

GRADE

119

PASTS

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FIELD BOOK

No. 385

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MICROFILMED

MICROFILMED

JAN 20 1965

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1234  
1227

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
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**THE FREDERICK POST CO.**  
*ENGINEERING and DRAFTING SUPPLIES*  
IRVING PARK STATION  
CHICAGO, ILL.



Control Interceptor

Control Interceptor  
Normal Heights

7/6/26  
Bliss  
Northern  
Price

42+64.45	222.85	1476 17.27	374.59 10.00 384.59	35+18.95	78.68	11.50 9.70	378.87 0.39
42+14.45	23.66	1476 17.27	374.59 10.00 384.59	34+73 = MH 211	328.87	11.31 9.25 +6.39	16.80
46+64.45	22.87	1476 17.27 10.00	374.59 10.00 384.59	34+23	79.08	9.58 3.82	385.26 388.66
46+14.45	24.08	1476 17.27 10.00	374.59 10.00 384.59	33+73	79.29	9.37 9.31 5.06	15.76
45+64.45	24.28	1476 17.27 10.00	374.59 10.00 384.59	33+23	79.50	9.16 4.54	9.62
45+10.575	274.54	1476 17.27 10.00	374.59 10.00 384.59	32+73	79.71	8.95 9.88 +4.01	8.74 4.67 +7.07
44+65.25	74.75	19.09 4.40 +7.69	374.59 10.00 384.59	32+23	79.88	8.66 9.89 +3.77	8.74 4.67 +7.07
44+10.575	74.96	13.88 4.83 +9.05	374.59 10.00 384.59	32+104.97 = MH 210A 16.41	380.00	13.18 8.98 +7.20	383.77 9.56 393.33
43+55.75	75.17	13.67 4.60 +9.07	374.59 10.00 384.59	31+54.97	80.15	13.03 8.52	12.58 5.84 +6.74
43+10.575	75.38	13.46 4.52 +8.94	374.59 10.00 384.59	31+04.97	80.30	12.43 4.60 +7.83	12.58 5.84 +6.74
42+55.75	75.59	13.25 4.18 +9.07	374.59 10.00 384.59	30+54.97	80.45	12.73 6.84 +5.89	12.58 5.84 +6.74
42+10.575	75.80	13.04 4.03 +8.99	374.59 10.00 384.59	30+64.97	80.60	12.43 4.60 +7.83	12.58 5.84 +6.74
41+60	275.97	12.85 4.00 +8.85	374.59 10.00 384.59	29+54.97	80.75	12.43 4.60 +7.83	12.58 5.84 +6.74
41+10	76.20	13.93 5.10 +8.83	374.59 10.00 384.59	29+04.97	80.90	12.43 4.60 +7.83	12.58 5.84 +6.74
40+60	76.41	13.72 4.97 +8.75	374.59 10.00 384.59	28+50.28 = MH 209A 27.17	381.06	12.27 3.30 +8.88	12.58 5.84 +6.74
40+10	76.62	13.51 4.90 +8.61	374.59 10.00 384.59	28+00.28	81.21	15.23 5.97 +9.26	15.08 5.72 +9.36
39+60	76.83	13.30 4.81 +8.49	374.59 10.00 384.59	27+50.28	81.36	14.93 5.34 +9.59	14.78 5.19 +9.59
39+10	77.04	13.09 4.73 +8.36	374.59 10.00 384.59	26+00.28	81.51	14.63 4.63 +9.98	13.74 4.08 +9.64
38+60	77.25	12.88 4.64 +8.24	374.59 10.00 384.59	25+50.28	81.66	13.59 4.08 +9.51	13.42 4.33 +9.09
38+18.95	277.42	12.71 4.62 +8.09	374.59 10.00 384.59	25+92.5 = MH 208A 24.03	381.83	13.27 4.28 +8.99	13.12 4.17 +8.95
37+68.95	77.63	12.50 4.56 +7.94	374.59 10.00 384.59	25+12.5	81.98	13.12 4.28 +8.84	13.12 4.17 +8.95
37+18.95	77.84	12.29 4.58 +7.71	374.59 10.00 384.59	24+92.5	82.13	13.12 4.28 +8.84	13.12 4.17 +8.95
36+68.95	78.05	12.08 4.68 +7.40	374.59 10.00 384.59	24+35.15 = Drop MH 707A 19.02	382.30	13.12 4.28 +8.84	13.12 4.17 +8.95
36+18.95	78.26	11.90 4.59 +7.31	374.59 10.00 384.59	23+85.15	82.25	13.12 4.28 +8.84	13.12 4.17 +8.95
35+68.95	78.47	11.71 4.26 +7.45	374.59 10.00 384.59	23+35.15	82.60	13.12 4.28 +8.84	13.12 4.17 +8.95

Central Interceptor

Central Interceptor

Normal Heights

Bliss  
Northern  
Price  
7/12/26

3

22+8545		38275	12.97 9.81 -12.76		11+3395 = MH 201A 49°05'	386.20		392.21 392.21 392.21
22+3545	7236	8290		12.88 5.21 +7.61	10+8395	86.35	12.31 +6.96	392.21 392.21 392.21
21+8545	7236	8305	12.67 5.41 +7.26		10+3395	86.50		392.21 392.21 392.21
21+6185 = MH 206 A 11°50'		38312		12.60 5.56 +7.04	9+9495 = MH 292A 33°35'	386.61	12.95 +4.70	392.21 392.21 392.21
21+4495		8327	12.98 6.08 +6.90	390.16 6.00 396.25	9+4695	86.76		392.21 392.21 392.21
20+6185	216.25	8342		12.83 5.91 +6.92	8+9695	86.91	7.75 +0.61	392.21 392.21 392.21
20+1185	216.25	8357	12.68 5.48 +7.20		8+8215 = MH 200 A 21°20'	386.94		392.21 392.21 392.21
19+6185		8372		12.53 4.95 +7.58	8+3815	87.14	8.58 +4.72	392.21 392.21 392.21
19+45.6 = MH 205 A 11°00'		38277	12.48 4.97 +7.51		7+8815	87.34		392.21 392.21 392.21
18+95.6	182.08	8392		12.33 4.81 +7.52	7+3815	87.54	8.18 +4.57	392.21 392.21 392.21
18+45.6	182.08	8407	12.18 4.63 +7.55		6+8815	87.74		392.21 392.21 392.21
17+95.6		8422		12.03 4.57 +7.46	6+3815	87.94	8.28 +4.72	392.21 392.21 392.21
17+58.58 = MH 204 A 17°27'	Drop Mn. No 6	38433	11.92 4.35 +7.57	842 4.35 +4.07	5+8815	88.14		392.21 392.21 392.21
17+08.58		8448		12.52 4.75 +7.77	5+3275 = MH 199 A 49°36'	388.36	8.10 +4.57	392.21 392.21 392.21
16+58.58	249.88	8463		12.12 4.63 +7.49	4+8275	88.56		392.21 392.21 392.21
16+08.58	249.88	8478		12.52 4.75 +7.77	4+3275	88.76	7.90 +4.70	392.21 392.21 392.21
15+58.58		8493		12.32 4.61 +7.71	3+8275	88.96	12.21 +5.79	392.21 392.21 392.21
15+0870 = MH 203 A 17°24'		38508		12.52 4.75 +7.77	3+3275	89.16	12.58 +5.70	392.21 392.21 392.21
14+58.9		8523		12.07 4.46 +7.61	2+8275	89.36	12.90 +5.70	392.21 392.21 392.21
14+08.9	170.25	8538		12.52 4.75 +7.77	2+3275	89.56	12.58 +5.70	392.21 392.21 392.21
13+58.9	170.25	8553		12.52 4.75 +7.77	2+208 = MH 198 A 35°05'	389.61	12.90 +5.70	392.21 392.21 392.21
13+37.75 = MH 202 A 21°57'		38559		12.52 4.75 +7.77	1+70.8	89.81	9.65 +5.03	392.21 392.21 392.21
12+87.75		8574		12.52 4.75 +7.77	1+208	90.01	9.65 +5.03	392.21 392.21 392.21
12+37.75	303.8	8589		12.52 4.75 +7.77	0+70.8	90.21	9.65 +5.03	392.21 392.21 392.21
11+87.75	303.8	8604		12.52 4.75 +7.77	0+208	90.41	9.65 +5.03	392.21 392.21 392.21
					0+0 = Dead End	390.49	9.75 +5.70	392.21 392.21 392.21

Sewer Construction #2 Line

Normal Heights

2+35 = M.H. 223	367.53	17.53 5.66 73.19 72.2	80.72
3+35	368.09	17.36 2.46 +5.20	
4+35	368.65	11.00 +5.75	
4+35	369.21		
5+35	369.77	10.61 +5.70	
5+35	370.23	10.44 3.77 +6.67	
6+35	370.79	9.56 +5.71	
6+35	371.11	9.34 3.53 +5.53	371.11 5.53 376.64
7+05 <sup>05</sup>	371.39		5.56 372.20
7+05 <sup>05</sup>	371.37		10.81 +6.75
7+55 <sup>05</sup>	371.67	10.53 3.55 +6.98	
7+55 <sup>05</sup>	371.62		10.25 3.90 +6.74
8+05 <sup>05</sup>	371.95		
8+05 <sup>05</sup>	371.90		
8+55 <sup>05</sup>	372.24	10.91 2.45 +6.46	
8+55 <sup>05</sup>	372.17		10.63 9.78
9+05 <sup>05</sup>	372.52		
9+05 <sup>05</sup>	372.43		
9+55 <sup>05</sup>	372.80	10.35 4.60 +5.75	+5.85
9+55 <sup>05</sup>	372.70		
9+90 <sup>10</sup> M.H. 226	373.00		10.15 9.80
10+0 <sup>10</sup>	373.26	12.57 6.89 +5.68	+5.35
10+90 <sup>10</sup>	373.53		12.30 6.25 +6.05
11+0 <sup>10</sup>	373.79	12.24 3.45 +6.79	
11+90 <sup>10</sup>	374.06		11.77 5.96 +6.31
12+0 <sup>10</sup>	374.32	11.51 5.16 +6.35	
12+90 <sup>10</sup>	374.59		11.24 5.51 +5.68
13+15 <sup>30</sup> M.H. 227	374.72	11.11 5.58 +5.53	
13+65 <sup>30</sup>	374.98		10.85 4.66
14+15 <sup>30</sup>	375.25	10.58 4.77 +6.31	+6.19
14+65 <sup>30</sup>	375.51		10.91 3.8 +6.51

0.012

0.056

0.053

0.053

Sender Construction Air line

Normal Hghts

Bliss  
Northern  
Price  
7/11/6

15+15 <sup>30</sup>		375.78	10.05 <u>3.56</u> +6.49	9.78 <u>3.39</u> +6.49
15+65 <sup>30</sup>	.0053	376.04		
16+15 <sup>3</sup>		376.31	9.52 <u>3.62</u> +5.90	9.39 <u>3.34</u> +6.02
16+90 <sup>30</sup> M.H. 228		376.44		
16+90 <sup>3</sup>		376.75	11.50 <u>5.09</u> +6.41	
17+90 <sup>3</sup>		377.07		11.18 <u>5.11</u> +6.07
17+90 <sup>30</sup>	.0063	377.38	10.87 <u>4.82</u> +6.05	
18+90 <sup>3</sup>		377.70		10.55 <u>5.16</u> +5.39
18+87 <sup>3</sup> Dead End		378.00	10.25 <u>5.04</u> +5.21	

# Sewer Construction B<sub>2</sub> Line

Normal Heights

B<sub>2</sub> 0+00 = A<sub>2</sub> 16+90.30 MH 228

0+00		376.44		
0+50		377.07		11.30 5.52 +578
1+00		377.70	10.67 5.01	
1+50		378.33	+5.66	10.08 4.27
2+00		378.96	9.41 4.61	+5.57
2+50		379.59	+5.35	left out
2+70	MH 229	379.89	8.53 3.28 5.25	
3+20		380.97		789 39/35 266 9111
3+70		381.14	10.24 5.23 +4.99	7523 47245 40.
4+20		381.74		960 7.66 +4.94
4+70		382.38	8.97 3.88 75.09	
5+20		383.01		8.33 3.80 +4.53
5+40	MH 230	383.28	8.07 3.22 +4.85	383.28 383.28 383.28
5+90		383.92		13.68 +27.15
6+40		383.57	12.16 2.85	
6+90		383.71		12.21 6.50 +28.71
7+40		383.86	12.62 +6.21	
7+90		384.00		13.82 7.11
8+10	MH 231	384.06	11.26 5.70	
8+60		384.20		16.82 7.66
9+10		384.35	14.62 7.00	
9+60		384.49		14.23 4.50
10+10		384.64	11.98 7.29	
10+60		384.78		11.74 4.83 7.60

.0126

.0127

.0029

.0029





Senior Construction Co Line  
Normal Heights

10+0	0+00 = 13+153 M.H. 227 An Line	374.72		
11+3	0+50	375.48	10.86 5.91	
11+8	1+00	376.25	+5.96	10.00 4.72
12+1	1+50	377.01	9.33 3.91	+5.37
12+4	2+00	377.78	+5.42	8.56 3.34
13+7	2+50	378.59	11.07 5.95	+5.00
13+5	2+80 M.H. 236	379.00	+5.12	10.61 5.46
14+0	3+30	379.62	9.99 9.94	+5.15
14+5	3+80	380.25	+5.05	9.36 9.23
15+0	4+30	380.88	8.73 3.57	+5.13
15+5	4+80	381.51	+5.16	8.10 2.84
16+0	5+30	382.13	7.48 2.61	+5.26
16+2	5+60 M.H. 237	382.50	0.70 7.4.87	7.115 1.85
16+7	6+10	382.76	12.48 1.70	+5.26
17+2	6+60	383.03	18.44 18.44 +4.78	5.771 5.771
17+7	7+10	383.29	18.15 15.00	
18+2	7+60	383.56	9.88 12.75	
18+7	8+10	383.83	9.46 5.28	
	8+40 M.H. 238	384.00	9.44 3.27 +5.50	387.00 6.00 387.50 6.27 394.03
19+0	8+90	384.21	11.82 11.82 +5.78	
19+5	9+40	384.42	11.61 11.61 +5.77	
19+8.5	9+90	384.62	11.41 11.41 +5.81	
19+3/4	10+40	384.83	11.20 11.20 +5.88	
19+50	10+90	385.05	10.98 10.98 +5.87	
19+80	11+20 M.H. 239	385.18	10.85 10.85 +6.13	

0.0153

0.0125

0.0053

0.0042

"California" Cont.

11+70		385.38	18.65 +5.71	391.03 //
12+20		385.58	19.45 +5.73	391.03 // 386.55
12+70	280	385.78	19.15 +5.50	396.78
13+20		385.98	12.95 +5.34	
13+70		386.18	20.55 +5.50	
14+00	M.H. 290	386.30	9.73 +5.72	
14+50		386.50	9.53 +5.05	
15+00		386.70	10.88 +5.74	
15+50	280	386.90	9.88 +5.27	
16+00		387.10	9.68 +5.03	
16+50		387.30	9.48 +5.71	
16+80	M.H. 291	387.42	9.36 +5.76	
17+30	110	387.62	9.16 +5.73	
17+80		387.82	8.98 +5.74	
18+25.62	D.F. and Madison	388.00	8.78 +5.75	

.004

.004

.004

Sewer Construction De. Line  
Normal Heights.

Bliss  
Price  
7/17/26

0100 = <sup>to</sup> 9790 MH 242	373.00		
0150	373.80	12.07 6.95 +5.27	
1+00	374.61		11.24 5.96 +5.28
1+50	375.41	10.46 5.34 +5.12	
2+00	376.22		9.66 7.57 +5.09
2+50	377.02	8.85 3.95 +4.90	
2+80 MH 242	377.50		8.37 3.55 +4.82
3+30	378.09	7.83 2.81 +5.02	
3+80	378.59		7.28 2.18 +5.10
4+30	379.13	6.74 1.56 +5.18	
4+80	379.68		6.19 0.85 +5.34
5+30	380.22	5.65 1.30 +4.35	
5+60 MH 243	380.56		5.31 0.18 +5.13
6+10	380.70	10.88 8.97 +9.91	
6+60	380.85		10.74 5.90 +4.84
7+10	380.99	10.60 5.59 +5.03	
7+60	381.14		10.46 5.23 +5.23
8+10	381.28	10.32 4.90 +5.42	
8+40 MH 244	381.37		10.22 4.04 +5.78
8+90	381.52	10.06 4.55 +5.51	
9+40	381.66		9.92 4.23 +5.69
9+90	381.81	9.77 3.93 +5.84	
10+40	381.95		9.63 3.33 +6.30
10+90	382.10	8.98 2.76 +6.72	
11+20 MH 245	382.18		9.39 2.60 +6.79

016

010

002

003

DzLine Cont.

11+70		382.38	$\frac{1126}{581}$ +5.45	
12+20		382.58		$\frac{1106}{765}$ +6.41
12+70		382.78	$\frac{1086}{973}$ +6.13	
13+20		382.98		$\frac{1066}{930}$ +5.86
13+70		383.18	$\frac{1046}{503}$ +5.43	
14+00	M.V. 246	383.30		$\frac{1034}{506}$ +5.28
14+50		383.50	$\frac{1014}{997}$ +5.17	
15+00		383.70		$\frac{994}{505}$ +4.89
15+50		383.90	$\frac{974}{979}$ +4.95	
16+00		384.10		$\frac{954}{460}$ +4.94
16+50		384.30	$\frac{934}{405}$ +4.89	
16+80	M.H. 207	384.42		$\frac{922}{923}$ +4.99
17+30		384.62	$\frac{902}{913}$ +4.89	
17+80		384.82		$\frac{882}{345}$ +5.37
18+26	D.E.	385.00	$\frac{864}{593}$ +4.21	

Saner Construction E. Line  
Normal Heights

0700	$\frac{6755.05}{92.200}$ M.H. 225	371.11		
0750		371.73	12.75 7.26	
1+00		372.36	75.99	12.12 8.72
1+50		372.98	11.99	+5.34
2+00		373.61	6.25	10.87 6.83
2+30	M.H. 228	374.00	10.48 5.39	+5.04
2780		374.98	+5.09	10.00 4.88
3+30		374.97	9.51 4.46	+5.12
3780		375.45	+5.05	9.03 4.00
4+30		375.93	8.55 3.52	5.03
4+57.3	M.H. 249	376.04	0.09 +5.03	11.24 6.18
4+67.3		376.63	10.65	+5.06
5+39.20	M.H. 250	377.00	5.68 +4.99	10.28 5.27
5+89.1		377.35	10.27 5.10	-5.01
6+39.2		377.70	+5.17	9.92 5.03
6+89.1		378.05	9.57 4.92	+4.87
7+39.2		378.40	4.65	9.22 4.76
7+60	M.H. 251	378.55	9.07 4.83	+4.40
8+10		378.75	+4.19	10.56 5.77
8+60		378.95	10.26 5.66	+4.97
9+10		379.15	+4.90	10.06 5.56
9+60		379.35	9.86 4.41	+4.50
9780	M.H. 252	379.43	+4.95	9.88 4.80
10+30		379.63	9.68 4.61	+5.04
10+80		379.83	+5.07	9.48 5.07
11+23.90	D.E.	380.00	9.31 4.46	+4.41
			+4.36	

Some Construction to find Normal Heights

10-12-26

S.M.  
E. Gordon  
389.12  
1.32  
387.80

0+0 = M.H. 105	378.00	378.00	
+50	78.18	378.18	
1+0	78.32	378.50	+3.71
+50	78.55	379.05	+3.71
2+0	78.74	379.79	+3.71
+50	78.93	380.72	+3.71
+70 = M.H. 151	379.01	380.72	+3.71
3+20	79.41	380.13	+3.71
+70	79.70	380.83	+3.71
4+20	80.47	381.30	+3.71
+70	80.73	382.03	+3.71
5+20	80.73	382.76	+3.71
+40 = M.H. 152	380.91	382.76	+3.71
+90	81.88	383.64	+3.71
6+40	81.64	384.28	+3.71
+90	81.99	385.27	+3.71
7+40	82.35	386.62	+3.71
+90	82.70	387.52	+3.71
8+10 = M.H. 153	387.80	387.52	+3.71
+60	83.04	388.56	+3.71
9+10	83.25	389.81	+3.71
+60	83.45	391.26	+3.71
10+10.	83.65	392.91	+3.71
+60	83.85	394.76	+3.71
+80 = M.H. 154	393.93	394.76	+3.71

0.007

0.007

0.007

0.007

H. Line Cost.

Item	Cost	Subtotal	Notes
11730	384.12	8.58 8.58 +5.03	383.71, H. 21, 15.01, 15.01
+80	84.32	8.88 8.88 +5.33	23+ 23.1
12130	84.52	8.88 8.88 +5.33	23+ 49.1 = 0.5
+80	84.72	8.88 8.88 +5.33	58.90
13130	84.92	8.88 8.88 +5.33	319.00
+54.75 - p.H. 155 A 110.05 2 Monroe	385.03	8.88 8.88 +5.33	
14104.75	85.22	8.88 8.88 +5.33	
+54.75	85.42	8.88 8.88 +5.33	
15104.75	85.62	8.88 8.88 +5.33	
15150 - M.H. 156	385.81	8.88 8.88 +5.33	
1640	86.01	11.15 11.15 +5.78	
+50	86.21	8.88 8.88 +5.33	
1710	86.41	11.15 11.15 +5.00	
17153.55 - M.H. 157 A 118.30	386.61	11.15 11.15 +5.78	
18103.55	86.81	11.15 11.15 +5.78	
18153.55	87.01	11.15 11.15 +5.78	
19102.55	87.21	8.88 8.88 +5.33	
19153.55	87.41	8.88 8.88 +5.33	
20102.55	87.61	8.88 8.88 +5.33	
20153.55	87.81	8.88 8.88 +5.33	
20171.70 - M.H. 158 A 87.31 2 Mod. 500	387.90	8.88 8.88 +5.33	
21123.1	88.10	8.88 8.88 +5.33	
21173.1	88.30	8.88 8.88 +5.33	
22173.1	88.50	8.88 8.88 +5.33	
22173.1	88.70	8.88 8.88 +5.33	



SEWER Construction Gaging

0+0	- MH 215	CI 32315	378.17	10.47 8.24 +1.77	373.45 2.29 388.91 8.15 388.57
+50			78.87	10.22 8.34 +1.86	
+100			78.57	10.02 8.10 +1.90	
+150	3.00	210	78.77	8.88 8.33 +1.55	
+200			78.97	9.62 8.69 +1.93	
+250			79.17	9.42 8.44 +1.41	
+300	- MH 257		379.37	9.22 8.22 +1.00	
+350			79.57	9.02 8.04 +1.54	
+400		0.00	79.77	8.82 7.84 +1.56	
+56.85	- DE 15 MH 110000		380.00	8.58 7.57 +1.62	

SEWER Construction Gaging

Normal Heights.

