side, Transverse drain to Rt. at Sta. 610+00.	
Sub-Totals			12338	9982	8	10	15	1023		2105	17	34		
Totals This Sheet			22410 **		8	10	15	1023		2105	17	34		

* See Station Equation.

** Includes Tees and Elbows.

Note: All C.S. Pipe to be 18 Gauge.
Additional Length Allowance:
5 L.Ft. for each tee connection.
2 L.Ft. for each elbow.

DETAILS



PROJECT NO.	LINE	SHEET	TOTAL SHEETS	FILE
1643-2786		44	71	

FEDERAL ROAD DISTRICT NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1643 0706	1970	45	71

LINE	LOCATION		6" GROUP "K" PIPE LFT.		6" OUTLETS					AGGREGATE FOR UNDERDRAINS CYS	DELINEATOR POSTS EACH	SODDING SQ. YDS.	REMARKS
	FROM STATION	TO STATION	LEFT	RIGHT	TEE	90° ELBOW	45° ELBOW	FBCSP LFT.	STATION				
	"A" Eastbound	626+01 "A"	22+00 "B"	1799		1			57				
	627+25 "A"	10+25 "B"		500			1	42	10+55	49	1	2	
"B" Eastbound	22+00	33+22	1122			1	1	70	21+70	107	1	2	Median Side, Transverse drain to Rt. at Sta. 22+00.
"	29+75	35+50		575			1	42	29+45	56	1	2	
"	35+50	56+00		2050		1		37		188			Transverse drain to Lt. at Sta. 56+00.
"	45+02	56+00	1098		1		1	42	56+30	103	1	2	Median Side.
"	56+00	62+00	600		1		1	42	62+30	58	1	2	Median Side.
"	56+00	62+00		600		1		37		57			Transverse drain to Lt. at Sta. 62+00.
"	62+00	77+07	1507				1	42	77+37	139	1	2	Median Side.
"	62+00	74+70		1270			1	29	74+90	117	1	2	
"	78+25	89+50		1125			1	29	89+70	104	1	2	
"	92+51	103+30	1079		1			29	102+9.111	100	1	2	Median Side, Low Point at Sta. 102+9.111.
"	104+80	112+15		735			1	29	104+60	69	1	2	
"	104+90	112+30	740				1	42	104+60	70	1	2	Median Side.
"	112+30	122+00	970				1	42	112+00	91	1	2	Median Side.
"	122+00	132+20	1020				1	42	121+70	96	1	2	Median Side.
"	143+21	153+20	999				1	42	142+91	94	1	2	Median Side.
"	145+50	152+00		650			1	29	145+30	61	1	2	
"	153+20	164+00	1080				1	42	152+90	101	1	2	Median Side.
"	153+20	158+95		575			1	29	153+00	54	1	2	
"	164+00	172+29	829				1	42	163+20	78	1	2	Median Side.
"	162+91	164+35		144		1		28		15			Transverse drain to Lt. at Sta. 162+91.
"	167+70	183+55		1585			1	42	167+40	146	1	2	
"	183+55	191+75	820				1	42	183+25	78	1	2	Median Side.
"	183+55	195+25		1170			1	42	183+25	109	1	2	
"	196+60	198+50		190			1	42	196+30	21	1	2	
"B" Eastbound	191+75	198+50	675				1	42	191+45	65	1	2	Median Side.
Sub-Totals			14338	11169	4	4	22	1075		2393	24	48	
Totals This Sheet			25579 **		4	4	22	1075		2393	24	48	

* See Station Equation. ** Includes Tees and Elbows.

Note: All C.S. Pipe to be 18 Gauge.
 Additional Length Allowance:
 5 L.Ft. for each tee connection.
 2 L.Ft. for each elbow.

DETAILS



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
1643/0706		45	71	

FEDERAL ROAD DIVISION NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	1643 (99)06	1970	46	71

PIPE FOR UNDERDRAINS													
LINE	LOCATION		6" GROUP "K" PIPE LFT.		6" OUTLETS				AGGREGATE FOR UNDERDRAINS CYS	DELINEATOR POSTS EACH	SODDING SQ. YDS.	REMARKS	
	FROM STATION	TO STATION	LEFT	RIGHT	TEE	90° ELBOW	45° ELBOW	FBCSP LFT.					STATION
"AL" Westbound	619+45 "AL"	10+25 "B"	1281				1	42	10+55	119	1	2	
"A" Westbound	625+58 "A"	22+00 "B"		1842	1			57	13+59	171	1	2	Median Side, Transverse drain to Lt. at Low Point Sta. 13+59 "B".
"B" Westbound	22+00	26+25	425		1		1	42	21+70	42	1	2	
"	22+00 "B"	33+81 "BL"		1181		1		28		109		2	Median Side, Transverse drain to Lt. at Sta. 22+00 "B".
"	29+25 "B"	33+81 "BL"	456				1	42	28+95	45	1	2	
"BL" Westbound	33+81	57+50		2369			1	42	57+80	217	1	2	Median Side.
"	33+81	57+50	2369				1	42	57+80	217	1	2	
"	57+50	67+35		985			1	42	67+65	92	1	2	Median Side.
"	67+35	77+35		1000			1	42	77+65	94	1	2	Median Side.
"	68+25	74+50	625				1	29	74+70	59	1	2	
"	77+35	87+35		1000			1	42	87+65	94	1	2	Median Side.
"	79+15	85+70	655				1	42	86+00	63	1	2	
"	87+35	96+00		865			1	42	96+30	82	1	2	Median Side.
"	95+75	107+20	1145				1	42	107+50	107	1	2	
"	96+00	107+20		1120			1	42	107+50	105	1	2	Median Side.
"	109+25	128+30	1905				1	42	128+60	175	1	2	
"	122+62	128+00		438			1	42	128+30	43	1	2	Median Side.
"	130+20	141+00		1080	1			29	130+94	100	1	2	Median Side, Low Point at Sta 13+94.
"	141+00	151+12		1012			1	42	140+70	95	1	2	Median Side.
"	147+75	152+75	500				1	42	147+35	49	1	2	
"	162+14	166+60		446		1	1	70	161+84	46	1	2	Median Side, Transverse drain to Lt. at Sta. 162+14.
"	169+20	182+00		1280			1	42	168+90	119	1	2	Median Side.
"	169+30	184+25	1495				1	42	169+00	138	1	2	
"	182+00	191+69		969			1	42	181+70	91	1	2	Median Side.
"BL" Westbound	198+00	201+50	350				1	42	197+70	35	1	2	
Sub - Totals			11206	15587	3	2	22	1053		2507	24	48	
Totals This Sheet			26856**		3	2	22	1053		2507	24	48	

