

1863

1863

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to $30.6 = 32.6$. For slopes of 1 on 1½ see inside of back cover.

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INDEXED
completely

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

- 1-35 Alignment Broadway Miss. 30th St. to Federal Blvd
36-53 Alig. + Cross Sec Wabash Freeway 1822-25
54-65 " " " " " J.F. Conn. to Federal Blvd 1826-27
66 Via Wabash Freeway Blair Market + Bancroft.
17-74 Alig. + Cross Sec 100th St. + Access Road

Alignment Broadway H Line
30th St. to Hobart Freeway Federal Blvd.

+20.32 = E.C.	2° 17.25'	
6+0	2° 05.61'	$\Delta 4^{\circ} 34' 30''$
+50	1° 36.96'	R 3000'
+20 P.O.C.	1° 19.77'	L 239.55
5+0	1° 08.31'	T 119.84
+50	0° 39.67'	D 157295
4+0	0° 11.02'	
3+80.77 B.C.H.		

+69.71 E.C.	2° 17.25'	
+50	2° 05.97'	$\Delta 4^{\circ} 34' 30''$
3+0	1° 37.32'	R 3000'
+50	1° 08.67'	L 239.55
2+0	0° 40.02'	T 119.84
+50	0° 11.37'	D 157295
1+30.16 B.C.Pt.		

0+00 = East Line of 30th St.

Nov. 16-48

S. S. 07
Smith
Becker
Garber

1

N.O. 90001

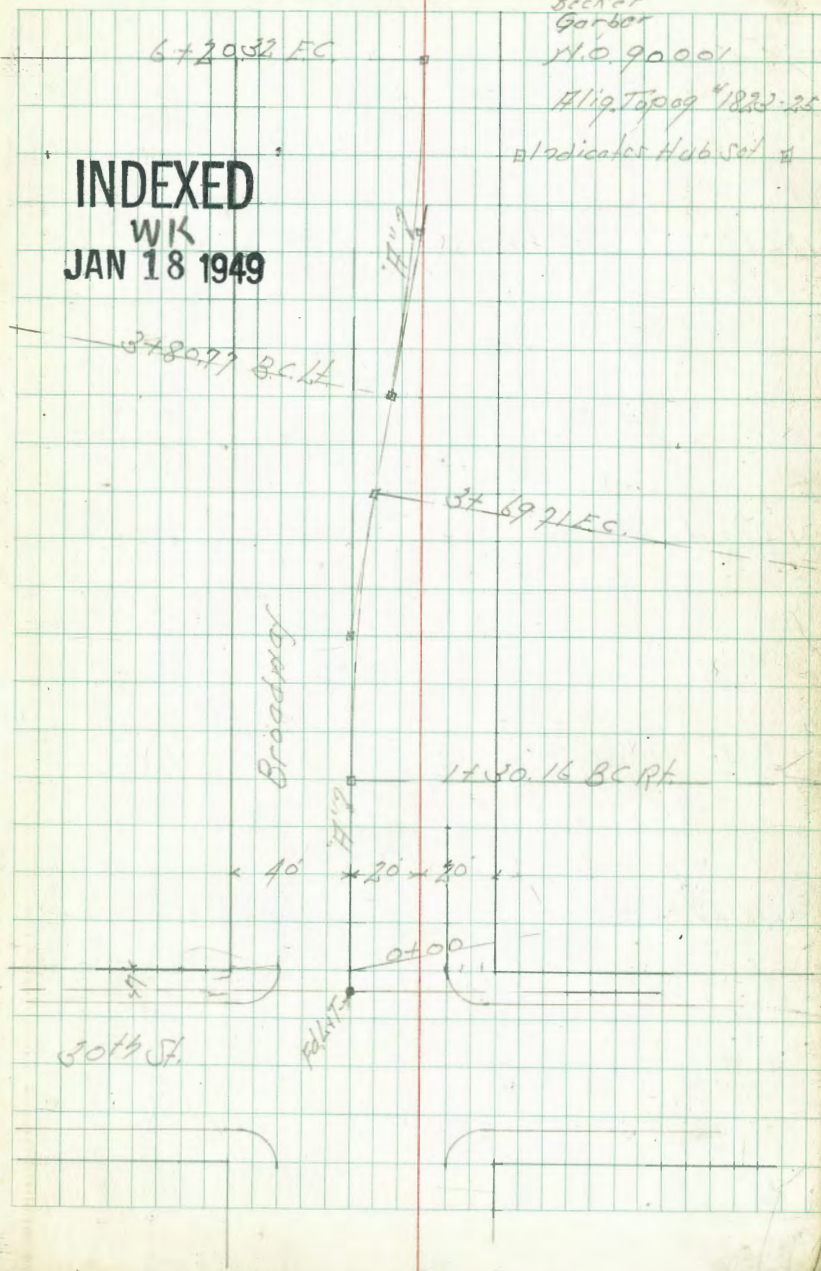
Align. Topog. 1832-25

Indicated Hub Set #

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WIK

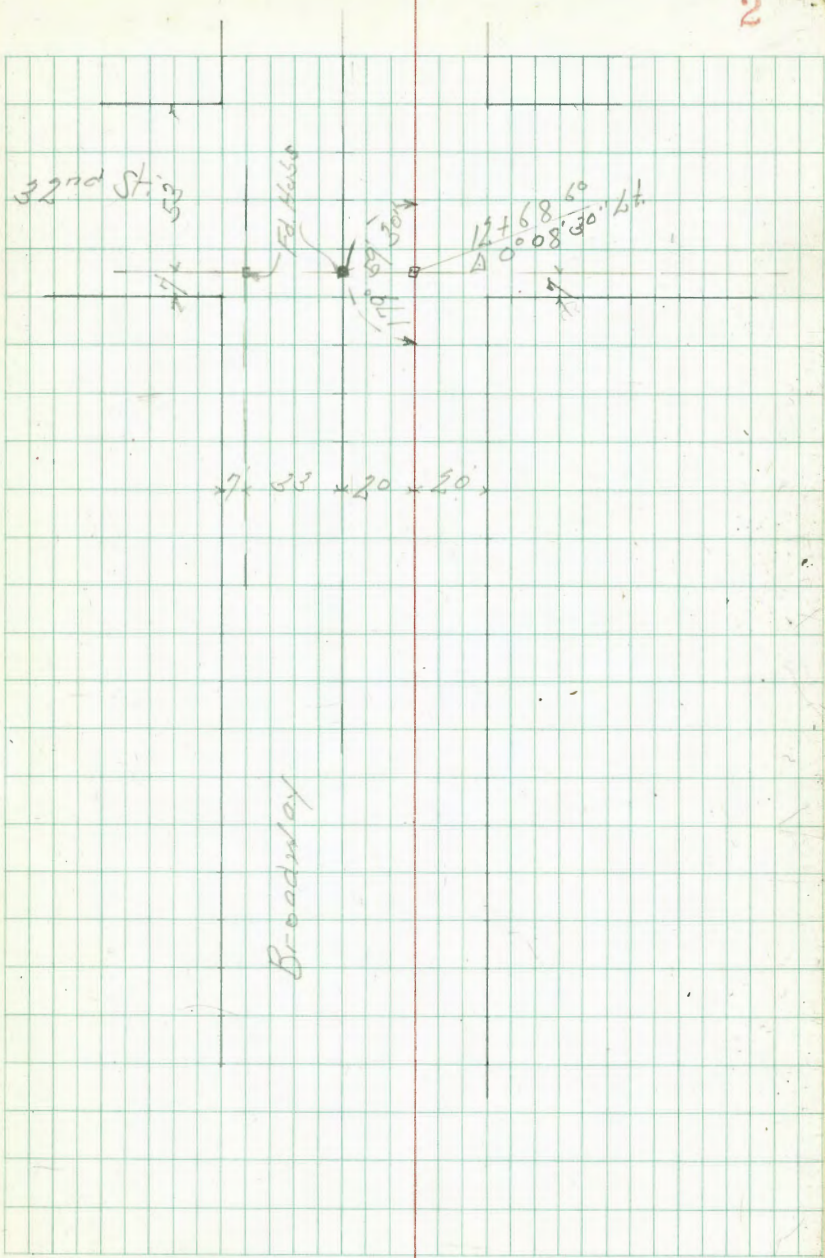
JAN 18 1949



12+68.60 Δ 0° 08' 30" Lt

11+13.36 P.O.T.

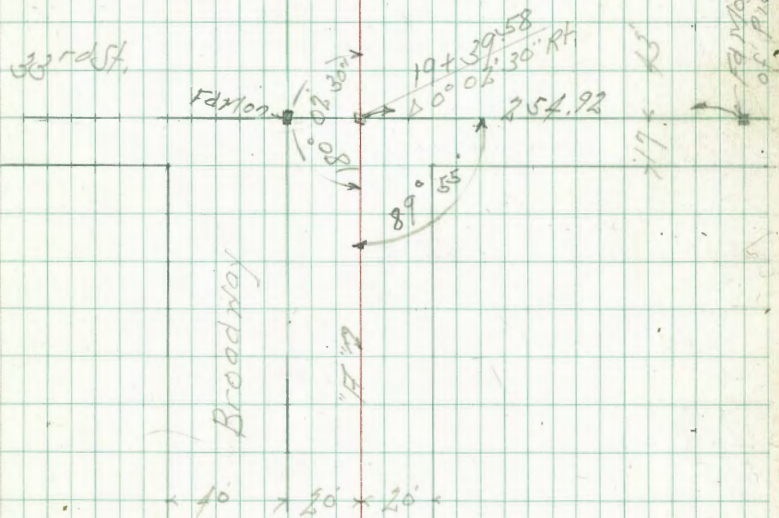
7+66.27 P.O.T.



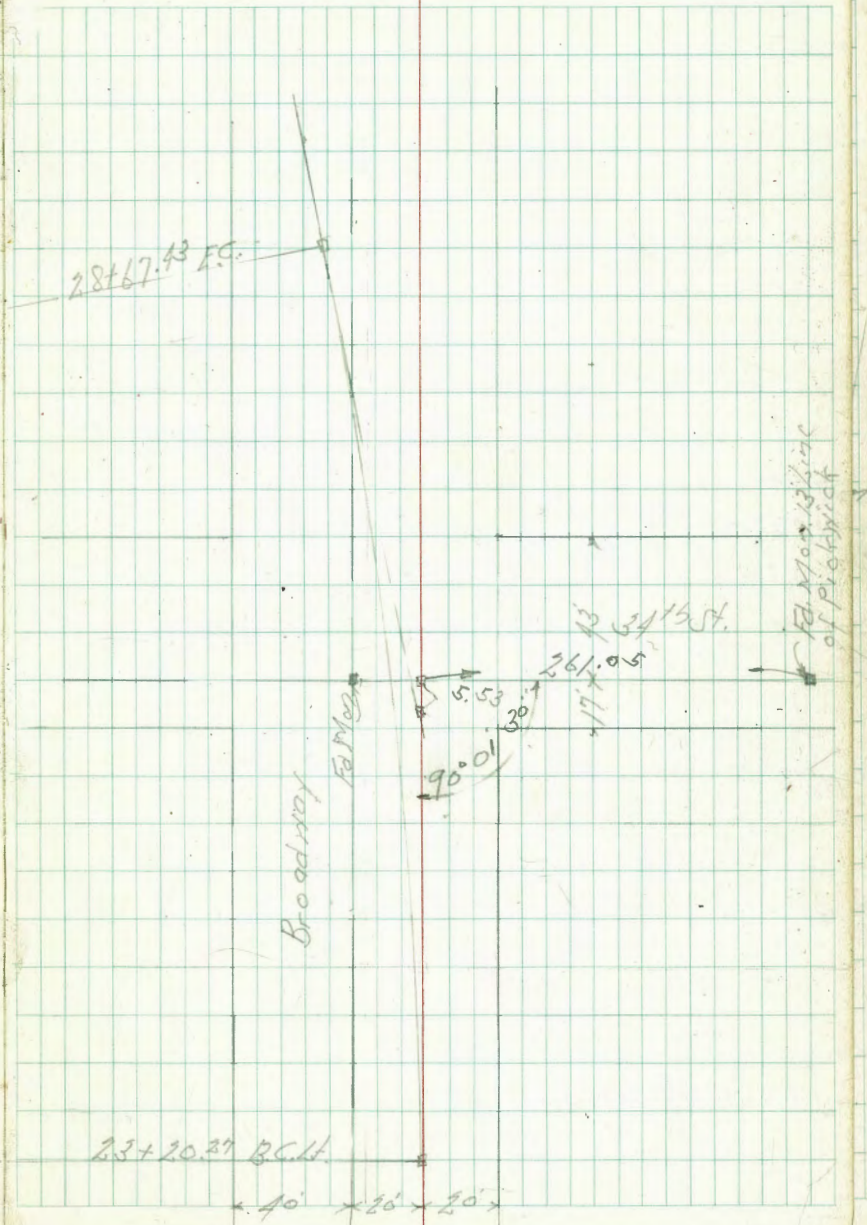
Alignment Broadway "H" Line

3

19+39.58 Δ 0° 02' 30" Rt.



+67.43	FC	5° 13.50'	
+50		5° 03.52'	
28+0		4° 34.87'	
+50		1° 06.22'	
27+0		3° 37.57'	
+50		3° 08.92'	Δ 10° 27'
			R 3000'
			T 277.34
26+0		2° 40.28'	L 547.16
			D. 572.95
+50		2° 11.62'	
25+0		1° 42.98'	
+50		1° 14.33'	
24+0		0° 45.68'	
+50		0° 17.03'	
23+20.27	BCU		

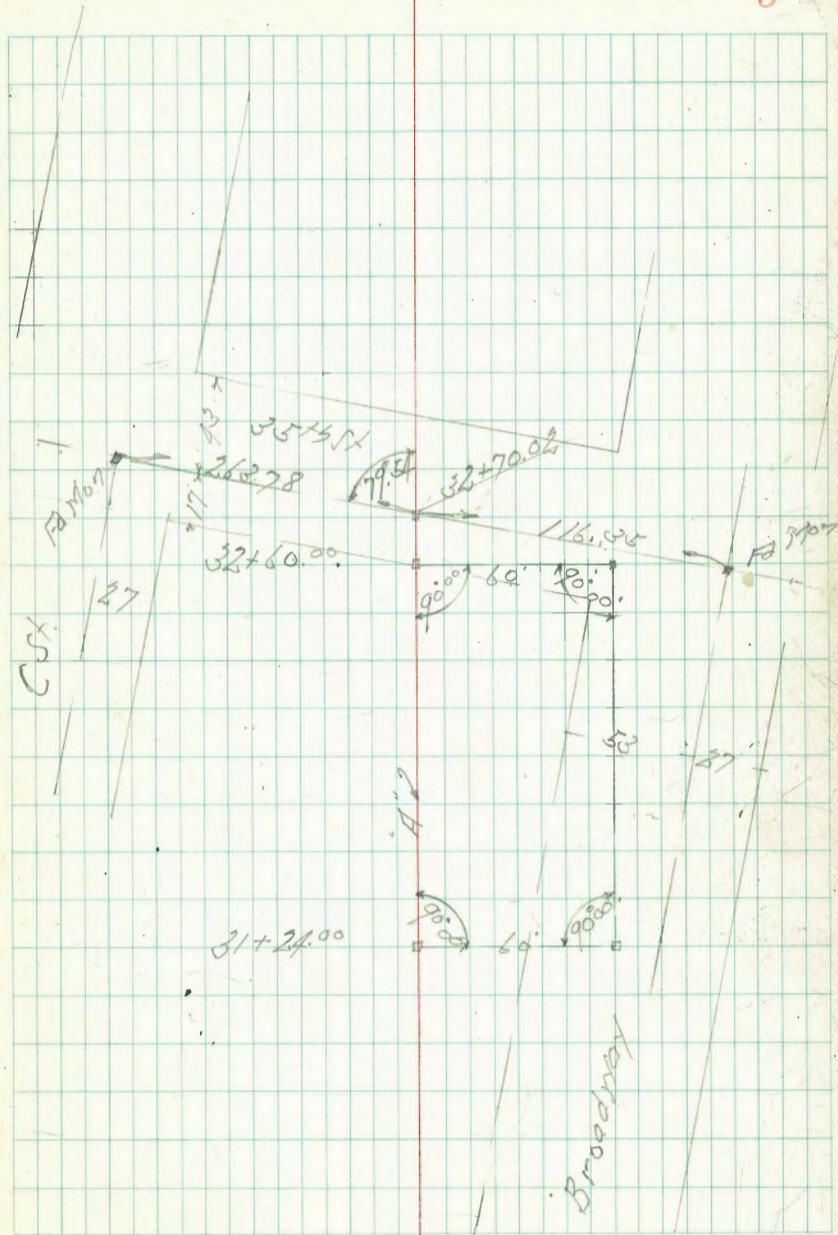


Alignment Broadway H^o Line

32+60.00 P.O.T.

31+24.00 P.O.T.

30+50.00 P.O.T.

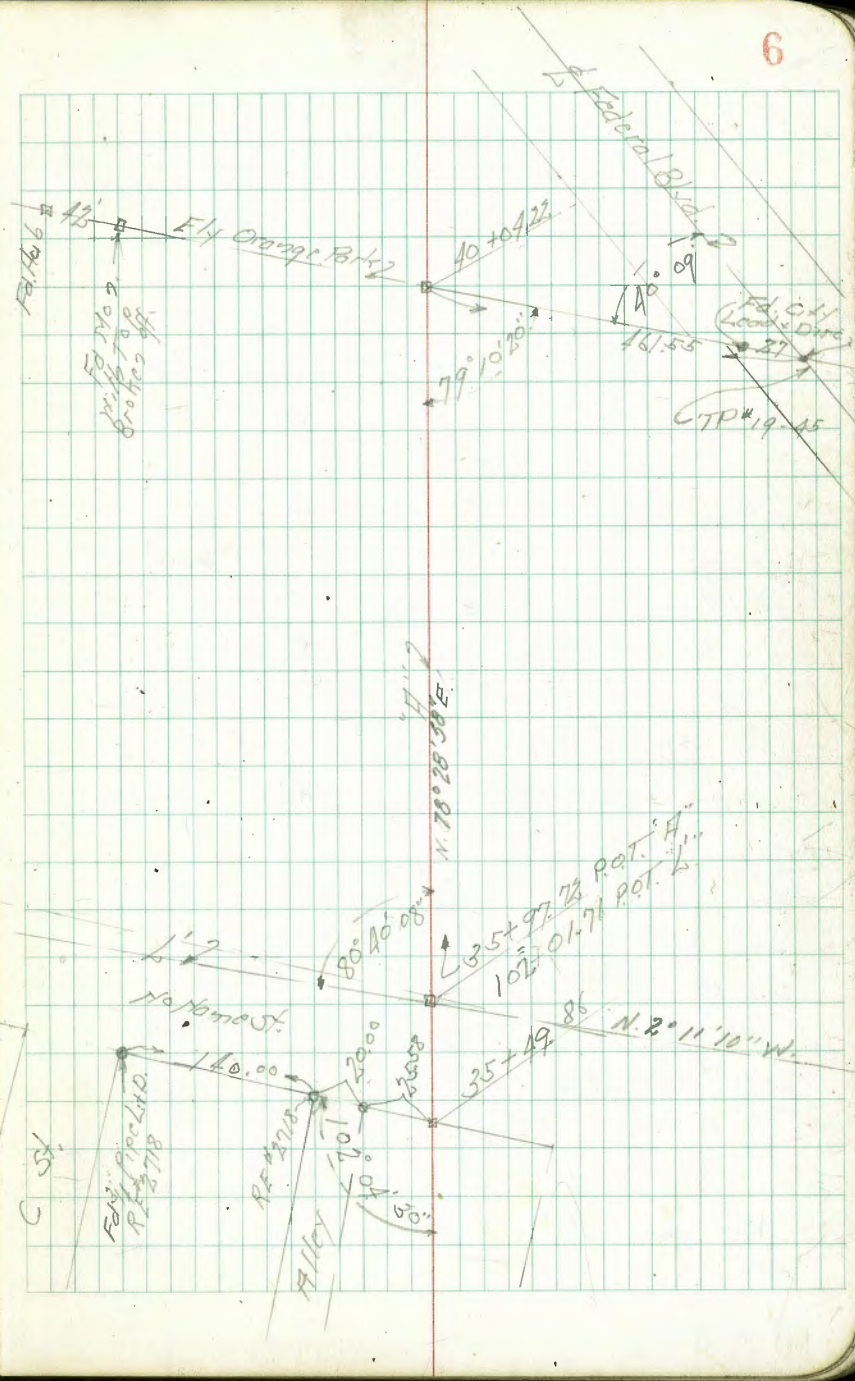


40+15.00 P.O.T.

40+04.82 P.O.T.

35+97.72 P.O.T.

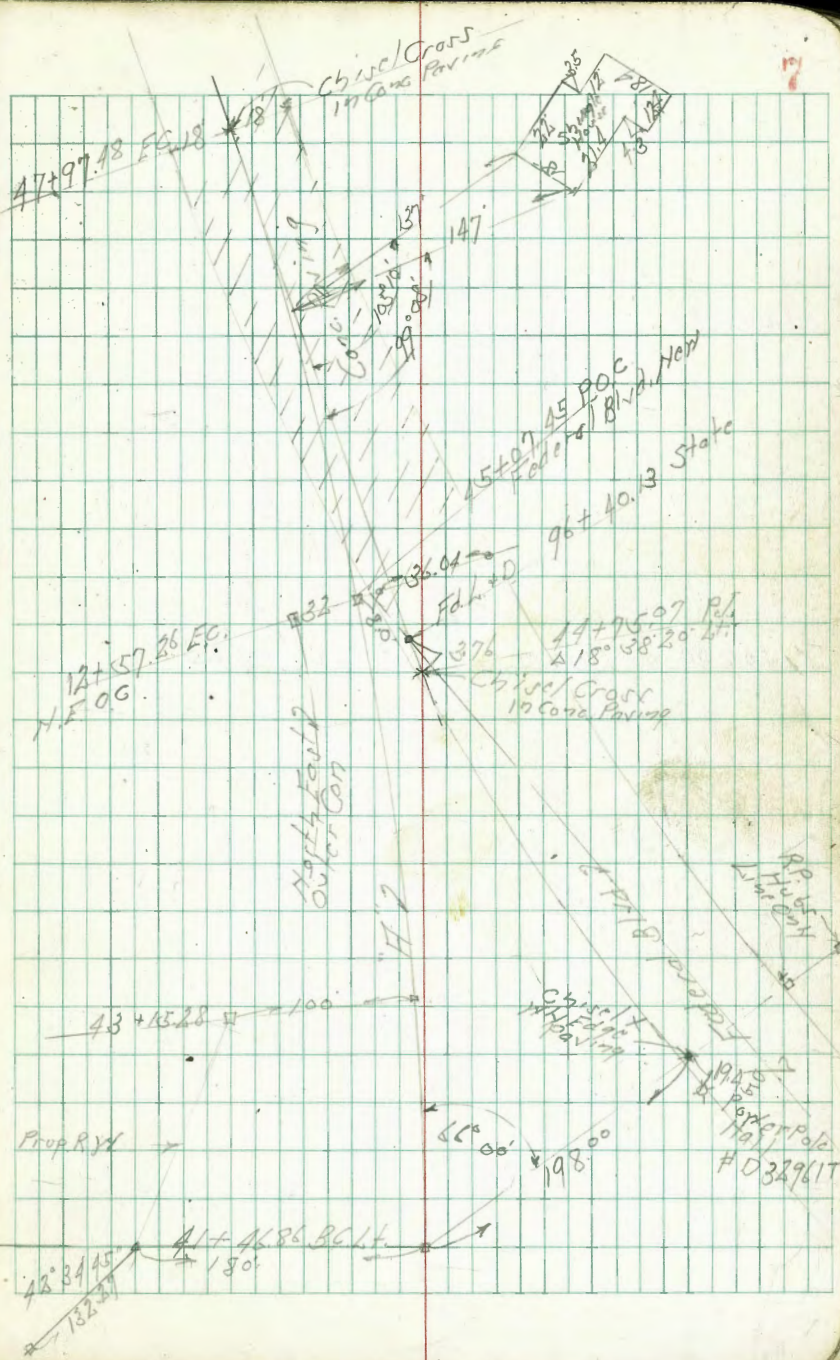
35+19.86 P.O.T.



