

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	57 D	1931	1	93

**INDEX OF SHEETS**

SHEET NO.	TITLE PAGE
2	TYPICAL CROSS-SECTION OF IMPROVEMENT WATERWAY SURFACE TREATED MACADAM
3	TYPICAL DETAILS OF CONSTRUCTION
4-32	PLATTANO PROFILE SHEETS
33	STANDARD STRUCTURE SHEET-520 (R.C. CULV.)
34	3-21 (BOX CULV.)
35	3-22 (ST. D. UNDERDRAIN-GUARD RAIL)
36	3-28 (CONC. CURB + GUTTER + RAMP)
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39	CULV. REPAIR SHEET
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**STATE OF VERMONT**  
**STATE HIGHWAY DEPARTMENT**  
**PLAN AND PROFILE OF PROPOSED**  
**STATE HIGHWAY**  
 FEDERAL AID PROJECT

**TOWN OF MARSHFIELD**

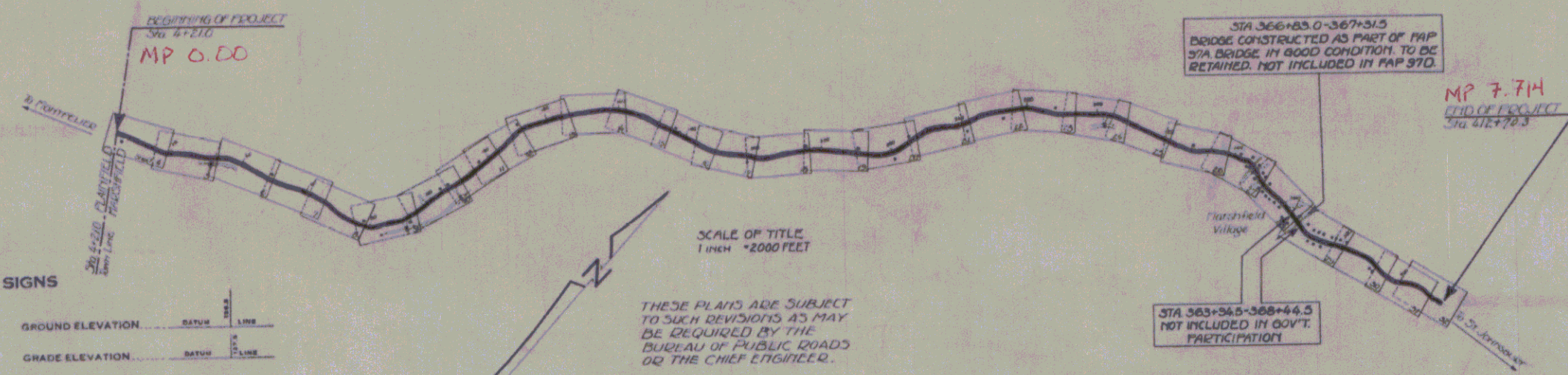
**MONTPELIER-ST. JOHNSBURY ROAD**  
 FROM THE PLAINFIELD TOWN LINE EAST 7.734 MILES  
 TO THE MOLLY'S BROOK BRIDGE

LENGTH OF PROJECT 406895 FT=7.706 MI.



PROJECT *Montpelier*  
 NUMBER *97-D*  
 TYPE *Also See 1930 Project 97-D*  
 CONTRACTOR *See file card*  
 LOCATION *See file card*  
 YEAR *30*

**SCALES**  
 PLANT 1/8" = 30 FT.  
 VERTICAL 1/8" = 10 FT.  
 HORIZONTAL 1/8" = 50 FT.  
 SECTIONS 1/8" = 5 FT.



**CONVENTIONAL SIGNS**

COUNTY LINE	GROUND ELEVATION
TOWN LINE	GRADE ELEVATION
FENCE LINE	
STONE WALL	
UNFENCED PROPERTY	
GUARD RAIL	
TRAVELED WAY	
RAILROAD	
RETAINING WALL	
CENTER LINE	
SURVEY LINE	
MANHOLE	
TRIP INLET	
UTILITY POLE	
POWER POLE	
TELEPHONE POLE	
TILES	
HEDGE	

**CURVE DATA**

DEFLECTION ANGLE	Δ
DEGREE OF CURVE	D
RADIUS OF CURVE	R
TANGENT DISTANCE	T
LENGTH OF CURVE	L
EXTERNAL DISTANCE	E
POINT OF INTERSECTION	P.I.
POINT OF CURVE	P.C.
POINT OF TANGENT	P.T.
POINT ON TANGENT	P.O.T.

THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY BE REQUIRED BY THE BUREAU OF PUBLIC ROADS OR THE CHIEF ENGINEER.

APPROVED \_\_\_\_\_

DISSEMINATED BY ORDER OF THE STATE HIGHWAY BOARD

**Route US 2**

**Pin # 99R123**

**Date 1/1/1930**

RECOMMENDED \_\_\_\_\_

DISTRICT ENGINEER BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL \_\_\_\_\_

CHIEF ENGINEER BUREAU OF PUBLIC ROADS

APPROVED \_\_\_\_\_

DIRECTOR BUREAU OF PUBLIC ROADS

CORRECT: 1931

ROAD ENGINEER

SERIES P. NO. 57 D. FILED SHEET 1 OF 9

WOOD GUARD RAIL REQUIRED

CULV. STA.	LEFT	RIGHT
7+73	24'	-
13+10	24'	-

CABLE GUARD RAIL REQUIRED

STA.	STA.	Lo D	LENGTH	CONSTANT	RAIL LENGTH
6+90	7+86	R	36'	40'	136'

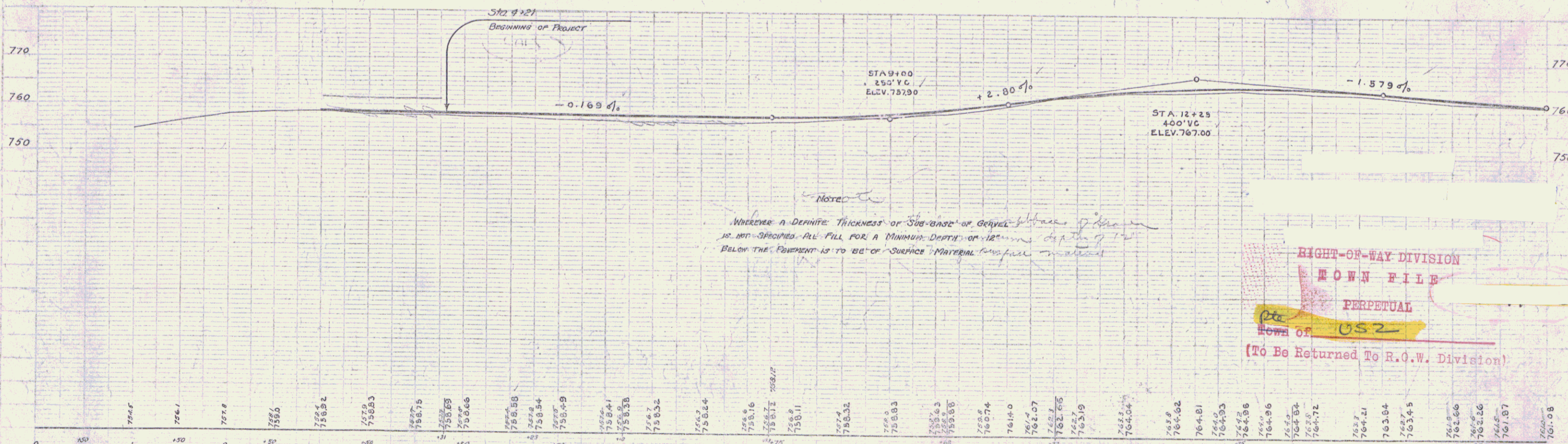
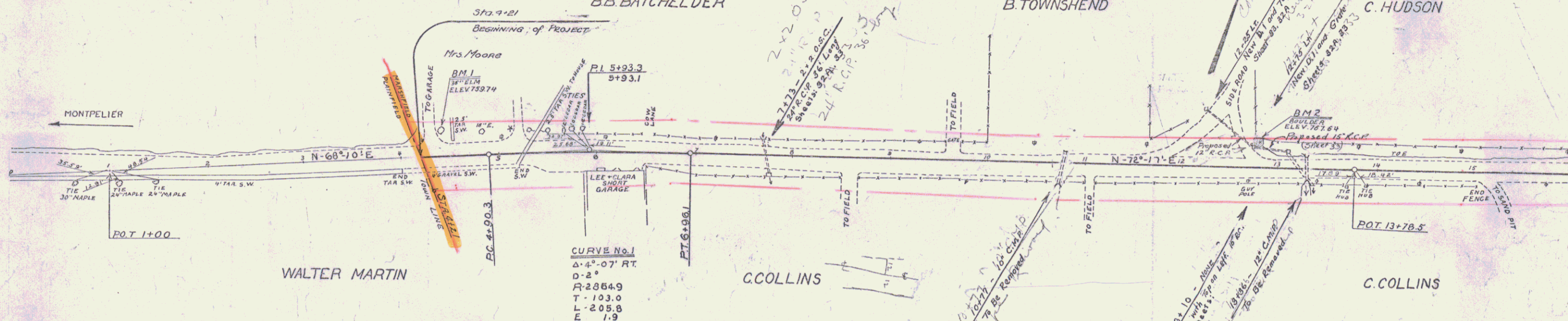
REINF. CONC PIPE CULV. Required

Sta.	D. in.	Length	Conc. A	Conc. C	Steel
7+73	36"	2.4	56	56	56
12+25	12"	56	1.5	1.5	91
13+10	15"	40	1.5	1.5	38
12+75	15"	40	1.5	1.5	91

WOOD GUIDE POSTS REQUIRED

STATION	LEFT	RIGHT
12+25	1	-
12+75	1	-

97 D 1930 4 99



NOTE: WHEREVER A DEFINITE THICKNESS OF SUB-BASE OR GRAVEL BELOW IS NOT SPECIFIED ALL FILL FOR A MINIMUM DEPTH OF 12" MUST BE PLACED BELOW THE PAVEMENT IS TO BE OF SURFACE MATERIAL UNLESS NOTED

RIGHT-OF-WAY DIVISION  
TOWN FILE  
PERPETUAL  
Town of US2  
(To Be Returned To R.O.W. Division)

B.M. #1 Spike 36" Elm 235' Lt. 4+91 Elev. 759.74  
B.M. #2 U.S.I. B.M. Top Boulder at Side Rd. 23.5' Lt. 12+76 Elev. 767.64

SERIES NO. 070  
SHEET 7 OF 30

STEARNS R. JENKINS

052

**WOOD GUARDRAIL REQUIRED**

STA.	LEFT	RIGHT
17+45	26'	26'
22+55	26'	26'
29+33	26'	26'

**CABLE GUARDRAIL REQUIRED**

STA.	STA.	LEN.	CONST.	PROV.
17+50	18+00	R 100'	40'	140'
19+50	21+50	R 200'	40'	240'
26+56	26+80	L 24'	20'	44'
26+56	26+80	L 24'	20'	44'
26+90	27+14	L 24'	20'	44'
26+90	27+14	L 24'	20'	44'

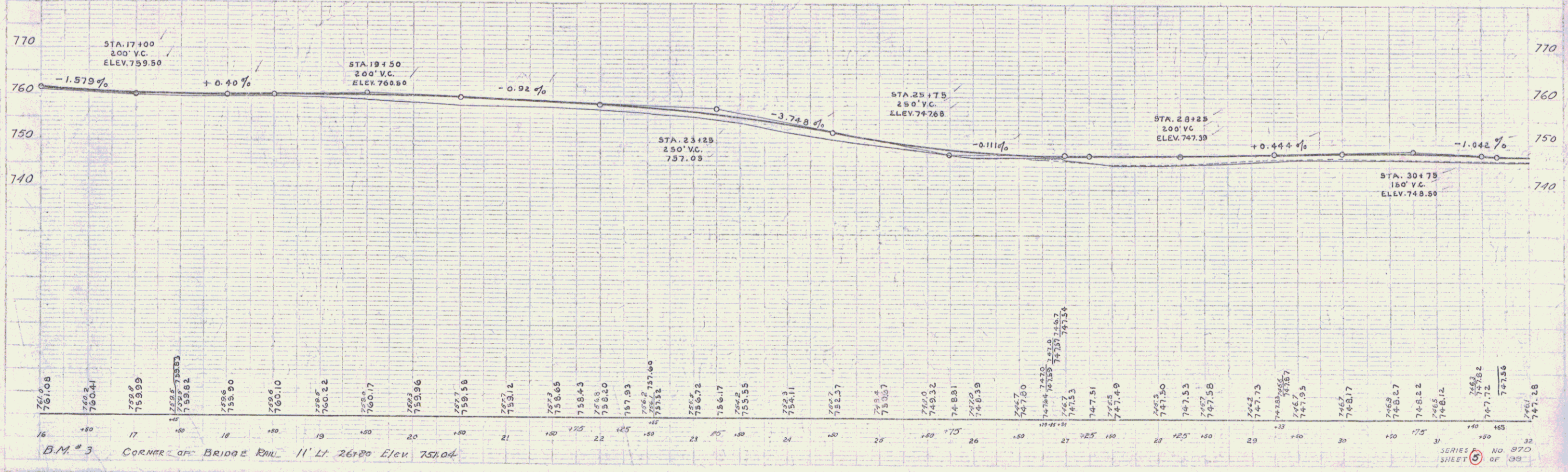
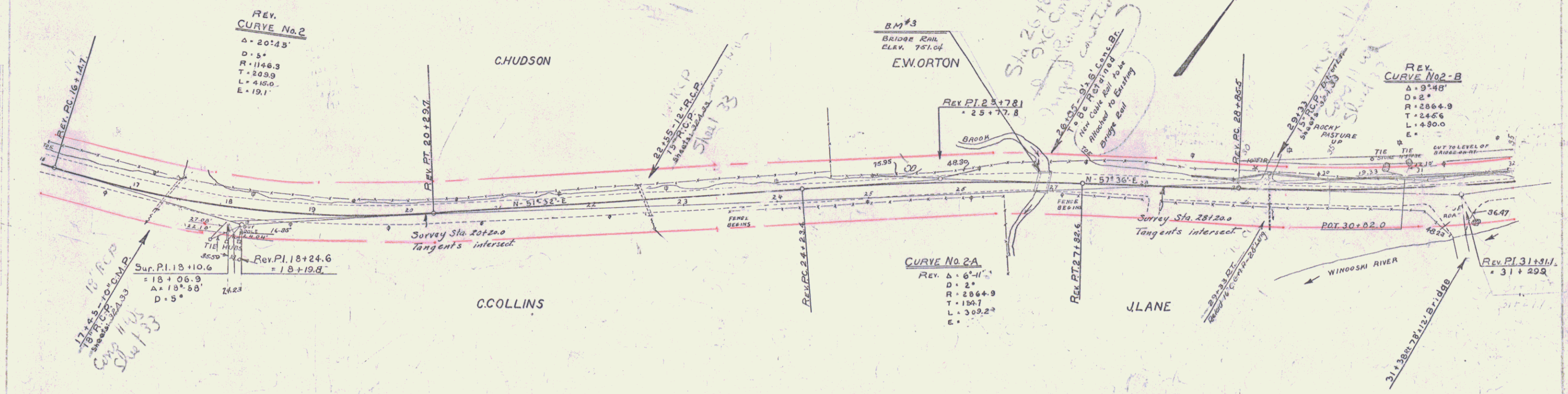
**REIN. CONC. PIPE CULVERT REQUIRED**

STA.	Sta.	Sta.	Len.	Comp.	Cons.	Size
17+45	18+00	18+00	55'	1.80%	3.0	33"
29+33	29+33	29+33	15'	3.6%	1.5	33"

**RELAYING PIPE CULVERTS**

STATION	C.M.P. LENGTH
29+33.07	16' 28"

37-0 1930 5 99



B.M. #3 CORNER OF BRIDGE RAIL 11' LT 26+80 Elev 757.04

SERIES NO 970 SHEET 5 OF 39

**WOOD GUANO DAIL REQUIRED**

CULV. STA	LEFT	RIGHT
32+22	24'	—
33+37	24'	—
36+39	24'	—
40+80	24'	—
42+22	24'	24'
43+31	24'	24'

**CABLE GUANO DAIL REQUIRED**

STA - STA	LEN	CONC	CONC	LEN
32109 - 41100	2	836	80'	976'

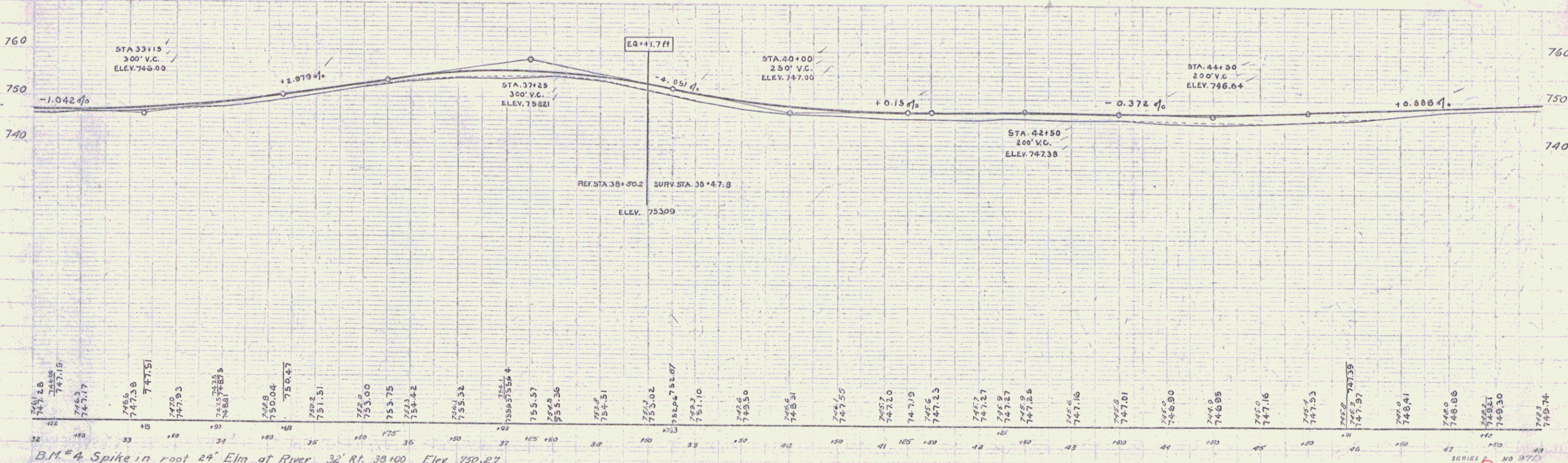
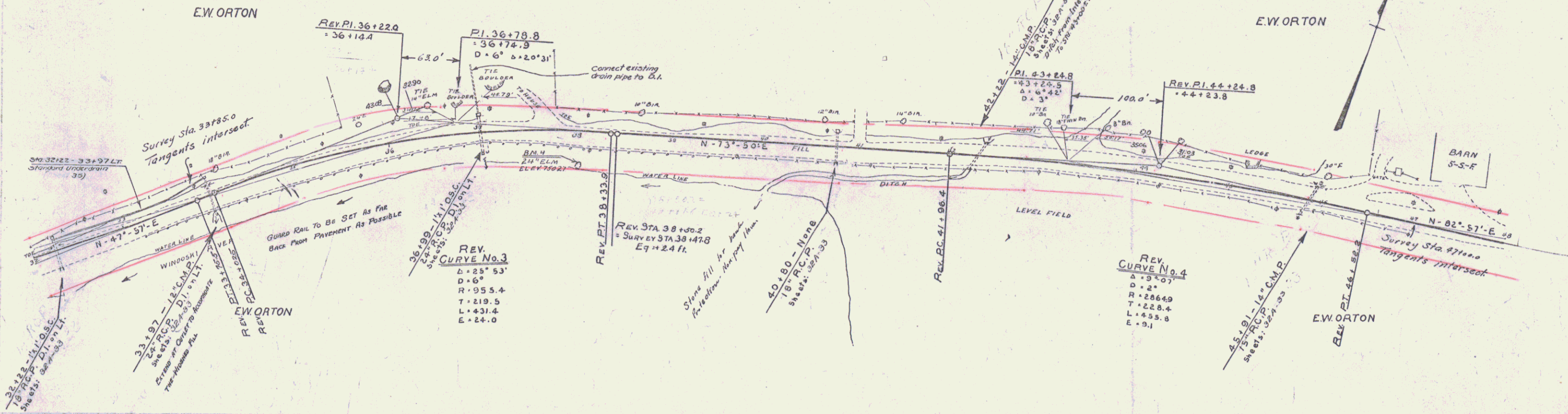
**REINF CONC PIPE CULV REQUIRED**

Sta.	Dia.	Len.	Conc. A	Conc. C	Steel
32+22	18"	32'	2.8 c.y.	—	176 #
33+37	24"	40'	1.8 c.y.	—	157 #
36+39	24"	42'	1.8 c.y.	—	157 #
40+80	18"	36'	2.3 c.y.	—	174 #
42+22	18"	32'	1.8 c.y.	—	54 #
43+31	15"	36'	—	3.0 c.y.	33 #

