

BK 78 Dr. 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Ditch Surveys

#1-3-5-7-14-16-4-11

From..... To.....

Road Acc't. No.....

Date Filed..... File.....

checked
Miss
4/25/41

Page 2 Transit Obs. Line Ditch #3Date 12-27-39 Rec.H.I. 945.27

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle			
End 12" C.M. Culv. Travel Rdway	187° 10'	1.22				12.45		932.82
Approx. $\frac{1}{2}$ Fairchild Ave Travel Rdway	179° 26'	2.60						
" $\frac{1}{2}$ " "	173° 43'	0.32						
End of 12" C.M. Culv.	171° 56'	1.24				9.9		935.37
Approx $\frac{1}{2}$ Fairchild Ave Travel Rdway	0° 34'	1.69						
	H.I. = 949.4	949.42 949.40						
at $\Delta^{\#} 2$								944.46 ✓ 944.45
To $\Delta^{\#} 1$	262° 24'	3.18				9.56		939.86 ✓
$\Delta^{\#} 3$	123° 25'	7.10				8.13		941.28 ✓
	4.87	946.15 946.15						H.I. = 946.15 -
at $\Delta^{\#} 3$								941.28 ✓
To $\Delta^{\#} 2$	303° 25'	7.10				1.69		944.48 ✓
$\Delta^{\#} 4$	146° 39'	3.92				7.94		938.21 ✓
F.I. 15" Tile sewer	293° 21'	2.06				14.48		931.67
F.I. 6" Tile inlet	293° 57'	1.97				14.00		

Page 3 Transit Obs. Line Ditch #3
 Date 12-27-38 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(Hi. 4.68)	942.89 942.515		H.I. = 942.58	✓			
At A#4								935.20 ✓ 938.41
To A#3	326°39'	3.92				1.59		941.28 ✓
A#5	150°19'	6.18				8.94		933.94 -
Beg. of ditch 4' wide 1' deep	247°40'	3.94		-	2°03'	4.68		
Fence line	246°52'	4.05						
F.L. 15" Tile Sewer ^{2' section Open on Top}	192°26'	1.62		-	6°18'	4.68		
4' ditch	201°04'	1.68		-	5°32'	4.68		
Angle in Fence	136°51'	2.12						
	(Hi. 4.60)	938.55 938.54		H.I. = 938.54	-			
At A#5								933.94 -
To A#4	330°19'	6.16				0.35		938.20 -
A#6	75°48'	2.29			N Edge Chimney	9.08		929.96 ✓
Angle in Fence running No.	344°20'	4.35						
Beg. Curve Approx. A Valley View Rd	350°48'	3.87						
F.T. Curve " " "	344°30'	3.75						
End Curve " " "	340°45'	3.47						

Page 4 Transit Obs. Anchor Line Ditch #3
 Date Dec. 28, 1939 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Approx. to Valley View Rd	325° 46'	2.10						
" " " " "	261° 20'	1.18						
	(H. 1.474)				939.225 939.207			H.I. = 934.21 -
AT Δ #6								929.47 929.46
To Δ #5	255° 48'	2.29				0.28		933.94 ✓
Δ #7	40° 38'	4.47				13.12		931.09 ✓
beg. Ditch 6' wide								
End 15" Tile Sewer. 4' deep.	295° 46'	2.24				15.70		
	(H. 1.536)							Rubblehead wall H.I. = 926.45 ✓
AT Δ #7								921.09 ✓
To Δ #6	220° 38'	4.47						
Δ #8	43° 41'	7.12				8.82		917.63 ✓
End 15" Vit. Culv.	227° 24'	3.42				11.52		
" 15" " " 5' wide	224° 32'	3.43				12.40		
beg. Curve in ditch 3' deep	191° 28'	2.44				15.1		
ON Curve 4' wide	180° 30'	2.30				16.2		
" " 2' deep	173° 00'	2.20				16.5		
Angle in ditch	163° 40'	2.10				17.2		

Date. 12-28-39 Rec. Clark

Page 6 Transit K.E. 25311 Obs. Anker Line Ditch #3
 Date 12-28-39 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(H.I. 4.75)			H.I. =	913.88			
At $\Delta^{\#} 8A$								909.00
To $\Delta^{\#} 8$	239° 12'	312		+	3° 51'			
To $\Delta^{\#} 9$	90° 57'	1.38						918.75
Angle in ditch	163° 45'	0.50				11.6		
E.I. end 36" Iron Culv.	67° 30'	0.96				13.9		
	(H.I. 3.54)			922.31 ✓ 922.20 ✓	H.I. 922.30 -			
At $\Delta^{\#} 9$								918.76
To $\Delta^{\#} 8$	248° 46'	4.36				4.66		918.77 ✓
$\Delta^{\#} 10$	63° 39'	5.18				13.74		908.54 ✓
Double R.R. Tracks	222° 05'	2.35						
" " "	226° 54'	1.24						
" " "	294° 00'	0.16				3.5		
" " "	34° 51'	1.32						
" " "	39° 45'	2.65						

Date 12-28-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			(H.I. 4.90)	H.I. = 912.56 ✓				
at A#10								908.56 ✓
To A#9	243° 39'	5.18						918.76
A#11	116° 26'	4.93		-Light, Boston White Barn.				895.90
Fl. end 36" Iron Culv.	240° 55'	4.01				12.50		900.06
Angle in ditch	238° 59'	3.95						
End of ditch	239° 30'	4.84				11.8		
Beg. of ditch	237° 11'	4.34				12.9		
Fence Cor. going E. & along RR Tracks	234° 00'	4.97						
Angle in Fence	225° 28'	4.06						
" " "	205° 38'	4.48						
" " " runs so. East	183° 49'	3.80						
Fl. end 12" C.M. Culv.	181° 03'	3.04				15.70		
Ditch at end of plank Xing	184° 08'	2.99				16.00		
Angle in ditch	232° 10'	3.60				13.9		
Fence cor. going E. & along R.R. Tracks	262° 12'	1.29						
Angle in Fence going N.W.	215° 26'	1.28						

Page 8 Transit Ditch #3 Obs. 3
 Date 12-28-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Angle in Fence Runs No. to R.R. Tracks	71° 51'	139						
	(H 1525)							
AT A [#] 11								895.90 -
To A [#] 10	290° 26'	4.93						
A [#] 12	111° 09'	4.70				0.65		900.30 -
Ditch Enters Pond ^{End} Ditch	261° 28'	3.90				3.1		
Edge of Pond, Shore	245° 00'	4.08						
" " " "	229° 47'	4.30						
" " " "	212° 54'	4.00						
" " " "	198° 30'	3.46						
" " " "	177° 43'	3.08						
No. West Cor. Barn 20' No. + 50.	167° 15'	3.50				2.8		510 on W. End of Barn.
No. East " "	162° 42'	3.53				2.9		
Edge of Pond Shore	163° 48'	3.08						
So. West cor. shed	152° 38'	3.65						
No. " " "	152° 13'	3.50				3.4		
No. East " "	147° 45'	3.56				2.9		

Page 9 Transit Obs. Line D.T.G. #3
 Date 12-28-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Edge of Pond shore	148° 48'	3.20							
" " " "	131° 00'	3.28							
Ditch Leaves Pond. ⁵⁰⁹ ditch	114° 28'	3.30					5.1		
Edge of Pond. shore line	95° 25'	3.30							
" " " "	80° 25'	3.87							
" " " "	76° 10'	4.32							
" " " "	78° 00'	5.34							
" " " "	76° 08'	5.70							
" " " "	63° 34'	5.60							
" " " "	53° 15'	5.80							
" " " "	44° 00'	6.15							
" " " "	36° 00'	6.90							
" " " "	30° 53'	7.38							
" " " "	21° 30'	7.65							
" " " "	13° 00'	7.86							
" " " "	5° 30'	7.74							
" " " "	358° 46'	7.05							

Page 10 Transit Obs. Line Dike #3
 Date 12-28-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
Edge of Pond Shore line	353° 20'	6.40						
" " " "	347° 46'	5.33						
" " " "	338° 06'	4.56						
" " " "	322° 37'	3.75						
" " " "	303° 35'	3.26						
" " " "	288° 25'	3.13						
" " " "	272° 50'	3.46						
Elev of water						5.35		
" Bottom of Pond	257° 35'	2.48				8.4		
" " " "	247° 04'	1.75				9.6		
" " " "	216° 08'	1.02				9.9		
" " " "	156° 07'	1.12				9.4		
" " " "	127° 03'	1.94				8.9		
" " " "	179° 25'	2.10				8.4		
" " " "	14° 00'	1.15				10.8		
" " " "	14° 00'	2.23				9.4		
" " " "	14° 00'	3.46				10.8		

Page 11.....Transit.....Obs.....Line Ditch #3
 Date 12-29-39.....Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. or Angle	Rod Equiv.			
Elev Bottom of Pond.	14°00'	4.56					11.0		
" " " "	14°00'	5.75					9.6		
" " " "	14°00'	6.92					8.1		
" " " "	14°00'	7.66					6.4		
	(H.I. = 459)	905.11 905.09							
QT A#12									900.51 ✓ 900.50
To A#11	291°09'	4.69					9.21		895.90 -
A#13	105°33'	9.79					0.18		904.98 ✓
F.I. end 30" C.M. Culv. 4' deep 3' wide	150°22'	0.17					10.30		
Δ in Fence from So. E. cor. barn	189°35'	0.29							
F.I. end 30" C.M. Culv.	120°20'	0.36					10.70		
Fence Cor. Running So.	112°00'	2.00							
Fence line	134°00'	2.60							
Δ in ditch	114°00'	0.87					9.3		
Fence line Runs N. & West	61°44'	3.10							
Δ in Fence	81°00'	2.85							
Δ ditch 2' deep 4' wide	114°36'	2.00					10.0		

Page 12 Transit. Obs. Line Ditch # 3
 Date 12-29-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
beg. of Curve	101° 35'	2.80				10.3		
Ctr. of "	101° 25'	3.00				10.4		
End. " "	102° 25'	3.25				10.8		
A in Fence	99° 35'	4.80						
1' deep 4' wide ditch	107° 50'	4.25				10.8		
Fence line	100° 14'	5.24						
ditch	111° 45'	5.38				11.1		
Fence line	102° 25'	6.20						
" "	106° 27'	7.40						
	(H.L. 4.18)	909.10 909.16						
90° 13								904.95 904.92 ✓ 904.90
To A # 12	285° 33'	9.18				8.65		900.41 ✓
A # 14 = Ctr. Sec. 32	155° 40'	3.02						
Beg. of Curve	273° 18'	3.82		- 1° 51'	12.3	4.18	16.5	92.6
Ctr. " "	269° 05'	3.44		- 1° 56'	11.6	4.18	15.8	93.3
End. " "	262° 39'	2.93		- 2° 16'	11.6	4.18	15.8	93.3
Beg. " "	221° 33'	1.49		- 4° 10'	10.8	4.18	15.0	93.1

Page. 13 Transit Obs. Anker Line Ditch #3
 Date 12-29-39 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Ch. of Curve	204° 23'	1.33		-	4° 27'	10.3	4.18	14.5	94.6
Extend 30" C.M. Culv.	186° 43'	1.20					15.10		94.0
Δ in Fence	187° 13'	1.12							
Δ in "	184° 35'	2.38							
Δ " " RUNS WEST	202° 22'	2.67							
	(H.I. 5.85)								H.I. = 918.00 ✓
At Δ #14 = Int. U.S. Band Pass Rd.									912.68 = 8.14
To Δ #13	335° 40'	3.02					13.05		909.93 ✓
To W 1/4 Cor. Sec. 32	270° 23'								
Δ #15	54° 37'	2.40					13.95		909.05 ✓
	(H.I. 4.59)								H.I. = 908.64 ✓
At Δ #15									909.05 ✓
To Δ #14	234° 37'	2.40							
Δ #16	54° 49'	2.57					13.30		895.34 ✓

Page 14 Transit Obs. Line Ditch #3
 Date 12-29-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(H.I. 4.57)	H.I. = 899.91						
ATA #16								895.34
To Δ #15	234° 44'	2.57						
Δ #14								
F.I. end 30" C.M. Culv	252° 26'	1.05				6.90		
F.I. beg 30" C.M. Culv.	257° 54'	0.74				6.90		
F.I. end 30" C.M. "	264° 32'	0.59				6.90		
End of ditch Edge of Swamp	3° 53'	0.32				7.0		
Edge of Swamp	170° 48'	0.91						
" " "	170° 00'	2.12						
" " " E. & W Fence line	169° 23'	3.96						
Elev. Water Swamp						6.65		893.26
Edge of swamp	162° 21'	3.78						
Swamp Elev.	51° 20'	1.92				8.8		
Edge of Swamp	148° 35'	5.06						
" " "	130° 05'	6.17						
" " "	121° 30'	7.16						

Jones Lake

Page. Transit. Obs. Line.

Date. Rec.

Date. Jan. 2, 1940 Rec. Nader

Page... 2... Transit..... Obs. *Anker.*..... Line... *Ditch #5*
 Date... *1-2-40*..... Rec. *N. Ador.*.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
$\Delta^{\#} 3 = E \frac{1}{4} \text{ Cor. Sec. 6}$	$0^{\circ} 00'$	9.50	912.45			9.45		03.0
Box 24" Vit Culv. End of Swamp	$248^{\circ} 35'$	1.23				Ground. Culv. 13.9 15.25		98.5 897.20
Fence corner Runs N.-S.-W.	$315^{\circ} 06'$	0.49						
Fence line runs WYE	$277^{\circ} 30'$	1.72						
Fence corner S-W	$353^{\circ} 03'$	2.85						
Fence line runs W	$339^{\circ} 52'$	3.10						
End 24" Vit Culv. 1'x6' HEADWALL	$353^{\circ} 26'$	2.92				GROUND 14.5 CULV 15.46		896.49
⊕ Ditch BEGINNING Swamp	$355^{\circ} 08'$	3.36				14.4		98.0
Cannot locate Culv. under Cleveland Ave.								
⊕ Ditch	$7^{\circ} 10'$	5.0				18.2		
$\left. \begin{array}{l} (41.544) \\ 908.41 \\ 908.45 \end{array} \right\} 908.43 \text{ H.I.} = 908.47 \text{ With Level}$ Top Mount = B.M.								
At $\Delta^{\#} 3$								903.03 With Level.
To $\Delta^{\#} 2$	$180^{\circ} 00'$	9.50				1.40		903.97
NE Cor. Sec. 5	$0^{\circ} 00'$							905.62
$\Delta^{\#} 4$	$0^{\circ} 00'$	7.26				2.81		905.66
⊕ Ditch	$156^{\circ} 14'$	3.43				12.41		895.1

Page 3 Transit Obs Anker Line Ditch #5Date 1-3-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
<u>& ditch</u>	<u>131° 21'</u>	<u>2.73</u>					<u>12.2</u>		<u>896.3</u>
<u>Bag. 36" C.M. Culv. Under Co. Rd. "C"</u>	<u>95° 44'</u>	<u>2.65</u>					<u>11.0</u>		<u>897.5</u>
<u>Approx. & Co. Rd. "C"</u>	<u>90° 40'</u>	<u>2.65</u>					<u>6.7</u>		<u>901.8</u>
<u>End C.M. Culv. Under Co. Rd. "C"</u>	<u>85° 22'</u>	<u>2.65</u>					<u>10.9</u>		<u>897.6</u>
<u>& ditch</u>	<u>64° 03'</u>	<u>2.95</u>					<u>11.7</u>		<u>896.8</u>
<u>" "</u>	<u>38° 30'</u>	<u>4.16</u>					<u>11.9</u>		<u>896.6</u>
<u>" " End of Swamp. ^{Water} Edge.</u>	<u>26° 30'</u>	<u>5.75</u>					<u>11.4</u>		<u>897.1</u>
<u>Elev. of Water</u>	<u>38° 00'</u>	<u>5.75</u>					<u>9.94</u>		<u>898.5</u>
<u>Edge of Water</u>	<u>47° 55'</u>	<u>6.00</u>							
<u>" " "</u>	<u>59° 25'</u>	<u>6.10</u>							
<u>" " "</u>	<u>70° 45'</u>	<u>5.70</u>							
<u>" " "</u>	<u>80° 10'</u>	<u>5.12</u>							
<u>" " " ^{Toe Slope} Co. Rd. "C"</u>	<u>87° 00'</u>	<u>4.83</u>							
<u>" Fence line E. & W. Toe of Slope</u>	<u>94° 30'</u>	<u>4.60</u>							
<u>Edge of Water</u>	<u>106° 00'</u>	<u>4.70</u>							
<u>" " "</u>	<u>121° 20'</u>	<u>4.35</u>							
<u>" " "</u>	<u>141° 25'</u>	<u>4.00</u>							

Page 4 Transit Obs. Line Ditch #5
 Date 1-3-40 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			908.47					
Edge of Water	160° 45'	4.35						
" " "	174° 05'	5.28						
" " " Toe of Slope								
No. 50. Fenceline Cleveland Ave	176° 12'	5.15						
" " " Toe of Slope								
Edge of Water Cleveland Ave	182° 20'	5.42						
" " "	192° 25'	5.60						
" " "	199° 00'	4.90						
" " "	206° 25'	3.70						
" " "	222° 30'	3.25						
" " "	232° 00'	2.34						
" " "	239° 50'	1.40						
F.L. 24" Conc. Culv.	240° 25'	0.53				9.85		898.7
F.L. 24" " "	294° 55'	0.50				9.16		899.3
Fence Cor. RUNS E. 450.	134° 40'	0.46						
" " " Toe of Slope								
Edge of Water Cleveland Ave	161° 35'	0.67						
Edge of Water	118° 25'	1.08						
" " "	101° 30'	2.20						
" " " Toe of Slope								
" " " Cr. Rd. " C2 "	96° 10'	2.55						

Page 5..... Transit N.E. 45311..... Obs. Amber..... Line Ditch #5.....Date 1-3-40..... Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Edge of Water	84° 35'	263							
" " "	50° 30'	3.30							
" " "	35° 40'	3.70							
" " "	26° 55'	4.16							
" " "	28° 30'	5.25							
	(41.543)	911.09 911.09	} H.I. = 911.09						
At $\Delta^{\#} 4$									905.66
To $\Delta^{\#} 3$	180° 00'	7.26					8.06		902.03
$\Delta^{\#} 4A$	0° 00'	4.18					2.90		908.19
$\Delta^{\#} 5$	0° 00'	9.74					2.55		908.54
Int. of Ditches.	81° 49'	2.55					12.7		898.4
Beg. 20" Vit. sewer. H.V.	78° 55'	2.54					13.3		897.8
Beg. Low. Willow Trees Along Ent.	75° 15'	2.65					14.52		896.57
E. Road to Farm Ho. -	61° 30'	2.07							
" " " "	85° 15'	3.90							
Row Willow Trees Along Road 3' deep.	73° 15'	2.70							
N. End 12" Vit. Culv. Under Road	73° 20'	2.96					11.2		899.9

Page... 4 Transit. Obs. Line Ditch #5Date... 1-3-40 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Beg. Curve	53° 50'	4.03				10.7		900.4
Chr. " 2' deep 1' wide	51° 45'	4.15				10.7		900.4
End of Ditch	42° 10'	4.32				9.9		901.2
Approx. End 12" Vit Under Road.	80° 00'	2.80				12.6		898.5
	(H.I. 5.38)							
At A#4A								908.19
To A#4B	0° 00'	1.68				4.21		909.36
So. W. Cor. House 33' deep	135° 30'	1.18						
No. W. Cor. House 20' long	126° 08'	1.02						
No. W. Cor. Garage	114° 45'	1.69						
No. E. " "	112° 28'	1.92						
Top of 36" Vert. Curve to Sewer	108° 30'	1.78						
Sewer caved in	98° 18'	1.61						
Top of Manhole	85° 14'	1.54						
Flow Line M.H. 20" Vit	"	"						
S.E. Cor. House	54° 10'	1.36						
So. W. " "	46° 09'	1.15						

H.I. = 913.57

36" long
 6" deep
 sewer

7.3

Water Elev. 14.8 898.8
 Top Dirt 8.05
 Flow Line 15.05
 Flow Line 16.92 896.65

Date 1-3-40 Rec. Clerk

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
No. W. Cor. House	37° 03'	1.38						
So. W. Cor. shed 12' wide	55° 20'	2.38						
So. E. " "	58° 49'	2.60						
	(Ht. 5.42)	Ht. =	914.78					
At Δ #48								908.36
Δ #5	0° 00'	3.82				6.19		908.59
bag. Wood Fence going East	88° 35'	0.63						908.54
Fence line " "	90° 15'	2.62						
So. W. Cor. Shed 12' wide	59° 09'	1.61						
No. W. " "	55° 39'	1.73						
So. W. " Chicken Coop 14' wide	64° 55'	2.18						
So. E. " " "	67° 20'	2.48						
So. E. Cor. House	38° 55'	1.82						
So. W. " "	28° 16'	1.62						
No. W. " "	24° 33'	1.85						
Top Ctr. M.H.	51° 05'	2.58						
Flowline M.H. 20" Vlt								
						Elev Water = 17.31		897.5
						10.31		904.5
						Elev Diff = 17.61		897.2
						FL. Cuts = 18.97		898.81

Page... 8 ... Transit... .. Obs. *Anker* ... Line... *Ditch #5*
 Date... *1-4-20* ... Rec. *Clark* ...

