

Bk 77 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

_____ Can _____ Survey

_____ White Bear Ave
From _____ Co Rd "C" _____ To Orchard Lane

Road Acct. No. 18 _____

Date Filed _____

File _____

PLAN SURVEY

WHITE BEAR AVE.

FROM

COUNTY ROAD "C"

TO

ORCHARD LANE

Survey Completed:
4-30-41

Party:

R. PEASE

A. MOESCHTER

L. GOLDBERG

C. FEWER

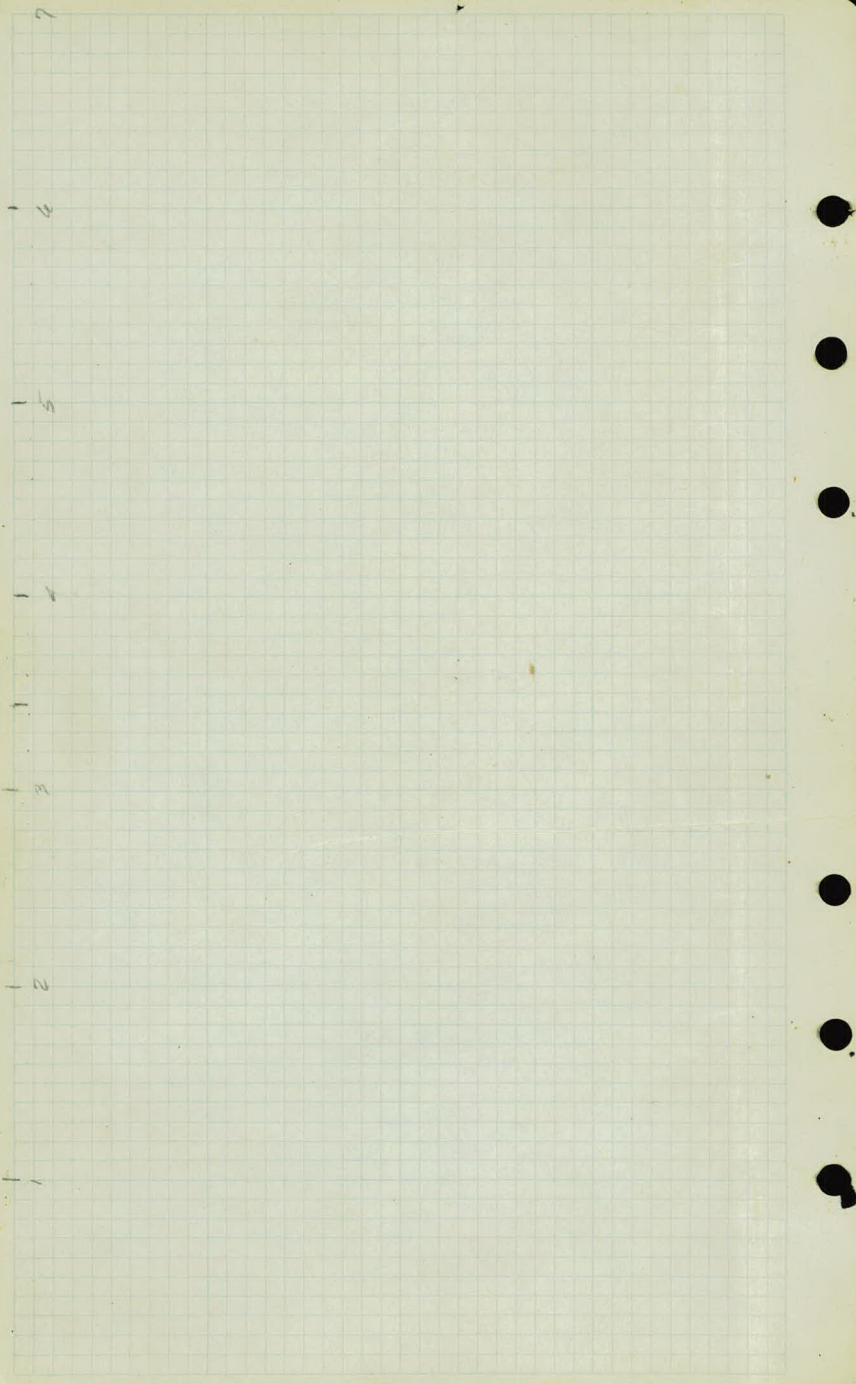
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WHITE BEAR AVE.

ALIGNMENT

Sta	Pt.	Angle Lt. Rt.	Data Mag Calc.
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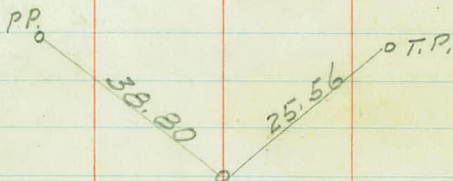
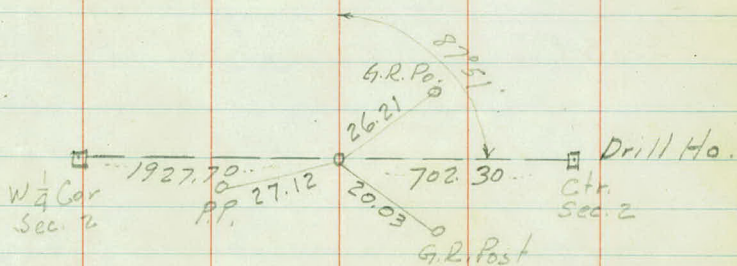
26+51 ⁴⁸	P.O.T.	E & W. $\frac{1}{4}$ Line Intersects	
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N 2°30' W

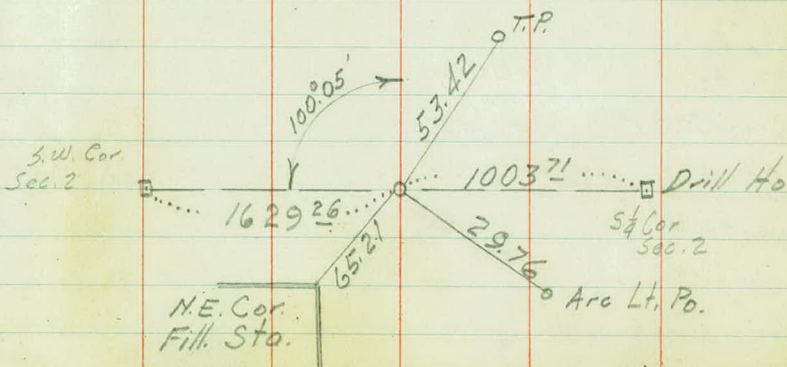
+40.70	P.T.	4°02'	Δ 8°04' Lt.
14		2°49'	D 6°
13+73.62	P.I.	8°04'	T 67.36
+50		1°19'	L 134.44
13+06.26	P.C.		R 955.366
			E 2.8

N 1°30' W

0+00	$\pm$ Co. Rd "C"
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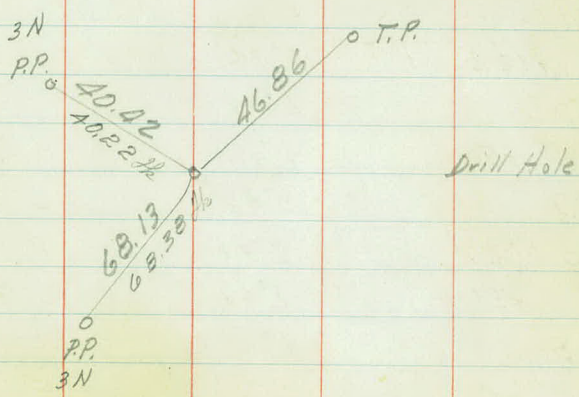
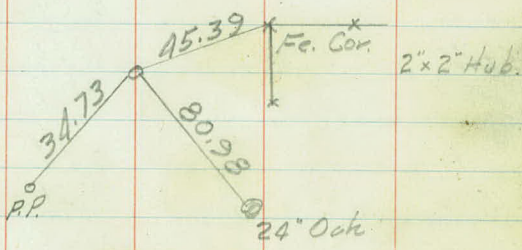


Drill Ho.



Sta	Pt.	Angle		Data	
		Lt.	Rt.	Mag	Calc.

	+39.16 P.T.		5°27½'	N 11°30' W	
42			5°04'		
	+50		4°34'		
41			4°04'		
	+50		3°34'	Δ 10°55' Rt.	
40			3°04'	D 2°	
39+67.1°	P.I.		10°55'	T 273.77	
	+50		2°34'	L 545.83	
39			2°04'	R 2864.93	
	+50		1°34'	E 12.1	
38			1°04'		
	+50		0°34'		
37			0°04'		
36+93.33	P.C.			N 8° W.	
	+102.83 P.T.	1°46'		Δ 3°32' Lt.	
31		1°44'		D 2°	
	+50	1°14'		T 88.36	
30+14.52	P.I.	3°32'		L 176.67	
30		0°44'		R 2864.93	
	+50	0°14'		E 1'	
29+26.16	P.C.				



Sta.	Pt.	Angle		Data	
		Lt.	Rt.	Mag	Calc.

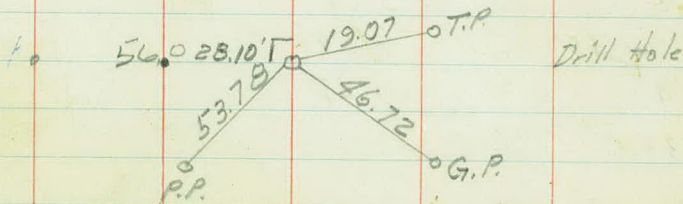
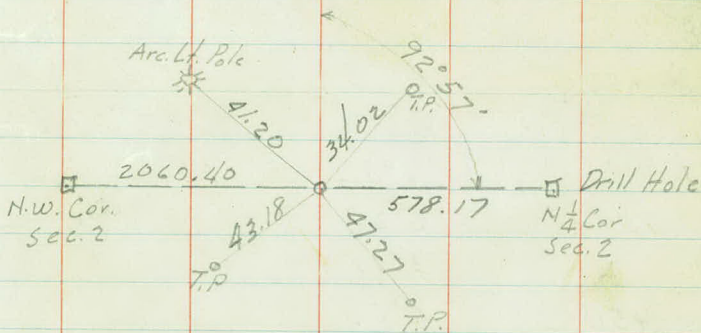
+27.58	P.T.		17°25'		
68			16°36'		
+50			15°06'	N 24° E	
67			13°36'		
+50			12°06'		
66			10°36'	Δ 34°51' Rt.	
+50			9°06'	D 6°	
65+46.60	P.I.		34°51'	T 299.85	
65			7°36'	L 580.83	
+50			6°06'	R 955.366	
64			4°36'	E 46.10	
+50			3°06'		
63			1°36'		
+50					
62+46.75	P.C.				

N 11°30' W

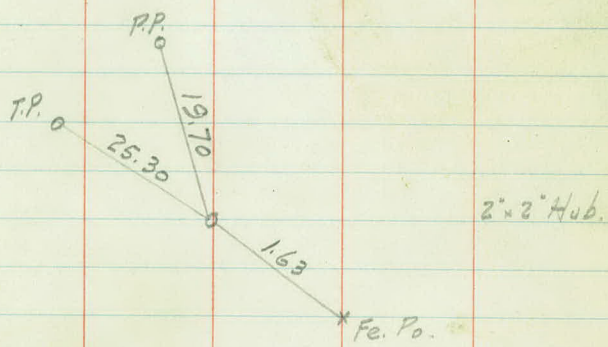
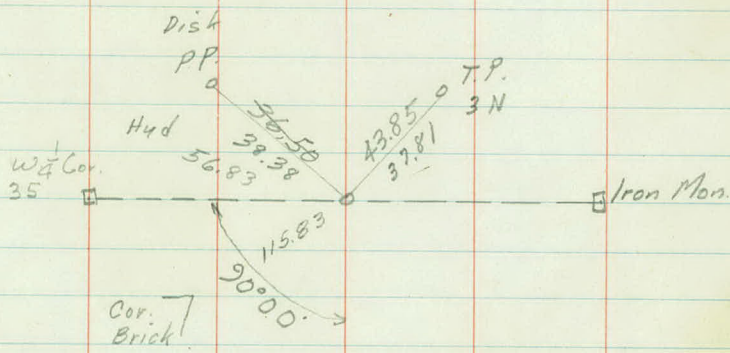
54+81.22	P.O.T.	± Co. Rd. D.			
+12.20	P.T.		6°00½'		
50			5°46'		
+50			4°46'	Δ 12°01' Lt.	
49			3°46'	D 4°	
48+62.52	P.I.		12°01'	T 150.79	
+50			2°46'	L 300.42	
48			1°46'	R 1432.69	
+50			0°46'	E 8'	
47+11.78	P.C.				

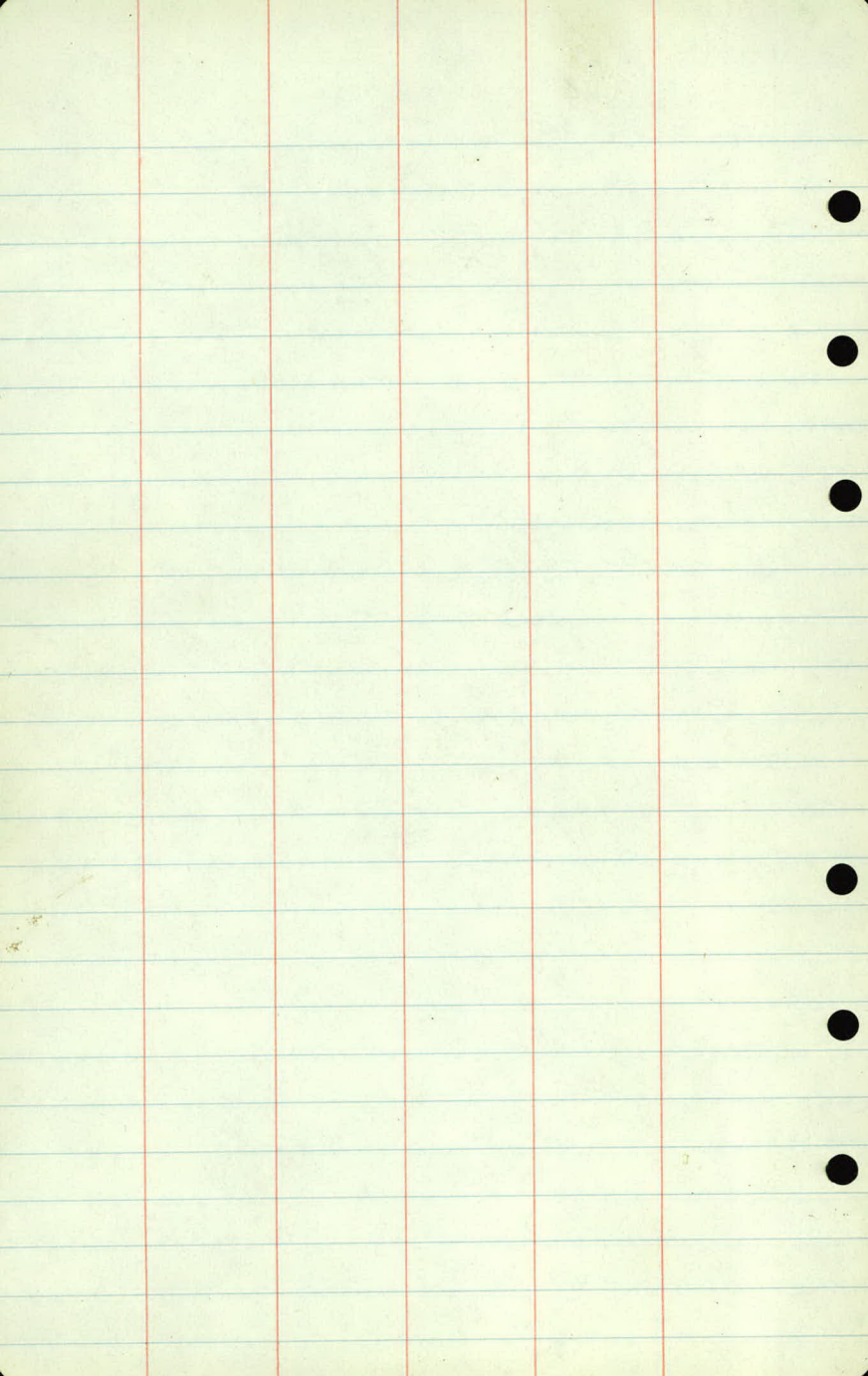
No Ties

2" x 2" Hub.



Sta	Pt.	Lt.	Angle Rt.	Data Mag Calc.
61.35				
82+61.25	P.O.T.	4 Orchard Lane (Center Sec. 38)		
				N 8°W.
+72.79	P.T.	15°55½'		
+50		15°24'		
80		14°17'		
+50		13°09'		
79		12°02'		
+50		10°54'		Δ 31°51' Lt.
78		9°47'		D 4°30'
+50		8°39'		T 363.39
77+28.40	P.I.	31°51'		L 707.78
77		7°32'		R 1273.57
+50		6°24'		E 51
76		5°17'		
+50		4°09'		
75		3°02'		
+50		1°54'		
74		0°47'		
73+65.01	P.C.			





