9408 7 111
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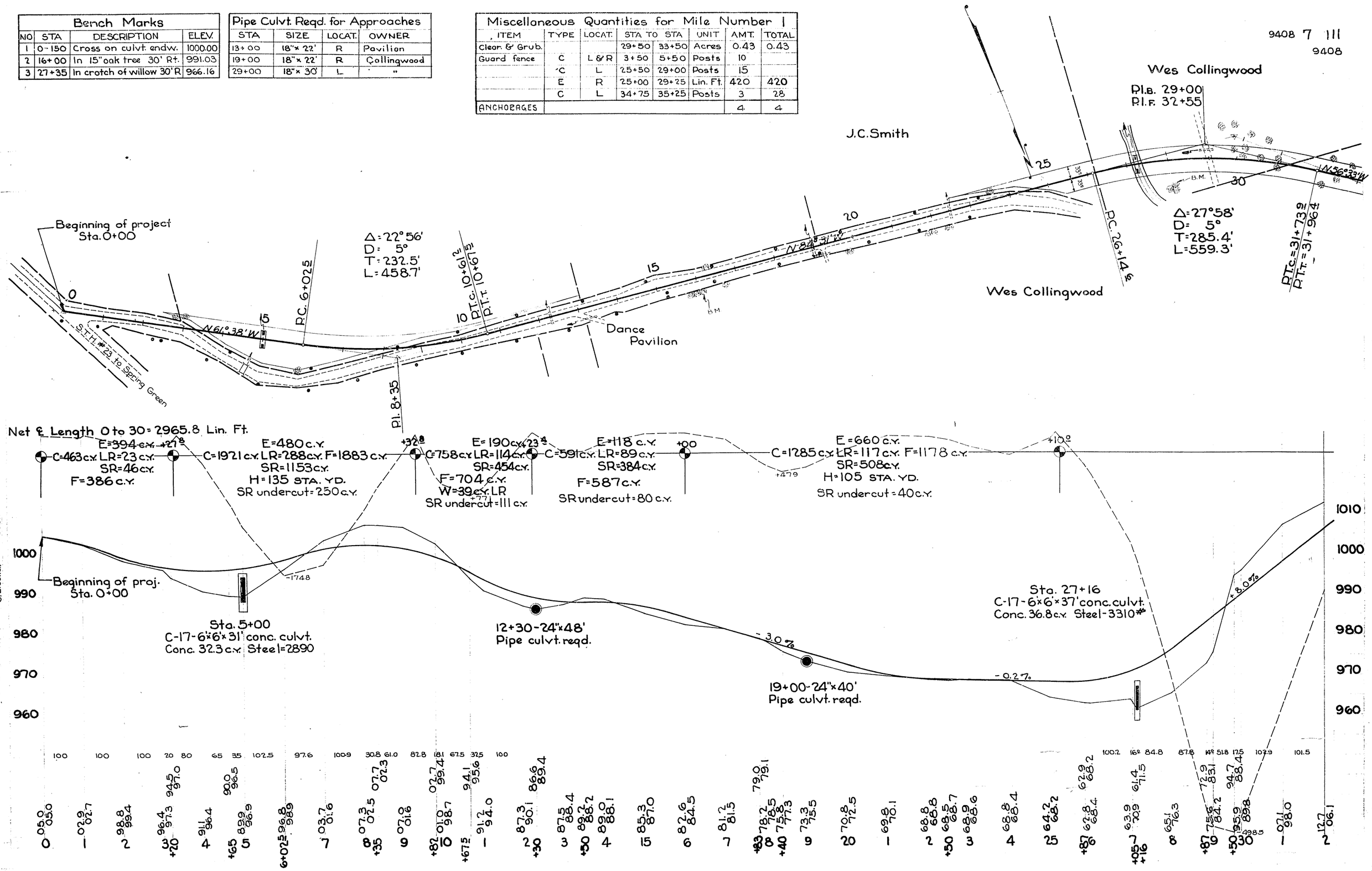
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
1	0-150	Cross on culvt. endw.	1000.00
2	16+00	In 15" oak tree 30' Rt.	991.03
3	27+35	In crotch of willow 30' R	966.16

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
13+00	18" × 22'	R	Pavilion
19+00	18" × 22'	R	Collingwood
29+00	18" × 30'	L	"

Miscellaneous Quantities for Mile Number 1							
ITEM	TYPE	LOCAT.	STA	TO STA	UNIT	AMT.	TOTAL
Clear & Grub.			29+50	33+50	Acres	0.43	0.43
Guard fence	C	L & R	3+50	5+50	Posts	10	
	C	L	25+50	29+00	Posts	15	
	E	R	25+00	29+25	Lin. Ft.	420	420
	C	L	34+75	35+25	Posts	3	28
ANCHORAGES						4	4



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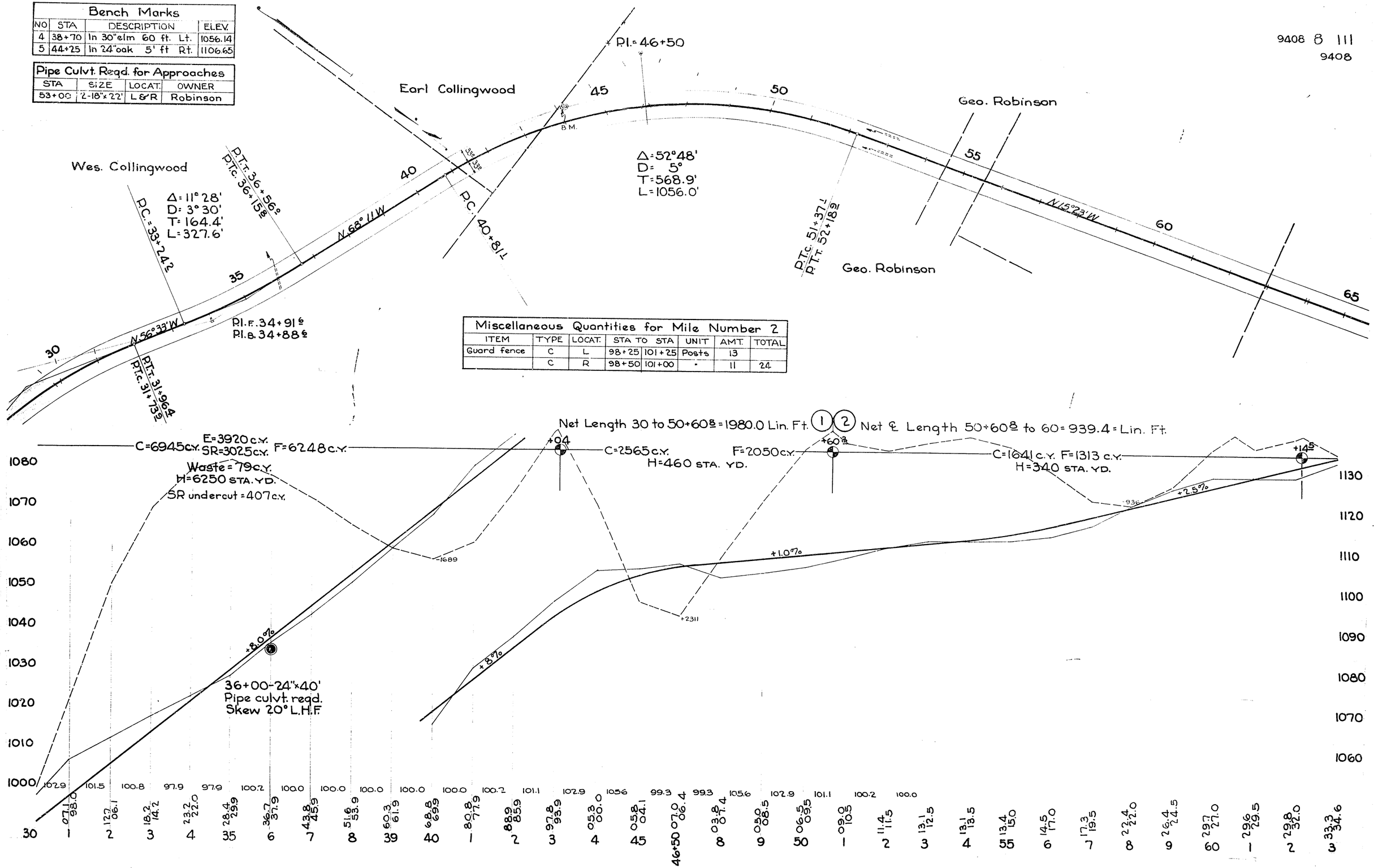
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
4	38+70	In 30" elm 60 ft. Lt.	1056.14
5	44+25	In 24" oak 5' ft Rt.	1106.65

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
53+00	2-18"x22'	L&R	Robinson



Miscellaneous Quantities for Mile Number 2							
ITEM	TYPE	LOCAT.	STA TO	STA	UNIT	AMT.	TOTAL
Guard fence	C	L	98+25	101+25	Posts	13	
	C	R	98+50	101+00	-	11	24

L.R. Suhr
T.W. Reilly
A.E. Austin
1-31
2-31
3-31
4-31
9408

L.R. Suhr
T.W. Reilly
H.D. Stevens
O.E. Callon
1-31
2-31
3-31
4-31
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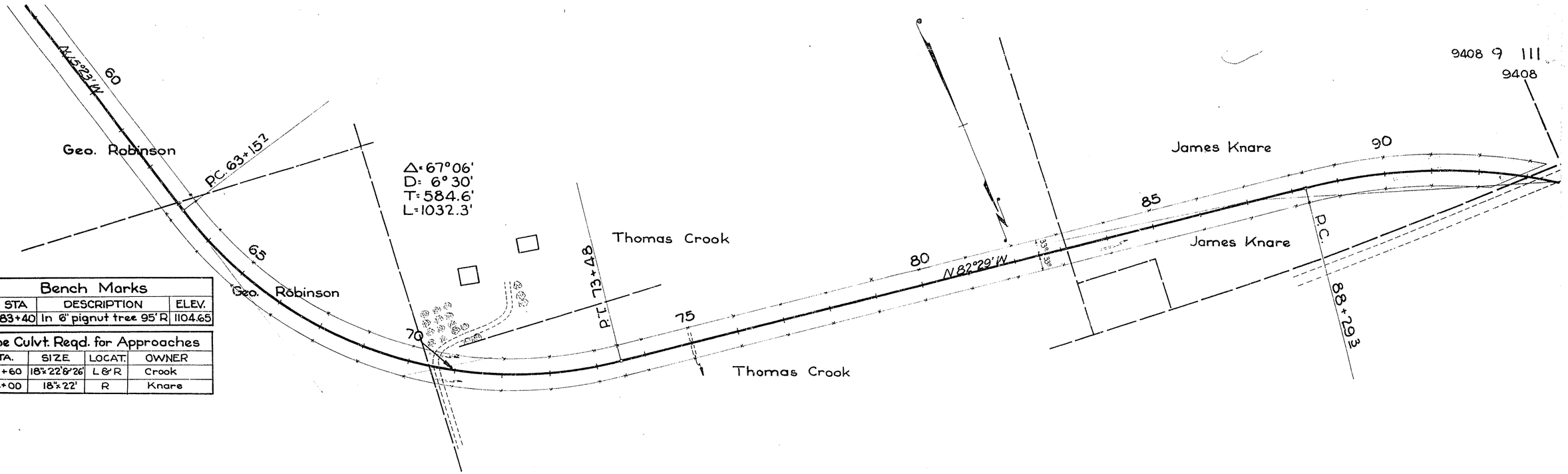
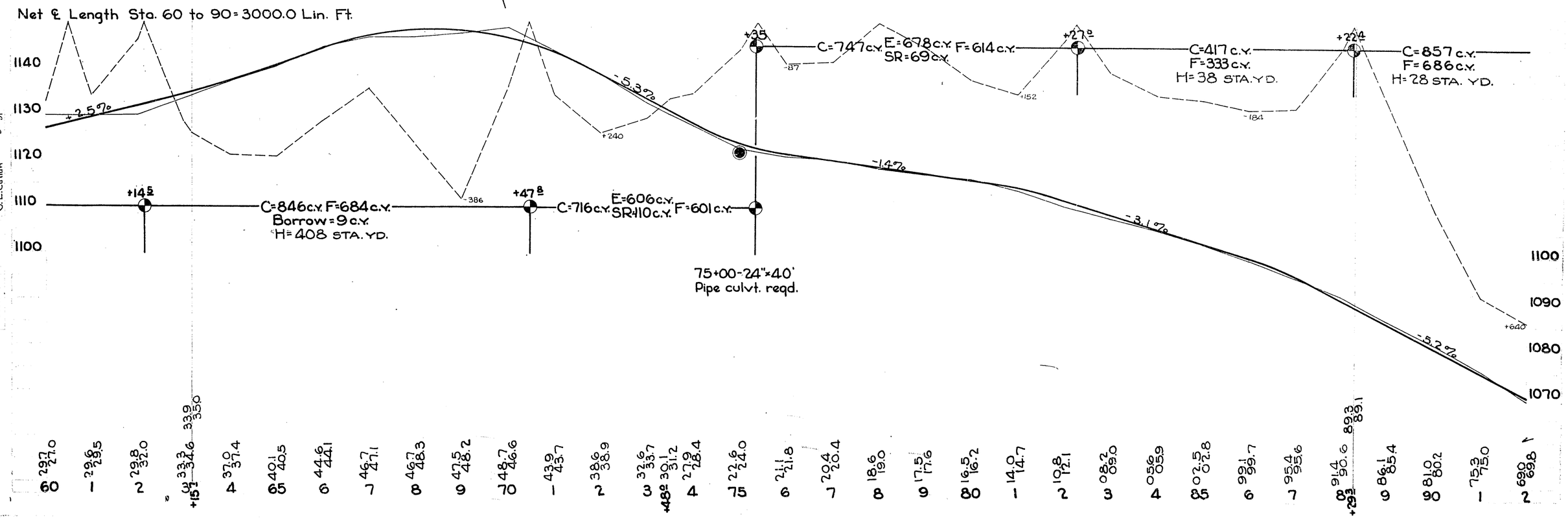