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>At Δ#5</i>	<i>(H. 534)</i>	<i>913.93 913.88</i>	<i>H.I. = 913.93</i>						<i>908.59 908.54</i>
<i>To Δ#4</i>	<i>180° 00'</i>	<i>9.73</i>					<i>8.32</i>		<i>905.66</i>
<i>Δ#6 = S.E. Cor. Sec 32.</i>	<i>0° 00'</i>	<i>12.05</i>					<i>with Level</i>		<i>917.35</i> <i>Top Mont. = 817.</i>
<i>Fence cor. going No. + East</i>	<i>152° 08'</i>	<i>0.68</i>							
<i>Fence line going East</i>	<i>109° 52'</i>	<i>1.88</i>							
<i>beg. Fence going West</i>	<i>342° 09'</i>	<i>1.10</i>							
<i>Fence line runs west</i>	<i>306° 34'</i>	<i>1.78</i>							
<i>" " " "</i>	<i>325° 19'</i>	<i>2.25</i>							
<i>beg. Fence " "</i>	<i>301° 13'</i>	<i>2.30</i>							
<i>Fence Cor runs No. + West</i>	<i>354° 32'</i>	<i>3.46</i>							
<i>No. E. Cor Foundation</i>	<i>344° 06'</i>	<i>3.31</i>							
<i>So. E. " "</i>	<i>342° 32'</i>	<i>3.05</i>							
<i>So. W. " "</i>	<i>338° 44'</i>	<i>3.12</i>							
<i>Fence line going West</i>	<i>329° 22'</i>	<i>4.02</i>							
<i>beg. ditch above sewer 6' wide</i>	<i>329° 15'</i>	<i>4.22</i>					<i>11.41</i>		<i>902.5</i>
<i>No. + So. Fence line</i>	<i>321° 08'</i>	<i>5.75</i>							

Page. 9 Transit. Obs. Anter. Line. Ditch #5
 Date. 1-4-10 Rec. Clark

OBJECT	913.93		DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
	AZIMUTH	STADIA		Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Fence line	328° 31'	6.92							
beg. Curve	325° 03'	6.10					11.4		902.5
Ctr. "	324° 45'	6.34					11.3		902.6
Ctr. top M.H. End of Curve	324° 37'	6.58				Elev. Water =	16.60		897.3
						Elev. Ditch =	9.80		904.1
N.W. side of M.H. covered in						FL. 20' Culv =	17.3		896.6
FL. of inlet 30 E. side M.H. 8" vit.							18.7		895.23
							11.60		902.3
At Δ #6									
To Δ #5	180° 00'	12.06							
Δ #7	270° 58'	9.45							
3/4 Cor. Sec. 32	270° 58'								
	(Ht. 536)					Ht. = 915.93 with Level			
At Δ #7 on sec. line									910.57
To Δ #6	90° 58'	9.45							
Δ #8	346° 54'	7.05					8.55		907.38
2' deep ditch Top sewer 4' wide	136° 32'	5.98					13.3		902.6
Fence line runs E. & W.	122° 51'	4.92							

Page 10 Transit Ditch #5 Obs. Line
 Date 1-5-40 Rec.

OBJECT	915.93		Dis- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
	AZIMUTH	STADIA		Up+ Down-	No. of Int. or Angle			
£ Ditch Top Sewer	130° 35'	4.06				12.6		903.3
Fence Cor. Runs No. & E.	140° 05'	3.45						
£ Ditch Top sewer 3' deep 4' wide	119° 57'	2.54				9.4		906.5
Fence Cor. Runs So. & E.	108° 10'	2.22						
" " " So. & W.	99° 04'	1.95						
" " " E. & W. & No.	85° 32'	2.42						
F.L. So. end 12" C.M. Culv.	97° 10'	1.56				8.72		907.2
F.L. No. " 12" C.M. "	84° 44'	1.56				8.42		907.5
£ Track beg. loading pit	320° 07'	0.49				9.6		
So. W. Cor. Warehouse 27' wide	318° 55'	1.26			Found. Black Walls. Morris & Dougherty Warehouse	6.5		
No. E. " "	346° 50'	2.29				6.1		
No. End loading pit & Tracks	352° 21'	2.28				10.1		
	H.I. 5.25	912.63 912.64			H.I. = 912.63			
ATA #8 (£ RR. Track)								907.38
To A #7	166° 54'	7.03				2.07		910.57
A #9	14° 09'	7.01				5.81		906.82
TOP Ctr. M.H.	183° 41'	2.40				8.35		904.25

202059

Page 12 Transit K&E 45311 Obs. Ad. Kar. Line Ditch #5
 Date 1-5-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Δ in Fence runs along Tracks	22° 40'	3.28							
Δ in "	25° 46'	3.38							
Δ Sport track	24° 25'	3.31							
Δ in Fence	20° 43'	4.42							
	H.I. 5.32	$\left. \begin{smallmatrix} 912.14 \\ 912.15 \end{smallmatrix} \right\}$							H.I. = 912.14
At Δ #9 Δ RR Tracks									906.82
To Δ #8	194° 09'	7.00					4.77		907.38
Δ #10	329° 23'	7.22					9.0		903.14
End 20" Vlt sewer 2' wide 6" Deep	182° 36'	2.08					14.81		895.3
Elev water							14.9		897.2
" Dirt							15.7		896.4
Δ Trick pt. of switch	194° 09'	0.32					5.4		
Δ Ditch	165° 04'	0.83					15.3		
Fe on both sides of track on E.W. Line									
Δ Ditch 5' wide 3' Deep	35° 50'	11.4					16.8		895.3
" " 10' cut from swamp	75° 15'	2.20					14.2		

Page 17 Transit Obs. Anker Line Ditch #5
 Date 1-5-40 Rec.

OBJECT	912.14		DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
	AZIMUTH	STADIA		Up+ Down-	No. of Int. or Angle	Rod Equiv.			
In Swamp. *	51°30'	1.90					18.2		93.9
Elev of Water.							15.9		96.2
Δ in Ditch	20°10'	3.88					17.4		94.7
End of Vit Cuv. Can not get size	17°26'	3.92		Top inside Edge Cuv =		15.5			96.6
" " " " " "	10°50'	3.91		Ground =		12.3			99.8
				Flow Line =		18.4			93.7
	H.I. 5.23	908.37 908.42		H.I. = 908.39					903.16 903.44
At Δ #10									
To Δ #9	149°23'	7.20					1.60		906.82
Δ #11	322°00'	3.25							901.64
Δ in ditch 5' wide 7' deep	122°45'	2.96					13.1		95.3
beg of Curve	171°24'	0.40					13.0		95.4
End " "	234°05'	0.23							
Fence line runs E+W	21°40'	0.75							
" Cor. " N+E	302°13'	1.50							
Δ in ditch	314°30'	1.45					12.4		96.0

Page 14 Transit ~~W. 15211~~ Obs. A. L. C. Line Ditch #5

Date 1-5-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
	(H.I. 404)		$\left. \begin{matrix} 905.69 \\ 905.68 \end{matrix} \right\}$		H.I. = 905.68				
at A#11									901.64
To A#10	147° 00'	3.25					2.53		903.16
A#12	10° 23'	2.96					7.59		898.09
ditch 6' wide 5' deep	109° 55'	0.58					9.9		95.8
F.L. SO. End Conc. box Culvert 3' wide	39° 40'	1.23					10.1		95.6
No. 11	35° 53'	1.35					10.1		95.6
ditch 5' wide 3' deep	24° 16'	2.09					10.4		95.3
	(H.I. 403)				H.I. = 902.11				
At A#12									898.09
To A#11	190° 23'	2.96							901.64
To A#16 Ditch #3	297° 03'	8.41					6.52	Elev = 895.54 from Ditch #3	
Edge of Swamp	33° 20'	5.76						Elev = 895.59 from Ditch #5	
" " "	29° 15'	4.73							
" " " No. 4 SO. Fence	24° 52'	3.80							
Fence Cor. RUNS N. 1/4 E. + W. 1/4 Cor. between class sec. 32									
Mon. = 1/4 Cor. between class sec. 32 and E. 1/4 Cor. sec. 32	66° 02'	1.71							

Page 15 Transit K 45 45311 Obs. Ankar Line Dit 6 # 5
Date 1-5-40 Rec. Clark

Profile Levels
of Drainage Study
Vicinity Cleveland Ave.
Between "C" and "D"
DITCH # 5

4/12/40

R. Pease
A Moeschter
L. Goldberg
C. Fewer.

Sta.	+	$\bar{x}$	-	Elev
B.M.	13.60	913.38 113.60		899.78 100.0 800.67 80.89
Water-Swamp	4/12/40		12.71	
0-15	Toe		10.8	02.6
0-06	Shlder		4.3	09.1
0+00	$\frac{1}{2}$ Ent		4.4	09.0
+05	Shlder		4.4	09.0
+19	Toe.		10.5	02.9
+50			11.6	01.8
+79			12.3	01.1
1			11.8	01.6
+50			11.4	02.0
2			11.4	02.0
+50			11.9	01.5
3			11.1	02.3
T.P.	9.52	912.20 112.52	10.60	902.78 103.00
+50			9.3	03.0
+85			8.6	03.7
4			8.7	03.6
+50			7.5	04.8
Top First	M.H. N. Drive		6.78	105.74 = 905.52
5			5.5	06.8
+50			5.0	07.3
6			4.4	07.9
+50			6.5	05.1
7			7.1	05.2

12 35
1 20

(2)

F.L. 12" Vit Under Ent. 14 End Culu.

Sta.	+	Δ	-	Elev.
		912.30 112.52		
7+50		914.76	7.3	905.07
T.P.	9.69	114.98	7.23	105.29
8			11.2	03.6
+50			11.6	03.2
9			11.3	03.5
+50			11.6	03.2
10			11.7	03.1
+50			12.7	02.1
11			12.1	02.7
+50			11.7	03.1
+86	Toc		11.1	03.7
+95	Shlder	Cleveland	7.2	07.6
12 + 42	Shlder		7.3	07.5
+51	Toc		10.9	03.9
13			12.9	01.9
T.P.	8.51	910.66 140.88	12.61	902.15 102.37
+50			8.1	02.6
14			7.9	02.8
+50			7.6	03.1
15			7.5	03.2
+50			8.4	02.3
16			8.4	02.3
+50			7.3	03.4
17			8.3	02.4

Sta.	+	π	-	Elev.
		910.66 410.88		
17+50			8.0	02.7
18			8.7	02.0
+50			7.9	02.8
19			8.4	02.3
+50			8.0	02.7
20			7.4	03.3
+50			8.1	02.6
21			8.1	02.6
T.P.	10.23	913.19 413.41	7.70	902.96 403.18
+50			10.5	02.7
22			10.5	02.7
+50			10.1	03.1
23			9.4	03.9
+50			8.4	04.8
24			7.3	05.9
+50			6.2	07.0
25			6.4	06.8
+46	FL. S. End	12" C.M.	5.86	907.33
+52	shlder	Co. Ed. D.	3.0	910.2
+81	shlder		2.8	910.4
	FL. N. End	12" C.M.	5.60	907.6

Page 2 Transit Obs. Line Ditch #7
 Date 11-16-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
		+	H.		-	Elev		
			921.19					
E & W. Fence xs ditch	34° 34'		375.0			7.7		913.50
H. A #4 H.I. 920.44	29° 12'		577.0					
T. P.		4.63	920.44	5.38	915.81			
± ditch 4' wide	191° 40'		94.0			7.0		913.4
So. End 36" C.M. Culv.	90° 58'		28.0			7.3		913.1
No. " " " "	67° 10'		42.0			6.9		913.5
± ditch 3' wide ditch 1.5 deep	45° 42'		102.0					
T. P.		5.74	921.09	5.09	915.35			
H. A #5 H.I. 921.09	34° 00'		555.0					
A #10	283° 05'		450.0			2.59		918.50
± ditch 3' wide 2' deep ^{beg. of} brush	59° 41'		50.0			6.5		914.6
T. P.		3.88	923.30	1.67	919.42			
A #6 H.I. 923.30	30° 20'		439.0					
± ditch 4' wide 4' deep	178° 03'		112.0			8.3		915.0
E & W. Fence xs ditch 3' wide	37° 48'		381.0			7.6		915.7
N. W Cor. Sec. #4	288° 35'		102.40			4.29	B.M.	918.09

FROM #4

Page 3 Transit Obs. Line Ditch #7
 Date 11-16-39 Rec.

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		$\pm$ H-1.	H-1. 923.30		-	Elev.			
# ditch 3' wide	35° 05'		500.0						
T.P.		4.58	923.23		4.65	918.65			
At Δ #7	28° 10'		623.0						
So. End of 36' C.M. Culv. } E & W. Trail	118° 42'		50.0			ground	9.1		914.2
No. " " " " " " }	96° 40'		52.0				7.7		915.6
							9.0		914.3
# ditch 3' wide 2' deep	32° 43'		308.0				6.8		916.5
E & W. Fence xs ditch ^{Ditch 1' deep} End of brush	30° 31'		478.0				7.5		915.8
		3.30	921.27		5.26	917.97			
At Δ #8	26° 26'		589.0						
So. End 9" Vit Culv.	36° 48'		210.0				4.9		916.4
No. " " " " " " " " " " " "	35° 55'		223.0				4.9		916.4
Fe. xs ditch									
So. End Plant Xing 3' wide	35° 51'		224.0				4.8		916.5
No. " " " " " " " " " " " "	35° 32'		238.0						
E & W. Fence xs ditch 1' wide 1' deep	32° 03'		426.0				4.7		916.6
End of ditch	30° 18'		608.0				5.7		915.6
T.P.		3.82	924.99		0.15	921.12			

Page 4 Transit Obs. Line Ditch #7
 Date 11-16-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
		+	H ₁	-		ELEV.		
			924.24					
At Δ #9	232° 31'		439.0					
N.W. Cor. Sec. #4	247° 45' ?		1276					O.K.
T.P.		3.55	924.32	3.17		920.77		
T.P.		4.34	923.56.	5.10		919.22		
B.M. Top Mont. N.W. Cor. Sec. 4				5.44		918.12	(918.42)	
of Δ #10								

Page 5 Transit Obs. Hoker Line Ditch # 7
 Date 11-17-22 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
				H.I. 921.35 Corr. with Level					
at Δ #10 on sec. Line								419 Hub-	917.21
N.W. Cor. Sec. 4	0°00'		1068.2						
E. End 15" C.M.	221°46'		5.0						
W. End 15" C.M. Sec. Ditch	268°51'		28.0			Ground	6.3 5.7 6.4		915.0 915.6 914.9
N.E. Cor. Ho. 20' N. and S.	267°33'		148.0						
S.E. Cor. Ho. 20' E. and W.	260°02'		150.0						
			H.I. 921.87 922.14		922.00+				
at Δ #11	282°17'		580.0				3.72	451	917.49 917.49
Δ #10			580'				4.66		917.34 917.21
No. & So. Fence XS 6' wide 4' deep	143°07'		106.0				6.6		915.4
Int. branch ditch so.	139°44'		108.0				6.5		915.5
" " "	108°25'		322.0				7.0		915.0
£ " " 2' Wide	166°21'		300.0				6.6		915.4
£ " " 2' "	144°02'		520.0				6.0		916.0
Flow Line Oil Drum Culv. 2 Hot Water Tanks in Clod Ent.	146°47'		97.0				9.1		912.9
Plants on W. End,	153°42'		92.0				9.0		913.0

Page 6 Transit Obs. Line Ditch # 7
 Date 11-17-39 Rec.

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		H ₁ 922.0							
No. & So. Fence XS ditch 4' wide 4' deep	236° 04'		230.0				11.0		911.0
Δ in ditch	237° 39'		255.0						
⊥ ditch 4' wide 5' deep	243° 21'		330.0						
	246° 05'		369.0				7.6		914.4
		H ₁ ^{917.23} 917.57			917.65				
at Δ [#] 12	267° 23'		530.0				8.80	1453	^{913.12} 913.20
Δ [#] 11							0.08		917.49
E. end of 18" vit culv.	145° 13'		149.0				7.2		910.4
W. " " " "	148° 49'		133.0				7.2		910.4
⊥ ditch 3' wide 2' deep	168° 58'		78.0				7.2		910.4
No. & So. Fence XS ditch 3' wide 2' deep	246° 48'		96.0				7.8		909.8
⊥ ditch 3' wide	269° 25'		168.0				8.6		909.0
No. & So. Fence XS ditch 3' wide	276° 57'		212.0				8.3		909.3
" " " " " "	282° 51'		285.0				8.8		908.8

Page 7 Transit Obs. Line Ditch #7
 Date 11-17-37 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		917.65 H.I. 913.40 913.62	913.51						
at Δ #13	301° 59'		630.0				8.8	+4.65	908.86 908.97
Δ #12							0.28		913.12
No. & So. Fence xs ditch 3' wide	164° 20'		159				5.4		908.1
E. & W. Fence xs ditch	190° 12'		96				5.9		907.6
No. & So. Fence xs ditch	288° 45'		97				6.3		907.2
Angle in ditch	171° 38'		132						
Φ ditch 3' wide 2' deep	310° 40'		232				6.8		906.7
No. & So. Fence xs ditch	312° 46'		240						
Int. branch ditch so 3' wide 2' deep	312° 52'		265				6.8		906.7
" " " " " "	239° 58'		229				5.7		907.8
beg. heavy brush & trees									
Φ ditch 3' wide 3' deep	315° 40'		280				8.1		905.4
Φ " 4' " 3' "	335° 12'		462				7.8		905.7
		H.I. 912.42 912.52	912.47						
at Δ #14	344° 23'		512				5.51	+4.52	907.95 908.00
Δ #13							3.56		908.86
Int. of ditch E. & W.									
See Co. Rd. "D" proposed Channel Change.	339° 53'		170				7.4		905.1

Page. 8.....Transit.....Obs.....Line. Ditch #7
 Date. 11-17-39.....Rec.....

