

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Road Map Survey

FROST AVE

From N. City Limits To Whits. Bear Ave.

Road Acc't. No. 10D

Date Filed.....

File.....

Frost Ave.

From

Phalen Pkwy.

To

White Bear Ave.

Dec. 8 1939

H. Duff

J. Sommers

Wm. Roth.

Outcar

①



Sta

Pt

Lt

Rt

6+18.36

P.T.

N 59° 46' 42" E

L = 180.17

D = 10° Rt

5+29.14

P.I.

18° 01' 02" Δ = 18° 01' 02"

T = 90.95

4+87.34

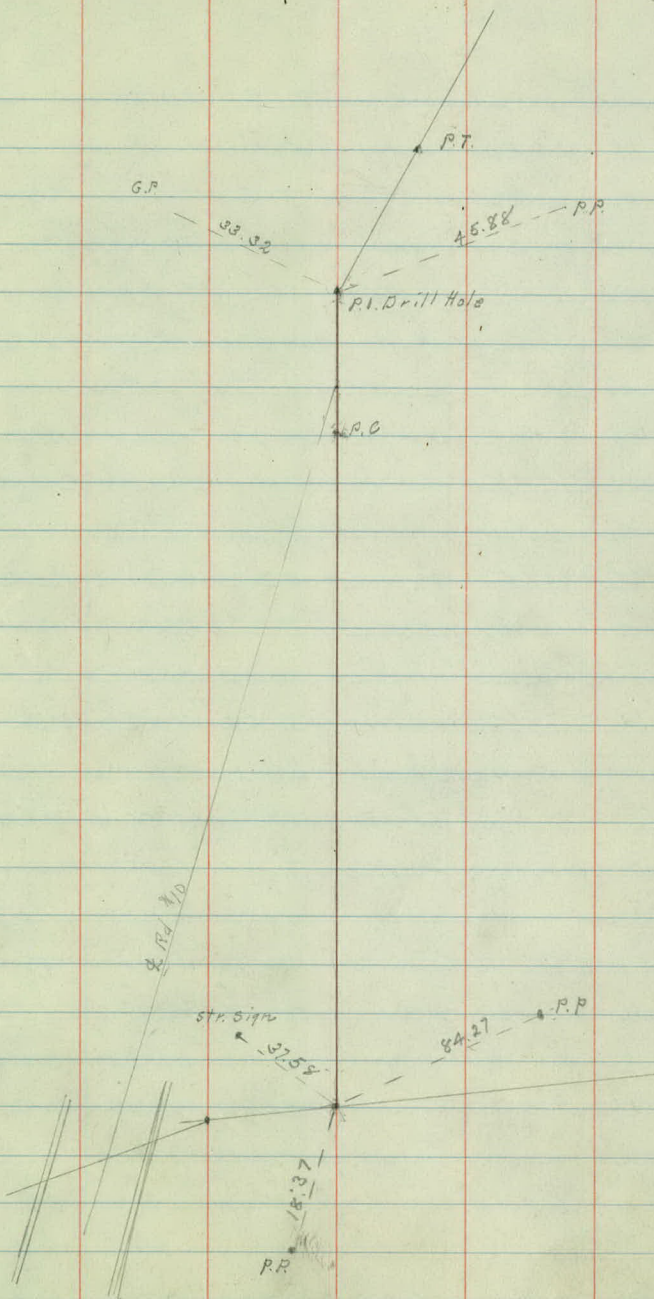
R = 573.69

4+38.19

P.C.

0+00

N 41° 45' 40" E



③



10+57.70

P.T

N. $66^{\circ} 31' 15''$ E

$L = 224.75$

$D = 3^{\circ}$ Rt.

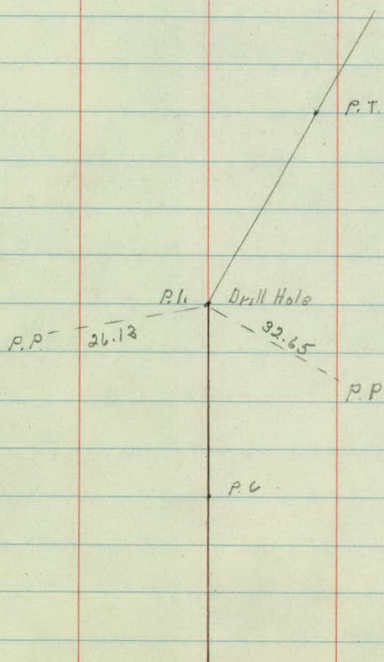
$\Delta = 6^{\circ} 44' 33''$

$T = 112.52$

$R = 1910.08$

9+45.47 P.I.

