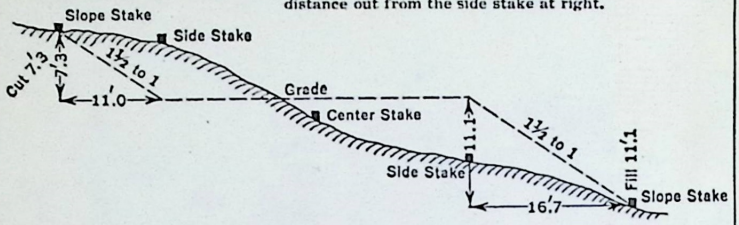
PROJ. 49-51
EAST SHORE DRIVE
CONSTRUCTION NOTES
DR. 12A BK. 60A

K&E
LEVEL BOOK
W.375-A

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2 4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19·8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25 2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44 6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54 6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59 7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

The paper in this book **No. 373A**
is made of 50% high grade rag stock
with a **WATER RESISTING** surface sizing

12,321-4. kh, c, yx. chss.

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EAST SHORE DRIVE

New Ties for

ORIGINAL ALIGNMENT

prior to Const

Sta	P.T.	Δ Lt	Δ Rt	
12+68.81	P.T.			Δ = 41°34'
12+70.26	P.I.	~~31°32'~~	41°34'	D = 20°00'
11+60.93	P.C.			T = 109.28
				L = 207.83
				R = 287.94
10+44.47	POT = ℄ existing Bridge			
9+93.49	P.T.			Δ = 15°10'
9+18.19	P.I.		15°10'	D = 10°00'
8+41.82	P.C.			T = 76.37
				L = 151.67
				R = 573.69
8+00	POT			
7+16.10	P.T.			Δ = 29°32'
6+13.29	P.I.	29°32'		D = 14°00'
5+05.15	P.C.			T = 168.14
				L = 201.95
				R = 410.28

7-27-49
GB B.C.
MB

PP
52.09
50.59
PP
Nail
18" Quad Willow
63.95

70.82
PP
56.58
PP
76.85
8" Elm
Nail
4" Willow
101.45

22.79
6" Elm
Nail
49.07

10" Elm
37.81
9.74
8" Elm
Nail

Bench Marks

Transfer for Const.

Sta	+	π	−	Elev.	
B.M.	0.50	871.94			(871.44)
B.M.			6.94	865.00	
B.M.			6.94	865.00	

7-29-49

Spk. in Arc Light Pole rt. sta. 9+34

Spk. in T.P. 25' Rt. sta. 7+65

Boat Spk. in 19" Elm 31' Rt. sta. 12+24

Elev. of Piles before cutoff
also top of slab for pile
cut off.

Pile No.	+	=	−	Elev.	
B.M.	4.60	869.60			865.00
B.M.			4.59	865.01	865.00
Elev. top Floor =				854.75	G.F. = 14.85
B.M.	2.60	867.60			865.00
Top of Floor =				854.75	G.F. = 12.85
#1			9.11		
2			10.82		
3			11.06		
4			8.64		
5			11.04		
6			9.70		

K.A.
P.M.
M.B.
P.C.

9-6-49

Boat Spk. in 18" Elm 31' Rt. sta. 12+24

Spk. in T.P. 25' rt sta. 7+65

= Pile cutoff is 1' below top of floor.

Boat Spk. in 18" Elm 31' rt. sta. 12+24

X Pile cutoff is 1' below top of floor. Nail set in each Pile to top of floor. (Top of floor elev. corrected to elev. 854.92. 9-7-49) K.A.

