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3	PLAN AND PROFILE STA 40+00 TO STA. 48+00
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5	64+00 - 80+00
6	80+00 - 96+00
7	96+00 - 112+00
8	112+00 - 128+00
9	128+00 - 144+00
10	144+00 - 160+00
11	160+00 - 176+00
12	176+00 - 192+00
13	192+00 - 208+00
14	208+00 - 211+00
15	BRIDGE STA. 85+63
16	137+70
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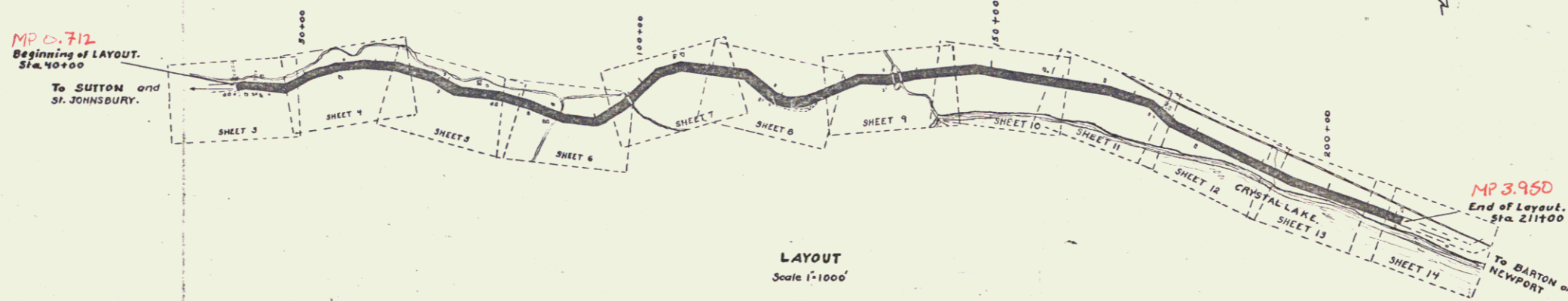
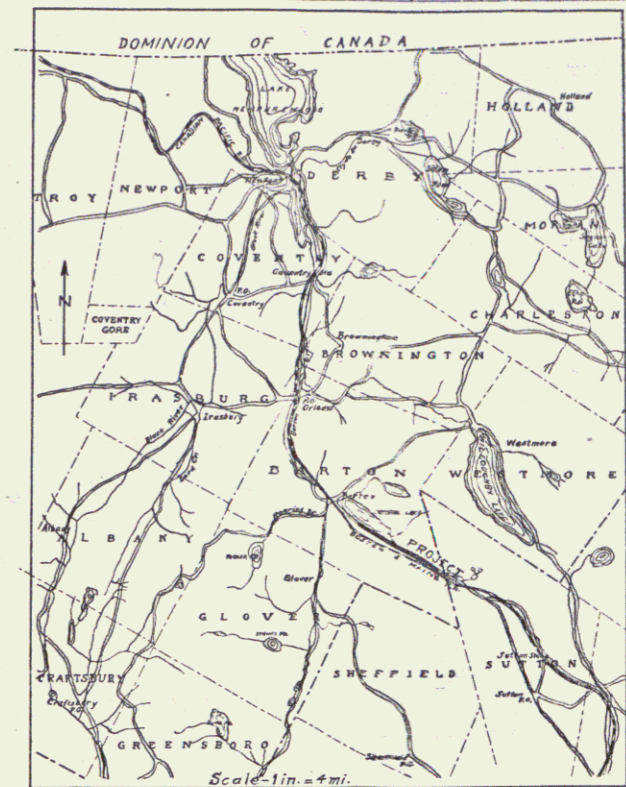
STATE OF VERMONT  
 STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED  
 STATE HIGHWAY  
 FEDERAL AID PROJECT

**TOWN OF BARTON**  
 CRYSTAL LAKE ROAD  
 FROM WILLOUGHBY STATION ROAD  
 TO JOE BARTON'S PLACE.

SCALES { PLAN 1IN.=50FT.  
 PROFILE HOR. 1IN.=50 FT. VERT. 1IN.=10FT.  
 CROSS SECTIONS 1IN.=5 FT.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	VT.	33	1927	1	35



PROJECT: Barton  
 NUMBER: 33  
 TYPE: Gravel  
 CONTRACTOR: D.W. Overaker  
 LOCATION: See Pile Card

TELEPHONE POLE  
 TREES  
 HEDGE

YEAR: 1927

CONVENTIONAL SIGNS

- GROUND ELEVATION
- GRADE ELEVATION
- CURVE DATA: DEFLECTION ANGLE, DEGREE OF CURVE, RADIUS OF CURVE, TANGENT DISTANCE, LENGTH OF CURVE, EXTERNAL DISTANCE, POINT OF INTERSECTION P. I., POINT OF CURVE, POINT OF TANGENT

Route US5  
 Project F 33  
 Pin # 998294

RIGHT-OF-WAY DIVISION  
 TOWN FILE  
 PERPETUAL  
 Town of US5  
 (To Be Returned To R.O.W. Division)

01/01/21

RECOMMENCE

STATE ENGINEER

APPROVED

GOVERNOR

SUBMITTED BY ORDER OF THE STATE HIGHWAY BOARD

COMMISSIONER OF HIGHWAYS

RECOMMENCE

DISTRICT ENGINEER BUREAU OF PUBLIC ROADS

RECOMMENCE FOR APPROVAL

CHIEF ENGINEER BUREAU OF PUBLIC ROADS

APPROVED

DIRECTOR BUREAU OF PUBLIC ROADS

Series F No. 33 Filed  
 Sheet 1 of 35

RIGHT OF WAY MAP FED. AID PROJ. NO. 33  
 PROPERTY OF PHILIP NODD -  
 F.W. BALDWIN.  
 TOWN OF BARTON VT.

STATE OF VERMONT  
 LAND TO BE ACQUIRED FOR THE  
 CRYSTAL LAKE ROAD  
 FEDERAL AID PROJECT NO. 33 - TOWN OF BARTON  
 FROM PHILIP NODD, RESIDENT OWNER

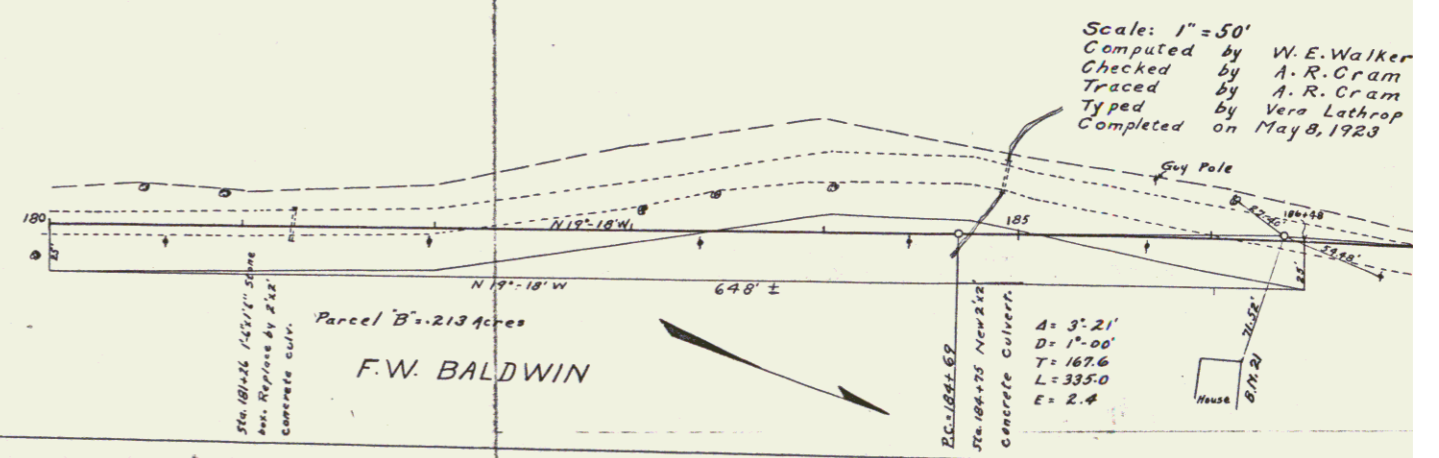
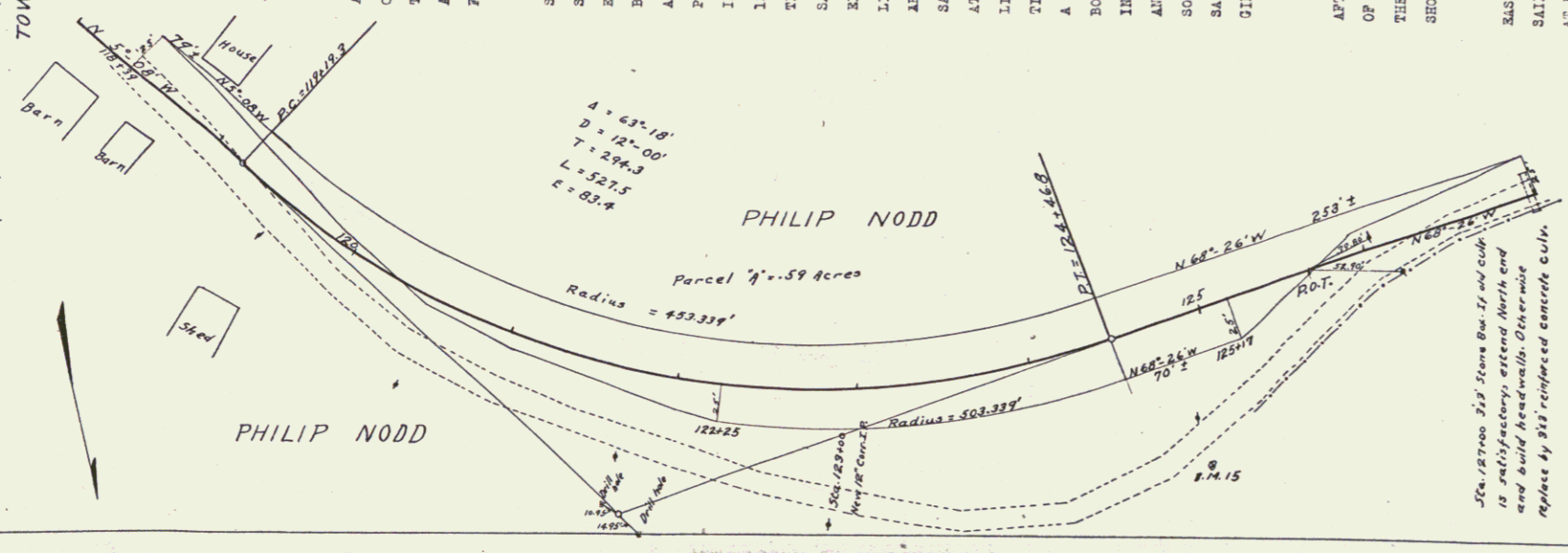
ALL THOSE PIECES OR PARCELS OF LAND HERETOFOR  
 AFTER DESIGNATED AS PARCEL A, SITUATED IN THE TOWN  
 OF BARTON, COUNTY OF ORLEANS, STATE OF VERMONT, FOR  
 THE CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33,  
 AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS  
 FOLLOWS:-

