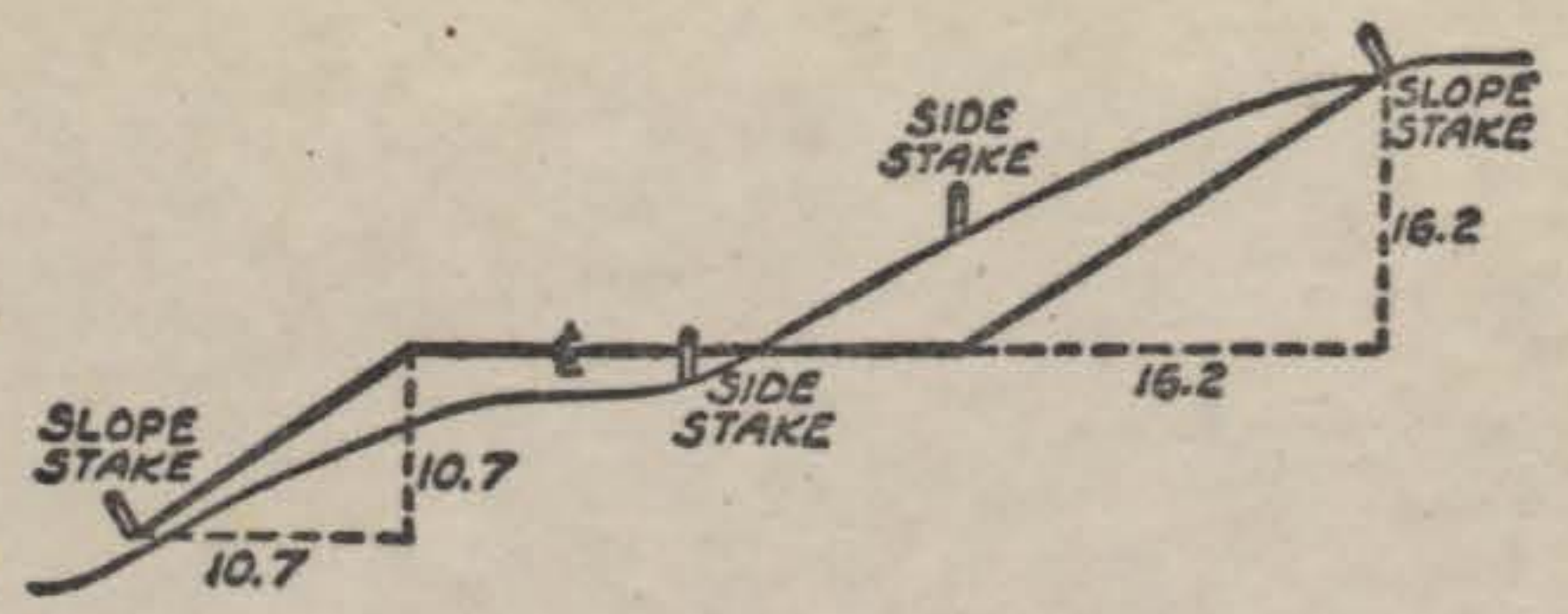




TIE POINT - 40



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING  
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 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 in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

**DIRECTIONS FOR USE OF TABLES**

**TABLE No. XIV**

Distance of slope stake from side or shoulder  
stake for any width roadway, slope 1/2 to 1.  
If ground is nearly level, the cut or fill at side

**IMPROVED TABLES  
AND  
INFORMATION**

**TABLE No. VIII**

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  $L$  may be found  
by dividing tangent (or external) opposite  $L$  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.

Law of Chords  
Law of Tangents

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"P" Line Curve 108+85<sup>52</sup>  
 to  
 128+47<sup>05</sup>

$\Delta = 40^\circ 08' 18''$   
 $R = 2800$   
 $T = 1022.95$   
 $L = 1961.25$   
 $d_s = .6138833$

+25'	1° 25' 37"	x
110~	1° 10' 17"	x
+75	0° 54' 56"	x
+50	0° 39' 35"	x
+36	0° 30' 59"	x
+26	0° 24' 51"	x
+25	0° 24' 14"	x
109~	0° 08' 54"	x
148		
*108+85 <sup>52</sup> B.C. RT	0° 00' 00"	1

+70	2° 54' 38"	x
+50	2° 42' 22"	x
+45	2° 39' 18"	x
+25	2° 27' 01"	x
+20	2° 23' 57"	x
111~	2° 11' 40"	x ✓ set in
+90	2° 08' 36"	x
+75	1° 56' 19"	x
+70	1° 53' 15"	x
110+50	1° 40' 58"	x

+75	5° 00' 29"			
13+5459 p.o.c.	4° 47' 57"	39' Rt to New D <sup>n</sup> Line tie	116 ~	7° 18' 36"
+50	4° 45' 08"			36 <sup>6</sup> Lt to "A" extended
			+75	7° 03' 16"
+25	4° 29' 47"			35 <sup>4</sup> Lt to "A" extended
			+50	6° 47' 55"
113 ~	4° 14' 27"			34 <sup>3</sup> Lt to "A" extended
			+46	6° 39' 19"
+75	3° 59' 06"			and "E" red 34° Lt to "A" extended
	Tied out Radial to west in new AC. 9.86 to PK & 35.65 more to PK.		+25	6° 32' 34"
P.O.C. 38.38 +61.62 = 100.00 399 Rt.	3° 50' 53" ← FROM EC			
	3° 49' 20" ← FROM BC		115 ~	6° 17' 13"
+50	3° 43' 45"		+90	6° 11' 05"
			+75	6° 01' 52"
+25	3° 28' 24"		+70	5° 58' 48"
			+50	5° 46' 32"
112 ~	3° 13' 03"			
			+25	5° 31' 11"
111 + 75	2° 57' 42"			
			114 ~	5° 15' 50"

118 ~ 9° 21' 23" ✓

+75 9° 06' 02"

+50 8° 50' 41" ✓

+25 8° 35' 21"

+24 8° 34' 44"

117 ~ 8° 20' 00" ✓

+75 8° 04' 39"

+61.06 7° 56' 05" 154<sup>26</sup> Rt to E Channel

+50 7° 49' 18" ✓  
Tied out Radial to West in New A.C.