**STD UNDERDRAIN WITH P.C.G.M.P. (Cont'd)**

STATIONS	DIA.	LENG.
32+22 - 33+37	6"	176'

DESIGNED BY: [Signature]  
 DATE: 1930  
 SHEET NO. 99



B.M. # 4 Spike in root 24" Elm at River 32' Rt. 38+00 Elev. 750.27

SERIES NO. 37  
 SHEET 99

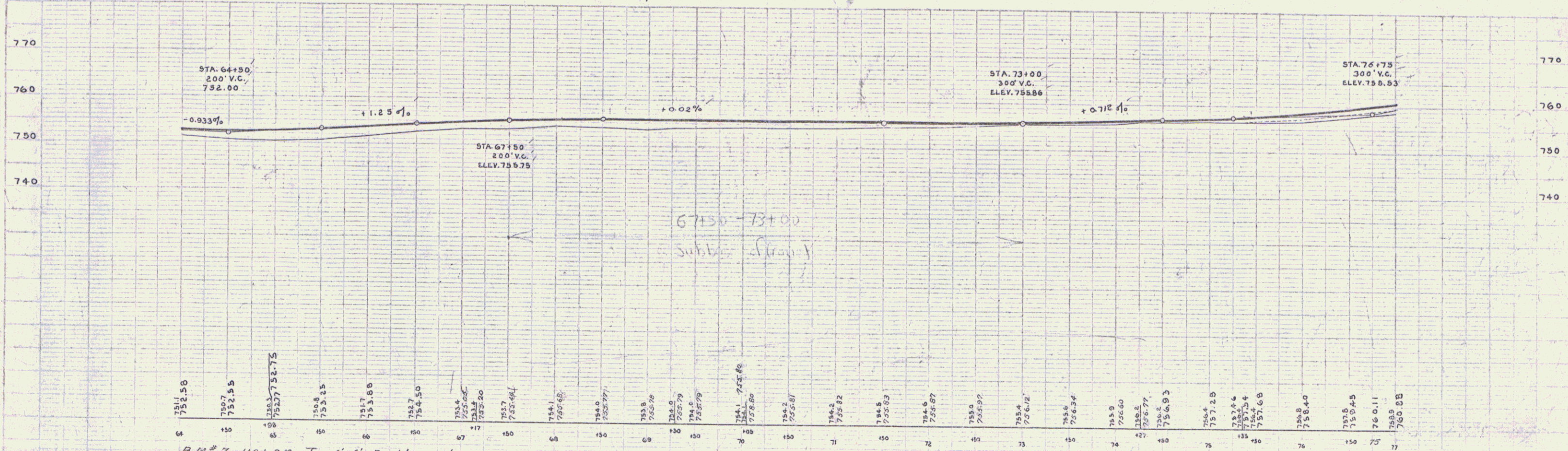
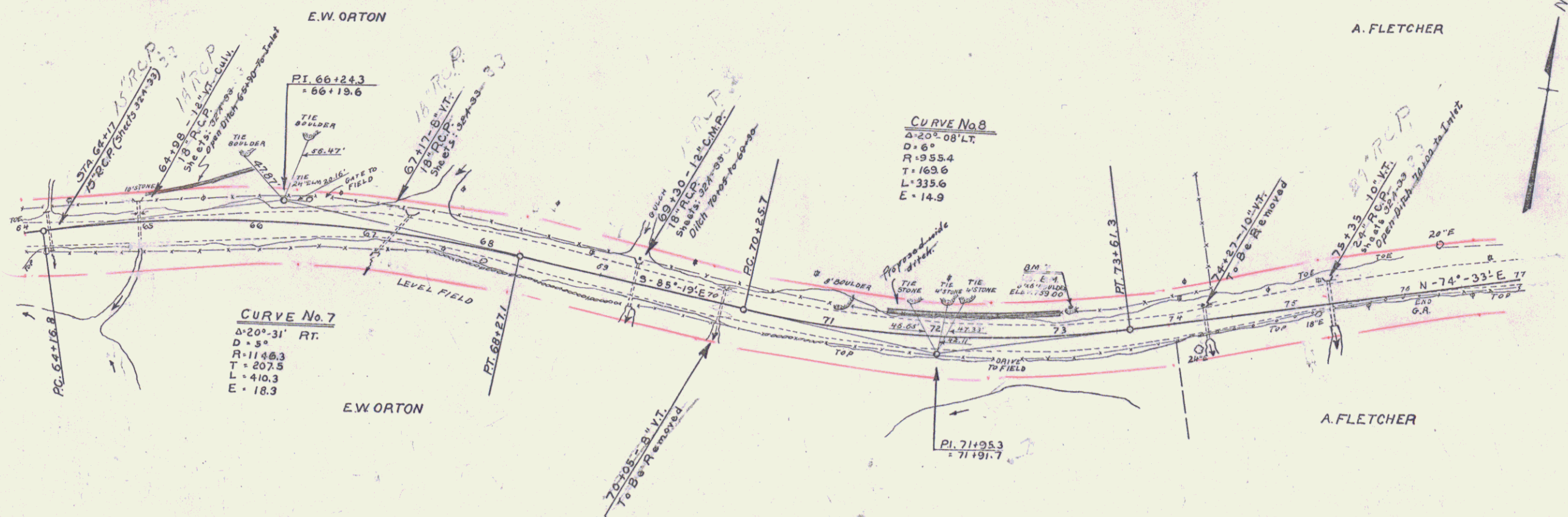


WOOD GUARD RAIL REQUIRED		
CUKX STA.	LEFT	RIGHT
64+17	24'	24'
64+98	24'	24'
67+17	24'	24'
69+30	24'	24'
75+35	24'	1'

CABLE GUARD RAIL REQUIRED					
STA.	STA.	Len	CONSTANT	FR.	ENCL.
71+50	77+0	12	550'	60'	610'

REINF CONC. PIPE CULV. REQUIRED					
Sta.	Dia.	Len	Cons.	Cons.	Steel
64+15.8	18"	40'	1.8 c.y.		54 #
67+17	18"	36'	1.8 c.y.		54 #
69+30	18"	36'	1.8 c.y.		54 #
75+35	24"	36'	2.4 c.y.		54 #
64+17	15"	32'		3.0 c.y.	33 #

20' ROAD WIDTH 14'4" SIDEWALK TOTAL  
 1937-1938 FISCAL YEAR  
 97-D 1930 6 89



B.M. # 7 U.S.I.B.M. Top 6'16" Boulder 17' Lt. 73+09 Elev 759.00

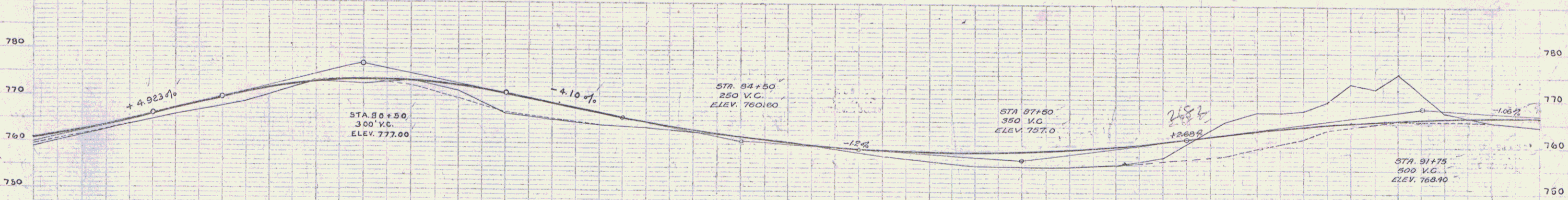
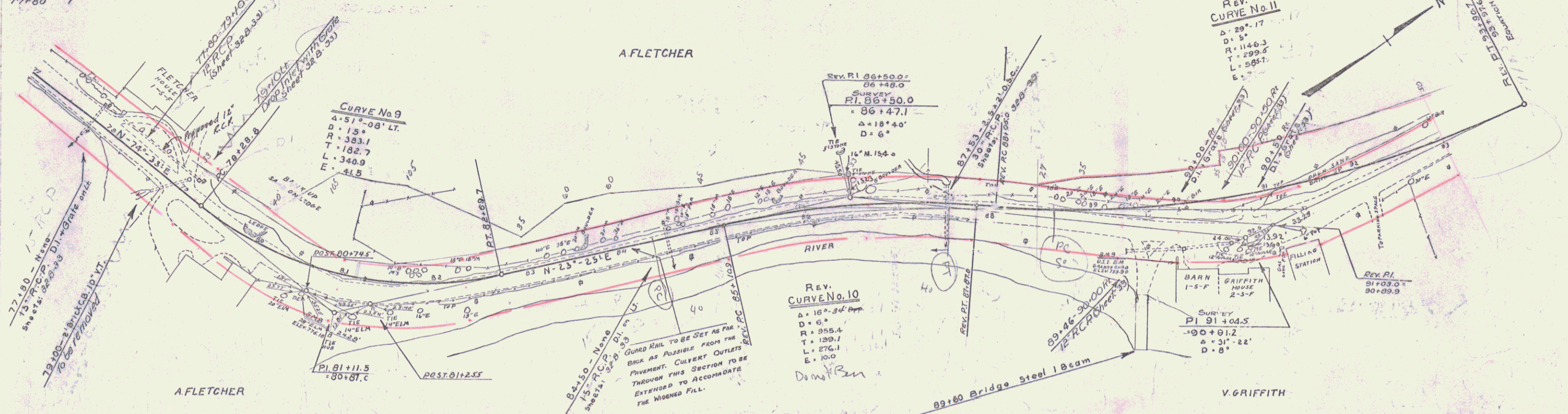
SERIES F NO. 97D  
 SHEET 6 OF 99

6

WOOD GUARD RAIL REQUIRED		CABLE GUARD RAIL REQUIRED		REINF. CONG. PIPE CULY. REQUIRED												
Sta.	Sta.	Left	Right	Sta.	Sta.	Lo. D.	Length	Constant	Per Length	Sta.	Dia.	Length	Cont. A	Cont. C	Steel	Grate
84+50	84			77+00	77+90	R	30"	20'	110'	77+80	15"	40'	2.0cy.	1.5cy.	42#	1
				87+25	87+97	L	72'	40'	112'	84+50	18"	40'	1.5cy.	1.5cy.	176#	1
				81+43	88+52	D	70'	00'	784'	87+53	30"	48'	1.8cy.		29#	1
				92+70	93+00	R	30"	20'	30'	77+80-79+10	12"	128'	1.4cy.		42#	1
										89+46-90+50	12"	104'	3.9cy.	1.0cy.	107#	2

WOOD GUIDE POSTS REQUIRED

Station	Left	Right
77+80	1	



77+80	765.88	77+85	766.25	77+90	766.62	77+95	766.99	78+00	767.36	78+05	767.73	78+10	768.10	78+15	768.47	78+20	768.84	78+25	769.21	78+30	769.58	78+35	770.00	78+40	770.42	78+45	770.84	78+50	771.26	78+55	771.68	79+00	772.10	79+05	772.52	79+10	772.94	79+15	773.36	79+20	773.78	79+25	774.20	79+30	774.62	79+35	775.04	79+40	775.46	79+45	775.88	79+50	776.30	79+55	776.72	80+00	777.14	80+05	777.56	80+10	777.98	80+15	778.40	80+20	778.82	80+25	779.24	80+30	779.66	80+35	780.08	80+40	780.50	80+45	780.92	80+50	781.34	80+55	781.76	81+00	782.18	81+05	782.60	81+10	783.02	81+15	783.44	81+20	783.86	81+25	784.28	81+30	784.70	81+35	785.12	81+40	785.54	81+45	785.96	81+50	786.38	81+55	786.80	82+00	787.22	82+05	787.64	82+10	788.06	82+15	788.48	82+20	788.90	82+25	789.32	82+30	789.74	82+35	790.16	82+40	790.58	82+45	791.00	82+50	791.42	82+55	791.84	83+00	792.26	83+05	792.68	83+10	793.10	83+15	793.52	83+20	793.94	83+25	794.36	83+30	794.78	83+35	795.20	83+40	795.62	83+45	796.04	83+50	796.46	83+55	796.88	84+00	797.30	84+05	797.72	84+10	798.14	84+15	798.56	84+20	798.98	84+25	799.40	84+30	799.82	84+35	800.24	84+40	800.66	84+45	801.08	84+50	801.50	84+55	801.92	85+00	802.34	85+05	802.76	85+10	803.18	85+15	803.60	85+20	804.02	85+25	804.44	85+30	804.86	85+35	805.28	85+40	805.70	85+45	806.12	85+50	806.54	85+55	806.96	86+00	807.38	86+05	807.80	86+10	808.22	86+15	808.64	86+20	809.06	86+25	809.48	86+30	809.90	86+35	810.32	86+40	810.74	86+45	811.16	86+50	811.58	86+55	812.00	87+00	812.42	87+05	812.84	87+10	813.26	87+15	813.68	87+20	814.10	87+25	814.52	87+30	814.94	87+35	815.36	87+40	815.78	87+45	816.20	87+50	816.62	87+55	817.04	88+00	817.46	88+05	817.88	88+10	818.30	88+15	818.72	88+20	819.14	88+25	819.56	88+30	819.98	88+35	820.40	88+40	820.82	88+45	821.24	88+50	821.66	88+55	822.08	89+00	822.50	89+05	822.92	89+10	823.34	89+15	823.76	89+20	824.18	89+25	824.60	89+30	825.02	89+35	825.44	89+40	825.86	89+45	826.28	89+50	826.70	89+55	827.12	90+00	827.54	90+05	827.96	90+10	828.38	90+15	828.80	90+20	829.22	90+25	829.64	90+30	830.06	90+35	830.48	90+40	830.90	90+45	831.32	90+50	831.74	90+55	832.16	91+00	832.58	91+05	833.00	91+10	833.42	91+15	833.84	91+20	834.26	91+25	834.68	91+30	835.10	91+35	835.52	91+40	835.94	91+45	836.36	91+50	836.78	91+55	837.20	92+00	837.62	92+05	838.04	92+10	838.46	92+15	838.88	92+20	839.30	92+25	839.72	92+30	840.14	92+35	840.56	92+40	840.98	92+45	841.40	92+50	841.82	92+55	842.24	93+00	842.66	93+05	843.08	93+10	843.50	93+15	843.92	93+20	844.34	93+25	844.76	93+30	845.18	93+35	845.60	93+40	846.02	93+45	846.44	93+50	846.86	93+55	847.28	94+00	847.70	94+05	848.12	94+10	848.54	94+15	848.96	94+20	849.38	94+25	849.80	94+30	850.22	94+35	850.64	94+40	851.06	94+45	851.48	94+50	851.90	94+55	852.32	95+00	852.74	95+05	853.16	95+10	853.58	95+15	854.00	95+20	854.42	95+25	854.84	95+30	855.26	95+35	855.68	95+40	856.10	95+45	856.52	95+50	856.94	95+55	857.36	96+00	857.78	96+05	858.20	96+10	858.62	96+15	859.04	96+20	859.46	96+25	859.88	96+30	860.30	96+35	860.72	96+40	861.14	96+45	861.56	96+50	861.98	96+55	862.40	97+00	862.82	97+05	863.24	97+10	863.66	97+15	864.08	97+20	864.50	97+25	864.92	97+30	865.34	97+35	865.76	97+40	866.18	97+45	866.60	97+50	867.02	97+55	867.44	98+00	867.86	98+05	868.28	98+10	868.70	98+15	869.12	98+20	869.54	98+25	869.96	98+30	870.38	98+35	870.80	98+40	871.22	98+45	871.64	98+50	872.06	98+55	872.48	99+00	872.90	99+05	873.32	99+10	873.74	99+15	874.16	99+20	874.58	99+25	875.00	99+30	875.42	99+35	875.84	99+40	876.26	99+45	876.68	99+50	877.10	99+55	877.52	100+00	877.94	100+05	878.36	100+10	878.78	100+15	879.20	100+20	879.62	100+25	880.04	100+30	880.46	100+35	880.88	100+40	881.30	100+45	881.72	100+50	882.14	100+55	882.56	101+00	882.98	101+05	883.40	101+10	883.82	101+15	884.24	101+20	884.66	101+25	885.08	101+30	885.50	101+35	885.92	101+40	886.34	101+45	886.76	101+50	887.18	101+55	887.60	102+00	888.02	102+05	888.44	102+10	888.86	102+15	889.28	102+20	889.70	102+25	890.12	102+30	890.54	102+35	890.96	102+40	891.38	102+45	891.80	102+50	892.22	102+55	892.64	103+00	893.06	103+05	893.48	103+10	893.90	103+15	894.32	103+20	894.74	103+25	895.16	103+30	895.58	103+35	896.00	103+40	896.42	103+45	896.84	103+50	897.26	103+55	897.68	104+00	898.10	104+05	898.52	104+10	898.94	104+15	899.36	104+20	899.78	104+25	900.20	104+30	900.62	104+35	901.04	104+40	901.46	104+45	901.88	104+50	902.30	104+55	902.72	105+00	903.14	105+05	903.56	105+10	903.98	105+15	904.40	105+20	904.82	105+25	905.24	105+30	905.66	105+35	906.08	105+40	906.50	105+45	906.92	105+50	907.34	105+55	907.76	106+00	908.18	106+05	908.60	106+10	909.02	106+15	909.44	106+20	909.86	106+25	910.28	106+30	910.70	106+35	911.12	106+40	911.54	106+45	911.96	106+50	912.38	106+55	912.80	107+00	913.22	107+05	913.64	107+10	914.06	107+15	914.48	107+20	914.90	107+25	915.32	107+30	915.74	107+35	916.16	107+40	916.58	107+45	917.00	107+50	917.42	107+55	917.84	108+00	918.26	108+05	918.68	108+10	919.10	108+15	919.52	108+20	919.94	108+25	920.36	108+30	920.78	108+35	921.20	108+40	921.62	108+45	922.04	108+50	922.46	108+55	922.88	109+00	923.30	109+05	923.72	109+10	924.14	109+15	924.56	109+20	924.98	109+25	925.40	109+30	925.82	109+35	926.24	109+40	926.66	109+45	927.08	109+50	927.50	109+55	927.92	110+00	928.34	110+05	928.76	110+10	929.18	110+15	929.60	110+20	930.02	110+25	930.44	110+30	930.86	110+35	931.28	110+40	931.70	110+45	932.12	110+50	932.54	110+55	932.96	111+00	933.38	111+05	933.80	111+10	934.22	111+15	934.64	111+20	935.06	111+25	935.48	111+30	935.90	111+35	936.32	111+40	936.74	111+45	937.16	111+50	937.58	111+55	938.00	112+00	938.42	112+05	938.84	112+10	939.26	112+15	939.68	112+20	940.10	112+25	940.52	112+30	940.94	112+35	941.36	112+40	941.78	112+45	942.20	112+50	942.62	112+55	943.04	113+00	943.46	113+05	943.88	113+10	944.30	113+15	944.72	113+20	945.14	113+25	945.56	113+30	945.98	113+35	946.40	113+40	946.82	113+45	947.24	113+50	947.66	113+55	948.08	114+00	948.50	114+05	948.92	114+10	949.34	114+15	949.76	114+20	950.18	114+25	950.60	114+30	951.02	114+35	951.44	114+40	951.86	114+45	952.28	114+50	952.70	114+55	953.12	115+00	953.54	115+05	953.96	115+10	954.38
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WOOD GUARD RAIL REQUIRED

STA	LEFT	RIGHT
113+80	24'	

CABLE GUARD RAIL REQUIRED

STA	STA	Le O	LENGTH	CONCRETE	PIV LENGTH
113+52	114+56	12	102'	40'	144'

New Rein Concrete Pipe Culverts Required

Station	Length	Diam	Class A	Class B	Steel
113+80	36'	15"	1.9c.y.	1.5c.y.	32'