13  
7.25K

0+0	Drop	MH 212	CI 37242	380.47	9.28 8.27 +1.01
+50				80.88	9.12 8.12 +1.00
+100				81.30	8.91 7.96 +1.05
+150				81.70	8.70 7.70 +1.00
+169.8	- MH 258			381.81	8.70 7.75 +1.75
+211.92				82.22	8.52 7.52 +1.00
+261.92				82.64	8.37 7.37 +1.00
+311.92				83.05	8.22 7.22 +1.00
+361.92				83.47	8.08 7.08 +1.00
+411.92				83.89	7.93 6.93 +1.00
+461.92				84.30	7.78 6.78 +1.00
+511.92	- MH 259			384.52	7.63 6.63 +1.00
+561.92				84.92	7.48 6.48 +1.00
+611.92				85.34	7.33 6.33 +1.00
+661.92				85.76	7.18 6.18 +1.00
+711.92				86.18	7.03 6.03 +1.00
+761.92				86.60	6.88 5.88 +1.00
+811.92				87.02	6.73 5.73 +1.00
+861.92	- MH 260			387.08	6.58 5.58 +1.00
+911.92				87.44	6.43 5.43 +1.00
+961.92	- DE			388.00	6.28 5.28 +1.00

84 55  
Admin + Charater

388.91  
378.81  
378.57

388.20  
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Senior Construction No Line

Senior Construction No Line

Normal Heights

00566 MH 253  
386.26  
1.25  
393.51 7

00410  
MH 258  
386.20  
1.20  
392.16

0+0 - MH 258	381.81		
+50	82.05	11.46 6.16 +5.30	
1+0	82.29	11.33 4.70	
+50	82.53	12.98 1.557	
2+0	82.77	10.74 5.97 +4.75	
+40 - MH 265	382.97	10.54 9.29 +1.25	
+90	83.17	13.22 +5.70	
3+40	83.37	12.66 +5.46	
+90	83.57	9.89 +5.21	
4+40	83.77	7.74 2.86 +4.88	
+80 - MH 266	383.93	9.58 1.72	
5+30	84.13	7.38 2.66 +4.72	
+80	84.33	9.88 2.12 +7.76	
6+22.5 - DE	384.50	7.05 12.44	

0+0 - MH 259	384.52		
+50	84.73	11.23 4.22 +5.78	
1+0	85.33	10.83 4.86 +5.97	
+50	85.74	10.46 4.22 +6.24	
2+0	86.14	10.22 +5.02	
+40 - MH 263	386.47	9.68 8.38 +1.30	
+90	86.67	9.16 8.59 +0.57	
3+40	86.87	9.80 8.85 +0.95	
+90	87.07	7.07 7.33 +0.26	
4+40	87.27	8.88 1.75	
+80 - MH 264	387.43	8.73 +0.70	
5+30	87.63	8.53 8.23 +0.30	
+80	87.83	8.33 +1.58	
6+22.5 - DE	388.00	8.16 8.26 +0.10	

Normal Hghts.

0+0	M.H. 260	387.08	397.49 H1 +1.51 398.00
+50		87.28	10.81 +15.27
1+0		87.48	1001
+07	M.H. 261 A	387.51	9.98 +15.30
+57		87.71	9.28 +15.27
2+0.7		87.91	9.58 +15.57
+57		88.11	10.02 +15.57
3+0.7		88.31	9.88 +15.88
+60	M.H. 262	388.52	9.61 +15.87
4+10		88.72	9.41 +15.51
+60		88.92	9.21 +15.70
+81.2	D.F.	389.00	9.18 +15.49

Lateral Conn

11+87.5		87.48	10.65 +6.33
12+32.0	D.F.	388.00	9.63 +6.27

0+0	M.H. 211	378.87	SEOP Ratna Choker 385.78 395.50 3.52
+50		80.18	13.31 +8.30
1+0		81.41	12.09 +7.63
+50		82.19	13.02 +7.87
+62.5	M.H. 217	383.00	13.50 +7.75
2+12.5		83.37	13.19 +6.88
+62.5		83.62	2.82 +7.71
3+12.5		83.92	2.57 +7.05
+62.5		84.22	3.26 +5.50
4+12.5		84.55	3.65 +5.48
+62.5		84.86	11.26 +5.73
+87.5	M.H. 218	385.02	11.55 +6.05
5+37.5		85.17	11.43 +5.73
+87.5		85.31	11.81 +5.70
6+37.5		85.46	11.61 +5.94
+87.5		85.60	10.97 +5.57
7+37.5		85.74	10.83 +5.66
+87.5		85.89	10.68 +5.51
8+12.5	M.H. 219	385.96	10.66 +5.73
+62.5		86.11	10.76 +5.88
9+12.5		86.25	10.88 +6.00
+62.5		86.40	10.67 +5.85
10+12.5		86.54	10.93 +5.87
+62.5		86.69	9.88 +5.93
11+12.5		86.83	9.74 +6.27
+87.5	M.H. 220	386.90	10.23 +6.22

Senior Construction Pz Line

Normal Hghts.

0+0	- MH 267	383.00		389.15 2.05 391.20
+50		83.20	11.30 1.57 +6.73	14.60 1.60 +6.60
1+0		83.40		10.28 16.62
+50		83.60		10.70 1.60 +5.70
2+0		83.80		10.61 1.60 +5.35
+22.5	- D.F.	383.88		

Senior Construction Oz Line.

0+0	- MH 268	385.08		391.22 1.50 392.72
+50		85.49	17.46 1.87 +5.59	13.20 1.60 +5.75
1+0		85.90		10.88 1.60 +5.72
+50		86.31		8.47 1.60 +5.27
2+0		86.72		7.88 1.60 +5.28
+50		87.13		7.29 1.60 +5.29
3+0	- MH 270	387.50		391.75 1.50 393.25
+50		88.08		7.67 1.60 +5.27
4+0		88.66		7.08 1.60 +5.28
+50		89.24		6.49 1.60 +5.29
+72.5	- D.F.	389.50		7.25 1.60 +5.25

Senior Construction N2 Line

0+0	- MH 269	385.96		391.80 1.60 393.40
+50		86.27	11.60 1.60 +5.72	10.25 1.60 +4.68
1+0		86.58		10.51 1.60 +4.69
+50		86.89		10.28 1.60 +4.68
2+0		87.20		9.69 1.60 +4.69
+50		87.51		9.10 1.60 +4.69
3+0	- MH 275	387.83		391.80 1.50 393.30
+50		88.14		8.51 1.60 +4.69
4+0		88.45		7.92 1.60 +4.69
+50		88.76		7.33 1.60 +4.69
5+0		89.07		6.74 1.60 +4.69
+22.5	- D.F.	389.20		6.15 1.60 +4.69

Senior Construction Machine

0+0 = MH 270	386.90	1932 +1622	39339 387 7212 1912 39105 1625 +637 38930
+50	87.05		
1+0	87.19	998 916 +1586	
+50	87.34		923 +1587
2+0	87.48	968 980 +1589	
+50	87.63		954 +1588
+60 = MH 271	387.65	953 958 +1590	
3+10	87.80		932 935 +1586
+60	87.94	833 +1592	
4+10	88.09		898 +1590
+60	88.23	884 +1592	
5+10	88.38		838 +1590
+20 = MH 272	388.40	822 +1611	
+70	88.59		858 +1621
6+20	88.78	892 +1627	
+70	88.97		1033 937 +1660
7+20	89.16	1265 +1628	
+70	89.35		935 +1645
+80 = MH 273	389.39	991 973 +1679	
8+30	89.59		921 921 +1630
+70	89.77	954 957 +1657	
9+30	89.97		901 901 +1642
+80	90.19	916 +1670	
10+30	90.39		881 +1650
+40 = MH 274	390.43	817 815 +1650	

0.028  
0.029

0.028  
0.029

0.028  
0.029

0.028  
0.029

Machine Cont

10+40	7541	869 813 +1450
11+40		847 833 +1404
+88.6 = DE		830 822 +1413
		39013
		70.83
		39100

19  
S-1-21  
5-1-507  
9-1-5  
1-1-1-1-1

Survey Construction Q2 Line

Normal Hgts

0+0 = Drop MH 207	386.50	7.49 4.55 45.11	391.37 462 MISCON
+50 M	86.92	2.05 +5.52	393.79
+100	87.34	8.65 46.75	399.16
+150	87.76	2.05 46.05	
+200	88.18	7.56 45.95	
+19.77 = MH 299	388.34	2.65 45.95	
+69.77	88.84	7.65 45.65	
3+19.77	89.35	6.64 45.25	
+69.77	89.85	5.64 44.98	
+82.77 = G.E.	390.00	5.07 44.97	

P2 Line

0+0 = MH 277	388.24	16.42 46.80	
+50 M	88.54	10.42 46.59	
+100	88.74	12.92 45.89	
+150	88.96	12.92 45.89	
+200	89.14	9.88 45.89	
+150	89.34	9.88 45.89	
3+0	89.54	9.68 46.01	
+15 = MH 298	389.60	9.56 45.81	

S2 Line

0+0 = D.E. 1657 MH 298	390.26	5.90 4.58 43.38	391.6
+50	90.01	9.10 43.75	
+100	89.86	9.88 43.04	
+150	89.66	7.50 42.52	
+65 = MH 298	389.60		
2+150	89.80	9.86 42.16	
+30 = D.E. East	389.86	9.30 41.86 45.86	

T2 Line

0+0 = MH 204	386.58	12.12 45.98	391.15 Cap/100
+50	87.37	12.26 45.83	391.90 MH
+100	88.21	12.42 45.67	392.5 MH 204
+150	89.08	11.52 45.80	
+149.2 = MH 279	389.34	11.31 45.77	
2+14.92	90.19	12.41 45.96	
+69.2	91.05	9.10 45.90	
3+010.5 = D.E.	391.67	8.88 45.77	

C/2 Line

0+0 = MH 299	387.34		391.45 507 MH 298 401.50
+50 M	90.08	11.14 45.92 45.52	
+100	90.23	13.52 45.87	
+45 = D.E.	391.50	12.82 45.70	

Section Construction V2 Line

Normal Heights.

0+0 = MH 280	386.20	13.28 +6.01	501 39.81 87.2 397.19 7.17
+1.50 N	86.62	13.38 +5.34	13.38 45.79 39.53 39.53
+2.0	87.04	14.38 +5.34	14.38 39.53 39.53
+3.50	87.46	14.50 +5.34	14.50 39.53 39.53
+6.29 = MH 280 A	387.57	14.41 +5.34	14.41 39.53 39.53
2+12.9 N	87.77	14.33 +5.34	14.33 39.53 39.53
+6.29	87.97	14.33 +5.34	14.33 39.53 39.53
3+12.9	88.17	14.12 +5.34	14.12 39.53 39.53
+6.29	88.37	13.83 +5.34	13.83 39.53 39.53
4+12.9	88.57	13.22 +5.34	13.22 39.53 39.53
+6.0 = MH 283	388.76	13.58 +5.34	13.58 39.53 39.53
5+10	88.96	13.33 +5.34	13.33 39.53 39.53
+6.0	89.16	10.13 +5.34	10.13 39.53 39.53
6+10	89.36	9.90 +5.34	9.90 39.53 39.53
+6.0	89.56	9.73 +5.34	9.73 39.53 39.53
7+10	89.76	9.53 +5.34	9.53 39.53 39.53
+6.0	89.96	9.33 +5.34	9.33 39.53 39.53
+7.03 = MH 284 A	390.00	9.13 +5.34	9.13 39.53 39.53
8+20.3	90.20	12.24 +6.01	12.24 45.54 39.53
+7.03	90.39	11.54 +6.01	11.54 45.54 39.53
9+20.3	90.60	10.34 +5.34	10.34 45.54 39.53
+7.03	90.80	10.14 +5.34	10.14 45.54 39.53
10+20.3	91.00	9.94 +5.34	9.94 45.54 39.53
+38.4 = DF	391.07	9.74 +5.34	9.74 45.54 39.53

V2 Line

87.41

0+0 = MH 280	387.57	13.12 +5.34	501 39.81 87.2 397.19 7.17
+1.50 W	87.84	13.12 +5.34	13.12 45.79 39.53 39.53
+1.0	88.14	14.36 +5.34	14.36 39.53 39.53
+1.50	88.43	13.55 +5.34	13.55 39.53 39.53
+2.0	88.71	13.27 +5.34	13.27 39.53 39.53
+2.0 = MH 281	388.88	14.11 +5.34	14.11 39.53 39.53
+7.0	89.11	14.36 +5.34	14.36 39.53 39.53
3+20	89.39	14.08 +5.34	14.08 39.53 39.53
+7.0	89.67	13.29 +5.34	13.29 39.53 39.53
+12.0	89.96	12.51 +5.34	12.51 39.53 39.53
+14.0 = MH 282	390.07	10.40 +6.01	10.40 45.54 39.53
+9.0	90.36	14.45 +5.34	14.45 39.53 39.53
5+10	90.64	9.54 +5.34	9.54 39.53 39.53
+9.55 = DF	390.96	8.51 +5.34	8.51 39.53 39.53

Sewer Construction X2 Line

8-12-26

F3 Line

Normal Hgts.

10-22-26

Boundary St

at 72.29 SE of junction

0+0 - MH 290	386.94	12.18 7.93 +4.55	389.96 397.93
+50	87.35		
1+0	87.71	12.07 +4.55	
+50	88.17	11.66 5.27 +6.37	
2+0	88.58	11.25 4.23 +6.52	
+50	88.98	10.84 4.86 +5.68	
3+0	89.40	10.43 4.45 +5.95	
+50	89.81	10.02 4.04 +5.81	
4+0	90.20	9.61 3.63 +5.98	
+50	90.60	9.20 3.22 +5.98	
5+0	90.99	8.79 2.81 +5.98	
6+0	91.38	8.38 2.40 +5.98	
7+0	91.77	7.97 1.99 +5.98	
8+0	92.16	7.56 1.58 +5.98	
9+0	92.55	7.15 1.17 +5.98	
10+0	92.94	6.74 0.76 +5.98	
11+0	93.33	6.33 0.35 +5.98	
12+0	93.72	5.92 -0.06 +5.98	
13+0	94.11	5.51 -0.47 +5.98	
14+0	94.50	5.10 -0.88 +5.98	
15+0	94.89	4.69 -1.29 +5.98	
16+0	95.28	4.28 -1.70 +5.98	
17+0	95.67	3.87 -2.11 +5.98	
18+0	96.06	3.46 -2.52 +5.98	
19+0	96.45	3.05 -2.93 +5.98	
20+0	96.84	2.64 -3.34 +5.98	
21+0	97.23	2.23 -3.75 +5.98	
22+0	97.62	1.82 -4.16 +5.98	
23+0	98.01	1.41 -4.57 +5.98	
24+0	98.40	1.00 -4.98 +5.98	
25+0	98.79	0.59 -5.39 +5.98	
26+0	99.18	0.18 -5.80 +5.98	
27+0	99.57	-0.23 -6.21 +5.98	
28+0	99.96	-0.64 -6.62 +5.98	
29+0	100.35	-1.05 -7.03 +5.98	
30+0	100.74	-1.46 -7.44 +5.98	
31+0	101.13	-1.87 -7.85 +5.98	
32+0	101.52	-2.28 -8.26 +5.98	
33+0	101.91	-2.69 -8.67 +5.98	
34+0	102.30	-3.10 -9.08 +5.98	
35+0	102.69	-3.51 -9.49 +5.98	
36+0	103.08	-3.92 -9.90 +5.98	
37+0	103.47	-4.33 -10.31 +5.98	
38+0	103.86	-4.74 -10.72 +5.98	
39+0	104.25	-5.15 -11.13 +5.98	
40+0	104.64	-5.56 -11.54 +5.98	
41+0	105.03	-5.97 -11.95 +5.98	
42+0	105.42	-6.38 -12.36 +5.98	
43+0	105.81	-6.79 -12.77 +5.98	
44+0	106.20	-7.20 -13.18 +5.98	
45+0	106.59	-7.61 -13.59 +5.98	
46+0	106.98	-8.02 -14.00 +5.98	
47+0	107.37	-8.43 -14.41 +5.98	
48+0	107.76	-8.84 -14.82 +5.98	
49+0	108.15	-9.25 -15.23 +5.98	
50+0	108.54	-9.66 -15.64 +5.98	
51+0	108.93	-10.07 -16.05 +5.98	
52+0	109.32	-10.48 -16.46 +5.98	
53+0	109.71	-10.89 -16.87 +5.98	
54+0	110.10	-11.30 -17.28 +5.98	
55+0	110.49	-11.71 -17.69 +5.98	
56+0	110.88	-12.12 -18.10 +5.98	
57+0	111.27	-12.53 -18.51 +5.98	
58+0	111.66	-12.94 -18.92 +5.98	
59+0	112.05	-13.35 -19.33 +5.98	
60+0	112.44	-13.76 -19.74 +5.98	
61+0	112.83	-14.17 -20.15 +5.98	
62+0	113.22	-14.58 -20.56 +5.98	
63+0	113.61	-14.99 -20.97 +5.98	
64+0	114.00	-15.40 -21.38 +5.98	
65+0	114.39	-15.81 -21.79 +5.98	
66+0	114.78	-16.22 -22.20 +5.98	
67+0	115.17	-16.63 -22.61 +5.98	
68+0	115.56	-17.04 -23.02 +5.98	
69+0	115.95	-17.45 -23.43 +5.98	
70+0	116.34	-17.86 -23.84 +5.98	
71+0	116.73	-18.27 -24.25 +5.98	
72+0	117.12	-18.68 -24.66 +5.98	
73+0	117.51	-19.09 -25.07 +5.98	
74+0	117.90	-19.50 -25.48 +5.98	
75+0	118.29	-19.91 -25.89 +5.98	
76+0	118.68	-20.32 -26.30 +5.98	
77+0	119.07	-20.73 -26.71 +5.98	
78+0	119.46	-21.14 -27.12 +5.98	
79+0	119.85	-21.55 -27.53 +5.98	
80+0	120.24	-21.96 -27.94 +5.98	
81+0	120.63	-22.37 -28.35 +5.98	
82+0	121.02	-22.78 -28.76 +5.98	
83+0	121.41	-23.19 -29.17 +5.98	
84+0	121.80	-23.60 -29.58 +5.98	
85+0	122.19	-24.01 -29.99 +5.98	
86+0	122.58	-24.42 -30.40 +5.98	
87+0	122.97	-24.83 -30.81 +5.98	
88+0	123.36	-25.24 -31.22 +5.98	
89+0	123.75	-25.65 -31.63 +5.98	
90+0	124.14	-26.06 -32.04 +5.98	
91+0	124.53	-26.47 -32.45 +5.98	
92+0	124.92	-26.88 -32.86 +5.98	
93+0	125.31	-27.29 -33.27 +5.98	
94+0	125.70	-27.70 -33.68 +5.98	
95+0	126.09	-28.11 -34.09 +5.98	
96+0	126.48	-28.52 -34.50 +5.98	
97+0	126.87	-28.93 -34.91 +5.98	
98+0	127.26	-29.34 -35.32 +5.98	
99+0	127.65	-29.75 -35.73 +5.98	
100+0	128.04	-30.16 -36.14 +5.98	

0+0 = DE	378.34	8.15 3.22 +4.93	386.51 393.65
+50	77.99	8.19 3.25 +4.94	391.59 396.48
1+0	77.64	8.24 3.29 +4.95	396.54 401.49
+50 - MH 295	377.29	9.10 4.20 +4.90	401.54 406.50
2+0	76.94	8.54 3.74 +4.80	406.54 411.50
+50	76.59	8.58 3.78 +4.80	411.54 416.50
3+0	76.24	8.62 3.82 +4.80	416.54 421.50
+50	75.89	8.66 3.86 +4.80	421.54 426.50
4+0	75.54	8.70 3.90 +4.80	426.54 431.50
+265 - MH 296 Δ 73°51'	375.37	8.74 3.94 +4.80	431.54 436.50
+78 - Funding Sewer	375.00	8.78 3.98 +4.80	436.54 441.50