PARCEL "A".- BEGINNING AT A POINT ON THE  
 SOUTHERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD,  
 SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASUR-  
 ED AT RIGHT ANGLES, FROM STATION 118+49 OF THE SURVEY  
 BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL  
 AID PROJECT NO. 33; THENCE N. 5°-08' W. 79.2 FEET TO A  
 P. C. OF A CURVE, STATION 119+19.3, TO THE LEFT, HAV-  
 ING A RADIUS OF 453.339 FEET TO THE P. T., STATION  
 124+46.8; THENCE S. 68°46' W. 232.1 FEET TO A POINT ON  
 THE SOUTHERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY,  
 SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASUR-  
 ED AT RIGHT ANGLES, FROM STATION 127+00 OF SAID BASE  
 LINE; THENCE NORTHEASTERLY ALONG THE SOUTHERLY BOUND-  
 ARY OF SAID EXISTING HIGHWAY 192.1 FEET TO A POINT,  
 AT RIGHT ANGLES, FROM STATION 125+17 OF SAID BASE  
 LINE; THENCE S. 08°-28' E. 70.1 FEET TO THE P. T., STA-  
 TION 124+46.8; THENCE ON A CURVE TO THE RIGHT, HAVING  
 A RADIUS OF 503.339 FEET TO A POINT ON THE SOUTHERLY  
 BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BE-  
 ING 25.0 FEET DISTANT NORTHERLY, MEASURED AT RIGHT  
 ANGLES, FROM STATION 124+24 OF SAID BASE LINE; THENCE  
 SOUTHEASTERLY ALONG THE SOUTHERLY BOUNDARY LINE OF  
 SAID EXISTING HIGHWAY 391.1 FEET TO THE POINT OF BE-  
 GINNING; BEING 0.459 ACRES MORE OR LESS.

FROM P. W. BALDWIN, RESIDENT OWNER

ALL THOSE PIECES OR PARCELS OF LAND HERETOFOR  
 AFTER DESIGNATED AS PARCEL B, SITUATED IN THE TOWN  
 OF BARTON, COUNTY OF ORLEANS, STATE OF VERMONT, FOR  
 THE CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33, AS  
 SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:-

PARCEL "B".- BEGINNING AT A POINT ON THE  
 NORTHERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD,  
 SAID POINT BEING 25.0 FEET DISTANT EASTERLY, MEASURED  
 AT RIGHT ANGLES, FROM STATION 180+00 OF THE SURVEY  
 BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL  
 AID PROJECT NO. 33; THENCE S. 19°-19' W. 648.1 FEET TO  
 A POINT ON THE EASTERLY BOUNDARY LINE OF SAID EXISTING  
 HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT EASTERLY,  
 MEASURED AT RIGHT ANGLES, FROM STATION 186+48 OF SAID  
 BASE LINE; THENCE SOUTHERLY ALONG THE LAST MENTIONED  
 BOUNDARY LINE OF SAID EXISTING HIGHWAY 656.1 FEET TO  
 THE POINT OF BEGINNING; BEING 0.213 ACRES MORE OR LESS.



Scale: 1" = 50'  
 Computed by W. E. Walker  
 Checked by A. R. Gram  
 Traced by A. R. Gram  
 Typed by Vera Lathrop  
 Completed on May 8, 1928

IA

2

RIGHT OF WAY MAP FED. AID PROJ. NO. 33  
 PROPERTY OF JOE BARTON  
 TOWN OF BARTON VT.

STATE OF VERMONT

LAND TO BE ACQUIRED FOR THE

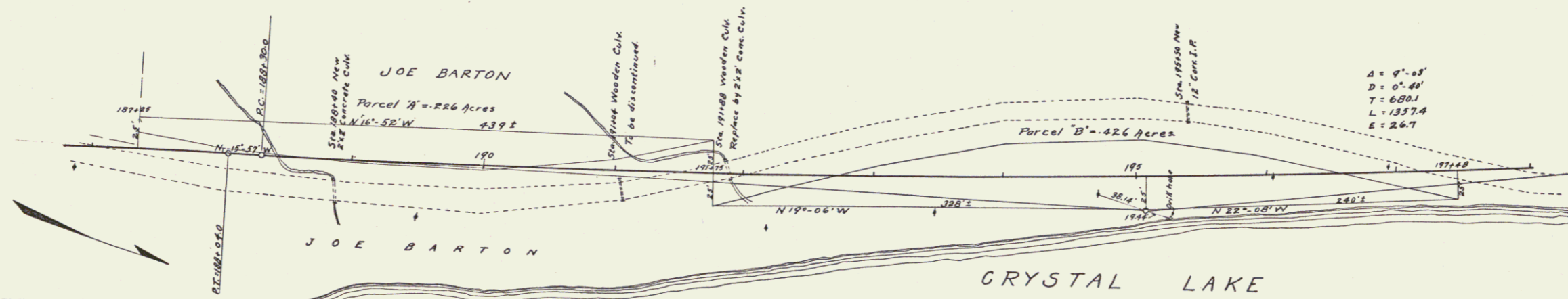
CRYSTAL LAKE ROAD

FEDERAL AID PROJECT NO. 33 - TOWN OF BARTON  
 FROM JOE BARTON, RESIDENT OWNER

ALL THOSE LINES OR PARCELS OF LAND HEREAFTER DESIGNATED AS PARCELS A AND B, SITUATED IN THE TOWN OF BARTON, COUNTY OF ORLEANS, STATE OF VERMONT, FOR THE CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33, AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:-

PARCEL "A":- BEGINNING AT A POINT ON T. W. 5011 BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD, SAID POINT BEING 25.0 FEET DISTANT WESTERLY, MEASURED AT RIGHT ANGLES, FROM STATION 197+28 OF THE SURVEY BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33; THENCE S. 16°-52' W. 439.1 FEET TO A POINT ON THE WESTERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT WESTERLY, MEASURED AT RIGHT ANGLES, FROM STATION 191+76 OF SAID BASE LINE; THENCE SOUTHWESTERLY ALONG THE LAST MENTIONED BOUNDARY LINE OF SAID EXISTING HIGHWAY 485.0 FEET TO THE POINT OF BEGINNING; BEING 0.286 ACRES MORE OR LESS.

PARCEL "B":- BEGINNING AT A POINT ON THE EASTERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD, SAID POINT BEING 25.0 FEET DISTANT EASTERLY, MEASURED AT RIGHT ANGLES, FROM STATION 191+76 OF THE SURVEY BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33; THENCE S. 19°-00' W. 388.2 FEET; THENCE S. 22°-08' W. 240.1 FEET TO A POINT ON THE EASTERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT WESTERLY, MEASURED AT RIGHT ANGLES, FROM STATION 197+48 OF SAID BASE LINE; THENCE SOUTHWESTERLY ALONG THE LAST MENTIONED BOUNDARY LINE OF SAID EXISTING HIGHWAY 860.0 FEET TO THE POINT OF BEGINNING; BEING 0.486 ACRES MORE OR LESS.



Scale: 1" = 50'  
 Computed by W.E. Walker  
 Checked by A.R. Cram  
 Traced by A.R. Cram  
 Typed by Vera Lathrop  
 Completed on May 8, 1923

RIGHT OF WAY MAP FED. AID PROJ. NO. 33  
 PROPERTY OF JOE BARTON  
 TOWN OF BARTON VT.