9.74 to RL. 531.54 more to RL.  
POC. 12175<sup>23</sup> "A" 39° Lt to "A" extended  
+46<sup>06</sup>/<sub>25</sub> 7° 46' 53" ✓

116 + 25 7° 33' 57" 378 Lt to "A" extended

+50 10° 53' 28" ✓

+25 10° 38' 07"

+23<sup>79</sup> 10° 37' 22" ✓

+13<sup>90</sup> 10° 31' 18"

119 ~ 10° 22' 46" ✓

+75 10° 07' 26"

+55<sup>06</sup> 9° 55' 11" "C" tie

+50 9° 52' 05" ✓

+35<sup>25</sup> 9° 43' 00"

POC. +32<sup>40</sup>/<sub>25</sub> 9° 41' 16<sup>1/2</sup>" 06<sup>00</sup> 40° Rt. B.C. Channel 1143 Rt.

+25 9° 36' 44"

+19 9° 33' 03"

118 + 07 9° 25' 41"

Tied out Radial to West in New AC  
22.67 to PK of 72.63 more to dis. x in the wall

121 ~ POC.

12° 25' 33"

83° Rt to end box  
culvert  
begin channel

+75 14° 12' 59"

57 (50) mca  
+57.02 14° 01' 56.2"

"P" int. "D" 10+66.67  
we hope

+75 12° 10' 12"

14° 02' 14"

10+66.78 mca

+50 13° 57' 38"

✓ +52.35

11° 56' 18"

POC. channel  
83° Rt.

83° Rt to "U" channel end

✓ +37 13° 49' 39"

+50 11° 54' 51"

✓ +31.65 13° 46' 22"

69° Rt to Sky Column  
Bent #2

+25 11° 39' 30"

+25 13° 42' 17"

+04 11° 26' 37"

122 ~ 13° 26' 56"

69° Rt to Sky Column  
Bent #2

120 ~ 11° 24' 10"

+75 13° 11' 36"

119 + 75 11° 08' 49"

+50 12° 56' 15"

119 + 73 11° 07' 35"

"S" inlet

121 + 25 12° 40' 54"



+50	16° 00' 25"	✓ ✓ 0
+25	15° 45' 04"	
124~	15° 29' 43"	✓ ✓ 0
+75	15° 14' 22"	
+67	15° 09' 27"	81° RT channel tangent layout
+50	14° 59' 01"	✓ ✓ 0
+25	14° 43' 40"	
+14	14° 36' 55"	81° RT channel tangent layout
123~	14° 28' 20"	✓ ✓ 0
122+90	14° 22' 11"	Pipe to Culvert local area drain

127~	18° 33' 53"	✓ ✓ 0
+75	18° 18' 32"	15" inlet
+65	18° 12' 24"	Pipe to culvert local area drain
+50	18° 03' 11"	✓ ✓ 0
+25	17° 47' 56"	
126~	17° 32' 30"	✓ ✓ 0
+75	17° 17' 09"	
+50	17° 01' 48"	✓ ✓ 0 POLE (LEFT OUT)
+25	16° 46' 27"	
125~	16° 31' 06"	✓ ✓ 0
124+75	16° 15' 45"	

(E.C. TIED 25' E 50' @ 90° WLY.)  
P.K. 5 IN NEW A.C.

+4705 E.C. 20° 04' 09"

+25 19° 50' 37"

128 ~ 19° 35' 16" ~ ~ ~

+75 19° 19' 55"

+50 19° 04' 34" ~ ~ ~

+41 18° 59' 03"

127+25 18° 49' 14"

"P-3"

149+83<sup>37</sup>

to

150+01<sup>02</sup>

Tangent offset  
to spiral

39° 24' E" Lane &  
48° 24' S" Lane &

$\Delta_s = 6^\circ 30' 00''$

$L_s = 317.65$

$X = 317.24$

$Y = 12.00$

$C_s = 317.47$

$P = 3.00$

$Q = 158.76$

$a = 1.288$

$P = .001288$

$P_{bh} = 0^\circ 00' 53.5486''$

$Z_{bh} = 0^\circ 01' 07.0972''$

7

+50

0° 35' 46"

179

(2) twice deflection of P.O.S. puts one tangent to P.O.S.  
by backsighting on P.S. thusly

+42<sup>13</sup>

0+00  
"f"  
(see 20 scale)

0° 32' 28"

150



+25

0° 25' 50"

106

$\frac{\Delta_s}{3} = \checkmark 2^\circ 10' 00''$

+01<sup>02</sup> P.S.  $2^\circ 09' 57''$

12<sup>00</sup>

151 ~

0° 17' 31"

"inlet"

059

153 ~ 2° 09' 07"

11<sup>07</sup>

+75

0° 10' 49"

029

+75 1° 49' 32"

9<sup>29</sup>

+50

0° 05' 43"

04

+50 1° 31' 34"

7<sup>10</sup>

+25

0° 02' 14"

003

+25 1° 15' 12"

5<sup>28</sup>

150 ~

0° 00' 21"

000

152 ~ 1° 00' 27"

3<sup>21</sup>

16<sup>43</sup>

149+83<sup>37</sup> "P-3"

0° 00' 00"

P.S.

