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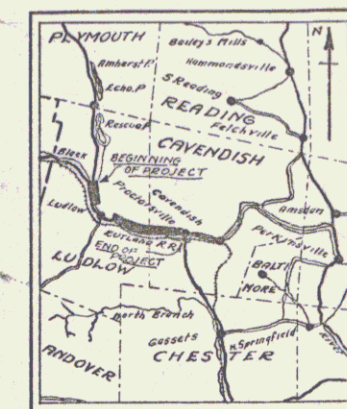
STATE OF VERMONT
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT

TOWNS OF LUDLOW - CAVENDISH
RUTLAND-BELLOWS FALLS ROAD

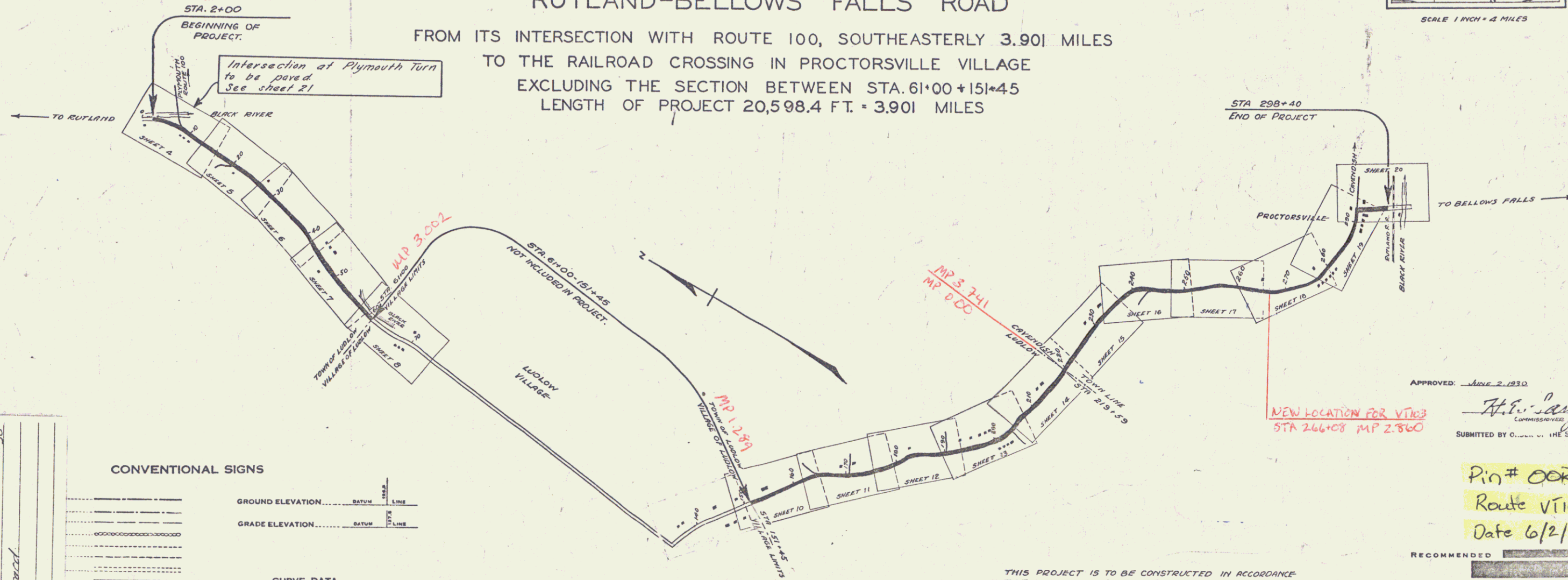
FROM ITS INTERSECTION WITH ROUTE 100, SOUTHEASTERLY 3.901 MILES
TO THE RAILROAD CROSSING IN PROCTORSVILLE VILLAGE
EXCLUDING THE SECTION BETWEEN STA. 61+00 + 151+45
LENGTH OF PROJECT 20,598.4 FT. = 3.901 MILES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	121-A	1930	1	37



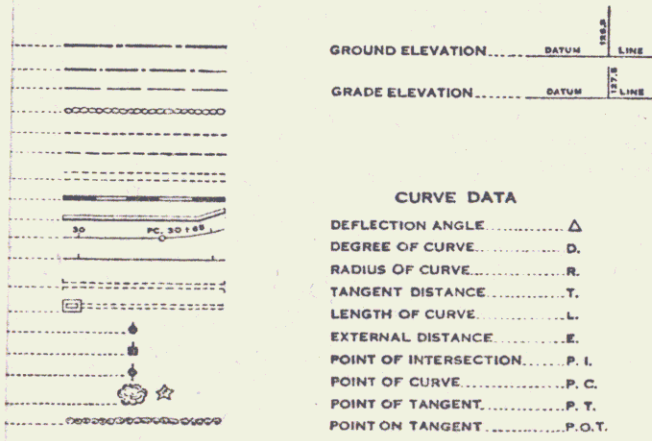
SCALE 1 INCH = 2 MILES

(To Be Returned to R.O.W. Division)
DOWN OF 4103
PERPETUAL
DOWN FILE
RIGHT-OF-WAY DIVISION



PROJECT: Ludlow - Cavendish
NUMBER: 121-A
TYPE: ROAD
CONTRACTOR: See file and
LOCATION: See file and
YEAR: 1930

CONVENTIONAL SIGNS



CURVE DATA

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

SCALE: 1 INCH = 1000 FT.

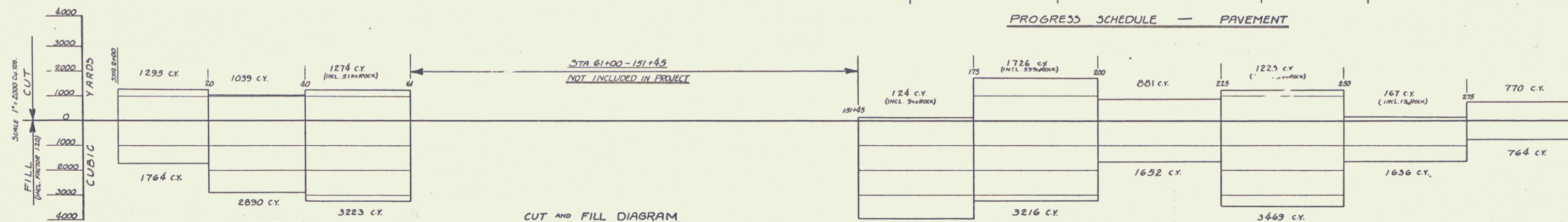
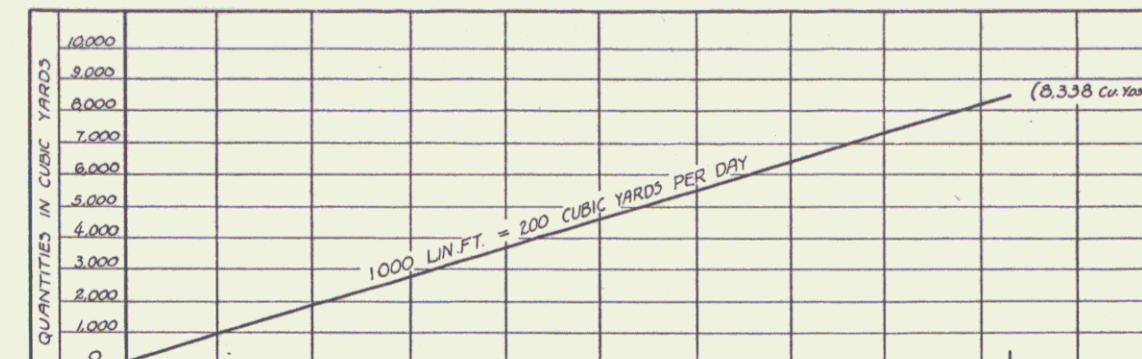
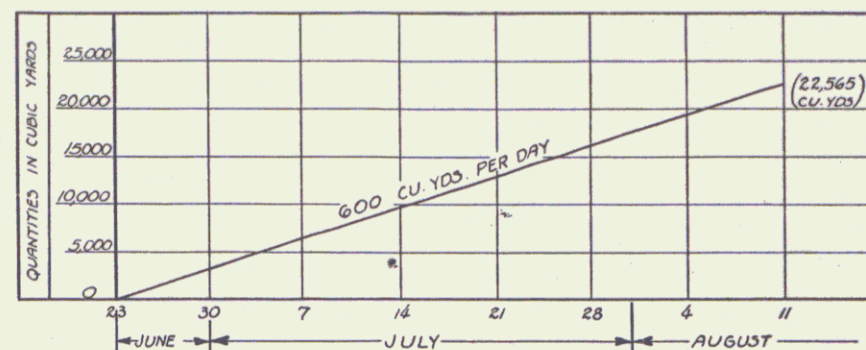
THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE
WITH THE VERMONT STANDARD ROAD AND BRIDGE
SPECIFICATIONS FOR 1930.
THESE PLANS ARE SUBJECT TO SUCH REVISIONS AS MAY
BE REQUIRED BY THE COMMISSIONER OF HIGHWAYS.

APPROVED: June 2, 1930
H. F. Sargent
Commissioner of Highways
SUBMITTED BY: THE STATE HIGHWAY BOARD

Pin # 000138
Route VT103
Date 6/2/1930

RECOMMENDED: [Signature]
DISTRICT ENGINEER
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL: [Signature]
CHIEF ENGINEER
BUREAU OF PUBLIC
APPROVED: [Signature]
DIRECTOR - BUREAU OF PUBLIC ROADS

SERIES F. NO. 121-A FILED
SHEET 1 OF 37



STA. 2+00
BEGINNING OF PROJECT

Intersection at Plymouth
Turn to be paved.

TO RUTLAND

LENGTH OF PROJECT 20,598.4 FT. = 3.901 MILES

ITEMS COMPLETED

- Pavement
- Sub-base and Shaping Course
- Excav. and Borrow

PLAN

PROGRESS CHART
LUDLOW - CAVENDISH 121-A
VERMONT DEPT. OF HIGHWAYS
1930

Surveyed by
Designed by H.L. TILTON
Drawn by J.E.F.
Traced by J.E.F.
Checked by
Series No. 1A of 1 Sheets

WOOD GUARD RAIL REQUIRED

CULV. STA.	LT.	RT.
5+07	24'	24'

CABLE GUARD RAIL REQUIRED

STATIONS	LEFT	RIGHT
5+90 TO 6+70 B.L. 240'	-	-
6+00 B.L. TO 11+50 4+80'	-	-
10+76 TO 11+24	-	4+8

WOOD GUIDE POSTS REQUIRED

CULV. STA.	LT.	RT.
6+92	-	1
8+16	-	1
8+88	-	1

NEW REINFORCED PIPE CULVERTS REQUIRED

STATION	DIA.	LENGTH	CONC.	REIN. STEEL
5+07	15"	36'	2.3 cy.	33 lbs
6+18	15"	44'	1.2 cy.	174 lbs
8+16	15"	52'	1.5	174 lbs
8+83	15"	36'	1.2 cy.	174 lbs
11+00	30"	56'	3.2	58 lbs

NEW REINFORCED DRIVEWAY PIPE CULVERTS REQUIRED

STATION	DIA.	LENGTH	CONC.	REIN. STEEL
12+75	12"	24'	2.3 cy.	1.2 cy.
9+00	12"	36'	2.3 cy.	1.2 cy.