8+32.95 P.C



⑤



18+05.24 P.I

17+31.42 P.T

13+16.73 P.I

$L = 232.52$

$D = 10^\circ \text{ Rt.}$

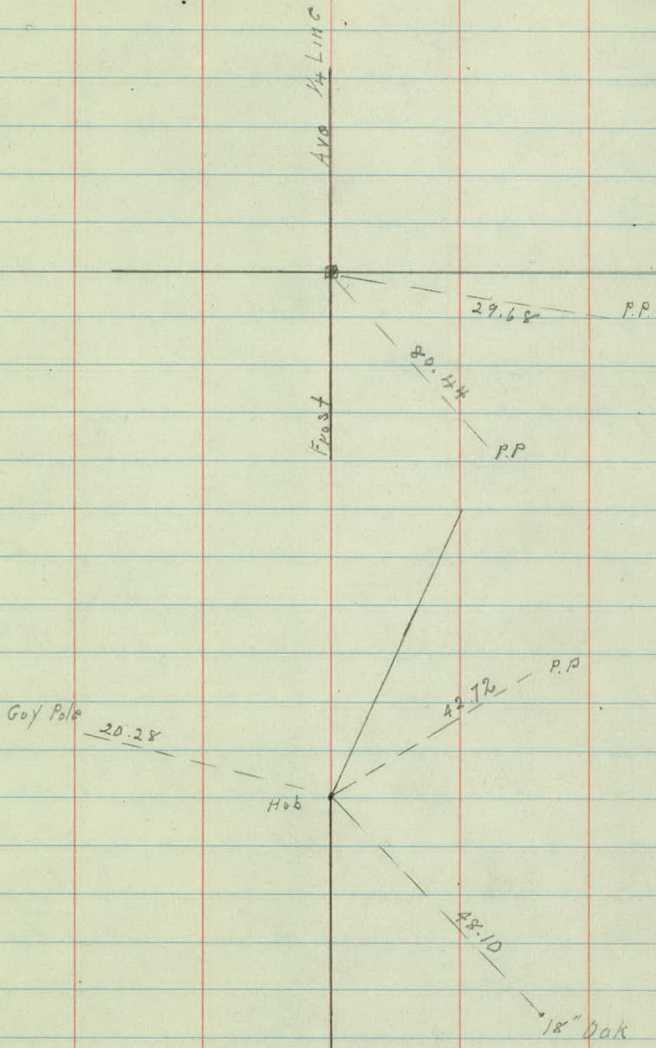
$\Delta = 23^\circ 15' 08''$

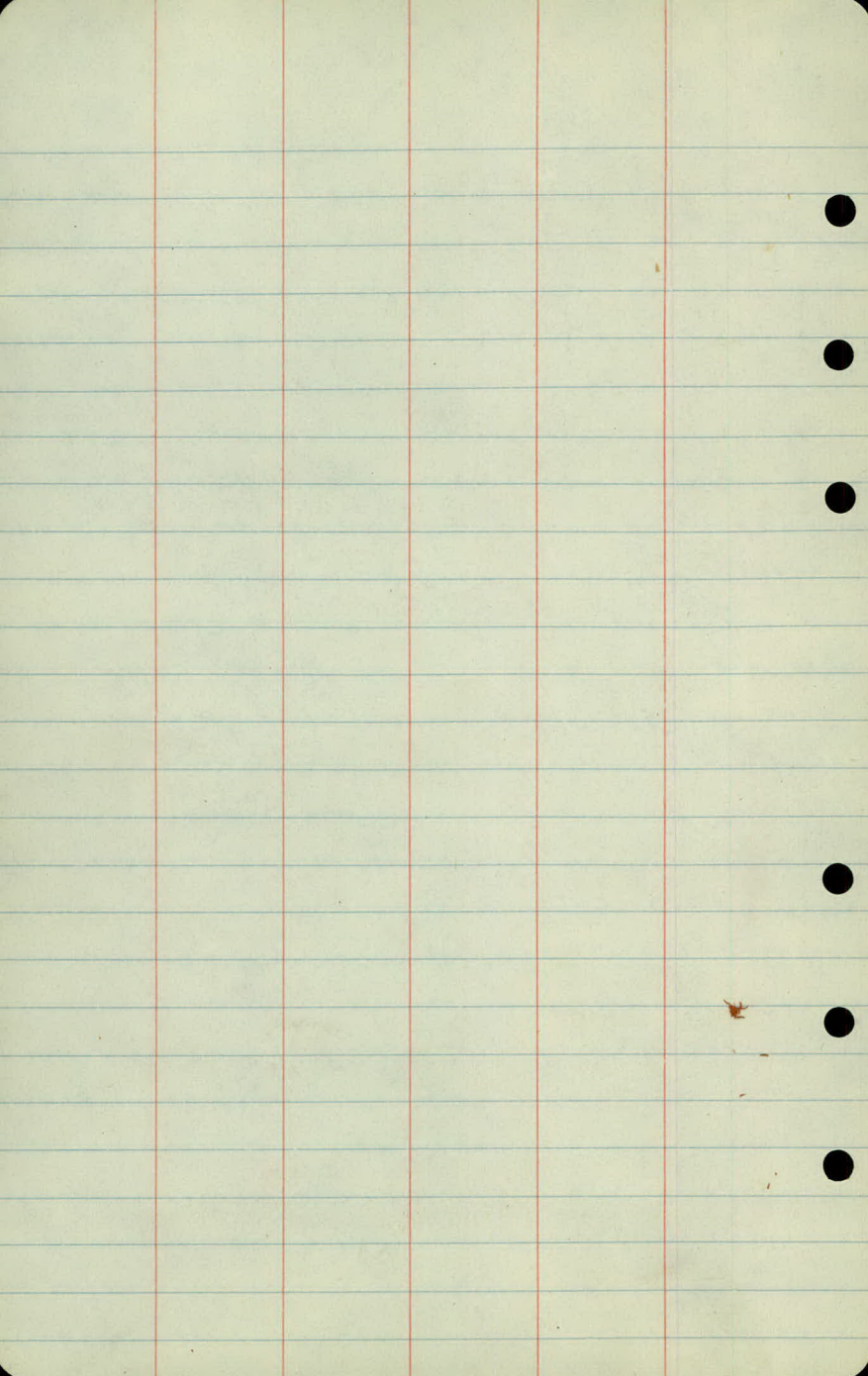
$T = 118.03$

$R = 573.69$

11+98.90 P.C

6





R.R. Crossing

$92^{\circ} 30'$

$00^{\circ} 38'$

First Ave.

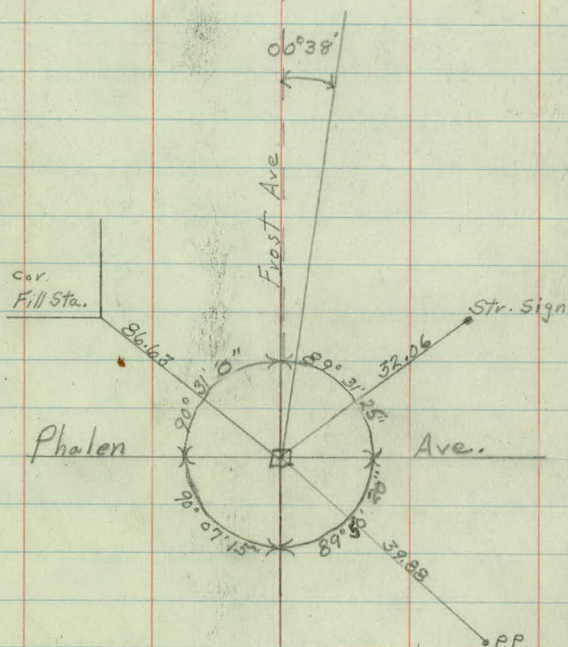
Car.
Fill Sta.

Str. Sign

Phalen

Ave.

P.P.

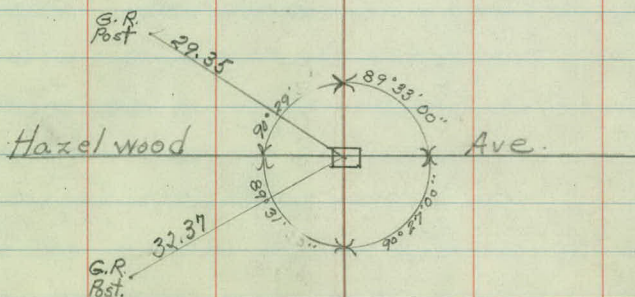
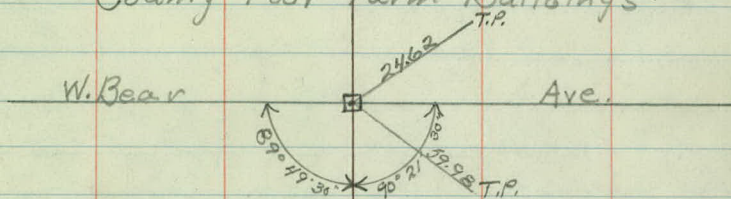


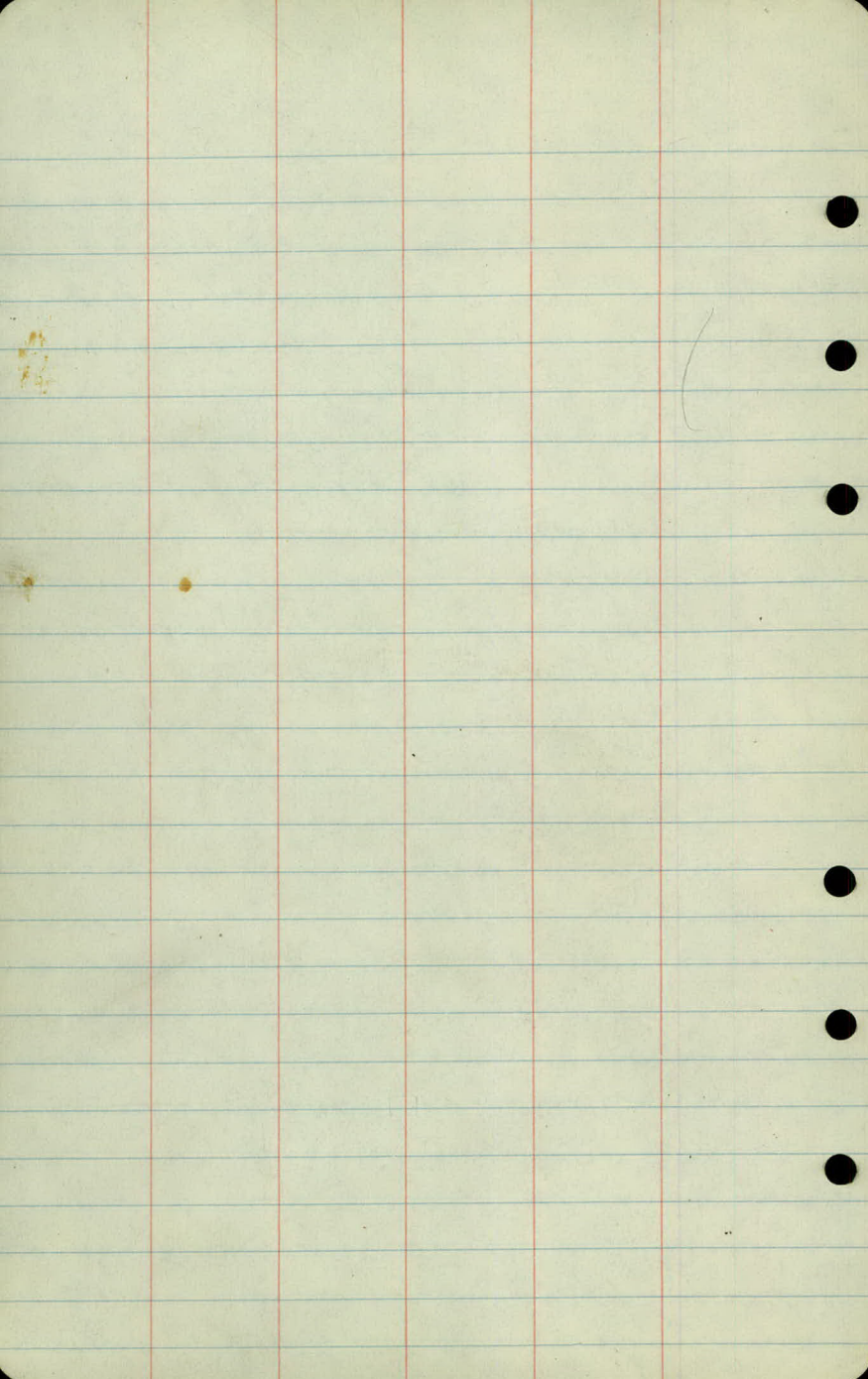
Sta	Pt	Lt.	Rt.
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977+53.45			
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70+99.43			
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County Poor Farm Buildings





Topography
on
Frost Ave (#10)
from
Phalen Pkwy
TO
White Bear Ave.

