

1/2 COURSE CEMENT CONCRETE PAVEMENT
TYPE B

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT

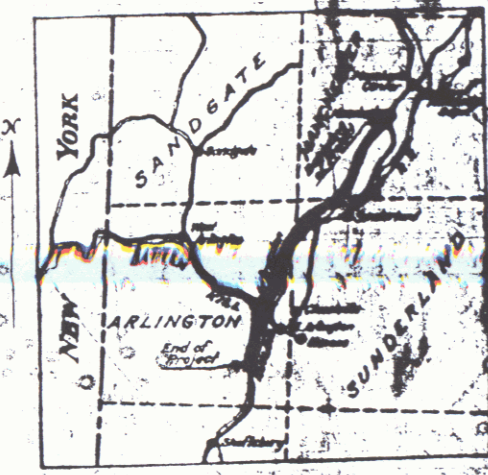
TOWNS OF

MANCHESTER, SUNDERLAND AND ARLINGTON

MANCHESTER-BENNINGTON ROAD

FROM THE CONCRETE PAVEMENT IN
MANCHESTER VILLAGE SOUTHERLY 8.736 MILES

LENGTH OF PROJECT INCLUDING BRIDGES OVER 20 FOOT SPAN= 46,128.6 FEET= 8.736 MILES
LENGTH OF PROJECT EXCLUDING BRIDGES OVER 20 FOOT SPAN= 45,951.6 FEET= 8.702 MILES

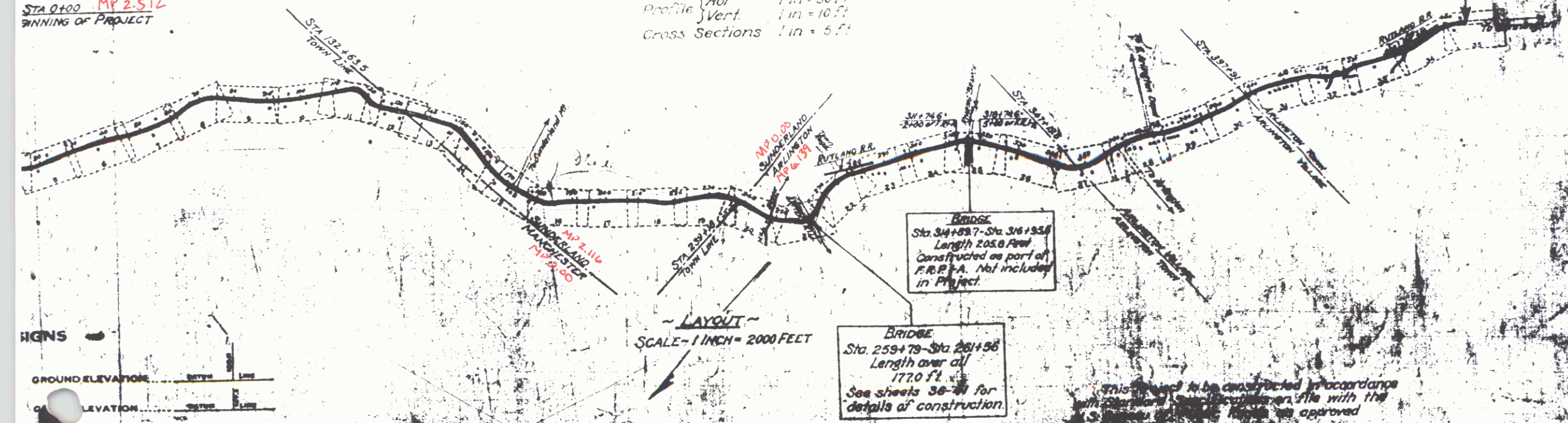


SCALE= 1 INCH= 4 MILES

STA 0+00 MP 2.512
BEGINNING OF PROJECT

SCALES
Plan 1 in = 50 ft
Profile Hor 1 in = 50 ft
Vert 1 in = 10 ft
Cross Sections 1 in = 5 ft

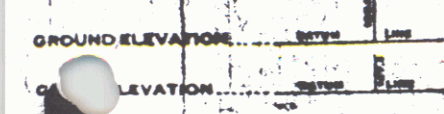
STA 465+00
END OF PROJECT
MP 1.852



BRIDGE
Sta. 34+63.7 - Sta. 36+95.6
Length 2,056 feet
Constructed as part of
F.R.R.P.A. Not included
in Project

BRIDGE
Sta. 259+75 - Sta. 261+56
Length over all
177.0 ft
See sheets 36-37 for
details of construction

LEGEND



CURVE DATA
DEFLECTION ANGLE
DEGREE OF CURVE
RADIUS OF CURVE
TANGENT DISTANCE

Pin# 99K75

1/1/29

NTR 7A

Project No. F104A

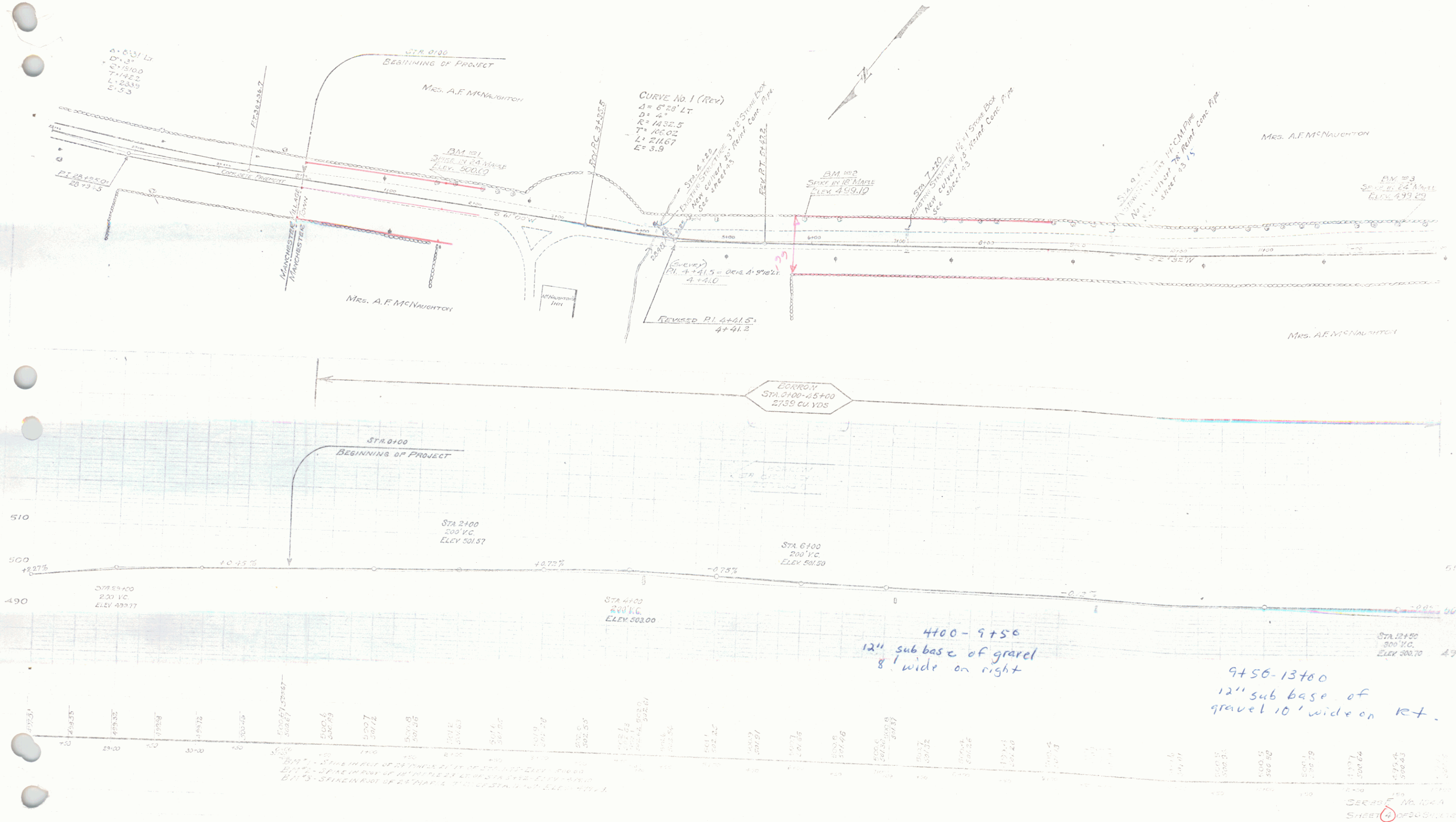
1

Handwritten: H&B Co. to G.M. & Sured

Station	Left	Right
4101-4145	-	24.1
4108-4132	24.1	-
4138-4142	24.1	24.1
4145-4149	24.1	24.1

Handwritten: New Main Line, East of Station 4100

Station	Left	Right	Center
4100	30"	34.1"	32.0"
4105	16"	33.4"	24.7"
4110	15"	32.1"	23.5"

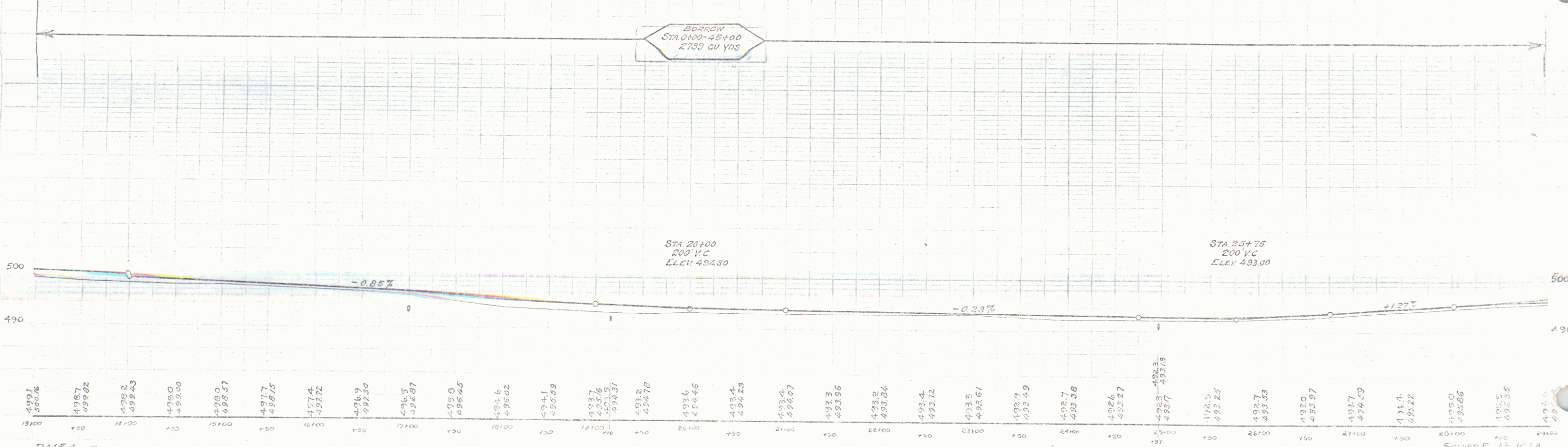
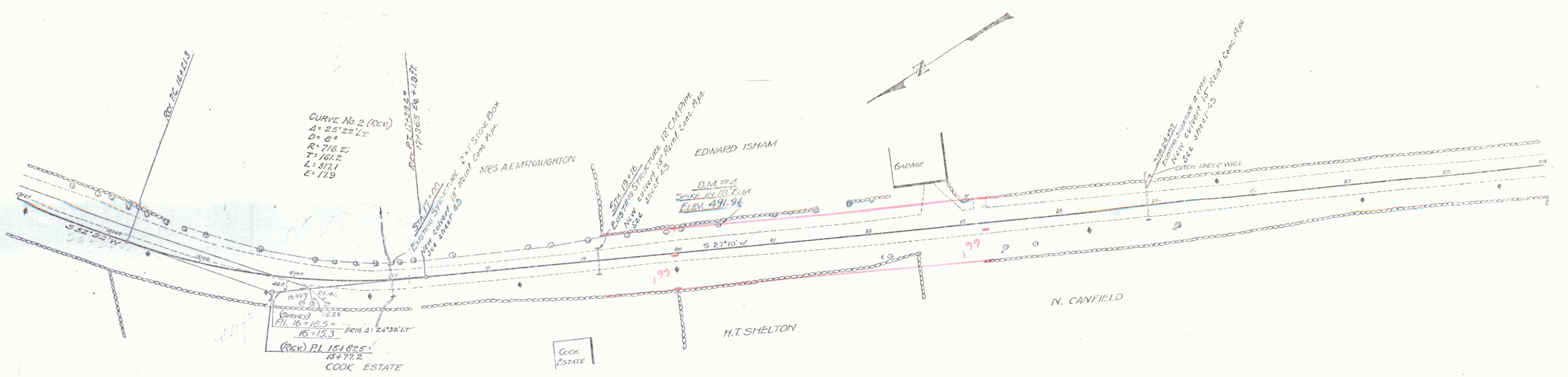


WOOD GUARD RAIL REQUIRED

Stations	Left	Right
16100-17112	24 ft.	24 ft.
17104-19128	24 ft.	24 ft.
24185-25120	24 ft.	24 ft.

NEW FLEET CONC. PIPE CULVERTS REQUIRED

Station	Diam.	Length	Conc. B.	Steel
17100	18"	32 ft.	3000	24# 34#
19116	15"	32 ft.	2400	33# 34#
24127	15"	32 ft.	2400	14#
			2.4	34#



BM #4 - SPIKE IN TRUNK OF 18" ELN 26' LT. OF STA. 20+47 - ELEV. = 491.94.

SERIES F. 16.10-1A
SHEET 6 OF 98 SHEETS

CABLE GUARD RAIL REQUIRED

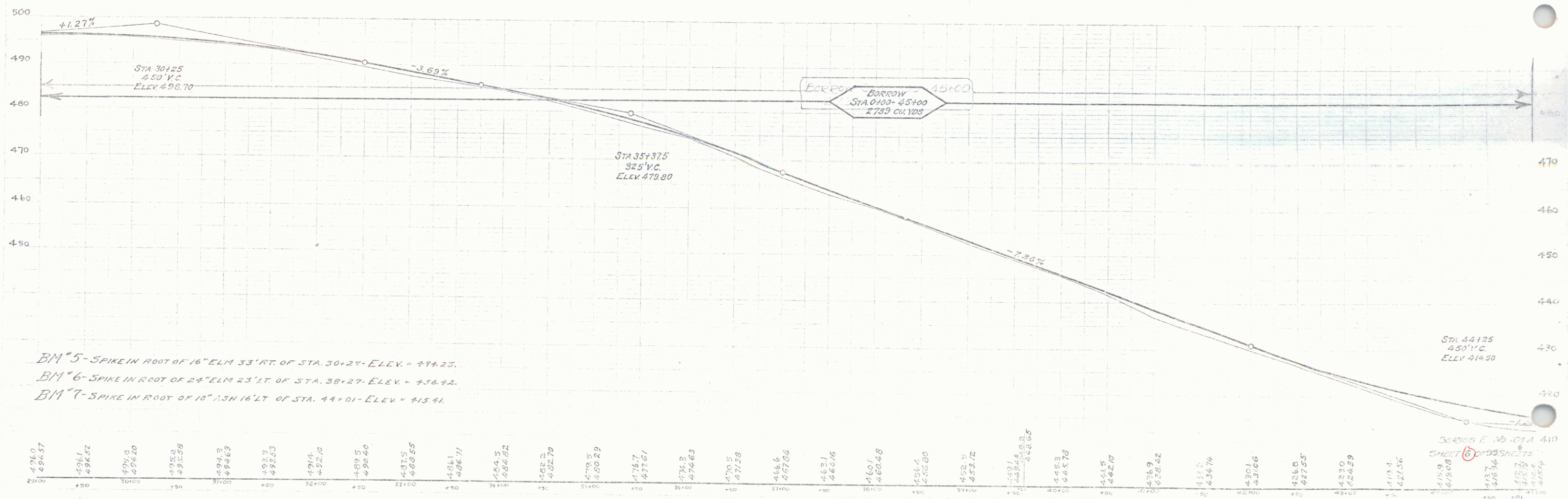
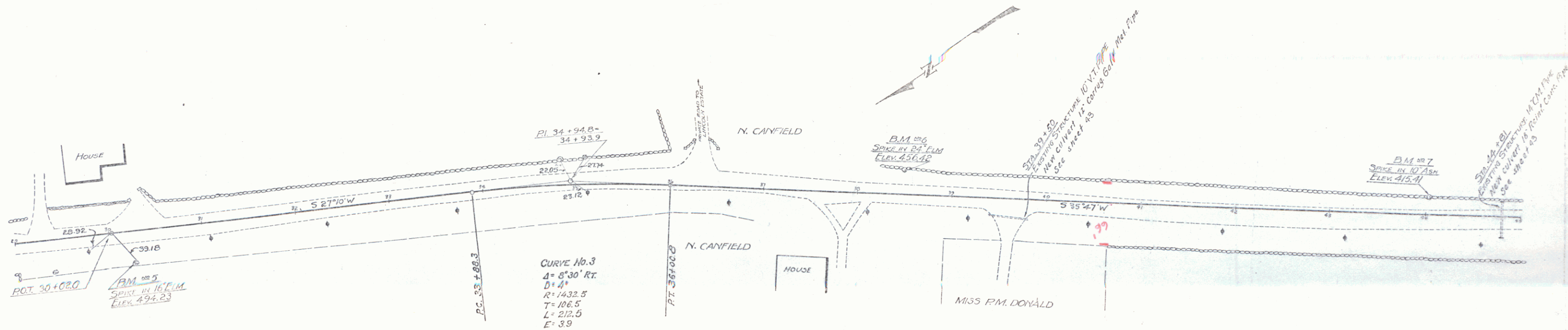
Stations 44763-45103
44763-45103
44763-45103
44773-44797

NEW BRINE CONC. PIPE CULVERTS REQUIRED

Station 44181
Diam. 18"
Length 44
Comp. 3.5
Steel 34 ft

NEW DRIVEWAY PIPE CULVERTS REQUIRED

Station 32150
Diam. 12"
Length 46
Comp. 2.5
Steel 2.5



BM #5 - SPIKE IN ROOT OF 16" ELM 33' RT. OF STA. 30+25 - ELEV. = 414.23.
BM #6 - SPIKE IN ROOT OF 24" ELM 23' LT. OF STA. 38+27 - ELEV. = 415.42.
BM #7 - SPIKE IN ROOT OF 10" ASH 16' LT. OF STA. 44+01 - ELEV. = 415.41.