GRADED COBBLE CUTTER REQUIRED

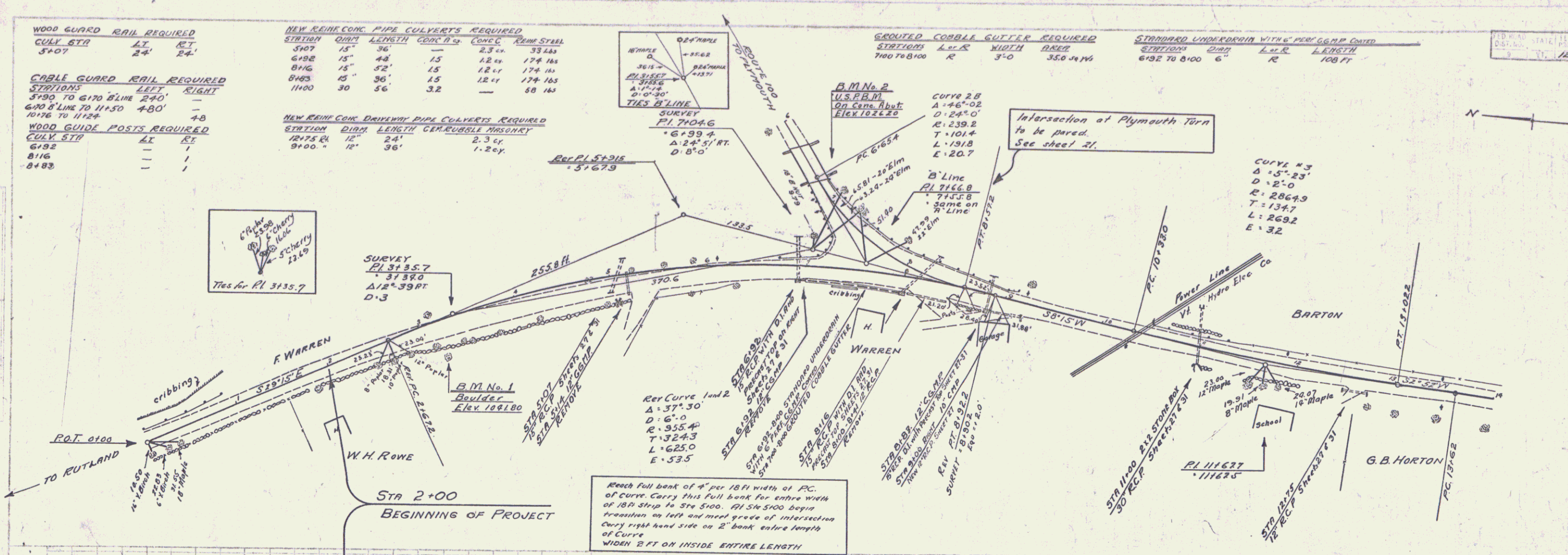
STATIONS	L & R	WIDTH	DEEP
7+00 TO 8+00	R	3'-0"	35.0 in. H

STANDARD UNDERDRAIN WITH 6" PER' G.M.P. COVER

STATIONS	DIA.	L & R	LENGTH
6+92 TO 8+00	6"	R	108 ft

ADDITIONAL STATE HIGHWAY 121A 1930

DATE	BY	NO.
12/1/30	4	57



SUB-SOIL INVESTIGATION

- Mud H
- Gravel G
- Sand S
- Silt St
- Clay C
- Quicksand Q
- Ledge L

LEGEND

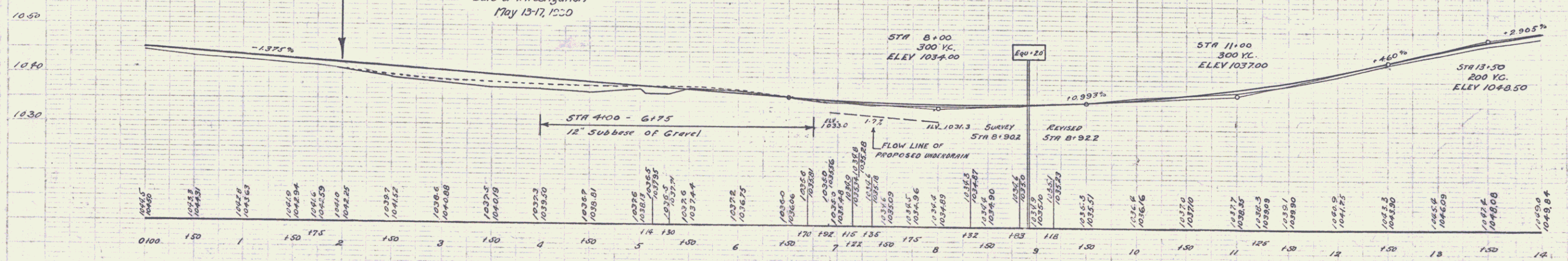
- Dry D Fine F
- Moist M Coarse C
- Wet W Stone Base SB

Date of Investigation
May 13-17, 1930

The intent of the sub-soil boring data as noted on the layouts is to show the sub-soil conditions only at the point where the boring was taken, and is no exact indication of surrounding sub-soil conditions.

Driveways to be constructed so as to provide satisfactory approaches to pavement at locations shown on cross sections, or as may be directed by the Engineer.

THE COMMON EXCAVATION INCLUDING ROCK AS ENCOUNTERED ON THE PROJECT, UNLESS OTHERWISE ORDERED BY THE ENGINEER, IS TO BE USED IN THE FORMATION OF EMBANKMENTS OUTSIDE OF THE PAVEMENT WIDTH AND ALSO IS NOT TO BE USED FOR SHOULDER CONSTRUCTION. APPROVED BOARDING IS TO BE USED FOR FILL UNDER PAVEMENT, AND FOR SHOULDER CONSTRUCTION OVER THE ENTIRE PROJECT EXCEPT AT THOSE LOCATIONS WHERE SUB-BASE OF GRAVEL OR GRAVEL SHOULDERS ARE CALLED FOR ON THE PLANS.



B.M. No. 1 - Point on boulder, 25' RT. of Sta. 3+18. Elev. 1041.80
B.M. No. 2 - U.S.P.B.M. on south-westerly wing at bridge. Elev. 1026.20

WOOD GUARD RAIL REQUIRED

CULV. STA	LEFT	RIGHT
16+25	24'	24'
20+90	24'	24'

CABLE GUARD RAIL REQUIRED

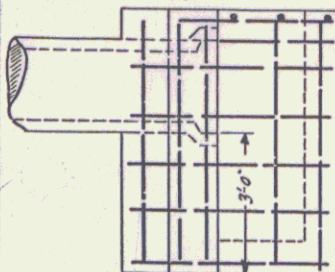
STATIONS	LEFT	RIGHT
22+22 to 23+50	120'	—

WOOD GUIDE POSTS REQUIRED

CULV. STA	LEFT	RIGHT
23+36	—	1
20+90	—	1

NEW REIN CONC PIPE CULVERTS REQUIRED

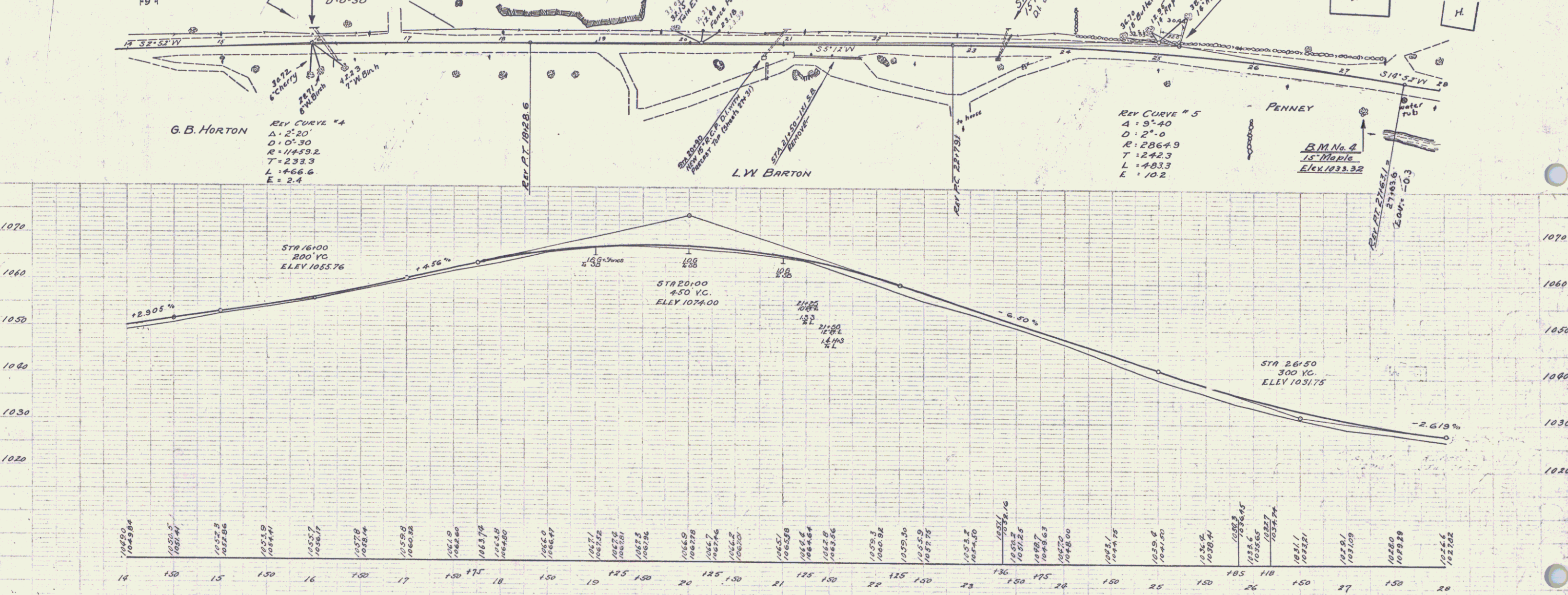
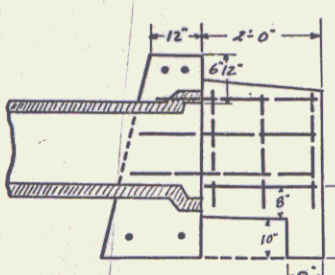
STATION	DIM	LENGTH	CONC. B	CONC. C	REIN. STEEL
16+12	15"	47'	13 cy	12 cy	92 lbs
23+36	15"	40'	13 cy	12 cy	174 "
20+90	15"	36'	13 cy	12 cy	174 "



DETAIL OF -
L-TYPE HEADWALL
Concrete Class B

All Reinf Steel to be 3/8" debar, 12%
Quantities for 18" Pipe
Conc. Class A: 1.9 cy
Reinf Steel: 75 lbs