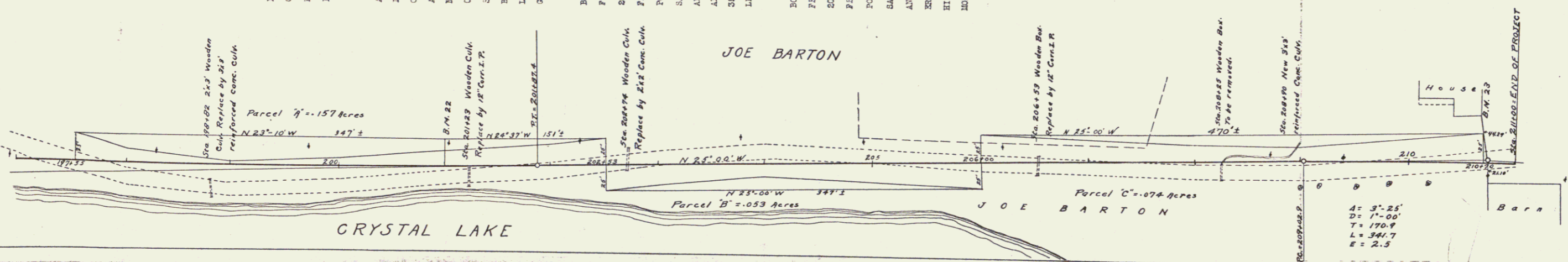
STATE OF VERMONT  
 LAND TO BE ACQUIRED FOR THE  
 CRYSTAL LAKE ROAD  
 FEDERAL AID PROJECT NO. 33 - TOWN OF BARTON  
 FROM JOE BARTON, BEHELD OWNER

ALL THOSE PIECES OR PARCELS OF LAND HEREAFTER DESIGNATED AS PARCELS A, B AND C, SITUATED IN THE TOWN OF BARTON, COUNTY OF ORLEANS, STATE OF VERMONT, FOR THE CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33, AS SHOWN ON THE ACCOMPANYING MAP AND DESCRIBED AS FOLLOWS:-

PARCEL "A":- BEGINNING AT A POINT ON THE SOUTHERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD, SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 197+65 OF THE SURVEY BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33; THENCE N. 43°-10' W. 84 1/2 FEET TO A POINT; THENCE N. 28°-37' W. 15 1/2 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 202+43 OF SAID BASE LINE; THENCE SOUTHWESTERLY ALONG THE LAST MENTIONED BOUNDARY LINE OF SAID EXISTING HIGHWAY 502.04 FEET TO THE POINT OF BEGINNING; BEING 0.157 ACRES MORE OR LESS.

PARCEL "B":- BEGINNING AT A POINT ON THE NORTHERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD, SAID POINT BEING 25.0 FEET DISTANT NORTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 202+43 OF THE SURVEY BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33; THENCE N. 45°-00' W. 84 1/2 FEET TO A POINT ON THE NORTHERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT NORTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 206+00 OF SAID BASE LINE; THENCE SOUTHWESTERLY ALONG THE LAST MENTIONED BOUNDARY LINE OF SAID EXISTING HIGHWAY 362.1 FEET TO THE POINT OF BEGINNING; BEING 0.063 ACRES MORE OR LESS.

PARCEL "C":- BEGINNING AT A POINT ON THE SOUTHERLY BOUNDARY OF THE EXISTING CRYSTAL LAKE ROAD, SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 206+00 OF THE SURVEY BASE LINE OF THE PROPOSED CRYSTAL LAKE ROAD, FEDERAL AID PROJECT NO. 33; THENCE N. 45°-00' W. 470 FEET TO A POINT ON THE SOUTHERLY BOUNDARY LINE OF SAID EXISTING HIGHWAY, SAID POINT BEING 25.0 FEET DISTANT SOUTHERLY, MEASURED AT RIGHT ANGLES, FROM STATION 210+70 OF SAID BASE LINE; THENCE SOUTHWESTERLY ALONG THE LAST MENTIONED BOUNDARY LINE OF SAID EXISTING HIGHWAY 472 FEET TO THE POINT OF BEGINNING; BEING 0.074 ACRES MORE OR LESS.



Scale: 1" = 50'  
 Computed by W. E. Walker  
 Checked by A. R. Oram  
 Traced by A. R. Oram  
 Typed by Vera Lathrop  
 Completed on May 6, 1923

10

4





**GUARD RAIL REQUIRED ON LEFT**

Sta 65+20 to 65+44	Length 24 ft.
69+61 - 69+85	24 "
71+00 - 73+48	248 "
75+78 - 76+02	24 "
77+02 - 80+00	298 "

**ON RIGHT**

Sta 65+14 to 65+38	Length 24 ft.
69+61 - 69+85	24 "
71+48 - 73+48	200 "
75+78 - 76+02	24 "

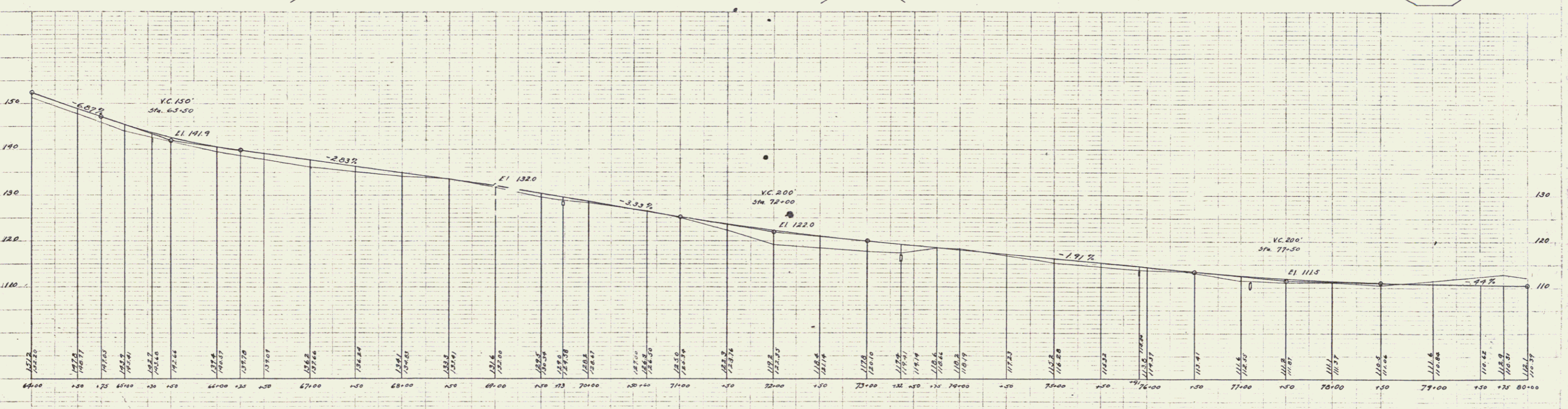
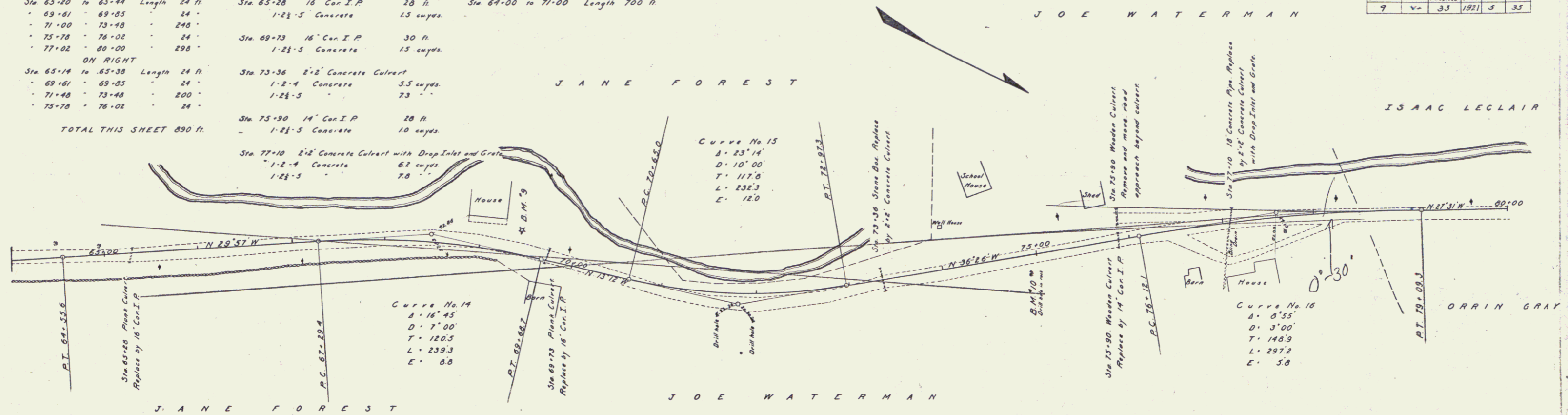
**TOTAL THIS SHEET 890 ft.**

**NEW CULVERTS REQUIRED**

Sta 65+28	16" Con. I.P.	28 ft.
	1-2'-5" Concrete	13 cuys.
Sta 69+73	16" Con. I.P.	30 ft.
	1-2'-5" Concrete	13 cuys.
Sta 73+36	2'-2" Concrete Culvert	
	1-2'-4" Concrete	5.5 cuys.
	1-2'-5" Concrete	7.3 "
Sta 75+30	14" Con. I.P.	28 ft.
	1-2'-5" Concrete	10 cuys.
Sta 77+10	2'-2" Concrete Culvert with Drop Inlet and Grate	
	1-2'-4" Concrete	6.2 cuys.
	1-2'-5" Concrete	7.0 "

**SUB BASE REQUIRED**  
Sta 64+00 to 71+00 Length 700 ft.

PER PLAN	PER R/W	PER R/W	PER R/W	TOTAL
DIST. NO.	DATE	NO.	DATE	NO.
9	4	33	1921	35



B.M. 9 Spike in Jam Tree Left of Road Sta. 69+43. Elev. 130.84  
B.M. 10 Drill Hole in Rock Right of Road Sta. 74+73. Elev. 110.70.

PLAN  
REVISED  
DATE  
BY  
CHECKED  
DATE  
BY

Checked  
by  
Date

**GUARD RAIL REQUIRED**

**ON LEFT**

Sta	To	Length
80+00	81+25	126 ft.
82+35	83+19	24 "
85+33	85+57	24 "
85+70	85+94	24 "
91+78	93+30	152 "
95+30	96+00	70 "

**ON RIGHT**

Sta	To	Length
82+09	83+13	24 ft.
83+33	85+57	24 "
85+70	85+94	24 "
91+84	92+08	24 "

TOTAL THIS SHEET 516 ft.

**NEW CULVERTS REQUIRED**

Sta	Description	Length
83+04	2'-2" Concrete Culvert with Drop Inlet	36 ft.
83+04	1'-2" Concrete	39 cu yds.
83+04	1'-2" Concrete	73 "
92+00	12" Cor I.P.	36 ft.
92+00	1'-2" Concrete	10 cu yds.