Alignment Broadway "H" Line

47+97.18	F.C.	9° 19' 17"	0° 40' 8"	C 4200	R 1980
+50		8° 38' 36"			
47+0		7° 55' 39"			
+50		7° 12' 42"			
46+0		6° 29' 45"			
+50		5° 46' 47"	118° 38' 20"	1/4	
+0.745	= opp X 200	5° 09' 89"	P 2000'		
45+0		5° 03' 50"	378.21		
			650.62		
			D1.85913		
+50	P.O.C.	4° 20' 53"			
44+0		3° 37' 56"			
+86	Subvert P.O.C.	3° 25' 54"			
+50		2° 54' 59"			
+15.28	P.O.C.	2° 24' 70"			
43+0		2° 11' 61"			
+50		1° 28' 64"			
+30	P.O.C.	1° 11' 45"			
42+0		0° 45' 67"			
41+46.86	B.C.H.				

← Replaced April 25-49



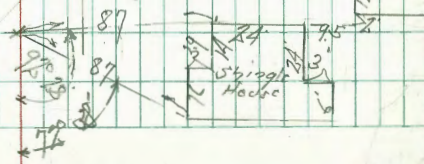
53 + 50.53 = Lead + Tack P.L. Rt

50 + 07.80 = (91 + 06.25 Pat 90 + 85.94 EC. CS. State)

47 + 97.48 EC.

18' x 18'
Conc Paving
Federal Blvd

47 + 97.48 EC.



52.25
12.25

Cross Section Broadway A Line
30th St. to Hobosy Freeway & Federal Blvd.
Alignment Page 1 to 8

Note: 0-30 to 140 Rods From M.L.
- 1+30 to 47+97.18 + Above - Below Center Line

INDEXED

WR
JAN 18 1949

+50

5.1 1959
100

0+0 - East Line of 30th St

5.1 1939
100

0-10

0-10 - East Corb Line 30th St

0-30 - East Corb Line 30th St

BM 420 199.03

194.83

S.F.R.P.
Broadway
& 30th St
1823-33

L.M.

Rt-5
Center Line
Nov 28 18
S. F. R. P.
S. F. R. P.
Garber

5.3 1938 90	5.1 1939 90	5.4 1937 100	5.2 1938 100	5.3 1938 100	5.4 1938 100	5.5 1938 100	5.6 1938 100	5.7 1938 100	5.8 1938 100	5.9 1938 100	5.10 1938 100	5.11 1938 100	5.12 1938 100	5.13 1938 100	5.14 1938 100	5.15 1938 100	5.16 1938 100	5.17 1938 100	5.18 1938 100	5.19 1938 100	5.20 1938 100	5.21 1938 100	5.22 1938 100	5.23 1938 100	5.24 1938 100	5.25 1938 100	5.26 1938 100	5.27 1938 100	5.28 1938 100	5.29 1938 100	5.30 1938 100	5.31 1938 100	5.32 1938 100	5.33 1938 100	5.34 1938 100	5.35 1938 100	5.36 1938 100	5.37 1938 100	5.38 1938 100	5.39 1938 100	5.40 1938 100	5.41 1938 100	5.42 1938 100	5.43 1938 100	5.44 1938 100	5.45 1938 100	5.46 1938 100	5.47 1938 100	5.48 1938 100	5.49 1938 100	5.50 1938 100	5.51 1938 100	5.52 1938 100	5.53 1938 100	5.54 1938 100	5.55 1938 100	5.56 1938 100	5.57 1938 100	5.58 1938 100	5.59 1938 100	5.60 1938 100	5.61 1938 100	5.62 1938 100	5.63 1938 100	5.64 1938 100	5.65 1938 100	5.66 1938 100	5.67 1938 100	5.68 1938 100	5.69 1938 100	5.70 1938 100	5.71 1938 100	5.72 1938 100	5.73 1938 100	5.74 1938 100	5.75 1938 100	5.76 1938 100	5.77 1938 100	5.78 1938 100	5.79 1938 100	5.80 1938 100	5.81 1938 100	5.82 1938 100	5.83 1938 100	5.84 1938 100	5.85 1938 100	5.86 1938 100	5.87 1938 100	5.88 1938 100	5.89 1938 100	5.90 1938 100	5.91 1938 100	5.92 1938 100	5.93 1938 100	5.94 1938 100	5.95 1938 100	5.96 1938 100	5.97 1938 100	5.98 1938 100	5.99 1938 100	6.00 1938 100
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+50

1986	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975
+11	+12	+72	+12	-1	72	-0	+0	+1	+12	+12
109	73	47	39	23	72	21	23	38	41	81

2+0

1981	1984	1982	1980	1981	1982	1985	1982	1980	1986	1988
+72	+72	+82	+0	-1	36	-0	+12	+72	+74	+64
106	68	46	35	21	36	22	30	45	72	104

+50

2016	2011	1999	1988	1987	1983	1988	1988	1980	1977	1972
+82	+72	+62	+0	-0	+5	-0	+0	+4	+4	+32
103	74	47	35	21	22	35	44	78	78	112

TP

128 194.78 5.53 193.50

+30.16 59' At North side of frame House 109' At South side

+30.16 BC Rt

2021	2015	2009	1940	1930	1935	1929	1941	1979	1983	1976
+82	+72	+65	+0	-0	5.53	-0	+0	+4	+4	+4
103	92	45	35	20	24	36	43	59	59	109

1+0

+0.5
100

1970	1985	1987	1980	1981	1984	1988	1985	1982	1988	1981	1978	1969
20	25	22	55	25	52	5	5	20	32	25	25	25
75	25	25	57	25	52	5	25	20	32	25	25	25

0475 - Fly Curb + Walk on Rt.

1974
100

19903

19903

Brooklyn 4th Line.

TP 2.80 171.53 130.4 168.73

+50

+26 = NY Curb + Walk on Pt

4+0 63' at North of Starco House

3+80.77 EC LT.

+69.71 EC

+50

TP 0.13 181.77 131.4 181.64

3+0

194.78

LT

2

Pt

11

174.0 164.5 157.2 148.8 139.4 130.0 120.8 111.8 102.6 93.4 84.2 75.0 65.8 56.6 47.4 38.2 29.0 19.8 10.6 1.4

+52 -42 -116 0.0 104 -28 0.0 130 -02 -102 112 +132 102 +162 162

126 102 80 56 37 34 18 130 105 105 20 30 64 78 100

part of
for curbs

170.6 160.5 151.0 141.2 131.8 122.0 112.5 103.0 93.5 84.0 74.5 65.0 55.5 46.0 36.5 27.0 17.5 8.0 -1.5 -12.0

-02 -112 -02 -02 -12 -102 10.5 -02 -102 102 +122 +122 +172 +172

105 77 53 34 33 17 105 118 118 26 26 39 70 100

part of
for curbs

165.3 155.2 144.7 135.5 126.0 116.5 107.0 97.5 88.0 78.5 69.0 59.5 50.0 40.5 31.0 21.5 12.0 2.5 -1.5 -12.0

+112 442 -92 -02 -02 -12 02 21 -06 -102 102 +122 +122 +152 +162 +162

123 102 70 33 31 15 11 16 28 28 47 63 84 102

(con wall)

160.5 150.3 141.1 131.5 122.0 112.5 103.0 93.5 84.0 74.5 65.0 55.5 46.0 36.5 27.0 17.5 8.0 -1.5 -12.0

+112 +62 52 +102 -02 -12 -02 5 21 -1 102 11 162 +142 +142 +182 +182 +182

118 90 68 52 34 29 16 13 18 30 30 50 50 83 100

part of
for curbs

157.8 147.2 138.1 128.2 118.6 109.4 100.0 90.5 81.0 71.5 62.0 52.5 43.0 33.5 24.0 14.5 5.0 -1.5 -12.0

+92 +52 -02 +22 102 -12 -22 -02 3 4 -12 +02 +12 +162 +142 +182 +172 +172

110 84 68 54 44 29 27 16 15 19 31 31 50 50 76 100

(con wall) (con wall)

151.3 141.9 132.5 122.9 113.0 103.5 94.0 84.5 75.0 65.5 56.0 46.5 37.0 27.5 18.0 8.5 -1.5 -12.0

+84 +52 +12 02 -02 -12 11 9 -12 102 +102 +162 +162 +182 +182

102 74 46 40 27 25 11 9 17 22 37 40 70 100

194.78

+70

TP 0.82 147.19 12.88 146.37

+50

TP 0.66 159.25 12.94 158.59

+35

+20 30' at North side garage con. floor 52' southerly garage

+0 50' at North side of House

+76

171.53

4

5

PX

12

163.2 160.7 1630 1653 1649 166x 1657 1670 166.5 1721 1710 171x 180.2 180x
 -22 51 22 02 02 102 58 12 12 16 112 112 115 142
 135 85 60 36 7 23 19 33 52 75 92 94 104

155.6 159 155x 162x 164.6 166.3 168.2 170x 174.6 175.8
 -94 -114 -92 -42 17 17 17 17 17 17 17 17 17 17
 129 79 49 17 17 17 17 17 17 17 17 17 17 17

149.8 148.5 141.6 146.9 145.8 149.3 1532 160.6 164.8 166x 166.5 166.1 166.8
 -102 -124 -192 -122 -142 -122 -72 10.9 142 152 152 152 152 162
 128 97 70 48 43 28 17 12 22 47 80 100

156.8 158.9 146.2 152.5 149.0 157.7 159.9 167.3 166.8 165.3 148.3 170.8 172.3
 -102 -134 -212 -152 -162 -132 -72 10 02 17 102 132 142
 111 94 74 48 41 35 16 9 30 52 80 102

162.3 153.1 141.6 142.9 158.9 167.6 167.2 167.1 166.6 167.6 175.1
 -42 -142 55 -42 -82 102 102 11 -02 102 182
 117 80 36 50 39 21 14 11 22 22 50

165.5 1540 165.7 167.8 166.0 166.9 167.5 167.2 167.8 175.9 178.6 179.6 180.7
 -22 -132 18 102 -15 -02 10 -02 102 182 112 112 132
 116 80 37 40 36 17 15 23 45 57 84 104

171.53

+32 61' W southerly garage 79' W southerly of Frame House

7+0

TP 11.38 170.66 0.07 159.28

+73

TP 12.36 159.35 0.20 146.99

+47

+20.32 FS

6+0

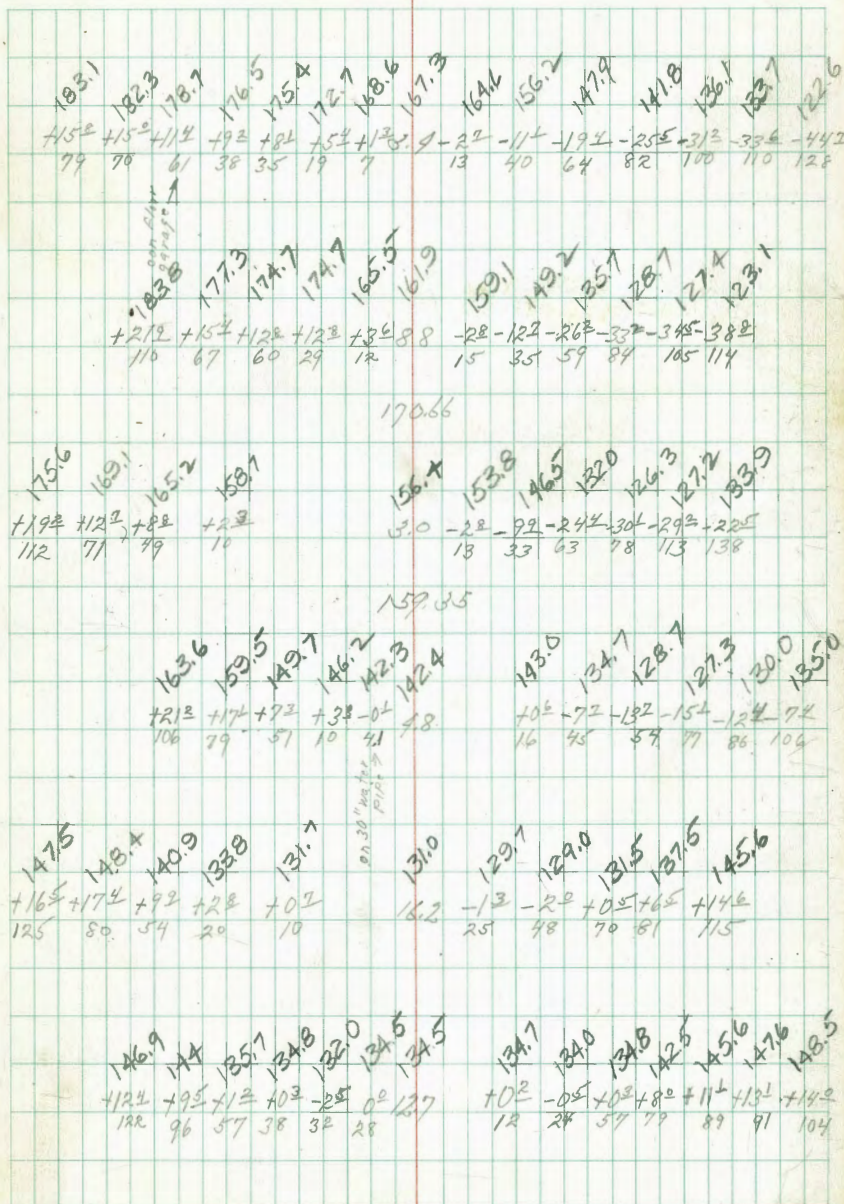
147.19

Lt

+

PL

13



147.19

9+0

+80

+65

IP 0.71 158.82 12.55 158.11

+30

8+0

7+66.27 P.O.T.

17086

173.4 169.6 165.4 162.7 157.3 152.3 147.6 143.0 139.0 134.3 132.5 133.5 134.4 130.6 140.9
 +130.4 +22.6 +22.4 +19.2 +14.3 +9.2 +4.6 15.8 -4.0 -8.2 -10.5 -9.5 -8.2 -3.4 -2.1
 105 92 89 83 80 48 21 20 35 35 64 78 109 136

178.5 167.1 166.4 159.4 154.1 152.3 150.9 148.5 143.9 138.7 130.1 127.5 137.4 133.8
 +127.4 +16.5 +14.5 +8.5 +3.2 +1.4 7.9 -2.4 -7.2 -12.2 -20.2 -23.4 -18.5 -17.4
 108 87 68 37 12 45 79 14 35 36 80 83 107 130

178.7 178.2 170.7 167.7 160.5 154.9 150.9 144.9 142.7 139.0 133.9 125.3
 +123.2 +23.7 +15.2 +12.2 +5.4 5.9 -4.0 -10.2 -12.2 -25.2 -31.2 -29.6
 106 96 87 62 25 23 51 62 93 112 133

179.0 178.4 173.3 171.1 167.7 165 159.8 156.8 152.3 148 135.4
 +19.2 +18.6 +14.2 +11.2 +7.2 16.2 10.9 -3.4 -7.5 -15.2 -24.4
 103 94 82 59 45 26 18 41 74 110

180.2 177.8 174 170.9 167.0 164.6 163.8 161.9 158.5 156.1 147.1 143.3 136.5
 +14.2 +14.8 +10.2 +7.4 +3.2 +0.2 6.9 -1.2 -5.3 -7.2 -16.2 -20.5 -27.2
 100 80 43 35 11 7 11 26 42 77 94 117

185.6 182.3 179.2 176.9 173.4 166.4 164.3 161.5 156.3 154.4 149.9 140
 +19.2 +16.2 +12.2 +10.2 +7.4 +0.4 4.3 6 5 -1.2 -3.2 -11.2 -26.1 -36.2
 103 75 71 48 20 5 5 18 53 101 133

17086

+70

TP 3.57 183.36 1.24 179.73

+30

1040

TP 11.42 180.97 0.03 169.55

+75

TP 11.07 169.58 0.01 158.57

+34

9+16

158.82

LT

2

RT

15

186.8	185.5	183.6	182.4	181.4	180.4	177.4	176.0	174.7
+5.4	+4.4	+2.2	+1.2	1.9	-0.2	-4.2	-5.4	-6.2
106	80	38	20	27	23	68	93	107

183.50

188.1	184.9	179.8	178.2	174.8	173.6	171.6	170.1
+8.2	+5.4	1.2	-1.2	-5.2	-6.2	-8.2	-9.2
103	50	12	16	30	66	92	110

186.3	185.8	182.1	175.6	173.8	170.8	169.8	167.3	165.2
+1.2	+1.2	+1.2	2.2	-3.2	-4.2	-6.2	-8.2	-8.2
100	91	30	15	23	25	30	77	106

180.97

173	171	173.5	170.9	168.5	166.1	163.7	161.2	158.4
+4.5	+2.5	+5.2	+2.4	1.1	-2.4	-4.2	-7.2	-9.2
114	78	50	18	11	22	54	83	115

169.58

168.4	162.7	157.9	151.9	152.2	149.7	151.2	149.4	150.1	149.0	147.8	
+1.2	+1.2	+1.2	+2.2	+2.5	3.1	+1.5	-0.2	+0.4	+0.4	-0.2	-1.2
108	77	38	23	45	31	13	26	38	62	87	125

165.5	164.1	159.6	149.2	146.7	142.7	141.8	142.4	141.0	141.4	144.2	144.8
+2.2	+2.2	+1.2	+7.2	+4.2	+0.2	17.0	+0.6	-0.2	-0.4	+2.4	+3.2
106	93	60	38	24	12	17	17	43	70	98	122

158.82

B.M

631 164.22

N.W. Mont BP
Broadway 1327
164.20 41323-32

+61.6 = W.L. 32nd St

+28

TP 0.02 170.53 12.79 170.51

12+0

+82

+50

11+06

18230

Lt

S

Rt

16

166.6	162.6	160.5	160.0	158.9	156.9	155.0	150.0
+62	+26	+05	+05	-14	-34	-52	-94
108	57	20	12.5	17	50	81	113

173.3	172.8	170.5	168.6	166.4	165.1	164.1	161.9	159.7	156.8
+75	+74	+48	+22	+02	+08	-16	-32	-62	-82
101	90	63	40	17	20	50	80	106	

170.53

180.7	180.1	175.6	173.6	171.9	170.5	169.1	168.0	166.0	165.3	162.2	159.8
+102	+96	+54	+24	+14	+2.8	-14	-25	-45	-52	-82	-102
100	69	53	38	15	2.8	16	32	38	53	85	115

181.8	181.7	180	178	175.3	173.8	1720	169.6	167.1	164.6	161.5
+82	+72	+62	+42	+15	+9.5	-18	-42	-62	-92	-122
108	98	57	54	15	9.5	25	45	53	80	113

182.9	182.7	181.8	180.5	179.9	178.8	177.9	176.1	173.1	170.3	166.7
+50	+42	+32	+22	+02	+02	+04	-12	-42	-72	-112
90	77	60	42	30	18	54	23	48	75	105

184.7	183.7	183.5	182.3	181.1	179.9	177.9	176.1	174.8
+36	+26	+24	+12	+22	-12	-32	-50	-62
107	80	62	30	22	18	55	85	110

18230

Broodway "A" Line

TP 0.36 1320.5 1297 131.69

+70

+47

TP 0.18 14466 1309 144.18

+216 = E.L. 33rd St

13716

+94

TP 0.24 15757 1320 157.33

12780

170.53

Lt.

S

Rt.

17

145.9 139.9 137.5 136.4 134.9 132.9 131.5 129.7 124
 +95 +35 +11 8.2 -15 -35 -42 -72 -124
 108 60 25 8 16 38 43 71 112

157 148.6 146.8 144.4 142.2 141.6 137.3 132.4 127.7
 +98 +64 +46 +22 2.5 -06 -42 -98 -145
 118 83 45 22 10 43 83 117

144.66

154.1 154.3 151.7 148.7 146.7 142.4 139.1 136.3
 +74 +54 +30 8.9 -22 -62 -96 -124
 102 69 30 23 36 92 109

158.6 136.1 133.6 15.1 149.1 146.1 143.3 138.9
 +75 +50 +25 6.5 -22 -52 -72 -122
 106 67 30 23 33 80 118

158.3 155.9 152.3 150.0 148.6 146.1 141.6 137.0
 +82 +52 +22 7.6 -14 -32 -82 -152
 105 75 22 15 20 53 93 128

157.57

4 173.6 6 170.5 5 168.6 5 167.3 5 167.1 5 164.1 5 163.0 4 158.3
 +63 +32 +13 32 -03 -32 -43 -92
 111 70 32 15 40 73 110

170.53

154.1

TP 0.40 119.65 12.80 119.25
 1640 39' at E Northerly of Calif House

1640

+50

1570

+75

+40

1410

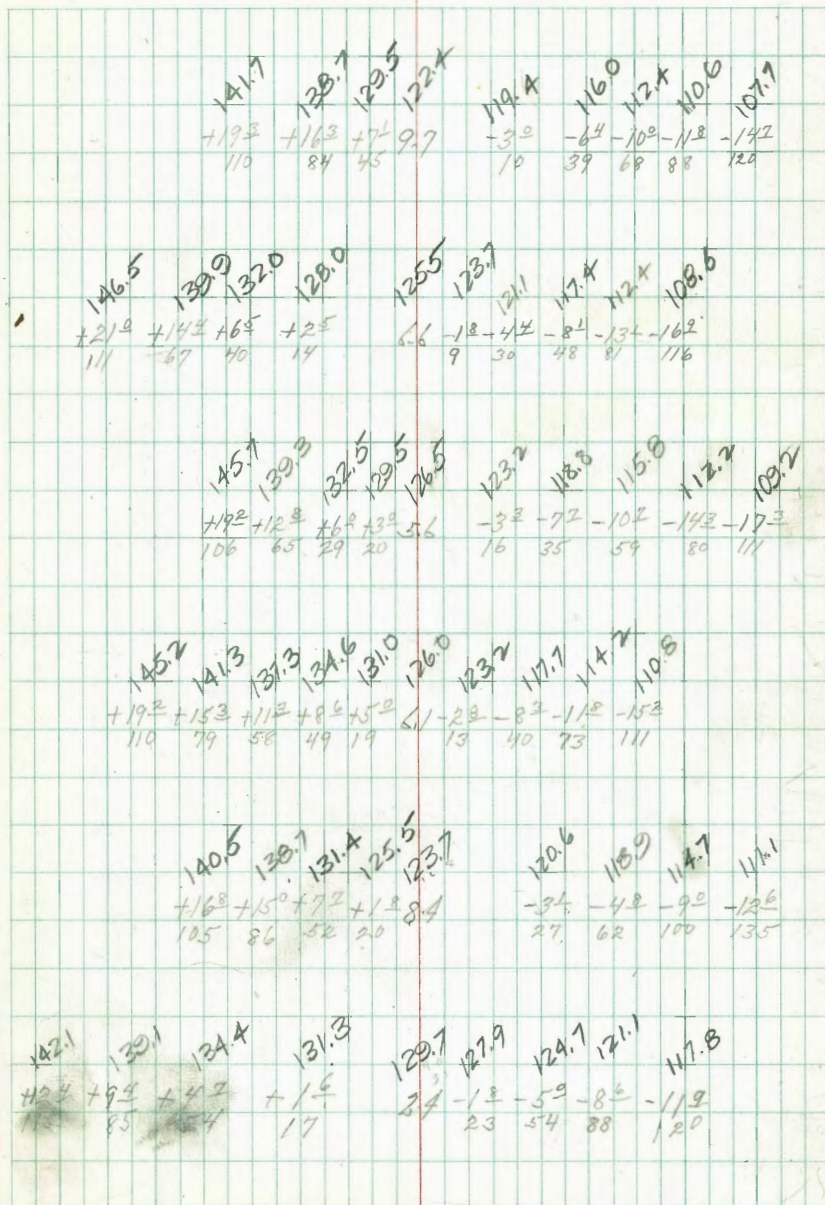
132.05

Lt.