* See Station Equation

** Includes Tees and Elbows.

Note: All C.S. Pipe to be 18 Gauge.
Additional Length Allowance:
5Lft. for each tee connection.
2Lft. for each elbow.

DETAILS



PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
16433206		46	71	

LINE	LOCATION		6" GROUP "K" PIPE LFT.		6" FBCCPS PIPE LFT.	6" OUTLETS				STATION	AGGREGATE FOR UNDERDRAINS CYS	DELINEATOR POSTS EACH	SODDING SQ. YDS.	REMARKS	
	FROM STATION	TO STATION	LEFT	RIGHT		TEE	90° ELBOW	45° ELBOW	FBCCSP LFT.						
	"A"	502+00	Transverse				48								10
"A"	518+00	"			48			10							
"A"	527+00	"			48			10							
"A"	559+00 Lt.	"			48			10							
"A"	570+45	"			96			20							
"A"	587+00 Lt.	"			48			10							
"A"	588+00 Pt.	"			48			10							
"B"	53+25	"			96			20							
"B"	61+00	"			48			10							
"B"	73+00	"			48			10							
"B"	83+00	"			48			10							
"B"	106+00	"			48			10							
"B"	146+00	"			48			10							
"B"	150+80	"			48			10							
"B"	170+00	"			48			10							
"B"	182+50	"			48			10							
"AL"	474+80	"			48			10							
"AL"	484+80	"			48			10							
"AL"	506+00	"			48			10							
"AL"	519+00	"			48			10							
"AL"	620+00	"			48			10							
"BL"	97+38	"			48			10							
"BL"	74+50	"			48			10							
"BL"	85+00	"			48			10							
"BL"	120+00	"			48			10							
"BL"	128+00	"			48			10							
"BL"	148+00	"			48			10							
Undistributed			750	750											
Total This Sheet			1500	1392	0	0	0	290							
GRAND TOTAL			102522 *	1392	19	25	73	4195							

* Includes Tees and Elbows.

Note: All C.S. Pipe to be 18 Gauge.
 Additional Length Allowance:
 5 Lft. for each tee connection.
 2 Lft. for each elbow.

DETAILS

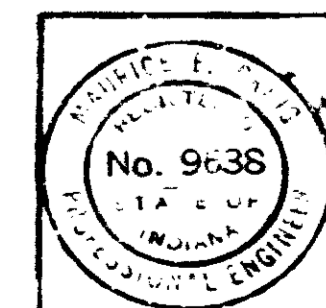


TABLE OF QUANTITIES

DETAIL	DESCRIPTION	LINE	STATIONS	Net Length Feet	Type 1st Compacted Aggregate Base	OPEN-GRADED A.S.P. FRICTION CRS. (N.A.E.)	Bituminous Surface	Bituminous Base	Bituminous BASE (No. 51 B)	Bituminous Material For Seal Coat	Bituminous Material For Prime Coat	BITUMINOUS SURFACE TYPE III (N.A.E.)	Cover Aggregate	BITUMINOUS MATERIAL FOR TACK COAT	BITUMINOUS STAB. SUBBASE	BITUMINOUS BINDER	Concrete Pavement Reinforced, 10"	1/2" Joint Type 'A'	Reinforcing Steel For Pavement	Butter Concrete	Paved Side Ditch Type 'A'	Paved Side Ditch Type 'B'	Paved Side Ditch Type 'C'	Paved Side Ditch Type 'D'	Guard Rail, Type 'F'	Guard Rail, Type 'G'	47" Fence, Farm Field	Agricultural Limestone	Fertilizer	Mulching Material	Seed Mixtures	Crown Vetch Seeding	Soading	18" Borrow	GUARD RAIL TYPE 'B'	Class 'A' Concrete for Structures			
					Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Sys.	L.Ft.	Lbs.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	Tons	Tons	Tons	Lbs.	Lbs.	Sys.	Cys.	L.Ft.	Cys.			
Plan and Profile	Mainline	"A" & "B"	2463+00-198+50	35,000.50	2678	3937	60948	32298	117.4	181.9	1520	978.7	222.2	27457	12734	8514	147	7812																					
Plan and Profile	Mainline	"AL"	2463+22-632+66.63	6,011.18	681	1001	9497	5839	21.2	28.7		176.9	37.5	4438	2016																								
Plan and Profile	Mainline	"AL"	508+04.08-625+58.78	3,673.90	367	540	5124	3341	12.2	15.5		101.3	20.2	2341	1087																								
Plan and Profile	Mainline	"BL"	33+21.15-201+90.00	16,572.61			23748	13098	47.6	58.4	1530	386.9	75.4	10463	4635	2924	112	5352																					
Interchange	N.W. Ramp	"NWR"	1+21.90-23+71.87		34	182	1848	860	2.7	4.9		25.4	1.1	198	99																								
Interchange	N.E. Ramp	"NER"	0+00.00-23+85.61		37	219	2237	1024	3.1	6.3		25.5	1.4	217	109																								
Interchange	S.W. Ramp	"SWR"	917+00.00-927+29.44 0+04.08-20+77.55		37	207	2109	978	2.9	5.8		24.2	1.3	217	109																								
Interchange	S.E. Ramp	"SER"	1+27.90-24+80.10		34	192	1952	861	2.8	4.8		23.1	1.1	198	99																								
TOTALS :						3868	6278	107483	58289	209.9	317.3	3050	1749.1	360.2	45529	21088	6430	259	13164	4179	4000	1000	500	500	614	2100	200	18	40	70	3308	200	1884	100	10075	50			