0+0 - MH 41 Δ 53°24'	382.52	13.58 7.01 +6.57	396.09 402.66
+50	82.72	13.62 7.05 +6.57	402.71 409.28
1+0	82.37	13.66 7.09 +6.57	408.33 414.90
+50	82.02	13.70 7.13 +6.57	414.95 421.52
+914 MH 295 Δ 71°10'	383.88	13.74 7.17 +6.57	421.57 428.14
2+0	81.68	13.78 7.21 +6.57	428.21 434.78
+714	81.33	13.82 7.25 +6.57	434.83 441.42
3+0 DE - Lot 175	383.71	13.86 7.29 +6.57	441.47 448.04

0+0 - MH 41 Δ 53°24'	382.52	13.58 7.01 +6.57	396.09 402.66
+50	82.72	13.62 7.05 +6.57	402.71 409.28
1+0	82.37	13.66 7.09 +6.57	408.33 414.90
+50	82.02	13.70 7.13 +6.57	414.95 421.52
+914 MH 295 Δ 71°10'	383.88	13.74 7.17 +6.57	421.57 428.14
2+0	81.68	13.78 7.21 +6.57	428.21 434.78
+714	81.33	13.82 7.25 +6.57	434.83 441.42
3+0 DE - Lot 175	383.71	13.86 7.29 +6.57	441.47 448.04



Sever Construction on the Line

Normal Heights

13+30.4 = MH 105.40'	87700	786 787 +1	374.05 375.92 377.81 379.71 381.61 383.51 385.41	1+30.8	70555	227 228 +1
12+20.4	7670	786 787 +1	385.41 387.31 389.21	0+80.8	7018	277 278 +1
12+20.1	7640	786 787 +1	389.21 391.11 393.01	0+30.8	6988	248 249 +1
11+70.4	7610	786 787 +1	393.01 394.91 396.81	0+0 = Drop MH 23 "mix"	31360	31340 MI
11+20.4	7580	786 787 +1	396.81 398.71 400.61			
10+70.4	7550	786 787 +1	400.61 402.51 404.41			
10+20.4	7520	786 787 +1	404.41 406.31 408.21			
9+85.65 = MH 104.81'	87500	786 787 +1	408.21 410.11 412.01			
9+35.65	7485	786 787 +1	412.01 413.91 415.81			
8+85.65	7470	786 787 +1	415.81 417.71 419.61			
8+35.65	7454	786 787 +1	419.61 421.51 423.41			
7+85.65	7439	786 787 +1	423.41 425.31 427.21			
7+35.65	7423	786 787 +1	427.21 429.11 431.01			
6+85.65	7408	786 787 +1	431.01 432.91 434.81			
6+59.3 = MH 103.71'	87200	786 787 +1	434.81 436.71 438.61			
6+09.3	7320	786 787 +1	438.61 440.51 442.41			
5+59.3	7342	786 787 +1	442.41 444.31 446.21			
5+09.3	7311	786 787 +1	446.21 448.11 450.01			
4+59.3	7281	786 787 +1	450.01 451.91 453.81			
4+09.3	7250	786 787 +1	453.81 455.71 457.61			
3+59.3	7220	786 787 +1	457.61 459.51 461.41			
3+30.8 = MH 102.70'	87200	786 787 +1	461.41 463.31 465.21			
2+80.8	7164	786 787 +1	465.21 467.11 469.01			
2+30.8	7128	786 787 +1	469.01 470.91 472.81			
1+80.8	7091	786 787 +1	472.81 474.71 476.61			

23  
9-21-26  
5:35pm  
Highway  
111

Sewer Construction G' Line

Normal Hghts.

Station	Normal Hght.	Actual Hght.	Notes
0+0 = MH 144	376.04	375.00	379.02 EIG 100 7.20 387.50
+50	715.1	19.89	19.89
+100	719.8	10.53 1.21 +4.21	10.53 1.21 +4.21
+150	77.45	18.95 +1.98	18.95 +1.98
+200	77.92	9.58 5.02 +4.56	9.58 5.02 +4.56
+300 = MH 145	378.20	8.39 +1.51	8.39 +1.51
+350	78.67	8.83 +1.70	8.83 +1.70
+400	79.14	8.36 +1.32	8.36 +1.32
+450	79.61	8.80 +1.98	8.80 +1.98
+500	80.08	7.77 +1.56	7.77 +1.56
+600 = MH 147	80.36	7.51 +1.63	7.51 +1.63
+700	80.83	6.63 +1.77	6.63 +1.77
+800	81.20	6.20 +1.91	6.20 +1.91
+900	81.77	5.73 +1.72	5.73 +1.72
+1000	82.24	10.55 4.55 +4.00	10.55 4.55 +4.00
+1100 = MH 148 & Made ΔRI 15	82.52	10.30 5.30 +5.00	10.30 5.30 +5.00
+1200	82.72	10.16 5.69 +1.67	10.16 5.69 +1.67
+1300	82.92	9.58 5.28 +1.60	9.58 5.28 +1.60
+1400	83.16	9.28 5.28 +1.68	9.28 5.28 +1.68
+1500	83.32	9.58 5.28 +1.60	9.58 5.28 +1.60
+1600 = MH 149	83.44	9.28 5.28 +1.61	9.28 5.28 +1.61
+1700	83.64	9.18 5.28 +1.60	9.18 5.28 +1.60
+1800	83.84	9.28 5.28 +1.60	9.28 5.28 +1.60
+1900	84.04	9.28 5.28 +1.61	9.28 5.28 +1.61
+2000	84.24	9.28 5.28 +1.61	9.28 5.28 +1.61

24  
Sewer  
Construction  
G' Line

846  
808  
+107.7

846  
808  
+107.7

806  
808  
+107.7

7.85  
3.15  
+1.60

0+0	- MH 102	375.50	374.00	19.56 +1.56	378.62	11+50 - MH 145	383.00	2.89 +2.89
+50		75.82		10.88 +4.22	86.70	12+10	83.32	2.52 +2.75
+100		76.15		8.61 +3.74	84.41	13+50	83.65	2.74 +3.74
+150		76.47		9.64 +3.70	86.17	14+10	83.97	1.92
+200		76.80		8.32 +2.70	84.50	15+30	384.03	4.06 +2.89
+250	- MH 141	377.00		8.67 +3.74	385.67			
+300		77.32		8.72 +3.72	86.04			
+350		77.65		8.16 +3.91	85.76			
+400		77.97		8.44 +3.70	86.17			
+450		78.30		8.88 +3.55	86.83			
+500	- MH 142	378.50		8.61 +3.80	387.11			
+550		38.82		8.82 +3.77	42.59			
+600		39.15		6.96 +3.87	46.02			
+650		39.47		6.66 +3.70	46.17			
+700		39.80		6.31 +3.70	46.10			
+750	- MH 143	380.00		6.66 +3.77	386.67			
+800		80.32		10.57 +3.80	90.89			
+850		80.65		10.24 +3.70	90.89			
+900		80.97		8.88 +3.80	89.85			
+950		81.30		8.58 +3.82	89.82			
+1000	- MH 144	381.50		8.88 +3.80	390.38			
+1050		81.82		8.27 +3.80	90.09			
+1100		82.15		8.71 +3.80	90.86			
+1150		82.47		8.44 +3.80	90.91			
+1200		82.80		8.88 +3.80	91.68			

Fo Line

Boundary Mt

10-11-26

0+10 - ME

378.34

+50

+100

+150 - MH 293

379.89

+200

+300

+400

+500

+600

+800 - MH 296 A

375.37

+900 - Existing Sewer

375.00

see p 32

Survey Construction C/Lines

C/Lines Cont.

Normal Hghts.

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Cilina Cont.

D. Line Normal Heights

9.16.27

82+65.9	83.05	10.28 9.28 +6.69	393.33 H. 37.1 386.7	0+0 = MH 125 = C.	386.12	387.25 393.56 397.53 399.50
83+10 = MH 126	83.73	9.28 9.28 +6.57	12.10 2.83 75.27 397.41 397.45 59389.85	+50	81.26	391.59 81.26 13.28 +6.58
+60	83.73		9.28 9.28 +6.57	+70	81.41	13.16 +6.77
84+10	83.63		9.28 9.28 +6.57	+50	81.53	11.97 +6.77
+60	83.83		9.53 9.53 +5.87	+20	81.70	16.82 +6.22
85+10	84.03		9.28 9.28 +6.57	+50	81.84	11.18 +6.88
+40 = MH 127	84.15		9.18 9.28 +5.46	+40	81.99	11.53 +6.23
+90	84.35		9.28 9.28 +6.57	+145 = MH 128 = E1.040	82.11	11.41 +6.21
86+40	84.55		18.18 9.28 +5.76	+91.15	82.25	16.77 +9.87
+90	84.75		9.28 9.28 +6.57	91.41.45	82.40	11.55 +6.51
87+40	84.95		9.28 9.28 +6.57	91.75	82.55	13.28 +6.70
+53.4 = MH 129 = C.	85.00		9.28 9.28 +6.57	51.41.45	82.69	11.55 +6.23

Q1 Line

0+0 = D.F. 11.44.11 L 34.5.56 = 9935 MH 128	87.00	24.73 9.28 9.28 +4.25		+50	83.00	93.50 83.50 +6.28
+50	86.00	9.28 9.28 +6.57		+70	83.15	10.35 +6.57
+99.3 = MH 128 = C. 2.00	85.00	9.28 9.28 +6.57		+50	83.29	10.81 +6.86 +5.89
1+49.3	85.20	9.28 9.28 +6.57		+70	83.44	10.06 +5.75
+98.6 = D.F. 11.44.11 Falt. 00	85.40	9.28 9.28 +6.57		+50	83.58	9.97 +6.75
				+74.1 = MH 131 - T. 0.00	83.65	9.28 9.28 +6.57
				9+72.1	83.79	9.28 9.28 +6.57
				+72.1	83.94	9.28 9.28 +6.57
				10+14.7 = MH 132 A = N.L. 10.11.01	84.06	9.28 9.28 +6.57
				+64.7	84.20	9.28 9.28 +6.57
				11+14.6 = MH 133 A	84.36	9.14 9.28 +5.25

11+64.6	157.50	0.00	84.50	393.51 393.51 393.51 393.51	010 = MH 131 = 8794.01	393.65	393.51 393.51
12+66			84.65	393.51 393.51 393.51	150	84.29	393.51 393.51
13+67.15	MH 134 = 010.01		384.82	393.51 393.51 393.51	140.55 D.F.	395.00	393.51 393.51
14+68.15			85.02	393.51 393.51 393.51	912.21		
+72.13			85.22	393.51 393.51 393.51			
14+68.15			85.42	393.51 393.51 393.51			
+72.15			85.62	393.51 393.51 393.51			
15+68.15			85.92	393.51 393.51 393.51			
+40 = MH 135			395.89	393.51 393.51 393.51	010 = MH 134 = 18792.15 D.	394.86	393.51 393.51
+90			86.09	393.51 393.51 393.51	150	85.57	393.51 393.51
16+69			86.29	393.51 393.51 393.51	170	86.21	393.51 393.51
+90			86.49	393.51 393.51 393.51	459 D.F.	397.00	393.51 393.51
17+69			86.69	393.51 393.51 393.51			
+90			86.89	393.51 393.51 393.51			
18+69.5	MH 136	MH 136	387.00	393.51 393.51 393.51			
+66.5			87.35	393.51 393.51 393.51			
19+69.5			87.71	393.51 393.51 393.51			
+66.5			88.06	393.51 393.51 393.51			
20+69.5			88.42	393.51 393.51 393.51			
+66.5			88.97	393.51 393.51 393.51			
21+70 = D.F.			389.08	393.51 393.51 393.51			

Senior Construction Se Line

Normal Hgts.

Station	Notes	Reading 1	Reading 2	Reading 3	Reading 4	Station	Notes	Reading 1	Reading 2	Reading 3	Reading 4	
32+00.87	- Drop MH 5 = 80+31.22	368.90	364.73	371.21 370.50 370.80 371.00 371.20 371.40 371.60 371.80 372.00 372.20 372.40 372.60 372.80 373.00 373.20 373.40 373.60 373.80 374.00	370.5	374.47	- Drop MH 172 = K.23+22.15	376.09	376.09	376.09	376.09	376.09
31+53.87		686.5	119 125 131	147 153 159 165 171 177 183 189 195 201 207 213 219 225 231 237 243 249 255 261 267 273 279 285 291 297 303 309 315 321 327 333 339 345 351 357 363 369 375 381 387 393 399 405 411 417 423 429 435 441 447 453 459 465 471 477 483 489 495 501 507 513 519 525 531 537 543 549 555 561 567 573 579 585 591 597 603 609 615 621 627 633 639 645 651 657 663 669 675 681 687 693 699 705 711 717 723 729 735 741 747 753 759 765 771 777 783 789 795 801 807 813 819 825 831 837 843 849 855 861 867 873 879 885 891 897 903 909 915 921 927 933 939 945 951 957 963 969 975 981 987 993 999 1005 1011 1017 1023 1029 1035 1041 1047 1053 1059 1065 1071 1077 1083 1089 1095 1101 1107 1113 1119 1125 1131 1137 1143 1149 1155 1161 1167 1173 1179 1185 1191 1197 1203 1209 1215 1221 1227 1233 1239 1245 1251 1257 1263 1269 1275 1281 1287 1293 1299 1305 1311 1317 1323 1329 1335 1341 1347 1353 1359 1365 1371 1377 1383 1389 1395 1401 1407 1413 1419 1425 1431 1437 1443 1449 1455 1461 1467 1473 1479 1485 1491 1497 1503 1509 1515 1521 1527 1533 1539 1545 1551 1557 1563 1569 1575 1581 1587 1593 1599 1605 1611 1617 1623 1629 1635 1641 1647 1653 1659 1665 1671 1677 1683 1689 1695 1701 1707 1713 1719 1725 1731 1737 1743 1749 1755 1761 1767 1773 1779 1785 1791 1797 1803 1809 1815 1821 1827 1833 1839 1845 1851 1857 1863 1869 1875 1881 1887 1893 1899 1905 1911 1917 1923 1929 1935 1941 1947 1953 1959 1965 1971 1977 1983 1989 1995 2001 2007 2013 2019 2025 2031 2037 2043 2049 2055 2061 2067 2073 2079 2085 2091 2097 2103 2109 2115 2121 2127 2133 2139 2145 2151 2157 2163 2169 2175 2181 2187 2193 2199 2205 2211 2217 2223 2229 2235 2241 2247 2253 2259 2265 2271 2277 2283 2289 2295 2301 2307 2313 2319 2325 2331 2337 2343 2349 2355 2361 2367 2373 2379 2385 2391 2397 2403 2409 2415 2421 2427 2433 2439 2445 2451 2457 2463 2469 2475 2481 2487 2493 2499 2505 2511 2517 2523 2529 2535 2541 2547 2553 2559 2565 2571 2577 2583 2589 2595 2601 2607 2613 2619 2625 2631 2637 2643 2649 2655 2661 2667 2673 2679 2685 2691 2697 2703 2709 2715 2721 2727 2733 2739 2745 2751 2757 2763 2769 2775 2781 2787 2793 2799 2805 2811 2817 2823 2829 2835 2841 2847 2853 2859 2865 2871 2877 2883 2889 2895 2901 2907 2913 2919 2925 2931 2937 2943 2949 2955 2961 2967 2973 2979 2985 2991 2997 3003 3009 3015 3021 3027 3033 3039 3045 3051 3057 3063 3069 3075 3081 3087 3093 3099 3105 3111 3117 3123 3129 3135 3141 3147 3153 3159 3165 3171 3177 3183 3189 3195 3201 3207 3213 3219 3225 3231 3237 3243 3249 3255 3261 3267 3273 3279 3285 3291 3297 3303 3309 3315 3321 3327 3333 3339 3345 3351 3357 3363 3369 3375 3381 3387 3393 3399 3405 3411 3417 3423 3429 3435 3441 3447 3453 3459 3465 3471 3477 3483 3489 3495 3501 3507 3513 3519 3525 3531 3537 3543 3549 3555 3561 3567 3573 3579 3585 3591 3597 3603 3609 3615 3621 3627 3633 3639 3645 3651 3657 3663 3669 3675 3681 3687 3693 3699 3705 3711 3717 3723 3729 3735 3741 3747 3753 3759 3765 3771 3777 3783 3789 3795 3801 3807 3813 3819 3825 3831 3837 3843 3849 3855 3861 3867 3873 3879 3885 3891 3897 3903 3909 3915 3921 3927 3933 3939 3945 3951 3957 3963 3969 3975 3981 3987 3993 3999 4005 4011 4017 4023 4029 4035 4041 4047 4053 4059 4065 4071 4077 4083 4089 4095 4101 4107 4113 4119 4125 4131 4137 4143 4149 4155 4161 4167 4173 4179 4185 4191 4197 4203 4209 4215 4221 4227 4233 4239 4245 4251 4257 4263 4269 4275 4281 4287 4293 4299 4305 4311 4317 4323 4329 4335 4341 4347 4353 4359 4365 4371 4377 4383 4389 4395 4401 4407 4413 4419 4425 4431 4437 4443 4449 4455 4461 4467 4473 4479 4485 4491 4497 4503 4509 4515 4521 4527 4533 4539 4545 4551 4557 4563 4569 4575 4581 4587 4593 4599 4605 4611 4617 4623 4629 4635 4641 4647 4653 4659 4665 4671 4677 4683 4689 4695 4701 4707 4713 4719 4725 4731 4737 4743 4749 4755 4761 4767 4773 4779 4785 4791 4797 4803 4809 4815 4821 4827 4833 4839 4845 4851 4857 4863 4869 4875 4881 4887 4893 4899 4905 4911 4917 4923 4929 4935 4941 4947 4953 4959 4965 4971 4977 4983 4989 4995 5001 5007 5013 5019 5025 5031 5037 5043 5049 5055 5061 5067 5073 5079 5085 5091 5097 5103 5109 5115 5121 5127 5133 5139 5145 5151 5157 5163 5169 5175 5181 5187 5193 5199 5205 5211 5217 5223 5229 5235 5241 5247 5253 5259 5265 5271 5277 5283 5289 5295 5301 5307 5313 5319 5325 5331 5337 5343 5349 5355 5361 5367 5373 5379 5385 5391 5397 5403 5409 5415 5421 5427 5433 5439 5445 5451 5457 5463 5469 5475 5481 5487 5493 5499 5505 5511 5517 5523 5529 5535 5541 5547 5553 5559 5565 5571 5577 5583 5589 5595 5601 5607 5613 5619 5625 5631 5637 5643 5649 5655 5661 5667 5673 5679 5685 5691 5697 5703 5709 5715 5721 5727 5733 5739 5745 5751 5757 5763 5769 5775 5781 5787 5793 5799 5805 5811 5817 5823 5829 5835 5841 5847 5853 5859 5865 5871 5877 5883 5889 5895 5901 5907 5913 5919 5925 5931 5937 5943 5949 5955 5961 5967 5973 5979 5985 5991 5997 6003 6009 6015 6021 6027 6033 6039 6045 6051 6057 6063 6069 6075 6081 6087 6093 6099 6105 6111 6117 6123 6129 6135 6141 6147 6153 6159 6165 6171 6177 6183 6189 6195 6201 6207 6213 6219 6225 6231 6237 6243 6249 6255 6261 6267 6273 6279 6285 6291 6297 6303 6309 6315 6321 6327 6333 6339 6345 6351 6357 6363 6369 6375 6381 6387 6393 6399 6405 6411 6417 6423 6429 6435 6441 6447 6453 6459 6465 6471 6477 6483 6489 6495 6501 6507 6513 6519 6525 6531 6537 6543 6549 6555 6561 6567 6573 6579 6585 6591 6597 6603 6609 6615 6621 6627 6633 6639 6645 6651 6657 6663 6669 6675 6681 6687 6693 6699 6705 6711 6717 6723 6729 6735 6741 6747 6753 6759 6765 6771 6777 6783 6789 6795 6801 6807 6813 6819 6825 6831 6837 6843 6849 6855 6861 6867 6873 6879 6885 6891 6897 6903 6909 6915 6921 6927 6933 6939 6945 6951 6957 6963 6969 6975 6981 6987 6993 6999 7005 7011 7017 7023 7029 7035 7041 7047 7053 7059 7065 7071 7077 7083 7089 7095 7101 7107 7113 7119 7125 7131 7137 7143 7149 7155 7161 7167 7173 7179 7185 7191 7197 7203 7209 7215 7221 7227 7233 7239 7245 7251 7257 7263 7269 7275 7281 7287 7293 7299 7305 7311 7317 7323 7329 7335 7341 7347 7353 7359 7365 7371 7377 7383 7389 7395 7401 7407 7413 7419 7425 7431 7437 7443 7449 7455 7461 7467 7473 7479 7485 7491 7497 7503 7509 7515 7521 7527 7533 7539 7545 7551 7557 7563 7569 7575 7581 7587 7593 7599 7605 7611 7617 7623 7629 7635 7641 7647 7653 7659 7665 7671 7677 7683 7689 7695 7701 7707 7713 7719 7725 7731 7737 7743 7749 7755 7761 7767 7773 7779 7785 7791 7797 7803 7809 7815 7821 7827 7833 7839 7845 7851 7857 7863 7869 7875 7881 7887 7893 7899 7905 7911 7917 7923 7929 7935 7941 7947 7953 7959 7965 7971 7977 7983 7989 7995 8001 8007 8013 8019 8025 8031 8037 8043 8049 8055 8061 8067 8073 8079 8085 8091 8097 8103 8109 8115 8121 8127 8133 8139 8145 8151 8157 8163 8169 8175 8181 8187 8193 8199 8205 8211 8217 8223 8229 8235 8241 8247 8253 8259 8265 8271 8277 8283 8289 8295 8301 8307 8313 8319 8325 8331 8337 8343 8349 8355 8361 8367 8373 8379 8385 8391 8397 8403 8409 8415 8421 8427 8433 8439 8445 8451 8457 8463 8469 8475 8481 8487 8493 8499 8505 8511 8517 8523 8529 8535 8541 8547 8553 8559 8565 8571 8577 8583 8589 8595 8601 8607 8613 8619 8625 8631 8637 8643 8649 8655 8661 8667 8673 8679 8685 8691 8697 8703 8709 8715 8721 8727 8733 8739 8745 8751 8757 8763 8769 8775 8781 8787 8793 8799 8805 8811 8817 8823 8829 8835 8841 8847 8853 8859 8865 8871 8877 8883 8889 8895 8901 8907 8913 8919 8925 8931 8937 8943 8949 8955 8961 8967 8973 8979 8985 8991 8997 9003 9009 9015 9021 9027 9033 9039 9045 9051 9057 9063 9069 9075 9081 9087 9093 9099 9105 9111 9117 9123 9129 9135 9141 9147 9153 9159 9165 9171 9177 9183 9189 9195 9201 9207 9213 9219 9225 9231 9237 9243 9249 9255 9261 9267 9273 9279 9285 9291 9297 9303 9309 9315 9321 9327 9333 9339 9345 9351 9357 9363 9369 9375 9381 9387 9393 9399 9405 9411 9417 9423 9429 9435 9441 9447 9453 9459 9465 9471 9477 9483 9489 9495 9501 9507 9513 9519 9525 9531 9537 9543 9549 9555 9561 9567 9573 9579 9585 9591 9597 9603 9609 9615 9621 9627 9633 9639 9645 9651 9657 9663 9669 9675 9681 9687 9693 9699 9705 9711 9717 9723 9729 9735 9741 9747 9753 9759 9765 9771 9777 9783 9789 9795 9801 9807 9813 9819 9825 9831 9837 9843 9849 9855 9861 9867 9873 9879 9885 9891 9897 9903 9909 9915 9921 9927 9933 9939 9945 9951 9957 9963 9969 9975 9981 9987 9993 9999 10005 10011 10017 10023 10029 10035 10041 10047 10053 10059 10065 10071 10077 10083 10089 10095 10101 10107 10113 10119 10125 10131 10137 10143 10149 10155 10161 10167 10173 10179 10185 10191 10197 10203 10209 10215 10221 10227 10233 10239 10245 10251 10257 10263 10269 10275 10281 10287 10293 10299 10305 10311 10317 10323 10329 10335 10341 10347 10353 10359 10365 10371 10377 10383 10389 10395 10401 10407 10413 10419 10425 10431 10437 10443 10449 10455 10461 10467 10473 10479 10485 10491 10497 10503 10509 10515 10521 10527 10533 10539 10545 10551 10557 10563 10569 10575 10581 10587 10593 10599 10605 10611 10617 10623 10629 10635 10641 10647 10653 10659 10665 10671 10677 10683 10689 10695 10701 10707 10713 10719 10725 10731 10737 10743 10749 10755 10761 10767 10773 10779 10785 10791 10797 10803 10809 10815 10821 10827 10833 10839 10845 10851 10857 10863 10869 10875 10881 10887 10893 10899 10905 10911 10917 10923 10929 10935 10941 10947 10953 10959 10965 10971 10977 10983 10989 10995 11001 11007 11013 11019 11025 11031 11037 11043 11049 11055 11061 11067 11073 11079 11085 11091 11097 11103 11109 11115 11121 11127 11133 11139 11145 11151 11157 11163 11169 11175 11181 11187 11193 11199 11205 11211 11217 11223 11229 11235 11241 11247 11253 11259 11265 11271 11277 11283 11289 11295 11301 11307 11313 11319 11325 11331 11337 11343 11349 11355 11361 11367 11373 11379 11385 11391 11397 11403 11409 11415 11421 11427 11433 11439 11445 11451 11457 11463 11469 11475 11481 11487 11493 11499 11505 11511 11517 11523 11529 11535 11541 11547 11553 11559 11565 11571 11577 11583 11589 11595 11601 11607 11613 11619 11625 11631 11637 11643 11649 11655 11661 11667 11673 11679 11685 11691 11697 11703 11709 11715 11721 11727 11733 11739 11745 11751 11757 								