2

pt.

18



132.05

NOTE: 1+30.16 TO 47+27.48 + ABOVE &

- BELOW &

+23

18+0

+62

+25

TP 4.55 110.95 132.5 106.40

17+0

16+67 32' At Q Northerly of Frame House

16+50

119.65

At

S

At

19

95.5	94.0	92.4	92.4	92.1	90.7	90.4	90.6
+3.2	+1.6	+0.8					
105	65	20	18.6	-0.2	-1.2	-2.2	-1.8
				18	53	88	112

95.6	94.4	92.9	92.6	91.3	90.8	89.6	88.6
+2.2	+1.2	+0.2	+1.8	-1.2	-1.2	-3.2	-4.2
102	55	25	24	54	88	118	

97.0	96.1	94.5	95.6	95.6	94.1	91.1	89.2	87.4	85.3	83.4	82.8
+1.4	+0.5	-1.1	-0.1	0.2	+5.4	-1.5	-4.5	-6.4	-8.2	-6.3	-6.2
113	74	35	23	42	12	30	52	56	65	93	45

99.3	101.3	105.6	105.8	102.5	103.1	102.8	98.8	92.3	88.4	85.5	85.3
-3.2	+1.2	+2.4	+1.2	8.5	+0.6	+0.3	-3.2	-12.2	-14.1	-17.2	-17.2
102	68	28	20	10	20	45	72	95	107	138	

110.95

108.8	110.3	114.8	103.8	108.1	108.1	106.1	102.2	100.5	96.8	91.9
-1.2	+0.5	+5.2	9.9	-1.2	-1.1	-3.2	-6.6	-9.2	-13.2	-17.2
106	65	40	7	20	41	57	76	91	111	

132.4	129.4	126.4	121.2	117.8	116.4	114.1	114.0	112.9	110.0	107.4	105.0
+16.2	+13.2	+10.2	+4.8	+1.4							
109	84	58	35	5	5.3	23	24	35	64	92	114
						9	22	32	65	93	113

119.65

Cross Section Broadway # Line
 30th St to Hobart Freeway + Federal Blvd.

B.M.

4.52

106.43

1124 Mon + 8P
 Broadway
 33rd
 106.43 #1823

+52.58 = 33rd St.

+22.58 = H.L. 33rd

19+0

+82

+60

+8+28

110.95

Lt.

2

Rt.

20

108.1 107.2 106.3 105.7 105.0 104.1 103.2 102.1
 +2.4 +1.5 +0.2 5.2 -0.2 -1.6 -2.5 -3.6
 105 70 32 30 63 93 120

107.7 106.7 106.7 105.9 106.2 106.1 105.2 103.3 101.8
 +1.5 +0.5 +0.5 -0.2 4.8 -0.4 -1.0 +2.2 -4.4
 102 70 40 12 25 55 85 108

105.7 104.0 102.7 103.2 103.9 101.6 101.9 103.3 103.4 103.2
 +3.8 +2.4 +0.8 +1.2 +2.2 -0.3 1.4 +1.5 +1.3
 110 83 77 53 34 15 5 20 38

99.7 100.4 99.7 98.4 97.4 97.3 96.4 95.5 97.2 99.8 99.0
 +3.8 +4.2 +3.2 12.2 +1.2 +0.2 14.6 -0.2 +0.5 +0.2 +3.4 +2.6
 100 87 80 60 33 42 13 20 46 73 104

95.7 94.3 93.7 93.9 92.3 92.1 95.3 96.1 96.0 91.5 97.0
 +3.4 +2.2 +1.4 +1.6 18.7 -0.2 +3.2 +3.2 +3.2 +5.2 +5.5
 106 65 33 42 13 18 40 70 96 114

95.1 92.9 92.7 92.4 92.1 91.1 93.1 93.4 92.6
 +3.8 +1.5 +0.3 18.6 -0.3 +1.2 +0.2 +1.0 +0.2
 105 55 22 18 20 48 74 106

110.95

22734 72' RT Weatherly power pole # R3341

2210

21780 20' RT Begin wire + post fence

+50

2110

20783 75' RT Weatherly power pole # JP3317

+50

2010

19782.58 East line of 33rd St.

110.95

Lt.

S

PL

21

104.9	103.2	102.8	103.1	102.5	102.2	103.7	103.5	103.6	103.2	102.6
+12	-05	-02	-06	-12	-15	23	-02	-01	-05	-14
110	85	52	35	32	10	12	40	70	105	

104.5	104.1	105.2	105.0	103.5	103.4	104.6	103.6	103.0	101.6	101.0
-04	+05	+06	+04	-14	-12	64	-12	-16	-32	-32
113	85	58	36	32	9	13	40	78	110	

105.3	106.4	106.5	105.3	104.5	103.9	104.4	103.4	102.5	101.5	100.8
+02	+20	+21	+02	+01	-05	66	-12	-12	-22	-32
112	85	58	36	33	9	20	45	75	104	

108.1	107.6	106.4	106.0	105.5	105.9	104.6	103.4	102.4	101.1	100.9
+28	+12	+05	+04	-04	5.1	-12	-25	-25	-48	-50
108	77	35	33	10	30	50	67	70	105	

109.4	108.6	108.8	108.0	107.5	106.6	106.9	106.1	105.6	103.9	103.0	102.0
+25	+12	+12	+14	+06	-03	11	-02	-12	-32	-32	-42
110	83	62	50	28	10	11	29	60	80	110	

109.1	108.1	107.8	106.9	105.9	106.3	105.6	104.8	103.2	102.7	102.2
+28	+12	+15	+06	-02	17	-04	-15	-34	-36	-44
108	45	41	32	11	11	34	64	88	115	

110.95

24+58

10 1/2' northerly of power pole #P3379

+50

24+0

23+85 19' Rt End of fence line

23+65 35' Rt northerly from House

+50

23+33

75' Rt northerly power pole #P3359

+2027 = B.C. Lt 18' Rt in fence line yet

23+0

TP 1.16 103.30 8.81 102.14

22+50

110.95

Lt.

S

Pt.

22.

101.3	100.4	101.1	100.0	99.7	99.5	99.5	99.2	99.2	94.4
+1.2	+0.2	+1.2	+0.5	-0.2	0.2	-1.0	-0.2	-4.2	-5.1
104	65	45	35	10	25	25	57	90	110

102.5	101.8	102.0	100.7	99.8	100.0	99.5	99.2
+2.5	+1.2	+2.2	+0.2	-0.2	0.3	-0.5	0.0
108	65	43	37	11	20	20	20

103.2	101.8	100.7	100.2	100.5	100.7	100.9	100.4	100.5	100.3
+2.2	+1.2	+0.2	-0.2	0.2	+0.2	+0.4	+0.2	-0.4	0.0
101	72	35	12	28	25	34	60	69	95

105.1	103.6	102.2	100.7	100.5	100.5	102.8	102.5	102.3	102.1
+4.4	+3.4	+1.2	+0.2	0.0	2.76	+0.4	+2.2	+2.0	+1.8
102	60	56	34	10	20	46	18	19	46

105.1	105.2	103.8	102.0	100.7	100.1	101.0	101.2	102.9	102.6	102.3	102.0
+4.2	+4.2	+2.2	+1.2	-0.2	-0.2	2.3	+0.2	+1.2	+1.4	+1.3	+1.0
102	92	61	55	32	12	23	18	19	39	75	100

105.6	105.2	103.5	101.2	101.5	102.2	102.3	102.8	104.4	104.4	103.0
+3.4	+3.2	+1.2	-1.0	-0.2	2.8	+0.1	+0.4	+2.2	+2.2	+0.4
90	83	58	34	6	19	19	36	76	100	120

Southerly
Frame House

110.95

Northerly
Frame House

Brooklyn A Line

B.M. 4.12 99.18
 26+91 - 305' Rt Northern power pole # P3109
 +70

+44 - Approx EL 341.5 ft

26+14 - Approx $\frac{1}{2}$ 341.5 ft

+84 - Approx W.L. 341.5 ft

25+82 186' Northern power pole # D31967

+50

25+0

10330

NE Mon 18 P
 Broadway
 +34.5
 99.19

Lt. 2 Rt. 23

102.7	100.0	99.6	99.6	99.2	95.2	94.4	92.7	92.1	88.0	86.6	85.4
+7.5	+7.2	+3.4	+1.4	0.0	8.1	-6.8	-2.5	-5.4	-7.2	-8.6	-9.8
118	78	37	12	9	10	20	40	70	90	105	

101.5	101.2	98.9	97.5	96.3	96.2	95.3	93.8	92.2	90.6	88.8	88.8
+5.8	+5.0	+2.7	+1.2	+0.2	7.1	-0.2	-2.4	-5.0	-5.6	-7.8	-7.8
108	98	55	18	11	7	10	18	42	67	88	88

101.8	100.2	98.3	96.9	95.3	92.7	92.7	88.8				
+4.2	+3.3	+1.4	6.7	-1.6	-4.2	-6.2	-8.1				
100	67	25	6	17	43	72	104				

101.8	101.1	100.3	98.7	98.4	97.6	97.0	94.5	92.9	91.2	89.3	
+4.8	+4.4	+3.3	+2.2	+1.4	+0.6	6.3	-2.5	-4.4	-5.8	-6.7	
100	76	84	48	35	17	6	34	60	81	106	

101.8	100.5	99.6	99.0	98.7	97.3	96.5	95.0	95.0	93.5	93.0	
+4.5	+3.2	+2.2	+1.2	+0.2	5.0	-0.8	-2.3	-2.2	-4.0	-4.3	
107	81	52	34	24	5	17	33	43	71	100	

101.4	99.9	99.1	98.6	97.8	97.0	97.0	95.3	94.7			
+3.6	+2.4	+1.3	+0.8	5.5	-0.8	-0.8	-2.5	-3.1			
105	76	43	26	5	27	58	87	110			

10330

29+0

+67.43 EC

+50

28+25 77' at Southern of Frame House

28+0

IP 0.21 90.80 12.7L 90.59

+50

27+0

103.30

Lt.

L

Rt.

24

82.0	82.1	82.8	82.1	85.8	82.4	83.0	83.1	81.8	80.4	77.5
+72	+62	+44	+13	50	-14	-22	-22	-40	-54	-83
106	87	48	24		20	27	40	32	73	105

86.1	82.7	80.5	81.6	86.0	85.6	82.2	82.4	83.3	82.1	81.0	79.0	
+92	+62	+45	+12	48	-04	-12	-16	-22	(900 and 11)	-32	-50	-72
110	74	40	8	02/106	17	22	35	44	72	78	100	

85.4	82.4	80.0	81.6	86.8	86.1	85.3	82.3	83.0	81.6	81.4
+72	+58	+24	3.2	-02	-25	-23	-23	-44	-60	-62
100	77	32		13	19	30	40	63	68	87

87.4	85.0	82.7	80.7	86.8	87.7	88.0	87.1	85.5	84.0	81.8
+82	+62	+32	+12	2.0	-14	-02	-12	-33	-48	-72
108	81	50	20		10	20	30	50	70	87

9080

101.3	89.4	82.6	82.7	81.5	80.6	80.4	80.5	80.2	86.5	85.0	83.0	82.8
+102	+82	+72	+22	+02	127	-02	-14	-24	-44	-56	-76	-72
131	105	67	23	4		12	22	33	57	66	95	104

101.8	82.7	80.5	82.4	83.1	83.4	82.1	80.4	82.4	86.4	85.8	83.1
+84	+53	+32	+12	-02	99	-13	-32	-50	-72	-76	-92
115	75	20	10	5		26	29	50	75	85	110

103.30

Northern House

+24 P.O.T.

31+0

TP 1.34 68.63 12.19 67.29

+77

TP 1.04 79.48 12.36 78.14

+50

30+0

29+50

90.80

Lt.

L

Rt.

25

68.1 68.8 61.5 64.9 62.5 61.4 59.4 59.1 59.1 59.1 59.4 59.1
 +8.2 +9.4 +8.2 +5.5 +3.1 +2.2 9.22 -0.2 -0.2 +0.3 0.0 +0.2
 120 104 91 78 65 46 25 35 90 118 130

76.5 75.9 62.2 64.6 62.6 61.0 60.1 60.7 61.8 60.9 61.2
 +13.2 +13.3 4.2 +2.2 6.0 -1.6 -1.2 -2.4 -0.2 -1.2 -1.4
 129 99 64 31 6 33 37 25 120 152

68.63

89.3 86.4 80.1 72.3 68.8 65.1 64.6 63.5 64.0 62.1 62.9
 +20.5 +17.4 +11.3 +3.5 10.7 -3.4 -4.2 -5.3 -4.2 -6.4 -5.2
 130 105 62 18 25 44 65 90 120 140

79.48

88.9 85.0 84.4 82.8 80.8 78.3 76.1 70.3 61.1 70.4 69.1 68.5 65.1
 +8.1 +4.4 +3.4 +2.2 9.99 -2.5 -4.2 -10.5 -13.4 -10.1 -11.1 -12.2 -15.2
 136 93 75 38 5 22 56 66 83 86 109 126 140

80.3 88.4 86.1 84.4 82.9 82.3 80.1 80.3 78.6 76.1 74.6 71.1 74.6 72.1
 +7.2 +6.5 +3.2 +1.5 7.9 -0.6 -2.2 -4.4 -4.8 -6.3 -5.2 -8.2 -10.2
 144 108 78 40 14 35 42 52 60 70 74 106 125

81.2 86.6 86.3 84.9 84.1 83.2 81.9 81.4 80.1 79.4 80.3 78.2 77.7 76.9
 +7.4 +4.5 +2.3 +0.8 6.7 -0.2 -2.2 -2.7 -3.4 -4.2 -3.2 -5.1 -6.0 -7.8
 111 80.42 9 7 30 50 52 60 67 83 95 108

90.80

weatherly
Prime House

+60

+45

Note, for intersection see BK#7644 p52m

32+0

+60

TP

11.65

68.11

12.17

56.46

67 Hub 60 Jk
32+60

32+36

31+73

68.63

Lt.

Z.

Pt.

26

53.4	51.5	50.9	55.0	54.7	55.0	54.4	53.0
+3.4	+2.5	+0.2	1.1	-0.2	0.2	-0.4	-2.2
109	53	17		25	47	82	115

51.6	50.9	51.9	50.0	51.4	55.7	54.4	54.0
+0.2	-1.5	+0.5	+0.4	10.7	-2.2	-3.2	-3.4
108	72	60	40	10.7	38	70	114

50.1	50.5	50.7	50.5	51.8	51.6	51.4	50.6	50.1	50.1	51.9	51.1	53.3
+2.2	+1.1	+1.2	+2.1	+0.4	+0.2	0.7	-0.2	-1.3	-2.3	-2.5	-3.3	-4.1
240	200	137	100	60	25	0.7	40	80	125	165	210	267

50.1	50.8	50.4	50.1	50.6	51.6	51.2	50.8	50.4	51.1	50.4	50.8	51.2	52.6
+3.3	+3.2	+2.4	+2.9	+1.2	+0.2	+0.5	11.30	-0.4	+0.2	-0.4	-1.2	-2.6	-4.2
235	200	160	140	82	50	27	37	37	85	130	160	217	285

68.11

50.1	50.3	50.8	50.1	50.7	51.0	51.0	51.3	50.9	50.6	50.8	51.9	51.0	53.3
+3.4	+3.2	+2.5	+1.2	+1.4	+0.4	+0.2	11.3	-0.4	-0.2	-1.5	-2.4	-3.3	-4.1
260	186	115	103	84	53	20	27	70	115	173	238	299	

64.0	63.0	63.3	62.5	62.1
+1.2	+0.2	+1.2	+0.4	6.5
162	112	68	32	

61.1	61.2	61.0	61.8
-1.2	-0.2	-1.1	-0.2
46	60	86	125

68.63

Broadway H' Line

+31

JP 10.99 77.37 1.72 16.38

35+0

+75

+70

+50

24+0

68.11

Lt

S

Rt

27

72.0	68.7	67.6	66.8	66.4	66.0	64.6
+5.2	+1.2	+0.8	10.1	-0.4	-0.2	-2.2
116	57	24	10.1	32	64	104

77.37

67.1	66.0	64.9	64.0	62.6	62.3	60.7	59.0
+3.2	+2.0	+0.8	4.1	-0.4	-1.2	-3.2	-5.0
101	48	20	4.1	18	50	83	106

55.4	55.1	54.6	53.0	52.4	50.0	51.2	51.5	51.7
-4.8	-4.2	+5.2	8.3	-0.4	-1.2	-8.2	-8.4	-8.2
110	53	15	8.3	10	28	38	65	106

54.3	55.4	54.0	53.8	53.3	52.0	51.3	51.4	53.3
+1.5	+0.6	+0.4	13.3	+0.5	-2.8	-2.6	-1.4	-2.5
110	53	16	13.3	9	12	44	73	106

55.9	55.0	55.7	54.7	51.9	53.4	53.1	53.7
+4.8	+4.2	+3.7	+2.8	16.2	+1.5	+1.2	+1.2
120	90	40	7	16.2	26	64	70

54.3	53.5	55.1	54.7	52.3	53.1	53.0
-0.2	-1.0	-0.4	12.9	-0.2	-1.5	-2.3
107	59	32	12.9	40	72	117

68.11

TP 0.15 64.54 12.98 64.39 3710 $\frac{1}{2}$

3710

+83

+50 P.O.T

36+25

+97.72 = 102 + 0.71 $\frac{1}{2}$

35+50

77.37

Lt.

8

Pl.

28

85.5 77.3 71.6 64.4
+21 112 72 13.0
1/2 48 22

57.5 52.4 53.9 53.7
-62 -9 -105 -107
27 56 72 107

80.1 84.3 78.2 74.1
+172 715.2 782 754
126 87 58 21

81.3 61.1 55.4 53.7 53.5
81 -76 -132 -152 -158
22 52 48 107

85.0 84.0 80.4 74.1 72
+122 412 722 402 415
105 81 44 13 52 106

60.7 62.9 56.2 55.8 55.8
-42 -102 -170 -174 -174
20 37 62 99 119

82.1 85.1 83.0 74.0 75.2 73.3 73.0 71.8 68.0 58.4 54.1 55.3
+92 +122 1102 132 122 102 4.4 -12 -52 -142 -162 -172
118 84 54 22 7 5 4.4 14 22 59 80 112

85.4 83.7 80.6 77.0 71.8 70.5 69.1 64.8 62.2 51.3 51.9
+132 +112 782 752 567 -12 -22 -52 -82 -142 -162
122 74 66 35 56 7 26 36 55 85 109

71.1 72.8 70.5 68.0
+92 +52 +22 +12
125 94 56 22

67.0 57.7 66.9 65.0 65.0 61.3
98 +04 -07 -12 -26 -62
20 35 70 94 116

77.37

NOTE: 1+30.16 TO 47+27.48 +

ABOVE ϕ ; - BELOW ϕ

+74

+63

+40

38+0

+70

37+33

64.54

Lt.

S

Rt.

29



64.54

+50

59.4 60.7 61.6 62.5 63.0 64.1 64.8 65.6
 +28 +28 +28 +28 +28 +28 +28 +28
 267 228 224 135 93 52 15 7.9 -08 -35 -44 -32 -34 -22 -34

20 48.4
 -76 -82
 176 225

+19

51.6 52.0 51.6 50.1 51.6 60.7 61.0 61.5 61.1 62.0 61.8 62.5 63.2 63.0 48.3 48.3
 -22 -18 -22 -14 -22 10.4 7.7 -32 -34 -62 -72 -62 -62 -62 -15 -115
 270 217 172 120 82 38 22 28 45 75 105 138 105 190 235

47.5

-65

235

40 + 0

41.9 41.0 41.6 41.1 40.3 41.0 41.0 41.0 41.2 41.0 41.8 41.9 41.1 42.1 41.8 41.5 48.0
 +32 +40 +25 +32 +42 -32 -02 10.5 +0.2 +3.2 +12 -18 -21 -12 -12 -22 -15 -62
 270 212 168 140 110 90 38 14 34 55 66 95 130 195 180 195 213

+60

51.2 51.6 51.4 50.5 50.6 50.2 50.6 50.8 50.8 50.8 53.3 50.6 50.6 50.0 51.6 51.4 48.1 51.0
 +28 +28 +45 +18 -12 -42 +48 +62 -32 9.7 -15 +12 +32 +12 -32 -22 -32 -62 -32
 258 218 173 178 116 98 58 16 35 11 21 28 49 79 97 120 165 182 240

51.2

51.5

41.6

49.9

46.7

+25 +24 -12 +25 -22

140 178 198 212 227

+30

51.8 46.9 51.0 51.7 51.0 49.8 50.4 51.8 50.8 49.4 49.9 51.1 50.7 50.3 50.1 50.1 52.9
 +75 +72 +72 +02 +12 +70 +82 +14 15.1 +05 +42 +72 +82 +62 +62 +35 +34
 223 152 116 100 60 50 42 29 15.1 13 17 26 42 52 95 85 122

51.7

51.9

+1.2 +1.0 -32

190 202 221

39 + 0

50.5 50.8 51.5 50.1 51.2 50.6 49.1 50.9 51.4 51.5 51.5 50.1 50.5 50.5 51.4 51.1
 +52 +52 +06 -02 +03 -02 -12 13.6 +05 +36 +34 +72 +46 +43 +12 +22
 183 123 104 68 60 40 15 13.6 15 20 25 40 62 77 90 126

250

1210

TP: 9.52 62.28 10.78 53.76

+46.86 B.C.H.