* UNDISTRIBUTED QUANTITY
 † INCLUDES 2110 L.F.T. UNDISTRIBUTED
 ‡ INCLUDES 25 TONS UNDISTRIBUTED
 § INCLUDES 66 SYD.

DETAIL	DESCRIPTION	LINE	STATIONS	Net Length Feet	6" Pipe Group 1/2" Br Underdrains	Aggregate for Underdrains	6" F.B.C.P.C.S. Pipe	Monument Type "C"	Monument Type "D"	Delimitor Posts Type "D-1"	Construction Sign Type "A"	D-25 SIGNS	DUMPED RIP RAP	PAVED SIDE DITCH TYPE "E"	PAVED SIDE DITCH TYPE "F"	PAVED SIDE DITCH TYPE "G"	PAVED SIDE DITCH TYPE "H"	PAVED SIDE DITCH TYPE "J"	PAVED SIDE DITCH TYPE "K"	PAVED SIDE DITCH TYPE "L"	PAVED SIDE DITCH TYPE "M"	
					L.Ft.	Cys.	L.Ft.	Each	Each	Each	Each	EACH	TONS	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.	L.Ft.
(See Above)	Mainline	"A" & "B"							29			10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	Mainline	"AL"						5				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	Mainline	"AL"						4				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	Mainline	"BL"						14				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	N.W. Ramp	"NWR"						2				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	N.E. Ramp	"NER"						2				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	S.W. Ramp	"SWR"						2				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
(See Above)	S.E. Ramp	"SER"						2				10 EACH	500 TON	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	200 FT.	
TOTALS :					159.71	12,725	4500	3000	10	52	110	2	10	500	200	200	200	200	200	200	200	200

* UNDISTRIBUTED QUANTITY
 † INCLUDES 1365 L.F.T. UNDISTRIBUTED
 ‡ INCLUDES 1608
 § INCLUDES 3489
 ¶ INCLUDES 3481
 †† INCLUDES 31 6004

DETAILS



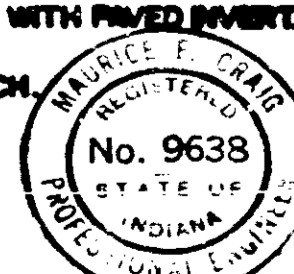
STRUCTURE DATA

STRUCTURE NUMBER	LOCATION	SIZE INCHES	DESCRIPTION	LENGTH FEET	SKEW	COVER	FLOW LINE		CONCRETE CLASS. "D"	SPECIAL CL. BORON GRADE "B"	REINFORCING STEEL LBS.	GAGES OR THICKNESS		REMARKS	PLANS ON SHEET NO.
							UP STREAM ELEV.	DOWN STREAM ELEV.				STEEL	ALUMINUM		
							GROUP								
STRUCTURES 111 THRU 118 TO BE CONSTRUCTED UNDER GRADING CONTRACT															

STRUCTURE NUMBER	LOCATION	SIZE INCHES	DESCRIPTION	LENGTH FEET	SKEW	COVER	FLOW LINE		CONCRETE CLASS. "D"	SPECIAL CL. BORON GRADE "B"	REINFORCING STEEL LBS.	GAGES OR THICKNESS		REMARKS	PLANS ON SHEET NO.
							UP STREAM ELEV.	DOWN STREAM ELEV.				STEEL	ALUMINUM		
							GROUP								
27															Set Coating to Grade
34															" " " "
37															" " " "
38															" " " "
39															" " " "
58															" " " "
59															" " " "
60															" " " "
61															" " " "
62															" " " "
65															Eliminated
70															" " " "
83															Set Coating to Grade
85															" " " "
88															" " " "
98															" " " "

