

FEDERAL ROAD DISTRICT NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	77(28)	1956	1	32

Code 0110

STATE OF INDIANA
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
F PROJECT NO. 77 (29) P.E. (28) R/W & CONSTR.

BEGINNING AT A POINT ON U.S.R. NO. 30 APPROXIMATELY 1816.0 FT. EAST OF THE WEST LINE OF SECTION 20, T.34N, R.1W. IN STARKE COUNTY AND EXTENDING IN AN EASTERLY DIRECTION A DISTANCE OF 49511.50 FT. TO A POINT APPROXIMATELY 2283.9 FT. EAST OF THE WEST LINE OF SECTION 26, T.34N, R.1E. IN MARSHALL COUNTY.

INDEX

SHEET NO.	DESCRIPTION	ADOPTED OR REVISED	APPROVED BY B.P.R.
1	INDEX		
2	ST. BARRICADE TYPE "A"	8-11-61	9-1-62
3	ST. BARRICADE TYPE "B"	5-11-62	5-1-62
4	SIGN STANDARD	7-11-60	3-9-61
5-29, 29A	CONSTRUCTION IDENTIFICATION SIGNS	2-13-61	3-9-61
30-32, 32A		4-1-59	1-26-60
33-35		5-26-59	1-26-60
36, 37, 37A, 38		10-14-60	8-9-61
39-41			
42			
43, 43A, 43B			
44	CONC. ARCH. 12' SPAN UNDER 5' HIGH BELL	4-16-60	1-26-60
45			
46			
46A	TYP. BEAM GUARD RAIL "GRA"	5-25-61	6-6-61
46B	STD. GUARD RAIL "GR"	10-20-60	11-3-61
47, 48, 48A, 48B			
49-50			

R/W INDEX

Sheet No.	Description
1	Title Sheet
2	Parcel Listing
3	R/W Plat # 2
4	Typical Cross Sections
5-21	Plan and Profile
22	Table of Approaches & Detail Sh.
22-29	Detail Sheets
30-32	Structure Data

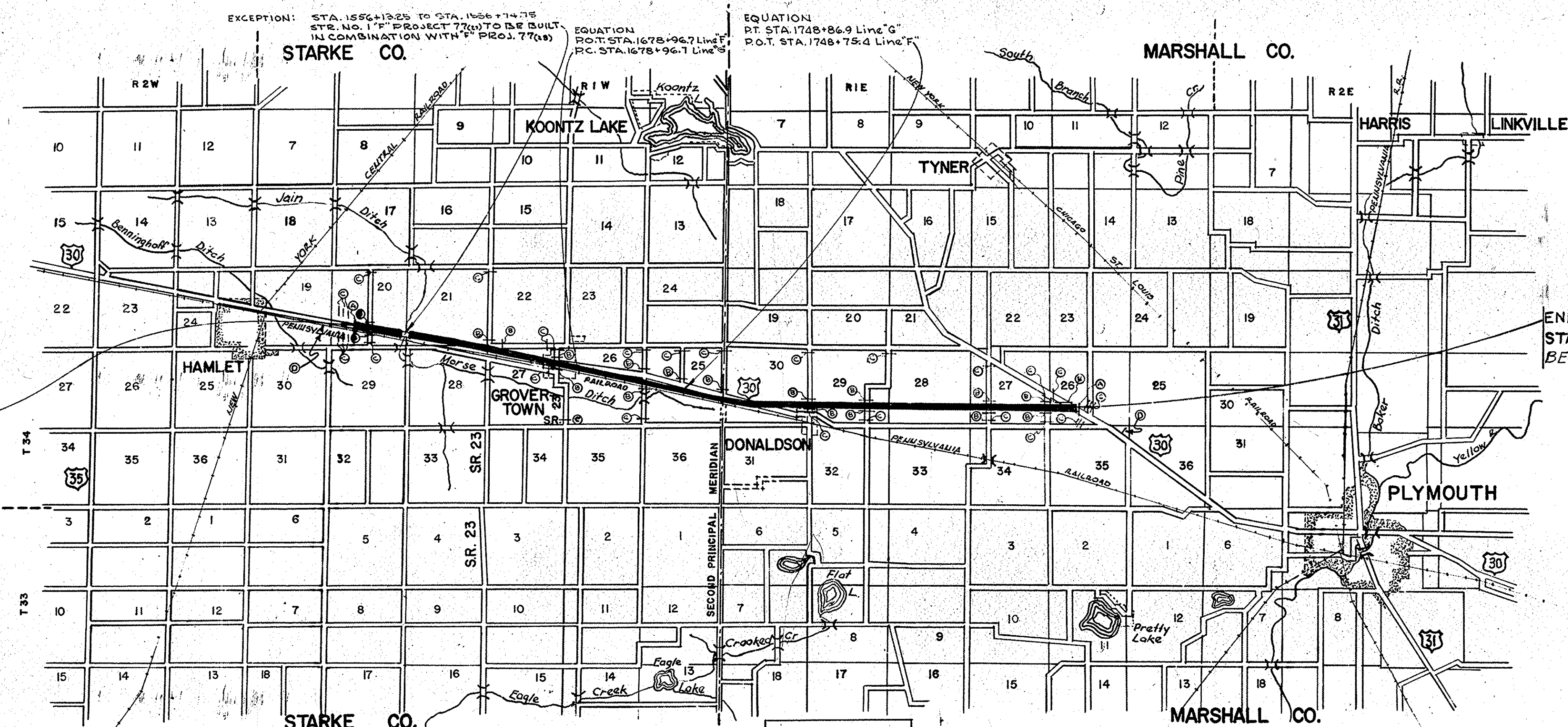
SHEET NO.	DESCRIPTION	ADOPTED OR REVISED	APPROVED BY B.P.R.
1	E-11-1P	R 8-11-61	9-1-62
2	St. Pav. Jt.	R 5-11-62	5-1-62
3	Misc. A	R 7-11-60	3-9-61
4	B	R 2-13-61	3-9-61
5	C	R 4-1-59	1-26-60
6	D	R 5-26-59	1-26-60
7	E	R 10-14-60	8-9-61
8	F	A MAR 1962	None
9	I	R 1-6-54	1-26-60
10	J	R 3-30-61	4-20-61
11	K	R 4-17-59	1-26-60
12	L	R 9-14-51	None
13	M	R 4-1-61	5-9-61
14	N	R 5-25-62	6-5-62
15	P	PI A OCT 1960	5-9-61
16	Q	R 10-14-60	8-9-61
17	Std. Arch. U	R 4-16-60	1-26-60
18	R.C. Out. U	R 4-15-59	1-26-60
19	GR	R 5-25-61	6-6-61
20	GRA	R 5-25-61	11-3-61
21	DR	R 10-20-60	8-9-61
22	Sh. 1	A DEC 1961	1-26-62
23	" 2	A DEC 1961	1-26-62
24	" 3	A DEC 1961	1-26-62
25	" 4	R 12-1-61	1-26-62

R/W SHOWN ON THESE PLANS INCLUDES R/W FOR SEPARATE CONTRACT STRUCTURE F PROJECT 77(27)

GROSS LENGTH: 9377 MI.
SCALES:
PLAN { LONG: 1"=100' PROFILE { HORIZ: 1"=100' VERT: 1"=10'
TRANS: 1"=100' MAX. GRADE 2.148 %

Sheet	Date	Revisions
11	9-5-58	Additional Topo / Rd. Design
5	11-6-58	R/W Rev. Per R/W Dept.
9-30-31	11-24-58	Additional Quantities Rd. Design
17-28-30	6-24-59	Relocated V Drive to Station 1584+20 Lt
12-28-30	4-27-60	Relocated Class V Drives, Est. one Structure, Revised Quantities
20, 22	10-8-61	Move Class II Drive
1	8-24-62	Design Data (per B.M.)
32-A	9-26-62	Untreated Timber Piles
11-28-22	10-16-63	Rev. Drives
7	11-17-61	Comp. Agg. Shoulder & sur. Type "A"
5-21	12-18-61	Pipe Classification
5-13	12-18-61	Pavement Removal Notes
5-21	12-18-61	L.A. R/W & A.C.L.
5-21	12-18-61	Fencing
7	12-18-61	STR. NOS. 92 & 43, Added
7B	1-25-60	Change of Sec. Line
5, 7, 8, 15	4-6-67	Term. R/W Added
30, 31, 32	12-6-67	Pipe Classification
9	4-3-57	R/W Revised
9	4-25-62	R/W Revised
9, 12-15	4-6-67	P.L.'S Added
25	4-6-67	R/W Corner CUT
12	5-5-67	Parcel #75 Added
5	4-25-63	DISP. OF EXCESS LAND

- LEGEND**
- Std. Barricade Type "A"
 - Std. Barricade Type "B"
 - Sign Standard
 - Construction Identification Signs.



BEGINNING OF "F" PROJECT 77(28)
STA. 1521+00=STA. 1521+00 OF
"F" PROJECT 77(22)

END OF "F" PROJECT 77(28)
STA. 2016+00
BEGIN "F" PROJECT 854(1)

DESIGN DATA
ADT 1962 = 6100
ADT 1982 = 10,200
DIRECTION 50%
TRUCKS 20%
DESIGN SPEED 70M-PH
ACCESS CONTROL PARTIAL
DHV 12.24

APPROVED AND ADOPTED: 5/10/67
APPROVED: 5-8-57
APPROVED: 5-24-62

STATE HIGHWAY COMMISSION OF INDIANA
STANDARD SPECIFICATIONS DATED 1962
TO BE USED WITH THESE PLANS.

PREPARED AND RECOMMENDED BY
FLECK, QUEBE & REID ASSOCIATES, INC.
ENGINEERS, INDIANAPOLIS, INDIANA
William F. Quebe 2-9-61

RECOMMENDED FOR APPROVAL: 5-22-62
W. B. Behrens
ENGINEER OF ROAD DESIGN - INDIANA STATE HIGHWAY COMMISSION.

Code 0110
F-77(28)
U.S.R. 30 Marshall County
32 sheets

TABULATION OF PARCEL LISTING
LAND ACQUISITION ELECTRONIC DATA PROCESSES

DIVISION OF LAND ACQUISITION
INDIANA STATE HIGHWAY COMMISSION

PARCEL NUMBER	GRANTOR	CENTER STATION TO STATION LINE	L+R	SHEET NUMBER	TOTAL AREA	*R/W AREA	NATURE OF TITLE	RESIDUE LEFT	RESIDUE RIGHT
1	PARCEL 1 ON PROJECT F-77(28) AND PARCEL 30 ON PROJECT F-77(24)				F-77(24)		COVER THE SAME LAND, WITH		
2	OLSON, H. E. + WAZOCHA, A.			5	4.630AC	0.350AC	PE	4.280AC	
3	SLOBODNIK, JOSEPH			5	5.000AC	0.430AC	PE	4.570AC	
3T				5		0.041AC	TE		
4	CREVISTON, DELMAN ET UX.			5	0.340AC	0.280AC	PE	0.560AC	
5	KNOX BLDG, LOAN+SAV. ASSN			5	0.939 0.939	0.939 0.939	FS		
6	HANSELMAN, ANGELINE			5	1.550AC	0.110AC	PE	1.440AC	
6T				5		0.025AC	TE		
7	STOFFER, MARY E.			5	0.310AC	0.250AC	PE	0.060AC	
8	COFFIN, CLIFFORD ET UX.			5	36.077AC	2.700AC	PE	33.377AC	
9	GODFREY, ELENORE ET AL.			5+6	37.000AC	2.940AC	PE	34.060AC	
10	UNCAPHER, MARCUS E.			6+7	616.000AC	8.720AC	PE	607.280AC	
11	HEIDEMAN, HAROLD ET UX.			7	3.571AC	1.984AC	PE	1.587AC	
12	KOBROW, WILLIAM A. ET UX.			8	14.000AC	2.952AC	PE	11.040AC	
12A				8		0.008AC	PE		
12T				8		3.200AC	TE		
13	POWELL, DELL I. ET UX.			8+9	59.770AC	8.600AC	PE	51.170AC	
13T				9		0.300AC	TE		
14	NELLANS, VERA M.			9	0.837AC	0.799AC	FS		
14A				9		0.038AC	FS		
14T	ELIMINATED 5/05/67								
15	GRAY, LEONARD F. ET UX.			9	0.548AC	0.548AC	FS		
15T	ELIMINATED 5/05/67								
16	UNCAPHER, CLIFFORD D.			9	26.500AC	0.004AC	PE	26.496AC	
16T				9		0.094AC	TE		
17	KEISTER, MATTA+COLE E.			9	0.202AC	0.027AC	PE	0.175AC	
18	COOK, GEORGE C. ET AL.			9	0.210AC	0.108AC	PE	0.102AC	
19	VENDOLA, ANTHONY			9	9.620SF	9.620SF	PE		
20	LANE, EARL W. ET UX.			9	19.135SF	19.135SF	PE		
21	UNCAPHER, ELIZABETH M.			9	4.050AC	4.050AC	PE		
22	TRAPP, GEORGE W. ET UX.			9	5.440AC	4.000AC	PE		
22A				9+10		1.440AC	PE		
23	KOPPENHOFER, FRED			10	75.700AC	3.022AC	PE	72.678AC	
23TS				9+10		4.396AC	TE		
23A				9	22.768SF	780SF	PE	21,988SF	
23B	KOPPENHOFER, F. + COOK, F.			10	4.950AC	0.630AC	PE	4.320AC	
23C	ELIMINATED 8/17/59								
24	KUCHEL, JOHANNA			10	5.000AC	0.560AC	PE	4.440AC	
25	JOHNSON, HAROLD R. ET UX.			10	5.000AC	0.590AC	PE	4.410AC	
26	PULLIAM, CHARLES ET UX.			10	2.000AC	0.950AC	PE	1.050AC	
27	HLAVACEK, LOUIS ET UX.			10	13.160AC	1.350AC	PE	11.810AC	
28	ARNETT, JAMES DEMPSEY			10+11	11.000AC	3.200AC	PE	7.800AC	
29	BARBKNECHT, E. H. ET UX.			11	71.550AC	2.123AC	PE	69.427AC	
29A				11		0.077AC	PE		
30	FRANCOIS, P. L. JR. ET UX.			11	2.500AC	2.360AC	PE	0.140AC	
31	HANEY, HOWARD C. ET UX.			11	0.700AC	0.068AC	PE	0.632AC	
32	NO PARCEL 32								
33	THORNBURG, J. O. ET UX.			11+12	81.000AC	3.710AC	PE	77.290AC	
33T				11+12		1.850AC	TE		
34T	DAILY, VERLE R. ET UX.			12	5.000AC	0.570AC	TE	5.000AC	
35	KING, HAROLD L. ET UX.			12	5.000AC	0.024AC	PE	4.976AC	
36	SANDRIDGE, EFFIE MAE			12	3.000AC	0.330AC	PE	2.670AC	
36T				12		0.350AC	TE		
37	VENDOLA, ANTHONY ET UX.			12	2.000AC	0.260AC	PE	1.740AC	
37T				12		0.370AC	TE		
38	VENDOLA, GEORGE ET UX.			12	2.000AC	0.320AC	PE	1.680AC	
38T				12		0.110AC	TE		
39	MCALLISTER, THOMAS			12+13	8.300AC	0.580AC	PE	7.720AC	
40	CARLSON, G. ET UX.			13	11.959AC	1.700AC	PE	10.259AC	
40A				13	0.240AC	0.240AC	PE		

TABULATION OF PARCEL LISTING
LAND ACQUISITION ELECTRONIC DATA PROCESSES

DIVISION OF LAND ACQUISITION
INDIANA STATE HIGHWAY COMMISSION

PARCEL NUMBER	GRANTOR	CENTER STATION TO STATION LINE	L+R	SHEET NUMBER	TOTAL AREA	*R/W AREA	NATURE OF TITLE	RESIDUE LEFT	RESIDUE RIGHT
41	BENNETT, CARL J. ET UX.			13	2.461AC	1.170AC	PE	1.291AC	
41A				13	0.130AC	0.130AC	PE		
42	WORMAN, JESSE M. ET UX.			13	10.000AC	3.978AC	PE	6.022AC	
43	ELIMINATED 10/10/61								
44	SAMUELSON, ALBERT			13+14	24.500AC	4.800AC	PE	18.600AC	1.100AC
45	HAHNE, OPAL			13+14	11.250AC	2.200AC	PE	7.050AC	2.000AC
46	ZAGLINSKI, CARL ET UX.			14	11.250AC	2.130AC	PE	6.770AC	2.350AC
47	SAMUELSON, ERNEST O.			14	25.770AC	3.190AC	PE	18.080AC	4.500AC
48	SAMUELSON, MARGARET L.			14	25.770AC	2.520AC	PE	17.250AC	6.000AC
49	BERGMAN, FRED E.			14+15	75.000AC	12.480AC	PE	46.387AC	16.133AC
49T				14+15		10.293AC	TE		
49T1				14+15		8.267AC	TE		
50T	CARLBERG, ALBERT ET UX.			14+15	25.800AC	2.330AC	TE		25.800AC
51	JOHNSON-FLOYD L. ET AL.			15	53.750AC	6.580AC	PE	12.820AC	34.350AC
51T				15		1.584AC	TE		
51T1				15		1.194AC	TE		
52	THOMAS, ALBERT C.			15+16	30.000AC	1.900AC	PE	28.100AC	
52T				16		0.800AC	TE		
53	GARRISON, CLAUDE ET UX.			15+16	45.000AC	4.100AC	PE		40.900AC
53T				16		0.800AC	TE		
54	ECKERT, GEORGE E. ET UX.			16	78.750AC	6.130AC	PE	34.170AC	38.450AC
55	CARANTZALIS, J. ET UX.			16+17	60.000AC	6.050AC	PE	16.930AC	37.020AC
55T				17		0.730AC	TE		
55T1				17		0.730AC	TE		
55T2				17		0.610AC	TE		
56	BAUM, C. OSCAR ET UX.			17+18	80.000AC	7.940AC	PE	72.060AC	
56T				17		2.400AC	TE		
57	WHITESSELL, MERVIN ET AL.			17	40.000AC	2.020AC	PE		37.980AC
58	JOHNSON, RUTH D. ET AL.			17+18	60.000AC	3.700AC	PE		56.300AC
59	COLE, ANSEL E. ET UX.			18	40.000AC	2.720AC	PE	37.280AC	
60	ROGERS, CHARLES C. ET UX.			18+19	100.000AC	7.975AC	PE	38.000AC	54.025AC
60T				18		1.607AC	TE		
60T1				18		1.607AC	TE		
61	GORDON, MYRTLE L.			18+19	40.000AC	0.700AC	PE	39.300AC	
61T				19		5.060AC	TE		
62	GORDON, LYMAN ET UX.			18+19	24.500AC	5.370AC	PE		19.130AC
62T				19		5.060AC	TE		
63	DILL, DEWAYNE R. ET UX.			19	1.000AC	0.097AC	PE	0.903AC	
64	COUTS, ELMER E.			19	39.500AC	5.670AC	PE		33.830AC
65	DILL, MYRON K. ET UX.			19	39.000AC	0.300AC	PE	38.700AC	
66	HOOLEY, RICHARD K. ET UX.			19	79.340AC	0.001AC	PE	79.339AC	
67	MILLER, RALPH H. ET UX.			19+20	74.000AC	13.260AC	PE		60.740AC
68	GRIEWANK, ERNEST C.			20+21	80.000AC	9.300AC	PE	23.400AC	47.300AC
69	PARCEL 69 ON PROJECT F-77(28) AND PARCEL 39 ON PROJECT ST-F-854(1)						COVER THE SAME LAND, WITH		
69	ACQUISITION THEREOF ENTIRELY UNDER SAID PROJECT F-77(28)								
69	BURROUGHS, OTTO A. ET UX.			21	21.300AC	3.040AC	PE	18.260AC	
70	PARCEL 70 ON PROJECT F-77(28) AND PARCEL 40 ON PROJECT ST-F-854(1)						COVER THE SAME LAND, WITH		
70	ACQUISITION THEREOF ENTIRELY UNDER SAID PROJECT F-77(28)								
70	BRADFELD, VIRGIL ET UX.			21	4.500AC	0.130AC	PE		4.370AC
71	ELIMINATED 11/06/58								
72	GOAD, WENDELL W. ET AL.			11	2.580AC	2.580AC	PE		
73	GOODRICH, RUSSELL ET UX.			21	1.740AC	0.410AC	PE		1.330AC
74	USELMAN, INNIS W. ET UX.			7+8	2.308AC	0.816AC	PE	1.492AC	
74T				7+8		0.125AC	TE		
75	DAILY, VERLE R. ET UX.			12	5.000AC	ACCESS	RTSPE	5.000AC	

LIST OF EXCESS LANDS TO BE ACQUIRED
AND A SEGREGATION BY PROJECTS OF RIGHT OF WAY AREAS AND EXCESS
LAND AREAS LYING IN TWO OR MORE PROJECTS

PARCEL NUMERAL	TYPE OF TAKING	LAND TO BE ACQUIRED	PROJECT F-77(28)	PROJECT ST-F-854(1)	PROJECT
5	EXCESS	0.593	0.593		
14	EXCESS	0.233AC	0.233AC		
15	EXCESS	0.300	0.300		
69	PE	0.240AC	0.240AC	2.114 AC	
70	PE	0.130AC	0.130AC	0.130AC	

FS = FEE SIMPLE TITLE
PE = PERMANENT R/W
TE = TEMPORARY R/W
ACCESS RTS = ONLY ABUTTERS RIGHTS TO BE ACQUIRED

* R/W AREA INCLUDES EXCESS LAND, IF ANY

Section 20, Twp. 34N., Range 1W.

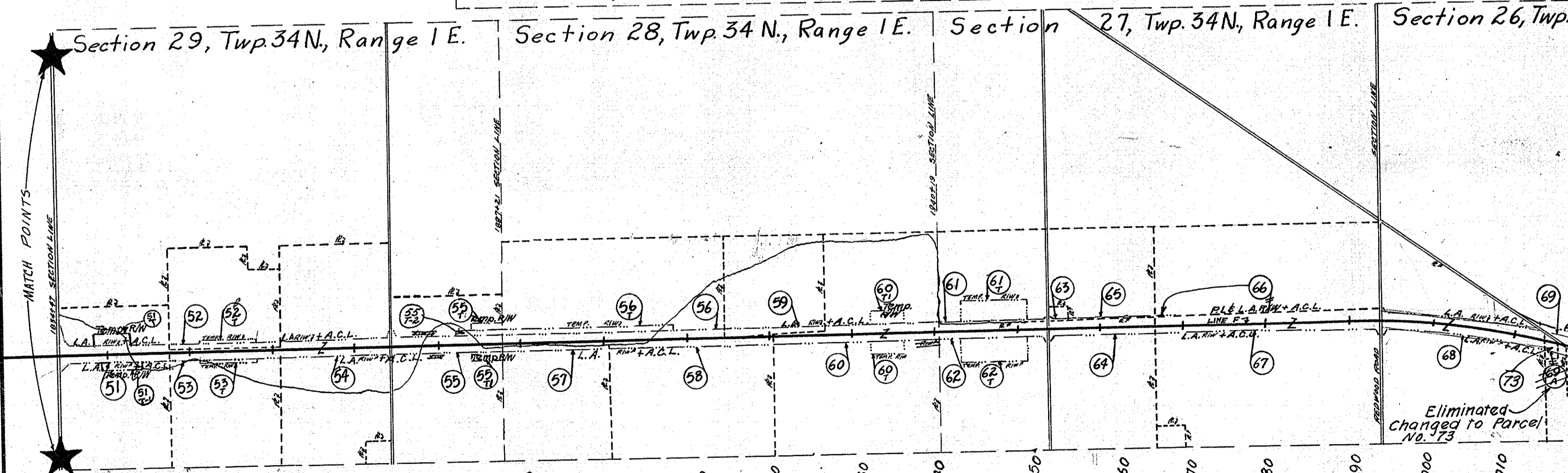
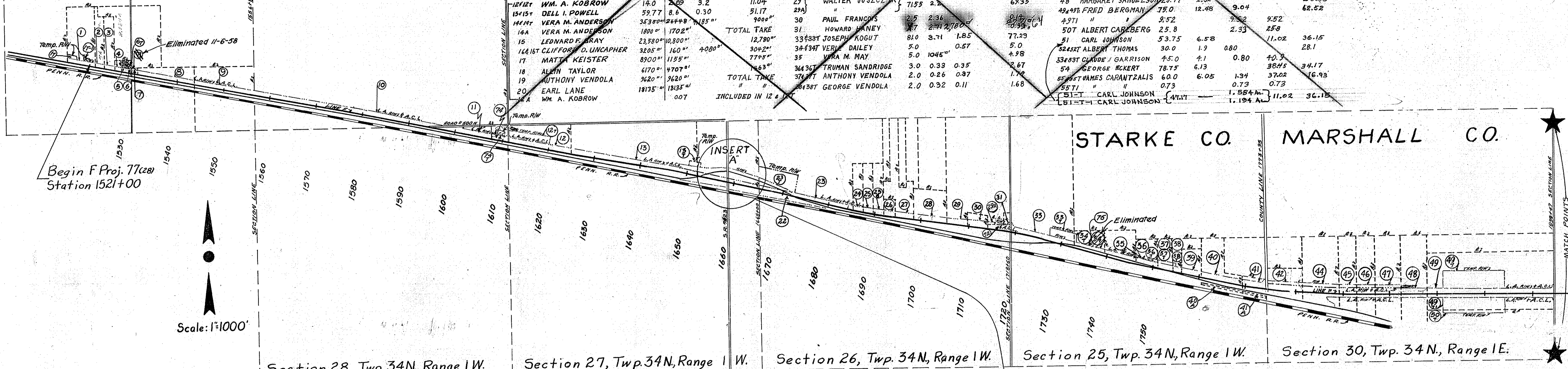
Section 21, Twp. 34N., Range 1W.

Parcel Nos.	GRANTOR	Total Acres	Total R/W	Temp R/W	Residue Rt.	Residue Lt.
1517	STANLEY J. HENSLE	12.384	0.35			12.348
2	HERMAN E. OLSON	5.0	0.43			4.57
3	MARTIN SLOBODNIK	0.84	0.28			0.56
4	AGNES GOLDNICK	1.45	0.39			1.06
5	ANGELINE M. HANSELMAN	1.53	0.11			1.42
6	GOLDIE M. LOGG'S WHITE	0.70	0.25			0.45
7	MARY STOFFER	36.077	1.70			34.377
8	CLIFFORD COFFIN	37.0	2.94			34.06
9	ELENORE GODFREY	6.0	8.72			607.28
10	MARCUS E. UNCAPHER	9.0	2.984			6.016
11	HAROLD B. HEIDEMAN	14.0	2.69	3.2		11.04
12	W.M. A. KOBROW	59.77	8.6	0.30		51.17
13	DELL I. POWELL	363.80	264.8	118.5		900.0
14	VERA M. ANDERSON	1800	1702			98
14A	VERA M. ANDERSON	23,580	10,800			12,780
15	LEONARD F. BRAY	32.05	1.60	4.080		304.2
16	CLIFFORD D. UNCAPHER	8900	1155			7745
17	MATTA KEISTER	6170	4707			1463
18	ALVIN TAYLOR	3620	3620			
19	ANTHONY VENDOLA	18135	18135			
20	EARL LANE					
20A	W.M. A. KOBROW		0.07			
TOTAL TAKE						
INCLUDED IN 12						

Parcel Nos.	GRANTOR	Total Acres	Total R/W	Temp R/W	Residue Rt.	Residue Lt.
21	OTTO UNCAPHER	5.3	4.05			1.25
22	GEORGE TRAPP	5.44	4.37			1.07
22A	"					
23	FRED KOPPENHOFER	75.7	3.04			72.66
23A	"					
24	JOHANNA KUCHEN	5.0	0.02			4.98
25	HAROLD JOHNSON	5.0	0.55			4.45
26	CHARLES PULLIAM	2.0	0.95			1.05
27	LOUIS HLAVACER	1.0	1.35			0.65
28	STEVE BYLONSKI JR.	11.0	3.2			7.8
29	WALTER JUSZCZYK	71.55	2.2			69.35
29A	"					
30	PAUL FRANCIS	2.5	2.36			0.14
31	HOWARD HARNEY	8.7	2.91	1.85		5.79
33	JOSEPH KOGUT	81.0	3.71	1.85		77.29
34	VERIE DAILEY	5.0	0.57			4.43
35	VERA M. MAY	5.0	10.45			5.45
36	TRUMAN SANDRIDGE	3.0	0.33	0.35		2.67
37	ANTHONY VENDOLA	2.0	0.26	0.37		1.74
38	GEORGE VENDOLA	2.0	0.32	0.11		1.68
TOTAL TAKE						

Parcel Nos.	GRANTOR	Total Acres	Total R/W	Temp R/W	Residue Rt.	Residue Lt.
39	THOMAS MC ALLISTER	8.3	0.58			7.72
40	GOTTFRIED CARLSON	12.37	1.7			10.67
40A	"		0.24	0.24		
41	CARL BENNETT	3.65	1.17			2.48
42	JESSIE WORMAN	2.45	4.1			20.4
43	SELMA BORGGREN	1.5	1.8			12.8
44	ALBERT SAMUELSON	2.43	4.8			19.7
45	DONALD GREEN	11.25	2.2			9.05
46	CARL ZAGLINSKI	11.25	2.13			9.12
47	ERNEST SAMUELSON	25.77	3.19			22.58
48	MARGARET SAMUELSON	25.77	2.62			23.25
49	FRED BERGMAN	75.0	12.48	9.04		62.52
49T1	"		2.52	9.52		9.52
50	ALBERT CARBERG	25.8	2.33	2.58		25.8
51	CARL JOHNSON	53.75	6.58	11.02		36.15
52	ALBERT THOMAS	30.0	1.9	0.80		28.1
53	CLAUDE J. GARRISON	45.0	4.1	0.80		40.9
54	GEORGE ECKERT	78.75	6.13	38.45		34.17
55	JAMES CARANTZALIS	60.0	6.05	1.34		37.02
56	"		0.73	0.73		16.93
57	CARL JOHNSON	1.584	1.194	11.02		36.15
58	CARL JOHNSON					

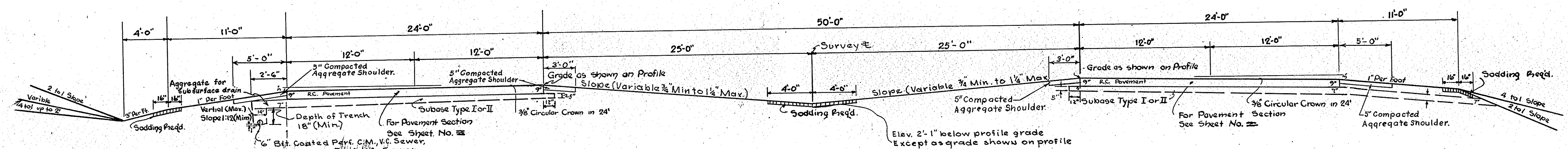
FEDERAL ROAD DIVISION NO. 4 STATE IND. PROJ. NO. 77(20) FISCAL YEAR 1956 SHEET NO. 3 TOTAL SHEETS 32
 Rev. 4-7-67, Parcel Numbering M.J. Koenig
 Combined with Parcel 42 10-5-51 BJM



Parcel Nos.	GRANTOR	Total Acres	Total R/W	Temp R/W	Residue Rt.	Residue Lt.
56	OSCAR BAUM	80.0	7.94	2.4		72.06
57	MERVIN WHITESELL	4.0	2.02			37.98
58	RUTH JOHNSON	4.0	3.70			56.30
59	ANSEL COLE	4.0	2.72			37.28
60	CHARLES RODGERS	100.0	7.8	1.61		53.53
60T1	"		1.61	1.61		161
61	MYRTLE GORDON	4.0	0.70	2.06		32.30
62	LYMAN GORDON	2.45	5.37	5.06		19.13
63	DEWAYNE DILL	1.0	0.097			0.903
64	ELMER COUTS	3.95	5.67			33.83
65	MYRON DILL	3.90	0.3			38.7

Parcel Nos.	GRANTOR	Total Acres	Total R/W	Temp R/W	Residue Rt.	Residue Lt.
66	JOHN GAIN	79.34	4.95			74.39
67	FREDERICK OULLS	50.0	13.26			36.74
68	ERNEST GRIEWAN	60.0	9.3			23.3
69	OTTO BURROUGHS	36.0	2.89			27.11
70	VIRGIL BRANFIELD	4.5	0.13			4.37
71	MARION HARNES	142				ELIMINATED 11-7-58
72	GOAD REALTY, INC.	2.58	2.58			TOTAL TAKE
73	GOODRICH	1.84	0.41			1.43
74	ANNIS USELMAN		0.516			
75	FRANK COOK	4.95	0.63			4.32

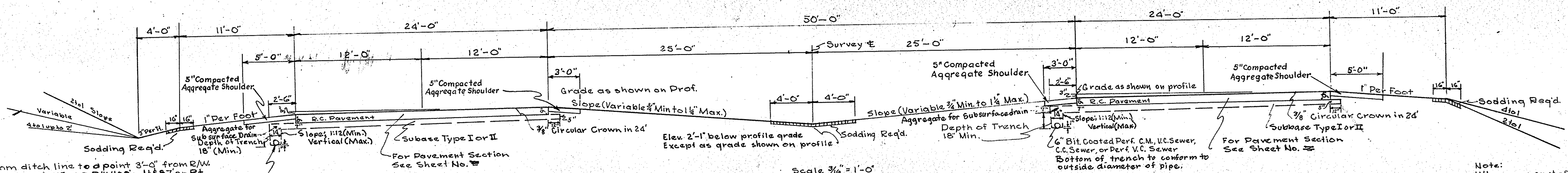
Rev 11-17-61, Comp. Agg. Shoulder & Sur. Type "A"



Note: Variable from ditch line to a point 3'-0" from R/W. Sta. 1521+00 to Sta. 1775+00 R/W 100' on Lt. & Rt. Sta. 1775+00 to Sta. 2020+00 R/W 100' Rt. & Lt.