1140

+72

40764 £ profile 9.0

64.54

Lt.

Rt.

Nov. 22-48

31

59.6	59.9	59.8	59.1	59.4	59.7	59.7	59.6	59.9	59.6	59.8	59.6	59.8	59.3	59.5
+42	+32	+22	+15	-04	+01	+02	77	+02	02	-02	-22	-12	+42	+42
215	167	115	85	70	50	25	77	23	47	68	95	117	135	153

59.5	59.7	59.4	59.8	59.6	59.0	59.4	59.4	59.4	59.8	59.8	59.4	59.0	59.4	59.1
+11	-02	+22	+12	+02	-02	89	+22	+12	+02	-02	02	-25	-22	+62
210	65	137	90	57	32	89	20	32	57	80	122	138	152	181

62.28

59.9	59.0	59.7	59.4	59.0	59.1	59.1	59.1	59.0	59.1	59.1	59.1	59.1	59.1	59.1
-22	-32	-42	-42	+02	10.78	+02	+02	+12	+12	+12	+02	-22	-12	+12
257	200	139	77	30	10.78	20	43	68	73	86	100	115	130	143

59.0	59.6	59.1	59.9	59.0	59.1	59.7	59.6	59.2	59.5	59.0	59.8	59.7	59.0	59.2	59.6
+12	+12	+12	+12	+02	+02	+02	+02	+12	+22	+32	-12	-32	-42	-52	-02
245	212	145	82	52	24	24	24	61	100	113	128	133	147	200	225

62.3	60.8	59.6	59.6	59.0	59.1	59.0	59.0	59.4	59.4	59.1	59.1	59.0	59.8	59.8	59.6
+22	+22	+12	+12	+12	+12	+12	+12	+12	+22	+22	-12	-42	-52	-62	-62
217	235	205	152	94	52	15	146	35	65	95	114	130	147	158	180

55.5
90

+50

TP 605 68.25 1.08 62.20

07220
15+71.79
Southside
6218
1823-30

+5+0

+57 For Profile 16

+50 POC

+45 For Profile 61

+4+0

+50

+3+0

62.28

64

66

PT

32

58.8 59.6 59.6 59.2 59.0 59.5 59.5 60.5 62.4 62.0 62.0
 -32 -52 -42 -52 -52 -52 -52 -02 5.88 -02 -02
 121 105 88 80 64 57 34 18 9 34 46

57.1 58.2 58.8 59.0 59.0 59.0 59.3 60.5 60.5 60.4 60.7 62.5
 -42 -42 -32 -52 -42 -52 -52 -02 -02 -02
 110 87 63 59 44 43 23 8 9 46 65

57.8 57.6 59.1 59.8 59.8 59.1 61.4 62.2 61.6 61.9 61.3 61.3
 -12 -15 -24 -23 -22 1.2 1.2 1.3 1.2 1.2 1.2 1.2
 103 65 40 21 8 5 17 18 26 42 96

57.0 58.1 57.5 57.6 55.9 59.2 59.2 59.1 62.0 61.1 61.0
 +14 +12 +12 +12 -02 71 02 +55 +61 +55 +48
 107 60 63 42 23 27 30 41 51 75

57.1 57.6 56.8 57.0 56.3 56.2 59.2 62.0 61.0 61.1
 +12 +23 +15 +12 80 102 +02 +12 +12 +55 +55
 100 70 40 9 39 44 50 75 79 86

56.8 56.1 56.0 59.0 59.2 59.5 59.1 59.8 59.2 59.2 61.9
 +02 -02 -02 -02 -02 5.88 -02 -12 -13 -02 +54
 109 97 78 60 35 32 44 67 97 108

62.28

North Facing Edge

Additional of Coto
 509.2.49
 H. C. Garber Lt.

48+50

TP 7.74 72.17 3.82 64.43

+97.48 = EC.

NOTE: 1+30.16 TO 47+97.48

+ ABOVE ϵ ; - BELOW ϵ

+50

47+0

+50

46+0

68.25

59.0
 182
 50
 80.4

65.1	64.1	65.0	65.1	65.2	65.3	65.4	65.5	65.6	65.7	65.8	65.9	66.0	66.1	66.2	66.3	66.4	66.5	66.6	66.7	66.8	66.9	67.0	67.1	67.2	67.3	67.4	67.5	67.6	67.7	67.8	67.9	68.0	68.1	68.2	68.3	68.4	68.5
64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
0.2	0.1	0.0	-0.1	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7	-0.8	-0.9	-1.0	-1.1	-1.2	-1.3	-1.4	-1.5	-1.6	-1.7	-1.8	-1.9	-2.0	-2.1	-2.2	-2.3	-2.4	-2.5	-2.6	-2.7	-2.8	-2.9	-3.0	-3.1	-3.2	-3.3	-3.4	-3.5

68.25

+50

51+0

+50

50+0

+50

49+0

7217

Lt.

L

Rt.

34

2889
3.35
18=H/Pump

2879
3.98
18

2879
4.54
18
665 600 614 615
59 48 48 46
40 29 27 22.5

2879
5.15
18
633 619 617 609
89 49 55 50
40 36 27 22.5

2879
5.87
18
667 665 659 661
60 57 60 60
40 29 27 22.5

2879
6.50
18=H/Pump
657 658 662 665
67 64 70 66
35 28 27 28.5

2915
3.02

2851
3.66

2919
4.26

2879
4.89

2879
5.58

2879
6.17

7217

2871
3.11
18=H/Pump

2889
3.92
18

2879
4.66
18
643 612 664
48 48 58
22.5=H/C

2879
5.28
18
667 664 664
55 51 58
22.5

2879
5.93
18
660 668 668
60 64 64
22.5

2879
6.56
18=H/Pump
656 656 651
65 66 71
22.5=H/C

Lt

Z

Rt

NOTE: 48+50 TO 52+50
RODS FROM H.I.

BM

3.30

75.26

BP 5th & Bridges
Federal Blvd.
T. Hammett
75.20 H. 823-33

date 8/1/14

TP

8.06

28.56

1.67

70.50

+50

52+0

72.17

70.1
1.93
1.18

70.12
1.05

19.19
2.56
1.18

19.19
2.18

19.55
2.62

19.23
2.91
2.18 - FH Bridge

72.17

Wabash Freeway S Line
 Broadway to Market St
 Levels Page 41-53

+57.18 P.R.C. 36° 29'

+25 32° 45.07'

10+0 29° 51.10'

+50 24° 02.15'

9+0 P.O.C. 18° 15.20'

+50 12° 27.25'

8+0 6° 39.31'

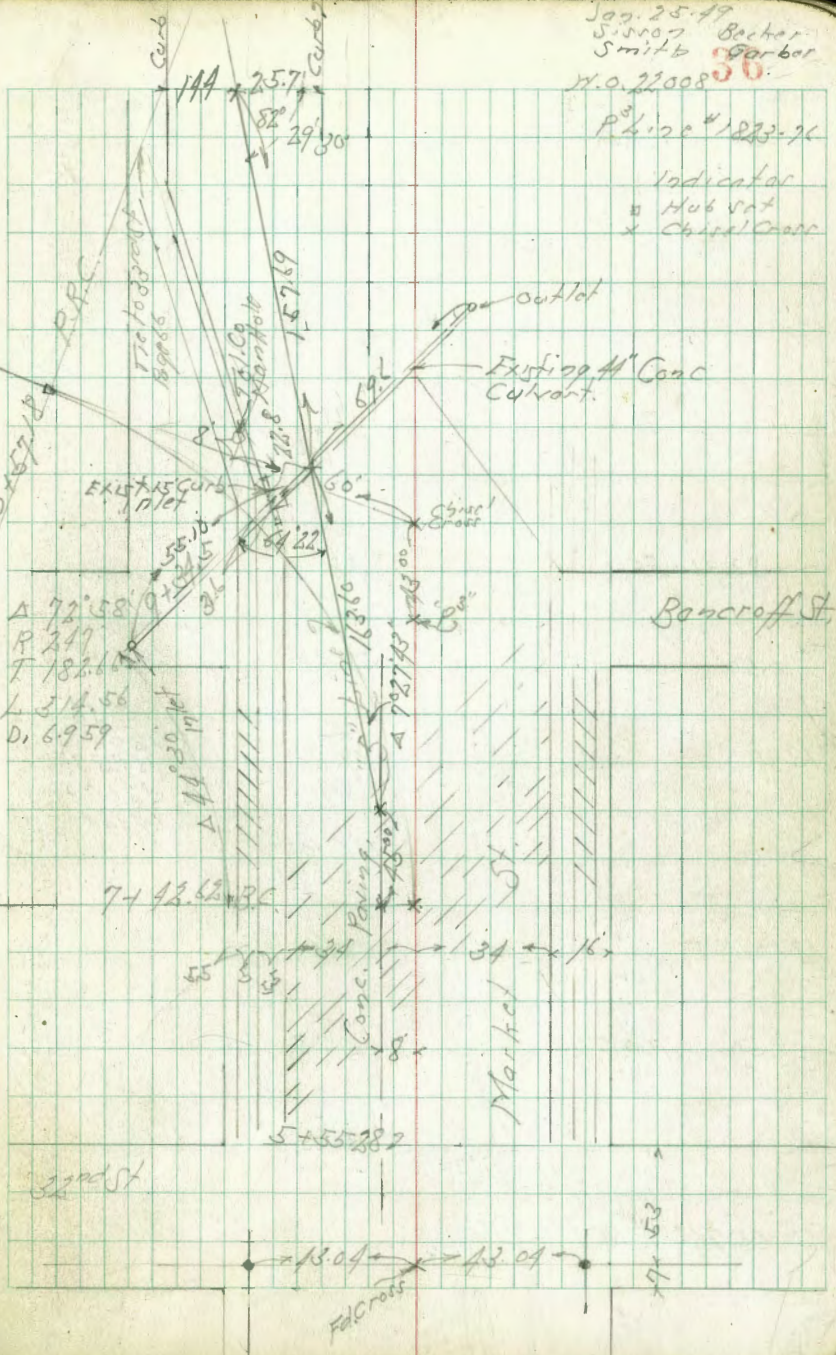
+75 3° 45.33'

7+42.62 B.C. Lt.

5+55.28 = East Line 3rd St.

Δ 72° 58'
 P 247'
 T 182.66
 L 314.56
 D. 6.959

Δ 72° 58'
 P 247'
 T 182.66
 L 314.56
 D. 6.959



Jan. 25.49
 Sisson Becker
 Smith Barber
 H.O. 22008
 P.L. 1223-76
 Indicator
 □ Hub set
 × Chisel Cross

15+50 P.O.T.

+83.91 F.C.

7° 48'

+50

6° 59.43'

13+0

5° 47.81'

Δ 15° 36'
 R 1200'
 T 164.38
 L 326.73
 D 1.4324

+50

4° 36.19'

12+0

3° 24.57'

+50 P.O.C.

2° 12.95'

11+0

1° 01.33'

10+57.18 P.R.C.

+35'

+35'

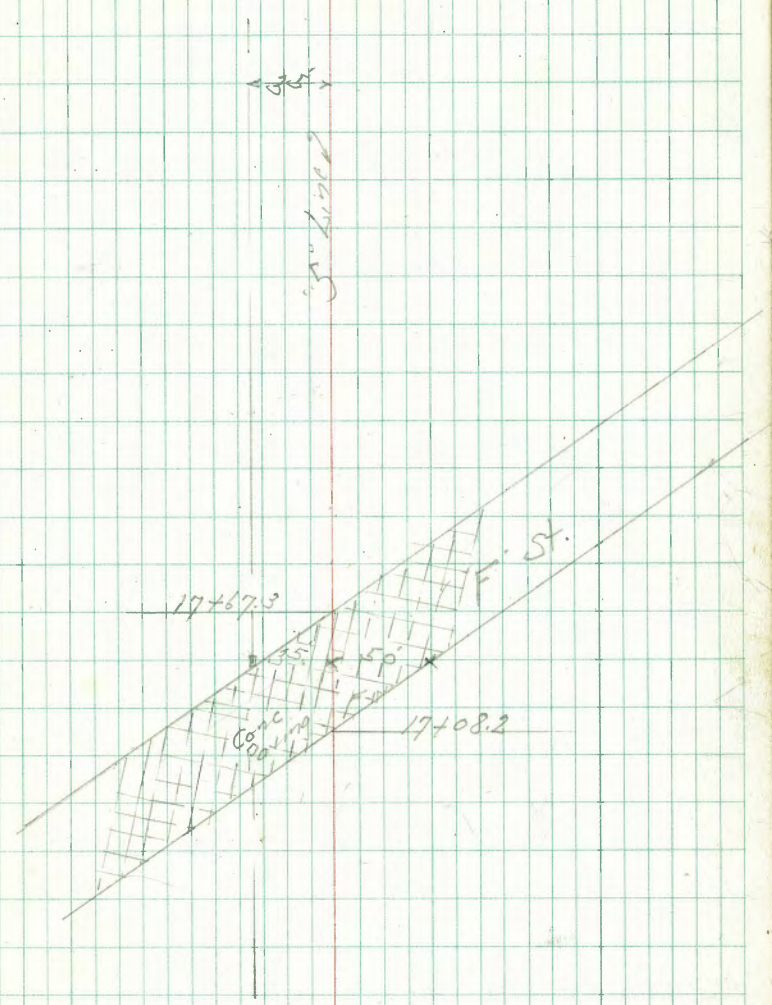
13+83.91 F.C.

Δ 15° 36'
 R 1200'
 T 164.38
 L 326.73
 D 1.4324

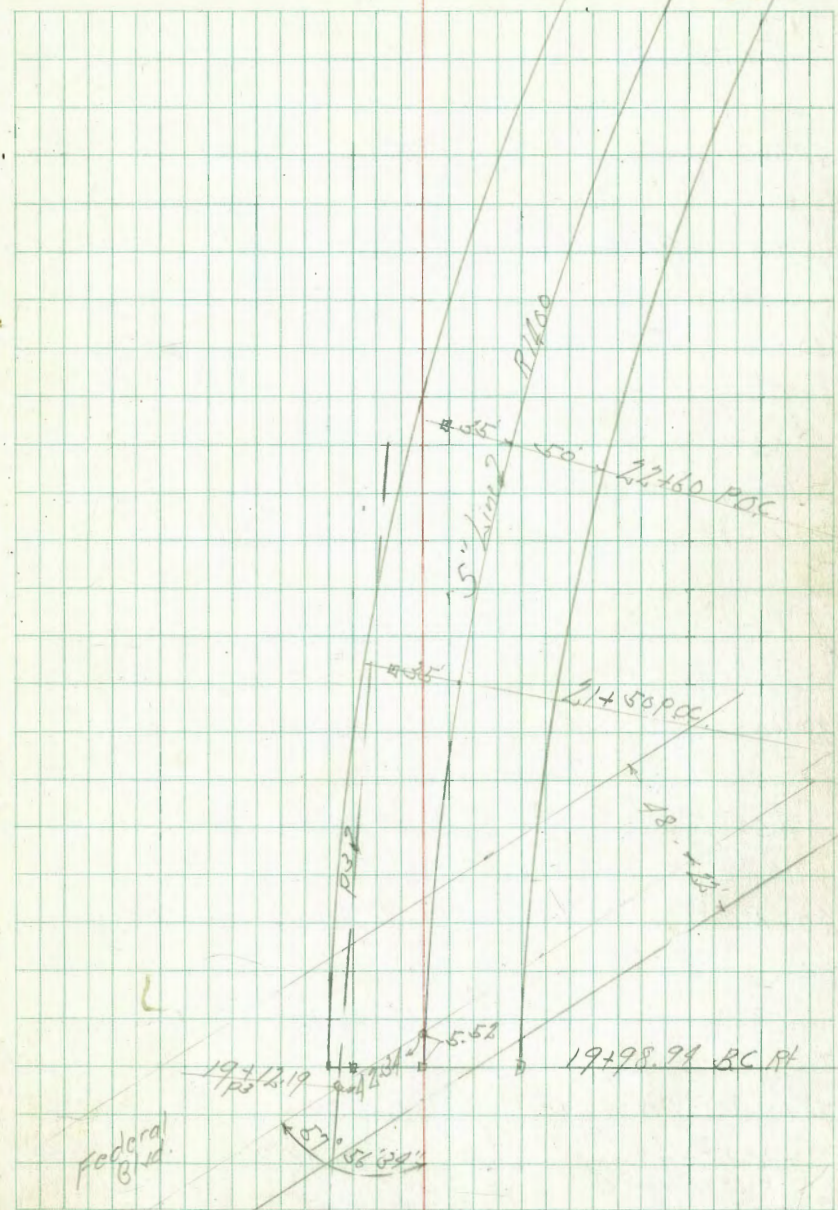
10+57.18 P.R.C.

Wabash Freeway 5" Line
Broadway to Market St.

17+53' P.O.T



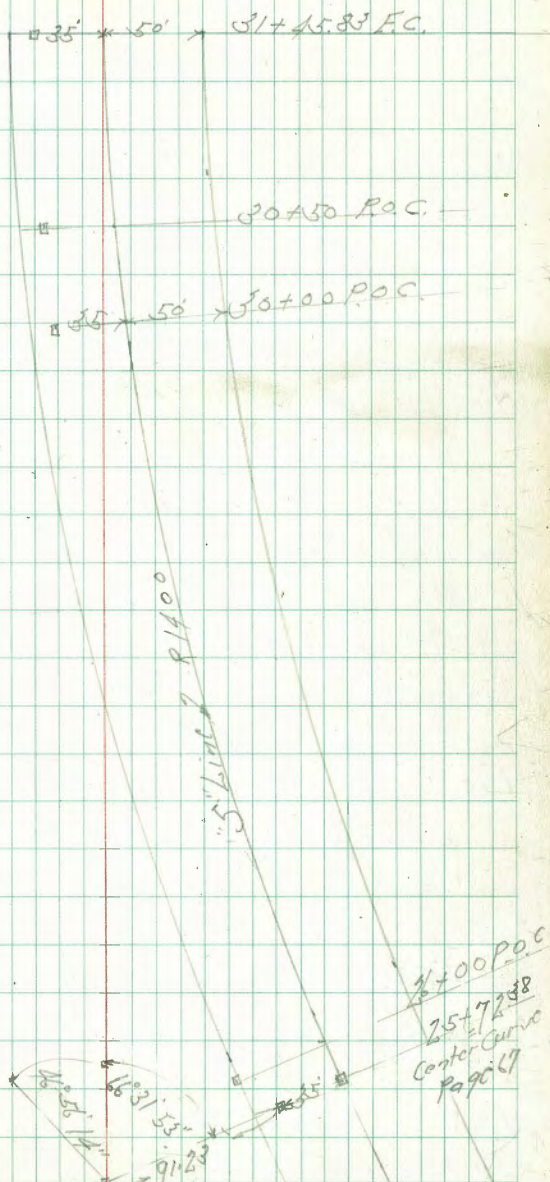
25+0		10° 15.19 ✓	
+50		9° 13.80 ✓	
24+0		8° 12.41 ✓	
	C=51.25 35 ft.		
+50		7° 11.02 ✓	
23+0	C=71.00	6° 09.64 ✓	Δ 46° 56' 14"
+60	POC 35 ft.	5° 20.52 ✓	R 1400
+50	C=10.25 35 ft.	5° 08.25 ✓	T 607.83
			L 1146.89
22+0		4° 06.86 ✓	D. 1.22777
			E 126.23
+50	POC 35 ft.	3° 05.47 ✓	
21+0		2° 04.08 ✓	
+50		1° 02.69 ✓	
	C=51.25 35 ft.		
20+0		0° 01.30 ✓	
	C=1.07 35 ft.		
19+98.94	BC PT		



Yabashi Freeway S' Line
Broadway to Market St.

+45.83 EC	33° 28.12'
c=46.97	
31+0	22° 31.86'
+50 P.O.C. on 35' Lt	21° 30.47'
36+40 & POC	21° 18.19'
30+0 P.O.C. on 35' Lt	20° 29.08'
+50	19° 27.69'
29+0	18° 26.30'
+50	17° 24.92'
28+0	16° 23.53'
+50	15° 22.14'
27+0	14° 20.75'
+50	13° 19.36'
26+0 P.O.C. 35' Lt	12° 17.97'
+72.38 = Curve	11° 44.06'
c=22.94 Mens 23.11	
25+50	11° 16.58'

40



Cross Section of Vabash Freeway 5' Line
Broadway to Market

Alignment 26-40

+42.62 = B.C. Lt

7+0

+50

6+0

5+55.28 = East line of 32nd St.

BM 1.34 82.81

East Curbside 32nd St.

BM 4.40 85.87

81.47

81.47

S.M. 80

Market 42nd St

81.03 80.61

7.84 55.28

80 = Cb 60 = Gut

521 BP

Market 40

Lt. 11 1/4

1

Rt. 5 Eddy

41

12.3 10.5 50	11.5 10.97 37=Cb	11.3 11.55 37=Gut	11.8 11.01 17	12.1 10.69	12.0 10.79 17	11.7 11.14 37=Gut	12.2 10.55 37=Cb	13.0 9.8 50
14.6 8.2 50	14.0 8.84 37=Cb	13.3 9.51 37=Gut	13.9 8.97 17	14.2 8.55	14.1 8.70 17	13.7 9.12 37=Gut	14.3 8.47 37=Cb	14.6 8.25 50
14.9 5.9 50	16.5 6.21 37=Cb	15.8 7.07 37=Gut	16.2 6.42 17	16.1 6.10	16.6 6.16 17	16.1 6.66 37=Gut	16.8 5.99 37=Cb	17.1 5.7 50
19.8 3.0 50	18.3 4.47 37=Gut	19.0 3.83 17	19.1 3.70	19.1 3.69 17	19.6 4.18 37=Gut	19.2 3.56 37=Cb	19.1 3.7 50	
21.4 1.36 50 on Conc.	21.0 1.81 37=Cb	20.3 2.52 37=Gut	20.9 1.89 17	21.1 1.72	21.1 1.74	20.6 2.09 37=Gut	20.2 1.84 37=Cb	21.9 0.93 50 on Conc.
81.11 4.76 50=Cb	80.57 5.30 50=Gut	81.11 4.26 45=Cb	80.50 5.37 45=Gut	80.37 5.50 36	82.81	80.87		

TP 3.85 67.09 10.04 63.24

9+0

+75

L. North Comb

+50

+25

8+0

TP 2.40 73.28 11.93 70.88

7+75

82.81

L.

Z

Rt.