LEGEND FOR ABBREVIATIONS

- | | |
|--|---|
| F.B.C.S./PI-- FULLY BITUMINOUS COATED CORRUGATED STEEL WITH PAVED INVERT. | F.B.C.S.A./PI-- FULLY BITUMINOUS COATED CORRUGATED STEEL ARCH WITH PAVED INVERT. |
| F.B.C.A.A./PI-- FULLY BITUMINOUS COATED CORRUGATED ALUMINUM ALLOY WITH PAVED INVERT. | F.B.C.A.A./PI-- FULLY BITUMINOUS COATED CORRUGATED ALUMINUM ALLOY ARCH WITH PAVED INVERT. |
| F.B.C.S----- FULLY BITUMINOUS COATED CORRUGATED STEEL. | F.B.C.S.A----- FULLY BITUMINOUS COATED CORRUGATED STEEL ARCH. |
| F.B.C.A.A----- FULLY BITUMINOUS COATED CORRUGATED ALUMINUM ALLOY. | F.B.C.A.A.A----- FULLY BITUMINOUS COATED CORRUGATED ALUMINUM ALLOY ARCH. |
| C.S----- CORRUGATED STEEL. | C.S.A----- CORRUGATED STEEL ARCH. |
| C.A.A----- CORRUGATED ALUMINUM ALLOY. | C.A.A.A----- CORRUGATED ALUMINUM ALLOY ARCH. |
| S.P.S----- STRUCTURAL PLATE STEEL. | S.P.S.A----- STRUCTURAL PLATE STEEL ARCH. |



ESTIMATE OF QUANTITIES

CODE No.	DESCRIPTION	UNIT	QUANTITY
01001	Mobilization	L.S.	1
01002	CLEARING RIGHT-OF-WAY	L.S.	
01005	CLEARING	L.S.	
01010	GRUBBING	L.S.	
01015	CLEARING & GRUBBING	L.S.	
02245	TREE REMOVAL 6 INCH	EA.	
02250	TREE REMOVAL 10 INCH	EA.	
02255	TREE REMOVAL 16 INCH	EA.	
02260	TREE REMOVAL 30 INCH	EA.	
02265	TREE REMOVAL 48 INCH	EA.	
02270	TREE REMOVAL 60 INCH	EA.	
02285	REMOVAL OF PRESENT STRUCTURE	EA.	
03000	REMOVAL OF HOUSES & BUILDINGS FROM PARCEL ()	L.S.	
03000	REMOVAL OF HOUSES & BUILDINGS FROM PARCEL ()	L.S.	
03000	REMOVAL OF HOUSES & BUILDINGS FROM PARCEL ()	L.S.	
03000	REMOVAL OF HOUSES & BUILDINGS FROM PARCEL ()	L.S.	
03000	REMOVAL OF HOUSES & BUILDINGS FROM PARCEL ()	L.S.	
02235	BREAKING PAVEMENT	SYS.	
02240	REMOVAL OF PAVEMENT	SYS.	
02080	LINEAR GRADING	MI.	
02090	COMMON EXCAVATION	CYS.	
02010	ROCK EXCAVATION	CYS.	
02020	UNCLASSIFIED EXCAVATION	CYS.	44,141
02100	FEAR EXCAVATION	CYS.	
02055	BREAKERETT	CYS.	
02131	EXPLORATORY EXCAVATION	CYS.	
02132	EXPLORATORY DRILLING	LFT.	
02133	EXPLORATORY CORES	LFT.	
02215	CASED TEST HOLE	LFT.	
02220	HOLE FOR TESTING OR FOR DYNAMITING 2 INCH	LFT.	
02225	HOLE FOR TESTING OR FOR DYNAMITING 4 INCH	LFT.	
02250	BITUMINOUS BASE NO. 5	TON	407,498
02255	BITUMINOUS BASE NO. 5	TON	58,280
02265	BITUMINOUS BINDER	TON	21,080
02300	BITUMINOUS SURFACE	TON	6,278
02070	BORROW	CYS.	48,952
02090	BORROW	CYS.	100

CODE No.	DESCRIPTION	UNIT	QUANTITY
04000	REPAIRING	MI.	
04010	PORTLAND CEMENT CONCRETE FOR PATCHING	SYS.	
04015	COMPACTED AGGREGATE FOR PATCHING	TON	
04020	BITUMINOUS MIXTURE FOR PATCHING	TON	
04025	WIDENING WITH BITUMINOUS MIXTURE	TON	
04030	WIDENING WITH CEMENT CONCRETE	SYS.	
04035	WIDENING WITH COMPACTED AGGREGATE	TON	
04040	PORTLAND CEMENT CONCRETE BASE	SYS.	
04045	TYPE P COMPACTED AGGREGATE FOR BASE (SIZE NO. 53)	TON	
04055	TYPE O COMPACTED AGGREGATE FOR BASE (SIZE NO. 53)	TON	
04065	TYPE P COMPACTED AGGREGATE FOR SURFACE (SIZE NO. 73)	TON	
04075	TYPE O COMPACTED AGGREGATE FOR SURFACE (SIZE NO. 73)	TON	
04085	TYPE P COMPACTED AGGREGATE FOR SHOULDER (SIZE NO. 73)	TON	
04095	TYPE O COMPACTED AGGREGATE FOR SHOULDER (SIZE NO. 73)	TON	
04105	PURE CALCIUM CHLORIDE	TON	
04115	PURE CALCIUM CHLORIDE (FOR SHOULDERS)	TON	
04125	HOT ASPHALT EMULSION (AE) BASE	TON	
04135	HOT ASPHALT EMULSION (AE) BINDER	TON	
04145	HOT ASPHALT EMULSION (AE) SURFACE	TON	
04150	HOT ASPHALT CONCRETE BASE	TON	
04165	HOT ASPHALT CONCRETE BINDER	TON	
04175	HOT ASPHALT CONCRETE SURFACE	TON	
04255	BITUMINOUS SURFACE TYPE B	TON	3,050
04255	BITUMINOUS SURFACE TYPE B	TON	407,498
04256	BITUMINOUS SURFACE TYPE B	TON	58,280
04257	BITUMINOUS SURFACE TYPE B	TON	21,080
04265	BITUMINOUS SURFACE TYPE B	TON	6,278
04275	OPEN-GRADED ASPHALT FRICTION COURSE (H.A.E.)	TON	3,868
04285	BITUMINOUS MIXTURE FOR SHOULDERS	TON	
04295	BITUMINOUS MIXTURE FOR APPROACHES	TON	
04300	BITUMINOUS MIXTURE FOR CROSROADS	TON	
04335	FILLING CRACKS & JOINTS IN CONCRETE PAVEMENT OR BASE	TON	
04345	SEALING CRACKS & JOINTS IN BITUMINOUS PAVEMENT	TON	
04355	BITUMINOUS MATERIAL FOR SEAL COAT	TON	218
04365	BITUMINOUS MATERIAL FOR PRIME COAT	TON	317
04375	BITUMINOUS MATERIAL FOR TACK COAT	TON	360
04385	COVER AGGREGATE	TON	
04386	COVER AGGREGATE NO. 12	TON	1762
04395	AGGREGATES FOR SHOULDER DRAINS	TON	
	() INCLUDES FOR ROAD APPROACHES		
	() INCLUDES FOR FRIDGE ROADS		
	() INCLUDES FOR PRIVATE DRIVES		
	() INCLUDES FOR COMMERCIAL DRIVES		