Bench Marks			
NO	STA	DESCRIPTION	ELEV.
6	83+40	In 6" pignut tree 95' R	1104.65

Pipe Culvt. Reqd. for Approaches			
STA.	SIZE	LOCAT.	OWNER
70+60	18"x22'6"x26'	L & R	Crook
84+00	18"x22'	R	Knare



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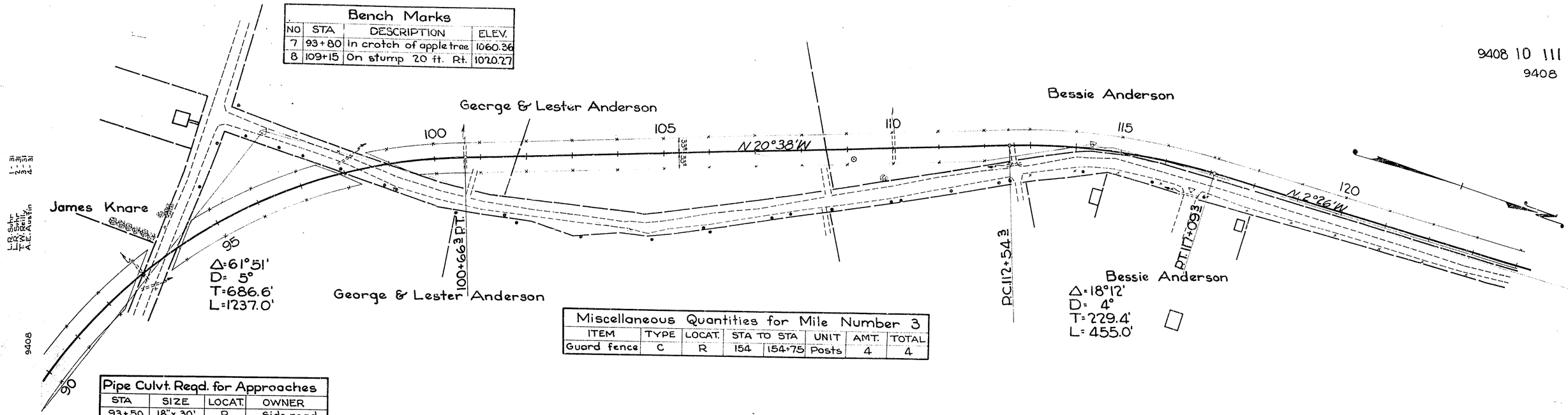
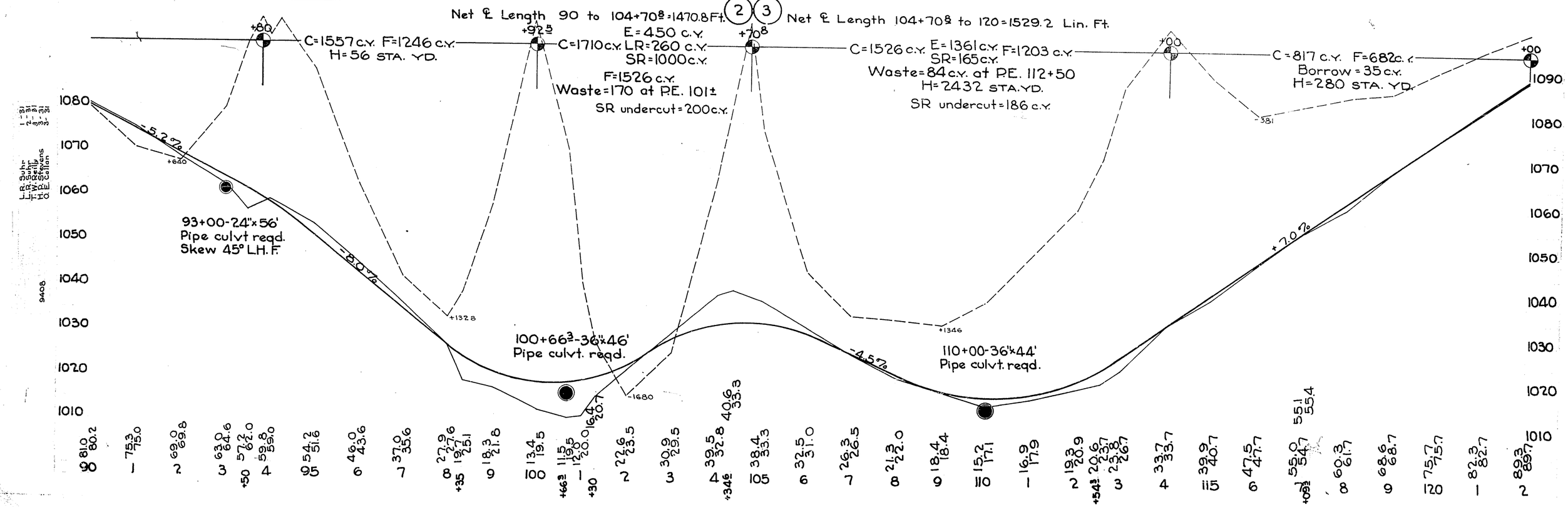
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
7	93+80	In crotch of apple tree	1060.36
8	109+15	On stump 20 ft. Rt.	1070.27



Miscellaneous Quantities for Mile Number 3							
ITEM	TYPE	LOCAT.	STA TO STA		UNIT	AMT.	TOTAL
Guard fence	C	R	154	154+75	Posts	4	4

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
93+50	18"x 30'	R	Side road
98+50	18"x 34'	L	" "
112+70	18"x 22'	R	G. Anderson
117+00	18"x 22'	R	B. "



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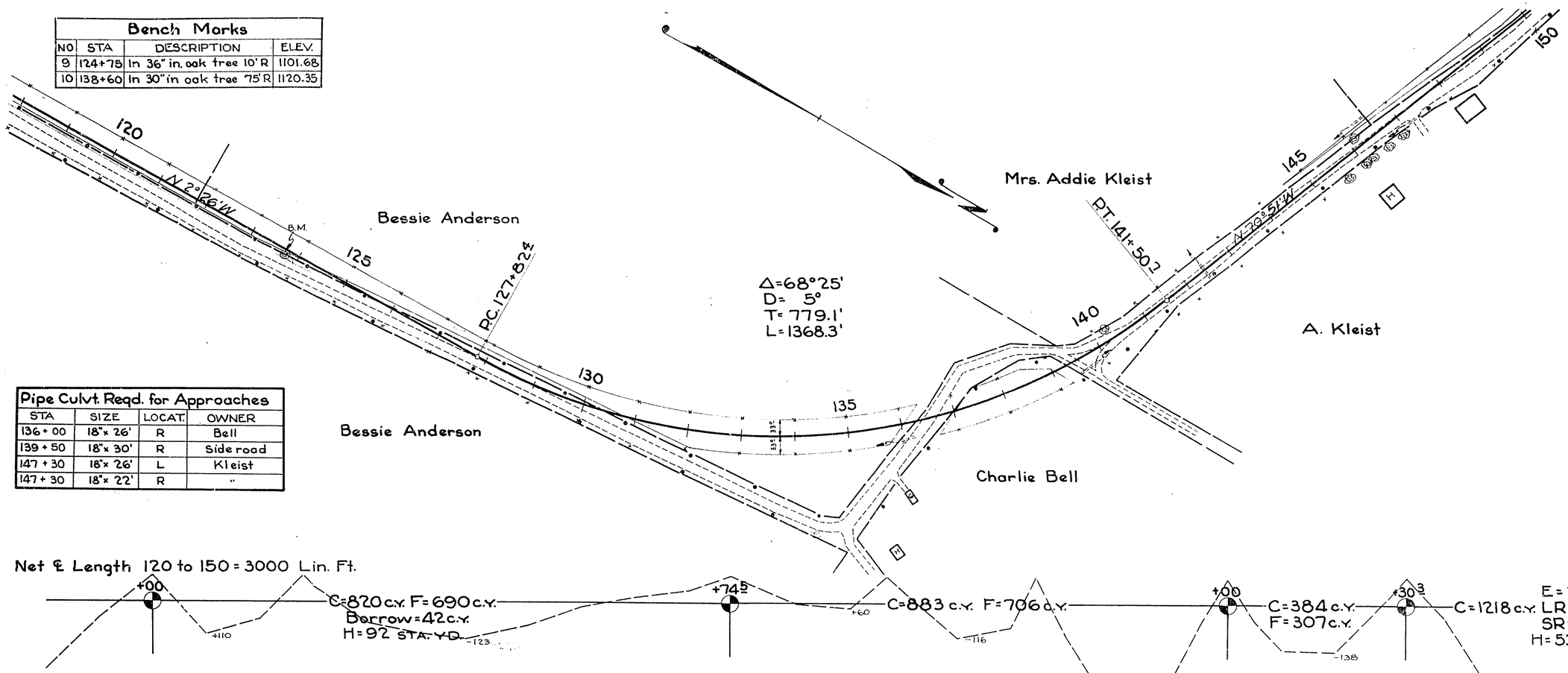
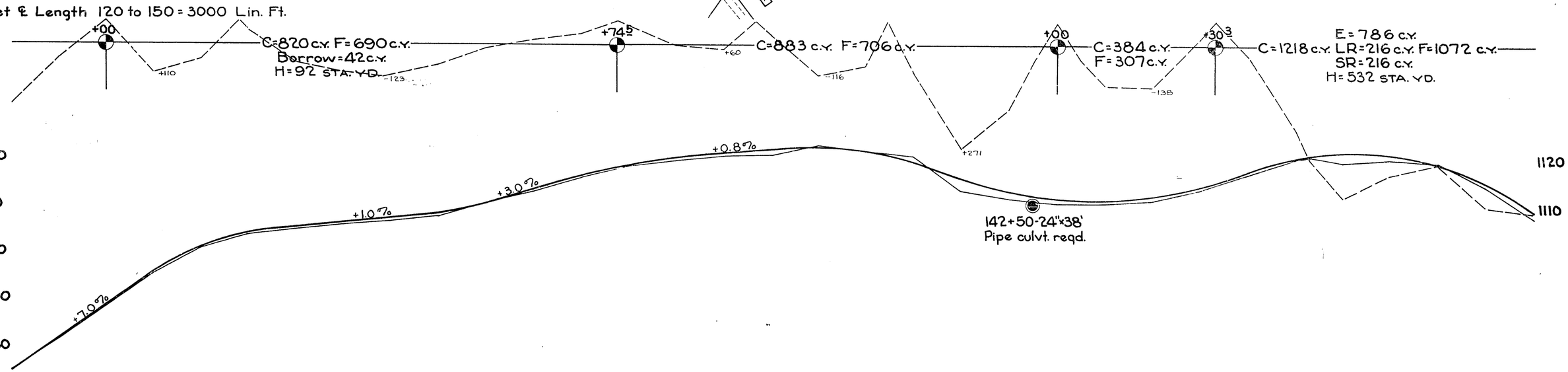
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
9	124+75	In 36" in. oak tree 10' R	1101.68
10	138+60	In 30" in oak tree 75' R	1120.35



Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
136+00	18"x 26'	R	Bell
139+50	18"x 30'	R	Side road
147+30	18"x 26'	L	Kleist
147+30	18"x 22'	R	"

Net ℄ Length 120 to 150 = 3000 Lin. Ft.