42

55.2 54.3 64.1 64.1 64.3 63.1 63.1 63.1
18.1 19.0 8.6 8.6 8.99 9.63 9.58 9.87
80 40 9 10.3-25 10.3-40 27 17

64.6 64.6 62.0 66.1 65.6 65.1 65.0 64.6 63.1 63.0
8.7 11.7 6.3 7.3 7.66 8.15 8.30 8.65 9.57 10.32
7.5 5.6 3.1 11=H.Comb 7.0=Cb 22.5 4.5 6.75 9.0
No. 2 No. 1

70.1 69.1 68.9 67.6 67.0 66.4 66.6 66.4 65.9 65.1 65.6 65.3
5.2 4.9 4.4 5.7 6.25 6.89 6.68 6.89 7.36 8.22 7.70 8.1
70 5.3 4.0 2.6 12.1-Cb 12.1-40 2.1 4.2 6.28 6.2-50 8.0
Gutter

78.0 72.8 69.0 68.3 67.6 67.9 67.1 66.8 61.6 61.6
6.3 0.45 1.24 5.03 5.70 5.38 5.56 6.53 5.82 5.8
49.6 4.5 38.8 21.6 21.6 25 30.5=60 50.5-Cb 6.8
S.E. Comb No. 1
Top Stairs
S.E. Comb
No. 2

13.2 13.2 69.1 69.4 68.7 69.0 69.2 69.1 68.4 69.0 69.2
0.1 0.11 3.6 3.93 4.55 4.29 4.05 4.20 4.96 4.27 4.1
19.2 14.5 44.5 28.1 28.1 73.28 2.1 4.2=60 4.2=Cb 5.3
S.E. Comb
No. 1
Top Stairs
No. 2
Gutter

78.4 71.6 70.5 69.8 70.3 70.6 70.3 69.8 70.5 70.7
12.8 11.3 12.2 12.97 12.48 12.32 12.46 13.01 12.23 13.1
70.5 78.5 3.5-Cb 9.2=60 17 6.5=60 3.65=Cb 5.0
No. 1 No. 2
S.E. Comb
No. 1
Gutter

82.81

+5718 P.R.C

10725

TR. 11.03 77.64 0.48 66.61

1070

+75

+45

9+25

67.09

Lt.

L

Rt.

43

56.1 [↑]	56.0	56.6	68.5	72.1	76.4	79.9
209	210	211	68.58 906	2.5	1.3	1.75
98	50	31	907 566	1.5	50	1.75
56.9	56.3	55.9	64.7	73.1	73.8	73.9
207	213	217	127	1.5	38	3.7
82	50	32		23	50	1.75
			77.64			
56.0	52.5	55.7	54.7	54.4	55.6	59.4
111	146	113	123	127	115	2.7
90	79	71	43	7		5.2
						50
						61.4
						64.6
						8.25
55.1	56.4	59.0	55.1	54.4	53.9	61.9
114	117	151	120	127	127	52
85	75	67	33	83	16	55
						8.9
						68
						50
						7.98
						68.7
						8.25
						70.0
						8.0
54.1	55.1	53.9	50.5	54.5	58.3	62.4
124	120	122	16.6	126	88	1.7
85	50	32	227	14		16
						5.26
						36
						5.39
						39.25
						6.23
						39.25
						51
						70
						62.8
						61.3
						62.8
						63.3
54.4	54.3	54.3	52.1	63.4	63.9	63.2
127	128	128	147	3.7	3.2	3.86
85	50	38	27	7		1.8
						24.5
						5.08
						24.5
						4.76
						12
						7
						5.00
						59
						62.1
						5.78
						76
						61.3
						6.68
						91.1
						60.4
						61.6
						91.1
						60.9

67.09

62.1

61.3

60.4

Wabash Freeway 5 Line
Broadway to Market St.

12790

12767.5 R = South curb line G St.

12750

1270

TP 5.29 81.94 0.99 76.65

+50 POC

1170

77.64

LT.

L

RT.

44

10.3	11.2	10.5	10.4	69.6	69.1	69.2	69.1	67.8	68.1	68.1	65.1	65.5	64.6
56	107	11.4	11.50	12.28	12.2	12.7	13.8	14.53	13.79	13.8	13.4	12.3	
75	60	50	47.3	44.3	25		25	43.3	43.3	50	62	72	

curb gutter gutter gutter

11.4	10.7	10.2	10.5	69.2	68.3	69.1	16.5	16.9	13.1
10.45	12.3	11.7	12.4	12.74	13.60	12.8	5.4	6.0	8.8
91	91	50	25	0.0	0.0	15	32	50	88

curb gutter curb gutter

10.8	10.8	10.7	69.9	69.9	77.4	14.1	16.5	14.6
11.1	12.1	12.71	11.85	13.0	4.5	5.2	5.4	7.3
75	50	35	35	21		25	50	73

11.9	16.3	15.8	16.1	16.5	16.5	15.3
7.0	6.6	6.1	5.8	5.4	5.4	6.6
75	50	25		25	50	75

81.24

57.3	64.6	69.3	72.9	75.1	77.0	77.3	76.5	75.6
20.3	12.0	8.8	4.7	1.9	0.6	0.2	1.1	2.0
82	65	50	36	20		25	50	75

56.1	56.2	56.6	64.3	73.6	76.1	77.3	77.1
20.9	2.4	2.0	1.3	4.0	0.9	0.3	0.3
75	50	75	25		75	50	75

77.64

TP 9.89 8760 4.23 77.71

14750

1470

13783.9 EC

13750

13730

13712.9 R = North curb line G St.

8194

Lt.

R

Rt.

45

71.5	71.3	71.2	66.8	76.5	72.8	72.2	71.6
44	46	47	51	54	91	95	103
75	50	25		25	37	50	75

76.1	76.9	76.2	75.2	72.7	71.9	72.1	68.1
52	51	57	67	72	70	128	138
75	50	25		25	47	69	100

76.6	76.6	76.1	75.0	72.5	72.1	72.5	68.9	68.0	67.0
53	53	58	68	74	72	74	130	139	149
75	50	25		25	50	57	77	80	100

76.9	76.8	75.8	75.6	75.2	72.8	72.0	69.0	68.1	67.3	66.5
50	51	61	63	65	71	12.9	13.83	14.03	15.6	
75	50	25		25	40	50	65	68	75	85

gutter

77.1	76.6	76.3	72.0	70.0	68.9	67.9	68.1	67.1	65.3
48	53	56	59	11.9	13.03	14.01	13.8	14.8	16.6
75	30	25		13	297	297	50	75	100

gutter

76.7	76.1	76.5	70.4	68.7	69.5	68.6	68.0	67.0	65.9
52	52	54	11.5	13.20	12.40	13.3	13.9	14.9	16.0
75	50	30	16	0.0	0.0	25	50	75	100

gutter

8194

17704

16780

T.P. 9,86 95,11 2,35 85,25

16764.2 Northerly side of house

16730

1670

15750

1570

8760

65.8	65.0	63.7	61.1	62.4	61.0	65.9	65.1	64.6	64.0	63.4	64.0	64.2	64.7
728	1010	1189	1374	1297	810	92	744	145	114	117	161	169	204
75	50	25				1	24	24	35	35	43	60	80
65.7	64.4	65.1	66.0	64.0	64.1	66.9	66.0	65.7	64.4	64.2	64.6	64.6	65.6
954	1069	1004	82	81	80	82	91	284	112	122	135	155	195
75	50	52.7	45	35		14	14	36	36	45	50	52	75
63.7	63.2	63.4	64.6	64.7	64.3	63.6	63.5	64.4	64.8				
39	44	42	303	29	33	40	42	62	25				
75	50	35				50	50	50	50				
61.5	61.0	60.9	61.7	62.5	61.8	61.3	60.1						
61	66	67	63	50	51	58	63						
75	50	35	16	16	25	50	25						
77.5	78.3	79.4	78.9	78.7	78.3	78.1	77.8	77.7	78.0				
101	93	82	87	942	93	845	98	704	126				
75	50	35	25		155	155	25	50	75				
71.0	75.5	75.4	71.0	78.5	71.4	71.4	71.5						
136	121	122	106	91	102	102	101						
75	50	25		25	36	50	75						

8760

Madash Freeway "S" Line
Broadway to Market St.

+50

TP: 8.96 98.39 0.50 89.43

18+0

+7.3

TP: 2.66 89.93 2.34 87.27

+67.3 = North Curbline of FST

+37.8 = Approx 1/2 FST

17+08.2 = South Curbline FST

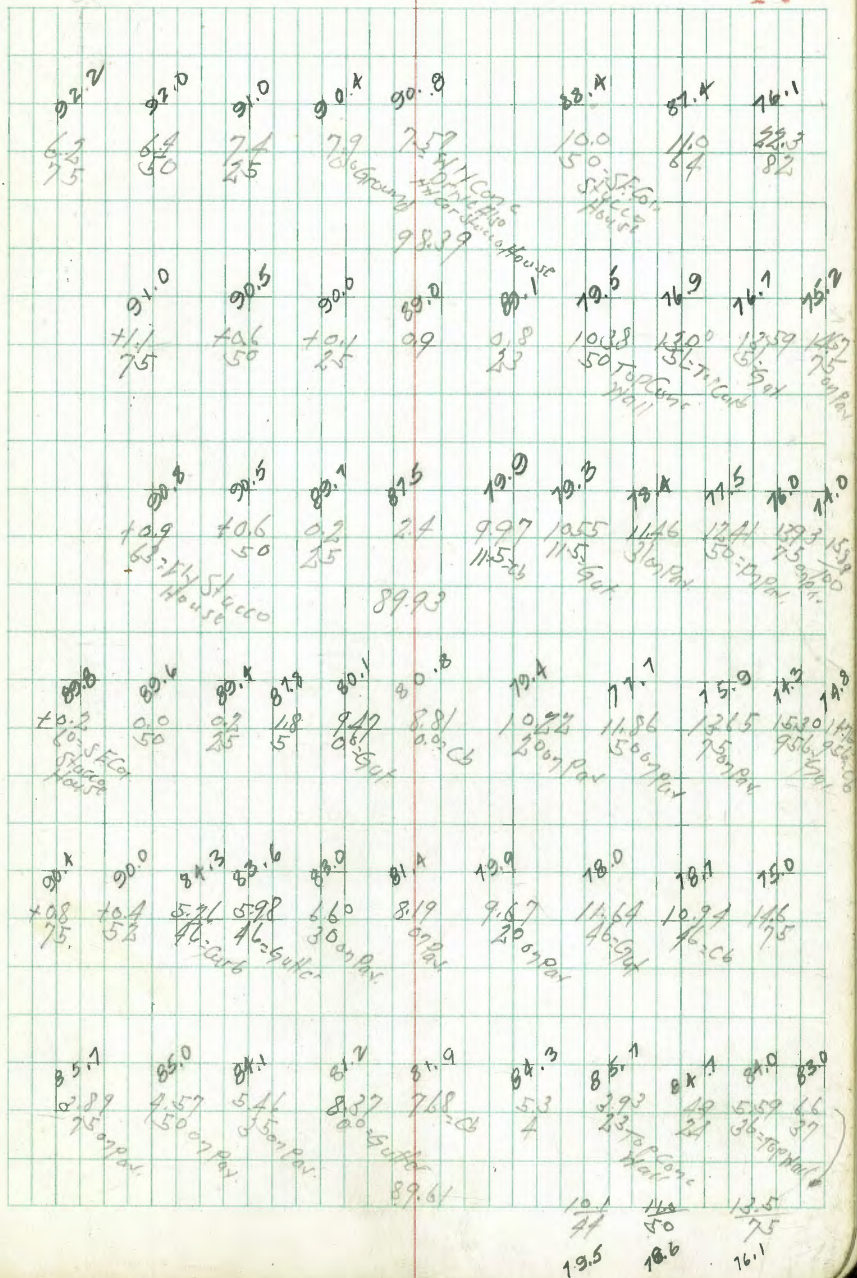
TP: Fire Hyd
Swor. P+33rd. 2.42 89.61 . 7.92 87.19
95.11

Lt.

S

PK

47



+50

20 21

+9894 BC RT

+80

IP 7.40 98.61 7.18 91.21

+50

194.00

98.39

LT

2

RT

48

91.5	94.9	96.3	95.1	84.8	83.8	82.4
1.1	1.7	2.3	2.9	13.8	14.8	15.2
75	50	25		31	50	75

91.2	95.3	95.1	88.3	87.9	86.8	85.5	85.6	83.0
1.1	3.3	3.5	10.2	10.7	12.3	13.1	13.0	14.2
75	50	38			25	36	50	75

94.1	92.0	90.5	89.0	88.2	88.2	86.6
8.9	5.6	8.1	9.58	10.4	10.4	13.0
75	50	25	2x66	25	58	75

91.1	92.4	91.1	90.4	90.3	90.2	89.4	90.0	88.9	87.3
5.0	6.4	7.5	8.3	7.8	8.4	8.8	8.57	9.7	14.3
75	50	25	13		25	33.7	10.2	50	75

98.61

94.6	92.5	93.8	94.4	94.2	92.3	89.8	87.1
5.8	5.9	4.6	5.0	6.2	5.64	8.6	10.7
75	50	43	7	47	onc Conc Landing	3-11/12 Conc House	9.6

93.1	92.1	92.1	92.3	92.1	91.0	90.2	88.6	84.1
5.2	5.2	5.2	5.17	5.70	7.1	8.7	9.8	14.7
75	50	25	5.07	2.12-5 Conc Drive 50		25	50	75

98.39

23+0

+50

22+0

TP 4.60 101.57 406 96.91

+50

21+0

161 100.97 225 96.26

20+75

9861

LT

S

RT

49

92.6	94.3	94.1	85.3	81.3	102	102
59 75	72 50	98 35	112	20.2 25	230 50	246 75

96.7	94.4	89.4	83.4	102	11.3
50 50 25	69 25	121	181 25	222 50	243 75

50.50
25.50
100.00

90.3	91.9	96.4	93.8	81.1	83.5	82.1	10.7
52 75	56 50	51 25	77	138 25	180 50	194 68	223 69

101.51

91.2	96.6	92.1	94.1	97.8	90.0	81.9	85.9	96.8
87 75	12 50	52 25	67	81 25	109 25	121 25	181 50	141 50

100.00
100.00

94.8	91.1	95.9	95.5	94.4	93.5	93.0	94.5	90.1	83.1	82.8
40 75	38 50	50 25	54 15.7	65	121 25	79 25	91 25	102 50	122 67	181 25

100.97

91.0	96.8	96.3	95.4	95.2	94.5	93.3	89.1	83.2	82.1
18 75	18 50	23 25	32 25	34	41 25	52 25	89 50	154 85	165 25

100.00

9861

Madash Freeway 5" Line
 Broadway to Market St.

2510

+50

IP 0.26 97.05 4.72 96.79

2410

+75

+50

23+25

101.51

ΔT

Z

PT

50

92.0	92.1	92.6	92.1	86.6	82.9	81.6
2/75	30/50	45/25	7.4	10.5/25	12.2/30	15.5/25

93.4	92.5	92.4	90.4	85.3	81.9	81.0	79.9	79.3
6.7/25	1.6/50	1.7/15	6.7	14.8/25	15.2/30	16.1/25	17.2/25	17.8/25

97.05

95.2	92.1	89.1	87.8	84.1	82.1	81.4	80.7	80.5
6.2/25	9.4/50	11.8/25	12.7	17.1/20	19.4/23	20.4/30	21.3/26	22.0/25

95.9	93.0	87.1	83.9	82.8	82.4	82.1	81.0
5.6/25	8.5/50	12.1/25	17.1	18.7/25	19.1/37	21.8/27	24.5/30

96.5	92.4	89.5	87.3	85.6	82.6	80.5	78.4	77.4
5.0/25	7.1/50	12.0/25	14.2/25	15.9	16.9/11	21.0/30	22.7/30	24.1/25

91.9	91.2	93.0	90.4	88.8	85.9	81.4	78.9	76.3
7.5/25	6.6/50	8.5/28	11.3/25	12.7/10	16.5	20.0/25	22.6/30	25.0/25

101.51

BM
+02' 21.5' H of L - Z +36" Papper Tree
27+0
IP 8.00 99.97 5.08 91.97
SE Cor Pipe
Broadway
+3475

+150

26+0

+72.38

+150

25+25

97.05

NE 1102
Broadway
+3475
99.86 ✓

Lt. 2 Rt. 51

94.3	91.6	88.1	87.1	85.4	85.0	82.1	12.6
57 25	85 50	143 25	129 25	141 25	150 25	129 50	304 25
93.6	91.0	89.4	88.1	86.4	85.1	83.9	82.3
55 75	61 50	74 50	90 25	10.7 25	11.4 10	132 35	148 50
93.0	91.1	89.4	87.8	85.0	82.1	81.0	
115 75	60 50	79 25	93 25	121 25	141 50	161 75	
93.9	92.4	91.2	89.1	88.3	87.3	85.1	83.3
32 75	169 50	59 25	71 26	88 19	98	114 25	138 39
93.8	93.1	92.5	90.3	87.4	86.4	83.5	83.4
53 75	340 50	46 50	63 25	97	117 17	136 25	137 50
93.9	92.4	90.4	88.4	86.2	84.6	82.6	81.2
39 75	47 50	57 25	87	109 25	135 22	155 50	159 75

97.05

30+0 POC

150

29+0

750

TP 3.65 90.78 12.84 87.13

28+0

27+50

99.97

41

2

PK

52

85.6	84.9	83.9	82.3	80.3	80.6	78.2	75.9	74.9	76.1
5.2	5.7	6.2	8.0	10.5	10.3	12.6	14.9	13.9	14.1
75	50	25		25	35	50	25	75	77

85.72	86.2	85.72	84.5	83.0	81.8	80.6	79.4	78.4	79.6	78.0
2.6	4.3	5.5	6.2	7.8	9.0	10.2	11.1	11.2	11.3	12.8
75	50	25	75		25	45	75	50	61	75

90.8	89.2	84.7	81.5	83.3	83.3	81.6	80.7	78.0
0.0	2.6	4.5	6.2	7.5	7.5	9.2	10.2	12.8
75	50	25		75	75	50	50	75

91.9	89.6	88.3	87.5	85.8	85.4	84.7	83.4	83.1	81.7	81.4	79.0
1.1	1.2	2.5	3.5	5.3	5.4	6.6	7.4	7.6	9.1	9.4	11.8
75	50	35	20	15		8	25	40	70	50	75

90.78

70: Toppen
71:11

92.1	90.0	89.4	88.1	87.4	86.0	84.7	81.3	80.0
7.9	10.0	10.6	11.9	12.6	14.1	15.8	18.7	20.0
75	50	42	35	70		25	50	75

92.6	91.0	91.1	88.6	87.4	87.6	87.1	78.9
7.4	9.0	8.9	11.5	13.6	15.4	17.3	20.1
75	25	50	25		25	50	75

99.97

Hobash Freeway 'S' Line
Broadway to Market St.

BM 527 52.13
Federal
35.15
51.87

TP 4.30 57.40 59.3 53.10

TP 0.62 59.03 8.15 58.41

+15.83 E.C.

TP 0.64 16.56 13.27 65.92

3170

+75

TP 117 79.19 12.76 78.02

+50

30+25

90.78

Lt.

S

Rt.

53

60.5	60.0	59.8	59.1	59.0	58.1	58.1
61/75	66/50	68.0	75	76	79	82
		65-11/16 Cont. Lateral Dr.	66.56	74-5/16 Hour	79	82
64	68.1	64.24	62.1	61.1	60.7	60.8
64/75	66/50	65.0	65	68.1	68.5	69.4
		65		65	65	65
83.3	79.1	75	69.1	65.0	64.1	63.0
74.1	70.5	71	75	72.8	74.5	76.2
75	75	75	75	75	75	75
			79.19			
84.8	83.6	82.6	81.1	78.1	76.5	74.5
60	72	82	97	12.7	15.3	16.3
75	50	25		20	30	50
85.0	84.3	83.3	82.0	80.1	78.0	76.8
88	85	75	8.8	10.1	12.8	17.6
75	50	25		20	30	50

90.78

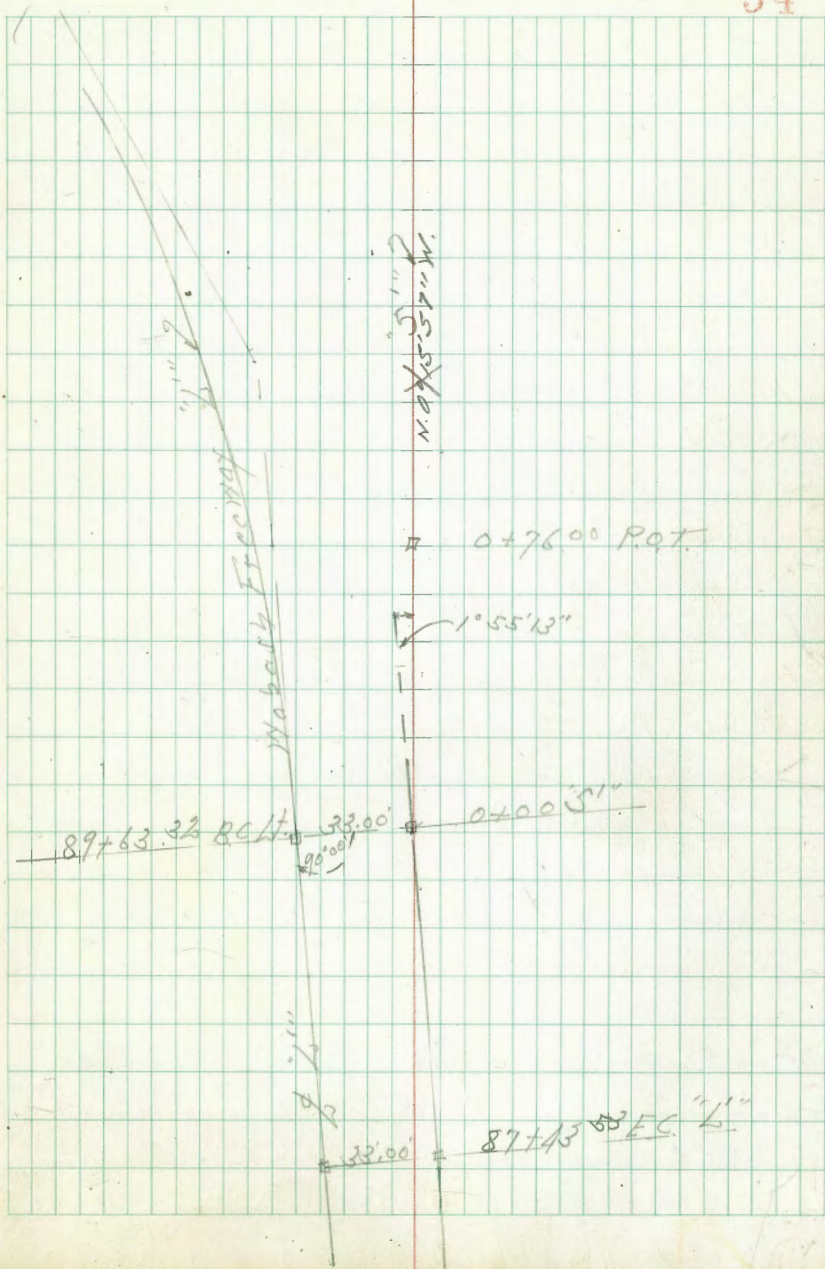
Alignment Mabark Freeway S' Line
South to East Connection to Federal Blvd.