CODE No.	DESCRIPTION	UNIT	QUANTITY
04405	SUBBASE	CYS.	
04406	BITUMINOUS STABILIZED SUBBASE	TON	45,529
05000	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 6 INCH	SYS.	
05010	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 7 INCH	SYS.	
05020	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 8 INCH	SYS.	
05030	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 9 INCH	SYS.	
05040	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT 10 INCH	SYS.	
05050	REINFORCED CONCRETE PAVEMENT 48 INCH FENCE, FARM FIELD	SYS.	
05060	REINFORCED CONCRETE PAVEMENT 7 INCH	SYS.	
05070	REINFORCED CONCRETE PAVEMENT 8 INCH	SYS.	
05080	REINFORCED CONCRETE PAVEMENT 9 INCH	SYS.	
05090	REINFORCED CONCRETE PAVEMENT 10 INCH	SYS.	644
05100	CONCRETE PAVEMENT, HIGH EARLY STRENGTH 7 INCH	SYS.	
05110	CONCRETE PAVEMENT, HIGH EARLY STRENGTH 8 INCH	SYS.	
05120	CONCRETE PAVEMENT, HIGH EARLY STRENGTH 9 INCH	SYS.	
05130	CONCRETE PAVEMENT, HIGH EARLY STRENGTH 10 INCH	SYS.	
05140	PLAIN CONCRETE PAVEMENT 6 IN	SYS.	
05150	PLAIN CONCRETE PAVEMENT 7 IN	SYS.	
05160	PLAIN CONCRETE PAVEMENT 8 IN	SYS.	
05170	PLAIN CONCRETE PAVEMENT 9 IN	SYS.	
05180	PLAIN CONCRETE PAVEMENT 10 IN	SYS.	
05181	PLAIN CONCRETE PAVEMENT 11 IN	SYS.	
05182	PLAIN CONCRETE PAVEMENT 12 IN	SYS.	
05210	CONCRETE PAVEMENT, PLAIN HIGH EARLY STRENGTH 8 INCH	SYS.	
05220	CONCRETE PAVEMENT, PLAIN HIGH EARLY STRENGTH 9 INCH	SYS.	
05230	CONCRETE PAVEMENT, PLAIN HIGH EARLY STRENGTH 10 INCH	SYS.	
05240	CONTRACTION JOINT, TYPE D-1	LFT.	
05250	1/2 INCH PREFORMED JOINT MATERIAL	LFT.	
05260	1 INCH PREFORMED JOINT MATERIAL	LFT.	
05270	1 1/2 INCH PREFORMED JOINT MATERIAL	LFT.	
05280	EXPANSION JOINT, WITH LOAD TRANSFER 1 INCH	LFT.	
05290	REINFORCING STEEL FOR PAVEMENT ANCHOR BOLTS	LBS.	13,164
05300	ANCHOR BOLTS	EA.	
05310	TERMINAL JOINTS	LFT.	
05320	CEMENT CONCRETE PAVEMENT FOR PRIVATE DRIVES	SYS.	
05330	CEMENT CONCRETE PAVEMENT FOR COMMERCIAL DRIVES	SYS.	
05340	CEMENT CONCRETE PAVEMENT FOR CROSSEVER	SYS.	
05390	SALVAGED ROAD MATERIAL	CYS.	