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		912.97							
	H.I.	911.43 911.68	911.66						
at A #15 = Sta 8100 Co. Rd. "D"	340° 04'		177				4.71	13.92	907.74 907.76
Δ #14							3.68		907.95
N. 1/4 Cor. Sec. 5	270° 50'		800'						
Δ at End of Proposed Channel Change	0° 50'		158.				7.5		905.0
Angle in ditch 3' wide 4' deep	14° 11'		206.				7.7		904.8
" " " " "	19° 48'		242.				7.5		905.0
" " " " 3' "	27° 34'		265.				7.5		905.0
" " " " 4' " 4' "	43° 58'		353.				6.1		906.4
Δ ditch 4' " 4' "	47° 53'		383.				7.3		905.2
Angle in ditch 4' wide 4' deep	56° 33'		462.				7.0		905.5
	H.I.	912.62 912.52	912.92	Checks with Level.					
at A #16	63° 08'		622.				3.53	14.37	908.03 908.13
Δ #15							4.58		907.74
Angle in ditch 4' wide 3' deep	249° 19'		135.				7.4		905.0
Δ ditch 4' wide 3' "	272° 59'		121.				7.8		904.6
So. End of plank bridge	304° 03'		127						

Page 9 Transit Ditch # 7 Obs. 7 Line 7
 Date 11-17-39 Rec.

OBJECT	AZIMUTH	STADIA #1 912.42	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
E. & W. Fence XS ditch									
No. End of Plank bridge	309° 57'		133.						
± ditch 4' wide 3' deep	336° 07'		180						
± " 4' " 3' "	356° 09'		262				7.7		904.7
± Bridge 12' long 7' wide (Plank)			337				7.6		904.8
		915.11							
	H.I. 912.26		918.19						
at Δ # 17	50° 13'		417.				3.69	+ 4.53	908.66 904.13
Δ # 16							5.08		908.03
± ditch 3' wide 3' deep	291° 03'		286.				8.2		905.0
± " 3' " 3' "	298° 44'		284.						
± " 3' " 3' "	300° 21'		268.				8.5		904.7
± " 3' " 3' "	329° 43'		106.				8.6		904.6
± " 3' " 3' "	339° 45'		93.						
± " 3' " 3' "	352° 50'		112.				8.1		905.1
Int. of branch ditch West									
So. End 15" C.M. Culv. Flow line	14° 30'		198.				8.2		905.0
No. End 15" C.M. Culv. Flow line	17° 23'		218				8.1		905.1
± branch ditch 2' wide 2' deep	321° 10'		254				6.6		906.6

Page. 10 Transit. Obs. Line. Ditch #7
 Date. 11-17-39 Rec.

OBJECT	AZIMUTH	STADIA #11 913.19	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
E ditch 3' wide 3' deep	27° 19'		317.				8.0		905.2
" " 3' " 3' "	30° 48'		363.				8.1		905.1
" " 3' " 3' "	32° 45'		383.				8.2		905.0
No. W. Cor. Sec. #4	121° 10'								
		H/L ^{913.54} 913.77 913.62							
at A #18	49° 06'		478.				4.10	146.2	^{909.00} 907.09
A #17							9.88		908.66
E ditch 3' wide 3' deep	10° 10'		132.				8.6		905.0
" " 3' " 3' "	20° 57'		195.						
SE End of 3' x 15' plank bridge	23° 09'		253.						
No. " " " " "	23° 09'		268.						
End of Brush + Trees									
Int of ditch 2' wide 2' deep	23° 09'		275.				7.7		905.9
E branch ditch W.	346° 36'		262.				6.0		907.6
" " " E.	45° 28'		358.				5.4		908.2
E ditch 3' wide 3' deep	24° 13'		342.				8.1		905.5
Angle in ditch	25° 40'		381						

Page. 11 Transit. Obs. Line. Ditch #7
 Date. 11-17-39 Rec.

OBJECT	AZIMUTH	STADIA H.I.	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
		913.62						
± ditch 3' wide 3' deep	28° 21'		400.			8.0		905.6
± " " "	33° 28'		435.			8.0		905.6
Angle in ditch 3' wide 3' deep	35° 26'		453					
± ditch 3' wide 2.5 deep	36° 23'		478			8.1		905.5
No. W. Cor Sec. #4	146° 21'							
		H.I. 913.46 913.87	913.77					
at Δ #19	27° 49'		519.			4.22	14.99	907.28 909.40
Δ #18						4.66		909.00
± ditch 3' wide 2.5 deep	133° 30'		86.			8.2		905.6
± " 3' " 3' "	101° 41'		86.			8.2		905.6
± " " "	68° 06'		101.			8.0		905.8
± " 2' " 1.5 "	43° 42'		123.			8.1		905.7
± " " "	26° 02'		158.			8.0		905.8
E. & W. Fence x's ditch	21° 04'		175					
± V. ditch 2' deep	13° 04'		207.			8.2		905.6
± V. " 2 "	2° 43'		268.			7.5		906.3

Page. 13 Transit. Obs. Line. Ditch # 7
 Date. 11-19-39 Rec.

OBJECT	AZIMUTH	STADIA 913.77	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
± V ditch 2' deep	344° 16'		484.				7.8		906.0
± V " 0.5 "	346° 12'		610.				7.4		906.4
Angle in ditch 3' wide 1' deep	345° 46'		643.				7.4		906.4
		912.06 H.I. 712.84	712.94						
at Δ # 20	314° 55'		753				5.38	14.67	908.27 908.27
Δ # 19							1.53		909.38
± ditch 2' wide 2' deep	48° 17'		164.				6.7		906.2
± " " "	355° 49'		120.				6.6		906.3
± " " "	327° 35'		147.				6.1		906.8
± " " "	321° 44'		174				—		
± " " "	313° 36'		235.				6.4		906.5
± " 2' " 1.5 "	311° 02'		267.				6.4		906.5
± " " "	311° 15'		295.				6.2		906.7
N. & S. Fence X S ditch	311° 54'		339.				5.8		907.1
± ditch 2' wide 1.5 "	311° 43'		470.				6.3		906.6
± " " 1' "	310° 14'		558.				5.7		907.2

Page 13 Transit..... Obs..... Line Ditch #7Date 11-18-39 Rec.....

OBJECT	AZIMUTH	STADIA #1 912.94	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
# ditch 2' wide 1' deep	310° 06'		570.						
# " " "	308° 28'		590.				5.9		907.0
# " " "	299° 12'		768.				5.8		907.1
Angle in ditch	298° 51'		778.						
# ditch 2' wide 1' deep	300° 03'		788.				5.6		907.3
# " " "	309° 11'		860.				5.6		907.3
			744.46 H.I. = 944.46 913.31						
at Δ #21	309° 43'		804.				4.14	14.66	908.65 908.90
Δ #20							4.89		908.27
N. & S. Fence x ditch (check shot)	127° 10'		368.						
# ditch 2' wide 1' deep (" ")	126° 53'		334.						
# " 2' wide 1' deep	319° 34'		73.				6.2		907.1
E. & W. Fence x S. ditch (END of ditch)	15° 38'		240.				6.0		907.3
	15° 57'		245.				5.3		908.0
Toe of Slope	16° 54'		260.				5.4		907.9
# Rd. (Miss. St.)	17° 39'		279.				3.4		909.9

Page 15 Transit..... Obs. Anker Line. Ditch #7
Date Nov. 20, 1939 Rec. Clark

Page 17 Transit Obs. Line Ditch #7
 Date 11-2-0-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
\$ ditch 2' wide 3' deep	41° 09'	0.36				7.6		894.6
\$ " 2' " 3' "	288° 50'	0.21				7.4		894.8
Fence cor. going West	299° 15'	0.33				5.0		897.2
\$ ditch 2' wide 3' deep	253° 11'	0.57				7.8		894.4
Fence cor. going West	251° 05'	0.66						
\$ ditch 4' wide 2' deep	242° 47'	1.34				7.9		894.3
\$ " 5' " 3' "	240° 10'	1.76				8.4		893.8
\$ " 5' " 3' "	235° 20'	2.15				8.4		893.8
At Δ #5	H.I. 4.36	902.45 902.48			H.I. = 902.48			898.15
To Δ #4	52° 31'	3.22				5.22		897.98
Δ #6	225° 29'	5.30				8.71		892.77
No. End Flowline 42" C.M. Col. v.	203° 11'	1.20				10.87 10.00		891.5
So. " " " 42" " " "	215° 04'	1.44				11.2		891.3
beg. of brush + Trees								
\$ ditch 3' wide 2' deep	218° 42'	1.85				10.8		891.7
\$ " 3' " 2' deep	213° 27'	2.28				11.0		891.3

Page 19.....Transit.....Obs.....Line. Ditch #7
 Date 11-21-39.....Rec.....

OBJECT	H.I. 895.22	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
					Up+	No. of Int. Down- or Angle	Rod Equiv.			
Curve of ditch	4' wide 3' deep	153° 37'	0.47					9.3		885.9
" " " "		198° 25'	0.70					9.5		885.7
End of Curve		221° 25'	0.92					10.2		885.0
E. end of 36" C.M. Culv		240° 32'	1.38					12.28		882.9
W. " " " "		244° 03'	1.59					12.50		882.7
Entrance		263° 57'	1.46							
Edge of B.T. Entrance		273° 57'	1.70							
Centerville Rd.		295° 14'	1.59							
Int. of branch Ditch #7 So.		249° 43'	1.98					12.3		882.9
End of Conc. slab Culv		262° 12'	2.06					12.58		882.6
E. end of Barrel Culv		254° 08'	2.14					12.32		882.9

Floor of Culv is cracked and is undermined about 1' below floor. West end of floor missing
 For details of Culv. see 1939 Drainage Survey of Ditch #7

From end of barrel to End of Wing Walls, Walls of Culv also cracked and N.W. wing wall ready to fall

N. end of old plank Xing #7 ditch So.	241° 41'	2.14					11.3		883.9
So. " " " " #7 " "	239° 28'	2.23					11.5		883.7
Centerville Rd. B.T. 18' wide	257° 04'	2.25					0.90		894.3
" " " " B.T. 18' wide	234° 04'	3.90					0.40		894.8

Page... 22... Transit..... Obs..... Line *Ditch #7*Date *11-2-1-3.7* Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
	<i>H.I. 434</i>								<i>895.89</i> <i>895.86</i> } <i>H.I. = 895.88</i>
<i>At Δ#8</i>									<i>891.52</i> <i>891.53</i>
<i>To Δ#7</i>	<i>88°20'</i>	<i>3.51</i>					<i>5.25</i>		<i>890.61</i>
<i>Δ#9</i>	<i>302°17'</i>	<i>0.98</i>					<i>8.43</i>		<i>887.45</i>
<i>F. line W. End of Barrel / Cona Culv</i>	<i>105°23'</i>	<i>1.23</i>					<i>13.50</i>		<i>882.4</i>
<i>F " at end of wing wall west</i>	<i>103°52'</i>	<i>1.18</i>					<i>15.0</i>		<i>880.9</i>
<i>Azimuth on Tower.</i>	<i>302°17'</i>								
	<i>H.I. 441</i>								<i>891.84</i> <i>891.86</i> } <i>H.I. = 891.85</i>
<i>At Δ#9</i>									<i>887.44</i> <i>887.45</i>
<i>To Δ#8</i>	<i>122°17'</i>	<i>1/2</i> <i>0.49</i>					<i>0.32</i>		<i>891.52</i>
<i>Δ#10</i>	<i>302°17'</i>	<i>0.72</i>					<i>8.52</i>		<i>883.33</i>
<i>Beg. Curve</i>	<i>112°08'</i>	<i>1.91</i>					<i>11.4</i>		<i>880.5</i>
<i>IN. CURVE</i>	<i>108°44'</i>	<i>1.70</i>					<i>11.9</i>		<i>880.0</i>
<i>IN " 3' wide</i>	<i>107°32'</i>	<i>1.46</i>					<i>12.4</i>		<i>879.5</i>
<i>IN " 6' deep</i>	<i>81°01'</i>	<i>1.24</i>					<i>13.2</i>		<i>878.7</i>
<i>" "</i>	<i>62°05'</i>	<i>1.07</i>					<i>13.5</i>		<i>878.4</i>
<i>" "</i>	<i>31°29'</i>	<i>0.80</i>					<i>14.0</i>		<i>877.9</i>

Page 21..... Transit..... Obs..... Line. Ditch # 7

Date. 11-21-39..... Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
In Curve of ditch 3' wide 6' deep	04° 07'	0.82				14.2		877.7
" " " "	338° 03'	1.00				14.5		877.4
Check on Tower	302° 17'							
At Δ # 10	41° 46'							
To Δ # 9	122° 17'	0.72				0.55		887.44
Δ # 11	290° 19'	3.03				8.72		879.27
End of curve in ditch 10' wide 4' deep	317° 10'	1.07				10.5		877.5
Check on Tower	302° 17'							
E. end of 42" C.M. culv. F. 1 in x	294° 55'	2.78				11.76		876.2
W " " 42" " "	293° 42'	3.05				12.06		875.9
at Δ # 11								
To Δ # 10	110° 19'	1.51				0.49		883.33
Δ # 1 Ditch # 16	357° 57'	2.99				5.47		878.35
Δ ditch 7 wide 2' deep	293° 05'	0.98				8.5		875.3
Int. with ditch # 16 + Fence	284° 48'	2.33				9.5		874.3

Page 22 Transit..... Obs. Acker..... Line Ditch #7
 Date 11-21-39 Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
At Δ #100									889.61
To Δ #7	22° 22'	4.11					3.90		890.61
Δ #101	121° 01'	3.40	6.80				1.00		893.52
Beg. Curve	3' wide 3' deep	342° 08'	1.56				10.3		884.2
Ctr. "	"	331° 49'	1.08				9.7		884.8
End "	"	317° 15'	0.53				9.3		885.2
Beg. "	"	192° 37'	0.53				8.3		886.2
Ctr. "	3' "	181° 52'	0.76				8.0		886.5
End "	"	171° 15'	1.05						
$\frac{1}{2}$ Ditch Fence RUNS WEST		167° 46'	1.18				7.8		886.7
$\frac{1}{2}$ Ditch Fence RUNS E. & No.		163° 03'	1.44				7.4		887.1
branch ditch going So.	1' wide 1' deep	165° 29'	1.60				6.6		887.9
End branch "	"	172° 25'	3.78				4.8		889.7
beg. Curve ditch	2' wide 1' deep	151° 00'	1.90				7.3		887.2
Ctr. "	"	147° 18'	1.07	2.14					
End Curve "	"	142° 02'	1.28	2.56			7.3		887.2

Page 23 Transit Obs. Line Ditch #7
 Date 11-21-39 Rec.

OBJECT	H.I. 894.52 AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
End of defined ditch beg of hand ditch ^{0.5 deep 1.0 wide}	121° 44'	3.29					6.8		887.7
End of ditch	110° 15'	4.81					5.6		888.9
	H.I. 860	898.11 898.12	} H.I. = 898.12						
at Δ #101									893.52
To A #100	301° 01'	6.79					8.50		889.61
A # 102	107° 44'	4.02					1.38		896.4
W. End Branch Ditch	260° 06'	2.35					7.5		890.6
Beg. ditch ^{2' wide}	347° 33'	1.23					7.7		890.4
Beg. Curve ^{2' deep}	88° 15'	1.08					6.2		891.9
Int. branch ditch going West	98° 07'	1.38					6.4		891.7
End of Curve	96° 29'	1.62					6.1		892.0
	H.I. 867	901.452 901.31	} 901.38						
at Δ #102									896.71 896.44
To A #101	287° 44'	4.00					7.83		893.52
A #103	95° 58'	3.90	7.80				0.60		900.78
Beg. Curve	352° 06'	1.00					8.6		892.8
Ctr "	8° 26'	1.00							

Page 23 Transit Obs. Line Ditch #7
 Date 11-21-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
W. end of 24" C.M. Culv.	9° 32'	0.97					8.86		892.54
E. " " 24" " "	19° 28'	0.86					8.56		892.84
Beg. Curve ditch 2' wide / deep	58° 27'	0.74					8.2		893.2
Ctr. " " " "	80° 13'	0.88							
End " " " "	90° 26'	1.10					7.9		893.5
Beg " " " "	101° 49'	1.71					7.6		893.8
Ctr. " " 2' " 1' " "	104° 16'	1.96							
End " " " "	102° 45'	2.24					7.3		894.1
End of ditch	100° 56'	3.10					6.8		894.6
End of 12" C.M. Culv. Runs No. E. = #1	99° 20'	4.18					6.78		894.6
" " 12" " " " East = #2	99° 32'	4.20					6.72		894.7
" " 12" " " " So. E. = #3	100° 02'	4.18					6.55		894.9
No. & So. Fence	99° 50'	4.13					6.1		895.3
	Ht. 466								
gt A #103									900.70
To A #102									900.78
Δ #104	47° 23'	156	3.12				2.56		896.71
							0.81		904.55

905.27
 905.40 } 905.36

Page 24 Transit Obs. Anker Line Ditch 7

Date. *Nov. 21, 1939* Rec. *Anchor*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	H.L. 4.54		909.07 } 909.03 }	H.I. = 909.06				
At Δ #104								904.52 904.55
To Δ #103	227°23'	3.10				8.33		900.70
Δ #105	59°29'	1/2 178'	3.56			0.66		908.40
	H.L.	9.68	913.05 }	913.07				908.39 908.40
At Δ #105								
To Δ #104	239°29'	3.56				8.53		904.52
Δ #106	36°43'	6.37				2.93		910.14
	H.I. 5.49		915.63 }	915.59 }	915.61			
At Δ #106								910.14 ✓
To Δ #105	216°43'	6.38				7.20		908.39 908.75 = H.M.
Mount. S. 1/4 Cor Sec. 32	358°33'	9.07				6.60		909.01

Page 2 Transit.....Obs.....Line Ditch #16Date 11-23-39 Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Int. hand ditch #16	229° 19'	2.10					9.4		872.3
So. End plank xing 15' Wide	278° 41'	0.65					8.8		872.9
No. " " ditch 6' wide 4' deep	288° 50'	0.62					8.1		873.6
& ditch 12' wide 2' deep	11° 21'	1.77					8.6		873.1
Nat. ground	25° 03'	3.11					9.1		872.6
& ditch water 1.7 deep	21° 39'	3.60					10.7		871.0
	H.I. 450								
									884.50 884.52 } H.I. = 884.51
at A # 3									879.93 879.94
to A # 2	215° 11'	7.10					7.68		876.82
& Ditch 4' wide 3' Deep	241° 50'	2.17					12.0		872.5
No. E. Cor. Sec. # 6	189° 52'								
Bag. Curve 4' Wide 3' deep	281° 42'	1.20					11.2		873.3
Cts. " 6' " 1.5 4.3 high	298° 02'	1.28					11.2		873.3
So. End oval conc. Culv. 3.9 wide	309° 52'	1.54					11.89		872.6
& R.R. tracks	312° 45'	1.73					1.4		883.1
No. End oval conc. Culv. 4.3 high 3.9 wide	314° 29'	1.90					12.15		872.4

Page 3 Transit Obs. Line Ditch #16Date 11-23-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
Top of spillway End of ditch	313° 28'	1.97					10.29		874.2 ✓
Elev. of Twin Lake							14.9		869.6 ✓
± R.R. Track	267° 52'	3.68							
	H. 454	^{879.53} 879.51							H.I. = 879.52
At Δ #4									874.98 874.97
To Δ #11 Ditch #7	64° 20'	6.62					0.26		879.27
To Δ #1 Ditch #16	42° 23'	7.35							878.35
Δ #5	204° 52'	3.40					3.77		875.15
Δ #4A	349° 02'	6.68					3.52		876.00
± ditch 4' wide 3' deep	72° 55'	0.83					6.1		873.4
N. End 36" C.M. Culv. F.I.	174° 45'	0.71					7.07		872.4
So. " 36" C.M. " F.I.	187° 33'	0.95					7.08		872.4
So. End "about 36" Home Made Tin Culv. Branch ditch #1	282° 14'	1.86					6.9		872.6
N. End of about 36" Home Made Tin Culv.	288° 13'	1.90					6.8		872.7
± branch ditch #1 3' wide 4' deep	319° 53'	2.88					7.0		872.5
N.E. Cor. Sec. #6	52° 31'								
± branch ditch #1	337° 40'	5.08					7.6		871.9

on
CN
DP

Page 4 Transit..... Obs. K. Fisher Line Ditch #16
 Date 11-39 Rec. L. Clark

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	#1 417		^{880.18} 880.17	H.I. = 880.17				
At $\Delta^{\#} 4A$								876.00
To $\Delta^{\#} 4$	169° 02'	667				52.0		874.98
N.E. Cor Sec. 6	80° 37'							
Branch Ditch #1 4' wide	318° 18'	1.07				7.9		872.3
" " " " 4' deep	344° 09'	2.85				7.8		872.4
" " " " 4' "	350° 24'	4.92				7.1		873.1
End of ditch	350° 26'	4.98				4.5		875.7
R.R. Track	351° 27'	5.54						
	H.I. 4.55		^{880.10} 880.28	H.I. = 880.29				
at $\Delta^{\#} 5$								875.74
To $\Delta^{\#} 4$	24° 52'	3.40				5.30		874.98
$\Delta^{\#} 6$	220° 54'	5.80				6.12		874.17
End of 36" C.M. Culv F.I.	357° 00'	0.54				7.82		872.5
" " 36" C.M. " F.I.	309° 31'	0.39				8.1		872.2
Angle in branch Ditch #1	324° 00'	0.56				8.0		872.3

Page... 5... Transit... Obs... Line... Ditch # 16

Date... 11... 24... 39... Rec...