Feb 21-49
S. W. P.
Smith
Becker
Garber

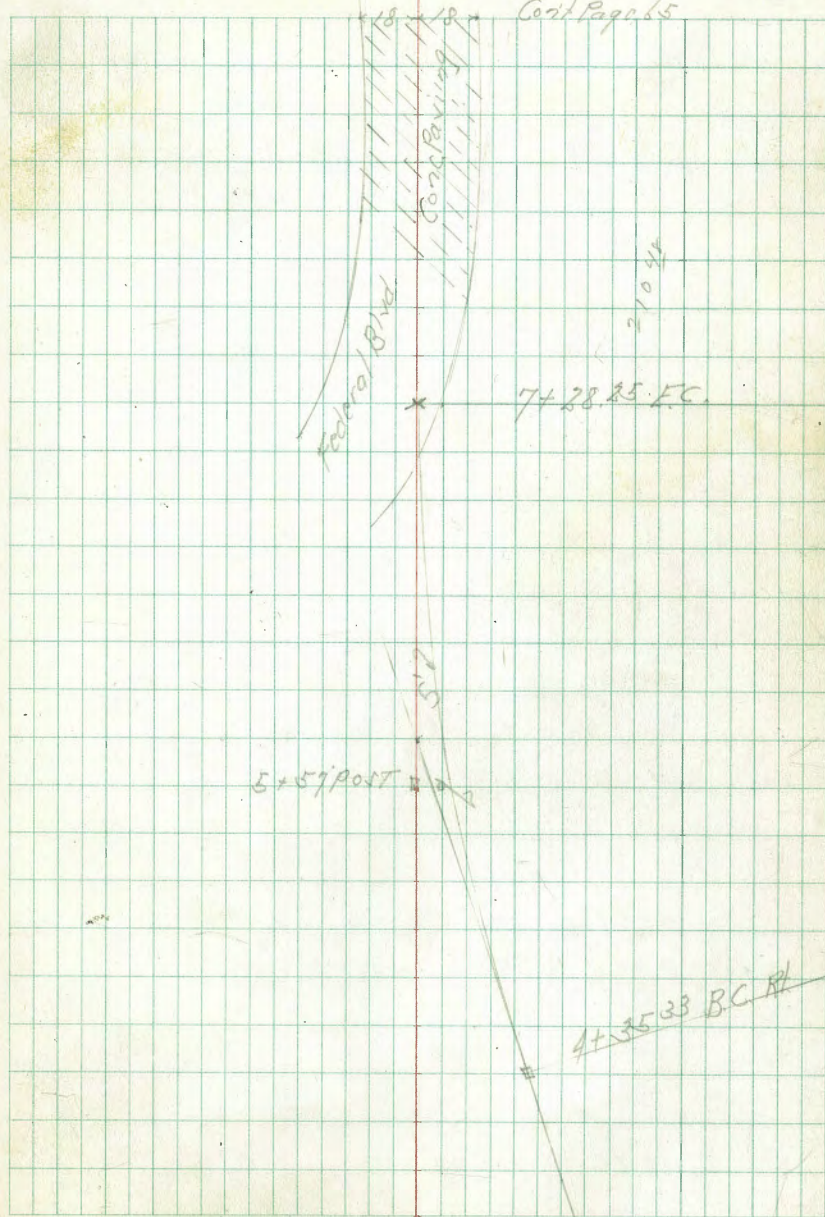
0+76.00 P.O.T

0+00 = Opp 89+63.32 B.C.H. "1"

54



+28.25	FC	8° 23.5'	
7+0		7° 34.93'	
+50		6° 09'	Δ 16° 47' RT.
			R 1000
			T 147.52
6+0		4° 43.05'	L 292.92
+60	PQC	3° 34.39'	
+50		3° 17.10'	
5+0		1° 57.16'	
+50		0° 25.22'	
4+25.33	BC RT		



Cross Section Yabash. Freeway S' Line
 South East Connection to Federal Blvd.

Notes - Rth Lt. + Above; - Below Center Line

Lt. N

L

Rt. = E

56

+50

11.8	92.6	98.2	120.8	134.0
-20.4	-5.6	13.6	+22.6	+25.8
47	11		46	100

+32

89.2	93.5	105.0	118.7	108.9	117.4	116.8
-22.7	-12.4	4.9	+12.8	+13.0	+11.5	+10.9
47	25		16	43	66	100

+10

87.1	92.1	103.3	111.4	117.0	110.4	110.0
-20.2	-11.2	7.5	+8.1	+9.7	+7.1	+6.7
36	17		12	43	70	101

+76

90.5	93.9	103.8	108.9	104.4	97.3	105.9
-19.4	-10.0	-2.1	0.9	-5.5	-12.6	-4.0
44	22	8		30	75	100

+38

88.1	92.6	95.6	101.1	93.8	90.3	90.6
+3.2	+4.1	15.3	-6.8	-11.7	-5.2	+4.1
45	15		26	52	72	98

BM

8.65

110.79

102.14

on Hub
 901 P.C.
 2' Line
 1844-32

110.79

+63

3+22

+76

+50

2+22

1+70

110.79

4.

5

pt.

57

80.1	95.2	103.6	110.3	131.7	137.6
-23.5	-8.4	7.2	+6.7	+28.1	+34.0
76	18		22	46	99

83.2	96.0	100.8	104.8	120.0	132.2	151
-17.6	-4.8	10.0	+9.0	+19.2	+32.4	+34.3
73	20		19	51	83	100

62.5	82.5	93.1	103.4	120.0	131.3	131.7
-31.2	-11.2	17.1	+9.7	+26.3	+37.6	+38.0
75	39		33	65	94	104

74.2	95.8	99.9	111.3	128.3	127.2
-25.7	-4.1	10.9	+11.4	+28.4	+31.3
84	15		30	77	115

15.9	102.1	107.1	116.7	126.6	129.5	129.5
-31.2	-5.0	3.7	+9.6	+19.5	+22.4	+22.5
65	10		26	58	84	108

78.6	94.0	101.6	112.3	122.3	128.6	125.9
-23.1	-7.6	9.2	+10.7	+20.7	+24.0	+24.3
53	15		22	44	74	130

110.79

TP 1.40 103.36 8.83 101.96

+65

+40

540

+50

+25.33 BCRT

+40

Note 1: RT & Lt + Above - Below

110.79

Lt

Z

Rt

58

56.3	57.3	88	100.0	105.9	106.5	101.9	100.9
-43 ²	-42 ²	-12 ⁹	10.8	+5 ¹⁰	+6 ¹⁰	+1 ⁹	+0 ⁹
53	35	16		18	36	84	100

55.7	55.3	55.4	77.4	88.1	101.2	100.5	111.5	107.8
-46 ¹⁰	-45 ⁹	-45 ⁸	-23 ¹⁰	-12 ¹⁵	9.6	+8 ¹³	+10 ¹³	+6 ¹⁶
80	67	54	42	25	96	29	54	98

56.1	89.5	100.1	100.3	119.5	121.3	124.4
-44 ⁶	-11 ²	10.1	+9.6	+18 ¹⁴	+20 ⁶	+23 ²
72	20	101	32	64	90	104

59.5	67.4	77.0	24.0	104.0	108	121.1	131.1	132.4
-34 ⁵	-26 ⁶	-16 ⁷	16.8	+10 ⁹	+14 ⁹	+27 ¹	+37 ⁴	+38 ⁷
59	46	29	168	21	45	70	88	100

59.2	83.2	93.3	104.5	113.4	129.9	132.3
-34.1	-10.1	17.5	+8.2	+20.1	+36.6	+38.0
72	18	175	16	55	83	100

12.8	81.1	91.3	106.3	114.9	132.1	134.9
-25.0	-10.1	12.0	+9.1	+17.1	+34.9	+37.0
48	25	120	29	48	87	100

110.79

S' List South East Connection to Federal Blvd

+50

+2825 - FC

7+0

+65

6+30

TP	1.08	66.89	13.08	65.81
TP	0.32	78.89	13.40	78.57
TP	0.15	90.97	12.54	90.82

5+90

102.36

52⁹ 54⁵ 52¹ 54^A 56¹ 55⁹ 56¹ 54¹ 58⁸ 60² 62⁵ 60³ 58⁰ 56¹ 54¹

-3.2 -1.6 -4.0 -4.7 0.0 -0.2 10.8 0.0 +0.7 +5.1 +8.7 +3.2 +18.9 +39.0

94 65 60 50 43 28 6.9 15 21 50 59 75 100

51⁵ 53⁰ 52⁰ 54² 55⁵ 54⁰ 56⁸ 59⁰ 61¹ 60⁰ 60⁰ 61⁶

-4.5 -3.0 -3.2 +0.2 -0.5 10.9 10.5 +3.9 +9.1 +12.0 +12.0 +3.6

105 76 55 44 32 14 16 33 42 69 95

51⁹ 51² 50⁵ 55^A 55⁰ 59⁸ 62¹ 61⁵ 60³ 62⁰ 61⁵ 60⁸

-3.9 -4.6 -0.3 -0.4 11.2 0.0 +6.3 +11.7 +14.5 +17.2 +17.7

100 75 63 37 15 10 17 35 57 78 86 100

55⁰ 54² 54⁶ 54¹ 61⁶ 63⁰ 63² 65⁵ 65¹

-0⁷ -0⁵ -0¹ 11.2 +5⁹ +18² +17⁵ +19⁸ +20⁰

60 47 10 8 33 66 82 100

55⁰ 54⁶ 55¹ 55⁶ 62⁰ 63⁰ 64^A 64^B 68⁶ 61⁰

-7⁸ -8³ -7⁸ -7³ 10 +16⁰ +21⁵ +21⁸ +15² +18¹

77 60 21 12 13 32 45 70 100

55⁰ 52⁴ 53^A 55⁵ 68⁰ 68¹ 62⁰ 68⁶ 61⁰ 67^A

-33⁰ -35⁶ -34⁶ -2⁵ 15² +10¹ +14⁰ +10⁶ +13⁰ -0⁶

80 46 26 5 37 13 32 50 92 104

102.36

7P 6.27 64.33 8.83 58.06

+50

+0+0

+50

9+0

+50

8+0

66.89

St.

2

Pt.

60

45.5	51.7	51.3	51.1	58.06	51.1	51.5	61.6	68.1	10.3	18.4
-10.6	-0.9	-0.8	-0.4	8.83	-0.4	-0.6	+3.5	+7.0	+1.2	+20.3
74	57	35	18		18	30	34	58	87	100

45.2	46.5	50.4	51.7	51.3	51.0	51.3	51.65	51.3	56.1	61.2	61.1	11.3	61.1	63.2
-12.5	-12.3	-7.3	-10.3	-0.4	-0.7	-0.4	9.24	-0.4	-1.0	+2.5	+4.4	+1.3	+7.5	+3.5
100	77	66	52	37	23	18	9.24	18	31	33	40	58	81	120

45.5	48.4	51.4	51.3	51.2	51.29	51.1	56.1	61.1	61.0	8.3	9.2	10.8
-11.8	-9.9	-2.9	-0.5	-0.4	10	-0.8	-0.6	+6.8	+18.7	+25.7	+35.9	+45.5
80	63	46	28	18	10	18	32	33	52	77	97	113

51.6	49.0	55.1	56.2	56.5	56.97	56.1	51.2	51.3	71.6	90.1	103.2
-5.8	-2.0	-1.3	-0.8	-0.5	9.92	-0.3	+0.2	+8.3	+20.6	+33.7	+41.9
66	57	44	28	18.5	10.1	17.6	31	36	64	90	118

46.6	50.5	53.8	51.3	56.4	56.3	56.67	56.1	61.1	61.7	16.8	21.1	27.4	33.7
-10.1	-6.2	-2.9	-5.4	-0.3	-0.4	10.23	-0.3	-0.6	+11.0	+22.1	+32.4	+33.7	
80	68	55	40	32	20		15.6	28	33	53	77	100	

52.3	52.0	51.1	51.1	51.1	56.6	56.0	56.4	56.3	54.6	60.1	70.2	79.6	
-4.1	-3.8	+1.3	-4.7	-4.7	+0.2	-0.4	10	50	-0.1	+0.2	+2.7	+20.5	+23.2
88	76	62	52	42	35	24			12.1	25	30	53	75

66.89

+50.3

E 18" Corrugated storm Drain
28 ft E of 6 1/2' long con. headwall

13+0

12+0

+50

12+0

+50

11+0

64.23

64

.2

RT

61

49.6	49.6	49.2	49.0	49.4	49.04	49.1	49.3	49.6	49.4	49.9	49.1	49.0
-10.4	-6.5	-5.24	1.2	-0.4	2.9	-0.2	-0.2	-5.42	-0.2	+1.2	+1.1	+1.32
48	46	35	24	18	29	18	28	28	43	88	164	123

Fl. 1" pipe

Fl. 1" pipe

49.0	49.2	49.2	49.1	49.3	49.15	49.3	49.2	49.6	49.9
-9.2	-9.5	-4.4	0.2	-0.4	1.58	-0.2	-0.5	+7.2	+9.2
84	64	52	35	18	18	30	80	105	

49.1	49.9	49.1	49.2	49.1	49.2	49.54	49.1	49.9	49.6	49.1	49.9
-9.2	-9.6	-5.8	-3.3	-0.5	-0.3	1.77	-0.4	+2.4	+7.0	+1.6	+1.7
87	62	53	37	27	18	18	50	76	86	117	

49.0	49.2	49.1	49.0	49.2	49.1	49.1	49.0	49.2	49.6	49.5	49.9
-9.4	-10.2	-7.5	-4.6	-0.2	-0.3	1.92	-0.2	-0.2	+3.4	+10.1	+1.5
82	60	55	43	31	18	18	30	34	72	100	

48.7	49.1	49.1	49.4	49.1	49.09	49.1	49.6	49.5	49.0	49.9	49.9
-10.4	-1.9	-2.2	-0.7	-0.4	5.24	-0.4	-0.5	+6.4	+9.9	+1.4	+1.8
87	64	46	28	18	18	31	33	53	80	102	

49.1	49.1	49.1	49.0	49.1	49.3	49.15	49.3	49.0	49.0	49.4	49.4
-10.6	-1.6	-6.4	-2.2	-0.2	-0.4	5.58	-0.4	-0.2	+7.2	+10.7	+1.7
85	58	55	45	27	18	18	30	32	71	100	

47.1	47.1	47.0	47.5	47.0	47.36	47.9	47.5	47.0	47.1	47.3	
-11.2	-11.2	-1.3	-0.8	-0.4	5.97	-0.4	-0.2	+4.3	+6.7	+13.8	+7.1
79	63	46	24	18	18	30	34	60	102	116	

64.23

S' line. South East Connection to Federal Blvd.

Note: - RT + Lt + Above - Below Z

+09.30 B.C. RT

1670

+50

14198.8 2 18" corrugated storm Drain

31' RT Northerly 25' Nth + South 20' East + West 6' width
con Box throat Easterly end

+50

-1410

64.33

Lt

Z

RT

52

53.7	62.0	63.9	61.3	61.4	61.52	60.8	60.9	61.5	71.4	76.1
-72	105	122	02	02	2.81	-02	02	02	+92	+146
62	44	27	23	18		18	28	58	85	130

53.1	55.1	62.0	61.4	61.2	61.3	61.47	60.8	60.8	62.4	65.1	71.7	75.9
-82	62	105	132	02	02	2.81	-05	-02	+12	+32	+103	+145
65	59	47	26	23	18		18	28	59	76	85	126

53.1	54.4	61.2	61.6	60.6	61.1	61.29	60.8	60.7	62.1	61.7
-82	42	02	102	02	-02	3.04	-05	-02	+02	+32
73	56	30	22	23	18		18	28	72	126

53.0	55.4	61.0	60.3	60.7	61.00	61.6	60.5	60.5	58.5	61.4	63.2	65.1
-82	-52	02	-02	-02	3.33	-02	-05	-05	-2.65	+02	+22	+44
67	38	28	24	18		18	28	31	31	43	91	146

51.6	52.2	60.7	61.5	61.1	60.15	60.4	60.2	62.3	61.2
-92	-82	02	-02	-02	3.58	-02	-05	+12	+35
60	40	32	22	18		18	28	71	123

51.0	52.1	52.4	60.0	60.44	60.1	59.9	61.4	62.5
-92	-02	-02	-02	3.89	-02	-05	+12	+34
44	30	23	18		18	28	53	112

64.33

+50

+11.24 EC

18+0

+50

720

TP 6.26 67.88 2.71 61.62

17+0

16+50

64.33

14

8

PT

63

56.1	61.1	62.3	62.4	62.7	63.0	62.6	62.0	68.8	72.4	79.6	81.8
-67	-22	-02	-06	-03	1.92	-04	-10	+52	+94	+166	+182
43	57	37	24	18	18	18	28	36	43	85	168

55.9	62.3	62.5	62.6	62.7	62.1	61.8	60.9	43.9	18.3	81.0
-68	-02	-02	-02	5.19	-06	-02	+72	+113	+156	+182
57	40	24	18	18	18	28	37	48	73	121

53.9	60.8	62.3	62.5	62.6	62.0	61.7	60.6	73.7	11.7	81.0	
-67	-12	+02	-02	-02	5.26	-05	-02	+79	+114	+152	+182
35	47	35	24	18	18	28	37	47	65	109	

51.2	56.9	61.8	61.8	62.2	62.3	61.7	61.5	61.7	61.4	82.3
-72	-52	-04	-02	-02	5.55	-02	-02	+94	+191	+212
58	47	37	24	18	18	28	40	76	701	

54.6	54.9	61.0	61.6	61.9	62.1	61.4	61.3	61.6	60.8	11.5	10.4
-75	-72	-11	-05	-02	5.77	-02	-02	-02	+42	+123	+175
63	51	40	24	18	18	28	34	48	52	88	

61.4	51.5	61.4	61.4	61.9	62.0	61.4	61.3	62.6	10.0	18.3	81.8
-76	-45	-02	-02	-02	2.29	-02	-02	+06	+80	+162	+192
49	47	40	24	18	18	28	61	73	75	115	

52.8	56.1	50.3	61.1	61.7	61.7	61.7	61.0	61.1	62.0	62.5	80.9	83.2
-72	-52	-52	02	02	02	2.62	-02	-02	+03	+32	+192	+212
57	50	42	34	24	18	18	28	59	79	83	138	

64.33

820

3.20

64.68

65.00 / 64.11
47+97.48 E.S. "H"
64.80 for 23

+33.67 = P.O.T. 47+97.48 E.S. "H"

20+0

150

+20

2 Drive on Rt.

19+0

67.88

Lt.

S

Rt

64

47
3.20

57.0	56.9	64.1	63.8	64.1	64.4	64.1	63.9	64.1	64.1	61.5	65.5
-72	-75	+02	-06	-03	3.50	-02	-05	-02	+20	+34	+31
69	49	33	24	18	18	28	37	41	50	23	123

56.6	54.5	63.9	63.1	62.6	62.9	63.6	63.4	63.3	62.8	64.1	63.3	64.1
-73	-64	80	-08	-03	3.28	-03	-05	-04	+12	+22	+19	+20
63	52	31	24	18	18	28	35	38	50	74	114	

56.5	57.2	62.5	63.3	62.9	63.3	63.6	63.3	63.3	64.8	71.7	76.6
-74	-62	-11	-03	-02	-03	4.26	-03	-03	+12	+81	+130
82	57	46	35	24	18	18	25	43	75	113	

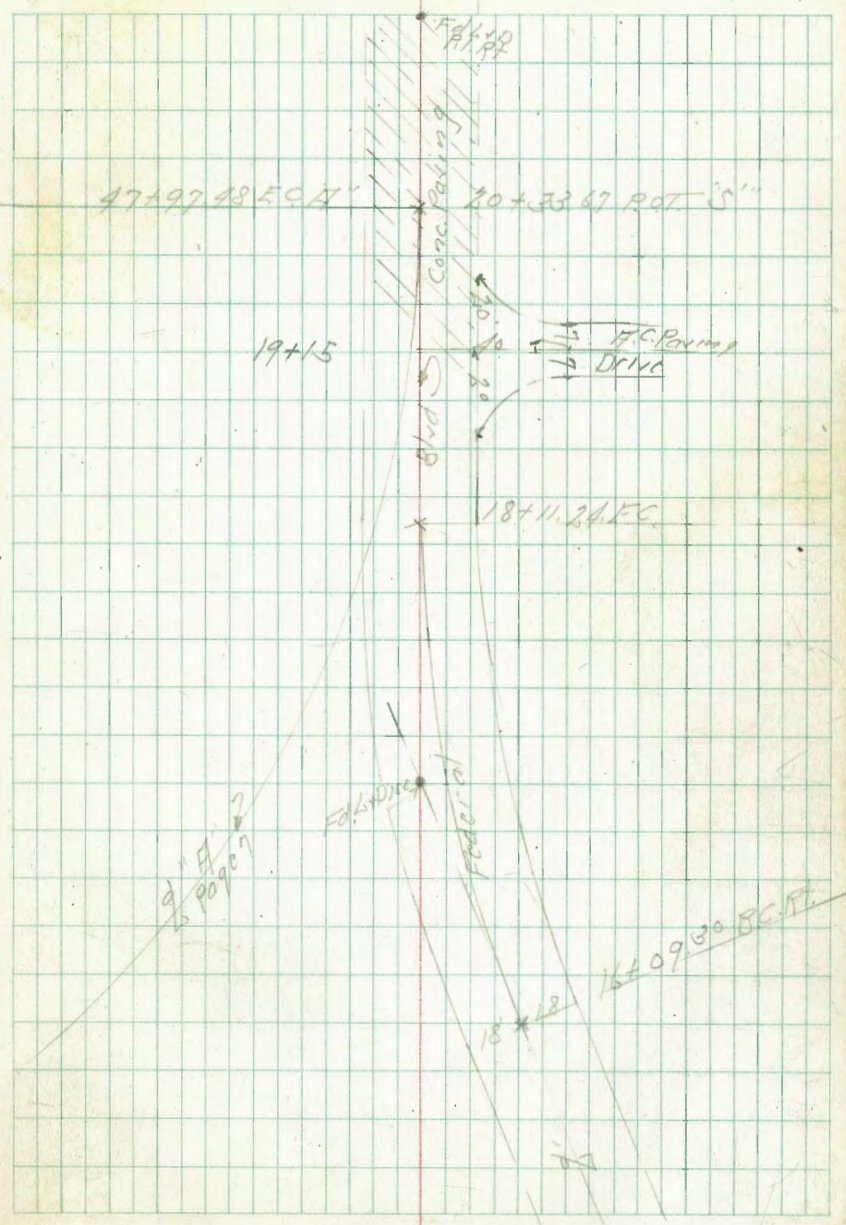
54.5	62.3	62.2	62.1	63.1	63.5	63.1	62.8	65.5	74.3	74.3
-70	+12	-02	-02	-04	4.36	-02	-02	+22	+102	+122
64	53	34	24	18	18	26	42	82	105	

67.88

Alignment Nhabash Freeway S. L. 20
 South East Connection to Federal Blvd.