P/c No.	+	℄	−	Elev.
		867.60		
7			10.50	
8			9.43	
9			12.6	
10			10.22	
11			12.82	
12			12.28	
13			11.34	
14			9.15	
15			10.53	

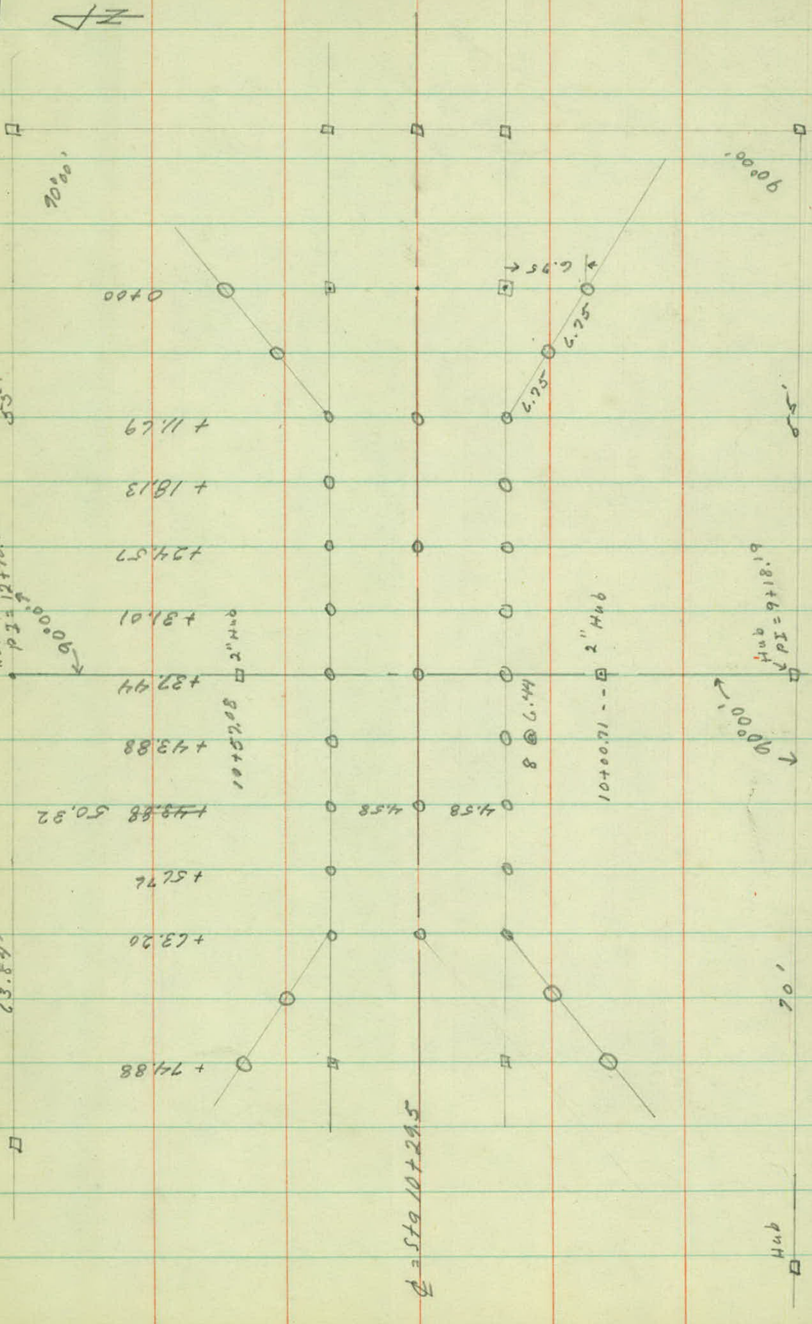
No. 7 was test pile. 9 ft. was cutoff above rod of 10.5.

Pile No.	+	℄	−	Elev.
		867.60		
16			10.73	
17			11.25	
18			11.40	
19			12.04	
20			12.33	
21			11.52	
22			11.27	
23			9.48	
24			8.14	

P/C No.	+	π	−	Elev	
		867.60			
25			10.20		
26			8.62		
27			11.78		
28			8.63		
29			11.87		
30			13.00		
31			11.96		
32			12.45		
33			10.67		
B.M.			2.60	865.00	(865.00)

Piling Layout

as Staked


90°00'
90°00'
0+00
6.95
6.25
6.25
6.25
55'
+ 11.69
+ 18.13
+24.57
Nail PI = 12+70.26
90°00'
+31.01
2" Hub
2" Hub
Hub PI = 9+18.19
+37.44
10+57.08
8 @ 6.44
10+00.71
90°00'
+43.88
+43.88 50.32
4.58
4.58
+56.76
+63.20
63.84'
70'
+ 74.88
℄ = Sta 10+29.5
Hub