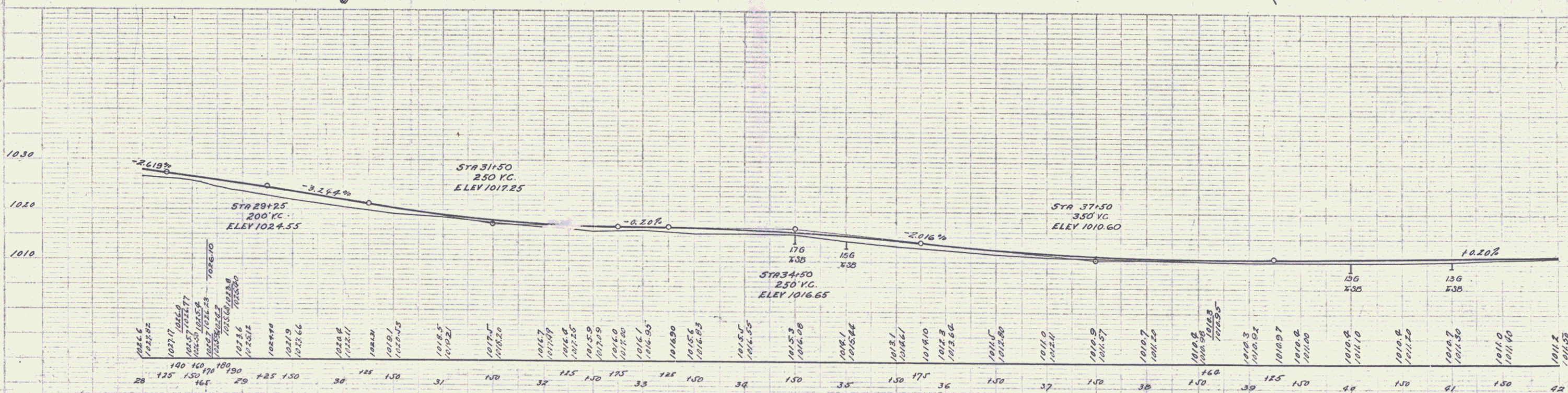
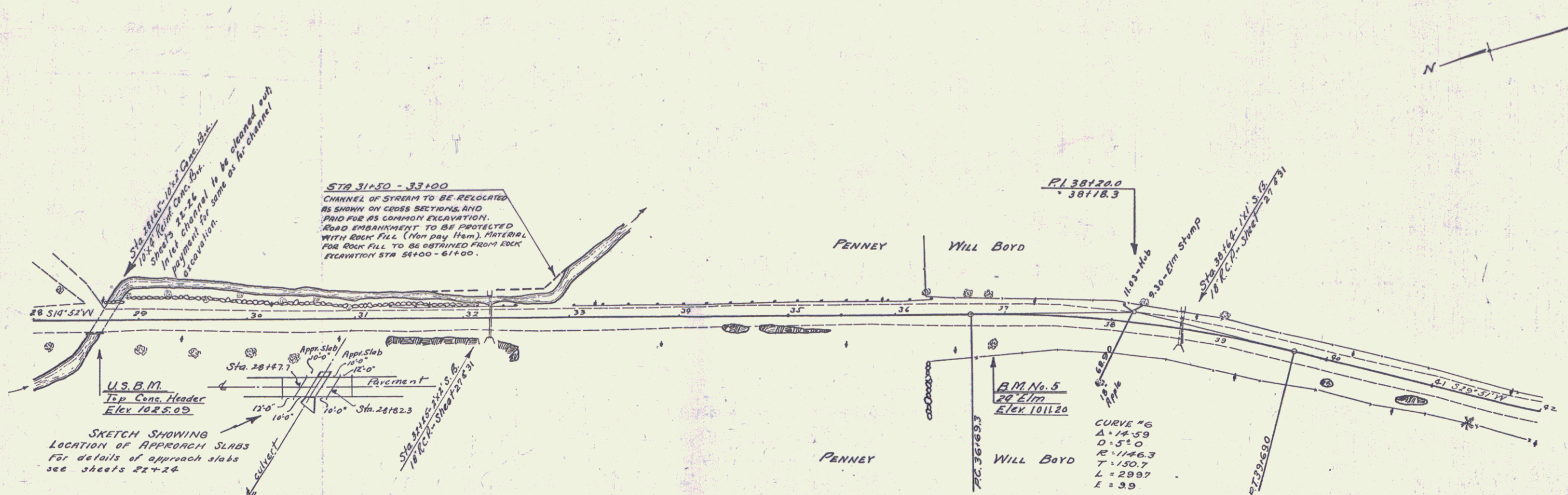
C.E. Plummer
Apr 1930
Apr 1930
Apr 1930



B.M. No. 3 - Boulder, 40' left of Sta 17+54. Elev 1061.19
B.M. No. 4 - Spike in root of 15' Maple, 32' right of Sta 27+20. Elev 1033.32

WOOD GUARD RAIL REQUIRED				CABLE GUARD RAIL REQUIRED				NEW REINFORCED CONCRETE PIPE CULVERTS REQUIRED				
CULVERT	LEFT	RIGHT	STATION	STATION	LEFT	RIGHT	STATION	DRAIN	LENGTH	GRADE	GRADE	REINFORCED
32+25	24'	24'	28+10	28+10	40'	40'	32+25	18"	36'	18.0%	18.0%	5# 10s
38+64	24'	24'	31+00	32+10	18'	—	38+64	18"	36'	18.0%	18.0%	5# 10s

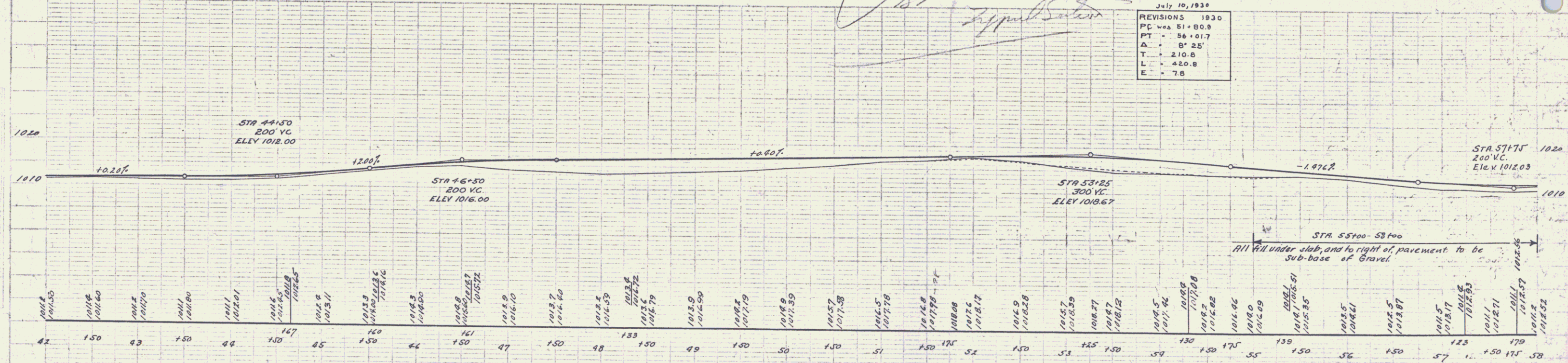
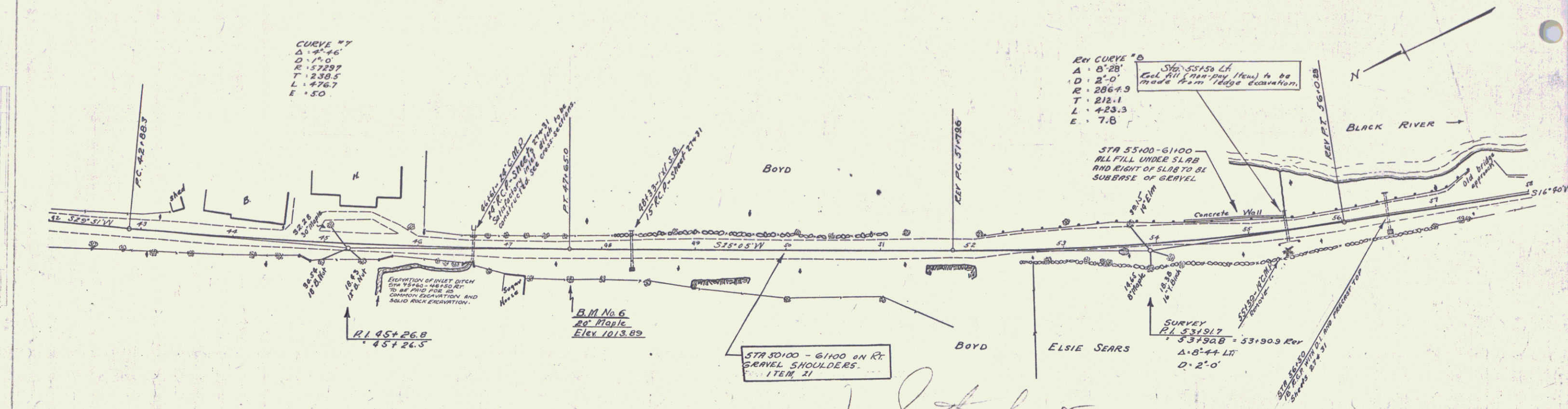
FEDERAL ROAD DIST. NO. 121-A
 STATE OF IOWA
 SHEET NO. 6 OF 57



SERIES F No. 121-A
 SHEET 6 OF 57

WOOD GUARD RAIL REQUIRED			CABLE GUARD RAIL REQUIRED			WOOD GUIDE POSTS REQUIRED			NEW REINFORCED CONCRETE PIPE CULVERTS REQUIRED				
CULV. STA.	LEFT	RIGHT	STATIONS	LEFT	RIGHT	CULV. STA.	LEFT	RIGHT	CULV. STA.	DIAM.	LEN.	CHOC. B.	CONC. G.
46161	24	24	46120 TO 57100	800	—	46133	—	1	46161	24"	36'	24"	—
			57100 TO 58100	20	—	56150	—	1	46173	18"	40'	15"	12"
									56150	18"	40'	15"	15"
													174 161
													174 165

