2' Topo

2

LEVEL BOOK

370

W89

Tables for Excavations and Embankments.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

INDEX

D to P

8/8/16

Grades for Flume

00	8.0
+50	
+75	
1+00	
+25	
+50	
+75	
2+00	
+25 =	Coffer Dam

Bob Motor
Dilley Insto

4x10

Correct Gr. taken on Top of Stringer
End of Flume at present

8.0	
7.85	
7.78	
7.7	
7.625	
7.550	
7.475	
7.400	
7.325	

E10 Coords Intersections

I 10	7143
I 11	6634
I 12	6533
I 13	6540
I 14	6721
I 15	6698
I 16	6712
I 17	6896
H 10	6794
H 11	6614
H 12	6572
H 15	6683
H 16	6754
G 10	6735
G 11	6615
G 12	6520
G 13	6552

P 15	6557	Q9 4'W
Q 10	6911	9343
Q 11	6606	
Q 12	6552	
Q 15	6556	
R 5	9985	
R 6	9839	
R 7	9176	
R 8	8257	
R 9	7173	
R 10	6613	
R 11	6598	Q10 – R11 ON Diagonal 10 NE – Q10 8064
R 12	6467	
R 13	6470	
R 14	6551	
R 15	6560	

Ele Coord intersections

G15	6680
G16	6699
F 10	7330
F 11	6585
F 12	6536
F 15	6692
F 16	6538
E 10	9007
E 11	7446
E 12	6509
E 13	6507
E 15	6676
E 16	6533
D 10	8639
D 11	7800
D 12	6509
D 15	6666
D 16	6598
C 10	8118
C 11	7071
C 12	6492
C 13	6510
C 15	6662
C 16	6668
B 10	7454
B 11	6669
B 12	6505
B 15	6636
B 16	6641
A 10	6987
A 11	6655
A 12	6508
A 13	6496
A 14	6599
A 15	6595
M 10	7929
M 11	6674
M 15	6570
N 10	8447
N 11	6654
N 12	6482
N 13	6489
N 15	6600
N 16	7499
N 17	39039
O 10	8959
O 11	7663
O 12	6475
O 15	6579
P 10	8703
P 11	6955
P 12	6518
P 13	6477

2'N = 8447

495 S = 9553

2' Topog for Excavation

Aug 4 1917

Bob – Notes
Dilley – Inst.
Fisher – Rod

H.I. = 4.95

72.07		A+I 16			67.1 ✓
68		263	25.4		✓
		295	23	48	67.3 ✓
		314	27.2	50	67.1 ✓
68		257.30	20.6		✓
68		250-30	20.2		✓
68		241-30	20.2		✓
68		240	19		✓
68		231-30	19		✓
68		214	21		✓
68		198	20.8		✓
68		182-30	22		✓
68		163	28.7		✓
68		158-30	23.1		✓
68		164-30	20.6		✓
68		199	13.7		✓
Point 68		227	12.6		✓
68		200	8.6		✓

Platted 17
Aug 4

H1

7207	At I16		67.12	
68	127-30	10.1	✓	
68	115°	20.8	✓	
68	113°	25.1	✓	
70	129°	159	✓	Ring Cont.
70	140	165	✓	" "
70	143-30	175	✓	" "
70	256	26.1	✓	
70	251	24.3	✓	
70	254	21.2	✓	
70	237-30	23.7	✓	
70	237-30	22.2	✓	
70	215	24.1	✓	
70	203-30	22.7	✓	
70	192	24.0	✓	
70	178-30	27	✓	
70	170	30	✓	
72	178-30	33		

platted Aug 4 1917

H.I			
72.07	At I 16		67.12
72	192-30	29	
72	212-30	27.3	
72	223-30	26.0	
72	229°	24.8	
72	232°	26.4	
72	236°	24.0	
72	240°	24.2	
72	239°	26.8	
72	248°	24.3	
72	256	26.5	
H.I. = 45° 78.79	At H 18		74.29
68	322	28.4	
68	338	23.5	
68	"	21	Point
68	340	18.5	
70	315-30	26.5	

Plotted Aug 4, 1917

78.79		At	H18	7429	
70		321	19.4		
70		328-30	14.7		
70		346.	15.6		
70		16 30	13.5		
70		40.	18.7		
70		46.	17.2		Point
70		25-30	25.2		
70		19-30.	26.6		
"		5°	26.7		
"		5°	34.7		
"		12-30	36.9		
"		23-30	39.2		
70		41	29.7		
"		39	36.7		
"		33-30	42		Point
"		40-30	43		
"		48	43.8		

Plotted
Avg 1/17

H.J.						
78.79		At	H 18		74.29	
72		50	43.3			
"		51-30	38.4			
"		48-30	37.8			
"		46	37			
"		45-30	31.3			
"		59-30	27.5			
"		62-30	22			
"		68	23.5			
"		121-30	23.7			
"		106	16			
"		72-30	15.3			
"		60	14.2			
"		26	11			
"		344-30	13.7			
"		310	12.8			
"		306-30	21			
"		305-30	29.2			

plotted.
8/J/17

	+	H.I	−	Elev.	
	10.78	382.8		371.30	B.M.
I 18.			5.20	376.88	✓
I 19			0.24	381.84	✓
H 18			7.82	374.26	✓
G 18.			7.48	374.60	✓
G 17			10.95	371.3	✓
H 17			12.93	369.15	✓
F 17	✓		3.5	378.58	✓
D	12.63	394.5	0.20	381.88	
E 17			9.24	385.27	✓
F 18			6.33	388.18	✓
E 18			2.31	392.20	✓
I 20			9.86	384.65	✓
I 21			6.51	388.00	✓
D	9.22	403.44	0.29	394.22	
I 22			8.27	395.17	✓
I 23			1.30	402.14	✓ ✓