000

149+83<sup>37</sup> "P"

151+75 0° 47' 18"

2<sup>64</sup>

"P-3" 153+01<sup>02</sup>  
to  
160+06<sup>52</sup>

155m ✓

4° 04' 18" ✓✓

+75

3° 33' 36" ✓

+50 ✓

3° 02' 55" ✓✓

+25

2° 32' 13" ✓

+02

2° 03' 59" ✓

154m ✓

2° 01' 32" ✓✓

+75

1° 30' 50" ✓

+50 ✓

1° 00' 08" ✓✓

+25

0° 29' 27" ✓

153+01<sup>02</sup> P.S.C. ✓

0° 00' 00' ✓

✓ 3921+ to 10+55<sup>37</sup> E line

$\Delta c = 28^{\circ} 52' 23''$   
 $\frac{1}{2} \Delta c = 14^{\circ} 26' 11\frac{1}{2}''$   
 $R_c = 1400$   
 $L_c = 705^{\circ} 50''$

$d_1 = 1.2277667$

8

+25

8° 40' 33" ✓

+24<sup>23</sup>

8° 39' 36" ✓

157m ✓

8° 09' 51" ✓✓

+75

7° 39' 10" ✓

+50 ✓

7° 08' 28" ✓

START 11-17-59

+25

6° 37' 46" ✓

156m ✓

6° 04' 05" ✓✓

+75

5° 36' 23" ✓

+50 ✓

5° 05' 41" ✓

+45

4° 59' 23" ✓

155+25

4° 35' 00" ✓

159 ~ ~ ~

12° 15' 24"

✓

1426 11  
4200  
1846 11

+ 75

11° 44' 43"

✓

+06<sup>52</sup> PCS.

14° 26' 11 1/2"

STOP

+62<sup>00</sup>

11° 28' 45"

✓ Bent #3

160 ~ ~ ~

14° 18' 11"

+ 50

11° 14' 01"

✓

+75

13° 47' 30"

+25

10° 43' 20"

✓

+68

13° 38' 54"

2° Lt to 2 SMH #4 now

10 31 37

9+21.59  
9+21.25 Aldine  
25 intersection

✓ +14<sup>37</sup> (ps) (ds)

10° 30' 25"

10 29 13

+50

13° 16' 48"

STOP  
158 ~ ~ ~

10° 12' 38"

✓

+30

12° 52' 15"

Head wall of pipe inlet  
drain to Aldine

+75<sup>00</sup>

9° 41' 56"

✓ Bent #3

+25

12° 46' 06"

+50

9° 11' 15"

✓

+12<sup>58</sup>

12° 30' 51"

157+26

8° 41' 46"

✓ Bent #1 pilling

159+11<sup>00</sup>

12° 28' 55"

✓ Bent #4 pilling

"P-3" 160+06<sup>52</sup>  
to  
163+26<sup>34</sup>

162 ~

3° 09' 20" ✓

+75

2° 50' 18" ✓

+50

2° 29' 39" ✓

+26

2° 08' 18" ✓

933 RT to 48' NCP end  
use P.C.S. back site  
1° 49' 55" to get tangent  
to P.O.S.

+25

2° 07' 23" ✓

161 ~

1° 43' 31" ✓

+75

1° 18' 02" ✓

+50

0° 50' 57" ✓

160+25

0° 22' 15" ✓

160+06<sup>52</sup> P.C.S.

0° 00' 00"

$\Delta_s = 6^\circ 30' 00''$   
 $L_s = 317.65$   
 $X = 317.24$   
 $Y = 12.42$   
 $C_s = 317.47$   
 $P = 3.00$   
 $Q = 158.76$

$a = 1.288$   
 $f = 0.001288$   
 $f66 = .595056$   
 $2f66 = 1.190112$   
 $dh = 30.6941675$   
 $dh - 2f66 = 29.5040555$

10

4 20 00  
14 26 12  
18 46 12

+26<sup>34</sup> Ah.

=s  
+24<sup>17</sup> P.T. BK 4° 20' 00" ✓

163 ~ 4° 09' 24" ✓

+75 3° 56' 48" ✓

+50 3° 42' 35" ✓

162+25 3° 26' 46" ✓

27.50

"A" Line

$\Delta = 43^\circ 16' 05''$  mea  
 $\frac{1}{2}\Delta = 21^\circ 38' 02\frac{1}{2}''$   
 $R = 600$   
 $T = 23797$

$L = 453.09$   
 $d_s = 2.864789$

11

			9+25	19° 47' 45"	°
7+00	POC	9° 03' 10"	✓		°
6+75		7° 51' 33"	°	9+00	18° 36' 07"
				8+89	18° 04' 36"
6+50		6° 39' 56"	✓	8+75	17° 24' 30"
6+25		5° 28' 18"	°	8+50	16° 12' 53"
6+00		4° 16' 41"	✓	8+25	15° 01' 16"
5+75		3° 05' 04"	°	8+00	13° 49' 39"
					P.O.C.
5+50		1° 53' 27"	✓	7+75	12° 38' 01"
50' C = 49.99					
25' C = 25.00				7+50	11° 26' 24"
5+25		0° 41' 50"	°	7+25	10° 14' 47"
C = 14.60					
5+10 <sup>40</sup> Ah	BC	0° 00' 00"	R.P. 99.14	9+62 <sup>64</sup> Ah	
= S			LINE ONLY	9+63 <sup>49</sup> BK	FC. 21° 38' 02 <sup>1</sup> / <sub>2</sub> "
5+09 <sup>84</sup> BK				C = 13.79	
				9+50	20° 59' 22"

"B" Line

$\Delta = 101^{\circ} 00'$   
 $\frac{1}{2}\Delta = 50^{\circ} 30'$   
 $R = 300$

$T = 36393$   
 $L = 52883$   
 $d = 5.729578$

12

6+75 <sup>p.o.c.</sup> 19° 14' 34"

9+00 40° 43' 43"

6+50 16° 51' 20"

8+75 38° 20' 29"

6+25 14° 28' 05"

8+50 35° 57' 15"

6+00 p.o.c. 12° 04' 51"

8+25 33° 34' 00"

5+75 9° 41' 37"

8+00 31° 10' 46"

5+50 7° 18' 22"

7+75 28° 47' 32"

5+25 4° 55' 08"

7+50 26° 24' 17"

50c = 4994  
25c = 2499

5+00 2° 31' 53"

c = 2391

c = 2650

c = 2535

7+25 24° 01' 03"

4+73 <sup>49</sup> Ah 0° 00' 00"

R = 287

4+72 <sup>86</sup> Bk

7+00 21° 37' 48"



16+12<sup>36</sup>"  
=5

10+02<sup>32</sup>" B" EC 50° 30' 00"

0-27<sup>31</sup>  
9+75  
0-52<sup>25</sup>

47° 53' 27"

9+50

45° 30' 12"