PRO. DIST. NO.	PRELIM. YEAR	FINAL YEAR	TOTAL SHEETS
9	V	33	1921 6 38

Curve No. 20  
 Δ = 15° 28'  
 D = 9' 00"  
 T = 86.3  
 L = 171.9  
 E = 5.8

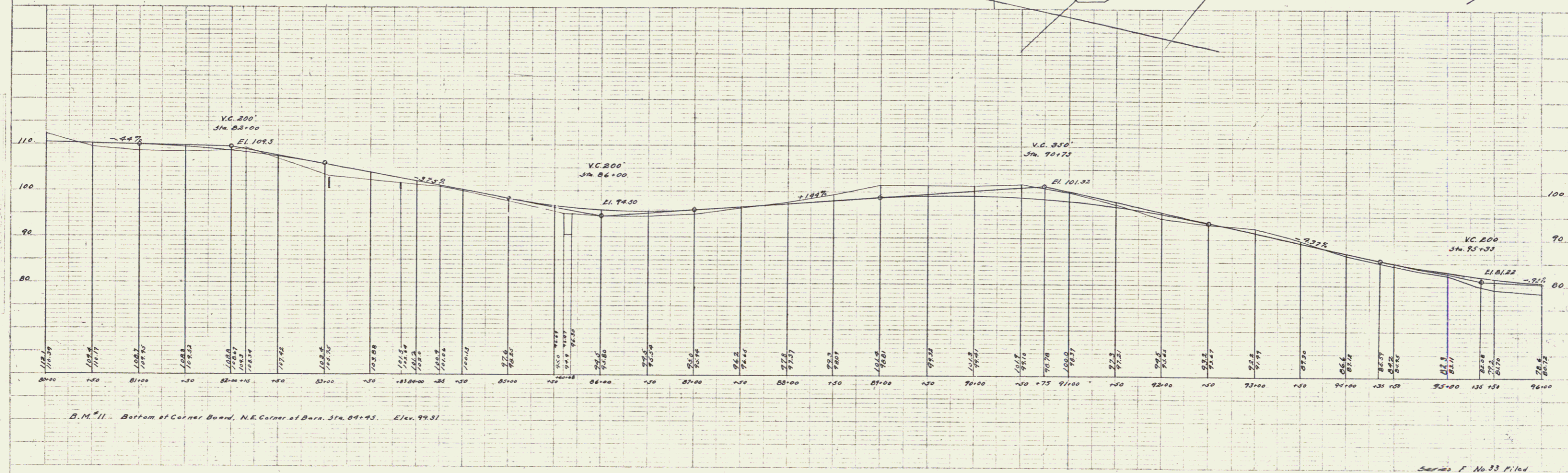
Curve No. 18  
 Δ = 14° 22'  
 D = 4' 00"  
 T = 180.3  
 L = 239.2  
 E = 11.3

Curve No. 19  
 Δ = 35° 08'  
 D = 11' 00"  
 T = 169.9  
 L = 319.4  
 E = 25.3

Curve No. 17  
 Δ = 2° 59'  
 D = 2' 00"  
 T = 74.6  
 L = 149.1  
 E = 1.0

E. M. WILCOX  
 CIVIL ENGINEER  
 1117 N. W. 10th St.  
 OMAHA, IOWA

E. M. WILCOX  
 CIVIL ENGINEER  
 1117 N. W. 10th St.  
 OMAHA, IOWA



B.M. 11 - Bottom of Corner Board, N.E. Corner of Barn, Sta. 84+95, El. 99.31

Series F No. 33 P. 1 of 38

ENGINEERING OFFICE OF A. L. HARRIS  
 1117 N. W. 10th St.  
 OMAHA, IOWA

8



**GUARD RAIL REQUIRED**

**ON LEFT**

Sta. 96+00 to 96+74	Length 74 ft.	
96+06	97+10	24'
100+08	101+12	24'
104+67	104+91	24'
107+15	107+39	24'
110+98	111+22	24'

**ON RIGHT**

Sta. 96+59 to 96+83	Length 24 ft.	
96+95	97+17	24'
100+88	101+12	24'
104+67	104+91	24'
107+15	108+11	96'
110+02	111+22	120'

TOTAL THIS SHEET 306 ft.

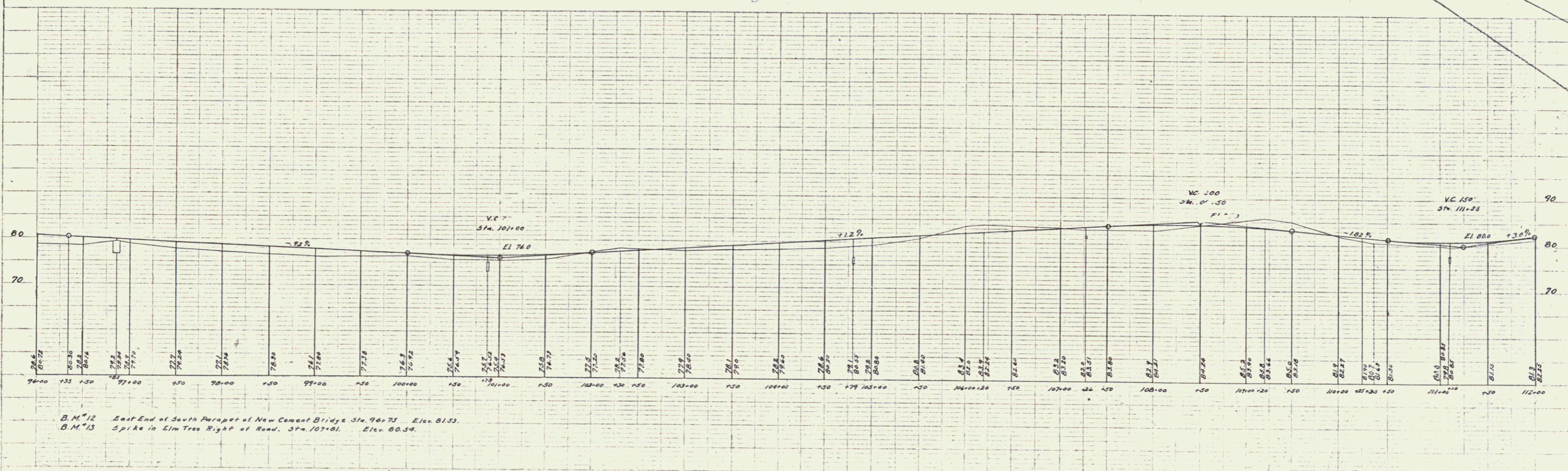
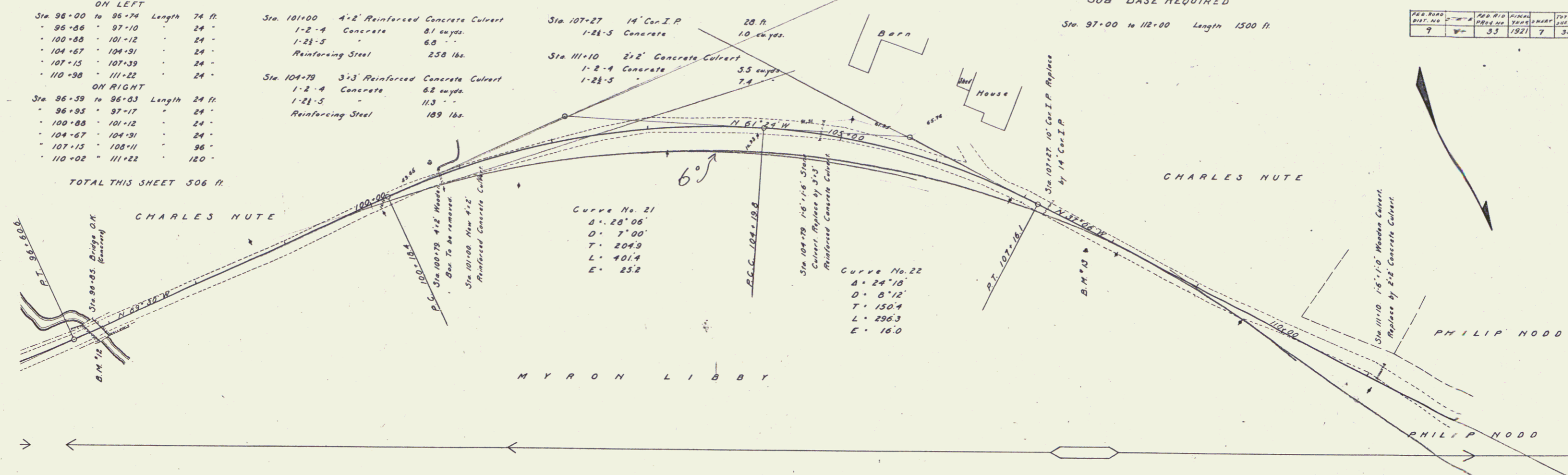
**NEW CULVERTS REQUIRED**

Sta. 101+00	4'-2" Reinforced Concrete Culvert	28 ft.
1-2-4	Concrete	81 cu. yds.
1-2 1/2-5	Reinforcing Steel	6.8 lbs.
258 lbs.		
Sta. 104+79	3'-3" Reinforced Concrete Culvert	33 cu. yds.
1-2-4	Concrete	62 cu. yds.
1-2 1/2-5	Reinforcing Steel	113 lbs.
189 lbs.		
Sta. 107+27	14" Con. I.P.	10 cu. yds.
1-2 1/2-5	Concrete	
Sta. 111+10	2'-2" Concrete Culvert	7.4 cu. yds.
1-2-4	Concrete	
1-2 1/2-5	Reinforcing Steel	

**SUB BASE REQUIRED**

Sta. 97+00 to 112+00	Length 1500 ft.
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PER ROAD DIST. NO.	7
PER ROAD DIST. NO.	33
PER ROAD DIST. NO.	1921
PER ROAD DIST. NO.	7
PER ROAD DIST. NO.	36



B.M. 72 East End of South Parapet of New Cement Bridge Sta. 96+75 Elev. 81.53.  
 B.M. 73 Spike in Elm Tree Right of Road. Sta. 107+81. Elev. 80.54.