Borrow Pit X Sections

East Shore Drive

(after Removal of dirt

by contractor)

8-24-49

Sta	+	HI	−	Elev
		875.26		
BM	10.26	~~866.26~~		865.00
0+35				
+50				
+75				
+25				
~~+50~~				
+50				

℄

edge of curb

64.2 62.6 62.1 69.9 76.2
11.1 12.7 13.2 5.4 +0.9
27 14 27 44

64.1 63.7 63.2 62.9 63.5 65.2 75.3
11.2 11.6 12.1 12.4 11.8 10.1 0.0
28 17 13 5 9 34

63.7 64.0 64.1 64.7 71.6 79.2
11.6 11.3 11.2 10.6 3.7 +3.9
31 15 11 22 40

63.7 65.4 64.8 65.3 75.1 80.3
11.6 9.9 10.5 10.0 0.2 +5.0
32.5 23 14 32 45

63.5 64.3 65.0 65.7 74.9 77.7 78.5
11.8 11.0 10.3 9.6 0.4 +2.4 +3.2
32.4 26 23 40 41 44

63.3 64.1 64.9 65.4 66.6 70.9 73.6 71.9
12.0 11.2 10.4 9.9 8.7 4.4 1.7 3.4
32 25 18 16 53 54 77

Sta	+	HI	−	Elev	
		875.26			
1 + 70					
+ 84					
2					
B.M			10.27	864.99	865.00

edge carb

63.2	64.3	64.5	64.8	66.0	67.5	69.8
12.1	11.0	10.8	10.5	9.3	7.8	5.6
29.5	23	12		40	49	76

63.1	64.4	64.5	64.6	64.8	65.7
12.10	10.9	10.8	10.7	10.5	9.6
27.3	17		22	40	50

63.1	63.1	62.6	62.5	65.7
12.2	12.2	12.7	12.8	9.6
24	5		24	0

Borrow Pit X-Sections

East Shore Drive

Taken (after removal by county,
before borrow by contractor

10-17-49

Sta	+	π	-	Elev
BM	12.11	876.11		865.00
0+00				
+35				
+50				
+75				
1				
+25				

℄

No change.

6.2 edge of curb

12.9	8.4		15.0	8.4	5.2	
27.0				27	44	
13.1	13.5	13.9	14.0	13.7	11.8	2.9
28	17	13	5		9	34
13.3	13.1		13.2	12.6	0.8	+ 1.9
31	15			13	33	44
13.50		12.8	12.3	11.9	10.6	+ 3.1
32.5		23		14	38	47
13.67	12.8		12.1	11.8	11.1	+ 2.5
32.4	26			23	30	48

Sta	+	π	−	Elev	
1 + 50					
+ 70					
+ 84					
2					
BM					865.00

£

12.2

13.8 13.0 11.7 10.6 2.0 1.8
32 25 18 42 54 77

13.97 12.7 12.7 12.3 11.0 10.4 6.4 5.8
29.5 23 12 40 46 53 76

14.0 12.6 12.6 12.5 11.6 10.7
27.3 17 22 40 50

14.1 14.0 14.6 14.1 11.7
24 5 24 50

East Shore Drive

Staking Notes

for

finish Grade

10-24-49

GB
AM
MB
RC

Sta	P.G	PGR	Gutter GR	
BM	4.64	869.64		865.00
8+25	65.18	4.46	4.71	
8+41.82	65.39	4.25	450	
+50		4.15	4.40	
+75	65.70	3.94	4.19	
9	65.84	3.80	4.05	
+25	65.90	3 74	3.99	
+50	65.91	3.73	3.98	
+75	65.82	3.82	4.07	
10	65.70	3.94	4.19	

16'Lt ℄ 16'Rt

Sta	P.G	PGR	Gutter GR
10+28	65.57	4.07	4.32
+54	65.44	4.20	4.45
+73	65.35	4.29	4.54
11	65.22	4.42	4.67
+25	65.10	4.54	4.79
+50	64.98	4.66	4.91
+75	64.86	4 78	5.03
12	64.74	4.90	5.15
+25	64.62	5 02	5.27

Sta	P.G	PGR	Gutter G.R.
		869.64	
12 +50	64.50	5.14	5.39
+75			
13	64.39	5.25	5.50

KELLER PARKWAY

Staking Notes

for

finish Grade.