6
TOPOGRAPHY

WHITE BEAR AVE

Co. Rd. "C"

to

Orchard Lane

6
5
4
3
2
1
0

+29 Bq Rod 40

+75 Stump

+95 Lot Iron 49
+91 P.P. 28

+90 Field Ent.
15' x 20' C.M. 24

+42 P.P. 27
+32 Lot Iron 49.5

+97 P.P. 27
+79 Lot Iron 49.5

+50 P.P. 25
+37 End Rad 13
+24 Lot Iron 49.5
+15 T.P. 59
+14 Beg. Rad 38

circled

COUNTY

R

circled

+95 Oak 33
+90 Stump 33
+54 T.P. 29

+11 Ent

yard

+33 End School yd.
+50 Oak 30
+27 Back stop 41
+24 T.P. 29
+23 Back stop 32
+03 Back stop 31

Schoolyard

+50 G.P. 27
+81 T.P. 28
+69 Elm 44
+48 Elm 44
+24 Elm 45

Schoolyard

+01 12' x 26' C.M. 21
+99 Elm 45
+86 - 6' Conc Walk
+75 12' x 26' C.M. 21
+79 Elm 45
+51 Elm 45
+26 Elm 45
+21 T.P. 28
+99 Elm 45
+71 Elm 44
+65 U.S.G.S B.M. 32
+54 End Rad 16

ROAD 'C'

+34 T.P. 41

13

12

11

10

9

8

7

6

+150 P.P. 28
 +45 Conc. Sp. 10-17
 +45 Beg. Curb 10'

+33 T.P. 28

161 Ent.
 12" x 26" C.M. 32'
 +50 Oak 32
 +45 Oak 30
 +30 Maple 27
 +10 Oak 32

+90 P.P. 27

+85 T.P. 28'

+46 Oak 30'

+139 P.P. 27'

165 Beg. Cult.
 +66 T.P. 28
 +50 Oak 26
 +45 Stump 24
 +37 End G.R. 15
 +34 Oak 27

+86 End G.R. 15'

+20 Δ Fe. 41
 +24 End 24" Conc. 29'
 +23 End - 18" x 19" U.I. 33'
 Fe. 30'
 +90 Beg G.R. 15
 +89 P.A. 27

+34 End 24" Conc. 28'

+14 T.P. 28

+93 Oak 33

+91 Beg. G.R. 15

+86 Oak 28

+78 Ent 30

+68 Oak 32

+21 Oak 33

+107 Oak 33

+71 T.P. 29

+90 Oak 35

+137 Beg. Tie Fe
 +132 Fe Cor. 29

Pasture

PEARL AVE

+83 Ent 12"
 12" x 32" Conc. 21
 +60 Lot Iron 49

+40 P.P. 27

+25 Oak 35

+07 Oak 35

Uncult.

Cultivated

Uncultivated

Uncult.

20

19

18

28

+ 83.24" x 58' Conc. X Drain

30

17

16

15

14

13

+63 P.P. 27

+44 End G.R. 15'

+10 Beg. G.R. 15
+07 P.P. 27

+50 End Yard
+38 Elm 22
+27 Elm 22
+21 Oak 35
+11 Lilac 35
+10 Elm 23
+00 Fir 35

+70 Lilac 25
+63 Stump 35
+51 P.P. 28'

+21 B.E. 44
+16 Elm 29
+03 Ent.

+89 End Curb 10'

+37 Apple 30
+21 Apple 34
+00 Beg Orchard
+95 P.P. 28'
+92 45 G.S.B.M. 27'

Uncultivated

Yard

Orchard



+85 End G.R. 15
+80 T.P. 28

+18 Beg. G.R. 15'

+88 T.P. 27

+16 T.P. 28

+25 End G.R. 15

+96 G.P. 21
+81 T.P. 28

+58 B.E. 44
+41 Stump 37

+17 Beg G.R. 15'

Hay Field

21

22

+50 24" x 48' Conc X Drain

26

26

25

24

23

22

21

20



+48 Fc. Cor. 30
+47 P.P. 28'
+33 Ent.
12"x26' C.M. 23'

+52 Fc. Cor. 34'
+25 Beg. G.R. 15

+84 T.P. 28

+87 P.P. 29

+40 T.P. 28

+28 P.P. 28

+96 T.P. 28

+60 Field Ent

+74 P.P. 28

+38 Ent
+20 Spruce 45
+09 Spruce 47
+80 Spruce 45
+65 Ent.
15"x20' C.M. 23
+47 T.P. 31
+46 Spruce 41

+80 Beg. Cult
+99 Col. Tree 33

+16 P.P. 27

+05 T.P. 28

Pasture

Cultivated

Hwy Field

Yard

Uncult.

34

33

32

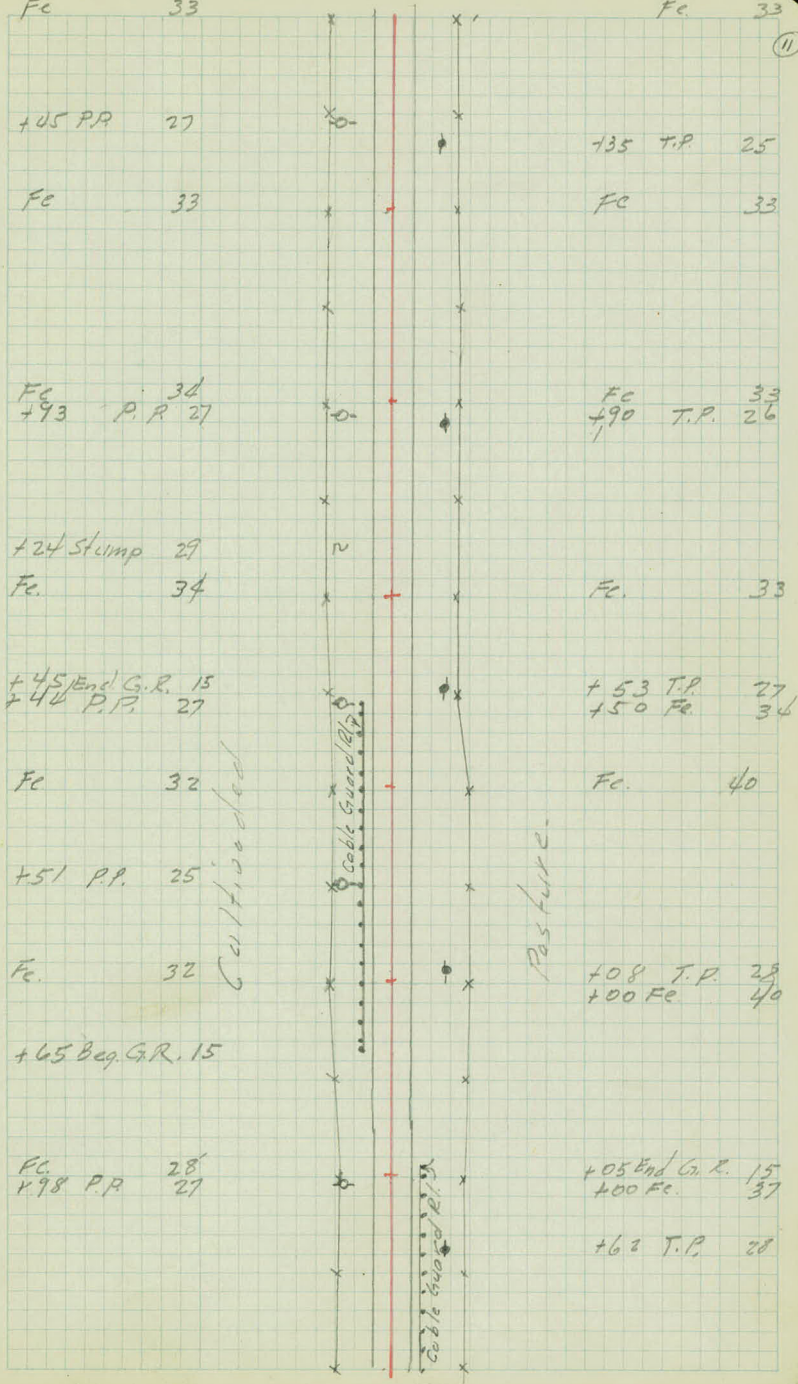
31

30

29

28

27



41

40

39

+ 96 Oak 30
+ 86 Eng 6.12 15

+ 57 Oak 26

38

21

+ 64 - 24 x 48' Conc X Drain
+ 91 G. B. 25
+ 90 Oak 36
27

37

36

35

34

+89 Elm 37
+82 P.P. 33
+69 Elm 35
+54 Elm 34
+38 Elm 33
+24 Elm 33
+11 Elm 32

Spaced

+92 Elm 27
+77 Elm 26
+69 X Fe. 31

+40 Stump 28
+35 P.P. 27

+09 Stump 26

+38 G.P. 26

+99 B.E. 29
+86 P.P. 26

+38 G.P. 27

Cultivated

+42 P.P. 29

+95 Field Ent.
+84 End Fe. 30
12" x 26" C.M. 24

Fe 33
+93 P.P. 30

30 33

Cultivated

+83 T.P. 30

+72 Fe Cor. 33

+55 T.P. 27

+37 Oak 31

+17 Oak 30
Fe 32

+04 Oak 27

+39 Oak 29

+38 T.P. 21

+38 G.R. 15

+32 Beg. Fe. 30

+26 G.R. 29

+17 Beg. G.R. 40

+09 Ent. 15" x 26" C.M. 55

+00 End G.R. 40

+79 G.R. 15

+74 Oak 25

+56 Stump 20

+50 End Pot Hole 53

+17 Stump 26

+14 Oak 40

+08 Beg. G.R. 15

+07 End Fe 21

+07 T.P. 21

Water Hole 60

+91 Oak 26

+81 Oak 32

+69 Oak 36

+50 Pot Hole 60

+49 Oak 40

+34 Stump 32

+33 Oak 39

+24 Stump 28

Fe 28

+86 T.P. 22

+80 Twin B.E. 34

+80 Water Hole 5

+47 Rect. X Fe.

+38 X Fe. 28

+35 Water Hole 7

Fe 31

+97 Stump 28

+64 T.P. 24

+38 Field Ent.

12" x 26" C.M. 23

Fe 30

Uncult.

Pot Hole - Wat.

Pasture

100 Fruit Tree 40

194 Spruce 32
185 Spruce 32

47

46

45 27

107 24" x 50" Conc

23

44

43

42

41

Fe. 35

+60 T.P. 33

+100 Fe. 28

+81 End G.R. 15

+74 P.P. 28

+74 Beg. Fe. 28

+24 P.P. 29

+100 Pot H. 29-55

+70 Pot H. 34-70

+20 Pot H. 34-130

+19 End Fe. 30

+79 P.P. 28

+70 Edge Pot H. 60-110

+38 Beg. G.R. 15

+20 Beg. Fe. 28

+94 Ent

12" x 26 C.M. 24"

+30 P.P. 25

+100 End yd.

+99 End x Hedge 48

+95 Maple 43

+75 Maple 42

+55 Maple 41

+49 Spirea 49

+38 Maple 39

+15 Cott'n 39

+03 Ent

Uncultivated

Pot Hole

Uncultivated

Hard

+76 Spruce 33

+68 Spruce 33

+55 B. 26

+44 Ent

12" x 42 C.M. 20

+34 T.P. 26

+32 Fe. Cor. 30

+100 Fe. 30

+170 End G.R. 15

+12 T.P. 29

+100 Fe. 34

+100 Fe. 36

+84 T.P. 30

+150 Fe. 43

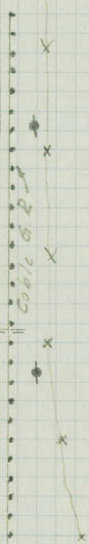
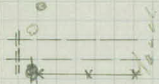
+100 Fe. 53

+147 T.P. 32

+150 Beg. G.R. 15

+114 T.P. 32

Post hole



55

22

+49- 24' x 44' Conc

22

54

53

52

51

50

+54 Hi-Tension Line to E

49

18

62

21

+ 29 - 24" x 50' Conc.

29

61

60

59

58

57

56

55

+29 Rgc. Tc. Ac
+74 Fe. Cor. 34
+62 Field Ent.
15"x32' C.M. 24

198 Fe. Cor. 26
190 Ent.
189 Rgc. Tc. Fe
169 End G.R. 15'

+24 P.P. 27
Fe. 30
+99 T.P. 30

+21 T.P. 26
Fe. 31

Fe. 30

+133 X Fe. 31
100 T.P. 28
Fe. 28
+97 Beg. G.R. 15

+40 T.P. 30
+24 P.P. 27
Fe. 29

Posture

Fe. 29
+90 T.P. 29

Fe. 27
+77 T.P. 28

Cut / Hatched

+22 P.P. 26
Fe. 28

+58 T.P. 28
Fe. 28

+29 T.P. 29
Fe. 29

+29 T.P. 28
Fe. 29

Cut / Hatched

+15 End Rad. 15
+08 Arc. L.L. Pa. 30
+08 Fe. Cor. 30

Posture

+20 End Rad. 17
+06 P.P. 29
+03 T.P. 27
+03 Fe. Cor. 27

69

68

67

100 Swamp. / 20

66

65

64

63

62

+70 P.P. 27

Cultivated

Fe 33
Swamp 76

+15 T.P. 32
Swamp 56
100 Fe. 33

165 Swamp 72

+10 Field Ent.
12"x12' V.T. 23



400 Fe. 29
109 T.P. 29
+98 Beg. G.R. 15
+73 T.P. 26

Chow Nivo 40

Fe 36
+87 T.P. 35

+33 Rgc Tie Fe.
130 Fe. Cor. 38
+28 P.P. (Lead in) 44
+27 Elm 38

+77 P.P. 28

+74 T.P. 31

+32 T.P. 33

Cultivated

+81 Pine 34
+71 Fruit Tr. 49
+65 Pine 34
+56 Fruit Tr. 48
+42 Fruit Tr. 48
+34 T.P. 25
+22 Elm 33
+24 Beg. Curd. 10
+100 Ent. 4
12"x38' C.M. 21

+34 G.P. 34
+28 P.P. 27
+06 Field Ent.
12"x26' C.M. 19



+62 T.P. 33

+24 T.P. 25

+03 Oak 28

76

75

74

73

24

+ 25-24' x 5' 0" Cone

26

72

71

70

69

Fe 30
196 T.P. 29 (17)

+80 P.P. 26

101 End G.R. 15
Fe 27

+62 T.P. 29
+50 End Swp. 50

Fe 29
Swamp 38

+75 B.E. 25

+29 End G.R. 15
+15 Beg Carb 10
+14-2 x 6 Conc Spill

+21 T.P. 29

Fe 30
Swamp 39

+75 P.P. 27

+40-4 Conc Spill 10-20

Swamp 39
Fe 30
+94 T.P. 29

+36 Beg G.R. 15

+34 Beg G.R. 15
+29 Oak 28
+20 Stump 48
+104 Stump 48
Fe 30
Swamp 104

+75 P.P. 27

+60 T.P. 30

+39 Oak 51

Swamp 113
Fe 30

+77 Oak 46

+59 Field Ent.
12" x 24" V. 26

+47 Oak 41
+42 T.P. 30
+39 End G.R. 15

+08 2 Conc Spill 10
+07 End Carb 10

Cultivated

Chickadee

Swamp

83

82

81

80

79

78

77

76

+75 End Rod 25
+84 Beg. Rod 28
12" x 24 CM 23'
+66 End Rod 25
+50 Beg. Rod 15

+66 Ent.
12" x 26 CM 21
+32 Fe. Cor. 28

+87 P.P. 28
+60 End Curb 10

+50 T.P. 28

+82 Arc. L.P. 27

+13 Fe. Cor 31
+11 T.P. 29

+80 T.P. 27

+70 T.P. 28

+46 Ent.
12" x 26 CM 22'

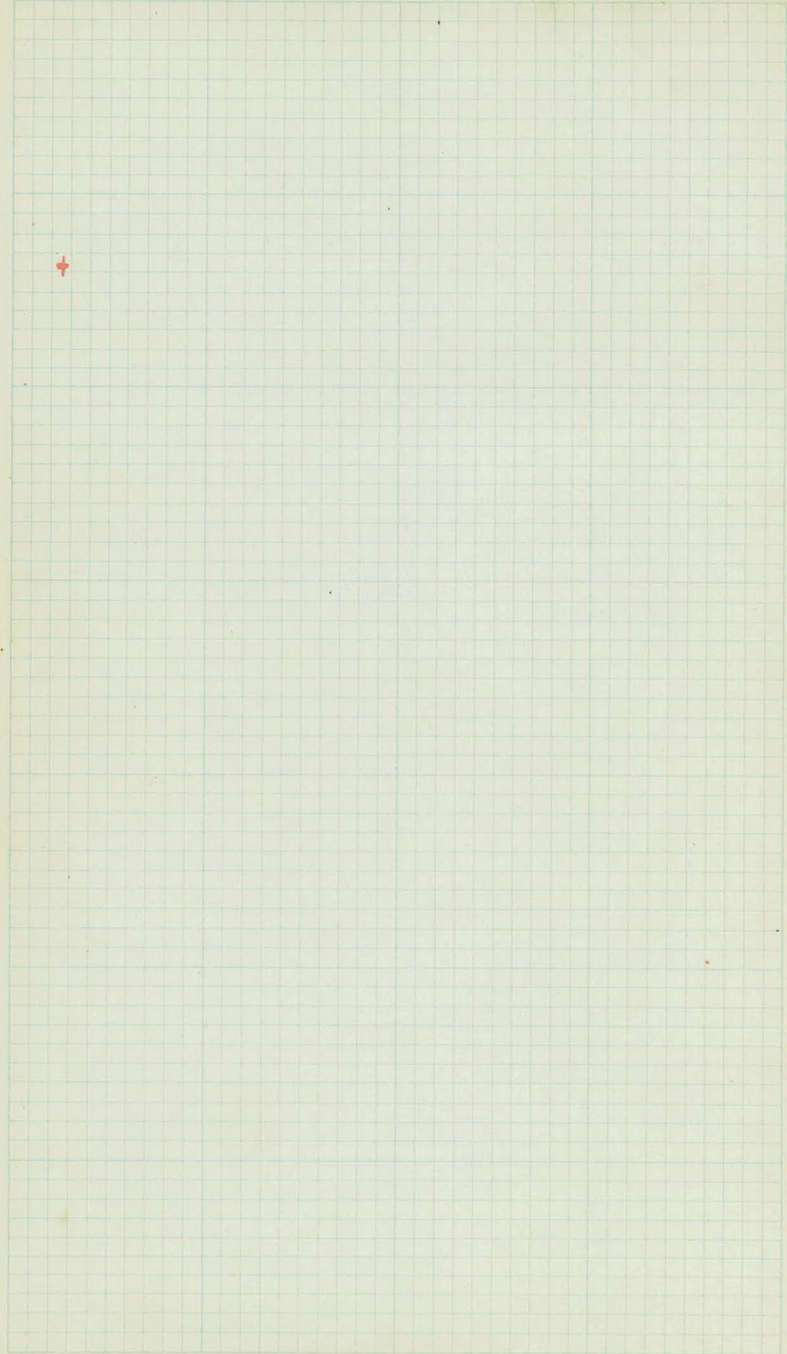
+80 T.P. 27

+37 G.P. 49
+30 T.P. 27
+30 Fe. Cor - 27-49
Fe. 27- 56

Cultivated

Cultivated

Cultivated



White Bear Ave.