Series F No. 33 F. 114  
 Sheet 7 of 35

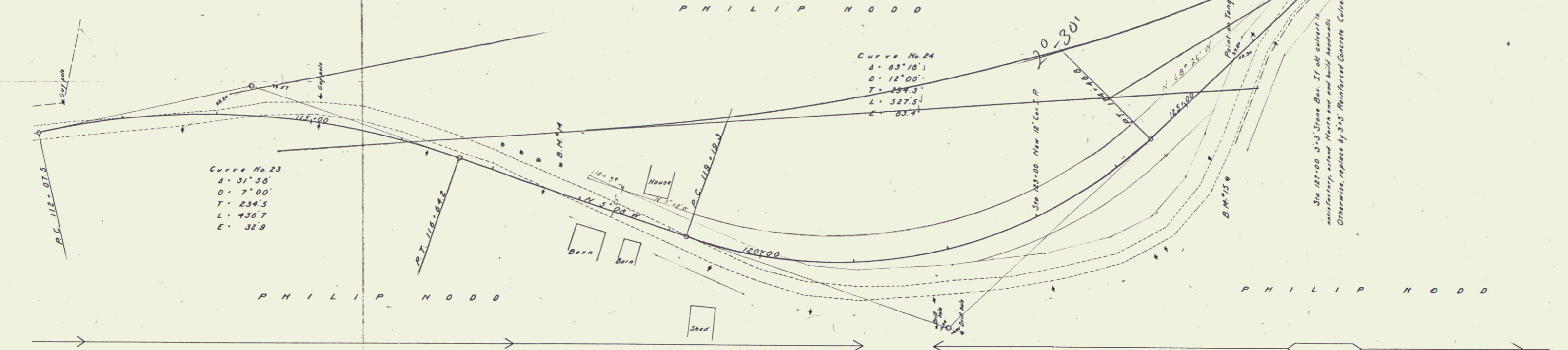
**GUARD RAIL REQUIRED**  
**ON LEFT**  
 Sta 122+94 to 123+10 Length 24 ft  
 126+72 127-12 40  
**ON RIGHT**  
 Sta 115+10 to 116+46 Length 136 ft  
 122+03 123+07 24  
 126+36 127+12 36  
**TOTAL THIS SHEET 280 ft**

**NEW CULVERTS REQUIRED**  
 Sta 123+00 12' Cor. I.P. 34 ft  
 1-2 1/2 - 5 Concrete 10 cu yds.  
 Sta 127+00 3-3 Reinforced Concrete Culvert  
 1-2 - 4 Concrete 70 cu yds.  
 1-2 1/2 - 5 Reinforcing Steel 214 lbs.

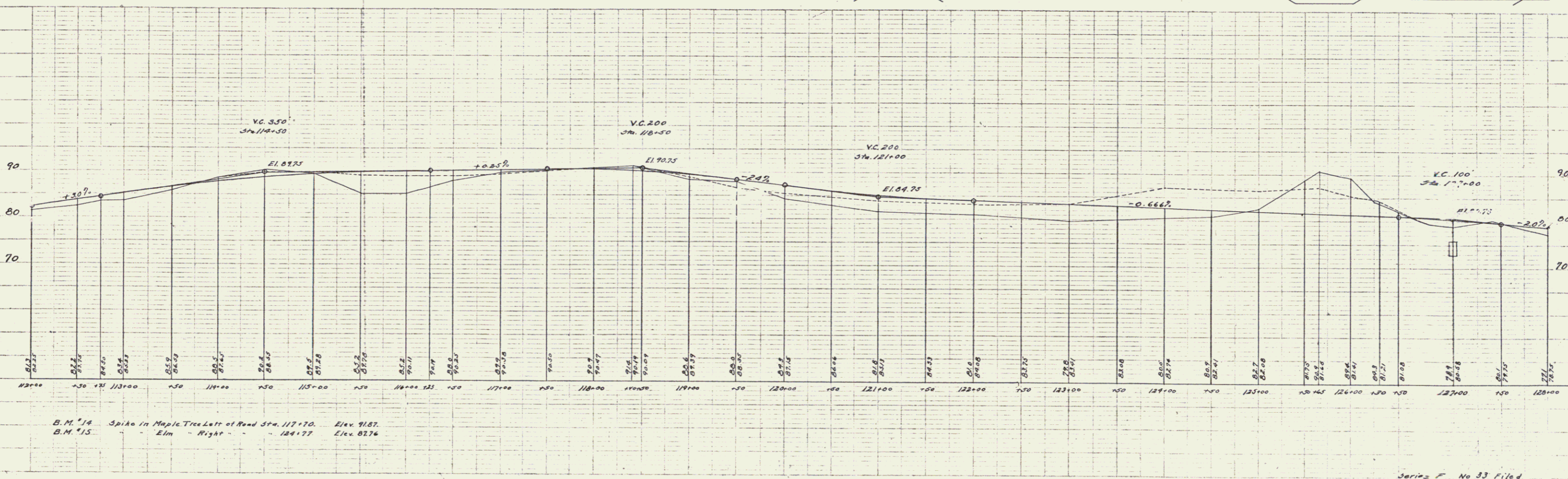
**SUB. BASE REQUIRED**  
 Sta 112+00 to 115+00 Length 300 ft  
 116+30 120+00 350  
 127+00 128+00 100  
**TOTAL THIS SHEET 750 ft**

FED. ROAD DIST. NO.	STATE	SECTION	DATE	SCALE	TOTAL SHEETS
9	Vt	33	1921	8	38

PLAN  
 DATE 1/14/12  
 BY E. P. WELCH  
 CHECKED E. P. WELCH  
 TITLE ROAD IMPROVEMENT  
 PROJECT NO. 33  
 SHEET NO. 8



ELEVATION  
 DATE 1/14/12  
 BY E. P. WELCH  
 CHECKED E. P. WELCH  
 TITLE ROAD IMPROVEMENT  
 PROJECT NO. 33  
 SHEET NO. 8



Series No 33 Filed  
 Sheet 8 of 38

**GUARD RAIL REQUIRED ON LEFT**

Sta 130+12 to 130+36	Length	24 ft
- 137+34	- 137+38	24
- 137+82	- 138+06	24
- 138+72	- 138+96	24
- 142+76	- 143+00	24
<b>TOTAL THIS SHEET 320 ft</b>		

**NEW CULVERTS REQUIRED**

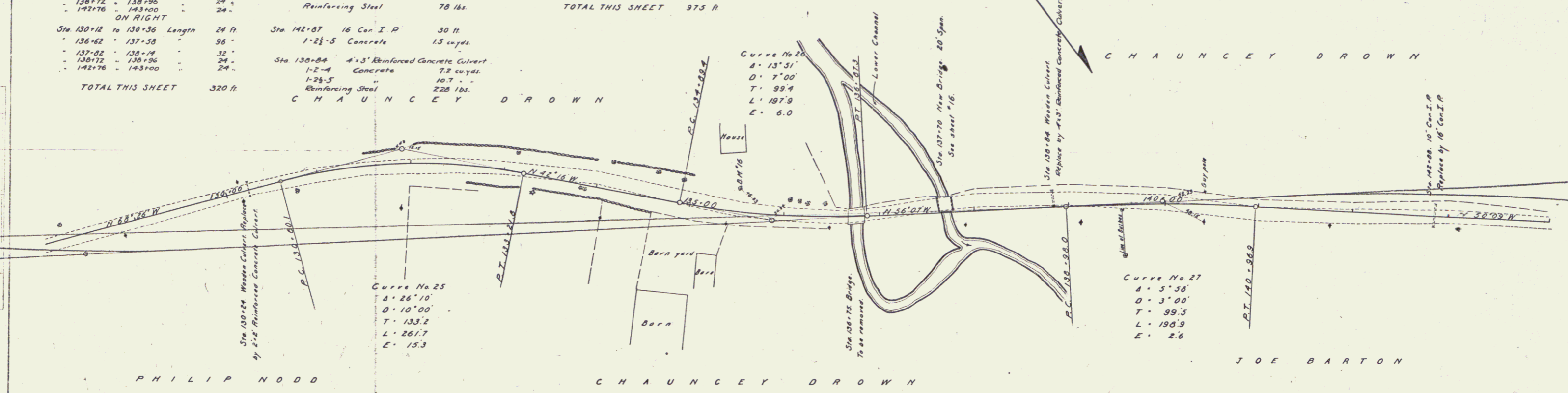
Sta 130+24	2'x2' Reinforced Concrete Culvert	4.0 cu yds.
- 1-2-4	Concrete	67
- 1-2-5	Reinforcing Steel	78 lbs.
Sta 142+87	16' Con I.P.	30 ft.
- 1-2-5	Concrete	13 cu yds.
Sta 130+84	4'x3' Reinforced Concrete Culvert	7.2 cu yds.
- 1-2-4	Concrete	10.7
- 1-2-5	Reinforcing Steel	228 lbs.
<b>TOTAL THIS SHEET 975 ft</b>		