1

Dec. 8 1939

π - Duff

Red - Sommers

" - Roth

" - Dufour

Lr RT

4+38.28		16.9	stop sign
4+28		10	Sheet Metal gutter
4+00 edge conc.	10	10.2	
3+72 culvert xs road	72	43.6	
3+23	22		
3+26 $\frac{1}{2}$ spillway	17.2		
3+16 reflector sign	28		
3+00 edge conc	10	10	
2+00 edge conc	10	10	
1+45 $\frac{1}{2}$ wall	23.2	18.5	side road sign
1+20 edge conc	10.2	10.2	
1+00 " "	11.0	11.0	
0+80 " "	12.2	12.2	
0+60 edge conc	13.8	13.8	
0+39.5 $\frac{1}{2}$ wall	29.3		
0+39.5	end block	16.3	16.3 for begin conc.
0+34 wall	35		
0+23 street sign	29.2		
0+20	25.6	23.8	
0+00 $\frac{1}{2}$ phalen pkwy			- Keller pkwy

LT RT

on *10+18+18

45'

30" conc. cul

stone
spillway

black top rd 4' W

rip-rap wall about 2' high

Frost Ave conc. pipe

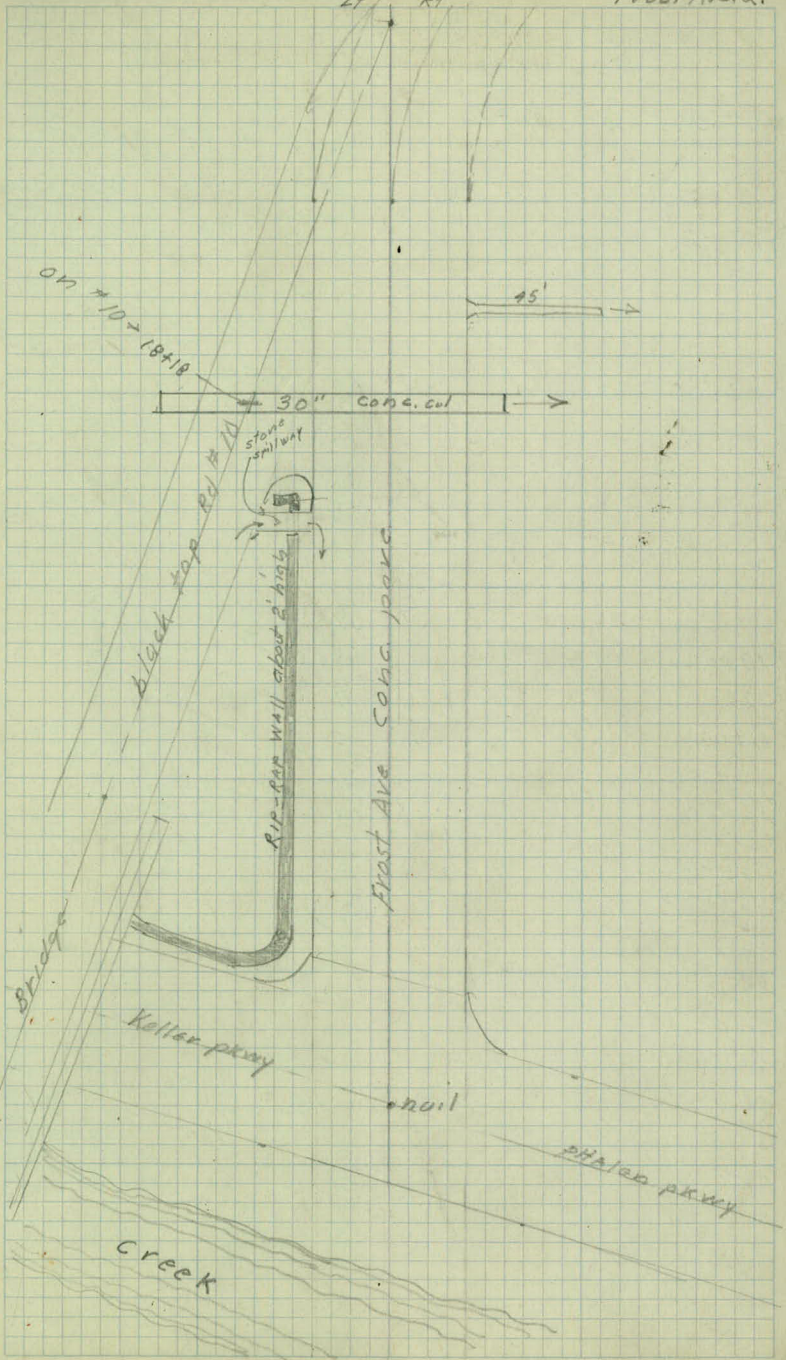
Bridge

Keller pkey

mail

PHALCO pkey

Creek



	LT	RT	
18+05.93 Steel Plate			12/20/59
			Continuation of Survey by Brettschneider Sommers Dufour
18+00	10.0	10.0	
17+22			Drive
17+00	10.0	10.0	
16+20			Drive
16+00	10.0	10.0	
15+00	10.0	10.0	
14+31.85 P.T.	10.0	10.0	
14+00	10.0	10.0	
13+50	10.0	10.0	
13+00	10.2	9.8	
12+00	10.3	9.7	
11+00	10.0	10.0	
10+53 Cul x road	35.8	33.8	30" Conc.
10+50	10	10	
10+00	10	10	
9+50	10	10	
9+00	10	10	
8+33.31	10	10	
8+00	10	10	
7+00	10	10	
6+50			
6+47 Speed 45 Zone sign	16	15.4	Speed 45 Zone sign
6+00 edge conc	10	12	
5+50 " "	10	12	
5+00 " "	10	12	
4+38.28 edge Conc.	10	12	

Lt. & Rt.

Frost Ave

3.

Concrete Pavement

27.5

26.0

16" Corg

16" Corg

36" Corg Culvert

80'

Lt & Rt

34+57 Prv. Drive

34+00 10.0 10.0

32+00 10.0 10.0

30+00 10.0 10.0

29+70 Conc. Spillway

29+50 Conc. Spillway

28+00 10.0 10.0

26+07 Prv. Drive

26+00 10.0 10.0

24+71 Prv. Drive

24+00 10.0 10.0

23+24 Prv. Drive

22+00 10.0 10.0

20+00 10.0 10.0

19+00 10.0 10.0

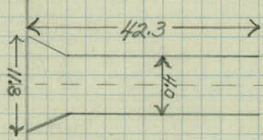
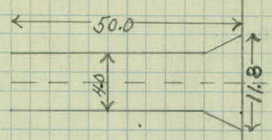
18+72 Prv. Drive

Lt. & Rt.

Frost Ave

4.

No Culvert



Concrete Pavement

28.0

27.5

26.6

2' 0" 16" Cong.

2' 0" 16" Cong.

2' 4" 16" Cong.

No Culvert.

	Lt. & Rt.	
47+51 R.R.X Signal	21.0	
47+40 Cross Rd. Sign	22.0	
46+04 Speed Signs	22.0	19.0
46+00	10.0	10.0
45+00 R.R.X Sign	19.0	
44+68 Str. Sign.	26.2	
44+48.45 Steel Plate in Pavement		
44+00	10.0	10.0
43+54 Blank Sign	16.6	
42+00	10.0	10.0
41+19 Prv. Drive		
40+68 Cross Rd Sign	14.2	
40+00	10.0	10.0
39+88 Conc. Spillway		Conc. Spillway
38+00	10.0	10.0
37+87 Prv. Drive		
36+00	10.0	10.0 Prv. Drive

Lt. & Rt.

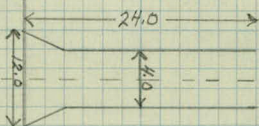
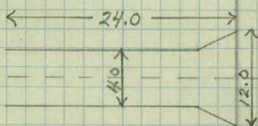
Frost Ave. S.

Phalen

Ave

Concrete Pavement

No Culvert



No Culvert

No Culvert

Lt. & Rt.