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Int. of branch ditch #1	302° 13'	0.41					7.9		872.4
End of 48" C.M. Culv. F.I.	274° 23'	0.48					8.62		871.7
" " 48" C.M. " F.I.	264° 06'	0.58					8.80		871.5
¢ ditch 4' wide 3' deep	234° 54'	1.67					8.2		872.1
¢ " 4' " 3' "	227° 28'	3.50					8.4		871.9
¢ " Beg. Curve. " "	226° 19'	4.52					8.6		871.7
	H.I. 461								
at Δ #6									874.16 874.17
to Δ #5	100° 54'	5.51					3.02		875.74
Δ #7	268° 42'	5.58					2.92		875.87
ctr. of Curve 7' wide 3' deep	4° 53'	0.70					7.3		871.5 ✓
End " 7' " 3' "	349° 04'	0.47					7.1		871.7
End of 48" C.M. Culv. F.I.	291° 56'	0.39					8.35		870.5
" " 48" C.M. " F.I.	270° 53'	0.51					8.50		870.3
ctr. of Curve 7' wide 3' deep	262° 42'	0.73					7.0		871.8
End of Curve 7' " 3' "	260° 40'	1.19					6.9		871.9
¢ " ditch 4' " 5' "	266° 37'	2.58					6.8		872.0

Approx. Beg. last spring levels.

Page 6 Transit Obs. Line Ditch # 16
 Date 11-24-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
☞ ditch 4' wide 5' deep	267° 28'	4.10				6.1		872.7
at Δ [#] 7	H. 466	880.51 880.41			H.I. = 880.50			875.84 875.85
to Δ [#] 6	89° 42'	5.80				6.32		874.16
Δ [#] 8	240° 26'	5.62				3.42		877.08
Δ [#] 7A	335° 30'	4.24				4.88		875.62
☞ ditch 3' wide 5' deep	175° 53'	0.17				8.2		872.3
☞ " 3' " 4' "	262° 48'	15.2				8.0		872.5
beg of Curve	265° 21'	3.06				8.5		872.0
ctr " "	265° 42'	3.39				8.5		872.0
Int. of branch ditch #2	266° 01'	3.74				8.7		871.8
☞ branch ditch #2 5' wide 5' deep	290° 13'	4.05				7.8		870.7
	H. 497	881.54 881.55			H.I. = 881.55			
At Δ [#] 8								877.08
to Δ [#] 7	60° 26'	4.62				5.10		875.84
Δ [#] 9	172° 00'	3.46				1.74		879.81
☞ Ditch 5' Bottom 5' Deep	170° 24'	1.83				9.7		871.9

Page 7 Transit.....Obs.....Line Ditch #16
 Date 11-24-39 Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
				Down-	or Angle	Equiv.			
Boq. Curve 5' wide 5' deep	350°40'	0.86					9.3		872.3
ON CURVE	322°36'	0.64					9.1		872.5
" "	269°18'	0.64					9.2		872.4
" "	241°57'	0.72					9.2		872.4
END "	209°16'	0.93					9.6		872.0
At Δ #7A	H.I. 4.58	^{880.18} 880.20	H.I. = 880.17						^{875.61} 875.62
To Δ #7B	155°30'	4.24					4.34		875.84
Δ #7B	354°20'	7.15					5.61		874.58
£ Branch Ditch #2	5' wide 5' deep	266°37'	2.12			Water	8.36		871.84
							9.4		870.8
N.E. Cor sec. 6	62°45'								
£ Branch Ditch #2	5' wide 4' deep	314°15'	3.04				9.6		870.6
£ " "	" "	329°34'	4.42				9.3		870.9
Transit in soft + root	H.I. 4.38	^{878.93} 878.97	H.I. = 878.95						
at A #7.B.									^{874.56} 874.58
To A #7A		7.14					3.32		875.61
Δ #7C	352°34'	6.88					0.71		878.24

Page... 8 ... Transit... Obs... Line... *Ditch #14*Date... *11-24-77* ... Rec...

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>8' wide</i> 4 branch ditch #2 2' deep	250° 41'	<i>?</i> 0.75					8.3		870.7
No. E. Cor. Sec. #6	78° 08'								
<i>8' wide</i> 4 branch ditch #2 3' deep	324° 53'	2.96					8.3		870.7
	H.I. 891	<i>882.14</i> <i>882.15</i>							
		H.I. = 882.15							
at Δ#7C.									878.24
To Δ#7B	172° 34'	6.88					7.58		874.56
<i>8' wide</i> 4 ditch 2' deep	205° 15'	2.18					11.3		870.9
<i>10' wide</i> 4 " 3' deep	259° 32'	1.01					11.5		870.7
End of ditch	263° 11'	1.01					9.9		872.3
4 R.R. Track at end of bridge	264° 05'	4.34							
4 R.R. " " " " "	333° 43'	<i>0.14</i>							
No. E. Cor. Sec. #6	93° 45'	6.14							
	H.I. 475	<i>884.59</i> <i>884.60</i>							
		H.I. = 884.59							
At Δ#9									879.81
To Δ#8	352° 00'	3.46					7.52		877.08
Δ#10	140° 03'	4.27					5.18		877.41
Ctr. sec. 6	171° 20'	<i>1/2</i> 5.64 7.28							

Page... 9 ... Transit. Obs. Anker ... Line. Ditch #16Date... 11-24-39 ... Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
H.I. 884.59								
End of 30" C.M. Culv. F.I.	338° 36'	1.56				12.88		871.7
" " 30" C.M. " F.I.	339° 35'	1.56				12.88		871.7
" " 30" C.M. " F.I.	340° 21'	1.37				12.92		871.7
" " 30" C.M. " F.I.	339° 13'	1.37				12.92		871.7
± ditch 3' wide 6' deep	69° 20'	0.45				11.9		872.7
beg of Curve	121° 53'	1.43				12.1		872.5
	41. 277							
at Δ #10								877.37
To Δ #9	320° 03'	4.26				4.53		877.41
Δ #11	139° 25'	3.63				4.58		877.78
End of Curve 3' wide 8' deep	331° 02'	2.35				12.8		871.6
End of Curve " "	332° 10'	1.87				13.0		871.4
End of 42" Conc. Culv.	336° 34'	0.88				ground 11.2		873.2
" " 42" " "	115° 20'	0.85				F.I. 13.28		871.1
						ground 11.6		872.8
						F.I. 13.40		871.0
At Δ #11								877.75
To Δ #10	319° 25'	3.62				5.05		877.78

H.I. = 884.36

H.I. = 884.46

Page... 10... Transit..... Obs.. *Anker*..... Line... *Ditch #14*.....
 Date... *Nov. 25, 1929*..... Rec.. *Clark*.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
$\Delta^{\#} 12$	145° 35'	4.56					5.31		879.2
beg. Curve 3' wide 5' deep	331° 10'	2.18					12.7		871.8
ON " " 6' "	339° 31'	1.34					12.9		871.6
" " " 7' "	7° 02'	0.62					12.5		872.0
" " " 7' "	103° 48'	0.73					13.0		871.5
" " " 7' "	127° 20'	1.64					13.2		871.3
End " " 7' "	134° 49'	2.64					13.0		871.5
$H.I. = 884.46$ $H.I. = 883.79$ $H.I. = 883.79$									
at $\Delta^{\#} 12$									879.15
To $\Delta^{\#} 11$	325° 35'	4.56					4.02		879.76
$\Delta^{\#} 13$	189° 45'	4.53					3.72		880.07
End Hand ditch Drains Low Point	278° 56'	1.38					7.1		876.7
End 12" C.M. Culv F.I.	291° 40'	1.18					7.30		876.5
" 15" C.M. " F.I.	310° 44'	1.02					7.86		875.9
Int. Hand ditch #14	349° 41'	0.91					11.8		872.0
Water Depth Fence	4° 34'	1.01							
beg. Curve 3' wide 8' deep	96° 03'	0.45					12.7		871.1

Page. 12 Transit Obs. Line. Ditch #16
 Date. 11-25-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod Equiv.			
				Down-	or Angle				
at Δ #14	H.I. - 483		$\left. \begin{matrix} 880.77 \\ 880.79 \end{matrix} \right\}$	H.I. = 880.78					$\left. \begin{matrix} 875.95 \\ 875.96 \end{matrix} \right\}$
To Δ #13	295° 43'	5.92					0.70		880.07
Δ #15	115° 18'	8.23					6.58		879.20
End of Curve	290° 23'	1.78					11.8		869.0
to ditch	151° 12'	0.23					12.0		868.8
" "	119° 01'	2.12					12.2		868.6
Begin of 36" Conc. Culv. F.I.	117° 23'	3.72					12.30		868.5
	H.I. 472		$\left. \begin{matrix} 878.92 \\ 878.91 \end{matrix} \right\}$	H.I. = 878.97					$\left. \begin{matrix} 879.25 \\ 879.20 \end{matrix} \right\}$
at Δ #15									
To Δ #14	295° 18'	8.20					3.06		875.95
Δ #16	118° 50'	1.62				Flow Line Culv Top 80 ft Spk	11.1		867.86
End of 36" Conc. Culv. F.I.	293° 34'	4.30					10.58		868.4
to ditch	292° 38'	2.75					10.6		868.4
begin Curve	290° 13'	1.36					10.7		868.3
on "	279° 41'	0.50					10.9		868.1
" "	156° 33'	0.29					10.6		868.4

Page 13 Transit Obs. Line. *Ditch #16*Date *11-25-39* Rec.

#	OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM						
					Up+	No. of Int.	Rod									
					Down-	or Angle	Equiv.									
<i>H.I. 878.97</i>																
<i>At Δ[#]15</i>																
	<i>Point of Reversed Curve</i>	<i>136° 35'</i>	<i>0.68</i>					<i>10.9</i>		<i>868.1</i>						
	<i>ON Curve</i>	<i>129° 13'</i>	<i>1.20</i>					<i>10.7</i>		<i>868.3</i>						
	<i>End</i>	<i>122° 52'</i>	<i>1.44</i>					<i>10.9</i>		<i>868.1</i>						
<i>At Δ[#]16</i>																
	<i>To Δ[#]15</i>	<i>299° 50'</i>	<i>E. of Culv. at End of Wing Walls</i>													
		<i>299° 50'</i>														
		<i>88° 17'</i>	<i>Azimuth of Culv.</i>													
		<i>218° 26'</i>	<i>Spike in Group of 6-12" Elm S.W. of W. Dept. Rd. & Centerville</i>													

*Δ[#]16 Bolt spk. at end of Culv.
between wing walls*

W. Dept. Rd.

spk. in Tree

Centerville Rd.

N

*Δ[#]16 Bolt spk. at End of Culv.
between wing walls*

W. Dept. Rd.

Spk. in Tree

Centerville Rd.

N

Page 14 Transit.....Obs.....Line Ditch #16
 Date 1-25-40 Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
At Δ #13									
To Δ #16	118° 50'	1.62							
Δ #17	146° 02'	3.12			+ 2° 42'				
At Δ #17									
To Δ #15	326° 02'	3.12			- 1° 25'				
Δ 18	179° 12'	5.48			+ 1° 47'				
At Δ #18									
To Δ #17	359° 17'	5.49			- 1° 23'				
Δ #19	127° 58'	4.19							

Page 1 Transit Obs. Taker Line Ditch #14
 Date Nov. 29, 1929 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
At 14-14 Cor between S. 14 Cor. sec. 29 and Ch. sec. 29. ^{SOUTH} NORTH =	0°00'								
$\Delta^{\#1}$	168°21'	Meas.	188.2						
At $\Delta^{\#1}$									
To 14-14 Cor.	348°21'	Meas.	188.2						
$\Delta^{\#2}$	88°48'	Meas.	53.5						
$\Delta^{\#3}$	88°48'								
	Hi. 5.29	H.I. = 899.50 Fixed with Level							
At $\Delta^{\#2}$									896.01
$\Delta^{\#3}$	88°48'	1.53					3.58		895.72
E. End 48' C.M. 1" x 6" Conc. Head wall	89°01'	0.13				Ground	8.9		890.4
						Flow Line	9.22		890.1
809. Curve E. 6' ditch	88°24'	0.99					8.2		891.1
	H.I. 9.95	900.65 900.67 H.I. = 900.65							
At $\Delta^{\#3}$									895.70
To $\Delta^{\#2}$	268°48'	1.84					6.62		894.01
$\Delta^{\#4}$	65°25'	3.23					3.93		896.72

Page... 2 ... Transit... .. Obs. *Notes* ... Line... *ditch #14* ...Date... *11-29-29* ... Rec. *Clark* ...

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>Ctr. Curve</i> <i>6' wide</i>	<i>282° 06'</i>	<i>0.16</i>					<i>9.6</i>		<i>891.0</i>
<i>End curve</i>	<i>62° 06'</i>	<i>0.58</i>					<i>9.6</i>		<i>891.0</i>
<i>£ ditch</i>	<i>66° 17'</i>	<i>1.69</i>							
	<i>(H.I. 467)</i>	<i>901.35</i> <i>901.39</i>	<i>H.I. = 901.37</i>						<i>896.70</i> <i>896.72</i>
<i>At Δ #4</i>									
<i>To Δ #3</i>	<i>245° 25'</i>	<i>3.22</i>					<i>5.65</i>		<i>895.70</i>
<i>Δ #5</i>	<i>72° 43'</i>	<i>3.13</i>					<i>2.41</i>		<i>898.96</i>
<i>£ ditch</i> <i>5' wide</i>	<i>234° 40'</i>	<i>0.48</i>					<i>10.2</i>		<i>891.2</i>
	<i>H.I. 471</i>	<i>902.60</i> <i>902.67</i>	<i>902.64</i>						<i>898.75</i> <i>898.76</i>
<i>At Δ #5</i>									
<i>To Δ #4</i>	<i>252° 43'</i>	<i>1.56</i>	<i>1/2</i>				<i>6.90</i>		<i>896.70</i>
<i>Δ #6</i>	<i>346° 54'</i>	<i>3.71</i>					<i>1.18</i>		<i>902.46</i>
<i>Δ #20</i>	<i>61° 04'</i>	<i>4.08</i>					<i>6.08</i>		<i>897.54</i>
<i>£ ditch</i> <i>4' Wide</i>	<i>252° 33'</i>	<i>2.11</i>					<i>12.3</i>		<i>891.3</i>
<i>lighting Rod on house</i>	<i>13° 06'</i>								
<i>branch ditch #5</i>	<i>317° 41'</i>								
<i>Int. of branch ditch #5</i>	<i>316° 55'</i>	<i>0.12</i>					<i>11.5</i>		<i>892.1</i>

Page 3 Transit Ditch #14 Obs. Ditch #14 Line Ditch #14
 Date 11-29-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
branch ditch #5	317° 47'	1.99		Down-	or Angle		2.8		895.8
Branch Ditch #5									
(H.I. 865)									
At Δ #6									902.43
									902.46
To Δ #5	146° 54'	3.71					8.12		898.93
Δ #7	301° 52'	6.19					0.49		906.59
At Δ #7 = sta 9400									906.57
									906.59
To Δ #6	121° 52'	6.19					8.79		902.93
Δ #8 = sta 19400	324° 40'						8.40		902.84
End of Old Culv. 12" C.M.	144° 31'	1.78					15.05		
Proposed Beg.									
OF New Culv.	144° 31'	1.28							
Azimuth of New Culv. =	324° 40'								
Δ 10' C.D.	324° 42'	2.27							
" " "	354° 26'	2.78							
" " "	291° 35'	2.42							
Monk 14-14 Cor	199° 08'								

M.C.S.