Bench Levels

Pt.	+	π	-	Elev
B.M.	464	933.05.		928.41'
B.M.	2.46		2.46	930.59'
T.P.	5.28	932.52.	5.81	927.24.
T.P.	8.38	936.05.	4.85	927.67.
B.M.	7.68	939.78.	3.95	932.10'
T.P.	8.39	944.95.	3.22	936.56.
B.M.	8.01	946.36.	6.60	938.35'
T.P.	6.52	949.45.	3.43	942.93.
T.P.	7.75	955.30.	1.90	947.55.
B.M.	8.14	957.24.	6.20	949.10'
T.P.	3.64	957.03.	3.85	953.39.
B.M.	4.65	951.70.	7.98	947.05.
T.P.	5.09	951.21.	5.58	946.12.
T.P.	2.45	948.78.	4.88	946.33.
T.P.	2.76	942.05.	9.49	939.29'
B.M.	2.99	941.40.	3.64	938.41'
T.P.	7.36	946.39.	2.37	939.03.
			1.92	944.47'
	9619			

Top Water Table N.W. Cor. Gar. in S.W. Cor Cold C^(H.G.)
 U.S. G.S. B.M. 32' Rl. 0+65 (Preferred)

U.S. G.S. B.M. 27' Lt 13+92

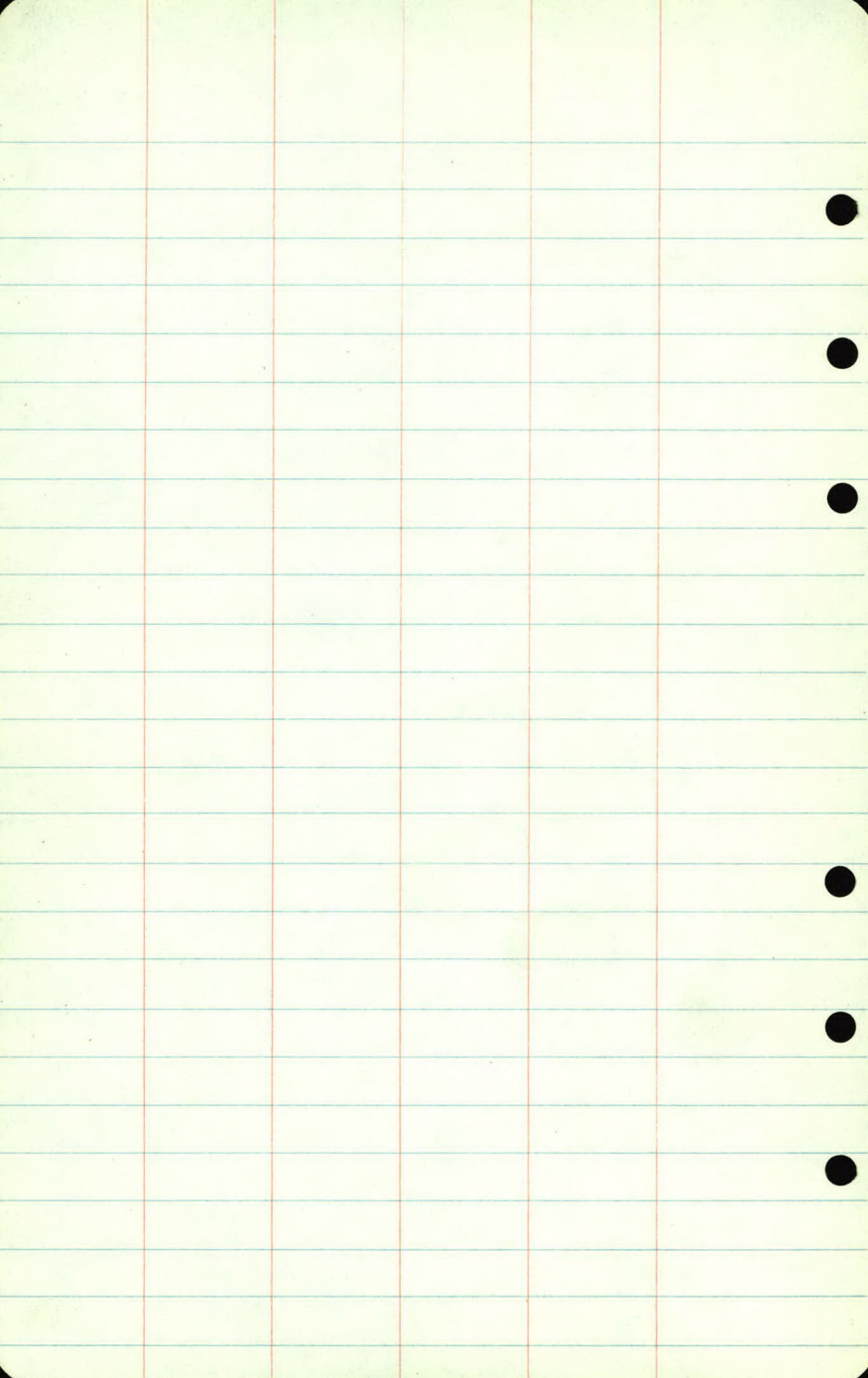
Spike P.P. 28' Lt 26+47

B.M. Spike in T.P. 30' Rl. 44+84

Top Drill Hole 54+81.22 $\frac{1}{2}$

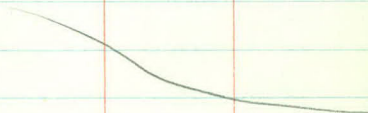
Spike 8" Oak 51' Rl. 70+39

Top Iron Mon 82+61.25 $\frac{1}{2}$



White Bear Av.

Cross Sections



Sta.	+	π	-	Elev.
B.M.	5.33	935.92		930.59
0+00			8.32	27.60
+27			8.23	27.69
+34			8.20	27.72
+52			8.17	27.75
+77			8.13	27.79
1			8.14	27.78
+50			8.14	27.78
2			8.23	27.69
+30			8.26	27.66
+71			8.35	27.57
+89			8.41	27.51
3			8.44	27.48

U.S.G.S.B.M. 32 RL 0+65

$\frac{9.6}{50}$ $\frac{9.1}{38}$ $\frac{8.4}{10}$ 8.32 $\frac{8.33}{10}$ $\frac{8.3}{30}$ $\frac{8.1}{50}$

$\frac{10.3}{50}$ $\frac{9.4}{29}$ $\frac{8.34}{10}$ 8.23 $\frac{8.23}{10}$ $\frac{7.9}{28}$ $\frac{8.1}{50}$

$\frac{7.9}{75}$ $\frac{7.7}{50}$ $\frac{7.6}{33}$ $\frac{9.7}{30-26}$ $\frac{8.97}{22}$ $\frac{8.32}{10}$ 8.20 $\frac{8.17}{10}$ $\frac{8.0}{22}$ $\frac{8.5}{30}$ $\frac{8.1}{50}$

$\frac{6.7}{75}$ $\frac{6.2}{50}$ $\frac{5.8}{35}$ $\frac{10.2}{28-22}$ $\frac{8.5}{16}$ $\frac{8.28}{10}$ 8.17 $\frac{8.21}{10}$ $\frac{8.2}{16}$ $\frac{9.0}{20-25}$ $\frac{4.6}{38}$ $\frac{4.2}{50}$ $\frac{3.8}{75}$

$\frac{6.0}{75}$ $\frac{5.6}{50}$ $\frac{5.0}{35}$ $\frac{10.4}{28-23}$ $\frac{8.6}{18}$ $\frac{8.26}{10}$ 8.13 $\frac{8.22}{10}$ $\frac{8.2}{18}$ $\frac{9.3}{20-24}$ $\frac{4.2}{40}$ $\frac{3.7}{50}$ $\frac{3.0}{75}$

$\frac{5.8}{75}$ $\frac{6.0}{50}$ $\frac{5.6}{35}$ $\frac{10.5}{28-23}$ $\frac{8.3}{19}$ $\frac{8.23}{10}$ 8.1 8.14 $\frac{8.21}{10}$ $\frac{8.2}{18}$ $\frac{9.3}{24-21}$ $\frac{4.0}{40}$ $\frac{3.6}{50}$ $\frac{2.6}{75}$

$\frac{7.5}{75}$ $\frac{7.9}{50}$ $\frac{7.5}{35}$ $\frac{10.8}{29-23}$ $\frac{8.3}{18}$ $\frac{8.28}{10}$ 8.1 8.14 $\frac{8.20}{10}$ $\frac{8.2}{18}$ $\frac{9.7}{20-23}$ $\frac{4.1}{40}$ $\frac{3.4}{50}$ $\frac{2.2}{75}$

$\frac{10.1}{50}$ $\frac{10.5}{32}$ $\frac{11.2}{29-24}$ $\frac{8.6}{18}$ $\frac{8.31}{10}$ 8.2 $\frac{8.31}{10}$ $\frac{8.4}{19}$ $\frac{10.1}{21-25}$ $\frac{4.8}{37}$ $\frac{3.6}{50}$ $\frac{2.5}{75}$

$\frac{11.2}{50}$ $\frac{11.1}{30}$ $\frac{11.7}{27-22}$ $\frac{8.6}{18}$ $\frac{8.38}{10}$ 8.3 $\frac{8.31}{10}$ $\frac{8.5}{18}$ $\frac{10.6}{21}$ $\frac{9.9}{27}$ $\frac{4.9}{41}$ $\frac{4.7}{50}$ $\frac{3.4}{75}$

$\frac{13.0}{50}$ $\frac{12.1}{24}$ $\frac{9.1}{18}$ $\frac{8.49}{10}$ $\frac{8.4}{8.35}$ $\frac{8.42}{10}$ $\frac{8.8}{18}$ $\frac{11.4}{21}$ $\frac{10.8}{26}$ $\frac{6.4}{40}$ $\frac{6.3}{50}$ $\frac{5.9}{75}$

8.4

$\frac{13.5}{50}$ $\frac{12.5}{24}$ $\frac{9.0}{18}$ $\frac{8.55}{10}$ $\frac{8.4}{8.41}$ $\frac{9.0}{10}$ $\frac{11.6}{18}$ $\frac{10.7}{21-23}$ $\frac{12.4}{24-27}$ $\frac{12.5}{30}$ $\frac{12.5}{50}$

$\frac{13.3}{50}$ $\frac{12.5}{24}$ $\frac{8.9}{17}$ $\frac{8.59}{10}$ $\frac{8.4}{8.44}$ $\frac{8.49}{10}$ $\frac{9.0}{19}$ $\frac{11.7}{21-23}$ $\frac{10.9}{25}$ $\frac{12.7}{31}$ $\frac{12.9}{50}$

Sta.	t	π	-	$\pm$ lev
		935.921		
3+50			8.62	27.30
4			8.75	27.17
150			8.82	27.10
5			8.82	27.10
+32			8.79	27.13
+68			8.75	27.17
6			8.70	27.22
T.P.	6.03	932.67	9.28	27.64.
150			5.45	27.22
7			5.38	27.29
150			5.35	27.32
8			5.24	27.43

+29

Don't use sec. for yardage - whole sec. skewed

$\frac{12.3}{50} \frac{11.5}{35} \frac{10.7}{27} \frac{11.2}{25.21} \frac{8.9}{15} \frac{8.74}{10} \frac{8.6}{8.62} \frac{8.71}{10} \frac{8.9}{17} \frac{12.2}{21.23} \frac{11.8}{24} \frac{12.7}{32} \frac{13.0}{50}$

$\frac{8.9}{75} \frac{9.9}{50} \frac{9.6}{29} \frac{11.2}{24.20} \frac{9.0}{15} \frac{8.85}{10} \frac{8.8}{8.75} \frac{8.82}{10} \frac{8.8}{14} \frac{12.8}{21} \frac{13.1}{32} \frac{13.2}{50}$

$\frac{5.7}{100} \frac{4.7}{83} \frac{2.8}{62} \frac{5.7}{45} \frac{5.6}{28} \frac{10.7}{21.12} \frac{9.1}{15} \frac{8.93}{10} \frac{8.8}{8.82} \frac{8.85}{10} \frac{8.9}{14} \frac{11.3}{20.23} \frac{10.9}{26} \frac{12.9}{33} \frac{14.2}{50}$

$\frac{3.0}{100} \frac{1.8}{85} \frac{0.6}{70} \frac{2.1}{50} \frac{2.7}{28} \frac{10.0}{19.17} \frac{8.8}{15} \frac{8.89}{10} \frac{8.6}{8.82} \frac{8.87}{10} \frac{9.3}{15} \frac{10.6}{20} \frac{11.7}{32} \frac{12.3}{50}$

$\frac{0.5}{100} \frac{0.3}{85} \frac{0.9}{67} \frac{2.0}{50} \frac{2.3}{30} \frac{10.0}{20.18} \frac{8.8}{15} \frac{8.81}{10} \frac{8.8}{8.79} \frac{8.85}{10} \frac{9.0}{15} \frac{10.4}{19.21} \frac{9.2}{24} \frac{10.0}{43} \frac{11.9}{50}$

$\frac{43.2}{100} \frac{43.2}{85} \frac{40.5}{68} \frac{32}{50} \frac{45}{28} \frac{103}{21.19} \frac{8.8}{14} \frac{8.81}{10} \frac{8.8}{8.75} \frac{8.83}{10} \frac{8.9}{15} \frac{10.4}{19.22} \frac{8.0}{27} \frac{8.9}{43} \frac{10.3}{50}$

$\frac{10}{100} \frac{23}{88} \frac{4.9}{69} \frac{5.6}{50} \frac{6.1}{40} \frac{7.0}{27} \frac{10.7}{21.19} \frac{8.8}{15} \frac{8.76}{10} \frac{8.7}{8.70} \frac{8.79}{10} \frac{8.8}{15} \frac{11.2}{21.23} \frac{10.3}{26} \frac{10.4}{37} \frac{11.9}{50}$

$\frac{6.6}{50} \frac{6.2}{30} \frac{6.8}{24} \frac{7.4}{22.19} \frac{5.7}{15} \frac{5.52}{10} \frac{5.5}{5.45} \frac{5.52}{10} \frac{5.6}{15} \frac{8.6}{22.24} \frac{8.2}{26} \frac{8.3}{32} \frac{9.3}{36} \frac{10.2}{50}$

$\frac{8.8}{50} \frac{8.0}{34} \frac{7.6}{21} \frac{5.6}{15} \frac{5.47}{10} \frac{5.4}{5.38} \frac{5.41}{10} \frac{5.7}{16} \frac{8.1}{22} \frac{8.2}{34} \frac{9.7}{50}$

$\frac{10.5}{50} \frac{10.0}{30} \frac{9.3}{24} \frac{5.7}{15} \frac{5.46}{10} \frac{5.4}{5.35} \frac{5.38}{10} \frac{5.4}{15} \frac{7.9}{21.23} \frac{7.6}{24} \frac{8.0}{33} \frac{8.3}{50}$

$\frac{8.2}{50} \frac{8.9}{28} \frac{7.8}{22} \frac{5.4}{15} \frac{5.33}{10} \frac{5.2}{5.24} \frac{5.36}{10} \frac{5.5}{15} \frac{7.3}{26} \frac{5.7}{50}$

17.87

18.20

18.07

5.2

18.62

FL 24" Cont.

FL 24" Cont.

FL 24" Cont.

 $\frac{14.80}{52} \frac{14.1}{50}$
 $\frac{14.47}{33} \frac{14.6}{30} \frac{14.0}{30}$
 $\frac{5.5}{14} \frac{5.32}{10} \frac{5.23}{10}$
 $\frac{5.38}{10} \frac{5.6}{15}$
 $\frac{10.0}{22} \frac{14.25}{28}$
 $\frac{13.7}{30} \frac{11.5}{36}$
 $\frac{11.0}{50}$

Sta.	+	π	-	Elev.
		932.67		
8+35			²⁶ 5.81	27.46
8+62			5.00	27.67
9			4.66	28.01
+ 27			4.40	28.27
+ 52			4.15	28.52
10			3.65	29.02
+ 50			3.18	29.49
11			2.68	29.99
T.P.	7.80	937.76	2.71	929.96
+ 50			7.27	30.49
12			6.70	31.06
+ 32			6.31	31.45
+ 50			6.19	31.57

$$\begin{array}{cccccccccccc} \frac{10.6}{50} & \frac{10.2}{26} & \frac{5.5}{14} & \frac{5.29}{10} & \frac{5.3}{5.26} & \frac{5.34}{10} & \frac{5.4}{15} & \frac{13.7}{30-32} & \frac{11.8}{35} & \frac{11.5}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.8}{50} & \frac{8.9}{37} & \frac{8.5}{23} & \frac{5.1}{15} & \frac{5.05}{10} & \frac{5.13}{5.00} & \frac{5.4}{10} & \frac{12.1}{15} & \frac{130}{28} & \frac{12.8}{38} & \frac{12.8}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.2}{50} & \frac{6.0}{38} & \frac{5.8}{30} & \frac{6.5}{23} & \frac{4.8}{16} & \frac{4.73}{10} & \frac{4.7}{4.66} & \frac{4.76}{10} & \frac{5.0}{15} & \frac{10.6}{26} & \frac{11.7}{40} & \frac{12.0}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{5.7}{50} & \frac{4.5}{38} & \frac{4.2}{29} & \frac{6.0}{24-21} & \frac{4.5}{14} & \frac{4.48}{10} & \frac{4.4}{4.40} & \frac{4.49}{10} & \frac{4.3}{15} & \frac{8.5}{24} & \frac{10.8}{40} & \frac{11.2}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{6.2}{50} & \frac{4.7}{38} & \frac{4.5}{27} & \frac{5.9}{24-21} & \frac{4.4}{15} & \frac{4.23}{10} & \frac{4.2}{4.15} & \frac{4.22}{10} & \frac{4.1}{15} & \frac{6.2}{22} & \frac{5.4}{24} & \frac{7.7}{32} & \frac{8.8}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.1}{50} & \frac{6.7}{38} & \frac{5.8}{26} & \frac{6.1}{22} & \frac{3.9}{15} & \frac{3.72}{10} & \frac{3.7}{3.65} & \frac{3.72}{10} & \frac{3.9}{15} & \frac{6.5}{22} & \frac{5.8}{29} & \frac{6.8}{32} & \frac{7.9}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.2}{50} & \frac{7.1}{39} & \frac{5.9}{24} & \frac{3.4}{15} & \frac{3.23}{10} & \frac{3.2}{3.18} & \frac{3.25}{10} & \frac{3.3}{15} & \frac{6.0}{22-25} & \frac{5.5}{27} & \frac{6.8}{36} & \frac{7.3}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.2}{50} & \frac{5.9}{37} & \frac{5.2}{22} & \frac{2.9}{15} & \frac{2.75}{10} & \frac{2.7}{2.68} & \frac{2.74}{10} & \frac{2.9}{15} & \frac{5.4}{22-25} & \frac{4.7}{26-29} & \frac{6.5}{36} & \frac{6.9}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{11.4}{50} & \frac{10.5}{36} & \frac{10.0}{21} & \frac{7.4}{15} & \frac{7.40}{10} & \frac{7.3}{7.27} & \frac{7.29}{10} & \frac{7.5}{16} & \frac{9.4}{23} & \frac{8.5}{27} & \frac{9.4}{32} & \frac{10.0}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.9}{50} & \frac{7.9}{37} & \frac{7.3}{24} & \frac{9.2}{22-19} & \frac{6.8}{15} & \frac{6.84}{10} & \frac{6.7}{6.70} & \frac{6.69}{10} & \frac{6.8}{15} & \frac{6.9}{31} & \frac{6.4}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{5.8}{50} & \frac{5.4}{39} & \frac{4.4}{27} & \frac{8.6}{22-19} & \frac{6.7}{15} & \frac{6.56}{10} & \frac{6.3}{6.31} & \frac{6.27}{10} & \frac{6.2}{22} & \frac{5.7}{34} & \frac{5.5}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.4}{50} & \frac{4.7}{41} & \frac{4.3}{30} & \frac{8.3}{22-19} & \frac{6.3}{15} & \frac{6.00}{10} & \frac{6.38}{6.19} & \frac{6.2}{10} & \frac{6.06}{10} & \frac{6.1}{23} & \frac{5.1}{36} & \frac{6.1}{50} \end{array}$$