Copied in #3

Ele

	+	H.I	−	ELEV		
		403.44				
			2.22	401.22		Check BM.
D 18	12.66	414.59	1.51	401.93	✓	
C. 18			2.48	412.11	✓	
			5.68	408.91	BM	Point on Steel.
T.P.	4.18	390.15		385.97	✓	E 17
D 17			11.02	379.13	✓	
T.P.	6.48	394.86	1.77	388.38		
B 17			2.78	392.08	✓	
T.P.	0.35	382.52	12.69	382.17		
C. 17			6.91	375.61	✓	
T.P.	3.76	373.91	12.37	370.15		
D 15-15' N.			4.68	69.23	✓	
C 15-18' N			5.19	68.72	✓	
A 15-8' N.			3.34	70.57	✓	
M 16			2.75	71.16	✓	
			7.93	65.98	✓	Check A 15. 65.95 ✓

File Copied in # 3

11.=45

78.79		At	#18		74.29
74		303	51		
74		300	48.5		
74		300	46.5		
74		297	44		
74		295-30	38.5		
74		295	27.6		
74		286.30	20.3		
74		286 30	15.6		
74		297	14.2		
74		287	8		
74		240-30	5		
74		209-30	6		
74		247-30	1.		
74		9	3.8		
74		100-30	5.3		
74		187	23.0		
74		148	26.5		

Platted
Aug 4 1917

H1.

78.79	H+H 18		74.29
74	158	28.8	
74	160-30	39.	
74	167	47.	
74	156	43.3	
74	144-30	38.6	
74	136	31.3	
74	123	24.5	
74	114-30	24.5	
74	108-30.	22	
74	90-30	24	
74	69	24.2	
74	63-30	21.8	
74	60	27	
74	60	28.5	
74	48	31.1	
74	49	34.6	
74	52	35.6	
74	50-30	37.8	

Platted
8/4/17

H1			
78.79	At H18		74.29
74	54-30	37.4	
74	53-30	43.7	
74	56-30	43.7	
H1 = 75.63	At G17		71.13
68	299	306	
68	318	20	
68	340	18.1	
68	9-30	17.9	
68	45°	18.5	
68	59°	18.7	
68	68°	27.5	
68	70°	38.8	
70	70 30	38.6	
70	68	27.7	
70	66	22.3	
70	59-30	17.6	

Plotted
Aug 4 17

HI=			
75.63	At G17		71.13
70	~~65-30~~	~~11.5~~	
70	64-30	11.5	
70	59	9.0	
72	67	19	
72	69	28.5	
72	72	38.1	
74	72-30	34.9	
74	69.30	25.4	
74	72-30	18.5	
74	77°	17.9	
74	81-30	12.3	
74	95	11.5	
HI=75.5			
79.1	At G18		74.60
76	181.30	40.3	
76	182-30	34.1	
76	179-30	31.3	

Plottool
8/4/17

H.I. = 791		At Sta 18		746
76		183-30	27.8	
76		180-30	26.1	
76		188	23.6	
76		194	14.7	
76		178	10.9	
76		153	6.9	
76		176	4.8	
76		133-30	4.0	
76		159	2.0	
76		76	3.5	
76		42-30	6.4	
76		46-30	7.8	
76		29-30	11.4	
76		23	14.5	
76		13	14.0	
76		9-30	15.7	
76		11-30	20.4	

Platted
8/4/17

H.I. - 79.1	A + G 15			
76	26°	24.7		
76	5-30	20.9	Ring Cont.	
76	358-30	19.4	" "	
76	00	14.0	" "	
76	357	10.	" "	
76	345-30	11.8	" "	
76	338-30	8.9	" "	
74	329	10.8		
74	340-30	8.8		Platted 8/4/17
74	353	6.0		
74	333	4.5		
78	350-30	9.7	Ring Co	
H.I. - 46.83.18	A + I = 17		78.58	
76	248-30	13		
76	273	11.9		
76	268-30	9.3		

HI - 83.8	At I = 17		78.58
76	263-	8.0	
76	286-30	9.0	
76	311	7.3	
76	80	7.7	
76	41-30	10~	
76	68-	6.3	
76	65-30	29.2	
76	67-30	47.5	
74	67	42.4	
74	63	28.6	
74	57	17.7	
74	63	11.0	
74	39	13.5~	
74	42	16~	
HI. = 44.5 83.03	At F 17		78.58
7~	51-30	13.7	~
7~	57-30	14.0	~

Platted 8/4/17

Aug 4 1917

H1.											
8303		A+F 17		7858					8/6/17		
72		56-30	20.5		✓						
72		62	38.8		✓						
72		66-30	42		✓						
70		64	42.7		✓						
70		62-30	37.2		✓						
70		63-30	30.2		✓						
70		57-30	24.2		✓						
70		54	17.0		✓						
70		42	17.5		✓						
78		72	42.7								
78		72 30	37.2								
78		70	33.4								
78		67-30	28.								
78		71	18.								
78		83	10.8								
78		76.	10.0								
78		165-30	15								

14					
8303		H+F17		7858	8/6/17
78	244-30	4.6	✓	Ring Court	
78	260-	7.5	✓	" "	
78	292	6.8	✓	✓" "	
78	352-30	5.0	✓	" "	
78	359	3.8	✓	" "	
78	33	6.3	✓		
78	45-30	6.8	✓		
78	83-30	12.7	✓		
78	218	15.	✓		
78	223	16.2	✓		Plotted
78	230	16	✓		8/6/17
78	233-30	19	✓		
78	238.	20	✓		
78	238-30	21.2	✓		
78	226.	27			
78	227-30	22.7			

H.1					
83.03		17	F17	7858	
78		235-30	198	✓	Ring Cont.
78		240.	22	✓	" "
78		242-30	212	✓	" "
78		237-30	185	✓	" "
78		220-30	248	✓	
78		221-30	28	✓	
78		217	27.6	✓	
78		219	30.5	✓	
78		216.	30.	✓	
78		222	36.	✓	Plotted
80		213	31	✓	5/6/17
80		215	29	✓	
80		211-30	246	✓	
80		205-30	212	✓	
80		202-30	18.6	✓	
8		216-30	13.8	✓	
8		219-30	234	✓	Ring Cont.