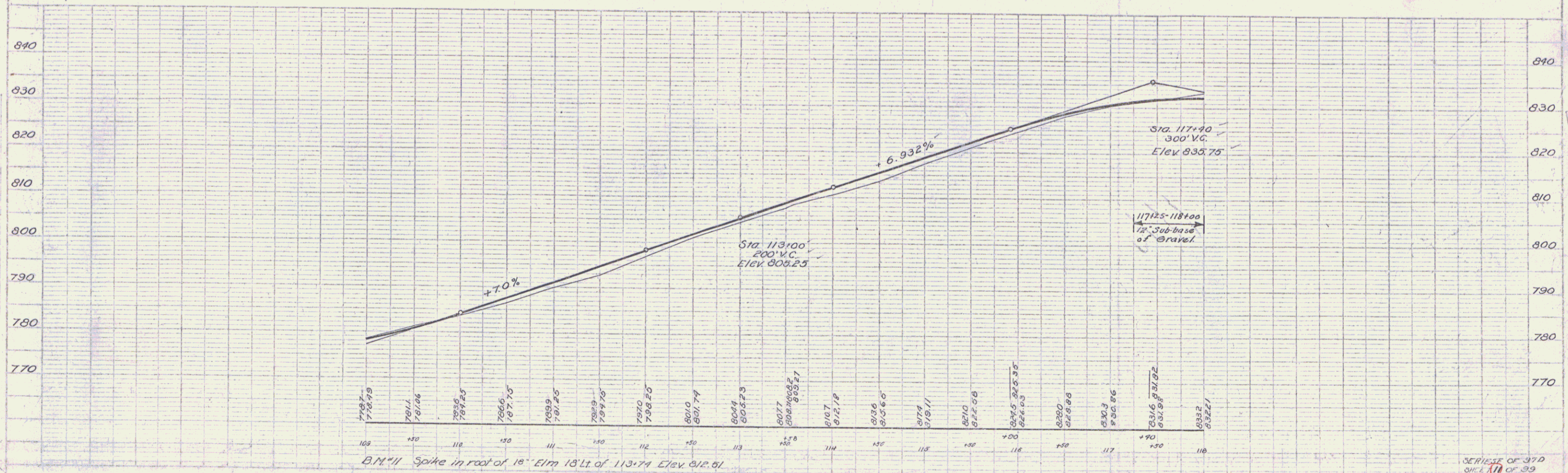
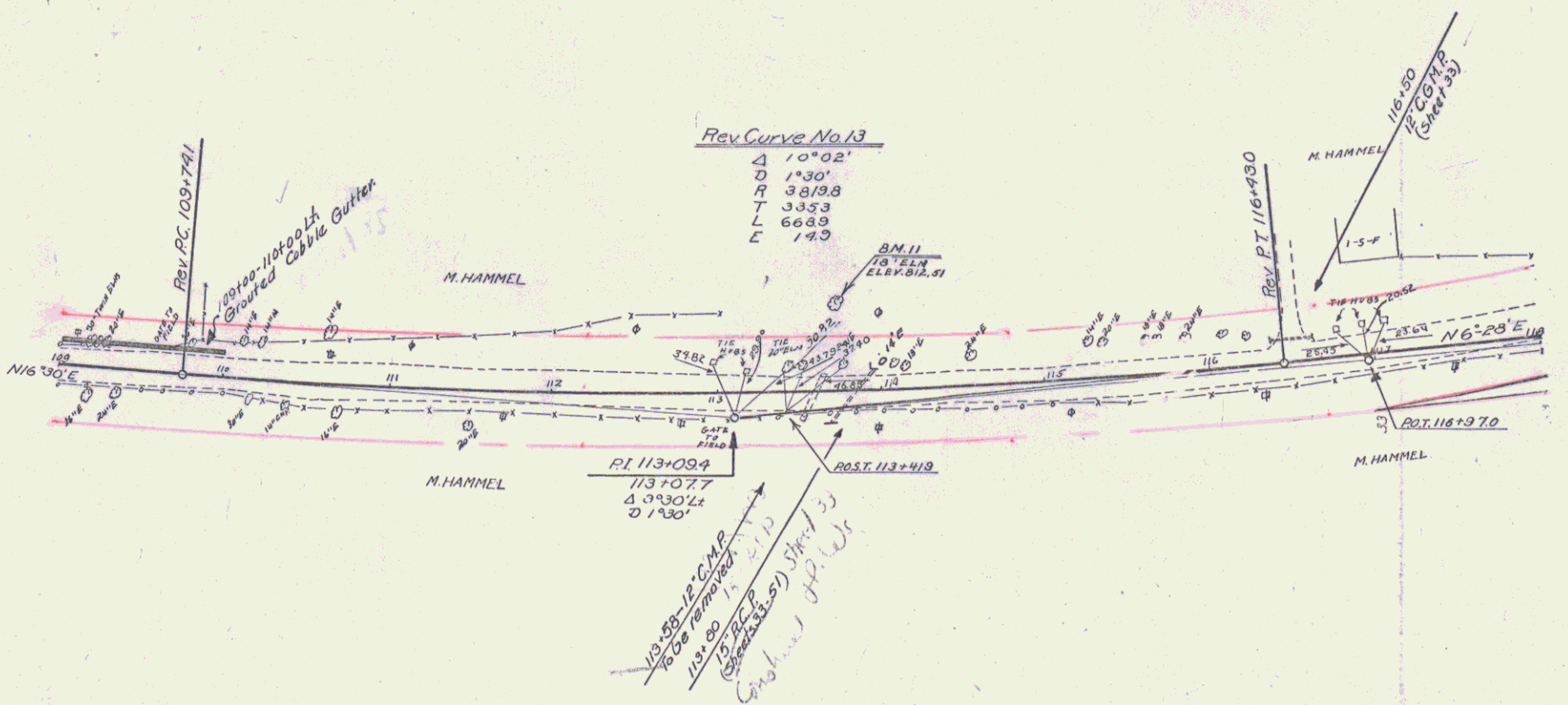
Driveway Pipe Culverts Required

Station	Diam	Length	Concrete	Public	Manhole
116+50	12"	28'	2.3 c.y.		

GRADED COBBLE GUTTER REQUIRED

Station	Length	Width	Slope
109+00-114+00	108'	3'-0"	34.84 yds.

STATE OF OHIO  
 DIVISION OF HIGHWAYS  
 PROJECT NO. 37-D  
 SHEET NO. 11 OF 39



B.M. 11 Spike in root of 18' Elm 18' Lt. of 113+74 Elev. 812.51

SERIES OF 37-D  
 SHEET 11 OF 39

**WOOD GUANO CHAIN REQUIRED**

STA	LEFT	RIGHT
126+15	24'	24'
129+06	24'	-
129+38	24'	-

**CABLE GUANO CHAIN REQUIRED**

STA	STA	LE	LO	CONSTANT	PI	LENGTH
119+00	128+06	D	30.2	90'	58.4'	
127+97	131+00	E	30.8	20'	34.5'	

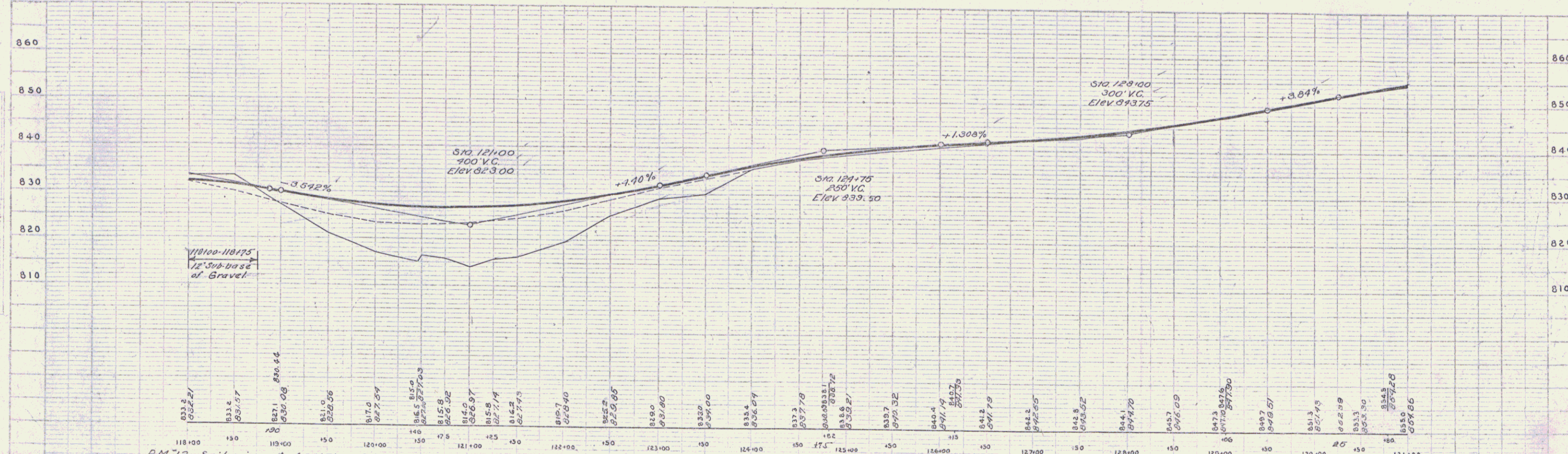
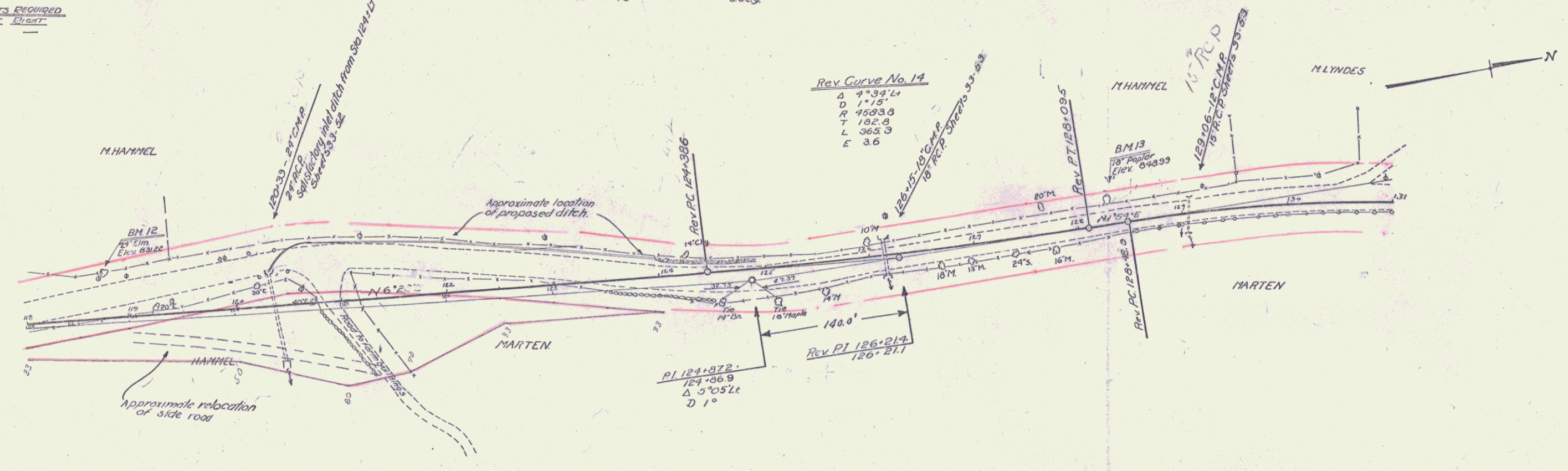
**New Reinf. Concrete Pipe Culverts Required**

Station	Length	Diam	Class A	Class C	Steel
120+33	92'	24"	2.9cy		59"
126+15	36'	18"	1.8cy		59"
129+06	40'	15"		30cy	33"

**WOOD GUIDE POSTS REQUIRED**

Station	Left	Right
130+00	1	-

FD ROAD STATE HIGHWAY 140 100 SHEETS TOTAL  
 9 VI. D 1930 12 39



BM 12 Spike in root of 29' Elm 14' left 118+76 Elev 831.22  
 BM 13 Spike in root of 18' Poplar 19' left 128+32 Elev 843.93

SERIES OF 270  
 SHEET 2 OF 39

**WOOD GUARD RAIL REQUIRED**

STA	LEFT	RIGHT
133+75	24'	24'
137+57	24'	24'
143+58	24'	24'

**CABLE GUARD RAIL REQUIRED**

STA	STA	Lo-D	LENGTH	CONSTANT	PAVEMENT
131+00	132+69	R	169'	20'	189'

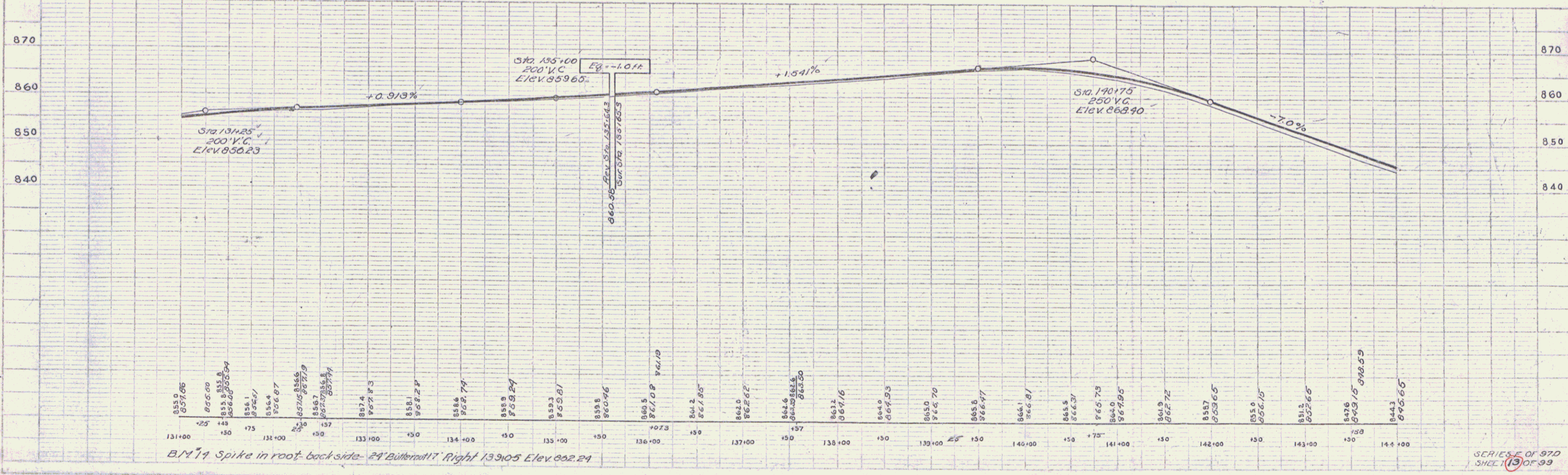
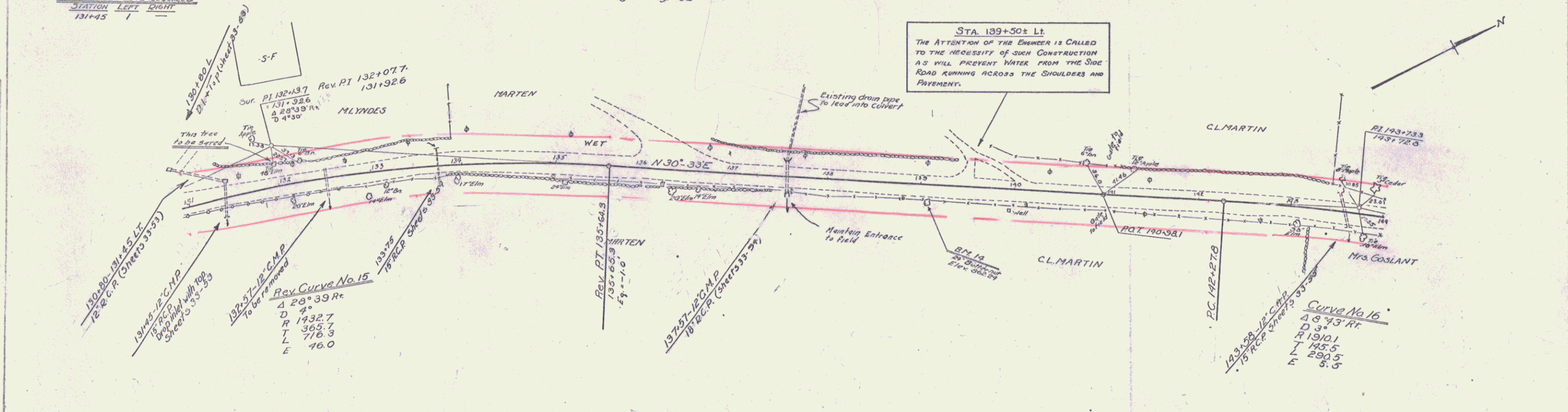
**New Rein. Concrete Pipe Culverts Required**

Station	Length	Diam.	Class	A	Class	C	Steel
131+00 to 131+15	15'	1.5'	2.0cy	1.5cy	174'		
131+15 to 131+25	10'	1.5'	2.0cy	1.5cy	174'		
131+25 to 131+37	12'	1.5'	1.8cy	1.5cy	174'		
131+37 to 131+58	21'	1.5'	1.9cy	1.5cy	174'		

**WOOD GUIDE POSTS REQUIRED**

STATION	LEFT	RIGHT
131+45	1	

U.S. ROAD STATE FED. AID LOCAL SHARE TOTAL  
 D.S. No. YEAR NO. SHEETS  
 97-D 1930 13 99



SERIES OF 97D  
 SHEET 13 OF 99

**WOOD GUARD RAIL REQUIRED**

CUK STA.	LEFT	RIGHT
148+20	24'	—
154+31	24'	—
156+41	24'	—
158+88	24'	—

**CABLE GUARD RAIL REQUIRED**

STA	STA	L+Q	LENGTH	CONSTANT	RYLENGTH
147+25	149+25	R	200'	40'	240'
156+0	156+56	R	236'	40'	296'
158+60	159+0	R	40'	20'	60'

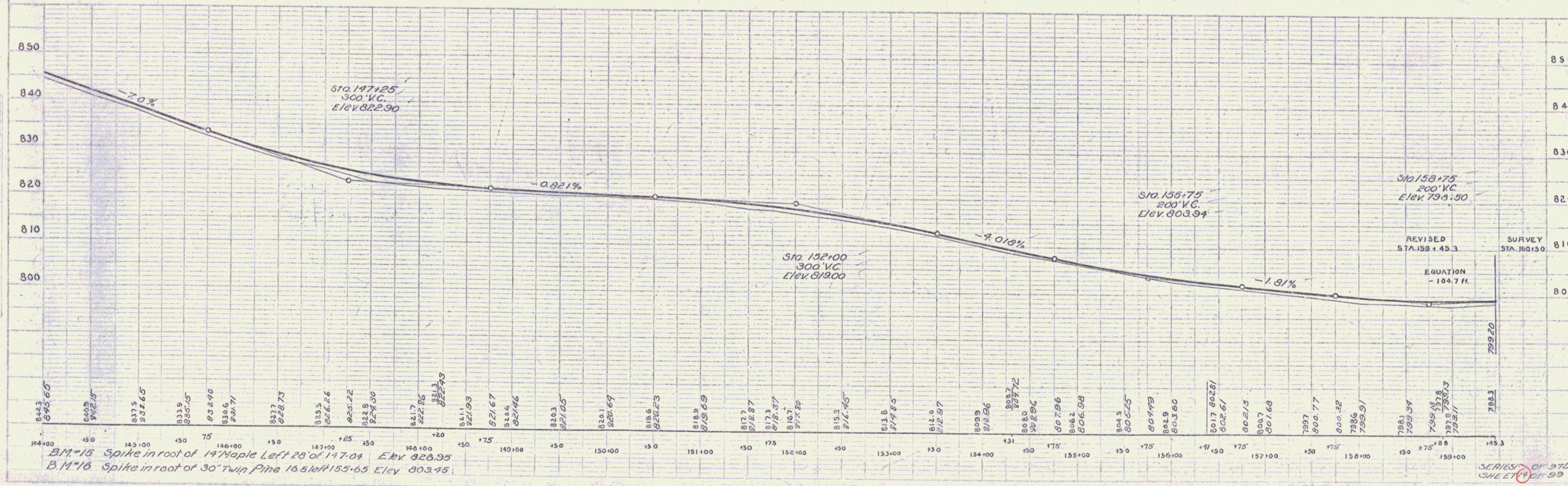
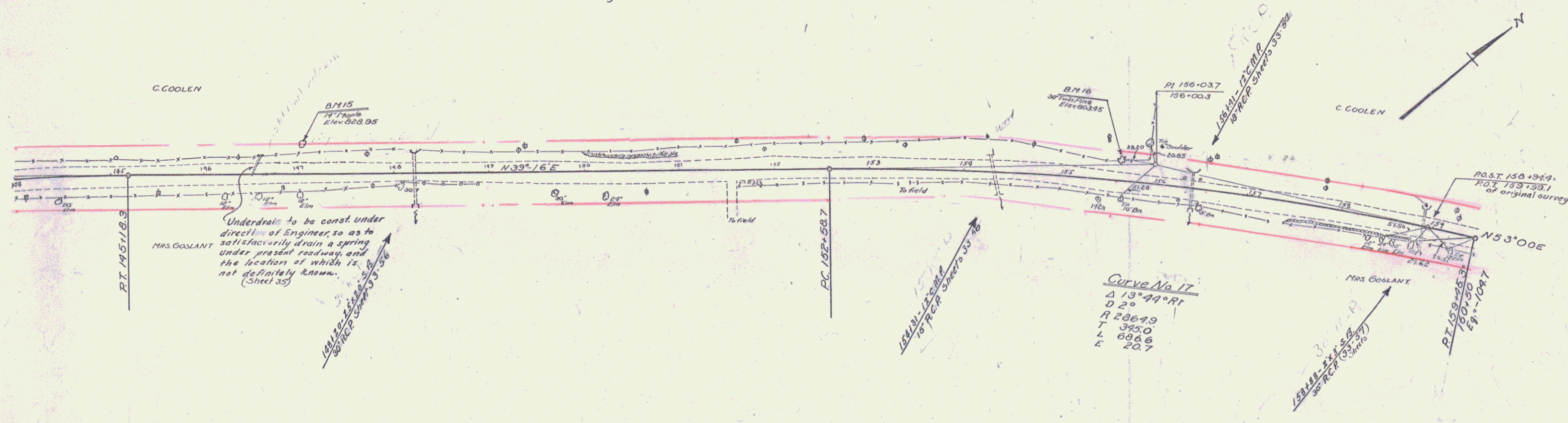
**New Reinforced Concrete Pipe Culverts Required**

Station	Length	Diam.	Class A	Class C	Steel
148+20	58'	30"	32 cy	58"	—
154+31	48'	15"	19 cy	15 cy	58"
156+41	40'	18"	18 cy	—	54"
158+88	44'	30"	32 cy	—	58"

**STD UNDERDRAIN WITH P.C.M.P. (Covered)**

Stations	Diam.	Length	Con. Reb. Mas.
146+302	6"	20'	1.2 cy.