Sta.	+	π	-	Elev.
		937.26		
12 + 87			5.84	31.92
13			5.74	32.02
+ 39			5.42	32.34
+ 47			5.32	32.44
+ 72			5.04	32.72
4			4.69	33.07
+ 14			4.62	33.14
+ 41			4.34	33.42
B.M.	5.66		5.66	932.10 ✓
+ 64			4.21	33.55
15			4.03	33.73
+ 50			3.76	34.00
16			3.51	34.25
T.P.	6.60	940.28	3.58	934.18

932.19

$$\begin{array}{cccccccccccc} \frac{7.9}{50} & \frac{7.6}{36} & \frac{7.5}{25} & \frac{8.3}{22-19} & \frac{5.8}{15} & \frac{5.73-6.12}{10} & \frac{5.8}{5.84} & \frac{5.59}{10} & \frac{5.2}{31} & \frac{5.6}{47} & \frac{9.9}{55} & 6.0 \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.5}{50} & \frac{7.6}{38} & \frac{7.5}{25} & \frac{8.2}{23-20} & \frac{5.8}{15} & \frac{5.66-6.23}{10} & \frac{5.7}{5.74} & \frac{5.43}{10} & \frac{5.3}{20} & \frac{5.4}{48} & \frac{9.6}{58} & 6.0 \end{array}$$

$$\begin{array}{cccccccccccc} \frac{6.4}{50} & \frac{6.1}{27} & \frac{7.6}{24-21} & \frac{5.5}{15} & \frac{5.44-5.83}{10} & \frac{5.4}{5.42} & \frac{4.97}{10} & \frac{4.9}{14} & \frac{5.2}{31} & \frac{6.1}{46} & \frac{8.7}{57} & 6.0 \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.9}{50} & \frac{6.3}{35} & \frac{5.7}{25} & \frac{7.5}{23-20} & \frac{5.9}{16} & \frac{5.31-5.68}{10} & \frac{5.3}{5.32} & \frac{4.88}{10} & \frac{4.8}{15} & \frac{7.0}{19} & \frac{8.1}{26} & \frac{10.5}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.4}{50} & \frac{7.7}{38} & \frac{6.4}{25} & \frac{7.4}{22-20} & \frac{5.2}{15} & \frac{5.39-5.03}{10} & \frac{5.0}{5.04} & \frac{4.58}{10} & \frac{4.5}{15} & \frac{6.9}{20-22} & \frac{4.8}{28} & \frac{9.9}{39} & \frac{12.4}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.3}{50} & \frac{6.7}{36} & \frac{6.0}{24} & \frac{7.4}{22-20} & \frac{5.0}{15} & \frac{4.77-5.14}{10} & \frac{4.7}{4.69} & \frac{4.34}{10} & \frac{4.1}{15} & \frac{5.8}{19} & \frac{7.5}{26} & \frac{12.5}{37} & \frac{13.8}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.3}{50} & \frac{6.8}{36} & \frac{5.9}{25} & \frac{7.1}{23-19} & \frac{5.0}{15} & \frac{4.70-5.04}{10} & \frac{4.6}{4.62} & \frac{4.25}{10} & \frac{4.0}{15} & \frac{6.1}{20-23} & \frac{2.9}{27} & \frac{3.0}{34} & \frac{3.0}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{9.1}{50} & \frac{7.6}{37} & \frac{6.8}{24} & \frac{7.3}{22-19} & \frac{4.5}{15} & \frac{4.35-4.71}{10} & \frac{4.3}{4.34} & \frac{4.12}{10} & \frac{4.1}{15} & \frac{5.9}{20-23} & \frac{3.4}{26} & \frac{2.4}{39} & \frac{1.1}{50} \end{array}$$

$$\begin{array}{cccccccccccc} 45.65 & 8.14 & 27 & 6.1 & & 13-192 & & & & & & & \\ \frac{9.8}{50} & \frac{7.6}{32} & \frac{6.8}{19} & \frac{4.3}{15} & \frac{4.14-4.47}{10} & \frac{4.2}{4.21} & \frac{4.00}{10} & \frac{4.0}{15} & \frac{5.7}{19-23} & \frac{3.9}{28} & \frac{3.2}{37} & \frac{1.6}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.6}{50} & \frac{7.8}{35} & \frac{6.1}{19} & \frac{4.3}{15} & \frac{4.30}{10} & \frac{4.0}{4.03} & \frac{3.94}{10} & \frac{3.9}{15} & \frac{5.6}{20-24} & \frac{3.6}{26} & \frac{2.5}{31} & \frac{1.2}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{8.1}{50} & \frac{7.1}{35} & \frac{5.8}{19} & \frac{4.0}{15} & \frac{3.89}{10} & \frac{3.8}{3.76} & \frac{3.76}{10} & \frac{3.8}{15} & \frac{5.2}{20-23} & \frac{2.8}{26} & \frac{1.5}{31} & \frac{0.2}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{6.2}{50} & \frac{4.4}{24} & \frac{5.7}{23-19} & \frac{3.6}{15} & \frac{3.58}{10} & \frac{3.5}{3.51} & \frac{3.58}{10} & \frac{3.6}{15} & \frac{4.6}{20-23} & \frac{2.6}{26} & \frac{1.5}{50} \end{array}$$

Sta.	+	✕	-	Elev.
		940.78		
16+50			6.32	34.46
17			6.10	34.68
+ 43			5.86	34.9.2
+83	Sec. 24' x 58' Conc		5.72	35.06
18			5.59	35.19
+25			5.36	35.42
+56			5.04	35.74
19			4.57	36.21
+50			3.93	36.85
20			3.28	37.50
+50			2.61	38.17
21			2.01	38.77

$\frac{10.3}{50} \frac{9.0}{38} \frac{7.8}{24} \frac{8.9}{23-18} \frac{6.5}{15} \frac{6.90}{10} \frac{6.37}{10} \frac{6.4}{15} \frac{7.8}{19-23} \frac{6.8}{26} \frac{6.7}{50}$

$\frac{12.2}{50} \frac{8.8}{28} \frac{9.3}{22} \frac{9.3}{19} \frac{6.3}{15} \frac{6.21}{10} \frac{6.18}{10} \frac{6.4}{15} \frac{8.8}{22} \frac{9.9}{30} \frac{10.1}{50}$

$\frac{15.0}{50} \frac{11.5}{25} \frac{6.0}{15} \frac{5.96}{10} \frac{5.9}{5.86} \frac{5.96}{10} \frac{6.0}{15} \frac{12.0}{27} \frac{12.2}{50}$

25.63

FL. 24 Conc.

$\frac{15.9}{50} \frac{15.3}{28} \frac{15.15}{28} \frac{12.7}{27} \frac{6.3}{15} \frac{5.83}{10} \frac{5.82}{10} \frac{6.2}{15} \frac{12.4}{28} \frac{13.55}{30} \frac{13.6}{31} \frac{12.5}{50}$

27.23

FL. 24 Conc.

$\frac{13.7}{50} \frac{12.5}{27} \frac{5.9}{15} \frac{5.67}{10} \frac{5.6}{5.59} \frac{5.72}{10} \frac{5.7}{15} \frac{12.5}{27} \frac{12.5}{50}$

$\frac{10.8}{50} \frac{10.4}{29} \frac{10.8}{24} \frac{5.6}{15} \frac{5.41}{10} \frac{5.50}{5.36} \frac{5.7}{10} \frac{5.7}{15} \frac{12.6}{29} \frac{12.2}{50}$

$\frac{7.0}{50} \frac{6.8}{30} \frac{8.0}{27} \frac{7.8}{20} \frac{5.4}{15} \frac{5.11}{10} \frac{5.19}{5.04} \frac{5.2}{10} \frac{5.2}{15} \frac{12.0}{28} \frac{11.7}{50}$

$\frac{4.3}{50} \frac{5.0}{29} \frac{7.1}{26-22} \frac{4.9}{15} \frac{4.64}{10} \frac{4.65}{4.57} \frac{4.7}{10} \frac{7.9}{15} \frac{6.7}{26-29} \frac{8.4}{31} \frac{8.4}{50}$

$\frac{4.0}{50} \frac{4.5}{29} \frac{6.7}{26-20} \frac{4.3}{15} \frac{4.02}{10} \frac{4.02}{3.93} \frac{4.1}{10} \frac{6.4}{15} \frac{1.8}{22-27} \frac{1.4}{34} \frac{1.4}{50}$

$\frac{4.1}{50} \frac{3.2}{28} \frac{6.2}{24-20} \frac{3.6}{15} \frac{3.27}{10} \frac{3.40}{3.28} \frac{3.6}{10} \frac{5.2}{15} \frac{1.6}{20-26} \frac{1.4}{35} \frac{1.4}{50}$

$\frac{4.0}{50} \frac{2.9}{28} \frac{5.8}{23-19} \frac{3.0}{15} \frac{2.72}{10} \frac{2.71}{2.61} \frac{2.8}{10} \frac{4.5}{15} \frac{3.2}{20-25} \frac{2.0}{31} \frac{1.9}{37} \frac{1.9}{50}$

$\frac{3.8}{50} \frac{3.2}{33} \frac{3.6}{27} \frac{5.3}{23-20} \frac{2.3}{15} \frac{2.12}{10} \frac{2.08}{2.01} \frac{2.2}{10} \frac{3.9}{15} \frac{1.9}{21-27} \frac{1.5}{33} \frac{1.5}{50}$

Sta	+	π	-	Elev
		940.78		
21 +50			1.54	39.24
T.P.	5.93	945.03	1.68	939.10
22			5.51	39.52
+50			5.35	39.68
23			5.22	39.81
+50			5.17	39.86
24			5.31	39.72
+50			5.60	39.43
B.M.	5.83	944.18	6.71	938.32
25		952 944.66	5.00	39.18
+50			5.27	38.91
26			5.48	38.70
156	24' Conc.		5.60	38.58
27			5.45	38.73

938.35

$\frac{3.7}{50}$ $\frac{3.8}{29}$ $\frac{4.7}{23-19}$ $\frac{1.8}{15}$ $\frac{1.62}{10}$ $\frac{1.54}{10}$ $\frac{1.8}{15}$ $\frac{3.6}{22-26}$ $\frac{2.1}{31}$ $\frac{1.7}{50}$

$\frac{8.2}{50}$ $\frac{8.2}{35}$ $\frac{8.6}{24-20}$ $\frac{5.8}{15}$ $\frac{5.62}{10}$ $\frac{5.51}{10}$ $\frac{5.58}{10}$ $\frac{5.7}{15}$ $\frac{7.6}{20}$ $\frac{7.5}{26}$ $\frac{6.1}{36}$ $\frac{5.8}{50}$

$\frac{7.5}{50}$ $\frac{7.3}{26}$ $\frac{8.3}{24-20}$ $\frac{5.6}{15}$ $\frac{5.45}{10}$ $\frac{5.35}{10}$ $\frac{5.41}{10}$ $\frac{5.7}{15}$ $\frac{7.0}{22-25}$ $\frac{6.3}{27}$ $\frac{5.8}{50}$

$\frac{6.6}{50}$ $\frac{7.0}{28}$ $\frac{7.8}{25-20}$ $\frac{5.4}{15}$ $\frac{5.32}{10}$ $\frac{5.22}{10}$ $\frac{5.23}{10}$ $\frac{5.4}{15}$ $\frac{7.2}{20-23}$ $\frac{5.2}{28}$ $\frac{5.7}{50}$

$\frac{6.3}{50}$ $\frac{6.6}{27}$ $\frac{7.7}{24-21}$ $\frac{5.4}{15}$ $\frac{5.23}{10}$ $\frac{5.17}{10}$ $\frac{5.72}{10}$ $\frac{5.4}{15}$ $\frac{7.5}{20-23}$ $\frac{6.2}{26}$ $\frac{5.5}{35}$ $\frac{5.5}{50}$

$\frac{6.9}{50}$ $\frac{7.1}{28}$ $\frac{7.8}{25-21}$ $\frac{5.6}{15}$ $\frac{5.39}{10}$ $\frac{5.31}{10}$ $\frac{5.42}{10}$ $\frac{5.6}{15}$ $\frac{7.5}{20-24}$ $\frac{6.2}{27}$ $\frac{5.9}{50}$

$\frac{7.1}{50}$ $\frac{7.5}{28}$ $\frac{7.8}{25-21}$ $\frac{5.7}{15}$ $\frac{5.65}{10}$ $\frac{5.60}{10}$ $\frac{5.63}{10}$ $\frac{5.7}{15}$ $\frac{7.6}{20-24}$ $\frac{6.2}{38}$ $\frac{5.8}{50}$

Spike P.P 28' 41" 26' 47"

$\frac{6.4}{50}$ $\frac{7.0}{27}$ $\frac{7.5}{26}$ $\frac{7.2}{21}$ $\frac{5.2}{15}$ $\frac{5.05}{10}$ $\frac{5.06}{10}$ $\frac{5.3}{15}$ $\frac{7.5}{20-24}$ $\frac{6.3}{28}$ $\frac{5.3}{50}$

$\frac{7.1}{50}$ $\frac{7.5}{26}$ $\frac{8.0}{25}$ $\frac{7.5}{20}$ $\frac{5.5}{15}$ $\frac{5.34}{10}$ $\frac{5.32}{10}$ $\frac{5.5}{15}$ $\frac{7.9}{22-25}$ $\frac{6.7}{27}$ $\frac{6.2}{34}$ $\frac{5.4}{50}$

$\frac{7.1}{50}$ $\frac{8.0}{26}$ $\frac{8.3}{25}$ $\frac{8.0}{21}$ $\frac{5.7}{15}$ $\frac{5.54}{10}$ $\frac{5.60}{10}$ $\frac{5.7}{15}$ $\frac{8.0}{20-23}$ $\frac{7.5}{25}$ $\frac{7.2}{43}$ $\frac{7.8}{50}$

$\frac{7.0}{50}$ $\frac{8.5}{26}$ $\frac{9.52}{22}$ $\frac{9.3}{22}$ $\frac{8.1}{20}$ $\frac{5.8}{15}$ $\frac{5.62}{10}$ $\frac{5.73}{10}$ $\frac{5.4}{15}$ $\frac{8.0}{20}$ $\frac{10.8}{26}$ $\frac{11.95}{26}$ $\frac{11.7}{44}$ $\frac{12.1}{50}$

$\frac{4.5}{50}$ $\frac{5.2}{29}$ $\frac{8.6}{24-20}$ $\frac{5.6}{15}$ $\frac{5.96}{10}$ $\frac{5.45}{10}$ $\frac{5.60}{10}$ $\frac{5.7}{15}$ $\frac{13.3}{27}$ $\frac{14.9}{36}$ $\frac{15.0}{50}$