Note: When any part of a fill requires a 2 to 1 slope that slope shall be continued thruout the fill on that side.

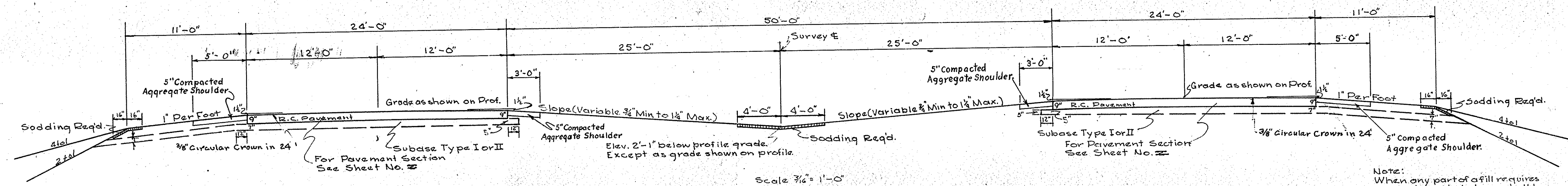
Scale 3/16" = 1'-0"
1521+00 to 1553+20
1559+60 to 2016+00



Note: Variable from ditch line to a point 3'-0" from R/W. Sta. 1521+00 to Sta. 1775+00 R/W 100' on Lt. & Rt. Sta. 1775+00 to Sta. 2020+00 R/W 100' Rt. & Lt.

Note: When any part of a fill requires a 2 to 1 slope that slope shall be continued thruout the fill on that side.

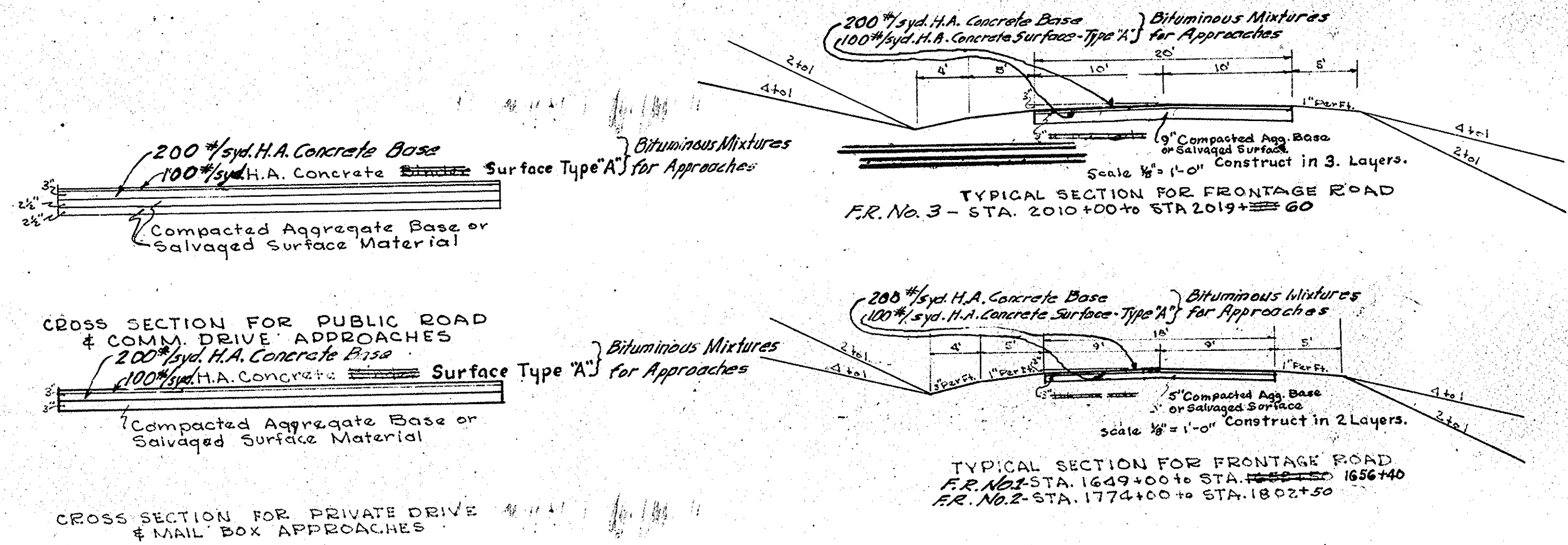
Scale 3/16" = 1'-0"
TYPICAL SECTION FOR CURVES OF 0°15' TO 0°60' TO RT. (REVERSE SECTION FOR CURVES TO RT.)



Scale 3/16" = 1'-0"

Note: When any part of a fill requires a 2 to 1 slope that slope shall be continued thruout the fill on that side.

STA. 1553+20 to STA. 1559+60



Note: For Subbase Drain Table See Sheet No. 33

PREPARED AND RECOMMENDED BY
FLECK, QUEBE & REID ASSOCIATES, INC.
ENGINEERS, INDIANAPOLIS, INDIANA
William J. D. V. 2-8-57

TYPICAL CROSS SECTIONS

Geo. E. J. Tardem
CHIEF ENGINEER - INDIANA STATE HIGHWAY COMMISSION
APPROVED: [Signature]
APPROVED: [Signature]
CHIEF ENGINEER

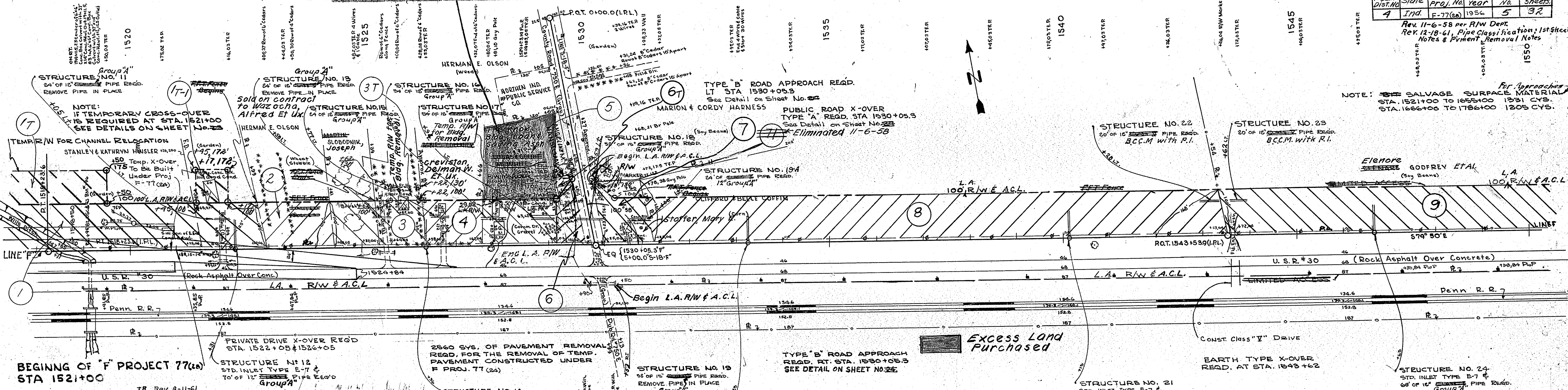
SCALE: AS INDICATED
5-22-62
RECOMMENDED FOR APPROVAL: [Signature]
ENGINEER OF ROAD DESIGN, INDIANA STATE HIGHWAY COMMISSION

DISPOSITION OF EXCESS LAND TO RUTH TRAPP
 AS PER I.D.O.H. RESOLUTION SALE OF EXCESS LAND
 DATED 4-30-82 AND QUITCLAIM DEED DATED 5-10-82

REV. 7-6-67, Temp. R/W @ 1522 LT. Added, M.J. Koenig
 REV. 4-25-83, DISPOSITION OF EXCESS LAND @ STA 1527 TO STA 1529
 LT. "LINE F" AS PER I.D.O.H. RESOLUTION DATED 4-30-82 AND
 Q.D. DATED 5-10-82

Dist. No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	Ind.	F-77(24)	1954	5	32

Rev. 11-6-58 per R/W Dept.
 Rev. 11-19-61, Pipe Classification; 1st Sheet
 Notes & Payment Removal Notes



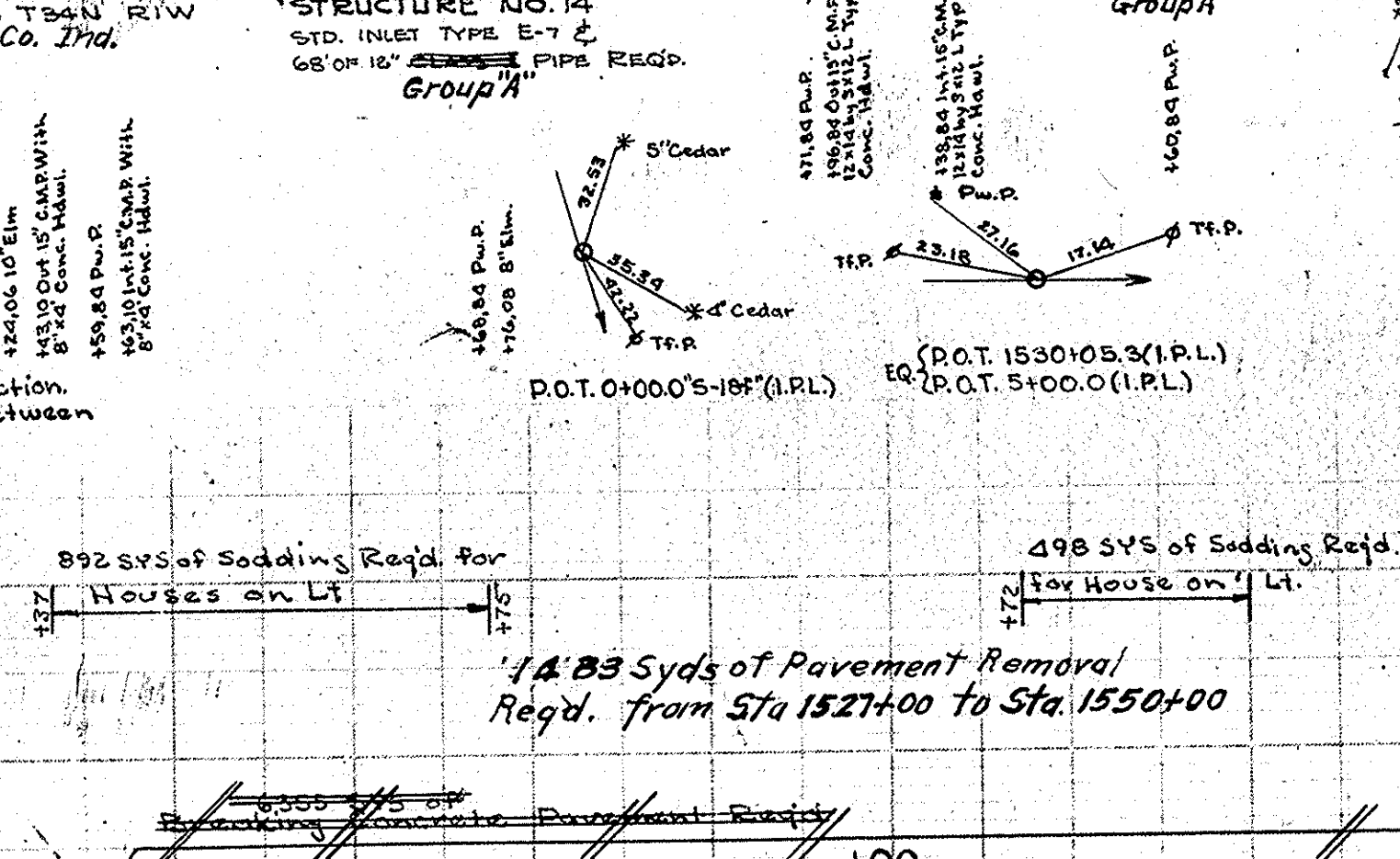
NOTE: IF TEMPORARY CROSS-OVER IS REQUIRED AT STA. 1521+00 SEE DETAILS ON SHEET No. 23

NOTE: TEMPORARY CROSS-OVER FOR CHANNEL RELOCATION STANLEY & KATHRYN HANSLER 145,178 Temp. X-Over 175 To Be Built Under Proj. F-77(24)

NOTE: 2560 CYS. OF PAVEMENT REMOVAL REQD. FOR THE REMOVAL OF TEMP. PAVEMENT CONSTRUCTED UNDER F PROJ. 77 (24)

NOTE: 419 CYS. OF BRACKING PAVEMENT REQD. FROM STA. 1521+00 TO STA. 1530+00

STANDARD CROSS SECTION E-11 IR Rev. 8-11-61 AS SHOWN ON SHEET No. 2 TO BE USED IN THIS PROJECT. TYPICAL CROSS SECTIONS AS SHOWN ON SHEET No. 3 TO BE USED ON THIS PROJECT. State Highway Commission of Indiana Standard Specifications dated 1960 used with these plans. Standards under dates as listed in index on Title Sheet to be used in this project. Grade line as shown on profile represents top of finished surface. All ditches of 1% and over shall be sodded except where ditch is in rock cut or where Paved Side Ditch is to be constructed. All shoulders, cut and fill slopes shall be plain or mulched sodded except where sodding is specified. Excavation quantities as shown on plan and profile sheets include estimated excavation for private and public approaches (see Table on Sheet No. 23). Paper relocation to be cross-sectioned by the Project Engineer before construction. Where existing surface is located outside the limits of new construction between Station 1521+00 to 1530+00, the contractor will be required to remove the present roadway surface and base as directed by the Engineer. Grade B Special Borrow for Structures to be constructed as shown under Section 23. Misc. Standards Sheet, 'N'. Length of pipe requiring anchors was determined on the basis of 2:1 slopes. Quantities for pipe culvert headwalls are based on using standard headwalls for retaining 2:1 slopes and private drive headwalls for retaining 4:1 slopes. For kind of pipe permitted for each site and classification as shown in structure notes, see Misc. standards sheet 'D' and 'P'. On curves, the fill in the outside lane to be reversed. Telephone lines along line 'F' owned by United Telephone Co., Inc. Power lines along line 'F' owned by Northern Indiana Public Service Co. County Roads to be turned back to County beyond R/W Markers as shown on Plans. 0+1501' to 0+44.93'



BALANCE No. 1

Cut	= 2382	CYS.
Fill +20%	= 3158	CYS.
Spec. Borrow	= 28826	CYS.

UTILITIES
 United Telephone Co., Inc.
 Warsaw, Ind.
 Northern Indiana Public Service Co.
 5265 Hoffman Ave. Hammond, Ind.

ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED. ACCESS WILL BE PERMITTED LT. STA. 1522+05 (CLASS II) LT. STA. 1525+56 (CLASS II) LT. STA. 1526+77 (CLASS II) LT. STA. 1528+20 (CLASS II) LT. STA. 1528+94 (CLASS II) LT. STA. 1531+00 (CLASS II) LT. STA. 1543+20 (CLASS II) RT. STA. 1543+62 (CLASS II) LT. STA. 1543+62 (CLASS II)

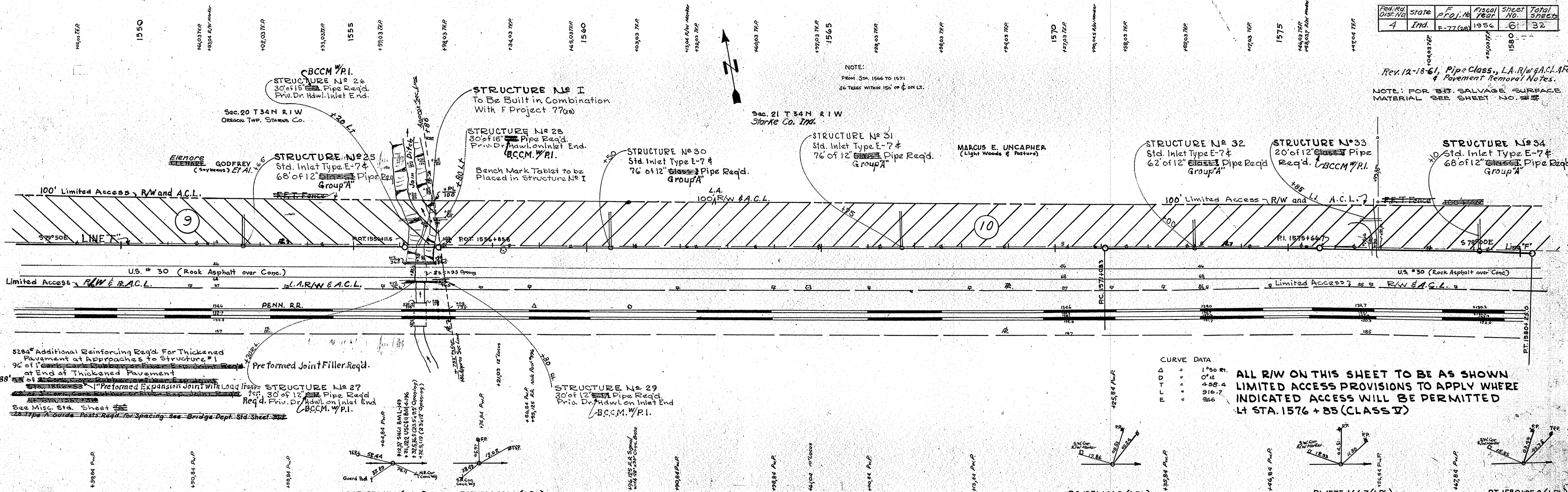
Disc in Top of W. End of S. Hdwy. 82 Rt. Sta. 1518+95
 U.S.C.G. BM *B-196 Elev. 697.22
 U.S.C.G. Elev. 697.059

B.M. *92 Elev. 700.94 Nail in N. Side P.W.P. No. 86 Rt. Sta. 1529+72
 B.M. *93 Elev. 701.28 Nail in N. Side P.W.P. No. 86 Rt. Sta. 1539+18
 B.M. *94 Elev. 701.08 Br. Spk. in N. Side P.W.P. No. 85 Rt. Sta. 1549+39

9-34
 H.R.M.
 M.F.Q.
 75607
 9-34
 H.R.M.
 M.F.Q.
 75607
 9-34
 H.R.M.
 M.F.Q.
 75607

Fed. Rd. Dist. No.	State	F. Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	Ind.	F-77(68)	1956	6	32

Rev. 12-18-61, Pipe Class., L.A. R/W & A.C.L. & Fence & Pavement Removal Notes.
NOTE: FOR BIT SALVAGE SURFACE MATERIAL SEE SHEET NO. 5



5284' Additional Reinforcing Req'd. For Thickened Pavement at Approaches to Structure #1
9' of 1" Concrete at End of Thickened Pavement
Preformed Joint Filler Req'd.
Preformed Expansion Joint with Load Trans. Req'd. for 30' of 12" Pipe Req'd. on Inlet End
See Misc. Std. Sheet
Type A Curves Posts Req'd. for Spacing. See Bridge Dept. Std. Sheet

CURVE DATA

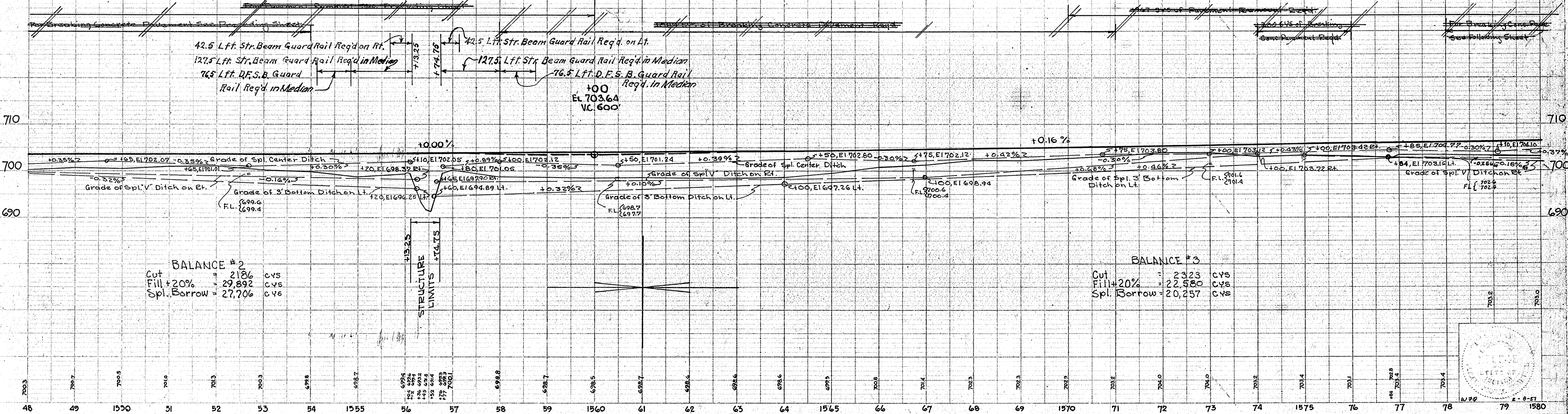
Δ	1°50' R.
FL	0'15"
ET	4'58" L
PT	916'-7"
PC	966'

ALL R/W ON THIS SHEET TO BE AS SHOWN LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED ACCESS WILL BE PERMITTED LT STA. 1576 + 85 (CLASS V)

1811 Syds. of Pavement Removal Req'd. from Sta. 1550+00 to Sta. 1561+00 and 2111 Syds. from Sta. 1569+00 to Sta. 1580+00.

557 Syds. of Breaking Pavement Req'd. from Sta. 1550+00 to Sta. 1554+00, and 789 Syds. from Sta. 1557+00 to Sta. 1563+00, and 211 Syds. from Sta. 1569+00 to Sta. 1571+00, and 257 Syds. from Sta. 1571+00 to Sta. 1580+00.

B.M. #94 Elev. 701.08' Bt. Spike in N. Side P.W.P. No. 283 85' Rt. Sta. 1549+39
USC & G.S.M. "A" #6 Elev. = 702.38 Line "F" Disc. in Top of NE. Cor. of W. Br. Seat 125' Rt. Sta. 1556+77
B.M. #95 Elev. 701.23' Bt. Spike in N. Side P.W.P. No. 286 86' Rt. Sta. 1566+00
B.M. #96 Elev. 704.64' Bt. Spike in N. Side P.W.P. No. 287 83' Rt. Sta. 1576+54

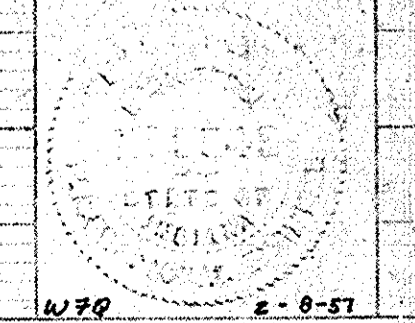


BALANCE #2

Cut	2126	CYS
Fill +20%	29,892	CYS
Spl. Borrow	27,706	CYS

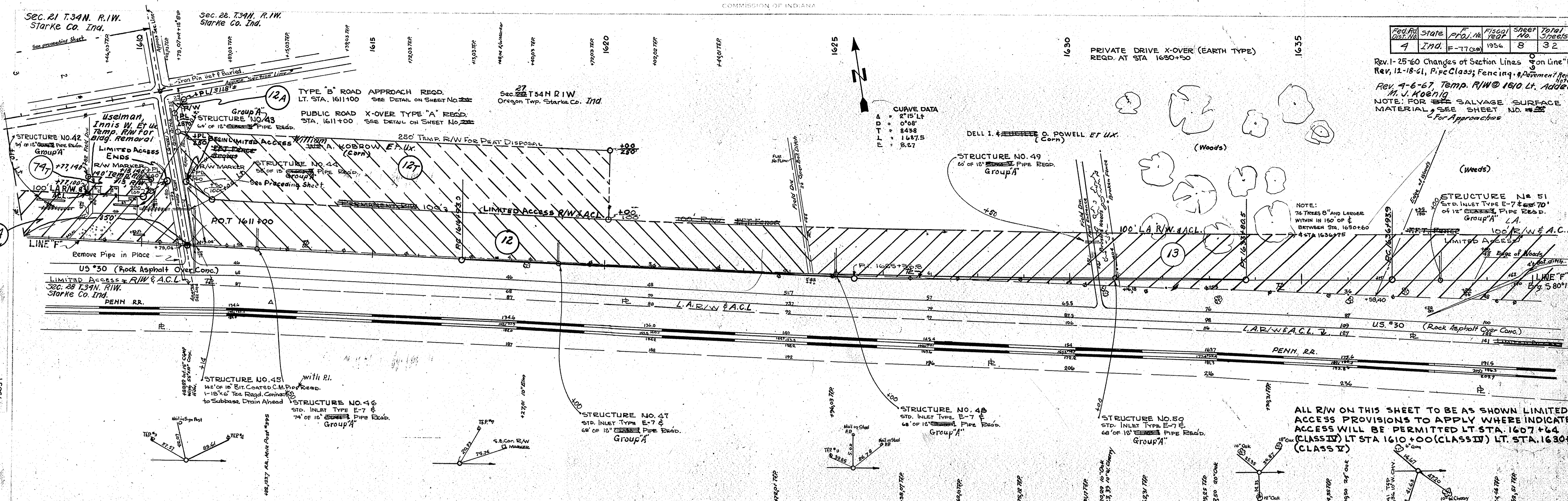
BALANCE #3

Cut	2323	CYS
Fill +20%	22,580	CYS
Spl. Borrow	20,257	CYS



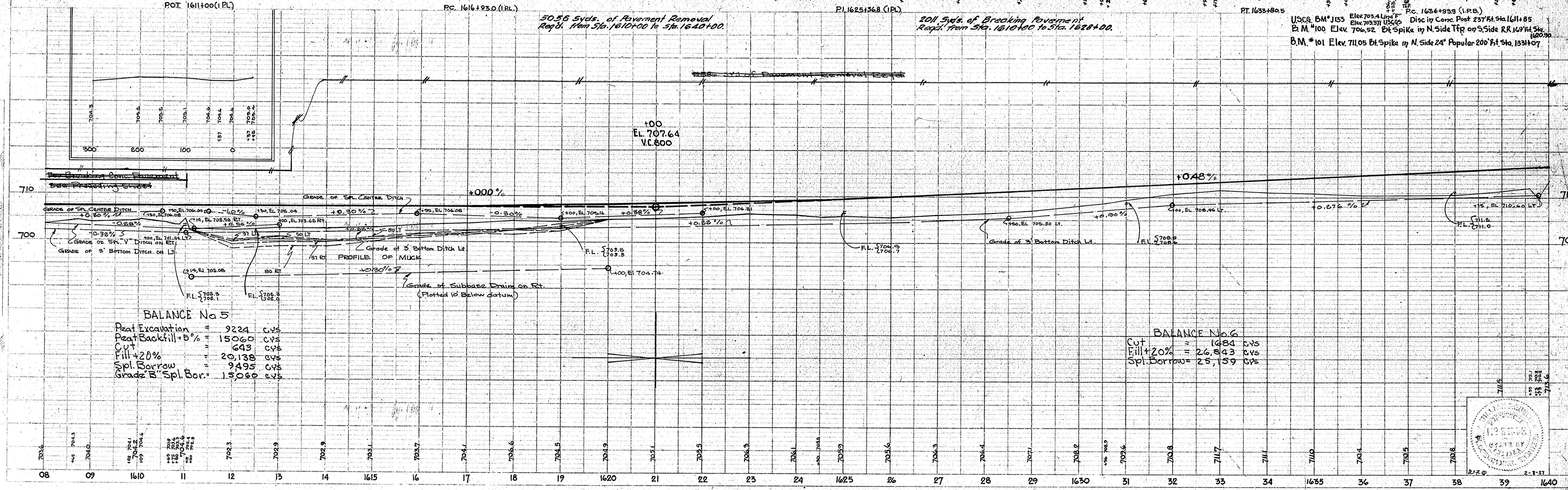
Fed. Rd. Dist. No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	IND.	F-77 (20)	1954	8	32

Rev. 1-25-60 Changes of Section Lines on Line "F"
 Rev. 12-18-61, Pipe Class, Fencing, & Pavement Removal
 Rev. 4-6-67 Temp. R/W @ 1610 Lt. Added.
 M. J. Koenig
 NOTE: FOR SALVAGE SURFACE MATERIAL, SEE SHEET NO. 7
 For Approaches



ALL R/W ON THIS SHEET TO BE AS SHOWN LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED CLASS IV LT STA 1610+00 (CLASS IV) LT STA 1630+50 (CLASS V)

USCG BM #153 Elev. 705.41
 B.M. #100 Elev. 706.52
 B.M. #101 Elev. 710.05

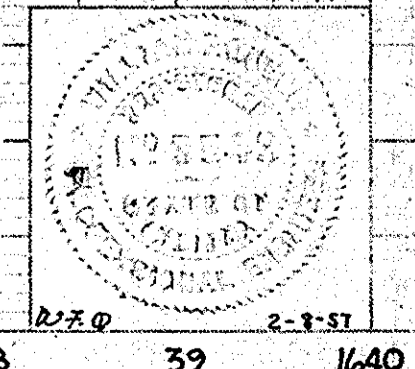


BALANCE No 5

Peat Excavation	9224	CYS
Peat Backfill - 5%	15060	CYS
Cut	643	CYS
Fill + 20%	20,138	CYS
Spl. Borrow	9495	CYS
Grade B' Spl. Bor.	15,060	CYS