1000.0

Flow Line of

New Culv. = 19.32

891.92

Page... 1 ... Transit... Obs. *Huber* ... Line... *Ditch #4 - Branch #5*
 Date... *11-29-39* ... Rec. *Clark*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
	<i>H.I. 442</i>								
<i>At Δ #8</i>									<i>H.I. = 907.21</i>
									<i>Corr with Level</i>
<i>To Δ #7</i>									<i>902.79 with level</i>
									<i>902.84</i>
<i>Δ #9</i>									
<i>500 ft W Fence</i>									
<i>To Mont. Ctr. Sec. 22-</i>	<i>144° 40'</i>		<i>1000.0'</i>						
	<i>321° 49'</i>	<i>2.02</i>					<i>7.50</i>		<i>899.71</i>
<i>E. & W. Fe. Line</i>	<i>126° 14'</i>	<i>3.93</i>							
	<i>174° 27'</i>	<i>2.37</i>							
<i>End of Old Culv. 24" C.M.</i>	<i>324° 39'</i>	<i>0.86</i>					<i>10.9</i>		<i>896.31</i>
<i>End of Proposed New Culv.</i>	<i>324° 37'</i>	<i>0.99</i>					<i>Proposed New</i>		
							<i>Flow Line =</i>		<i>898.41</i>
	<i>H.I. 452</i>								
<i>At Δ #9</i>									<i>899.69</i>
									<i>899.71</i>
<i>To Δ #8</i>	<i>141° 47'</i>	<i>2.02</i>					<i>1.69</i>		<i>902.79</i>
<i>Δ #10</i>	<i>270° 04'</i>	<i>3.10</i>					<i>4.91</i>		<i>899.60</i>
<i>Δ #14</i>	<i>32° 36'</i>	<i>2.91</i>					<i>4.49</i>		<i>900.02</i>
<i>Int with Branch Ditch #5A,</i>	<i>357° 03'</i>	<i>0.32</i>					<i>7.8</i>		<i>896.71</i>
<i>ON Curve</i>	<i>22° 40'</i>	<i>0.74</i>							
<i>" "</i>	<i>29° 28'</i>	<i>1.50</i>							
<i>End "</i>	<i>28° 59'</i>	<i>2.23</i>							

Page 5 Transit Ditch #14 branch #5 Obs. 5 Line 5
 Date 12-1-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			904.51					
Angle in ditch	305° 01'	0.43				8.7		895.8
± ditch	277° 08'	1.68				7.9		896.6
	H.I. 489.	900.49 904.43	H.I. = 904.46					
gt Δ #10								899.57 899.60
To Δ #9	90° 04'	3.10				4.74		899.69
Δ #11	268° 37'	5.00				5.04		899.42
± Ditch	63° 27'	0.32				7.3		897.2
Iron - N.W. 20	329° 23'	0.21						
" S.W. 12	301° 02'	0.31						
± ditch	270° 36'	1.82				7.1		897.4
	H.I. 453	903.95 903.84	H.I. = 903.90					
At Δ #11								899.37 899.42
To Δ #10	89° 27'	5.00				4.27		899.57
Δ #12	358° 19'	2.67				0.41		903.49
Reg. Curve	87° 06'	2.49						
Chr. Curve	84° 41'	1.80				6.7		897.2
End "	82° 08'	1.44				6.4		897.5

Page 6 Transit Anchor Line Ditch #19 branch #5
 Date 12-1-39 Rec. Clark

OBJECT	AZIMUTH	STADIA 903.90	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Iron S.W. Lot #15	112° 38'	0.57							
No. + So. Fence line	186° 55'	0.93							
No. + So. " "	353° 04'	1.12							
beg Curve + Fence line	343° 50'	0.41					6.1		897.8
ON CURVE	313° 41'	0.78					5.9		898.0
" "	306° 22'	1.38							
" "	307° 28'	1.97					5.3		898.6
	11449	907.91 907.98							903.96 903.77
pt. A #12									
To A #11	178° 19'	2.66					8.54	8.54	899.37
A #13	292° 01'	5.15					1.67		906.28
Fence S.W. & N.	278° 03'	0.5							
ON CURVE	240° 31'	2.15					9.3		898.7
" "	254° 30'	2.31					9.0		899.0
E. & W. Fence & S ditch	269° 52'	2.67					8.8		899.2
End 12" Conn. Col. r.	284° 28'	3.15					9.2		898.8
" 12" " "	286° 20'	3.23					9.2		898.8

Page 7 Transit Obs. Anker Line Ditch #14 Branch #5
 Date 12-1-39 Rec. "

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Δ #13	H.I. 466	91088 91094	H.I. = 910.91						906.25 906.28
To Δ #12	112° 01'	5.15					19.2		903.46
# Ditch	84° 49'	1.29					11.9		899.0
End of Ditch	36° 56'	1.87					11.0		899.9
Point 1/4 Cor. between N.W. Cor. Sec. 29 and N 1/4 Cor. Sec. 29	11° 21'	18.26							
Branch Ditch #5A	H.I. 476	90475 90479	H.I. = 904.78						
At Δ #14									900.02
To Δ 9	212° 36'	2.91					5.10		899.69
Δ 15	24° 31'	4.45					0.01		904.77
# ditch	311° 07'	0.22					7.6		897.2
# "	21° 30'	1.56					7.5		897.3
	H.I. 483	909.60 909.50	H.I. = 909.58						904.75 904.77
Δ #15									
To Δ #14	204° 41'	7.44					9.54	9.54	900.02

Page... 8... Transit..... Obs. *Arker*..... Line. *Ditch #1A*..... Branch # *5A*.....Date. *12-2-29*..... Rec. *Clark*.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
			<i>909.58</i>						
Δ #16	$5^{\circ} 33'$	<i>3.42</i>					<i>3.30</i>		<i>906.28</i>
beg. Curve	$202^{\circ} 40'$	<i>1.88</i>					<i>12.2</i>		<i>897.4</i>
Ctr. "	$200^{\circ} 17'$	<i>0.98</i>					<i>11.8</i>		<i>897.8</i>
End "	$264^{\circ} 40'$	<i>0.37</i>					<i>10.3</i>		<i>899.3</i>
Iron P.C. Rd. R.W.	$5^{\circ} 10'$	<i>1.14</i>							
Iron So.W. Cor. lot. #8	$336^{\circ} 31'$	<i>1.78</i>							
ϕ ditch	$338^{\circ} 04'$	<i>1.75</i>					<i>11.2</i>		<i>898.4</i>
ϕ ditch	$343^{\circ} 59'$	<i>3.29</i>					<i>10.4</i>		<i>899.2</i>
ϕ ditch & Beg. Swamp	$345^{\circ} 34'$	<i>4.34</i>					<i>11.70</i>	<i>Elev. water</i>	<i>897.9</i>
ϕ ditch	$346^{\circ} 58'$	<i>5.38</i>					<i>12.6</i>		<i>897.0</i>
	<i>41.461</i>	$\left. \begin{array}{l} 910.89 \\ 910.88 \end{array} \right\}$	<i>H.I. = 910.89</i>						
At Δ #16									<i>906.28</i>
To Δ #15	$185^{\circ} 23'$	<i>3.41</i>					<i>6.13</i>		<i>904.75</i>
Δ #17	$47^{\circ} 57'$	<i>4.58</i>					<i>3.23</i>		<i>907.16</i>

Page 7 Transit Obs. Feb 1 Line 24 Feb 14 - Branch 5A
Date 12-2-38 Rec. Clark

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	H.I. 472		911.88 911.85	H.I. = 911.87				
At Δ #17								917.15 907.16
To Δ #16								
Δ #18 (S.P.O.T. sta 91147.5 Co. Bd. "F" Plan Survey 1935)	227° 57'	6.57				5.57		906.28
	36° 02'	10.10				2.95		908.92
			913.97 914.01	H.I. = 914.03				
At Δ #18								908.92
To Δ #17	216° 02'	5.05				6.86		917.15
Δ #20 = Approx. to Co. Bd. "F"	267° 40'	13.20						
B.M.						5.02		909.01
				H.I. = 907.03 With Level.				
At Δ #20								
To Δ #19								
Δ # = 1/2 Cor. between	87° 40'	6.90						
= North. N.W. cor. sec 29 + N 1/2 cor. 29	272° 27'	10.11						
S. End 24" C.M. Culv.	170° 29'	0.25				10.62		896.4
N. End 24" " "	7° 28'	0.23				10.32		896.5
Δ in Ditch	351° 49'	0.56				9.4		897.6
End of Ditch	351° 49'	8.10				8.0		899.0

Page... 10... Transit..... Obs. *Anker*..... Line... *Ditch #14*
 Date. *12/4/89*..... Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
	<i>H. 1.451</i>		<i>902.05 902.07</i>	<i>H.I. = 902.06</i>					<i>897.55 897.56</i>
<i>At Δ#20</i>									
<i>To Δ#5</i>	<i>241° 04'</i>	<i>4.08</i>					<i>3.12</i>		<i>898.93</i>
<i>Δ#21</i>	<i>61° 45'</i>	<i>10.80</i>					<i>4.29</i>		<i>897.77</i>
<i>So. E. Cor. lot #55</i>	<i>287° 16'</i>	<i>0.07</i>							
<i>¢ ditch</i>	<i>149° 52'</i>	<i>0.22</i>					<i>10.7</i>		<i>891.4</i>
<i>¢ ditch</i>	<i>70° 10'</i>	<i>3.05</i>					<i>10.6</i>		<i>891.5</i>
<i>Δ#21 to Δ#23 to Δ#24 = Traverse</i>	<i>H. 1.474</i>		<i>902.51 902.36</i>	<i>H.I. = 902.44</i>					<i>897.70 897.77</i>
<i>at Δ#21</i>									
<i>To Δ#20</i>	<i>241° 45'</i>	<i>10.80</i>					<i>4.81</i>		<i>897.55</i>
<i>Δ#22</i>	<i>27° 32'</i>	<i>9.18</i>					<i>7.76</i>		<i>894.68</i>
<i>M.C. #23 between S.E. Cor. sec. 29</i>	<i>135°</i>								
<i>and E 1/4 Cor. sec. 29</i>	<i>130° 35'</i>	<i>6.26</i>							
<i>Angle in ditch</i>	<i>224° 52'</i>	<i>2.97</i>					<i>10.8</i>		<i>891.6</i>
<i>¢ Rd. 8' wide</i>	<i>324° 35'</i>	<i>1.15</i>							
<i>Fence line Running No. W.</i>	<i>340° 38'</i>	<i>2.08</i>							
<i>Fence Cor. No. E. & No. W.</i>	<i>152° 58'</i>	<i>0.40</i>							
<i>So. E. Cor. lot #65</i>	<i>174° 22'</i>	<i>0.47</i>							

Page 11.....Transit.....Obs. Anker.....Line. Ditch #1A
 Date 12/5/39.....Rec.....

OBJECT	AZIMUTH	STADIA DIS- TANCE <u>902.44</u>	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
			Up+	No. of Int.	Rod			
			Down-	or Angle	Equiv.			
beg. Fence Running So. E.	176° 54'	0.39						
& ditch + beg. plank bridge bridge 25' long	166° 30'	0.59				10.5		891.9
& ditch + End of Plank bridge	149° 51'	0.55				10.3		892.1
& Rd. 8' wide	149° 16'	2.05						
Fence line Running So. E.	150° 14'	7.00						
So. W. Cor. lot # 63	82° 37'	0.49						
Angle in ditch	56° 05'	1.61				10.3		892.1
& ditch	36° 41'	5.90				10.0		892.5
Δ # 23	2° 45'	11.85				5.05		897.39
X in floating swamp	H. 470	$\left. \begin{matrix} 899.38 \\ 897.21 \end{matrix} \right\}$						
at Δ # 22								$H.I. = 899.30$
								894.60
to Δ # 21	207° 32'	9.18				1.51		897.70
Δ # 23	315° 09'	5.21						897.39
Δ # 24	40° 24'	4.91				4.12		895.18
Assumed as								
Iron $\frac{1}{4}$ Cor. Sec. 29	175° 51'	2.42						
Fence line Running No. E.	123° 00'	0.30						
& ditch 3' deep 8' wide	149° 40'	1.11				6.4		892.9

Beg. Heavy Paper & willow Brush.

Page. 12. Transit. Obs. Line. Ditch # 14.
 Date. 12/15/29. Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			899.30					
£ ditch	50° 21'	2.38				6.4		892.9
in Floating Swamp.	H.I. 4.67		899.87 899.80		H.I. = 899.84			
At Δ # 24								895.15 895.18
To Δ # 22	220° 24'					5.20		894.60
Δ # 25	25° 17'	4.61				4.72		895.12
£ ditch	5° 34'	0.39				6.9		892.9
Fence line	325° 02'	1.11						
in Floating Swamp.								
At A # 25	H.I. 4.84		899.90 899.85		H.I. = 899.91			895.07 895.12
To A # 24	205° 17'	4.60				4.70		895.15
Δ # 26 Main Ditch	29° 02'	3.19				4.57		895.34
Δ # 27 = Branch Ditch 3	350° 54'	2.37				4.87		895.04
Inter branch ditch # 3	203° 14'	0.47				7.2		892.7
£ Main ditch	151° 40'	0.9				7.0		892.9
£ branch ditch # 3	293° 36'	0.10				6.7		893.2
on Curve	354° 17'	0.71				6.9		893.0
on Curve	353° 45'	1.47				6.3		893.6

299°

Page... 13... Transit..... Obs. *Antares*... Line *Ditch # 1A Branch 3*...
 Date... 12/16/39... Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			899.91					
<i>to Main Ditch</i>	<i>38° 57'</i>	<i>0.39</i>				<i>7.2</i>		<i>892.7</i>
<i>in Floating Swamp</i>	<i>H. 1.514</i>	<i>902.15</i> <i>900.10</i>	<i>H. 1. = 900.14</i>					<i>895.00</i> <i>895.04</i>
<i>At Δ# 27</i>								
<i>to Δ# 25</i>	<i>170° 54'</i>	<i>2.37</i>				<i>5.03</i>		<i>895.07</i>
<i>Δ# 28</i>	<i>325° 53'</i>	<i>3.93</i>				<i>4.41</i>		<i>895.73</i>
<i>to branch ditch # 3 on curve</i>	<i>167° 54'</i>	<i>0.67</i>				<i>7.2</i>		<i>892.9</i>
<i>End of Curve</i>	<i>323° 20'</i>	<i>0.69</i>				<i>7.0</i>		<i>893.1</i>
<i>to ditch</i>	<i>325° 33'</i>	<i>2.12</i>				<i>7.1</i>		<i>893.0</i>
	<i>H. 1. 4.45</i>	<i>900.16</i> <i>900.01</i>	<i>H. 1. = 900.09</i>					<i>895.66</i> <i>895.73</i>
<i>at Δ# 28</i>								
<i>to Δ# 27</i>	<i>145° 53'</i>	<i>3.91</i>				<i>5.01</i>		<i>895.00</i>
<i>Δ# 29</i>	<i>299° 09'</i>	<i>4.40</i>				<i>1.38</i>		<i>898.71</i>
<i>to ditch</i>	<i>101° 25'</i>	<i>0.15</i>				<i>7.1</i>		<i>893.0</i>
<i>to "</i>	<i>336° 10'</i>	<i>1.71</i>				<i>6.1</i>		<i>894.0</i>
	<i>H. 1. 4.72</i>	<i>902.11</i> <i>901.90</i>	<i>H. 1. = 902.00</i>					<i>897.28</i> <i>897.37</i>
<i>At Δ# 23</i>								
<i>to Δ# 21</i>	<i>182° 45'</i>	<i>11.84</i>				<i>4.20</i>		<i>897.10</i>

Page. 14. Transit. Obs. *Anker* Line. *Ditch #14. Branch #3*Date. *12/4/39* Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
To $\Delta^{\#} 22$	135° 10'	5.20				7.37		894.60
$\Delta^{\#} 29$	110° 24'	12.20				3.20		898.80
	H.I. 4.63	903.43 903.10	H.I. = 903.31					898.71 898.68 898.80
At $\Delta^{\#} 29$								
To $\Delta^{\#} 23$	191° 24'	12.21				5.90		897.28
To $\Delta^{\#} 28$	119° 12'	4.40				7.59		895.66
$\Delta^{\#} 30 = S.E. \text{ Cor } \text{Sec. } 20$	10° 19'	8.38				4.65		898.35 898.66
to Ditch 15' Deep 6' wide	72° 55'	2.58				9.6		893.7
to Ditch 20' Deep 6' "	28° 47'	3.14				10.2		893.1
" " " " " "	90° 58'	4.35				10.2		893.1
At $\Delta^{\#} 30$ S.E. Cor. Sec. 20 to M.C. #21 =	0° 09'							
To $\Delta^{\#} 29$	190° 19'	8.38						
To N.E. Cor. between N.W. Cor. Sec. 28								
N.W. Cor. Sec. 28	89° 35'							
$\Delta^{\#} 31 = \text{Approx. } \& \text{ Co. Rd. "F"}$	259° 26'	2.74						

Page. 15.....Transit.....Obs. *Anker*.....Line. *Ditch #1A Branch #3*
 Date. 12/17/29.....Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	H.I. 5.30			H.I. = 903.38 Corr. with Level.				
At Δ #31								898.08
To Δ #30	79° 26'	2.74						
Δ #32	275° 12'	4.57				0.18		903.20
Angle in ditch	150° 56'	0.66				10.0		898.4
Angle in ditch End of Heavy Brush	129° 01'	0.42				9.2		894.2
So. End 24" C.M. Culv. $\frac{1}{2}$ ditch	96° 40'	2.50				ground 9.2		893.1
No. " 24" C.M. " $\frac{1}{2}$ " "	82° 47'	2.50				Flow line 10.31		893.3
Angle in ditch	325° 26'	0.32				ground 9.8		893.8
$\frac{1}{2}$ ditch 10' wide 2' deep	326° 16'	3.25				Flow line 10.15		893.8
$\frac{1}{2}$ " 8' " 2' "	324° 33'	4.58				9.6		894.1
	H.I. = 4.90					9.3		
At Δ #32								903.20
To Δ #31	95° 12'	4.57				10.03		898.08
Δ #33	327° 25'	13.43				0.59		907.51

Page 16 Transit. Obs. Hooker Line Ditch #14 branch #3
 Date 12/7/39 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	H1-478	912.11 912.29	H1=912.20					907.42 907.51
AT A [#] 33								
To Δ [#] 32	147° 25'	13.46				8.91		903.20
Δ [#] 34	349° 16'	2.85				4.84		907.36
± ditch 2' deep 8' wide	125° 57'	$\frac{1}{2}$ 4.48				18.7		894.5
± ditch	120° 05'	$\frac{1}{2}$ 3.50				18.3		893.9
Beg. Curve.	113° 13'	5.60				17.0		895.2
ON "	107° 08'	$\frac{1}{2}$ 2.32				16.1		896.1
End "	104° 38'	$\frac{1}{2}$ 2.03						
± ditch 3' deep 6' wide	90° 00'	2.41				14.6		897.6
Rubble wing walls								
E. End 24" c.m. cul. flow line	6° 02'	1.40				12.95		899.2
Rubble wing walls								
W " 24" c.m. " "	0° 00'	1.50				13.15		899.1
± 10' Trail	13° 00'	2.21						
± 10' "	8° 49'	1.74						
± 10' "	356° 11'	1.23						
± 10' "	345° 30'	0.88						
± 10' "	334° 16'	0.58						

Page 17 Transit Obs. Line Ditch #14 branch #3
 Date 12/2/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
			912.20					
± 10' Trail	284° 45'	0.39						
± 10' "	256° 45'	0.90						
± 10' "	252° 26'	1.78						
beg Curve 4' wide 8' deep	352° 54'	1.68				13.4		898.8
Ctr. "	345° 29'	0.95				13.5		898.7
		912.34						
	41.498	912.25						
			H.I. = 912.30					
at Δ #34								907.32
								907.36
to Δ #33	169° 16'	2.86				48.3		907.42
Δ #35	340° 00'	2.92				8.47		903.83
N.W. Cor. Ho. } 16' wide	141° 50'	0.44						
S.W. " " }	115° 48'	0.26						
± 10' Trail	101° 09'	1.20						
± 10' "	89° 22'	1.46						
± 10' "	80° 32'	2.11						
End of Curve 4' wide 10' deep	214° 12'	0.52				13.3		899.0
beg of Curve 4' " 6' "	311° 47'	1.64				13.4		898.9

Page 18.....Transit.....Obs.....Line Ditch #14 branch #3
 Date 12/1/39.....Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	H.I. = 977	908.57 908.60	H.I. = 908.59					908.82 903.82
at A#35								
To A#34	160°00'	2.92				125		907.32
A#36	264°24'	5.15				6.01		902.58
Ctr. Curve 4' wide 5' deep	200°02'	1.46				10.0		898.6
End " 4' " 5' "	217°02'	1.74				10.3		898.3
to ditch Beg. Brush.	237°31'	3.02				10.2		898.4
	H.I. = 512	907.55 907.70	H.I. = 907.63					902.51 902.58
at A#36								
To A#35	84°24'	5.16				3.73		903.82
A#37	259°35'	4.65				6.99		900.64
to ditch 4' wide 3' deep	159°37'	1.52				8.1		899.5
beg. Curve	224°37'	2.43				7.7		899.9
Ctr. " 2' wide 2' deep	229°30'	2.73						
End " 2' " 2' "	236°45'	2.89				7.8		899.8

Page 19 Transit Obs. Antel Line Ditch #4 branch #3
 Date 12/8/39 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
	H. 1.475	^{915.28} 903.39		H. 1. 905.34					900.54 900.59
at Δ [#] 37									
To Δ [#] 36	79° 35'	4.65					2.77		902.51
Δ [#] 38	286° 20'	4.91					4.64		900.70
& Ditch 4' Wide 1' Deep.	35° 15'	0.26					6.1		899.2
℄ " 5' " 1' "	305° 55'	1.46					6.6		898.8
℄ " 5' " 1' "	301° 04'	2.84					6.3		899.0
	H. 1.481	^{905.51} 905.95		H. 1. = 905.48 ✓					900.67 900.70
at Δ [#] 38									
To Δ [#] 37	106° 20'	4.91					4.86		900.59
Δ [#] 39	296° 43'	5.37					5.17		900.31
& Ditch 8' Wide 1' Deep	40° 26'	1.08					6.4		899.1
℄ " 6' " 1' "	326° 41'	1.92					5.9		899.6
℄ " 4' " 1' "	310° 43'	3.56					6.4		899.1
	H. 1.503	^{905.34} 905.37		H. 1. = 905.34 + 905.35					900.32 900.32
at Δ [#] 39									
To Δ [#] 38	116° 43'	5.36					4.70		900.67