CODE No.	DESCRIPTION	UNIT	QUANTITY
06000	GUARD RAIL, TYPE A	LFT.	
06005	GUARD RAIL, TYPE B	LFT.	10,875
06010	GUARD RAIL, TYPE C	LFT.	
06015	GUARD RAIL, TYPE D	LFT.	
06020	GUARD RAIL, TYPE E	LFT.	
06025	GUARD RAIL, TYPE F	LFT.	814
06030	GUARD RAIL, TYPE G	LFT.	2,100
06031	GUARD RAIL, TYPE H	LFT.	
06032	CONCRETE MEDIAN BARRIER	LFT.	
06037	GUARD RAIL FOR RAILROAD SIGNAL PROTECTION, SHOULDER	RA.	
06039	GUARD RAIL FOR RAILROAD SIGNAL PROTECTION, MEDIAN	EA.	
06035	RESET GUARD RAIL	LFT.	
44241	CLASS A CONCRETE FOR GUARD RAIL	CYS.	16,73
06040	47 INCH FENCE, FARM FIELD	LFT.	200
06045	48 INCH FENCE, CHAIN LINK	LFT.	
06050	GATE, FARM FIELD	EA.	
06055	GATE, CHAIN LINK	EA.	
06060	RESETTING FENCE, FARM FIELD	LFT.	
06065	RESETTING FENCE, CHAIN LINK	LFT.	
06070	CONCRETE SIDEWALK	TON	
06075	BITUMINOUS SIDEWALK	TON	
06080	RECONSTRUCTED SIDEWALK	SYS.	
06085	RE-PAID SIDEWALK	SYS.	
06090	CURB, INTEGRAL	LFT.	
06095	CURB, INTEGRAL CONCRETE, TYPE B	LFT.	
06100	CURB, INTEGRAL CONCRETE, TYPE C	LFT.	
06120	CURB, CONCRETE	LFT.	
06121	CURB, CONCRETE, TYPE B	LFT.	
06130	CURB, BITUMINOUS	LFT.	
06140	CURB & GUTTER, COMBINED	LFT.	
06145	CURB & GUTTER, COMBINED, TYPE B	LFT.	
06150	CURB & GUTTER, COMBINED, TYPE C	LFT.	
06170	GUTTER, STANDARD LIP	LFT.	
06176	CEMENT CONCRETE GUTTER	LFT.	4,179
06185	CONCRETE GUTTER, REINFORCED	LFT.	
06195	RESET CURB	LFT.	
06200	CENTER CURB, CONCRETE, TYPE A	LFT.	
06205	CENTER CURB, CONCRETE, TYPE B	LFT.	
06210	CENTER CURB, CONCRETE, TYPE C	LFT.	
06215	CENTER CURB, CONCRETE, TYPE D	LFT.	
06240	CENTER CURB, CONCRETE, TYPE A	SYS.	
06245	CENTER CURB, CONCRETE, TYPE B	SYS.	
06250	CENTER CURB, CONCRETE, TYPE C	SYS.	
06255	CENTER CURB, CONCRETE, TYPE D	SYS.	
06280	CENTER CURB, BITUMINOUS, TYPE A	LFT.	
06285	CENTER CURB, BITUMINOUS, TYPE B	LFT.	
06290	SPECIAL CENTER CURB, BITUMINOUS, TYPE A	LFT.	
06295	SPECIAL CENTER CURB, BITUMINOUS, TYPE B	LFT.	
06300	CENTER CURB, BITUMINOUS, TYPE A	SYS.	
06305	CENTER CURB, BITUMINOUS, TYPE B	SYS.	
06310	SPECIAL CENTER CURB, BITUMINOUS, TYPE A	SYS.	
06315	SPECIAL CENTER CURB, BITUMINOUS, TYPE B	SYS.	
06320	CURB REMOVAL	LFT.	
06335	PAVED SIDE DITCH, TYPE A	LFT.	200
06340	PAVED SIDE DITCH, TYPE B	LFT.	4,000
06345	PAVED SIDE DITCH, TYPE C	LFT.	1,000
06350	PAVED SIDE DITCH, TYPE D	LFT.	500
06355	PAVED SIDE DITCH, TYPE E	LFT.	500
06360	PAVED SIDE DITCH, TYPE F	LFT.	200
06365	PAVED SIDE DITCH, TYPE G	LFT.	200
06370	PAVED SIDE DITCH, TYPE H	LFT.	200
06375	PAVED SIDE DITCH, TYPE J	LFT.	200
06380	PAVED SIDE DITCH, TYPE K	LFT.	200
06385	PAVED SIDE DITCH, TYPE L	LFT.	200