56+12 Driveways

56+00 10.0 10.0

55+03 Speed Signs 23.5 20.0

54+53 Intersection of

54+00 10.0 10.0

52+13 Speed Sign 26.0

52+00 10.0 10.0

51+35 Str. Sign 31.2

51+19 Intersection of Fisher Str

50+87 R.R.X. Sign 19.0

50+00 10.0 10.0

48+08 R.R.X. Signal 20.8

48+00 10.0 10.0

47+92.36 W. Rail of Main line No. Bound.

47+78.08 W. Rail of Main line So. Bound.

47+63.8 W. Rail of Spur track N.P. Ry.

Lt. & Rt.

Frost Ave.

6.

No Culvert

250

16" Gang.
4' 8"

Concrete Pavement
Ave.

Fisher

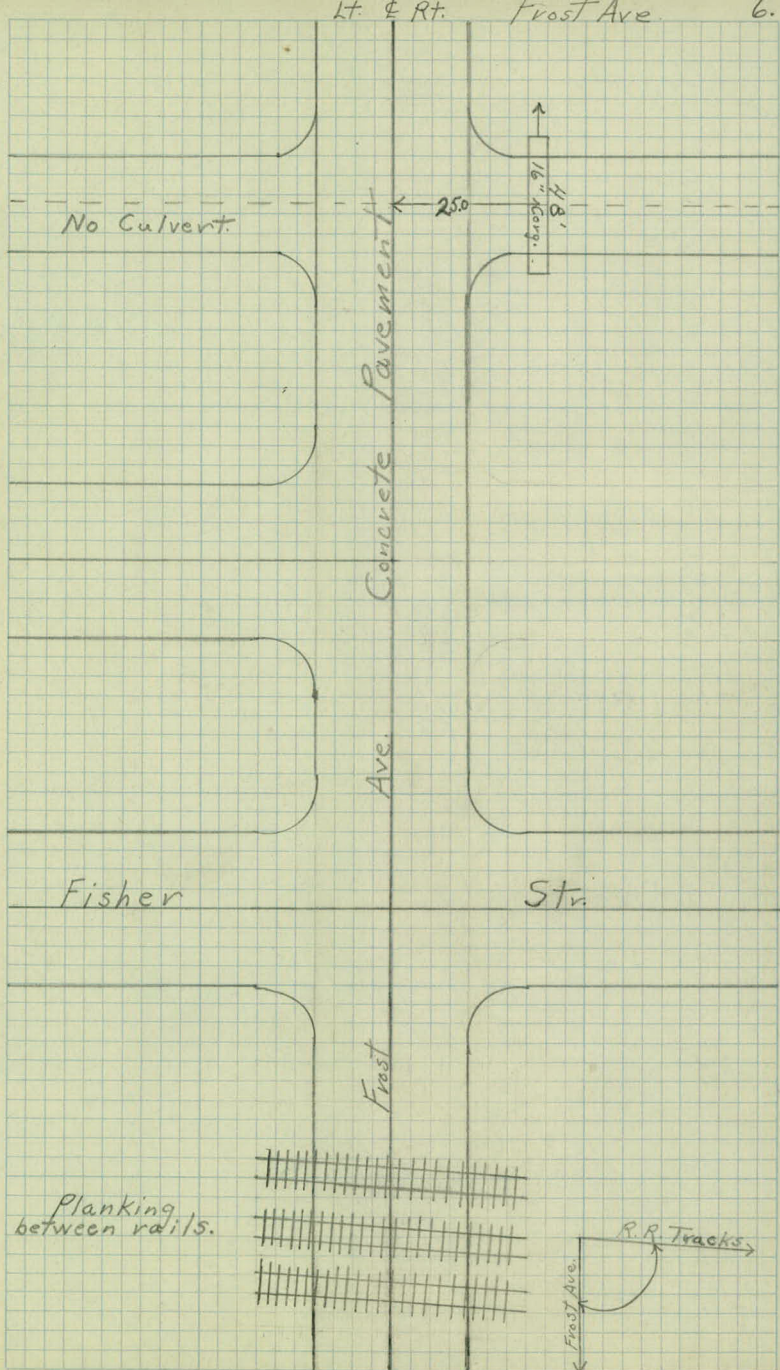
Str.

Frost

Planking
between rails.

R.R. Tracks

Frost Ave.



Lt. & Rt

62+73 Culvert

Driveway.

62+37 School Sign 21.0

62+00 10.0 10.0

61+09 Intersection of Manton Str.

60+83 Str Sign 30.0

60+00 10.0 10.0

59+21 Drive

58+68 Walk

58+00 10.0 10.0

57+76 Intersection of Hager Str.

20'
16" Cong

260

Manton

Str.

Frost Ave.

Concrete Pavement

8'
16" Cong

250

14'
16"

25.0

Hager

Str.

LT & RT

67+88 Walk+Culvert

67+62 Side Rd. Sign

14.7

67+33

67+02 Walk

66+00

10.0

10.0

65+91 Driveway + Culvert

64+33 Intersection of Duncan Str.

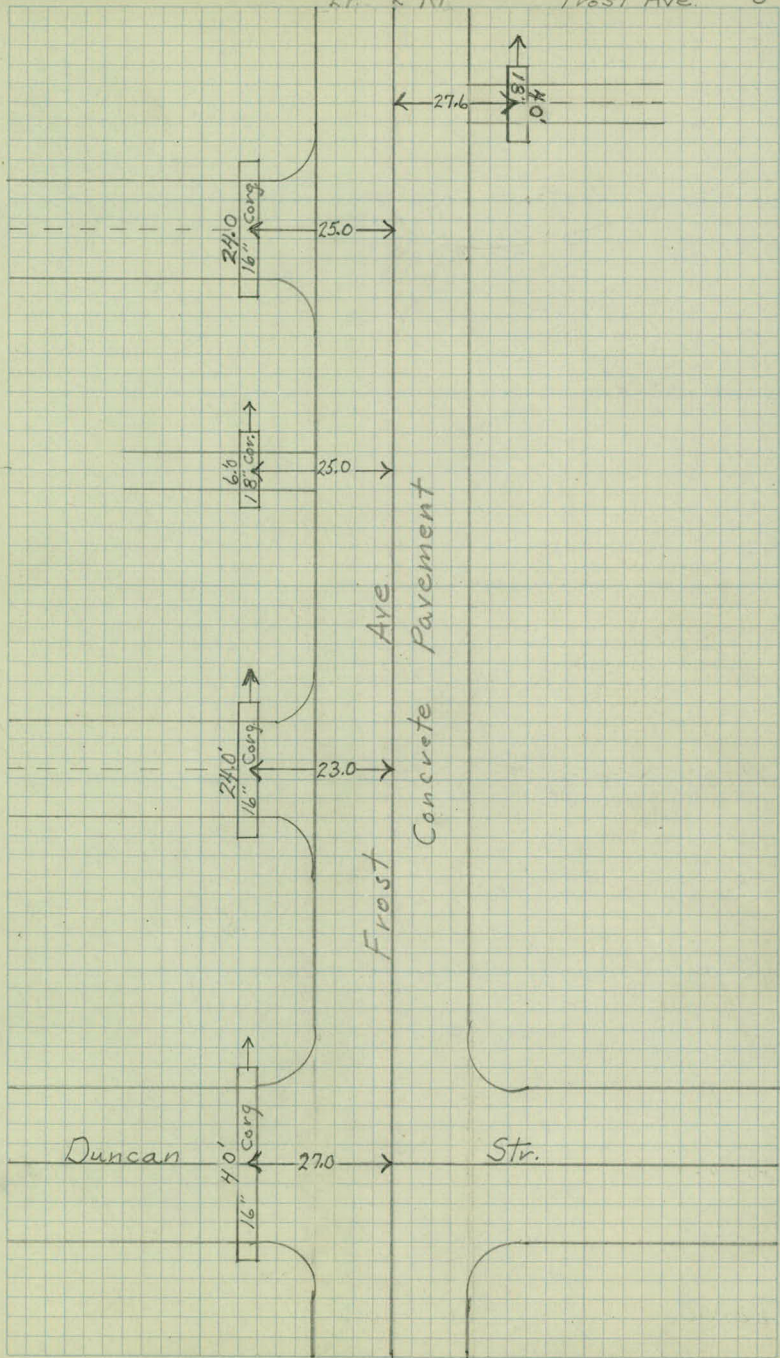
64+06 Str. Sign

25.0

64+00

10.0

10.0



	Lt.	Rt.
82+00	10.0	10.0
80+00	10.0	10.0
79+47 Cattle X Sign		20.0
79+08 X Rd. Sign	24.0	
78+00	10.0	10.0
77+30 Culvert		
76+84 Speed Sign		18.4
76+00	10.0	10.0
75+71 Str Sign	35.0	
75+35 Intersection of Prosperity Ave.		
74+00	10.0	10.0
73+68 Side Rd. Sign	21.0	
72+00	10.0	10.0
71+57 X Rd. Sign		19.7
71+26 G.R. Posts.		
70+99.43 Intersection of Hazelwood Ave.		
70+71 Street Sign +	29.5	End of G.R. Posts.
70+66 Beg. of G.R. Posts.		
70+64 Speed Sign	20.6	
70+00	10.0	10.0
68+42 Drive + Culvert		
68+00	10.0	10.0

Lt. & Rt.