8303	At F17		7858
80	221	24.1	
80	219	27.0	
80	212-30	24.7	
80	220	19.4	
80	221	11.7	
80	197-30	7.0	
80	198	5.6	
80	93	8.0	
80	102	8.0	
88	76	18.2	
80	70	28.2	
80	73-30	28.2	
80	78-30	32.2	
80	76	33.	
80	75	34.	
80	78	35.7	
80	75-30	43.0	

Ring Cont. ✓
" " ✓
" " ✓
" " ✓
" " ✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓
✓

Plotted
8/6/17

8303		At F17	7858	8/6/17
82		72-30	27.3	
82		75-30	23.6	
82		80	23.6	
82		139	7.5	
82		120-30	6.1	
82		187	8.3	
82		215-30	14.0	
H.I = 4.55 9273		At F18	8818	
80		258	19.6	
80		253	23	Plotted 8/6/17
80		248-30	21.1	
80		239	2	
80		240-30	24.9	
80		233-30	25.7	
80		233	28	
80		228	30.6	
80		226	32.6	

14 = +5			
92.73	At F.8		88.8
80	224	34.4	
80	225	35.5	
80	221	34.6	
80	219	34.8	
80	221	37.3	
80	218	39.2	
80	215-30	37.3	
80	214	37.1	
80	214-30	40.6	
80	212-30	41.5	
80	213	46.5	
80	212	48.8	
82	212	45.3	
82	210-30	41.9	
82	212-30	40.4	
82	213-30	39.2	
82	212-30	37.5	

Plotted
8/6/17

H.I.=

9273 AA F18 8818

82	214-30	36.6
82	213-30	35.6
82	216-30	33.2
82	218.	33.2
82	224	31.6
82	228	29.0
82	234-30.	23.5
82	240-30.	19.0
82	250	17.5
82	251-30	14.2
82	259-30	13.2
82	274-30.	16.4
82	279-30.	14.2
82	298.	10.1
82	277-30	7.2
82	285-30	6.8
82	323-	12.3
82	330	12.3

Platted
8/6/17

9273	AT=18	8818
82	328-30	15-4
82	38-30	42
82	42-30	41
82	44	446
82	49	43-4
82	52	50
84	53-30	455
84	49	42-4
84	44-30.	38-4
84	42	402
84	38-30.	328
84	35	26.0
84	17	23
84	9-30	17
84	350.	142
84	335	13.0
84	333-30	11 0.

8/6/17

Platted
8/6/17

9273 at F18 888 8/6/17

84	322	11.4	✓
84	305-30	7.0	✓
84	250-30	5.5	✓
84	250-30	6.5	✓
84	288	8.5	✓
84	284-30	10.5	✓
84	278-30	10.9	✓
84	254	12.0	✓
84	226-30	12.5	✓
84	231	16.0	✓
84	239	19.6	✓
84	238°	23.9	✓
84	227-30	25.)	✓
84	219	26.5	✓
84	220	28.9	✓
84	216-30	31	✓
84	213	3/3	✓

Plotted 8/6/17

9:73		AF 18	8818	
84		211-30	34	✓
84		210	36.1	✓
84		212-30	39.8	✓
84		208-30	41.3	✓
84		210.0	44.5	✓
86		202-30	46.5	✓
86		203-30	42	✓
86		204-30	41	✓
86		204-30	39	✓
86		207-30	39.7	✓
86		205	36.7	✓
86		206-30	36.0	✓
86		206	34	✓

Plotted
8/6/17

H1

92.73		Ft Fl 8		8818	
86		210-30	29.4	✓	
86		215	28	✓	
86		220	25	✓	
86		223-30	24.5	✓	
86		223	20.8	✓	
86		226	19.8	✓	
86		220	17.7	✓	
86		218-30	15	✓	
86		212-36	11.9	✓	
86		229	9.2	✓	
86		214	8.9	✓	Plotted 8/6/17
86		225	6.9	✓	
86		233	4.3	✓	
86		268-30	2.0	✓	
86		278-20	4.4	✓	
86		301-30	6.2	✓	
86		333	6.5	✓	

H1.

9273		AT=18		8818	
86		331	90		
86		353	10.5		
86		12-30	12.6		
86		19°	16.2		
86		31	20.		
86		40-30	27.3		
86		42	29.2		
86		45-30	34.4		
86		53-30	35.7		
86		58-30	34.9		
86		63-30	38.0		
86		67-30	38.2		
86		68-30	40.6		
88		70	41		
88		72-30	35.9		
88		71-30	34.0		
88		67-30	34.1		

Plotted
8/6/17

M1

9273		At F18		88.8
88		62	30.7	
88		46	29.8	
88		42-30	23.8	
88		3/-30	12.8	
88		1	7.7	
88		14	4.6	
88		321-30	1.5	
88		206	15	
88		171-30	7.4	
88		193	9.1	
88		200	10.6	
88		199-30	13.0	
88		205-30	12.	
88		210-30	13.3	
88		203	14.8	
88		207	15.7	
88		199-30	18.9	

Plotted 8/6/47

H1

9273		19+	F18	8818	
88		199.30	22?		~
88		196-30	24?		~
88		200	31		~
88		203-30	32.6		~
88		200	34.4		~
88		201	36.3		~
88		201	39.7		~
88		201-30	42.7		
88		200	45?		
90		195	42.6		
90		192-30	40		
90		193	36.5		
90		192	33.8		
90		192-30	34.7		Ring Cont
90		196-30	34.8		"
90		194-30	32.7		"
90		192-30	30.6		

Platted
8/6/17

9273		17+F18	8818	
90		191	28.4	✓
90		187	26.3	✓
90		188	24.3	✓
90		181-30	23.4	✓
90		183	19.8	✓
90		178	16.7	✓
90		164	11.6	✓
90		164-30	16.3	✓
90		142-30	9.0	✓
90		138-	5.5	✓
90		116.	4.6	✓
90		70.	9.7	✓
90		45.	16.5	✓
90		48-30	23.5	✓
90		61	19.9	✓
90		63	25.6	✓
90		7	32.1	✓

Platted
8/6/17

92.73		At F18		8818
90		76.30	34.3	
90		74	37.1	
90		71-30	41.5	
H' = 4.9 97.1		At E18		92.2
92		49.30	20.3	
92		48.	17	
92		60.	12.2	
92		43	8.0	
92		278.	1.0	
92		245	8.0	
92		231	14.3	
92		226	20	
92		231	20.5	
92		235	24.3	
92		223-30	29.5	
92		227	31	
92		225-30	34.	