9+250

43° 06' 58"

see pg 37

"C" Line

changed

$\Delta = 162^{\circ} 23' 05''$   
 $\frac{1}{2}\Delta = 81^{\circ} 11' 32\frac{1}{2}''$   
 $R = 74^{\circ}$   
 $L = 209^{\circ} 73$   
 $d_1 = 23,22802$

~~1+50      58° 04' 10"      116° 08' 20"~~

~~1+30      50° 19' 38"      100° 39' 16"~~

~~1+00      38° 42' 48"      77° 25' 36"~~

~~0+80      30° 58' 15"      61° 56' 30"~~

~~0+60      23° 13' 41"      46° 27' 22"~~

~~0+40      15° 29' 07"      30° 58' 14"~~

~~0+20      7° 44' 34"      15° 29' 08"~~

~~0+1507      5° 49' 58"      11° 39' 56"~~

~~0+00 "C"      0° 00'      0° 00'~~

11873240P"

~~2+0973      81° 11' 32½"      162° 23' 05"~~

~~2+00      77° 25' 33      154° 51' 06"~~

~~1+79<sup>33</sup>      69° 25' 24"      138° 50' 48"~~

~~1+70      65° 48' 43"      131° 37' 26"~~

"D" Line

changed

see pg 36-35

$\Delta = 29^{\circ} 01' 30''$   
 $\frac{1}{2}\Delta = 14^{\circ} 30' 45''$   
 $R = 300$   
 $L = 151.97$   
 $T = 151.97$   
 $d_1 = 5.729578$

~~$\Delta = 7^{\circ} 20'$   
 $\frac{1}{2}\Delta = 3^{\circ} 40'$   
 $R = 400$   
 $L = 51.20$   
 $T = 25.33$   
 $d_1 = 4.277183$~~

~~3+15<sup>09</sup>      14° 30' 45"      345° 29' 15"~~

~~c=15<sup>09</sup>~~

~~3+00      13° 04' 16"      346° 55' 44"~~

~~2+75      10° 41' 01"      349° 18' 59"~~

~~2+50      8° 17' 47"      351° 42' 13"~~

~~2+25      5° 54' 33"      354° 05' 27"~~

~~2+00      3° 31' 18"      356° 28' 42"~~

~~c=24<sup>09</sup>~~

~~1+75      1° 08' 04"      358° 51' 56"~~

~~c=11<sup>88</sup>~~

1+63<sup>12</sup> B.C.      0° 00'      360° 00'

FAIRMOUNT AVE.  
ACCESS ROAD

1+06.44 = E.C.  $\Delta = 127^{\circ}30'$

0+75  $\Delta = 89^{\circ}31'28''$

0+43  $\Delta = 51^{\circ}19'39''$

0+35  $\Delta = 41^{\circ}46'41''$

STA. 205+61 "FRFS" LINE =

STA. 0+00 ACCESS ROAD

$\Phi$   
 $R = 48.0'$   
 $\Delta = 127^{\circ}30'$   
 $L = 106.81$   
 $D_1 = 35.80985$

CB. 16  
 $R = 30.76'$   
 $\Delta = 127^{\circ}30'$   
 $L = 68.45'$   
 $D_1 = 55.88$

CURVE # 2  
 $\Delta = 30^{\circ}13'10''$   
 $R = 500'$   
 $T = 135.00$   
 $L = 263.71$   
 $D_1 = 3.437746$

CURVE # 3 17  
 $\Delta = 34^{\circ}51'29''$   
 $R = 439.0'$

*changed*

9+64.78 = B.C.

9+49.23 = E.C.

chd. = 49.21

9+00

*changed*

+50

8+00

+50

chd. = 49.98

7+00

chd. = 14.47

6+85.52 = B.C.

$15^{\circ}06'34''$

$12^{\circ}17'20''$

$9^{\circ}25'26''$

$6^{\circ}33'33''$

$3^{\circ}41'40''$

$0^{\circ}49'48''$

$0^{\circ}00'00''$



"E" RAMP

+ 81.50 - 24.5 RT. 17° 01' 36"  
END 45" PIPE

+ 75 16° 25' 18"

+ 50 14° 04' 50"

+ 34.50 12° 37' 49"

+ 25 11° 44' 27"

3+00 9° 24' 00"

+ 89.50 8° 25' 01"

+ 75 7° 03' 45"

+ 50 4° 43' 10"

+ 25 2° 22' 44"

2+00 0° 02' 18"

1+99.59 = B.C. "E"

$\Delta = 44^\circ 32' 43''$   
 $\frac{1}{2}\Delta = 22^\circ 16' 21.5''$   
 $R = 306'$   
 $T = 125.33'$   
 $L = 237.90$   
 $D_1 = 5.6172$

10+56.48 "E" = s 153+01.02 P-3  
← 39° Lt

4+82.19 "E" <sup>19</sup> <sub>109</sub> 12° Wly = s 1+07.14 E-1)

4+37.49 = E.C. 22° 16' 21.5"

+ 25 21° 06' 10"

4+00 18° 45' 45"

## Aldine

38° Lt to drain		
7+26	9° 25' 09"	omits
7+25	9° 20' 52"	✓
7+00	7° 33' 38"	✓
6+75	5° 46' 24"	✓
18° NT 06 POC 6+67 <sup>30</sup>	5° 13' 22"	✓
6+50	3° 59' 10"	✓
6+25	2° 11' 56"	✓
6+00	0° 24' 42"	✓
5+94 <sup>24</sup> BC.	0° 00'	

20

$$\Delta = 19^{\circ} 15' 20''$$

$$\frac{1}{2}\Delta = 9^{\circ} 37' 40''$$

$$R = 400.74 \quad d_1 = 4.2892.48$$

$$L = 134.68$$

$$T = 67.98$$

7+28<sup>92</sup> EC.

9° 37' 40" ✓



"P 4"

173+53.57 to 180+18.02

No chord cut.