Frost Ave.

7.

57'
30" Concrete. →

Ave.

Concrete Pavement

Prosperity Ave.

Frost

G.R. Posts

20.0

4.8'
18" Corg

26.6

Monument

23.6

Red reflector sign

4 G.R. Posts.
No Chain or Cable.

20.0

29.0

30'
18" Corg

97+53.45

97+23 Str Sign 30.0

96+89 Stop Sign 21.8

96+41 Speed Signs 24.0 19.5

96+00 10.0 10.0

94+00 10.0 10.0

93+94 X Rd. Sign 23.6

92+00 10.0 10.0

90+81 Intersection of Flandrau Str.

90+41 Str. Sign 18.0

90+00 10.0 10.0

88+00 Blank Sign 10.0 10.0 Sign = 23.0 out;

86+00 10.0 10.0

85+68 Cattle X Sign 21.0

84+00 10.0 10.0

83+16 Slow Sign 22.3

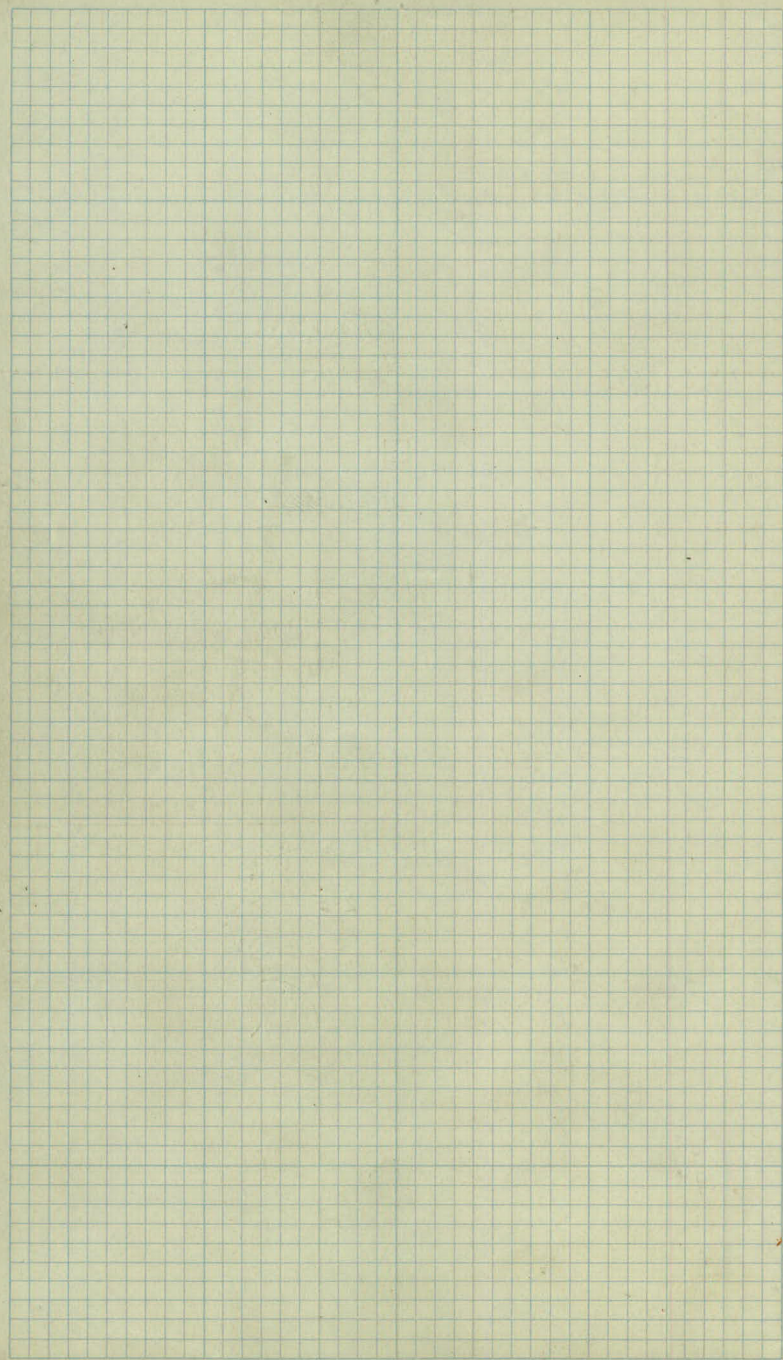
County Poor Farm.

Retaining Wall Full length.

Monument length

← 28.5

4.3'
26' 1" Corng.



Co. Rd 10

From

S.T.H '61'

To Frost Ave Conn

Dec 7, 1939

H. Dett

J. Somers

G. Dalen

W. Roth

Dufour

①

✓

10+99.48 P.T

7+78.28 P.I

$$L = 654.37$$

$$D = 4^\circ R+$$

$$\Delta = 26^\circ 16' 29''$$

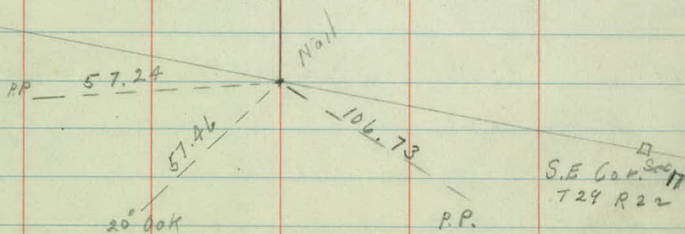
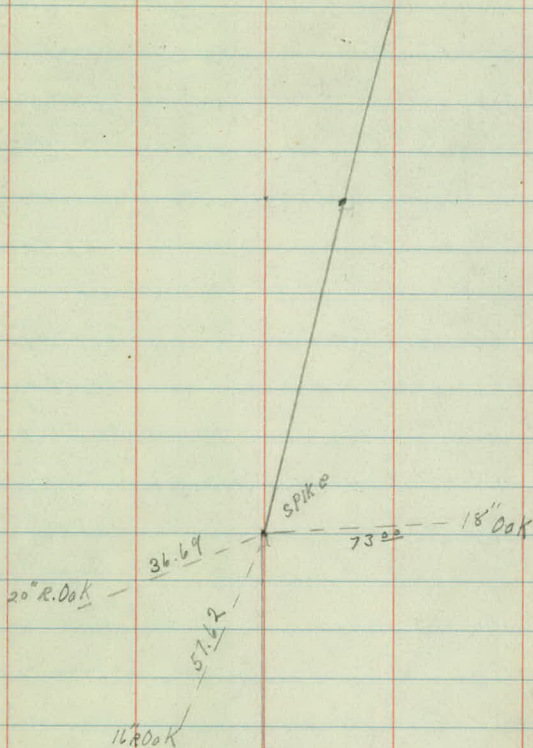
$$T = 333.17$$

$$R = 1432.96$$

$$Ext. = 38.5$$

4+45.11 P.C.