10-24-49

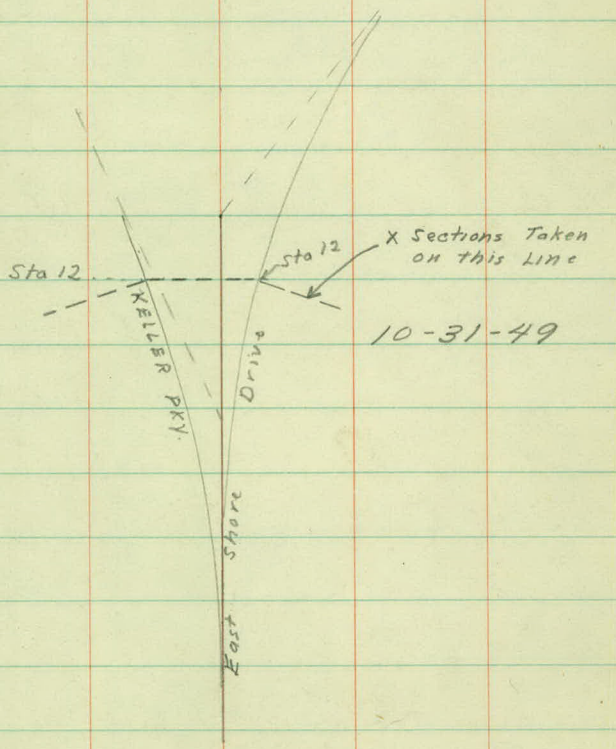
GB MB

AM BC.

Sta	P.G	P.G.R	Gutter GR
		869.64	
11 +75	64.86	4.78	5.03
12	64.65	4.99	5.24
+25	64.43	5.21	5.46
+50	64.08	5.56	5.81

A.M.
M.B.
B.C.
G.B.

Final X Sections



10-31-49

Sta	+	HI	−	Elev	
B.M.	5.39	870.39		865.00	
8 + 00				64.8	
+ 42				65.4	65.4
+ 75				65.7	66.3
9				65.8	67.1
+ 25				65.7	68.2
+ 50				65.6	69.5

Lt ℄ Rt

Spk in T.P. 25' Rt @ Sta 7+65

60.5 60.6 63.7 64.4 64.2 64.4 64.7 64.6 64.8 65.0 64.1 63.6 62.3

9.9 9.8 6.7 6.0 6.2 6.0 5.6 5.7 5.8 5.6 5.4 6.3 6.8 8.1

50 34 23 16.1 15.1 14.1 13.5 14.5 15.5 21 28 36 40

12.5 48 57.9

59.7 60.3 64.4 64.7 64.6 64.8 65.2 65.3 65.2 65.5 65.6 64.6 63.7

10.7 10.1 6.0 5.7 5.8 5.6 5.2 5.0 5.1 5.2 4.9 4.8 5.8 6.7 12.4

50 41 22 16.3 15.3 14.3 11 13.5 14.5 15.5 22 31 43 53

58.0

65.4

4.1

10.9 10.7 5.4 5.0 4.7 5.0 4.4 4.6 5.6 ✓

49 46 25 13 14 21 28 35

3.3

11.3 10.1 6.7 4.9 4.6 5.1 4.4 4.8 5.4 6.6 9.8 ✓

57 50 39 25 21 23 31 37 46 50

2.2

10.7 5.6 4.5 5.3 4.7 5.1 4.4 5.9 11.9 ✓

61 39 26 18 16 27 42 51

0.9

9.6 7.0 4.5 5.3 4.8 5.0 4.7 5.0 5.8 12.2 ✓

62 46 27 16 16 25 36 45 53

Sta	+	HI 870.39	−	Elev	
9+75				65.5	70.7
10+00.43				65.5	72.3
+02.1				65.5	72.3
+02.5				65.5	64.8
+16.5				65.5	60.2
+23.7				65.6	59.4
+28				65.5	58.9