$\Delta = 31^{\circ}43'30''$   
 $R = 1200'$   
 $T = 340.98$   
 $L = 664.45$   
 $D_1 = 1.4324$

$\Delta = 9^{\circ}18'22'' \pm 1$   
 $R = 1200'$   
 $T = 97.67$   
 $L = 194.91$

+25 4°05'34" 355°54'26"

+50 9°27'51" 350°32'09"

175~ 3°29'45" 356°30'15"

+25 8°52'02" 351°07'58"

+75 2°53'56" 357°06'04"

177~ 8°16'13" 351°43'47"

+50 2°18'07" 357°41'53"

+75 7°40'25" 352°19'35"

+25 1°42'19" 358°17'41"

+50 7°04'36" 352°55'24"

174~ 1°06'30" 358°53'30"

+25 6°28'48" 353°31'12"

+75 0°30'42" 359°29'18"

176+00 5°53'00" 354°07'00"

+60 0°09'13" 359°50'47"

+75 5°17'11" 354°42'49"

173+53.57 = B.C.

0°00'

(175+48.48 4°39'11" 355°20'49"  
P.C.C. to P-5 line  
' All pg - 33 - )

"P. 4"

(CONTINUED)

+50 14°14'20" ✓ 345°45'40"

+25 13°38'31" ✓ 346°21'29"

179~ 13°02'42" ✓ 346°57'18"

+75 12°26'54" ✓ 347°33'06"

+50 11°51'05" ✓ 348°08'55"

+25 11°15'17" ✓ 348°44'43"

178~ 10°39'28" ✓ 349°20'32"

180+ 18.02 = E.C. 15°51'45" ✓ 344°08'15"

+75 10°03'40" ✓ 349°56'20"

180~ 15°25'57" ✓ 344°34'03"

177+ 60 9°42'10" ✓ 350°17'58"

179+75 14°50'08" ✓ 345°09'52"

"P4"

No chord cut.

$$\begin{aligned}\Delta &= 9^{\circ}58'16'' \\ R &= 1000' \\ T &= 87.23 \\ L &= 174.03 \\ D_1 &= 1.7887338\end{aligned}$$

23

184+03.61 = E.C  $4^{\circ}59'08''$   $355^{\circ}00'52''$

184-  $4^{\circ}52'56''$   $355^{\circ}07'04''$

+75  $4^{\circ}09'58''$   $355^{\circ}50'02''$

+50  $3^{\circ}27'00''$   $356^{\circ}33'00''$

+25  $2^{\circ}44'00''$   $357^{\circ}16'00''$

183-  $2^{\circ}01'02''$   $357^{\circ}58'58''$

+75  $1^{\circ}18'04''$   $358^{\circ}41'56''$

+50  $0^{\circ}35'06''$   $359^{\circ}24'54''$

182+29.58 = B.C.

MONTEZUMA ROAD

2+0662 To 26+62 CURVE #1

*changed to Pit*  
*leaf*  
 $A = 45^{\circ} 38' 50''$   
 $R = 2000$   
 $L = 1593.38$

$\Delta = 70^{\circ} 22' 07''$   
 $\frac{1}{2}\Delta = 35^{\circ} 11' 03.5''$   
 $R = 2000$   
 $L = 2456.33$

$d_1 = 0.8594365$  24  
 $\frac{1}{3}\Delta = 23^{\circ} 27' 22''$   $c = 813.92$   
 $\frac{1}{6}\Delta = 11^{\circ} 43' 41''$

4+00	2° 46' 12"	357° 13' 48"	6+00	5° 38' 05"	354° 21' 55"
+75	2° 24' 43"	357° 35' 17"	+83 = Drive	5° 23' 29"	354° 36' 31"
+50	2° 03' 13"	357° 56' 47"	+75	5° 16' 36"	354° 43' 24"
+25	1° 41' 44"	358° 18' 16"	+50	4° 55' 07"	355° 04' 53"
3+00	1° 20' 15"	358° 39' 45"	+25	4° 33' 38"	355° 26' 22"
+75	0° 58' 46"	359° 01' 14"	5+00	4° 12' 08"	355° 47' 52"
+50	0° 37' 17"	359° 22' 43"	+75	3° 50' 40"	356° 09' 20"
+25	0° 15' 48"	359° 44' 12"	+50	3° 29' 10"	356° 30' 50"
2+0662 = B.C.	0° 00'	0° 00'	4+25	3° 07' 41"	356° 52' 19"

1838

+25 8°51'28" 351°08'32" ✓

+50 12°04'50" 347°55'10" ✓

8+00 8°29'58" 351°30'02" ✓

<sup>1/3</sup>  
P.O.C. 10+25 40 11°43'41" Long chnd 348°16'19" ✓

+25 11°43'21" 348°16'39" ✓

+75 8°08'29" 351°51'31" ✓

<sup>P.O.C.</sup>  
10+00 11°21'52" 348°38'08" ✓

+50 7°47' 352°13'00" ✓

+75 11°00'23" 348°59'37" ✓

+25 7°25'31" 352°34'29" ✓

+50 10°38'53" 349°21'07" ✓

7+00 7°04'02" 352°55'58" ✓

+25 10°17'24" 349°42'36" ✓

+75 6°42'32" 353°17'28" ✓

9+00 9°55'55" 350°04'05" ✓

+50 6°21'04" 353°38'56" ✓

+75 9°34'26" 350°25'34" ✓

6+25 5°59'34" 354°00'26" ✓

8+50 9°12'57" 350°47'03" ✓

+75	15°18'13"	344°41'47" ✓	15+00	18°31'35"	341°28'25" ✓
+50	14°56'43"	345°03'17" ✓	+75	18°10'06"	341°49'54" ✓
+25	14°35'14"	345°24'46" ✓	+50	17°48'37"	342°11'23" ✓
12+00	14°13'45"	345°46'15" ✓	+25	17°27'07"	342°32'53" ✓
+75	13°52'16"	346°07'44" ✓	14+00 <sup>POC</sup>	17°05'38"	342°54'22" ✓
+50	13°30'47"	346°29'13" ✓	+75	16°44'09"	343°15'51" ✓
+25	13°09'17"	346°50'43" ✓ <small>SET</small>	+50	16°22'40"	343°39'20" ✓
11+00	12°47'49"	347°12'11" ✓	+25	16°01'11"	343°58'49" ✓
10+75	12°26'19"	347°33'41" ✓	13+00	15°39'41"	344°20'19" ✓