9-10-26

Normal Heights.

8+90	7785	10.80 10.80 10.80	388.15 M 388.15 388.15
8+40	7800	10.65 10.65 10.65	388.15 388.15 388.15
7+90	7814	10.49 10.49 10.49	388.15 388.15 388.15
7+80 = MH 177	378.17	10.34 10.34 10.34	388.15 388.15 388.15
7+30	7831	10.19 10.19 10.19	388.15 388.15 388.15
6+80	7846	10.04 10.04 10.04	388.15 388.15 388.15
6+30	7860	9.89 9.89 9.89	388.15 388.15 388.15
5+80	7875	9.74 9.74 9.74	388.15 388.15 388.15
5+30	7889	9.59 9.59 9.59	388.15 388.15 388.15
5+20 = MH 178	378.92	9.44 9.44 9.44	388.15 388.15 388.15
4+70	7912	9.29 9.29 9.29	388.15 388.15 388.15
4+20	7932	9.14 9.14 9.14	388.15 388.15 388.15
3+70	7952	8.99 8.99 8.99	388.15 388.15 388.15
3+20	7972	8.84 8.84 8.84	388.15 388.15 388.15
2+70		8.69 8.69 8.69	388.15 388.15 388.15
2+60 = MH 179	379.94	8.54 8.54 8.54	388.15 388.15 388.15
2+10	8016	8.39 8.39 8.39	388.15 388.15 388.15
1+60	8036	8.24 8.24 8.24	388.15 388.15 388.15
1+10	8056	8.09 8.09 8.09	388.15 388.15 388.15
0+60	8076	7.94 7.94 7.94	388.15 388.15 388.15
0+10		7.79 7.79 7.79	388.15 388.15 388.15
0+0 = MH 180 = 199.5 M	386.00	7.64 7.64 7.64	388.15 388.15 388.15

0+0 - D.E. 388.15	381.38	9.80 9.80 9.80	10.80 10.80 10.80
+50	81.18	9.65 9.65 9.65	10.65 10.65 10.65
+99.5 = MH 180 = 0+0.5	381.00	9.50 9.50 9.50	10.50 10.50 10.50
1+44.5	82.05	9.35 9.35 9.35	10.35 10.35 10.35
+89 = D.E. = 388.15	383.00	9.20 9.20 9.20	10.20 10.20 10.20

Hi Line

0+0 - D.M.H. 37	367.13	9.05 9.05 9.05	10.05 10.05 10.05
+50	67.63	8.90 8.90 8.90	9.90 9.90 9.90
+100	68.13	8.75 8.75 8.75	9.75 9.75 9.75
+150	68.63	8.60 8.60 8.60	9.60 9.60 9.60
+200	69.13	8.45 8.45 8.45	9.45 9.45 9.45
+250	69.63	8.30 8.30 8.30	9.30 9.30 9.30
+300	70.13	8.15 8.15 8.15	9.15 9.15 9.15
+350 = MH	370.19	8.00 8.00 8.00	9.00 9.00 9.00

Go Line

0+0 = MH 179	372.57	8.15 8.15 8.15	9.15 9.15 9.15
= S. 27 + 10.72	72.77	8.00 8.00 8.00	9.00 9.00 9.00
+50	73.27	7.85 7.85 7.85	8.85 8.85 8.85
+100	73.77	7.70 7.70 7.70	8.70 8.70 8.70
+150	74.27	7.55 7.55 7.55	8.55 8.55 8.55
+195 = D.E.	373.15	7.40 7.40 7.40	8.40 8.40 8.40



Survey Construction Bi Line  
Normal Heights

0+0 = Deep MH 33 MH 95 + 99.73	369.60	368.46 W.I.	12.52 12.97 11.43 11.83	57.05 381.03 372.57 383.44
1+50	70.04		11.99 12.22 11.95	381.03 372.57 383.44
1+70	70.48		12.55 12.72 12.91	381.03 372.57 383.44
1+50	70.92		13.46 14.17	385.42 385.20
2+10	71.32		13.62 14.27	385.42 385.20
4+50	71.80		9.83 11.14	385.42 385.20
4+70 = MH 106	372.00		9.03 11.17	385.42 385.20
3+20	72.28		8.75 11.18	385.42 385.20
4+20	72.57		8.66 11.18	385.42 385.20
4+70	72.85		8.18 11.17	385.42 385.20
5+20	73.14		7.88 11.13	385.42 385.20
5+70	73.43		7.61	385.42 385.20
7+0 = MH 107	373.50		7.53 11.13	385.42 385.20
7+50	73.17		8.36 11.15	385.42 385.20
6+30	73.85		8.18 11.17	385.42 385.20
7+80	74.02		8.11 11.17	385.42 385.20
7+30	74.20		8.66 11.18	385.42 385.20
7+80	74.37		9.41	385.42 385.20
7+80 = MH 108	374.40		9.41 11.14	385.42 385.20
8+10	74.56		9.17 11.10	385.42 385.20
7+90	74.71		8.66 11.18	385.42 385.20
9+10	74.85		8.25 11.15	385.42 385.20
7+90	75.00		8.83 11.13	385.42 385.20
10+10	75.14		8.67	385.42 385.20
1+50 = MH 109	375.17		8.60 11.10 11.50	385.42 385.20

Bi Line Cont.

1+10	375.31		8.52 11.17	
1+50	75.46		8.27 11.17	
1+10	75.60		8.43 11.15	
1+50	75.75		8.08 11.17	
1+30	75.89		7.82 11.17	
1+10	375.94		8.28 11.17	
1+10	76.08		8.65 11.14	
1+10	376.19		7.64 11.13	
1+30	76.33		8.23 11.12	
1+10	76.48		8.58 11.17	
1+50	76.62		8.44 11.17	
1+10	76.77		8.28 11.17	
1+50	76.91		8.15 11.17	
1+80 = MH 112	377.60		8.05 11.13	
1+10	77.27		8.78 11.17	
1+80	77.55		8.51 11.17	
1+10	77.82		7.91 11.16	
1+90	78.10		8.86 11.16	
1+10	78.37		8.83 11.13	
1+50 = MH 113	378.59		11.16 11.16	
1+10	78.87		10.89 11.12	
1+50	79.24		10.46 11.15	
1+10	79.61		10.98 11.12	
1+50	79.98		9.77 11.11	
1+10	80.35		8.35 11.10	

B. Line Cont.

22+20	MH 114	380.50	8.20 +4.17	388.29 382.73
+70		80.76	8.94 +4.31	371.89 385.35
23+20		81.02	8.68 +4.58	391.02 386.27
+70		81.28	8.41 +4.90	387.66 386.71
24+20		81.54	8.16 +5.1	382.56 387.66
+70		81.80	7.90 +5.4	377.16 382.56
+90	MH 115	381.91	7.64 +5.7	371.51 387.21
25+40		82.11	7.38 +6.0	364.13 383.11
+90		82.31	7.12 +6.3	357.01 388.41
26+40		82.51	6.86 +6.6	350.15 395.01
+90		82.71	6.60 +6.9	343.55 401.91
27+40		82.91	6.34 +7.2	337.21 409.11
762.35 - MH 116	0191579	383.00	6.08 +7.5	330.13 416.61

P. Line

0+0	DI 46 MH 116	384.00	5.82 +7.83	378.17 426.00
+50		82.48	5.56 +8.1	372.61 434.10
+94.5	MH 116	383.00	5.30 +8.4	367.05 442.40
+144.5		83.19	5.04 +8.7	361.49 450.70
+189	DE	383.38	4.78 +9.0	355.93 459.00

M. Line

Normal Hghts.

0+0	DI 35 MH 116	380.54	5.52 +8.29	374.92 453.21
+50		80.34	5.26 +8.55	369.36 461.76
+94.5	MH 116	380.16	5.00 +8.81	363.80 470.31
+144.5		80.36	4.74 +9.07	358.24 478.86
+189	DE 35 MH 116	380.54	4.48 +9.33	352.68 487.41
Ha Line				
0+0	DNH 32	567.13	564.13	570.53
+50	MH 116	67.63	567.13	576.73
+140		68.13	567.13	582.93
+50		68.63	567.13	589.13
2+0		69.13	567.13	595.33
+50		69.63	567.13	601.53
3+0		70.13	567.13	607.73
+50		70.63	567.13	613.93
7.25	MH 117	370.48	5.05 +9.0	365.43 451.5

Super Construction T.L. 102

Normal Hghts

0+0 = MH 167 20494.5 NT	38014	9.32 +5.37	
+50	7996	9.52 +4.77	
1+0	7976	9.77 +4.73	
+50	7956	8.52 +4.52	
2+0	7936	8.11 +4.50	
+50	7916	8.52 +4.53	
+90 = MH 166	39900	8.88 +4.55	
3+90	7880	9.18 +4.77	
+90	7860	9.38 +4.58	
4+40	7840	9.51 +4.77	
+90	7820	9.78 +4.50	
5+90	7800	9.98 +4.77	
+60 = MH 165	37792	10.04 +4.57	
6+10	7770	10.20 +4.56	
+60	7763	10.35 +4.59	
7+10	7749	10.49 +4.51	
+60	7734	10.69 +4.50	
8+10 = MH 164	37720	10.88 +4.50	
+60	7706	10.88 +4.50	
9+10	7691	10.63 +4.50	
+60	7677	10.77 +4.72	
10+10	7662	10.97 +4.50	
+60 = MH 163	37648	10.96 +4.57	
11+10	7639	11.20 +4.50	
+60	7619	11.35 +4.57	

12+10	7605		
+60	7590		
13+10 = MH 162	37576		
+60	7562		
14+10	7547		
+60	7532		
15+10	7518		
+60 = MH 161	37504		
16+10	7490		
+60	7475		
17+10	7461		
+60	7446		
18+10 = MH 160	37432		
+60	7416		
19+10	7401		
+60	7387		
20+10	7372		
+60 = MH 159 Δ L. Modic	37357		
21+10	7361		
+60	7344		
22+10 = Drop MH 29 = MH 173 + 4448	37250		

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N. Line Cont.

SEMI Construction for line

Normal Hghts.

35  
10-22-21

0+65 88.74  $\begin{matrix} 95.2 \\ 96.6 \\ 119.1 \end{matrix}$   $\begin{matrix} 389.09 \\ 1.22 \\ 393.31 \end{matrix}$  *SE Adams + Boundary*  
 0+15 201  
 0+0 = MH 190 384.00  $\begin{matrix} 93.1 \\ 94.6 \\ 150.1 \end{matrix}$

0+0 = DE 385.71  $\begin{matrix} 91.2 \\ 91.6 \\ 147.2 \end{matrix}$   $\begin{matrix} 399.86 \\ 3.29 \\ 394.83 \\ 5.20 \\ 389.73 \\ 4.12 \\ 393.87 \end{matrix}$   
 +50 85.51  
 +10 85.21  
 +150 85.11  
 +2+0 84.91  
 +36.55 MH 193 Δ 384.76  
 +86.55 84.56

Oil Line

0+0 = DE EX 1100 384.40  $\begin{matrix} 98.36 \\ 91.51 \\ 93.5 \\ 145.7 \end{matrix}$   
 +50 89.26  
 +1+0 = MH 190 384.00  $\begin{matrix} 93.1 \\ 95.21 \end{matrix}$   
 = 0+0 K  
 +50 85.00  $\begin{matrix} 83.6 \\ 142.7 \end{matrix}$   
 +2+0 = DE EX 1314 386.00  $\begin{matrix} 93.6 \\ 145.1 \end{matrix}$

+3+36.55 84.36  
 +86.55 84.16  
 +4+36.55 83.96  
 +80 = MH 192 383.79  
 +3+0 83.65  
 +80 83.51

Es Line

0+0 = MH 185 378.98  $\begin{matrix} 147.3 \\ 157.6 \end{matrix}$   $\begin{matrix} 390.5 \\ 41 \end{matrix}$   
 +50 80.18  $\begin{matrix} 83.9 \\ 84.6 \\ 147.3 \end{matrix}$   
 +88.5 = DE 88.00  $\begin{matrix} 85.5 \\ 87.2 \\ 132.7 \end{matrix}$

+6+30 83.37  
 +80 83.23  
 +7+25.2 = MH 191 Δ Boundary 383.10  
 +75.2 82.95  
 +8+25.2 82.81  
 +75.2 82.66  
 +9+25.2 82.57  
 +51.35 = Existing MH 382.45

Normal Heights.

9-24-21

R. Line

36  
9-24-21

0+0	= M.H. 129 1/2 Madison = 3+91.45 D. Line	383.11	382.11	389.42 92 St. J. St. 1381 392.07 316 2.35 +52.7 374.60
+50		83.25		1366 352 291.2 397.95 5.06
1+0		83.40		1352 37.23 291.2 397.95 5.06
+50		83.54		1352 37.23 291.2 397.95 5.06
2+0		83.69		1352 37.23 291.2 397.95 5.06
+30	= M.H. 138	383.78		1352 37.23 291.2 397.95 5.06
+80		83.92		1352 37.23 291.2 397.95 5.06
3+30		84.07		1352 37.23 291.2 397.95 5.06
+80		84.21		1352 37.23 291.2 397.95 5.06
4+30		84.36		1352 37.23 291.2 397.95 5.06
+60	= M.H. 139	384.45		1352 37.23 291.2 397.95 5.06
5+10		84.59		1352 37.23 291.2 397.95 5.06
+60		84.74		1352 37.23 291.2 397.95 5.06
6+10		84.88		1352 37.23 291.2 397.95 5.06
+60		83.03		1352 37.23 291.2 397.95 5.06
+86.5	= D.M.H. 140 = 0+99 ft.	385.12	382.60	1352 37.23 291.2 397.95 5.06

0+0	= D.F.	388.00		387.95 8.00 5.00 +2.97
+50		87.80		16.15 4.67 +5.59
+99	= M.H. 140	389.60		16.15 4.67 +5.59
		385.72		16.15 4.67 +5.59
1+49		85.30		16.15 4.67 +5.59
+99		85.50		16.15 4.67 +5.59
2+46.7	= M.H. 194 A. W. L. Harbor	385.70		16.15 4.67 +5.59
+96.7		85.90		16.15 4.67 +5.59
3+50.45	= M.H. 195 A. E. L. Harbor	386.11		16.15 4.67 +5.59
4+00.45		86.31		16.15 4.67 +5.59
4+50.45		86.51		16.15 4.67 +5.59
5+00.45		86.71		16.15 4.67 +5.59
5+50.45		86.91		16.15 4.67 +5.59
6+00.45		87.11		16.15 4.67 +5.59
6+43.85	= M.H. 196 A. W. Mansfield	387.28		16.15 4.67 +5.59
6+93.85		87.48		16.15 4.67 +5.59
7+43.85		87.68		16.15 4.67 +5.59
7+93.85		87.88		16.15 4.67 +5.59
8+23.9	= M.H. 197 A W. Mansfield + School	388.00		16.15 4.67 +5.59

S. Line

0+0	= D.F.	389.00		8.00 5.00 +2.97
+50		88.80		16.15 4.67 +5.59
1+0		88.60		16.15 4.67 +5.59
+50		88.40		16.15 4.67 +5.59
2+0		88.20		16.15 4.67 +5.59
+50	= M.H. 197	389.00		16.15 4.67 +5.59

Survey Construction of Mine  
Normal Heights.