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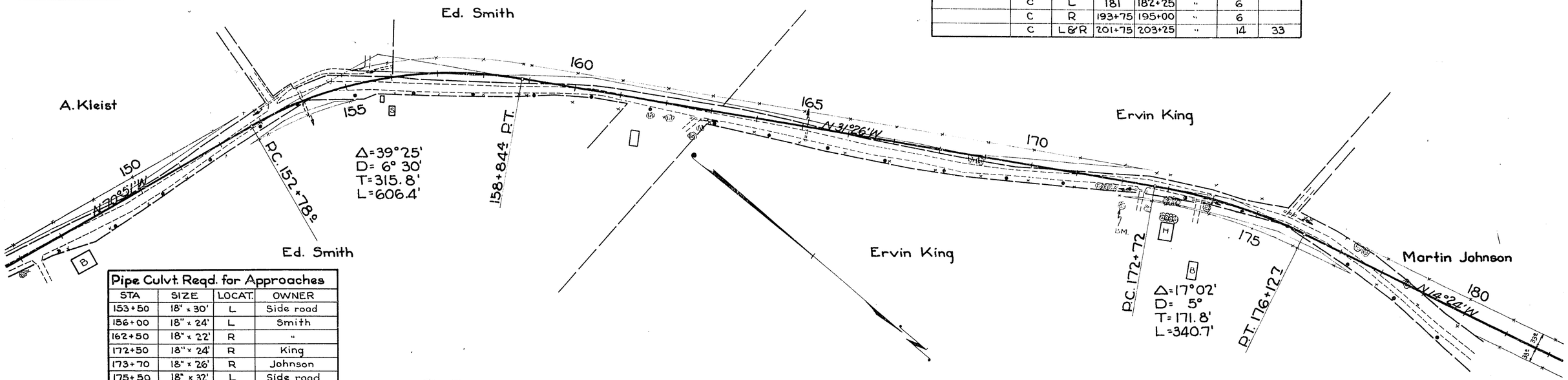
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
11	156+45	In 12" walnut 30' Left	1109.52
12	166+50	In 36" oak tree 40' R	1111.06
13	175+50	In 36" oak tree 40' R	1120.39

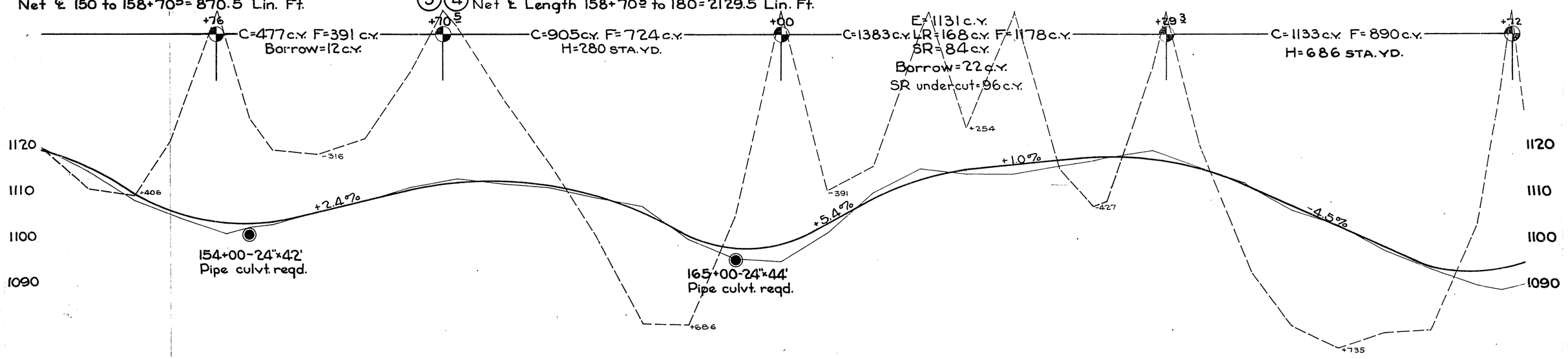
Miscellaneous Quantities for Mile Number 4							
ITEM	TYPE	LOCAT.	STA TO STA		UNIT	AMT.	TOTAL
Clear. & Grub			177	179	Acres	0.22	
			185	191	"	0.69	0.91
Guard fence	C	L	165	166+50	Posts	7	
	C	L	181	182+25	"	6	
	C	R	193+75	195+00	"	6	
	C	L & R	201+75	203+25	"	14	33

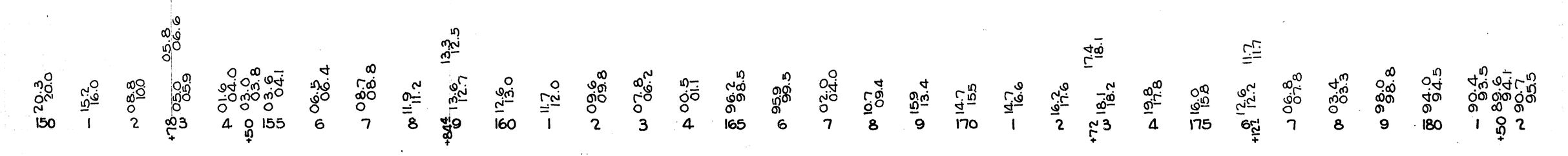


Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
153+50	18" x 30'	L	Side road
156+00	18" x 24'	L	Smith
162+50	18" x 22'	R	"
172+50	18" x 24'	R	King
173+70	18" x 26'	R	Johnson
175+50	18" x 32'	L	Side road

Net ℄ 150 to 158+70.5 = 870.5 Lin. Ft.

(3)(4) Net ℄ Length 158+70.5 to 180 = 2129.5 Lin. Ft.





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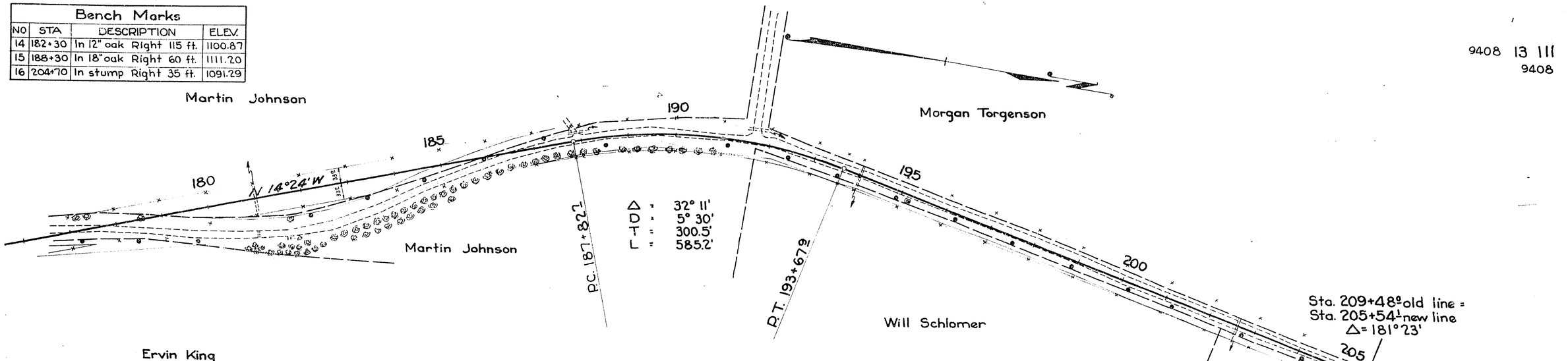
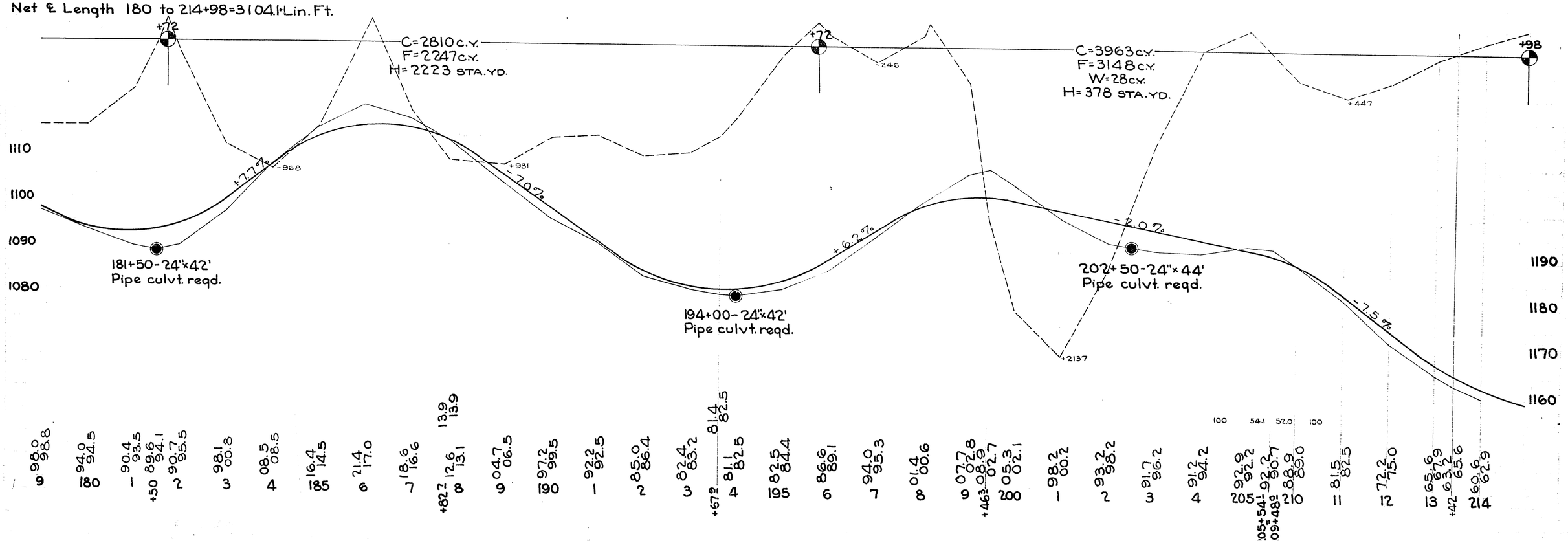
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
14	182+30	In 12" oak Right 115 ft.	1100.87
15	188+30	In 18" oak Right 60 ft.	1111.20
16	204+70	In stump Right 35 ft.	1091.29



Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
188+00	18" x 26'	L	Johnson
191+70	18" x 32'	⊥	Side road
210+00	18" x 24'	R	Schlomer

Net ℄ Length 180 to 214+98=3104.1 Lin. Ft.