Page 20 Transit.....Obs.....Line Ditch #1 Branch 3Date 12/8/39 Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
$\Delta^{\#} 40$	296° 10'	4.34	905.35	.			4.80		900.55 900.21
E Ditch 5' wide 1' deep	30° 47'	0.82					6.3		898.9
E " 3' " 1' "	317° 54'	1.95					6.1		899.1
E " 3' " 1' "	308° 07'	3.28					6.3		898.9
	H.I. 4.93	$\left. \begin{matrix} 105.48 \\ 905.42 \end{matrix} \right\}$	H.I. = 905.72 905.45						900.55 900.30 900.41 900.32 900.01
at $\Delta^{\#} 40$									
To $\Delta^{\#} 39$	116° 10'	3.27					5.10		
$\Delta^{\#} 41$	217° 45'	2.10					3.35		901.89
E ditch 3' wide 1' deep	33° 36'	0.63					6.1		899.3
N. + 50. Fence x S. ditch	311° 15'	2.20					4.9		900.5
Fence Cor.	275° 41'	1.66							
	H.I. 4.33	$\left. \begin{matrix} 906.14 \\ 906.21 \end{matrix} \right\}$	H.I. = 906.40 906.16						901.55 901.88
at $\Delta^{\#} 41$									
To $\Delta^{\#} 40$	37° 45'	2.10					5.84		900.30
$\Delta^{\#} 42$	287° 35'	2.39					0.10		906.08
Fc. Line	284° 00'	0.28							

Page 21 Transit Obs. Line Ditch #146 branch #3

Date 12/18/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
					911.01			
	H.I. 472	910.80 910.77	H.I. = 910.77					
ATA #42								916.07 916.08
To A #41	107° 35'	2.39				8.92		901.85 909.08 A.M.
M.C. between W & L corner 29 & Ch. Sec. 29	319° 37'	7.08				2.03		908.96
Fe. Line.	321° 16'	1.33						
End of ditch 2' wide 2' deep	11° 42'	3.05				8.2		902.8
End of ditch 3' wide 1' deep	330° 18'	5.04				9.2		901.8
End of ditch 3' wide End of Brush	326° 13'	5.60				9.2		901.8

Page 22 Transit Obs. Anker Line Ditch #14
 Date 12/19/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
	H. 1.468	899.96 900.02	} H.I. = 899.99			900.21		895.31 895.34
At $\Delta^{\#} 26$								
To $\Delta^{\#} 25$	209° 02'	3.19				4.89		895.07
$\Delta^{\#} 43$	24° 33'	6.45				4.20		895.79
£ ditch 3' wide 1' deep	225° 12'	0.30				7.4		892.8
£ " 2 " 0.5 " "	22° 35'	1.87				6.4		893.8
£ " 4 " 0.5 " "	24° 12'	4.07				5.4		894.8
End of defined ditch 3' wide 0.3 deep	24° 16'	4.58				5.4		894.8
	H. 1.517	900.94 900.79	} H.I. = 900.87			901.09		895.70 895.79
at $\Delta^{\#} 43$								
To $\Delta^{\#} 26$	204° 33'	6.45				5.48		895.31
$\Delta^{\#} 44$	44° 36'	3.36				2.30		898.57
Traces of ditch 0.2' deep	204° 33'	0.52				6.0		895.1
	H. 1.990	903.34 903.97	} H.I. = 903.41			903.63		898.73 895.54 895.99 895.72
at $\Delta^{\#} 44$								
To $\Delta^{\#} 43$	224° 36'	3.36				7.64		
North $\frac{1}{2}$ Cor. between								
$\Delta^{\#} 45 = N.W. \text{ Cor. Sec. 28 and N. } \frac{1}{2} \text{ Cor. Sec. 28}$	17° 53'	5.30						

Page. 23.....Transit.....Obs.....Line. Ditch #14
 Date. 12/9/39.....Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>End of Heavy Poplar & Willow Brush.</i>			<u>903.63</u>						
beg. of ditch 2' Wide 0.3 deep	331° 33'	1.82					4.8		898.8
Beg Curve 2' Wide 2' deep	346° 55'	2.47					5.3		898.3
Ctr. "	349° 22'	2.63							
End "	352° 19'	2.22							
(H.I. 453)			H.I. = 911.44 From B.M.			1.64		El. =	909.80
Corrected Azimuth from Δ#30			H.I. 911.44						
At Δ#45									
To Δ#44	197° 59'	5.30					13.10		
Δ#46 =	99° 53'	9.18						3.97	
Δ#30	269° 35'								
N. 1/4 Cor. Sec. 28	89° 35'								
Int. of ditch	197° 05'	0.95					11.6		899.8
<i>under co. Rd. "A"</i>									
Flow line 48" C.M. C.V.V.	195° 07'	0.82					11.02		900.4
" " 48" C.M. "	115° 19'	0.49					10.80		900.6
Angle in ditch	57° 10'	4.05					11.6		899.8
Δ ditch	72° 43'	5.72					11.4		900.0
beg. of plank gutter No. side	200° 49'	0.82					5.9		905.5

corr. elev. = 906.61
 (898.34)
 898.73

Page 24 Transit.....Obs.....Line Ditch #14
 Date 12/12/39 Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE <u>911.44</u>	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
End of plank gutter No. side	118° 04'	2.40					5.1		906.3
begot " "	115° 32'	2.77					4.9		906.5
beg. of " " So. Side of "F"	130° 34'	1.70					4.6		906.8
Top of spillway	118° 37'	2.28					5.15		906.3
of ditch	114° 41'	2.18					9.7		901.7
F.I. west End 48" C.M. Culv.	111° 57'	2.43					11.20		900.2
End of plank gutter So. side	115° 44'	2.51					4.6		906.8
beg of " " So. " "	112° 15'	2.86					4.7		906.7
F.I. E. end 48" C.M. Culv.	108° 51'	2.82					11.18		900.2
begot plank gutter So. side	105° 34'	2.76					4.9		906.5
of spillway No. side	104° 58'	2.86					5.42		905.8
of ditch	102° 54'	2.92					11.6		899.8
Top of spillway So. side	111° 26'	2.95					5.05		906.3
" of " So. " "	102° 35'	3.48					5.45		906.0
of ditch	104° 31'	3.22					10.5		900.9
Top of spillway So. side	101° 29'	5.35					4.90		906.5
of ditch	99° 36'	5.32					10.4		901.0

spillway undermined and
 ditch filled from wastebut

spillway undermined and
 ditch filled from wastebut

spillway undermined and
 ditch filled from wastebut

Page 25 Transit Obs. Anker Line Ditch #14
 Date 12/12/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
			<u>911.44</u>						
Top of spillway No. Side	97° 44'	5.31					5.05		906.3
	(41458)	912.05 911.94	H.I. = 912.00						907.42 907.47
at Δ [#] 46									
to Δ [#] 45	279° 53'	9.18					5.33		906.61
Δ [#] 47	110° 26'	3.55					6.12		905.88
N. 1/4 Cor. Sec. 28	67° 57'								
of ditch	283° 57'	2.90					11.1		900.9
of ditch at washout so. side	284° 13'	2.86					10.0		902.0
of ditch	284° 40'	2.78					11.3		900.7
Top of spillway so. side	287° 08'	1.78					4.70		907.3
of ditch	292° 40'	1.84					10.5		901.5
of ditch	291° 34'	1.91					10.7		901.3
of ditch at washout	294° 39'	1.67					10.0		902.0
of ditch	295° 50'	1.61					10.4		901.6
Top of spillway No. Side	304° 46'	1.55					4.95		907.0
of ditch	299° 04'	1.45					11.3		900.7
End of plank gutter No. Side	320° 03'	1.15					4.0		908.0

Page 26 Transit Obs. Line Ditch #14

Date 12/12/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. or Angle	Rod Equiv.			
		912.00							
F.I. West End 48" C.M. Culv.	311° 54'	105					12.58		899.4
End of plank gutter 50 side	303° 25'	0.96					4.4		907.6
F.I. East end 48" C.M. Culv.	334° 05'	0.78					11.74		900.3
beg of curve	336° 40'	2.88					10.3		901.7
Ctr of "	348° 58'	2.45					10.3		901.7
End of "	355° 38'	2.17					10.3		901.7
End of ditch N. side Co. Rd. "F"	16° 17'	1.64					8.9		903.1
Angle in ditch	63° 06'	1.55					11.7		900.3
	H.I. 454	910.35 910.42	H.I. = 910.39						905.85 905.88
At Δ #47									
To Δ #46	290° 26'	3.54					2.93		907.42
Δ #48 = Branch Ditch #2	164° 41'	9.68					2.45		907.74
Δ #49 = Main Ditch	78° 25'	3.59							
N. 1/4 Cor. Sec. 28	15° 21'	3.00							
FL. W. End. 48" C.M. Centerville Rd.	325° 59'	0.55					10.77		899.4
" E. " " " "	43° 46'	0.11					10.80		899.6
Int. with branch ditch #2	125° 00'	2.96					9.2		901.2

Page 27 Transit Obs. Line Ditch #14 Branch #2
 Date 12/12/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
				Down-	or Angle	Equiv.			
£ branch ditch #2	127° 58'	3.11					8.3		902.1
£ branch ditch #2 at Fence	147° 50'	5.32					7.5		902.9
Fence line	141° 56'	5.70							
Fence Cor. RUNS E., S., and West	149° 45'	5.28							
	41-928	712.53							
at A #48									908.10
									907.94
to A #47	344° 41'	2.68					6.38		905.85
A #50	82° 44'	4.20					0.51		911.87
Fence line	17° 08'	1.94							
£ branch ditch #2	21° 17'	1.97					7.7		904.7
Angle in Fence	31° 12'	2.11							
No. end of plank xing. 14' long	70° 00'	0.99					7.9		904.5
So. " " big heavy brush	78° 13'	0.97					8.2		904.2
£ ditch + E. & West Fence	130° 16'	1.47					7.9		904.5
Fence Running E. & No	124° 33'	1.65							
Fence " S. & West	135° 00'	1.33							
Fence line	155° 08'	1.05							

Page 28 Transit Ditch #14 Branch #2 Line 12/12/39 Obs. Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle			
to branch ditch #2 ^{2' W. side} 2' W. side 2' W. side	154°02'	3.21				7.9		904.5
at Δ #50	(H.I. 432)	96.19 96.11						911.83 711.87
To Δ #48	262°44'	4.29				8.01		908.10
Δ 51	187°18'	9.50				2.10		914.05
At Δ #51	H.I. - 4.91	91.877 91.876						913.96 714.05
To Δ #50	7°18'	7.51				6.94		911.83
Δ #52	213°49'	2.80						
Angle in ditch	332°25'	2.37				12.9		906.0
End of ditch	46°06'	3.80				12.0		906.9
to Track	55°11'	3.95						
" "	125°00'	0.61						
at Δ #52								
To Δ #51	33°49'	2.80						
Mont. Ctr. sec. 28	227°31'	4.38						

Page... 29... Transit... Obs. *Anchor*... Line... *Ditch #14*
 Date. *Dec. 13, 1939*... Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(41.497)			H.I. = 912.48 Corr. with Level				
At Δ #49								907.51
To Δ #47	258° 25'	3.59						
Δ #53	49° 50'	7.94	15.88			7.90		904.58
<i>swamp.</i> E. Ditch 1' Deep 2' Wide	127° 06'	1.02				11.8		900.7
" "	66° 18'	3.02				11.9		900.6
" "	57° 00'	5.65				12.1		900.4
" " 2' Deep 4' Wide	54° 21'	7.74				10.5		902.0
E. Ditch	52° 30'	7.24				7.6		902.9
	(41.517)			H.I. = 909.96				
At Δ #53								904.75
To Δ #49	229° 50'	7.95	15.90			2.65		907.51
Δ #54	56° 50'	10.39				0.52		909.44
N. + S. F.C. Line	242° 46'	1.94						
E. Ditch	221° 45'	2.60				6.9		903.1
Fe. Cor. Runs S. & N. E.	220° 52'	2.61						
Angle in Fe. Runs S.	130° 52'	0.66						

Page 30 Transit Obs. Anker Line Ditch #1A 59°42'
 Date 12/13/39 Rec. "

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
End of Plank Xing 10' Long.	110°13'	069	909.96				7.1	902.9
" " " "	102°38'	0.76					7.1	902.9
Fc. Line	151°02'	1.37						
to Ditch	61°39'	4.47					5.7	904.3
(H.I. 499)		914.43 914.64	H.I. = 914.54					909.55 909.44
At Δ#54								
To Δ#53	236°50'	10.39					9.85	904.79
Δ#55	58°59'	6.60					0.40	914.14
to Ditch 2' Wide 3' Deep.	231°10'	2.42					8.7	905.8
End Plank Xing 16' Long.	69°00'	0.55					7.5	907.0
" " " "	64°28'	0.71					8.1	906.4
to Trail to farm yard.	17°00'	0.54						
" " " "	324°15'	0.90						
Fc. Cor. Runs Along Ditch 450.	71°00'	0.76						
to 8' Trail	124°38'	1.30						
Fc. Cor. Runs W. & S.	135°20'	1.58						
Fc. Line	178°15'	1.90						

Page 31.....Transit.....Obs. Parker.....Line Ditch #1A
 Date 12/13/89.....Rec. ".....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
		<u>914.54</u>							
Fe Line continues so.	<u>143°05'</u>	<u>2.53</u>							
Angle in Fe. to Fe Cor	<u>127°33'</u>	<u>1.55</u>							
Fe Line so. Cattle Lane	<u>29°07'</u>	<u>1.52</u>							
" " No. " "	<u>29°07'</u>	<u>1.72</u>							
Angle in S. Fe Line } Cattle	<u>54°19'</u>	<u>1.88</u>							
" " N " " } Lane.	<u>50°57'</u>	<u>2.00</u>							
Fe. Line so. of Ditch	<u>59°40'</u>	<u>2.30</u>							
	<u>(H. 1.496)</u>	<u>919.10</u> <u>919.17</u>	<u>H.I. = 919.14</u>						
At $\Delta^{\#} 55$									<u>914.18</u> <u>914.14</u>
To $\Delta^{\#} 54$	<u>238°59'</u>	<u>1.60</u>					<u>9.62</u>		<u>909.55</u>
$\Delta^{\#} 56$	<u>55°30'</u>	<u>3.44</u>					<u>5.42</u>		<u>913.72</u>
Fe. Cor.	<u>239°47'</u>	<u>3.50</u>							
Δ in S. Fe. Line Cattle Lane	<u>242°35'</u>	<u>3.52</u>							
Fe. Cor N. side Cattle Lane.	<u>345°07'</u>	<u>3.20</u>							
Fe Line Runs No.	<u>255°45'</u>	<u>3.00</u>							
E. Fe. Line } Cattle	<u>231°49'</u>	<u>3.70</u>							
W. " " } Lane.	<u>231°49'</u>	<u>3.86</u>							

Page. 32. Transit. Obs. *Anker* Line. *Ditch #14*
 Date. *12/18/39* Rec. "

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		<i>919.14</i>							
W End Plank Xing 8' Long	241°33'	3.50					12.3		906.8
E. " " "	241°42'	3.42					12.2		906.9
R Ditch Beg. Brush 8' wide in ditch 4' deep.	253°37'	1.44					13.2		905.9
Angle in Ditch	29°20'	1.26					12.3		906.8
W 1/4 Cor. sec. 22 Mont.	342°19'	9.45			+ 0°55'				
	(H. 4.71)	918.43 918.44			H.I. = 918.43				
At Δ #56									913.72
To Δ #55	235°30'	3.44					4.26		914.18
Δ #57	15°17'	7.32	1464				4.56		913.87
W End Plank Xing 10' Long	158°14'	0.98					11.5		906.9
E " " "	152°54'	1.03					11.8		906.6
R Ditch Beg. Curve	124°05'	1.75					12.3		906.1
" " On "	119°56'	1.95					11.8		906.6
" " End "	115°22'	2.03					11.9		906.5
" " 4' wide, 2' deep.	97°55'	2.47					11.4		907.0
" " 8' " 1' "	82°41'	3.24					11.8		906.6
" " "	70°06'	3.25					12.1		906.3

Page 33 Transit Obs. Antec. Line Ditch #14 Branch #1
 Date 12-14-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle			
			<u>918.43</u>					
± Ditch 5' wide 1' deep	61° 24'	5.57				11.7		906.7
" "	55° 44'	$\frac{1}{2}$ 3.55				12.0		906.4
" " 4' " 2' "	52° 40'	$\frac{1}{2}$ 4.2				12.6		905.8
" "	49° 51'	$\frac{1}{2}$ 5.12				11.4		907.0
" "	48° 21'	$\frac{1}{2}$ 5.74				13.1		905.3
" "	46° 55'	$\frac{1}{2}$ 6.52				12.8		905.6
	(4.4 4.93)	918.92 918.80	} H/1 = 918.86					913.93 913.87
At Δ #57								
To Δ #56	195° 17'	$\frac{1}{2}$ 7.33	1466			5.20		913.72
Δ 58	100° 52'	$\frac{1}{2}$ 5.70	1140			10.71		908.15
± Ditch	132° 22'	$\frac{1}{2}$ 3.85				13.0		905.9
" "	123° 20'	6.65				13.1		905.8
" "	114° 31'	7.82				12.3		906.6
" "	116° 46'	$\frac{1}{2}$ 4.05				13.0		905.9
" " 4' wide, 2' deep,	95° 46'	$\frac{1}{2}$ 4.45				12.8		906.1
" "	87° 12'	$\frac{1}{2}$ 4.96				11.8		907.1
" "	80° 57'	$\frac{1}{2}$ 5.48				11.6		907.3

Page 34 Transit Obs. Hooker Line Ditch #14 Branch #1 189° 10'
 Date 12-15-39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
E. & W. F.C. X ^s Ditch ^{beg.} dense brush.	80° 27'	$\frac{1}{2}$ 5.53						
Δ #59	100° 52'							
	(H.I. 518)	924.08	} H.I. = 1316		H.I. - 924.33 Corrected Elev. (919.15)			
At Δ #59								919.15
To Δ #57	280° 52'					10.15		913.93
Δ #58	280° 52'	$\frac{1}{2}$ ✓ 6.58	1316					908.15
Δ #59 A.	317° 44'	9.54				2.80		921.53
Δ #60	62° 22'	5.10				6.75		917.58
ctr sec. 22	252° 53'	7.93	see T at E. of sec.			13.17		911.16
	(H.I. 453)	926.06 926.13	} H.I. = 926.10					
A / Δ #59 A								921.57 921.53
To Δ #59	137° 44'	9.56				6.98		919.15
End of Main Ditch ^{End of} brush.	297° 36'	3.10				14.0		912.1

634
1316

Next page

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(H. 4.44)		H.I. = 915.60					
At Ctr. of sec.								911.16
To Δ [#] 58	312° 09'	7.16						
To Δ [#] 59	120° 53'	7.92						
To W. 1/4 Cor. Sec. 22	269° 57'							
Intol. main ditch & branch ditch #1	259° 22'	7.20	1/2			8.6		907.0
£ branch ditch #1	260° 10'	6.48	1/2			10.0		905.6
£ " " #1 2' deep	261° 37'	5.60	1/2			9.0		906.6
£ " " #1 6' wide	262° 10'	4.90	1/2			9.2		906.4
£ " " #1	265° 20'	8.32				9.7		905.9
£ " " #1	266° 56'	7.44				9.5		906.1
beg. trees in ditch 1' deep	271° 50'	5.80				8.7		906.9
£ ditch 4' wide	282° 19'	3.89				8.0		907.6
£ " 1' deep	318° 37'	2.27				6.9		908.7
Fence Cor. 3' wide	0° 25'	0.78						
Fence line x S ditch 1' deep	0° 08'	1.92				6.0		909.6
Fence Cor. 3' wide	0° 00'							