11-2-26

070 - MH 20	373.44	12.26 +11.93	386.21 SF 392.70 Adams 113	12102.5 = MH 68	376.92	17.81 +13.46	3290.7 SF 328
+50	73.58	12.17 +11.91	386.71 SF 396.70 Adams 113	+52.5	77.06	17.87 +13.37	3949.8 SF 3941
120	73.73	14.67 +12.17	14.28 +11.80	13402.5	77.21	17.67 +13.59	3914.7 SF 397.06
+62.5 = MH 69	373.91	11.65 +11.87	14.50 +11.97	+52.5	77.35	17.53 +13.53	397.06 SF Adams 113
2712.5	74.05	12.10 +11.97	14.50 +11.97	14102.5	77.50	17.33 +13.57	392.78 SF Adams 113
+62.5	74.20	12.10 +11.97	14.50 +11.97	+52.5	77.64	17.24 +13.53	
2 + 75 = Adams	74.39	12.10 +11.97	14.50 +11.97	15102.5	77.79	17.09 +13.69	
3712.5		12.10 +11.97	14.50 +11.97	+52.5	77.93	16.13 +13.69	
1530 = MH 65 Adams 3rd	399.46	12.91 +12.09	12.86 +12.04	1758 = MH 69	398.00	16.86 +13.82	
4103	74.60	12.91 +12.09	12.86 +12.04	+52.5	78.14	16.91 +13.57	
+53	74.75	12.91 +12.09	12.86 +12.04	167258	78.29	16.77 +13.54	
4781 = MH 66	374.83	12.91 +12.09	12.86 +12.04	+758	78.39	16.77 +13.54	
5781	74.97	12.91 +12.09	12.86 +12.04	+925 = Dead End	378.34	16.77 +13.54	
+81	75.12	12.91 +12.09	12.86 +12.04				
6781	75.26	12.91 +12.09	12.86 +12.04				
+81	75.41	12.91 +12.09	12.86 +12.04				
7731	75.55	12.91 +12.09	12.86 +12.04				
+81	75.70	12.91 +12.09	12.86 +12.04				
8731	75.84	12.91 +12.09	12.86 +12.04				
+67.5 = MH 67	375.95	15.51 +13.07	16.51 +13.07				
9717.5	76.09	15.51 +13.07	16.51 +13.07				
+67.5	76.24	15.51 +13.07	16.51 +13.07				
10717.5	76.38	15.51 +13.07	16.51 +13.07				
+67.5	76.53	15.51 +13.07	16.51 +13.07				
11717.5	76.67	15.51 +13.07	16.51 +13.07				
1767.5	76.82	15.51 +13.07	16.51 +13.07				

0+0 = MH-11 = 371.70 C 111.1	379.98	15.51 8.25 70.26	372.38 375.28 379.04 399.76
+50	80.27		
+100	80.56		
+150	80.85		
+200	81.14		
+250	81.43		
+299.62 MH 34 A 32° 47'	381.55		
+319.62	81.69		
+369.62	81.84		
+419.62	81.98		
+468.07 = MH 35 A 27° 00'	382.07		
+498.07	82.21		
+548.07	82.36		
+598.07	82.50		
+648.07	82.65		
+697.12 = DMH 36 A 11° 35'	382.80 384.59		
+747.12	84.73		
+797.12	84.88		
+847.12	85.02		
+896.17 = MH 37 A 38° 44'	385.08		
+946.17	85.22		
+996.17	85.37		
+1046.17	85.51		
+1096.17	85.66		
+1145.72 = DMH 38 A 40° 05'	385.80 389.00		

1146.72	89.14	13.36 7.75
1211.87	89.39	18.46 7.11
+68.72	89.43	99.7 5.26 7.77
1371.82	89.58	9.82 5.07
+56.67 = D.F.	389.63	8.22 7.77
B Line & Ch/H Place		
0+0 = D.F.	387.00	13.40 7.77
+50	86.80	17.53 7.77
+100	86.60	13.80 7.77
+150	86.40	13.00 7.77
+200	86.20	12.20 7.77
+250	86.00	11.40 7.77
+302.4 = DMH 38 = A 1148.72	385.80 389.00	



0+0 = Drop M.H. 18 = N145+25.18	380.32	374.91	381.25.80 2.26 +3222
+50	80.46		382.06 383.86 384.27 384.83 385.58
+100	80.61		387.88 388.58
+150	80.75	001	389.88
+225 = D.M.H. 39 = T0+0	380.79	383.00	16.27 2.06 +576 +5.55
2+12.5	80.83		14.73 +6.35
+62.5	81.08		12.08 4.80 +6.68
3+12.5	81.22		10.38 5.54
+62.5	81.37		10.67 3.27 +7.00
4+12.5	81.51		10.55 7.27
+62.5	81.65		10.40 8.06 47.38
5+12.5 = D.M.H. 40 = H5+07.5	381.80	384.25	10.26 7.68 +4.73
+62.5	81.74		12.18 7.67
6+12.5	82.09		12.06 2.92 +7.72
+62.5	82.23		11.72 4.59
7+12.5	82.38		11.42 4.77
+62.3 = M.H. 41 Δ 88°51'	382.52		11.48 2.62
= D0+0	82.66		11.24 4.59 +4.75
8+12.3	82.81		11.16 2.73
+62.3	82.95		11.05 4.45 +5.56
9+12.3	82.95		10.93 4.29 +5.74
+52.6 = M.H. 42 = D10+30.6	383.07		10.72 4.22 +6.17
10+02.6	82.21		10.46 4.34
+52.6	82.36		10.29 4.37
11+02.6	82.50		10.15 4.37
+52.6	82.65		10.03 4.22

11+80 = M.H. 43	383.73		11.15 4.15 +5.70
12+30	83.87		11.01 4.14 +6.54
+80	84.02		10.86 4.14 +5.77
13+30	84.16		10.72 4.14 +6.26
+80	84.31		10.57 4.14 +6.60
14+15.5 = M.H. 44 Δ 26°54'	384.41		10.42 4.14 +6.87
+65.5	84.55		10.28 4.14 +7.21
15+15.5	84.70		10.14 4.14 +7.55
+50.46 = D.M.H. 45 = 90+0	384.80	387.10	10.00 4.14 +7.88
16+00.46	84.94		9.86 4.14 +8.21
+50.46	85.07		9.72 4.14 +8.55
17+00.46	85.23		9.58 4.14 +8.89
+50.46	85.38		9.44 4.14 +9.23
18+00.46	85.52		9.30 4.14 +9.57
150.46	85.67		9.16 4.14 +9.91
19+09.7 = M.H. 46 Δ 86°53'	385.84		9.02 4.14 +10.25
+59.7	85.98		8.88 4.14 +10.59
20+09.7	86.13		8.74 4.14 +10.93
+59.7	86.27		8.60 4.14 +11.27
21+00.1 = D.M.H. 47 Δ 24°01'	386.39	388.00	8.46 4.14 +11.61
+50.1	86.53		8.32 4.14 +11.95
22+00.1	86.68		8.18 4.14 +12.29
+50.1	86.82		8.04 4.14 +12.63
23+00.1	86.97		7.90 4.14 +12.97
+50.1	87.11		7.76 4.14 +13.31

C Line Cont.

24+00.1		87.26	10.64 16.77	388.37 817 388.20 394.3 394.3
+ 44.87 = M.H. 48	$\Delta 46^{\circ} 54'$	387.39	10.54 4.25 16.77	10.88 4.25 16.77
+ 94.87		87.53	10.54 4.25 16.77	10.60 4.51 16.17
25+44.87		87.68	10.55 4.26 16.81	10.55 4.26 16.81
+ 94.87		87.82	10.55 4.26 16.81	10.40 4.28 16.12
26+44.87		87.97	10.57 4.27 16.84	10.37 4.27 16.10
+ 90 = M.H. 49		388.10	10.57 4.27 16.84	10.30 4.27 15.73
27+40		88.24	10.57 4.27 16.84	10.30 4.27 15.73
+ 90		88.39	10.57 4.27 16.84	10.30 4.27 15.73
28+40		88.53	10.57 4.27 16.84	10.30 4.27 15.73
+ 90		88.68	10.57 4.27 16.84	10.30 4.27 15.73
29+19.4 = M.H. 50	$\Delta 68^{\circ} 30'$ $\Delta 65^{\circ} 11'$	388.76	10.57 4.27 16.84	10.30 4.27 15.73
+ 78.9		88.93	10.57 4.27 16.84	10.30 4.27 15.73
30+38.4 = M.H. 51	$\Delta 76^{\circ} 00'$ $\Delta 70^{\circ} 44'$	389.10	10.57 4.27 16.84	10.30 4.27 15.73
+ 78.4		89.24	10.57 4.27 16.84	10.30 4.27 15.73
31+28.4		89.39	10.57 4.27 16.84	10.30 4.27 15.73
+ 78.4		89.53	10.57 4.27 16.84	10.30 4.27 15.73
32+28.4		89.68	10.57 4.27 16.84	10.30 4.27 15.73
+ 78.4		89.82 out	10.57 4.27 16.84	10.30 4.27 15.73
+ 95.7 = D.F.		389.85	10.57 4.27 16.84	10.30 4.27 15.73

1/3 Line

0+0 = M.H. 54		385.08	9.15 4.75 13.90	389.71 4.75 394.4
+ 150		85.88	9.15 4.75 13.90	389.71 4.75 394.4
+ 170		85.48	9.15 4.75 13.90	389.71 4.75 394.4
+ 139 = D.F.		385.60	9.15 4.75 13.90	389.71 4.75 394.4

D Line

Normal Hghts.

40  
11-1-26

0+0 = D.F.		386.04	8.63 5.20 13.83	389.01 1.17 390.18
+ 150		85.89	8.63 5.20 13.83	389.01 1.17 390.18
+ 170		85.75	8.63 5.20 13.83	389.01 1.17 390.18
+ 150 = M.H. 55		385.61	8.63 5.20 13.83	389.01 1.17 390.18
+ 2+0		85.47	8.63 5.20 13.83	389.01 1.17 390.18
+ 150		85.32	8.63 5.20 13.83	389.01 1.17 390.18
+ 3+0		85.18	8.63 5.20 13.83	389.01 1.17 390.18
+ 139 = M.H. 54		385.08	8.63 5.20 13.83	389.01 1.17 390.18
+ 87		84.94	8.63 5.20 13.83	389.01 1.17 390.18
+ 134		84.79	8.63 5.20 13.83	389.01 1.17 390.18
+ 194.5 = M.H. 53		384.62	8.63 5.20 13.83	389.01 1.17 390.18
+ 5+44.5		84.48	8.63 5.20 13.83	389.01 1.17 390.18
+ 94.5		84.33	8.63 5.20 13.83	389.01 1.17 390.18
+ 6+44.5		84.19	8.63 5.20 13.83	389.01 1.17 390.18
+ 94.5		84.04	8.63 5.20 13.83	389.01 1.17 390.18
+ 7+50 = M.H. 52		383.88	8.63 5.20 13.83	389.01 1.17 390.18
+ 8+0		83.74	8.63 5.20 13.83	389.01 1.17 390.18
+ 150		83.59	8.63 5.20 13.83	389.01 1.17 390.18
+ 9+0		83.45	8.63 5.20 13.83	389.01 1.17 390.18
+ 150		83.30	8.63 5.20 13.83	389.01 1.17 390.18
+ 10+0		83.16	8.63 5.20 13.83	389.01 1.17 390.18
+ 130.6 = M.H. 42		383.07	8.63 5.20 13.83	389.01 1.17 390.18
= C 94.52.6				

Series of Construction Western Interceptor

Normal Heights

					987.85			352.95	14.10 7.25 7.75	117.55 266.75 117.55
					977.75	89.4		52.97	12.37 1.59	
					977.25			54.98	12.37 6.27 17.00	
					967.75 = MH 298			356.00	11.35 6.75 76.15	
					967.31.66			56.60	12.25 6.25 75.17	
					957.81.66			57.28	14.27 -1.07	
					957.31.66	898.34		57.96	7.37 1.55	
					947.81.66	898.34	0.136	57.64	7.76 1.57	24.22 50.32 101.00 1.53
				8-12-26	947.31.66			59.32	8.03 1.03 7.17	From Foot of 5-19-26
					937.81.66 = MH 256 A			360.00	16.37 7.67	
					937.47.66	1224.05	0.106	60.37	10.25 1.50 1.50	on 21-1-27 1.18
					927.97.66			60.64	12.27 1.77	372.25 1.17 362.17
					927.47.66 = MH 255 A			361.42	9.20 1.45 1.57	2.61 2.61 317.32
					917.30			61.52	2.28 1.57	
					914.90	162.6	0.059	61.81	8.50 7.03	8.62 10.77
					911.30			61.96	2.27 1.57	8.51 7.03
					907.80 = MH 254			362.38	14.27 1.77	2.28 1.57
					907.40			62.43	14.27 1.77	14.27 1.77
					897.90			62.59	14.62 1.77	14.62 1.77
					897.40	240	0.0324	62.65	7.67	14.60 7.93
					897.00			62.76	14.58 7.22	14.58 7.22
					887.90			62.81	14.56 1.50	14.56 1.50
					887.40 = MH 253			362.92	14.77 1.77	14.77 1.77
					887.97.72			63.02	14.77 1.77	14.77 1.77
					877.47.72			63.08	14.77 1.77	14.77 1.77
					867.97.72	242.72	0.0224	63.24	14.01 1.50 110.78	14.01 1.50 70.25
104+96.9 = Existing M.H. Lincoln	337.00			343.97						
104+80 = Pilling 841. Wabash 3304				357.57						
104+80	38.24	out		357.57						
104+30 = MH 301	438.63			343.97						
103+80	39.91			357.57						
103+30	11.15			357.57						
102+80	42.39			357.57						
102+30	43.63			357.57						
102+15 = MH 300	244.00			357.57						
101+65	15.22			357.57						
101+15	46.91			357.57						
100+65	47.66			357.57						
100+15	18.10			357.57						
99+69.6 = MH 299 & 154 A	350.00			357.57						
99+25	50.90			357.57						
987.75	51.92			357.57						

Normal Hghts.

Time	Altitude	Notes	Time	Altitude	Notes
86+47.73	63.35	13.82 +10.96	74+94.98	66.29	14.72 +9.32
85+97.73 = Drop MH 23 36720	63.46	13.79 +10.73	74+44.98	66.43	13.65 +9.35
85+150	63.58	13.48 +10.32	73+94.98	66.58	13.58 +9.18
85+100	63.69	13.57 +9.52	73+44.98 = Drop MH 29 32250	66.72	15.22 +10.12
84+50	63.80	13.46 +9.16	73+09.08	66.82	15.12 +9.45
84+00	63.91	13.25 +8.77	72+59.08	66.97	14.92 +9.30
83+50	64.02	13.24 +8.63	72+09.08	67.11	14.84 +9.15
83+06 = Drop MH 32 = 0.10 Hg	64.13	13.13 +8.21	71+59.08	67.26	14.68 +8.95
82+81.32	64.17	13.09 +8.15	71+09.08 = MH 28	67.40	14.52 +8.75
82+31.32	64.28	12.97 +7.93	71+0	out	385.88 376.91 385.65
81+81.32	64.39	12.81 +7.67	70+50	67.57	14.25 +8.48
81+31.32	64.51	12.75 +7.61	70+0	67.71	14.21 +8.40
80+81.32	64.62	12.63 +7.49	69+50	67.86	14.06 +8.29
80+31.32 = Drop MH 31 36700	64.73	12.53 +7.37	69+0	68.00	13.92 +8.25
80+0	64.82	12.41 +7.25	68+50	68.15	13.82 +8.17
79+50	64.97	12.30 +7.13	68+00 = MH 27	68.29	13.67 +8.01
79+0	65.11	12.17 +6.91	67+96.33	out	
78+50	65.26	12.03 +6.79	67+46.33	68.46	13.46 +7.80
78+0	65.40	11.88 +6.67	67+06.33	68.60	13.32 +7.75
77+50	65.55	11.73 +6.55	66+46.33	68.75	13.17 +7.63
77+00 = MH 30	65.69	11.58 +6.43	65+86.33	68.89	13.03 +7.51
76+96.08	65.71 out		65+46.33	69.04	12.88 +7.39
76+46.98	65.85	11.43 +6.31	64+96.33 = MH 26	69.18	12.75 +7.28
75+94.98	66.00	11.28 +6.19	64+46.33	out	
75+44.98	66.14	11.13 +6.07	64+06.33	69.33	12.59 +7.16

Sewer Construction Western Interceptor

38029 G.M. SE 33rd  
614

38643 MT 16.95  
627

16.80  
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16.51  
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173.18 16.37  
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16.99  
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63+93<sup>11</sup> = 00 M.H. 25

369.48

63+43<sup>11</sup>

369.67

62+93<sup>11</sup>

369.85

62+43<sup>11</sup>

370.03

61+93<sup>11</sup>

370.06

61+50 M.H. 29

370.18

61+00

370.32

60+50

370.97

60+00

370.61

59+50

370.76

59+00 M.H. 23

370.90

58+50

371.09

58+00

371.19

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57+00

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56+50

371.63

56+00 M.H. 22

371.77

55+50

71.91

55+10

72.06

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53+00 M.H. 21

372.64

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7-25-21  
5:00  
8:15  
9:15

Sewer Construction Western Interceptor

51+50			373.08	15.86 -11.24	388.94 H.
51+0	217.72	0200	73.22	15.77 4.23 +11.24	387.72 387.72
50+50			73.37	15.57 2.02 +11.53	385.20 385.52 385.52
50+32.28 = MH 20 A			373.44	15.50 2.02 +11.77	390.13 387.11 AM
49+88.28			73.58	15.79 2.33 +11.46	385.71 AM 385.71
49+32.28	217.72	0200	73.73	15.66 2.02 +11.68	385.71 AM 385.71
48+82.28	217.72	0200	73.87	15.50 2.02 +11.53	385.71 AM 385.71
48+20.18 = MH 19 Δ P. B. Bondraff			373.91	15.46 2.02 +10.85	385.80 385.80
48+20.18			74.05	15.50 2.02 +10.85	389.45 389.45
47+20.18			74.20	15.46 2.02 +10.85	385.80 385.80
47+39.18 = S. L. P. Co. and 800			74.29	15.46 2.02 +10.85	385.80 385.80
47+20.18			74.34	15.46 2.02 +10.85	385.80 385.80
46+20.18			74.49	15.46 2.02 +10.85	385.80 385.80
46+59.18 = H. L. Adams Riv			74.52	14.92 2.02 +10.85	385.80 385.80
46+20.18			74.63	15.24 2.02 +10.85	385.80 385.80
45+70.18			74.78	15.24 2.02 +10.85	385.80 385.80
45+25.18 = MH 18 D-OP C 390.32			374.91	15.46 2.02 +11.10	385.80 385.80
44+75.18			75.05	14.97 2.02 +10.85	385.80 385.80
44+25.18	217.72	0200	75.20	14.82 2.02 +10.85	385.80 385.80
43+75.18			75.34	14.82 2.02 +10.85	385.80 385.80
43+63.18 = MH 17 A			375.38	14.66 2.02 +10.85	385.80 385.80
43+13.18			75.52	14.66 2.02 +10.85	385.80 385.80
42+63.18			75.67	14.66 2.02 +10.85	385.80 385.80
42+13.18	217.72	0200	75.81	14.66 2.02 +10.85	385.80 385.80
41+63.18			75.96	14.66 2.02 +10.85	385.80 385.80
41+13.18			76.10	14.66 2.02 +10.85	385.80 385.80
40+65.0 = MH 16			376.24	14.66 2.02 +10.85	385.80 385.80



Normal Heights. 10.20.26

1578645	83.41	16.55 +11.80	49172 40024
1573645	83.55	16.77 +11.97	49172 40024
1478645	83.70	16.56 +12.01	49172 40024
147584	83.78	16.56 +12.01	49172 40024
147084	83.92	16.34 +11.58	49172 40024
137584	84.07	16.19 +11.58	49172 40024
137084	84.21	16.05 +11.62	49172 40024
127584	84.26	15.00 +11.70	49172 40024
127084	84.50	15.24 +11.81	49172 40024
117584	84.65	15.6 +12.0	49172 40024
117084	84.79	15.33 +11.71	49172 40024
107584	84.94	15.33 +11.71	49172 40024
107380	85.00	15.44 +11.73	49172 40024
97880	85.14	15.32 +11.67	49172 40024
97380	85.29	15.48 +11.80	49172 40024
8788	85.43	15.54 +11.87	49172 40024
8738	85.58	15.39 +11.70	49172 40024
7788	85.72	15.25 +11.60	49172 40024
7738	85.87	15.69 +11.82	49172 40024
7700	85.99	15.25 +11.73	49172 40024
6750	86.13	15.84 +11.90	49172 40024
6700	86.28	15.68 +11.82	49172 40024
5750	86.42	15.55 +11.66	49172 40024
5700	86.57	15.40 +11.52	49172 40024
4750	86.71	15.24 +11.32	49172 40024

4100	86.86	15.00 +11.57	49172 40024
3750	86.99	14.77 +11.36	49172 40024
3700	87.13	14.58 +11.33	49172 40024
2750	87.28	14.28 +11.07	49172 40024
2700	87.42	14.34 +11.58	49172 40024
1750	87.57	14.19 +11.58	49172 40024
1700	87.71	14.05 +11.62	49172 40024
0750	87.86	15.00 +11.70	49172 40024
070	88.00	15.24 +11.81	49172 40024

No Time

070	88.12	15.13 +11.79	49172 40024
750	88.26	15.03 +11.70	49172 40024
700	88.42	15.23 +11.89	49172 40024
750	88.58	15.43 +12.09	49172 40024
2700	88.32	15.65 +12.27	49172 40024
750	88.12	15.03 +11.79	49172 40024
770	88.00	15.25 +11.73	49172 40024
3730	88.20	15.37 +11.87	49172 40024



Sever Construction "E Line"

11-21

"G Line"

Normal Heights

47  
10-29-26

0+0	= D.M.H. 47 = C.N. 100.1	388.00	384.32	388.48	D.M.H. 47
+50		88.20	85.57	87.94	
+100		88.40	85.77	88.56	
+150		88.60	85.97	89.18	
+200		88.80	86.17	89.80	
+250		89.00	86.37	90.42	
+300		89.20	86.57	91.04	
+400	= D.E.	388.28	384.60	388.88	

0+0	= D.M.H. 45 = C.N. 151.50.1	387.60	384.80	387.78	D.M.H. 45
+50		87.80	85.00	87.98	
+100		88.00	85.20	88.18	
+150		88.20	85.40	88.38	
+200	= M.H. 56	388.40	384.40	388.58	
+250		88.60	85.60	88.78	
+300		88.80	85.80	88.98	
+350		89.00	86.00	89.18	
+400		89.20	86.20	89.38	

"F Line"

0+0	= M.H. 57 = G 4+13	389.25	385.57	389.43	M.H. 57
+50		89.45	86.77	89.63	
+100		89.65	86.97	90.15	
+150		89.85	87.17	90.67	
+200		90.05	87.37	91.19	
+250		90.25	87.57	91.71	
+300	= M.H. 58	390.23	386.55	390.41	
+350		90.53	87.87	91.23	
+400		90.73	88.07	91.75	
+450	= D.E. = 31.5 S.S.L. Copley	390.94	386.86	391.12	

+100	= M.H. 57 = F 0+0	389.25	385.57	389.43	M.H. 57
+150		89.45	86.77	89.63	
+200		89.65	86.97	90.15	
+250		89.85	87.17	90.67	
+300		90.05	87.37	91.19	
+350		90.25	87.57	91.71	
+400		90.45	87.77	92.23	
+450	= D.E.	389.78	385.80	389.96	

"H Line"

0+0	= D.E. 50' S.S.L. Collier	389.00	385.32	389.18	
+50		88.25	85.57	88.43	
+100		87.50	84.82	87.68	
+150		86.75	84.07	86.93	
+200	= M.H. 59	386.00	382.32	386.18	
+250		85.90	83.82	86.08	
+300		85.10	83.07	85.28	
+350		84.40	82.32	84.58	
+400		83.70	81.57	83.88	
+450		83.00	80.82	83.18	

5+07.5 = D.M.H. 40

384.75 381.80

Senior Construction I Line

Normal Heights.