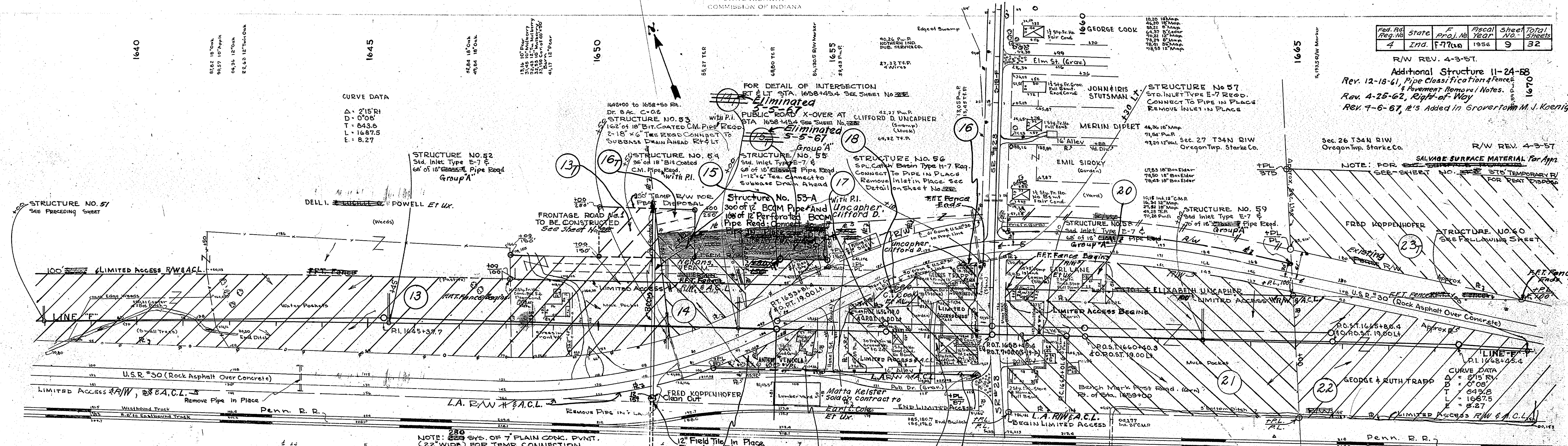
BALANCE No 6

Cut	1484	CYS
Fill + 20%	26,843	CYS
Spl. Borrow	25,159	CYS



Proj. No.	State	Proj. No.	Year	Sheet	Total
4	Ind.	F-77(10)	1954	9	32

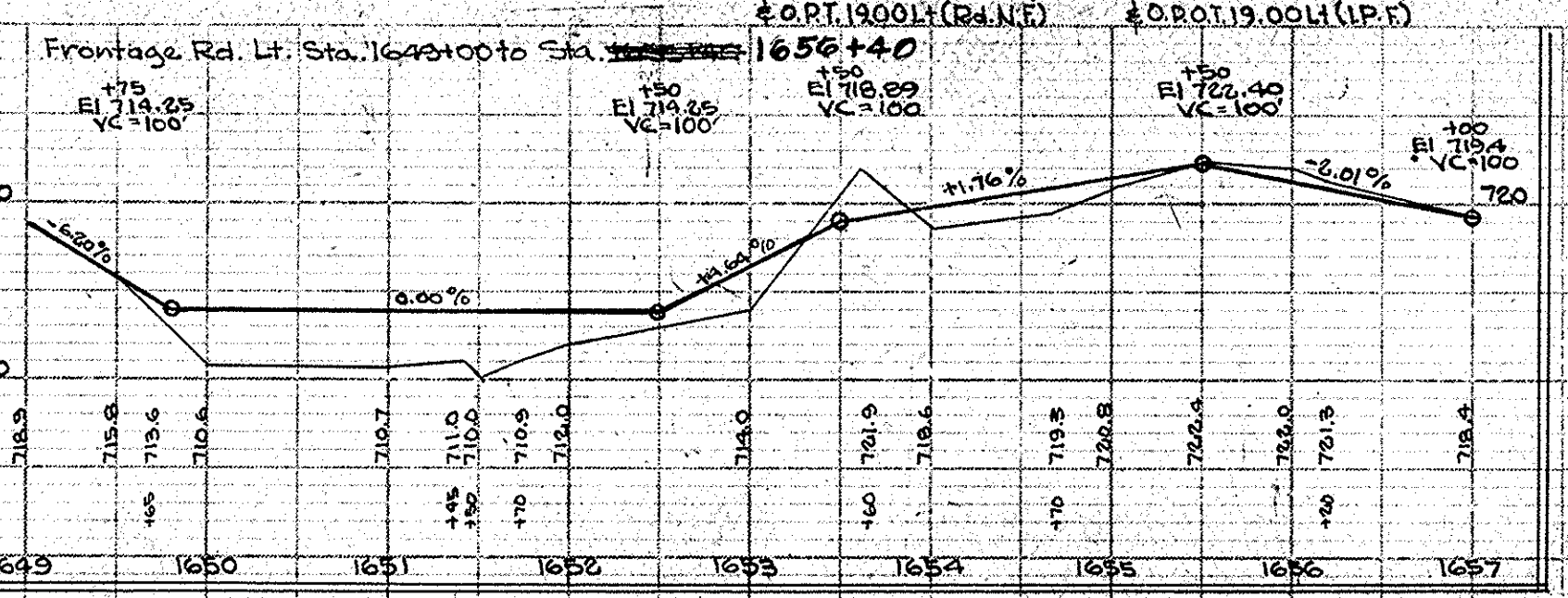
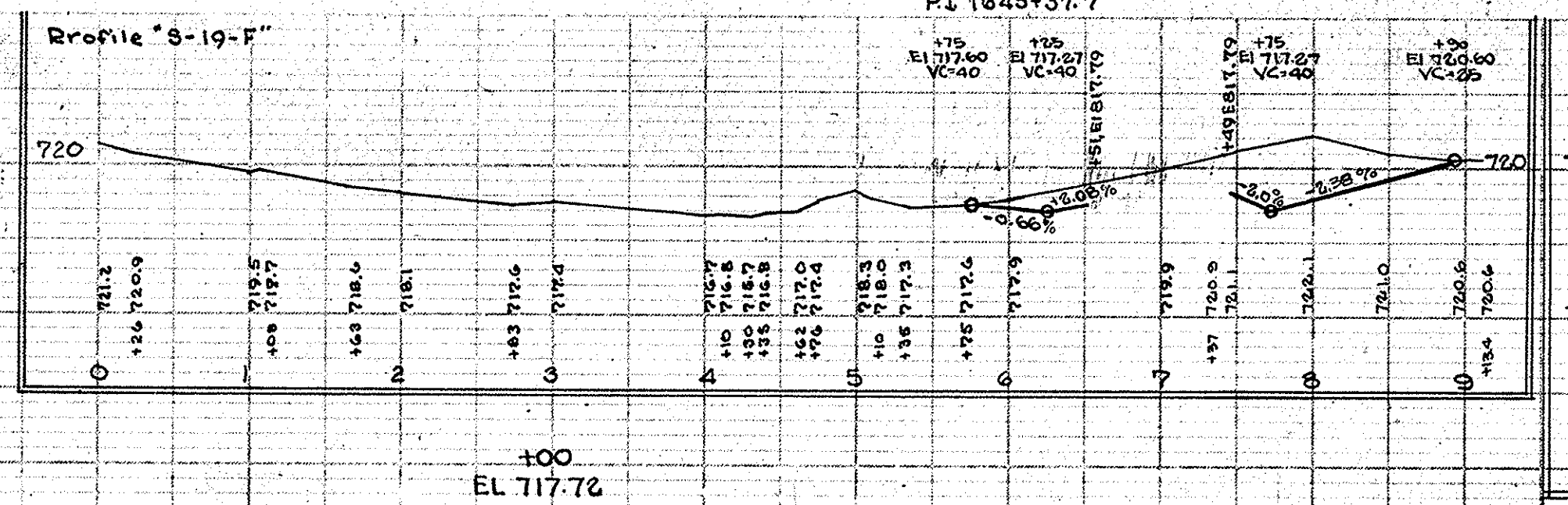
R/W REV. 4-3-57
Additional Structure 11-24-58
Rev. 12-18-61, Pipe Classification, Grades
& Pavement Removal Notes.
Rev. 4-25-62, Right-of-Way
Rev. 7-6-67, 12's Added in Grovertown M. J. Koenig



NOTE: 280 SYD. OF 7" PLAIN CONC. P.V.M.T. (22" WIDE) FOR TEMP. CONNECTION TO PRESENT U.S.R. #30 FROM STA. 1654+00 TO STA. 1654+00
280 SYD. OF PAVEMENT REMOVAL FROM STA. 1654+00 TO STA. 1654+00
SEE DETAILS ON SHEET NO. 23A

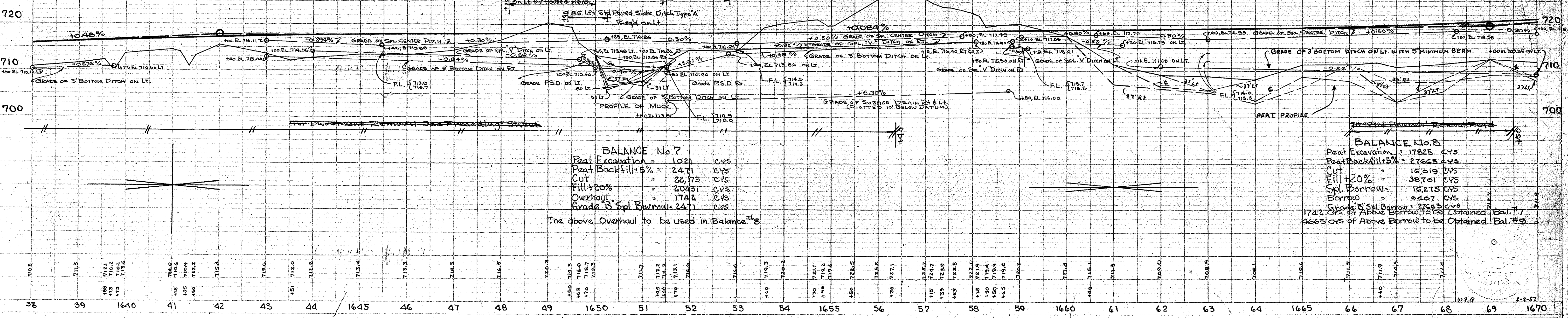
EXCESS LAND
Purchased

ALL R/W ON THIS SHEET TO BE AS SHOWN
LIMITED ACCESS PROVISIONS TO APPLY
WHERE INDICATED



4276 Syds. Pavement Removal Reg'd.
From Sta. 1640+50 to Sta. 1656+40,
and 856 Syds. from Sta. 1666+00 to Sta. 1669+50.

B.M. #102 Elev. 717.66 B. Spk. in N. Side T.F.P. on S. Side RR. 235' Rt. Sta. 1644+47
U.S.C.G. B.M. #7 Elev. 719.64 Disc. in Conc. Post 254' Rt. Sta. 1655+75
U.S.C.G. Elev. 719.559
B.M. #103 Elev. 713.89 B. Spk. in N. Side T.F.P. 250' Rt. Sta. 1666+75

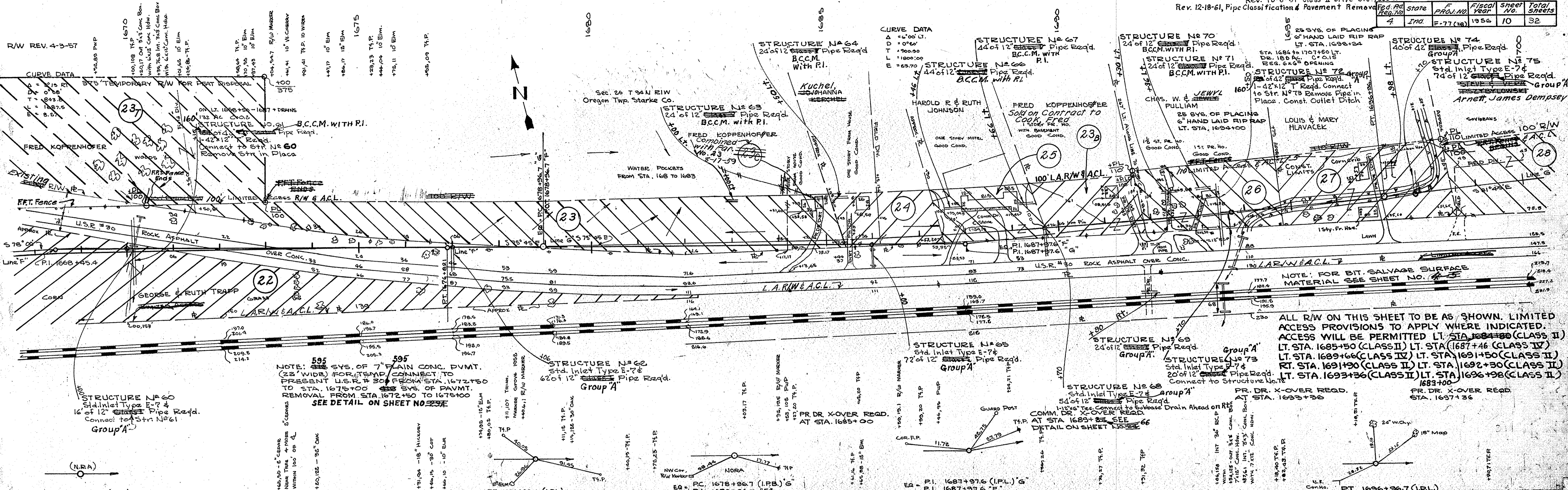


BALANCE No. 7
Peat Excavation = 1021 C.Y.S.
Peat Backfill 5% = 24.71 C.Y.S.
Cut = 22.73 C.Y.S.
Fill +20% = 204.31 C.Y.S.
Overhaul = 174.8 C.Y.S.
Grade 3 Spl. Borrows = 24.1 C.Y.S.
The above Overhaul to be used in Balance #8

BALANCE No. 8
Peat Excavation = 1782.5 C.Y.S.
Peat Backfill 5% = 276.5 C.Y.S.
Cut = 16.19 C.Y.S.
Fill +20% = 38.701 C.Y.S.
Spl. Borrows = 16.215 C.Y.S.
Borrow = 64.67 C.Y.S.
Grade 3 Spl. Borrows = 276.3 C.Y.S.
1742 C.Y.S. of Above Borrow to be Obtained Bal. #9
4663 C.Y.S. of Above Borrow to be Obtained Bal. #9

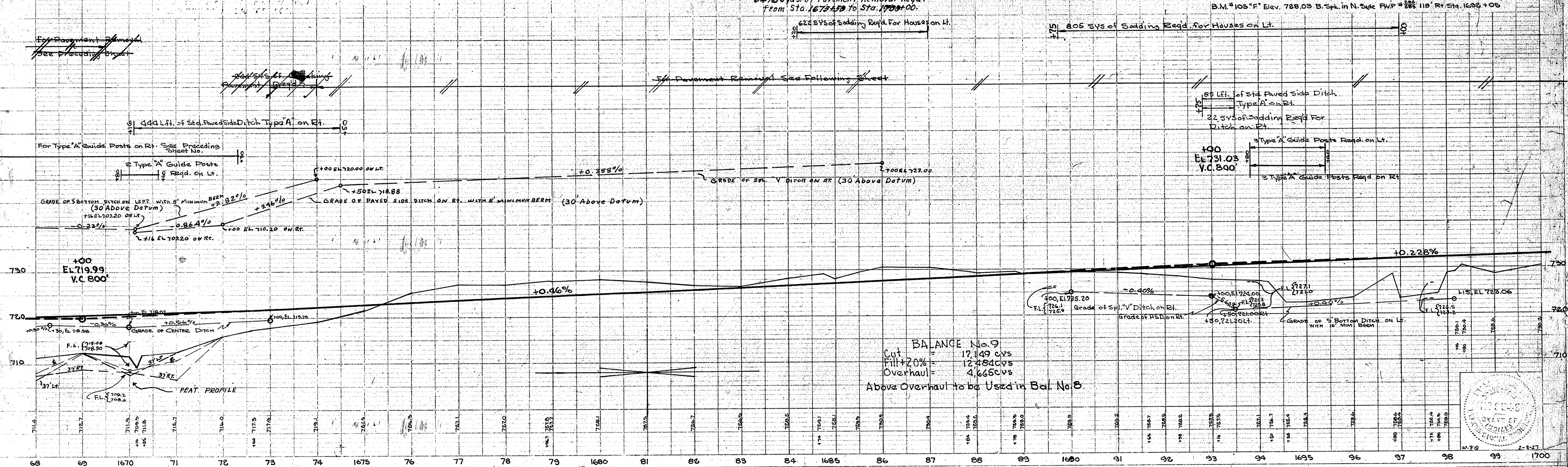
PLAN
NOTE BOOK
7937

PROFILE
NOTE BOOK
7937

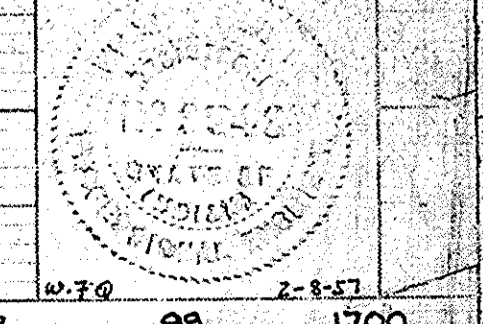


NOTE: 595 SYS. OF 7" MAIN CONC. PVMT. (22" WIDE) FOR TRENCH CONNECT TO PRESENT U.S.R. # 30 FROM STA. 1672+50 TO STA. 1675+00. REMOVE FROM STA. 1672+50 TO 1675+00. SEE DETAIL ON SHEET NO. 337.

ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED. ACCESS WILL BE PERMITTED LT. STA. 1684+00 (CLASS II) LT. STA. 1685+50 (CLASS II) LT. STA. 1687+46 (CLASS IV) LT. STA. 1689+66 (CLASS II) LT. STA. 1691+50 (CLASS II) LT. STA. 1693+36 (CLASS II) LT. STA. 1696+98 (CLASS II).



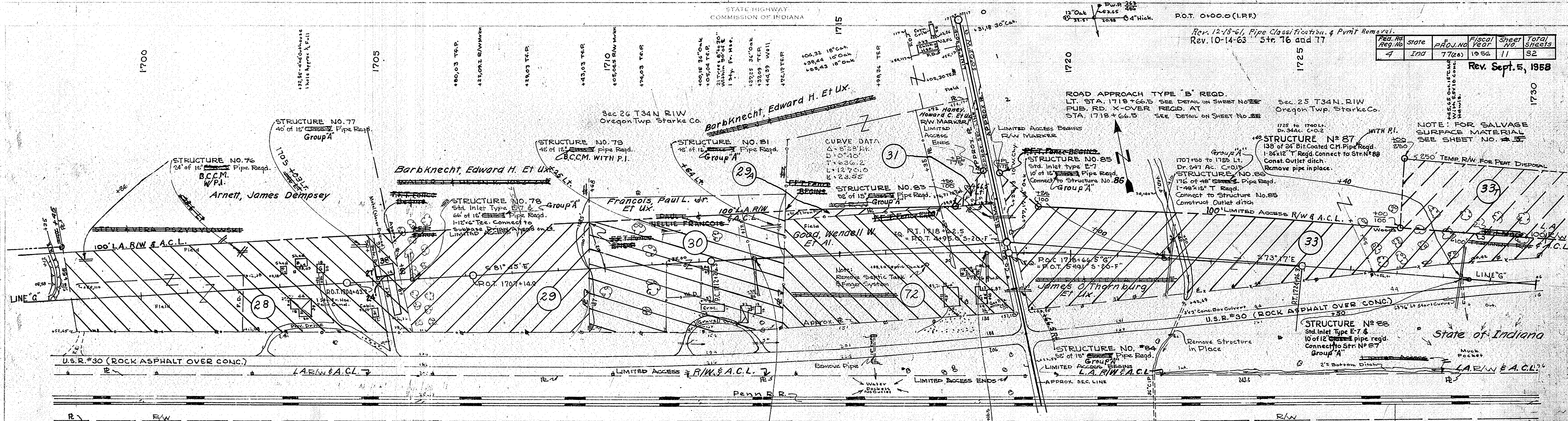
BALANCE No. 9
 Cut = 17,149 cys
 Fill + 20% = 12,480 cys
 Overhaul = 4,665 cys
 Above Overhaul to be Used in Bal. No. 8



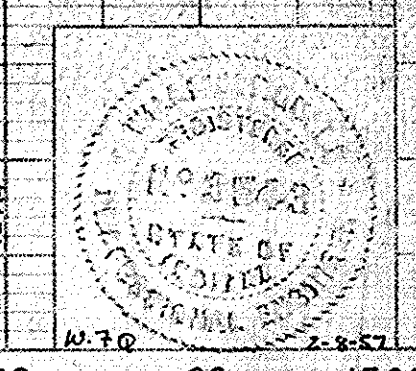
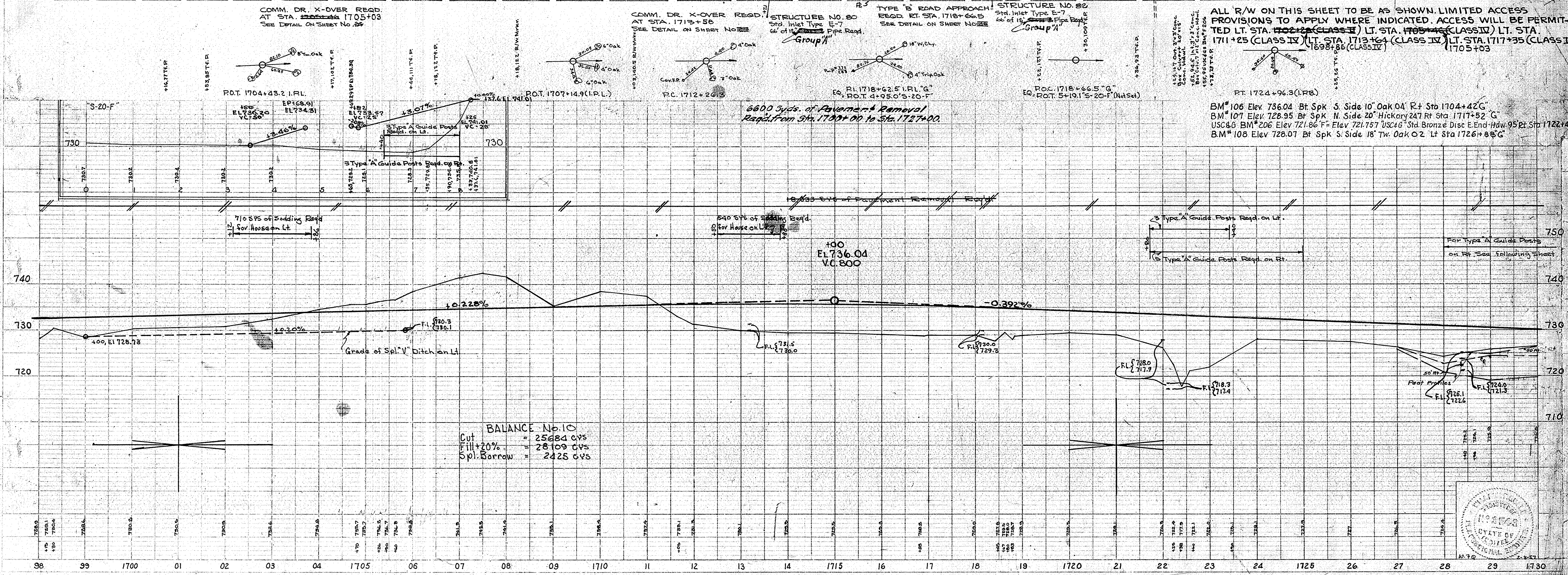
Rev. 12-18-61, Pipe Classification & Permit Removal.
Rev. 10-14-63 Str. 76 and 77

Proj. No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
77(2)	IND	77(2)	1958	11	32

Rev. Sept. 5, 1958



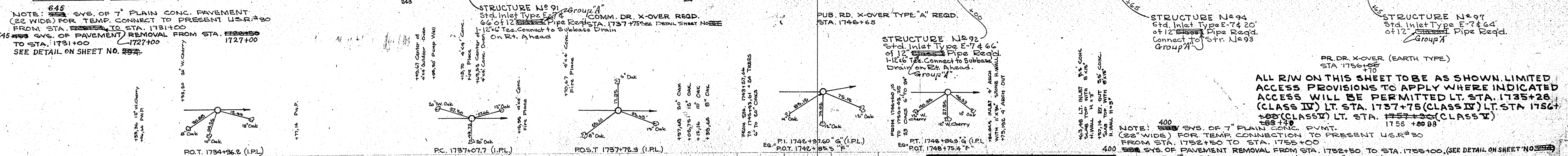
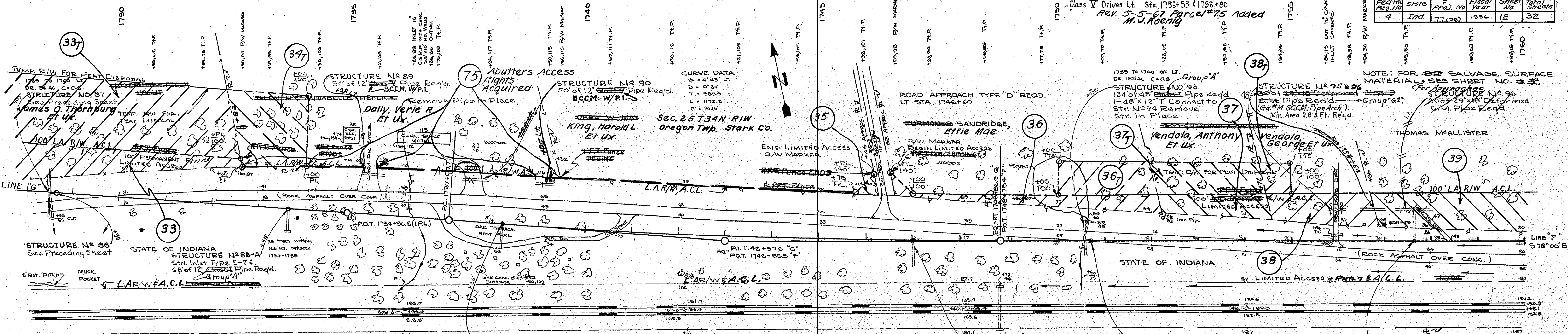
ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED. ACCESS WILL BE PERMITTED LT. STA. 1702+25 (CLASS II) LT. STA. 1705+46 (CLASS IV) LT. STA. 1711+25 (CLASS IV) LT. STA. 1713+64 (CLASS IV) LT. STA. 1717+35 (CLASS IV) 1705+03



Proj. No.	Line	Sheet
77(2)	F	11

Revised 4-27-60
Class V Drives Lt. Sta. 1756+55 to 1756+80
Rev. 5-5-67 Parcel #75 Added
M. J. Koenig

Fed. Rd. Act No.	State	Fiscal Year	Sheet No.	Total Sheets
4	Ind.	1954	12	32



464 Syds. of Pavement Removal Req'd from Sta. 1731+00 to Sta. 1750+00.

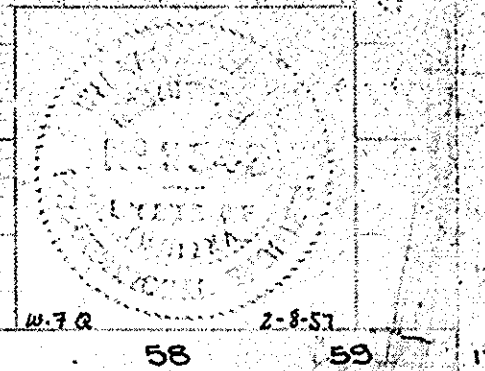
733 Syds. Pavement Removal Req'd from Sta. 1737+00 to Sta. 1760+00.

BALANCE #11

Peat Excavation	8488	CYS
Cut	16567	CYS
Peat Backfill +5%	9997	CYS
Fill +20%	31936	CYS
Spec. Borrow	15,379	CYS
Grade B Spl. Borrow	9997	CYS

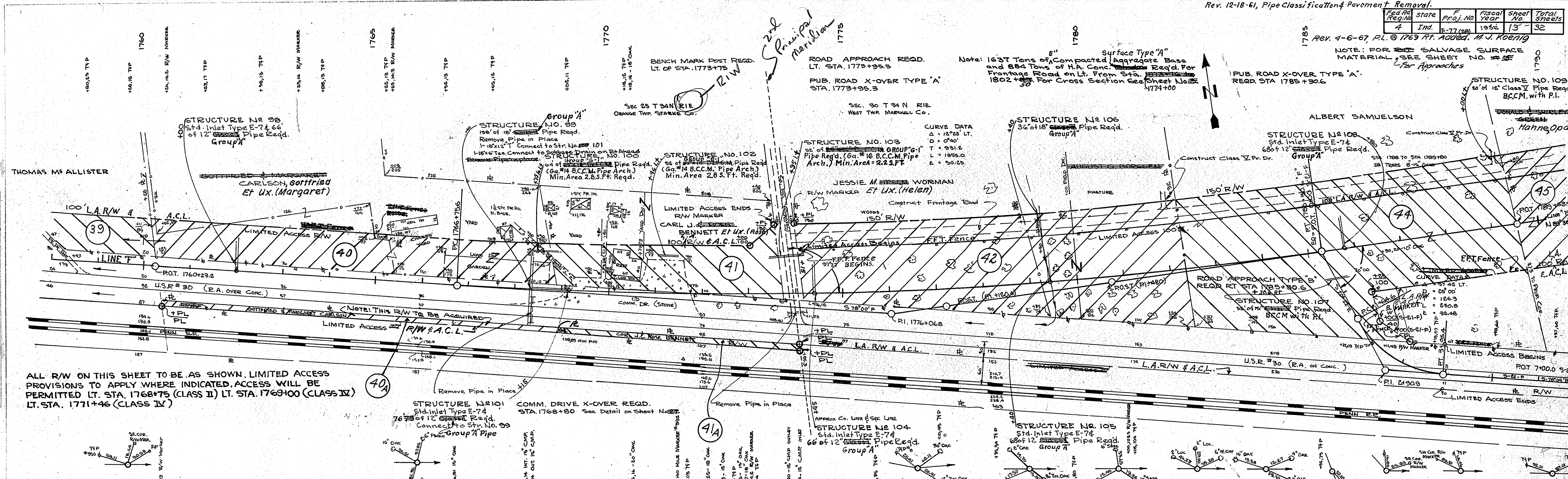
BALANCE #12

Peat Excavation	1755	CYS
Cut	10,110	CYS
Peat Backfill +5%	3122	CYS
Fill +20%	10,041	CYS
Waste	69	CYS
Grade B Spl. Borrow	3122	CYS

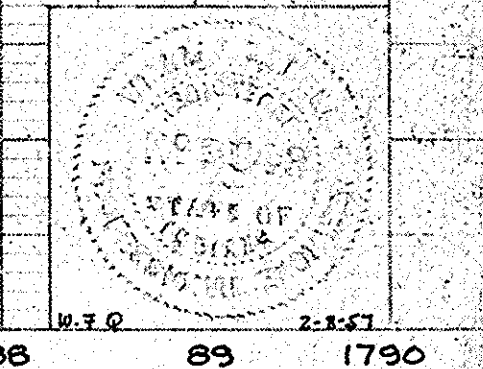
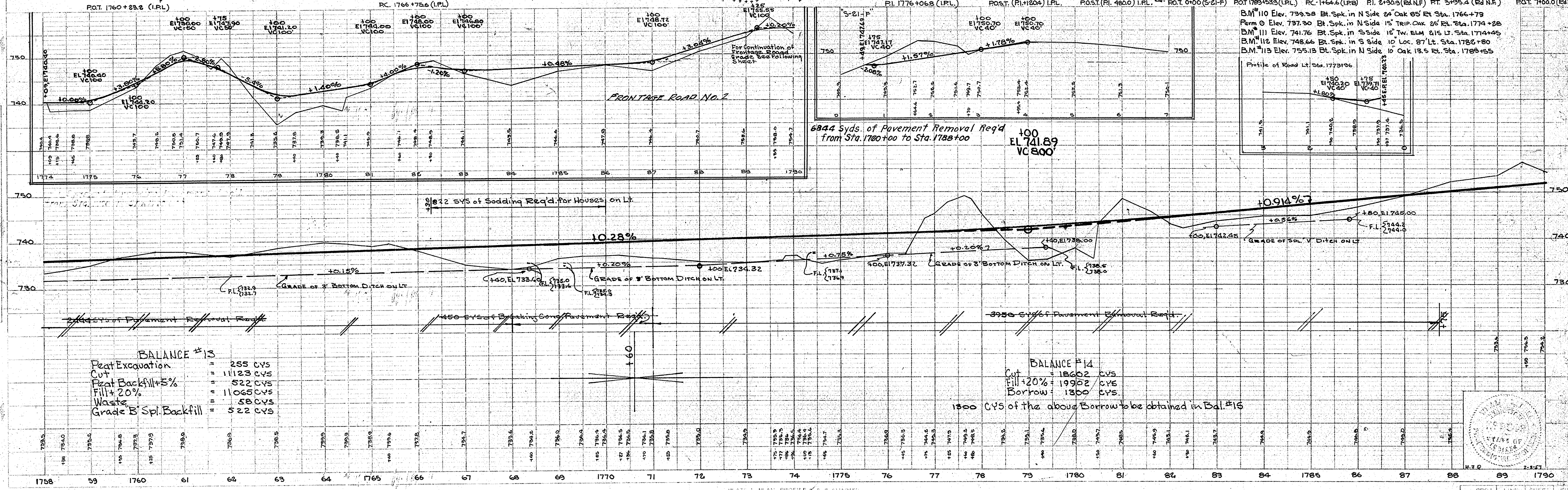


Sheet No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	Ind.	E-77(10)	1956	13	32

NOTE: FOR SALVAGE SURFACE MATERIAL, SEE SHEET NO. 35 For Approaches



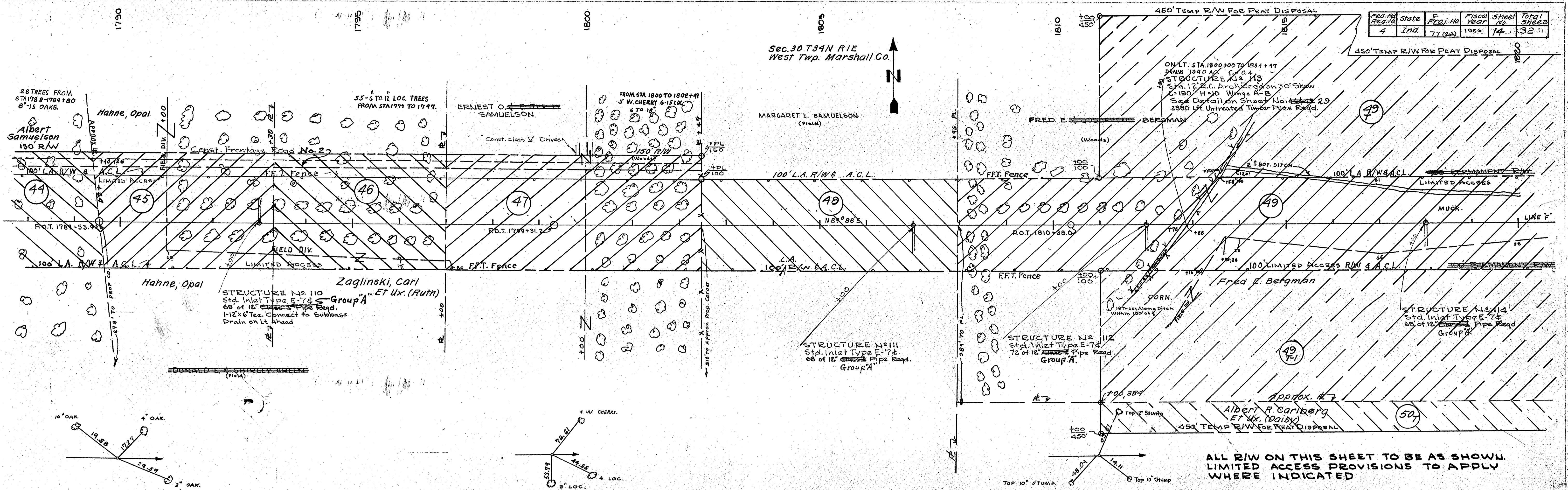
ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED. ACCESS WILL BE PERMITTED LT. STA. 1768+75 (CLASS II) LT. STA. 1771+46 (CLASS IV)