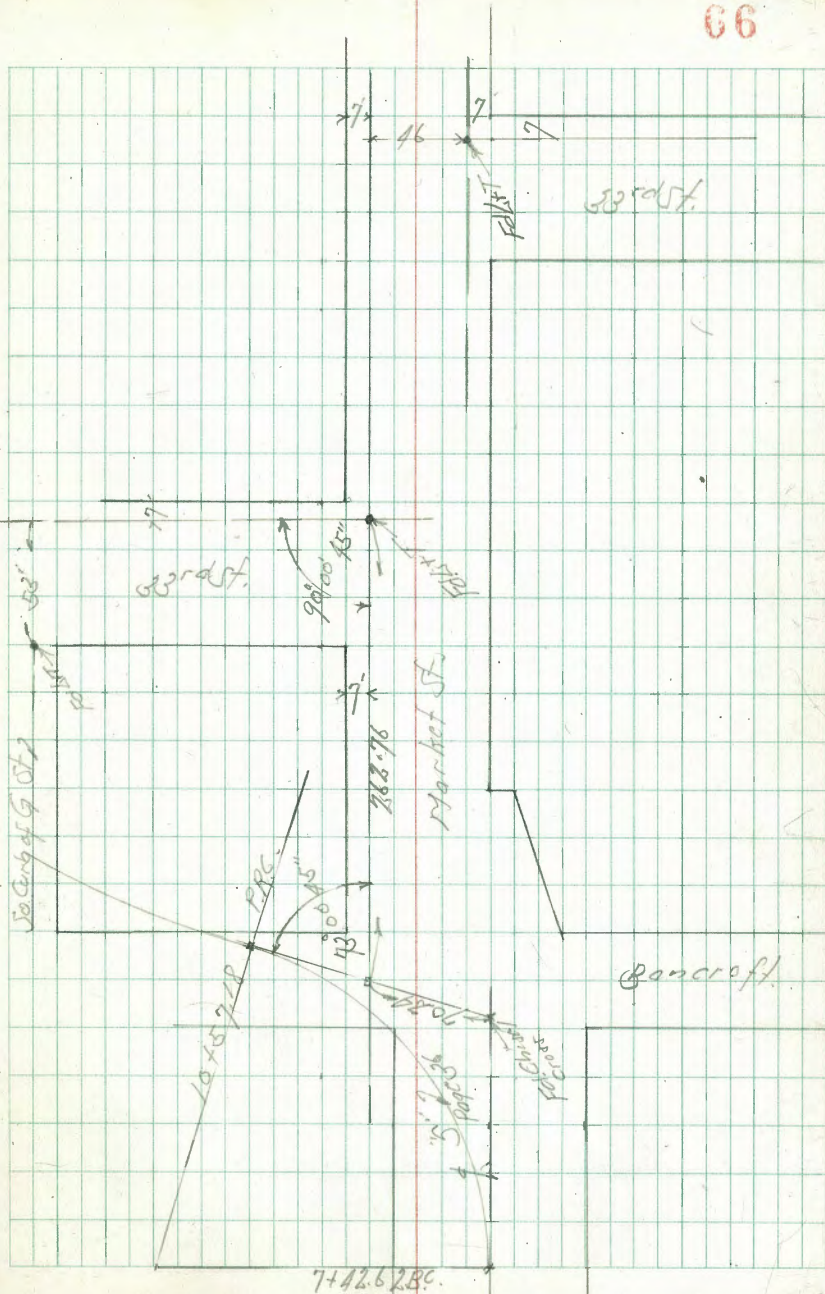
20+33.67 P.O.T. = 47+97.48 E.C.M.

111.24	FC	10° 11.37'	
18+0		9° 37.35'	Δ 20° 22' 45"
			R. 1517.75
+50		7° 05.97'	T. 102.02 ⁰⁵
			L. 201.94
17+0		4° 34.60'	D. 3.0275
	c 18 Rt. 48.40		
+50		2° 02.22'	
	c 18 Rt. 39.40		
16+09.30	BC Rt.		



The Mabash Freeway S Line Market St
33rd + Bancroft St.

Feb. 28-49
Sisco
Smith
Garber



Alignment North West Outer
 Connection to Hobash Blvd. At Federal Blvd.

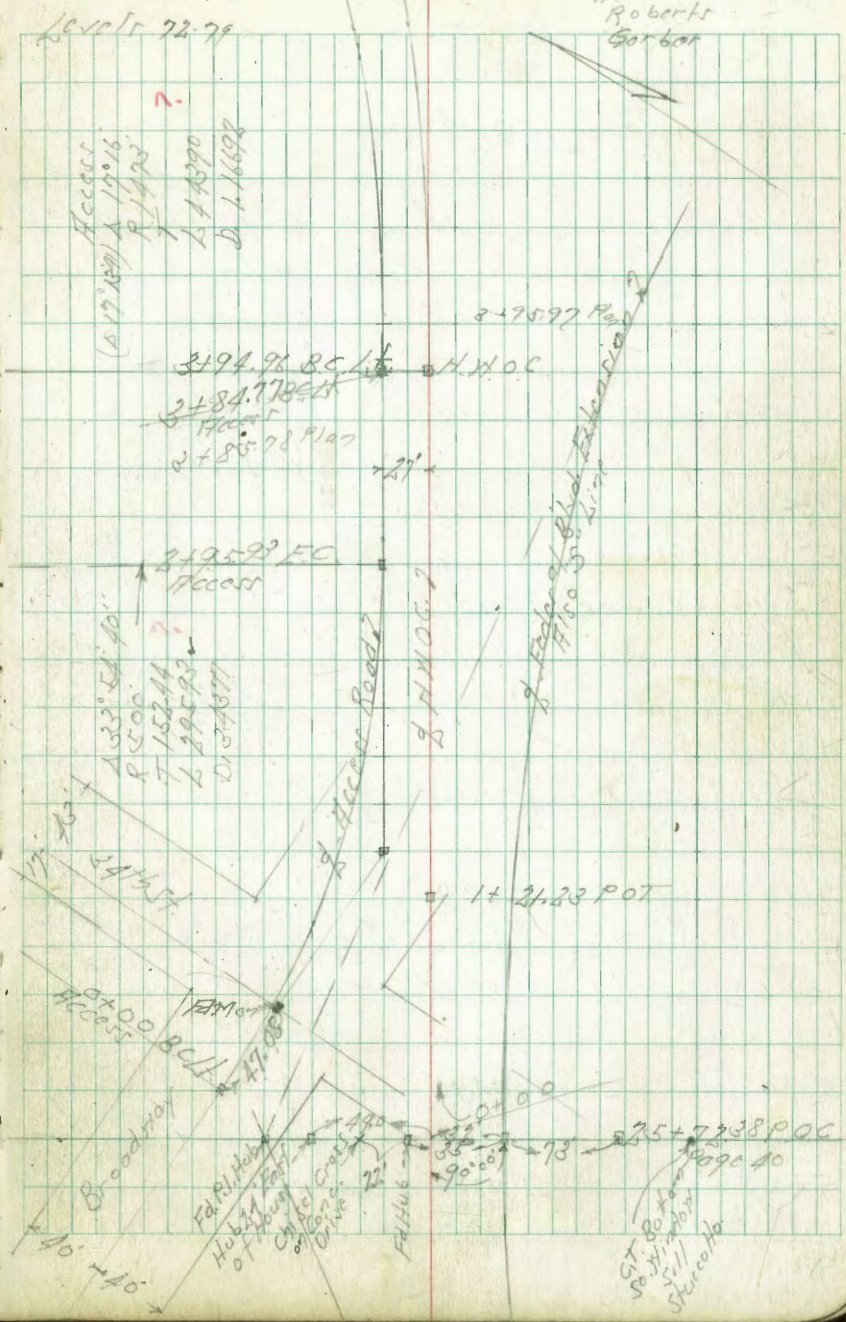
5+0 2° 00.87'
 7+50 1° 03.07'
 4+0 0° 05.78'

2+94.96 B.C. Lt.

1+21.23 P.O.T. End of Garage

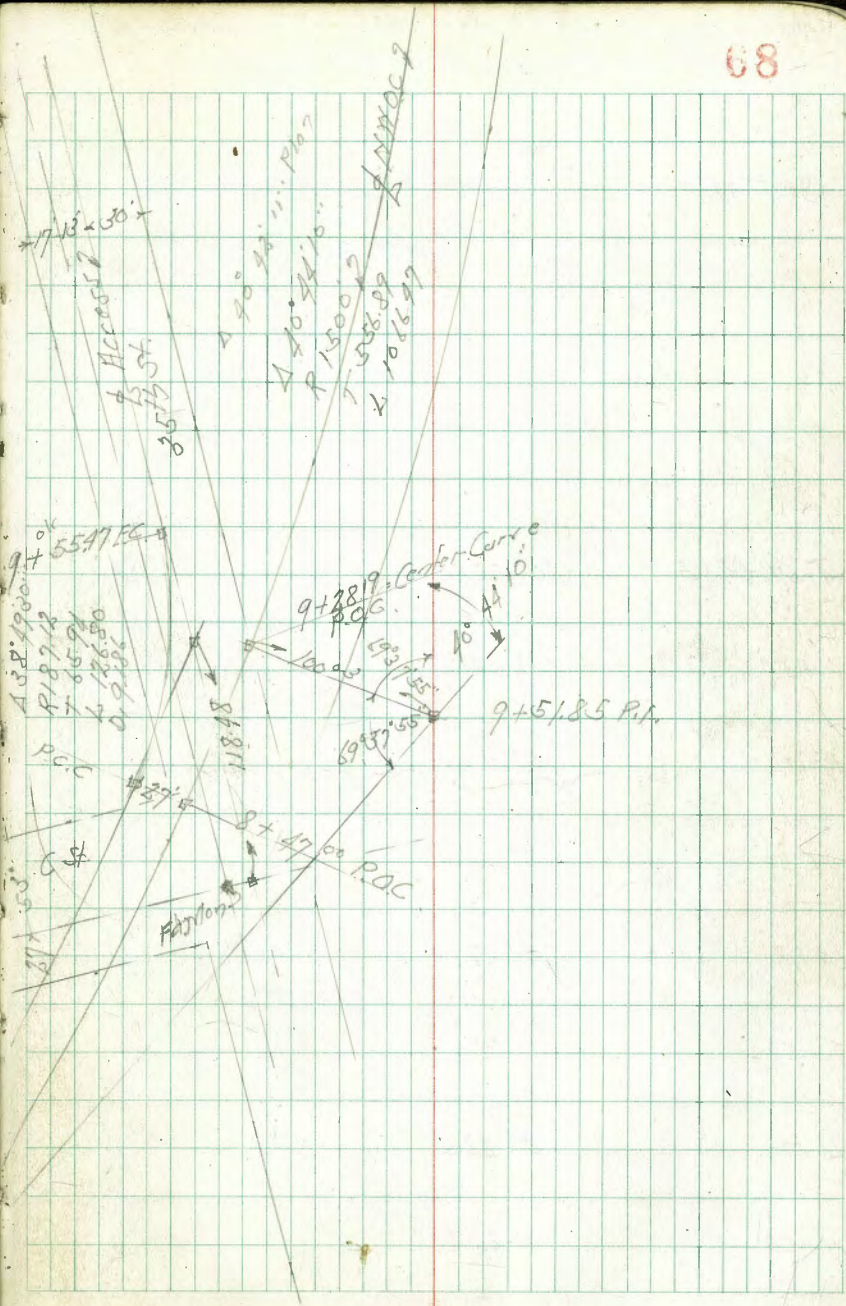
0+00 Opp 25+72.38 P.O.C. "S" Line

May 10-99 67
 H.S. 5502
 Roberts
 Garber



North West Outer Connections

11+0	P.O.C.	13° 27.96'	
+50		12° 30.62'	
10+0		11° 32.33'	A 40° 14' 10"
			R 1500'
+50		10° 36.03'	T 556.89
			L 1066.47
+28.19	Center Curve	10° 11.06'	E 100.03
			D 114591
9+0		9° 38.73'	
+47	Opp P.C.C.	8° 38'	
8+0		7° 44.14'	
+50		6° 46.85'	
7+0		5° 49.55'	
+50		4° 52.25'	
6+0		3° 54.96'	
5+50		2° 57.66'	



Alignment Northward Outer Connection
to Habash Blvd. at Federal Blvd.

18+91.91

14+61.43 F.C. 20° 22.08'

+50 20° 09'

14+0 19° 11.69'

+50 18° 14.40'

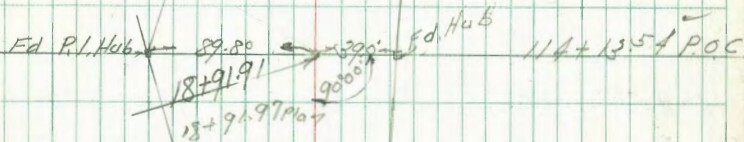
13+0 17° 17.10'

+50 16° 19.80'

12+0 15° 22.51'

11+50 14° 25.21'

69



Habash Blvd.
 114+135.4 POC
 13+96.97 POC

14+61.57 POC
 14+61.43 F.C.

Alignment North West Access Road
Habor 5 Blvd. 34th to 35th St. North of
Broadway Sketch Page 67

May 18-19
H. S. Jones
Roberts
H. Garber
S. P. Coyle

70

3+84.77 B.C. Lt.

+95.93 F.C. 16° 57.33'

+50

14° 19.43'

Δ 33° 54' 40"

R 500'

2+0

11° 27.54' ✓

T 1152.24

Δ 295.93

+50

8° 35.66' ✓

D₁ 3.43775

1+0

5° 43.77' ✓

+50

2° 51.89' ✓

0+00 B.C. Lt. = 1/2 Broadway West of 34th St.

+28.57	P.C.C.	8° 38'	
8+0		8° 04.54'	
+50		7° 06.20'	
7+0		6° 07.85'	A 17° 16'
			R 1473'
+50		5° 09.50'	T
			L 44390
6+0		4° 11.16'	D. 116692
+50		3° 12.81'	
5+0		2° 14.47'	
+50		1° 16.12'	
4+0		0° 17.77'	
3+81.77	B.C.L.A.		

+55.47	EC	19° 24.75' ✓	
+50		18° 34.5' out	
+25		14° 44.9' ✓	A 38° 49' 30"
			R 187.12'
			T 65.94
9+0		10° 55.2' ✓	L 126.80
			D. 9.186
+75		7° 05.6' ✓	
+50		3° 15.9' ✓	
8+28.67	P.C.C.		

Cross Section North West Outer Connection
to Wabash Blvd. At Federal Blvd. Ext.
Alignment

TP	11.70	99.22	12.58	87.62
+50				
2+0				
+50				
TP	1.01	100.20	2.20	99.19
1+0				
+50				
0+0				
B.M.	2.20	101.39	99.19	N.E. 1/2 Broadway +347504

May 19-49

Lt-11

S

Pt-5 72

99.4	96.3	94.6	91.7	89.90	86.9	85.8	83.9	81.6		
100	100	51	85	100	100	100	100	100		
98.9	96.7	94.2	91.3	89.9	89.90	88.5	86.5	85.1	82.2	82.4
100	100	50	88	100	100	100	100	100	100	100
98.9	98.0	96.4	93.4	91.9	90.10	87.20	87.1	84.3	82.3	80.8
100	100	50	50	83	10.1	100	100	100	100	100
98.3	97.0	95.3	91.9	88.99	86.8	84.9	82.9	80.7		
100	100	50	85	100	100	100	100	100		
97.5	96.1	94.6	91.5	90.09	88.7	87.2	85.8	84.6	81.5	
100	100	50	89	100	100	100	100	100	100	
94.0	92.1	89.79	88.0	85.9	84.9	80.9				
100	100	100	100	100	100	100				

N.E. 1/2
Broadway
+347504

7.4
56 = E. 1/2
House

101.39

14.2
53 = W. 1/2
Farm
House

+37 195 Rt of Z - Z Papperticc ✓ on Cobble Hall
 TP 3.41 92.34 10.39 88.93 18.17 5+3.5
 +32 19 Rt of Z - Z Papperticc #3450 99.7
 +25 7.06
 88
 10.2

5+0

4+50

+9496 - B.C.H

+50

3+0

99.32

Lt.

S

Rt. 73

94.3	93.1	92.7	91.0	89.9	88.9	88.12	86.3	83.8	82.0	79.7	72.7
48 88	62 98	61 51	83 50	94 50	104 15	112 14	130 21	155 30	173 60	196 61	266 75
Ret Hall	Station	St-Top Hall	St-Station	St-Top Hall	St-Top Hall	St-Top Hall	St-Top Hall	St-Top Hall	St-Top Hall	St-Top Hall	St-Top Hall
97.1	92.9	90.4	89.4	87.92	85.2	84.1	83.6	81.6	78.6	70.6	
23 100	64 100	87 100	99 100	114 100	141 100	152 100	157 100	217 100	207 100		
	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station	St-Station
100.1	95.8	92.3	89.6	87.62	85.4	84.4	83.3	83.1			
108 100	35 75	70 50	97 25	117	139 25	149 50	160 75	162 98			
97.9	95.7	92.8	90.7	88.82	86.6	85.0	83.4	81.5			
14 100	36 75	65 49	86 27	105	127 24	142 51	159 75	178 103			
98.3	96.6	94.2	92.1	90.22	87.3	85.7	83.4	82.3			
100	47 75	51 51	73 27	91	120 24	136 52	159 78	170 102			
94.4	94.0	92.1	90.02	87.9	85.5	84.0	82.6				
49 64	53 51	72 25	93	114 33	138 49	153 62	167 86	176 100			

99.32

Northwest Outer Connection
 Habash Blvd. at Federal Blvd. Etc.

7+0

+50

+25

6+0

TP 0.90 70.63 10.51 69.73 ^{0.75" Pipe} 7R.7+95

TP 0.38 80.24 12.48 79.86

+75

7+60 12.5' dia of $\frac{1}{2}$ " 18" Pepper Tree

+59 For Profile $\frac{1}{2}$ " 4.9

5+51 P.O.C.

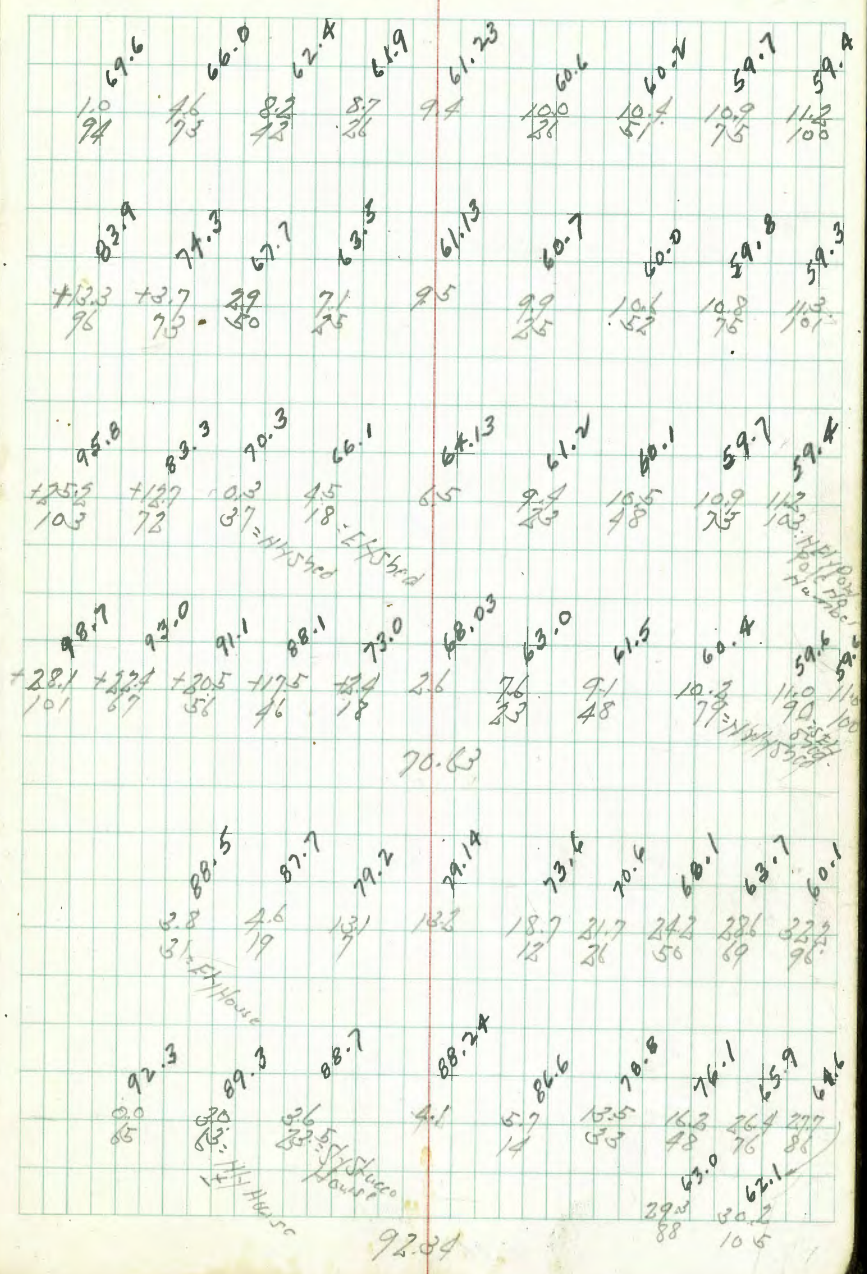
+50 $\frac{1}{2}$ " 24" Pepper Tree
 92.34

Δt,

8

RT

74



TP 11.36 18.34 11.22 56.98 ²¹⁰⁰ 91.28.19

9+0

+75

TP 7.45 18.20 9.88 60.75

+63 " " " 11.2

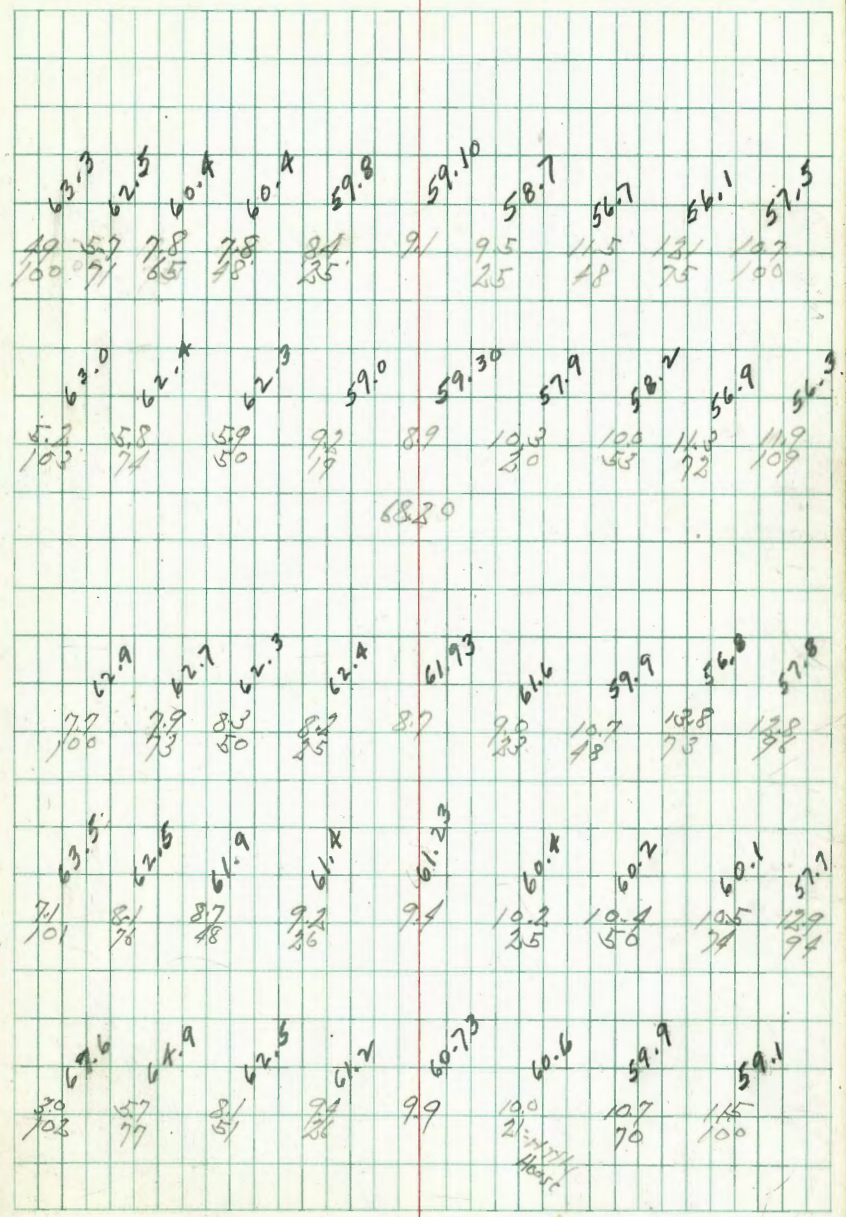
+60 To For Profile 8.7

+47

8+0

7+50

7063



70.63

Northwest Outer Concretion
 Habash Blvd. at Federal Blvd Est.