10-25-26

K Line

10-10-26

0+0 = D.M.H. 39  
= C1+22.5

383.00 380.79

386.55  
384.79  
384.79

0+0 = D.F.

389.53

9.01

387.38  
387.38  
387.38

+50

83.40

11.98  
+14.25

+50

89.33

3.64  
-5.77

9.71  
387.38  
387.38

1+0

83.80

12.68  
+3.74

1+0

89.13

2.41  
-2.02  
+5.37

387.38  
387.38

+50

84.20

10.28  
+5.27

+27.5 = M.H. 62

389.02

15.37

387.38  
387.38

2+0

84.60

8.88  
+2.89

+77.5

88.82

10.26  
-2.22  
+5.57

387.38  
387.38

+50

85.00

6.28  
+2.87

2+27.5

88.62

12.86  
-2.38

387.38  
387.38

3+0 = M.H. 60

385.40

8.88  
+1.27

+77.5

88.42

10.66  
-1.91  
+5.75

387.38  
387.38

+50

86.00

8.49  
+1.38  
+1.17

3+30 = M.H. 61

388.21

12.86  
-2.38

387.38  
387.38

4+0

86.60

7.88  
+1.38

+80

88.01

10.66  
-1.91  
+5.75

387.38  
387.38

+50

87.20

7.28  
+1.90

4+30

87.81

11.66  
-1.44  
+2.75

387.38  
387.38

5+07.5 D.F. 50' S.S.L. Gillier

387.89

6.60  
+2.90

+80

87.61

11.66  
-1.44  
+2.75

387.38  
387.38

5+31.8 = D.M.H. 10  
= M1.26 + 99.30

382.40

380.17

11.66  
-1.44  
+2.75

10-27-26

"J Line"

0+0 = D.F.

392.00

7.50  
3.75  
+4.03  
B.M. 393.50  
5.70  
399.20

"L Line"

390.66

8.74  
-1.07

91.38  
391.00  
91.20

+50

91.25

8.70  
-2.29  
+6.63

0+0 D.F.

90.46

8.74  
-1.07

91.38  
391.00

1+0

90.50

9.45  
-1.60  
+7.85

+50

90.26

9.18  
-1.52  
+7.81

91.38  
391.00

+50

89.75

9.45  
-1.60  
+7.85

+50 = M.H. 63

390.06

9.54  
-1.68  
+7.85

91.38  
391.00

+94.93 = D.M.H. 7  
= M1.19 + 30.2

389.00

382.41

2+0

89.86

9.54  
-1.68  
+7.85

91.38  
391.00

+50

89.66

9.90  
-1.76  
+7.85

91.38  
391.00

3+0

89.46

9.90  
-1.76  
+7.85

91.38  
391.00

+50

89.26

9.90  
-1.76  
+7.85

91.38  
391.00

4+0

89.06

9.90  
-1.76  
+7.85

91.38  
391.00

+11 = M.H. 62  
= K1 + 27.5

389.02

9.90  
-1.76  
+7.85

91.38  
391.00

Sever Construction "N Line"

Normal Heights.

0+0 = MH 65 = M 4181	374.46	12.54 18.36	386.71 392.64 397.04
+50	74.60		397.04 397.04 397.04
+1+0	74.75	17.25 4.25	397.04 397.04
+50 = D. MH 66	374.90 74.95	17.10 4.77 17.33	397.04 397.04 397.04
+2+0	83.00	9.00	397.04
+50	83.14	8.86	397.04
77.7 = MH 70	83.29	18.56 11.70	397.04 397.04
372.65 +76.5	83.35	18.29 11.70	397.04 397.04
472.65	83.50	18.00 11.70	397.04 397.04
+76.5 = 2x76.5 Equally	83.79	18.00 11.70	397.04 397.04
4+04.5 = MH 71	383.23	17.16 11.70	397.04 397.04
4+50 = MH 72	384.08	17.16 11.70	397.04 397.04
5+0	84.22	17.16 11.70	397.04 397.04
+50	84.87	17.16 11.70	397.04 397.04
6+0	84.51	17.16 11.70	397.04 397.04
+50	84.66	17.16 11.70	397.04 397.04
7+0 = MH 73	384.80	17.16 11.70	397.04 397.04
157.5 A = S.L. Callow	85.03	17.16 11.70	397.04 397.04
8+17.5 A = N.L.	85.27	17.16 11.70	397.04 397.04
+67.5	85.47	17.16 11.70	397.04 397.04
9+17.5	85.67	17.16 11.70	397.04 397.04
9+50 = MH 74	385.90	17.16 11.70	397.04 397.04
10+0	86.28	17.16 11.70	397.04 397.04
+50	86.77	17.16 11.70	397.04 397.04
11+0	87.25	17.16 11.70	397.04 397.04
+50	87.74	17.16 11.70	397.04 397.04
12+0 = MH 75	388.22	17.16 11.70	397.04 397.04

"N Line" Contd.

12+50	88.70	9.40 4.20 +5.00	397.04
13+0	89.19	9.00 4.20 +4.50	397.04
+50	89.67	8.50 4.20 +4.00	397.04
1782.5 = DE = 35'S.P.L. Capley	390.00	8.10 4.20 +3.90	397.04
Zs Line			
0+0 = MH 78	386.08		397.04
+36.5 = MH 78 D	384.24	11.86 +2.90	397.04
+86.5	84.14	11.66 3.60 +8.00	397.04
1+36.5	84.14	11.66 3.60 +8.00	397.04
+86.5	84.84	11.66 3.60 +8.00	397.04
2+36.5	85.04	9.40 4.20 +5.00	397.04
+86.5	85.24	9.40 4.20 +5.00	397.04
3+36.5 = DE	385.46	9.20 4.20 +5.00	397.04

marked on plan  
390.77  
396.70  
397.04  
397.04  
397.04

Normal Heights.

Station	Normal Height	Notes	Other Station	Other Normal Height	Notes
0+0 = MH. 67	375.95	19.20 +13.72	12+50	89.29	2.34 2.34 +5.00
-150 = MH 67.5	76.09	387.75 395.85 187.63 +12.75	13+0	89.67	8.96 2.09 +2.51
+10	76.34	19.46 +10.93	137 = DE	389.96	8.67 2.09 +7.58
+50 = DMH 76	376.38	19.46 +10.93	35' 552 Capley		
2+0	84.30	18.25 +7.9			
+150	84.45	18.83 +7.32			
3+0	84.59	18.60 +7.15			
+50	84.74	18.56 +7.02			
4+0 = MH. 77	387.88	18.45 +7.91			
+150	85.02	387.75 14.16 +7.03			
5+0	85.17	14.02 +6.84			
+250	85.31	13.87 +6.98			
6+0	85.46	13.73 +7.07			
+50 = MH 78	385.60	13.58 +6.08			
7+0	85.86	13.38 +6.07			
+50	86.00	13.18 +5.87			
8+0	86.20	12.98 +5.63			
+50	86.40	12.78 +5.47			
9+0 = MH 79	386.60	12.58 +5.27			
+50	86.98	12.38 +5.07			
10+0	87.37	11.81 +4.80			
+50	87.75	11.43 +4.67			
11+0	88.14	11.04 +4.47			
+50 = MH. 80	388.52	10.66 +4.26			
12+0	88.90	9.73 +4.28			



"P Line" Cont.

Survey Construction "Q Line"

Horizontal Heights

7-21-21 53

Station	Height	Notes	Station	Height	Notes	Station	Height	Notes
2570 = MH 89	390.55	10.92 5.61 +5.26	070 = MH 69	378.00	19.75 5.62 +13.97	378.00	378.00	19.75 5.62 +13.97
+50	90.19	10.72 5.62 +5.12	+150	78.14	19.66 +1.83	78.14	78.14	19.66 +1.83
2610	90.84	10.86 5.36 +5.50	+10	78.29	19.46 +1.63	78.29	78.29	19.46 +1.63
+57 = D.F.	391.00	9.16 5.68 +3.77	+50 = D.M.H. 90	378.43	17.21 4.22 +6.76	378.43	378.43	17.21 4.22 +6.76
			210	86.07	12.53 +7.70	86.07	86.07	12.53 +7.70
			+150	86.22	12.36 +7.33	86.22	86.22	12.36 +7.33
			310	86.31	12.36 +7.33	86.31	86.31	12.36 +7.33
			+50	86.51	12.29 +7.26	86.51	86.51	12.29 +7.26
			410	86.65	12.09 +7.06	86.65	86.65	12.09 +7.06
			+50 = MH 91	386.80	11.89 +7.57	386.80	386.80	11.89 +7.57
			510	86.74	11.89 +7.57	86.74	86.74	11.89 +7.57
			+150	87.09	11.65 +7.33	87.09	87.09	11.65 +7.33
			610	87.23	11.56 +7.24	87.23	87.23	11.56 +7.24
			+50	87.38	11.36 +7.04	87.38	87.38	11.36 +7.04
			710	87.52	11.36 +7.04	87.52	87.52	11.36 +7.04
			+50 = MH 92	387.67	11.27 +7.07	387.67	387.67	11.27 +7.07
			810	87.81	11.27 +7.07	87.81	87.81	11.27 +7.07
			+150	87.96	11.07 +6.87	87.96	87.96	11.07 +6.87
			910	88.10	10.92 +6.72	88.10	88.10	10.92 +6.72
			+50	88.25	10.86 +6.66	88.25	88.25	10.86 +6.66
			1010	88.39	10.86 +6.66	88.39	88.39	10.86 +6.66
			+50 = MH 93	388.54	10.76 +6.56	388.54	388.54	10.76 +6.56
			1110	88.68	10.76 +6.56	88.68	88.68	10.76 +6.56
			+150	88.83	10.56 +6.36	88.83	88.83	10.56 +6.36
			1210	88.97	10.56 +6.36	88.97	88.97	10.56 +6.36

Q Line Cont.

Normal Heights

9.27.66

12+50	300	0079	89.16	9.53 9.82 +5.66	399.15 H. 4.71 393.88 5.97
13+0			89.26	9.39 4.22 +4.97	399.85
7.50 = M.H. 94			389.41	8.44 1.72 +4.97	10.26 6.72 +4.52
14+0			89.61		
7.50	2.50	.004	89.81	15.08 8.32 +5.66	
15+0			90.01	9.04 5.45 +4.52	
7.50			90.21	8.66 +4.7	
16+0 = M.H. 95			390.41	8.44 9.60 +4.76	
7.50			90.61	8.66 9.70 +4.75	
17+0			90.81	8.04 9.04 +4.70	
7.50	2.50	.004	91.01	8.44 9.37 +4.67	
18+0			91.21	8.44 9.37 +4.67	
7.50 = M.H. 96			391.41	8.44 9.37 +4.67	
19+0			91.61	8.44 9.37 +4.67	
7.50	1.48	.004	91.81	8.04 9.20 +4.50	
7.98 = D.F.			392.00	8.44 9.37 +4.67	

"R Line"

53

0+0 = D.F.			387.00	
7.50	1.00	.004	382.60	
7.50 = M.H. 97			382.60	
7.50				
2+0	1.00	.004		
7.50				
3+0 = D.M.H. 36			382.80	384.59
				= 46.19912
11-2-66				
"S Line"				
0+0 = D.F.			387.00	10.60 +3.77
7.50			386.80	10.39 6.25 +4.77
7.50			386.60	10.60 10.6 +4.53
7.50			386.20	10.99 5.44 +4.95
2+0			386.00	10.99 15.27 +5.74
			386.03	380.97
				+ 42.78 D.M.H. 9
				= 41.24 + 28.7

Sewer Construction "T Line"

Normal Heights

11-2-26

0+0 = DE	387.00	11.45 6.88 4.57	395.86 D.M.H.5
+50	86.80	11.65 6.57 4.57	398.45
+100	86.60	12.85 6.27 4.67	398.45
+150 = M.H. 98	386.40	12.05 7.27 4.75	
+200	86.20	13.25 7.27 4.81	
+250	86.00	13.45 7.27 4.80	
+300	85.80	13.65 7.27 4.87	
+350	85.60	13.85 7.27 4.88	
4+04 = D.M.H. 5 - 11/14 + 58.4	385.39		383.78

"C Line"

0+0 = D.M.H. 4 = M.H. 10+38	387.14	12.09 6.94 4.94	394.13 M.H. 150
+50	87.31	11.89 6.94 4.86	
+100	87.51	11.68 6.94 4.87	
+150	87.71	11.47 6.94 4.87	
+191.03 = M.H. 99 = M.H. 0+0	387.90	11.23 6.94 4.87	
+241.03	88.10	11.02 6.94 4.87	
+291.03	88.30	10.81 6.94 4.87	
+341.03	88.50	10.60 6.94 4.87	
+400 = M.H. 100	388.73	10.39 6.94 4.87	
+450	88.93	10.18 6.94 4.87	
+500	89.13	9.97 6.94 4.87	
+550	89.33	9.76 6.94 4.87	
+600	89.53	9.55 6.94 4.87	

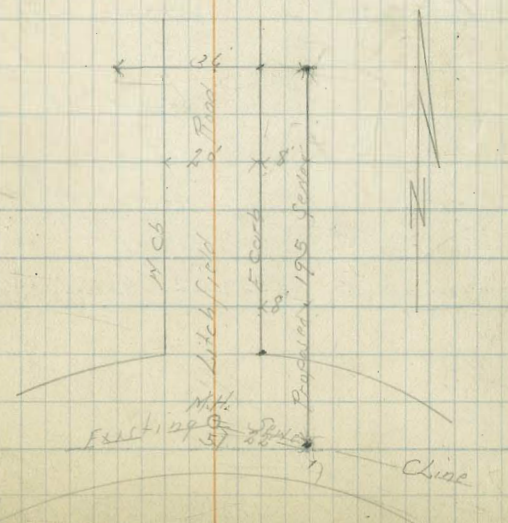
6+11.58 = M.H. 101 Δ 19° 55'	389.58	9.35 4.32 4.97	
+61.58	89.78	9.15 4.32 4.83	
7+14 = DE	390.00	8.95 4.32 4.63	

11-29-26

Sewer Construction Litohfield Road

Cuts Marked on East Ch 8' x of 2' Litoh 389.10

0+0 = Existing Sewer	389.17	9.87	399.04
+50' W	389.31	9.73 4.57 4.87	
+100	389.46	9.58 4.57 4.87	
+150	389.60	9.44 4.57 4.87	
+200 = Δ 90° L	389.79	9.30 4.57 4.87	
+231 End	389.85	9.18 4.57 4.87	





Server Construction A3 Line

0+0	Existing M.H. L 3055 SW	81.75 81.70	12.87 +6.61	12.87 +6.61
+50		81.64 81.64	12.83 +7.70	12.83 +7.70
1+0		82.04 81.89	12.81 +7.81	12.81 +7.81
+50		82.18 82.03	12.84 +7.81	12.84 +7.81
2+0		82.33 82.18	12.86 +7.83	12.86 +7.83
+50		82.32	12.81 +7.83	12.81 +7.83
+65	= MH 289	82.51 82.36	12.07 +7.06	12.07 +7.06
3+15		82.50	11.92 +7.06	11.92 +7.06
+65		82.65	11.78 +7.06	11.78 +7.06
4+15		82.79	11.78 +7.06	11.78 +7.06
+65		82.94	11.78 +7.06	11.78 +7.06
5+15		83.08	11.78 +7.06	11.78 +7.06
5+38.66	MH 290 L Boundary	383.13	11.78 +7.06	11.78 +7.06
5+38.66	0+0 B3		11.78 +7.06	11.78 +7.06
5+78.25	MH 291 = 0+0 C3	383.32	11.78 +7.06	11.78 +7.06
6+41.5	MH 292	383.57	11.90 +6.03	11.90 +6.03
+91.5		83.77	11.89 +6.03	11.89 +6.03
7+41.5		83.97	11.89 +6.03	11.89 +6.03
+91.5		84.17	11.89 +6.03	11.89 +6.03
8+41.5		84.37	11.89 +6.03	11.89 +6.03
+82	- DF	384.53	11.89 +6.03	11.89 +6.03

B3 Line

Horizontal Heights

11-9-50

0+0	MH 290 = A3 Line	383.13	9.34 +5.61	383.90 26 Adams L Boundary
+50		83.33	9.14 +5.61	383.88
1+0		83.53	9.04 +5.61	383.87
+25	- DF	383.63	9.04 +5.61	383.87
0+0	MH 291 = A3 5628 75	383.32	8.85 +6.09	384.17
+50		83.52	8.85 +6.09	384.17
1+0		83.72	8.85 +6.09	384.17
+28	= MH 293 A	383.83	8.85 +6.09	384.17
+78		84.03	8.85 +6.09	384.17
2+28		84.23	8.85 +6.09	384.17
+85.5	- DF	384.46	8.85 +6.09	384.17

Drain on South Curb of Reed St  
From N.E. Ingraham to 170 NW Corner

	Top width	Bottom	L		54.7 + 1.18
0 + 0	11.5	10.0	42.25	44.77 +32.5 187.25 +1.5	54.7 +1.18 3.06 51.12
+ 50	11.5	10.0	43.02	11.32 +5.71	11.32 +5.71
+ 100	12.0	9.0	42.90	11.60 +6.34 16.24	11.60 +6.34 16.24
+ 50	11.2	8.6	42.57	11.82 +6.37	11.82 +6.37
+ 100	11.0	8.6	42.25	12.05 +6.37	12.05 +6.37
+ 50	10.6	8.5	42.12	12.16 +6.36 15.80	12.16 +6.36 15.80
+ 100	11.5	8.6	41.90	12.10 +6.36 15.76	12.10 +6.36 15.76
+ 50	10.6	8.3	41.67	12.26 +6.35 15.73	12.26 +6.35 15.73
+ 100	11.0	8.7	41.45	10.16 +6.35 15.50	10.16 +6.35 15.50
+ 50	10.6	8.6	41.23	10.32 +6.35 15.72	10.32 +6.35 15.72
+ 100	10.4	8.5	41.00	10.46 +6.35 15.78	10.46 +6.35 15.78
+ 50	11.6	8.6	40.78	10.60 +6.35 15.76	10.60 +6.35 15.76
+ 100	11.2	8.4	40.55	10.76 +6.35 15.76	10.76 +6.35 15.76
+ 50	11.0	8.7	40.33	10.92 +6.35 15.76	10.92 +6.35 15.76
+ 100	9.6	8.4	40.10	11.06 +6.35 15.76	11.06 +6.35 15.76
+ 25	8.8	7.5	39.88	11.20 +6.35 15.76	11.20 +6.35 15.76
+ 50					
+ 100			39.65		

Drain Construction "Street"  
130' x 110'

	Top width	Bottom	L		54.7 + 1.18
0 + 0	11.5	10.0	42.25	44.77 +32.5 187.25 +1.5	54.7 +1.18 3.06 51.12
+ 50	11.5	10.0	43.02	11.32 +5.71	11.32 +5.71
+ 100	12.0	9.0	42.90	11.60 +6.34 16.24	11.60 +6.34 16.24
+ 50	11.2	8.6	42.57	11.82 +6.37	11.82 +6.37
+ 100	11.0	8.6	42.25	12.05 +6.37	12.05 +6.37
+ 50	10.6	8.5	42.12	12.16 +6.36 15.80	12.16 +6.36 15.80
+ 100	11.5	8.6	41.90	12.10 +6.36 15.76	12.10 +6.36 15.76
+ 50	10.6	8.3	41.67	12.26 +6.35 15.73	12.26 +6.35 15.73
+ 100	11.0	8.7	41.45	10.16 +6.35 15.50	10.16 +6.35 15.50
+ 50	10.6	8.6	41.23	10.32 +6.35 15.72	10.32 +6.35 15.72
+ 100	10.4	8.5	41.00	10.46 +6.35 15.78	10.46 +6.35 15.78
+ 50	11.6	8.6	40.78	10.60 +6.35 15.76	10.60 +6.35 15.76
+ 100	11.2	8.4	40.55	10.76 +6.35 15.76	10.76 +6.35 15.76
+ 50	11.0	8.7	40.33	10.92 +6.35 15.76	10.92 +6.35 15.76
+ 100	9.6	8.4	40.10	11.06 +6.35 15.76	11.06 +6.35 15.76
+ 25	8.8	7.5	39.88	11.20 +6.35 15.76	11.20 +6.35 15.76
+ 50					
+ 100			39.65		