Sta	+	π	—	Elev
		944.18		
27 + 17			5.38	38.80
+ 44			5.20	38.98
+ 72			4.95	39.23
28			4.75	39.43
+ 50			4.36	39.82
+ 70			4.21	39.97
29			4.00	40.18
+ 20			3.84	40.34
+ 50			3.60	40.58
+ 73			3.45	40.73
30			3.25	40.93
T.P.	12.08	951.95	4.31	939.87
28 + 70				39.97

$$\begin{array}{r} 42 \\ 50 \end{array} \quad \begin{array}{r} 42 \\ 30 \end{array} \quad \begin{array}{r} 8.4 \\ 24.19 \end{array} \quad \begin{array}{r} 5.5 \\ 15 \end{array} \quad \begin{array}{r} 542 \\ 10 \end{array} \quad \begin{array}{r} 5.38 \\ 5.38 \end{array} \quad \begin{array}{r} 5.53 \\ 10 \end{array} \quad \begin{array}{r} 5.6 \\ 15 \end{array} \quad \begin{array}{r} 13.7 \\ 28 \end{array} \quad \begin{array}{r} 14.9 \\ 36 \end{array} \quad \begin{array}{r} 15.5 \\ 50 \end{array}$$

$$\begin{array}{r} 6.3 \\ 50 \end{array} \quad \begin{array}{r} 4.1 \\ 30 \end{array} \quad \begin{array}{r} 7.7 \\ 25.20 \end{array} \quad \begin{array}{r} 5.3 \\ 15 \end{array} \quad \begin{array}{r} 5.28 \\ 10 \end{array} \quad \begin{array}{r} 5.32 \\ 5.20 \end{array} \quad \begin{array}{r} 5.2 \\ 10 \end{array} \quad \begin{array}{r} 13.7 \\ 31 \end{array} \quad \begin{array}{r} 14.7 \\ 37 \end{array} \quad \begin{array}{r} 15.2 \\ 50 \end{array}$$

$$\begin{array}{r} 7.556 \\ 50 \end{array} \quad \begin{array}{r} 4.7 \\ 38 \end{array} \quad \begin{array}{r} 7.1 \\ 28 \end{array} \quad \begin{array}{r} 50 \\ 24.20 \end{array} \quad \begin{array}{r} 505 \\ 15 \end{array} \quad \begin{array}{r} 5.04 \\ 10 \end{array} \quad \begin{array}{r} 4.8 \\ 15 \end{array} \quad \begin{array}{r} 10.6 \\ 25 \end{array} \quad \begin{array}{r} 13.1 \\ 37 \end{array} \quad \begin{array}{r} 14.6 \\ 50 \end{array}$$

$$\begin{array}{r} 8.5 \\ 50 \end{array} \quad \begin{array}{r} 6.0 \\ 40 \end{array} \quad \begin{array}{r} 4.8 \\ 29 \end{array} \quad \begin{array}{r} 7.0 \\ 24.19 \end{array} \quad \begin{array}{r} 4.8 \\ 15 \end{array} \quad \begin{array}{r} 4.82 \\ 10 \end{array} \quad \begin{array}{r} 4.75 \\ 4.75 \end{array} \quad \begin{array}{r} 4.8 \\ 10 \end{array} \quad \begin{array}{r} 4.6 \\ 15 \end{array} \quad \begin{array}{r} 7.5 \\ 25 \end{array} \quad \begin{array}{r} 10.8 \\ 38 \end{array} \quad \begin{array}{r} 12.6 \\ 50 \end{array}$$

$$\begin{array}{r} 11.2 \\ 50 \end{array} \quad \begin{array}{r} 7.9 \\ 32 \end{array} \quad \begin{array}{r} 6.6 \\ 26 \end{array} \quad \begin{array}{r} 6.5 \\ 19 \end{array} \quad \begin{array}{r} 4.5 \\ 15 \end{array} \quad \begin{array}{r} 4.48 \\ 10 \end{array} \quad \begin{array}{r} 4.48 \\ 4.36 \end{array} \quad \begin{array}{r} 4.26 \\ 10 \end{array} \quad \begin{array}{r} 6.0 \\ 15 \end{array} \quad \begin{array}{r} 6.2 \\ 27 \end{array} \quad \begin{array}{r} 3.1 \\ 33 \end{array} \quad \begin{array}{r} 3.0 \\ 38 \end{array} \quad \begin{array}{r} 4.5 \\ 41 \end{array} \quad \begin{array}{r} 5.9 \\ 50 \end{array}$$

$$\begin{array}{r} 12.9 \\ 50 \end{array} \quad \begin{array}{r} 10.0 \\ 33 \end{array} \quad \begin{array}{r} 8.5 \\ 28 \end{array} \quad \begin{array}{r} 6.6 \\ 23 \end{array} \quad \begin{array}{r} 6.6 \\ 19 \end{array} \quad \begin{array}{r} 4.3 \\ 15 \end{array} \quad \begin{array}{r} 4.29 \\ 10 \end{array} \quad \begin{array}{r} 4.21 \\ 4.21 \end{array} \quad \begin{array}{r} 4.26 \\ 10 \end{array} \quad \begin{array}{r} 4.3 \\ 15 \end{array} \quad \begin{array}{r} 6.1 \\ 19.26 \end{array}$$

$$\begin{array}{r} 13.6 \\ 50 \end{array} \quad \begin{array}{r} 11.6 \\ 34 \end{array} \quad \begin{array}{r} 9.7 \\ 29 \end{array} \quad \begin{array}{r} 8.7 \\ 25 \end{array} \quad \begin{array}{r} 4.0 \\ 15 \end{array} \quad \begin{array}{r} 4.1 \\ 10 \end{array} \quad \begin{array}{r} 4.02 \\ 4.00 \end{array} \quad \begin{array}{r} 4.1 \\ 10 \end{array} \quad \begin{array}{r} 5.8 \\ 15 \end{array} \quad \begin{array}{r} 20.27 \end{array}$$

$$\begin{array}{r} 13.6 \\ 50 \end{array} \quad \begin{array}{r} 12.0 \\ 34 \end{array} \quad \begin{array}{r} 10.3 \\ 30 \end{array} \quad \begin{array}{r} 9.3 \\ 26 \end{array} \quad \begin{array}{r} 3.9 \\ 15 \end{array} \quad \begin{array}{r} 4.01 \\ 10 \end{array} \quad \begin{array}{r} 3.84 \\ 3.84 \end{array} \quad \begin{array}{r} 3.90 \\ 10 \end{array} \quad \begin{array}{r} 4.0 \\ 15 \end{array} \quad \begin{array}{r} 5.4 \\ 19.25 \end{array}$$

$$\begin{array}{r} 12.6 \\ 50 \end{array} \quad \begin{array}{r} 11.7 \\ 35 \end{array} \quad \begin{array}{r} 10.4 \\ 31 \end{array} \quad \begin{array}{r} 9.8 \\ 26 \end{array} \quad \begin{array}{r} 3.9 \\ 15 \end{array} \quad \begin{array}{r} 3.84 \\ 10 \end{array} \quad \begin{array}{r} 3.58 \\ 3.60 \end{array} \quad \begin{array}{r} 3.7 \\ 10 \end{array} \quad \begin{array}{r} 5.6 \\ 15 \end{array} \quad \begin{array}{r} 20.30 \end{array}$$

$$\begin{array}{r} 11.0 \\ 50 \end{array} \quad \begin{array}{r} 11.0 \\ 35 \end{array} \quad \begin{array}{r} 9.3 \\ 26 \end{array} \quad \begin{array}{r} 8.4 \\ 24 \end{array} \quad \begin{array}{r} 3.8 \\ 15 \end{array} \quad \begin{array}{r} 3.76 \\ 10 \end{array} \quad \begin{array}{r} 3.45 \\ 3.45 \end{array} \quad \begin{array}{r} 3.34 \\ 10 \end{array} \quad \begin{array}{r} 3.4 \\ 15 \end{array} \quad \begin{array}{r} 5.4 \\ 20.30 \end{array}$$

$$\begin{array}{r} 9.8 \\ 50 \end{array} \quad \begin{array}{r} 9.9 \\ 37 \end{array} \quad \begin{array}{r} 9.3 \\ 26 \end{array} \quad \begin{array}{r} 3.9 \\ 15 \end{array} \quad \begin{array}{r} 3.62 \\ 10 \end{array} \quad \begin{array}{r} 3.7 \\ 3.25 \end{array} \quad \begin{array}{r} 3.13 \\ 10 \end{array} \quad \begin{array}{r} 3.3 \\ 15 \end{array} \quad \begin{array}{r} 5.2 \\ 20.30 \end{array}$$

11.98

$$\begin{array}{r} 8.5 \\ 36 \end{array} \quad \begin{array}{r} 10.3 \\ 43 \end{array} \quad \begin{array}{r} 11.4 \\ 50 \end{array} \quad \begin{array}{r} 15.1 \\ 75 \end{array}$$

Sta.	f	π	-	Elev.	
		951.95			
29				40.18	27
+20				40.34	25
+50				40.58	20
+73				40.73	20
30	-			40.93	20
+50			10.72	41.23	
31			10.36	41.59	
+50			10.14	41.81	
32			9.77	42.18	
+50			9.40	42.55	
33			9.06	42.89	
T.P.	4.97	950.10	6.82	945.13	Spik T.P. Rt
+50			6.85	43.25	

Please raise
Johanna Gauge

Replace
Spring Lake
Gauge. Post
is still there

Reset gauge inside
Phalen Dike
raise about 2'

2651.48

1373.62

1277.86

896.70

885.80
9.10

881.92
3.88

887.50
886.70

2651.48

1440.70

1210.78

62.36

1278.14

28.10

109 + 81.92

59.30

61.78
83

49.98

C & W. B. Ave

115

(11.77) - $\frac{7.5}{37} \frac{9.8}{50} \frac{14.0}{75}$

(11.61) - $\frac{8.5}{36} \frac{9.4}{59} \frac{13.2}{75}$

114

(11.37) - $\frac{7.0}{40} \frac{7.5}{50} \frac{8.8}{75}$

(11.22) - $\frac{5.4}{42} \frac{5.3}{50} \frac{5.7}{75}$

(11.02) - $\frac{5.0}{41} \frac{4.5}{50} \frac{3.9}{75}$

$\frac{12.2}{50} \frac{12.9}{36} \frac{13.6}{28} \frac{14.0}{21} \frac{11.0}{15} \frac{11.01}{10} \frac{10.7}{10.72} \frac{10.63}{10} \frac{10.7}{15} \frac{13.6}{20.26} \frac{9.8}{36} \frac{8.5}{50} \frac{5.7}{75}$

$\frac{8.4}{75} \frac{8.9}{56} \frac{9.5}{34} \frac{13.1}{29} \frac{12.6}{20} \frac{10.7}{15} \frac{10.50}{10} \frac{10.4}{10.36} \frac{10.42}{10} \frac{11.6}{15} \frac{13.6}{22} \frac{13.2}{33} \frac{13.5}{44} \frac{13.0}{50}$

$\frac{9.6}{50} \frac{10.3}{34} \frac{12.7}{30} \frac{12.3}{21} \frac{10.3}{15} \frac{10.20}{10} \frac{10.1}{10.14} \frac{10.27}{10} \frac{10.5}{15} \frac{15.4}{25} \frac{15.3}{33} \frac{15.2}{50}$

$\frac{10.2}{50} \frac{10.6}{33} \frac{12.2}{30} \frac{11.6}{20} \frac{9.9}{15} \frac{9.81}{10} \frac{9.8}{9.77} \frac{9.86}{10} \frac{9.9}{15} \frac{14.7}{28} \frac{14.9}{33} \frac{14.4}{50}$

$\frac{9.6}{50} \frac{9.5}{33} \frac{11.5}{30} \frac{11.2}{20} \frac{9.6}{15} \frac{9.98}{10} \frac{9.46}{9.40} \frac{9.5}{10} \frac{11.4}{15} \frac{9.7}{20.25} \frac{10.5}{29} \frac{10.0}{45} \frac{10.0}{50}$

$\frac{8.8}{50} \frac{8.9}{33} \frac{10.9}{30} \frac{10.5}{20} \frac{9.2}{15} \frac{9.17}{10} \frac{9.1}{9.06} \frac{9.08}{10} \frac{9.1}{15} \frac{10.3}{18.23} \frac{3.6}{32} \frac{3.3}{50} \frac{3.4}{75}$

$\frac{6.9}{50} \frac{6.6}{33} \frac{8.5}{31} \frac{7.7}{19} \frac{6.9}{15} \frac{6.94}{10} \frac{6.9}{6.85} \frac{6.91}{10} \frac{6.9}{15} \frac{7.9}{18} \frac{6.8}{24} \frac{1.4}{30} \frac{0.8}{45} \frac{10.3}{75}$

Sta.	+	π	-	Elev
		950.10		
34			6.59	43.51
+37			6.33	43.77
+77			6.10	44.0
35			6.03	44.07
+50			5.85	44.25
36			5.71	44.39
+50			5.44	44.66
37			4.97	45.13
+50			4.42	45.68
+64	24" Conc.		4.24	45.86
38			3.79	46.31
+50			3.16	46.94

$$\begin{array}{cccccccccccccccc} \frac{7.1}{50} & \frac{7.2}{33} & \frac{8.6}{31} & \frac{7.6}{19} & \frac{6.7}{15} & \frac{6.6}{10} & \frac{6.4}{63} & \frac{6.6}{10} & \frac{8.1}{75} & \frac{7.1}{26} & \frac{2.5}{31} & \frac{2.1}{44} & \frac{0.6}{50} & \frac{0.6}{75} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{8.0}{50} & \frac{7.5}{34} & \frac{8.7}{31} & \frac{8.4}{26} & \frac{7.7}{21} & \frac{6.5}{15} & \frac{6.39}{10} & \frac{6.3}{63} & \frac{6.6}{10} & \frac{6.1}{75} & \frac{7.2}{19} & \frac{4.1}{26} & \frac{4.0}{50} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{9.7}{50} & \frac{9.2}{34} & \frac{9.1}{28} & \frac{8.4}{20} & \frac{6.2}{15} & \frac{6.16}{10} & \frac{6.1}{61} & \frac{6.14}{10} & \frac{6.1}{15} & \frac{7.8}{20} & \frac{7.1}{23} & \frac{4.3}{29} & \frac{4.4}{50} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{9.5}{50} & \frac{9.7}{33} & \frac{9.4}{28} & \frac{8.6}{21} & \frac{6.2}{15} & \frac{6.12}{10} & \frac{6.0}{60} & \frac{6.06}{10} & \frac{6.1}{15} & \frac{7.6}{20} & \frac{7.0}{24} & \frac{4.8}{28} & \frac{5.4}{50} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{8.4}{50} & \frac{9.2}{32} & \frac{8.7}{21} & \frac{6.1}{15} & \frac{6.00}{10} & \frac{5.9}{58} & \frac{5.92}{10} & \frac{6.0}{15} & \frac{8.2}{20} & \frac{7.2}{24} & \frac{7.9}{26} & \frac{10.0}{36} & \frac{10.0}{50} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{6.8}{50} & \frac{7.0}{31} & \frac{8.2}{28} & \frac{7.8}{20} & \frac{5.8}{15} & \frac{5.78}{10} & \frac{5.7}{57} & \frac{5.75}{10} & \frac{5.8}{15} & \frac{8.6}{20} & \frac{8.6}{26} & \frac{9.7}{28} & \frac{13.5}{50} \end{array}$$

$$\begin{array}{cccccccccccccccc} \frac{6.7}{50} & \frac{5.0}{40} & \frac{4.7}{30} & \frac{7.7}{25} & \frac{7.4}{20} & \frac{5.6}{15} & \frac{5.43}{10} & \frac{5.4}{5.44} & \frac{5.5}{10} & \frac{8.0}{15} & \frac{8.2}{19} & \frac{7.6}{24} & \frac{9.6}{25} & \frac{13.0}{37} & \frac{13.0}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.9}{50} & \frac{4.2}{30} & \frac{7.5}{25} & \frac{7.1}{22} & \frac{4.9}{16} & \frac{4.92}{10} & \frac{5.00}{4.97} & \frac{5.09}{10} & \frac{5.1}{15} & \frac{7.8}{23} & \frac{13.3}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.7}{50} & \frac{4.6}{31} & \frac{7.4}{26} & \frac{6.9}{22} & \frac{4.3}{15} & \frac{4.27}{10} & \frac{4.4}{4.42} & \frac{4.6}{10} & \frac{4.9}{17} & \frac{9.8}{24} & \frac{14.3}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.6}{50} & \frac{4.6}{31} & \frac{7.2}{26} & \frac{7.60}{21} & \frac{7.5}{22} & \frac{4.2}{15} & \frac{4.13}{10} & \frac{4.2}{4.24} & \frac{4.4}{10} & \frac{4.7}{18} & \frac{9.60}{9.6} & \frac{11.1}{28} & \frac{14.0}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.0}{50} & \frac{4.5}{33} & \frac{6.2}{30} & \frac{6.9}{26} & \frac{6.8}{22} & \frac{3.6}{15} & \frac{3.66}{10} & \frac{3.8}{3.79} & \frac{4.04}{10} & \frac{4.0}{16} & \frac{6.7}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{3.3}{50} & \frac{3.1}{30} & \frac{6.0}{23} & \frac{3.2}{20} & \frac{3.04}{15} & \frac{3.4}{10} & \frac{3.42}{3.16} & \frac{3.6}{15} & \frac{7.6}{24} & \frac{8.7}{31} & \frac{8.0}{50} \end{array}$$

Sta.	+	π	-	Elev.
		950.10		
39			2.53	47.57
T.P.	7.57	955.52	2.15	947.95
+50			7.33	48.19
+75			7.09	48.43
40			6.73	48.79
+50			6.22	49.30
41			5.72	49.80
+50			5.48	50.04
42			5.43	50.09
+50			5.38	50.14
B.M.	8.05	957.15	6.39	949.13
+87			6.88	50.27
43			6.87	50.28
+50			6.67	50.48

949.10

4.6	4.2	5.3	2.6	2.45	2.5	2.68	3.0	5.1	5.148	5.2	3.9	
50	30	24-20	15	10	2.53	10	15	20	25	27	38	50

8.4	7.1	9.5	7.3	7.28	7.3	7.51	7.6	9.9	5.6	4.9
50	26	23-19	15	10	7.33	10	15	20-25	32	50

7.9	7.3	9.4	7.0	6.94	7.1	7.28	7.3	9.2	2.7	2.0	2.0
50	29	26-21	15	10	7.09	10	15	20-25	33	50	75

7.9	7.1	8.2	9.0	8.9	6.7	6.65	6.7	6.95	7.0	9.1	6.2	5.2
50	38	29	25	19	15	10	6.73	10	15	21-27	32	50

7.4	6.9	6.5	8.1	8.2	6.1	6.12	6.1	6.38	6.5	9.0	10.1	11.8
50	40	29	25	20	15	10	6.22	10	15	20	35	50

6.2	5.4	7.3	5.7	5.75	5.7	5.90	6.2	8.6	8.3	9.7	12.6
50	29	24-20	15	10	5.72	10	15	20-24	27	34	50

3.1	3.2	6.7	5.4	5.35	5.5	5.67	5.8	10.7	11.7
50	34	26-20	15	10	5.48	10	15	26	50

0.1	0.0	0.9	1.4	6.2	6.7	5.4	5.31	5.4	5.4	5.7	7.9	11.6
75	50	38	35	27	19	15	10	5.43	10	15	23	50

10.6	0.0	1.4	7.4	7.3	5.4	5.36	5.4	5.52	5.6	9.6	11.6
75	42	38	29	18	15	10	5.38	10	15	24	50

Spike T.P. 30 R.L. 516. 44-84

55	44	48	6.8	7.2	6.98	6.9	6.97	6.9	11.6	11.7	13.4
50	40	35	23	10	6.88	10	15	23	27	50	

7.9	7.0	6.4	9.4	6.8	6.92	6.9	6.93	7.0	10.9	12.0	13.1
50	35	31	25-21	15	10	6.87	10	15	22	38	50

12.6	10.1	10.1	6.7	6.72	6.7	6.72	6.8	10.2	9.3	10.4
50	28	22	15	10	6.67	10	15	22-29	33	50