FD-302 (REV. 1-25-60) FEDERAL BUREAU OF SURVEYING  
 97-D 1930 14 99



BM-15 Spike in root of 14" Maple Left 20' of 147+04 Elev. 826.35  
 B.M. 16 Spike in root of 30" Twin Pine 16.5 ft. W 155+65 Elev. 803.45

SERIES OF 970 SHEET 14 OF 99

**WOOD GUARD RAIL REQUIRED**

CULV. STA.	LEFT	RIGHT
164+44	24	24
167+60	24	24

**WOOD GUIDE POSTS REQUIRED**

STATION	LEFT	RIGHT
164+44	1	1

**CABLE GUARD RAIL REQUIRED**

STA	STA	Lx D	LENGTH	CONSTANT	PIV. LENGTH
159+0	159+56	R	56'	20'	76'
162+26	163+70	R	44'	20'	64'
165+25	166+77	R	52'	20'	72'
167+15	168+91	R	76'	20'	96'

578  
16  
738

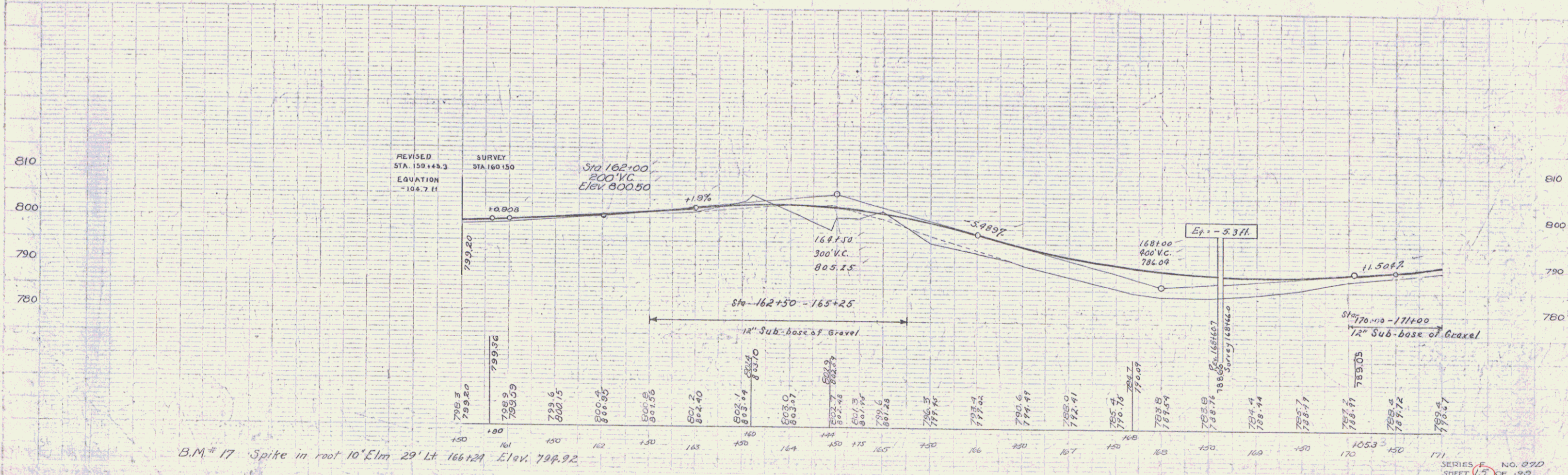
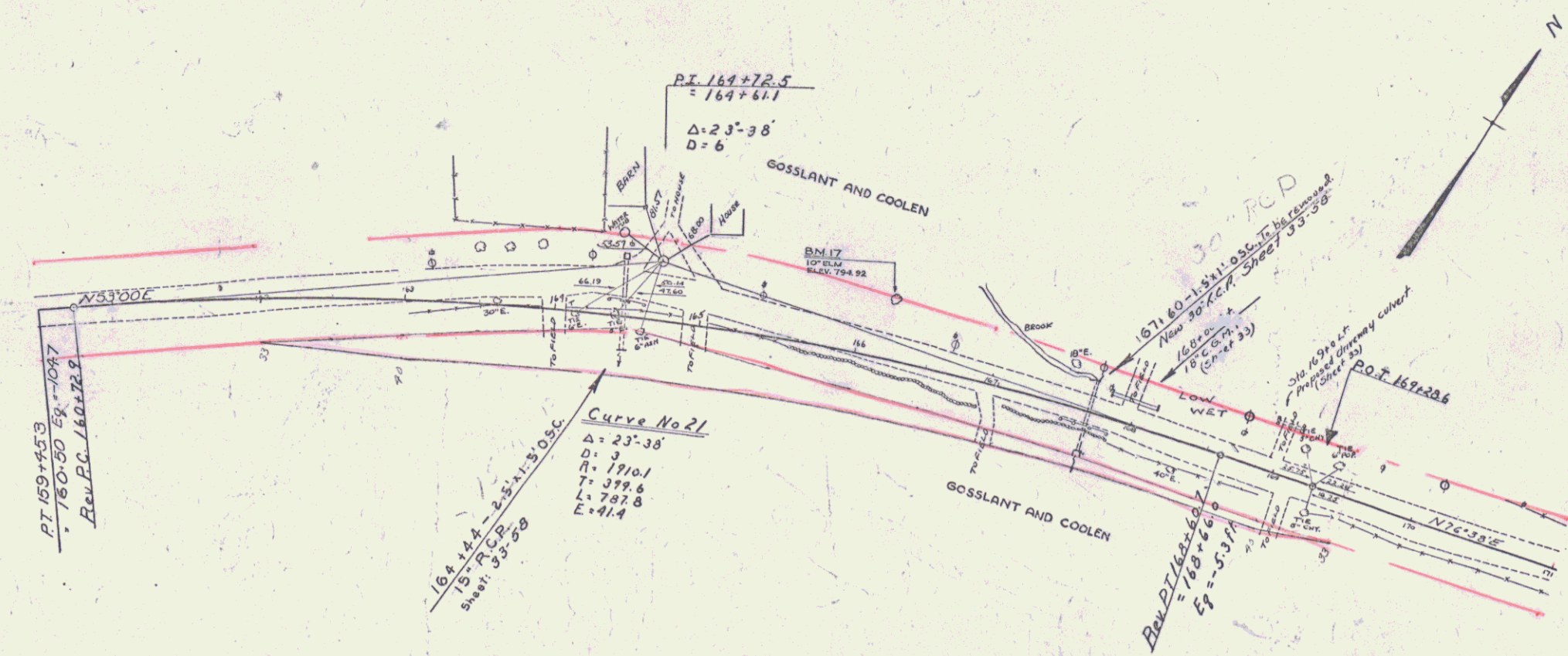
**REINF. CONG. PIPE CULVERT REQUIRED**

STA	DIA.	LENG.	CONC.	CONG.C. STEEL
164+44	15"	68'	1.5x7	174 #
167+60	30"	48'	3x7	52 #

**C.G.M. PIPE REQUIRED**

Sta.	Dia.	Leq.	Con. Rub. Mas.
168+00 Lt 18"	28"	33	3.3 cy
169+00 Lt 12"	24"	23	2.3

ED. ROAD	STATE	FED. AID	TOTAL SHEET
9	VT	97-D	1930 15 30

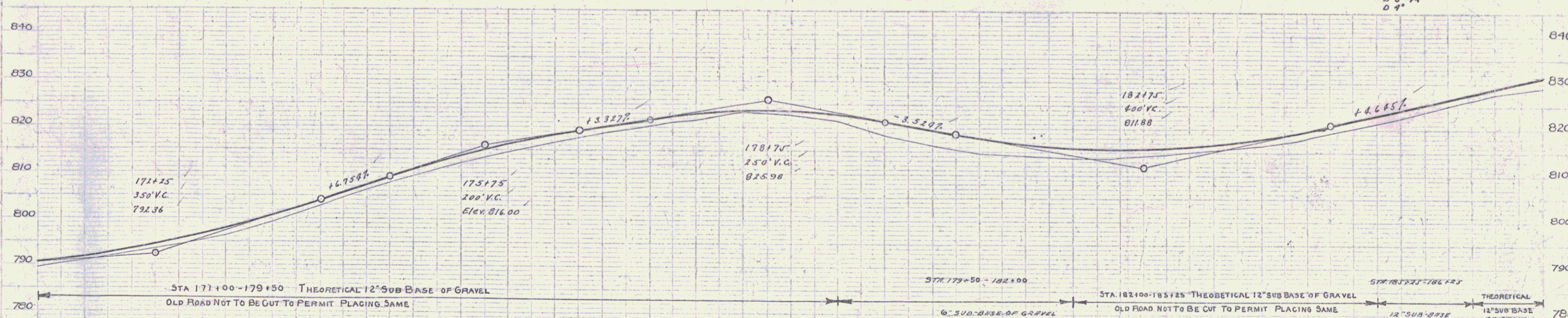
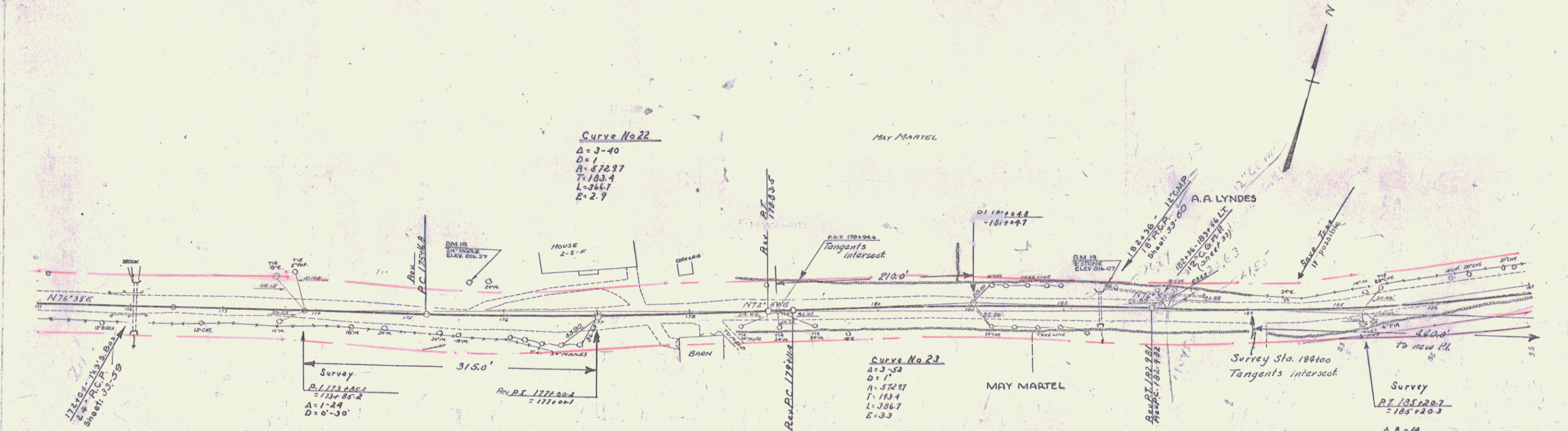


B.M. # 17 Spike in root 10' Elm 29' Lt 166+24 Elev. 799.92

SERIES E NO. 37-D  
SHEET 15 OF 30

WOOD GUARD RAIL REQUIRED				CABLE GUARD RAIL REQUIRED				REINF. CONC. PIPE CULVERT REQUIRED				RELAYING PIPE CULVERTS					
CULV. STA.	LEFT	RIGHT		STA	STA	Lo-R	LENGTH CONSTANT	STA	DIA.	LENG.	CONG. CONC.	STEEL	STA	STA	CG.M.P. LENGTH	REINFORCING	
182+36	24'	24'		171+0	173+30	Q	230' 20' 250'	172+04	24"	56'	2.4-cy	54#	182+36	183+46.6	12'	120'	1.2 c-y
				171+77	172+25	L	48' 40' 88'	182+36	18"	36"	1-8-cy	84#					

97-D 1930 16 39

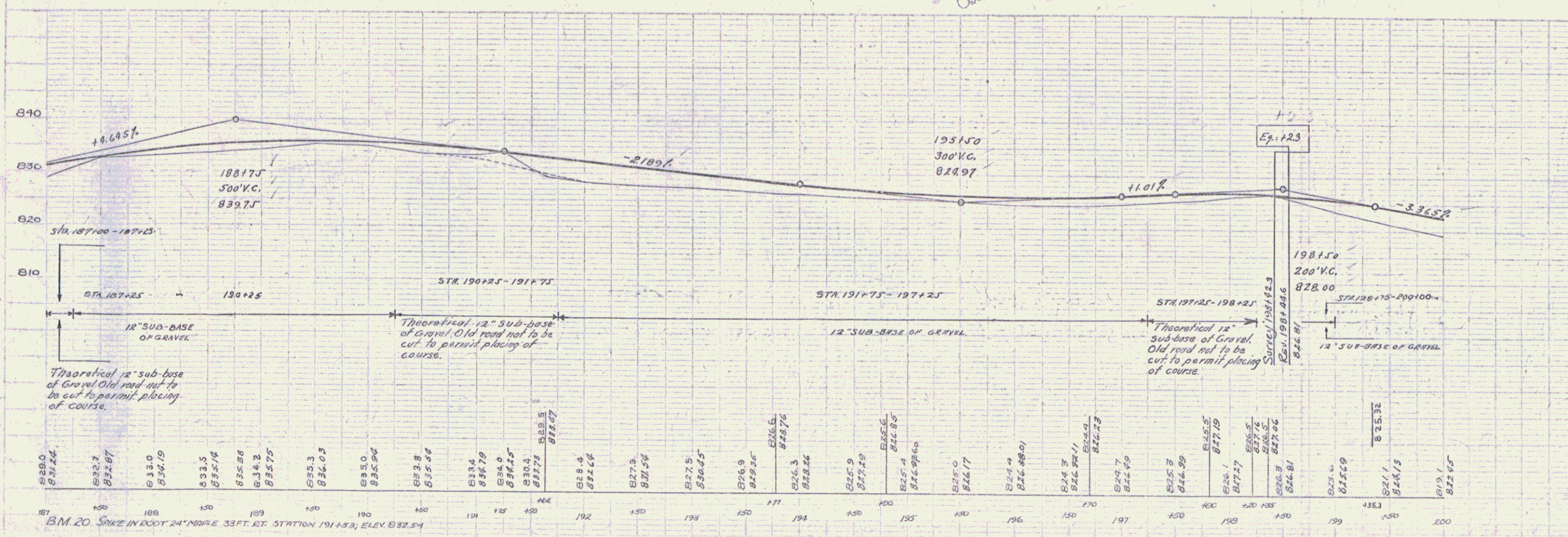
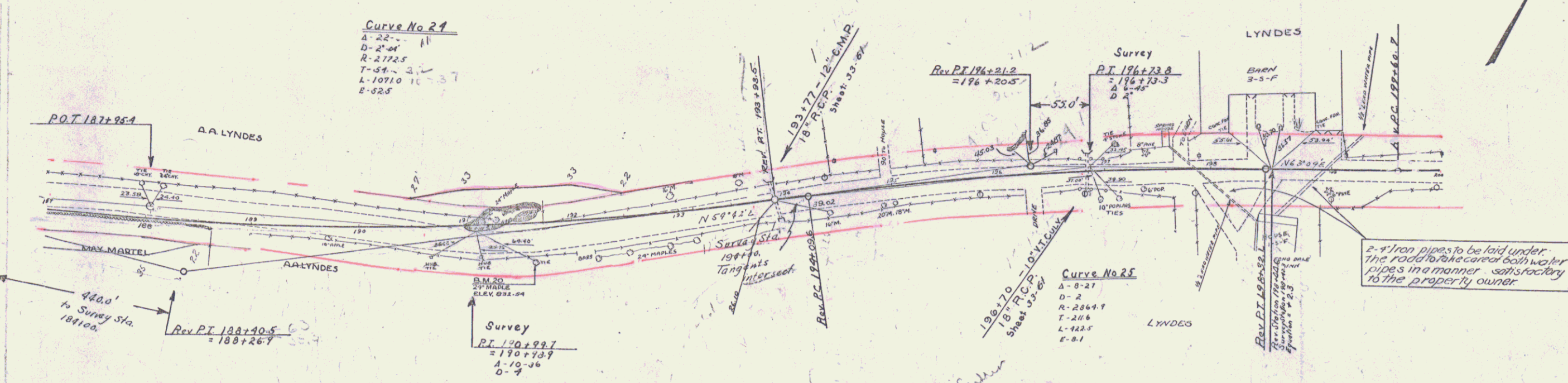