1490.19 cu yds EXCAV  
3.63 " " " EMB

56  
1125.26

31 77.24  
4.27  
81.73

58.73  
+16.93

58.67  
+16.07

59.53  
+16.00

60.38  
+14.97

61.23  
+13.80

62.08  
+12.70







Grades on Madison Ave

60  
9-22-21  
Duron  
G.W.  
Merrill

	N.L.
N.L. Massachusetts	331.25
50' N	329.75
100' N	328.25
150' N	326.75
200' N	325.25
250' N	323.75
300' N - old E. New Hampshire	322.25

321.75  
N.E.  
332.03 Madison  
2.28 Mass.  
335.02

N	331.75	299.5	28.25	26.75	25.25	23.75	22.25
	1.57	6.07	7.57	8.07	10.57	12.07	13.57
	3.14	12.14	15.71	16.71	19.21	20.71	22.21
	4.71	18.21	23.28	24.28	26.78	28.28	29.78
	6.28	24.28	30.85	31.85	34.35	35.85	37.35
	7.85	30.85	37.42	38.42	40.92	42.42	43.92
	9.42	37.42	43.99	44.99	47.49	48.99	50.49
	10.99	43.99	50.56	51.56	54.06	55.56	57.06
	12.56	50.56	57.13	58.13	60.63	62.13	63.63
	14.13	57.13	63.70	64.70	67.20	68.70	70.20
	15.70	63.70	70.27	71.27	73.77	75.27	76.77
	17.27	70.27	76.84	77.84	80.34	81.84	83.34
	18.84	76.84	83.41	84.41	86.91	88.41	89.91
	20.41	83.41	89.98	90.98	93.48	94.98	96.48
	21.98	89.98	96.55	97.55	100.05	101.55	103.05
	23.55	96.55	103.12	104.12	106.62	108.12	109.62
	25.12	103.12	109.69	110.69	113.19	114.69	116.19
	26.69	109.69	116.26	117.26	119.76	121.26	122.76
	28.26	116.26	122.83	123.83	126.33	127.83	129.33
	29.83	122.83	129.40	130.40	132.90	134.40	135.90
	31.40	129.40	135.97	136.97	139.47	140.97	142.47
	32.97	135.97	142.54	143.54	146.04	147.54	149.04
	34.54	142.54	149.11	150.11	152.61	154.11	155.61
	36.11	149.11	155.68	156.68	159.18	160.68	162.18
	37.68	155.68	162.25	163.25	165.75	167.25	168.75
	39.25	162.25	168.82	169.82	172.32	173.82	175.32
	40.82	168.82	175.39	176.39	178.89	180.39	181.89
	42.39	175.39	181.96	182.96	185.46	186.96	188.46
	43.96	181.96	188.53	189.53	192.03	193.53	195.03
	45.53	188.53	195.10	196.10	198.60	200.10	201.60
	47.10	195.10	201.67	202.67	205.17	206.67	208.17
	48.67	201.67	208.24	209.24	211.74	213.24	214.74
	50.24	208.24	214.81	215.81	218.31	219.81	221.31
	51.81	214.81	221.38	222.38	224.88	226.38	227.88
	53.38	221.38	227.95	228.95	231.45	232.95	234.45
	54.95	227.95	234.52	235.52	238.02	239.52	241.02
	56.52	234.52	241.09	242.09	244.59	246.09	247.59
	58.09	241.09	247.66	248.66	251.16	252.66	254.16
	59.66	247.66	254.23	255.23	257.73	259.23	260.73
	61.23	254.23	260.80	261.80	264.30	265.80	267.30
	62.80	260.80	267.37	268.37	270.87	272.37	273.87
	64.37	267.37	273.94	274.94	277.44	278.94	280.44
	65.94	273.94	280.51	281.51	284.01	285.51	287.01
	67.51	280.51	287.08	288.08	290.58	292.08	293.58
	69.08	287.08	293.65	294.65	297.15	298.65	300.15
	70.65	293.65	300.22	301.22	303.72	305.22	306.72
	72.22	300.22	306.79	307.79	310.29	311.79	313.29
	73.79	306.79	313.36	314.36	316.86	318.36	319.86
	75.36	313.36	319.93	320.93	323.43	324.93	326.43
	76.93	319.93	326.50	327.50	330.00	331.50	333.00
	78.50	326.50	333.07	334.07	336.57	338.07	339.57
	80.07	333.07	339.64	340.64	343.14	344.64	346.14
	81.64	339.64	346.21	347.21	349.71	351.21	352.71
	83.21	346.21	352.78	353.78	356.28	357.78	359.28
	84.78	352.78	359.35	360.35	362.85	364.35	365.85
	86.35	359.35	365.92	366.92	369.42	370.92	372.42
	87.92	365.92	372.49	373.49	375.99	377.49	378.99
	89.49	372.49	379.06	380.06	382.56	384.06	385.56
	91.06	379.06	385.63	386.63	389.13	390.63	392.13
	92.63	385.63	392.20	393.20	395.70	397.20	398.70
	94.20	392.20	398.77	399.77	402.27	403.77	405.27
	95.77	398.77	405.34	406.34	408.84	410.34	411.84
	97.34	405.34	411.91	412.91	415.34	416.84	418.34
	98.91	411.91	418.48	419.48	421.98	423.48	424.98
	100.48	418.48	425.05	426.05	428.55	430.05	431.55
	102.05	425.05	431.62	432.62	435.12	436.62	438.12
	103.62	431.62	438.19	439.19	441.69	443.19	444.69
	105.19	438.19	444.76	445.76	448.26	449.76	451.26
	106.76	444.76	451.33	452.33	454.83	456.33	457.83
	108.33	451.33	457.90	458.90	461.40	462.90	464.40
	109.90	457.90	464.47	465.47	467.97	469.47	470.97
	111.47	464.47	471.04	472.04	474.54	476.04	477.54
	113.04	471.04	477.61	478.61	481.14	482.64	484.14
	114.61	477.61	484.18	485.18	487.68	489.18	490.68
	116.18	484.18	490.75	491.75	494.25	495.75	497.25
	117.75	490.75	497.32	498.32	500.82	502.32	503.82
	119.32	497.32	503.89	504.89	507.42	508.92	510.42
	120.89	503.89	510.46	511.46	513.96	515.46	516.96
	122.46	510.46	517.03	518.03	520.56	522.06	523.56
	124.03	517.03	523.60	524.60	527.16	528.66	530.16
	125.60	523.60	530.17	531.17	533.76	535.26	536.76
	127.17	530.17	536.74	537.74	540.36	541.86	543.36
	128.74	536.74	543.31	544.31	546.96	548.46	549.96
	130.31	543.31	549.88	550.88	553.56	555.06	556.56
	131.88	549.88	556.45	557.45	560.16	561.66	563.16
	133.45	556.45	563.02	564.02	566.80	568.30	569.80
	135.02	563.02	569.59	570.59	573.36	574.86	576.36
	136.59	569.59	576.16	577.16	580.00	581.50	583.00
	138.16	576.16	582.73	583.73	586.72	588.22	589.72
	139.73	582.73	589.30	590.30	593.84	595.34	596.84
	141.30	589.30	595.87	596.87	600.52	602.02	603.52
	142.87	595.87	602.44	603.44	607.28	608.78	610.28
	144.44	602.44	609.01	610.01	614.08	615.58	617.08
	146.01	609.01	615.58	616.58	620.92	622.42	623.92
	147.58	615.58	622.15	623.15	627.80	629.30	630.80
	149.15	622.15	628.72	629.72	634.80	636.30	637.80
	150.72	628.72	635.29	636.29	641.92	643.42	644.92
	152.29	635.29	641.86	642.86	649.16	650.66	652.16
	153.86	641.86	648.43	649.43	656.52	658.02	659.52
	155.43	648.43	655.00	656.00	664.00	665.50	667.00
	157.00	655.00	661.57	662.57	671.60	673.10	674.60
	158.57	661.57	668.14	669.14	679.36	680.86	682.36
	160.14	668.14	674.71	675.71	687.36	688.86	690.36
	161.71	674.71	681.28	682.28	695.52	697.02	698.52
	163.28	681.28	687.85	688.85	703.92	705.42	706.92
	164.85	687.85	694.42	695.42	712.56	714.06	715.56
	166.42	694.42	701.00	702.00	721.44	722.94	724.44
	167.99	701.00	707.57	708.57	730.56	732.06	733.56
	169.56	707.57	714.14	715.14	740.00	741.50	743.00
	171.13	714.14	720.71	721.71	750.00	751.50	753.00
	172.70	720.71	727.28	728.28	760.56	762.06	763.56
	174.27	727.28	733.85	734.85	771.60	773.10	774.60
	175.84	733.85	740.42	741.42	783.20	784.70	786.20
	177.41	740.42	747.00	748.00	795.44	796.94	798.44
	178.98	747.00	753.57	754.57	808.32	809.82	811.32
	180.55	753.57	760.14	761.14	821.84	823.34	824.84
	182.12	760.14	766.71	767.71	836.00	837.50	839.00
	183.69	766.71	773.28	774.28	850.80	852.30	853.80
	185.26	773.28	779.85	780.85	866.32	867.82	869.32
	186.83	779.85	786.42	787.42	882.56	884.06	885.56
	188.40	786.42	793.00	794.00	899.52	901.02	902.52
	190.00	793.00	799.57	800.57	917.20	918.70	920.20
	191.57	799.57	806.14	807.14	935.60	937.10	938.60
	193.14	806.14	812.71	813.71	954.72	956.22	957.72
	194.71	812.71	819.28	820.28	974.56	976.06	977.56
	196.28	819.28	825				

Pair of 33rd St

871.87  
311.45

Opas

31k P.C. 31206 1850

1853 1910 Brk PC

Thor 7

Paved

St

Pairing Felton St  
PC 31k 312.000 214°

0 Br Brk PC

975.21

2092.191 Ench.

Thor 0

Paved

1690 1630

1830 217.03 Brk

31k

313.01

31295 1840

1202

1202

1202

1202

Redwood

1310 1160  
1202 1140

186 12.99

Brk 3074 0 840

3074 0 650

3074 0 520

840 309.01 Brk

650 307.10

530 306.03

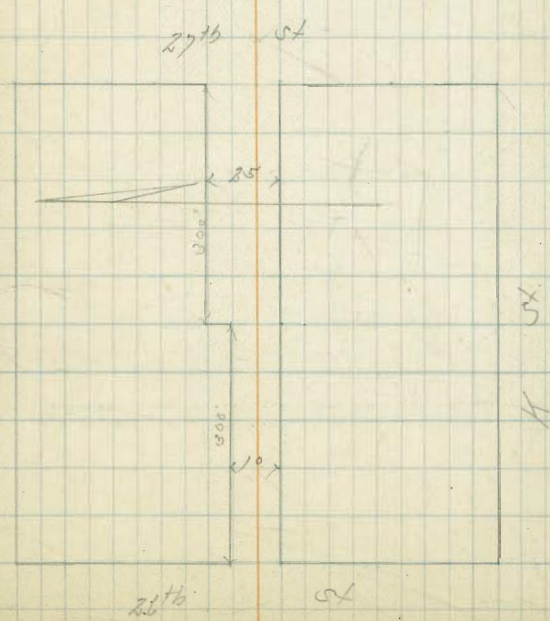
Palm

3300  
3300

Paving Alley Back of Great Hill

63  
9-1-56  
S. 5500  
Bills  
Northman

Sta	HL	SL	BM	Dist	Angle	Dist	Angle	Dist	Angle	Dist	Angle	Dist	Angle
EL 26	107.37	105.76	87.86	73.7	15.41	21.74	15.14	11.44	17.27	19.50	22.13	24.64	26.20
30 E	109.11	108.00	108.00		3.50	3.61	6.00	5.20	3.77	3.88	3.01	3.64	3.99
55 E	112.12	112.07	112.07		1.50	1.61	2.00	1.80	1.57	1.68	1.56	1.72	1.83
90 E	115.14	115.13	115.13		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
110 E	116.44	116.44	116.44		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
125	117.97	117.97	117.97		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
180	119.50	119.50	119.50		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
220	120.07	120.07	120.07		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
260	120.64	120.64	120.64		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
300	121.20	121.20	121.20		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
350	121.68	121.68	121.68		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
400	120.56	120.16	120.16		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
440	120.15	119.75	119.75		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
480	119.40	119.00	119.00		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
520	118.65	118.25	118.25		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
560	117.90	117.50	117.50		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
580	117.60	116.61	116.61		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53
600	116.90	116.80	116.80		1.50	1.60	1.51	1.41	1.27	1.38	1.26	1.42	1.53









Grades on 31<sup>st</sup> St.

8-22-21  
S. 31<sup>st</sup> St.  
Market St.  
Rise

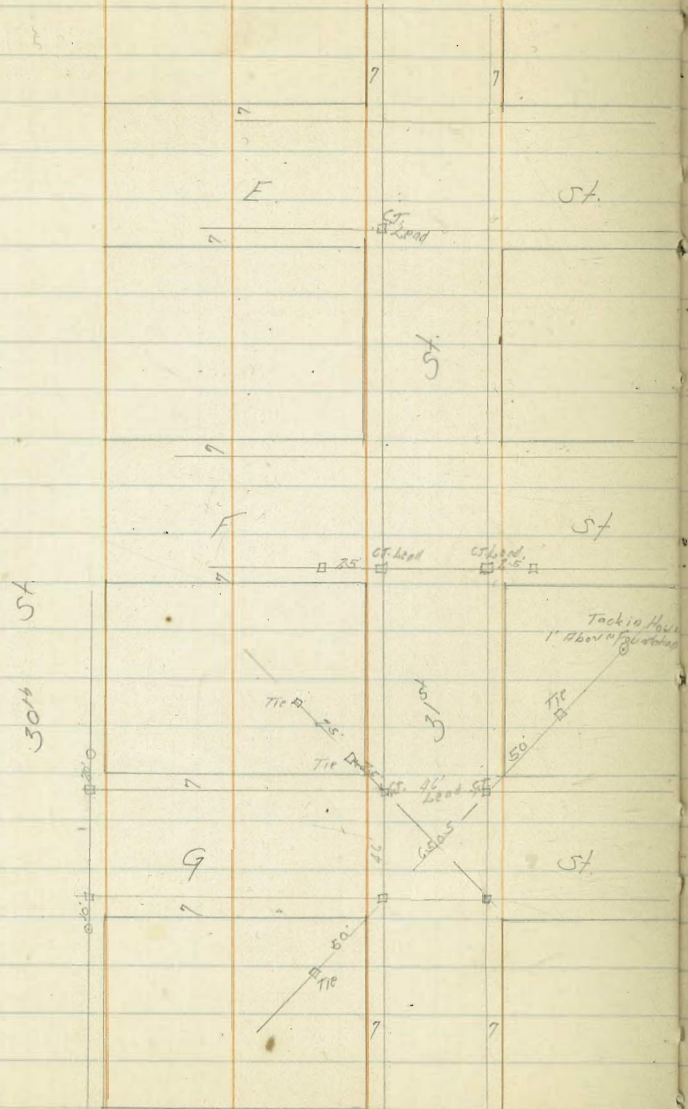
	N	F	9M	10081 10.25 152.76	NET 91.21
N. Market St.	104.25	103.25			
50'H	106.75	106.10		139.21 12.56	
100'H	109.25	108.25		12.22 128.66 0.50	
140'H = FVC	111.25	111.25		127.42 72.71	
180'H	114.34	113.38		116.71 3.62	
220'H = FVC	120.02	119.17		112.73 12.12	
265'H	127.63	126.96		107.11 19.31 108.25	
310'H = SLG	135.25	134.75		102.77	SHMM Market St. 12.61
NLG St	136.25	135.75			
50'H = FVC	141.25	140.52			
90'H	144.65	143.78			
130'H = FVC	146.25	145.88			
170'H = FVC	147.85	146.85			
220	148.25	147.35			
270	148.85	147.85			
310 = S.L.F. St.	149.25	148.25			
N.L.F. St.	151.25	150.25			
40'H	156.25	155.25			
80'H	164.25	160.25			
120'H	166.25	165.25			
160'H = FVC	171.25	170.25			
200'H	175.30	174.30			
240'H = FVC	177.45	176.45			
270'H	178.25	177.25			
300'H = S.L.F. St.	179.25	178.25			

E	107.45 103.25 5.2 4.2 +0.7	106.10 13.6 12.7 +0.9	108.25 10.8 12.8 -2.0	10.25 17.25 7.5 10.8 +3.8 8.5 -2.8	19.72 10.37 6.3 9.2 -1.1	15.17 10.2 7.5 +0.5	29.42 21.91 7.5 7.8	34.25
N	109.25 2.5 2.5 +0.5	106.75 13.8 12.9 +0.9	109.25 10.8 10.9 -0.7	11.25 7.5 8.2 -0.7	14.34 5.4 8.3 -2.9	20.07 9.1 12.6 -2.8	27.63 1.8 3.2 7.2	35.25
E	135.75 12.9 17.6 +0.7	135.25 9.1 9.1 -0.5	137.8 7.0 7.3 -0.3	45.88 7.0 6.6 -0.6	11.85 6.5 8.5 -2.5	17.35 5.5 7.5 -1.9	17.85 6.0 2.3 -1.3	18.25 2.1 5.2 -0.6
N	136.25 57.81 16.6 +0.1	136.25 8.6 8.7 +0.1	141.5 6.9 6.7 +0.3	17.85 5.6 7.5 +3.7	17.85 4.5 4.5 +0.5	48.35 4.2 4.7 +0.5	48.85 3.4 3.8 +0.8	49.25
E	165.09 150.25 14.8 15.9 -0.9	155.25 9.8 9.1 +0.7	160.25 7.8 7.4 +0.7	77.66 15.25 12.4 13.7	70.25 7.1 8.0 +0.7	74.30 3.4 4.2 +0.6	80.82 7.45 7.8 +0.6	77.25 6.5 6.7 +0.7
N	151.25 13.8 13.1 +0.7	151.25 8.8 8.3 +0.5	161.25 7.2 7.0 +0.2	77.66 7.2 7.2 +0.5	71.75 6.8 6.8 +0.8	75.26 2.4 2.5 -0.1	77.25 0.5 0.2 -0.5	78.35 5.5 5.5 0.0

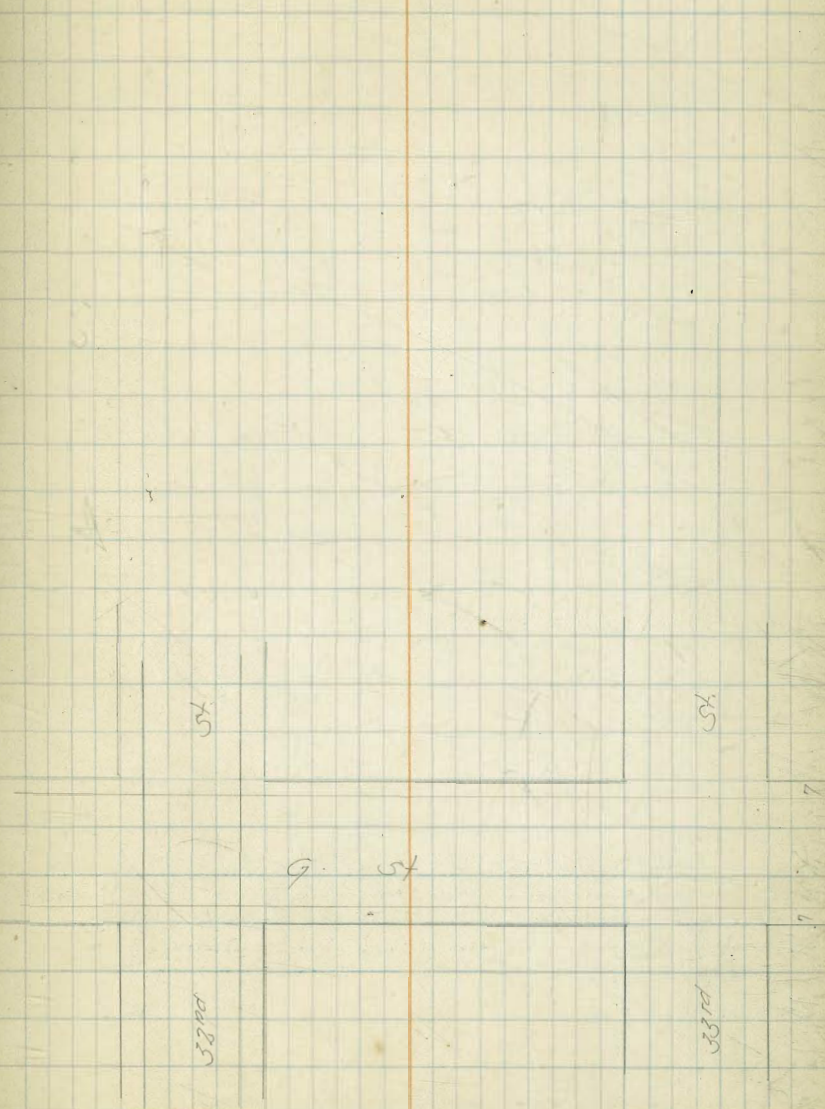
9-25-21

0.00

Ties on G St And 31<sup>st</sup> St.

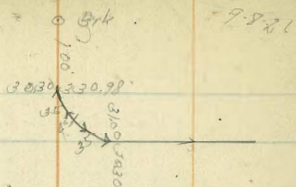


Market



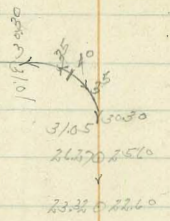
Market

Paris Louisiana St.