0+00 = 12+56.84 of Payne Ave Conn Survey



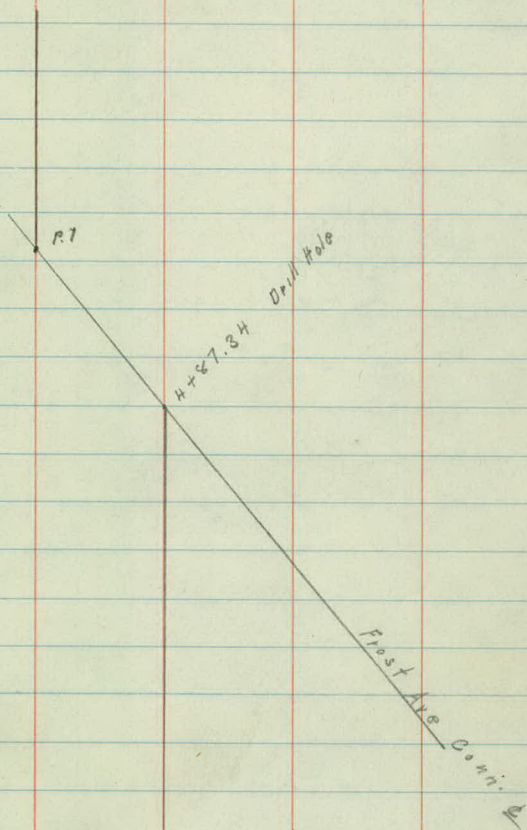
S.E. Cor. Sec 17
T24 R22

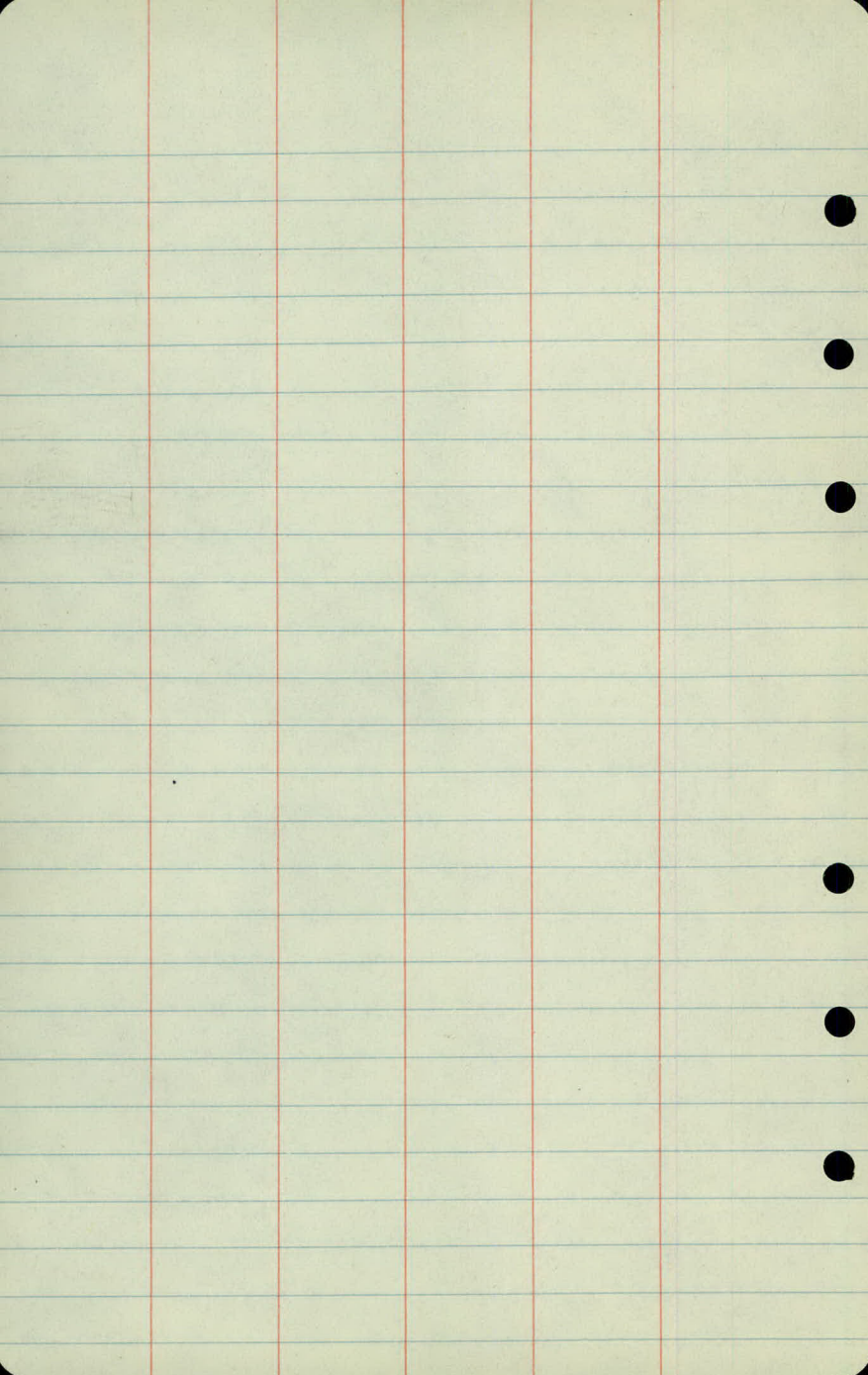
③

✓ 19 + 34.45 Intx. ~~2~~ with Tangent on Frost Conn

✓ 14 +

P.D.T.





Topography
on
Co. Road # 10
from
S.T.H. # 61
to
Frost Ave Conn

1

Dec. 7, 1939

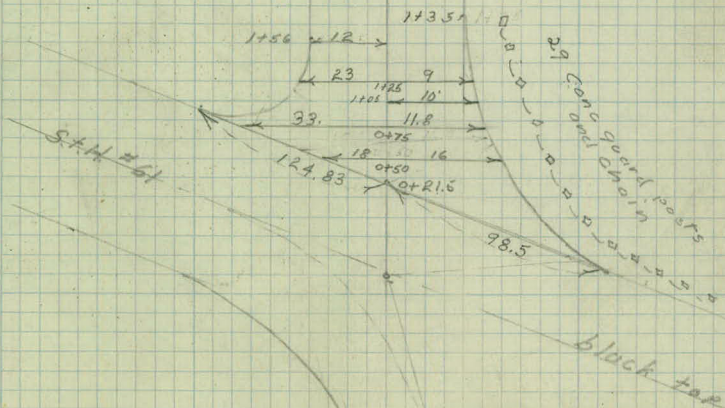
A - H. Duff
Rod - J. Sommers
" - G. Dalen
" - W. Roth
" - . Dufour

	LT	RT
12+00 edge black top	12	10
11+02.33 " " "	10	10
10+50 " " "	8	13
10+00 " " "	8	13
9+50 " " "	9	13
9+00 " " "	10	12
8+50 " " "	11	12
8+00 " " "	10	10
7+50 " " "	10	10
7+00 " " "	10	10
6+50 " " "	9	11
6+00 " " "	8	12
5+50 " " "	7	13
5+00 " " "	7	14
4+42.85 " " "	8	12
4+34 cross rd sign	21.9	
4+00 edge rd	9	10
3+00 edge rd	11	8
2+63 "End 45 zone" sign	20.3	20.2 "Begin 45 zone" sign
2+00	12	8
1+50 Edge Rd	11	9
1+35		17 end conc. posts
		17.2 end conc. posts
1+35 "stop and tractor lag" sign		18.2
1+32 "stop" sign	26.5	
0+21.5 ∇ Crosses Edge S.T.H. #61		
0+00		

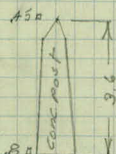
Lt Rt

21

black top



	LT	RT	
19+02.70 intr & with edge conc. pave			
18+16 end guard posts	18.6		end guard posts
18+00 edge black top	12	31'	to edge conc
17+65		15.6	stone spillway 3' wide
17+71 "traction lug" sign	18.4	17.8	end guard posts
17+00 edge black top	11	10	
16+00 edge black top	11	10	
15+21		18.7	"Side Road sign"
15+00 edge black top	12	10	
14+58.5		20.4	end bridge railing
14+31.5 end bridge railing	20.6		
14+28.95			P.O.T. rail in road
14+00 edge black top	13	10	
13+00 edge black top	13	10	
13+00		20.4	begin bridge railing
12+73 begin bridge rail	20.9		
12+60		18.3	begin guard posts
12+57		26.2	begin culvert
			begin culvert posts
12+32 begin posts	18.6		
12+23 begin culvert	23.5		



detail of conc. guard post and chain

19 conc. guard posts and chain

8.35'

18+16

19+35.32

19+02.7

17+71

Stone Spikeway

39 conc. posts and chain

Masonry 4' high approx

lamps

3'4"

2'

158.5'

Keller PKWY

Masonry wall

39'

12+37.4 Creek
Creek approx 4.5 wide

Creek

30'

Creek

21'