STA	ELEV.	STA	ELEV.	STA	ELEV.	STA	ELEV.	STA	ELEV.	STA	ELEV.	STA	ELEV.	STA	ELEV.
171	799.4	172	796.8	173	798.5	174	798.6	175	798.7	176	798.8	177	798.9	178	799.0
178	820.2	179	821.0	180	821.7	181	822.3	182	822.9	183	823.5	184	824.1	185	824.7
190	825.1	191	825.7	192	826.3	193	826.9	194	827.5	195	828.1	196	828.7	197	829.3
198	830.2	199	831.0	200	831.7	201	832.3	202	832.9	203	833.5	204	834.1	205	834.7
208	838.2	209	839.0	210	839.7	211	840.3	212	840.9	213	841.5	214	842.1	215	842.7
218	845.2	219	846.0	220	846.7	221	847.3	222	847.9	223	848.5	224	849.1	225	849.7
228	852.2	229	853.0	230	853.7	231	854.3	232	854.9	233	855.5	234	856.1	235	856.7
238	860.2	239	861.0	240	861.7	241	862.3	242	862.9	243	863.5	244	864.1	245	864.7
248	868.2	249	869.0	250	869.7	251	870.3	252	870.9	253	871.5	254	872.1	255	872.7
258	875.2	259	876.0	260	876.7	261	877.3	262	877.9	263	878.5	264	879.1	265	879.7
268	882.2	269	883.0	270	883.7	271	884.3	272	884.9	273	885.5	274	886.1	275	886.7
278	890.2	279	891.0	280	891.7	281	892.3	282	892.9	283	893.5	284	894.1	285	894.7
288	898.2	289	899.0	290	899.7	291	900.3	292	900.9	293	901.5	294	902.1	295	902.7
298	908.2	299	909.0	300	909.7	301	910.3	302	910.9	303	911.5	304	912.1	305	912.7
308	918.2	309	919.0	310	919.7	311	920.3	312	920.9	313	921.5	314	922.1	315	922.7
318	928.2	319	929.0	320	929.7	321	930.3	322	930.9	323	931.5	324	932.1	325	932.7
328	938.2	329	939.0	330	939.7	331	940.3	332	940.9	333	941.5	334	942.1	335	942.7
338	948.2	339	949.0	340	949.7	341	950.3	342	950.9	343	951.5	344	952.1	345	952.7
348	958.2	349	959.0	350	959.7	351	960.3	352	960.9	353	961.5	354	962.1	355	962.7
358	968.2	359	969.0	360	969.7	361	970.3	362	970.9	363	971.5	364	972.1	365	972.7
368	978.2	369	979.0	370	979.7	371	980.3	372	980.9	373	981.5	374	982.1	375	982.7
378	988.2	379	989.0	380	989.7	381	990.3	382	990.9	383	991.5	384	992.1	385	992.7
388	998.2	389	999.0	390	999.7	391	1000.3	392	1000.9	393	1001.5	394	1002.1	395	1002.7
398	1008.2	399	1009.0	400	1009.7	401	1010.3	402	1010.9	403	1011.5	404	1012.1	405	1012.7
408	1018.2	409	1019.0	410	1019.7	411	1020.3	412	1020.9	413	1021.5	414	1022.1	415	1022.7
418	1028.2	419	1029.0	420	1029.7	421	1030.3	422	1030.9	423	1031.5	424	1032.1	425	1032.7
428	1038.2	429	1039.0	430	1039.7	431	1040.3	432	1040.9	433	1041.5	434	1042.1	435	1042.7
438	1048.2	439	1049.0	440	1049.7	441	1050.3	442	1050.9	443	1051.5	444	1052.1	445	1052.7
448	1058.2	449	1059.0	450	1059.7	451	1060.3	452	1060.9	453	1061.5	454	1062.1	455	1062.7
458	1068.2	459	1069.0	460	1069.7	461	1070.3	462	1070.9	463	1071.5	464	1072.1	465	1072.7
468	1078.2	469	1079.0	470	1079.7	471	1080.3	472	1080.9	473	1081.5	474	1082.1	475	1082.7
478	1088.2	479	1089.0	480	1089.7	481	1090.3	482	1090.9	483	1091.5	484	1092.1	485	1092.7
488	1098.2	489	1099.0	490	1099.7	491	1100.3	492	1100.9	493	1101.5	494	1102.1	495	1102.7
498	1108.2	499	1109.0	500	1109.7	501	1110.3	502	1110.9	503	1111.5	504	1112.1	505	1112.7
508	1118.2	509	1119.0	510	1119.7	511	1120.3	512	1120.9	513	1121.5	514	1122.1	515	1122.7
518	1128.2	519	1129.0	520	1129.7	521	1130.3	522	1130.9	523	1131.5	524	1132.1	525	1132.7
528	1138.2	529	1139.0	530	1139.7	531	1140.3	532	1140.9	533	1141.5	534	1142.1	535	1142.7
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548	1158.2	549	1159.0	550	1159.7	551	1160.3	552	1160.9	553	1161.5	554	1162.1	555	1162.7
558	1168.2	559	1169.0	560	1169.7	561	1170.3	562	1170.9	563	1171.5	564	1172.1	565	1172.7
568	1178.2	569	1179.0	570	1179.7	571	1180.3	572	1180.9	573	1181.5	574	1182.1	575	1182.7
578	1188.2	579	1189.0	580	1189.7	581	1190.3	582	1190.9	583	1191.5	584	1192.1	585	1192.7
588	1198.2	589	1199.0	590	1199.7	591	1200.3	592	1200.9	593	1201.5	594	1202.1	595	1202.7
598	1208.2	599	1209.0	600	1209.7	601	1210.3	602	1210.9	603	1211.5	604	1212.1	605	1212.7
608	1218.2	609	1219.0	610	1219.7	611	1220.3	612	1220.9	613	1221.5	614	1222.1	615	1222.7
618	1228.2	619	1229.0	620	1229.7	621	1230.3	622	1230.9	623	1231.5	624	1232.1	625	1232.7
628	1238.2	629	1239.0	630	1239.7	631	1240.3	632	1240.9	633	1241.5	634	1242.1	635	1242.7
638	1248.2	639	1249.0	640	1249.7	641	1250.3	642	1250.9	643	1251.5	644	1252.1	645	1252.7
648	1258.2	649	1259.0	650	1259.7	651	1260.3	652	1260.9	653	1261.5	654	1262.1	655	1262.7
658	1268.2	659	1269.0	660	1269.7	661	1270.3	662	1270.9	663	1271.5	664	1272.1	665	1272.7
668	1278.2	669	1279.0	670	1279.7	671	1280.3	672	1280.9	673	1281.5	674	1282.1	675	1282.7
678	1288.2	679	1289.0	680	1289.7	681	1290.3	682	1290.9	683	1291.5	684	1292.1	685	1292.7
688	1298.2	689	1299.0	690	1299.7	691	1300.3	692	1300.9	693	1301.5	694	1302.1	695	1302.7
698	1308.2	699	1309.0	700	1309.7	701	1310.3	702	1310.9	703	1311.5	704	1312.1	705	1312.7
708	1318.2	709	1319.0	710	1319.7	711	1320.3	712	1320.9	713	1321.5	714	1322.1	715	1322.7
718	1328.2	719	1329.0	720	1329.7	721	1330.3	722	1330.9	723	1331.5	724	1332.1	725	1332.7
728	1338.2	729	1339.0	730	1339.7	731	1340.3	732	1340.9	733	1341.5	734	1342.1	735	1342.7
738	1348.2	739	1349.0	740	1349.7	741	1350.3	742	1350.9	743	1351.5	744	1352.1	745	1352.7
748	1358.2	749	1359.0	750	1359.7	751	1360.3	752	1360.9	753	1361.5	754	1362.1	755	1362.7
758	1368.2	759	1369.0	760	1369.7	761	1370.3	762	1370.9	763	1371.5	764	1372.1	765	1372.7
768	1378.2	769	1379.0	770	1379.7	771	1380.3	772	1380.9	773	1381.5	774	1382.1	775	1382.7
778	1388.2	779	1389.0	780	1389.7	781	1390.3	782	1390.9	783	1391.5	784	1392.1	785	1392.7
788	1398.2	789	1399.0	790	1399.7	791	1400.3	792	1400.9	793	1401.5	794	1402.1	795	1402.7
798	1408.2	799	1409.0	800	1409.7	801	1410.3	802	1410.9	803	1411.5	804	1412.1	805	1412.7
808	1418.2	809	1419.0	810	1419.7	811	1420.3	812	1420.9	813	1421.5	814	1422.1	815	1422.7
818	1428.2	819	1429.0	820	1429.7	821	1430.3	822	1430.9	823	1431.5	824	1432.1	825	1432.7
828	1438.2	829	1439.0	830	1439.7	831	1440.3	832	1440.9	833	1441.5	834	1442.1	835	1442.7
838	1448.2	839	1449.0	840	1449.7	841	1450.3	842	1450.9	843	1451.5	844	1452.1	845	1452.7
848	1458.2	849	1459.0	850	1459.7	851	1460.3	852	1460.9	853	1461.5	854	1462.1	855	1462.7
858	1468.2	859	1469.0	860	1469.7	861	1470.3	862	1470.9	863	1471.5	864	1472.1	865	1472.7
868	1478.2	869	1479.0	870	1479.7	871	1480.3	872	1480.9	873	1481.5	874	1482.1	875	1482.7

WOOD GUARD RAIL REQUIRED				CABLE GUARD RAIL REQUIRED				REINF. CONC. PIPE CULVERT REQUIRED						
STA	STA	LEFT	RIGHT	STA	STA	LEN	CONSTANT	PAR LENGTH	STA	DIA	LENG	CONCA	CONC. STEEL	
193+65	194+09	24'	24'	192+80	193+52	2	112'	40'	152'	193+77	18"	36'	1.8 ct.	54*
194+58	194+82	24'	24'						196+70	18"	36'	1.8 ct.	54*	

1930  
 3 97-D 1930 17 30

PUTNAM CHANCE 8'-6" 8'-6"

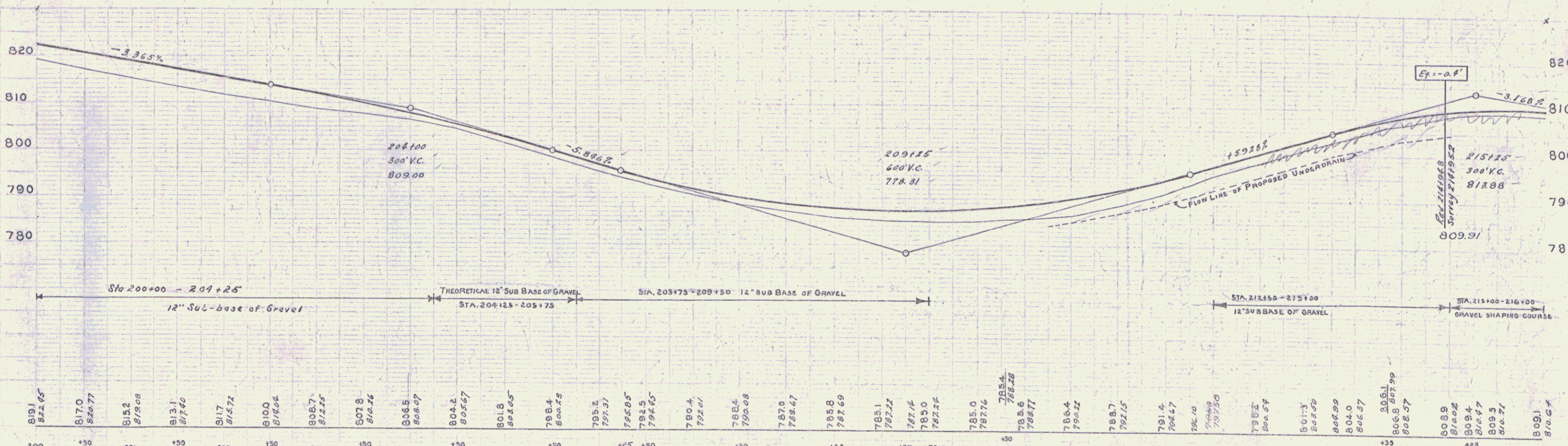
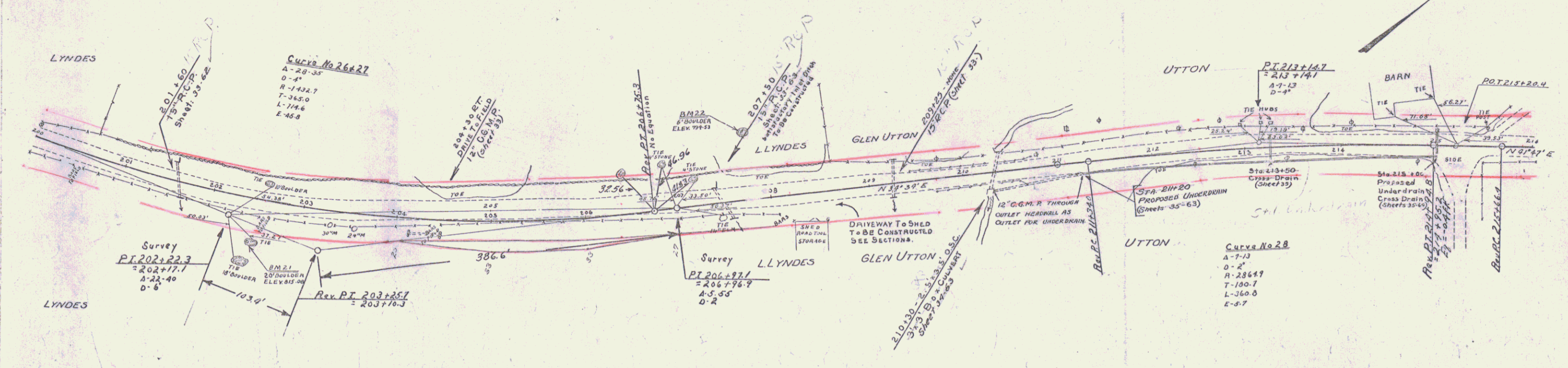


B.M. 20 SPIKE IN ROOT 24" DIAMETER 33 FT. STATION 191+33; ELEV 822.54

SERIES F NO. 97-D  
 SHEET 17 OF 22

WOOD GUARD RAIL REQUIRED				CABLE GUARD RAIL REQUIRED				REIN. CONC. PIPE CULVERT REQUIRED				REIN. CONC. BOX CULVERTS REQUIRED				STD. UNDERDRAIN WITH P.C.G.M. PIPE (CONT'D)				CORRUG. GALV. METAL PIPE REQUIRED						
CULVERT STA.	LEFT	RIGHT		STATIONS	LENG.	CONSTANT	PAY LEVS.	STA.	DIA.	LENG.	CONC. A	CONC. C	STEEL	STA.	SIZE	CONC. A	STEEL	STATIONS	DIA.	LENG.	CEM. RUB. MAS.	STA.	DIA.	LENG.	CEM. RUB. MAS.	
201+50	24'	-		201+13-202+25.4	12'	40'	12'	201+50	15"	44'	1.9	1.5	99#	210+30-213	3x3	27-00	1716#	211+20-213+00 RT.	6"	380'		204+30 RT.	12"	28'		
207+50	24'	-		207+25-207+73 RT.	48'	40'	40'	207+50	15"	40'	1.9	1.5	99#	213+50 Across Road	6"				210+70 RT.	12"	100'		210+70 RT.	12"	100'	2.3 c.c.
				209+10-211+10 RT.	160'	40'	40'	209+25	15"	40'	-	3.0	33#													

97-D 1930 18 99



B.M. #21 U.S.L.B.M. Top 20' Boulder 42' 77' 202+50 Elev. 815.00  
 B.M. #22 Top 6' Boulder in Pasture 67' 11' 207+76 Elev. 794.53

SERIES NO. 97-D  
 SHEET 18 OF 22

**WOOD GUARD RAIL REQUIRED**

STATION	LEFT	RIGHT
219+80	24'	

**CABLE GUARD RAIL REQUIRED**

STA.	STA.	LEN.	CONST.	CONC.	STEEL
219+75	220+35	R	160'	40'	200'
223+00	225+80	R	240'	40'	280'
224+09	226+25	L	216'	40'	256'

**REIN. CONC. PIPE GULVERT REQUIRED**

STA.	DIA.	LEN.	CONC.	STEEL
219+75	18"	40'	1.8 c.y.	54#
224+79	30"	52'	3.2 c.y.	58#

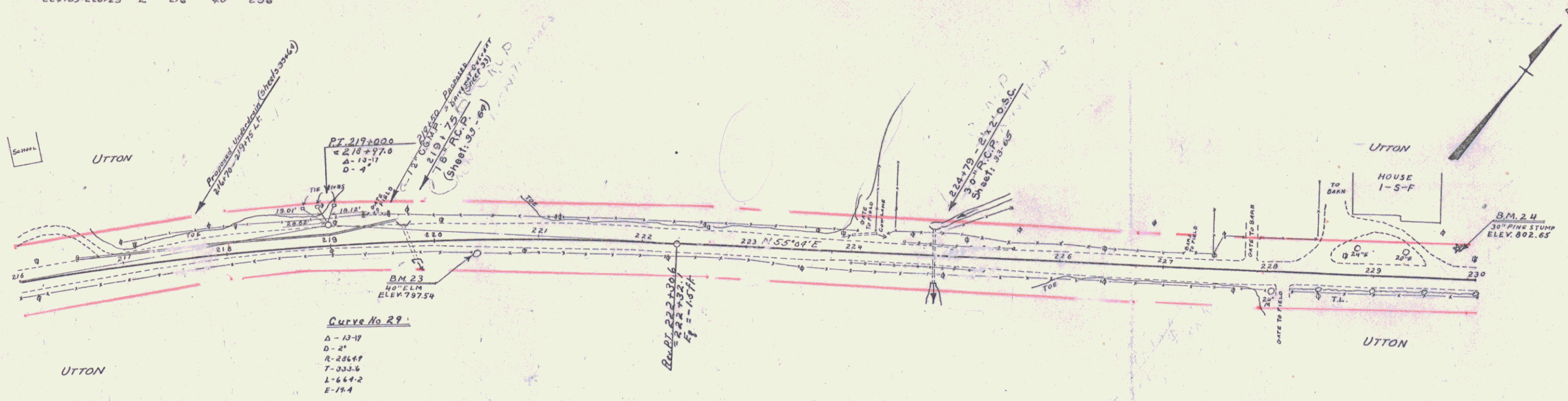
**STD. UNDERDRAIN WITH P.C.S.M.P. (Concrete)**

STATIONS	DIA.	LENG.	CEM. RUB. MS.
216+30 - 219+75	6"	320'	
226+00 - 229+00	6"	300'	1.2 cu. yds.

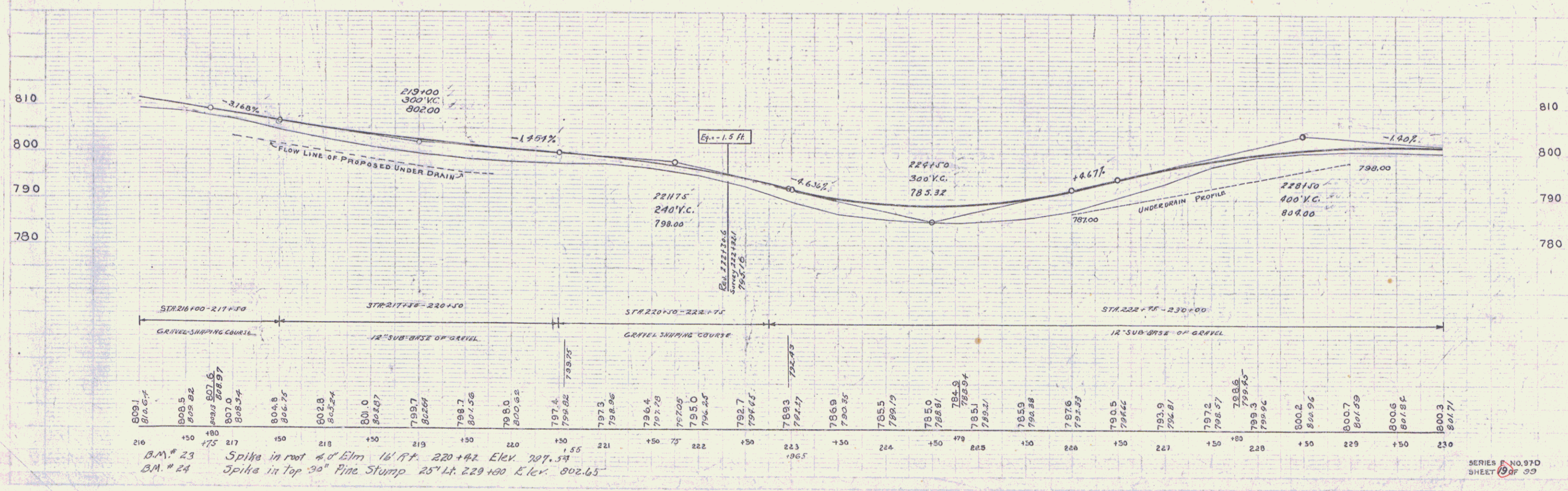
**C.G.M. PIPE REQUIRED**

STA.	DIA.	LENG.	CEMENT RUB. MS.
224+10 LF	18"	24'	R.3 C.Y.

STATE ROAD DIST. NO. 110  
 DIST. NO. 110  
 ELEV. 97.0 1930 19 99



**Curve No. 29**  
 Δ - 13-17  
 D - 24'  
 R - 256.64'  
 T - 333.6'  
 L - 644.2'  
 E - 19.4'



B.M. # 23 Spike in root 4.0' Elm 16' W. 220+42 Elev. 797.54  
 B.M. # 24 Spike in Top 30" Pine Stump 25' Lt. 229+00 Elev. 802.65

SERIES NO. 97D  
 SHEET 17 OF 30

**WOOD GUARD RAIL REQUIRED**

STATION	LEFT	RIGHT
234+37	24'	24'
240+11	24'	24'

**CABLE GUARD RAIL REQUIRED**

STA	STA	Len	CONSTANT	PLY	LENGTH
234+75	235+23	48'	40'	88'	

**REIN. CONC. PIPE CULVERT REQUIRED**

STA.	DIA.	LENG.	CONC.	STEEL	DI GRATES
234+97	24"	24'	2.4cy	54#	
240+11	15"	36'	3.0cy	33#	
(244+60)	12"	150'	3.8cy	113#	

**WOOD GUIDE POSTS REQUIRED**

STATION	LEFT	RIGHT
244+60	1	

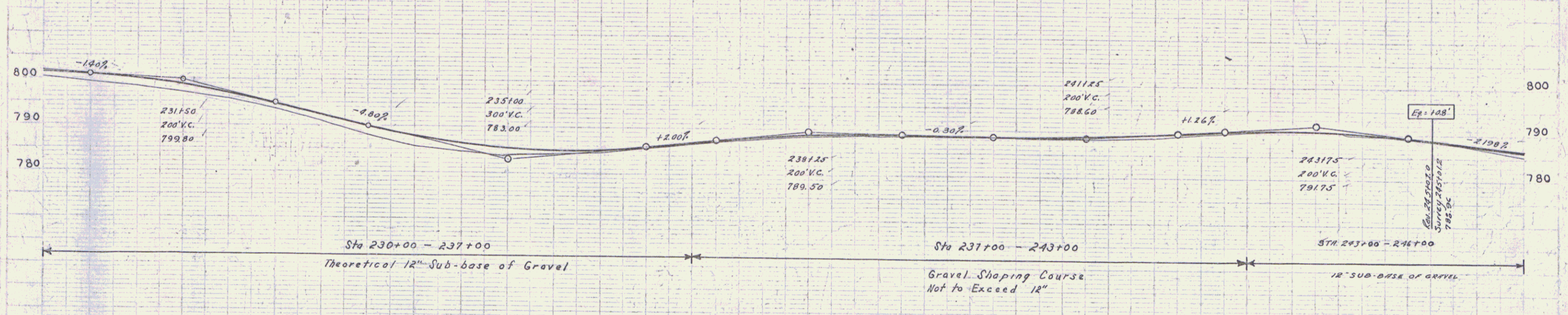
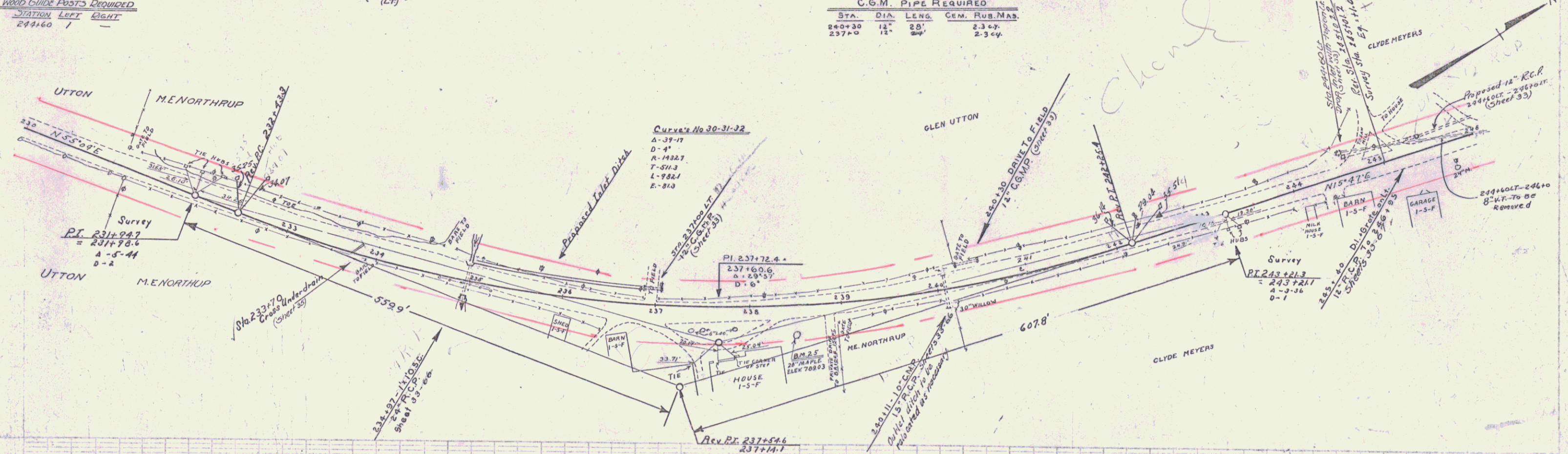
**C.G.M. PIPE REQUIRED**