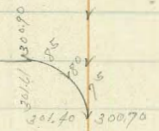
Howard

St.



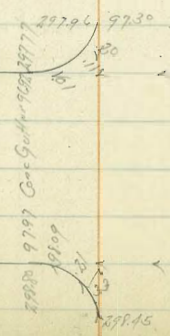
Polk

St.



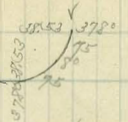
Lincoln

St.



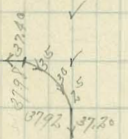
Paris Louisiana St.

9-16-51



Monroe

St.



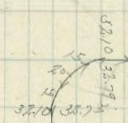
Meade

St.



Et Capin

St.



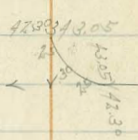
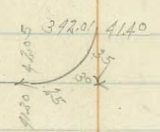
Paving Louisiana St

Adams

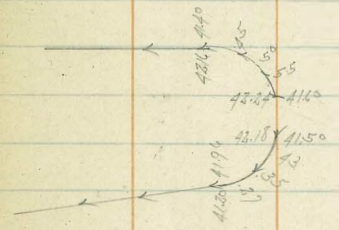
Ave

Parad

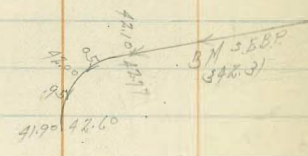
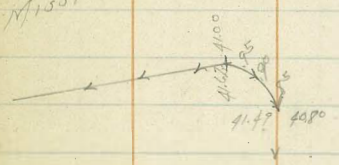
S. L. Adams



Madison Ave.



Mission Ave.



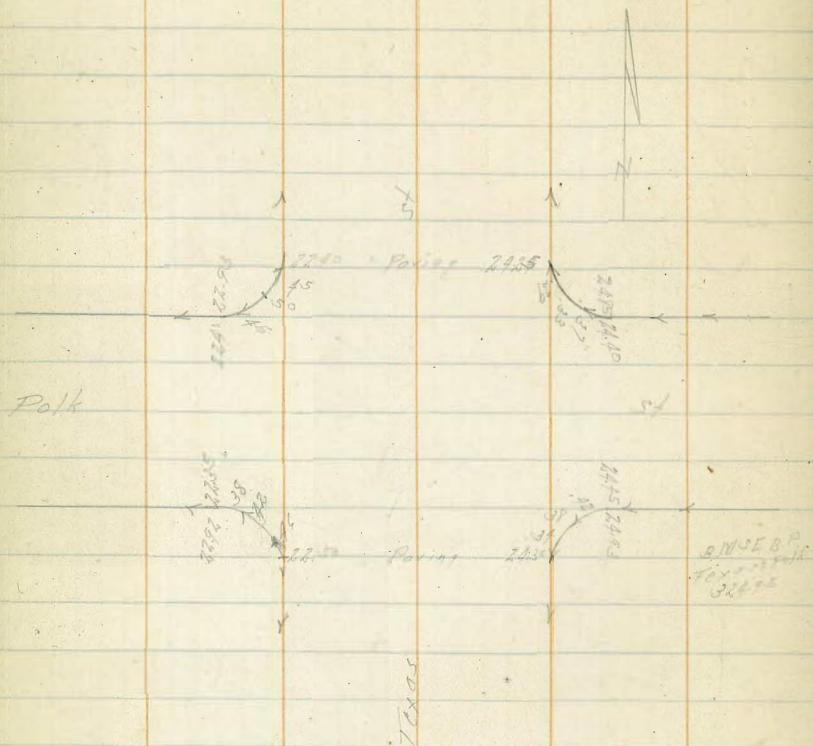
BM 5588  
322.31

Paris, Intersession Texas + Polk

8-6-26

Paris Alabama  
From Univ. of Polk

69  
8-6-26

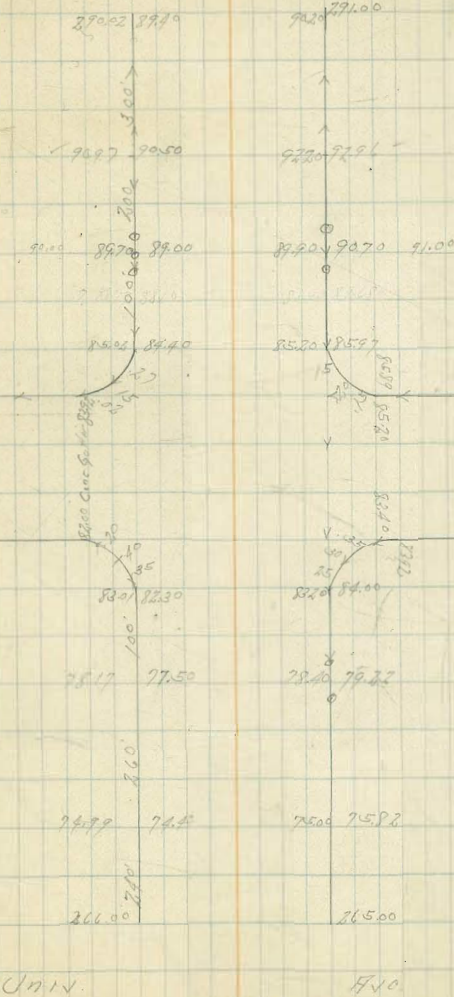


Polk

Lincoln

Polk

Ala



BWNN  
20596

Univ.

Ala





Baring Alley Block H Chain Hgts  
 From Adams to Collier Between Utah & Kansas

71  
 81.1

	N		E										
			389.04										
			393.08										
N.L. Adams	387.40	Par 109	27.70		W	82.10	88.05	88.19	89.33	89.70	89.91	90.17	90.23
50' N	88.05		88.25			6.07	6.07	5.88	6.71	4.97	4.87	4.19	4.18
100' N	88.69		88.81			6.02	6.02	5.38	6.13	4.82	4.82	4.19	4.18
150' N	89.33		89.36			6.01	6.01	5.38	6.13	4.82	4.82	4.19	4.18
180' N	89.70	o Break	389.20			6.01	6.01	5.38	6.13	4.82	4.82	4.19	4.18
230' N	89.91		89.89			6.01	6.01	5.38	6.13	4.82	4.82	4.19	4.18
280' N	90.12		90.08		W	90.54	90.75	90.86	91.17	91.31		90.08	90.23
330' N	90.33		90.28			3.71	3.70	3.47	4.37	3.21		1.50	1.17
380' N	90.54		90.47			3.71	3.70	3.47	4.37	3.21		1.50	1.17
430' N	90.75		90.67			3.71	3.70	3.47	4.37	3.21		1.50	1.17
480' N	90.96		90.87		E	90.47	90.67	90.87	91.07	91.20		90.08	90.23
530' N	91.17		91.07			3.71	3.70	3.47	4.37	3.21		1.50	1.17
560' N	91.38	o Break	391.36			3.71	3.70	3.47	4.37	3.21		1.50	1.17
600' N	91.59	o Collier	390.02			3.71	3.70	3.47	4.37	3.21		1.50	1.17

Paving Alley Back L. Univ. Hqts.  
 From Collier to Copley Between Hobt Kansas

76  
 8-10-26

	W	E	MM								
			391.55 Collier								
			5.15								
			396.70								
11 Collier	390.90	390.80	392.77	W	390.90	91.20	91.50	91.55	92.10	92.40	92.15 Paving
50'H	91.20	91.10	396.55		5.15	5.05	5.15	4.75	4.45	4.15	
100'H	91.50	91.40			4.25	4.25	4.57	4.55	4.57	4.57	
150'H	91.80	91.70			4.00	4.00	4.17	4.10	4.10	4.10	
200'H	92.10	92.00		E	390.80	91.10	91.40	91.70	92.00	92.30	91.94
250'H	92.40	92.30			5.25	5.25	5.25	4.85	4.55	4.25	
289.9'H - S.L. Copley		391.94 Paving			4.25	4.25	4.77	4.25	4.25	4.25	
295.2'H - S.L. Copley	392.15 Paving				4.25	4.30	4.77	4.25	4.25	4.25	

Grades on Cerro Gordo Ave.

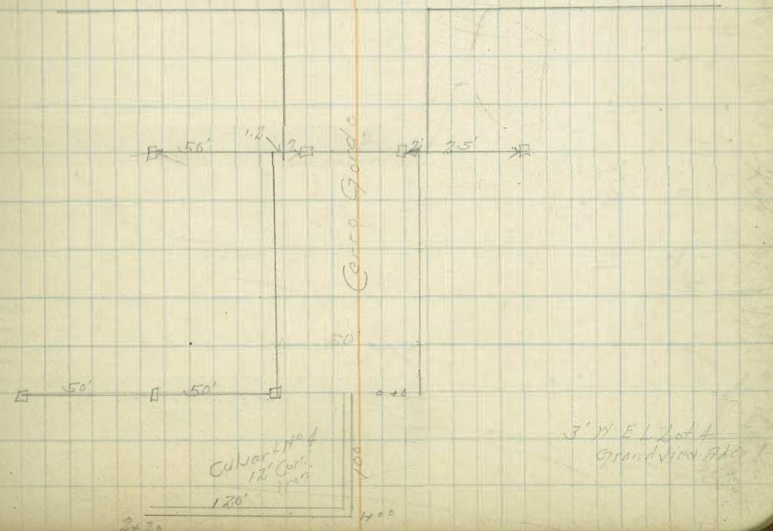
73  
8-2-26

	M	E									
5 L. Tract	183.25	182.25	180.01	182.25	85.65	86.30	86.15	86.14	86.23	85.21	
60 S 3	185.15	185.25									
80 0	186.30	186.00		182.25	85.25	86.07	86.57	86.60	86.97	85.21	
103 - 2	186.65	186.50									
120 0	186.64	186.60									
140 0 - 2' break	186.33	186.33		84.20	83.20	82.27	81.25	80.25			
190	185.31	185.21									
240	184.29	184.29									
290	83.25	183.25		82.6	81.67	80.67	79.20	78.20			
340	182.27	182.27									
390	181.25	181.25									
438.6	180.25	180.25									

Tract

179.38  
182.27

010	176.67	86.62	137.7
6450	73.23		
140	171.00	19.87	16.17
750	70.54	19.75	50.72
2406	70.13	11.16	12.10
420	170.00	11.16	12.10







Paving Alley Block 6 Watkins + Biddlas Field  
 From EL 21st 276' E Between Sanipart Hwy

NE corner  
 2017

	N	S										
EL 31' 1/2	284.25	284.25	287.00 287.00 287.00 287.00 287.00 287.00	N 284.25	15.22	15.20	16.25	16.20	16.15	16.15	16.00	16.00
30' E	285.30	285.30	287.75	✓	1.15	1.17	1.15	1.17	1.15	1.15	1.15	1.15
60' E	285.80	285.80	288.75	✓	1.05	1.07	1.05	1.07	1.05	1.05	1.05	1.05
100' E	286.05	286.05	289.75	S 284.25	15.22	15.20	16.25	16.20	16.15	16.15	16.00	16.00
140' E	286.30	286.30	290.75	✓	1.15	1.17	1.15	1.17	1.15	1.15	1.15	1.15
170' E	286.15	286.15	291.75		1.05	1.07	1.05	1.07	1.05	1.05	1.05	1.05
200' E	286.00	286.00	292.75	N 284.25	15.22	15.20	16.25	16.20	16.15	16.15	16.00	16.00
250' E	285.00	285.00	293.75	✓	1.15	1.17	1.15	1.17	1.15	1.15	1.15	1.15
300' E	286.00	286.00	294.75		1.05	1.07	1.05	1.07	1.05	1.05	1.05	1.05
350' E	286.00	286.00	295.75		1.05	1.07	1.05	1.07	1.05	1.05	1.05	1.05
370' E	287.00	287.00	296.75		1.05	1.07	1.05	1.07	1.05	1.05	1.05	1.05

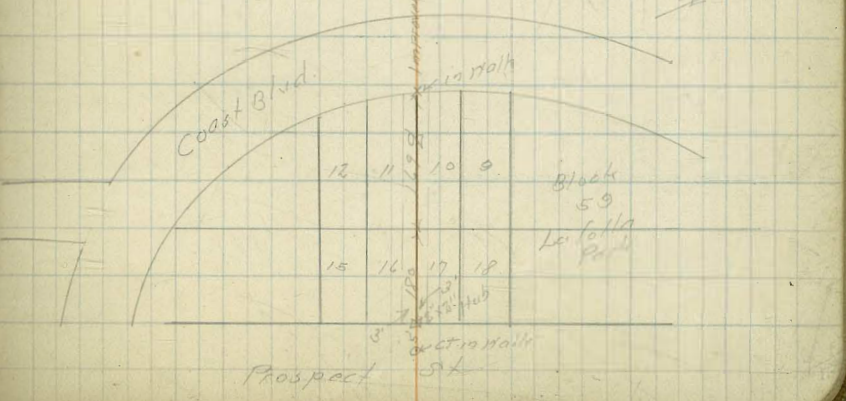
Grades of Lane in Block 59 Lejolla Park  
From Prospect to Coast Blvd

77  
1-20-26  
5,135.7  
8,135  
piece

SW  
Prospect  
+ Woods

0+0 - N/L Prospect	126.60	105.00
+25	100.30	104.00
+50 Break	99.00	102.75
+80 Break	95.00	101.60
+100	91.34	100.30
+81 Break	87.50	99.00
+86 Top Step No 1	87.50	97.20
+94 Bottom Step No 1	78.00	95.00
+50 Top Step No 2	77.50	93.20
+59 Bottom Step No 2	72.50	91.34
+67 Top Step No 3	72.00	89.50
+80 Bottom Step No 3	65.00	87.50
+96 Top Step No 4	64.00	85.00
2+13 Bottom Step No 4	55.00	82.50
+27 Top Step No 5	54.00	80.00
+33 Bottom Step No 5	50.50	77.50
+59 Top Step No 6	48.00	75.00
+68 Bottom Step No 6	43.00	72.00
+97 Break	42.13	70.00
3+07 Break	41.93	67.50
+14 Top Step No 7	39.50	65.00
+49 - SE L Coast Blvd	36.50	62.50

106.00	106.00	106.00	106.00	73.43	73.43	73.43	73.43	80.00
101.60	100.30	99.00	97.20	71.34	71.34	71.34	71.34	75.00
99.00	97.20	95.00	93.20	69.00	69.00	69.00	69.00	70.00
95.00	93.20	91.34	89.50	66.93	66.93	66.93	66.93	65.00
91.34	89.50	87.50	85.00	64.87	64.87	64.87	64.87	62.50
87.50	85.00	82.50	80.00	62.80	62.80	62.80	62.80	60.00
87.50	85.00	82.50	80.00	60.74	60.74	60.74	60.74	57.50
80.00	77.50	75.00	72.00	58.67	58.67	58.67	58.67	55.00
78.00	75.00	72.00	69.00	56.60	56.60	56.60	56.60	52.50
77.50	75.00	72.00	69.00	54.54	54.54	54.54	54.54	50.00
72.50	70.00	67.50	65.00	52.47	52.47	52.47	52.47	47.50
72.00	70.00	67.50	65.00	50.41	50.41	50.41	50.41	45.00
65.00	62.50	60.00	57.50	48.34	48.34	48.34	48.34	42.50
64.00	62.50	60.00	57.50	46.28	46.28	46.28	46.28	40.00
55.00	52.50	50.00	47.50	44.21	44.21	44.21	44.21	37.50
54.00	52.50	50.00	47.50	42.15	42.15	42.15	42.15	35.00
48.00	45.50	43.00	40.50	40.08	40.08	40.08	40.08	32.50
43.00	40.50	38.00	35.50	38.02	38.02	38.02	38.02	30.00
42.13	40.50	38.00	35.50	35.95	35.95	35.95	35.95	27.50
41.93	40.50	38.00	35.50	33.89	33.89	33.89	33.89	25.00
39.50	37.00	34.50	32.00	31.82	31.82	31.82	31.82	22.50
36.50	34.00	31.50	29.00	29.76	29.76	29.76	29.76	20.00









Paving Dockman Ave.

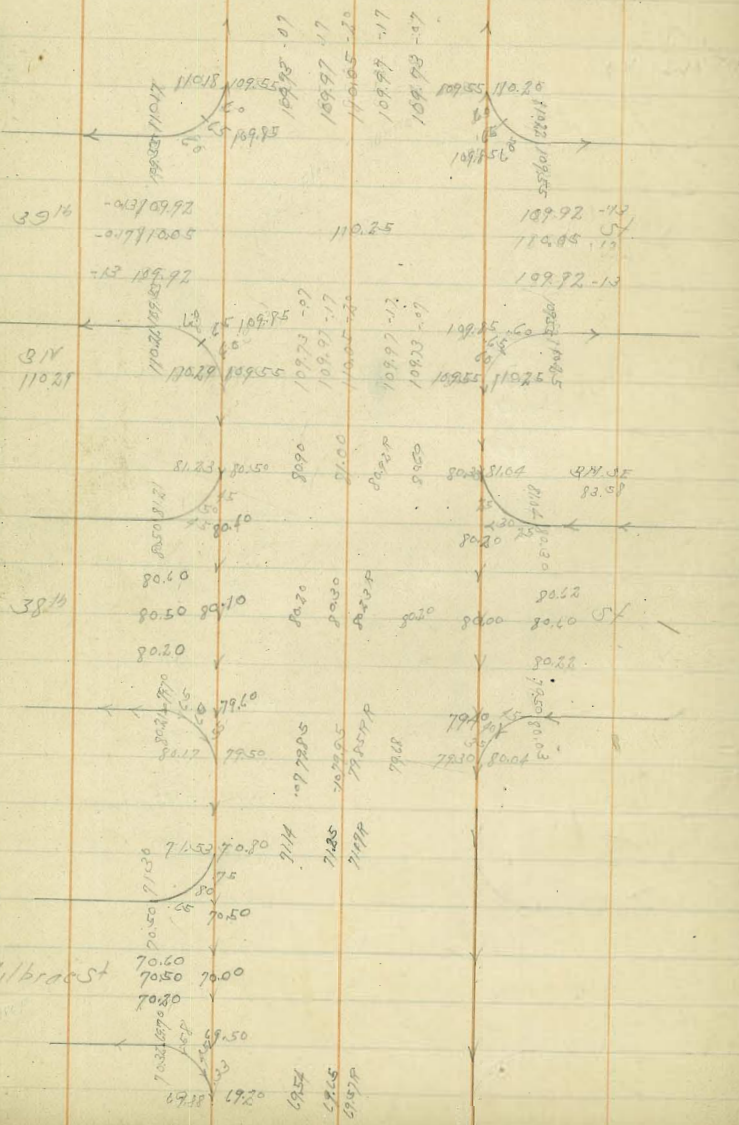
8-13-26

BM 5N 144

117

40<sup>th</sup> 41<sup>st</sup> 42<sup>nd</sup> 43<sup>rd</sup> 44<sup>th</sup> 45<sup>th</sup> 46<sup>th</sup> 47<sup>th</sup> 48<sup>th</sup> 49<sup>th</sup> 50<sup>th</sup> 51<sup>st</sup> 52<sup>nd</sup> 53<sup>rd</sup> 54<sup>th</sup> 55<sup>th</sup> 56<sup>th</sup> 57<sup>th</sup> 58<sup>th</sup> 59<sup>th</sup> 60<sup>th</sup> 61<sup>st</sup> 62<sup>nd</sup> 63<sup>rd</sup> 64<sup>th</sup> 65<sup>th</sup> 66<sup>th</sup> 67<sup>th</sup> 68<sup>th</sup> 69<sup>th</sup> 70<sup>th</sup> 71<sup>st</sup> 72<sup>nd</sup> 73<sup>rd</sup> 74<sup>th</sup> 75<sup>th</sup> 76<sup>th</sup> 77<sup>th</sup> 78<sup>th</sup> 79<sup>th</sup> 80<sup>th</sup> 81<sup>st</sup> 82<sup>nd</sup> 83<sup>rd</sup> 84<sup>th</sup> 85<sup>th</sup> 86<sup>th</sup> 87<sup>th</sup> 88<sup>th</sup> 89<sup>th</sup> 90<sup>th</sup> 91<sup>st</sup> 92<sup>nd</sup> 93<sup>rd</sup> 94<sup>th</sup> 95<sup>th</sup> 96<sup>th</sup> 97<sup>th</sup> 98<sup>th</sup> 99<sup>th</sup> 100<sup>th</sup>

Break 71.01 90.81 90.57 90.32 89.97 89.52 88.97 88.32 87.57 86.72 85.77 84.72 83.57 82.32 80.97 79.52 77.97 76.32 74.57 72.72 70.77 68.72 66.57 64.32 61.97 59.52 56.97 54.32 51.57 48.72 45.77 42.52 38.97 35.32 31.57 27.72 23.77 19.52 15.97 11.32 6.57 1.72



DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 $\frac{1}{2}$  to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table is same row and column gives distance

from side stake to slope stake. If ground is not

## IMPROVED TABLES AND INFORMATION

TABLE No. 2.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections. Degree of curve with a given I may be found by dividing tangent (or external), opposite I by given tangent (or external). The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.

145  
265  
460

365.4  
357.95  
7.45

467.45 - 1.62  
46  
276  
90

305

1.62  
2.65  
810  
972  
324  
429.30  
357.95  
362.24