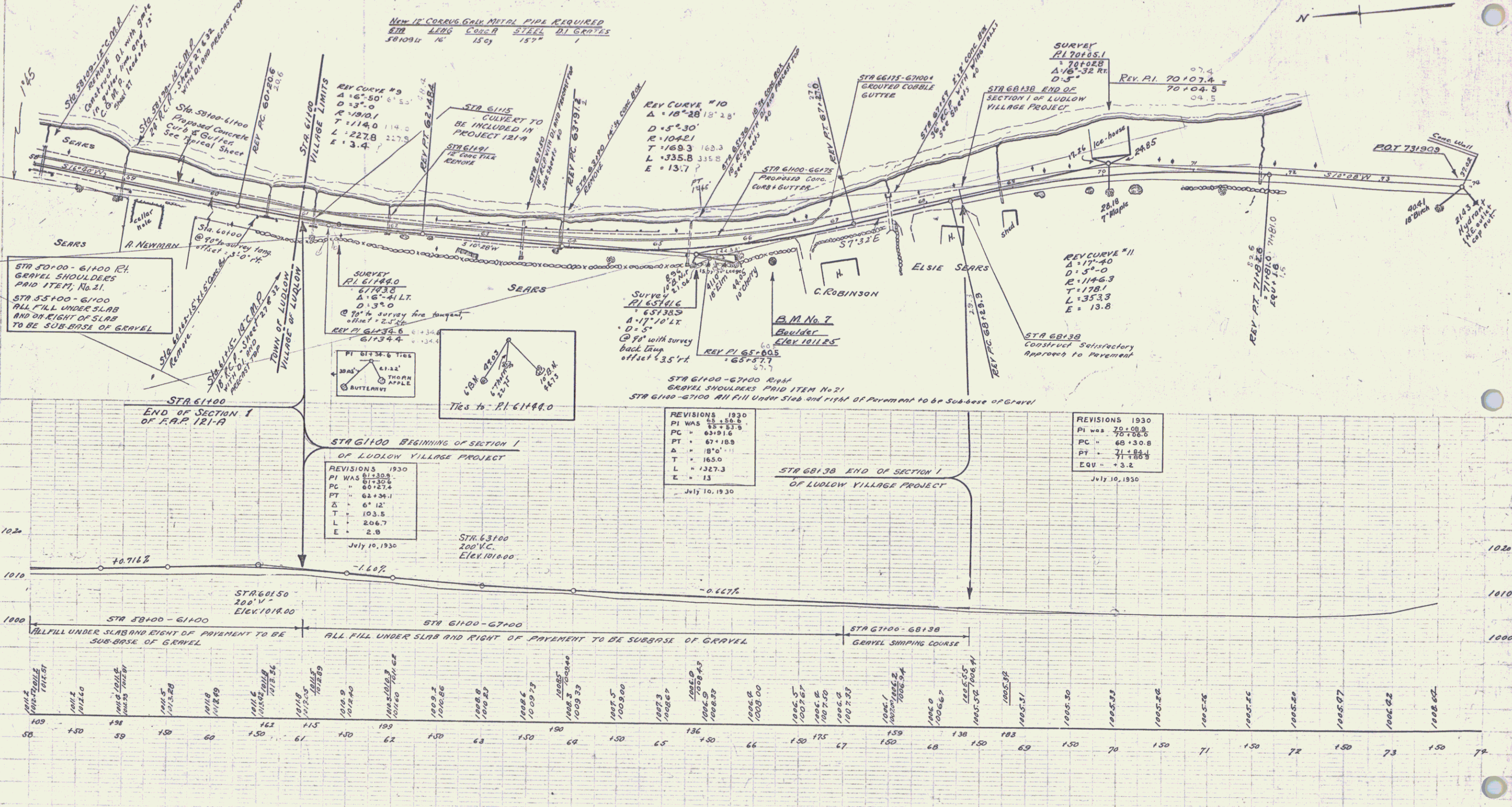
FED. ROAD DIST. NO. 121A 1930 7 57



B.M. No 6 - Spike in 20' Maple, 30' right of Sta 47163. Elev 1013.89

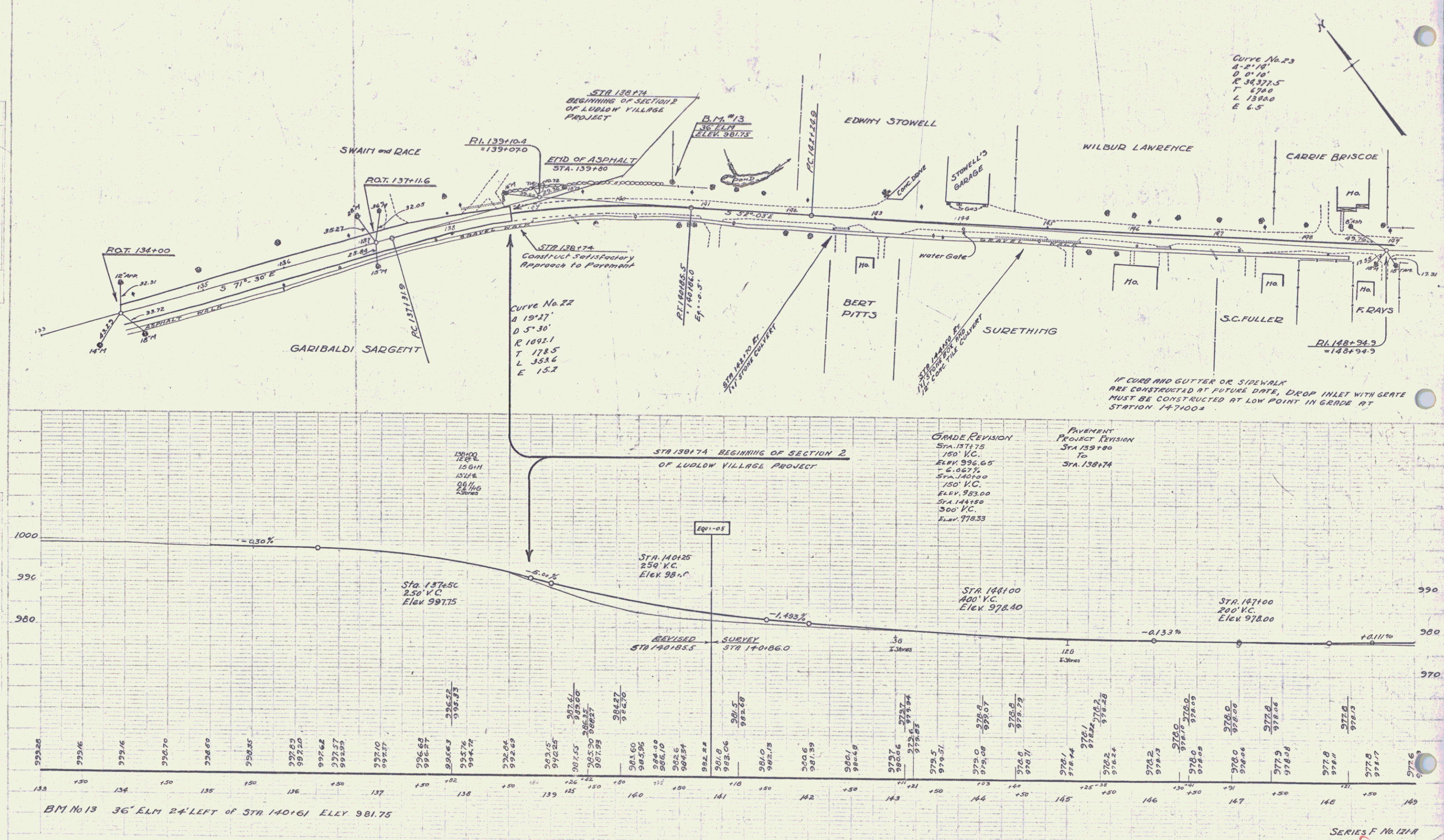
SERIES F No. 121-A SHEET 7 OF 57

CABLE GUARD RAIL REQUIRED				WOOD GUIDE POSTS REQUIRED				NEW CORRUGATED GALV. PIPE REQUIRED				NEW CORRUGATED GALV. PIPE REQUIRED				NEW CORRUGATED GALV. PIPE REQUIRED				GROUTED CORREL GUTTER RUNOFF			
STATIONS	LEFT	RIGHT		STATIONS	LEFT	RIGHT		STATIONS	LEFT	RIGHT		STATIONS	LEFT	RIGHT		STATIONS	LEFT	RIGHT		STATIONS	LEFT	RIGHT	
58100 TO 61000	324	—		61115	—	—		61115	18"	32"	1.8 cy	61115	18"	32"	1.8 cy	61115	18"	32"	1.8 cy	61115	18"	32"	1.8 cy
61115 TO 66124	360	—		63130	—	—		63130	18"	40"	1.8 cy	63130	18"	40"	1.8 cy	63130	18"	40"	1.8 cy	63130	18"	40"	1.8 cy
WOOD GUARD RAIL REQUIRED	—	—		65136	—	—		65136	18"	40"	1.8 cy	65136	18"	40"	1.8 cy	65136	18"	40"	1.8 cy	65136	18"	40"	1.8 cy
CULV. STA.	LEFT	RIGHT		67139	—	—		67139	36"	36"	4.0 cy	67139	36"	36"	4.0 cy	67139	36"	36"	4.0 cy	67139	36"	36"	4.0 cy
67139	24"	24"																					