SHEET 6 OF 8 SHEETS
SERIES F NO. 107A 410

WOOD GUARD RAIL REQUIRED

Stations	Left	Right
53159-53161	14 ft.	-
53165-53169	14 ft.	14 ft.

CABLE GUARD RAIL REQUIRED

Stations	Left	Right
43100-43105	5 ft.	-
43105-43106	6 ft.	5 ft.
53150-53156	13 ft.	13 ft.

53145-54197 152 ft

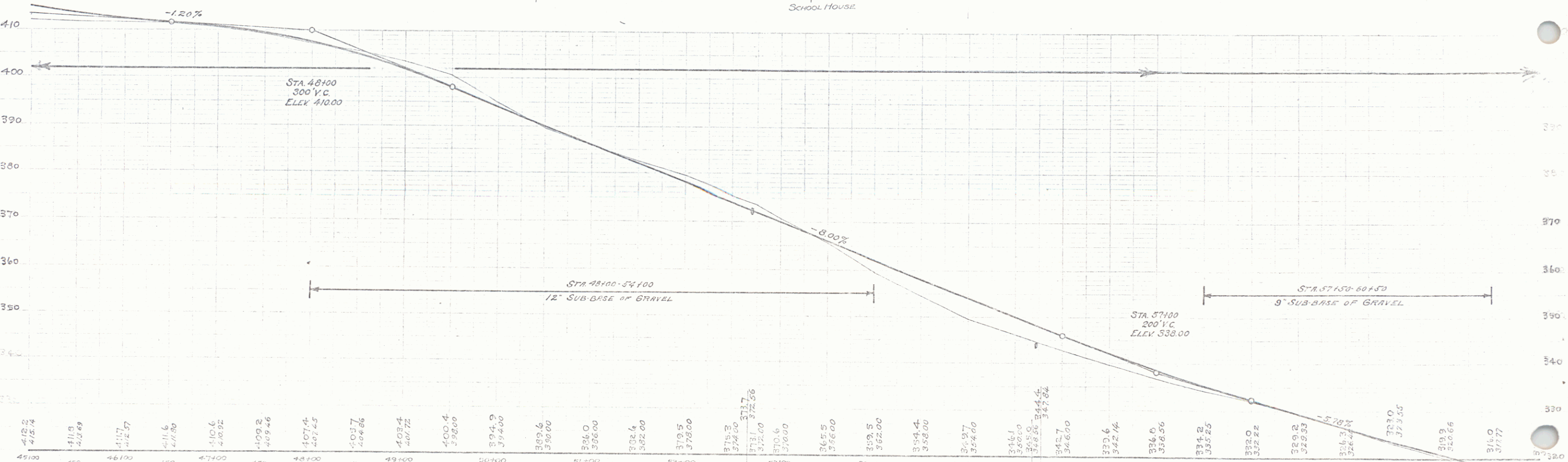
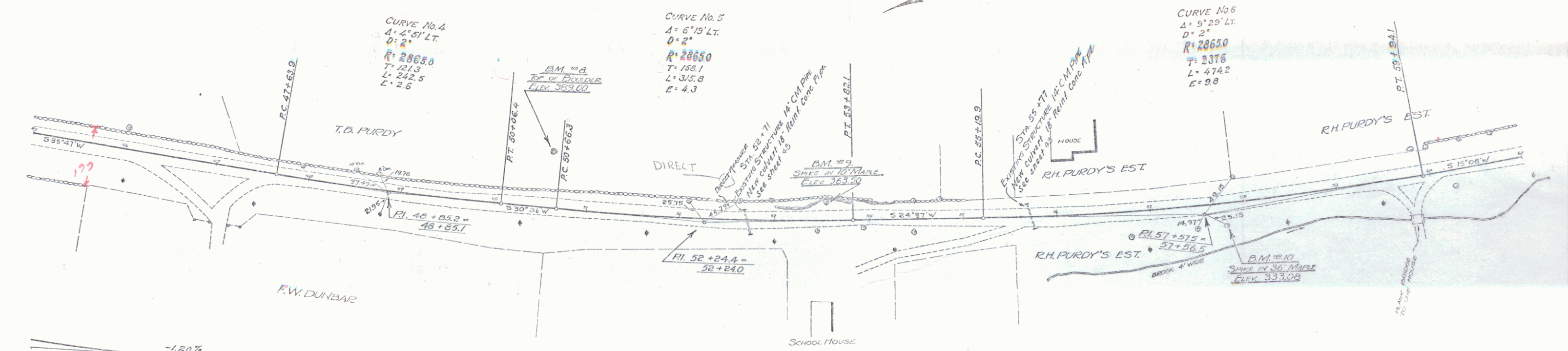
NEW REINFORCED CONCRETE PIPE CULVERTS REQUIRED

Station	Dist.	Leg.	Cont.	Size
52171	18'	32 ft.	30' C.Y.	34" 34
53177	18'	36 ft.	30' C.Y.	33" 34

4.0

104.6 1929 7 98

PLAN
SHEET NO. 5
DATE
BY
CHECKED
APPROVED



BM #8: TOP OF BOUNDER 60' LT. OF STA. 50+58 - ELEV = 359.00
 BM #9: SPIKE IN ROOT OF 10" MAPLE 17' LT. OF STA. 53+54 - ELEV = 363.50
 BM #10: SPIKE IN ROOT OF 36" MAPLE 23' RT. OF STA. 57+48 - ELEV = 333.08

SHEET NO. 5
 SERIES R. NO. 104.6
 SHEET 5 OF 28 SHEETS

5

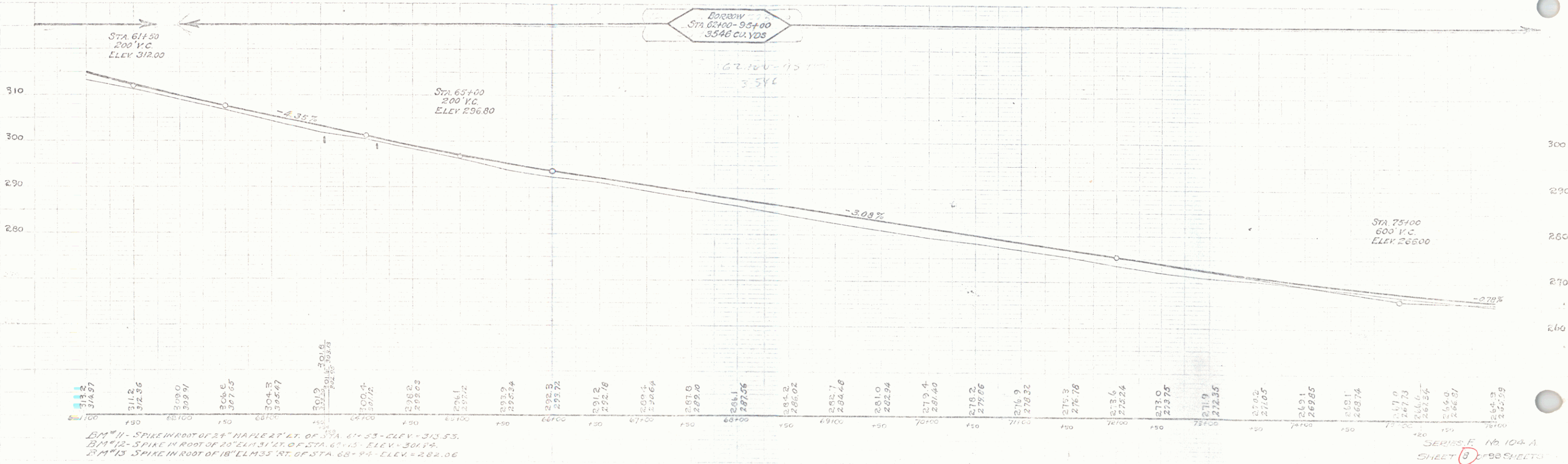
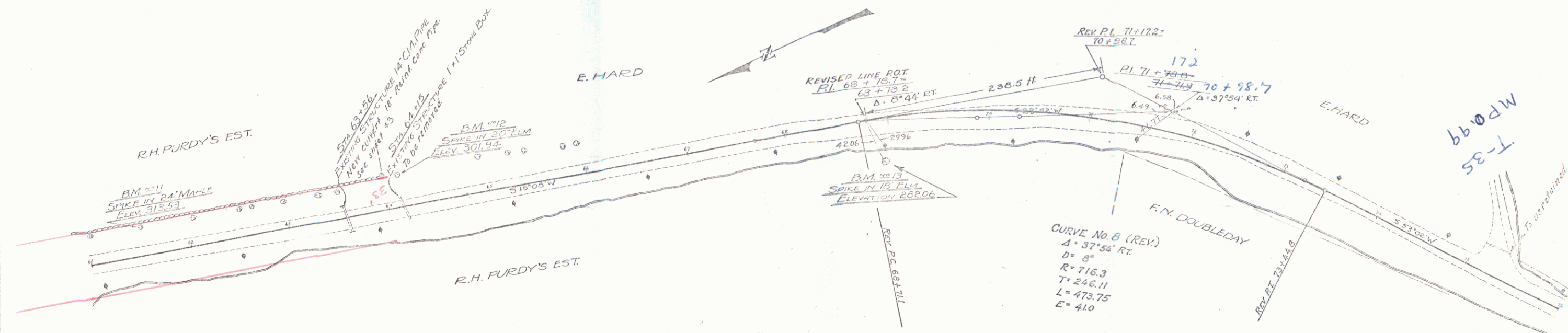
Wood Guard Rail Required
 Stations 14 ft. 24 ft.
 63141-63165 14 ft.
 63166-63170 24 ft.

Cable Guard Rail
 61+10-61+50

RT.
 101

New Rebar Conc. Pipe Culverts Required
 Station 18 32 ft. 32 ft. 32 ft. 32 ft.
 63156 18 32 ft. 32 ft. 32 ft. 32 ft.

104A 1923 C 30



BM 111 - SPIKE IN ROOT OF 24" MAPLE RT. OF STA. 61+53 - ELEV. 313.53.
 BM 112 - SPIKE IN ROOT OF 20' L.M. 31' RT. OF STA. 62+13 - ELEV. 301.94.
 BM 113 - SPIKE IN ROOT OF 18' L.M. 35' RT. OF STA. 62+84 - ELEV. 282.06.

SHEET 8 OF 30 SHEETS

1019-1 (2)

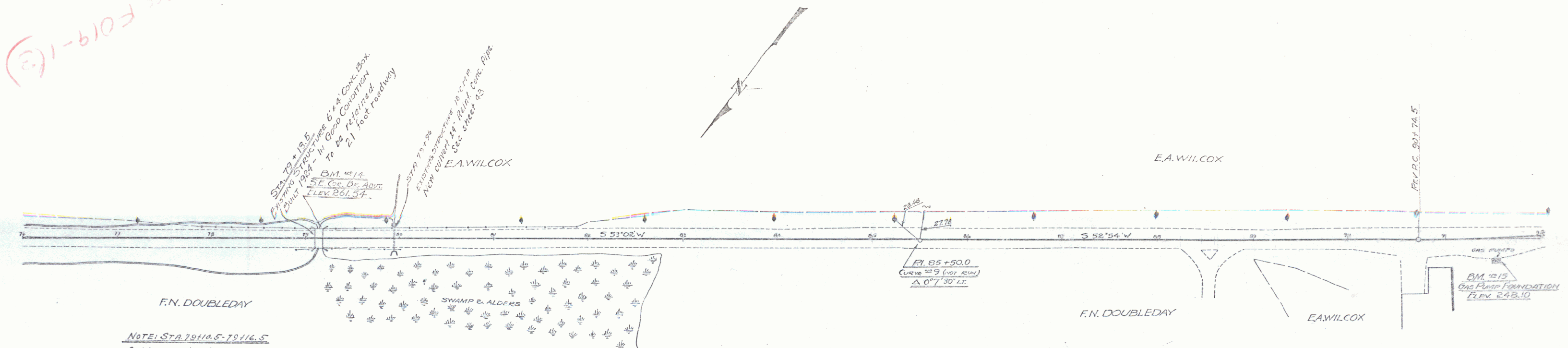
CABLE GUARD RAIL REQUIRED

Stations	Left	Right
77+00-79+10	24	24
79+10-79+13	24	24
79+13-80+14	24	24
80+14-80+16	24	24
80+16-80+20	24	24
80+20-80+24	24	24

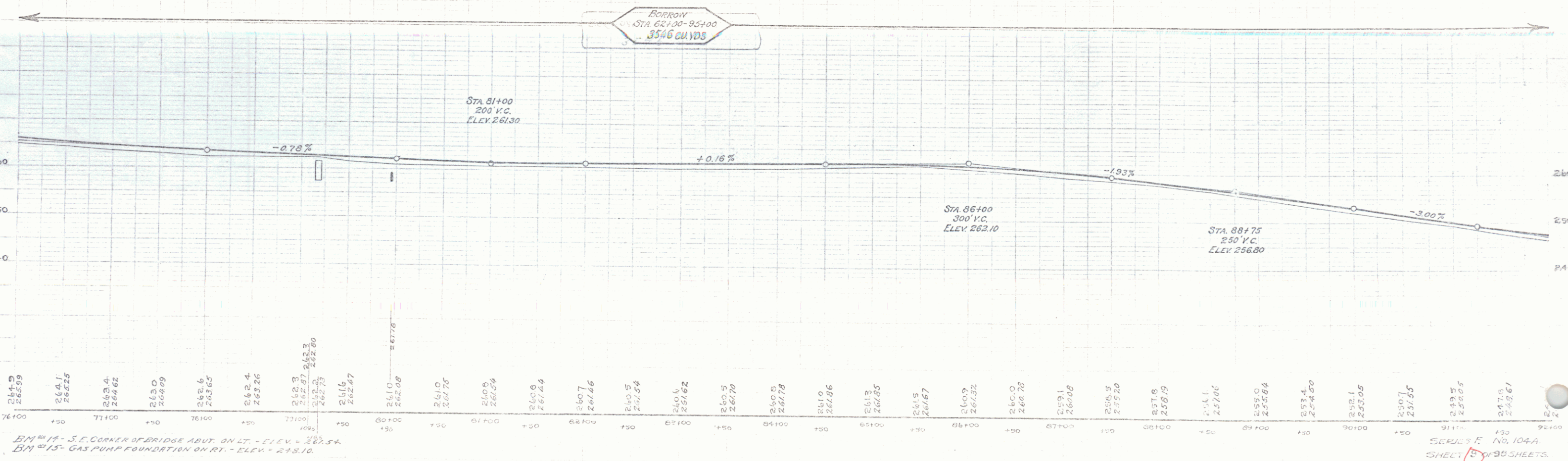
NEW 6" DRAIN CONC. PIPE GUARDRAIL REQUIRED

Station	Dist.	Length	Chgs.	Notes
79+13	25	36H	3.0	50H

1019-1 (2)



NOTE: STA 79+13.5 TO 79+16.5
Cable guard rail on right shall be fastened to bridge rail by the contractor, charge for this item shall be included in the bid price per foot for Cable Guard Rail.