Sta.	+	π	-	Elev.
		957.15.		
43+85			6.55	50.60
44			6.50	50.65
+30			6.42	50.73
+61			6.26	50.89
45			6.16	50.99
+07	24" x 50' Conc.		6.16	50.99
+36			6.00	51.15
+75			5.83	51.32
46			5.72	51.43
+50			5.43	51.72
47			5.23	51.92
+50			5.03	52.02

$$\frac{14.9}{50} \quad \frac{13.8}{33} \quad \frac{11.3}{22} \quad \frac{6.7}{15} \quad \frac{6.69}{10} \quad \frac{6.60}{6.55} \quad \frac{6.5}{10} \quad \frac{10.0}{22-27} \quad \frac{6.4}{40} \quad \frac{6.3}{50}$$

$$\frac{16.1}{50} \quad \frac{15.1}{39} \quad \frac{13.8}{27} \quad \frac{6.9}{15} \quad \frac{6.62}{10} \quad \frac{6.59}{6.50} \quad \frac{6.5}{10} \quad \frac{10.3}{22-28} \quad \frac{6.4}{39} \quad \frac{5.8}{50}$$

$$\frac{17.2}{50} \quad \frac{15.0}{30} \quad \frac{6.6}{15} \quad \frac{6.52}{10} \quad \frac{6.44}{6.42} \quad \frac{6.4}{10} \quad \frac{10.8}{27-34} \quad \frac{8.4}{34} \quad \frac{7.3}{50}$$

$$\frac{16.5}{50} \quad \frac{15.5}{31} \quad \frac{6.5}{15} \quad \frac{6.40}{10} \quad \frac{6.30}{6.26} \quad \frac{6.3}{10} \quad \frac{10.7}{22-27} \quad \frac{8.0}{36} \quad \frac{6.8}{50}$$

$$\frac{15.8}{50} \quad \frac{16.1}{32} \quad \frac{6.5}{15} \quad \frac{6.32}{10} \quad \frac{6.21}{6.16} \quad \frac{6.4}{10} \quad \frac{10.8}{22-25} \quad \frac{7.1}{36} \quad \frac{6.4}{50}$$

$$\frac{15.8}{50} \quad \frac{15.8}{33} \quad \frac{13.8}{29} \quad \frac{14.0}{28} \quad \frac{14.21}{27} \quad \frac{6.6}{15} \quad \frac{6.3}{10} \quad \frac{6.18}{6.16} \quad \frac{6.4}{10} \quad \frac{10.8}{22-26} \quad \frac{11.8}{23} \quad \frac{7.1}{36} \quad \frac{6.5}{50}$$

FL 24" 2.94

$$\frac{15.0}{50} \quad \frac{14.9}{42} \quad \frac{14.6}{41-35} \quad \frac{15.9}{31} \quad \frac{6.3}{15} \quad \frac{6.15}{10} \quad \frac{6.02}{6.00} \quad \frac{6.2}{10} \quad \frac{10.5}{22-26} \quad \frac{7.3}{31} \quad \frac{6.3}{37} \quad \frac{6.3}{50}$$

$$\frac{15.8}{50} \quad \frac{15.8}{37} \quad \frac{13.8}{27} \quad \frac{6.0}{15} \quad \frac{6.00}{5.83} \quad \frac{5.88}{10} \quad \frac{6.0}{15} \quad \frac{9.6}{22-25} \quad \frac{6.0}{30} \quad \frac{4.6}{35} \quad \frac{4.5}{50}$$

$$\frac{15.5}{50} \quad \frac{17.2}{40} \quad \frac{16.7}{30} \quad \frac{6.0}{15} \quad \frac{5.87}{5.72} \quad \frac{5.74}{10} \quad \frac{5.9}{15} \quad \frac{9.0}{20-24} \quad \frac{6.8}{26} \quad \frac{4.9}{33} \quad \frac{4.9}{50}$$

$$\frac{14.6}{50} \quad \frac{13.3}{34} \quad \frac{5.7}{15} \quad \frac{5.64}{10} \quad \frac{5.43}{5.46} \quad \frac{5.3}{10} \quad \frac{8.3}{20-23} \quad \frac{3.3}{30} \quad \frac{4.4}{50}$$

$$\frac{11.3}{50} \quad \frac{9.4}{33} \quad \frac{6.6}{27} \quad \frac{7.6}{25-20} \quad \frac{5.4}{15} \quad \frac{5.42}{5.23} \quad \frac{5.13}{10} \quad \frac{5.0}{15} \quad \frac{7.0}{20-23} \quad \frac{5.3}{25} \quad \frac{5.2}{32} \quad \frac{6.1}{50}$$

$$\frac{8.1}{50} \quad \frac{6.8}{35} \quad \frac{5.2}{28} \quad \frac{7.0}{24-20} \quad \frac{5.2}{15} \quad \frac{5.33}{5.03} \quad \frac{4.80}{10} \quad \frac{4.6}{15} \quad \frac{6.3}{19-23} \quad \frac{4.9}{25} \quad \frac{4.0}{50}$$

Sta.	+	π	-	Elev.
		957.15,		
48			4.69	52.46
+42			4.28	52.87
+71			3.97	53.18 v
49			3.65	53.50
+50			3.47	53.68
50			3.40	53.75
+50			3.42	53.73
51			3.85	53.30
+50			4.36	52.79
T.P.	11.51	968.51.	0.15	957.00 ,
48+71				53.18
49				53.50
+50				53.68

$$\begin{array}{cccccccccccc} \frac{2.2}{50} & \frac{1.9}{34} & \frac{6.1}{22-19} & \frac{5.0}{15} & \frac{50.1}{10} & 4.7 & \frac{442}{10} & \frac{4.3}{15} & \frac{5.7}{17-20} & \frac{4.1}{24} & \frac{3.5}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{2.3}{75} & \frac{1.0}{58} & \frac{10.3}{39} & \frac{11.2}{34} & \frac{5.9}{23-19} & \frac{4.6}{15} & \frac{4.63}{10} & 4.7 & \frac{3.85}{10} & \frac{4.0}{15} & \frac{5.5}{19-22} & \frac{0.7}{28} & \frac{0.8}{50} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.3}{50} & \frac{2.6}{37} & \frac{2.5}{29} & \frac{5.9}{24} & \frac{5.7}{17} & \frac{4.4}{15} & \frac{4.31}{10} & 4.0 & \frac{3.72}{10} & \frac{3.6}{15} & \frac{4.5}{18-22} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.2}{50} & \frac{5.8}{39} & \frac{3.3}{29} & \frac{5.9}{24} & \frac{5.7}{18} & \frac{4.2}{15} & \frac{4.02}{10} & 3.7 & \frac{3.39}{10} & \frac{3.4}{15} & \frac{4.5}{17} & \frac{3.3}{23} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.3}{50} & \frac{6.1}{33} & \frac{4.0}{28} & \frac{5.5}{25-19} & \frac{4.0}{15} & \frac{3.87}{10} & 3.5 & \frac{3.15}{10} & \frac{3.1}{15} & \frac{3.5}{16} & \frac{1.9}{25} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{7.0}{50} & \frac{6.7}{36} & \frac{4.5}{28} & \frac{5.4}{26} & \frac{5.0}{18} & \frac{4.0}{15} & \frac{3.68}{10} & 3.40 & \frac{3.18}{10} & \frac{3.1}{15} & \frac{3.3}{18} & \frac{1.7}{24} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{1.7}{50} & \frac{0.9}{33} & \frac{5.0}{25} & \frac{5.0}{20} & \frac{3.5}{15} & \frac{3.59}{10} & 3.4 & \frac{3.40}{10} & \frac{3.4}{15} & \frac{4.3}{18} & \frac{3.1}{25} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{1.3}{75} & \frac{0.9}{50} & \frac{0.1}{39} & \frac{11.0}{36} & \frac{5.2}{24-19} & \frac{4.0}{15} & \frac{3.99}{10} & 3.1 & \frac{3.90}{10} & \frac{3.9}{15} & \frac{4.9}{18} & \frac{3.6}{25} \end{array}$$

$$\begin{array}{cccccccccccc} \frac{4.0}{50} & \frac{3.0}{37} & \frac{1.9}{32} & \frac{6.2}{25-21} & \frac{4.5}{15} & \frac{4.47}{10} & 4.4 & \frac{4.47}{10} & \frac{4.4}{15} & \frac{5.4}{18} & \frac{4.3}{25} \end{array}$$

$$\begin{array}{ccc} 15.5 \\ \textcircled{15.53} & \frac{9.2}{31} & \frac{8.4}{50} & \frac{7.4}{25} \end{array}$$

$$\begin{array}{ccc} 15.0 \\ \textcircled{15.01} & \frac{6.2}{33} & \frac{5.2}{50} & \frac{3.0}{75} & \frac{2.5}{100} \end{array}$$

$$\begin{array}{ccc} 14.8 \\ \textcircled{14.83} & \frac{3.9}{37} & \frac{2.6}{50} & \frac{1.3}{60} & \frac{0.9}{75} & \frac{1.3}{100} \end{array}$$

Sta.	+	π	-	Elev.
		968.51		
50				53.75
+50				53.73
51				53.30
+50				52.79
T.P.	1.05	956.80	12.76	955.75
52			4.75	52.05
+50			5.76	51.04
53			6.82	49.98
+50			7.86	48.94
T.P.	3.52	952.08	8.24	948.56
54			4.05	48.03
+40			4.57	47.51
+49	24" x 44' Conc.		4.69	47.39
+60			4.68	47.40

$$\textcircled{1476} \quad \begin{array}{cc} 2.5 & 2.0 \\ 37 & 50 \end{array} \quad \begin{array}{cc} 1.2 & 2.5 \\ 70 & 100 \end{array}$$

$$\textcircled{1478} \quad \begin{array}{cc} 5.6 & 5.3 \\ 34 & 50 \end{array} \quad \begin{array}{cc} 4.2 & 4.1 \\ 75 & 100 \end{array}$$

$$\textcircled{15.21} \quad \begin{array}{cc} 7.1 & 6.9 \\ 35 & 50 \end{array} \quad \begin{array}{cc} 6.1 & 5.6 \\ 75 & 100 \end{array}$$

$$\textcircled{15.72} \quad \begin{array}{cc} 8.7 & 8.8 \\ 31 & 50 \end{array} \quad \begin{array}{cc} 7.6 & \\ & 75 \end{array}$$

$$\begin{array}{cccccccccccccccc} 7.1 & 6.0 & 4.7 & 6.7 & 4.9 & 4.84 & 4.8 & 4.83 & 4.8 & 6.2 & 2.5 & 1.2 & 0.8 & 10.3 \\ 50 & 35 & 30 & 24-20 & 15 & 10 & 4.75 & 10 & 15 & 18-21 & 26 & 35 & 50 & 75 \end{array}$$

$$\begin{array}{cccccccccccccccc} 10.3 & 8.9 & 7.2 & 7.2 & 8.3 & 5.9 & 5.8 & 5.8 & 5.8 & 7.6 & 5.5 & 3.6 & 3.3 \\ 50 & 34 & 29 & 26 & 24-20 & 15 & 10 & 5.76 & 10 & 15 & 18-20 & 25 & 37 & 50 \end{array}$$

$$\begin{array}{cccccccccccccccc} 12.7 & 10.7 & 9.3 & 9.8 & 7.1 & 6.90 & 6.8 & 6.91 & 7.0 & 8.7 & 7.8 & 5.9 & 5.6 \\ 50 & 34 & 27 & 25-20 & 15 & 10 & 6.82 & 10 & 15 & 18-23 & 26 & 39 & 50 \end{array}$$

$$\begin{array}{cccccccccccccccc} 14.1 & 12.6 & 10.3 & 10.8 & 8.1 & 7.94 & 7.9 & 7.91 & 8.0 & 10.0 & 9.9 & 8.7 & 7.7 \\ 50 & 34 & 24 & 22-20 & 15 & 10 & 7.86 & 10 & 15 & 18 & 24 & 34 & 50 \end{array}$$

$$\begin{array}{cccccccccccccccc} 10.3 & 8.2 & 7.4 & 4.3 & 4.15 & 4.1 & 4.13 & 4.2 & 6.7 & 6.2 & 4.5 & 3.8 \\ 50 & 29 & 23-20 & 15 & 10 & 4.05 & 10 & 15 & 19-23 & 25 & 38 & 50 \end{array}$$

$$\begin{array}{cccccccccccccccc} 11.5 & 9.7 & 8.6 & 4.7 & 4.69 & 4.6 & 4.62 & 4.6 & 7.6 & 5.4 & 4.3 & 5.0 & 4.1 \\ 50 & 32 & 22 & 15 & 10 & 4.57 & 10 & 15 & 21-24 & 26 & 33 & 37 & 50 \end{array}$$

$$\begin{array}{cccccccccccccccc} 10.9 & 9.8 & 9.66 & 9.3 & 4.9 & 4.82 & 4.7 & 4.73 & 5.1 & 8.4 & 7.8 & 5.2 & 4.0 \\ 50 & 39 & 22 & 22 & 15 & 10 & 4.69 & 10 & 18 & 22 & 27 & 26 & 29 & 50 \end{array}$$

$$\begin{array}{cccccccccccc} 10.8 & 8.0 & 7.6 & 4.88 & 4.7 & 4.84 & 4.9 & 7.0 & 6.9 \\ 50 & 30 & 20 & 10 & 4.68 & 10 & 29 & 39 & 50 \end{array}$$

Sta.	+	π	-	Elev.
		952.08		
54+65			4.84	47.24
181.22	C.O.R.D.		4.98	47.10
B.M.	464	951.69	4.97	947.11
+97			4.75	46.94
55			4.80	46.89
+05			4.82	46.87
+09			4.84	46.85
+50			5.01	46.68
56			5.12	46.57
+50			5.18	46.51
57			5.24	46.45
+50			5.29	46.40
58			5.34	46.35

$\begin{array}{r} 6.8 \\ \hline 50 \end{array}$
 $\begin{array}{r} 5.5 \\ \hline 25 \end{array}$
 $\begin{array}{r} 4.89 \\ \hline 10 \end{array}$
 $\begin{array}{r} 4.8 \\ \hline 484 \end{array}$
 $\begin{array}{r} 4.90 \\ \hline 10 \end{array}$
 $\begin{array}{r} 5.0 \\ \hline 35 \end{array}$
 $\begin{array}{r} 4.7 \\ \hline 50 \end{array}$

$$\begin{array}{r} 6.1 \\ \underline{5.0} \end{array} \quad \begin{array}{r} 5.3 \\ \underline{2.5} \end{array} \quad \begin{array}{r} 5.08 \\ \underline{1.0} \end{array} \quad \begin{array}{r} 5.0 \\ \underline{4.98} \end{array} \quad \begin{array}{r} 5.01 \\ \underline{1.0} \end{array} \quad \begin{array}{r} 4.1 \\ \underline{5.0} \end{array}$$

Top Drill Hole 541 81.22 E

6.7	5.4	4.84	4.8	4.82	4.9	4.3
50	24	10	4.75	10	22	50

$\frac{9.6}{50} \quad \frac{8.3}{32} \quad \frac{7.4}{22} \quad \frac{5.4}{17} \quad \frac{4.9}{10} \quad \frac{4.82}{10} \quad \frac{4.9}{17} \quad \frac{5.0}{25} \quad \frac{5.3}{31} \quad \frac{4.5}{50}$

9.9	7.8	6.9	5.5	4.92	4.8	4.88	5.1	5.6	5.3	5.0
50	29	18	15	10	482	10	19	23	35	50

<u>7.9</u>	8.7	2	<u>7.5</u>	5.3	<u>4.9</u>	4.8	<u>4.9</u>	5.0	<u>5.7</u>	4.1	<u>3.7</u>
50	30	24	19	15	10	4	10	17	20	36	50

$\frac{10.2}{50}$	$\frac{88}{33}$	$\frac{7.0}{25}$	$\frac{7.2}{22}$	$\frac{5.4}{15}$	$\frac{5.08}{10}$	$\frac{5.0}{50}$	$\frac{5.08}{10}$	$\frac{5.0}{15}$	$\frac{6.7}{20}$	$\frac{4.6}{25}$	$\frac{3.7}{31}$
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5.7

<u>10.0</u>	<u>8.6</u>	<u>7.0</u>	<u>7.6</u>	<u>7.1</u>	<u>5.5</u>	<u>5.22</u>	<u>5.19</u>	<u>5.1</u>	<u>6.8</u>	<u>5.7</u>	<u>3.9</u>	<u>3.9</u>	<u>3.0</u>	
50	32	26	23	18	15	10	5.12	10	15	20-24	26	30	39	50

5.2

7.3	5.5	5.0	7.0	6.7	5.4	5.24	5.22	5.2	6.8	7.2	4.9	3.4	2.1	
5.0	3.1	2.7	2.3	1.8	1.5	1.0	5.18	1.0	1.5	1.8	2.3	2.7	3.1	5.0

5.2

$\frac{58}{50}$	$\frac{39}{27}$	$\frac{71}{23}$	$\frac{68}{19}$	$\frac{53}{15}$	$\frac{5.25}{10}$	$\frac{5.28}{10}$	$\frac{52}{15}$	$\frac{6.6}{19.21}$	$\frac{2.0}{29}$	$\frac{3.2}{50}$
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53

$\frac{48}{50}$	$\frac{37}{27}$	$\frac{71}{23 \cdot 19}$	$\frac{54}{15}$	$\frac{533}{10}$	$\frac{53}{5 \cdot 29}$	$\frac{531}{10}$	$\frac{54}{15}$	$\frac{72}{19 \cdot 22}$	$\frac{36}{27}$	$\frac{56}{50}$
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5.3

$\frac{5.5}{50}$ $\frac{4.8}{28}$ $\frac{7.5}{24}$ $\frac{7.2}{19}$ $\frac{5.5}{15}$ $\frac{5.39}{10}$ $\frac{5.37}{10}$ $\frac{5.3}{15}$ $\frac{7.6}{20-23}$ $\frac{5.5}{26}$ $\frac{7.6}{50}$

Sta.	+	π	-	Elev.
		951.69		
58+50			5.34	46.35
59			5.35	46.34
+50			5.40	46.29
60			5.46	46.23
T.P.	5.60	951.76	5.53	46.16
+50		10.41 51.79 13.41 58.76	5.58	46.18
61			5.61	46.15
+29	24' x 50' Conc.		5.75	46.01
+50			5.63	46.13
62			5.58	46.18
+12			5.59	46.17
+50			5.68	46.08
63			5.62	46.09

5.3

$\frac{6.2}{50}$	$\frac{6.3}{37}$	$\frac{5.8}{28}$	$\frac{7.9}{26}$	$\frac{7.0}{19}$	$\frac{5.6}{15}$	$\frac{5.4}{10}$	$\frac{5.4}{5.34}$	$\frac{5.4}{10}$	$\frac{5.5}{15}$	$\frac{7.8}{20-24}$	$\frac{5.6}{22}$	$\frac{7.6}{32}$	$\frac{8.6}{50}$
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5.4

$\frac{5.9}{50}$	$\frac{6.5}{37}$	$\frac{6.3}{29}$	$\frac{8.0}{26}$	$\frac{7.5}{20}$	$\frac{5.6}{15}$	$\frac{5.4}{10}$	$\frac{5.4}{5.35}$	$\frac{5.4}{10}$	$\frac{5.5}{15}$	$\frac{7.6}{20}$	$\frac{8.2}{25}$	$\frac{7.1}{27}$	$\frac{8.0}{32}$	$\frac{8.5}{50}$
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5.4