B.M. No. 7 - Boulder, 25' right of Sta. 66120. Elev. 1011.25

SERIES F No. 121-A
SHEET 8 OF 57

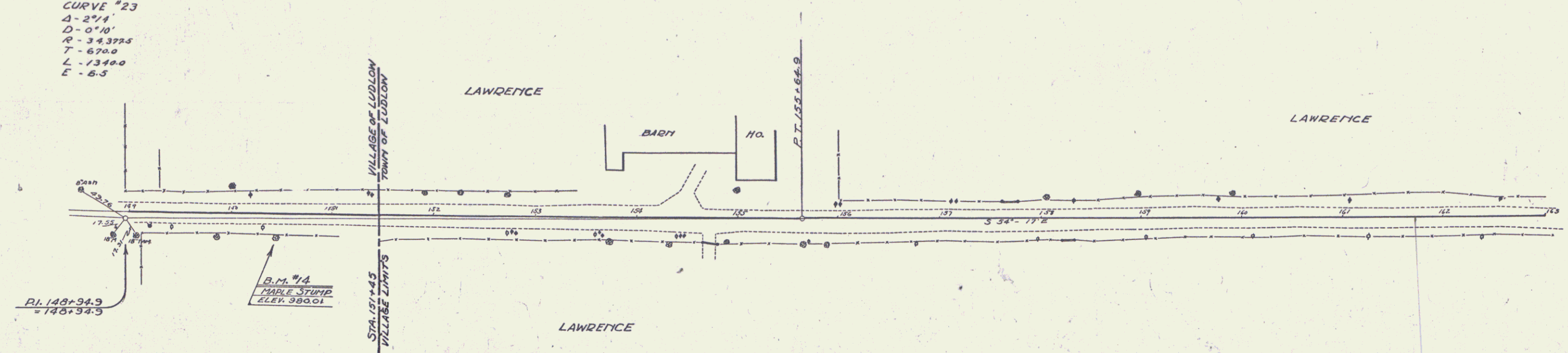


C. PUTNAM
H. B. HINBALL

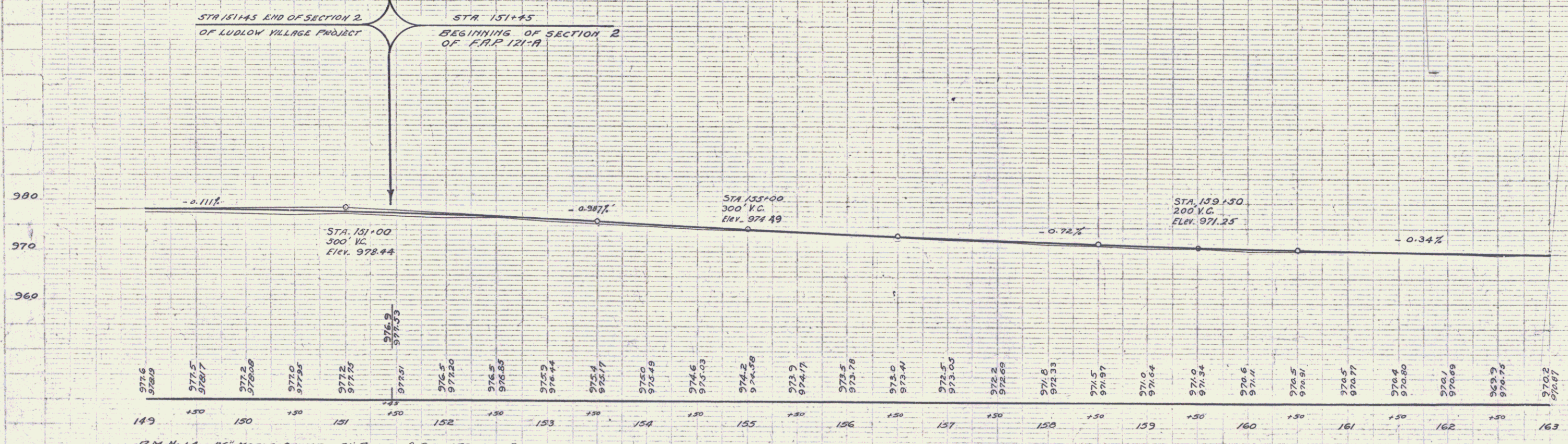
C. PUTNAM
H. B. HINBALL

CURVE #23
 Δ - 2°14'
 D - 0°10'
 R - 34.3725
 T - 670.0
 L - 1340.0
 E - 6.5

S.E. Putnam
 Surveyor
 1930



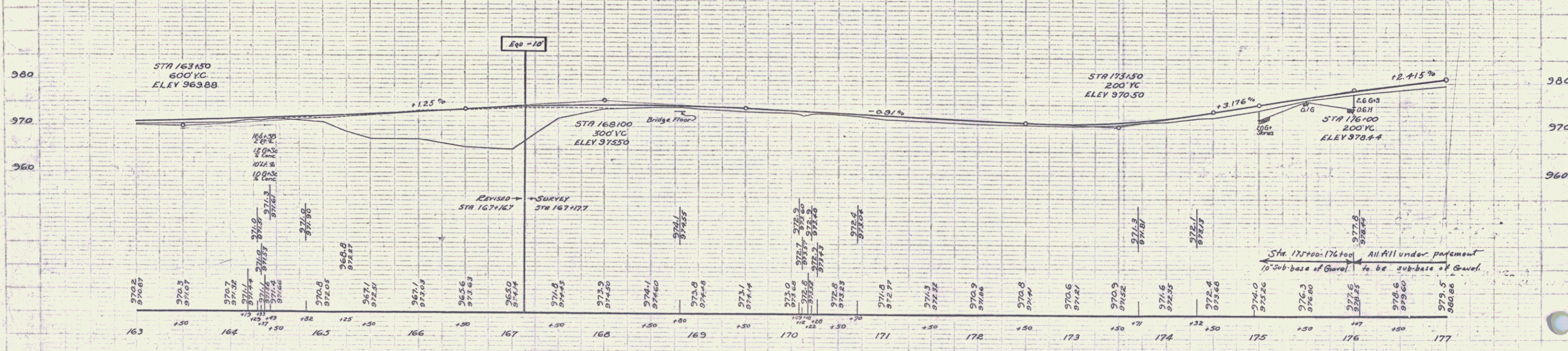
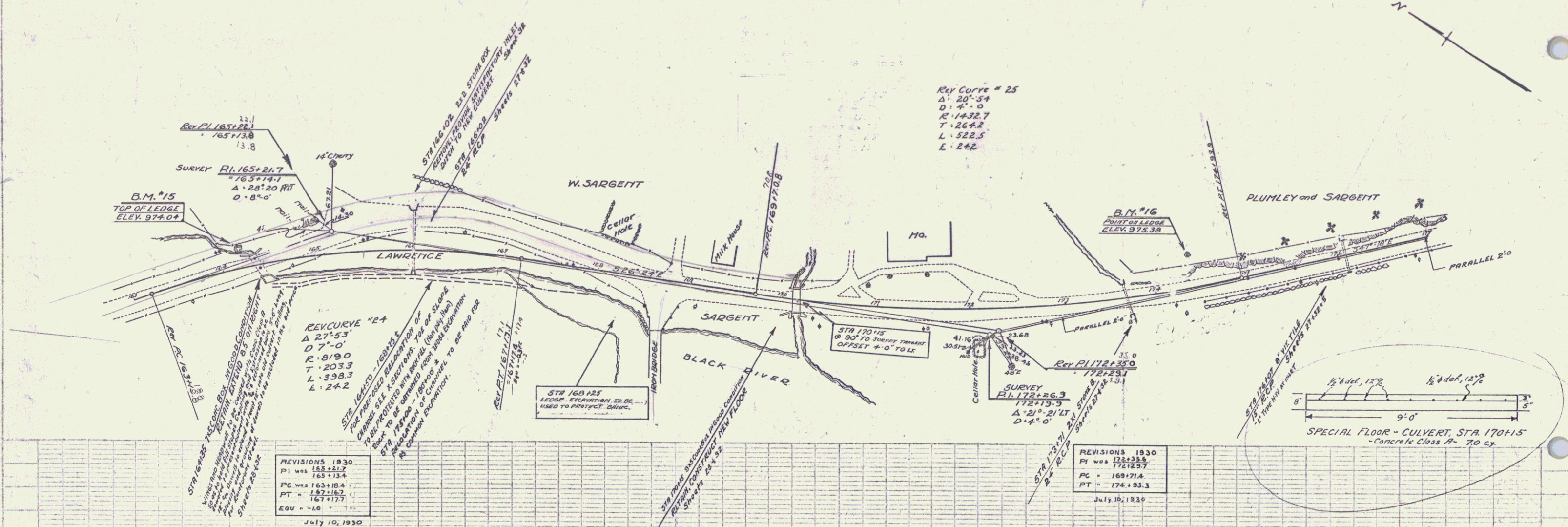
S.E. Putnam
 Surveyor
 1930



B.M. No. 14 36" MAPLE STUMP 21' RIGHT OF STA. 150+44 ELEV. 980.01

WOOD GUARD RAIL REQUIRED			CRILL GUARD RAIL REQUIRED			NEW CRIMP CORRUGATED PIPE CULVERTS REQUIRED			CULVERT REPAIRS REQUIRED		
CULVERT	LEFT	RIGHT	STATION	LEFT	RIGHT	CULVERT	DIAM	LENGTH	CULVERT	DIAM	REPAIRS
166+02	24'	—	164+23-169+47	24'	—	166+02	24"	6'	164+35	12.5"	513 lbs.
173+71	24'	24'	170+03-170+27	24'	24'	173+71	24"	40'	170+15	9.0"	300 lbs.
176+07	24'	—	173+25-177+00	—	175'	176+07	15"	36'			NEW FLOOR

REVISED STATE ROAD PLANS SHEET NO. 12/A 1930 11 57



B.M. #15 TOP OF LEDGE AT BRIDGE 35' LEFT OF STA 164+17 ELEV 974.04
 B.M. #16 POINT ON LEDGE 36' LEFT OF STA 174+40 ELEV 975.38

WOOD GUARD RAIL REQUIRED		
CULV. STA.	LEFT	RIGHT
183+00	—	24'

CABLE GUARD RAIL REQUIRED		
STATIONS	LEFT	RIGHT
179+00 - 178+53	—	153
179+50 - 189+26	—	276

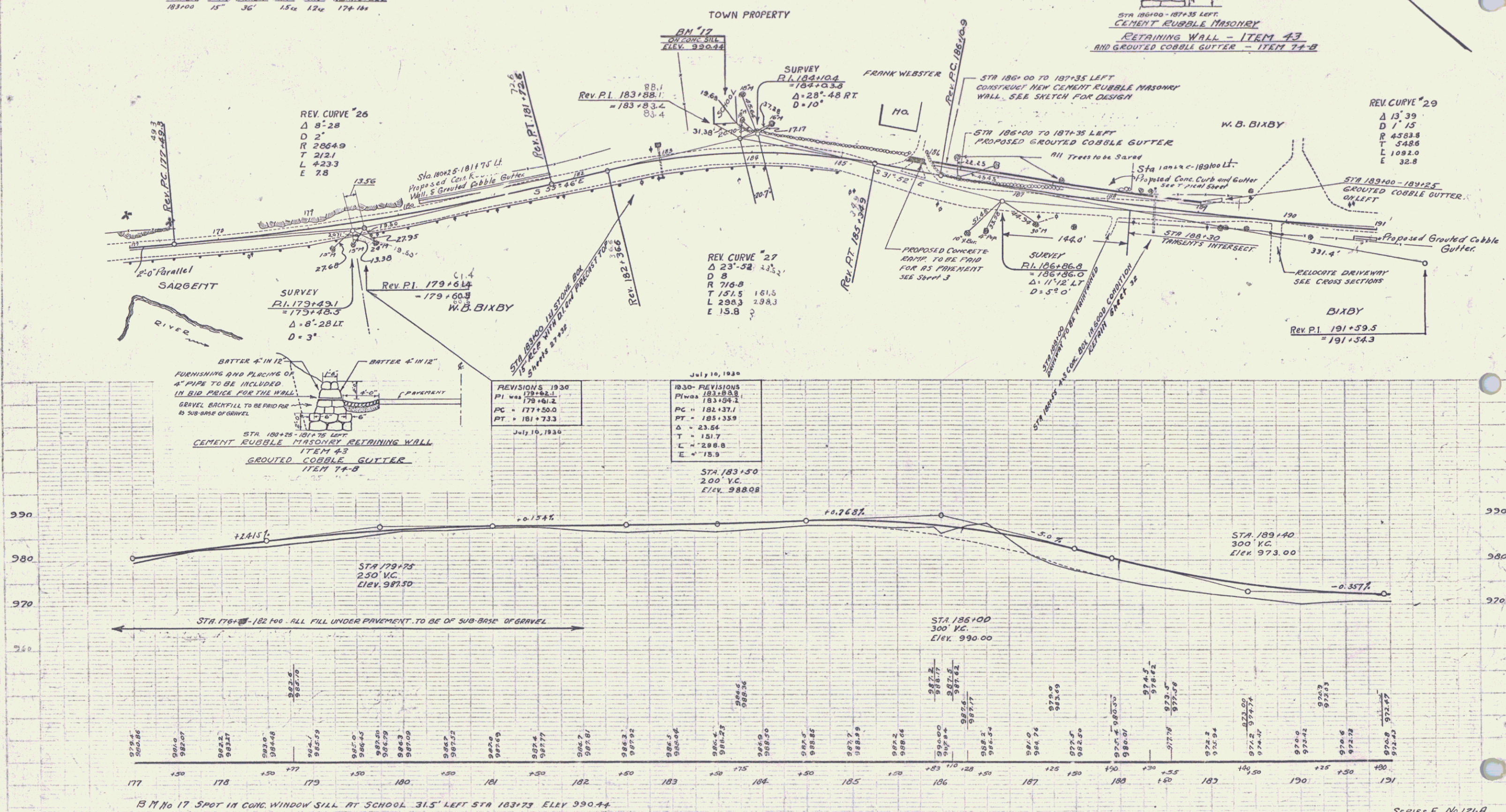
GROUTED COBBLE GUTTER REQUIRED			
STATIONS	L+R	WIDTH	AREA
180+00 - 181+00	L	3'-0"	45.41
180+25 - 181+00	E	3'-0"	8
180+25 - 181+75	L	4'-0"	67
181+00 - 181+75	L	3'-0"	9

CEMENT RUBBLE MASONRY RETAINING WALL		
STATIONS	LENGTH	MASONRY
186+00 - 187+35	135'	90 CF
187+25 - 187+75	50'	106 CF

WOOD GUIDE POSTS REQUIRED		
CULV. STA.	LEFT	RIGHT
183+00	1	—

RAW REINFORCED PIPE CULVERTS REQUIRED		
CULV. STA.	LENGTH	CONC. COBBL. REINSTEEL
183+00	15'	36' 15" 12" 174 184

REVISED	STATE	FILED	LOCAL	SHEET	TOTAL
NO.	NO.	NO.	NO.	NO.	NO.
121	A	1930	12	57	



C.E. PUTNAM
S.D. BIXBY

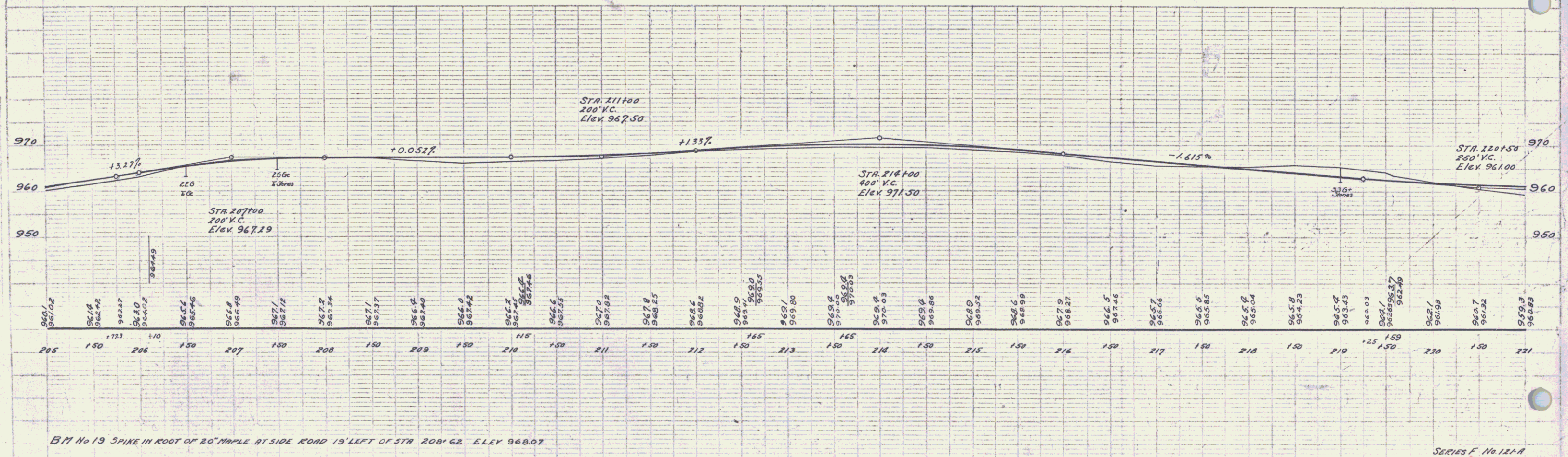
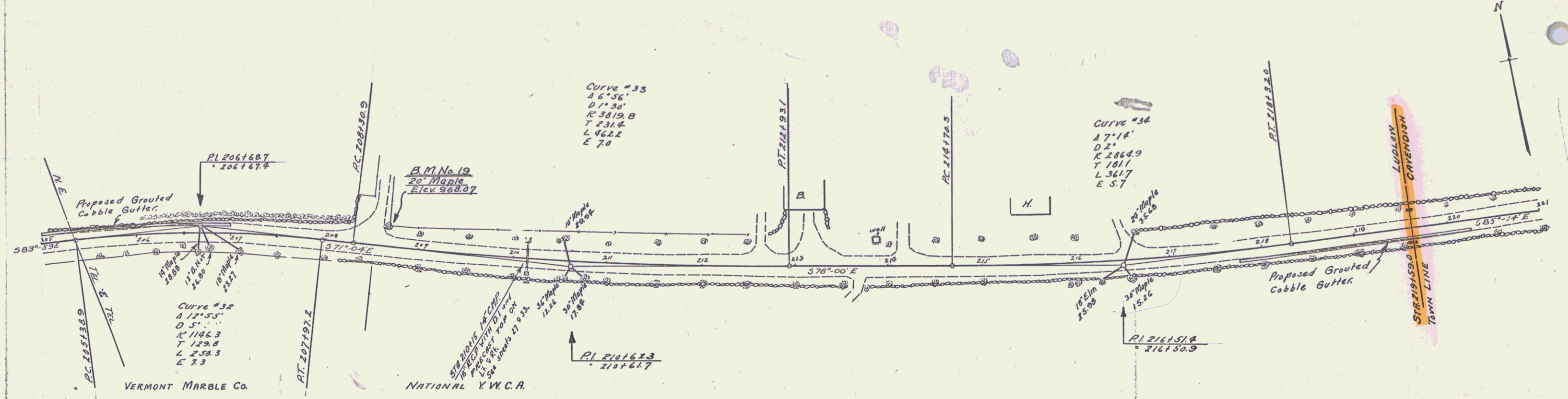
C.E. PUTNAM
S.D. BIXBY