Plotted 8/6/17

H.I. = 4.9

97.1		ATE 18	92.7	
92		221-30	34.8	✓
92		220, 20	39.5	✓
92		221-30	43.7	✓
92		221-30	44.6	✓
92		218	47.5	✓
92		218	50	✓
92		217	55.5	✓
94		214-30	50	✓
96		215	45.2	✓ Rig Cart
96		219	44.5	✓ " "
96		218	41.7	" "
96		214-30	41.3	
96		215	37.7	
96		214-30	32.0	
94		215	34.6	Rig Cart
96		219-30	32.3	" " Boulder
94		221	36.3	" "

Plotted 8/6/17

H.I.=					
97.1		AHEB		92.2	
94		217-30	38.4		Rwig Cut. Boulder.
94		214-30	26.8		✓
94		216	22.8		✓
94		215-30	15.5		✓
94		217	11.8		✓
94		222-30	6.6		✓
94		69	6.6		✓
94		60-30	12		✓
94		51	12.2		✓
94		48-30	16.7		✓
94		51-30	19.4		✓ Plotted
94		56	18.5		✓ 8/6/17
94		58-30	19.5		✓
94		62	17.1		✓
94		59	22.8		✓
94		64	32		✓
96		61	31.5		✓

97.1		A+E 18	92	
96		62	23.7	
96		67	22.9	
96		62	13.8	
96.		119-30	5.0	
96.		141-30	6.8	
96		180	7.6	
96		197-30	11.2	
96		205	12.7	
96		202	17.0	
96		206	20.2	
96		204	26.5	
96		206	32.1	
96		206-30	37.0	
96		205	40.7	
96		206	43.1	
96				

Plotted
8/6/17

H.I. = 50.0

90.32	E 17		8527
90		112	26
92		113-30	27
90		106-30	30.4
92		108-30	30.4
90			
92		108-	34.8
96			
88		106-30	36.8
88		105	32.7
88		102-30	32.3
86		106-30	37
86		100-30	35.2
86		101	30.3
84		105	38.6
84		95	37.2
84		98	31.2
84		124	16.8
84		111	11.1
84		80-30	11.1

Plotted 8/6/17

H.I. –

90.82	Ft. E17		85.27
82		66-30	16
82		81-30	17
82		89-30	15.1
82		87	17.8
82		117	17.8
82		99	21.8
82		91	37.4
82		93-30	40.7
82		104-30	40.7
80		99-30	44
80		91	43
80		89-30	37.1
80		89-30	32.5
80		105	22.5
80		85	23.3
80		72-30	23.8
80		67-30	23.0

Platted
8/6/47

HI 90.32		At E17		8527	
80		73.	18.1		
78		49-30	20.4		
78		62.	20.8		
78		63-30	23.0		
78		66.	23.8		
78		66-30	28.3		
78		70.	30		
78		82	29.5		
78		93-30	29.5		
78		88	38.2		
78		89	47.		Plotted 8/6/17
78		92-30	47.6		
HI 80.6 5.0		At C17		7561	
80		158	48		
80		109	10.		
80		93	10		
78		106-30	66		

H.I.	806	At C17		7561
	78	95-30	9.9	
	78	85-30	10.3	
	78	80	17.3	
	80	80	17.3	
	78	75.3	20.5	
	80	78	23	
	78	69	21.9	
	80	72-30	24.6	
	76	73	28.5	
	76	67-30	27.3	
	76	69	19.5	
	76	79	15.7	
	76	94	6.6	
	76	176	1.0	
	76	317-30	3.0	
	76	276	7.4	
	76	277	12.2	

Plotted
8/6/17

#1

80.6		4+C17	7561	
76		272	16.6	
76		287	19.1	
76		304	20.4	
76		299-30	24.9	
76		291	30.3	
76		293-30	31.6	
76		294-30	39.2	
74		294	34.3	
74		293-30	31.3	
74		298-30	29.5	
74		305	26.3	
74		302-30	25.3	
74		308-30	23.0	
74		305	21.8	
74		310	19.5	
74		294-30	16.2	
74		298-30	12	

Plotted
8/6/17

#1.					
80.6		Atc	17	7561	
74		280	8.8		
74		307-30.	3.4		
74		45	30		
74		97	30		
74		81	12.8		
74		66	15.7		
74		66-30.	17.8		
74		69	24		
74		72-30.	28.8		
#1.475					
73.47		Atc 15	18' North	68.72	Plotted 8/16/17
72		239-30	35.7		
72		237-	17.4		
72		237-30	23.3		
72		223-30	24		
72		218	21.6		
72		211	24		

7347		AtC15 18'N			6872
72		203-30	216		
72		197-30	224		
72		196-30	258		
72		187-30	27.1		
72		180	29		
72		183	26.2		
72		177-30	239		
72		172	22		
72		165-30	284		
72		165	208		
72		158-30	23.		
72		156-30	237		
72		154	284		
72		144	298		
72		133-30	337		
72		127-30	383		
72		124	367		

7347		AT	C15-18'N	6872
72		122-30	39.3	
72		119-30	41.7	
72		117	45.1	
72		105	44.0	
72		98	50.5	
72		98	56	

H.1 —

7347		Afc 15-18 N		68.7°
70		115-30	44.8	
70		116	39.1	
70		121	35.3	
70		126	33.6	
70		131	35.4	
70		140	29.5	
70		152	27.8	
70		144	25.3	
70		154	30.1	
70		160	21.1	
70		159	17	
70		165	17.5	
70		171	20.3	
70		180	18.3	
70		180	16.9	
70		189-30	22.2	
70		205-30	18.5	

7347		At C15 18'N		6872
70		212	20.9	
70		221	21	
70		226	22.7	
70		236-30	22.7	
70		241	19.1	
70		242-30	36.8	
70		250	38.6	
68		252	44.7	
68		250	38.2	
68		245-30	36.9	
68		243-30	29.6	
68		240	23.6	
68		231/30	21.5	
68		229	20.5	
68		224	21.2	
68		210	16.5	
68		190-30	16.9	