$\frac{6.1}{50}$	$\frac{6.4}{40}$	$\frac{6.2}{28}$	$\frac{7.8}{26}$	$\frac{7.3}{19}$	$\frac{5.7}{15}$	$\frac{5.4}{10}$	$\frac{5.4}{5.40}$	$\frac{5.4}{10}$	$\frac{5.7}{15}$	$\frac{8.0}{19}$	$\frac{8.1}{24}$	$\frac{6.7}{27}$	$\frac{7.7}{37}$	$\frac{7.7}{50}$
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5.5

$\frac{6.3}{50}$	$\frac{6.5}{34}$	$\frac{6.6}{28}$	$\frac{8.3}{25}$	$\frac{7.7}{19}$	$\frac{5.8}{15}$	$\frac{5.3}{10}$	$\frac{5.4}{5.46}$	$\frac{5.5}{10}$	$\frac{5.6}{15}$	$\frac{8.4}{21}$	$\frac{9.4}{34}$	$\frac{9.9}{50}$
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5.6

$\frac{6.8}{50}$	$\frac{7.8}{29}$	$\frac{9.0}{27}$	$\frac{8.2}{18}$	$\frac{5.9}{15}$	$\frac{5.6}{10}$	$\frac{5.7}{5.58}$	$\frac{5.7}{10}$	$\frac{5.9}{15}$	$\frac{12.4}{30}$	$\frac{13.8}{50}$
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5.6

$\frac{6.2}{50}$	$\frac{7.3}{29}$	$\frac{9.6}{27}$	$\frac{9.3}{22}$	$\frac{5.8}{15}$	$\frac{5.7}{10}$	$\frac{5.7}{5.61}$	$\frac{5.7}{10}$	$\frac{5.5}{15}$	$\frac{13.7}{31}$	$\frac{14.6}{50}$
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5.8

$\frac{5.3}{50}$	$\frac{6.1}{35}$	$\frac{7.0}{28}$	$\frac{9.9}{24}$	$\frac{FL.24}{(10.47)} \frac{9.8}{22}$	$\frac{5.9}{15}$	$\frac{5.72}{10}$	$\frac{5.9}{5.75}$	$\frac{5.9}{10}$	$\frac{6.1}{15}$	$\frac{FL.24}{13.7(13.41)} \frac{14.8}{29(29)}$	$\frac{14.8}{50}$
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5.6

$\frac{4.6}{50}$	$\frac{6.3}{29}$	$\frac{9.0}{26-22}$	$\frac{5.7}{15}$	$\frac{5.6}{10}$	$\frac{5.6}{5.63}$	$\frac{5.8}{10}$	$\frac{5.7}{15}$	$\frac{13.5}{30}$	$\frac{14.6}{50}$
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5.6

$\frac{1.4}{75}$	$\frac{1.7}{50}$	$\frac{2.3}{34}$	$\frac{8.1}{27}$	$\frac{8.0}{20}$	$\frac{5.5}{15}$	$\frac{5.4}{10}$	$\frac{5.8}{5.58}$	$\frac{5.7}{10}$	$\frac{7.9}{15}$	$\frac{7.6}{21-23}$	$\frac{9.6}{24}$	$\frac{11.1}{35}$	$\frac{50}{50}$
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5.6

$\frac{1.5}{75}$	$\frac{1.6}{50}$	$\frac{1.6}{34}$	$\frac{8.2}{26}$	$\frac{7.9}{21}$	$\frac{5.3}{15}$	$\frac{5.4}{10}$	$\frac{5.8}{5.59}$	$\frac{5.9}{10}$	$\frac{7.9}{15}$	$\frac{6.6}{20-23}$	$\frac{6.6}{24}$	$\frac{50}{50}$
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5.7

$\frac{1.3}{75}$	$\frac{1.8}{50}$	$\frac{1.4}{34}$	$\frac{7.7}{27}$	$\frac{7.6}{20}$	$\frac{5.3}{15}$	$\frac{5.3}{10}$	$\frac{6.0}{5.68}$	$\frac{6.0}{10}$	$\frac{7.8}{15}$	$\frac{5.8}{19-23}$	$\frac{5.4}{25}$	$\frac{50}{50}$
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5.7

$\frac{3.1}{75}$	$\frac{2.7}{50}$	$\frac{3.1}{28}$	$\frac{7.0}{23}$	$\frac{7.7}{19}$	$\frac{5.0}{15}$	$\frac{6.19}{10}$	$\frac{5.19}{5.67}$	$\frac{6.1}{10}$	$\frac{7.4}{15}$	$\frac{5.6}{20-23}$	$\frac{4.5}{26}$	$\frac{50}{50}$
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Sta.		π	—	Elev.
		951.76		
63 +50			5.72	46.04
64			5.78	45.98
T.P.	7.78	954.94	4.60	947.16
+50			9.02	45.92
65			9.06	45.90
+50			9.16	45.78
66			9.36	45.58
+50			9.75	45.19
67			10.52	44.42
T.P.	0.78	944.68	11.04	943.90
+50			1.22	43.46
68			2.44	42.24
+50			3.58	41.10
69			4.62	40.06

5.7

$\frac{1.7}{75}$	$\frac{2.0}{50}$	$\frac{2.3}{28}$	$\frac{7.0}{21-18}$	$\frac{5.3}{15}$	$\frac{5.29}{10}$	$\frac{6.28-5.88}{10}$	$\frac{5.5}{15}$	$\frac{7.3}{19-23}$	$\frac{6.1}{27}$	$\frac{5.0}{50}$
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5.8

$\frac{0.2}{75}$	$\frac{0.4}{50}$	$\frac{1.1}{28}$	$\frac{6.4}{22}$	$\frac{5.7}{15}$	$\frac{5.38}{10}$	$\frac{6.30-5.90}{10}$	$\frac{5.6}{15}$	$\frac{6.3}{17}$	$\frac{6.0}{23}$	$\frac{4.5}{31}$	$\frac{3.7}{50}$
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G.P.L. 6420

9.0

$\frac{1.7}{75}$	$\frac{2.3}{50}$	$\frac{2.9}{31}$	$\frac{7.0}{24}$	$\frac{9.4}{19}$	$\frac{8.2}{15}$	$\frac{8.54}{10}$	$\frac{9.56-9.18}{10}$	$\frac{9.2}{14}$	$\frac{9.8}{16}$	$\frac{9.5}{22}$	$\frac{7.7}{32}$	$\frac{7.4}{50}$
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9.0

$\frac{3.7}{75}$	$\frac{4.1}{50}$	$\frac{4.4}{35}$	$\frac{7.1}{34}$	$\frac{7.2}{27}$	$\frac{7.0}{20}$	$\frac{8.5}{15}$	$\frac{8.62}{10}$	$\frac{9.61-9.20}{10}$	$\frac{7.2}{15}$	$\frac{10.1}{18}$	$\frac{9.9}{24}$	$\frac{8.4}{39}$	$\frac{8.0}{50}$
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9.2

$\frac{4.2}{75}$	$\frac{4.5}{50}$	$\frac{4.0}{30}$	$\frac{10.1}{23-20}$	$\frac{8.6}{15}$	$\frac{8.70}{10}$	$\frac{9.69-9.34}{10}$	$\frac{9.4}{15}$	$\frac{11.3}{20}$	$\frac{11.6}{32}$	$\frac{7.4}{38}$	$\frac{8.0}{50}$
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9.4

$\frac{5.6}{75}$	$\frac{6.0}{50}$	$\frac{5.7}{31}$	$\frac{10.6}{23-20}$	$\frac{8.8}{15}$	$\frac{8.89}{10}$	$\frac{9.91-9.51}{10}$	$\frac{9.6}{15}$	$\frac{11.9}{20}$	$\frac{12.4}{31}$	$\frac{8.1}{37}$	$\frac{7.9}{50}$
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9.8

$\frac{7.0}{50}$	$\frac{6.9}{29}$	$\frac{11.4}{24}$	$\frac{11.0}{18}$	$\frac{9.4}{15}$	$\frac{9.32}{10}$	$\frac{10.31-9.91}{10}$	$\frac{10.0}{15}$	$\frac{12.5}{21}$	$\frac{13.0}{29}$	$\frac{8.6}{36}$	$\frac{7.5}{40}$	$\frac{7.6}{50}$
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10.5

$\frac{10.0}{50}$	$\frac{10.4}{40}$	$\frac{10.1}{27}$	$\frac{12.6}{24-22}$	$\frac{10.4}{15}$	$\frac{10.12}{10}$	$\frac{11.09-10.67}{10}$	$\frac{10.7}{15}$	$\frac{12.7}{20}$	$\frac{13.0}{26}$	$\frac{11.0}{31}$	$\frac{11.7}{42}$	$\frac{12.7}{50}$
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11.2

$\frac{2.3}{50}$	$\frac{2.5}{32}$	$\frac{3.0}{25}$	$\frac{3.9}{23}$	$\frac{3.6}{19}$	$\frac{0.8}{15}$	$\frac{0.78}{10}$	$\frac{1.85-1.46}{10}$	$\frac{1.5}{15}$	$\frac{10.8}{27}$	$\frac{11.1}{37}$	$\frac{13.9}{50}$	$\frac{14.3}{75}$
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2.4

$\frac{5.2}{50}$	$\frac{5.7}{35}$	$\frac{5.7}{22}$	$\frac{2.0}{15}$	$\frac{2.00}{10}$	$\frac{2.44}{10}$	$\frac{2.99-2.63}{10}$	$\frac{2.5}{15}$	$\frac{16.8}{37}$	$\frac{18.3}{50}$	$\frac{19.2}{75}$
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3.6

$\frac{7.1}{50}$	$\frac{7.0}{42}$	$\frac{7.9}{27}$	$\frac{6.9}{20}$	$\frac{3.2}{14}$	$\frac{3.32}{10}$	$\frac{3.94-3.55}{10}$	$\frac{3.4}{15}$	$\frac{15.2}{34}$	$\frac{17.5}{50}$	$\frac{18.8}{75}$
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4.6

$\frac{8.0}{50}$	$\frac{8.1}{37}$	$\frac{8.0}{20}$	$\frac{4.6}{15}$	$\frac{4.54}{10}$	$\frac{4.62}{10}$	$\frac{4.80-4.42}{10}$	$\frac{4.3}{15}$	$\frac{14.2}{32}$	$\frac{16.2}{50}$	$\frac{17.9}{75}$
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Sto.	+	π	-	Elev
		944.68		
69+50			5.63	39.05
70			6.64	38.04
B.M.	2.90	941.31	6.29	938.39
+134			3.78	37.53
+63			4.25	37.06
71			4.68	36.63
+32			4.96	36.35
150			5.08	36.23
182			5.31	36.00
72			5.37	35.94
+25	24" x 50' Conc.		5.45	35.86
+50			5.35	35.96
73			5.18	36.13

938.41

5.6

$\frac{7.3}{50} \frac{7.1}{27} \frac{8.0}{26} \frac{8.0}{21} \frac{5.8}{15} \frac{5.6}{10} \frac{5.76}{10} \frac{5.7}{15} \frac{9.5}{21} \frac{8.4}{24} \frac{11.6}{26} \frac{50}{50}$

6.6

$\frac{5.1}{50} \frac{4.6}{30} \frac{7.9}{25} \frac{7.9}{19} \frac{6.6}{15} \frac{6.66}{10} \frac{6.75}{10} \frac{6.7}{15} \frac{9.2}{21} \frac{9.7}{25} \frac{8.4}{28} \frac{8.8}{44} \frac{9.5}{50}$

spike in Oak 51 Rt Sta 70+39

$\frac{0.8}{75} \frac{0.7}{30} \frac{0.0}{31} \frac{5.4}{24} \frac{5.4}{19} \frac{3.6}{15} \frac{3.82}{10} \frac{3.8}{3.78} \frac{3.85}{10} \frac{3.8}{15} \frac{6.7}{22} \frac{7.1}{24} \frac{7.1}{26} \frac{5.1}{30} \frac{6.8}{50}$

4.3

$\frac{1.7}{75} \frac{1.3}{50} \frac{1.1}{31} \frac{6.1}{24} \frac{6.0}{20} \frac{4.1}{15} \frac{4.29}{10} \frac{4.32}{10} \frac{4.4}{14} \frac{7.2}{19} \frac{7.6}{25} \frac{5.5}{30} \frac{5.2}{40} \frac{2.8}{50}$

4.7

$\frac{4.3}{50} \frac{3.9}{31} \frac{6.9}{26} \frac{6.7}{20} \frac{4.6}{15} \frac{4.74}{10} \frac{4.76}{10} \frac{4.7}{14} \frac{7.6}{21} \frac{8.0}{77} \frac{6.5}{29} \frac{6.4}{40} \frac{4.3}{50}$

5.0

$\frac{7.3}{50} \frac{6.7}{27} \frac{7.3}{25} \frac{7.0}{20} \frac{4.8}{15} \frac{5.01}{10} \frac{5.02}{10} \frac{4.8}{14} \frac{8.6}{24} \frac{8.5}{27} \frac{7.4}{29} \frac{8.4}{42} \frac{10.2}{50}$

5.1

$\frac{8.3}{50} \frac{8.1}{26} \frac{8.3}{25} \frac{8.2}{23} \frac{5.0}{15} \frac{5.17}{10} \frac{5.15}{10} \frac{5.0}{15} \frac{8.8}{24} \frac{8.9}{27} \frac{8.0}{29} \frac{9.2}{36} \frac{10.7}{39}$

5.3

$\frac{9.9}{50} \frac{9.3}{23} \frac{5.5}{15} \frac{5.40}{10} \frac{5.34}{10} \frac{5.2}{15} \frac{7.6}{22} \frac{13.7}{33} \frac{15.4}{43} \frac{16.1}{50}$

5.4

$\frac{10.1}{50} \frac{10.0}{24} \frac{5.6}{15} \frac{5.48}{10} \frac{5.44}{10} \frac{5.3}{15} \frac{12.7}{28} \frac{15.4}{40} \frac{16.4}{50}$

5.5

$\frac{10.5}{50} \frac{11.0}{33} \frac{12.4}{30} \frac{12.04}{24} \frac{12.0}{23} \frac{5.8}{15} \frac{5.59}{10} \frac{5.56}{10} \frac{5.5}{15} \frac{15.1}{28} \frac{13.07}{26} \frac{14.8}{40} \frac{15.6}{50}$

5.4

$\frac{10.2}{50} \frac{10.3}{25} \frac{5.5}{15} \frac{5.49}{10} \frac{5.42}{10} \frac{5.2}{15} \frac{14.7}{31} \frac{15.6}{36} \frac{16.8}{50}$

5.2

$\frac{8.9}{50} \frac{8.3}{32} \frac{8.7}{29} \frac{8.7}{25} \frac{5.1}{15} \frac{5.28}{10} \frac{5.13}{10} \frac{5.3}{15} \frac{14.4}{32} \frac{15.1}{38} \frac{17.0}{50}$

Sta	r	π	-	Elev.
		941.31		
73+50			4.82	36.49
74			4.40	36.91
+50			3.97	37.34
T.P.	7.45	945.04	3.72	937.59
75			7.20	37.84
+50			6.71	38.33
+66			6.59	38.45
76			6.25	38.79
+22			6.09	38.95
+50			5.82	39.22
+83			5.54	39.50
77			5.40	39.64
+33			5.13	39.91

$$\begin{array}{r} 51.0 \quad 3.6 \quad 7.7 \quad 7.7 \quad 4.7 \\ 50 \quad 33 \quad 24 \quad 21 \quad 15 \end{array} \quad \begin{array}{r} 475 \quad 505 \\ 10 \quad 482 \end{array} \quad \begin{array}{r} 465 \quad 4.6 \quad 14.8 \quad 15.5 \quad 16.5 \\ 10 \quad 15 \quad 34 \quad 41 \quad 50 \end{array}$$

$$\begin{array}{r} 0.4 \quad 2.3 \quad 2.9 \quad 2.9 \quad 7.9 \quad 4.5 \\ 75 \quad 50 \quad 36 \quad 27 \quad 22 \quad 15 \end{array} \quad \begin{array}{r} 438 \quad 4.71 \\ 10 \quad 440 \end{array} \quad \begin{array}{r} 4.09 \quad 4.1 \quad 15.8 \quad 16.7 \\ 10 \quad 15 \quad 38 \quad 50 \end{array}$$

$$\begin{array}{r} 0.0 \quad 2.2 \quad 3.7 \quad 7.0 \quad 7.1 \quad 4.0 \\ 75 \quad 50 \quad 34 \quad 27 \quad 22 \quad 15 \end{array} \quad \begin{array}{r} 4.08 \quad 4.34 \\ 10 \quad 3.97 \end{array} \quad \begin{array}{r} 3.62 \quad 3.4 \quad 13.4 \quad 14.9 \\ 10 \quad 15 \quad 33 \quad 50 \end{array}$$

$$\begin{array}{r} 2.5 \quad 5.2 \quad 6.7 \quad 9.5 \quad 10.0 \quad 7.3 \\ 75 \quad 50 \quad 33 \quad 26 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 7.23 \quad 7.54 \quad 7.4 \\ 10 \quad 7.20 \end{array} \quad \begin{array}{r} 6.78 \quad 6.8 \quad 7.6 \quad 13.2 \\ 10 \quad 15 \quad 29 \quad 50 \end{array}$$

$$\begin{array}{r} 3.1 \quad 4.5 \quad 5.5 \quad 9.2 \quad 9.3 \quad 6.6 \\ 75 \quad 50 \quad 33 \quad 26 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 6.72 \quad 7.03 \\ 10 \quad 6.71 \end{array} \quad \begin{array}{r} 6.38 \quad 6.3 \quad 9.5 \quad 9.5 \quad 9.3 \quad 10.4 \\ 10 \quad 15 \quad 23 \quad 31 \quad 42 \quad 50 \end{array}$$

$$\begin{array}{r} 3.6 \quad 4.5 \quad 5.4 \quad 9.2 \quad 9.3 \quad 6.7 \\ 75 \quad 50 \quad 32 \quad 26 \quad 21 \quad 15 \end{array} \quad \begin{array}{r} 6.59 \quad 6.72 \\ 10 \quad 6.59 \end{array} \quad \begin{array}{r} 6.22 \quad 6.2 \quad 9.4 \quad 9.4 \quad 8.4 \quad 8.2 \quad 5.3 \\ 10 \quad 15 \quad 22 \quad 25 \quad 28 \quad 35 \quad 42 \end{array}$$