Lt Lt Rt

-0.3

9.9 8.9 5.8 4.7 5.2 4.9 5.0 4.7 5.5 7.0 12.0
75 62 43 27 17 13 24 40 47 54

-1.9

12.4 9.1 7.1 5.3 5.1 4.9 5.2 4.8 4.9 12.2
66 50 38 22 16 15 23 27 48

-1.9

12.4 9.4 7.7 6.3 5.2 5.1 4.9 5.2 4.8 4.9 12.3
64 50 39 29 20 16 16 24 26 47

5.6
4.9

See 02.1

W.S. -10.2 W.S. 12.5

12.5 5.5 5.2 4.9 5.2 4.9 5.6 9.1 12.5
38 22 17 14 21 25 33

Top Bottom Slab

-11.0

15.45 W.S. 12.5 5.6 5.4 5.1 4.8 5.3 5.1 4.9 5.4 15.45
27 24 19 16 14 15 21 24

-11.5

5.7 5.6 5.1 4.9 5.3 5.1 5.1 5.4
24 21 15 14 15 21 24

Sta	+	π 870.391	−	Elev	
10+35.2				65.4	57.4
+41				65.4	55.6
+47				65.4	53.5
+54				65.4	54.2
+62				65.3	56.7
+73				65.4	59.4
+86.5				65.3	64.4
+86.8				65.3	72.3

Lt ℄ Rt

13.0

5.7 5.5 5.2 5.0 5.4 5.2 5.2 5.5 ✓
24 20 15 14 15 21 25

14.8

0.2

9.7 6.9 5.3 5.2 5.0 5.4 5.2 5.3 6.5 10.8 ✓
34 27 21 16 14 15 21 27 36

16.9

W.S. W.S.
12.5 9.3 6.5 5.2 5.2 5.0 5.4 5.2 5.4 6.4 10.0 12.5 ✓
28 34 27 21 16 14 15 22 27 35 39

16.2

W.S. W.S.
12.5 7.5 6.2 5.2 5.0 5.4 5.2 5.3 6.6 10.6 12.5 ✓
42 32 27 21 13 14 21 29 38 40

13.7

W.S. W.S ✓
12.5 9.5 6.5 5.2 5.1 5.4 5.2 5.2 7.0 12.5
44 38 30 21 14 15 21 32 42

11.0

WS W.S.
12.5 10.1 6.3 5.3 5.3 5.0 5.4 5.2 5.2 6.8 12.5 ✓
47 42 31 23 16 14 15 21 33 46

6.0

WS W.S.
12.5 6.7 5.5 5.3 5.1 5.3 5.3 5.2 6.5 12.5 ✗
49 36 26 12 14 15 24 35 48

Sta	+	HI	-	Elev	
		870.39			
10+88.45				65.2	72.3
11				65.2	71.5
+25				65.0	69.8
+50				65.0	68.0
+75				65.1	66.4
12				64.6	~~65.4~~

Lt ℄ Rt

-1.9

W.S.										W.S.
12.5	7.0	5.6	5.6	5.3	5.2	5.4	5.3	5.3	6.6	12.5
49	37	27	17	12		14	15	24	36	48

-1.1

W.S.										W.S.
12.5	8.3	6.3	5.3	5.5	5.2	5.5	5.3	5.3	6.6	9.0	12.5
49	43	34	21	16		14	15	25	37	44	49

0.6

W.S.										W.S.
12.5	7.5	5.3	5.7	5.4	5.6	5.2	6.8	7.8	12.5	
50	43	29	18		14	25	39	45	50	

2.4

9.6	6.3	5.5	5.9	5.4	5.8	5.7	5.3	6.1	7.9	11.2
50	42	30	19		12	21	25	34	43	47

4.0

~~8.5~~	~~7.1~~	~~5.6~~	5.7	5.5	5.3	5.7	5.1	6.8	~~7.5~~
55	50	37	28	11		12	23	38	

5.0

8.7	6.2	5.7	5.8	5.7	5.1	6.8
57	45	20		13	20	31

Sta	+	℄	−	Elev	
		870.39			
12+25				64.4	64.9
+50				64.5	64.5
B.M.			5.39	865.00	