STA.	DIA.	LENG.	CEM.	RUB.MAS.
240+30	12"	28'	2.3cy	
237+0	12"	24'	2.3cy	

**STD UNDERDRAIN WITH P.C.M.P. (CONT'D)**

STA.	DIA.	LENG.
233+70	6"	14'

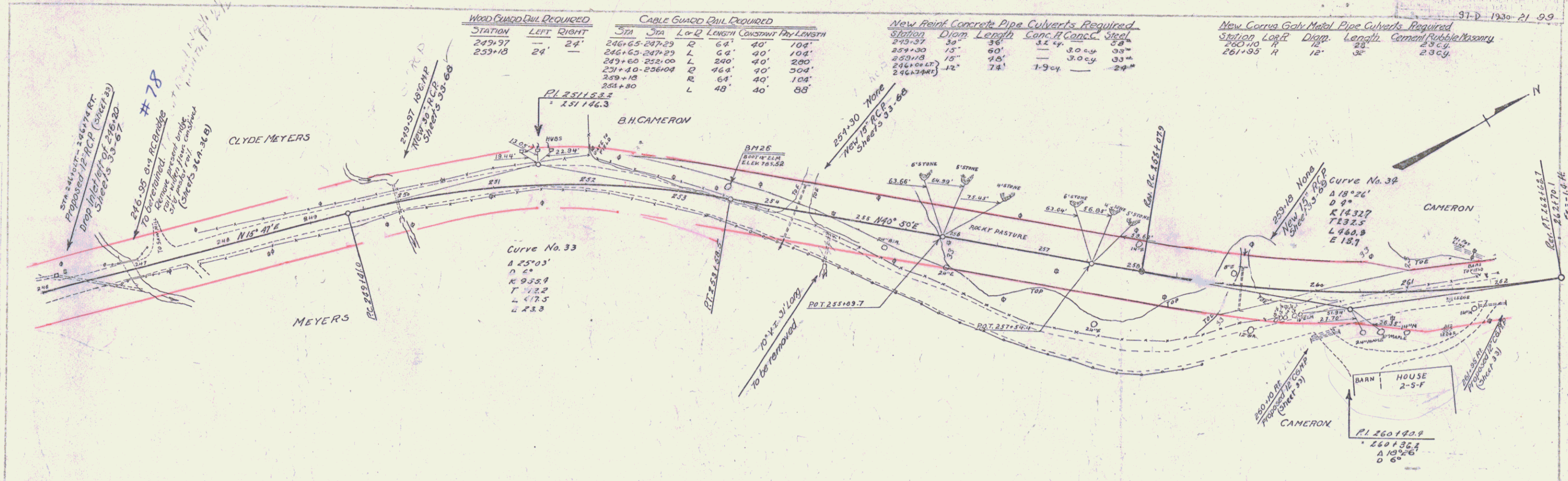
ROAD STATE 11.000 P. 11.000  
 PLAN NO. 97-D 1930. 20 00  
 SHEET 18 OF 20



STATION	ELEVATION
230	800.3
230+50	799.3
231	798.2
231+50	797.0
232	795.6
232+50	793.6
233	791.0
233+50	788.0
234	785.8
234+50	784.3
235	783.8
235+50	784.1
236	784.0
236+50	785.3
237	786.3
237+50	787.2
238	787.9
238+50	788.2
239	788.5
239+50	788.4
240	788.3
240+50	788.5
241	788.3
241+50	788.9
242	788.6
242+50	789.7
243	789.8
243+50	790.3
244	790.7
244+50	790.4
245	790.8
245+50	791.5
246	791.7
246+00	792.5

B.M. # 25 Spike in root 28" Maple 26" P.I. 235+49 Elev. 789.03

SERIES F. NO. 97-D  
 SHEET 18 OF 20



WOOD GUANO CHIL REQUIRED

STATION	LEFT	RIGHT
249+97	—	24'
253+18	24'	—

CABLE GUANO CHIL REQUIRED

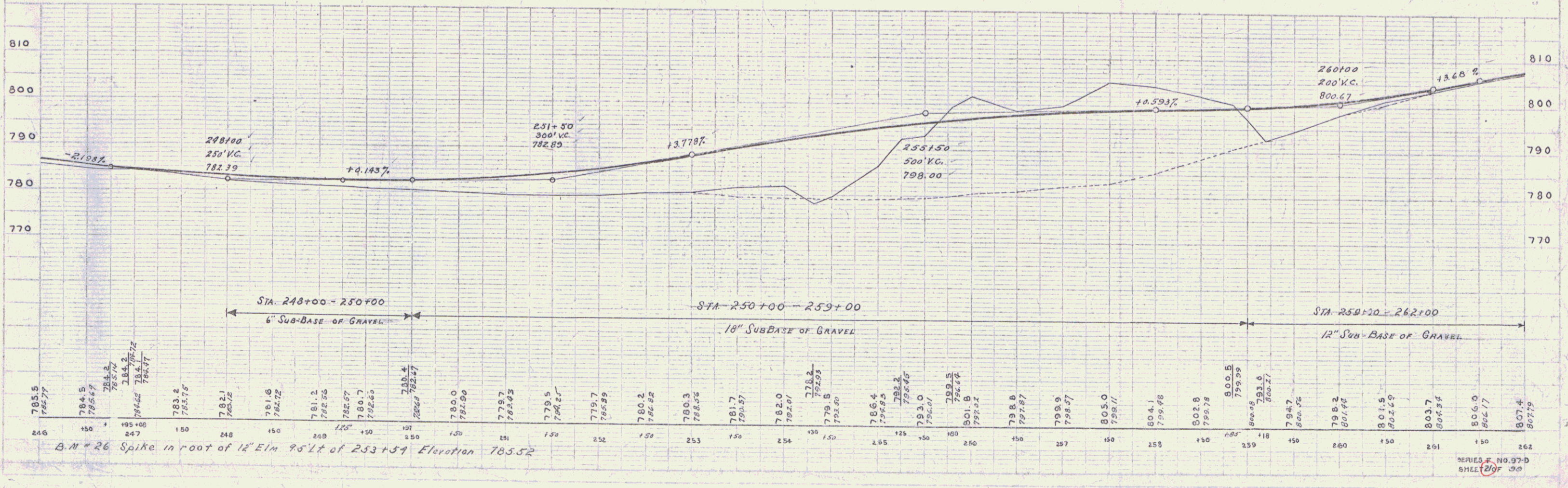
STA	STA	L-R	LENGTH	CONSTANT	RY-LENGTH
246+65	247+29	R	64'	40'	104'
246+65	247+29	L	64'	40'	104'
249+65	252+00	L	230'	40'	200'
251+40	256+04	R	464'	40'	304'
259+18	—	R	64'	40'	104'
254+80	—	L	48'	40'	88'

New Preint Concrete Pipe Culverts Required

Station	Diam	Length	Conc. #	Conc. Steel
249+37	30"	36'	3.2 cy	58#
259+30	18"	60'	—	3.0 cy
259+18	18"	24'	—	3.0 cy
246+00 (ST)	12"	74'	1.9 cy	—
246+34 (ST)	—	—	—	29#

New Corrugated Metal Pipe Culverts Required

Station	Left	Diam	Length	Cement	Rebar	Roosny
250+10	—	24"	—	—	—	23 cy
261+95	H	12"	36'	—	—	23 cy



PUTNAM  
MAYNARD

PUTNAM  
MAYNARD





**WOOD GUARD RAIL REQUIRED**

Station	Left	Right
296+00	24'	
298+87	24'	
301+17	24'	
302+44	24'	24'
303+85	24'	
296+00	24'	

**CARL GUARD RAIL REQUIRED**

Station	Station	Len	Const	Pay
29271	29285	14'	20'	44'
29271	29285	14'	20'	44'
293405	293425	20'	20'	44'
296+00	299+82	152'	40'	192'
303+60	306+00	140'	40'	280'

**REIN. CONC. PIPE CULVERTS REQUIRED**

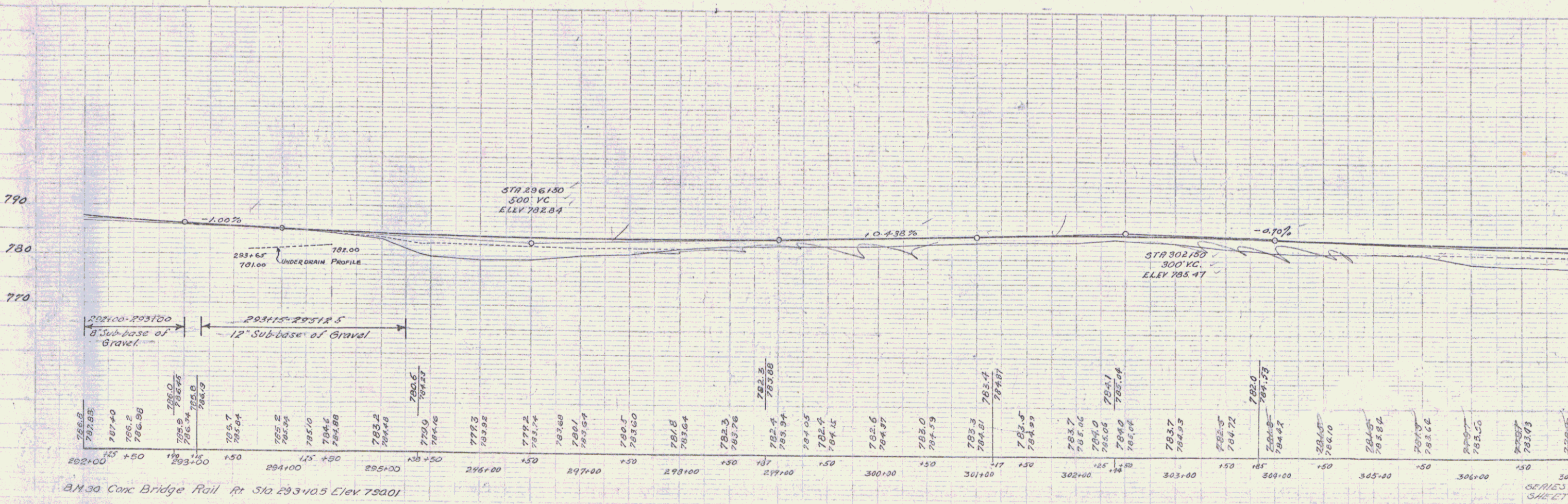
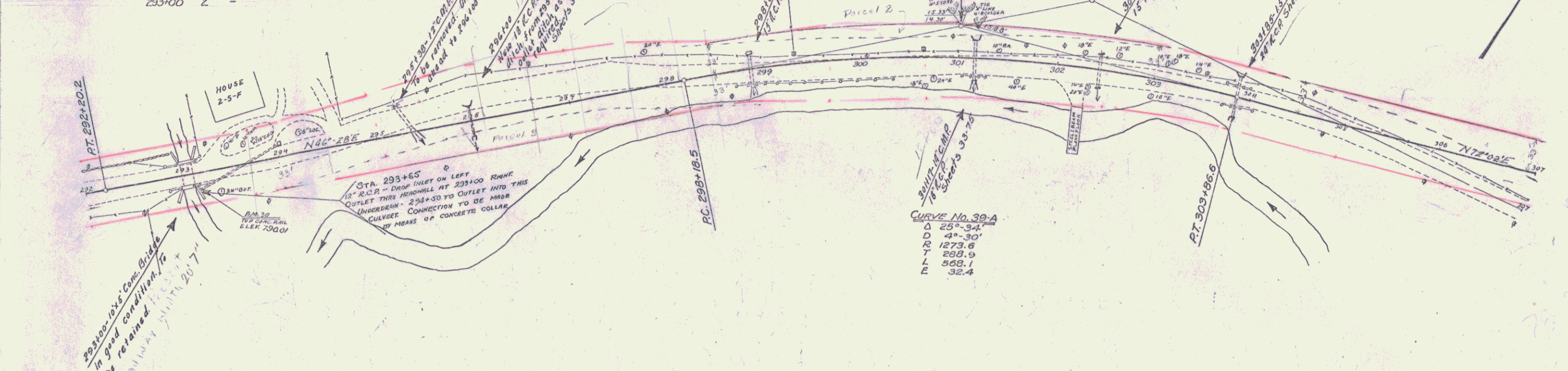
Station	Diam.	Length	Conc. P.	Steel	Conc. C.
296+00	18"	33'	1.864	54"	
298+87	18"	36'	1.5	54"	
301+17	18"	40'	1.8	54"	
302+44	18"	36'	1.8	54"	
303+85	24"	44'	2.4	54"	300' 300'
296+00	24"	96'	1.2	99"	1 D.I. GRATE.

**STD. UNDERDRAIN WITH 6" PC.G.M.P.**

Sta.	Length
293+65	294+50

**WOOD GUIDE POSTS REQUIRED**

Station	Left	Right
293+00	2	



STATE ROAD DISTRICT NO. 1  
 DIVISION OF HIGHWAYS  
 L. V. 97-D 1930 29 99



**WOOD GUARD RAIL REQUIRED**

CULVERT STATION	LEFT	RIGHT
331+09	24'	24'
328+25	24'	24'

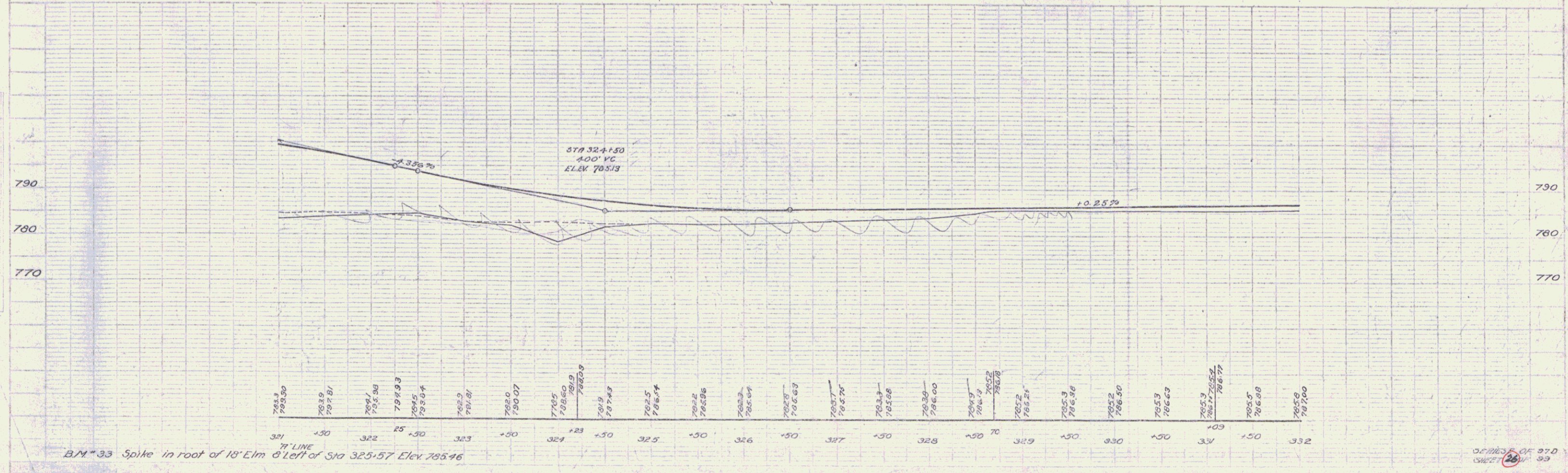
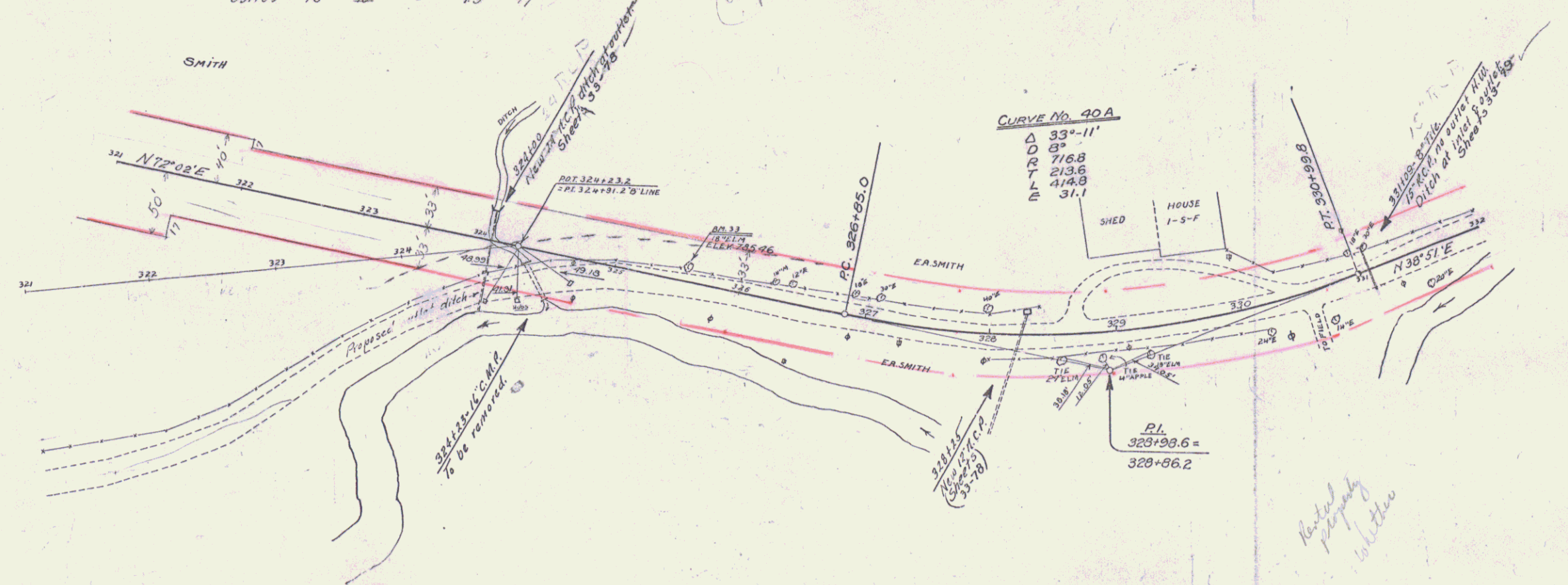
**CABLE GUARD RAIL REQUIRED**

STATIONS	LENS	CONSTANT	PIVOT
331+75-332+00	R	25'	40'
321+00-324+52	L	352'	40'
321+00-324+58	R	354'	40'

**NEW REIN. CONC. PIPE CULVERTS REQUIRED**

Station	Diam.	Length	Curve R.	Curve G.	Steel
324+00	24"	48'	240'	-	54'
328+25	12"	100'	150'	-	157'
331+00	15"	60'	15'	17'	-