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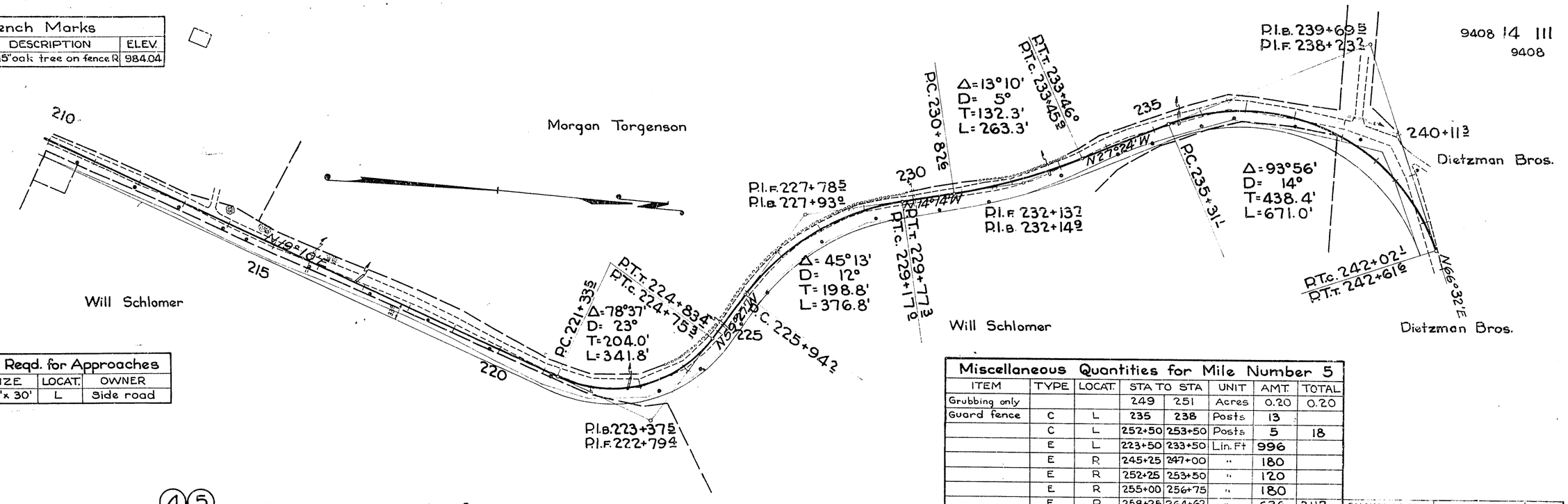
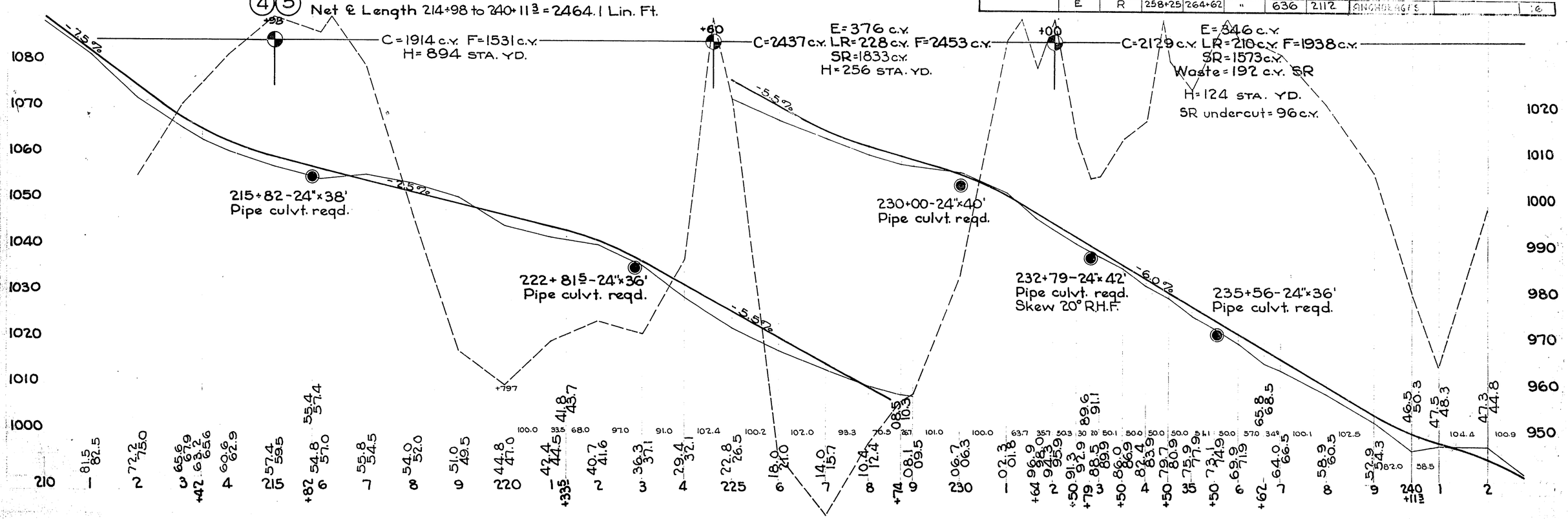
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
17	234+86	In 15" oak tree on fence R	984.04



Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
239+30	18" x 30'	L	Side road

Miscellaneous Quantities for Mile Number 5							
ITEM	TYPE	LOCAT.	STA TO	STA	UNIT	AMT.	TOTAL
Grubbing only			249	251	Acres	0.20	0.20
Guard fence	C	L	235	238	Posts	13	
	C	L	252+50	253+50	Posts	5	18
	E	L	223+50	233+50	Lin. Ft	996	
	E	R	245+25	247+00	"	180	
	E	R	252+25	253+50	"	120	
	E	R	255+00	256+75	"	180	
	E	R	258+25	264+62	"	636	2112

ANCHORAGES



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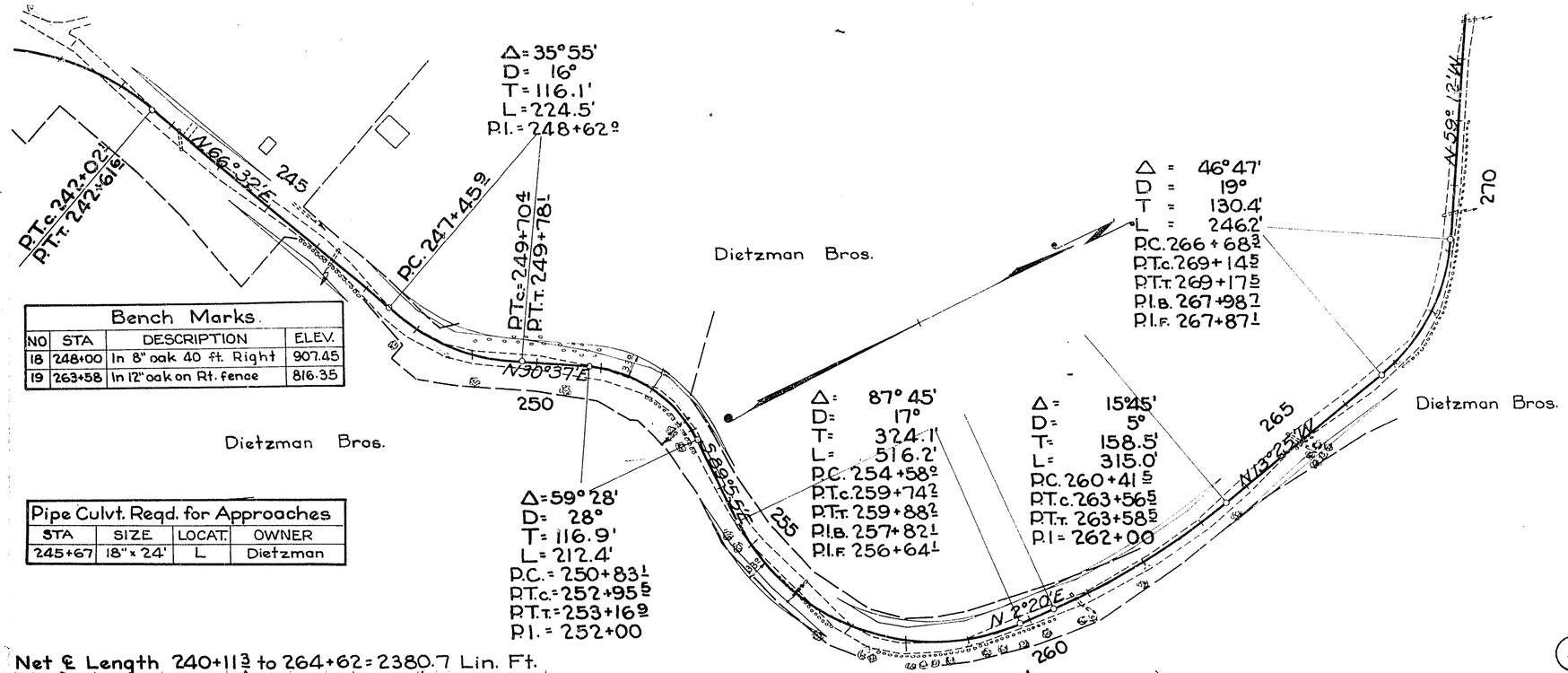
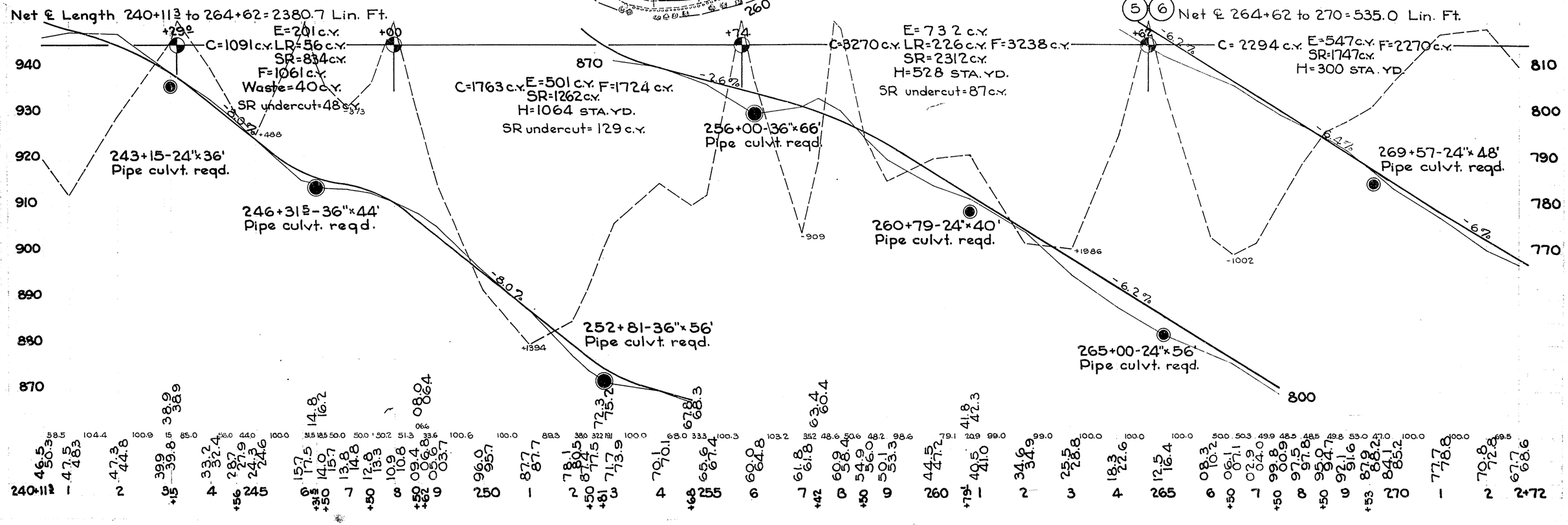


Bench Marks.			
NO	STA	DESCRIPTION	ELEV.
18	248+00	In 8" oak 40 ft. Right	907.45
19	263+58	In 12" oak on Rt. fence	816.35

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
245+67	18" x 24'	L	Dietzman

Miscellaneous Quantities for Mile Number 6							
ITEM	TYPE	LOCAT.	STA TO	STA	UNIT	AMT.	TOTAL
Guard fence	E	R	264+62	273	Lin. Ft.	840	840
	C	R	273	276	Posts	13	
	C	R	278	280+50	"	11	
	C	R & L	286+25	286+75	"	6	
	C	L	293	301+50	"	35	65
ANCHORAGES					NO.	4	4

Net ℄ Length 240+11 to 264+62 = 2380.7 Lin. Ft.



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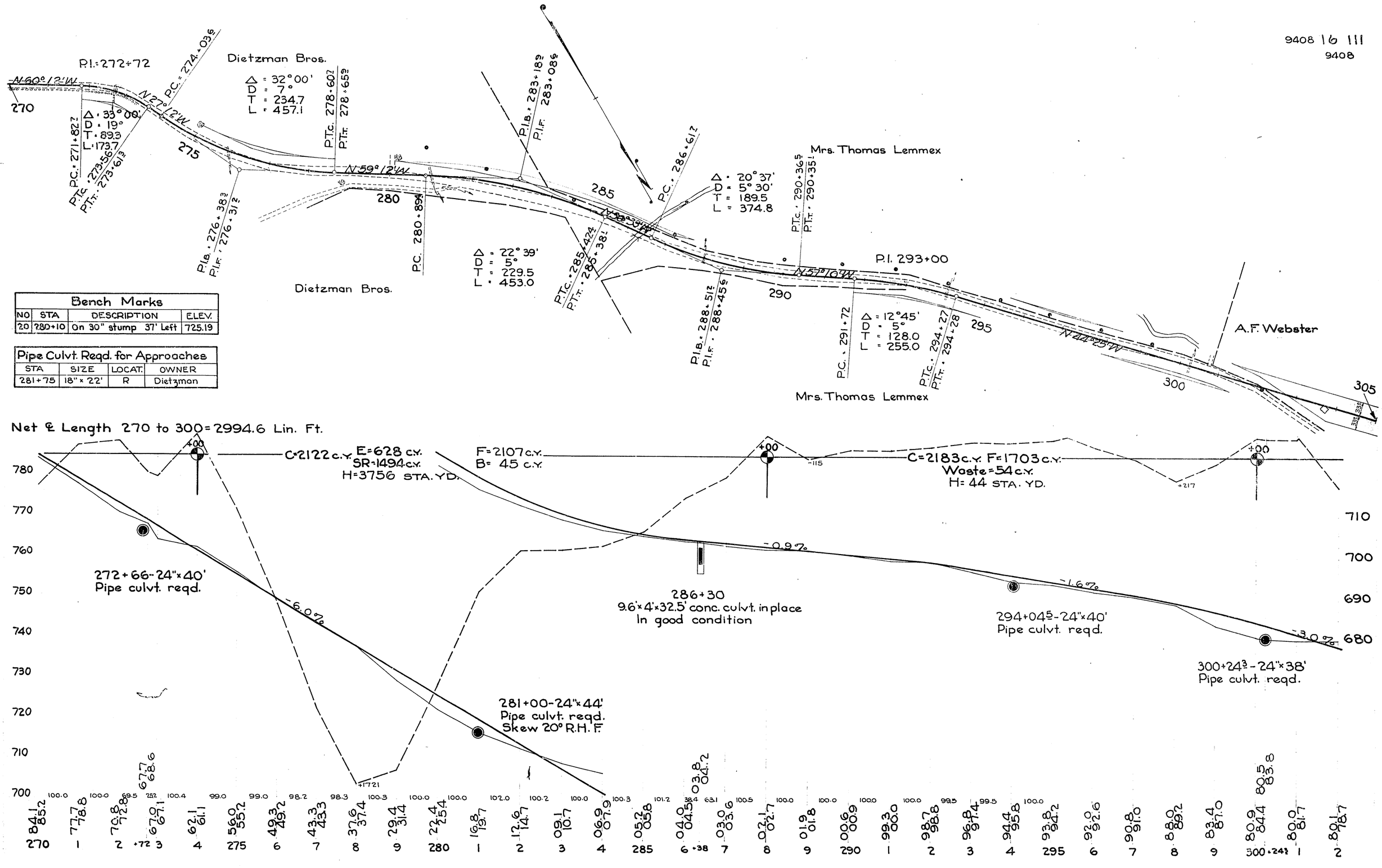

Bench Marks			
NO	STA	DESCRIPTION	ELEV.
20	280+10	On 30" stump 37' Left	725.19

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
281+75	18" x 22'	R	Dietzman

Net ℄ Length 270 to 300 = 2994.6 Lin. Ft.