BM #14 - S.E. CORNER OF BRIDGE ABUT. ON LT. - ELEV. = 263.54
BM #15 - GAS PUMP FOUNDATION ON RT. - ELEV. = 243.10

SHEET 15 OF 38 SHEETS

WOOD GUARD RAIL REQUIRED

Station	Left	Right
96169-96193	14' H	14' H
100107-100131	24' H	24' H

CABLE GUARD RAIL REQUIRED

Station	Left	Right
92110-92134	8' H	8' H
92134-92142-12	45' H	-
101104-101105	22' H	-
101154-101154	200'	-

NEW RAILING CONC. PIPE CURB REQUIRED

Station	Diam.	Length	Size	Material
96180	18"	33' 11"	34"	Steel
100115	18"	34' 11"	34"	Steel

NEW RAILING CONC. PIPE CURB REQUIRED

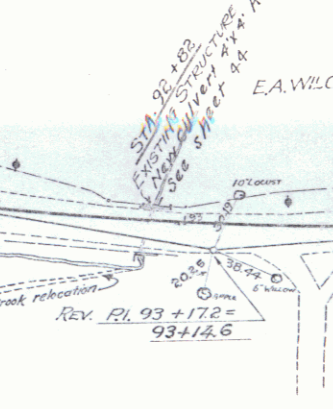
Station	Size	Material
92181	4x8'	2x4x8' 16x8'
		6.8 33x4

NEW DRIVEWAY PIPE CURB REQUIRED

Station	Right	Diam.	Length	Material
103175	12"	12"	16' H	16' C.Y.

(31-612) 200'

CURVE No. 10 (REV)
A = 14'29" Lx
D = 3"
R = 1910.0
T = 242.7
L = 452.8
E = 15.4



EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
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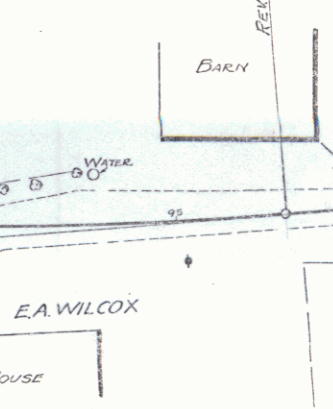
EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
House

EA. WILCOX
House

REV. PT. 95+53.2 =
95+53.2
24' 11"



M.P. HEALEY

A. BURT

A. BURT

A. BURT

A. BURT

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95+53.2
24' 11"



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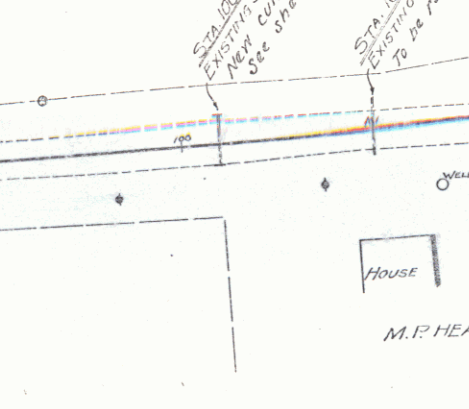
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REV. PT. 95+53.2 =
95+53.2
24' 11"



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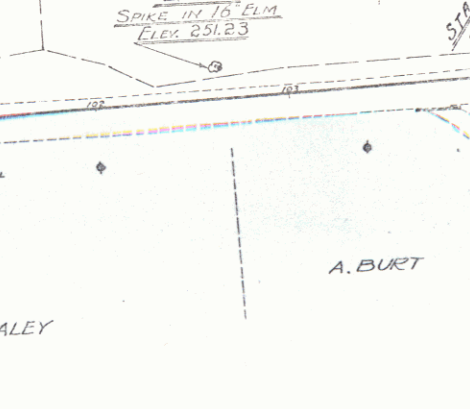
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REV. PT. 95+53.2 =
95+53.2
24' 11"



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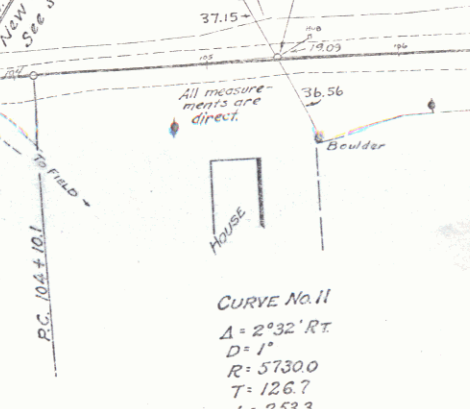
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95+53.2
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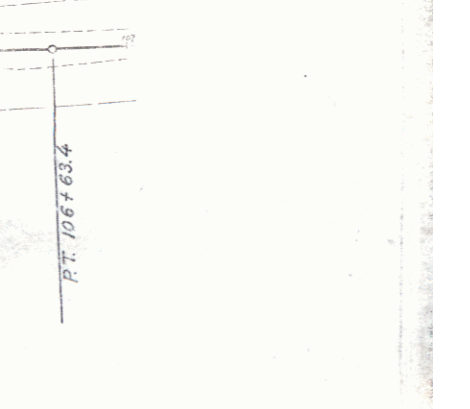
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REV. PT. 95+53.2 =
95+53.2
24' 11"



M.P. HEALEY

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A. BURT

STA. 92+75
300' V.C.
ELEV. 244.80

STA. 96+75
400' V.C.
ELEV. 250.00

STA. 102+00
300' V.C.
ELEV. 253.00

STA. 105+25
300' V.C.
ELEV. 262.50

STA. 104+150-106+100
12' SUB-BASE OF GRAVEL

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12' SUB-BASE OF GRAVEL

STA. 104+150-106+100
12' SUB-BASE OF GRAVEL

STA. 104+150-106+100
12' SUB-BASE OF GRAVEL

BM 16 - SPIKE IN FOOT OF 16" ELM ON RT. - ELEV. = 253.68.

BM 17 - SPIKE IN FOOT OF 16" ELM ON LT. OF STA. 102+62 - ELEV. = 251.23.

SERIES F. No. 104A.

SHEET 10 OF 20 SHEETS

8

WOOD GUARD RAIL REQUIRED
Stations Left Right
108+57 108+31 24 21 ft

CABLE GUARD RAIL REQUIRED
Stations Left Right
117+55 103+95 96 ft

NEW REINFORCED CONCRETE PIPE CULVERTS REQUIRED
Station Diam. Length Conc. B. Slab
108+60 24" 26'11" 42" x 34" 3.2 3.2

(2)-6102 200

CURVE No. 12
Δ = 2° 27' LT.
D = 117
R = 5730
T = 122.5
L = 245.0
E = 1.5

PI 108+70.4
108+70.4

ANN LATHROP
High Embankment

E.A. WILCOX

ANN LATHROP

FWESTERMAN

CURVE No. 13
Δ = 6° 53' RT.
D = 18
R = 3136
T = 158.4
L = 354.9
E = 56.3

(SURVEY) UNACCESSIBLE
PI 117+64.7

Distance from PI to
Sta. PI 117+64.7 (Observed)
117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

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PI 117+64.7

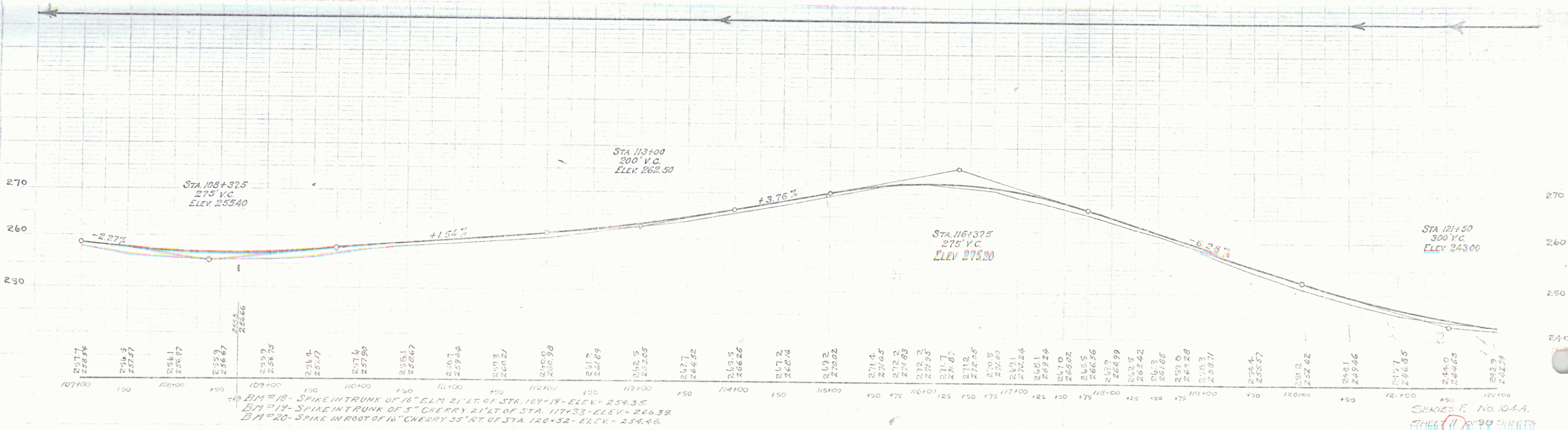
PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7

PI 117+64.7



SERIES F. NO. 104A
SHEET 11 OF 11 SHEETS

WOOD GUARD RAIL REQUIRED

Stations	Left	Right
1231.51-1231.75	24' 11"	24' 11"
1311.32-1311.52	23' 6"	23' 6"

CABLE GUARD RAIL REQUIRED

Stations	Left	Right
1311.32-1311.54	24' 11"	24' 11"
1301.10-1311.14	96'	104'
1311.47-1311.55	488'	
1311.52-1331.52	200'	

NEW RISING CONC. PIPE CULVERTS REQUIRED

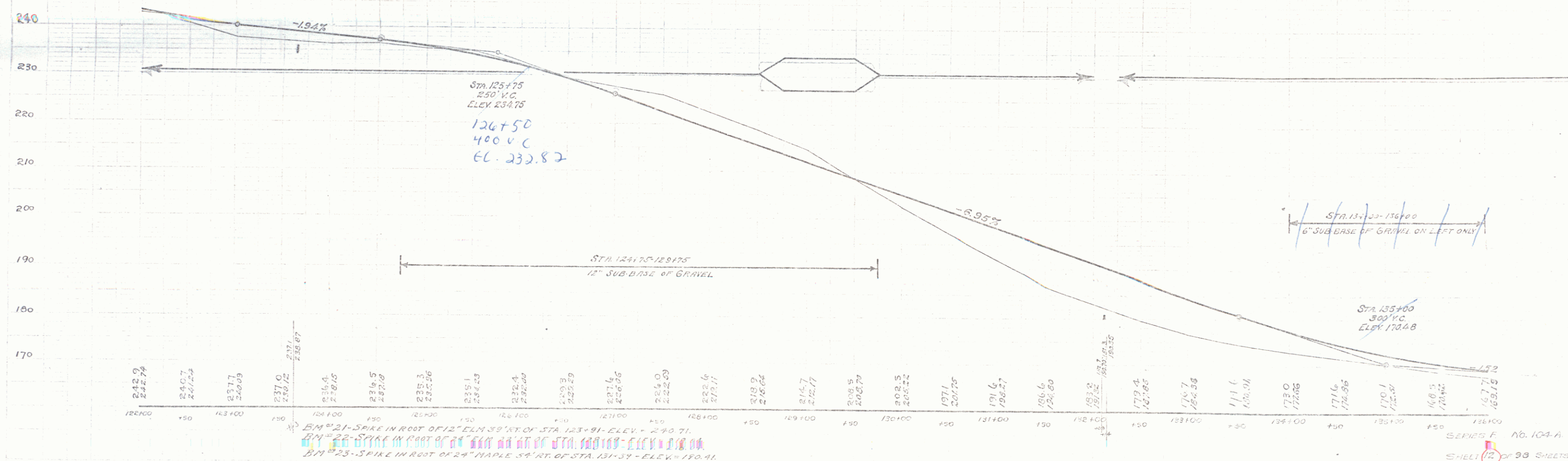
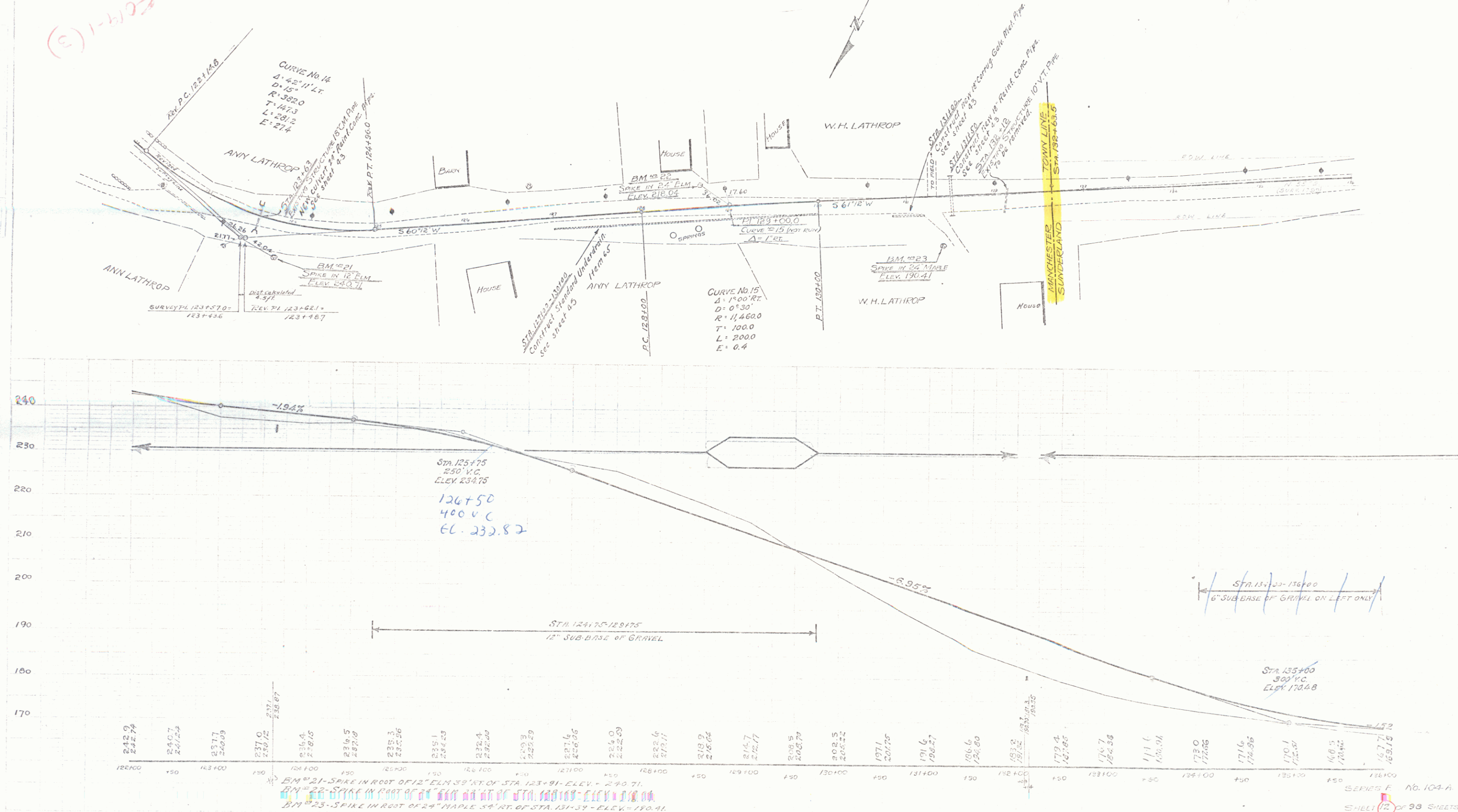
Station	Width	Length	Grade	Material
1231.63	24"	80'	2.75%	CONC. PIPE
1311.50	18"	80'	2.75%	CONC. PIPE
1321.12	66"	1.3	1.4	CONC. PIPE