**SUB. BASE REQUIRED**

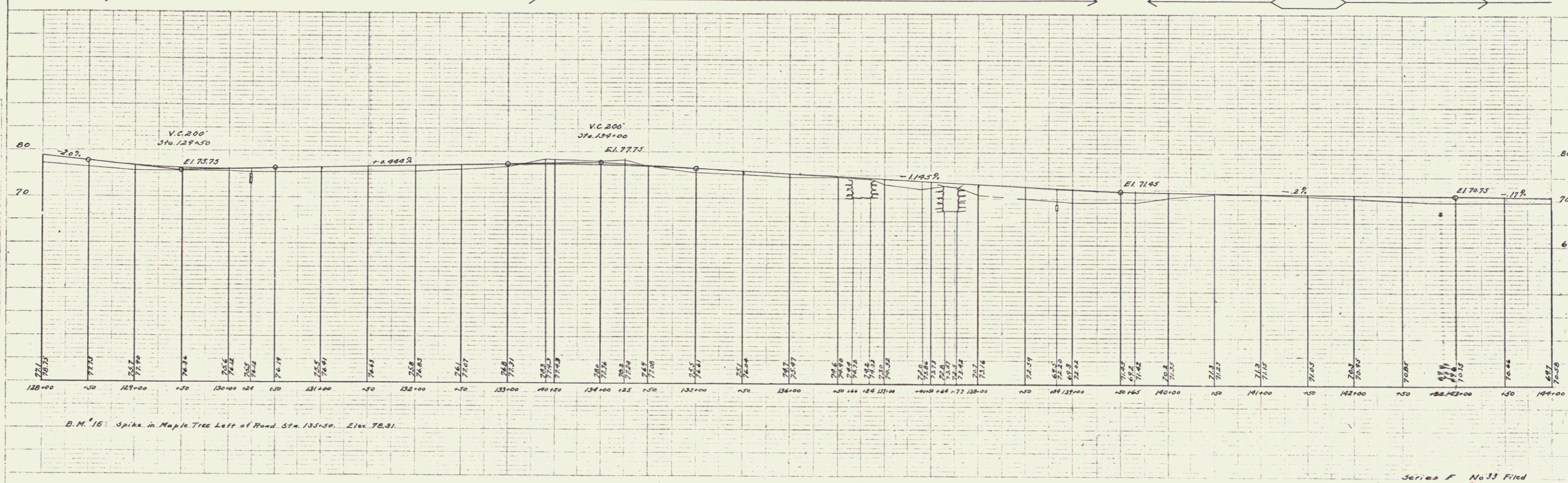
Sta 128+00 to 134+25	Length	625 ft
- 140+30	- 144+00	330
<b>TOTAL THIS SHEET 975 ft</b>		

NO. REVISIONS	DATE	BY	REASON
9		JJ	1/21
			9
			35

PLAN  
 DATE REVISION BY REASON  
 1/21/21 JJ



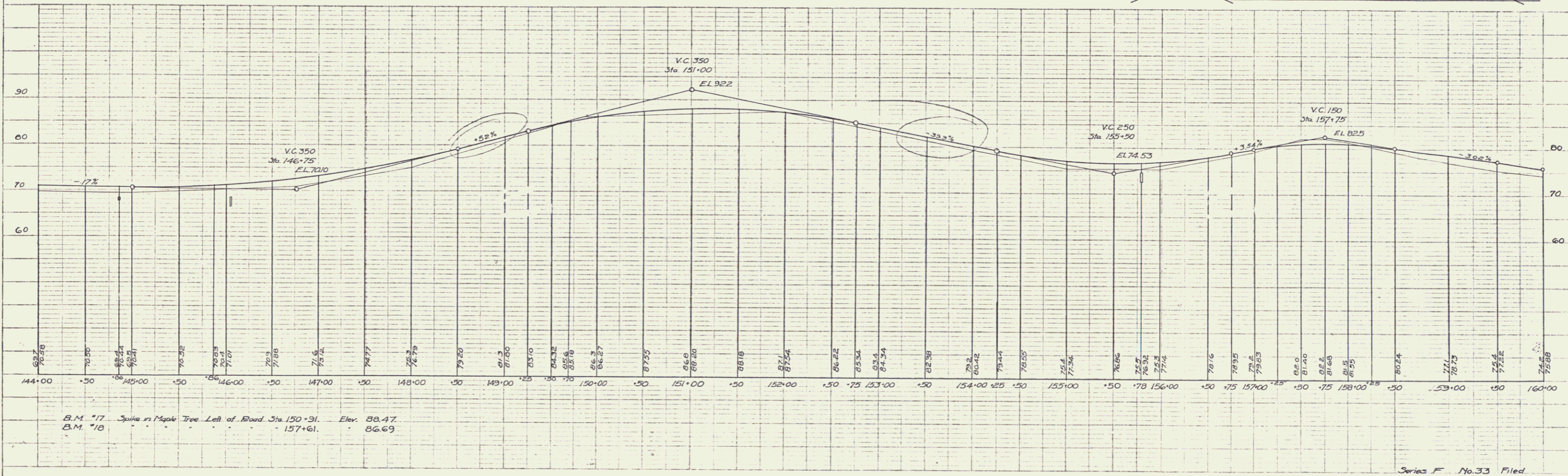
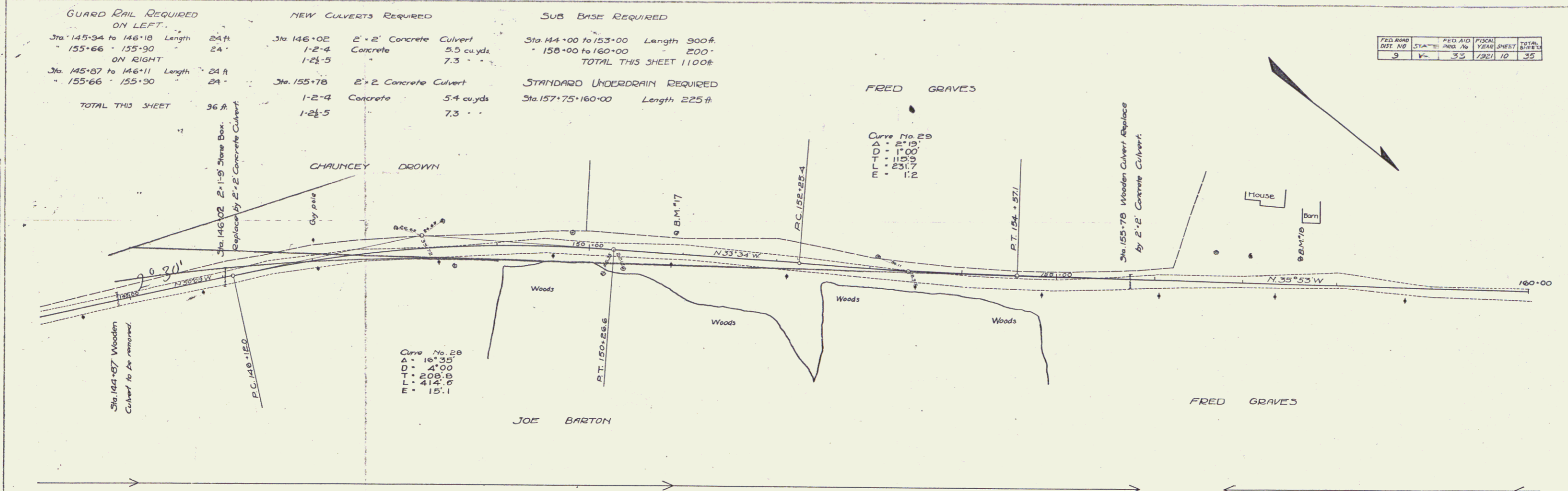
SECTION  
 DATE REVISION BY REASON  
 1/21/21 JJ



Series F No. 33 Filed  
 3/21/21

PLAN  
 DATE 1/22/22  
 DRAWN BY E. M. H. / J. S. H.  
 CHECKED BY E. M. H. / J. S. H.  
 SCALE 1" = 40'

PROFILE  
 DATE 1/22/22  
 DRAWN BY E. M. H. / J. S. H.  
 CHECKED BY E. M. H. / J. S. H.  
 SCALE 1" = 40'



FED. ROAD DIST. NO.	STA. NO.	FED. AID PROJ. NO.	FISCAL YEAR	TOTAL SHEETS
9	1	33	1921	35

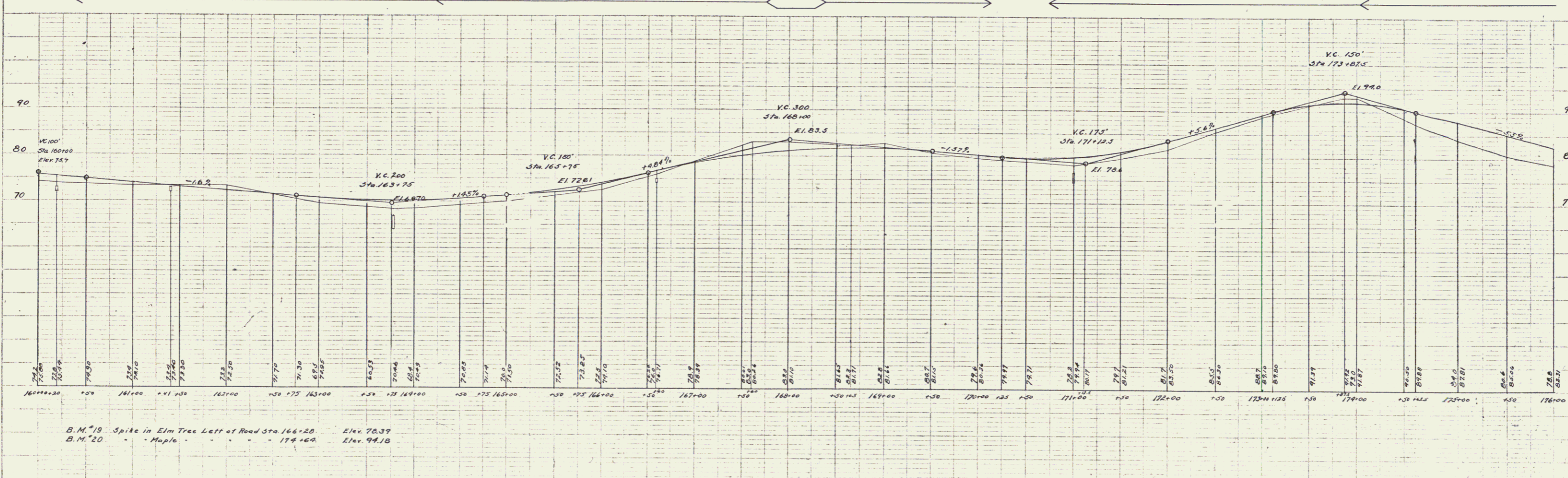
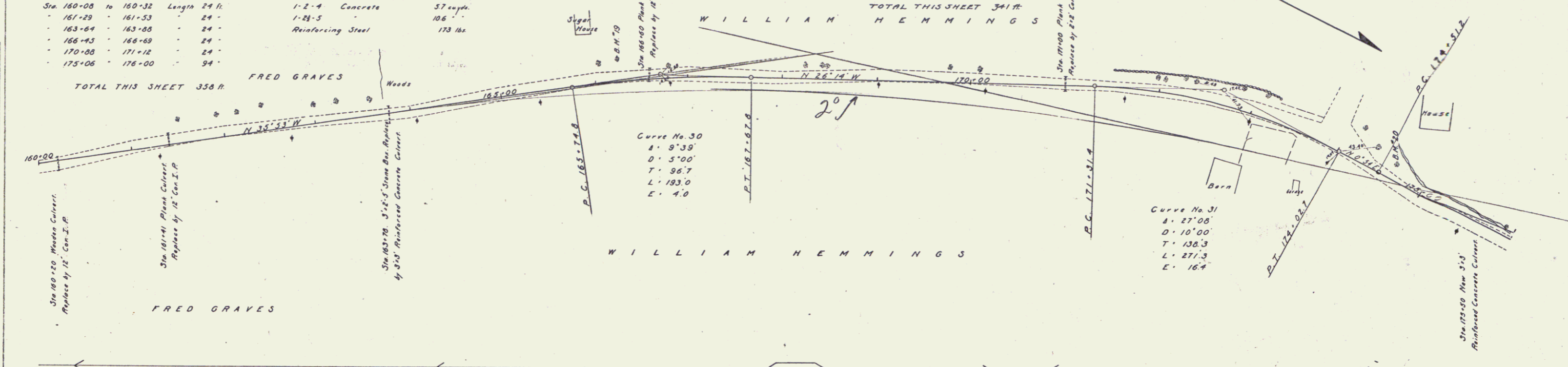
Series F No. 33 Filed  
 Sheet 10 of 35