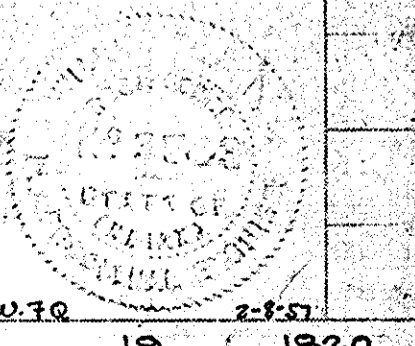
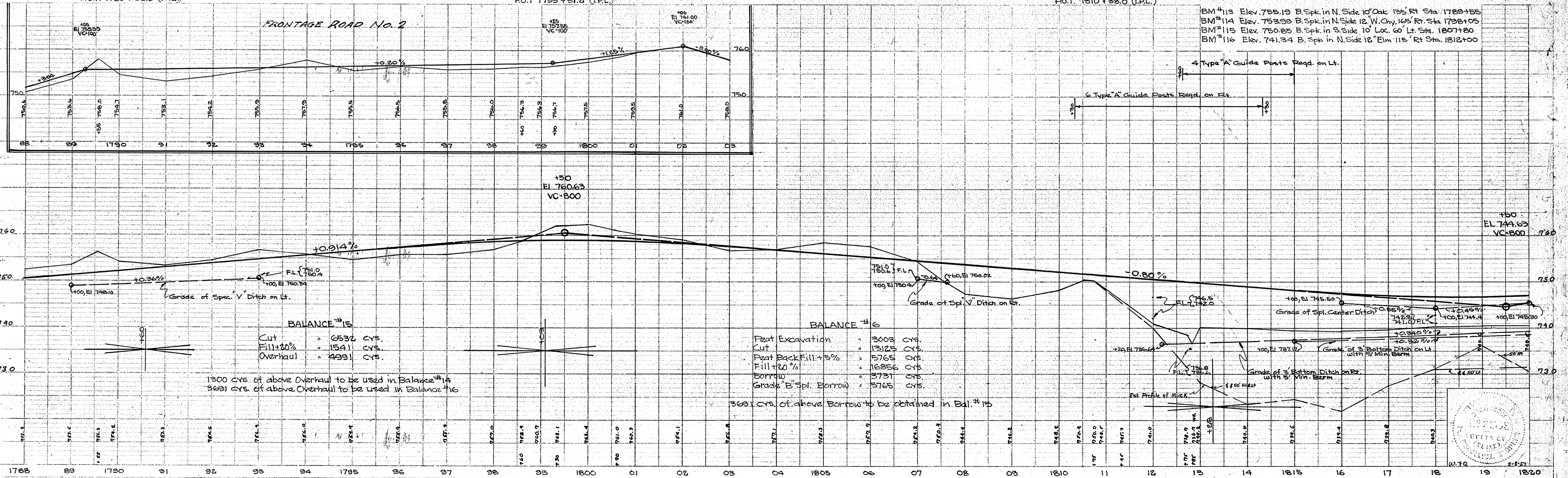
PLAN
H.E.M.
NOTE BOOK
NO. 7580-T
DATE: 2-2-57

PROFILE
H.E.M.
NOTE BOOK
NO. 7581-L
DATE: 2-2-57

Proj. No.	State	F. Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	Ind.	77 (2a)	1954	14	32

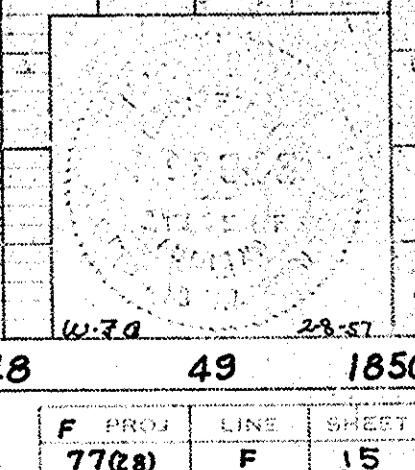
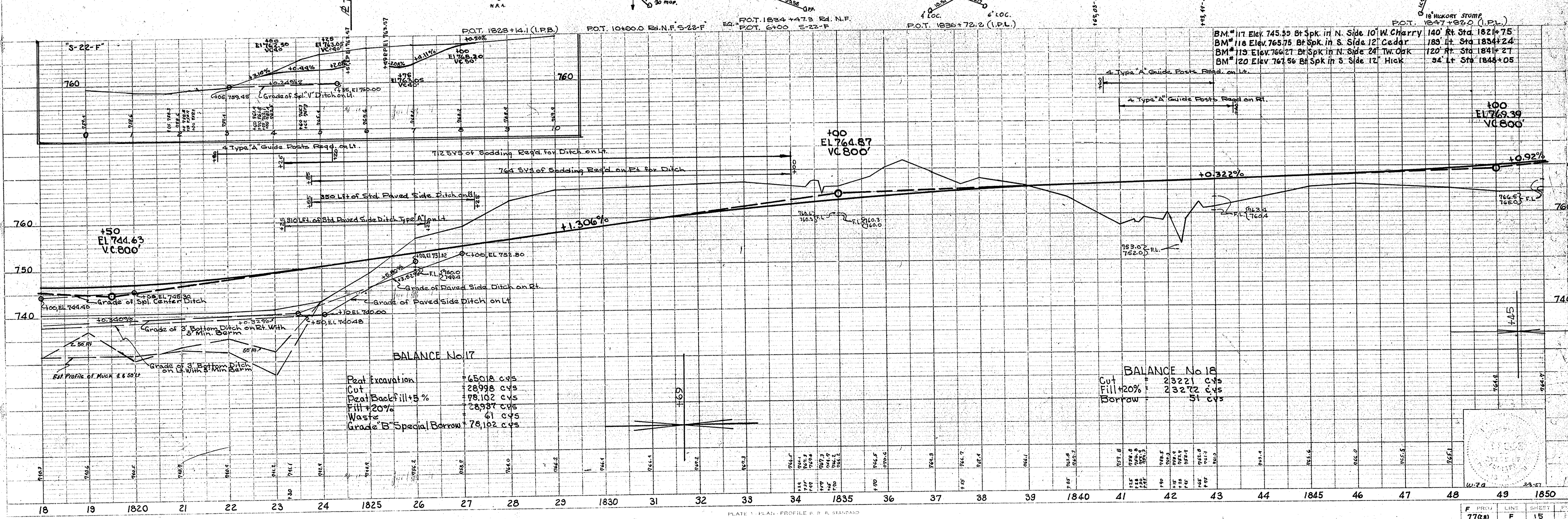
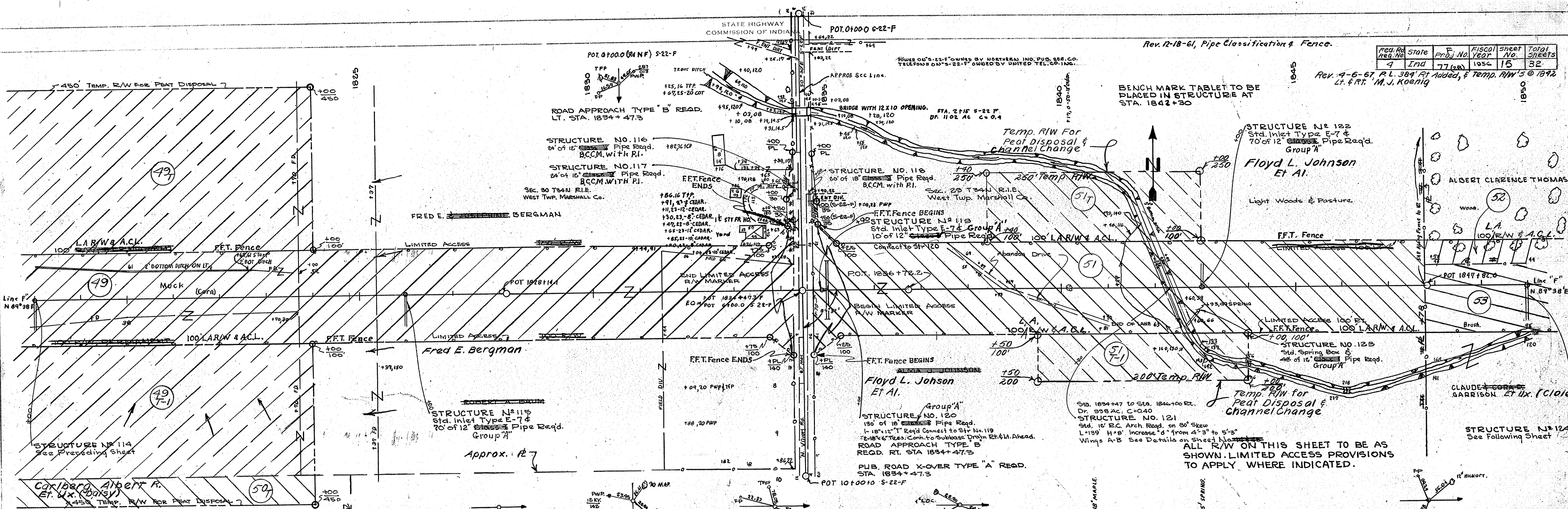


ALL R/W ON THIS SHEET TO BE AS SHOWN.
LIMITED ACCESS PROVISIONS TO APPLY
WHERE INDICATED

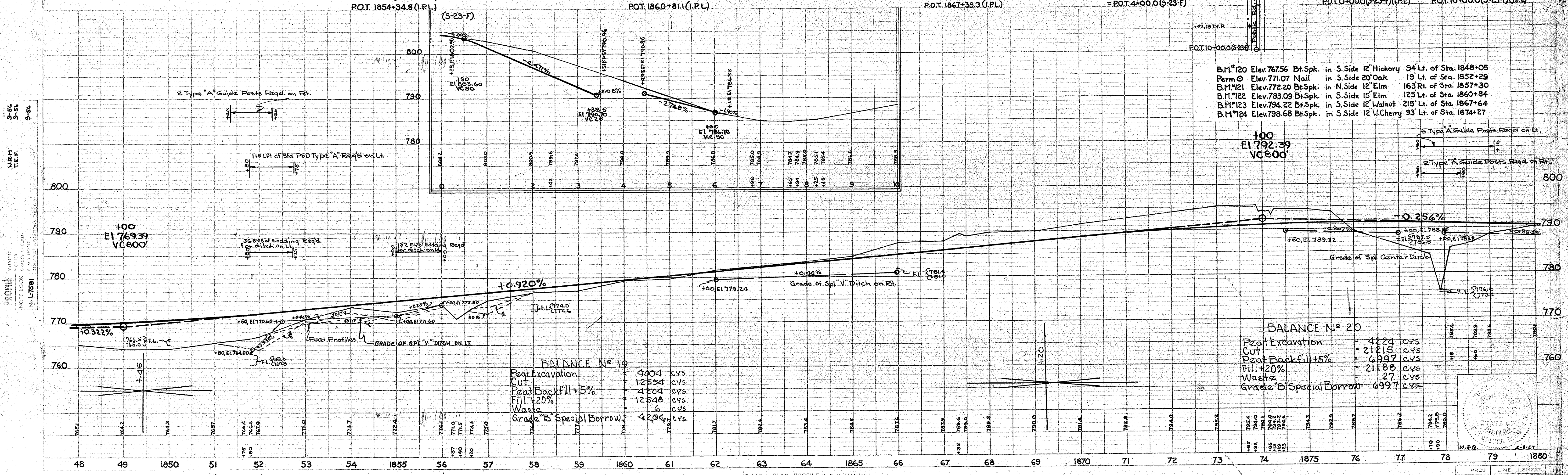
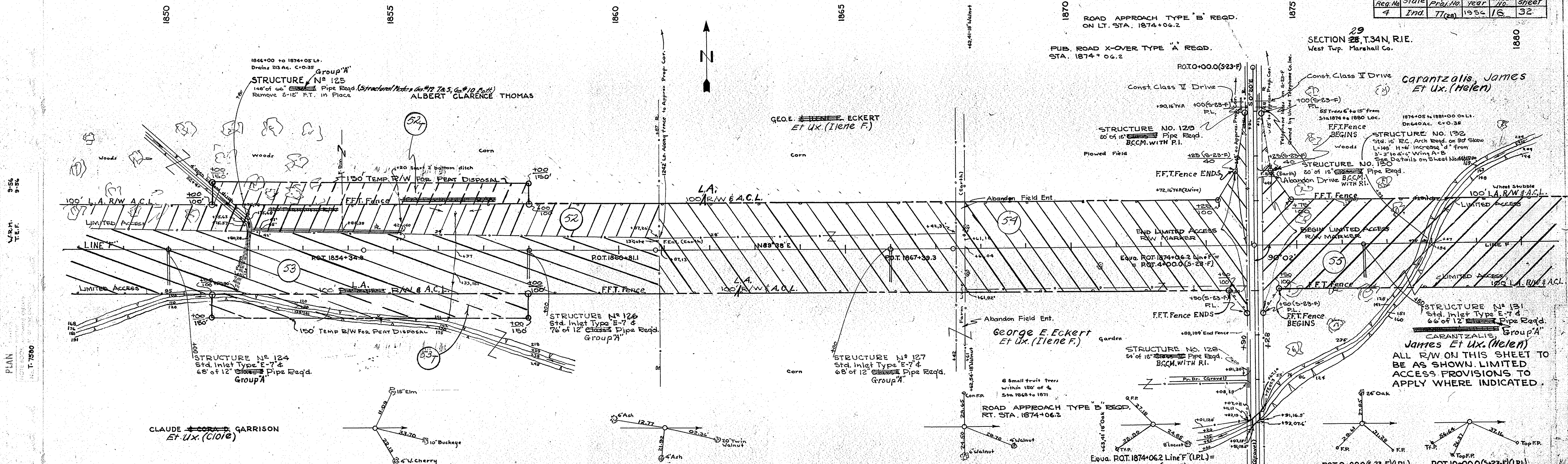


PLAN SHEET
 NOTE BOOK: GRADES CHECKED
 No. 7581

PROFILE SHEET
 NOTE BOOK: GRADES CHECKED
 No. 7581



Fed. Reg. No.	State	F. Proj. No.	Fiscal Year	Sheet No.	Total Sheet
4	Ind.	71(2)	1954	16	32



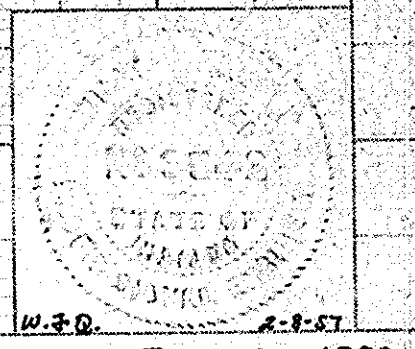
B.M. #120 Elev. 767.56 Bt. Spk. in S. Side 12' Hickory 94' Lt. of Sta. 1848+05
 Perm. Elev. 771.07 Nail in S. Side 20' Oak 19' Lt. of Sta. 1852+29
 B.M. #121 Elev. 772.20 Bt. Spk. in N. Side 12' Elm 163' Rt. of Sta. 1857+30
 B.M. #122 Elev. 783.09 Bt. Spk. in S. Side 15' Elm 125' Lt. of Sta. 1860+84
 B.M. #123 Elev. 794.22 Bt. Spk. in S. Side 12' Walnut 215' Lt. of Sta. 1867+64
 B.M. #124 Elev. 798.68 Bt. Spk. in S. Side 12' W. Cherry 93' Lt. of Sta. 1874+27

100
 El. 769.39
 VC800

Grade of Spl. Center Ditch

BALANCE No 20

Peat Excavation	4224	CYS
Cut	21215	CYS
Peat Backfill +5%	6997	CYS
Fill +20%	21188	CYS
Waste	27	CYS
Grade B Special Borrow	6997	CYS

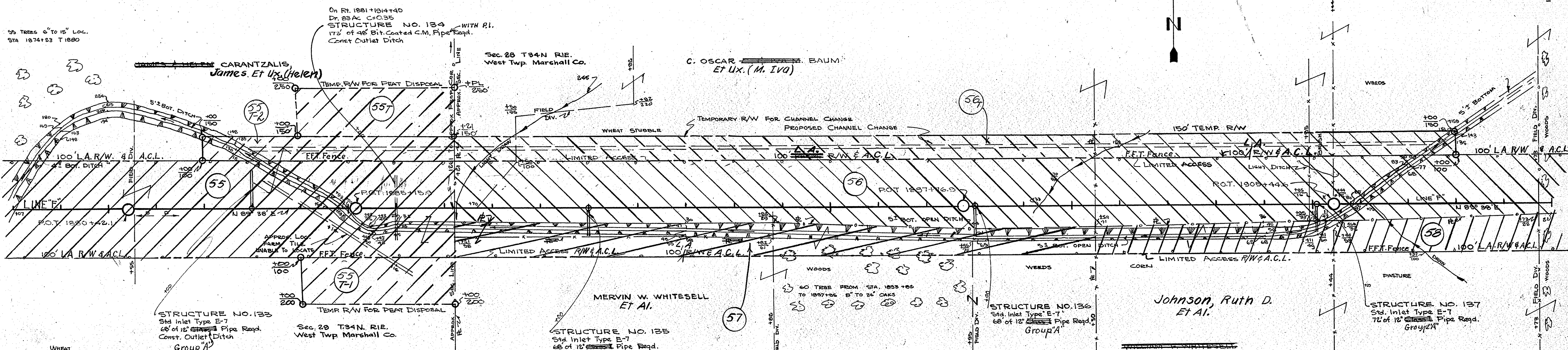


PLAN
 9-52
 9-53
 9-54
 9-55
 9-56

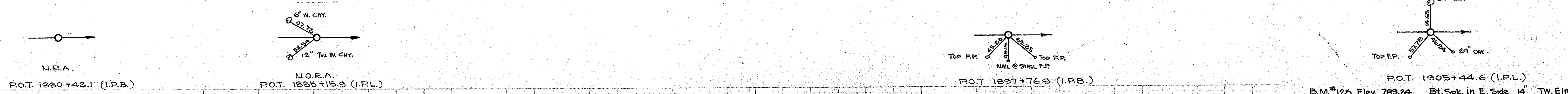
PROFILE
 9-52
 9-53
 9-54
 9-55
 9-56

Fed. Reg. No.	State	F. Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	IND	F-77(68)	1976	17	32

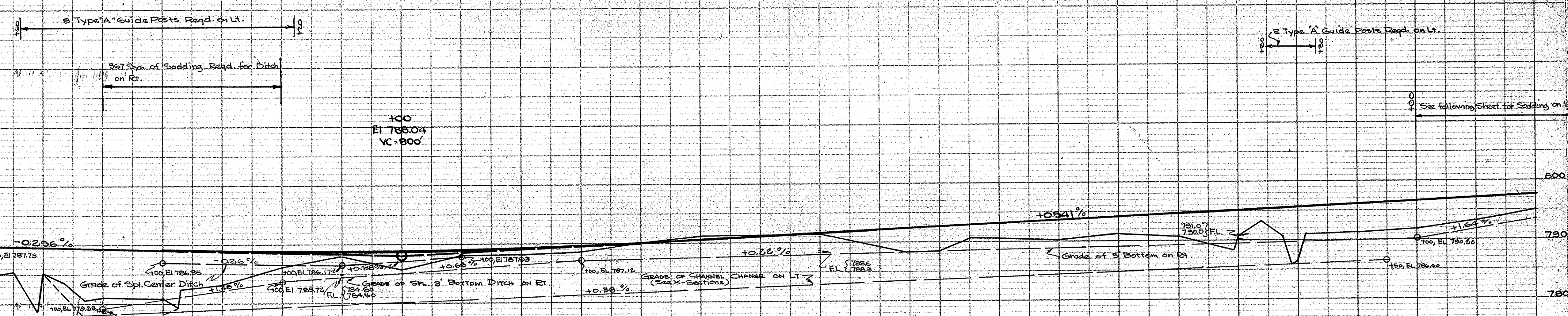
Rev. 12-18-61, Pipe Classification, R/W, Fencing.



ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED



B.M. #125 Elev. 789.24 Bt. Spk. in E. Side 14' TW. Elm 105' Lt. 1882+65
 B.M. #126 Elev. 788.95 Bt. Spk. in N. Side 8' Elm 93' Rt. 1895+65
 B.M. #127 Elev. 790.34 Bt. Spk. in E. Side 16' Elm 104' Lt. 1905+40



BALANCE #21

Peat Excavation	143 CYS
Cut	102.48 CYS
Peat Back Fill + 5%	285 CYS
Fill + 20%	101.72 CYS
Waste	76 CYS
Grade B' Spl. Borrow	285 CYS

BALANCE #22

Cut	13822 CYS
Fill + 20%	13752 CYS
Waste	70 CYS

PLAN
H.M.
W.S.H.
No. 7581

PROFILE
H.M.
W.S.H.
No. 7581

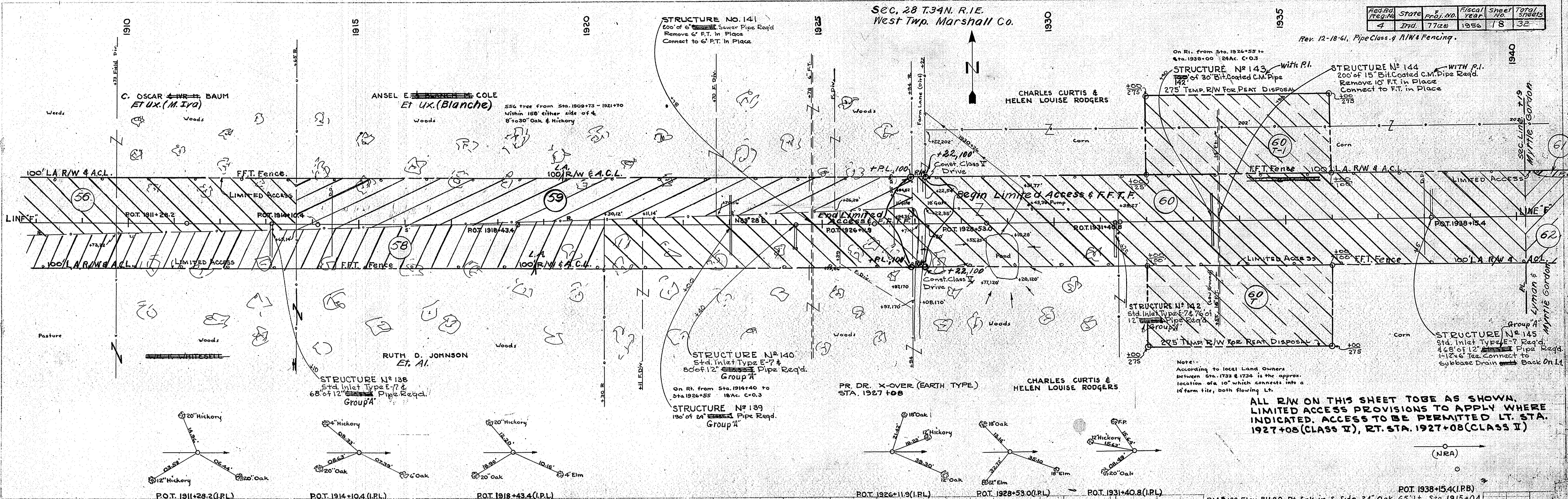
SEC. 28 T.34N. R.1E.
West Twp. Marshall Co.

Fed. Rd. Prog. No.	State Prj. No.	Fiscal Year	Sheet No.	Total Sheets
4	77a	1956	18	32

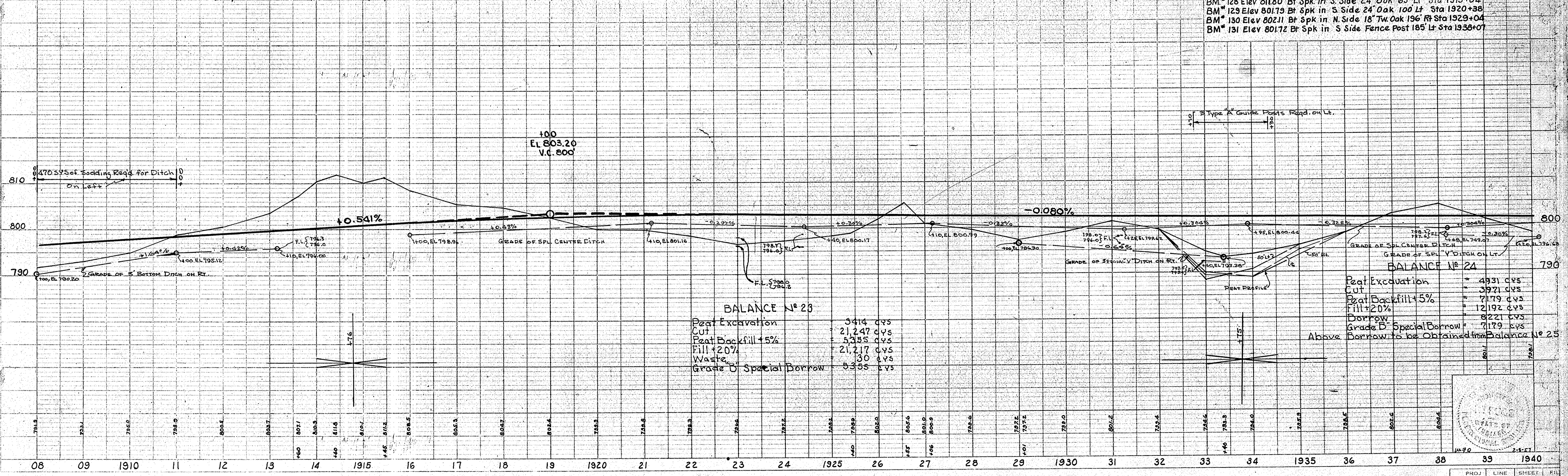
Rev. 12-18-61, Pipe Class. & R/W Fencing.

PLAN
5-56
5-56
HRM
TEF

PROFILE
5-56
5-56
HRM
TEF



ALL R/W ON THIS SHEET TO BE AS SHOWN.
LIMITED ACCESS PROVISIONS TO APPLY WHERE
INDICATED. ACCESS TO BE PERMITTED LT. STA.
1927+08 (CLASS II), RT. STA. 1927+08 (CLASS II)



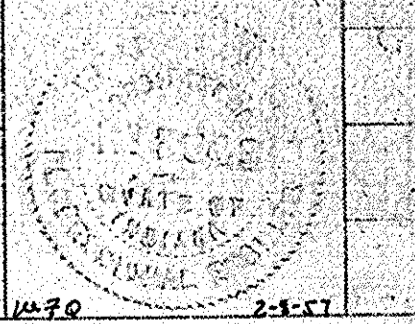
BALANCE N° 23

Peat Excavation	3414 cys
Cut	21,247 cys
Peat Backfill +5%	5,335 cys
Fill +20%	21,217 cys
Waste	30 cys
Grade D Special Borrow	5,335 cys

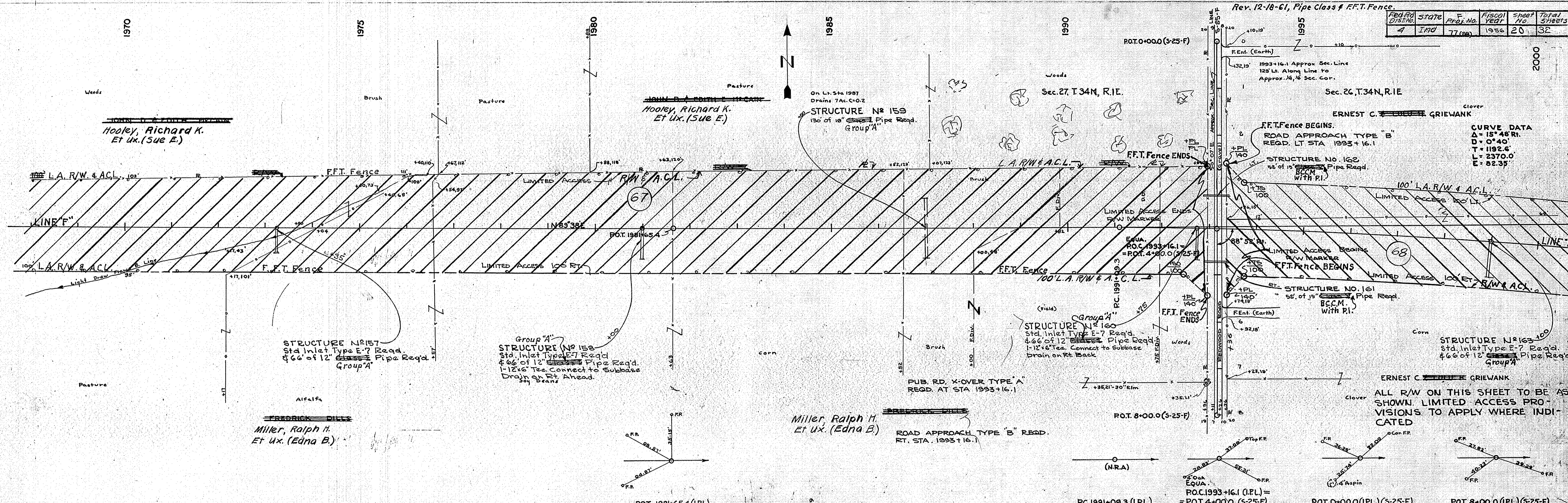
BALANCE N° 24

Peat Excavation	4931 cys
Cut	3971 cys
Peat Backfill +5%	7179 cys
Fill +20%	12,192 cys
Dorrow	8221 cys
Grade D Special Borrow	7179 cys

Above Borrow to be Obtained from Balance N° 25

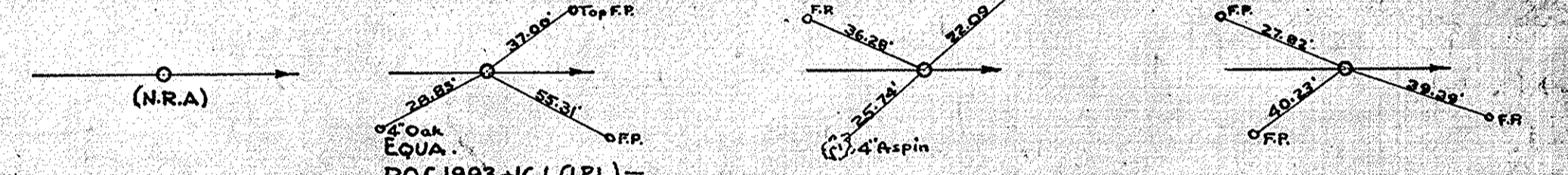
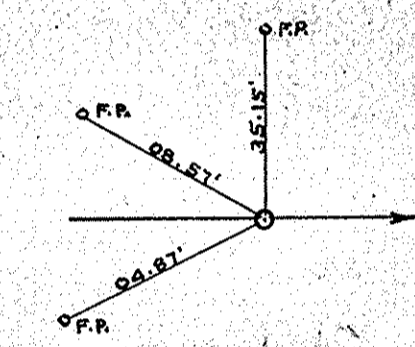


Fed. Rd. Dist. No.	State	F. Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	IND	77(108)	1956	20	32

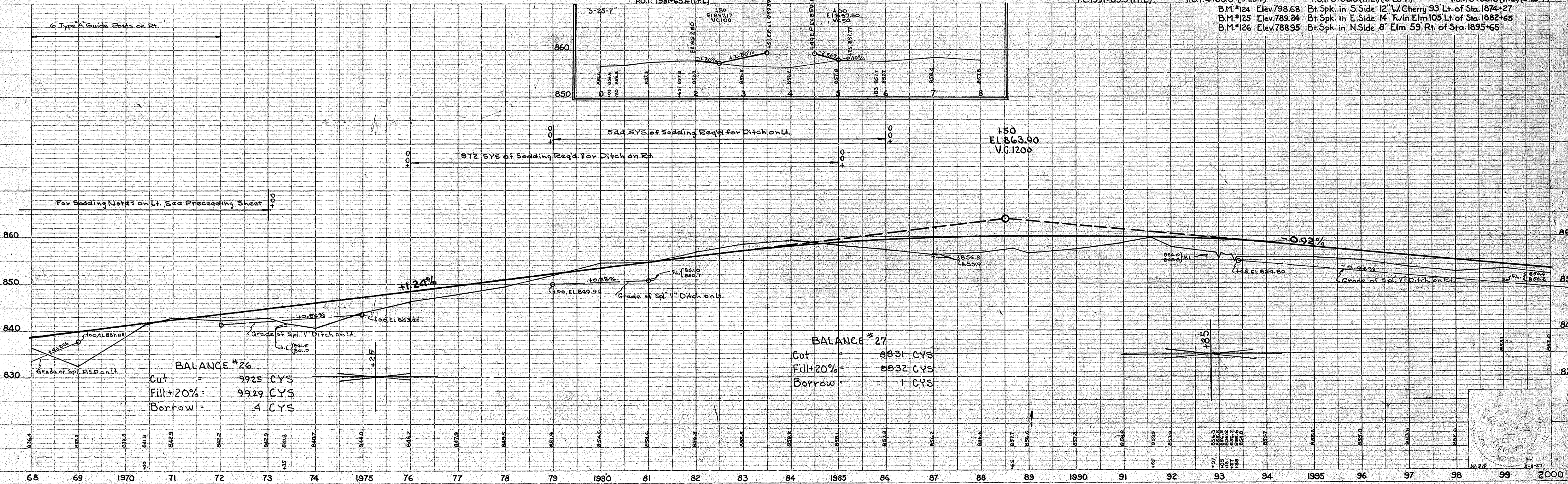


CURVE DATA
 $\Delta = 15^\circ 48' 31''$
 $D = 0^\circ 40'$
 $T = 1192.6'$
 $L = 2370.0'$
 $E = 82.35'$

PLAN
 SUPERVISOR: [Blank]
 ENGINEER: [Blank]
 NOTE BOOK: CHECKED [Blank]
 NO. 17580



ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED.