337° 10' 35"  
 12° 22"  
 324° 48' 35"

NEW CURVE @ 18+00 27

$\Delta = 24^\circ 44' 00''$   
 $T = 437.26$   
 $P = 1994.30$   
 $L = 860.90$   
 $D_1 = .8618911$   
 $\frac{1}{2}\Delta = 12^\circ 22' 00''$   
 NO CUT ON CHORDS

17+00 21° 23' 28" 338° 36' 32" +25 1° 47' 45" 358° 12' 15"

+75 21° 02' 00" 338° 58' 00" 19+00 1° 26' 11" 358° 33' 49"

+50 20° 40' 30" 339° 19' 30" +75 1° 04' 38" 358° 55' 22"

+25 20° 19' 00" 339° 41' 00" +50 0° 43' 05" 359° 16' 55"

16+00 19° 57' 31" 340° 02' 29" +25 0° 21' 33" 359° 38' 27"

+75 19° 36' 02" 340° 23' 58" 18+00 = 22° 49' 25" 337° 10' 35"

P.C.C. here changed to A.7 - road

+69<sup>25</sup> 19° 31' 05" 340° 28' 55" +75 22° 27' 55" 337° 32' 05"

+50 19° 14' 33" 340° 45' 27" +50 22° 06' 26" 337° 53' 34"

15+25 18° 53' 04" 341° 06' 56" 17+25 21° 44' 57" 338° 15' 03"

P.O.C. +50 5°01'40" 354°58'20"

+75 8°15'35" 351°44'25"

+25 4°40'07" 355°19'53"

+50 7°54'00" 352°06'00"

+45 7°49'44" 352°10'16"

21+00 4°18'34" 355°41'26"

+25 7°32'30" 352°27'30"

+75 3°57'00" 356°03'00"

23+00 7°10'56" 352°49'04"

+50 3°35'28" 356°24'32"

+75 6°49'23" 353°10'37"

+25 3°13'54" 356°46'06"

+50 6°27'51" 353°32'09"

20+00 2°52'23" 357°07'37"

+25 6°06'18" 353°53'42"

+75 2°30'48" 357°29'12"

22+00 5°44'45" 354°15'15"

19+50 2°09'17" 357°50'43"

21+75 5°23'13" 354°36'47"



26+00 11°29'30" 348°30'30"

+75 11°08'00" 348°52'00"

+50 10°46'25" 349°13'35"

+25 10°24'52" 349°35'08"

25+00 10°03'20" 349°56'40"

+75 9°41'45" 350°18'15"

+55 9°24'32" 350°35'28" 26+59<sup>44</sup> AHEAD

+50 9°20'<sup>19</sup>'13" 350°39'47" 26+60<sup>90</sup> 12°22'00" 347°38'00"  
BK. =

+25 8°58'40" 351°01'20" +50 12°12'36" 347°47'24"

24+00 8°37'08" 351°22'52" +25 11°51'03" 27 348°08'57"

MONTENZUMA RD.

30+86<sup>02</sup> To 42+25<sup>53</sup>  
CURVE # 2

$\Delta = 46^{\circ} 38' 07''$   
 $\frac{1}{2}\Delta = 23^{\circ} 19' 03.5''$   
 $R = 1400'$   
 $L = 1139.51$

$d_1 = 1.2278(30)$

+75	3° 52' 00"	4"	35+00	8° 28' 17"	4"
+50	3° 21' 20"	4"	+75	7° 57' 34"	4"
+25	2° 50' 38"	4"	+50	7° 26' 53"	4"
32~	2° 19' 56"	4"	+25	6° 56' 12"	4"
+75	1° 49' 15"	4"	34+00 P.O.C.	6° 25' 30"	4"
+50	1° 18' 33"	4"	+75	5° 54' 49"	4"
+25	0° 47' 52"	4"	+50	5° 24' 07"	4"
31~	0° 17' 10"	4"	+25	4° 53' 25"	4"
30+86 <sup>02</sup> = B.C.	0° 00'		33+00	4° 22' 43"	4"

+25

13° 04' 32"

x

+50

17° 40' 48"

x

37~ P.O.C.

12° 33' 50"

x

+25

17° 10' 06"

x

+75

12° 03' 09"

x

39~

16° 39' 24"

x

P.O.C.

+50

11° 32' 27"

x

+75

16° 04' 43"

x

+25

11° 01' 45"

x

+50

15° 38' 00"

x

36~

10° 31' 04"

x

+25

15° 07' 20"

x

+75

10° 00' 22" P.O.C.

x

38~

14° 36' 37"

x

+50

9° 29' 40"

x

+75

14° 05' 55"

x

35+25

8° 59' 00"

x

37+50

13° 35' 14"

x

+75

22° 17' 03"

A'

+50

21° 46' 21"

A'

+25

21° 15' 40"

A'

41-

20° 44' 58"

A'

+75

20° 14' 16"

A'

+50

19° 43' 34"

A'

+25

19° 12' 53"

A'

40- POC

18° 42' 11"

A'

42 + 25<sup>53</sup> = E.C. 23° 19' 035" SET

39 + 75

18° 11' 30"

A'

42-

22° 47' 45" A'

PR-5 Line

$\Delta = 55' 36.50''$   
 $R = 497.75$   
 $T = 262.51$   
 $L = 483.14$

$d_1 = 345.3285$   
33  
50'c = 49.28

begin term +65

$12^\circ 27' 42''$

$347^\circ 32' 18''$

+75

$24^\circ 32' 52''$

$335^\circ 27' 08''$

+50

$11^\circ 35' 54''$

$348^\circ 24' 06''$

+50

$23^\circ 06' 31''$

$336^\circ 53' 29''$

+25

$10^\circ 09' 34''$

$349^\circ 50' 26''$

+25

$21^\circ 40' 12''$

$338^\circ 19' 48''$

177 ~

$8^\circ 43' 13''$

$351^\circ 16' 47''$

179 ~

$20^\circ 13' 52''$

$339^\circ 46' 08''$

+75

$7^\circ 16' 54''$

$352^\circ 43' 06''$

+75

$18^\circ 47' 32''$

$341^\circ 12' 28''$

+50

$5^\circ 50' 34''$

$354^\circ 09' 26''$

+50

$17^\circ 21' 12''$

$342^\circ 38' 48''$

176 +25

$4^\circ 24' 15''$

$355^\circ 35' 45''$

+25

$15^\circ 54' 53''$

$344^\circ 05' 07''$

176 ~

$2^\circ 57' 54''$

$357^\circ 02' 06''$

178 ~

$14^\circ 28' 33''$

$345^\circ 31' 27''$

175 +75

$1^\circ 31' 34''$

$358^\circ 28' 26''$

177 +75

$13^\circ 02' 12''$

$346^\circ 57' 48''$

175 +4848 PCC.