5 conc. posts

no chains on this side

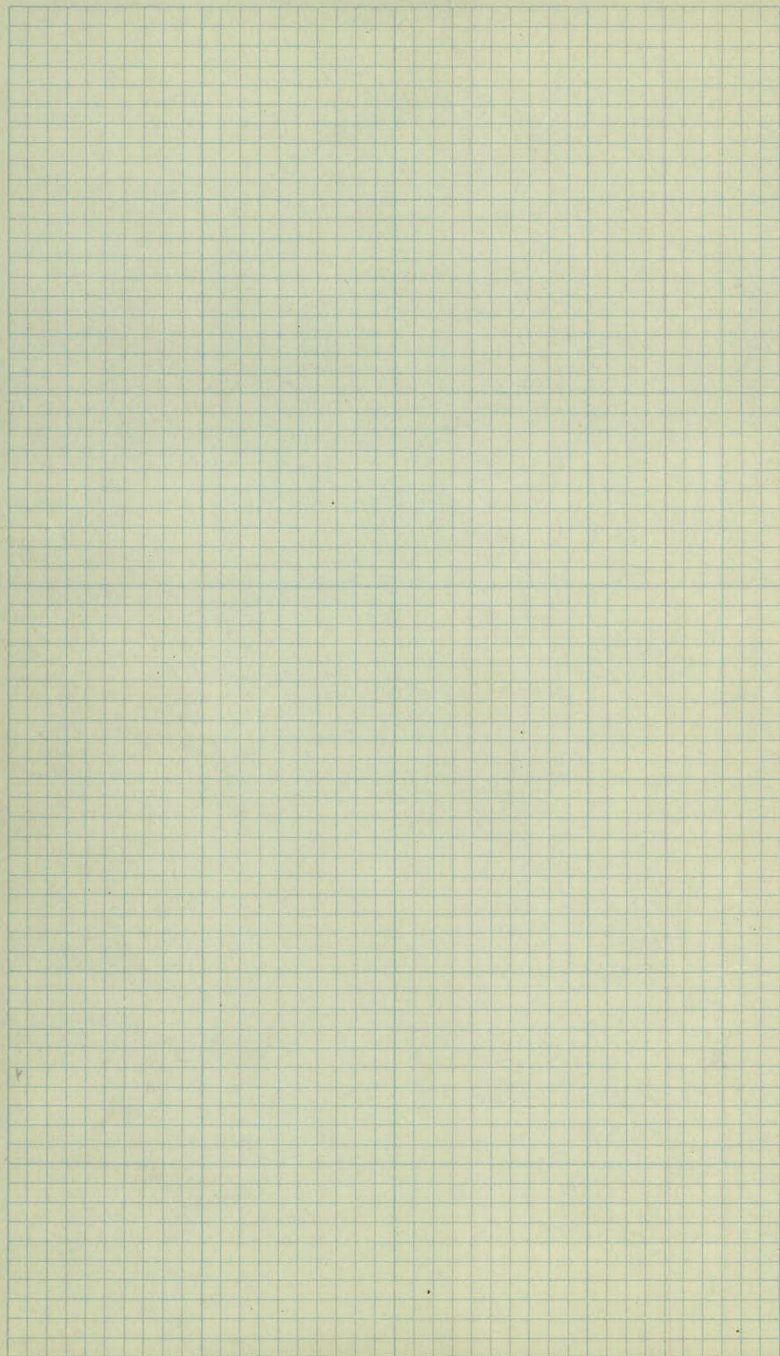
5 conc. posts

16' cut pipe
5'6"
3A'

Stone bulkhead

this pipe is buried

Stone bulkhead



ALIGNMENT
PAYNE AVE. CONNECTION
FROM
CITY LIMITS
to
S.T.H. # 61 (ARCADE STREET)



Nov 6 1939

A - H. DUFF

Rod - SOMMERS

" - DALLEN

" - ROTH

" - DUFOUR

Station Pt Lt Rr

~~13+63.83~~ ^{13+63.27} P.T. 16° 29' 00"
 13+50 15° 26' 53"
 13+00 11° 42' 13"
 12+56.84 P.I.
 12+50 7° 57' 33"
 12+00 4° 12' 53"
 11+50 0° 28' 13"
~~11+43.57~~ ^{11+43.49} P.C. 0° 00' 00"

~~L = 220.26~~ 219.78

D = 15° Lt

$\Delta = 32° 58' L$

T = ~~113.27~~ 113.35

R = ~~382.80~~ 383.06

1+96.33 P.T. 4° 54' 30"
 1+50 3° 45' 00"
 1+00 2° 30' 00"
 0+98.44 P.I.
 0+50 1° 15' 00"
 0+00 P.C. 0° 00' 00"

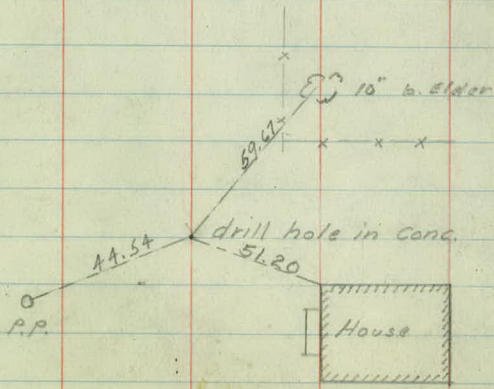
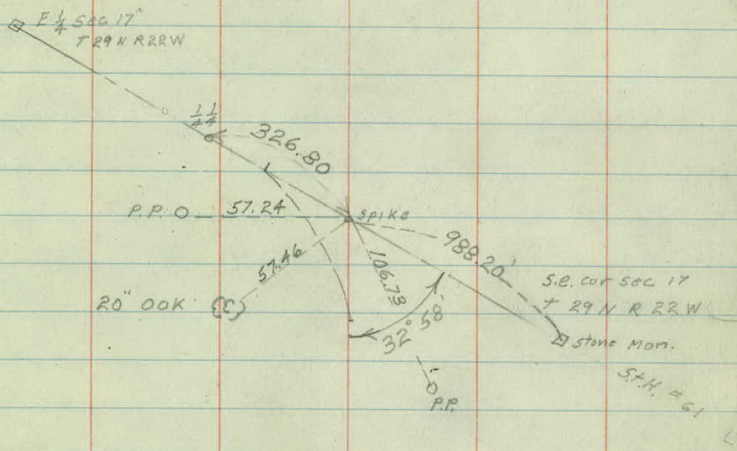
L = 196.33