CODE No.	DESCRIPTION	UNIT	QUANTITY
06395	RIPRAIP	SYS.	
06400	DUMPED RIPRAIP	SYS.	
06405	DUMPED RIPRAIP	SYS.	500
06410	REINFORCEMENT RIPRAIP	SYS.	
06415	HAND-LAID RIPRAIP 6 INCH	SYS.	
06420	HAND-LAID RIPRAIP 12 INCH	SYS.	
06425	GROUPED RIPRAIP 6 INCH	SYS.	
06430	GROUPED RIPRAIP 12 INCH	SYS.	
06435	PLACING HAND-LAID RIPRAIP 6 IN	SYS.	
06440	PLACING HAND-LAID RIPRAIP 12 IN	SYS.	
06445	PLACING GROUPED RIPRAIP 6 IN	SYS.	
06450	PLACING GROUPED RIPRAIP 12 IN	SYS.	
06455	SLOPEMALL	SYS.	
06460	CONCRETE SLOPEMALL 4 INCH	SYS.	
06465	CONCRETE SLOPEMALL 5 INCH	SYS.	
06470	CONCRETE HEADER, TYPE A	LFT.	
06475	CONCRETE HEADER, TYPE B	LFT.	
06480	CONCRETE HEADER, TYPE C	LFT.	
06485	CEMENT CONCRETE HEADER	LFT.	
06490	RECONSTRUCTED CONCRETE HEADER	LFT.	
06500	MONUMENT, TYPE A	EA.	
06505	MONUMENT, TYPE B	EA.	10
06510	MONUMENT, TYPE C	EA.	52
06515	MONUMENT, TYPE D	EA.	
06520	RE-ESTABLISH MONUMENT	EA.	
06525	CASTING ADJUSTED TO GRADE, MONUMENT	EA.	
06526	MONUMENT MARKER D-25	EA.	10
06530	BENCH-MARK POST	EA.	
06535	RESET BENCH-MARK POST	EA.	
06540	AGRICULTURAL LIMESTONE (1)	TON	18
06545	FERTILIZER (2)	TON	40
06550	MULCHING MATERIAL (3)	TON	70
06551	MULCHING MATERIAL (WOOD CELLULOSE FIBER)	TON	
06553	SEED MIXTURES, CLASS B	LBS.	3,007
06554	SEED MIXTURES, CLASS C	LBS.	
06555	SEED MIXTURES, CLASS D	LBS.	
06556	SEED MIXTURES, CLASS E	LBS.	
06557	SEED MIXTURES, CLASS F	LBS.	
06558	SEED MIXTURES, CLASS G	LBS.	800
06559	MULCHED SEEDING, CLASS B	SYS.	
06560	MULCHED SEEDING, CLASS C	SYS.	
06561	MULCHED SEEDING, CLASS D	SYS.	
06562	MULCHED SEEDING, CLASS E	SYS.	
06563	MULCHED SEEDING, CLASS F	SYS.	
06564	MULCHED SEEDING, CLASS G	SYS.	
06567	WATER	MG.	60
06570	TOP SOIL	CYS.	
06574	SODDING	SYS.	19,938
06575	SODDING (NURSERY)	SYS.	
06580	STEEL (CONDUIT) 2 INCH	LFT.	
06585	STEEL (CONDUIT) 3 INCH	LFT.	
06595	P.V.C. (CONDUIT) 2 INCH	LFT.	
06600	P.V.C. (CONDUIT) 3 INCH	LFT.	
06610	HANDHOLES	EA.	
06615	RIMBLE STRIP	LFT.	
	(1) INCLUDES FOR TEMP. SEEDING	TON	
	(2) INCLUDES FOR TEMP. SEEDING	TON	
	(3) INCLUDES FOR TEMP. SEEDING	TON	

CODE No.	DESCRIPTION	UNIT	QUANTITY
06620	STANDARD BARRICADE, TYPE I	EA.	
06621	STANDARD BARRICADE, TYPE II	EA.	
06622	STANDARD BARRICADE, TYPE III	EA.	4
06623	STANDARD BARRICADE, TYPE IV	EA.	
06625	STANDARD BARRICADE, TYPE V	EA.	
06630	PERMANENT BARRICADE, TYPE I	EA.	
06631	PERMANENT BARRICADE, TYPE II	EA.	
06632	PERMANENT BARRICADE, TYPE III	EA.	4
06633	PERMANENT BARRICADE, TYPE IV	EA.	
06634	PERMANENT BARRICADE, TYPE V	EA.	
06640	CONSTRUCTION SIGN, TYPE A	EA.	26
06645	CONSTRUCTION SIGN, TYPE B	EA.	
06650	STOP SIGN, TYPE R-1A	EA.	
06652	DO NOT PASS SIGN, TYPE R-11-A	EA.	
06655	YIELD SIGN, TYPE R-301	EA.	
06657	PASS WITH CARE SIGN, TYPE R-12A	EA.	
06660	CURVE SIGN, TYPE W-2AR	EA.	
06665	CURVE SIGN, TYPE W-2AL	EA.	
06670	REVERSE CURVE SIGN, TYPE W-4AR	EA.	
06675	REVERSE CURVE SIGN, TYPE W-4AL	EA.	
06680	LARGE ARROW SIGN, TYPE W-11A	EA.	
06685	STOP AHEAD SIGN, TYPE W-13A	EA.	
06690	FRONTAGE ROAD SIGN, TYPE W-26	EA.	
06695	DEAD END SIGN, TYPE W-64	EA.	
06700	RAILROAD ADVANCE WARNING SIGN, TYPE W-32A	EA.	
06706	FLASHING ARROW SIGN	EA.	
06707	TEMPORARY ILLUMINATION	L.S.	
06711	LINE, SKIP WHITE 4 INCH	LFT.	
06712	LINE, SKIP YELLOW 4 INCH	LFT.	
06713	LINE, SOLID WHITE 4 INCH	LFT.	
06714	LINE, SOLID YELLOW 4 INCH	LFT.	
06715	TEMPORARY PAVEMENT MARKING (PAINT)	LFT.	
06720	TEMPORARY PAVEMENT MARKING (TAPE)	LFT.	
06721	SPECIAL MARKINGS, CROSSWALK 4 INCH	EA.	
06722	SPECIAL MARKINGS, STOP BAR	EA.	
06723	SPECIAL MARKINGS, LANE INDICATION ARROWS	EA.	
06724	SPECIAL MARKINGS, WORD (ONLY)	EA.	
06725	DELINEATOR WITH POST, TYPE D-1 3 INCH	EA.	
06740	DELINEATOR WITH POST, TYPE D-2 3 INCH	EA.	
06755	DELINEATOR WITH POST, TYPE D-3 3 INCH	EA.	
06770	DELINEATOR POST	EA.	79
06771	FLEXIBLE DELINEATOR POST	EA.	