7347	A-015	18'N		687		
68	186	14.0				
68	173-30	16.7				
68	164-30	15.6				
68	159	16.4				
68	146	19.7				
68	143	21.6				
68	135	29.4				
68	121	35				
68	115-30	40				
68	115-30	43				
68	113	42.8				
68	113	44.6				
Flume ΔR	119	22.5	8.05	6.54	Q Flume	
" ΔL	246	21.8	7.9	15.57	" "	
	00	34.8	6.5	67.0	"	
	10	9.7	6.7	66.8	"	
	299	35.6	6.7	66.8	"	

7347	At C 15	18'N		68.72	✓	
	300	23.6	6.7	66.8	✓	
	319	17.5	6.8	66.7	✓	
	45	13.0	6.8	66.7	✓	
	67	26.5	6.4	67.1	✓	
	105	23.2	7.3	66.2	✓	
	40	40	6.7	66.8	✓	
	339	35.2	6.4	67.1	✓	
	321-30	39.8	6.35	67.1	✓	
	263	20.6	7.0	67.5	✓	
	184	4.6	6.8	66.8	✓	
E Flume	103	35.5	8.1	65.37	✓	
"	94	50	8.1	65.37	✓	
H.I. = 48.5 7.68	At 4 15			66.83		
	273	42.3	4.6	67.1 ✓	✓	
	267	43.4	~~4.0~~	67.3 ✓	✓	
	251	46.1	4.4	67.6 ✓	✓	

7168	AH15			6.8.3		
	238-30	31.7	44	67.3	✓	
	255	28.7	4.6	67.1	✓	
	255	28	4.8	66.9	✓	
	228	14.4	4.7	67.0	✓	
	210	22.5	47	67.0	✓	
	180	21	46	67.1	✓	
	180	11.5	46	67.1	✓	
	128	21.7	46	67.1	✓	
	104	28.3	4.7	67.0	✓	
	133-30	34.7	47	67.0	✓	
	118°	29.9	48	66.9	✓	
	97-30	11.2	48	66.9	✓	
	61	28.4	45	67.2	✓	
	42	17.5	4.5	67.2	✓	
	00	14.7	4.5	67.2	✓	
	311	20.3	44	67.3	✓	
	298	28.5	44	67.3	✓	

71.68		AT H 15			66.83	
		289-30	40.1	44	67.3 ✓	
		305	46.6	44	67.3	✓
		310	42.5	5.2	66.5	✓
		320-30	39.8	53	66.4	✓
66		324.30	47.1	57	66.	✓
		344	29.0	54	66.3	✓
		342-30	24.4	46	67.1	✓
		351	36.5	48	66.9	✓
		00	35	4.9	66.8	✓
		28	30.5	53	66.4	✓
		32	27.2	45	67.2	✓
		20.	39.5	49	66.8 ✓	✓
		33	44.1	50	66.7	✓
HI = 4.8						
71.72		AT F 15			66.92	
68		162	38.3			
68		154-30.	41.1			
68		142	44.4			

Plotted 8/6/47

7172		At E 15			6692		
68		134	452				
		146-30	359	49	668	✓	
		134	29.1	48	669	✓	
		151	208	48	669	✓	
		161	30	49	668	✓	
		180	27.2	49	668	✓	
		180 -	17	48	669	✓	
		222	206	47	670	✓	
		211-30	297	48	669	✓	
		240	28.1	47	670	✓	Platted
		258-30	25.0	49	668	✓	8/9/17
		249-30	14.1	50	667	✓	
		180	67	49	668	✓	
		122	12.6	48	669	✓	
		104	25.5	50	667	✓	
		97-30	388	50	667	✓	
		120	44	50	667 ✓	✓	

717		AF	15		669	✓						
		90	35	5.0	667	✓						
		90	15	4.9	668	✓						
		270	1.5	4.7	670	✓						
		300	27	4.4	67.3	✓						
		315	33.2	4.4	67.3	✓						
		319	359	5.2	66.5	✓						
		325	45	5.0	667	✓						
		340	388	5.3	664	✓						
		00	37	5.3	664	✓						
		20	40	5.4	663	✓						
		30	28.5	5.0	667	✓						
		30	24.2	4.4	67.3	✓						
		35	45	5.4	663	✓						
		45	50	5.5	662	✓						
		55	46	5.3	664	✓						
		55	40.9	4.5	672	✓						
		~~75~~	50	4.6	671	✓						

Platted 8/6/17

71.7		AH E 15			669
		70	35	46	671
		65	28	44	673
		45	20	44	673
		00	12	44	673
		310	20.	44	673
All = 4.7					
71.3	AH	CIS			666
66		351	346		
66		18	351		
66		14	346		
66		43	435		
66		60	50		
66		70	492		
66		59-30	38		
66		31	286		
66		14-13	249		
66		349-30	256		

Platted
8/6/14

8/7/17

54

H1- 713		A+C 15			666
66		33r-30	32.6		
66		372	37.1		
66		327-30	31.8		
66		355-30	22.5		
66		8	20		
66		38-30	22.5		
66		38	25		
66		53-30	30.7		
66		62-30	32		
66		75	45.7		
66		77-30	51.5		
		90	36.3	.49	66.4
		70	13.8	49	66.5
		270	15	46	66.7
		216	26.2	48	66.5
		182-30	22.5	48	66.5
		245	28.8	44	66.9

Platted 8/7/17

55

8/7/17

H.I.					
71.3		D+C 15			666
		235-30	88.5	47	66.6
		727-30	309	48	66.5
		150	177	50	66.3
		129	35.7	53	66.0
		140	43	48	66.5
66		137	48		
66		136-30	54.2		
66		130-30	48.2		
		115	41.7	50.	66.3
		105-30	56.2	50	66.3
		80	40.5	46	66.7
		74	26.3	44	66.9
		51	14.9	43	67
		1°	12.5	43	67
		316°	17.8	47	67.1
		281-30	24.7	43	67
		290	11.8	43	67.0

Platted
8/7/17

713		AC 15			66.2
66		67	40	5.3	
		57	30.8	5.5	65.8
		30	25	5.0	
		30	35	4.9	66.4
		340	33	48	66.5
		320	47	50	66.3
		320.30	50	5.0	66.3
		327	41.3	4.9	66.4
		345	35.6	5.1	66.2
		2°-	33.1	5.1	66.2
		19°	33.7	4.9	66.4
		25	38.3	5.0	66.3
		38.30	40	4.8	66.5
		46	43.7	5.1	66.2
		47-30	50	5.8	65.6
		26	40.4	6.0	65.3
		15	36.5	5.8	65.5