NEW DRIVEWAY PIPE CULVERTS REQUIRED

Station	Width	Length	Grade	Material
1311.00	18"	40'	2.75%	CONC. PIPE

STATE 104-A 1989 12 29

(3) 104-A



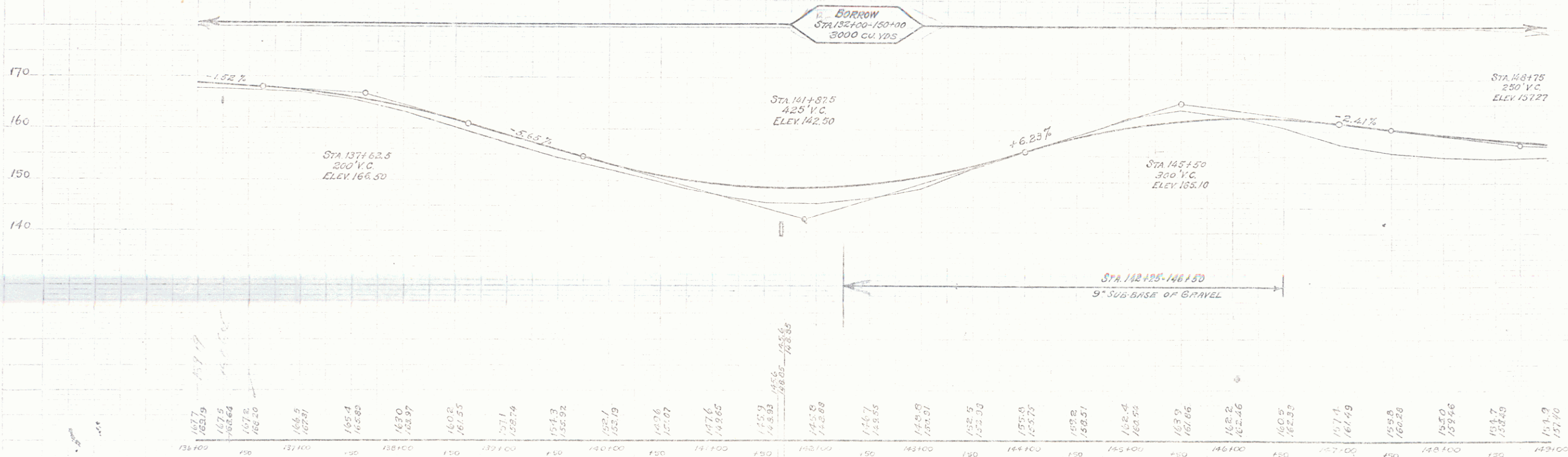
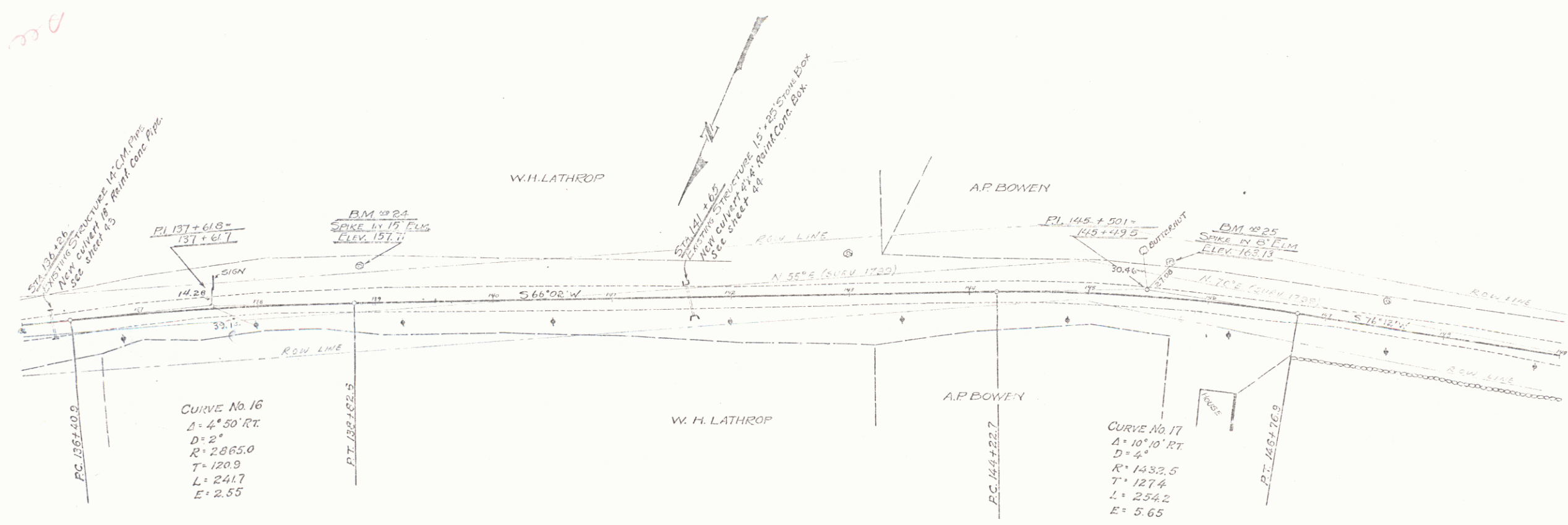
SERIES F No. 104-A SHEET 12 OF 33 SHEETS

WOOD GUARD RAIL REQUIRED
Stations Left Right
136113-136137 24H 24H

CABLE GUARD RAIL REQUIRED
Stations Left Right
141141-141180 48H 48H

NEW REINFORCED PIER CONCRETE REQUIRED NEW REINFORCED BOX CONCRETE REQUIRED
Station 141163 18' 24H 30' 34' 21' 14' 80"
Size 4' x 4' 24' x 4' 14' x 80'

(S) 100' 300'



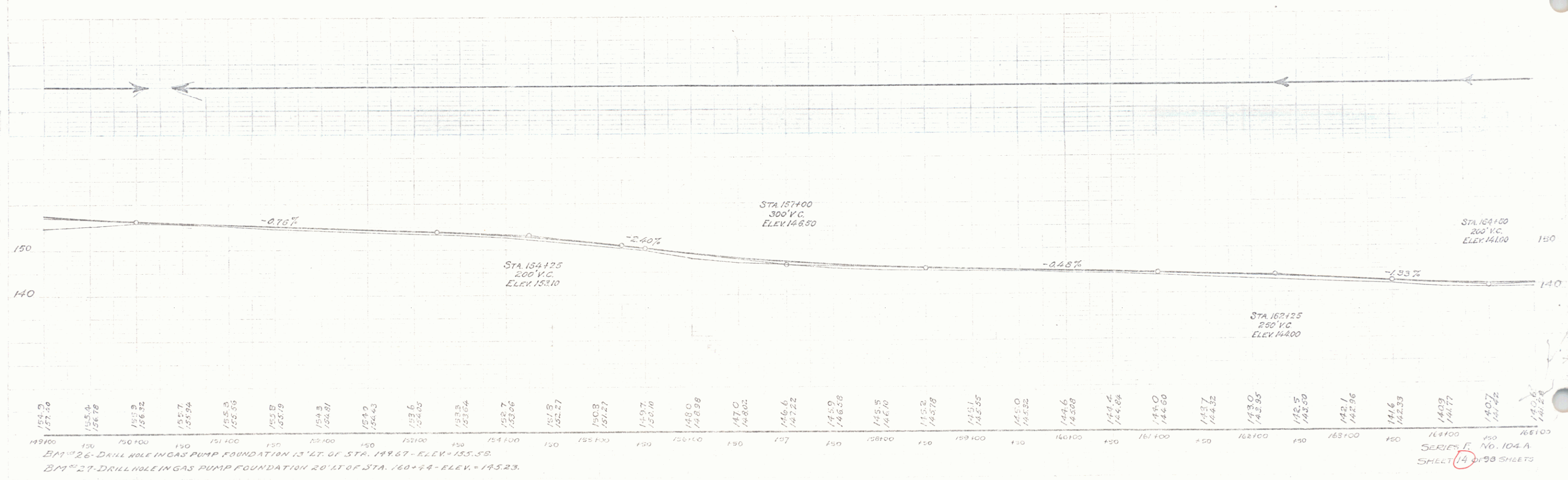
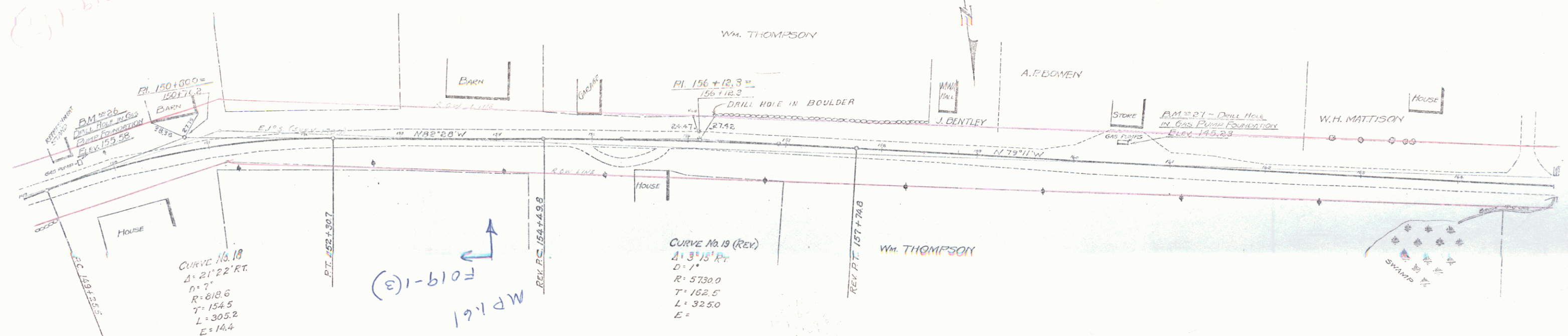
BM #24 - SPIKE IN ROOT OF 15' CLM 21.5' LX OF STA. 138+00 - ELEV. 157.71.
 BM #25 - SPIKE IN ROOT OF 8' CLM 27' LX OF STA. 145+50 - ELEV. 163.13.

SHEET 13 OF 38 SHEETS

Wood Guard Rail Required
 Stations Left Right
 157+00-162+00 10ft. 10ft.

104A 1929 1A 98

See Form 157



1A.DOE
 E.C. BALL
 Jan 1929

SHEET 14 OF 98 SHEETS

WOOD GUARD RAIL REQUIRED

Station	Dist.	Height
165100-165111	11 ft.	14 ft.
165111-165155	44 ft.	24 ft.
172145-172160	15 ft.	24 ft.
175159-176113	54 ft.	24 ft.
177182-178100	18 ft.	18 ft.

NEW BRIDGE CONC. PIPE GUARDRAIL REQUIRED

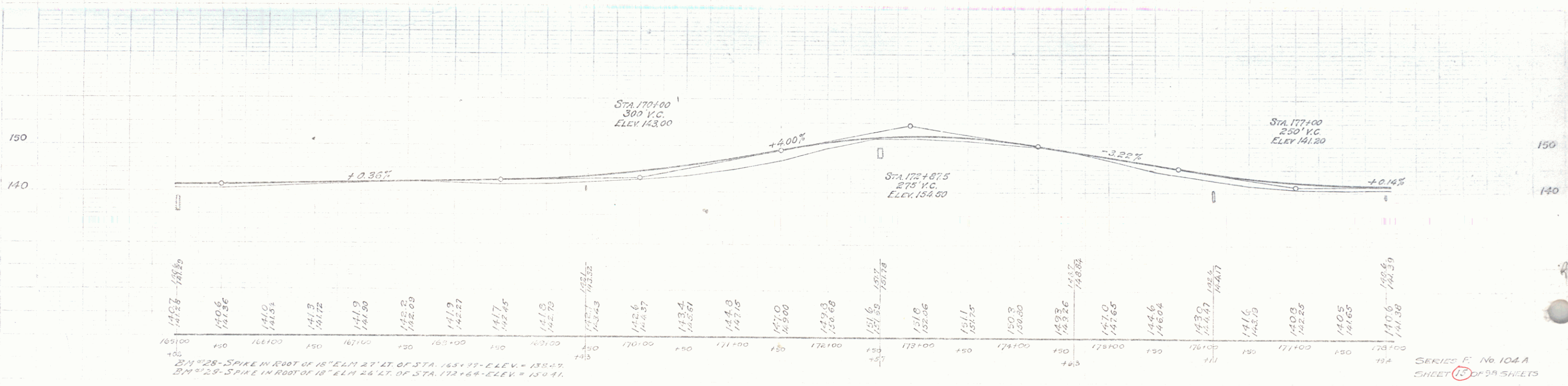
Station	Width	Length	Center	Base	Notes
165143	18"	35 ft.	32.4	34	3.2
176109	30"	35 ft.	32.4	34	3.2
177195	13"	32 ft.	32.4	34	3.2

CULVERT REPAIRS REQUIRED

Station	Size	Type	Notes
172160	42"	Box	22 ft.

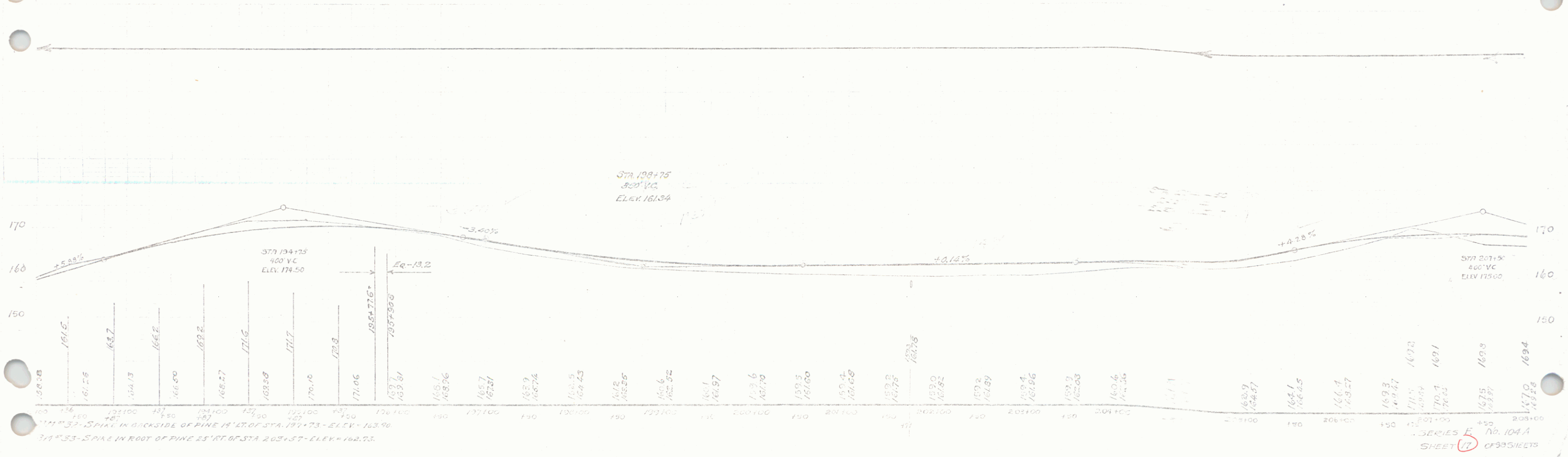
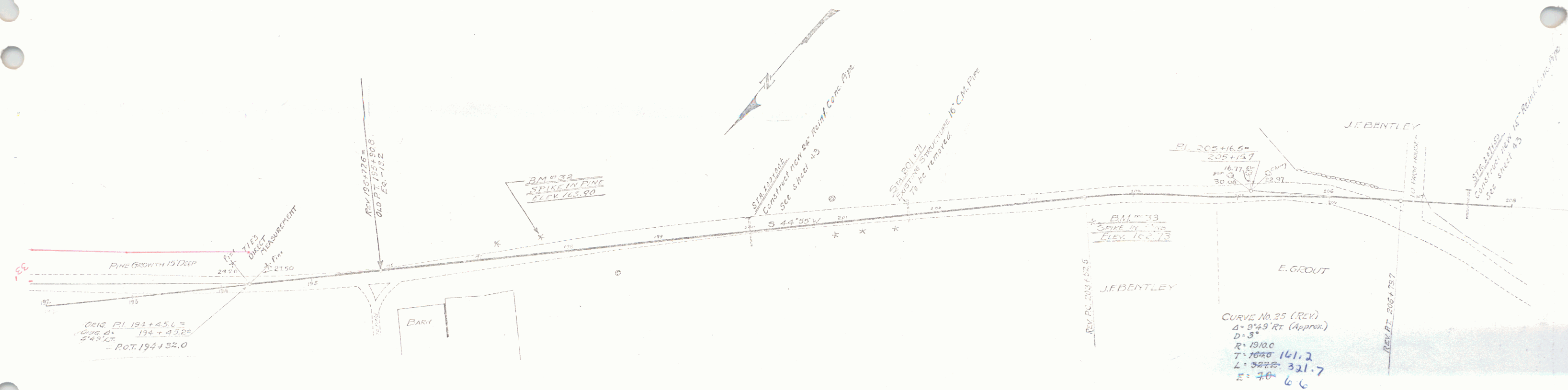
NEW DRIVEWAY PIPE CULVERTS REQUIRED

Station	Dist.	Length	Center	Base	Notes
175175	12'	10 ft.	16 ft.	16 ft.	



Woods Super Rev. Required
Station Left Right
199+00 199+11 14 ft. 14 ft.

NEW PINE CANS PIPE CULVERTS REQUIRED
Station Width Depth Spacing Steel Gauge A
200+00 20' 31.71 3' 5.58" 10' 2.42 ft.
200+00 20' 31.71 3' 5.58" 10' 2.42 ft.