$0^\circ 00'$

$360^\circ 00'$

PF5 LINE  
CURVE No. 2

$\Delta = 23^{\circ}18'40''$   
 $R = 500'$   
 $T = 103.14'$   
 $L = 203.43$   
 $d_1 = 3.4377$

50' chd. = 49.98 34

183+00  $6^{\circ}36'22''$

+80.78  $5^{\circ}30'17''$  ✓

+75  $5^{\circ}10'25''$  ✓

+50  $3^{\circ}44'29''$  ✓

+25  $2^{\circ}18'32''$  ✓

182+00  $0^{\circ}52'36''$  ✓

181+84<sup>20</sup> =  
B.C.

183+88<sup>13</sup> = E.C.

$11^{\circ}39'20''$

+75

$10^{\circ}54'11''$

180+31<sup>62</sup> = EC,  $27^{\circ}48'25''$   $332^{\circ}11'35''$

+50

$9^{\circ}28'15''$

180+00  $25^{\circ}59'12''$   $334^{\circ}00'48''$

+25

$8^{\circ}02'19''$

"D" Line

New

$\Delta = 84^\circ 42' 25''$

343

35

$R = 280$

$L = 41396$

$d_1 = 6.1388325$

$T = 25526$

343

35

7+25 21° 43' 13" 338° 16' 47" 4

7+05 & pipe 19° 40' 27" 340° 19' 33"

7+00 19° 09' 45" 340° 50' 15" 4

6+75 16° 36' 17" 343° 23' 43" 4 9+26<sup>67</sup> EC, 42° 21' 12 1/2" 317° 38' 47 1/2" 4

6+50 14° 02' 48" 345° 57' 12" 4 9+00 39° 37' 31" 320° 22' 29" 4

6+25 11° 29' 20" 348° 30' 40" 4 8+75 37° 04' 05" 322° 55' 55" 4

6+00 8° 55' 52" 351° 04' 08" 4 8+50 34° 30' 34" 325° 29' 26" 4

5+75 6° 22' 23" 353° 27' 37" 4 8+25 31° 57' 06" 328° 02' 54" 4

5+50 3° 48' 55" 356° 11' 05" 4 8+00 29° 23' 38" 330° 36' 22" 4

5+34<sup>66</sup> Lt only PCC. Lt. OS Line 2° 14' 41" 357° 45' 19" 4

5+25 Rt only 1° 15' 27" 358° 44' 33" 4 7+75 26° 56' 09" 333° 09' 51" 4

5+12<sup>71</sup> BC, 0° 00' 360° 00' 4 7+50 24° 16' 41" 335° 43' 19" 4

2+60<sup>75</sup> "C" Line

"D" Line

$$\Delta = 36^{\circ} 08' 25''$$

$$HA = 18^{\circ} 04' 12'' \quad L = 18923$$

$$R = 300 \quad d = 5729578'$$

$$T = 97.88$$

3+08<sup>58</sup> EC,  $18^{\circ} 04' 12\frac{1}{2}''$

(795)

3+00  $17^{\circ} 15' 03''$

(23165)

2+75  $14^{\circ} 51' 49''$

2+50  $12^{\circ} 28' 34''$

2+25  $10^{\circ} 05' 20''$

2+11<sup>30</sup> <sup>Begin "</sup> BC, Lt H 06  $8^{\circ} 46' 50''$

2+00 <sup>target</sup> 6272  $7^{\circ} 42' 05''$

↓

1+75  $5^{\circ} 18' 51''$

1+50  $2^{\circ} 55' 37''$

1+25  $1^{\circ} 32' 22''$

565

(523)

1+19<sup>35</sup> BC,  $0^{\circ} 00' 00''$



"C" Line  
New

$\Delta = 149^\circ 23' 57''$   
 $R = 100^{\circ}$   
 $L = 260^{\circ}$

deflection  $\Delta_s$        $\Delta_s$

0+98 <sup>04</sup>	46° 36' 46"	93° 13' 32"
1+00		92° 06' 11"
1+23 <sup>04</sup>	39° 27' 03"	78° 54' 06"
1+25		77° 46' 45"
1+40 <sup>04</sup>	32° 17' 37"	64° 35' 14"
1+50		63° 27' 19"
1+73 <sup>04</sup>	25° 07' 37"	50° 15' 14"
1+75		49° 07' 52"
1+98 <sup>04</sup>	17° 57' 54"	35° 55' 48"
2+00		34° 48' 26"
2+23 <sup>04</sup>	10° 48' 11"	21° 36' 22"
19 <sup>62</sup> 2+25		20° 29' 00"
25 2+32 <sup>66</sup> PCC 2+06 Line	8° 02' 50"	16° 05' 40"
2+48 <sup>04</sup>	3° 38' 28"	7° 16' 56"
10 <sup>21</sup> 2+50		6° 09' 34"
2+60 <sup>75</sup> EC =5	0° 00' 00"	0° 00' 00"
5+12 <sup>71</sup> "D" Line BC		