WOOD GUIDE POSTS REQUIRED
 CULV. STA. LEFT RIGHT
 210+15 1 1

CEMENT PIPE CULVERTS REQUIRED
 CULV. STA. DIAM. LENGTH CORR. CORR. C. REIN. STEEL
 210+15 10" 44' 3.0' 15' 231 lbs

GRAVEL COBBLE GUTTER REQUIRED
 STATIONS L.W.C. LENGTH WIDTH DRAIN
 205+00-207+00 L 200' 3'-0" 67 in.
 217+25-220+25 R 250' 3'-0" 64 in.

STATE OF VERMONT
 ROAD NO. 121A
 YEAR 1930
 SHEET NO. 74 OF 57



B.M. No. 19 SPINE IN ROOT OF 20" MAPLE AT SIDE ROAD 19' LEFT OF STA. 208+62. ELEV. 968.07

SERIES F No. 121-A
 SHEET 74 OF 57

WOOD GUARD RAIL REQUIRED

CULV STA	LEFT	RIGHT
226+79	—	24'
231+00	—	24'
235+90	24'	24'

CABLE GUARD RAIL REQUIRED

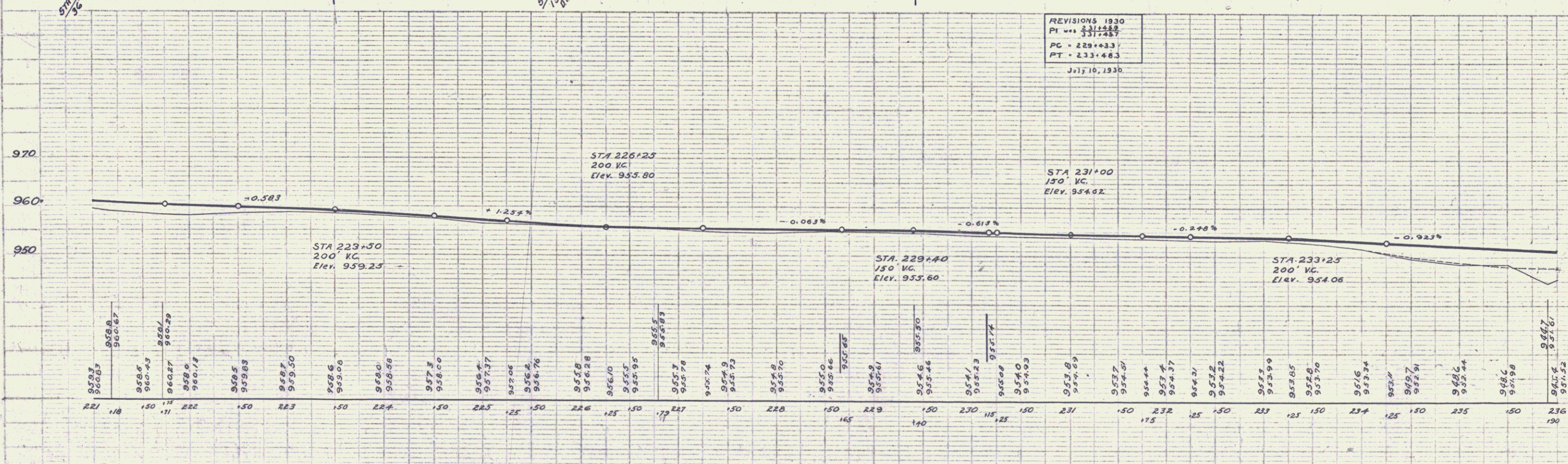
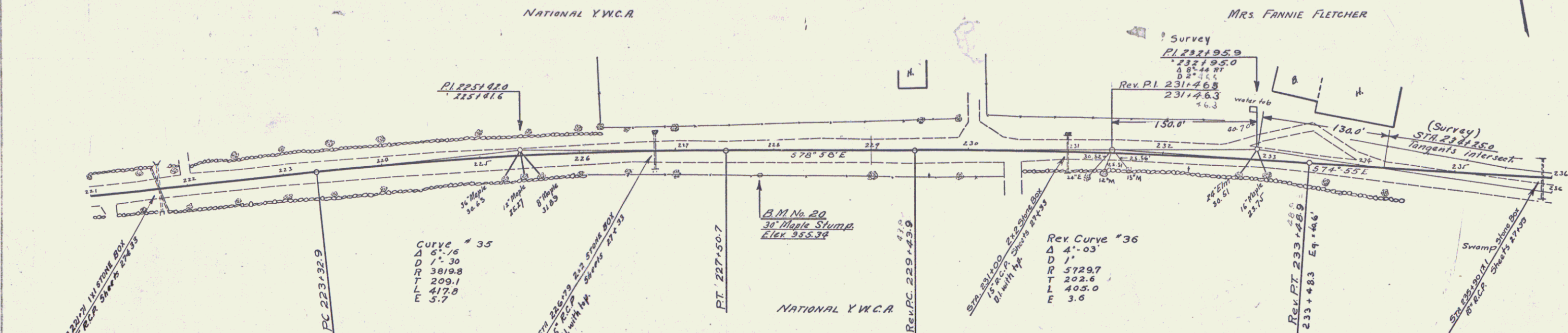
STATIONS	LEFT	RIGHT
221+47-221+95	40'	48'

NEW REIN CONC PIPE CULVERTS REQUIRED

CULV STA	DIM	LENGTH	CONC R	CONC C	REIN STEEL
221+71	36"	48'	4.0 cu	—	33 lbs
226+79	15"	38'	1.5 cu	1.2 cu	174 lbs
231+00	15"	40'	1.5 cu	1.2 cu	174 lbs
235+90	18"	40'	—	3.0 cu	33 lbs

WOOD GUIDE POSTS REQUIRED

CULV STA	LEFT	RIGHT
226+79	1	—
231+00	—	1



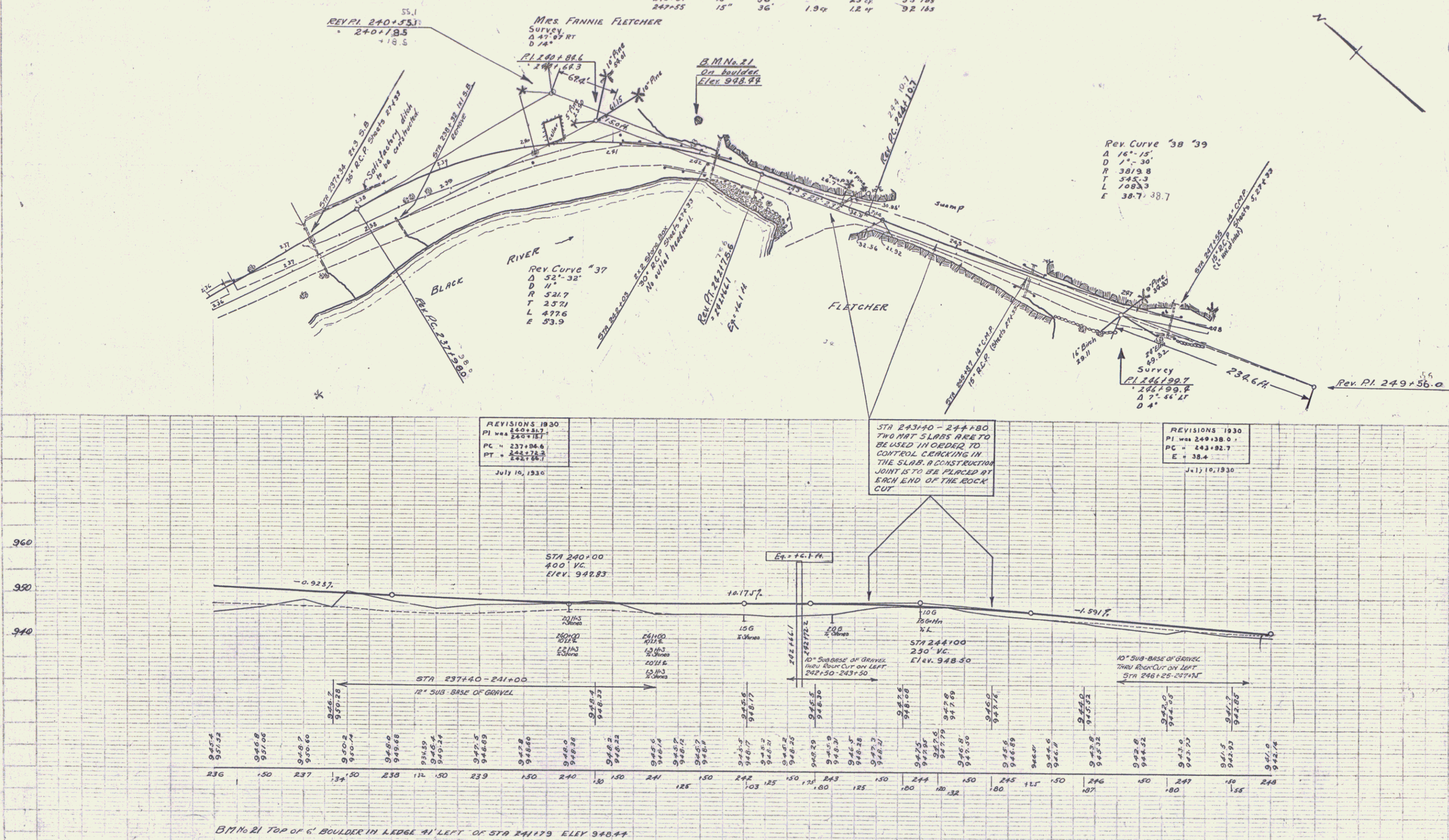
SERIES No. 121A
SHEET 15 OF 57

<u>WOOD GUARD RAIL REQUIRED</u>		
<u>CULV STA</u>	<u>LEFT</u>	<u>RIGHT</u>
237+34	24'	24'
245+87	24'	24'
247+55	24	24

<u>CABLE GUARD RAIL REQUIRED</u>	<u>LEFT</u>	<u>RIGHT</u>
<u>STATIONS</u>		
241120-242180	160'	115'
241150-242186		136'