SERIES E No. 104 A
SHEET 17 OF 35 SHEETS

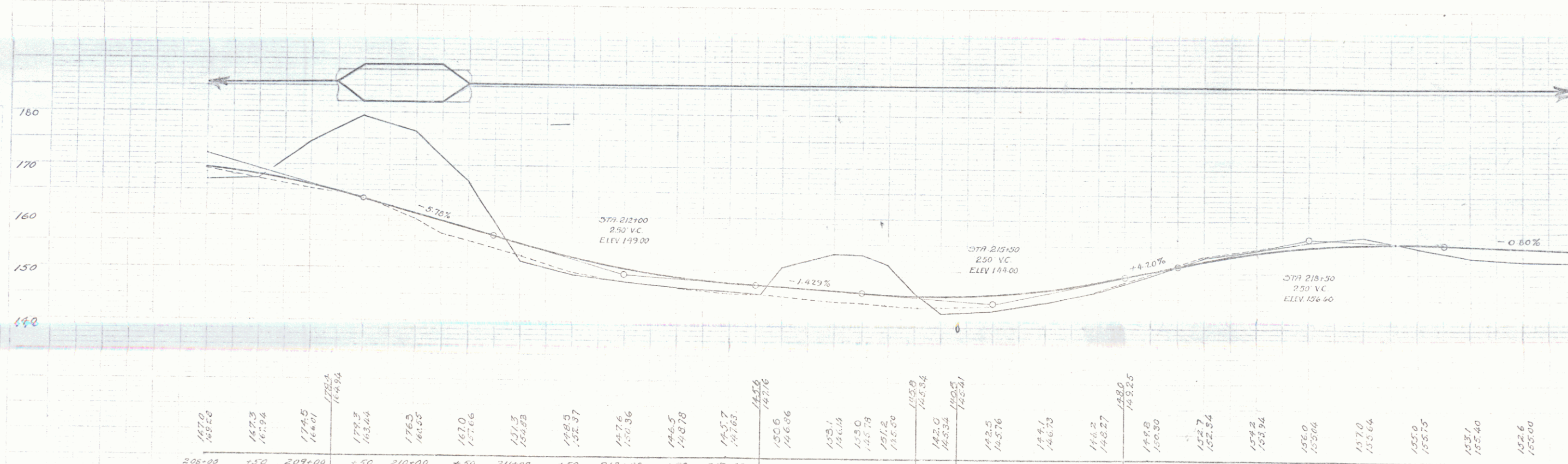
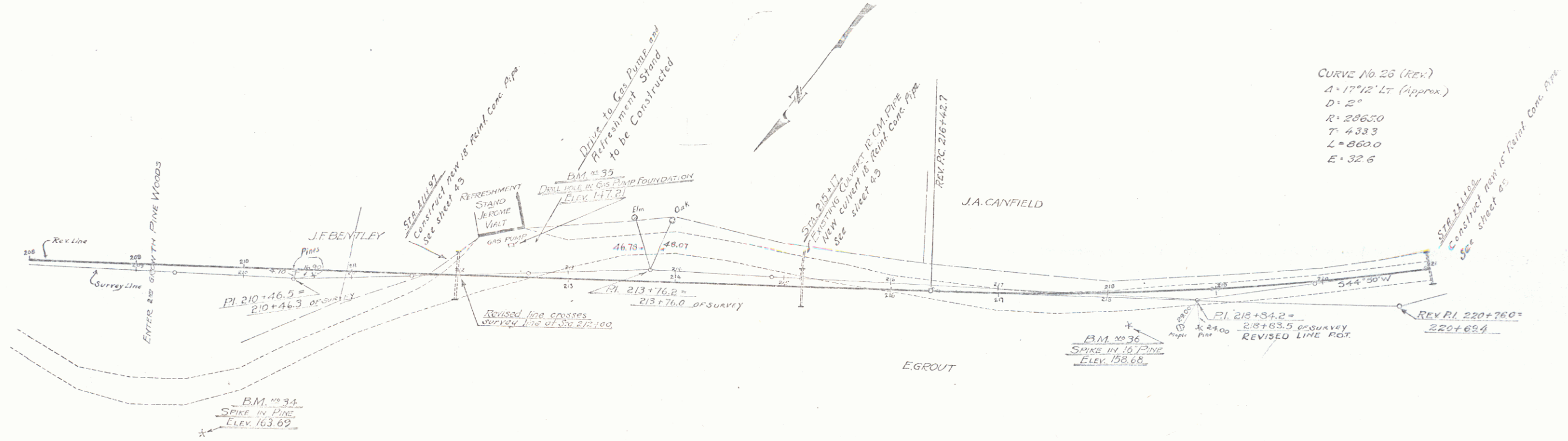
WIDE GUARD RAIL REQUIRED

Station	Left	Right
215+65-215+75	24 ft.	14 ft.
217+85-217+95	21 ft.	21 ft.
220+65-221	12 ft.	12 ft.

NEW REINFORCED CONCRETE PIPE CHUTE REQUIRED

Station	Width	Conc. B.	Steel
211+37	18"	30 c.y.	33" 34
217+15	18"	30 c.y.	33" 34
221+60	15"	26 ft.	33" 34

NO. 104A (SER. 10) 73



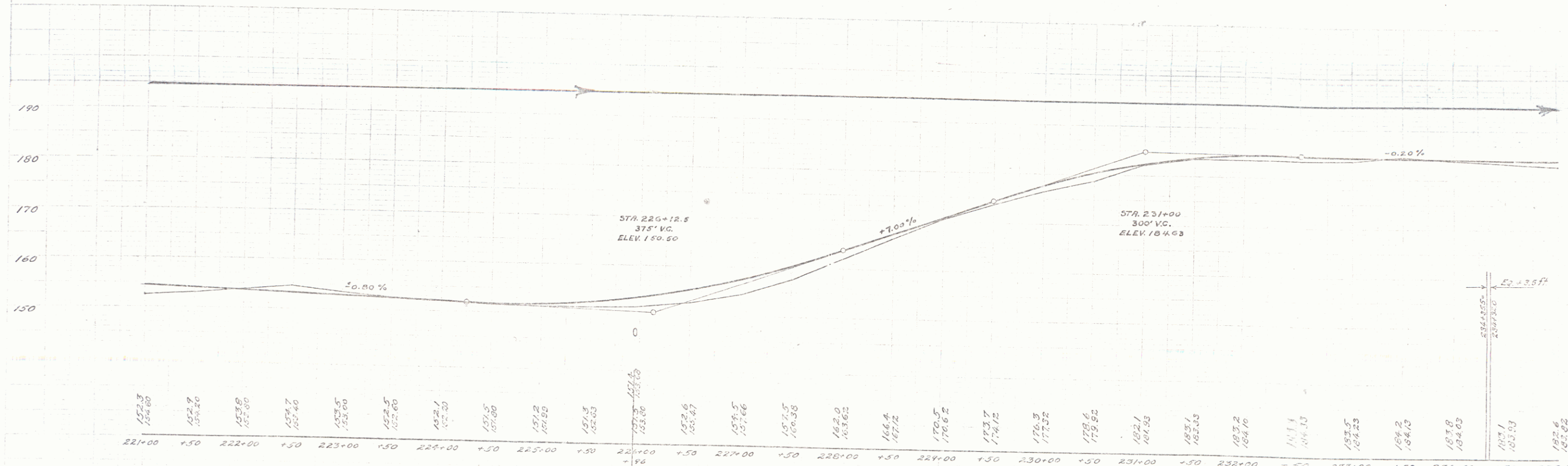
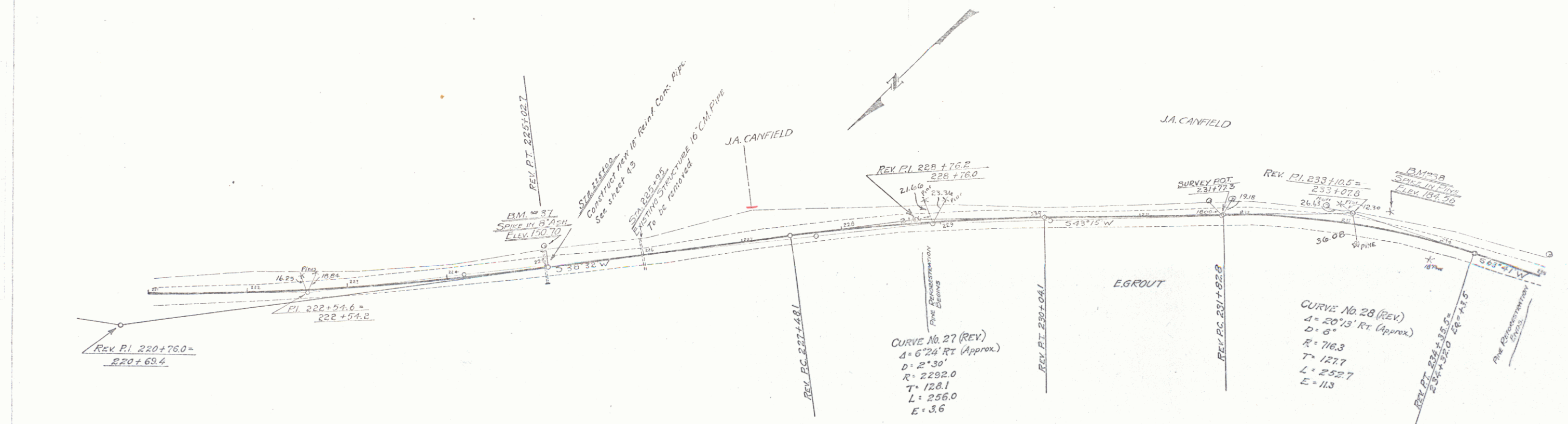
BM 34 - SPIKE IN ROOT OF PINE ON RT OF OLD HIGHWAY - ELEV. 163.69
 BM 35 - DRILL HOLE IN GAS PUMP FOUNDATION 24" LT. OF STA. 212+47 - ELEV. 147.21
 BM 36 - SPIKE IN ROOT OF 16" PINE 26' RT OF STA. 218+18 - ELEV. 158.68

SERIES F. NO. 104A. SHEET 18 OF 90 SHEETS

WOOD GUARD RAIL REQUIRED
 Station 221+00 to 221+12
 12' 12" 12' 12"

CABLE GUARD RAIL REQUIRED
 Station 225+45 to 276+73
 128' 4"

NEW RAIN CONC PIPE CURBIS REQUIRED
 Station 226+00
 15' 32" 3' 6" 34"



BM 37 - SPIKE IN TRUNK OF 8" ASH 37' LT. OF STA. 224+95 - ELEV. 150.70.
 BM 38 - SPIKE IN ROOT OF PINE 15' LT. OF STA. 233+42 - ELEV. 184.56.

WOOD GUARD RAIL REQUIRED

Station	Left	Right
235160-235166	24 ft	24 ft
236158-236162	24 ft	24 ft
240157-240161	24 ft	24 ft

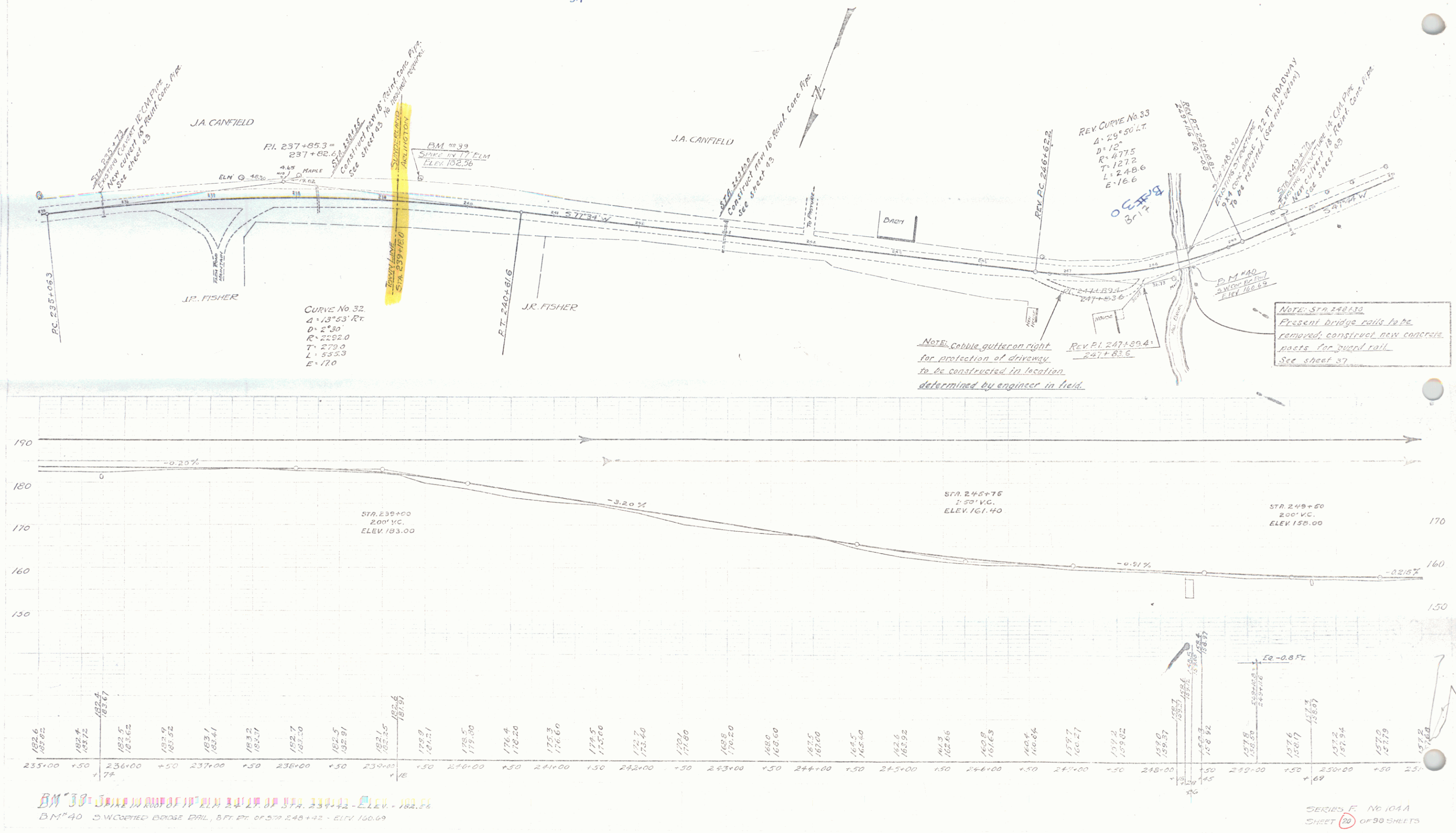
CABLE GUARD RAIL REQUIRED

Station	Left	Right
235160-235166	24 ft	24 ft
236158-236162	24 ft	24 ft
240157-240161	24 ft	24 ft

NEW REINFORCED CONCRETE PILES REQUIRED

Station	Depth	Length	Concrete	Steel
235174	15'	32 ft	3.0 cu yd	34#
238175	18'	32 ft	3.0 cu yd	34#
240176	18'	32 ft	3.0 cu yd	34#
249178	18'	32 ft	3.0 cu yd	34#

1044 1924 20 20



BM 39 = SPIKE IN TOP OF PILE AT STA. 234+42 - ELEV. 182.56
 BM 40 = EXISTING BRIDGE PILE, 8 FT. E. OF STA. 248+42 - ELEV. 160.69

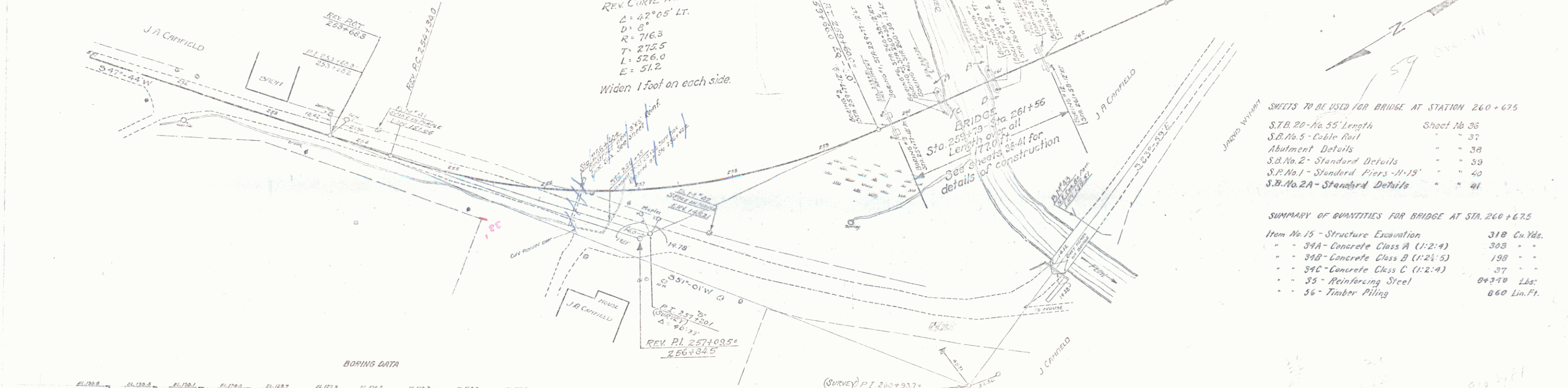
SERIES F. No 104A
 SHEET 20 OF 90 SHEETS

CABLE GUARD RAIL REQUIRED
 Stations Left Right
 258+05-263+00 495 ft.
 258+16-262+39 423'

NEW REINFORCED CONCRETE CHUTE REQUIRED
 Size Length Station
 250" x 34" 54' 2500'

Period of Installation Date of Grantor Grantor Recorded Remarks
 PLACED Q.C.D. 3-14-32 M&E Confid. Staff 24 240 241 11-14-32

REV. CURVE No. 34 B
 Δ = 42° 05' LT.
 D = 8'
 R = 716.3
 T = 275.5
 L = 526.0
 E = 51.2
 Widen 1 foot on each side.