Page 36.....Transit.....Obs.....Line Ditch #14 branch #1
 Date 12/15/39.....Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		915.60							
Fence line going East	55° 29'	1.56							
Fence Cor.	38° 56'	3.32							
Ditch	39° 15'	3.23					5.6		910.0
Fence line going No.	24° 15'	4.73							
	(H1525)								
at A [#] 59									919.15
to A [#] 58	290° 52'								
Fence Cor.	227° 10'	1.44							
Ditch 2' deep 3' wide	278° 46'	4.09					14.7		909.7
Fence Cor.	324° 40'	1.86							
No + So. Fence line	325° 57'	4.88							
Ditch	303° 11'	2.22					15.0		909.4
Fence Cor. going No.	304° 44'	2.26							
to Otter Lake Rd.	339° 33'	3.40							
Fence Cor. going East	346° 15'	3.18							
West End 36" C.M. Culv.	328° 17'	1.77					15.5		908.9
to Otter Lake Rd.	337° 43'	1.70							

115 26
 Page 37 Transit Obs. Harker Line Ditch #14 branch #1
 Date 12/15/39 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. or Angle	Rod Equiv.			
		<u>924.40</u>							
Off Otter lake Rd	184° 55'	0.22							
East End 36" C.M. Culr.	348° 07'	1.70					15.3		909.1
Fence cor. going No. + East	4° 36'	1.64							
Off ditch	14° 52'	2.00					14.0		910.4
Off " 2' wide 4' deep	39° 10'	3.07					13.8		910.6
Fence line	51° 55'	3.98							
Off 12' wide ent.	346° 23'	1.47							
	(H1492)	922.48 922.52							
		H.I. = 922.50							917.60 917.52
At Δ #60									
To Δ #59	242° 22'	5.10					3.37		919.15
Δ #61	91° 17'	4.51					3.44		919.06
Fence xs ditch 2' wide 7' deep	284° 10'	1.41					10.8		911.7
Angle in Fence	290° 13'	1.48							
Fence Cor	346° 53'	1.16							
Fence line	342° 04'	1.95							
Angle in ditch 2' wide 4' deep	348° 34'	0.66					10.3		912.2

Page 30 Transit.....Obs. Anker.....Line Ditch #1A Branch #1
 Date 12/16/39.....Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle			
			<u>922.50</u>					
Angle in ditch 1' wide 1' deep	36° 10'	1.20				9.0		913.5
" IN " 1' " 1.5 "	64° 54'	2.77				7.7		914.8
" IN " 1' " 2' "	69° 43'	3.09				7.8		914.7
End of ditch 1' " 3' "	81° 32'	3.85				7.2		915.3
	(H1495)	<u>924.01</u> <u>924.02</u>	H1-924.01					
At Δ ⁶¹								919.06
To Δ ⁶⁰	271° 17'	4.51				6.42		917.60
Δ ⁶²								
Fence line	91° 45'	1.23						
Angle in Fence	122° 36'	0.08						
Fence line	223° 00'	1.40						
End of ditch + Shore line	137° 02'	2.23				Water 8.4 ground 9.8		915.6 914.2
Edge of water	167° 54'	4.35						
" of "	171° 19'	3.62						

Page 19.....Transit.....Obs. Anker.....Line. Ditch #1A Branch #A
 Date. Dec. 18, 1939.....Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
At M.C. #23 ^{between S.E. Cor Sec. 29} and E. 1/4 Cor. Sec. 29	H 14.73				H.I. = 912.13			
To Δ #21	315°-35'	←	SEE PAGE 10-		#21 TO M.C. #23			907.40
Δ #100	310°-35' 61°-15'	6.27						897.70
E. 1/4 Cor. Sec. 29	56°-15' 00°-08'	5.17				6.87		905.26
	355°-08'							
At Δ #100	(H 1 5.17)				H.I. = 910.43			
To Δ # M.C. #23	241°-15'							905.26
Δ #101	236°-15' 99°-59'	5.17						
	74°-59'	5.50				1.74		908.69
	(H 1 = 4.87)				H.I. = 913.59			
At Δ #101								908.72
To Δ #100	279°-59'							908.69
Δ #102	274°-59' 120°-26'	5.51				8.35		905.26
Beg. Ditch	115°-26' 9°-21'	5.46				3.39		910.20
beg. Curve 2' wide 3' deep	229°-21' 5°-41'	3.35				12.5		901.1
No. End plank bridge 8' long	0°-41' 3°-36'	1.88				11.2		902.4
So " " " 8' "	358°-36' 3°-36'	1.44				11.1		902.5
	358°-24'	1.36				11.1		902.5

CHANGED BY A.W.L.

Page 90 Transit. Obs. Line Ditch #1 H. Branch #1 913

Date 12/18 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
				Down-	or Angle	Equiv.			
	4°-08'	913.59							
Ctr Curve 2' wide 5' deep	358°-08'	0.98					10.8		902.8
	171°-31'								
No. End 36" C.M. Culv.	106°-31'	0.96					10.7		902.9
(caved in)	172°-57'								
Flowline 36" Conc. Culv.	107°-57'	1.38					11.15		902.5
	172°-40'								
⊥ pavement Centerville Rd.	107°-40'	1.21					2.40		911.2
	118°-46'								
⊥ " " "	113°-46'	2.12							
	207°-08'								
⊥ " " "	202°-08'	2.55							
	168°-21'								
To P of Spillway	163°-21'	1.38					2.60		911.0
	173°-02'								
Flowline 36" Conc. Culv.	168°-02'	2.03					11.28		902.3
3' wide	172°-37'								
Angle in ditch 3' deep	164°-37'	2.04					11.3		902.3
	161°-50'								
" " "	158°-50'	2.01					11.5		902.1
		914.31							
	Ht. 4.11	914.27							
at A #102									(910.18)
									44020
To A #101	300°-26'								
	295°-26'	5.47					5.55		908.72
A #103									
	276°-26'								
Fence xs ditch going with Tracks	271°-26'	0.81					11.4		902.9
	274°-20'								
No. End 24" V.I.T. culv.	268°-20'	0.44					11.2		903.1
	264°-07'								
⊥ R.R. Track	259°-07'	0.22							

Page 41 Transit. Obs. Anker Line Ditch #14 branch #4
 Date 12/18/39 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle			
	233° 34'		914.29					
£ R.R. Tracks	228° 34'	1.18						
So. End 24" Vit. Culv.	211° 20'							
	206° 20'	0.13				11.2		903.1
£ R.R. Tracks	39° 00'							
	34° 00'	1.09						
No. End 18" Vit. Culv. 3' wide	116° 36'							
3' deep	111° 36'	0.39				11.18		903.1
So. 30" C.M. Culv.	113° 28'							
	108° 28'	0.54				11.14		903.2
£ ditch	105° 30'							
	100° 30'	2.50				11.9		902.4
Flow line 24" C.M. Culv.	104° 31'							
	99° 31'	4.02				11.6		902.7
" " 24" C.M. "	105° 28'							
	100° 28'	4.15				12.2		902.1
£ ditch	104° 02'							
	99° 02'	6.55				11.5		902.8
No. End of Plank xing	103° 56'							
	98° 56'	4.08	816			11.5		902.8
So. End of Plank xing	103° 55'							
	98° 55'	4.15	830			11.5		902.8
End of ditch Edge of swamp	113° 51'							
	108° 51'	4.55	970			11.7		902.6
Ctr section #28 45° 30'	45° 30'							
	40° 20'	8.20	1640					

Page...1.....Transit *K.F. 45.311*....Obs. *ANKER*.....Line. *DITCH #1*
 Date...*JAN. 30, 1940*.....Rec. *CLARK*.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
				Down-	or Angle	Equiv.			
	(5.43 H.I.)								
<i>H.I. = 897.70 From W. Dept. M.H. 1/4 Mi. E. of Lexington</i>									
<i>At Δ #1 = on sec. line between</i>									
<i>N.E. Cor. Sec. 10 and E 1/4 Cor. Sec. 10 - T. 30 - R. 23 N. = 0° 00'</i>									
<i>To N.E. Cor. Sec. 10</i>	<i>0° 00'</i>	<i>9.54</i>							<i>884.46</i>
<i>Δ #2</i>	<i>275° 37'</i>	<i>9.40</i>					<i>13.24</i>		<i>874.46</i>
<i>End 30" C.M. Culv.</i>	<i>95° 38'</i>	<i>0.22</i>					<i>11.54</i>		<i>86.2</i>
<i>" " " " Bog. Ditch</i>	<i>272° 37'</i>	<i>0.32</i>					<i>11.38</i>		<i>86.3</i>
<i>No. + So. Fence line</i>	<i>270° 00'</i>	<i>0.19</i>							
<i>& ditch</i>	<i>272° 37'</i>	<i>0.35</i>					<i>11.0</i>		<i>86.7</i>
<i>End of Plank King 6' Long</i>	<i>275° 08'</i>	<i>2.10</i>					<i>11.7</i>		<i>86.0</i>
<i>" " " " 2' deep</i>	<i>275° 15'</i>	<i>2.16</i>					<i>11.8</i>		<i>85.9</i>
<i>& ditch 4' wide</i>	<i>275° 15'</i>	<i>3.45</i>					<i>12.8</i>		<i>84.9</i>
<i>Ditch enters swamp</i>	<i>275° 25'</i>	<i>5.03</i>					<i>13.1</i>		<i>84.6</i>
<i>& ditch in swamp</i>	<i>275° 23'</i>	<i>6.65</i>					<i>13.4</i>		<i>84.3</i>
	<i>5.44 H.I.</i>								
<i>H.I. = 889.90 -</i>									
<i>At Δ #2</i>									<i>884.46</i>
<i>To Δ #1</i>	<i>95° 31'</i>	<i>9.40</i>							<i>884.46</i>

Checked
 12/2/40

Page 2.....Transit.....Obs. Anker.....Line Ditch #1
 Date 1-30-40.....Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
A [#] 3	276° 37'	6.34					5.57		874.33 ✓
£ ditch in swamp	96° 51'	0.88					5.8		84.1
£ " " "	279° 16'	0.80					5.7		84.2
£ " " "	279° 02'	2.28					5.8		84.1
N. + S. Fence x S ditch	277° 40'	4.40					6.1		83.8
£ ditch in swamp	276° 55'	5.70					5.9		84.0
	(5.31 H.I.)	889.67 889.64							884.35 ✓ 884.33 ✓
At A [#] 3									
To A [#] 2	96° 37'	6.34					5.21		884.46
A [#] 4	299° 04'	6.43					4.19		885.47 ✓
Δ in ditch	274° 20'	0.92					5.8		83.9
Reg. brush + end of defined ditch	274° 04'	2.25					5.8		83.9
£ ditch	274° 14'	4.20					5.9		83.8
£ " "	274° 12'	5.18					6.1		83.6
	5.06 H.I.	890.53 890.53							H.I. = 890.53 ✓
At A [#] 4									885.47 ✓
To A [#] 3	119° 04'	6.42					6.18		884.35

Page 3 Transit Obs. Anker Line Ditch #1
 Date 1-30-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
$\Delta^{\#} 5 = \text{No. } 1/4 \text{ Cor. Sec. } 10$	$314^{\circ} 08'$	7.04							
	411-893.27								$H.I. = 893.53 \text{ Cor. from B.M. } 19. \text{ W. Depth } 19. \text{ ft.}$
At $\Delta^{\#} 5$									
To $\Delta^{\#} 4$	$134^{\circ} 08'$	7.04					7.80		845.73 885.47
To Ctr. of Sec. 3	$359^{\circ} 55'$								
$\Delta^{\#} 6$	$359^{\circ} 55'$	4.52					4.27		889.26
Beg. Main ditch #1 ^{END of} brush	$148^{\circ} 20'$	8.90					9.2		84.3
£ ditch	$147^{\circ} 13'$	7.68					10.2		83.3
£ "	$144^{\circ} 20'$	6.05					9.8		83.7
£ "	$139^{\circ} 55'$	4.54					9.6		83.9
£ "	$129^{\circ} 08'$	2.80					9.7		83.8
£ "	$109^{\circ} 09'$	1.78					9.5		84.0
									$H.I. = 893.44$
At $\Delta^{\#} 5$									
Cannot locate S. End of Cuts. Under Conduit or FL. of N. End.									
£ Ruble headwall	$77^{\circ} 36'$	1.38							

Page 4 Transit Obs. A.W. Ker. Line Ditch #1
 Date 1-31-90 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Top $\pm$ Conduit	73°00'	1.38					4.17		
Top inside Edge C.M. Culv.	67°04'	1.38					11.21		
Elev. of Water							9.20		
$\pm$ ditch	29°13'	2.04					9.9		
	(5.43 H.I.)								
At A#6									889.26 ✓
To A#5	179°35'	4.52							
A#7	326°42'	5.97					7.80		886.89 ✓
Δ in ditch	168°08'	1.20					11.3		
Δ in "	96°52'	0.23					11.1		
Begin 30" C.M. Culv.	96°05'	0.22				F.L. ground	10.50 11.1		883.89
End 30" C.M. "	295°22'	0.31				F.L.	11.60		883.09
$\pm$ ditch	333°17'	1.62					12.4		
End 18" C.M. Culv.	336°54'	3.93					12.50 12.4		
" " " " Angle in ditch	336°47'	4.05				Grounds	12.32		
Δ in ditch	335°25'	4.55					12.7		

Page 6 Transit N.E. 45311 Obs. Anker Line Ditch #1
 Date 1-31-40 Rec. Anker

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
			<u>895.08</u>					
<u>to Ditch</u>	<u>267°35'</u>	<u>0.58</u>				<u>10.1</u>		<u>83.0</u>
" "	<u>283°30'</u>	<u>0.78</u>				<u>9.7</u>		<u>83.4</u>
" "	<u>302°15'</u>	<u>1.92</u>				<u>10.10</u>	<u>Elev Water</u>	<u>83.0</u>
" " <u>Nts. to xs Ditch</u>	<u>307°30'</u>	<u>3.20</u>				<u>11.7</u>		<u>81.4</u>
<u>to Ditch</u>	<u>309°16'</u>	<u>4.30</u>				<u>11.5</u>		<u>81.6</u>
	<u>(H.I. 5.11)</u>	<u>890.41</u>						
<u>At Δ#9</u>		<u>890.41</u>						
			<u>H.I. = 890.41 ✓</u>					
<u>To Δ#8</u>	<u>131°27'</u>	<u>6.72</u>				<u>2.39</u>		<u>888.02 ✓</u>
<u>Δ#10</u>	<u>4°11'</u>	<u>8.47</u>				<u>4.22</u>		<u>886.19 ✓</u>
<u>to Ditch Beg. Curve.</u>	<u>135°07'</u>	<u>1.84</u>				<u>8.9</u>		<u>81.5</u>
" " <u>Ctr. of Curve.</u>	<u>134°46'</u>	<u>1.62</u>				<u>9.2</u>		<u>81.2</u>
" " <u>End Curve.</u>	<u>130°50'</u>	<u>1.40</u>				<u>8.9</u>		<u>81.5</u>
<u>to Ditch</u>	<u>91°14'</u>	<u>1.06</u>				<u>9.2</u>		<u>81.2</u>
" "	<u>39°19'</u>	<u>1.75</u>				<u>7.47</u>	<u>Elev Water</u>	<u>82.94</u>
" "	<u>21°53'</u>	<u>3.05</u>				<u>9.2</u>		<u>81.2</u>
" " <u>4' Deep</u>	<u>15°22'</u>	<u>4.65</u>				<u>8.9</u>		<u>81.5</u>
" " <u>5' Wide</u>	<u>11°30'</u>	<u>6.30</u>				<u>9.4</u>		<u>81.0</u>
" "						<u>9.4</u>		<u>81.0</u>

Page... 7... Transit *X.P.E. 25311*... Obs. *Anker*... Line. *Ditch #1*
 Date. *2-1-40*... Rec. *Anker*...

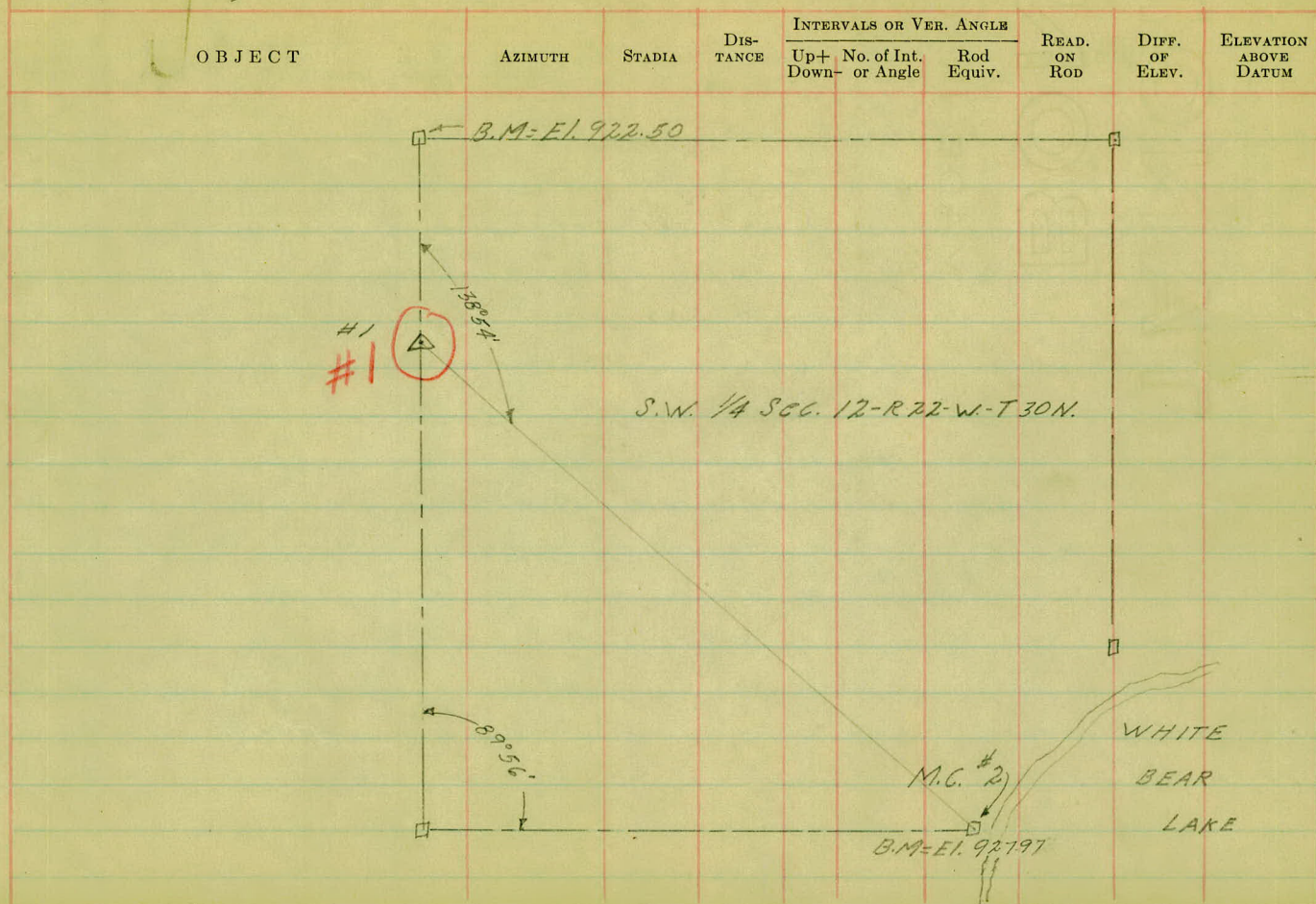
OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
<i>R Ditch</i>	<i>9°39'</i>	<i>7.85</i>				<i>7.8</i>		<i>80.6</i>
	<i>(Ht. 5.30)</i>	<i>891.49</i>						
		<i>891.59</i>			<i>H.I. = 891.54</i>			
<i>At Δ#10 on Lexington Ave.</i>								<i>886.24</i>
								<i>886.19</i> ✓
<i>To Δ#9</i>	<i>184°11'</i>	<i>8.47</i>	<i>1/2</i>			<i>6.30</i>		<i>885.29</i> ✓
<i>Δ#11</i>	<i>332°33 1/2</i>	<i>6.80</i>				<i>5.40</i>		<i>886.14</i> ✓
<i>R Ditch</i>	<i>179°30'</i>	<i>9.15</i>				<i>10.9</i>		<i>80.6</i>
<i>" "</i>	<i>178°49'</i>	<i>7.28</i>				<i>11.0</i>		<i>80.5</i>
<i>" "</i>	<i>177°51'</i>	<i>5.38</i>				<i>11.2</i>		<i>80.3</i>
<i>" "</i>	<i>174°47'</i>	<i>3.00</i>				<i>11.3</i>		<i>80.2</i>
<i>Elev. Water</i>						<i>8.75</i>		<i>82.8</i>
<i>R Ditch</i>	<i>167°00'</i>	<i>1.45</i>						<i>79.9</i>
								<i>80.4</i>
<i>End 42" C.M. Culv. 1' X 8' Conc. H.W.</i>	<i>100°43'</i>	<i>0.34</i>				<i>Ground.</i> <i>FL.</i> <i>Ground</i>		<i>79.6</i>
<i>" " " " 1' X 8' Conc. H.W.</i>	<i>56°25'</i>	<i>0.41</i>			<i>Angle in Ditch</i>	<i>11.90</i> <i>11.90</i> <i>12.5</i>		<i>79.6</i>
<i>Approx R Lexington Ave</i>	<i>76°50'</i>	<i>0.36</i>						<i>79.0</i>
<i>" " " "</i>	<i>272°50'</i>	<i>1.43</i>			<i>Beg. Curve.</i>			
<i>" " " "</i>	<i>777°20'</i>	<i>2.05</i>						
<i>" " " "</i>	<i>288°35'</i>	<i>2.38</i>			<i>End Curve.</i>			