$$\begin{array}{r} 5.1 \quad 5.6 \quad 8.7 \quad 8.4 \quad 6.2 \\ 30 \quad 30 \quad 25 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 6.28 \quad 6.62 \\ 10 \quad 6.25 \end{array} \quad \begin{array}{r} 5.92 \quad 5.9 \quad 8.5 \quad 8.5 \quad 3.4 \quad 4.5 \quad 8.4 \\ 10 \quad 15 \quad 21 \quad 33 \quad 43 \quad 50 \quad 60 \end{array}$$

$$\begin{array}{r} 5.3 \quad 5.6 \quad 8.6 \quad 8.5 \quad 6.1 \\ 50 \quad 28 \quad 24 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 6.09 \quad 6.43 \\ 10 \quad 6.09 \end{array} \quad \begin{array}{r} 5.74 \quad 5.7 \quad 8.4 \quad 9.0 \quad 1.8 \quad 1.8 \quad 7.0 \\ 10 \quad 15 \quad 21 \quad 33 \quad 46 \quad 48 \quad 60 \end{array}$$

$$\begin{array}{r} 5.5 \quad 5.8 \quad 8.5 \quad 8.4 \quad 5.9 \\ 50 \quad 28 \quad 24 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 5.82 \quad 6.15 \\ 10 \quad 5.82 \end{array} \quad \begin{array}{r} 5.48 \quad 5.3 \quad 7.6 \quad 7.6 \quad 5.5 \quad 4.9 \quad 3.1 \\ 10 \quad 15 \quad 19 \quad 24 \quad 27 \quad 32 \quad 43 \end{array}$$

$$\begin{array}{r} 6.2 \quad 6.3 \quad 8.7 \quad 8.7 \quad 5.6 \\ 50 \quad 27 \quad 25 \quad 22 \quad 15 \end{array} \quad \begin{array}{r} 5.57 \quad 5.91 \\ 10 \quad 5.54 \end{array} \quad \begin{array}{r} 5.18 \quad 5.0 \quad 7.1 \quad 7.1 \quad 5.5 \quad 4.8 \quad 4.8 \\ 10 \quad 15 \quad 19 \quad 22 \quad 25 \quad 36 \quad 50 \end{array}$$

$$\begin{array}{r} 7.0 \quad 8.1 \quad 7.1 \quad 9.0 \quad 8.3 \quad 5.5 \\ 50 \quad 32 \quad 27 \quad 25 \quad 20 \quad 15 \end{array} \quad \begin{array}{r} 5.48 \quad 5.82 \\ 10 \quad 5.40 \end{array} \quad \begin{array}{r} 5.02 \quad 4.9 \quad 6.8 \quad 6.8 \quad 4.2 \quad 4.5 \quad 3.6 \\ 10 \quad 15 \quad 19 \quad 21 \quad 24 \quad 37 \quad 50 \end{array}$$

$$\begin{array}{r} 8.0 \quad 8.6 \quad 8.5 \quad 8.8 \quad 8.7 \quad 5.1 \\ 50 \quad 38 \quad 27 \quad 26 \quad 21 \quad 15 \end{array} \quad \begin{array}{r} 5.25 \quad 5.58 \\ 10 \quad 5.13 \end{array} \quad \begin{array}{r} 4.76 \quad 4.6 \quad 6.5 \quad 6.5 \quad 3.6 \quad 2.4 \quad 3.3 \\ 10 \quad 15 \quad 18 \quad 20 \quad 26 \quad 52 \quad 50 \end{array}$$

Sta	L	π	-	Elev
		945.04.		
77+66			4.81	40.23.
78			4.48	40.56
T.P.	8.08	948.53	4.59	940.45.
+24			7.78	40.75
+73			7.50	41.03
+85			7.40	41.13
79			7.22	41.31
+50			6.84	41.69
80			6.38	42.15
+15			6.23	42.30
+50			5.92	42.61
81			5.48	43.05
+50			4.98	43.55

$$\frac{8.9}{50} \frac{8.7}{38} \frac{8.5}{26} \frac{8.3}{21} \frac{4.8}{15} \frac{4.90-5.25}{10} 4.81 \frac{4.42}{10} \frac{4.3}{15} \frac{6.5}{19-22} \frac{3.8}{25} \frac{2.6}{30} \frac{3.5}{50}$$

$$\frac{8.8}{50} \frac{8.5}{31} \frac{7.6}{27} \frac{8.7}{24} \frac{8.1}{21} \frac{4.7}{15} \frac{4.60-4.92}{10} 4.48 \frac{4.12}{10} \frac{3.9}{15} \frac{5.7}{19-21} \frac{2.1}{26} \frac{3.0}{50}$$

$$\frac{12.3}{50} \frac{10.5}{28} \frac{11.6}{24} \frac{11.2}{20} \frac{8.0}{15} \frac{7.93-8.25}{10} 7.78 \frac{7.48}{10} \frac{7.3}{15} \frac{9.2}{18-22} \frac{5.2}{27} \frac{6.3}{50}$$

$$\frac{11.0}{50} \frac{10.0}{32} \frac{8.9}{29} \frac{10.7}{25} \frac{10.2}{20} \frac{7.5}{15} \frac{7.58-7.91}{10} 7.50 \frac{7.12}{12} \frac{7.0}{15} \frac{9.4}{20-23} \frac{6.6}{29} \frac{8.2}{50}$$

7.4

$$\frac{11.3}{50} \frac{9.2}{28} \frac{10.7}{26} \frac{10.2}{20} \frac{7.5}{15} \frac{7.50-7.80}{10} 7.40 \frac{7.01}{10} \frac{6.9}{15} \frac{9.0}{19-21} \frac{4.6}{30} \frac{4.6}{35} \frac{6.779}{40} \frac{7.79}{50}$$

7.2

$$\frac{11.6}{50} \frac{9.4}{28} \frac{11.0}{25} \frac{10.6}{21} \frac{7.4}{15} \frac{7.30-7.65}{10} 7.22 \frac{6.86}{10} \frac{6.7}{15} \frac{8.4}{18-20} \frac{3.2}{30} \frac{5.1}{36} \frac{7.2}{50}$$

6.8

$$\frac{12.0}{50} \frac{9.9}{28} \frac{11.1}{25} \frac{10.5}{21} \frac{7.1}{15} \frac{6.95-7.26}{10} 6.84 \frac{6.43}{10} \frac{6.3}{15} \frac{8.2}{18-22} \frac{2.8}{31} \frac{3.5}{34} \frac{6.3}{50}$$

6.4

$$\frac{11.4}{50} \frac{9.5}{27} \frac{10.2}{25} \frac{9.8}{21} \frac{6.5}{15} \frac{6.42-6.77}{10} 6.38 \frac{5.95}{10} \frac{5.8}{15} \frac{8.2}{20-23} \frac{4.2}{33} \frac{3.9}{41} \frac{5.4}{50}$$

6.2

$$\frac{11.0}{56} \frac{8.9}{27} \frac{10.0}{25} \frac{9.7}{21} \frac{6.5}{15} \frac{6.31-6.64}{10} 6.23 \frac{5.81}{10} \frac{5.8}{15} \frac{8.0}{19-23} \frac{2.6}{33} \frac{4.5}{50}$$

5.9

$$\frac{10.0}{50} \frac{8.5}{27} \frac{9.5}{25} \frac{8.8}{20} \frac{6.0}{15} \frac{5.92-6.22}{10} 5.92 \frac{5.62}{10} \frac{5.6}{15} \frac{8.6}{20-24} \frac{3.6}{32} \frac{3.5}{37} \frac{5.0}{50}$$

5.5

$$\frac{8.6}{50} \frac{7.8}{27} \frac{9.4}{25} \frac{9.0}{21} \frac{5.7}{15} \frac{5.66}{10} 5.48 \frac{5.37}{10} \frac{5.4}{15} \frac{8.1}{21} \frac{8.6}{25} \frac{6.7}{28} \frac{6.1}{33} \frac{6.1}{50}$$

5.0

$$\frac{7.3}{50} \frac{7.1}{29} \frac{8.9}{26} \frac{8.6}{21} \frac{5.2}{15} \frac{5.07}{10} 4.98 \frac{5.04}{10} \frac{5.0}{15} \frac{8.1}{21} \frac{8.8}{26} \frac{7.9}{27} \frac{7.5}{32}$$

$$\frac{7.5}{50}$$

Sta	+	π	-	Elev.
		948.53.		
82			4.54	43.99
+50			4.14	44.39
+61.25			4.08	44.45
B.M.			4.07	944.46. (944.47)

4.5

$\frac{5.1}{50}$ $\frac{5.5}{29}$ $\frac{7.7}{26}$ $\frac{7.4}{20}$ $\frac{4.8}{15}$ $\frac{4.62}{10}$ $\frac{4.54}{10}$ $\frac{4.65}{10}$ $\frac{4.7}{15}$ $\frac{7.6}{21}$ $\frac{7.9}{25}$ $\frac{7.6}{26}$ $\frac{7.2}{31}$ $\frac{7.6}{50}$

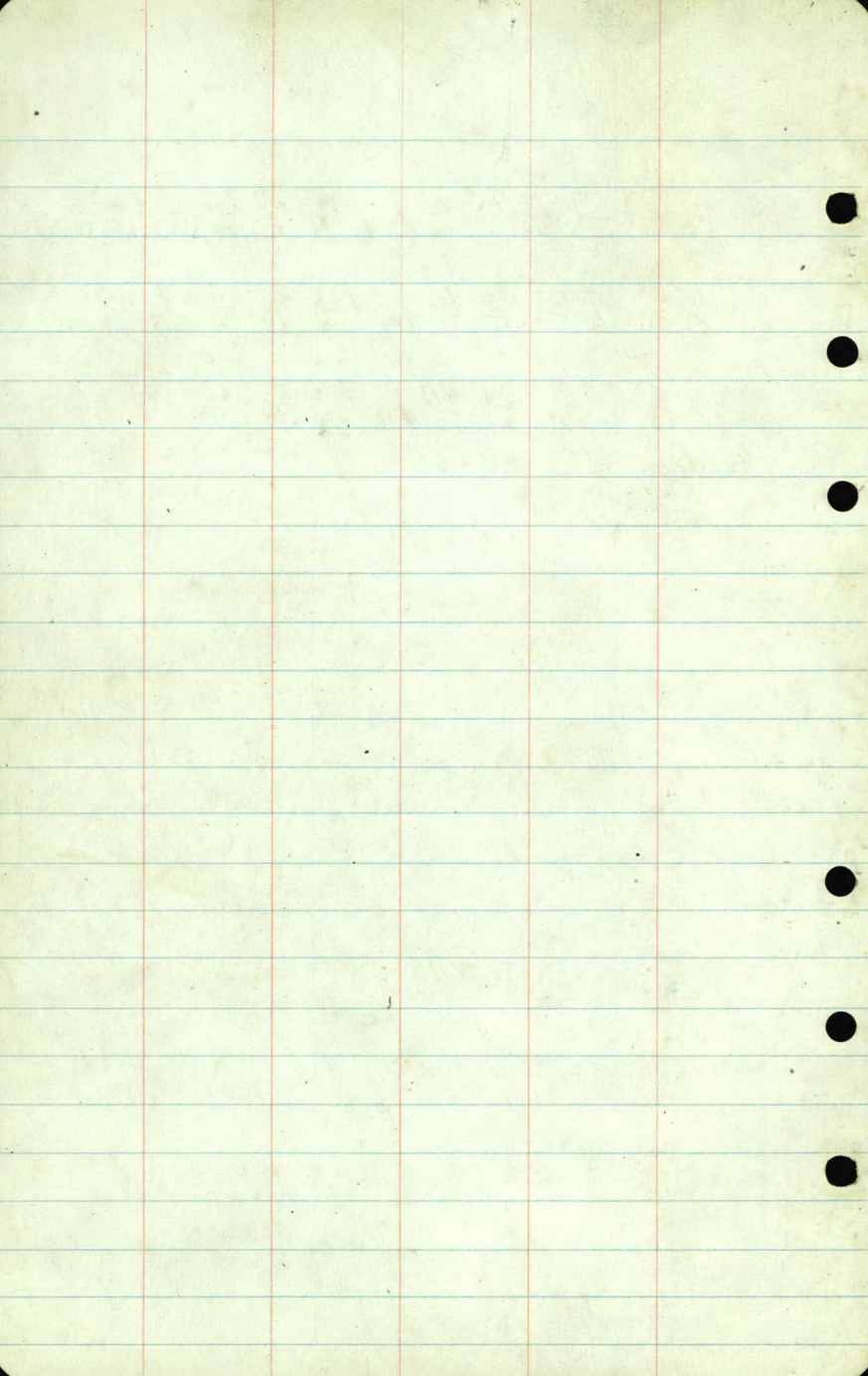
4.1

$\frac{4.6}{50}$ $\frac{5.2}{29}$ $\frac{6.9}{26}$ $\frac{6.5}{20}$ $\frac{4.2}{15}$ $\frac{4.22}{10}$ $\frac{4.14}{10}$ $\frac{4.22}{10}$ $\frac{4.2}{15}$ $\frac{6.6}{21}$ $\frac{6.7}{23}$ $\frac{5.5}{26}$ $\frac{5.7}{50}$

4.1

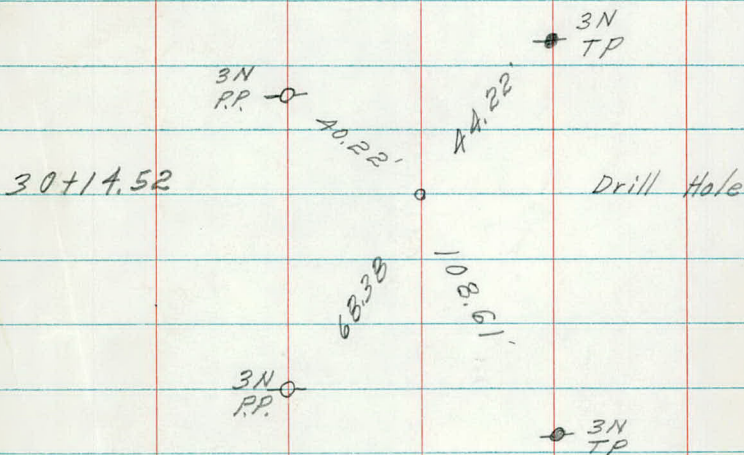
$\frac{3.5}{50}$ $\frac{5.0}{28}$ $\frac{5.9}{26-23}$ $\frac{5.0}{21}$ $\frac{4.13}{10}$ $\frac{4.08}{10}$ $\frac{4.15}{10}$ $\frac{5.0}{21}$ $\frac{6.0}{50}$

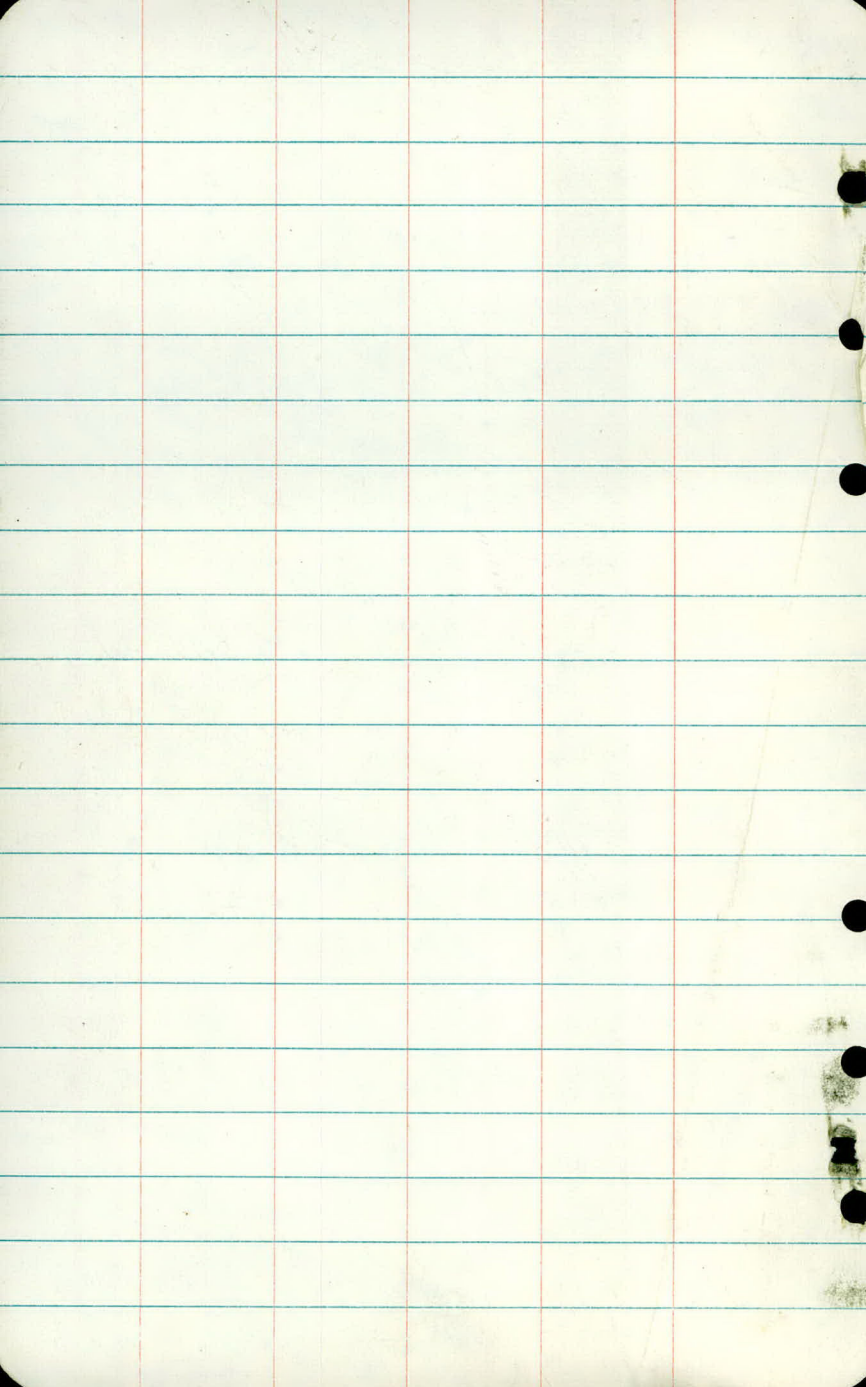
Top Iron Mon 82 + 61.25 £



FK
WM
DM
WF

July 8, 1968





49+50.5 Tower 67' Lt.