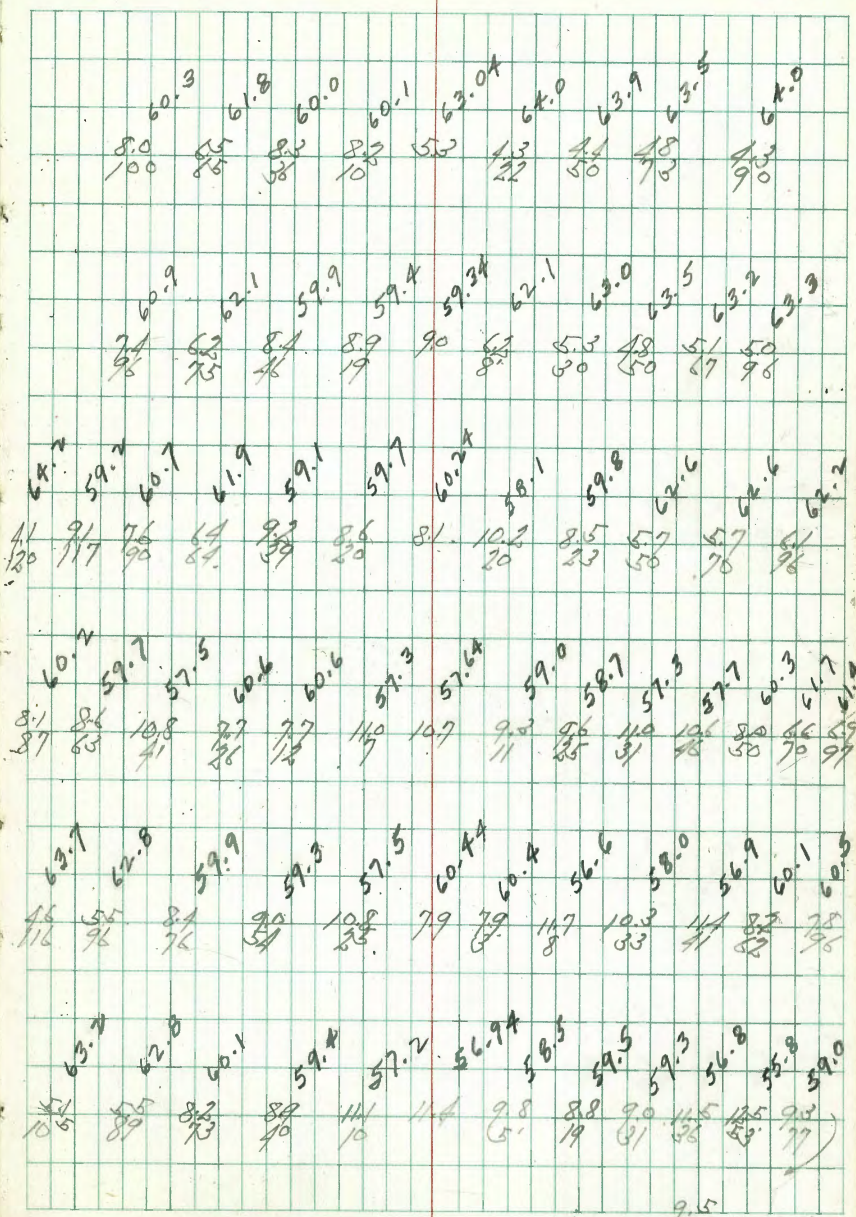
47 . 58 87 76

+80
 +62 For Profile 61 62.2
 +60 " " 90 59.3
 +50
 +22 For Profile 97 58.6
 +17 " " 8.5 59.8
 1070

+75 For Profile 83 60.0
 +50 49 63.4 52 63.1 98

+40
 9+28.19

6834



6834

9.5
 100

704 29.11.74 = 2 M.H. 5.23 70.40
 70.40
 top surface
 Man Hole

13+0

+50

12+0

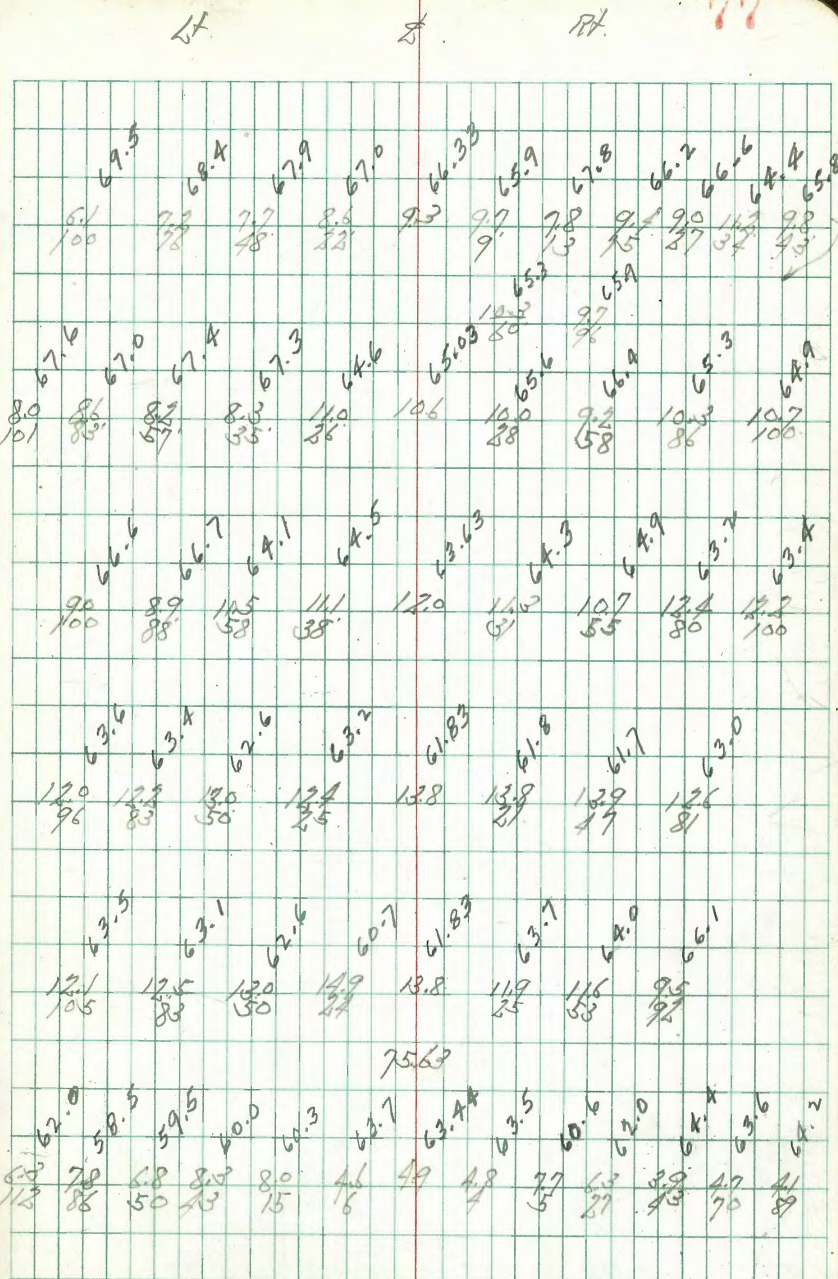
+50

+18

TP 1294 75.63 5.65 62.69

7+05

6834



Lt.

Z

May 25-19
S. J. 100
Rt. 100
Gardner
Colo

TP 10550 79.95 6.81 69.45

15+75 6.3
100

+71 For Profile 97

+50 6.6
103

15+10

+61.43 FC

BM 6.20 70.06

+48 2 47.0/25 = 2 Schrock H. 6.20

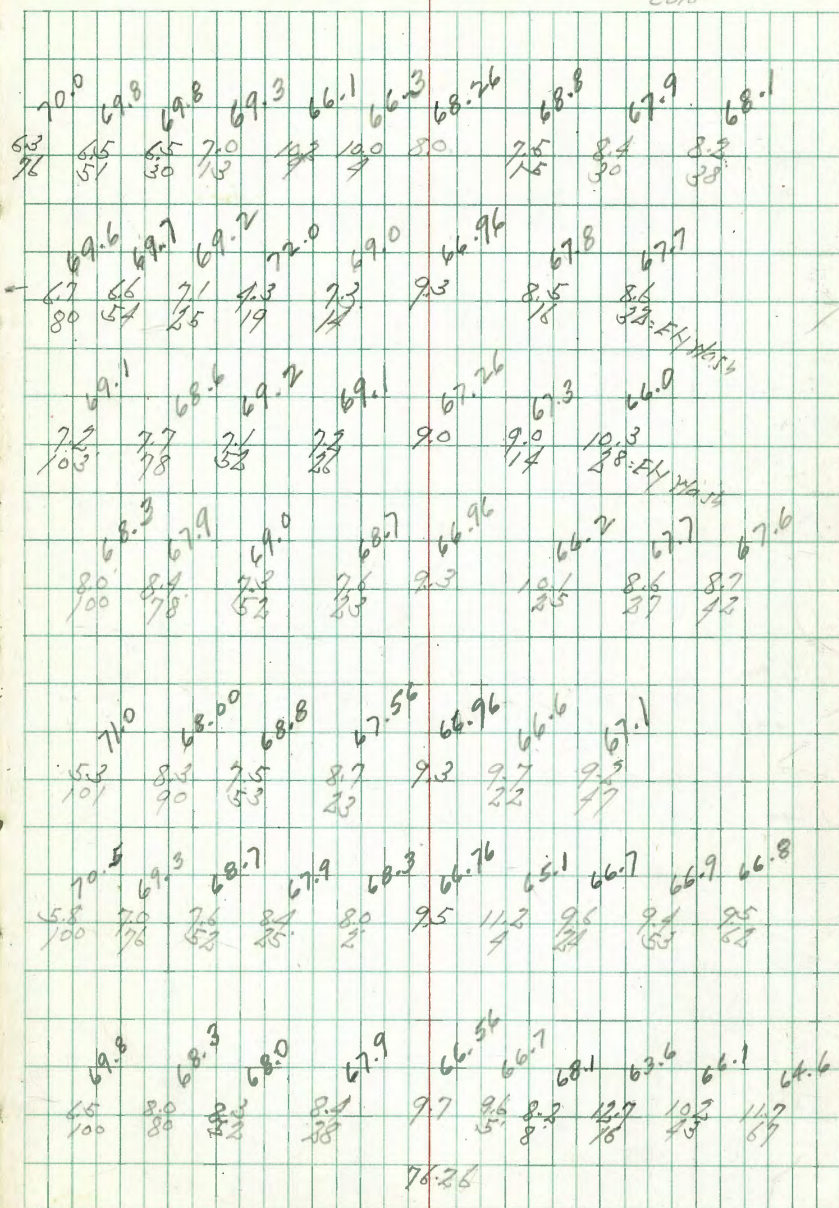
+40

14+10

+50

TP 1098 76.26 10.35 65.28 0785/06
1270

7583



Lt.

S

Rt.

79

BM

632

72.63

on Hub
1.19.18.54.20
5.2.72

191.91

450

1810

450

443

10.5 Lt of 7 = 7 M.H.

462

Top of
Rim

1710

450

1610

79.95

74.2	73.9	71.8	72.3	74.0	73.9	73.65	73.5	74.7	73.4	73.2
57/104	83/88	83/76	77/50	68/45	61/36	63	65/35	53/17	46/71	68/50
73.7	72.2	71.3	72.7	72.8	72.95	73.1	72.7	74.1		
63/100	78/73	87/78	78/40	77/38	70	69/36	73/53	59/76		
		71.6	70.4	72.0	71.95	72.0	72.1	72.2		
	73/100	84/77	96/40	80/33	80	80/29	72/52	78/75		
73.6	71.3	70.8	69.3	71.3	72.05	72.1	71.2	71.5		
64/103	87/75	92/52	10.7/31	87/35	79	79/36	88/53	85/77		
73.5	71.1	70.4	70.1	71.05	70.5	70.7	70.5			
65/93	87/81	96/57	99/21	89	95/30	93/17	95/69			
70.6	70.4	70.5	68.3	69.3	69.85	69.8	69.9			
95/98	96/74	95/75	11.7/41	10.7/31	10.1	10.2/23	10.1/54			Top floor
70.5	69.9	69.7	69.9	67.0	67.4	68.85	69.1	68.2		
95/106	101/81	103/53	101/25	130/30	126/13	111	109/17	118/41		

79.95

Location of Eucalyptus Trees
C 57 + 35755

17 12 30

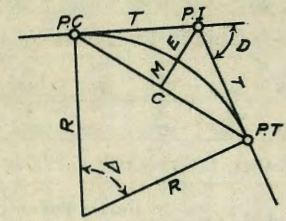
35755

24" Tree	41	+27
24" Stump	35	+19
Do. 36" Tree	41.5	+07
24" Tree		
30" Tree	28	+80
24" Tree	37.5	+68
48" Stump	23	+63
24" Stump	16.5	+57
36" Stump	15	+50
36" Stump		
12" Stump	30	+33
24" Stump	16	+25
48" Stump	11	+16
Do. 36" Tree	31	+07
30" Tree	25	

C 57

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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CURVE FORMULAS

- Radius $= R = \frac{50}{\sin. \frac{D}{2}}$ (1) Degree of Curve $= D$ and $\sin. \frac{D}{2} = \frac{50}{R}$ (2)
- Tangent $= T = R \tan \frac{\Delta}{2}$ (3) Length of Curve $= L = 100 \frac{\Delta}{D}$ (4)
- Middle ordinate $= M = R(1 - \cos. \frac{\Delta}{2})$ (5) $= R \text{vers} \frac{\Delta}{2}$ (6)
- External $= E = T \tan \frac{\Delta}{4}$ (7) $= R + \cos. \frac{\Delta}{2} - R$ (8) $= R \text{exsec} \frac{\Delta}{2}$ (9)
- Long Chord $= C = 2 R \sin. \frac{\Delta}{2}$ (10) $\Delta =$ Central Angle

EXPLANATION AND USE OF TABLES

Stations.—Given P. I. = Sta. 161 + 60.35 to find Sta. of P. C. and P. T. $\Delta = 32^\circ 10'$ $D = 8^\circ 20'$. From Table IV for 1° curve $T = 3454.1$ and $\div 8\frac{1}{3} = 414.49$ ft. From Table V correction = .36 or $T = 414.85$ ft. P. C. = Sta. P. I. - $T = 157 + 45.50$. Also from (4) $L = 746.00$ and P. T. = Sta. P. C. + $L = 164 + 91.50$.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft. = 7.27 ft. Distance = 158 - Sta. P. C. = 54.50, hence offset = $7.27 \frac{54.50}{100} = 2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $\frac{54.50^2}{2 \times 688.26} = 2.16$ ft.

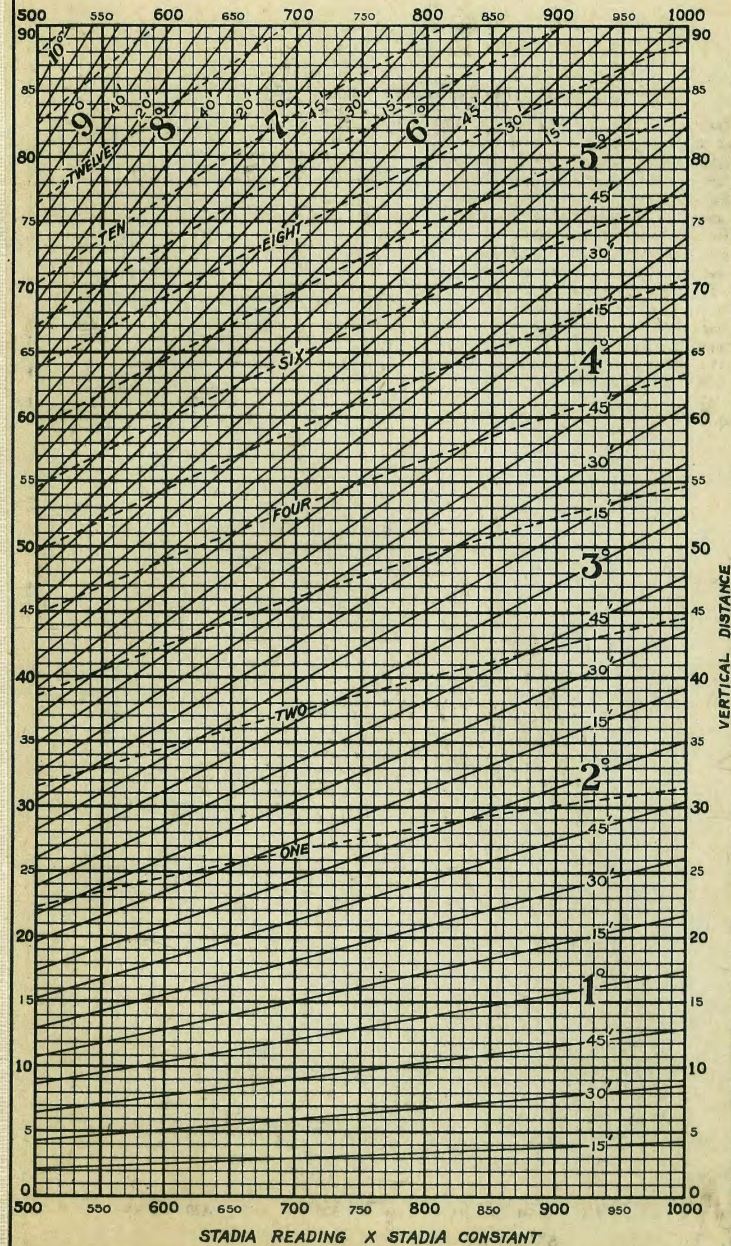
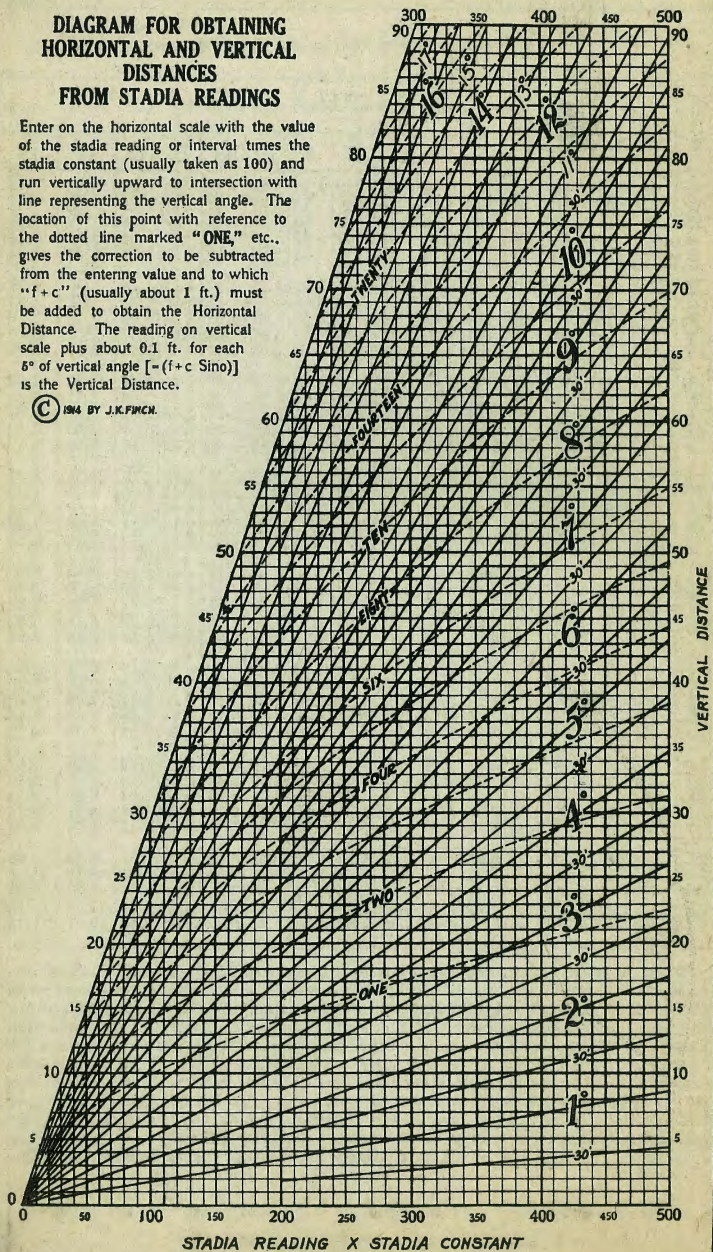
Deflections.—Deflection angle = $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft. = (in minutes) $.3 \times C \times D$ or = defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve = $.3 \times 54.5 \times 8\frac{1}{3} = 136.2'$ or $2^\circ 16.2'$, or = $2.50 \times 54.5 = 136.2'$ from Table III. For Sta. 159 deflection angle = $2^\circ 16.2' + 8^\circ 20' \div 2 = 6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve $E = 960.6$ for $8^\circ 20' = 960.6 \div 8\frac{1}{3} = 115.27$ and from Table V correction = .10 or $E = 115.37$ ft. Or suppose $\Delta = 32^\circ$ and E is measured and found to be 42 ft. What is D? From Table IV $E = 230.9$ and $\div 42 = 5.5$ or $D = 5^\circ 30'$.

**DIAGRAM FOR OBTAINING
HORIZONTAL AND VERTICAL
DISTANCES
FROM STADIA READINGS**

Enter on the horizontal scale with the value of the stadia reading or interval times the stadia constant (usually taken as 100) and run vertically upward to intersection with line representing the vertical angle. The location of this point with reference to the dotted line marked "ONE," etc., gives the correction to be subtracted from the entering value and to which "f+c" (usually about 1 ft.) must be added to obtain the Horizontal Distance. The reading on vertical scale plus about 0.1 ft. for each 5° of vertical angle [$-(f+c \text{ Sino})$] is the Vertical Distance.

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6689

1092

5597

**DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.**

Roadway 16 feet wide. Side Slopes 1 on 1½
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9 + (20 - 16) ÷ 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.