Plotted 8/7/17

713		9C15			6662
	00	50		6.1	652
	345	405		5.8	655
	336	466		5.9	654
	326	51		6.0	653
	350	47		60	653
	10	45		59	654

Plotted 8/7/17

H.I. = 5.1 97.73	At	A16	934 North 5' W.		9263
96	145	4.2	✓		
96	171	4.3	✓		
96	178	5.0	✓		
96	208	9.8	✓		
94	143	3.2	✓		
94	164	3.3	✓		
94	173-30	5.2	✓		
94	208	11.0	✓		
94	211	14.7	✓		

M1–		9.34N		
9776	A1A16	5W		92.63
92	344	6.3	✓	
92	5.0°	5.7	✓	
92	42°-30	3.5	✓	
92	63.30	4.7	✓	
92	97-30	6.7	✓	
90	97.30	6.7	✓	
88	97.30	6.7	✓	
86	89	11.7	✓	
90	70	5.5	✓	
88	70	6.0	✓	
86	70	9.3	✓	
86	28-30	7.0	✓	
90	28.30	6.1	✓	
88	2830	5.7	✓	
96	202	13.7	✓	
94	208-30	13.8	✓	

Platted 8/7/17

Corner Corrected

9276	At A16	9344 S W		9263
9r	215-30	16.3	✓	
94	215-30	16.7	✓	
96	218-30	16.7	✓	
9r	221	17.3	✓	
9r	224.30	20	✓	
9r	235	20.5	✓	
9r	230-30	26.8	✓	
9r	237-30	35.9	✓	
9r	237-	37.5	✓	
9r	236	38	✓	
9r	237-30	42.3	✓	
94	235	40.2	✓	
94	235-30	35.7	✓	
94	226-30	26.8	✓	
94	227	22.7	✓	
94	223-30	20.3	✓	
94	218	19.5	✓	

Plotted 8/7/17

H1

9276	H1 A16	934/N 5-W1		9263	
96	216	19.7	✓		
96	220	21.9	✓		
96	219	23.7	✓		
96	224	24.8	✓		
96	226	30.3	✓		Wall
96	23530	40.5	✓		"
90	21030	14.3	✓		Hits Concrete
86	" "	14.3	✓		" "
88	" "	14.3	✓		"
84	212	17.5	✓		Hits Concrete
82	215	10.5	✓		Hits Concrete
80	217	90	✓		
80	236	14.6	✓		
82	236	146	✓		
82	220	14.3	✓		
84	221.30	148	✓		
86	218	155	✓		

Platted 8/7/17

9776	At AK	9.34 N 5. W		92.63
80	218	15.9	✓	
84	233	156	✓	
86	235	158	✓	
88	228	16.3	✓	
88	231	19.3	✓	
88	238-30	180	✓	
88	239	21.6	✓	
88	235	232	✓	
90	235-30	17.3	✓	
90	234	238	✓	
86	243.	198	✓	
84	240	198	✓	
82	205.30	21.0	✓	
90	233	258	✓	
90	236	31.6	✓	
90	239.30	36.4	✓	
90	239	37.4	✓	

Plotted 8/7/17.

9776		AH A16	934N 6W		9263
90		237	38.1	✓	
90		238-30	41.4	✓	
88		238-30	42.4	✓	
88		239	37.9	✓	
88		241	36.5	✓	
88		236-30	29.0	✓	
86		239-30	25.6	✓	
86		240	31.8	✓	
86		242-30	37.8	✓	
H.L. 4.8 804		AH C17			7861
84		180	7.0		
84		119	9.5		
84		97	12.0		
84		81	22		
84		82 30	24.3		
84		75	27.2		

Wall Connect up
" Connect up

Platted 8/7/17

80	At C17		7561
82	73-30	27.2	✓
82	81	24.4	✓
82	80.30	22.1	✓
82	86	12	✓
82	120	8.9	✓
82	180	60	✓

Hi = 48
75.39

	At A15 8'N		7057
66	3°	31	
66	20	31.2	
66	32	41.8	
66	49-30	48.5	
66	71.30	46.3	
66	60	32.2	
66	44-30	31	
66	19.0	27.6	
66	22	18.6	

Pallad
8/7/17

75.37	17+A 15	8'14		70.57	
66	55	20.9			
66	66	29.3			
66	70-30	38.5			
66	91-30	35.8			
~~66~~	91	50	92	66.8	
~~66~~	91	348	93	66.1	
~~66~~	95	25	86	66.8	
~~66~~	110	174	8.6	66.8	
~~66~~	153	136	8.7	66.7	
~~66~~	126	26.8	8.6	66.8	
	1x2	97	86	66.8	
	60	45	91	66.3	
	43	3.58	91	66.3	
	20	29	93	66.1	
	00	28	92	66.2	
	30	28	92	66.2	
	330	28	93	66.1	

7537					7057
		340	33	8.9	66.5
		00	45	9.9	68.5
		17	45	9.9	65.5
		35	50	9.6	65.8
H.I = 4.25					
69.33		17 + 12			65.08
		140	27	42	65.1
		210	27	44	64.9
		220	18	42	65.1
		155	27	43	650
		127	27	43	650
		130	18	43	650
		90	15	44	649
		96	37	45	648
		110	40	44	649
		125	45	43	650
		105	52	45	648
		75	52	40	653

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69.3 At A 12

80	40	43	650
60	35	28	665
50	25	28	665
75	20	40	653
60	10	40	653
00	8	37	656
20	20	28	665
25	30	29	664
340	20	29	664
330	30	27	666
320	25	28	665
300	15	37	656
270	15	41	652
220	10	45	648
130	10	46	647

Hi. 48

69.98 At P 12

285	45	51	649
250	40	50	650
240	30	50	650
270	40	51	649
210	28	51	649
220	18	50	650
150	15	51	649
130	20	51	649
150	30	52	648
120	30	52	648
90	15	47	659
100	15	52	648
60	30	39	661
50	30	37	663
00	18	36	664
30	30	35	665