STATE OF VERMONT  
 1930  
 26 89

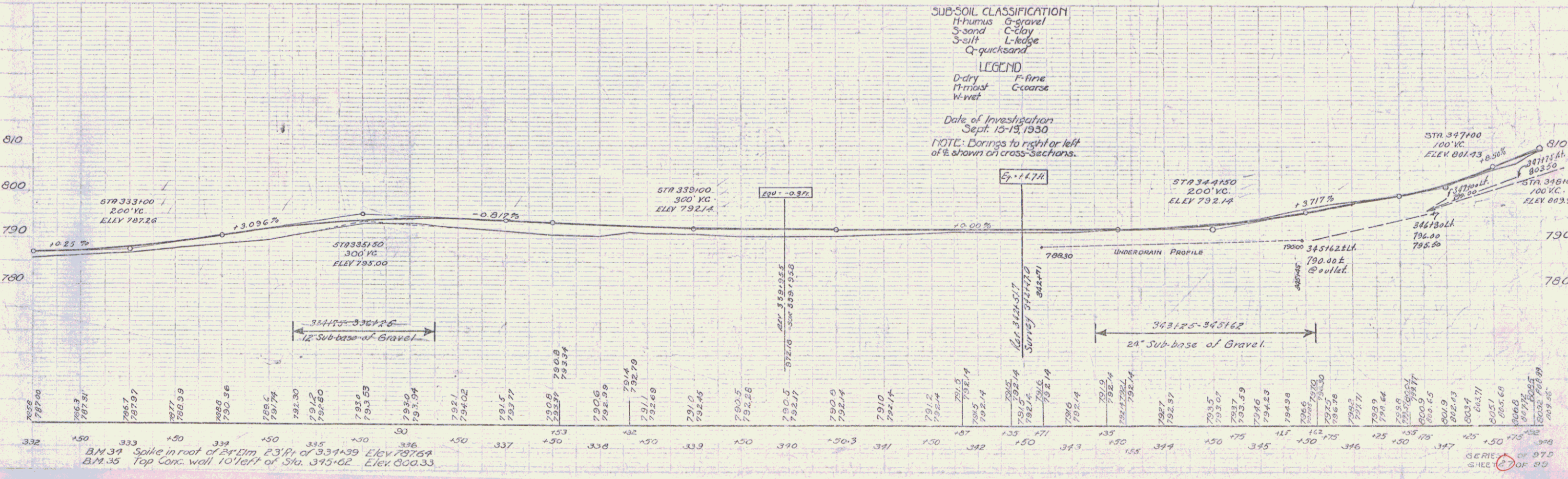
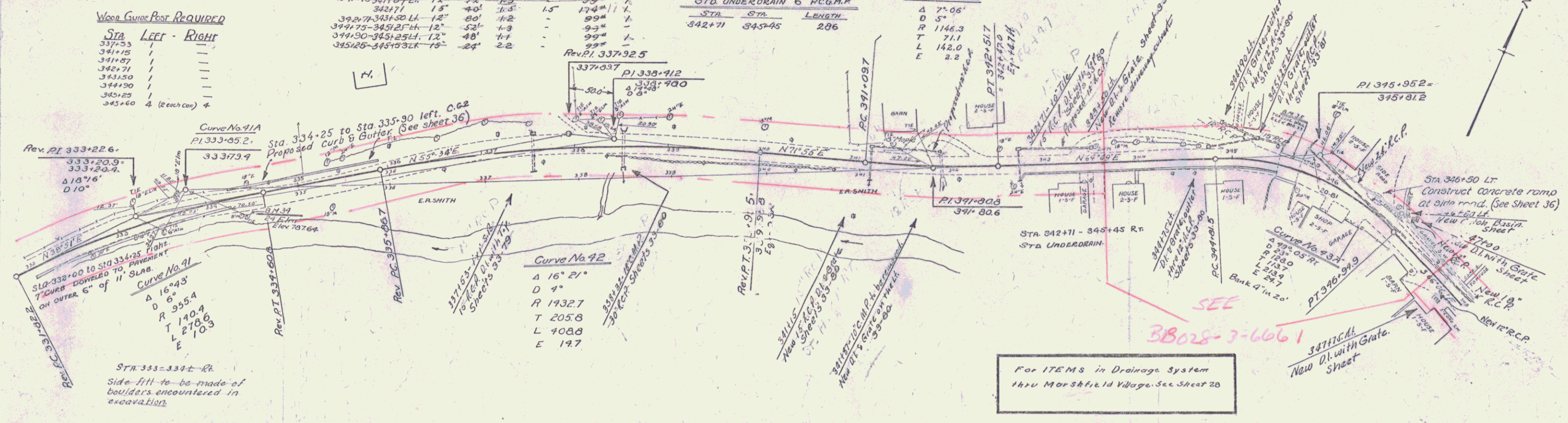


OF THIS SET OF 37.0  
 SHEET 26 OF 39

WOOD CURB PAV. REQUIRED				CABLE GUARD RAIL REQUIRED				NEW REIN. CONC. PIPE CULVERTS REQUIRED				CONCRETE CURB REQUIRED				CONCRETE CURB & GUTTER REQUIRED				
STATION	LEFT	RIGHT	WIDTH	STA - STA	LO.P.	LENGTH	CONSTANT	PI LENGTH	STATION	DIAM.	LENGTH	CONC. A.	CONC. C.	STEEL D/GRADES	STA - STA	LO.P.	AREA	CONC. A.	STEEL	
330+32	24'			332+0 - 334+0	R	215'	20	235'	337+53	15"	40'	3.2	1.5cy	178"	332+00	334+25	R	0.3038	2.5cy	151"
341+15	24'			336+28 - 339+44	R	216'	40	256'	341+15	15"	40'	3.2	1.5	178"	334+25	335+90	L	163'	10.8cy	297"
342+71	24'								342+71	15"	40'	3.2	1.5	178"						
343+15									343+15	15"	40'	3.2	1.5	178"						
344+15									344+15	15"	40'	3.2	1.5	178"						
345+15									345+15	15"	40'	3.2	1.5	178"						

WOOD GUARD POST REQUIRED

STA	LEFT	RIGHT
337+53		
341+15		
342+71		
343+15		
344+15		
345+15		
345+60	4 (Each cor)	4



STATE OF IOWA  
 COUNTY OF WASHINGTON  
 SHEET NO. 970.1930.27

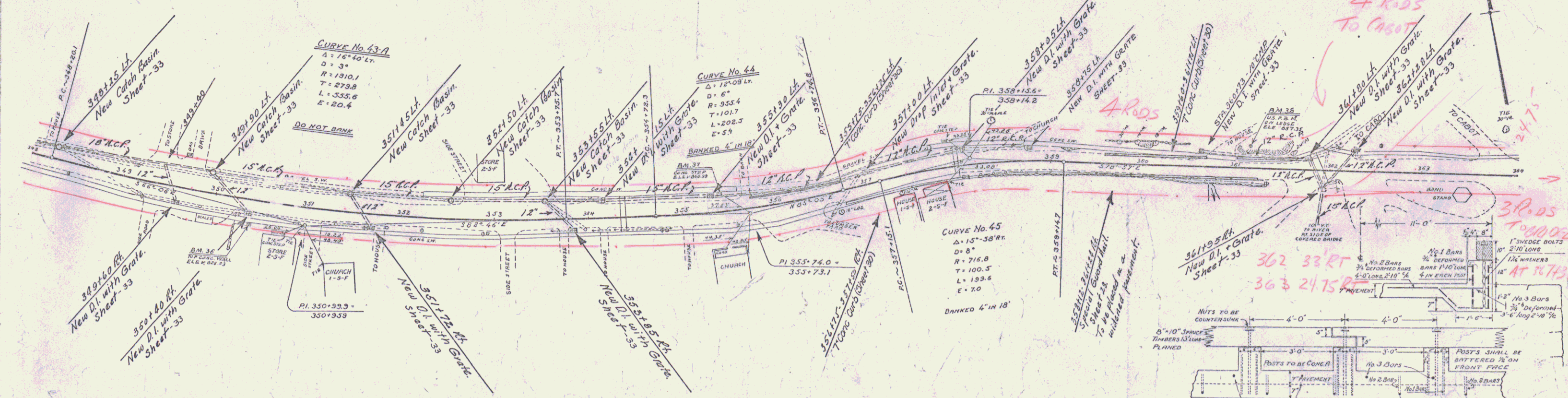
WOOD CURB AND RAIL REQUIRED  
 CULV. STA LEFT-RIGHT  
 350+75 24'

SPECIAL TIMBER GUARD RAIL REQUIRED  
 STA - STA LOOK LENG CONC. STEEL TIMBER  
 358+12 - 361+24 R 312' 3 ex 222' 2.253M/M

CONCRETE CURB REQUIRED  
 STA STA LOR R LENGTH CONC. P. STEEL  
 355+75 - 356+75 L 100' 1.1 ex 67"  
 356+75 - 357+30 R 75' 0.8 ex 50"  
 359+60 - 361+75 L 215' 2.4 ex 144"

Recel In str. Date Grantor Granted Recorded Book Rec Date Remarks  
 R 358+12 - 361+24 W.D.O.E. 8-15-52 R.C. E. T. Farrington St. of Vt. Marshfield 2-1 206 B-33-52 Side Right

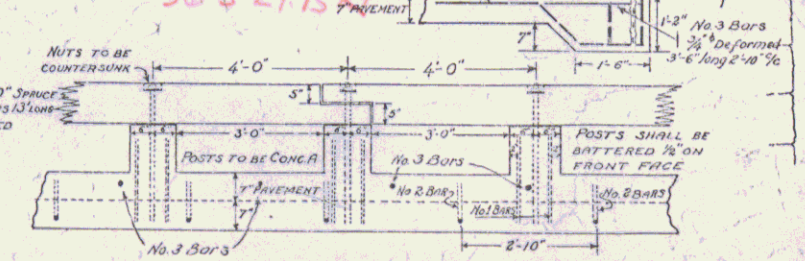
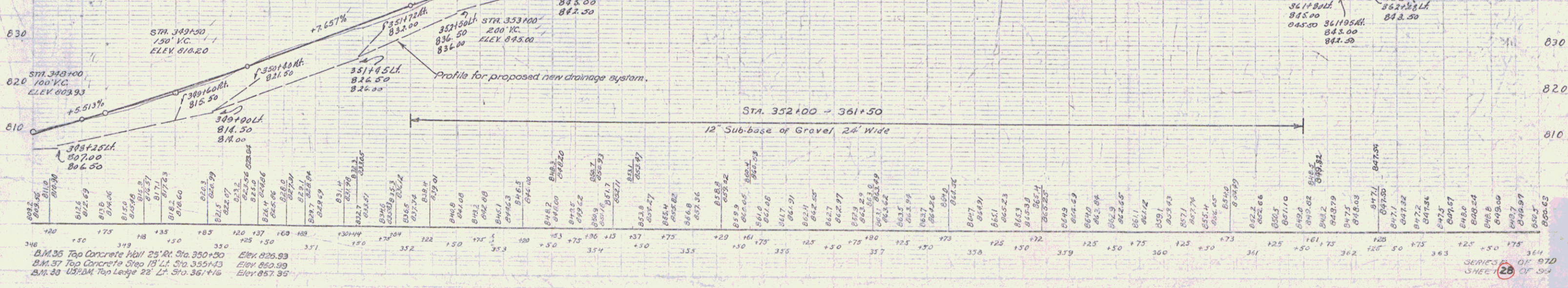
STATE OF VERMONT  
 1970 1930 28 99



ITEMS REQUIRED FOR DRAINAGE SYSTEM IN MARSHFIELD VILLAGES

DROP INLETS		CATCH BASINS		REINFORCED CONC. PIPE					
Station	Concr. Steel Grates	Station	Side	Stations	Diam.	Length	Stations	Diam.	Length
367+00L	20x24	366+00	LH	345+75L - 346+00L	18"	25'	354+15L - 355+00L	15"	85'
367+15R	20	368+15	LH	347+00L - 347+00R	12"	40'	355+00L - 357+00L	12"	100'
369+00L	20	369+00	LH	346+00L - 347+00L	12"	20'	357+00L - 358+00L	12"	100'
369+00R	20	369+00	LH	346+00L - 347+00L	18"	140'	361+00L - 361+00R	12"	32'
351+75R	20	351+75	LH	348+00L - 349+00L	12"	60'	361+00L - 361+00R	12"	32'
353+00R	20	353+00	LH	349+00L - 349+00R	12"	60'	361+00L - 361+00R	12"	32'
354+15L	20	354+15	LH	349+00L - 350+00L	12"	60'	361+00L - 361+00R	12"	32'
355+00L	20	355+00	LH	349+00L - 351+00L	12"	80'	361+00L - 361+00R	12"	32'
357+00L	20	357+00	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
358+00L	20	358+00	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
361+00L	20	361+00	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
361+00R	20	361+00	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
361+25L	20	361+25	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
361+75L	20	361+75	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'
361+75R	20	361+75	LH	351+00L - 351+00R	12"	40'	361+00L - 361+00R	12"	32'

NOTE: Present drainage system in Marshfield Villages to be removed.



WOOD CURB REQUIRED

CULV STA	LEFT	RIGHT
370+70	2'	—
372+26	2'	—
373+35	2'	—

WOOD GUIDE POSTS REQUIRED

STATION	LEFT	RIGHT
370+70	—	1
372+26	—	1
373+35	—	1

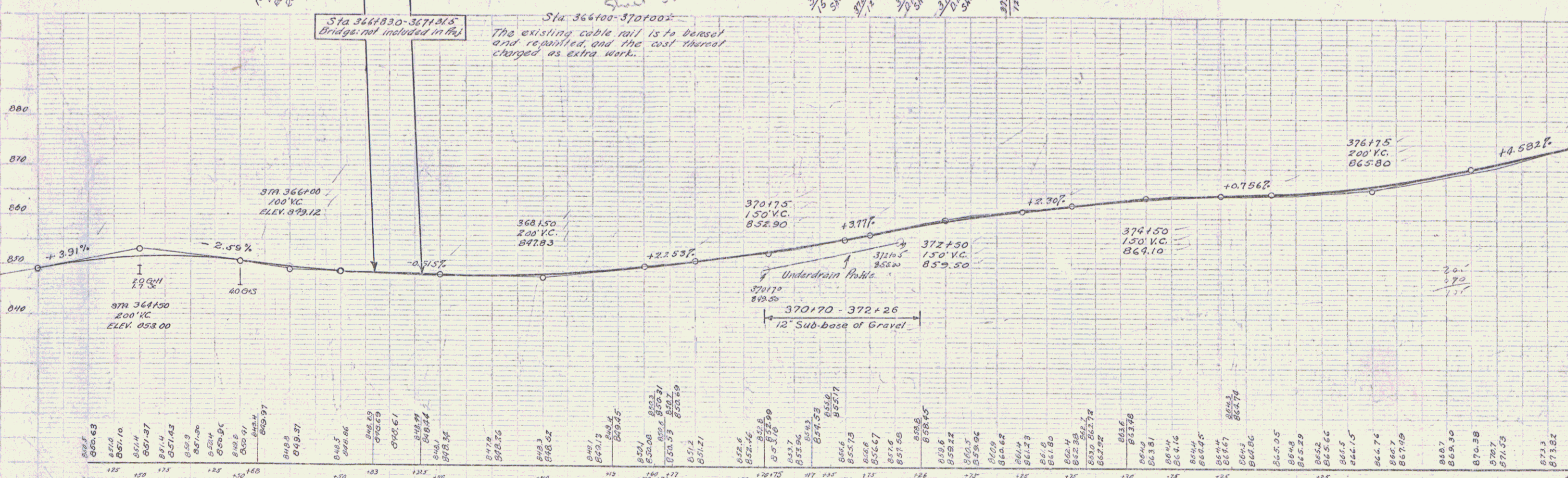
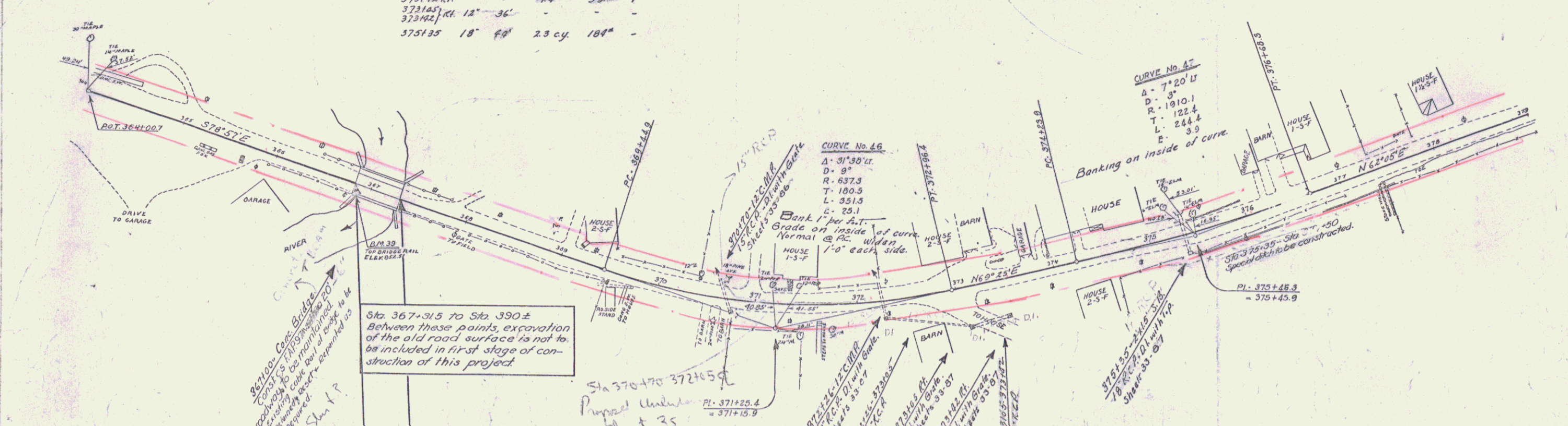
NEW REIN. CONC. PIPE CULVERTS REQUIRED

Station	Diam	Length	Conc. R.	Steel D.	Grate
370+70	18"	36'	1804	99"	—
372+26	18"	36'	1804	99"	—
373+35	18"	36'	1804	99"	—
373+42	18"	36'	1804	99"	—
375+35	18"	36'	1804	99"	—

SPR UNDERDRAIN WITH 6" R.C.G.P.

Stations	Length
370+70 - 372+26	140 ft

PER. NO. STATE. FISCAL YEAR. 1970 1930 29 99



B.M. 39 - Top of Conc. Bridge rail, 11 ft. Rt. of Sta. 364+00. Elev. 852.51

SERIES OF 310 SHEET 27 OF 99

**WOOD GUARD RAIL REQUIRED**

Cur. Sta.	Left	Right
382+10	24'	
385+03	24'	
387+50	24'	
389+79	24'	

**CABLE GUARD RAIL REQUIRED**

Sta.	Sta.	Loc. R.	Length	Concrete	Phy. Length	Sta.	Diam.	Length	Concrete	Steel	D. Grade
381+45	388+29	L	704'	80	784'	382+18	15"	48'	27 c.y.	15 c.y.	17"
387+00	387+76	L	76'	90	136'	384+03	18"	48'	14	102	17"
						387+50	18"	36'	14	99	17"
						389+76	R	12'	128'	1	17"
						391+00	R	-	1.4 c.y.	99'	17"

**NEW REINF. CONC. PIPE CULVERTS REQUIRED**

Station	Size	Conc. A	Steel	D. Grade
389+76	5'x5'	32.8 c.y.	2966'	

**REINF. CONC. BOX CULVERTS REQUIRED**

Station	Size	Conc. A	Steel
389+76	5'x5'	32.8 c.y.	2966'

**CONCRETE CURB REQUIRED**

Sta.	Sta.	Loc. R.	Length	Concrete	Steel
387+35	387+50	R	15'	1 c.y.	60'

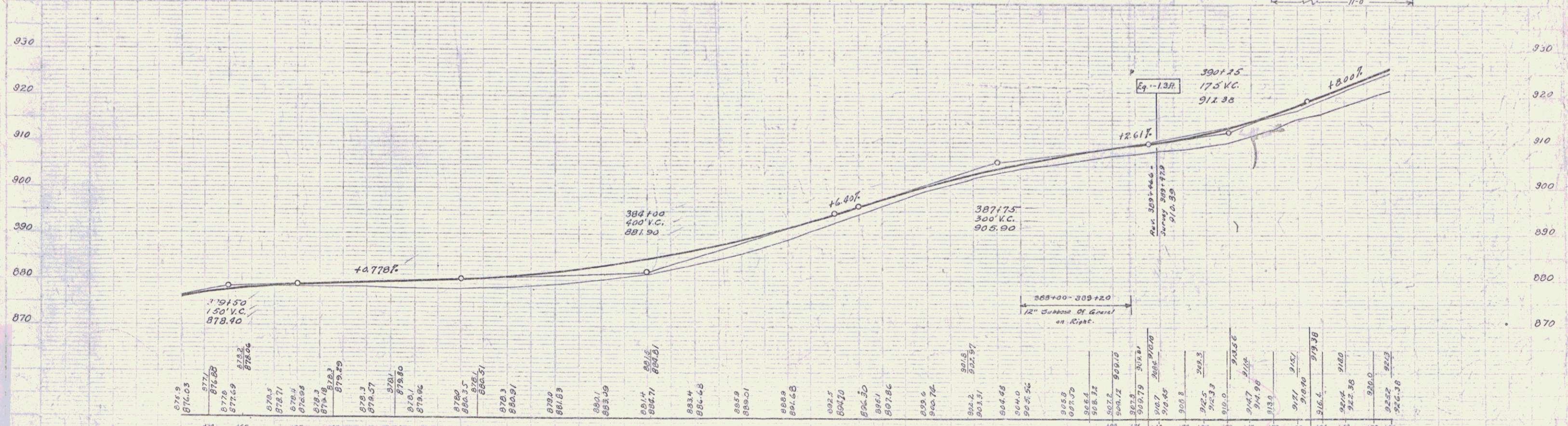
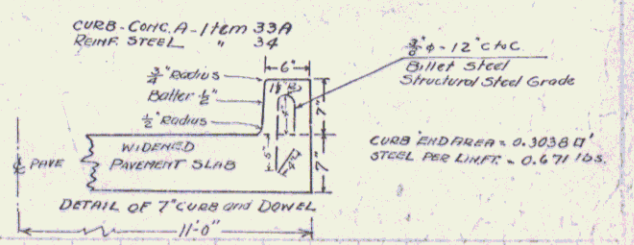
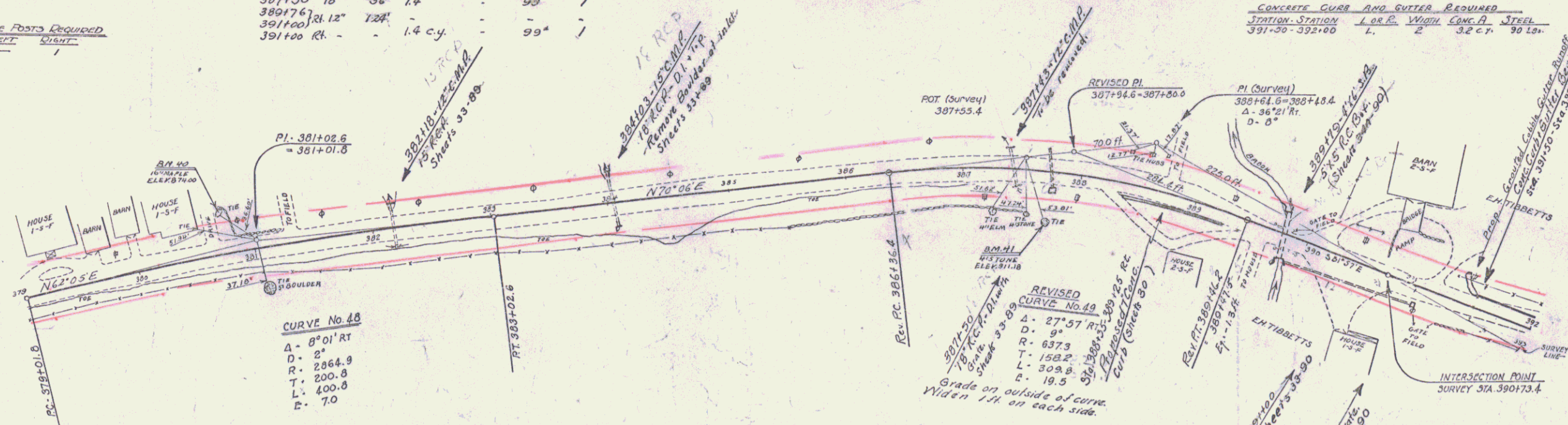
**SPROUTED CABLE CUTTER REQUIRED**

Sta.	Sta.	Loc. R.	Length	Width	Area
381+50	Runoff	L	20'	4'-6"	10' approx.