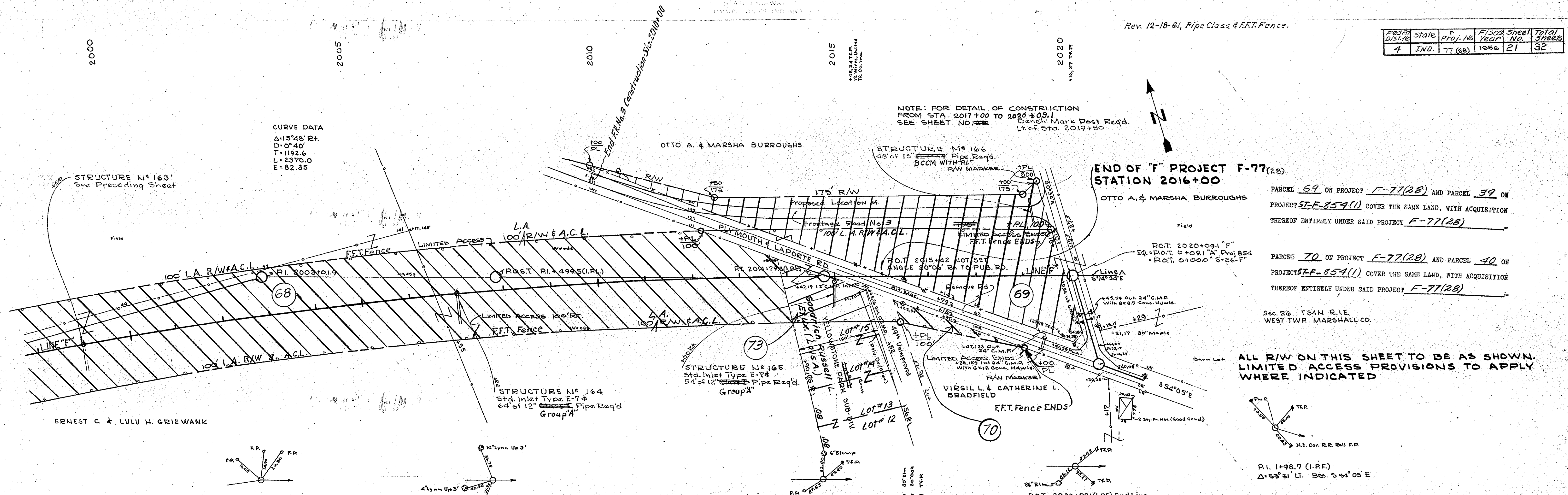


PROFILE
 SUPERVISOR: [Blank]
 ENGINEER: [Blank]
 NOTE BOOK: CHECKED [Blank]
 NO. 17580

Fed. Dist. No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
4	IND.	77 (88)	1950	21	32

Rev. 12-18-61, Pipe Class 4 F.F.T. Fence.

NOTE: FOR DETAIL OF CONSTRUCTION FROM STA. 2017+00 TO 2020+00, SEE SHEET NO. 21. Bench Mark Post Req'd. Ltr. of Sta. 2019+50



PLAN T-7590

PARCEL 69 ON PROJECT F-77(28) AND PARCEL 39 ON PROJECT ST-F-854(1) COVER THE SAME LAND, WITH ACQUISITION THEREOF ENTIRELY UNDER SAID PROJECT F-77(28)

PARCEL 70 ON PROJECT F-77(28) AND PARCEL 40 ON PROJECT ST-F-854(1) COVER THE SAME LAND, WITH ACQUISITION THEREOF ENTIRELY UNDER SAID PROJECT F-77(28)

Sec. 26 T34N R.1E. WEST TWP. MARSHALL CO.

ALL R/W ON THIS SHEET TO BE AS SHOWN. LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED

R.I. 1+98.7 (I.P.F.)
 $\Delta = 53^{\circ} 51' \text{ LT. Bss. } S 54^{\circ} 05' E$

R.O.T. 2020+09.1 (I.P.F.) End Line
 R.O.T. 0+09.1 Start Line A, Proj F854
 R.O.T. 0+00.0 Line S-26-F Proj F77
 $\Delta = 74^{\circ} 00' \text{ CC. From Line 'A' TO S-26-F}$

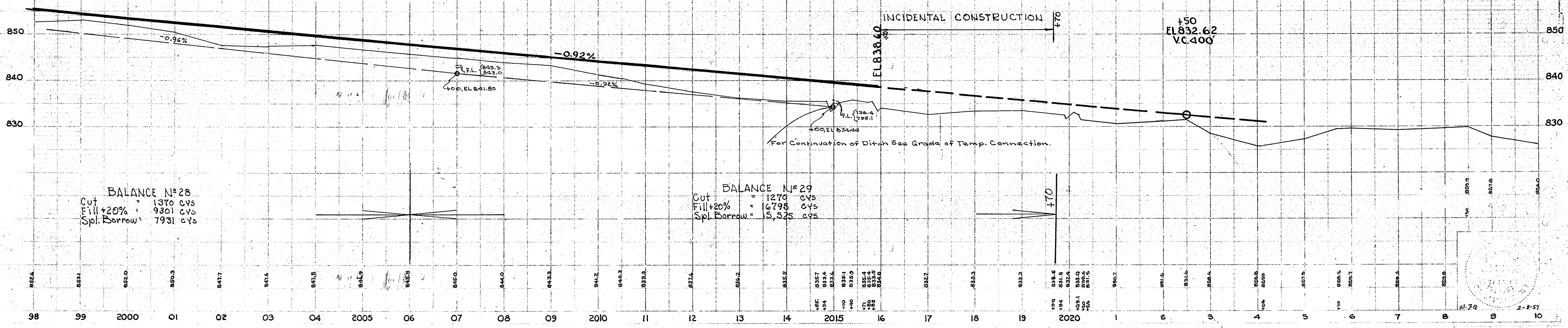
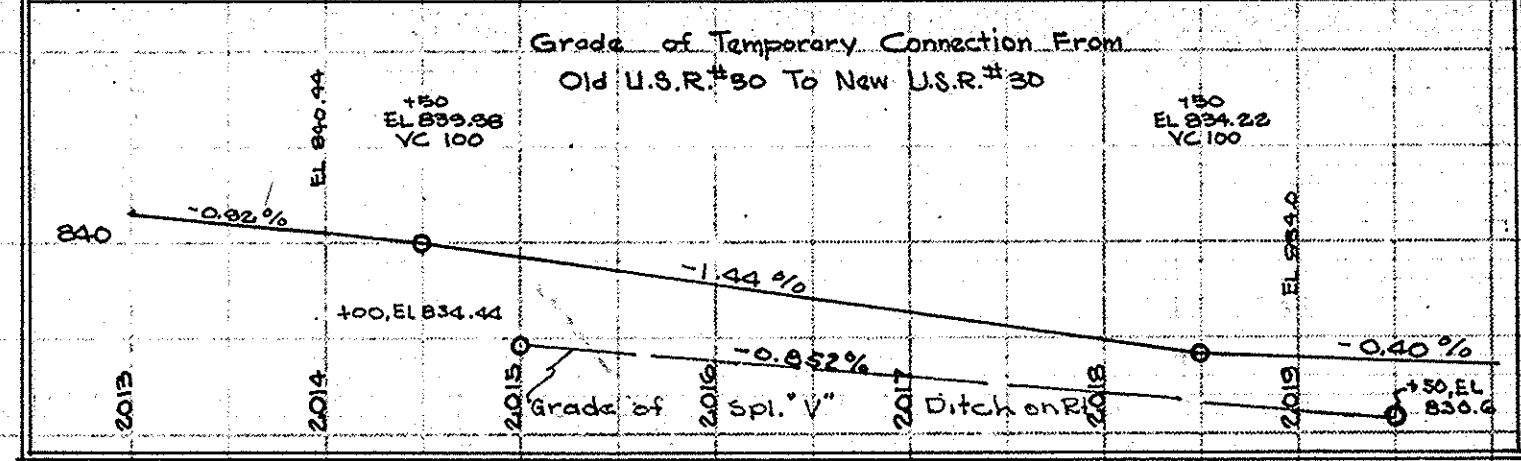
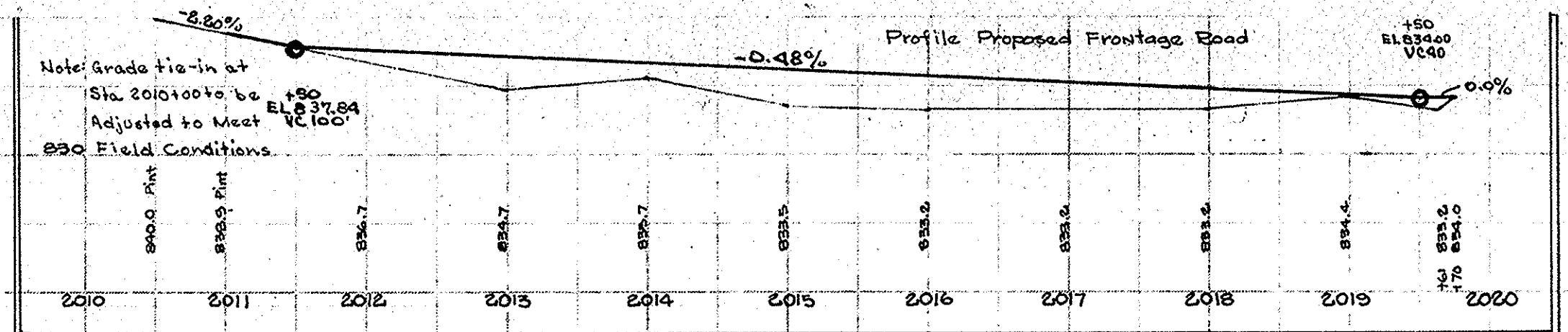
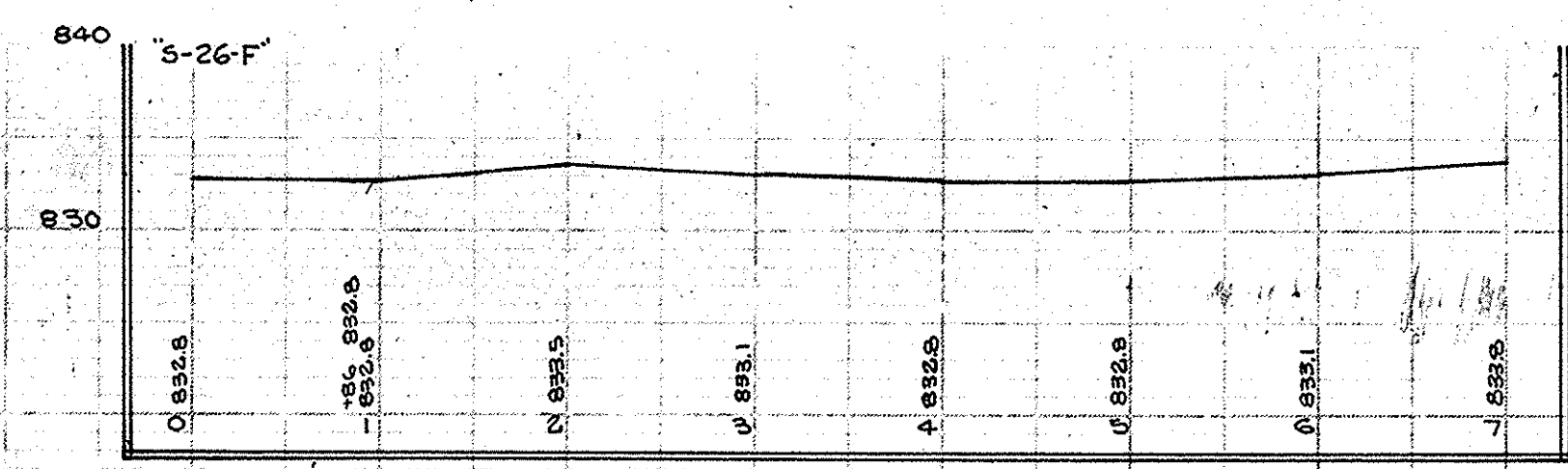
BM#135 Elev. 845.80 Bt. Spk. in S. Side 36" Elm 163' Lt. of Sta. 2006+17
 BM#140 Elev. 834.84 Bt. Spk. in N. Side 30" Elm 114' Rt. of Sta. 2017+72
 BM#141 Elev. 831.95 Bt. Spk. in E. Side 36" Maple 92' Rt. of Sta. 2020+20

CURVE DATA
 $\Delta = 15^{\circ} 48' \text{ Rt.}$
 $D = 0^{\circ} 40'$
 $T = 1192.6$
 $L = 2376.0$
 $E = 82.35$

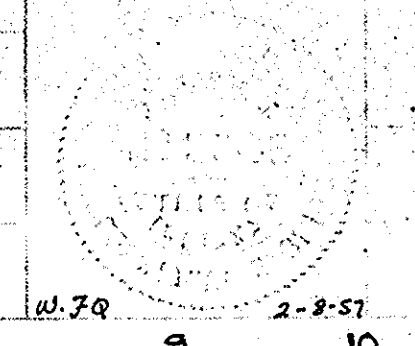
R.I. 2003+01.9 (I.P.F.)

P.O.S.T. R.I. 499.5 (I.R.L.)

P.T. 2014+79.3 (I.R.L.)



PROFILE T-7591



100#/S.Yd. of H.A.C. Surface Type "A" } Bituminous Mixtures for Approaches
 200#/S.Yd. of H.A.C. Base } SURFACE TYPE "B"

1" PREFORMED JOINT FILLER

LOCATION	DESCRIPTION	EXCAVATION CU. YDS.		LENGTH "L"	WIDTH "W"		RADI "R"	C.A. BASE OR SALVAGED SURFACE MATERIAL SYS.		300# H.A.C. CONG. REINFOR. SYS.	REINFORCED CONCRETE PAVEMENT SYS.	REINFORCING STEEL FOR PAVEMENT LBS.
		CUT	FILL		PAVEMENT	SHOULDERS		5"	3"			
1522+05 Lt.	Class II	0	5	51	12		15-25	55	55			
1525+50 Lt.	Class II	0	5	51	12		15-25	55	55			
1526+77 Lt.	Class II	0	5	51	12		15-25	55	55			
1528+20 Lt.	Class IV	0	5	51	40		20	See Detail On Sheet No. 22				
1528+94 Lt.	Class IV	0	5	51	40		20	See Detail On Sheet No. 22				
1530+05.3 Lt.	Type "B" (5-15-F)	0	32	121	16	3		See Detail On Sheet No. 22				
1530+05.3 Rt.	Type "B"	0	140	72	16	3		See Detail On Sheet No. 22				
1531+00 Lt.	Class II	0	5	51	12		15-25	55	55			
1543+20 Lt.	Class V	0	0									
1543+42 Lt.	Class V	0	0									
3+40 Rt. (5-15-F)	Class III	0	0	20	30			See Detail On Sheet No. 22				
1576+85 Lt.	Class V	0	0									
1584+20 Rt.	Type "B"	0	85	86	20	3	38-38					
1607+42 Lt.	Class IV	0	10	51	40		20	See Detail On Sheet No. 22				
1610+20 Lt.	Class IV	0	5	51	30			See Detail On Sheet No. 22				
1611+00 Lt.	Type "B"	5	35	71	20	3		See Detail On Sheet No. 22				
1630+90 Lt.	Class V	0	0									
1658+45.4 Rt.	Class IV	10	0	40	68			See Detail On Sheet No. 22				
1658+45.4 Rt.	Rd. App.	210	0					See Detail On Sheet No. 22				
1658+45.4 Lt.	Rd. App.	133	0					See Detail On Sheet No. 22				
1683+00 Lt.	Class II	10	0	51	12		15-25	55	55			
1685+50 Lt.	Class II	10	0	51	12		15-25	55	55			
1687+42 Lt.	Class IV	5	0	51	24			See Detail On Sheet No. 22				
1689+42 Lt.	Class IV	5	0	51	24			See Detail On Sheet No. 22				
1691+50 Lt.	Class II	0	0	51	12		15-25	55	55			
1691+90 Rt.	Class II	0	0	38	12		15-25	71	71			
1692+30 Lt.	Class II	0	0	51	12		15-25	55	55			
1692+36 Lt.	Class II	0	5	51	12		15-25	55	55			
1696+98 Lt.	Class II	0	5	51	12		15-25	55	55			
1698+86 Lt.	Class IV	0	5	51	24			See Detail On Sheet No. 22				
1705+03 Lt.	Class IV	10	0	72	24			See Detail On Sheet No. 22				
1711+25 Lt.	Class IV	5	0	51	30			See Detail On Sheet No. 22				
1713+44 Lt.	Class IV	0	5	51	30			See Detail On Sheet No. 22				
1717+85 Lt.	Class IV	0	15	51	40			See Detail On Sheet No. 22				
3+61 (5-20-F)	Class IV	0	5	20	40			See Detail On Sheet No. 22				
1718+65 Lt.	Type "B"	0	45	45	14	3		See Detail On Sheet No. 22				
1718+65 Rt.	Type "B"	0	268	14	3			See Detail On Sheet No. 22				
1735+28 Lt.	Class IV	5	0	55	30			See Detail On Sheet No. 22				
1737+75 Lt.	Class IV	5	0	64	30			See Detail On Sheet No. 22				
1745+40 Lt.	Type "D"	45	0	60	16	3	25					
1756+55 Lt.	Class V	0	5	27								
1756+55 Lt.	Class V	0	5	27								
1768+75 Lt.	Class II	0	5	51	12			See Detail On Sheet No. 22				
1769+00 Lt.	Class IV	0	0	51	30			See Detail On Sheet No. 22				
1785+30.6 Rt.	Type "B"	1306	2	346	20	8		647	647	114	102	
1771+46 Lt.	Class IV	0	5	51	40			See Detail On Sheet No. 22				
1773+95 Lt.	Type "B"	0	150	80	16	3		145	145	101	102	
1781+75 Lt.	Class V	0	0									
1789+00 Lt.	Class V	0	0									
1800+00 Lt.	Class V	0	0									
1834+47.3 Lt.	Type "B"	784	0	176	20	8		515	515	99	102	
1834+47.3 Rt.	Type "B"	630	0	176	20	8		515	515	99	102	
1799+80 Lt.	Class V	0	0									
3+98 Lt. (5-22-F)	Class V	0	0									
4+58 Rt. (5-22-F)	Class II	5	0	25	12		15-25	54	54			
0+90 Rt. (5-23-F)	Class V	0	0									
0+90 Lt. (5-23-F)	Class V	0	0									
7+00 Rt. (5-23-F)	Class II	0	0	25	12		15-25	54	54			
1874+42 (5-23-F) Lt.	Type "B"	1471	0	276	16	3	38-38	448	448	99	102	
1874+42 (5-23-F) Rt.	Type "B"	149	0	176	16	3	38-38	270	270	99	102	
1927+08 Rt.	Class V	0	0									
1927+08 Lt.	Class V	0	0									
1953+42.6 Rt.	Type "B"	1032	0	226	16	3	38-38	359	359	99	102	
1953+42.6 Lt.	Type "B"	7	251	176	16	3	38-38	270	270	99	102	
3+50 Lt. (5-24-F)	Class II	0	0	25	12		15-25	55	55			
1993+16.1 Lt.	Type "B"	0	50	151	16	3	38	257	257	99	102	
1993+16.1 Rt.	Type "B"	0	50	76	16	3	38	113	113	99	102	
2020+09 Rt.	Type "B"							See Detail On Sheet No. 22				
2020+09 Lt.	Type "B"							See Detail On Sheet No. 22				

* INDICATES OUT OF ORDER

CROSS-OVER TABLE

LOCATION	DESCRIPTION	WIDTH	RADI	9" R.C. PAVEMENT	PLAIN CONC. FOR PRIV. DRIVE X-OVER	CONC. CORNER REINFOR. NECESSARY	1" PREF. JOINT WITH LOAD TRANSFER	INTEGRAL CONC. CURB TYPE "B"	REINFORCING STEEL FOR PAVEMENT
1522+05	Pr. Dr.				129	20	14		96
1526+05	Pr. Dr.				129	20	14		96
1530+05.3	Pub. Rd. Type "A"								
1543+42	Pr. Dr. (Earth Type)								
1576+85	Pr. Dr. (Earth Type)								
1584+20	Pub. Rd. Type "A"			342		20	52	168	204
1611+00	Pub. Rd. Type "A"								
1630+50	Pr. Dr. (Earth Type)								
1658+45.4	Pub. Dr.								
1685+10	Pr. Dr.				129	20	14		96
1689+42	Com. Dr.								
1693+42	Pr. Dr.				129	20	14		96
1697+42	Pr. Dr.				129	20	14		96
1713+44	Com. Dr.								
1718+66.8	Pub. Rd. Type "A"								
1737+75	Comm. Dr.								
1746+60	Pub. Rd. Type "A"					20	52	188	204
1756+70	Pr. Dr. (Earth Type)								
1768+50	Com. Dr.								
1773+95.3	Pub. Rd. Type "A"			342		20	52	188	204
1834+47.3	Pub. Rd. Type "A"			342		20	52	188	204
1874+06.2	Pub. Rd. Type "A"			342		20	52	188	204
1927+08	Pr. Dr. (Earth Type)								
1954+42.6	Pub. Rd. Type "A"					20	52	188	204
1993+16.1	Pub. Rd. Type "A"					20	52	188	204
2020+09	Pub. Rd.								

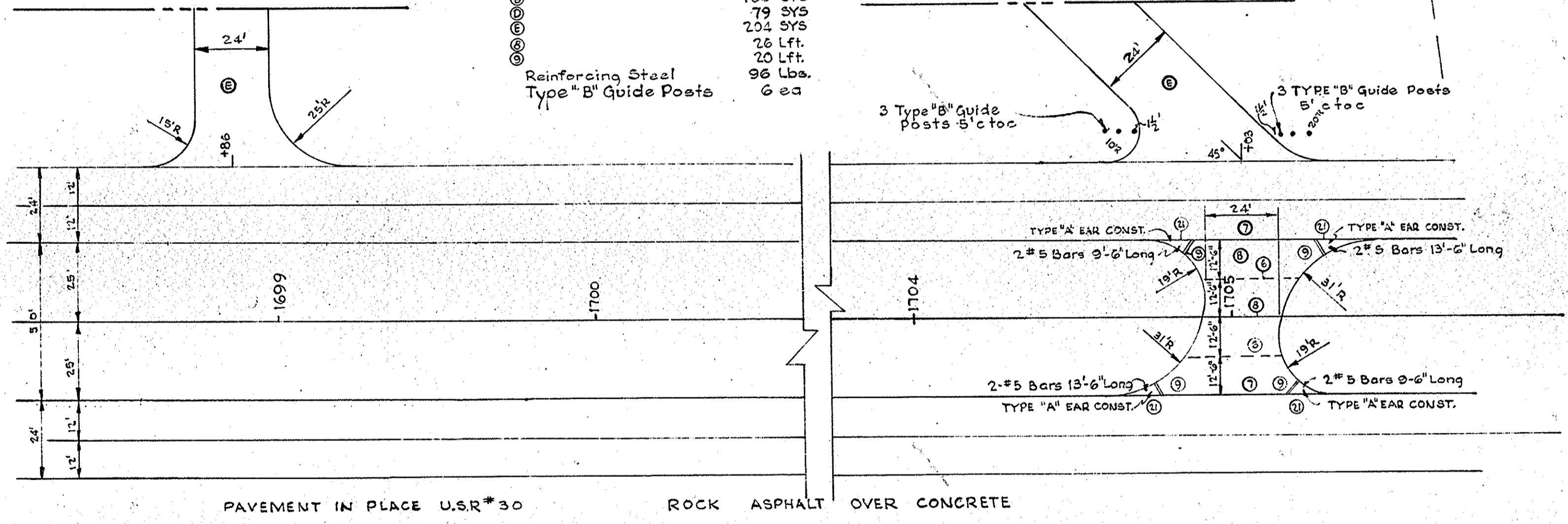
Rev. 6-24-59 Structure No. 36 Revised.
 Rev. 4-27-60 Class V Drives Sta. 1758+55
 Rev. 10-3-61 Class II Drive Sta. 1758+80
 Rev. 12-18-61 Sur. Type "A" Pref. Joint Filler.
 Rev. 10-14-63 Rev. Drives

DETAIL OF CONSTRUCTION STA. 1698 - STA. 1706

SCALE 1"=30'

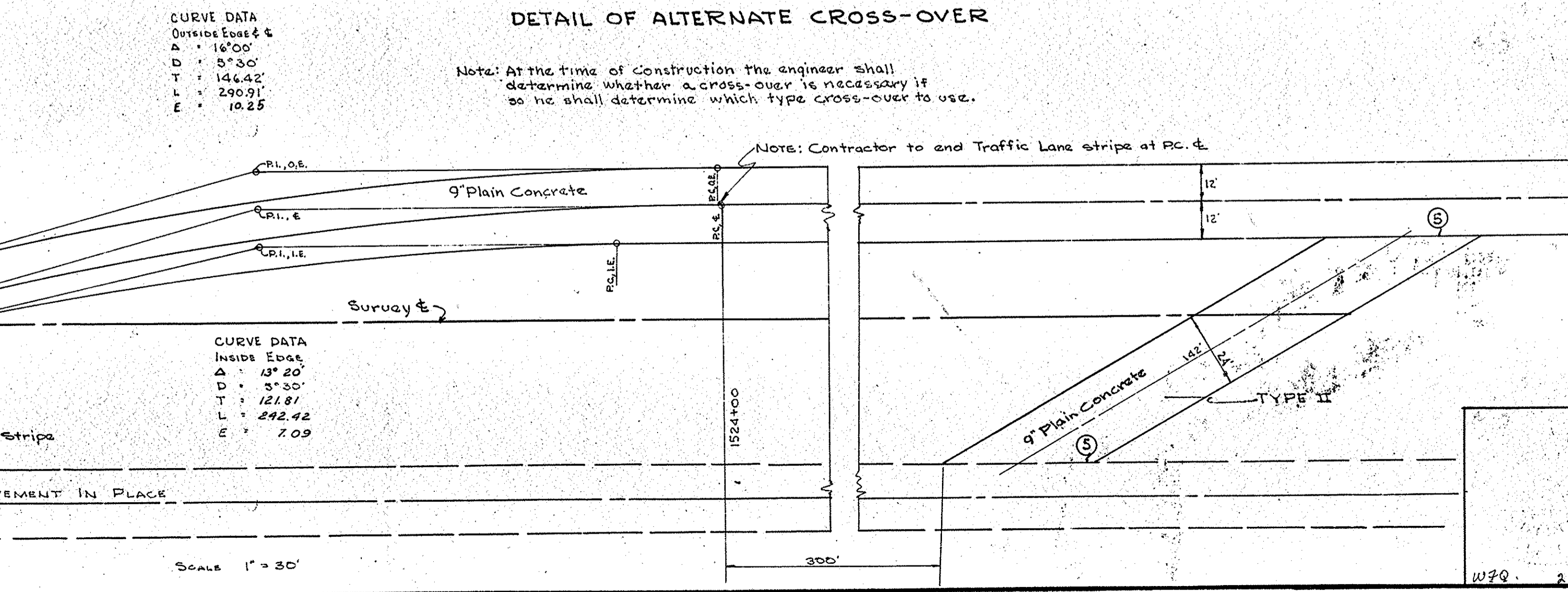
ADDITIONAL QUANTITIES

- 185 SYS
- 79 SYS
- 204 SYS
- 26 Lft.
- 20 Lft.
- 96 Lbs.
- 6 ea



DETAIL OF ALTERNATE CROSS-OVER

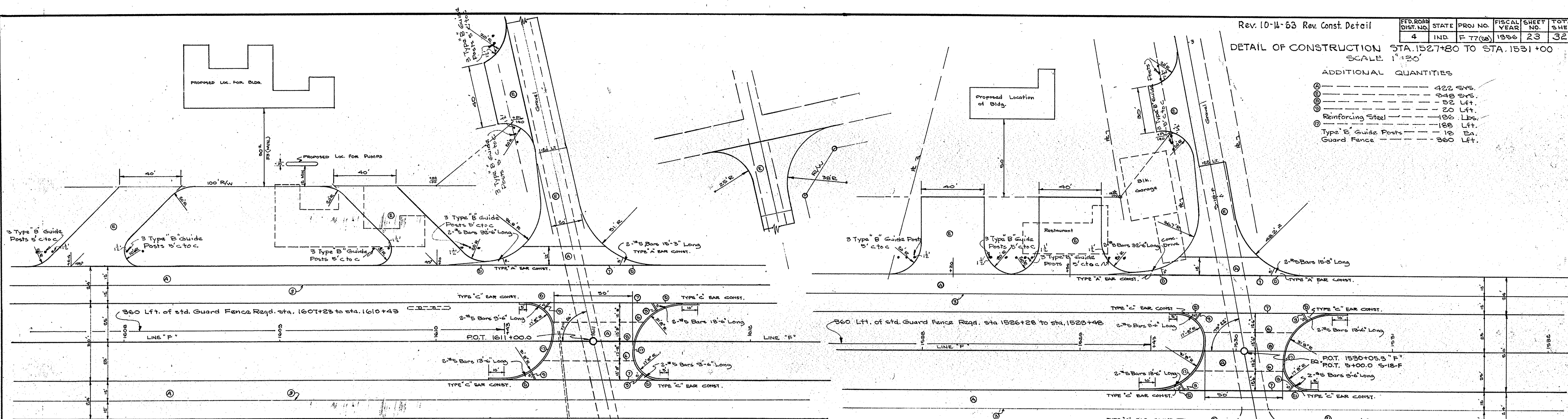
Note: At the time of construction the engineer shall determine whether a cross-over is necessary if so he shall determine which type cross-over to use.



DETAIL OF CONSTRUCTION STA. 1527+80 TO STA. 1531+00
SCALE 1"=30'

ADDITIONAL QUANTITIES

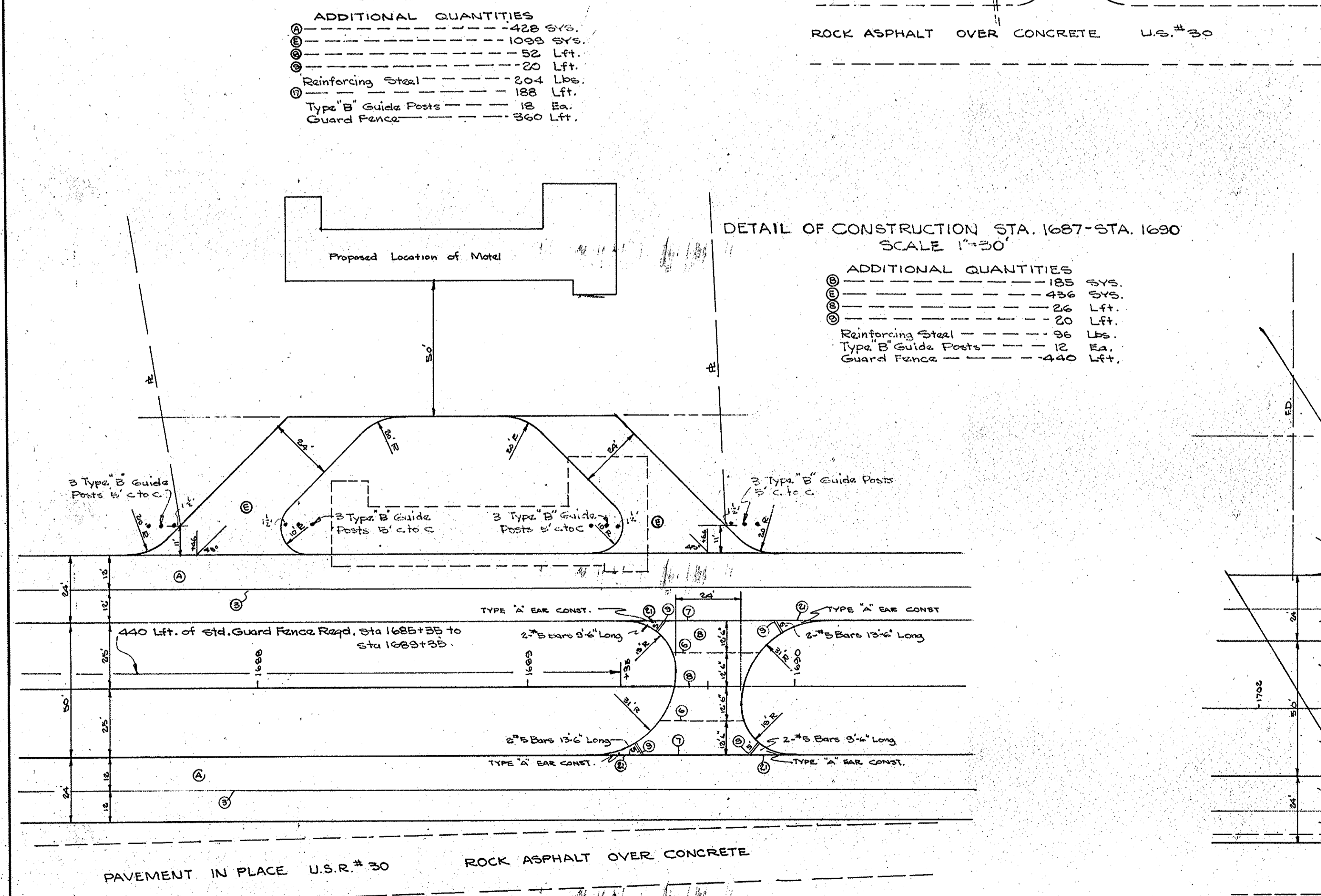
①	422 S.Y.S.
②	348 S.Y.S.
③	52 Lft.
④	20 Lft.
⑤	186 Lbs.
⑥	186 Lbs.
⑦	18 Ea.
⑧	360 Lft.