H1

5.0
69.8

At R12 6467

210	30	4.8	650
220	18	4.8	65
180	12	4.8	65
260	15	5.0	648
272	15	3.7	661
300	25	3.5	663
330	30	3.5	663
320	17	3.5	664
00	15	3.2	666
00	25	3.7	661
30	30	2.7	671
45	18	3.2	666
65	28	3.2	666
55	45	2.7	671
70	40	3.2	666
75	50	3.2	666
81	49.5	3.8	66

698 At R12 6467

76	50	3.1	667
90	50	5.1	647
90	40	5.1	647
105	50	4.9	649
115	55	5.0	648
123	45	5.0	648
110	40	4.8	650
115	28	4.8	650
90	12	4.9	649
130	18	4.8	650
150	30	4.9	649

8/8/16

HI = 4.75

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7035	At R15			6560
	130	20	4.6	658
	140-00	28	4.4	660
	90	15	4.8	656
	90	50	4.8	656
	45	20	4.7	657
	00	12	4.5	658
	00	37	5.6	648
	20	40	5.7	647
	55	45	5.5	649
66	330	28	4.4	660
66	314	45	4.4	66
66	305	355		
	275	28	4.8	656
	270	12	4.7	657
	310	18	4.6	658
	300	29	4.5	659
	240	29	4.6	658

HI = 4.75

7035	At R15			6560
	230	20	4.6	658
	180	12	4.7	657
	210	247	4.4	660
v.75				
7037	At P15			6557
66	20	20.5		
	50	17	4.4	659
66	20	35	4.3	660
	20	43	5.7	646
	00	41	5.8	645
66	00	335		
66	335	345		
	340	40	5.6	647
66	310	43.1		
	300	30	4.2	661
66	310	17	4.3	
66	276	25		
66	284-300	38.		

7035		Rt R15			6560
		320	22		
66		06	10	4.3	
		90	12	4.7	65.7
66		130	17	4.5	65.9
66		116	14		
66		152	24		
66		179	21.5		
66		248	37.5		
		270	12	47	65.7
		230	15	47	65.7
HJ. = 485					
7085		Rt N15			66.00
		15	50	61	64.8
		20	40	54	65.5
		00	37	55	65.4
66		00	25		
		340	50	59	65.0

H.J.					
7085		Rt N15			6600
		340	40	5.5	65.4
		00	15	47	66.2
		40	22	4.8	66.1
		90	15	47	66.2
		115	20	4.8	66.1
		138.30	16.3	4.6	66.3
	& Flume	192	14	5.8	65.1
	" "	128	435	60	
	" "	122	50	60	
	" "	236	31.3	5.7	

8/8/17

H.I. = 4.7

75.27	At A15 8'N		7057
68	164-30	18.5	
68	200	21.5	
68 70 72 76	180	17.1	Corner Cancel
78	180	18.1	
68 70 72	163.30	18.2	
74	166	20	
74 76	160-30	21.	
68 70 74	157	24.2	
68 70 72 74 76-78-80	141	27.7	
68	135	30.5	
68	121.30	27.5	
70	133	32.4	
72	132-30	33.2	
74	131-30	36	
70	119-30	28.9	
72	116-30	30	
74	115	30.6	

75.27	A A15 8'N		7057
65 70 72 74	109-30	33.5	
68 70 72	107-30	36.5	
74	109	37	
68	107	40.4	
70	107	39.5	
72	107	38.8	
74	109-30	40	
72	110.	43	
70	108	41.8	
H.I. = 4.75 79.74	At N16		7499
68	315	10.3	
68	328	9.0	
68	324-30	7.1	8/8/17
70	314-30	8.0	
70	324-30	7.1	
72	286-30	6.3	
72	340	5.0	

1974	At N 16		7490	
74	268-30	13.6		
74	260	10.8		
74	241	9.7		
74	265-30	8.0		
74	270	4.7		
74	322	1.5		
74	33	2.5		
76	253-30	24.3		
76	254	22.8		
76	278	19.9		
76	279	18.3		
76	275	17.8		
76	267	19.0		
76	267	14.8		
76	257	11.6		
76	246	10.5		
76	224	12		

1974	At N 16			7499
76	229	14.5		
76	219	12.0		
76	242-30	7.4		
76	230	2.		
76	102	4		
78	254-30	24.8		
78	248	22.2		
78	252	21		
78	258-30	19.5		
78	260-30	16.3		
78	248	15.1		
78	241-30	16.5		
78	242	14.9	Ring Gone	
78	229-30	13.2		
78	236-30	12.7	8/8/17	
78	225	18.0		

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79.74	At N16		74.99
78	208	12.3	
78	210-30	10.0	
78	187	9.1	
78	205	7.7	
78	197	5.7	
78	169	5.2	
78	170	9.0	
78	158	10.5	
78	148	14.3	
78	145-30	13.3	Ring Cont.
78	137-30	14.0	
78	136	17.8	
78	145	24.4	
78	129	20.5	
78	121	24	
78	124-30	29	
78	118-30	29.9	

79.74	At N16		74.99
78	118	31.8	
76	116-30	28	
74	116	28.5	
72	115	28.5	
76	118	24.5	
76	122	21.3	
76	128	18.4	
76	139-30	21	
76	143-30	20.5	
76	145	15	
76	136	16	
76	131	16.5	
76	123	10.5	
76	135	8.5	
76	143	9.5	
76	152	7.0	
76	125	6.8	
76	111	5.5	

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7974	At	N16	7499
74	83	5.5	
74	117	9.5	
74	118	10.5	
74	126	14.0	
74	120	14.0	
74	118	16	
74	124	18.3	
74	113	24	
74	116	26.5	
72	116-30	26.5	
74	109-30	20.5	
72	108-30	22.5	
72	111	20.5	
72	105	19.1	
72	108	16.5	
72	115	10.0	
72	97	6.5	

7974	At	N16	7499
72	13	4.0	
70	13	4.5	
68	13	4.7	
70	77	6.5	
70	96	7.5	
70	87	10	
70	103	12	
70	103	14	
70	107-30	16.5	
70	102	22.3	
70	105	24.5	
70	100-30	25.0	
70	103	27.5	
68	98	26.5	
68	97	23.4	
68	102	17.5	
68	95-30	15.0	