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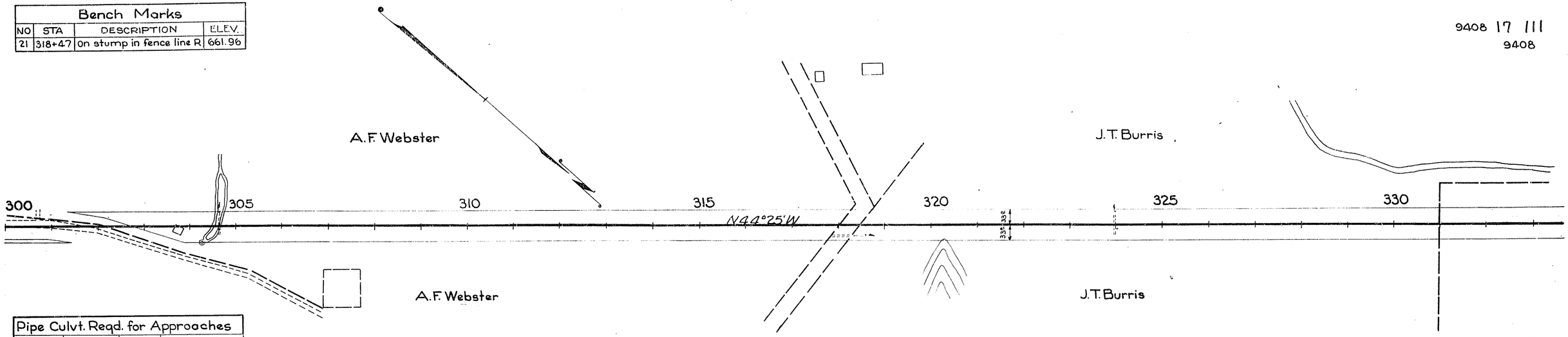
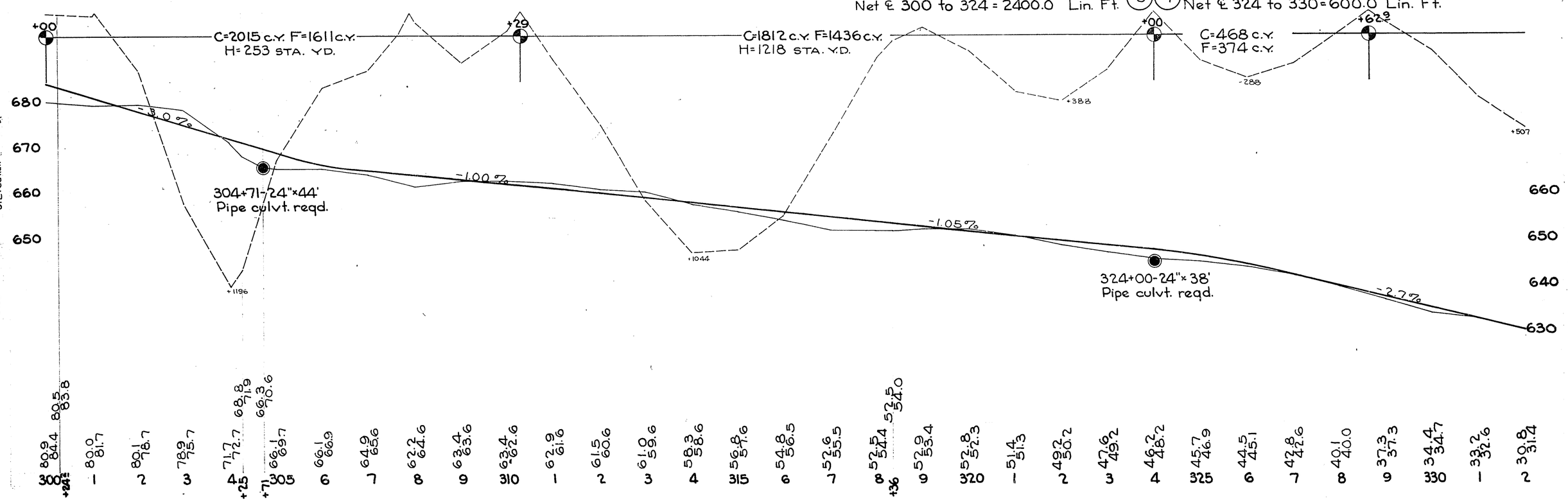
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
21	318+47	On stump in fence line R	661.96



Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
318+50	18" x 22'	R	Webster

Miscellaneous Quantities for Mile Number 7							
ITEM	TYPE	LOCAT.	STA TO STA		UNIT	AMT.	TOTAL
Guard fence	C	R	348	349	Posts	5	5
ANCHORAGES					NO.		

Net ℄ 300 to 324 = 2400.0 Lin. Ft. (6) (7) Net ℄ 324 to 330 = 600.0 Lin. Ft.



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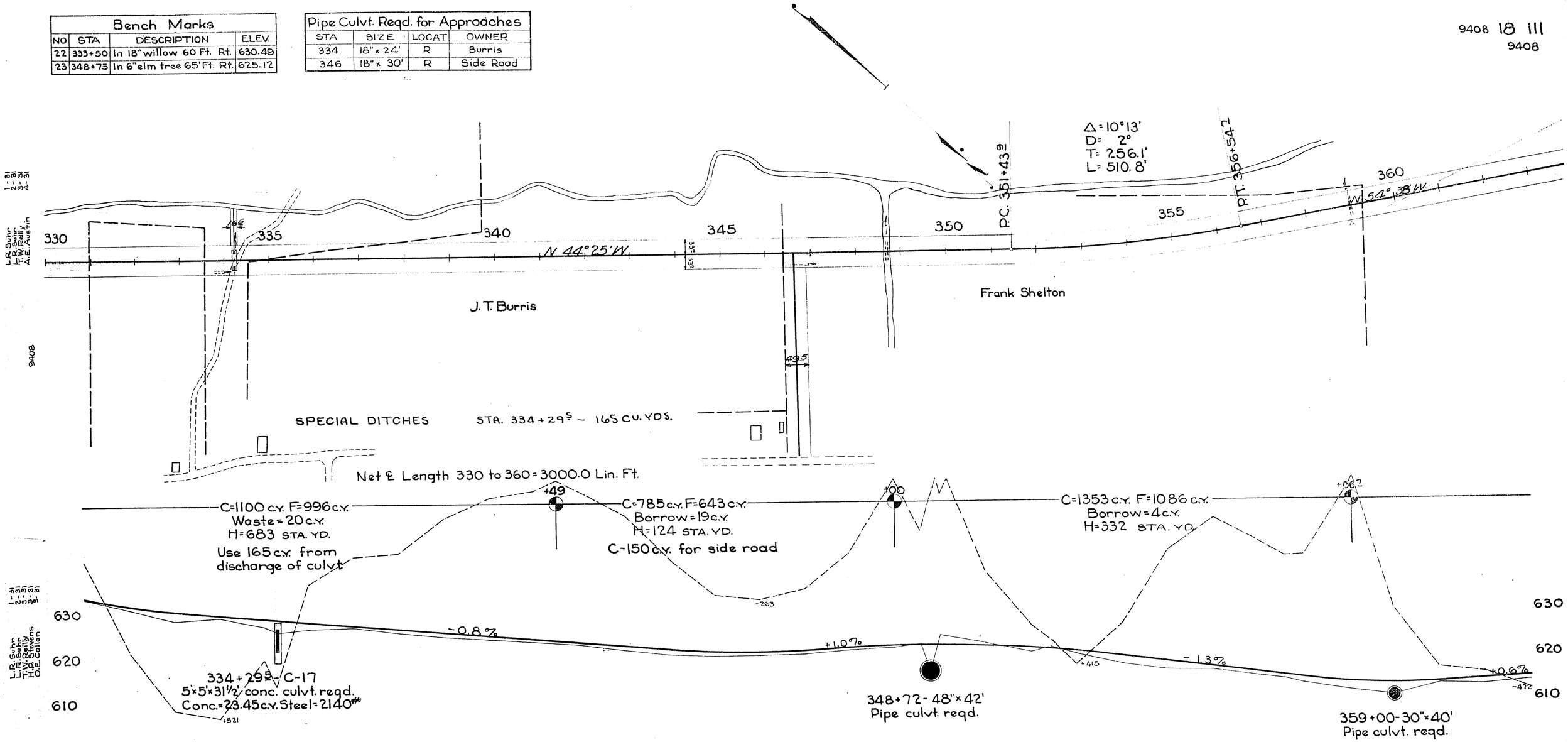
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
22	333+50	In 18" willow 60 Ft. Rt.	630.49
23	348+75	In 6" elm tree 65' Ft. Rt.	625.12

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
334	18" x 24'	R	Burris
346	18" x 30'	R	Side Road



330	1	2	3	4 +29.5	335	6	7	8	9	340	1	2	3	4	345	6	7	8 +57 +78.9	350	1 +43.9	2	3	4	355	6 +54.7	7	8	9	360	1	2
34.4 / 34.7	33.2 / 32.6	30.8 / 31.4	30.1 / 30.6	28.0 / 29.8	27.5 / 29.0	27.7 / 28.2	26.4 / 27.4	25.5 / 26.6	24.9 / 25.8	24.1 / 25.0	23.5 / 24.2	22.3 / 23.4	21.2 / 22.6	20.9 / 22.0	21.1 / 21.9	21.2 / 22.0	22.1 / 22.6	22.7 / 22.9	23.9 / 23.0	23.5 / 22.8	21.3 / 22.4	22.6 / 22.0	21.0 / 21.5	18.8 / 20.4	17.4 / 19.1	15.3 / 15.9	14.2 / 15.2	12.8 / 14.5	11.5 / 14.1	14.0 / 14.4	13.7 / 15.0	14.8 / 15.5