DETAIL OF CONSTRUCTION STA. 1607+30 TO 1612+00
SCALE 1"=30'

ADDITIONAL QUANTITIES

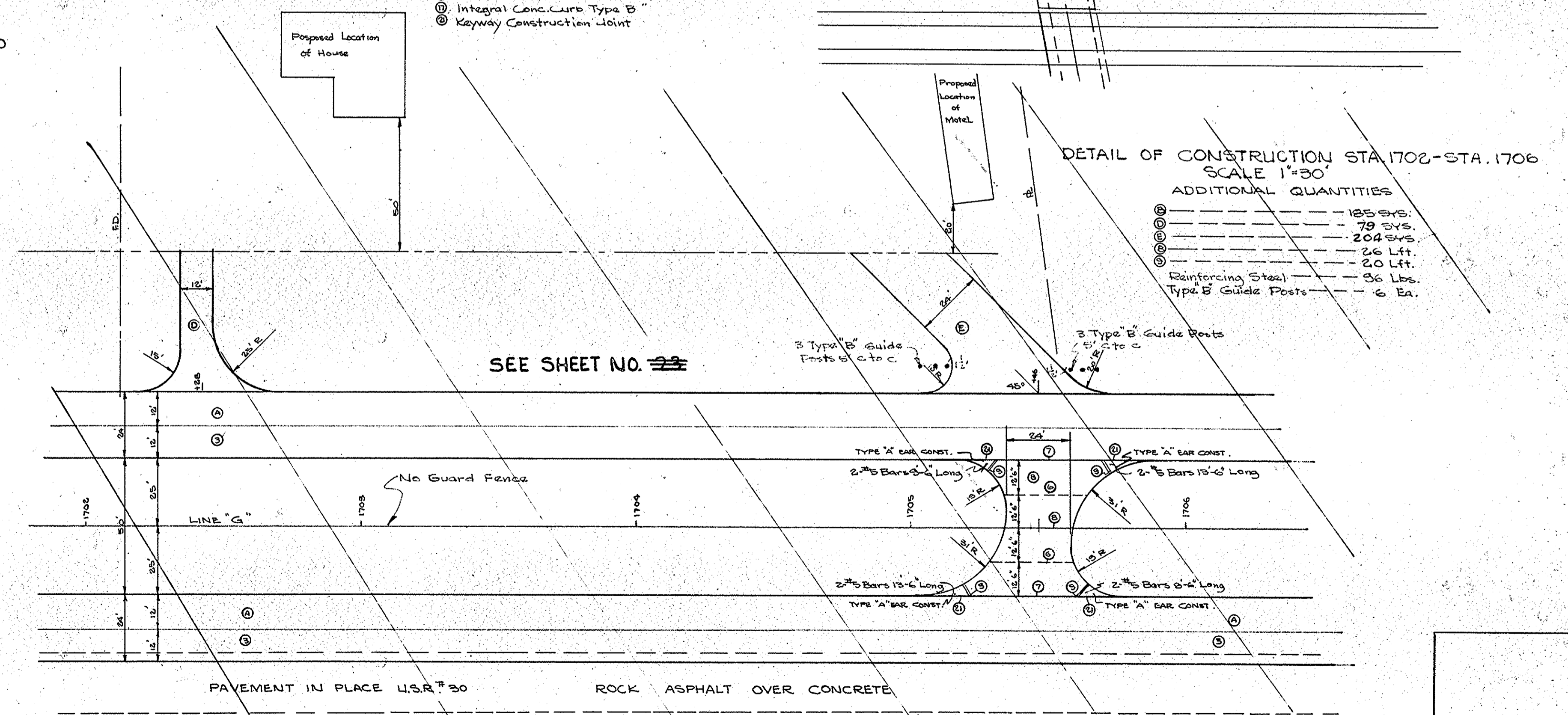
①	428 S.Y.S.
②	1093 S.Y.S.
③	52 Lft.
④	20 Lft.
⑤	204 Lbs.
⑥	188 Lbs.
⑦	18 Ea.
⑧	360 Lft.



DETAIL OF CONSTRUCTION STA. 1687+STA. 1690
SCALE 1"=30'

ADDITIONAL QUANTITIES

①	185 S.Y.S.
②	436 S.Y.S.
③	26 Lft.
④	20 Lft.
⑤	96 Lbs.
⑥	12 Ea.
⑧	440 Lft.

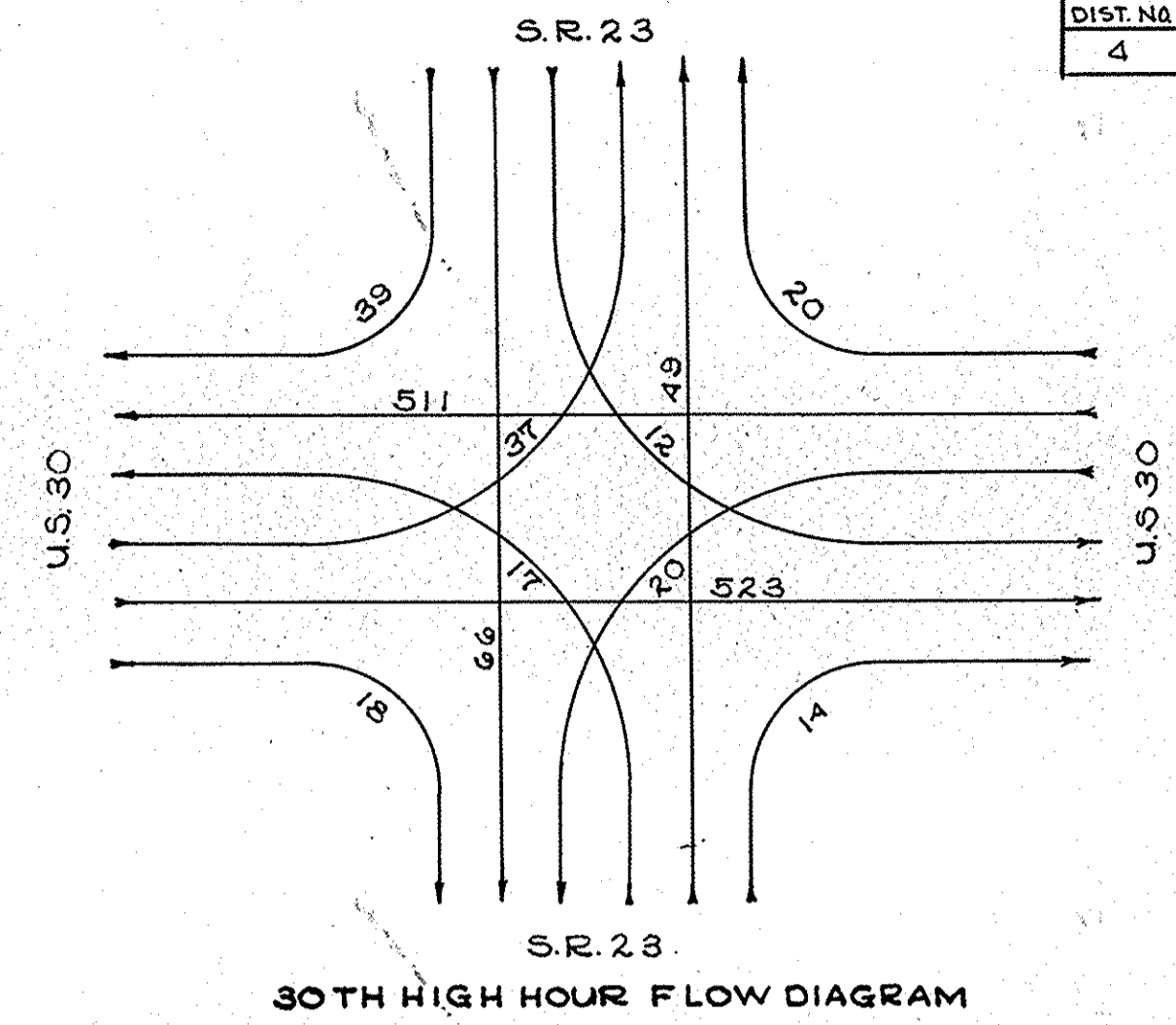


DETAIL OF CONSTRUCTION STA. 1702+STA. 1706
SCALE 1"=30'

ADDITIONAL QUANTITIES

①	185 S.Y.S.
②	79 S.Y.S.
③	204 S.Y.S.
④	26 Lft.
⑤	20 Lft.
⑥	96 Lbs.
⑦	6 Ea.

SEE SHEET NO. 22

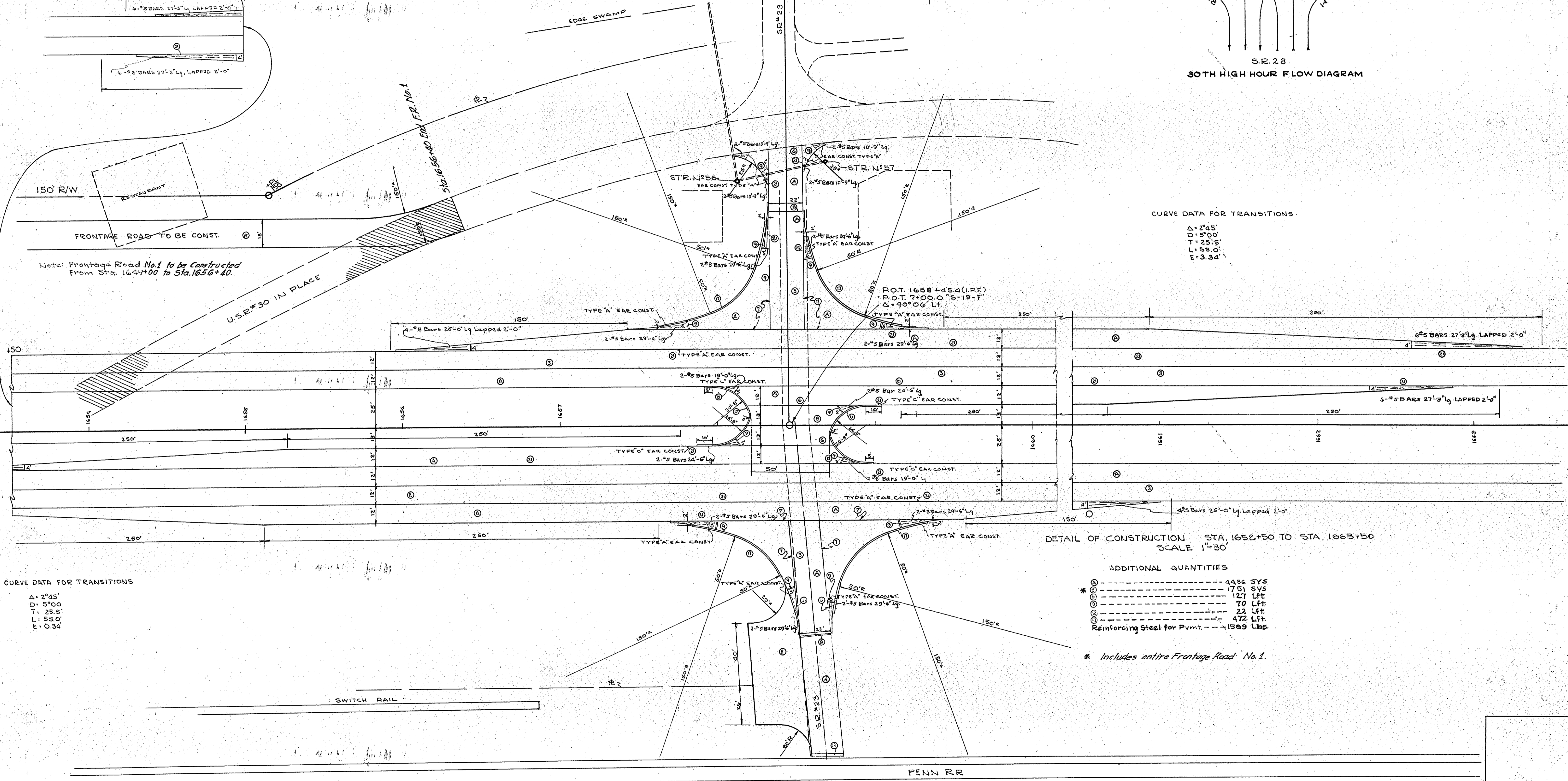
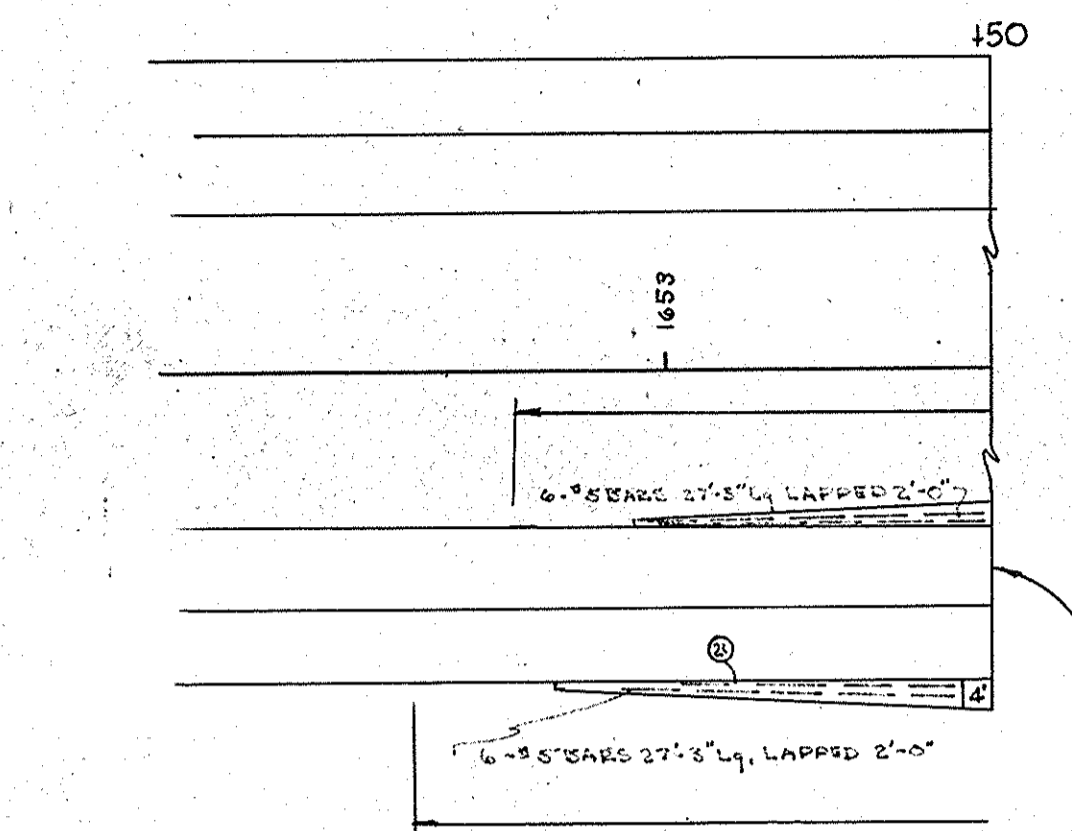


LEGEND:

- ① 5" R.C. Pavement
- ② 5" Comp. Agg. Base or Salvaged Surface Material
- ③ 3" 100% Spd. H.A. Surface - Type 'A' & 200% Spd. H.A. Base - Bituminous Mixtures for Approaches
- ④ Longitudinal Joint
- ⑤ Butt Joint
- ⑥ Construction Joint
- ⑦ Keyway Joint
- ⑧ Preformed Expansion Joint With Load Transfer
- ⑨ Preformed Joint Filler
- ⑩ Concrete Header
- ⑪ Integral Concrete Curb Type 'B'
- ⑫ Keyway Construction

CURVE DATA FOR TRANSITIONS

Δ = 2'45"
D = 5'00"
T = 25.5'
L = 55.0'
E = 3.34'



CURVE DATA FOR TRANSITIONS

Δ = 2'45"
D = 5'00"
T = 25.5'
L = 55.0'
E = 0.34'

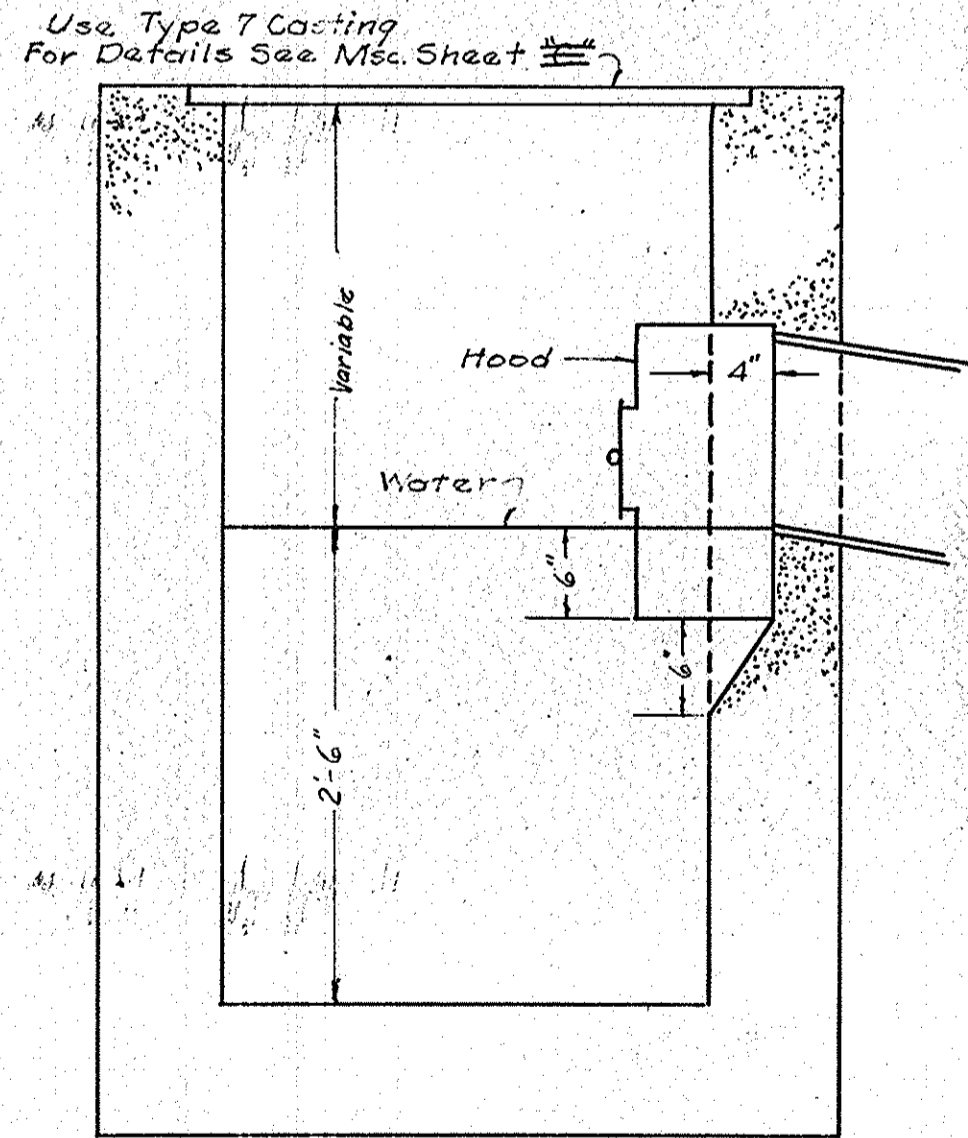
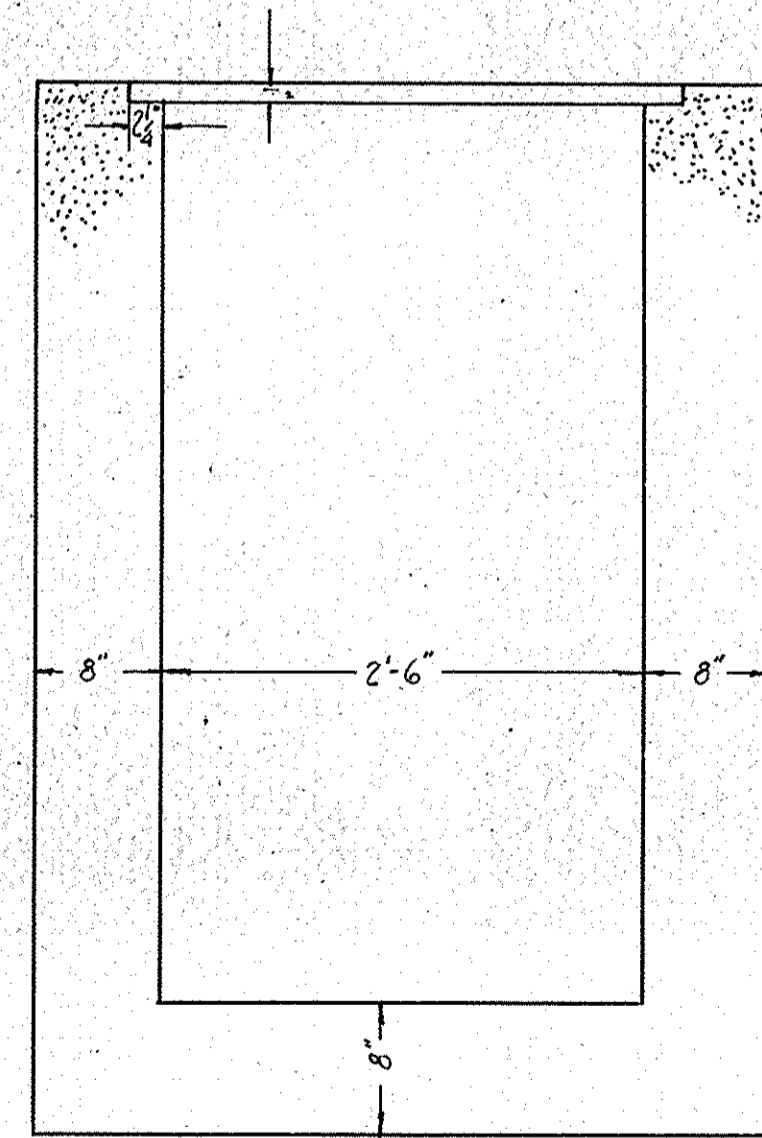
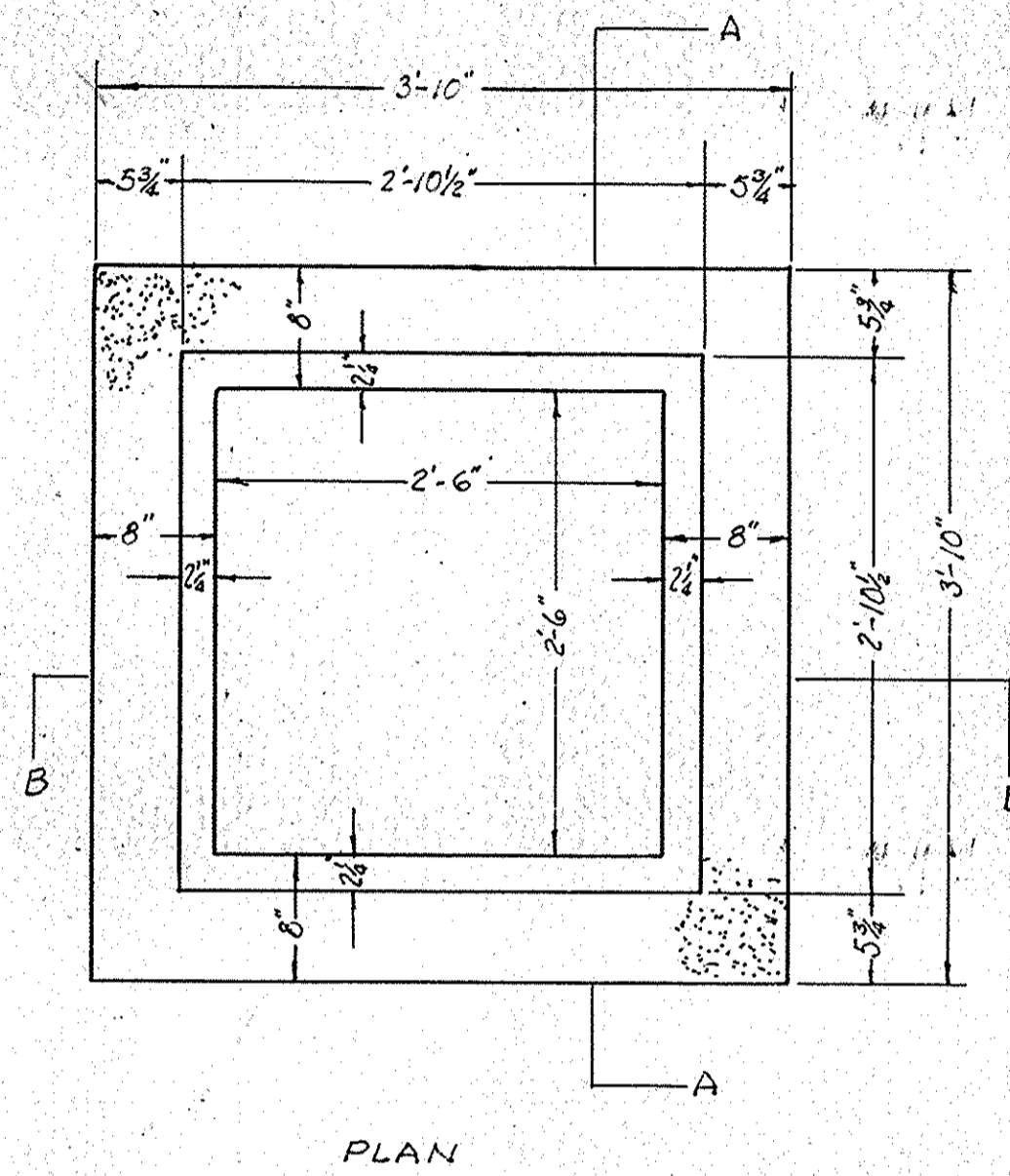
DETAIL OF CONSTRUCTION STA. 1652+50 TO STA. 1663+50
SCALE 1"=30'

ADDITIONAL QUANTITIES

- ① ----- 4436 SYS
- ② ----- 1751 SYS
- ③ ----- 70 Lft.
- ④ ----- 22 Lft.
- ⑤ ----- 472 Lft.
- Reinforcing Steel for Pmnt. ----- 1589 Lbs

* Includes entire Frontage Road No. 1.

REV. 7-6-67, R/W Corner Cut Changed, M. J. Koenig



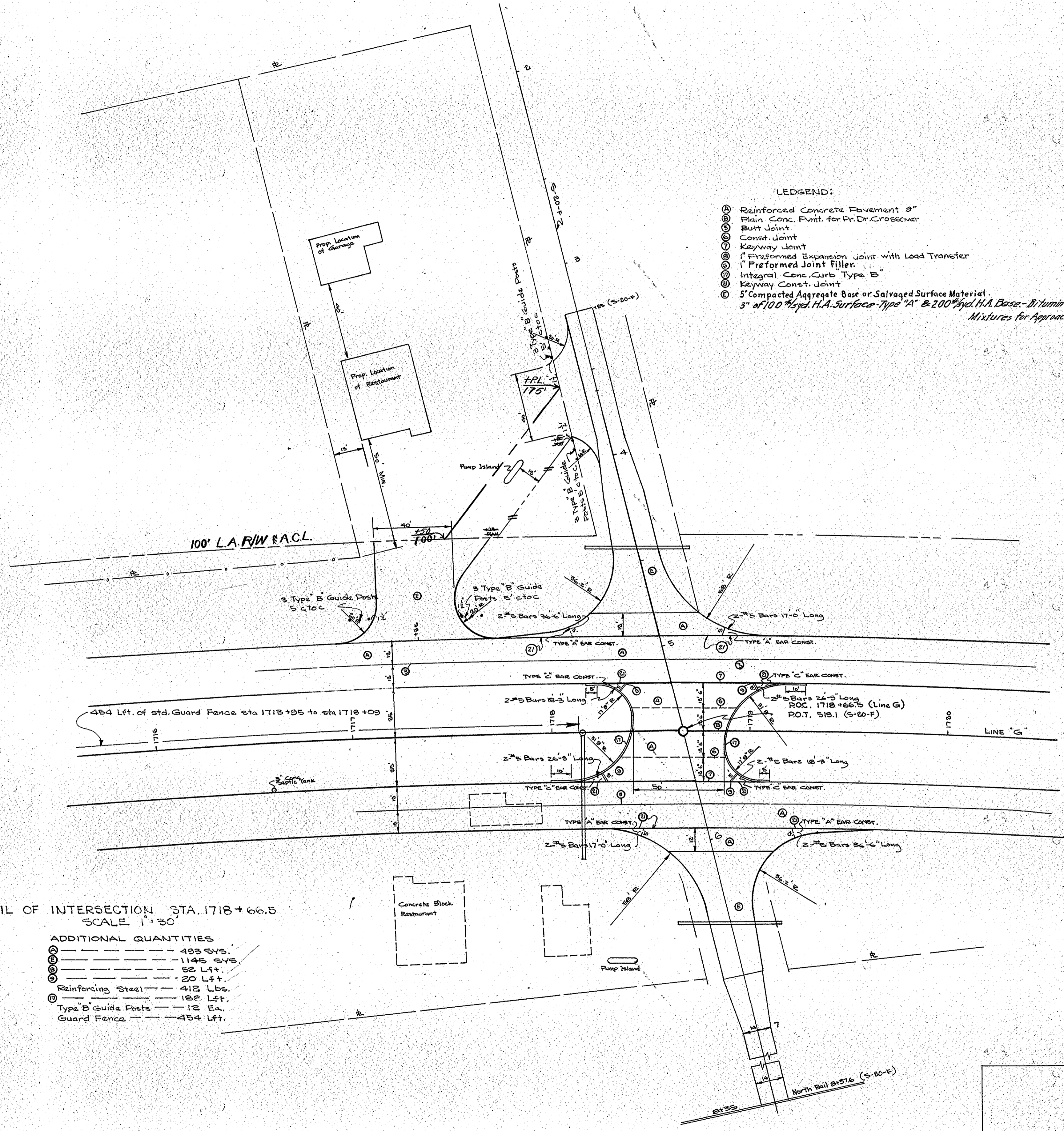
SECT B-B

SECT A-A

Scale 1"=1'

SPECIAL CATCH BASIN TYPE H-7

Use Type 7 Casting For Details See Misc. Sheet 7



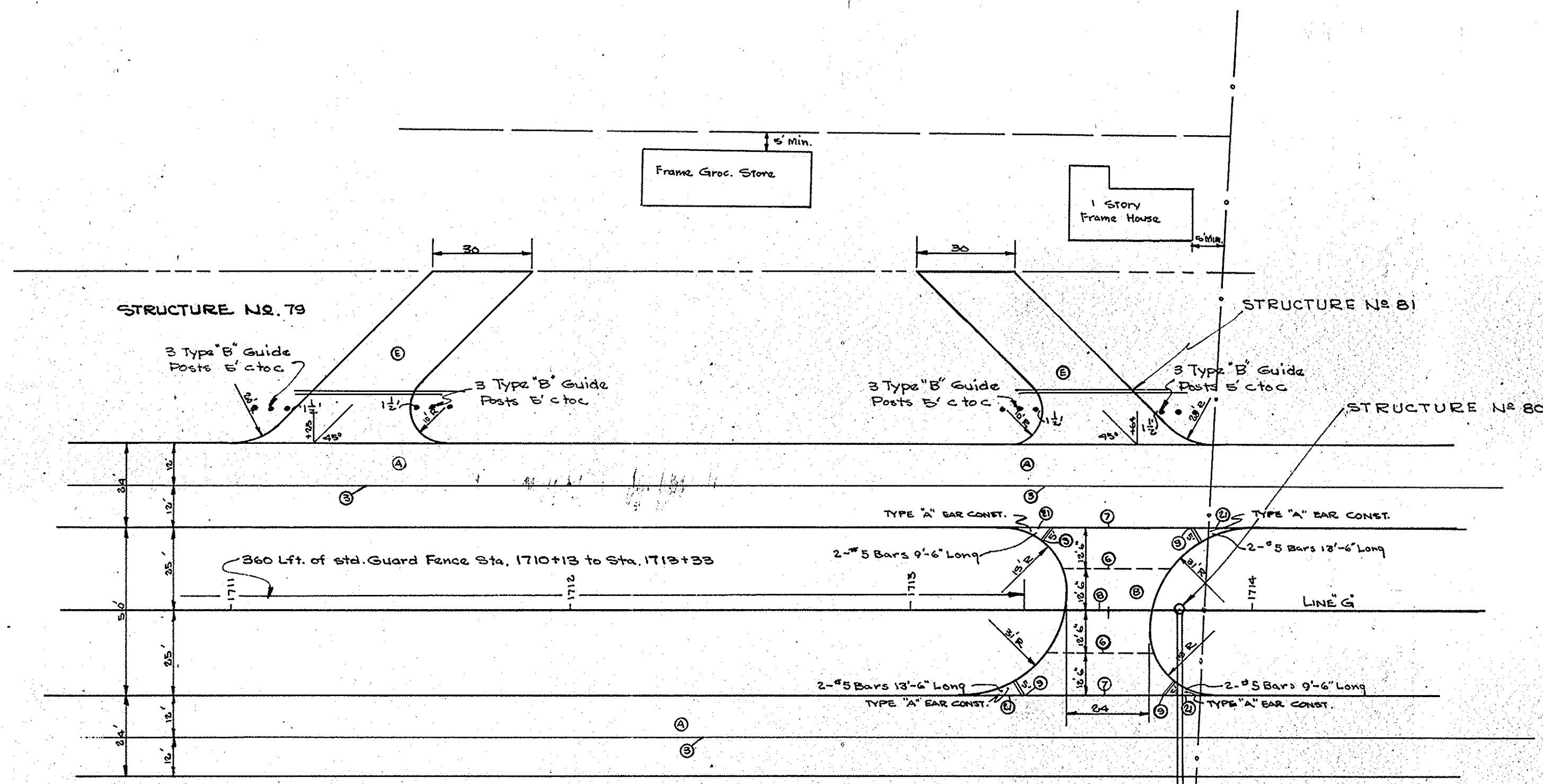
DETAIL OF INTERSECTION STA. 1718+66.5
SCALE 1"=30'

ADDITIONAL QUANTITIES

- ① 493 EYS.
- ② 1145 EYS.
- ③ 52 Lft.
- ④ 20 Lft.
- Reinforcing Steel 412 Lbs.
- ⑤ 128 Lft.
- Type B Guide Posts 12 Ea.
- Guard Fence 454 Lft.