DATE: 1970 7 30 99  
 VI: 970 7930 30 99

**WOOD GUARD POSTS REQUIRED**

Sta.	Left	Right
391+00		1



B.M. No. 40, Spike in root of 16' Maple, 33 ft. Lt. of Sta. 380+76 Elev. 874.00  
 B.M. No. 41, Top of Boulder, 41 ft. R. of Sta. 387+75 Elev. 911.18

SERIES OF 970 SHEET 30 OF 03

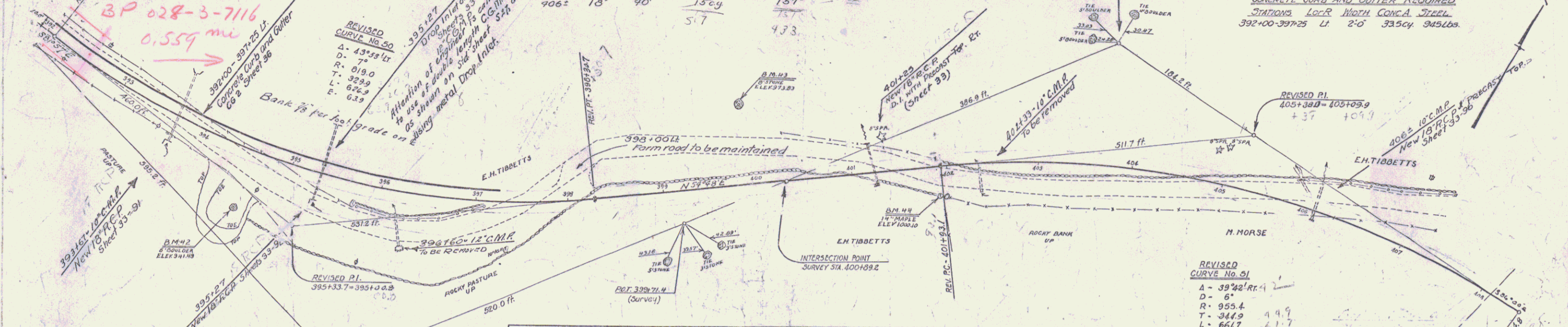
**WOOD GUARD RAIL REQUIRED**

CULV. STA.	LEFT	RIGHT
401+25	24'	
406+0		24'

**New Rein Concrete Pipe Culverts Required**

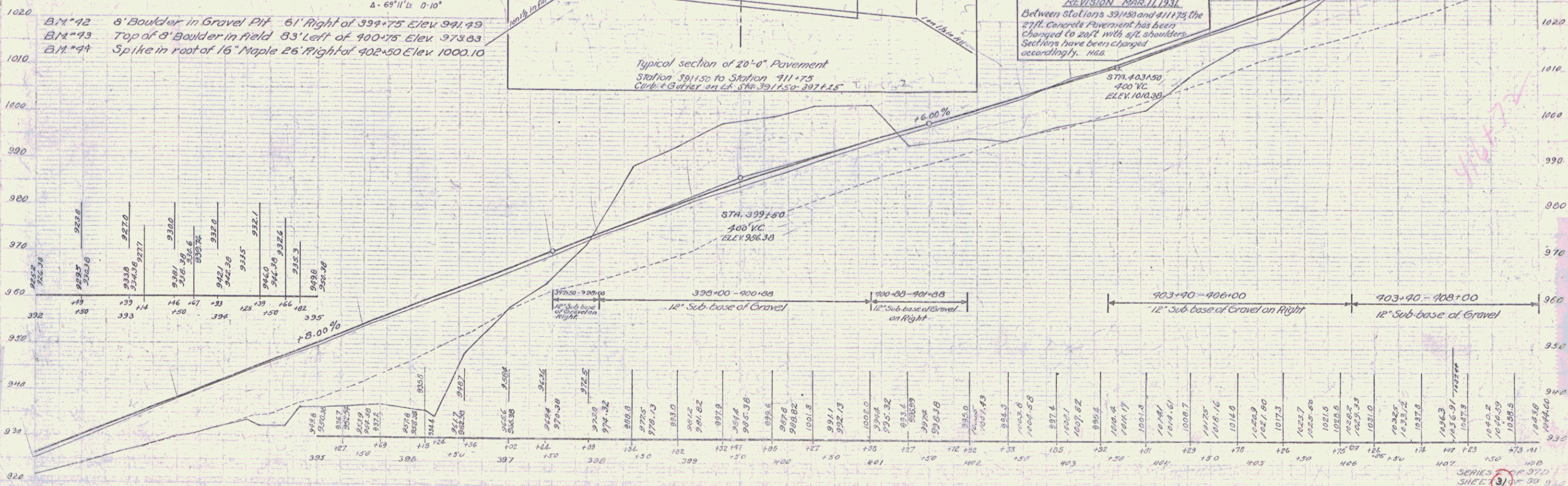
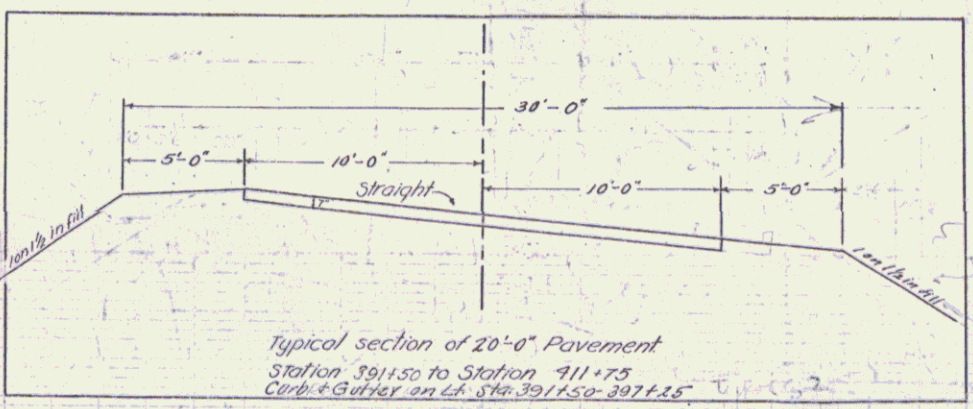
Station	Diem	Length	Conc. A	Conc. C	Steel	D/Grate
393+67	18"	60'	2.7cy	1.5cy	17"	1 (12" x 12" MS)
395+27	18"	60'	1.5cy	1.5cy	15"	
401+25	18"	90'	1.5cy	1.5cy	15"	
406+2	18"	90'	1.5cy	1.5cy	15"	

**CONCRETE CURB AND GUTTER REQUIRED**  
 STATIONS LEFT WITH CONC. STEEL  
 392+00-397+25 LI 2'-0" 33.5cy 345lbs.



**CABLE GUARD RAIL REQUIRED**

STA - STA	LT	RT	LENGTH CONSTANT	PIV LENGTH
392+25-397+25	LT	RT	80	640'
393+25-397+25	LT	RT	40	296'
400+60-402+80	LT	RT	60	670'
402+80-402+80	RT	RT	40	120'
				1736



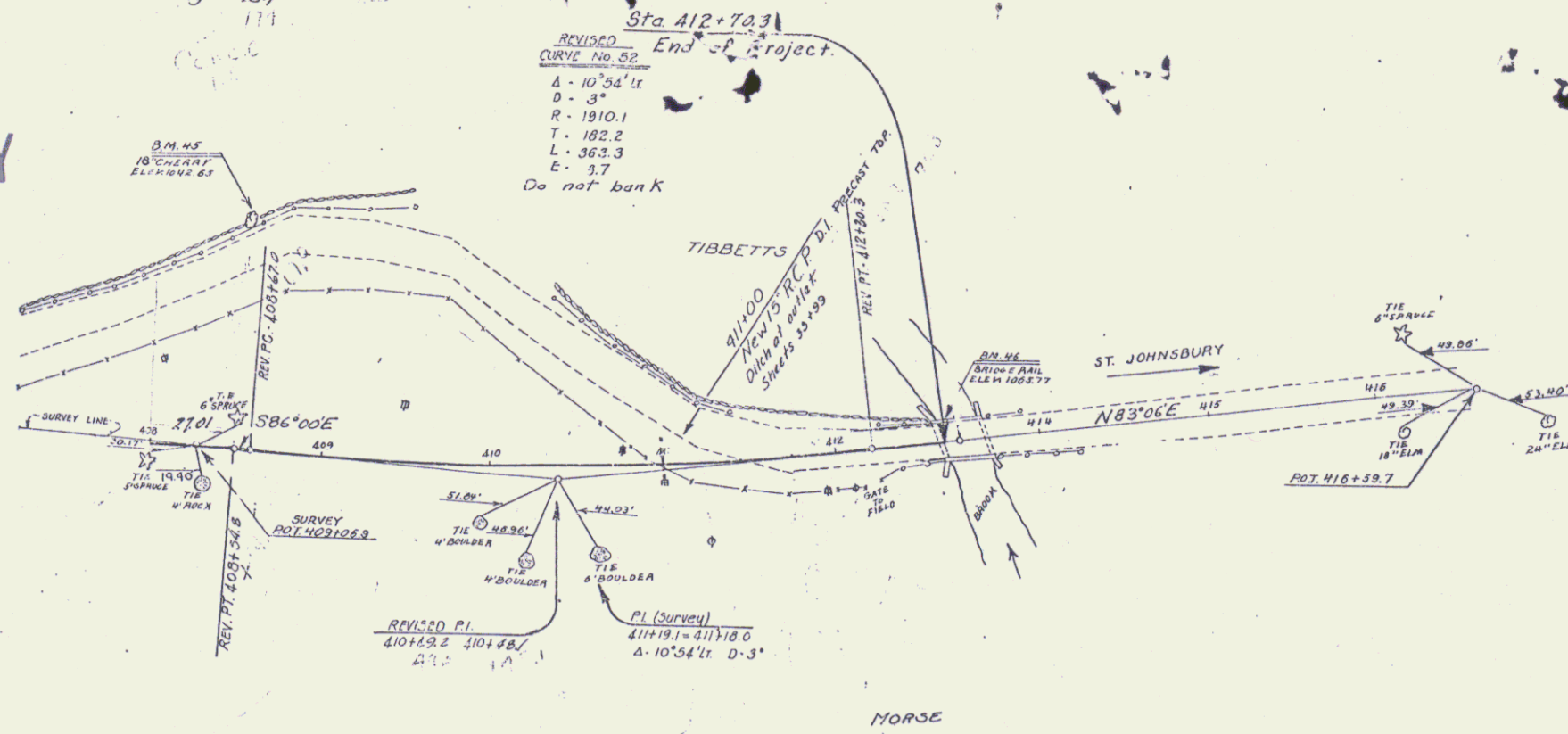
- B.M. #42 6' Boulder in Gravel Pit 61' Right of 394+75 Elev 991.49
- B.M. #43 Top of 8' Boulder in field 83' Left of 400+75 Elev 973.83
- B.M. #44 Spike in roof of 16" Maple 26' Right of 402+50 Elev 1000.10

10' Concrete Pipe Culverts Required  
 Walk STA Left Right  
 411+0 24' 24'  
 412+0 41' 24'

Concrete Pipe Culverts Required  
 Station Diagram Length Cong Steel  
 411+0 13 36 156.9 157

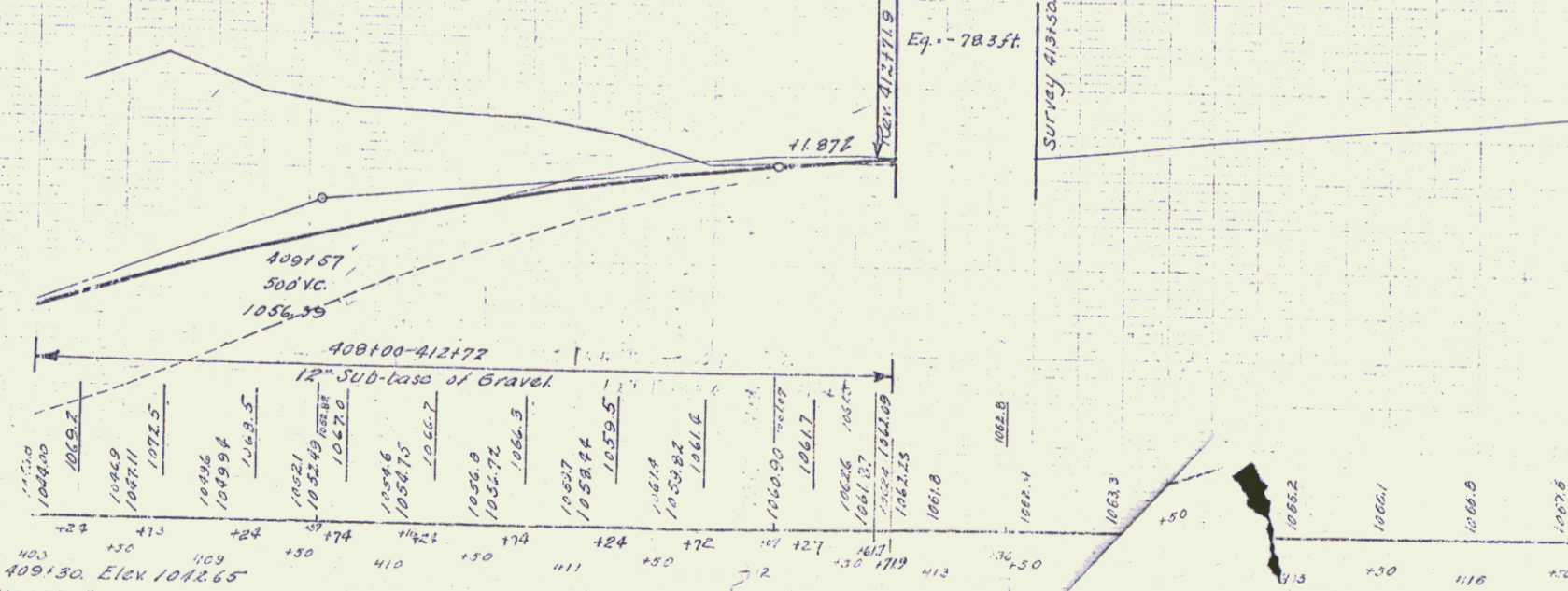
POOR ORIGINAL COPY

Sta 412+70.3  
 End of Project  
 REVISED CURVE No. 52  
 Δ - 10°54'18"  
 D - 3'  
 R - 1910.1  
 T - 182.2  
 L - 362.3  
 E - 3.7  
 Do not bank



Sta 412+70.3  
 End of Project

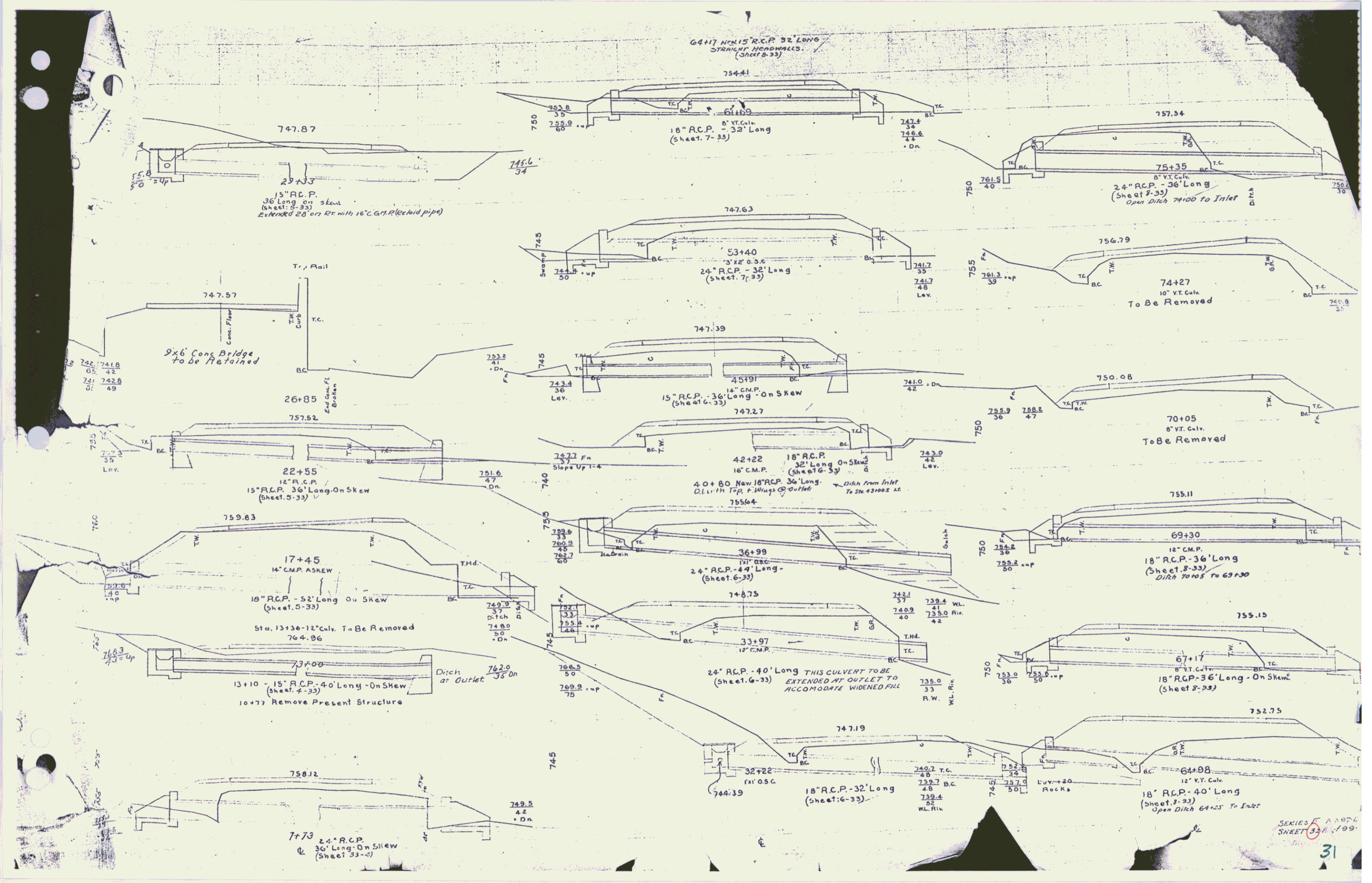
1070  
 1080  
 1090  
 1100  
 1130



5 in No. 45 Spike in road of 18" Cherry 120 ft. Li. of Sta 409+30. Elex 1082.65  
 3 in No. 46 Top of Conc rail at bridge 11 ft. Li. of Sta 413+45. Elex 1055.77

31A

3D



POOR ORIGINAL COPY