NEW REINF CONC PIPE CULVERTS REQUIRED						
CULVERT STA	DIAM	LENGTH	Conc A	Conc C	REINF STEEL	
237+34	36"	40'	4.0 cy	—	58 lbs	
242+03	30"	52'	1.8 cy	—	29 lbs	
245+87	15"	36'	—	23 cy	33 lbs	
247+55	15"	36'	1.9 cy	12 cy	92 lbs	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.	121A	1930	16	57



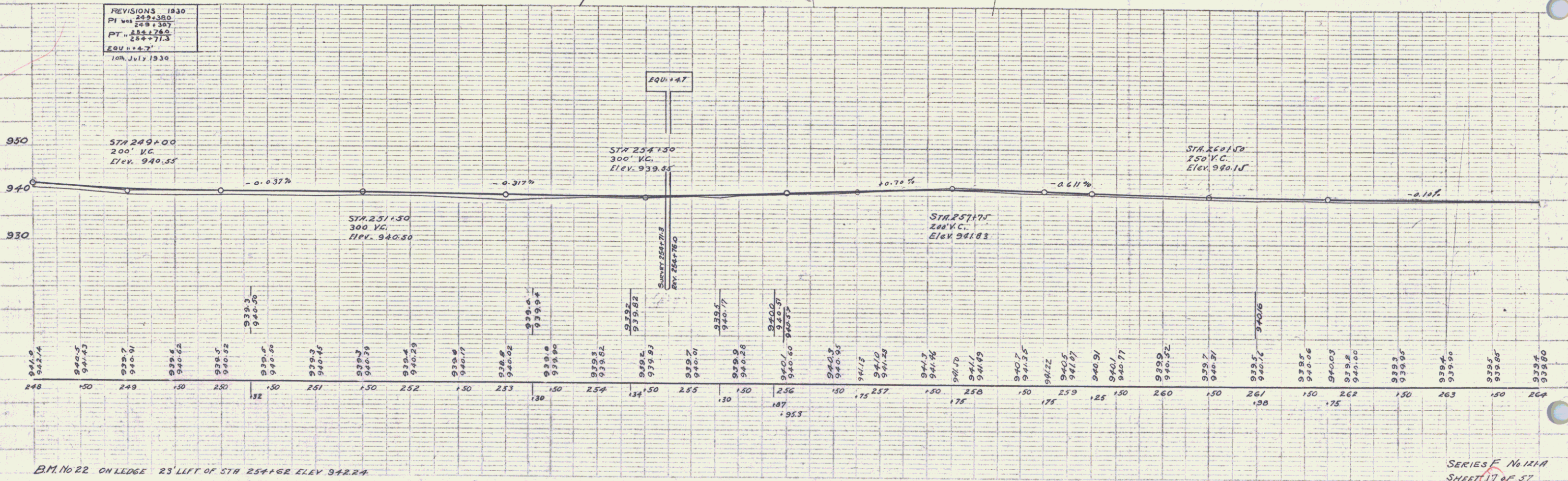
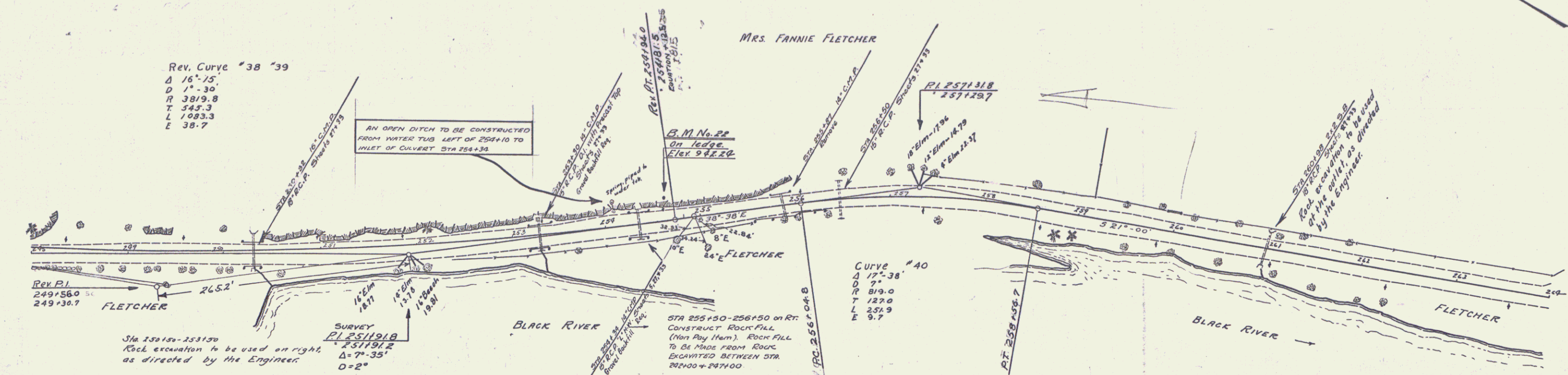
SERIES F No. 121A
SHEET 16 OF 57

WOOD GUARD RAIL REQUIRED		
CULV. STA.	LEFT	RIGHT
250+32	24'	24'
253+30	24'	24'
254+34	24'	24'
256+50	24'	—
260+38	24'	24'

CABLE GUARD RAIL REQUIRED		
STATIONS	LEFT	RIGHT
255+24 - 257+00	—	176'

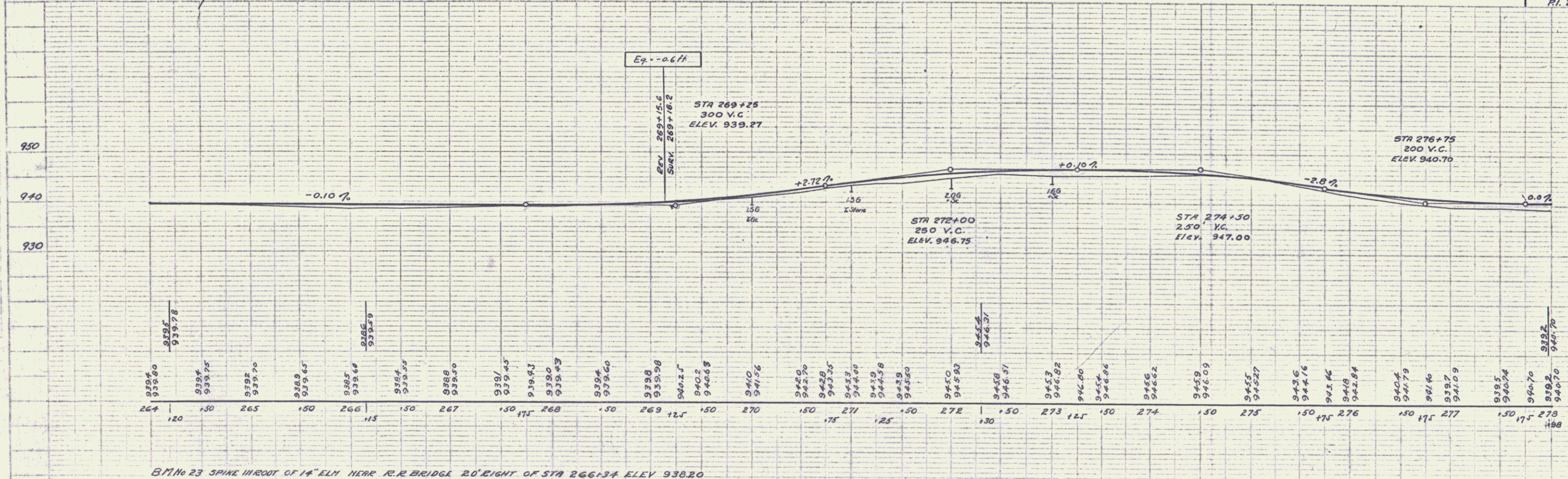
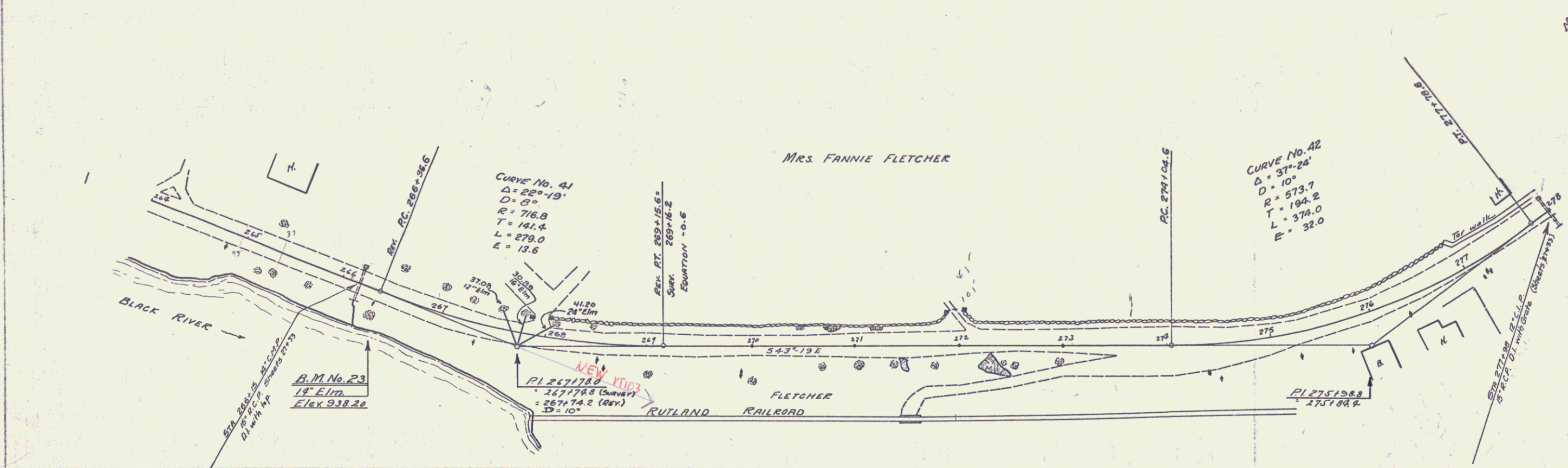
NEW REIN. CONC. PIPE CULVERTS REQUIRED					
CULV. STA.	DIA.	LENGTH	CONC.	REIN. STEEL	
250+32	18"	36'	1.0 cu	—	54 lbs
253+30	15"	32'	1.5 cu	1.2 cu	174 lbs
254+34	15"	32'	1.9 cu	1.2 cu	92 lbs
256+50	15"	40'	1.0 cu	1.2 cu	44 lbs
260+38	18"	36'	1.8	—	54 lbs

DES. NO. 127 A 1930 17 57



WOOD GUARD RAIL REQUIRED			CABLE GUARD RAIL REQUIRED			WOOD GUIDE POSTS REQUIRED			NEW FIRM CONC PIPE CULVERTS REQUIRED					
CULV STA	LEFT	RIGHT	STATIONS	LEFT	RIGHT	CULV STA	LEFT	RIGHT	CULV STA	DIM	LENGTH	CONC	PIPE	GRATE
266+15	-	24'	269+26-269+74	-	48'	278+00	-	-	266+15	15"	32'	1.5cy	1.5cy	179.16
278+00	-	24'				266+15	-	-	278+00	15"	32'	1.4cy	1.2cy	116.16