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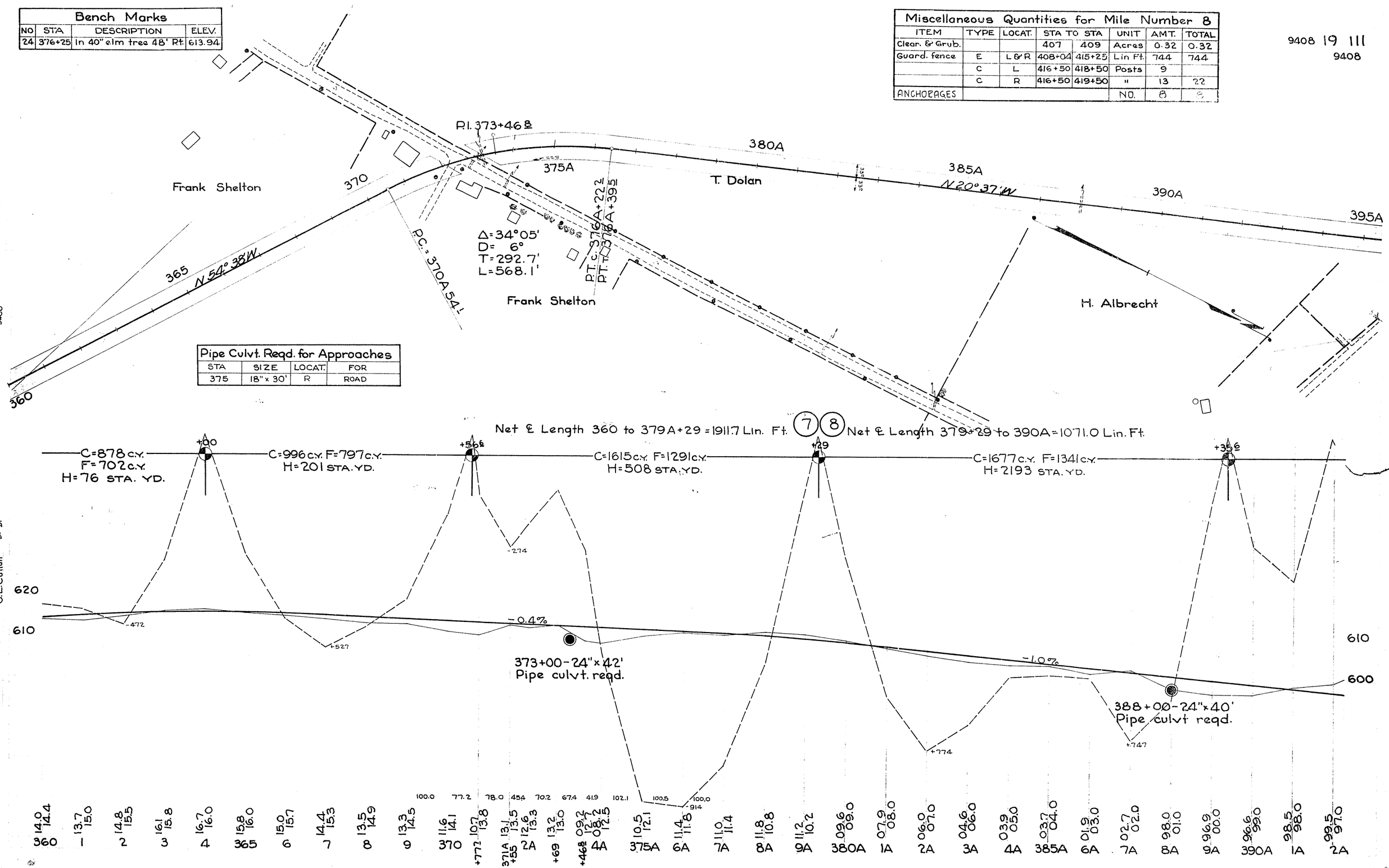
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
24	376+25	In 40" elm tree 48' Rt.	613.94

Miscellaneous Quantities for Mile Number 8							
ITEM	TYPE	LOCAT.	STA TO STA		UNIT	AMT.	TOTAL
Clear. & Grub.			407	409	Acres	0.32	0.32
Guard. fence	E	L & R	408+04	415+25	Lin Ft.	744	744
	C	L	416+50	418+50	Posts	9	
	C	R	416+50	419+50	"	13	22
ANCHORAGES					NO.	8	8



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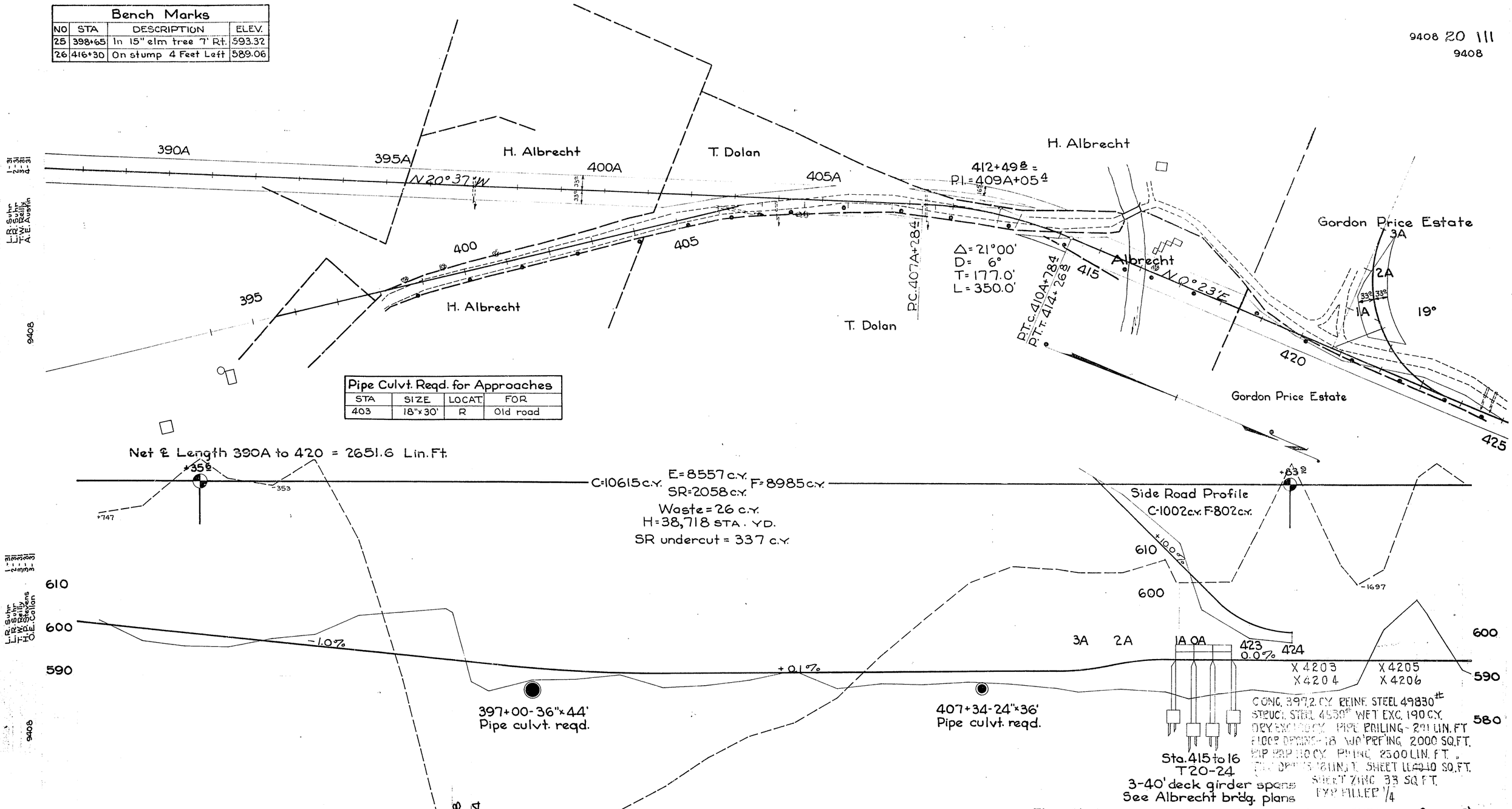
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
25	398+65	In 15" elm tree 7' Rt.	593.32
26	416+30	On stump 4 Feet Left	589.06



Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	FOR
403	18"×30'	R	Old road

L. R. Suhr 1-31
L. W. Bailey 2-31
T. W. Stevens 3-31
A. E. Austin 4-31

L. R. Suhr 1-31
L. W. Bailey 2-31
T. W. Stevens 3-31
H. E. Collon 4-31

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STATE

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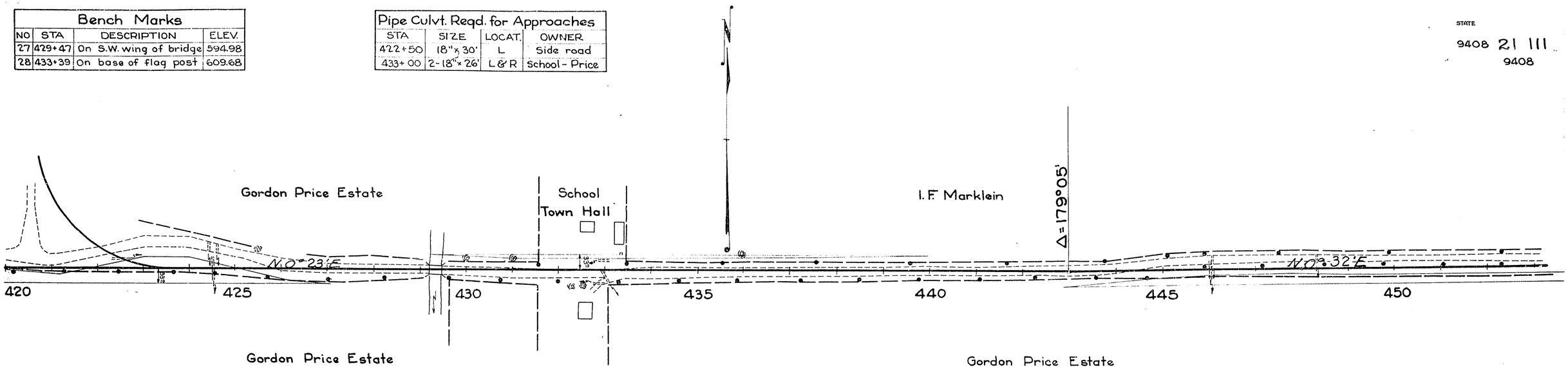
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
27	429+47	On S.W. wing of bridge	594.98
28	433+39	On base of flag post	609.68

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
422+50	18" x 30'	L	Side road
433+00	2-18" x 26'	L & R	School - Price

L.R. Suhr 1-31
J.R. Smith 2-31
J.W. Reilly 3-31
A.E. Austin 4-31



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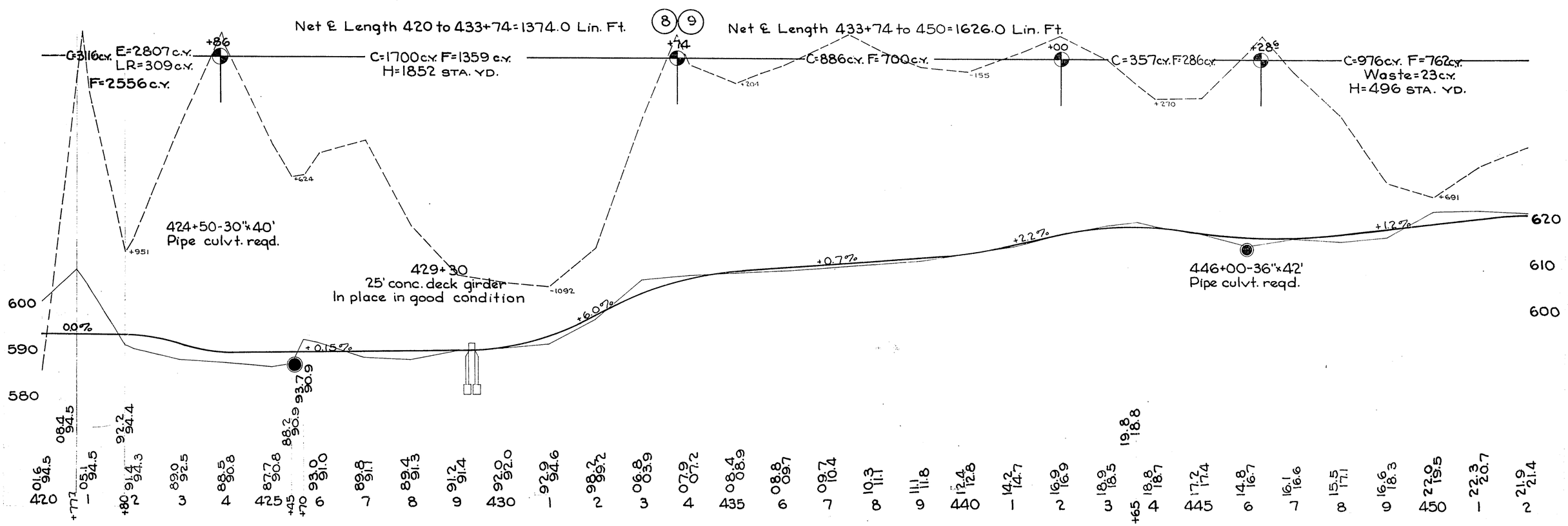
L.R. Suhr 1-31
J.R. Smith 2-31
J.W. Reilly 3-31
H.P. Stevens 4-31
O.E. Callon 5-31