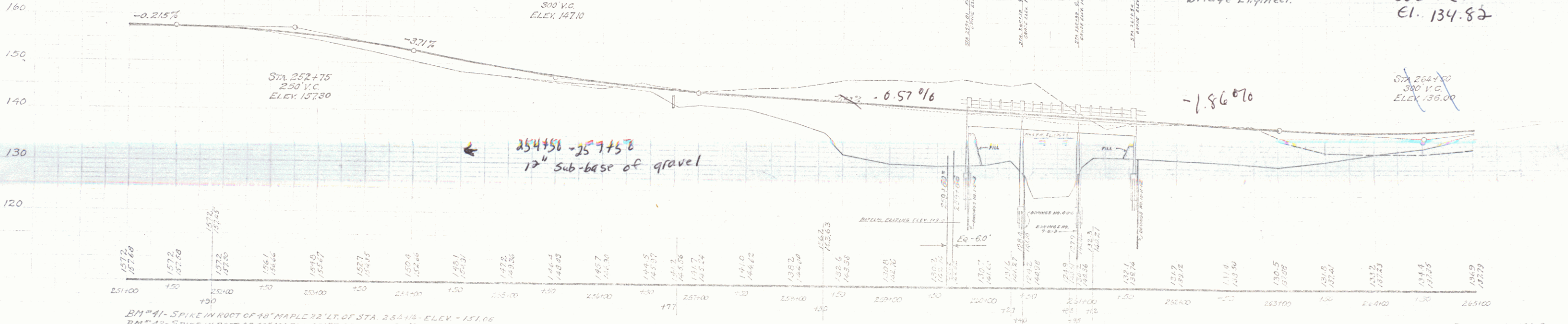


SHEETS TO BE USED FOR BRIDGE AT STATION 260+67.5
 S.B. No. 5 - Cable Rail Sheet No. 36
 S.B. No. 5 - Cable Rail " " 37
 Abutment Details " " 38
 S.B. No. 2 - Standard Details " " 39
 S.P. No. 1 - Standard Piers - 11' 15' " " 40
 S.B. No. 2A - Standard Details " " 41

SUMMARY OF QUANTITIES FOR BRIDGE AT STA. 260+67.5
 Item No. 15 - Structure Excavation 318 Cu. Yds.
 " 34A - Concrete Class A (1:2:4) 303 " "
 " 34B - Concrete Class B (1:2:5) 198 " "
 " 34C - Concrete Class C (1:2:4) 37 " "
 " 35 - Reinforcing Steel 84340 Lbs.
 " 56 - Timber Piling 660 Lin. Ft.

BORING DATA

NO.	NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12
EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8
EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8
EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8	EL. 138.8



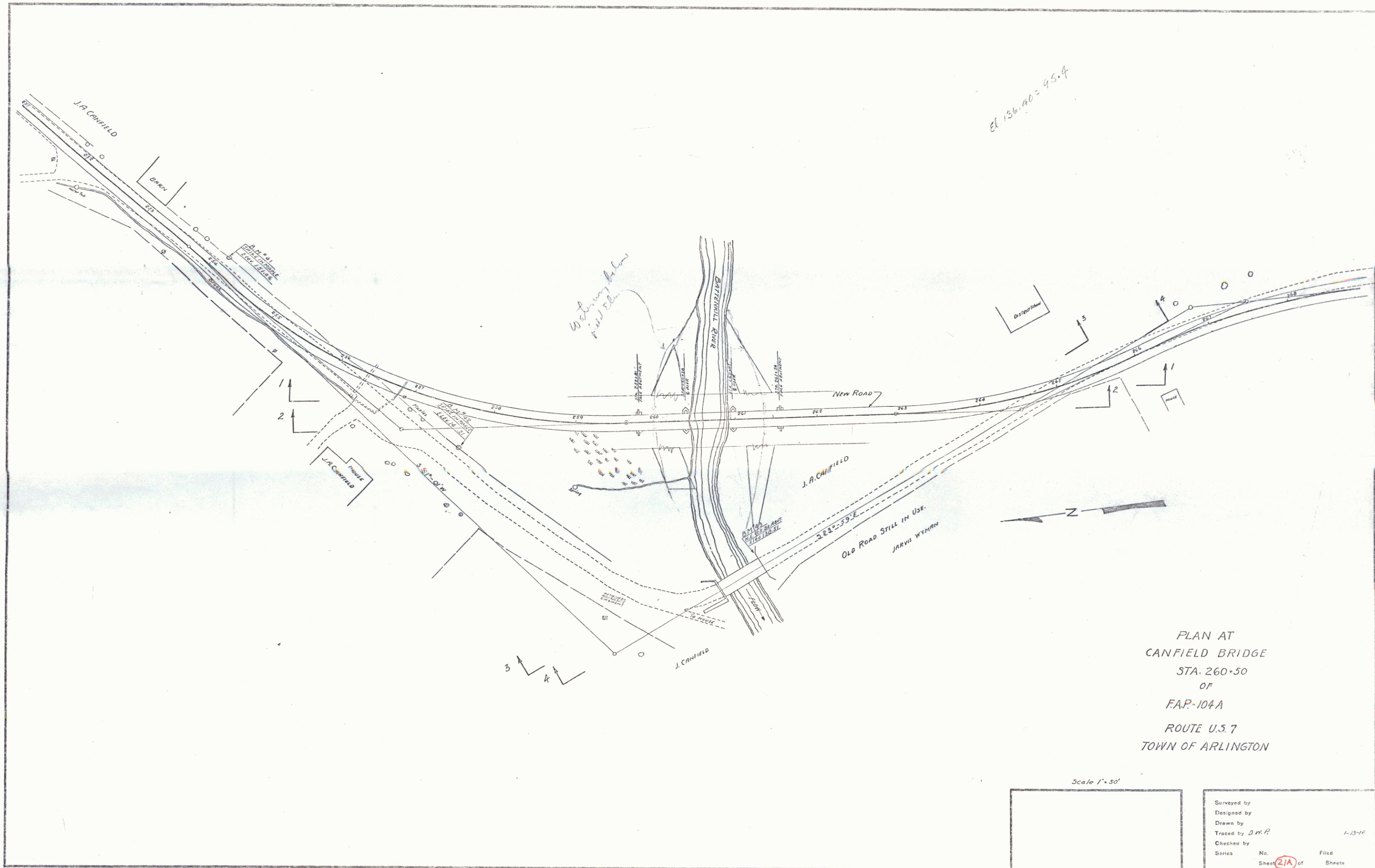
BM #41 - SPIKE IN ROOT OF 48" MAPLE 23' LT. OF STA. 254+45 - ELEV. 157.06
 BM #42 - SPIKE IN ROOT OF 40" MAPLE 48' RT. OF STA. 257+10 - ELEV. 148.21
 BM #43 - N.E. CORNER OF BRIDGE ABUT. 165' RT. OF STA. 257+10 - 2" P.C. & 12.5' S.

Correct
 Bridge Engineer.

264+00
 300 V.C.
 El. 134.82

Sta. 264+75
 300 V.C.
 Elev. 138.00

DESIGNED BY 104-A
 SHEET 31 OF 39



NEW REIN. CONC. PIPE CULVERTS REQUIRED.

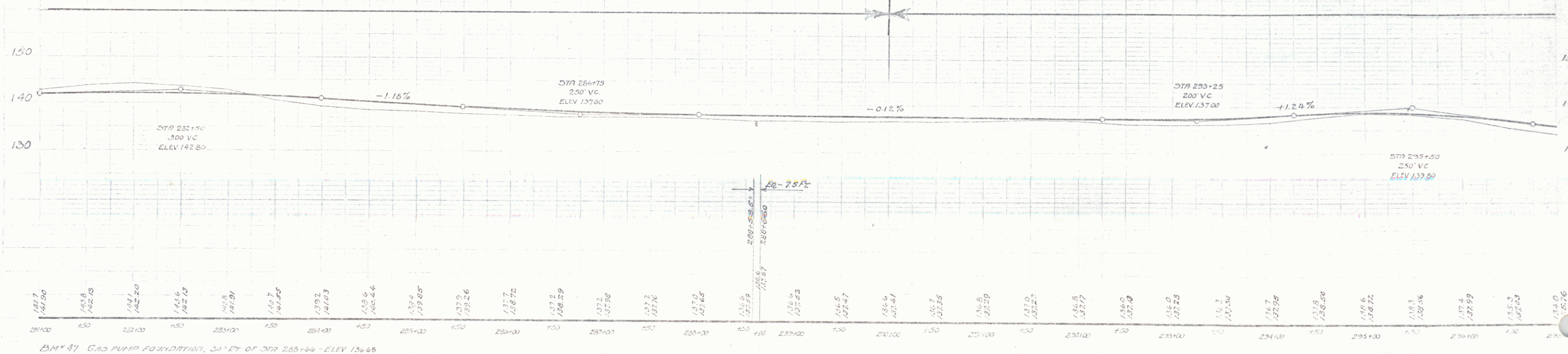
Station	Diam.	Length	Conc. H	Conc. B	Steel
2891+00	15"	32 ft.	100% N.C.Y.	100% N.C.Y.	116#
293+00	15"	32 ft.	100% N.C.Y.	100% N.C.Y.	116#

0.6
1.4

CURVE No. 38 (REV.)
 $\Delta = 7^{\circ} 40' \text{ LT. Approx}$
 $D = 4^{\circ}$
 $R = 1432.5$
 $T = 96.0$
 $L = 191.7$
 $E = 3.2$
Do not bank

CURVE No. 40
 $4^{\circ} 5' 43''$ LT.
 $D = 3^{\circ}$
 $R = 1910.0$
 $T = 95.4$
 $L = 190.6$
 $E = 2.4$

CURVE No. 39
A = 13° 58' RT.
D = 5°
R = 1146.0
T = 140.4
L = 279.3
E = 8.6

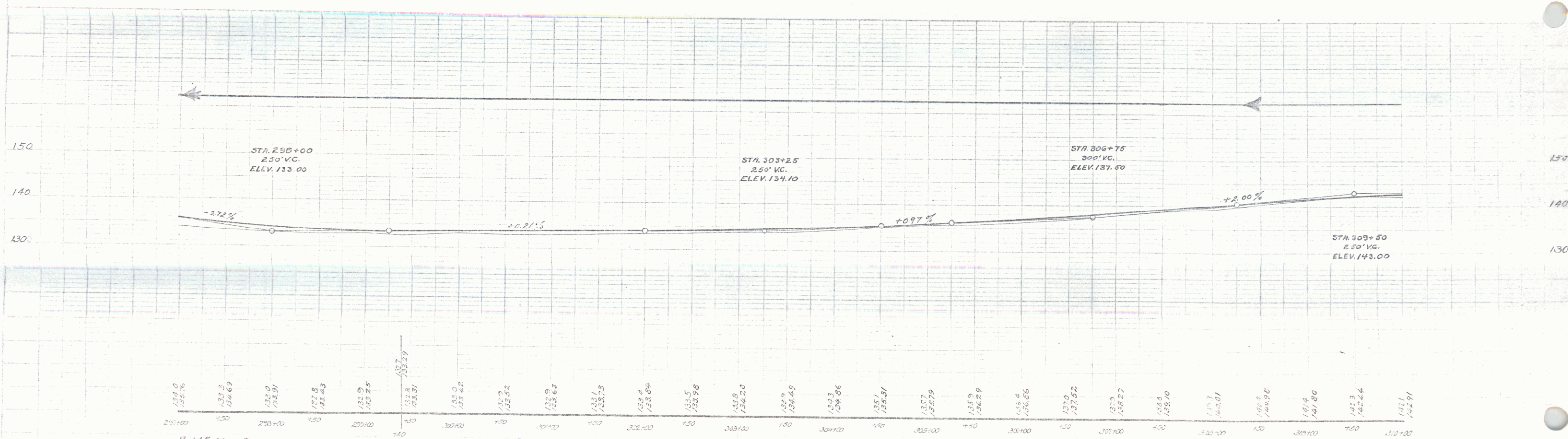
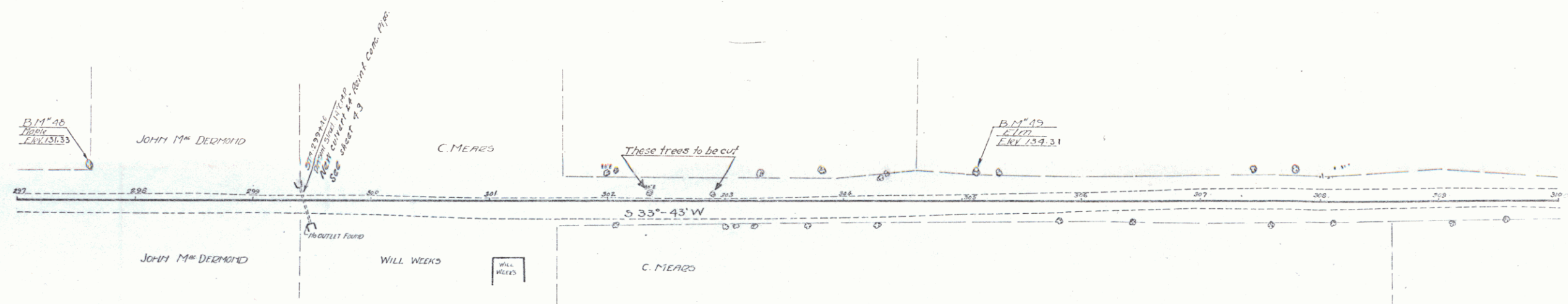


SERIES F NO. 104-A
SHEET 23 OF 98

Wood Guard Rail Required
 Stations Left Right
 293+26-299+51 24 ft 24 ft

NEW 18" CONC PIPE CULVERTS REQUIRED
 Station Diam. Leng. Culvert Slope
 298+40 24" 32 ft 3.9 6.8%

104A 1929 24 90



B.M. 48 SPIKE IN FOOT OF MAPLE 24 FT. LT. OF STA 297+63 - ELEV. 131.33
 B.M. 49 SPIKE IN ROOT OF ELM 20 FT. LT. OF STA 305+18 - ELEV. 134.31

Station	Elevation
297+00	131.0
297+10	131.2
297+20	131.4
297+30	131.6
297+40	131.8
297+50	132.0
297+60	132.2
297+70	132.4
297+80	132.6
297+90	132.8
298+00	133.0
298+10	133.2
298+20	133.4
298+30	133.6
298+40	133.8
298+50	134.0
298+60	134.2
298+70	134.4
298+80	134.6
298+90	134.8
299+00	135.0
299+10	135.2
299+20	135.4
299+30	135.6
299+40	135.8
299+50	136.0
299+60	136.2
299+70	136.4
299+80	136.6
299+90	136.8
300+00	137.0
300+10	137.2
300+20	137.4
300+30	137.6
300+40	137.8
300+50	138.0
300+60	138.2
300+70	138.4
300+80	138.6
300+90	138.8
301+00	139.0
301+10	139.2
301+20	139.4
301+30	139.6
301+40	139.8
301+50	140.0
301+60	140.2
301+70	140.4
301+80	140.6
301+90	140.8
302+00	141.0
302+10	141.2
302+20	141.4
302+30	141.6
302+40	141.8
302+50	142.0
302+60	142.2
302+70	142.4
302+80	142.6
302+90	142.8
303+00	143.0

SECTION 10 104-A
 SHEET 24 1929

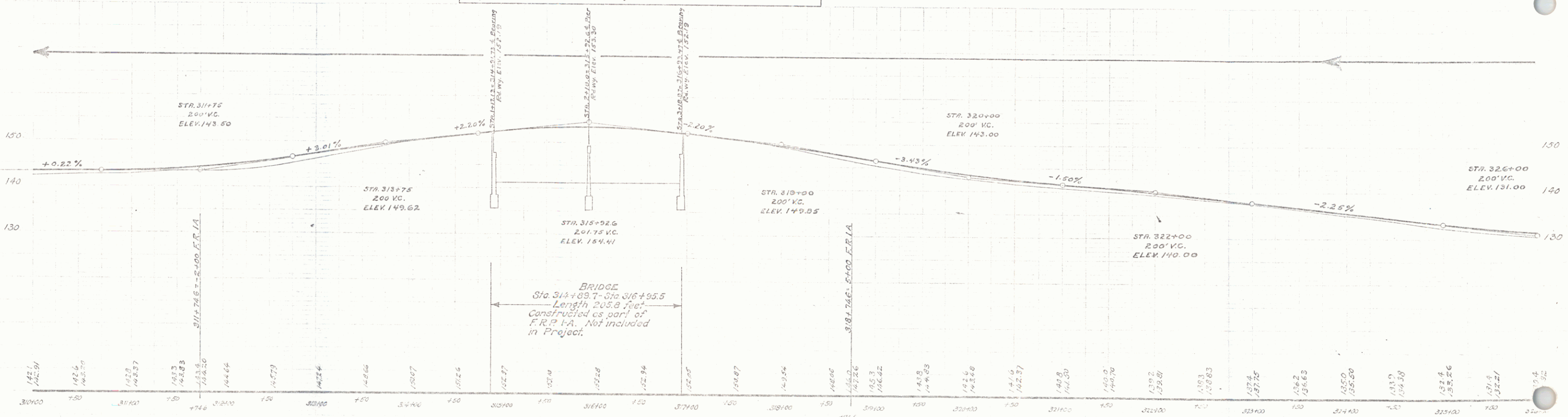
B.D. Dox
E. H. Hansen
1928

B.D. Dox
E. H. Hansen
1928



NOTE:
The grade as shown on this sheet may require the removal of material by the contractor on Project 104-A, or the contractor may put in the embankments by the contractor on Project F.R.I.A. due to the latter's filling to finished rather than sub-grade elevations.