Lt ℄ Rt

5.5

6.6 6.2 6.0 6.0 6.1 5.7
47 33 15 12 14

6.9 6.3 6.0 5.9 6.2
62 48 23 14

Boat Spk in 18" Elm 31' Rt. @ Sta 12+24

Note: Sections 11+75, 12+00, 12+25 and 12+50 taken on New Alignment. For comparison to original Align.

See Page 29

Sta	+	HI	-	Elev	
B.M.	4.49	869.49		865.00	
11+75				65.1	66.4
12				64.8	65.4
+25				64.7	64.85
12+50				64.5	64.5

Lt ℄ Rt

Boat Spk in 18" Elm, 31 'rt at Sta 12+24

℄ Keller Parkway

7.7	5.4	4.8	4.8	4.4		4.4	4.6	4.2	5.7
54	45	36	24	9.5			18	24	38

7.9	5.3	5.2	4.9	4.6	4.7	4.6	4.4	5.8	
56	43	35	18	10		17	24	32	

Begin old gutter Sec

7.1	5.6	6.6	5.9	6.7	6.3	5.0	4.8	5.1	4.8
56	53	46	45	44	30	15		15	15.5

6.04	5.45	5.2	5.0	5.2
60	46	25		16

Final Topography

+39 Beg old Blk Top 01

+26 Beg orig. Blk Top -30

+25 Tri. Willow -65

+24 Beg old gutter -44

+24 Beg orig. Blk Top -42

+23 Beg old gutter Sta -15.6 - 17.8

+22 18" Elm - 30'

Sta 12

+76 24" Elm 36

+22 PP - 48'