7974	At N16		7499
68	93	10.7	
68	86-30	10.5	
68	72	8.8	
68	78	9.0	
HI. = 3.4 92.32	At M 17		8892
78	00	18.5	
80	356-30	19.2	
78	356-30	19.2	
82 80 78	341	20.8	
78-80	330	22.5	
86	323	23.3	
78	323	24.3	
80	310	20.5	
78	3.2	23.3	
82-84-86	311-30	26.5	
86	310-30	31.5	
84	310	31	

9232	At M17		8892
86	293-30	7.2	
84	303	14.4	
82	309-30	19.3	
82	315	17.3	
82	318-30	15.5	
82	326	17	
82	322	20	
82	328	20.2	
82	326	22.2	
83	348	19.	
82	348-30	16.5	
82	338	15.0	
82	340-30	13.3	
82	341	10.0	
82	332	6.7	
82	347	6.5	
82	14	4.8	

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97.3	At M 17	88.9
82	50	6.0
82	30-30	10.3
82	35	12.7
82	51	14.0
82	65-30	16.5
82	70-30	19.0
82	67	20.5
82	71	22.5
82	67-30	30.5
82	69	32
82	74-30	34
82	78-30	34
82	87-30	38.8
80	86-30	38.7
80	77.30	36.5
80	71-30	34.7
80	64	31

97.3	At M 17	88.92 75
70	65	26
80	64 30	22.2
80	55-30	22
80	51.30	20
80	42	13.5
80	38	13.0
80	23	10.7
80	356-30	15.0
80	359	18.2
84	318-30	17.0
84	322	15.8
84	320	11.5
84	330	10.7
84	313-30	80
84	334-30	5.5
84	329	40
84	18-30	4.3

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9z.3z	At	M17	88.9z
84	6z	7.0	
84	39	11.5	
84	61	15.5	
84	76	18.7	
84	75	26.5	
84	73-30	29.6	
84	79	33.5	
84	87-30	37.8	
86	87	36.8	
86	85	34.5	
86	80	30.5	
86	83-30	25	
86	80-30	20.5	
86	73	16.5	
86	73	14.0	
86	65-30	15.5	
86	49	11.8	

9z.3z	A	M17	88.9z
86	76	85	
86	49-30	4.5	
86	285-30	4.0	
86	310-30	4.5	
86	295	6.6	
88	28z	18.9	
90	28z	18.9	
9z	277.30	19.6	
9z-96	292	28.8	
90-88	283-30	14.0	
88	28z	10.8	
90	277	10.2	
9z	28z	14.0	
9z	277	11.4	
9z	275-30	8.9	
9z	261	6.0	
90	256-30	5.1	

9232		At	M 17		8892
90		224 30	4.5		
88		239	4.5		
88		305	1.0		
90		128-30	1.4		
92		223-30	7.5		
92		117	4.6		
88		72-30	6.5		
88		91	11.1		
88		85	12.2		
88		94	18.7		
88		88	22		
88		87-30	27.2		
88		86	30		
88		89 30	28		
88		83-30	32.9		
88		88	36		
90		93-30	31.5		

403.60
H.I. = 4.4

	At A	M 17 HI	114° Lt	Dist 1486	99.2
	13.21	403.60	–	9039	N 17
90	141.30	14.7	✓		
90	131-30	14.5	✓		
90	125	13.4	✓		
90	130	11.1	✓		
90	117	9.7	✓		
90.	111	7.0	✓		
90	102-30	6.8	✓		
90.	97 30	6.3	✓		
90	47-30	5.1	✓		
92	51-30	4.7	✓		
94	57-45	4.5	✓		
92	94	4.7	✓		
94	94	4.7	✓		
92	118	6.9	✓		
94	114	6.9	✓		

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Hi 403.60	At M	17	114°	Dist	14.8	99.2
92			114-30	7.0	✓	
92			118	9.2	✓	
94			135-30	9.9	✓	
92			135	11.7	✓	
92			131-30	12.2	✓	
92			126-30	13.2	✓	
92			140-30	13.1	✓	
94			140-30	12.6	✓	
90			149-30	18.5	✓	
92			150	18.4	✓	
94			150	18.4	✓	
90			155-30	22.4	✓	
92			155-30	22.4	✓	
94			163.30	25.3	✓	
92			163	25.7	✓	
90			162-30	26.2	✓	
96			164	24	✓	

Hi 403.6	At M	17	14°	Dist	14.8	99.2
96			159	21.3	✓	
96			155-30	16.5	✓	
96			149.30	15.9	✓	
96			147	14.0	✓	
96			160-30	13.4	✓	
96			156-30	11.2	✓	
96			141	8.5	✓	
96			131-30	4.8	✓	
96			111-30	5.3	✓	
96			82	3.0	✓	
96			60	3.8	✓	
96			33	4.1	✓	
96			357-30	4.9	✓	
96			350-30	9.3	✓	
94			33	6.0	✓	
92			17	8.4	✓	
90			11-30	10.8	✓	

403.6	17	N 17	114°04	1486 ft	9.9
94			357	7.0	✓
94			357	9.7	✓
94			334	18.3	✓
94			338 00	22.2	✓
94			349-30	22.3	✓
94			353-	24.5	✓
94			349	25.5	✓
94			358-30	27.7	✓
94			350 30	33	✓
96			350	32.8	✓
98			350	33.3	✓
00			350	34.7	✓
04 06 07			350	35.2	✓
07			346	34.1	✓
00			346-30	33.2	✓
00			337-30	33.5	✓
04 06 07			334-30	34.7	✓

Check for End Cam.
" " " "

END Gradata

4036	Af	M17-	114°4	1486	99.2
00		341	30.4	✓	
02		336-30	28.5	✓	
00		329-30	29.7	✓	
02		326-30	29.9	✓	
00		332-30	22.6	✓	
00		329	22.6	✓	
00		331-30	18.6	✓	
02		329-30	18.7	✓	
02		318-30	11.6	✓	
00		321	14.2	✓	
00		344	3.3	✓	
02		319	5.6	✓	
02		318-30	3.6	✓	
00		332-30	7.1	✓	
00		305-30	26	✓	

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37 0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41 7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47 1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51 1	51.3	51.4	51.6	51 7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57 1	57.3	57 4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julion A. Hall, M. Am. Soc. C. E.