NOTE:
Recross sections will be taken over Project F.R.I.A. as soon as the Project is completed, and these new sections are to be used for computing earthwork quantities on Project 104-A.
The contract for Project F.R.I.A. calls for the construction of guard rail, the location of which is not shown on these plans. The contractor on Project 104-A will be required to leave this rail in satisfactory condition following the completion of his work, and any expense incurred in this connection must be assumed by the contractor and not by the State.



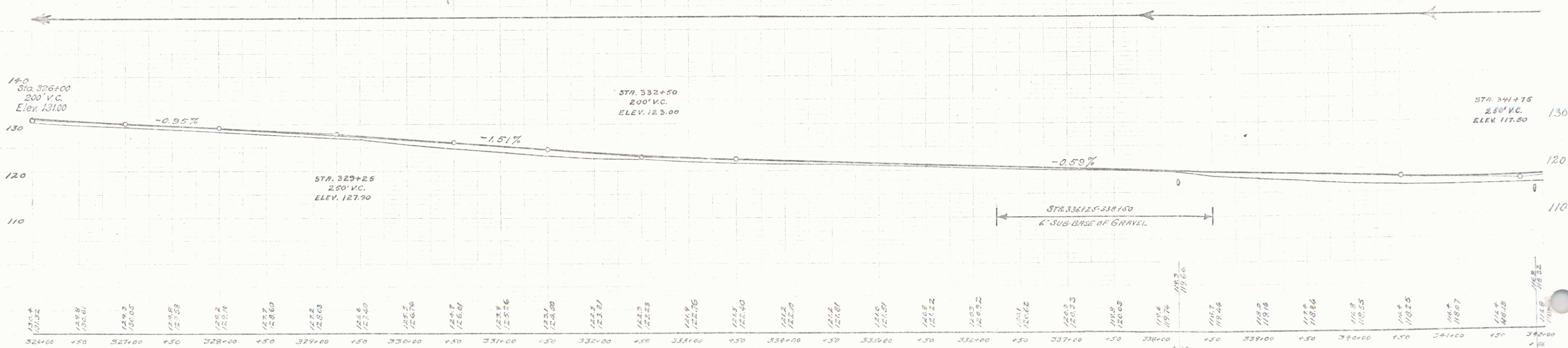
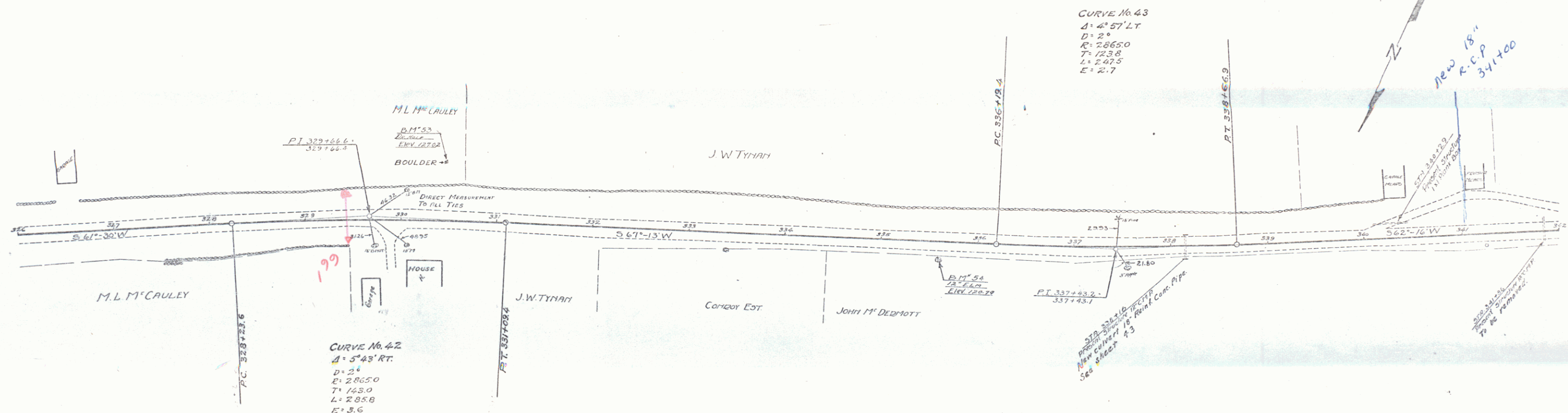
BM# 50 SPIKE IN POST MARK, 75' LT OF STA. 311-105 - ELEV. 146.19 * BM# 1 OF F.R.I.A. ELEV. 100.00
BM# 51 SPIKE IN POST MARK, 21' LT OF STA. 318+63 - ELEV. 147.03
BM# 52 SPIKE IN POST MARK, 21' LT OF STA. 323+32 - ELEV. 136.03

SEDS E.D. 104-A
Sheet 23 of 98

WOOD GUARD RAIL REQUIRED
 Station Left Right
 338+15 338+12 34+ 24+H

NEW REIN CONC PIPE CULVERTS REQUIRED

Station	Diam.	Len.	Conc. B.	Steel
338+17	18"	32 ft.	3.6	3.4
341+00	18"	32 ft.	3.6	3.4



BM 53 - DRILL HOLE IN BOULDER 59' LT. OF STA. 330+48 - ELEV. = 127.02
 BM 54 - SPIKE IN TRUNK OF 12" ELM 16' RT. OF STA. 335+60 - ELEV. = 120.79

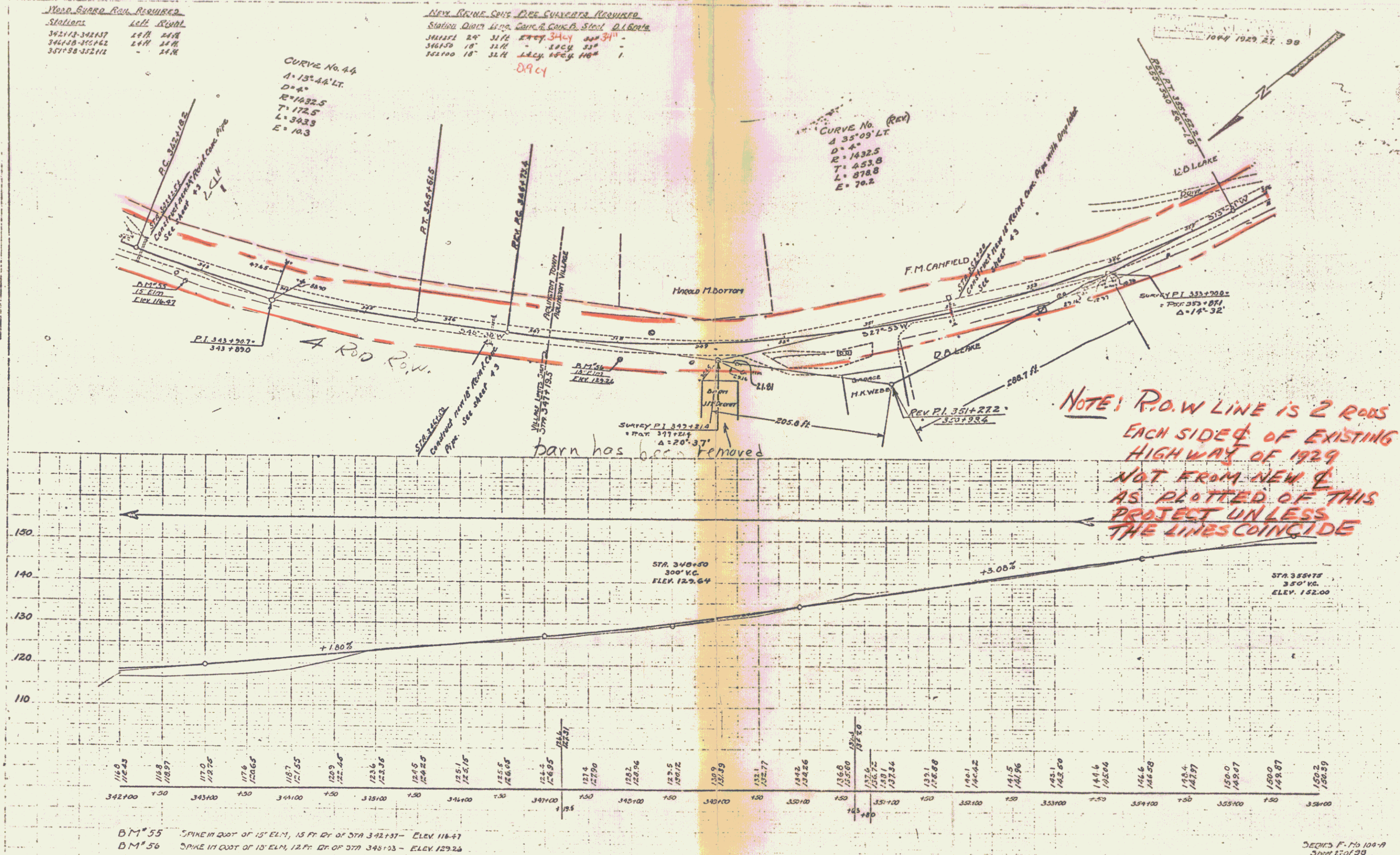
SHEET 28 OF 30

YOUR BURD ROW REQUIRED
 Stations Left Right
 342113-342117 24' 24'
 344110-344112 24' 24'
 347108-347112 24' 24'

NEW RISING CURVE DATA REQUIRED
 Station Curve 1500' 342113-342117 24' 24'
 344110-344112 24' 24'
 347108-347112 24' 24'

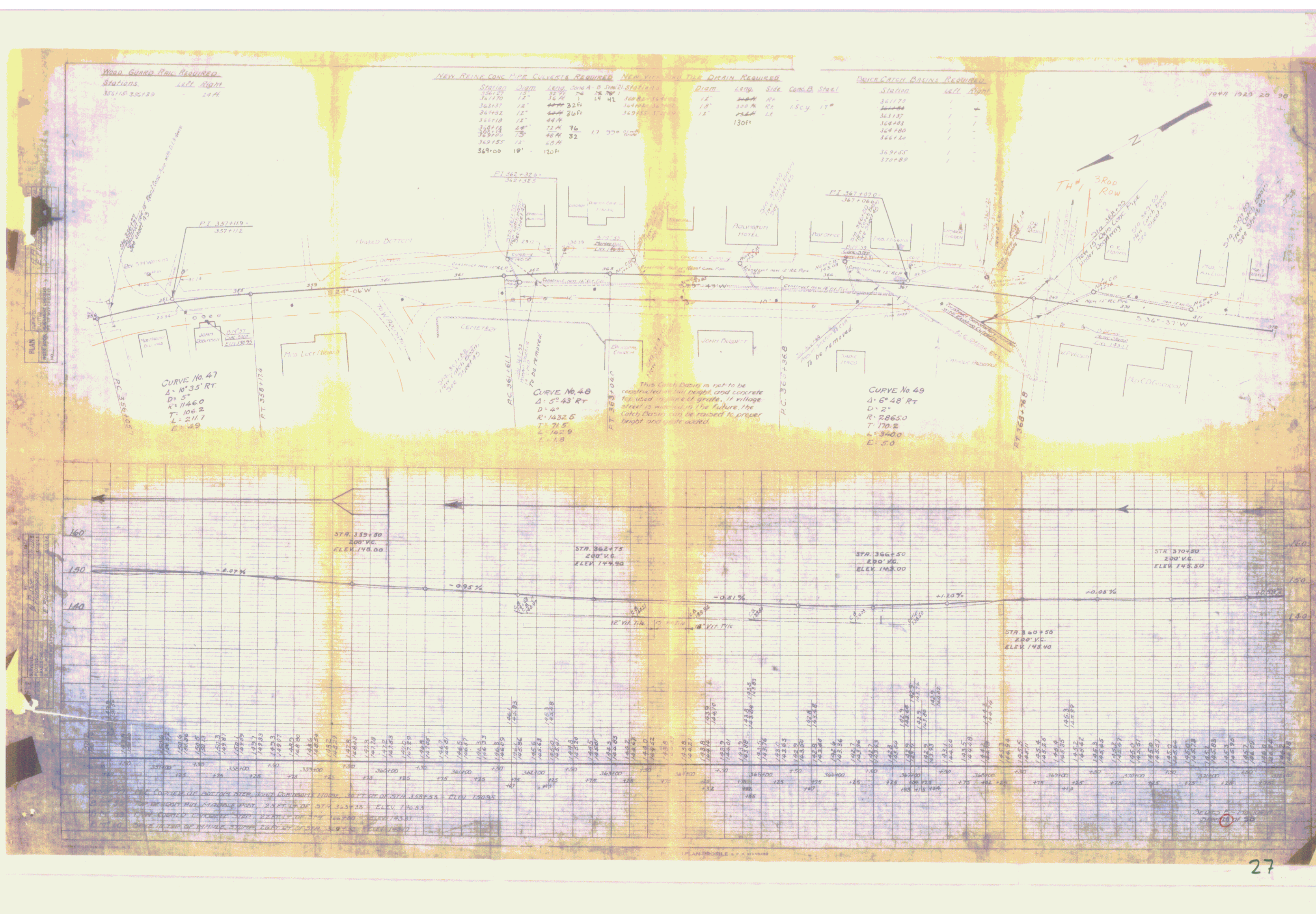
CURVE No. 44
 $\Delta = 13^\circ 44' LT.$
 $D = 4^\circ$
 $R = 1432.5$
 $T = 172.5$
 $L = 343.3$
 $E = 10.3$

CURVE No. (REV)
 $\Delta = 35^\circ 09' LT.$
 $D = 4^\circ$
 $R = 1432.5$
 $T = 453.8$
 $L = 878.8$
 $E = 70.2$



JAN 12 1978

992775
 Replacement



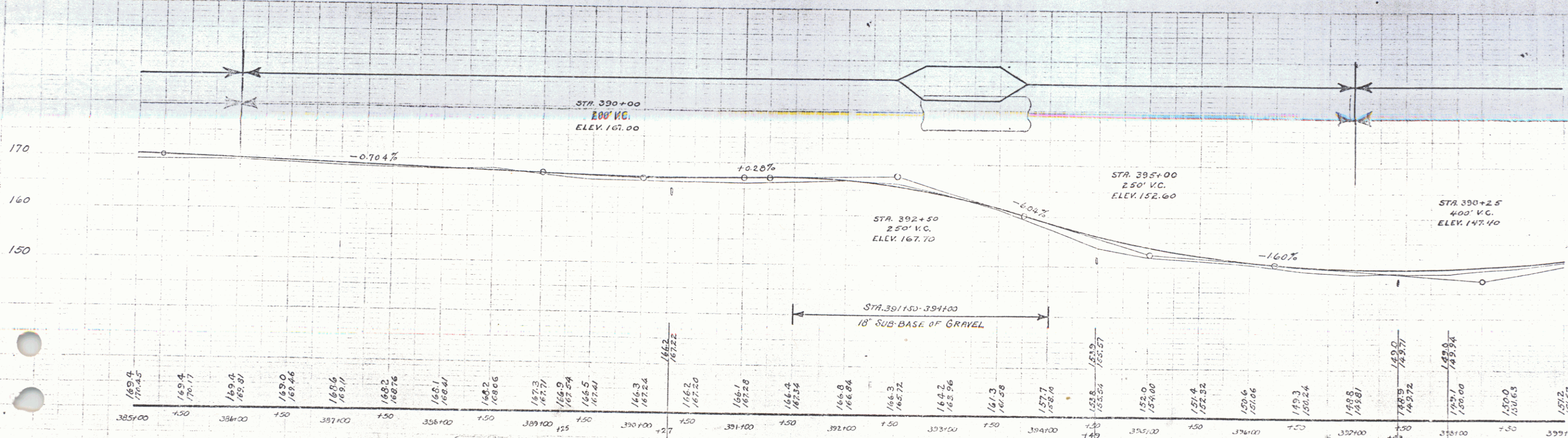
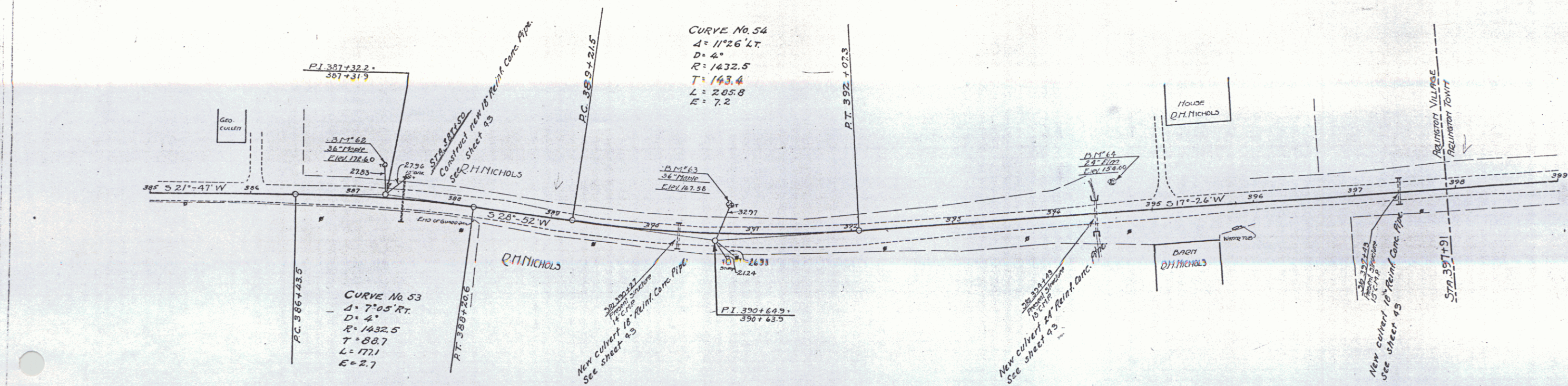
Wood Guard Rail Required