Sta 11

+43.60 NE cor. wing wall -38.22

+35.30 NE cor Conc Rail -24.07

+43.51 NW cor Wing Wall - 38.13

+35.33 NW cor. Conc. Rail - 23.86

+23.85 SE cor Conc Rail - 24.13

+16.70 SE cor Wing W - 38.21

+23.90 SW cor. Conc. Rail - 23.80

+16.70 SW cor Wing W - 38.04

Sta 10

+85 PP - 51

Sta 9

+76 PP - 34

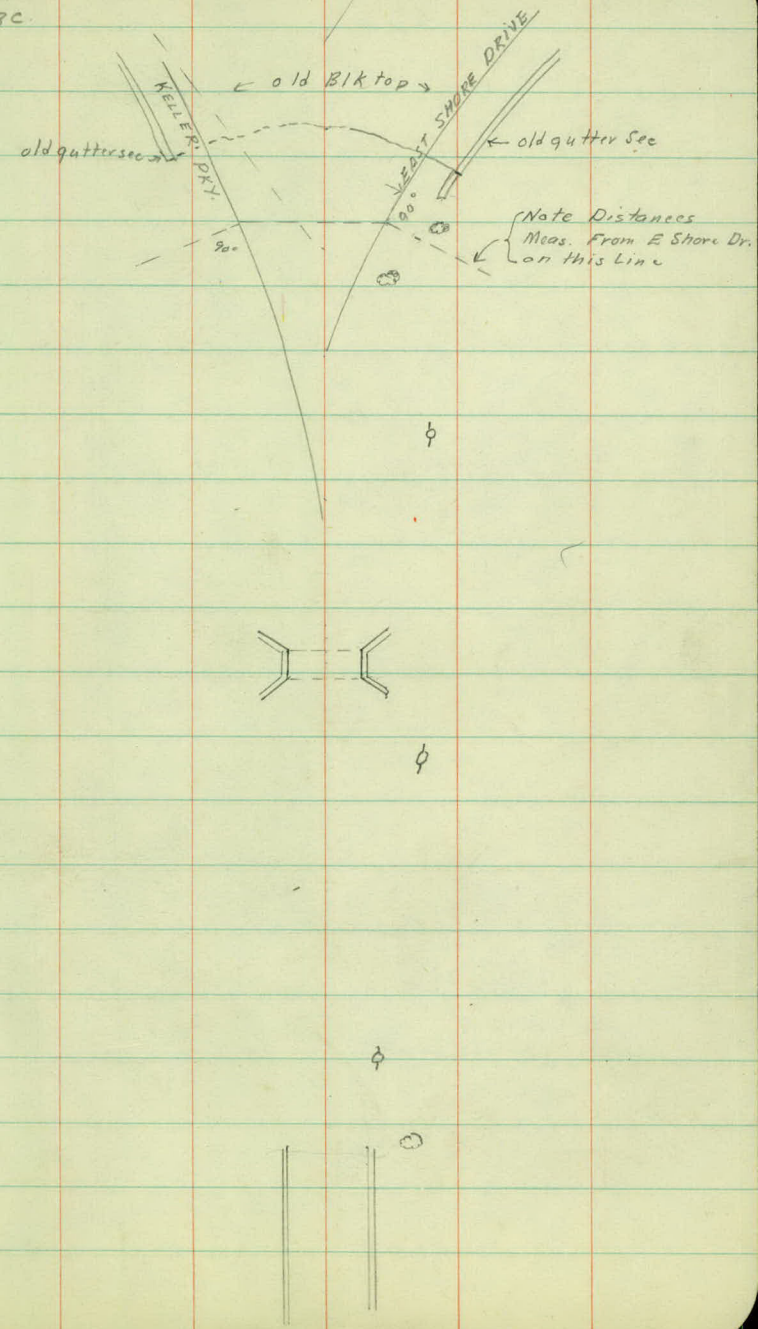
+45 end of old gutter - 13'

+47 end old gutter - 15'

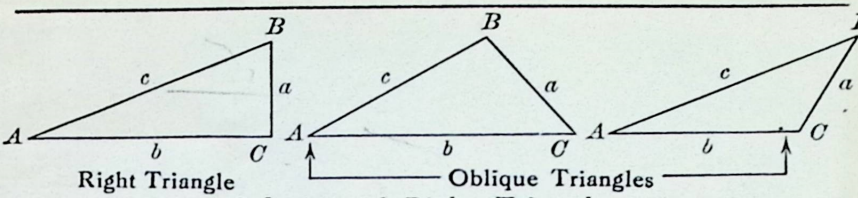
+45 8" elm - 23

Sta 8

11-3-49
GB MB
AM BC



TRIGONOMETRIC FORMULÆ



Right Triangle — Oblique Triangles

Solution of Right Triangles

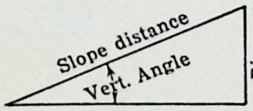
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\operatorname{cosec} = \frac{c}{a}$

Given	Required	
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B,\ c = \sqrt{a^2 + b^2} = a\sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B,\ b = \sqrt{(c+a)(c-a)} = c\sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90° - A,\ b = a \cot A,\ c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90° - A,\ a = b \tan A,\ c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90° - A,\ a = c \sin A,\ b = c \cos A,$

Solution of Oblique Triangles

Given	Required	
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A},\ C = 180° - (A + B),\ c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a},\ C = 180° - (A + B),\ c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180° - C,\ \tan \frac{1}{2}(A - B) = \frac{(a-b)\tan \frac{1}{2}(A+B)}{a+b},$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a+b+c}{2},\ \sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}},$ $\sin \frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{ac}},\ C = 180° - (A+B)$
a, b, c	Area	$s = \frac{a+b+c}{2},\ \text{area} = \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	$\text{area} = \frac{b\,c \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = 5° 10′. From Table, Page IX. cos 5° 10′ = .9959. Horizontal distance = 319.4 × .9959 = 318.09 ft.
Horizontal distance also = Slope distance minus slope distance times (1 − cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. Cosine 5° 10′ = .9959. 1 − .9959 = .0041. 319.4 × .0041 = 1.31. 319.4 − 1.31 = 318.09 ft.

When the rise is known, the horizontal distance is approximately:—the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance $= 302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.