CODE No.	DESCRIPTION	UNIT	QUANTITY
06775	MAINTAINING TRAFFIC	L.S.	
06776	FHWA ORDER INTERIM 7-2(2)		
	TRAINERS (G)	HRS.	6000
06780	FIELD OFFICE (ROAD) (120 SQ. FT.)	MOS.	
06785	FIELD OFFICE (ROAD) (240 SQ. FT.)	MOS.	
06790	FIELD OFFICE (ROAD) (300 SQ. FT.)	MOS.	
06800	FIELD OFFICE (ROAD) (400 SQ. FT.)	MOS.	
06802	FIELD OFFICE (ROAD) (440 SQ. FT.)	MOS.	
06803	FIELD OFFICE (ROAD) (500 SQ. FT.)	MOS.	12
06805	FIELD LABORATORY (120 SQ. FT.)	MOS.	
06810	FIELD LABORATORY (240 SQ. FT.)	MOS.	8
06815	FIELD LABORATORY (300 SQ. FT.)	MOS.	
06820	FIELD LABORATORY (400 SQ. FT.)	MOS.	
06825	FIELD OFFICE (BRIDGE) (120 SQ. FT.)	MOS.	
06830	FIELD OFFICE (BRIDGE) (240 SQ. FT.)	MOS.	
06835	FIELD OFFICE (BRIDGE) (300 SQ. FT.)	MOS.	
06840			

ESTIMATE OF QUANTITIES (CONT.)

STRUCTURE SUMMARY

FEDERAL ROAD DISTRICT NO.	STATE	PROJECT NO.	TOTAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND	1-64-3C2988		51	71

KIND	SIZE	CIRCULAR PIPE LINEAL FEET																								
		4"	6"	8"	10"	12"																				
THICKNESS	STEEL																									
THICKNESS	TOP & SIDES																									
STRUCT PLATES	BOTTOM																									
STEEL	TOP & SIDES																									
	BOTTOM																									
GROUP																										
GROUP																										
GROUP																										
GROUP																										
GROUP																										
GROUP																										
GROUP																										
GROUP																										
REINFORCED CONCRETE																										
EXTRA STRENGTH REINF. CONC.																										
HEAVY DUTY REINF. CONC.																										
VITRIFIED CLAY CULVERT																										
CORR. STEEL																										
FULLY BITUM. COATED CORR. STEEL																										
FULLY BITUM. COATED CORR. STEEL WITH PAVED INVERT																										
FULLY BITUMINOUS COATED PERFORATED CORR. STEEL																										
DRAIN TILE CLASS STANDARD																										
DRAIN TILE CLASS EXTRA																										
DRAIN TILE CLASS HEAVY DUTY																										

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STRUCTURE SUMMARY (CONT.)

KIND	MIN. AREA SQ. FT. *	PIPE ARCHES LINEAL FEET																			
		STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	
THICKNESS	TOP & SIDES																				
STRUCT PLATES	BOTTOM																				
STEEL	TOP & SIDES																				
	BOTTOM																				
THICKNESS																					
GROUP G-																					
GROUP G-																					
GROUP G-																					
GROUP H-																					
GROUP H-																					
GROUP H-																					
CORR. STEEL PIPE ARCH																					
STRUCT. PLATE STEEL PIPE ARCH																					
BIT. COAT. CORR. STEEL PIPE ARCH																					
BIT. COAT. CORR. STEEL PIPE ARCH WITH PAVED INVERT																					
REINE ELLIPTICAL CONCRETE																					

PIPE GROUP "K" FOR UNDERDRAINS PIPE FULLY BIT. COATED NON PERFORATED CORR. STEEL (THICKNESS 0.352) FOR UNDERDRAINS	6"	133,171	LINEAL FT.
AGGREGATE FOR UNDERDRAINS PIPE FULLY BITUM. COATED PERFORATED CORR. STEEL (TH. 0.052)	+	12,725	CYS
	+	6"	5,500
			LINEAL FT.

ITEM	UNIT	QUANTITY
CONCRETE CLASS "A" IN STRUCTURES	CYS	
REINFORCING STEEL FOR STRUCTURES	LB	
CONCRETE CLASS "A" FOR INTEGRAL CURB WALK	CYS	

INLETS				CATCH BASIN	
TYPE	EACH	TYPE	EACH	TYPE	EACH

MANHOLES		PIPE CATCH BASINS		RECONSTRUCTED STRUCTURE	
TYPE	EACH	SIZE	EACH	MANHOLE	INLET

AUTO DRAINAGE GATES		
SIZE	HEAD	EACH

CASTINGS FURNISHED AND ADJUSTED TO GRADE	
TYPE	EACH

INLETS USING CASTING IN PLACE		CATCH BASINS USING CASTING IN PLACE	
TYPE	EACH	TYPE	EACH

PIPE END SECTION			
SIZE	EACH	SIZE	EACH
12"		18" X 11"	
15"		22" X 13"	
18"		25" X 16"	
24"		29" X 18"	
30"		36" X 22"	
36"		42" X 27"	

(*) SPAN AND RISE WHEN OTHER THAN GROUP "G" OR GROUP "H" IS SPECIFIED.
+ INCLUDES UNDISTRIBUTED QUANTITIES

END