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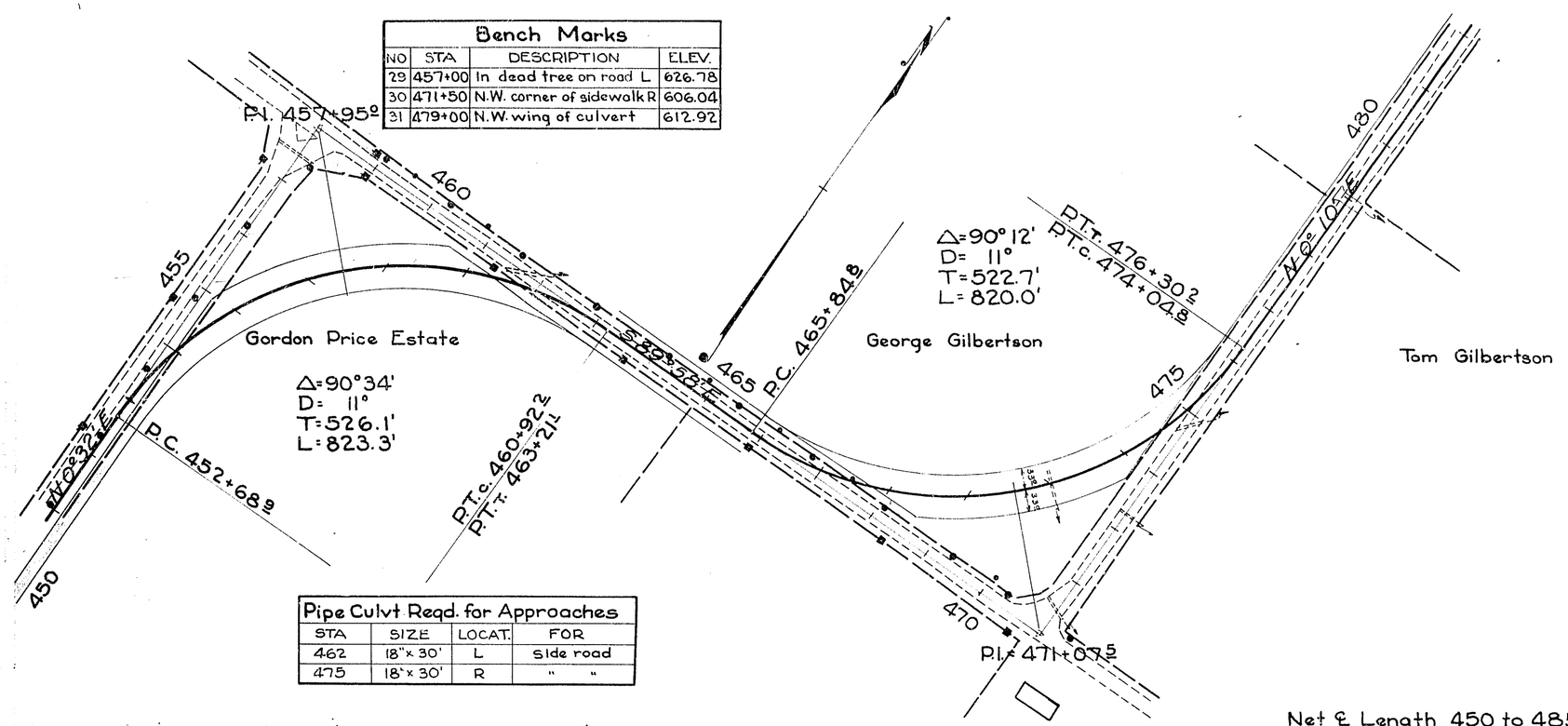
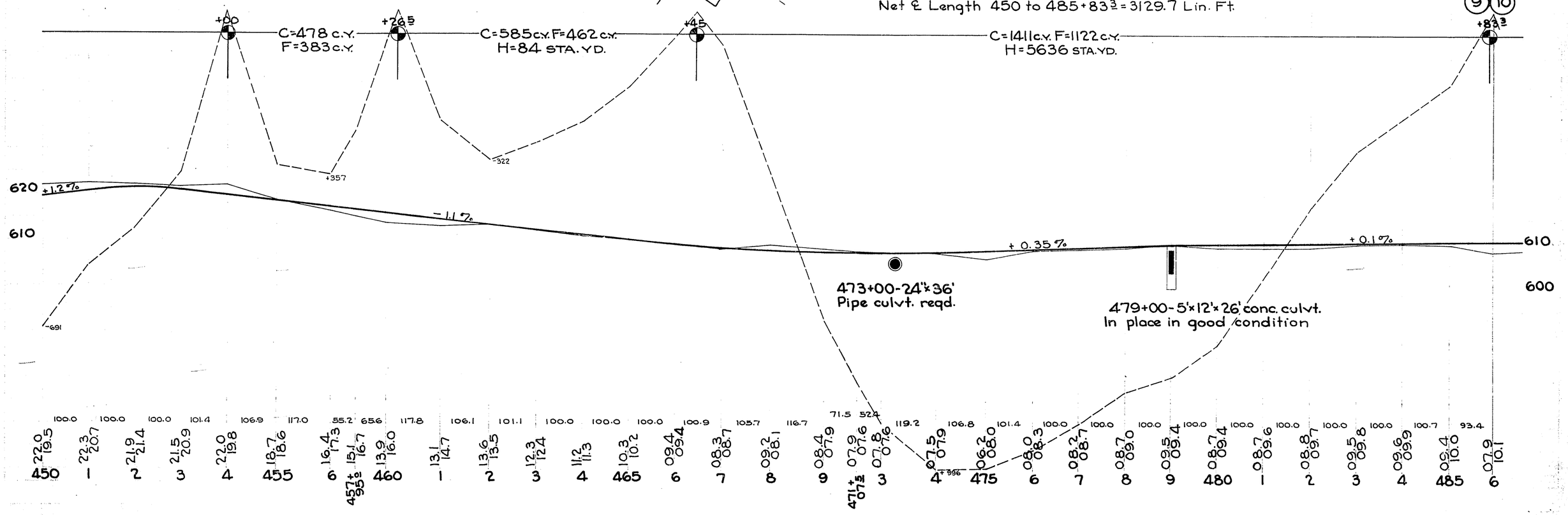
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
29	457+00	In dead tree on road L	626.78
30	471+50	N.W. corner of sidewalk R	606.04
31	479+00	N.W. wing of culvert	612.92



Pipe Culvt Reqd. for Approaches			
STA	SIZE	LOCAT.	FOR
462	18"x 30'	L	Side road
475	18"x 30'	R	" "

Net ℄ Length 450 to 485+83.3 = 3129.7 Lin. Ft.



L.R. Suhr 1-31
L.R. Suhr 2-31
T.W. Reilly 3-31
A.E. Austin 4-31

9408

L.R. Suhr 1-31
L.R. Suhr 2-31
T.W. Reilly 3-31
H.O. Williams 3-31
O.E. Callan

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STATE
9408 23 111
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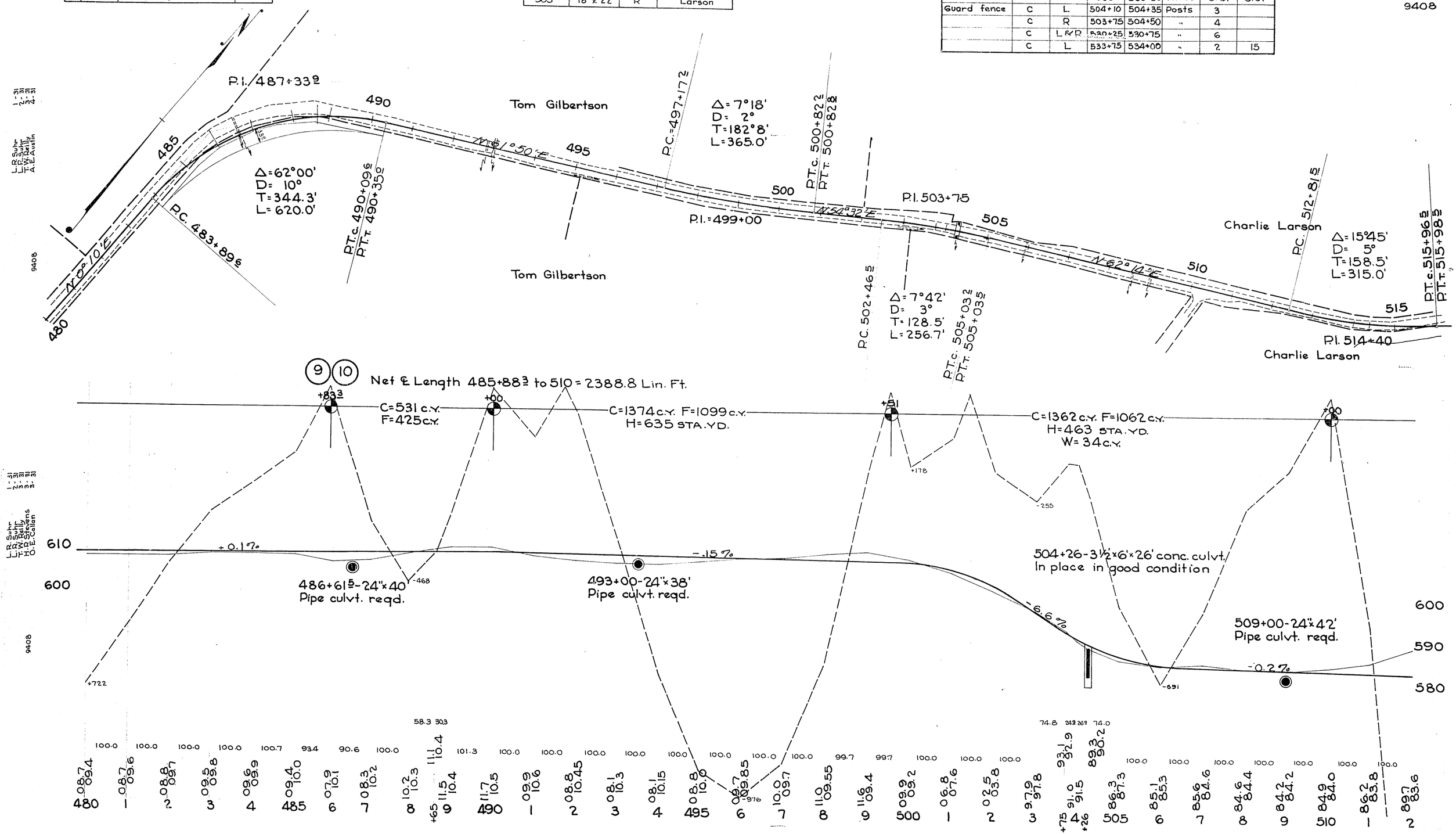
Bench Marks			
NO	STA	DESCRIPTION	ELEV.
32	485+33	On top of steel post	612.45
33	504+26	On parapet wall Rt.	590.06

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
495	18" x 24'	R	Gilbertson
503	18" x 22	R	Larson

Miscellaneous Quantities for Mile Number 10							
ITEM	TYPE	LOCAT.	STA. TO STA.		UNIT	AMT.	TOTAL
Clear. & Grub.			530	533+80	Acres	0.61	0.61
Guard fence	C	L	504+10	504+35	Posts	3	
	C	R	503+75	504+50	"	4	
	C	L & R	530+25	530+75	"	6	
	C	L	533+75	534+00	"	2	15



Bench Marks			
NO	STA	DESCRIPTION	ELEV.
34	517+80	In 48" oak tree 6' Lt.	580.40
35	533+55	In root of 12" oak 10' R	577.06

Miscellaneous Quantities for Mile Number 11							
ITEM	TYPE	LOCAT.	STA TO	STA	UNIT	AMT.	TOTAL.
Clear & Grub.			551	554	Acres	0.35	
Clearing only			533+80	551	"	1.95	2.30
Grubbing only			538	545	"	0.56	0.91
Rip Rap			543+10	544+90	C.Y.	80.0	80.0
Guard fence	E	R	571	578	Lin. Ft.	700.0	700.0
	C	L	542+50	544+50	Posts	5	
	C	L	549+50	552+50	"	8	
	C	L	555	558+50	"	8	
	C	R	560+50	569+50	"	19	
	C	L	560+50	571+00	"	24	
	C	R	578	590	"	49	113

ANCHORAGES	2

STATE

9408 24 111

9408

L.R. Suhr 1-31
L.R. Suhr 2-31
T.W. Reilly 3-31
A.E. Austin 4-31

9408

Charlie Larson

Charlie Larson

Albert Olson

Albert Olson

OTTER CREEK

510 515 520 525 530 535 540

N 62°14'E

N 46°20'E

N 51°24'E

P.C. 512+81.5

Δ=15°45'
D= 5°
T=158.5'
L=315.0'

P.T.c. 515+96.5
P.T.t. 515+98.5

P.I.=514+40

P.I.=530+10

P.C.=527+64.2

Δ=4°55'
D= 1°
T=246.0'
L=491.7'

P.T.c. 532+55.7
P.T.t. 532+56.2

P.C. 543+17.5

Net ℄ Length 510 to 540+25=3022.7 Lin. Ft.

10 11

+00

C=6296 c.y. F=5036 c.y.
H=20,445 STA. YD.

+96.7

-302

C=3053 c.y. E=1856 c.y. F=2743 c.y.
SR=1197 c.y.
H=920 STA. YD.
SR undercut=150 c.y.

+25

-1658

+1653

L.R. Suhr 1-31
L.R. Suhr 2-31
T.W. Reilly 3-31
H.E. Stevens 3-31
O.E. Colton

9408

590

580

521+35-36"×42'
Pipe culvt. reqd.