0+00	74° 41' 58 1/2"	149° 23' 57"
0+18 <sup>27</sup> PCC, L+06	69° 27' 56"	138° 55' 52"
0+19 <sup>04</sup>	69° 00' 25"	138° 00' 50"
0+25		135° 04' 30"
0+23 <sup>04</sup>	68° 05' 55"	136° 11' 50"
0+48 <sup>04</sup>	60° 56' 12"	121° 52' 24"
0+50		120° 45' 03"
0+68 <sup>04</sup> Inlet	55° 12' 26"	111° 24' 52"
0+73 <sup>04</sup>	53° 46' 29"	107° 32' 58"
0+75		106° 25' 37"

CURVE ON "D" LINE

$\Delta = 23^{\circ}24'00''$   
 $R = 1490'$   
 $T = 308.56$   
 $L = 608.53$

$D_1 = 1.153606$  38

+75	$3^{\circ}26'32''$	-225	$7^{\circ}22'28''$
18 +6590 20° Lt to 0+00 "A"	$3^{\circ}16'03''$		
+50	$2^{\circ}57'42''$	-250	$6^{\circ}53'36''$
+25	$2^{\circ}28'52''$	-275	$6^{\circ}24'45''$
18~	$2^{\circ}00'00''$	-300	$5^{\circ}55'55''$
+75	$1^{\circ}31'11''$	20 - = -304 <sup>49</sup>	$5^{\circ}50'45''$
+50	$1^{\circ}02'20''$	+75	$5^{\circ}21'54''$
+25	$0^{\circ}33'30''$	+50	$4^{\circ}53'04''$
17~	$0^{\circ}04'40''$	+25	$4^{\circ}24'13''$
16 + 95 <sup>96</sup> = B.C.	$0^{\circ}00'00''$	19~	$3^{\circ}55'23''$

23+0449 "D"  
0+00 = E.C. Montezuma Rd. 11°42'00"

-25 11°13'10"

-50 10°44'20"

-75 10°15'30"

-100 9°46'38"

-125 9°17'48"

-150 8°48'58"

-175 8°20'07"

-200 7°51'17"

"F" Line

$\Delta = 58^{\circ} 52' 17''$   
 $\frac{1}{2}\Delta = 29^{\circ} 26' 08\frac{1}{2}''$   
 $R = 125$   
 $T = 70.54$   
 $L = 128.44$

"F"  
 $d_1 = 13.750987$

5+20<sup>47</sup> = 11+50 Aldine

4+48.17 EC.

29° 26' 08½" ✓

c = 23<sup>13</sup> ↑  
4+37.2

27° 02' 05" ✓

4+35

26° 25' 04" ✓

4+30

25° 16' 19" ✓

4+25

24° 07' 34" ✓

4+00

18° 23' 48" ✓

3+75

12° 40' 01" ✓

3+50

6° 56' 15" ✓

c = 24<sup>9</sup>

3+25

1° 12' 28" ✓

c = 5<sup>21</sup>

3+19<sup>73</sup> BC.

0° 00'

1469

3+05<sup>04</sup> F'

= 5 0+00 F-1"

"F-1" Line

$$\Delta = 148\ 52\ 17''$$

$$N = 85$$

$$T = 30517$$

$$L = 22086$$

$$d_1 = 20.22204$$

	$\Delta$	$\frac{1}{2} \Delta$
1775	117° 57' 42"	58° 58' 51" ✓
1750	101° 06' 36"	50° 33' 18" ✓
1725	84° 15' 30"	42° 07' 45" ✓
1705	70° 46' 38"	35° 23' 19" ✓
1700	67° 24' 24"	33° 42' 12" ✓
0775	50° 33' 18"	25° 16' 39" ✓

33 BK of BK E  
C = 465

P.O.C.

17° to island

18° to island

0750	33° 42' 12"	16° 51' 06" ✓
0725	16° 51' 06"	8° 25' 33" ✓
0700 "F-1" BC	0° 00'	0° 00'
3705 "F-1" BC		

2491  
C = 2544

33 BK of BK E  
C = 21787

2315

	$\Delta$	$\frac{1}{2} \Delta$
1270 Aldine = S		
2220 <sup>86</sup> EC "F-1"	148 52 17	74° 26' 08 1/2" ✓
2200	134 48 48	67° 24' 24" ✓
1780		60° 19' 57" ✓

2491 Mt.

C = 2081

33 BK of BK E  
C = 1934

Survey Line Aldine  
 B.C. @ 14+25.06 Survey

A = 55° 24' 22"  
 R = 305'  
 L = 294.94  
 d<sub>1</sub> = 5.63565  
 42

16+25	18° 46' 48"	341° 13' 12"
16+00 POC	16° 25' 54"	343° 34' 06"
15+75	14° 05' 01"	345° 44' 59"
15+50	11° 44' 07"	348° 15' 53"
15+25	9° 23' 14"	350° 36' 46"
15+00	7° 02' 20"	352° 57' 40"
14+75	4° 41' 27"	355° 08' 33"
C = 2499		
14+50	2° 20' 30"	357° 39' 30"
C = 2493		
14+25.06 Survey	0° 00'	360° 00'
14+25.29 Const Line		

end job

17+20	27° 42' 11"	332° 17' 49"
C = 2000		
17+00	25° 49' 28"	334° 10' 32"
16+75	23° 28' 34"	336° 31' 26"
16+50	21° 07' 41"	338° 52' 19"

Construction Line

Aldine

this line is 14° offset @ 16+00 Survey Line

$A = 30^{\circ} 05' 40''$

43

$R = 318.76$

$L = 167.43$

$c = 165.51$  mea  
 $d_1 = 5.39237$

(sly ep = 303.26)

15+92<sup>72</sup>

15° 02' 50"

344° 57' 10"

c = 177<sup>2</sup>

15+75

13° 27' 18"

346° 32' 42"

15+50

11° 12' 29"

348° 47' 31"

15+25

8° 57' 40"

351° 02' 20"

15+00

6° 42' 52"

353° 17' 08"

14+75

4° 28' 03"

355° 31' 57"

c = 24<sup>99</sup>

14+50

2° 13' 15"

357° 46' 45"

c = 24<sup>71</sup>

14+25<sup>29</sup> BC

0° 00'

360° 00'

14+25<sup>06</sup> Survey line

11° SW of