PLAN  
 E. P. WELLS  
 10/12  
 10/12

PLAN  
 E. P. WELLS  
 10/12  
 10/12

GUARD RAIL REQUIRED ON LEFT				NEW CULVERTS REQUIRED				STANDARD UNDERDRAIN REQUIRED			
Sta 160+00 to 160+32	Length 32 ft.	Sta 160+20	12" Con. I. P.	28 ft.	Sta 166+60	12" Con. I. P.	32 ft.	Sta 175+50	3'x3' Reinforced Concrete Culvert	Sta 160+00 to 160+20	Length 20 ft.
- 161+29	- 161+53	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete		
- 163+64	- 163+08	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete		
- 166+31	- 166+75	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete		
- 170+88	- 171+12	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete		
- 175+32	- 175+56	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete	10 cupts.	- 1-2 1/2	Concrete		

NO. SHEETS	SHEET NO.	TOTAL SHEETS
9	4	35



Series F No. 33 filed  
 Sheet 11 of 35

**GUARD RAIL REQUIRED**

**ON LEFT**

Sta 176-08 to 178-32	Length	24 ft.
181-14 to 181-38		24 "
184-73 to 184-97		24 "
188-23 to 188-47		24 "
191-74 to 191-98		24 "

**ON RIGHT**

Sta 176-00 to 176-02	Length	2 ft.
177-61 to 185-05		744 "
188-37 to 188-61		24 "
191-83 to 192-00		17 "

TOTAL THIS SHEET 907 ft.

**NEW CULVERTS REQUIRED**

Sta 178-20	2'-2" Concrete Culvert	1-2-4 Concrete	61 cu yds.
181-23		1-21-5	77 "
181-26	2'-2" Concrete Culvert	1-2-4 Concrete	53 cu yds.
181-28		1-21-5	73 "
184-25	2'-2" Concrete Culvert	1-2-4 Concrete	78 cu yds.
184-27		1-21-5	93 "

**SUB BASE REQUIRED**

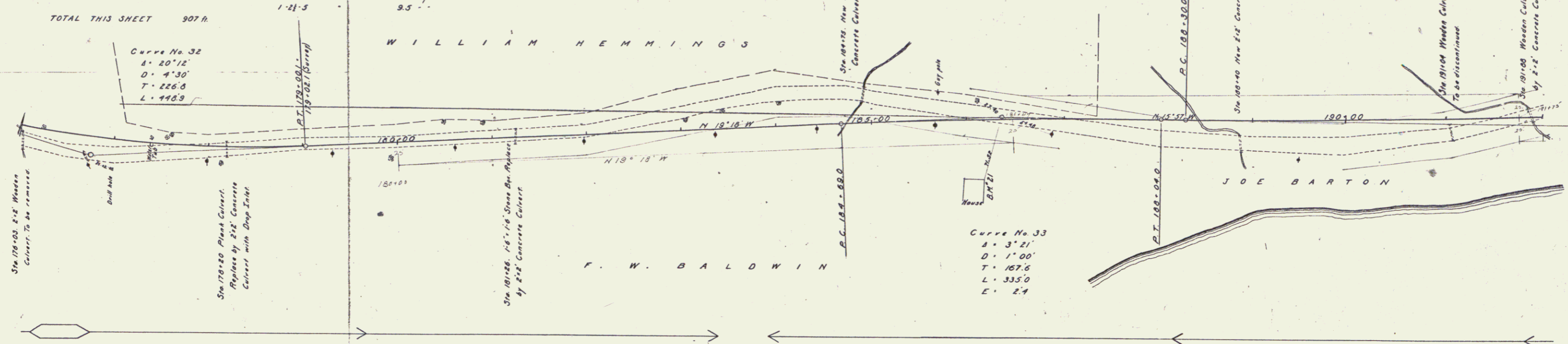
Sta 188-40	2'-2" Concrete Culvert	1-2-4 Concrete	60 cu yds.
188-42		1-21-5	78 "
191-00	2'-2" Concrete Culvert	1-2-4 Concrete	58 cu yds.
191-02		1-21-5	76 "

**STANDARD UNDERDRAIN REQUIRED**

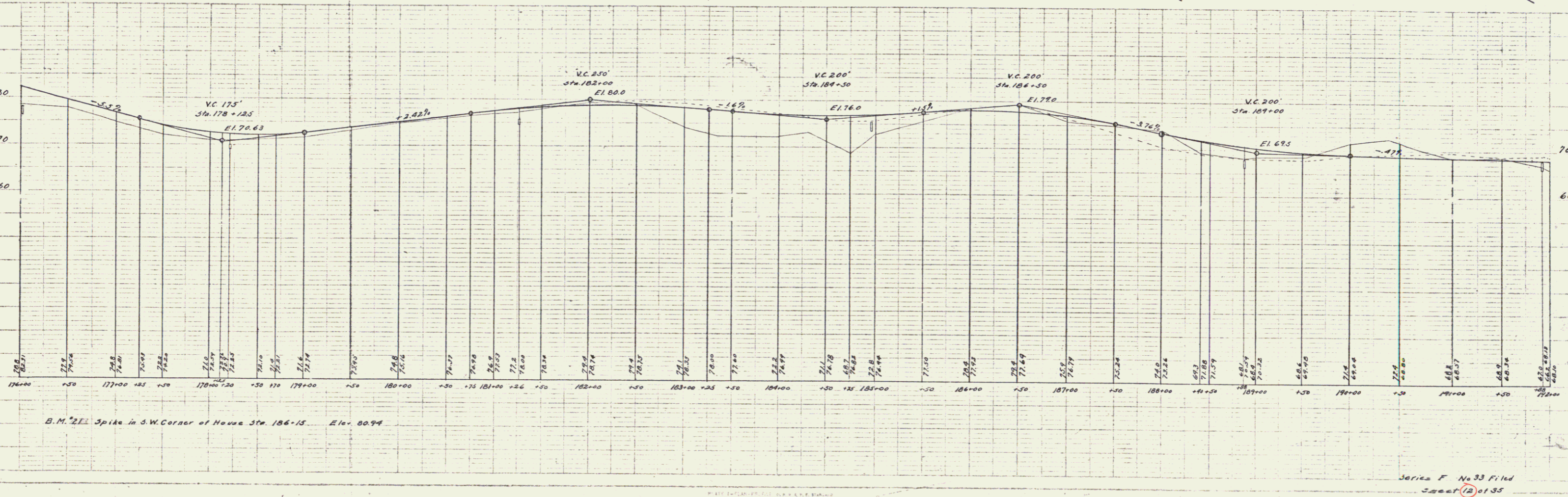
Sta 176-10 to 178-20	Length	210 ft.
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YEAR	DIST. NO.	AREA	FIN. YEAR	TOTAL AREA
4	4	33	1921	18 35

PLAN  
E. R. WALSH  
C. E. WALSH  
J. H. WALSH  
B. L. WALSH



PLAN  
E. R. WALSH  
C. E. WALSH  
J. H. WALSH  
B. L. WALSH



**GUARD RAIL REQUIRED ON LEFT**

Sta 195+30 to 195+62	Length 24 ft
- 198+70 - 198+94	- 24 -
- 201+11 - 201+35	- 24 -
- 202+62 - 202+86	- 24 -
- 206+41 - 206+65	- 24 -