Stations	Left	Right
387+00-387+05	24" H	24" H
387+05-387+10	24" H	24" H
387+10-387+15	24" H	24" H

Cable Guard Rail Required

Stations	Left	Right
387+00-387+05	42" H	42" H
387+05-387+10	42" H	42" H
387+10-387+15	42" H	42" H

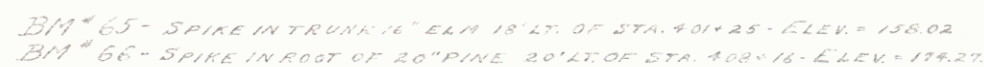
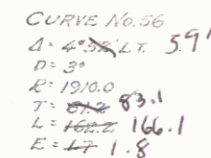
387+15	15'	44' H	-	3.0 c.y.	33"
387+20	18'	32' H	-	3.0 c.y.	33"
387+25	24'	32' H	3.4 c.y.	-	34"
387+30	18'	32' H	-	3.0 c.y.	33"



D.M. 62 SPIKE IN FOOT OF 36" PILE, 36 FT. LT. OF STA 387+31 - ELEV. 172.40
 D.M. 63 SPIKE IN FOOT OF 36" PILE, 36 FT. LT. OF STA 390+79 - ELEV. 167.59
 D.M. 64 SPIKE IN FOOT OF 24" ELM, 24 FT. LT. OF STA 394+68 - ELEV. 154.60

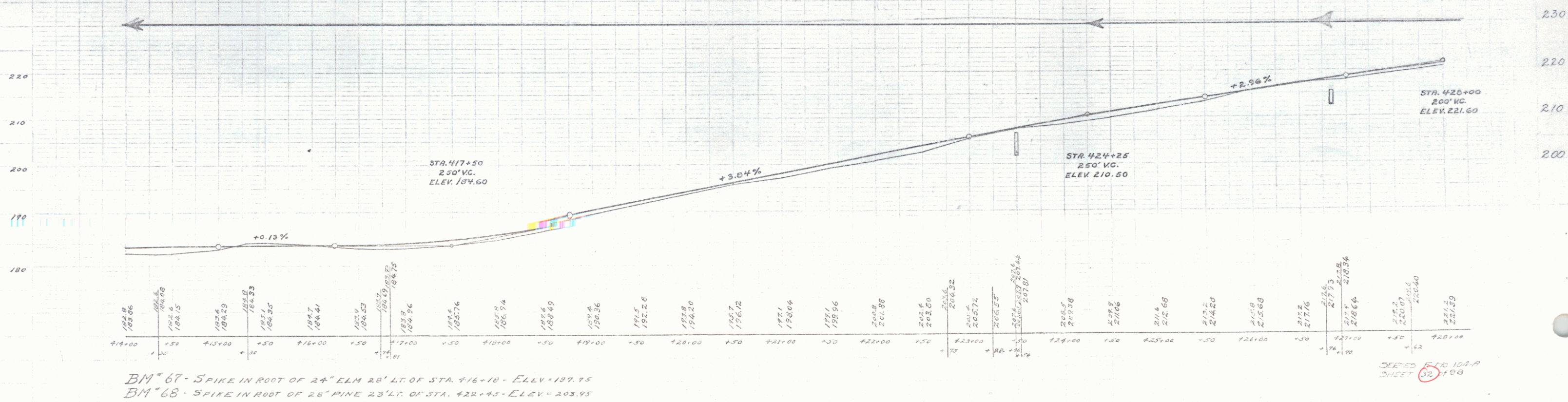
NEW REINFORCED CONCRETE CULVERTS REQUIRED

<u>Station</u>	<u>Diam.</u>	<u>Length</u>	<u>Conc. A</u>	<u>Conc. B</u>	<u>Steel</u>
A08107	18"	32.4	-	34	30 34
A13192	18"	32.4	-	34	30 34



<u>CABLE GUARD RAIL REQUIRED</u>		
<u>Stations</u>	<u>Left</u>	<u>Right</u>
144-145		145

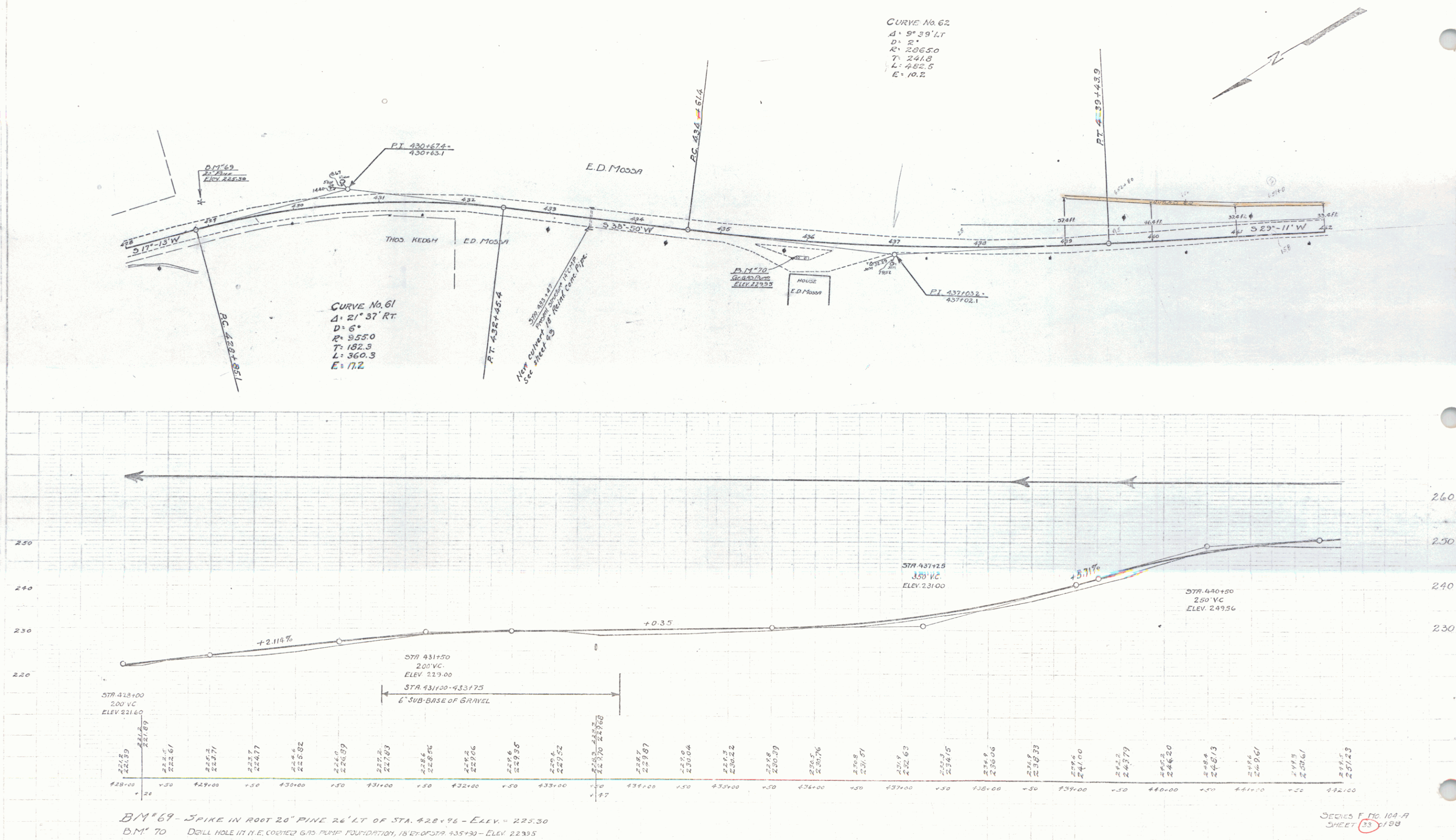
NEW REIN CONC. PILE CULVERTS REQUIRED					NEW REIN CONC. BOX CULVERTS REQUIRED				
Station	Diam.	Length	Conc. H	Steel	Dinlet	Station	Size	Conc. H	Steel
41+00 - 18"	36 ft	1000 ft	1000 ft	121	425 x 8	425 x 8	1620 ft	1000 ft	1620 ft
41+14 - 24"	40 ft	1000 ft	1000 ft	50	425 x 8	425 x 8	1620 ft	1000 ft	1620 ft
73	40	35					23.9		



NEW REINFC CONC PIPE CULVERTS REQUIRED

<u>Station</u>	<u>Diam</u>	<u>Length</u>	<u>Conc.</u>	<u>B</u>	<u>Steel</u>
435+47	18"	31 ft	200 y.	28"	34
			2.8		

CURVE No. 62
A = 9° 39' LT
D = 2°
R = 2865.0
T = 241.8
L = 482.5
E = 10.2

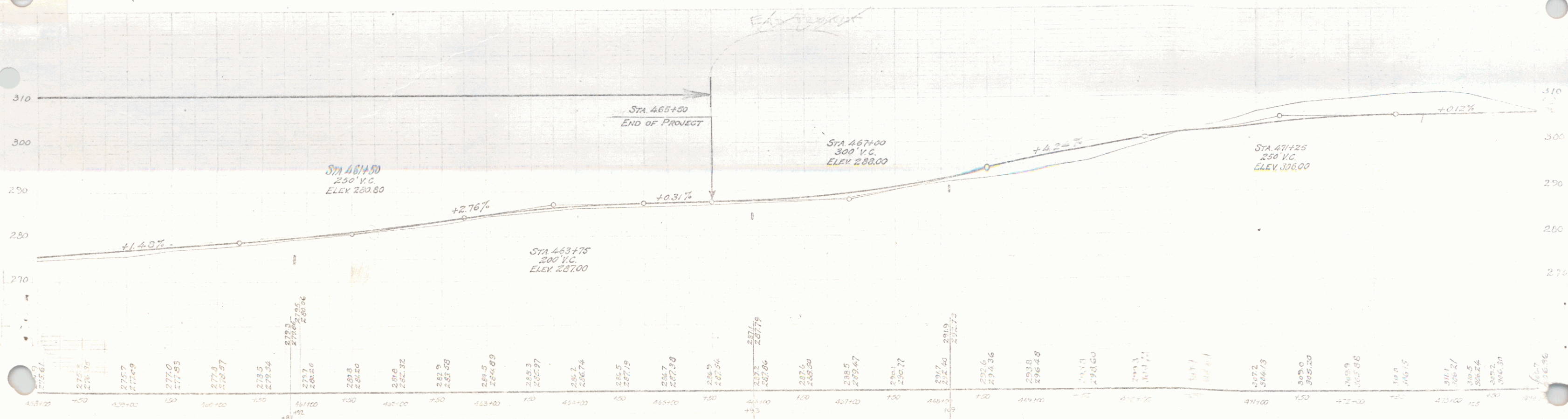
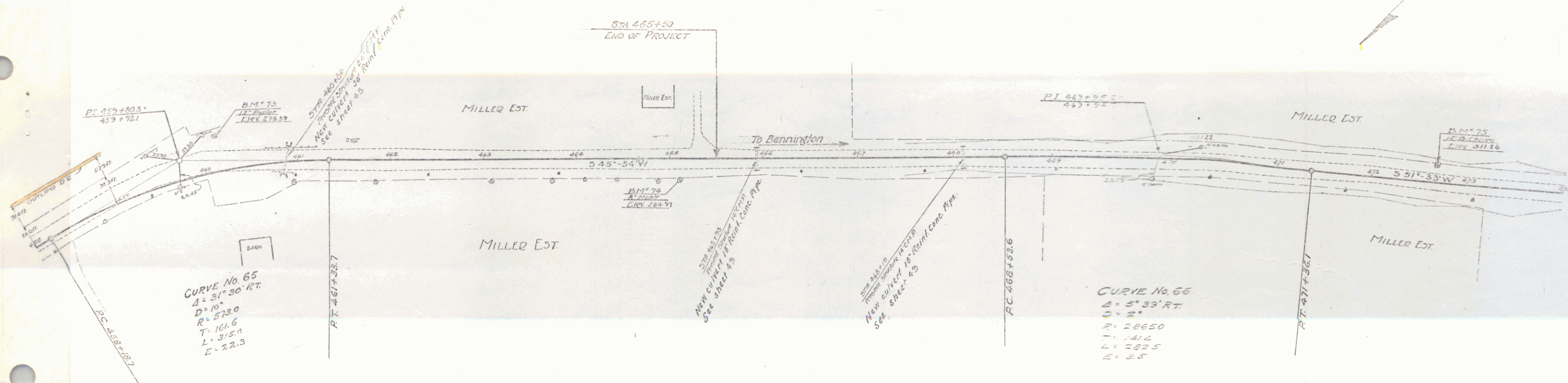


WIDE GUARD RAIL REQUIRED

Station	Left Right
4601.60 - 4601.83	Left
4601.83 - 4601.85	Right
4601.85 - 4601.87	Left
4601.87 - 4601.89	Right

NEW REIN. CONC. PIPE CULVERTS REQUIRED

Station	From	To	Length	Notes
4601.60	32	35	3.4	See sheet 34
4601.83	10	32	22.2	See sheet 34
4601.85	15	32	17.2	See sheet 34



STEARNS R. JENKINS

SERIES F NO. 104-A
Sheet 36 of 98

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INDEX OF SHEETS

SHEET NO.	TITLE PAGE
1	TYPICAL CROSS-SECTION OF IMPROVEMENT & SUMMARY OF QUANTITIES
2-7	LAYOUT SHEETS
8	STANDARD STRUCTURE SHEET 5-35 (CONCRETE CRIBBING)
9-24	CROSS SECTION SHEETS

STATE OF VERMONT
STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY
FEDERAL AID PROJECT

ROADSIDE IMPROVEMENT
PLANTING PLANS

TOWNS OF MANCHESTER-
SUNDERLAND-ARLINGTON
MANCHESTER-BENNINGTON ROAD
ROUTE U.S. 7

BEGINNING AT STA. 0+00 OF PROJECT F.A. 104-A
AND EXTENDING SOUTHERLY TO STA. 355+00

LENGTH OF PROJECT 29,282.9 FEET = 5.546 MILES



ROADSIDE DIVISION

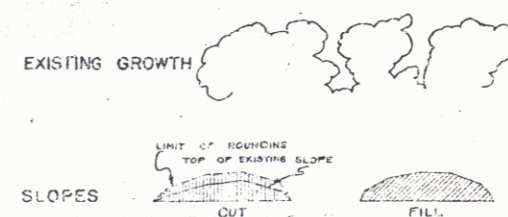
TOWN FILE

PERPETUAL

of 557

(To Be Returned To R.O.W. Division)

CONVENTIONAL SIGNS



COUNTY LINE
TOWN LINE
FENCE LINE
STONE WALL
UNFENCED PROPERTY (R.O.W.)
QUADRAIL
TRAVELED WAY (UNPAVED)
RAILROAD (METALLED)
CENTER LINE
SURVEY LINE
CULVERT
SHOULDER POLE
POWER POLE
YELLOW POLE
TRAFFIC HARDWOOD
LYNGREEN
WEDGE

GROUND ELEVATION
GRADE ELEVATION

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

SCALES

TYPICAL SECTIONS AS INDICATED
LAYOUTS 1" = 50'

NOTE
These plans are subject to such revisions as may be required by the Bureau of Public Roads or the Commissioner of Highways. Construction is to be carried on in accordance with the plans and Standard Road and Bridge Specifications of 1936, as approved December 29, 1936 by the Bureau of Public Roads, including all subsequent approved revisions and such revised specifications and special provisions as are submitted with the plans.

APPROVED: May 2, 1937

COMMISSIONER OF HIGHWAYS

SUBMITTED BY ORDER OF THE STATE HIGHWAY DEPARTMENT

APPROVED: 7/10/37

STATE HIGHWAY DEPARTMENT

RECOMMENDED

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

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