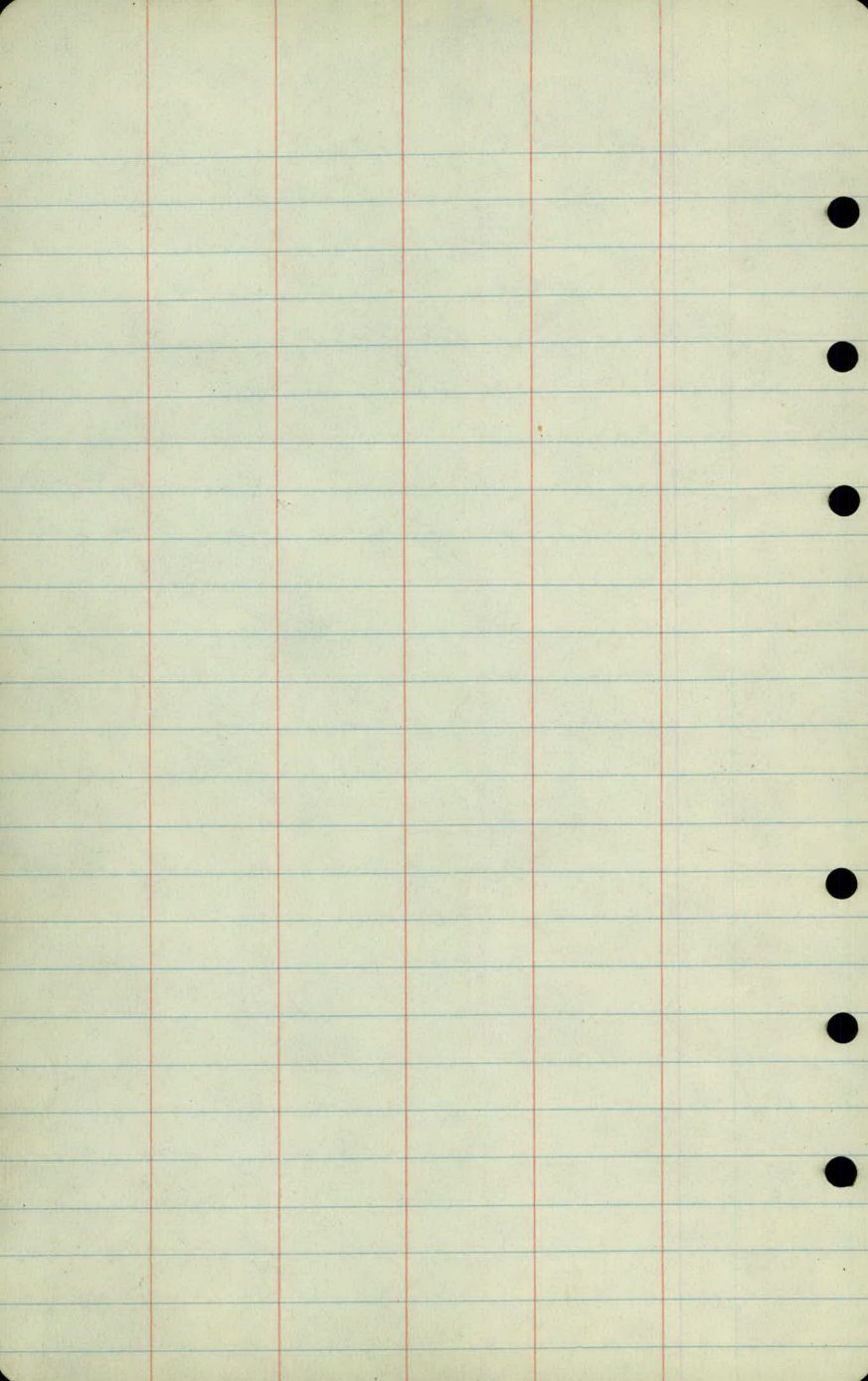
D = 5° Lt

$\Delta = 9° 49' L$

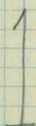
T = ~~98.44~~ 98.44

R = ~~1146.75~~ 1146.28



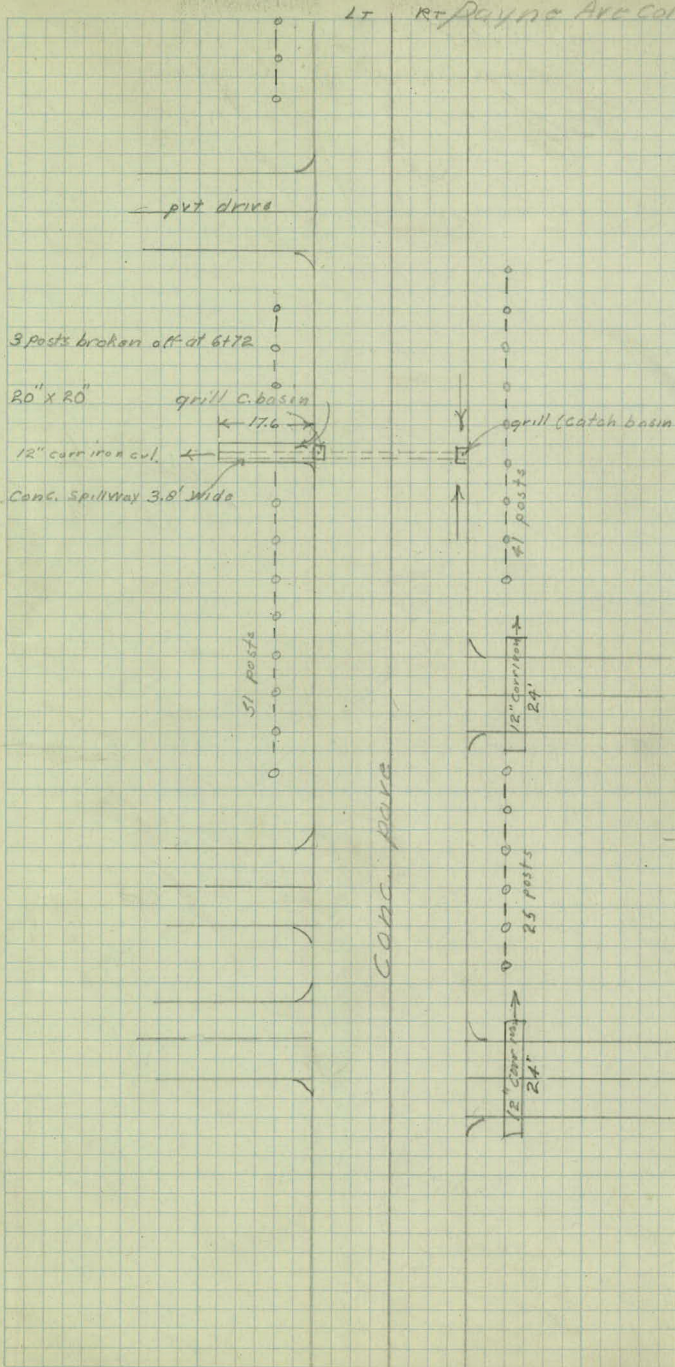


Topography
on
Payne Ave Connection
from
City Limits
to
S.T.H. # 61



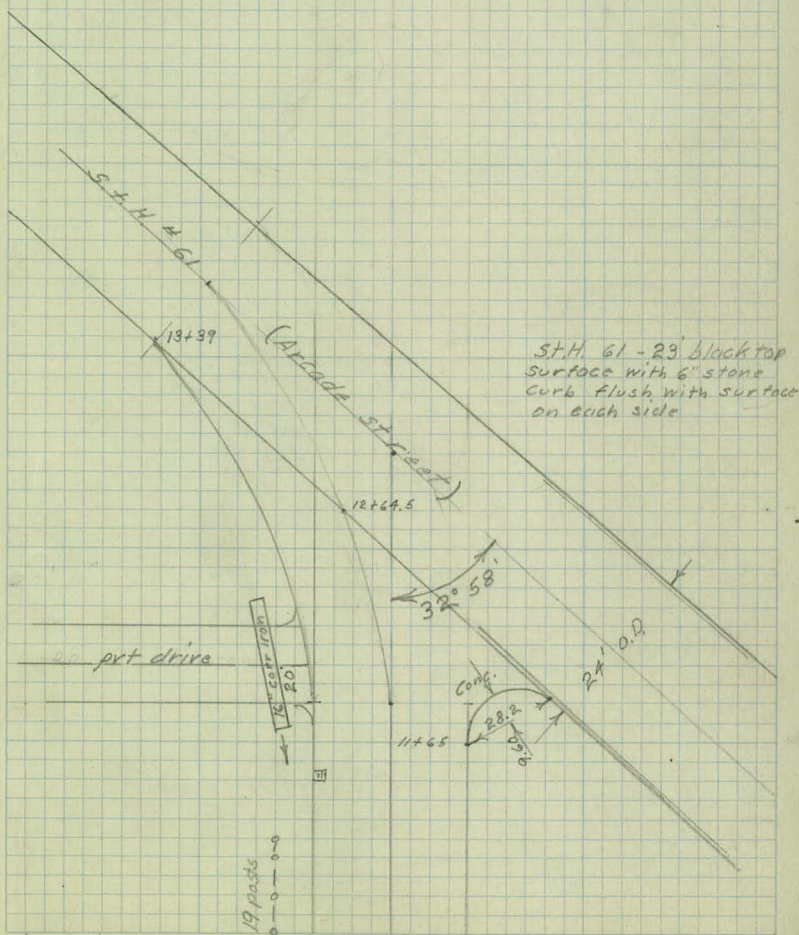
NOV 6 1939
K - DUFF
Rod - Semmiers
" - Deiter
" - Roth
" - Dufour

	LT	RT	
8+83 begin plank guard posts	14		
8+53		16.6	Cross Rd sign
8+00 edge conc	10	10	
7+42		1+	
7+31		14	end guard posts
7+26 end guard posts	14		
7+00 edge conc.	10	10	
6+95 "spread 30 M. sign	12.6		
6+72			
6+00 edge conc.	10	10	
5+08 Conc spillway and cul			
5+00 edge conc.	10	10	
4+12		13.7	begin plank guard rail
4+00 edge conc.	9.9	10.1	
3+46		25'	pvt drive
3+28 begin guard rail	14.3	14.0	end guard rail
3+00 edge conc.	9.9	10.4	
1+96.33 edge conc.	9.8	10.3	
1+68 pvt drive			
1+30 edge conc.	9.7	11.6	
1+45		15.6	begin plank guard rail
1+17 water valve box	13.4		
1+09 pvt drive			
1+00		22.2	pvt drive
1+00 edge conc.	10.6	12.4	
0+50 edge conc.	12.1	12.8	
0+47 fire hydrant	22.3		
0+33 - conc. spillway 4.5 mi	12.6		
0+00 edge conc.	13.5	13.5	



LT RT

13+63.83 edges of s.t.H. #61	12.4	11.5	
13+39 W. edge of s.t.H. #61 intx west edge conc. 12' left of #			
13+28 prt drive			
13+00 edge conc	13.3		
12+64.5 # intx west edge s.t.H. #61			
12+30 edge conc.	13	5.2	to W. edge s.t.H. #61
12+00 "stop" sign	21.4		
12+00 edge conc.	13	24.7	to West edge s.t.H. #61
11+70		21.2	"Street" sign
11+67		20.5	"Stop" sign
11+67 prt drive	29.0		
11+65			P.C. of small arc concurb
11+43.57 edge conc.	11.6	10	
11+00 edge conc	10	10	
10+91 C. basin (storm drain)			
10+25 end guard posts	14		
10+00 edge conc	10	10	
9+00 edge conc	10	10	



Lt Rt