TOTAL THIS SHEET 247 ft

**NEW CULVERTS REQUIRED**

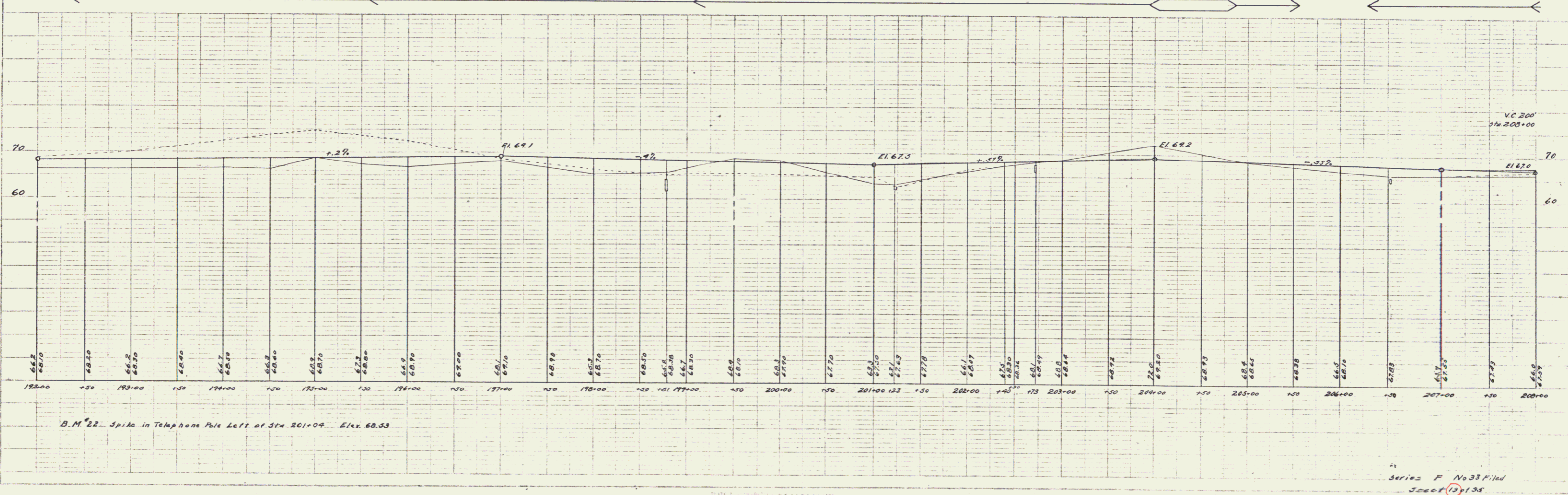
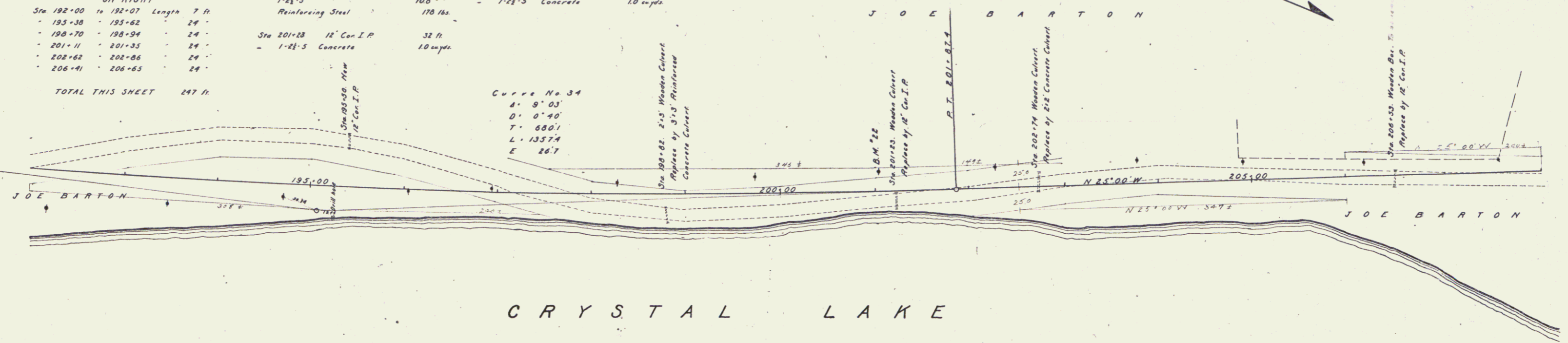
Sta 195+30	12" Con I.P.	28 ft
- 1-21-5	Concrete	10 cu yds
Sta 198+02	3'3" Reinforced Concrete Culvert	
- 1-2-4	Concrete	53 cu yds
- 1-21-5	Reinforcing Steel	178 lbs.
Sta 201+28	12" Con I.P.	32 ft
- 1-21-5	Concrete	10 cu yds

**SUB. BASE REQUIRED**

Sta 192+00 to 202+25	Length 1025 ft
- 206+00 - 208+00	- 200 -

TOTAL THIS SHEET 1225 ft

NO. SHEETS	NO. SHEETS	NO. SHEETS	NO. SHEETS
9	33	13	35



Series F No 33, 11/14  
Sheet 135

**GUARD RAIL REQUIRED ON LEFT**  
 Sta 208-78 to 209-02 Length 24 ft.  
**ON RIGHT**  
 Sta 208-78 to 209-02 Length 24 ft.  
**TOTAL THIS SHEET 48 ft.**

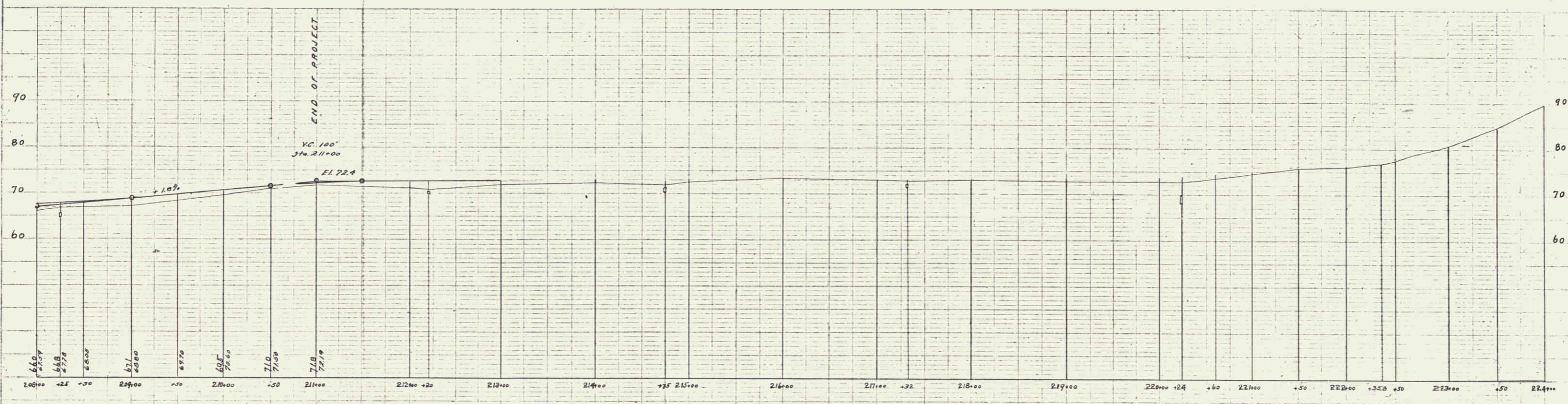
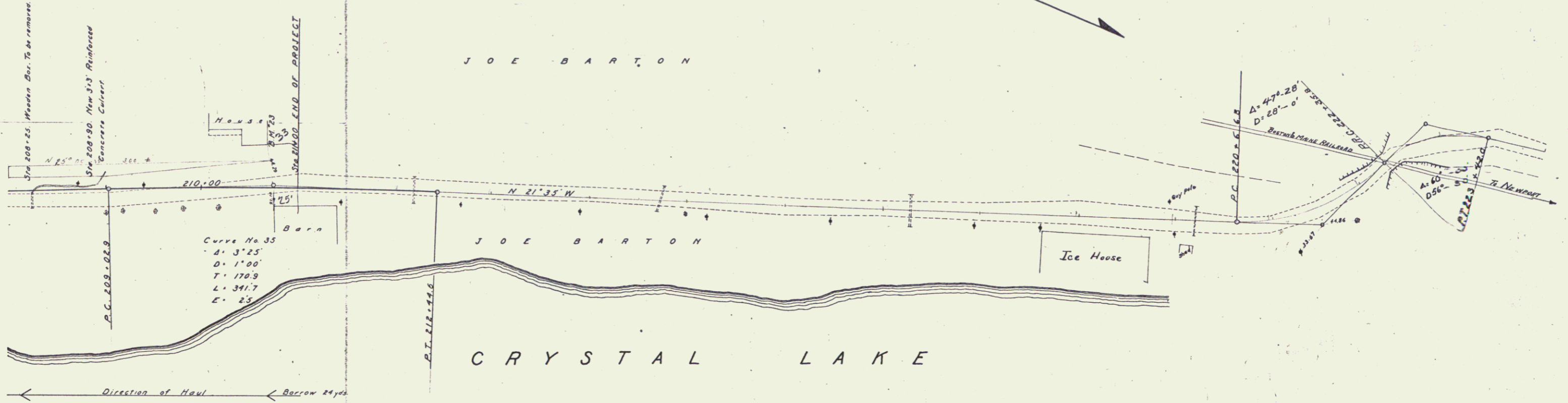
**NEW CULVERTS REQUIRED**  
 Sta. 208-90 3'-3" Reinforced Concrete Culvert  
 1-2-4 Concrete 53 cu. yds.  
 1-2-5 Reinforcing Steel 104 lbs.  
 187 lbs.

**SUB BASE REQUIRED**  
 Sta 208-00 to 210-00 Length 200 ft.

JOB NO.	DIST. NO.	DATE	SCALE	TOTAL SHEETS
9	33	1927	14	35

E. R. HUBB  
 CIVIL ENGINEER  
 1712 W. 1st St.  
 SPOKANE, IDAHO

E. R. HUBB  
 CIVIL ENGINEER  
 1712 W. 1st St.  
 SPOKANE, IDAHO



B.M. 23 Bottom of Corner Board N.W. Corner Joe Barton's House. Sta. 210-68 Elev. 77.84

Series F No 33 F. 16d Sheet 19 of 35

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