LEDGEND:

- ① Reinforced Concrete Pavement 9"
- ② Plain Conc. Fvmt. for Pr. Dr. Crossover
- ③ Butt Joint
- ④ Const. Joint
- ⑤ Keyway Joint
- ⑥ 1" Preformed Expansion Joint with Load Transfer
- ⑦ Preformed Joint Filler
- ⑧ Integral Conc. Curb Type B
- ⑨ Keyway Const. Joint
- ⑩ 5" Compacted Aggregate Base or Salvaged Surface Material
- ⑪ 3" or 100 # Spd. H.A. Surface - Type "A" & 200 # Spd. H.A. Base - Bituminous Mixtures for Approaches.



DETAIL OF CONSTRUCTION STA. 1711+00 TO STA. 1714+00
SCALE 1"=30'

ADDITIONAL QUANTITIES

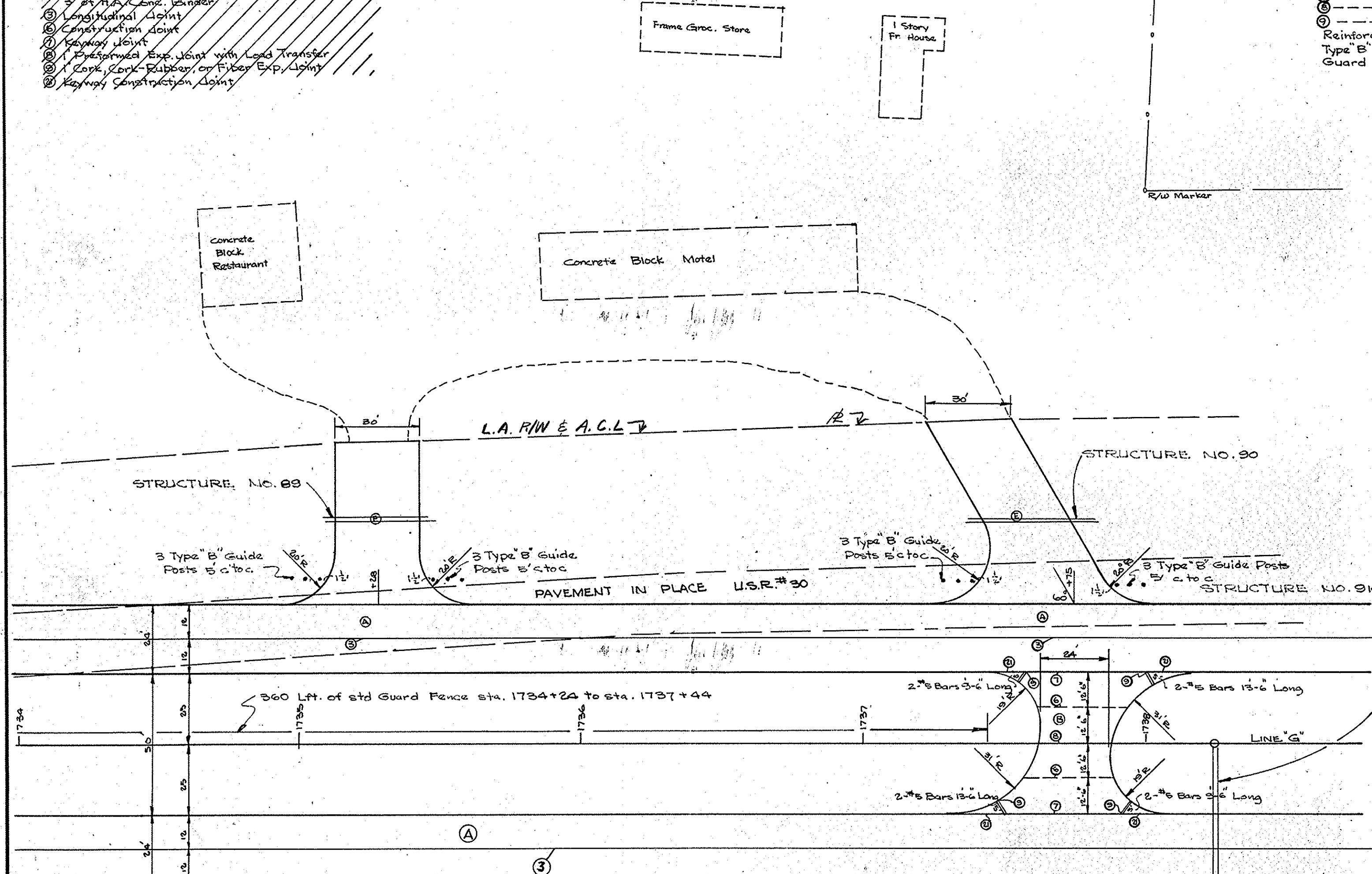
①	Reinforcing Steel	185 Svs.
②	Plain Concrete	634 Svs.
③	5" of Compacted Aggregate Base or Salvage Surface Material	26 Lft.
④	Reinforcing Steel	20 Lft.
⑤	Type 'B' Guide Posts	36 Ea.
⑥	Guard Fence	360 Lft.

- LEGEND
- ① Reinforcing Steel
 - ② Plain Concrete
 - ③ 5" of Compacted Aggregate Base or Salvage Surface Material
 - ④ Longitudinal Joint
 - ⑤ Construction Joint
 - ⑥ Keyway Joint
 - ⑦ 1" Preformed Expansion Joint with Load Transfer
 - ⑧ 1" Preformed Joint Filler
 - ⑨ Keyway Construction Joint

STATIONS	LENGTH	REMARKS	CONNECT TO STR. NO.
1611+14 to 1620+00 Rt.	886	Connect to Str. No. 45	
1641+50 to 1642+50 Lt.	100	Outlet thru Shoulder 1641+50	
1651+50 to 1658+80 Rt.	730	Connect to Str. No. 53	
1651+50 to 1658+80 Lt.	730	Connect to Str. No. 53 & 55	
1673+00 to 1693+00 Lt.	2000	Outlet thru Shoulder 1673+00	
1678+00 to 1697+00 Rt.	1800	Outlet thru Shoulder 1678+00	68
1705+83 to 1713+00 Lt.	716	Connect to Str. No. 78	
1693+00 to 1711+30 Rt.	1230	Outlet thru Shoulder 1693+00	
1723+50 to 1748+00 Lt.	1900	Outlet thru Shoulder 1723+00	
1735+00 to 1748+00 Rt.	1200	Outlet thru Shoulder 1735+00	91 & 92
1757+00 to 1802+00 Rt.	5200	Outlet thru Shoulder 1757+00 & 1802+00	99
1753+00 to 1807+50 Lt.	2850	Outlet thru Shoulder 1753+00 & 1807+50	110
1803+00 to 1811+45 Lt.	245	Outlet thru Shoulder 1811+45	
1826+00 to 1840+50 Rt.	1450	Outlet thru Shoulder 1826+00	120
1825+00 to 1840+50 Lt.	1550	Outlet thru Shoulder 1825+00	120
1852+00 to 1877+00 Lt.	2550	Outlet thru Shoulder 1852+00 & 1877+00	
1853+00 to 1877+00 Rt.	1800	Outlet thru Shoulder 1853+00 & 1877+00	
1878+10 to 1883+00 Rt.	480	Outlet thru Shoulder 1883+00	
1883+00 to 1900+00 Lt.	1100	Outlet thru Shoulder 1883+00	
1908+00 to 1920+00 Lt.	1200	Outlet thru Shoulder 1908+00	
1911+00 to 1921+00 Rt.	1000	Outlet thru Shoulder 1911+00	
1925+40 to 1928+00 Rt.	260	Outlet thru Shoulder 1925+40	
1925+40 to 1928+00 Lt.	260	Outlet thru Shoulder 1925+40	
1935+00 to 1936+15 Lt.	316	Connect Str. No. 145	
1936+00 to 1940+20 Rt.	420	Outlet thru Shoulder Sta. 1940+20	
1951+00 to 1953+65 Rt.	266	Outlet thru Shoulder Sta. 1951+00	
1955+75 to 1967+00 Rt.	1126	Outlet thru Shoulder Sta. 1955+75	
1956+45 to 1967+00 Lt.	3056	Outlet thru Shoulder Sta. 1956+45	
1973+25 to 1986+00 Rt.	1266	Outlet thru Shoulder Sta. 1973+25	158
1983+00 to 1992+75 Rt.	376	Connect to Str. No. 160	
1990+00 to 2015+00 Lt.	2500	Outlet thru Shoulder 2015+00	

LEGEND

- ① Reinforced Concrete Pavement.
- ② Plain Concrete Pavement for Private Drive Crossovers.
- ③ 5" of Compacted Aggregate Base or Salvage Surface Material.
- ④ 3" of 100% Hyd. H.A. Surface - Type "A" & 200% Hyd. H.A. Base - Bituminous Mixtures for Approaches.
- ⑤ Longitudinal Joint.
- ⑥ Construction Joint.
- ⑦ Keyway Joint.
- ⑧ 1" Preformed Expansion Joint with Load Transfer.
- ⑨ 1" Preformed Joint Filler.
- ⑩ Keyway Construction Joint.



DETAIL OF COMMERCIAL DRIVES STA. 1735+00 TO STA. 1738+50
SCALE 1"=30'

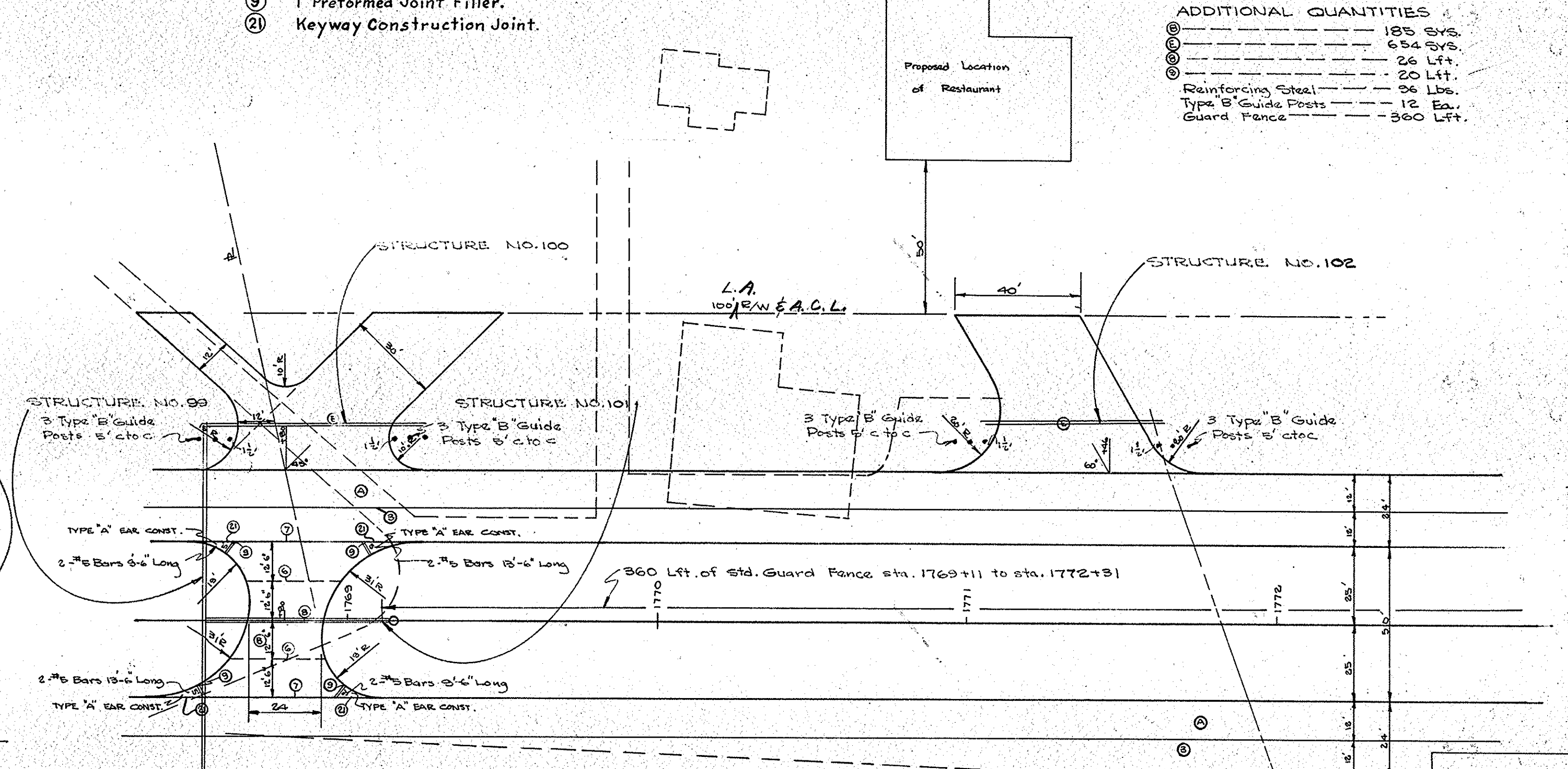
ADDITIONAL QUANTITIES

①	Reinforcing Steel	185 Svs.
②	Plain Concrete	634 Svs.
③	5" of Compacted Aggregate Base or Salvage Surface Material	26 Lft.
④	Reinforcing Steel	20 Lft.
⑤	Type 'B' Guide Posts	36 Ea.
⑥	Guard Fence	360 Lft.

DETAIL OF COMMERCIAL DRIVES STA. 1768+80 TO 1772+00
SCALE 1"=30'

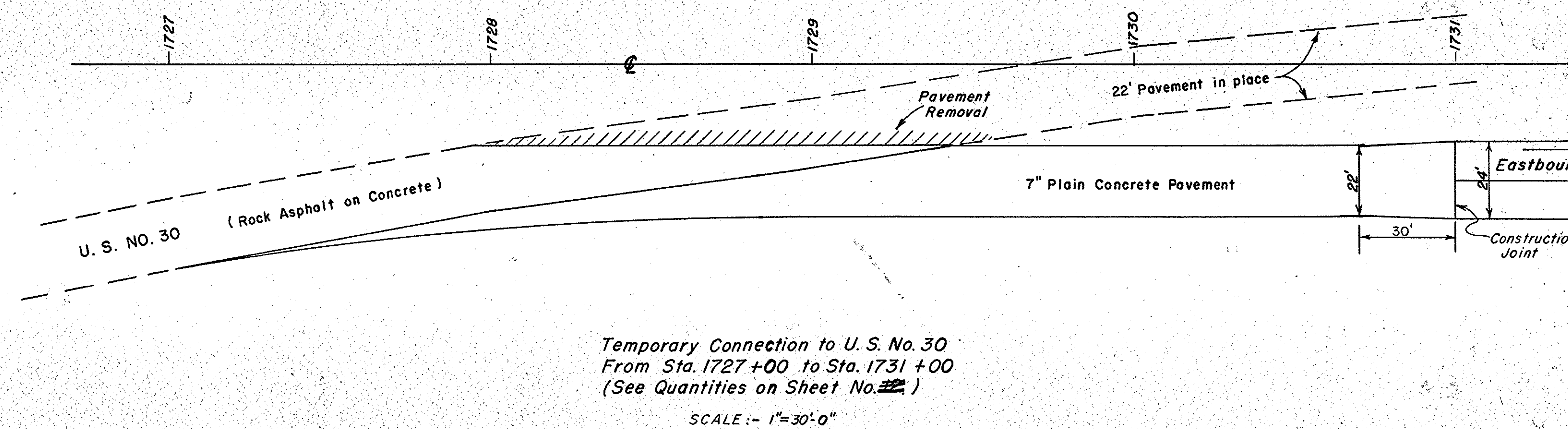
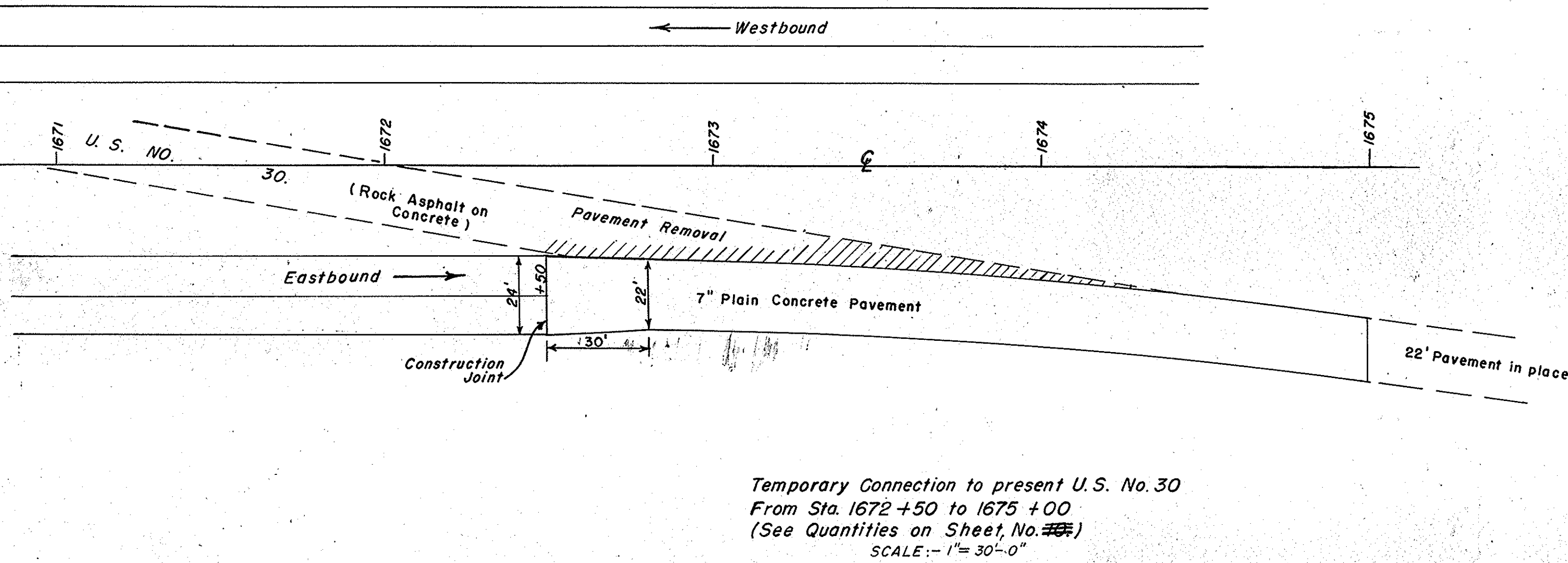
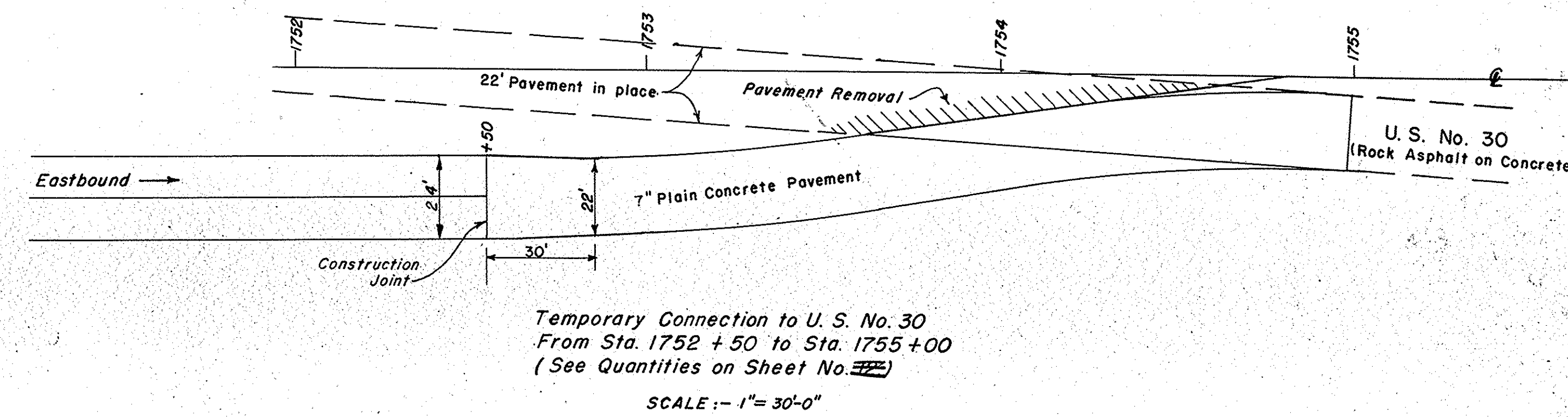
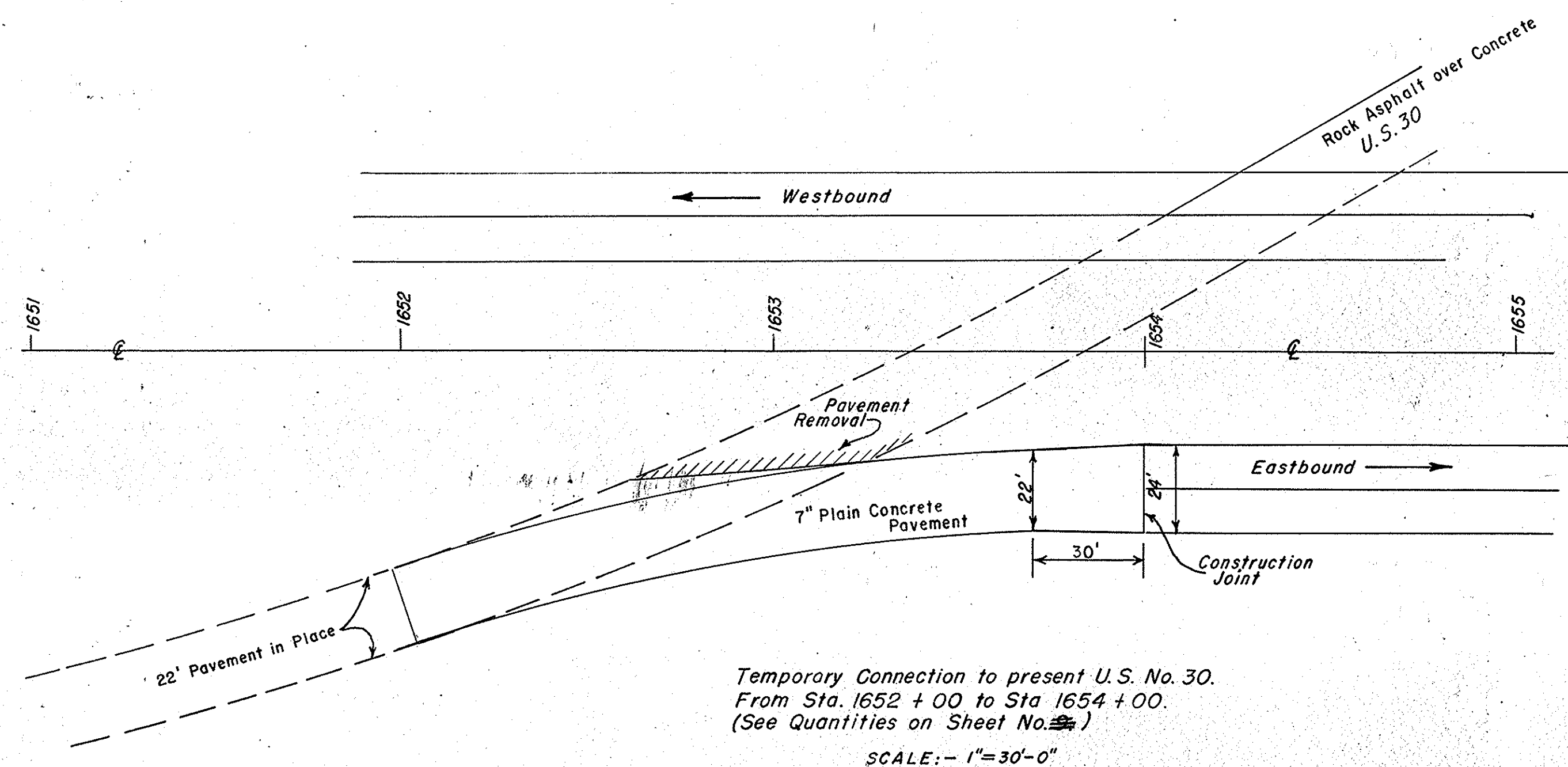
ADDITIONAL QUANTITIES

①	Reinforcing Steel	185 Svs.
②	Plain Concrete	634 Svs.
③	5" of Compacted Aggregate Base or Salvage Surface Material	26 Lft.
④	Reinforcing Steel	20 Lft.
⑤	Type 'B' Guide Posts	36 Ea.
⑥	Guard Fence	360 Lft.



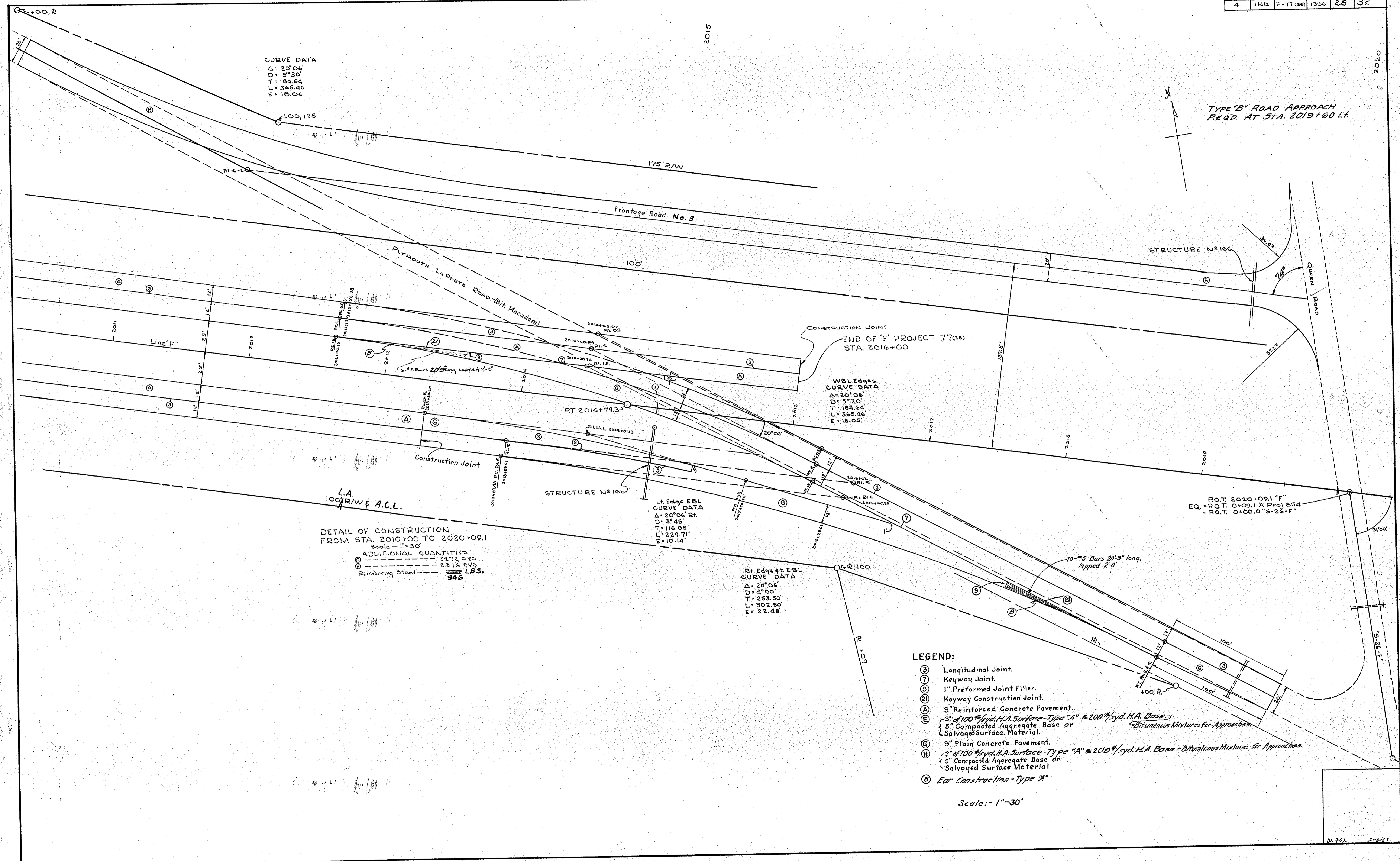
DETAIL OF COMMERCIAL DRIVES STA. 1768+80 TO 1772+00
SCALE 1"=30'

FEDERAL ROAD REGION NO.	STATE	F-PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	77 (28)	1956	27	32



DETAILS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-77(20)	1956	28	32



CURVE DATA
 $\Delta = 20^{\circ}06'$
 $D = 5^{\circ}30'$
 $T = 184.64$
 $L = 365.46$
 $E = 18.06$

WBL Edge CURVE DATA
 $\Delta = 20^{\circ}06'$
 $D = 5^{\circ}20'$
 $T = 184.64$
 $L = 365.46$
 $E = 18.05$

Lt. Edge EBL CURVE DATA
 $\Delta = 20^{\circ}06'$ Rt.
 $D = 3^{\circ}45'$
 $T = 116.05$
 $L = 229.71$
 $E = 10.14$

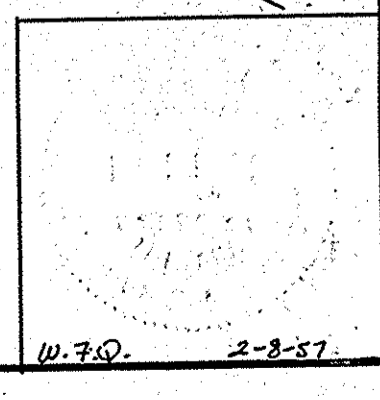
Rt. Edge Lt. EBL CURVE DATA
 $\Delta = 20^{\circ}06'$
 $D = 4^{\circ}00'$
 $T = 253.50$
 $L = 502.50$
 $E = 22.48$

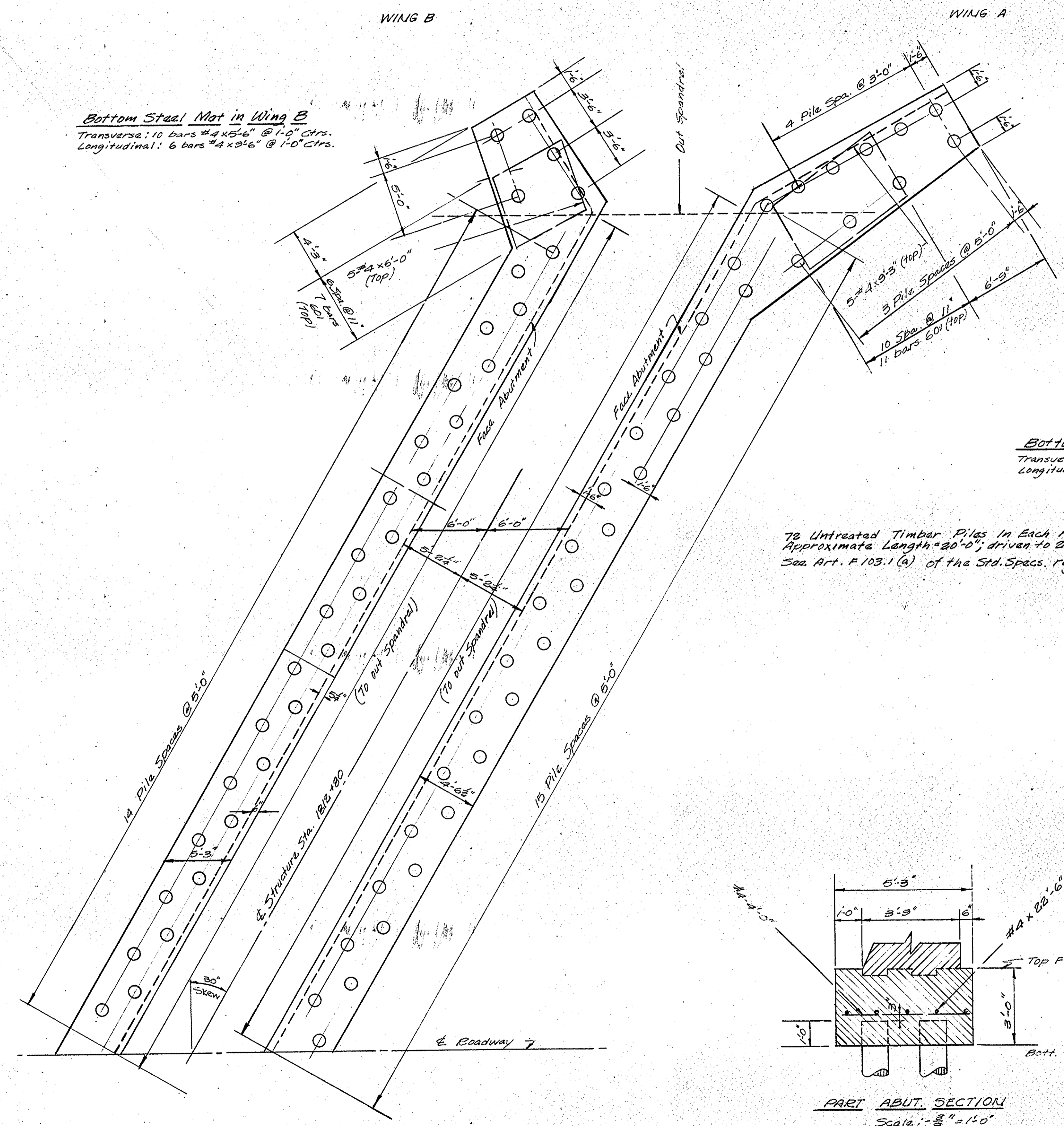
DETAIL OF CONSTRUCTION FROM STA. 2010+00 TO 2020+09.1
 Scale - 1"=30'
 ADDITIONAL QUANTITIES
 2472 S.Y.S.
 2316 S.Y.S.
 Reinforcing Steel - 346 LBS.