533+80-C-18
3½'×5'×31' conc. culvt. reqd.
Conc. 17.4 c.y. Steel=1595#

-0.2%

38.3 56.4

+42.05

100.0 101.0 100.2 100.1 100.0

100.0

590
580
570

84.9 84.0 510
86.2 83.8 1
89.7 83.6 2
88.1 83.4 3
85.4 83.2 4
+40
83.9 83.0 515
80.0 82.8 6
77.9 82.6 7
80.5 82.4 8
79.9 82.2 9
79.1 82.0 520
77.9 81.8 1
+35
77.3 81.7
79.8 81.6 2
79.6 81.4 3
79.4 81.2 4
78.2 81.0 525
78.4 80.8 6
77.5 80.6 7
78.5 80.4 8
78.2 80.2 9
78.4 80.0 530
+10
78.6 80.0
+42
74.4 79.9
+80
77.8 79.8 1
+50
77.5 79.8
74.5 79.7 2
74.9 79.6
3
77.5 79.4
77.0 79.3
+55
+80
76.2 79.2 4
74.3 79.2
535
77.6 79.0
+85
76.8 78.8 6
74.5 78.8
+50
76.8 78.7 7
75.8 78.6
+25
74.6 78.7 8
+15
77.6 78.8
76.2 79.3 9
+70
79.3 79.8
+50
91.0 80.2 540
90.6 80.5
+60
90.6 80.4 1
84.4 80.3
+40
84.8 80.2 2
77.6 80.1

Bench Marks			
NO	STA	DESCRIPTION	ELEV.
36	553+30	On top of stump 30' R	617.11
37	563+00	In 12" oak tree 40' Rt.	575.68

Pipe Culvt. Reqd. for Approaches			
STA	SIZE	LOCAT.	OWNER
544	18" x 22'	Lt.	Simonson

STATE
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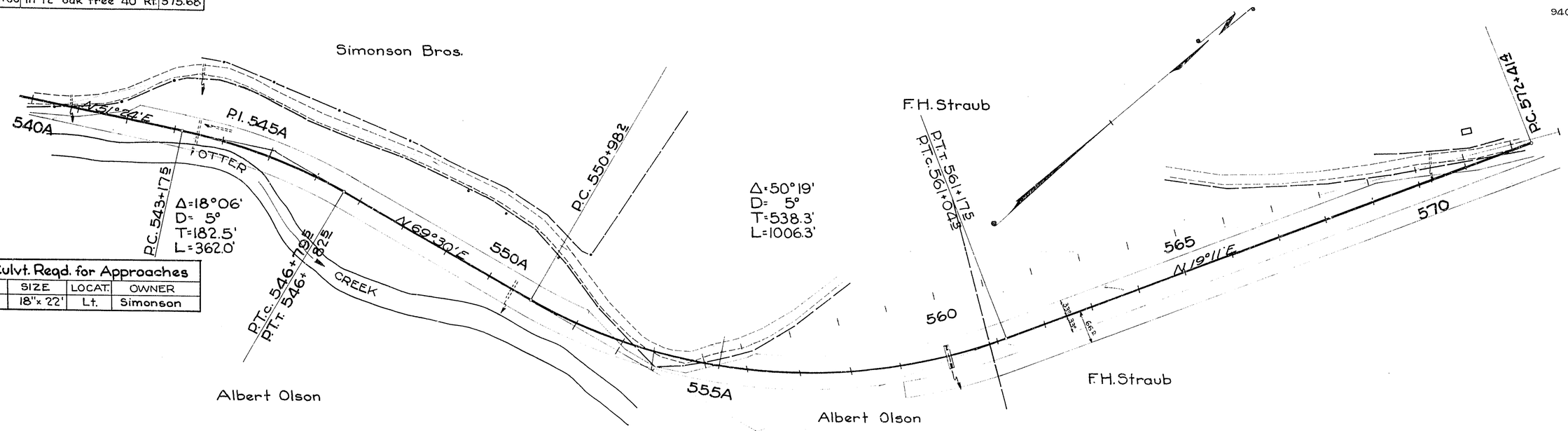
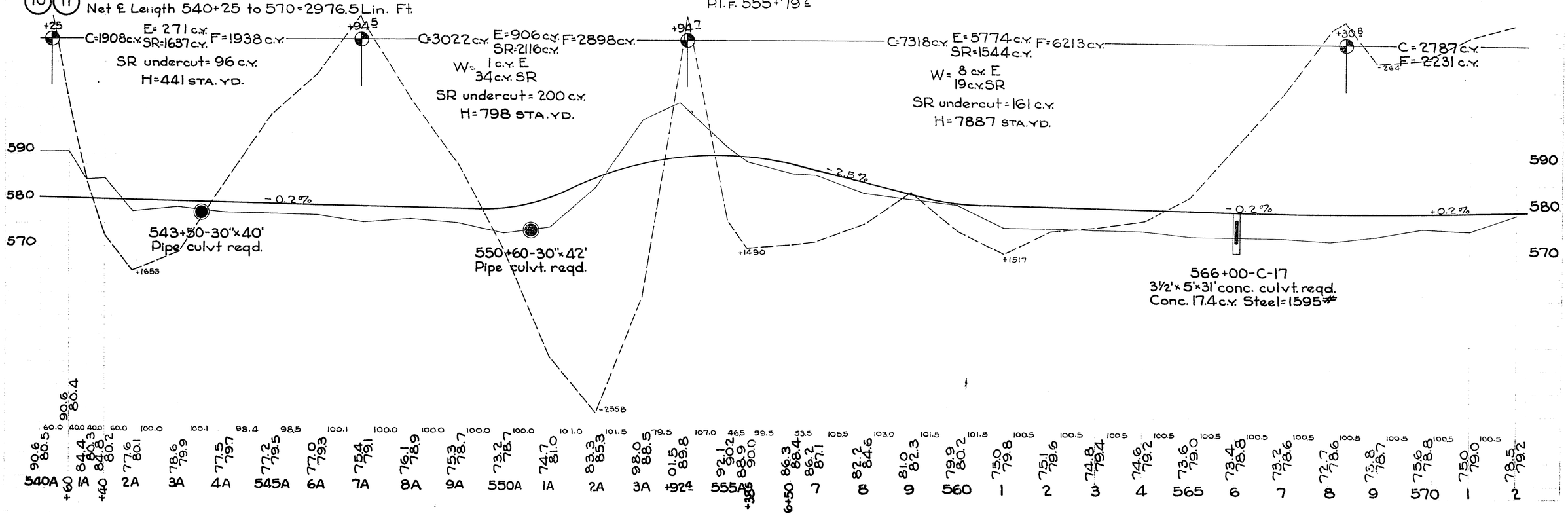


(10) (11) Net ℄ Length 540+25 to 570=2976.5 Lin. Ft.



L.R. Suhr
J.J. Reilly
F.W. Stevens
H.O.E. Callan
1-31
2-31
3-31
4-31

L.R. Suhr
J.J. Reilly
F.W. Stevens
H.O.E. Callan
1-31
2-31
3-31
4-31

9408

STATE

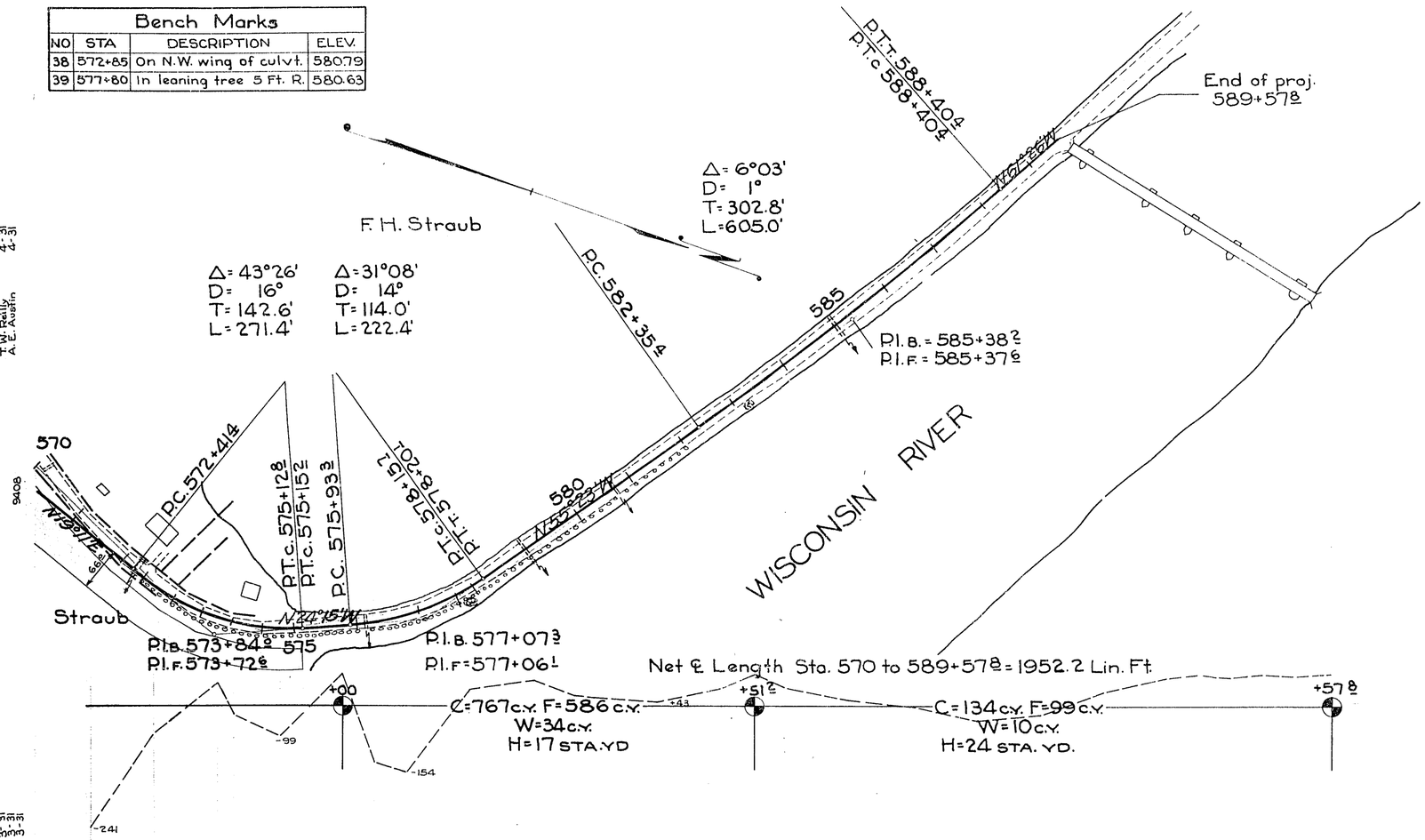
9408 26 111

9408

Bench Marks			
NO	STA	DESCRIPTION	ELEV.
38	572+85	On N.W. wing of culvt.	580.79
39	577+80	In leaning tree 5 Ft. R.	580.63

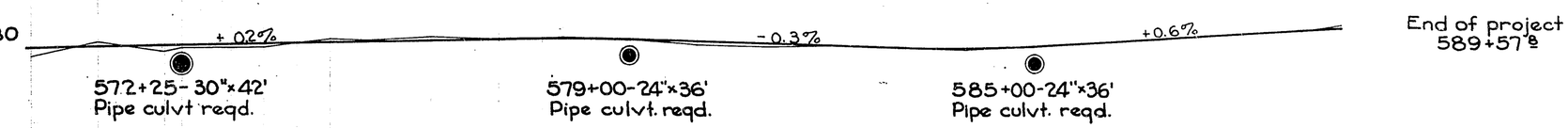
1-31
2-31
3-31
4-31

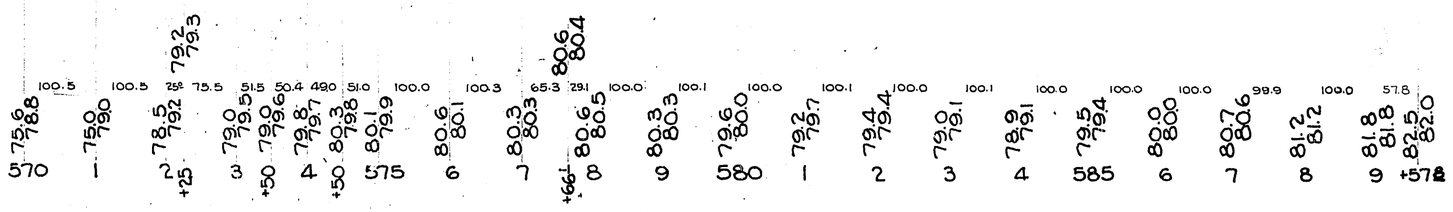
L.R. Suhr
D.J. Suhr
T.W. Wendt
A.E. Austin



1-31
2-31
3-31
3-31

L.R. Suhr
D.J. Suhr
T.W. Wendt
H.D.E. Stevens
O.E. Callan





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