DATE	BY	CHKD BY	APP'D BY	SHEET NO.	TOTAL SHEETS
12/1	1936	10	57		



BM No 23 SPIKE IN ROOT OF 14" ELY. HERE R.R. BRIDGE 20' RIGHT OF STA 266+34 ELEV 938.20

SERIES F No. 121-A
SHEET 18 OF 57

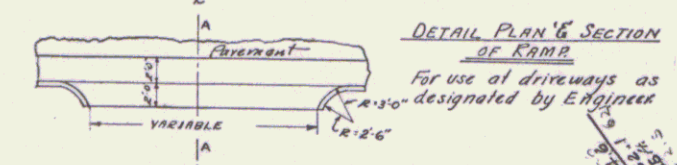
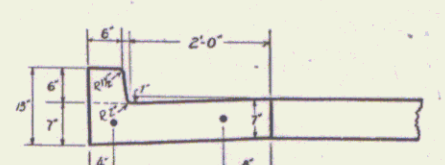
NEW CONCRETE GRAVITY CURB REQUIRED
 STATIONS L&R LENGTH CONC H
 279+40-279+90 L 50' 4.3' 6"

NEW CONC CURB AND GUTTER REQUIRED
 STATIONS WIDTH CURB/HIGHT CONC REINF STEEL
 279+90-290+50 L 2'-0" 0'-6" 6" 4-cy 800#

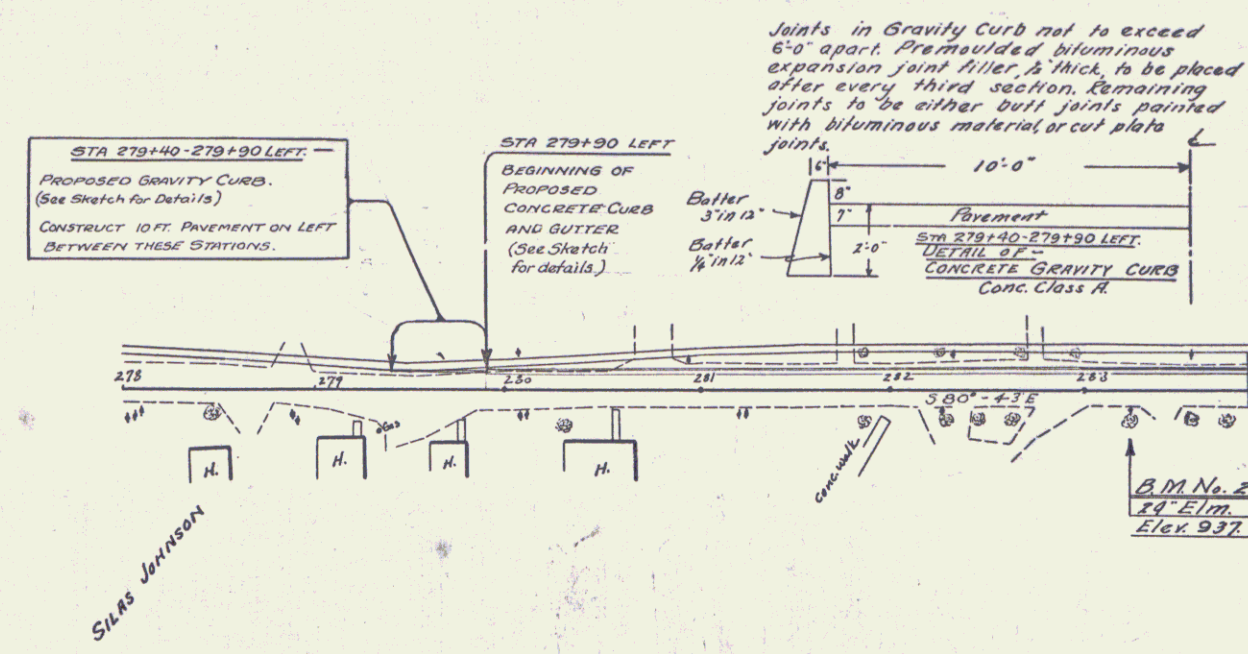
NEW DROP INLETS REQUIRED
 STATION L&R CONC H REINF STEEL PLGRATE
 287+50 L 2.8' 4" 19# 14" 2
 287+50 R 2.4' 4" 9# 9" 1
 290+75 R 2.4' 4" 9# 9" 1

REINF CONC PIPE REQUIRED
 Station Diam Length
 287+50 15'

VITRIFIED CLAY PIPE REQUIRED
 Stations Diam Length
 290+75-291+00 R 8" 126'



10' ROAD STATE ROAD 121A 1930 19 57



CONCRETE CURB & GUTTER
 STA 279+90-290+50 L
 Conc. Class A

SECTION A-A
 17' 0" Ht.

REV. CURVE No. 43
 $\Delta = 35^\circ 33'$
 $D = 6^\circ$
 $R = 955.4$
 $T = 306.3$
 $L = 592.5$
 $E = 456$

DETAIL PLAN & SECTION OF RAMP
 For use at driveways as designated by Engineer

P.O.T. 291+45.7
 offset 4.9 ft. R.
 $\Delta = 90^\circ$

Shed

Slas Jackson

B.M. No. 20
 10' ELM.
 Elev. 932.67

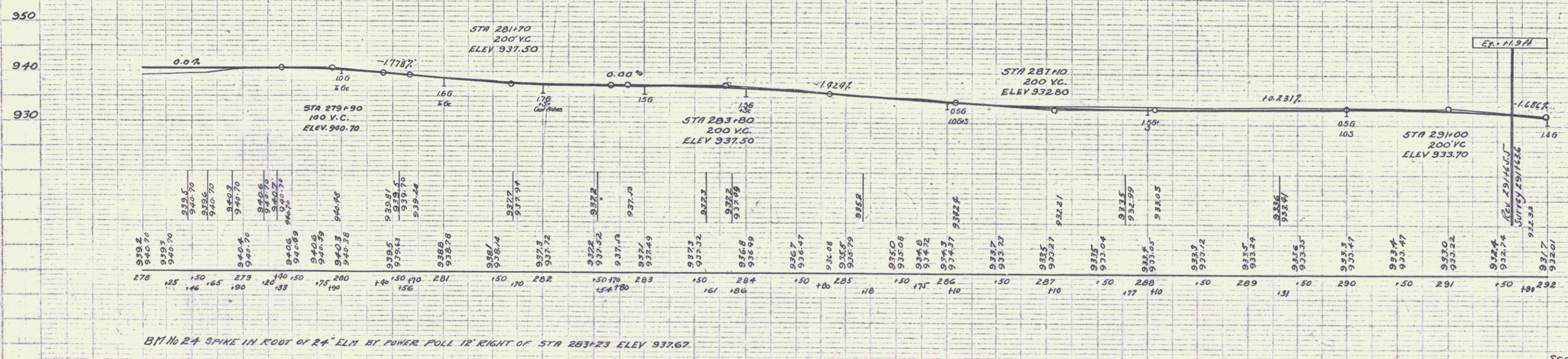
Ties for P.O.T. 285+61.8

Sta 287+50
 Min. grade of pipe left
 Last three feet of pipe to be
 constructed on a steeper grade
 to avoid the water setting back
 in culvert for more than a
 short distance

PROCTORVILLE MILLS

REVISIONS 1930
 P1 was 288+79.3
 P2 was 288+79.3
 PC = 285+73.0
 PT = 291+163.5
 EGL = 113'
 July 10, 1930

Remove grates from all existing Drop Inlets.
 Place a precast reinforced concrete cap on same
 in a manner to securely seal the opening and at
 an elevation below the bottom of proposed
 pavement or curb & gutter. These caps to be paid
 for at the bid price for Conc. Class A and
 Reinforcing Steel.

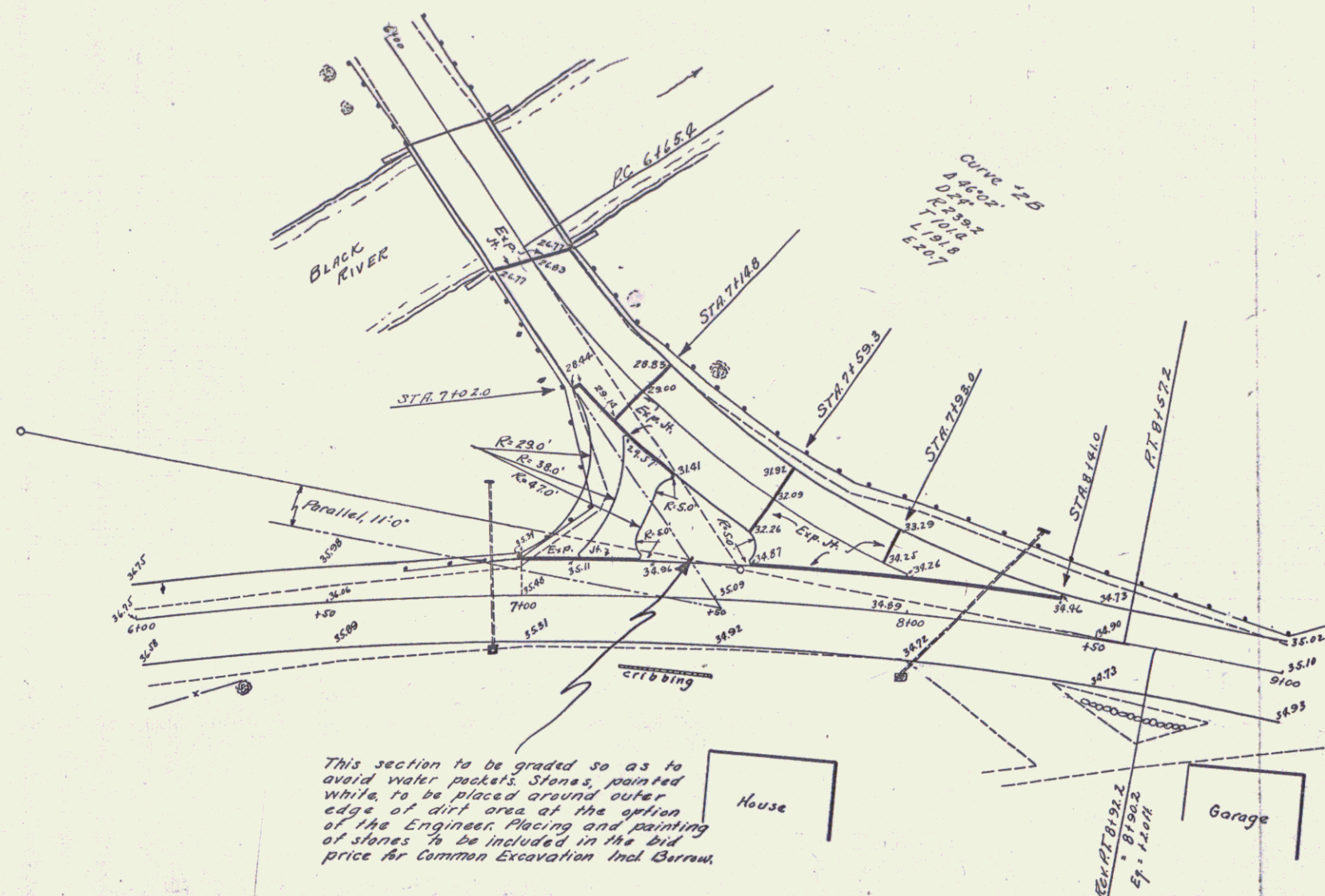


B.M. No. 24 SPIKE IN FOOT OF 24' ELM. BY POWER POLE 12' RIGHT OF STA 283+23 ELEV 937.67

SERIES F No. 121A
 SHEET 19 OF 57

C.E. Putnam
 Engineer
 April 30
 1930

PROJECT NO. 127-A
 SHEET 57
 DATE 4/30/30



INTERSECTION AT PLYMOUTH TURN
 Scale: 1"=20'
 Drainage structures shown are those proposed.