LEGEND:

- (3) Longitudinal Joint.
- (7) Keyway Joint.
- (9) 1" Preformed Joint Filler.
- (2) Keyway Construction Joint.
- (A) 9" Reinforced Concrete Pavement.
- (E) 3" of 100#/syd. H.A. Surface - Type "A" & 200#/syd. H.A. Base - Bituminous Mixtures for Approaches.
5" Compacted Aggregate Base or Salvaqed Surface Material.
- (G) 9" Plain Concrete Pavement.
- (H) 3" of 100#/syd. H.A. Surface - Type "A" & 200#/syd. H.A. Base - Bituminous Mixtures for Approaches.
5" Compacted Aggregate Base or Salvaqed Surface Material.
- (B) Ear Construction - Type "A"

Scale: - 1"=30'





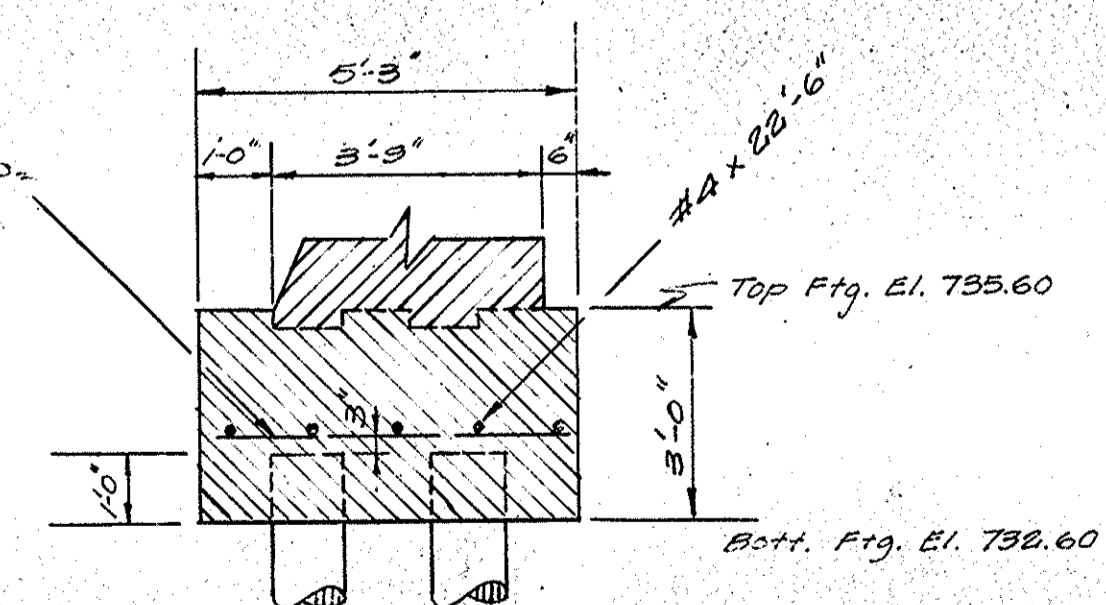
Bottom Steel Mat in Wing B
 Transverse: 10 bars #4 x 5'-6" @ 1'-0" Ctrs.
 Longitudinal: 6 bars #4 x 9'-6" @ 1'-0" Ctrs.

Bottom Steel Mat in Wing A
 Transverse: 18 bars #4 x 5'-6" @ 1'-0" Ctrs.
 Longitudinal: 6 bars #4 x 17'-6" @ 1'-0" Ctrs.

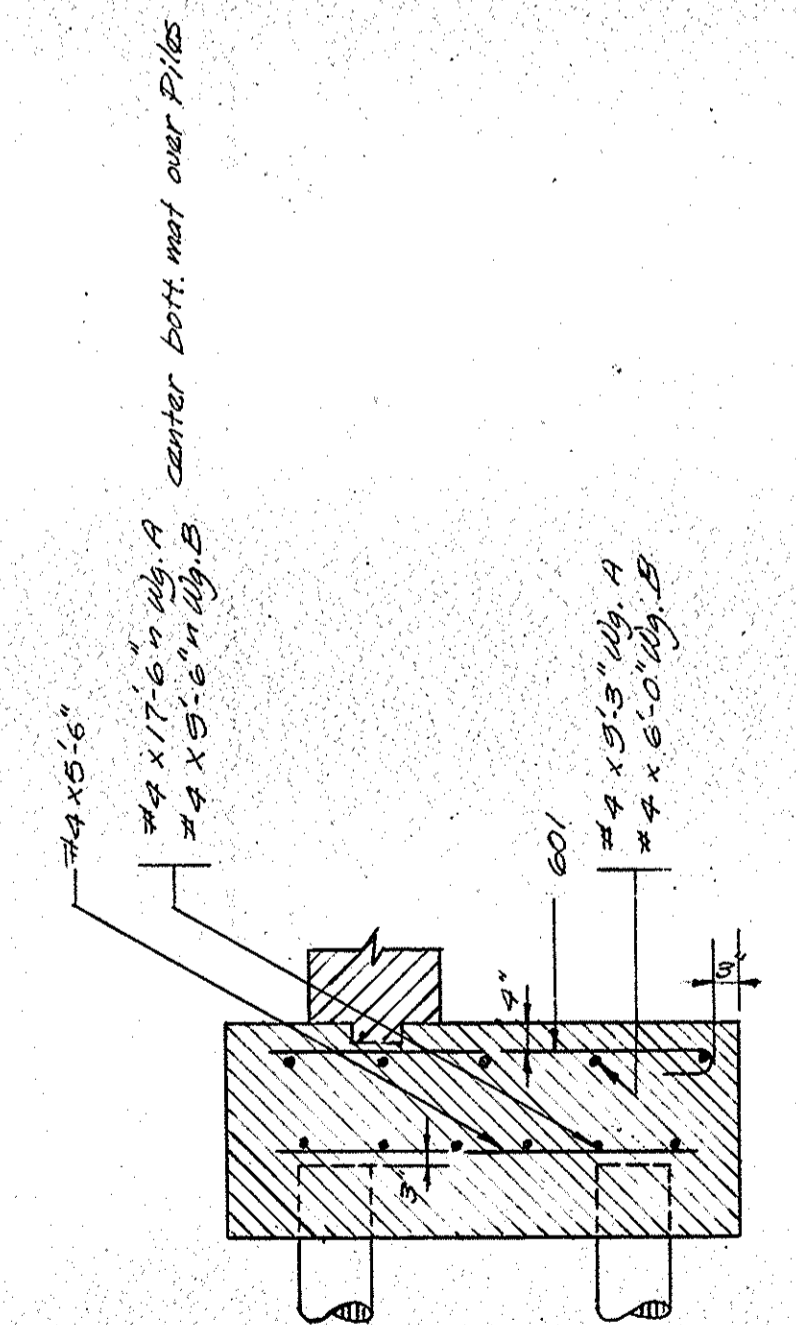
Bottom Steel Mat in Each Abutment
 Transverse: 149 bars #4 x 4'-0" @ 1'-0" Ctrs.
 Longitudinal: 95 bars #4 x 28'-6" @ 1'-0" Ctrs.

78 Untreated Timber Piles in Each Footing
 Approximate Length = 20'-0", driven to 20 tons minimum bearing
 See Art. F.103.1 (a) of the Std. Specs. regarding test piles

HALF FOOTING PLAN
 Scale: - 3/16" = 1'-0"
 Structure is Symmetrical about the Intersection of E Rdwy. & E Structure



PART ABUT. SECTION
 Scale: - 3/16" = 1'-0"
 Parallel To E Roadway
 Max. Soil Pressure = 1.7 Tons per Sq. Ft. (without Piles)



PART WING SECTION
 Scale: - 3/16" = 1'-0"
 Max. Soil Press = 2.0 Tons/1' (without piles)

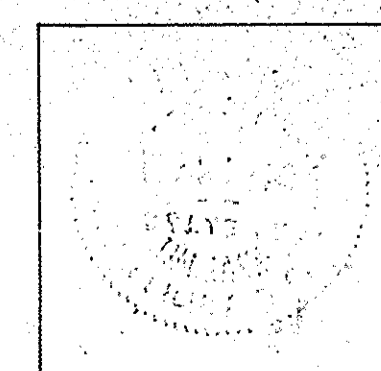
BILL OF MATERIALS "FOOTINGS ONLY"
 (DOES NOT INCLUDE DWEL STEEL)

REINFORCING STEEL			
SIZE & MARK	NUMBER OF BARS	LENGTH	WEIGHT
#4	70	22'-6"	
"	12	17'-6"	
"	12	9'-6"	
"	10	9'-3"	
"	10	2'-0"	
"	56	5'-6"	
"	228	4'-0"	
TOTAL #4 BARS			2,372
601	36	6'-9"	365 #
TOTAL STEEL			2,737
CONCRETE IN FOOTING =			190.0 cu.
UNTREATED TIMBER PILES = 144 @ 20 feet (Approx.) =			2,880 L.F.

NOTES

The purpose of this sheet is to augment the Standard Reinforced Concrete Arch in 18' Span, for the addition of piling. No changes are contemplated above top of footing.
 For all Span details, See the above Standard H=10'-0"
 For Wing Details, See "Standard R.C. Culverts" Slab Top Type, Under Fill 1ft. to 6ft., 30° Skew, Spans 10' to 20', dated May 1, 1956. Use 20' Clear Span, K=13'-9 1/2". Disregard mat steel outlined in this Std., and use that shown on this sheet. Remaining Steel and the dimensions are to be taken from the Std.

FOOTING DETAILS
 Structure @ Sta. 1812+80
 Designed by:
 Reg. Indiana Prof. Engr. No 2193
 December 24, 1956



ESTIMATE OF QUANTITIES

GRADING			PAVEMENT			MISCELLANEOUS		
ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
COMMON EXCAVATION	CYS.	301.735	SUBBASE, TYPE "I" OR "II"	CYS.	71,961	BITUMINOUS MATERIAL FOR PRIME	TONS	32.8
SOLID ROCK EXCAVATION	CYS.		REINFORCED CONCRETE	SYS.	2,72,006	BITUMINOUS MATERIAL FOR SEAL	GALS.	2085
SPECIAL BORROW	CYS.	200,421	PLAIN CONCRETE	SYS.	1,625	COVERING AGGREGATE	TONS	231.0
OVERHAUL	CYS.	10,613	H.E.S. REINFORCED CONCRETE	SYS.		FURNISHING & PLACING FERTILIZER	TONS	24.65
ADDED HAUL	UNITS		H.E.S. PLAIN CONCRETE	SYS.		FURNISHING & PLACING AGRIC. LIMESTONE	TONS	231.0
PEAT EXCAVATION	CYS.	131.723	PLAIN CONCRETE FOR PRIVATE DRIVE CROSSOVERS	SYS.	1570	FURNISHING & PLACING MULCHING MATERIAL	TONS	363.7
SURCHARGE - 4'	LFT.		PRIVATE DRIVE	SYS.		GUARD RAIL	LFT.	
SURCHARGE - 8'	LFT.		PLAIN CONCRETE 8"	SYS.	3658	FLEXIBLE STEEL PLATE GUARD RAIL	LFT.	25
SURCHARGE - 8'-1/2'	LFT.		REINFORCING STEEL	LBS.	11,259	DOUBLE FACE STEEL BEAM GUARD RAIL	LFT.	
MACHINE OPERATION	HRS.		CONTRACTION JOINTS, TYPE "O, O, OR B"	LFT.	62,746	WIRE ROPE GUARD RAIL	LFT.	
MACHINE AVAILABILITY	HRS.		EXPANSION JT., 1" PREF. BITUM.	LFT.		WOVEN WIRE FABRIC GUARD RAIL	LFT.	
DYNAMITE	LBS.		EXP. JT., 1" CORK, CORK RUBBER, OR FIBER	LFT.	546	FLEXIBLE STEEL PLATE OR STEEL BEAM GUARD RAIL	LFT.	
TEST HOLES	LFT.		EXPANSION JT., " PREF.	LFT.		RESETTING FLEXIBLE STEEL PLATE GUARD RAIL	LFT.	
CASED DYNAMITE HOLES	LFT.		EXPANSION JT., 1" PREFORMED WITH LOAD TRANSFER	LFT.	735	RESET STEEL BEAM GUARD RAIL	LFT.	
GRADE "B" SPECIAL BORROW	CYS.	200,423	3' PREFORMED BITUM. EXP. JT.	LFT.		RESET WIRE ROPE GUARD RAIL	LFT.	
TOP SOIL	CYS.		3" CORK, CORK RUBBER, OR FIBER EXP. JT.	LFT.	96	GUARD RAIL SALVAGE	LFT.	
PAVEMENT REMOVAL	SYS.	45,812	CONCRETE BASE			GUARD FENCE	LFT.	2,694
SALVAGED PAVEMENT	SYS.		H.E.S. CONCRETE BASE			GUIDE POSTS, TYPE "A"	EA.	164
PAVEMENT SURFACE REMOVAL	SYS.		CONCRETE PATCHES	SYS.		GUIDE POSTS, TYPE "B"	EA.	102
BREAKING PAVEMENT	SYS.	12,243	CLASS I CONCRETE PATCHES	SYS.		RESET GUIDE POSTS	EA.	
CURB REMOVAL	LFT.		CLASS II CONCRETE PATCHES	SYS.		BARRICADES, TYPE "A"	EA.	2
CENTER CURB REMOVAL	LFT.		CLASS III CONCRETE PATCHES	SYS.		BARRICADES, TYPE "B"	EA.	13
COMB. CURB & GUTTER REMOVAL	LFT.		CLASS IV CONCRETE PATCHES	SYS.		TYPICAL SIGN STANDARDS	EA.	32
LIP GUTTER REMOVAL	LFT.		CONCRETE WIDENING	SYS.		MAINTAINING TRAFFIC	LUMP SUM	1
GUTTER REMOVAL	LFT.		FILLING CRACKS AND JOINTS	GALS.		RAILROAD CROSSING SIGN, TYPE "A"	EA.	
WALK REMOVAL	SYS.					RAILROAD CROSSING SIGN, TYPE "B"	EA.	
STEPS REMOVAL	SYS.					ADVANCE RAILROAD WARNING SIGN	EA.	
RETAINING WALL REMOVAL	LFT.					PAVED SIDE DITCH, TYPE "A"	LFT.	2023
PAVED SIDE DITCH REMOVAL	LFT.					PAVED SIDE DITCH, TYPE " "	LFT.	
STOCKPILED SELECTED MATERIAL	CYS.					PAVED SIDE DITCH, TYPE " "	LFT.	
SALVAGING STOCKPILED SELECTED MATERIAL	CYS.					LIP GUTTER	LFT.	
SALVAGED ROAD MATERIAL	CYS.					COMBINED CURB AND GUTTER	LFT.	
BIT. SALVAGE SURFACE MATERIALS FOR APPROACHES	CYS.	3381				CONCRETE CURB	LFT.	
						CONCRETE CURB TYPE "B"	LFT.	
						INTEGRAL CONCRETE CURB	LFT.	
						INTEGRAL CONCRETE CURB TYPE "B"	LFT.	2164
						CONCRETE CENTER CURB		
						6" HAND LAID RIP RAP	SYS.	50
						12" HAND LAID RIP RAP	SYS.	
						GROUTED RIP RAP	SYS.	
						PLACING 6" HAND LAID RIP RAP	SYS.	
						PLACING 12" HAND LAID RIP RAP	SYS.	
						PLACING GROUTED RIP RAP	SYS.	
						PRECAST CONCRETE RIP RAP	SYS.	
						RIGHT OF WAY MARKERS	EA.	123
						PLACING RIGHT OF WAY MARKERS	EA.	
						RESET RIGHT OF WAY MARKERS	EA.	
						RIGHT-OF-WAY FENCE (CHAIN LINK TYPE)	LIN. FT.	50,333
						MONUMENTS, TYPE " "	EA.	
						MONUMENTS, TYPE " "	EA.	
						MONUMENTS, RE-ESTABLISHED	EA.	
						CASTINGS ADJUSTED TO GRADE, MONUMENTS	EA.	
						BENCH MARK POSTS	EA.	4
						RESETTING BENCH MARK POSTS	EA.	

VOID
DUPLICATE ON SHEET NO. 32

STRUCTURE DATA

FEDERAL ROAD DIVISION NO.	STATE	F. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	77 (26)	1956	30	32

Rev. 6-24-59 Structure No. 36 Revised
Rev. 4-27-60 Class 9 Pipe
Rev. 10-6-61 Class II Drive Shafts
Rev. 12-6-61, Pipe Classification

STRUCTURE NUMBER	LOCATION	SIZE	GROUP	DESCRIPTION	SKEW	LENGTH L'	COVER F.T.	WINGS W'	UP STREAM ELEV.	LINE DOWN STREAM ELEV.	CONCRETE CLASS "D" CUYDS.	SPECIAL BORROW GRADE "B" CUYDS.	REINFORCING STEEL LBS.	REMARKS	PLANS ON SHEET NO.
1	1556+44														
11	1522+05L	12"	A	CLASS II PIPE		24'	4'				0.58			REMOVE PIPE IN PLACE	
12	1522+31	12"	A	STD. INLET TYPE E-7 &		70'	4'		798.0	797.7	0.29				
13	1525+50L	12"	A	CLASS II PIPE		24'	3'				0.58			REMOVE PIPE IN PLACE	
14	1526+36	12"	A	STD. INLET TYPE E-7 &		68'	3'		699.1	698.9	0.29				
15	1526+77L	12"	A	CLASS II PIPE		24'	3'				0.58				
16	1528+20L	12"	A	CLASS II PIPE		54'	2'				0.58				
17	1528+94L	12"	A	CLASS II PIPE		54'	3'				0.58				
18	1530+05.3L	15"	A	CLASS II PIPE		52'	5'				0.69			REMOVE PIPE IN PLACE	
19	1530+53R	15"	A	CLASS II PIPE		52'	5'				0.69				
20	1533+25	12"	A	STD. INLET TYPE E-7 &		70'	4'		699.0	698.0	0.29				
21	1540+15	12"	A	STD. INLET TYPE E-7 &		68'	3'		699.2	699.0	0.29				
22	1543+20L	12"	A	PIPE, B.C.C.M./P.I.		20'	<1'				0.58				
23	1543+22L	12"	A	PIPE, B.C.C.M./P.I.		20'	<1'				0.58				
24	1546+6.5	12"	A	STD. INLET TYPE E-7 &		68'	3'		699.5	699.3	0.29				
25	1552+6.5	12"	A	STD. INLET TYPE E-7 &		68'	3'		699.6	699.4	0.29				
26	1556+20L	15"	A	PIPE, B.C.C.M. WITH P.I.		30'					0.35			PRIV. DRIVE HDWL. INLET END	
27	1556+30R	12"	A	PIPE, B.C.C.M. WITH P.I.		30'					0.29			PRIV. DRIVE HDWL. INLET END	
28	1556+60L	15"	A	PIPE, B.C.C.M. WITH P.I.		30'					0.35			PRIV. DRIVE HDWL. INLET END	
29	1556+60R	12"	A	PIPE, B.C.C.M. WITH P.I.		30'					0.29			PRIV. DRIVE HDWL. INLET END	
30	1560+50	12"	A	STD. INLET TYPE E-7 &		74'	5'		698.7	697.7	0.29				
31	1566+7.5	12"	A	STD. INLET TYPE E-7 &		70'	3'		700.6	700.4	0.29				
32	1573+00	12"	A	STD. INLET TYPE E-7 &		62'	3'		701.6	701.4	0.29				
33	1576+85L	12"	A	PIPE, B.C.C.M./P.I.		20'	<1'				0.58				
34	1579+10	12"	A	STD. INLET TYPE E-7 &		68'	3'		702.6	702.4	0.29			REMOVE PIPE IN PLACE	
35	1584+20R	15"	A	PIPE		52'	1'				0.69				
36	1585+44	12"	A	PIPE		24'	3'		701.54	701.08	0.40		16		
37	1585+44	15"	A	PIPE		16.5'	5'				0.58				
38	1586+35	12"	A	STD. INLET TYPE E-7 &		70'	4'		703.0	702.3	0.29				
39	1593+25	12"	A	STD. INLET TYPE E-7 &		68'	3'		703.5	703.3	0.29				
40	1600+15	12"	A	STD. INLET TYPE E-7 &		68'	3'		703.5	703.3	0.29				
41	1607+05	12"	A	STD. INLET TYPE E-7 &		66'	3'		703.3	703.5	0.29				
42	1608+10L	12"	A	PIPE		54'	2'				0.58				
43	1610+00L	12"	A	PIPE		64'	2'				0.58				
44	1611+00L	15"	A	PIPE		52'	1'				0.69				
45	1611+14	18"	A	BIT. COATED C.M. PIPE WITH P.I.		142'	4'		702.3	702.1	0.40		16	CONNECT TO SUBBASE DRAIN AHEAD RT.	
46	1612+30	12"	A	STD. INLET TYPE E-7 &		74'	4'		702.3	702.0	0.29				
47	1619+00	12"	A	STD. INLET TYPE E-7 &		68'	3'		703.5	703.3	0.29				
48	1625+00	12"	A	STD. INLET TYPE E-7 &		68'	3'		706.9	706.7	0.29				
49	1630+50L	12"	A	PIPE		20'	1'				0.58				
50	1631+00	12"	A	STD. INLET TYPE E-7 &		68'	3'		706.8	706.6	0.58				
51	1638+00	12"	A	STD. INLET TYPE E-7 &		70'	4'		711.2	711.0	0.58				
52	1645+45	12"	A	STD. INLET TYPE E-7 &		68'	3'		713.9	713.7	0.58			CONNECT TO SUBBASE DRAINS AHEAD RT & LT	
53	1651+50	18"	A	BIT. COATED C.M. PIPE WITH P.I.		162'	7'		710.9	710.0	0.40		16		
54	1651+50L	18"	A	BIT. COATED C.M. PIPE WITH P.I.		36'	2'				0.80				
55	1653+00	12"	A	STD. INLET TYPE E-7 &		68'	3'		714.5	714.3	0.29			CONNECT TO SUBBASE DRAIN AHEAD LT.	
56	1658+10	12"	A	SPL. CATCH BASIN TYPE H-7										CONNECT TO PIPE IN PLACE, REMOVE INLET IN PLACE	
57	1658+30L	12"	A	STD. INLET TYPE E-7										CONNECT TO PIPE IN PLACE, REMOVE INLET IN PLACE	
58	1659+16	12"	A	STD. INLET TYPE E-7 &		68'	3'		715.7	715.5	0.29				
59	1663+00	12"	A	STD. INLET TYPE E-7 &		70'	5'		714.0	712.2	0.29				
60	1670+00	12"	A	STD. INLET TYPE E-7 &		70'	5'							CONNECT TO STR. NO. 61	
61	1670+16	42"	A	PIPE		16'	6'		715.0	708.9					
62	1670+16	42"	A	BIT. COATED C.M. PIPE WITH P.I. 1-42x12 TEE		160'	8'		709.2	708.6				CONNECT TO STR. NO. 60; REMOVE STR. IN PLACE	
63	1677+06	12"	A	STD. INLET TYPE E-7 &		62'	3'		720.1	719.9	0.29				
64	1683+00L	12"	A	PIPE, B.C.C.M./P.I.		24'	<1'				0.58				
65	1684+00	12"	A	PIPE, B.C.C.M./P.I.		24'	<1'				0.58				
66	1687+46L	12"	A												

ESTIMATE OF QUANTITIES

STRUCTURE DATA

GRADING			PAVEMENT			MISCELLANEOUS		
ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY	ITEM	UNIT	QUANTITY
COMMON EXCAVATION	CYS.		SUBBASE, TYPE "A"	CYS.		SODDING	SYS.	
SOLID ROCK EXCAVATION	CYS.		REINFORCED CONCRETE	SYS.		FURNISHING MATERIAL FOR PLAIN SEEDING	ACRES	
SPECIAL BORROW	CYS.		PLAIN CONCRETE	SYS.		COVERING AGGREGATE	TONS	
OVERHAUL	CYS.		H.E.S. REINFORCED CONCRETE	SYS.				
ADDED HAUL	UNITS		H.E.S. PLAIN CONCRETE	SYS.				
PEAT EXCAVATION	CYS.		PLAIN CONCRETE FOR PRIVATE DRIVE CROSSOVERS	SYS.		HOT ASPHALTIC CONCRETE BINDER (1)	TONS	
SURCHARGE - 4'	LFT.		PRIVATE DRIVE	SYS.		HOT ASPHALTIC CONCRETE SURFACE TYPE "B"	TONS	
SURCHARGE - 4'-8"	LFT.		REINFORCING STEEL	LBS.		BITUMINOUS COATED AGGREGATE BINDER (1)	TONS	
SURCHARGE - 8'-12"	LFT.		CONTRACTION JOINTS, TYPE	LFT.		BITUMINOUS COATED AGGREGATE SURFACE	TONS	
MACHINE OPERATION	HRS.		EXPANSION JT., 1" PREF. BITUM.	LFT.		ROCK ASPHALT SURFACE	TONS	
MACHINE AVAILABILITY	HRS.		EXPANSION JT., 1" CORK OR CORK RUBBER	LFT.				
DYNAMITE	LBS.		EXPANSION JT., 1" PREF. FIBER	LFT.				
TEST HOLES	LFT.		EXPANSION JT., 1" PREF. WITH LOAD TRANSFER	LFT.				
CASED DYNAMITE HOLES	LFT.		3" PREFORMED BITUM. EXP. JT.	LFT.				
GRADE "B" SPECIAL BORROW	CYS.		CONCRETE BASE	SYS.				
TOP SOIL	CYS.		H.E.S. CONCRETE BASE	SYS.				
PAVEMENT REMOVAL	SYS.		CONCRETE PATCHES	SYS.				
SALVAGED PAVEMENT	SYS.		CLASS I CONCRETE PATCHES	SYS.				
PAVEMENT SURFACE REMOVAL	SYS.		CLASS II CONCRETE PATCHES	SYS.				
BREAKING PAVEMENT	SYS.		CLASS III CONCRETE PATCHES	SYS.				
CURB REMOVAL	LFT.		CLASS IV CONCRETE PATCHES	SYS.				
CENTER CURB REMOVAL	LFT.		CONCRETE WIDENING	SYS.				
COMB CURB & GUTTER REMOVAL	LFT.		FILLING CRACKS AND JOINTS	GALS.				
LIP GUTTER REMOVAL	LFT.							
GUTTER REMOVAL	LFT.							
WALK REMOVAL	SYS.							
STEPS REMOVAL	SYS.							
RETAINING WALL REMOVAL	LFT.							
PAVED SIDE DITCH REMOVAL	LFT.							
STOCKPILED SELECTED MATERIAL	CYS.							
SALVAGING STOCKPILED SELECTED MATERIAL	CYS.							
SALVAGED ROAD MATERIAL	CYS.							

VOID M.J. KOENIG

QUANTITIES SEE SHEET NO. 32A

STRUCTURE NUMBER	LOCATION	DESCRIPTION	SKEW	LENGTH	COVER	WINGS	FLOW LINE		CONCRETE CLASS "D"	SPECIAL BORROW GRADE "B"	REINFORCING STEEL	REMARKS	PLANS ON SHEET NO.
							UP STREAM ELEV.	DOWN STREAM ELEV.					
131	1876+50	STD. INLET TYPE E-7 &		66'	4'		787.5	786.5	0.64	6			
132	1877+92	STD. R.C. ARCH	30'	149'	6'	A-B	776.0	775.6	2.23	3	20790	INCREASE "d" FROM 3'-3" TO 4'-6"	
133	1883+00	STD. INLET TYPE E-7 &		68'	4'		785.8	785.4	0.29	6		CONSTRUCT OUTLET DITCH	
134	1886+00	BIT. COATED C.M. PIPE/R.I.		172'	6'		779.2	778.8	2.83	70		CONSTRUCT OUTLET DITCH	
135	1890+00	STD. INLET TYPE E-7 &		68'	3'		784.8	784.5	0.29	6			
136	1898+00	STD. INLET TYPE E-7 &		68'	3'		788.6	788.3	0.29	6			
137	1905+10	STD. INLET TYPE E-7 &		72'	4'		791.0	790.0	0.29	6			
138	1913+10	STD. INLET TYPE E-7 &		68'	3'		796.3	796.0	0.29	6			
139	1923+00	STD. INLET TYPE E-7 &		150'	5'		798.0	796.2	0.62	22			
140	1924+40	STD. INLET TYPE E-7 &		80'	5'		798.7	796.0	0.29	7		REMOVE 6" F.T. IN PLACE; CONNECT TO 6" F.T. IN PLACE	
141	1924+78	SEWER PIPE		200'									
142	1931+25	STD. INLET TYPE E-7 &		76'	4'		798.0	796.0	0.29	7			
143	1933+40	BIT. COATED C.M. PIPE/R.I.		142'	7'		793.5	793.0	2.89	15		REMOVE 10" F.T. IN PLACE; CONNECT TO 10" F.T. IN PLACE	
144	1933+55	BIT. COATED C.M. PIPE/R.I.		200'									
145	1938+15	STD. INLET TYPE E-7 &		68'	3'		798.2	797.6	0.29	6		CONNECT TO SUBBASE DRAIN BACK ON LT.	
146	1945+05	STD. INLET TYPE E-7 &		70'	5'		796.0	794.6	0.64	6			
147	1947+97	BIT. COATED C.M. PIPE/R.I.		146'	4'		794.0	793.0	2.83	45			
148	1948+90	STD. INLET TYPE E-7 &		70'	6'		797.5	795.0	0.64	9		REMOVE FT. IN PLACE NO CHANGES REQ'D.	
149	1950+30	BIT. COATED C.M. PIPE/R.I.		200'									
150	1953+15L	C.M. PIPE IN PLACE											
151	1953+15L	PIPE, BCCM/R.I.		24'	< 1'				0.58	1			
152	1953+42.4L	PIPE, BCCM/R.I.		52'	< 1'				1.24	3			
153	1953+75	STD. INLET TYPE E-7 &		68'	5'		804.0	802.3	0.29	6			
154	1961+00	STD. INLET TYPE E-7 &		74'	5'		819.7	819.0	0.29	6			
155	1967+30	PIPE		130'	4'		830.5	830.0	3.14	45		CONNECT TO STR. NO. 156; CONST. OUTLET DITCH	
156	1967+40	STD. INLET TYPE E-7 &		10'	2'		833.4	832.0				CONNECT TO STR. NO. 155	
157	1973+35	STD. INLET TYPE E-7 &		66'	4'		841.5	841.0	0.64	7			
158	1981+00	STD. INLET TYPE E-7 &		66'	3'		851.0	850.7	0.29	6		CONNECT TO SUBBASE DRAIN AHEAD ON RT.	
159	1987+00	PIPE		130'	3'		856.3	855.9	0.80	16			
160	1992+75	STD. INLET TYPE E-7 &		66'	3'		856.0	855.8	0.29	6		CONNECT TO SUBBASE DRAIN BACK ON RT.	
161	1993+20R	PIPE, BCCM/R.I.		52'	< 1'				0.69	2			
162	1993+20L	PIPE, BCCM/R.I.		52'	< 1'				0.69	2			
163	1999+00	STD. INLET TYPE E-7 &		66'	3'		850.6	850.2	0.29	6			
164	2007+00	STD. INLET TYPE E-7 &		64'	3'		843.3	843.0	0.29	6			
165	2015+00R	STD. INLET TYPE E-7 &		54'	2'		736.4	735.1	0.29	7			
166	2019+20L	PIPE, BCCM, W/R.I.		48'	1'				0.69	2			
*53-A	1651+12R	BCCM Pipe with R.I. Perforated BCCM Pipe		300'			706.4					Connect to Structure under Railroad	
*19-A	1531+00L	Pipe		24'	2'				0.58	1		Connect to 300' BCCM Pipe	

STRUCTURES									
ITEM	PIPE - LINEAL FEET								
	4"	6"	8"	10"	12"	15"	18"	24"	
REINFORCED CONCRETE									
VITRIFIED CLAY CONCRETE									
CORRUGATED METAL									
R.C. V.C. C.I. OR CONC.									
V.C. C.I. OR CONC.									
PIPE									
PIPE TO BE RELAID									
EXTRA STRENGTH REINFORCED CONCRETE									
VIT. CLAY OR CONC. SEWER									
SEWER									
VIT. CLAY SEWER									
REINF. CONC. SEWER									
BITUM. COATED CORR. METAL									
DEFORMED CORR. METAL									
DRAINTILE									

SUBSURFACE DRAINAGE			CASTINGS ADJUSTED TO GRADE	FOR STRUCTURES			GATE VALVES		
PIPE - LINEAL FEET				ITEM	UNIT	QUANTITY	SIZE	HEAD	EA.
3" PERF. C.M. V.C. SEWER, CEM. CONC. SEWER OR PERF. V.C. SEWER		AGG. CU. YDS.	CONCRETE CLASS "D"	GYS.					
6" BIT. COATED PERF. C.M. V.C. SEWER, CEM. CONC. SEWER OR PERF. V.C. SEWER			REINFORCING STEEL	LBS.					
EACH									

CATCH BASINS		PIPE CATCH BASIN		INLETS		MANHOLES		RECONSTRUCTED	
TYPE	EACH	SIZE	EACH	TYPE	EACH	TYPE	EACH	TYPE	LIN. FT.
		12"				A-4		MANHOLE	
		15"				B-4		CATCH BASIN	
		18"						INLET	
		24"							