Page... 2 Transit *N.E. 45.311* Obs. *Archer* Line. *Ditch #1*Date. *2-1-20* Rec. *Archer*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
		<i>891.54</i>							
<i>E Ditch</i>	<i>337°15'</i>	<i>1.05</i>					<i>10.3</i>		<i>81.2</i>
						<i>Ground=</i>	<i>11.0</i>		<i>80.5</i>
<i>End 30" C.M. Curve</i>	<i>329°00'</i>	<i>1.57</i>					<i>12.6</i>		<i>78.9</i>
<i>" " " "</i>	<i>328°14'</i>	<i>1.73</i>				<i>Ground=</i>	<i>11.2</i>		<i>80.8</i>
							<i>12.6</i>		<i>78.9</i>
<i>Angle in Ditch</i>	<i>325°05'</i>	<i>3.57</i>					<i>11.8</i>		<i>79.7</i>
	<i>(H.I. 5.24)</i>	<i>891.41</i> <i>891.38</i>	<i>H.I. = 891.40 ✓</i>						
<i>At Δ #11</i>									<i>886.14</i>
<i>To Δ #10</i>	<i>152° 33 1/2'</i>	<i>6.78</i>					<i>5.17</i>		<i>886.24</i>
<i>Δ #12</i>	<i>351° 35'</i>	<i>14.08</i>							
<i>E ditch</i>	<i>94° 55'</i>	<i>0.85</i>					<i>12.9</i>		<i>78.5</i>
<i>Δ in ditch</i>	<i>28° 22'</i>	<i>1.50</i>					<i>14.2</i>		<i>77.2</i>
<i>Ditch enters Rice Creek</i>	<i>14° 02'</i>	<i>1.56</i>					<i>14.9</i>		<i>76.5</i>
<i>E Creek</i>	<i>10° 05'</i>	<i>1.55</i>					<i>15.1</i>		<i>76.3</i>
<i>Ctr. bridge</i>	<i>355° 02'</i>	<i>1.23</i>							
<i>Elevations check O.K. with 1939 Hoo Survey of Lexington Ave.</i>									
<i>At Δ #12</i>									
<i>To Δ #11</i>	<i>171° 35'</i>	<i>14.10</i>							
<i>N.W. Cor. Sec. 3</i>	<i>272° 00'</i>	<i>6.75</i>			<i>+ 2° 25'</i>				

Page... 1..... Transit *N.E. 15.311*... Obs... *Anker*... Line... *Ditch #11*.....

Date. *1917. 26, 1940*..... Rec.....



Page... 2 ... Transit *S.E. 45211* ... Obs. *Antar* ... Line *Ditch #11*
 Date... *1-26-40* ... Rec. *Clark*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	<i>528 H.I.</i>			<i>H.I. = 932.98 ✓</i>				
<i>At Δ #1 on sec. line between</i>								<i>928.70</i>
<i>S.W. Cor. sec. 12 to W. 1/4 Cor. sec. 12 = N.</i>	<i>0°00'</i>	<i>5.67</i>				<i>10.48</i>		<i>922.50</i>
<i>M.G. #2</i>	<i>138°54'</i>							
<i>Δ #2</i>	<i>138°54'</i>	<i>5.33</i>				<i>4.83</i>		<i>925.15 -</i>
<i>Δ #4</i>	<i>315°56'</i>	<i>5.58</i>				<i>9.08</i>		<i>923.90 -</i>
<i>End of Curve</i>	<i>301°49'</i>	<i>3.95</i>				<i>15.1</i>		<i>917.9</i>
<i>Ctr. "</i>	<i>300°20'</i>	<i>3.85</i>				<i>15.0</i>		<i>918.0</i>
<i>Beg. "</i>	<i>297°27'</i>	<i>3.75</i>				<i>15.2</i>		<i>917.8</i>
<i>Δ in ditch</i>	<i>288°36'</i>	<i>3.51</i>				<i>14.7</i>		<i>918.3</i>
<i>End of Curve</i>	<i>288°16'</i>	<i>3.05</i>				<i>14.6</i>		<i>918.4</i>
<i>beg. " "</i>	<i>286°49'</i>	<i>2.71</i>				<i>14.9</i>		<i>918.1</i>
<i>Δ in ditch</i>	<i>279°02'</i>	<i>1.93</i>				<i>14.9</i>		<i>918.1</i>
<i>Δ " "</i>	<i>280°16'</i>	<i>0.79</i>				<i>14.8</i>		<i>918.1</i>
<i>End of Oval Conc. Culv.</i>	<i>258°04'</i>	<i>0.55</i>				<i>14.8</i>		<i>918.2</i>
<i>Approx E Eagle Ave.</i>	<i>349°00'</i>	<i>1.50</i>				<i>16.55</i>		<i>916.43 -</i>
<i>" E " "</i>	<i>185°56'</i>	<i>2.80</i>						

Page 3 Transit Obs. Archer Line Ditch #11
 Date 1-26-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
			<u>H.I. 932.98</u>					
± R.R. Track on Curve	231° 40'	2.97						
± R.R. " " "	229° 53'	1.77						
± R.R. " " "	82° 45'	0.12					5.0	928.0
± R.R. " " " 4'4" x 4'0"	49° 23'	2.52						
Bag. Oval Conc. Culv.	183° 34'	0.52				ground 14.7		918.3
						F.I. 15.85		917.13
End " " " 4'4" x 4'0"	144° 51'	1.21				ground 14.2		916.8
						F.I. 15.47		917.51
± R.R. Tracks	217° 50'	2.93						
± R.R. " "	110° 03'	2.08						
Bag. Oval Conc. Culv. 4'4" x 4'0"	147° 36'	1.69				ground 14.2		918.8
						F.I. 15.13		917.85
Δ inditch	147° 10'	3.72						
						13.8		919.2
	140° 54'	3.90				ground 13.7		919.3
						F.I.		
	(50° 3 H.I.)	933.23						
		933.18						
								H.I. = 933.20
At Δ #2								928.15
To Δ #1	318° 54'	5.32					5.53	927.67
								927.70
Δ #3	138° 54'	7.34					13.58	919.62
± R.R. Tracks	233° 47'	2.05						
± R.R. " "	359° 06'	2.70						

Page 4 Transit Obs. Arker Line Ditch #11
 Date 1-26-90 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
	<u>H.I. 933.20</u>							
Beg. Oval Conc. Culv. 4'4" x 4'0"	327° 10'	0.93				GROUND 14.0		919.20
						F.I. 14.90		918.30
24" C.M. storm sewer	337° 02'	0.75				14.55		918.65
From White Bear Town								
Δ in ditch	347° 05'	0.62				14.0		919.20
						GROUND 14.0		919.20
End of Floor Mono. Culv. 4' x 4' culv.	354° 03'	0.42				F.I. 14.8		918.40
						GROUND 13.7		919.50
Beg. " " " 4' x 4' "	144° 35'	0.46				F.I. 14.70		918.50
Int. with branch ditch	148° 50'	0.68				13.9		919.30
" " " ditch	69° 26'	0.88				14.0		919.20
ON branch ditch cont. East ^{2' deep}	85° 25'	1.67				14.0		919.20
" " " " No. ^{3' wide} 2' deep	46° 39'	1.60				14.1		919.10
Beg. of Fence going East	74° 37'	0.89						
Fence Cor. going So.	94° 40'	3.85						
ON branch cont. East	94° 11'	3.85				14.4		918.80
Beg. Fence Runs along ditch	137° 15'	0.88						
\$ Hiway #61 20' pavement	23° 59'	2.13						
\$ " #61 20' "	198° 18'	2.23						
\$ ditch ^{2' deep} _{5' wide}	156° 54'	2.30				13.8		919.40

Page 5 Transit N.E. 45311 Obs. Anchor Line Ditch #11
 Date 1-26-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
Δ in ditch	157°30'	3.75				14.4		918.80
Δ in Fence	156°36'	3.72						
	(508 W.1)							H.I. = 924.70
At $\Delta^{\#} 3$								919.62
To $\Delta^{\#} 2$	318°54'	7.34						928.15
M.C. #2	138°54'	14.65						927.97
Δ ditch	330°07'	2.33				6.0		918.70
F. Cor. RUNS W. & No.	330°49'	2.40						
Δ ditch 1' deep 5' wide	31°11'	2.34				5.7		919.00
Int. of ditches	68°02'	5.35				5.7		919.00
Δ ditch CONT. 50. 1' deep 5' wide	80°16'	5.00				5.7		919.00
Δ " " No.	56°40'	5.93				5.6		919.1
Δ " " E.	71°09'	6.16				5.6		919.1
	(539 W.1)							H.I. = 929.82
At $\Delta^{\#} 4$								924.43
To $\Delta^{\#} 1$	135°56'	5.57				1.65		928.70
$\Delta^{\#} 5$	354°13'	6.09				7.93		921.89

Page 6 Transit Obs. Anker Line Ditch #11
 Date 1-27-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Δ in ditch	167° 06'	1.42					11.7		918.1
Δ " "	194° 18'	1.02					11.3		918.5
Approx. $\frac{1}{2}$ Park Ave	86° 45'	1.33					5.2		924.6
beg. 48" C.M. Culv.	248° 36'	0.25				ground	11.6		918.2
Approx. $\frac{1}{2}$ Park Ave	274° 26'	1.75				F.I.	12.50		917.3
End 48" C.M. Culv.	319° 58'	0.38				ground	4.5		925.3
Δ in ditch ^{4' deep} _{3' wide}	334° 07'	0.44				F.I.	11.7		918.1
Δ in " "	57° 06'	0.79					12.55		917.27
Δ " "	44° 38'	1.79					11.9		917.9
Beg. Curve	25° 35'	3.00					11.9		917.9
End " "	21° 23'	3.30					12.0		917.8
So. E. Cor. House	25° 10'	3.60					12.2		917.6
So. W. " "	22° 34'	3.50					11.9		917.9
Ns. W. " "	20° 43'	3.77							
	(540 Ht.)								
At Δ 5									921.89
To Δ 4	174° 13'	6.09							923.90

H.I. = ~~926.79~~ 927.29

Page 7 Transit Anchor Obs. Ditch Line 11
 Date 1-27-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
$\Delta^{\#} 6$	$0^{\circ} 20'$	6.40					7.15		920.14 919.64
Δ in ditch 4' deep 4' wide	$155^{\circ} 05'$	2.40					9.9		917.4
No. E. Cor. garage	$154^{\circ} 45'$	2.80							
No. W. " " 18' wide	$158^{\circ} 48'$	2.69							
End 24" Conc. storm sewer } From Eagle Ave. }	$154^{\circ} 41'$	1.87				F.I.	9.8		917.5
6' wide 4 Foot bridge (plank) 14' long	$154^{\circ} 00'$	1.33							
SAW. Cor. House	$138^{\circ} 21'$	1.84							
No. W. " "	$130^{\circ} 05'$	1.58							
No. E. " " 3' wide	$124^{\circ} 02'$	1.88							
beg. Curve 3' deep	$155^{\circ} 04'$	1.43					10.0		917.3
End. " "	$147^{\circ} 30'$	1.26					9.8		917.5
Pt. reverse Curve	$137^{\circ} 05'$	1.23					10.0		917.3
Ctr. Curve	$122^{\circ} 34'$	1.24					10.2		917.1
beg. 24" C.M. Culv.	$98^{\circ} 38'$	1.06				F.I.	10.42		916.88
So. W. Cor House	$120^{\circ} 41'$	0.56							
No. W. " "	$104^{\circ} 38'$	0.49							

Page 9 Transit Obs. Anker Line Ditch
 Date 1-27-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	<u>H.I. 927.29</u>							
No. E. Cor House	99° 30'	0.85						
End 29" C.A. Culv. beg. Curve	93° 27'	1.00				F.I. 10.55		916.74
ON Curve	82° 05'	0.92				10.5		916.8
End "	67° 38'	1.00				10.4		916.9
beg. "	60° 53'	1.15				10.5		916.8
Ctr. "	55° 27'	1.27				10.5		916.8
End " 3' deep	51° 18'	1.34				10.4		916.9
5' " 3' wide	38° 05'	1.56						
Plank Foot bridge 16' long	57° 21'	1.46						
So. W. Cor House	63° 24'	1.68						
So. E. " "	48° 53'	1.72						
No. W. " "	32° 05'	1.68				11.5		915.8
Δ in ditch	23° 20'	1.83				11.0		916.3
beg. Curve	14° 58'	2.14				10.9		916.4
ON " "	14° 10'	2.31				11.1		916.2
Pt. reversed Curve	15° 51'	2.40				11.1		916.2
ON Curve	18° 55'	2.48				11.1		916.2

Page 9 Transit Anchor Obs. Ditch Line
 Date 1-27-40 Rec Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
ON Curve ^{3' deep} ^{5' wide}	19° 42'	3.09					11.2		916.1
END "	18° 58'	3.36					11.2		916.1
	(5.38 H.I.)	^{925.52} 925.09			H.I. = ^{925.52} 925.05				^{920.14} 919.64
At Δ [#] 6									^{921.89} 920.00
To Δ [#] 5 - Approx E East St.	180° 20'	6.40							^{920.00} 919.53
Δ [#] 7	310° 12'	3.52					5.52		
End Curve ^{2' deep} ^{5' wide}	158° 56'	2.90							
Δ in ditch	153° 38'	2.23					9.7		915.8
Δ in "	130° 10'	0.20					10.6		914.9
beg. 48" C.M. Culv.	141° 50'	0.17				F.L.	11.05		914.47
Approx E East St - 2' W. of Δ [#] 6									
End 48" C.M. Culv.	233° 28'	0.23				F.L.	11.21		914.31
Δ in ditch	246° 55'	0.35					11.0		914.5
Fence Cor.	269° 10'	0.29							
End of Fence	291° 33'	0.91							
Beg Curve	304° 40'	0.38					11.2		914.3
ON " ^{2' deep} ^{3' wide}	331° 19'	0.56					11.5		914.0

Page. 10 Transit. Obs. Anker Line. Ditch #11
 Date. 1-29-40 Rec. Clark
 H.I. 925.52

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
End of Fence	339° 54'	0.68							
End curve in ditch	327° 16'	0.85					11.7		913.8
Δ in ditch	317° 50'	0.95					11.9		913.6
S.W. Cor. House	326° 28'	1.35							
S.E. " "	335° 21'	1.07							
N.E. " "	345° 12'	1.28							
Δ in ditch	315° 59'	1.18					12.0		913.5
Δ in "	316° 55'	1.45					12.3		913.2
Δ " "	310° 40'	1.70					12.3		913.2
925.40 } 925.42 } (5.40 R.I.)				924.93					
				924.92					
				H.I. = 925.42					
				924.93					
At A ^{#7}									920.00
To A ^{#6}	130° 12'	3.52					5.28		919.54
A ^{#8}	346° 29'	5.24							920.14
Δ in ditch	139° 16'	1.60					12.6		912.8
Δ " "	142° 30'	1.38					12.7		912.7
Δ " "	131° 25'	1.20					12.7		912.7
Δ " "	146° 55'	1.03					13.0		912.4

Page 11 Transit 154311 Obs. Anker Line Ditch #11
 Date 1-29-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
A in ditch	137° 32'	1.08				12.8		912.6
A " "	152° 00'	0.95				13.0		912.4
A " "	146° 45'	0.66				13.2		912.2
Bag Conc. box Culv. } 6' wide with End of barrel } rounded top	170° 33'	0.35				Ground 13.1		912.3
End of barrel	227° 14'	0.26				Ground 13.1		912.3
Approx & Bald Eagle Ave.	200° 26'	1.40						
" " " "	199° 54'	0.29						
" " " "	31° 56'	0.78						
Approx. Shoreline Bald Eagle Lake	279° 10'	0.46						
Elev. Bald Eagle Lake						15.2		919.22 909.73
								Elev. Lake 1-29-40 = <u>910.05</u>
At A ⁸								
To A ⁷	166° 29'	5.22						
M.C. #10 Sec. 12	76° 16'	8.62						

Page 1 Transit N^o E 45.31 Obs. Adler Line Ditch #4
 Date Jan. 11, 1940 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
$\Delta^{\#1} = 5\frac{1}{4}$ Cor sec 9								
$5\frac{1}{4}$ Cor sec 9 to Ctr. sec 9 = North	0° 00'							
At $\Delta^{\#1}$								
To $\Delta^{\#2}$	270° 26'		Meas. 1142.10'					
	(H.I. - 535)		H.I. = 970.25 ✓					
At $\Delta^{\#2}$ = Approx to Co. Ed. "B"								
To $\Delta^{\#1}$	90° 26'							
$\Delta^{\#3}$	2° 03'	7.72				7.84		962.41 ✓
END 18" C.M. CULV.	174° 04'	0.26				10.08		60.2
Fe. LINE RUNS E-W.	174° 04'	0.26						
END 18" C.M. CULV.	330° 50'	0.25				10.91		59.5
Fe. CORNER RUNS E-W-N.	353° 15'	0.26						
BEG. DITCH.	344° 45'	0.27				11.0		59.2
Ditch 1' deep 3' wide.	350° 07'	2.22				12.0		58.2
" " 9' deep 4' wide.	350° 20'	2.29				12.5		57.7

B.M. Top S.W. Cor. Mont = 973.85

Page 2 Transit Obs. ANKER Line Ditch #4
Date 1-12-40 Rec. NADON

Page. 3 Transit. Obs. ANKER Line. Ditch #4
 Date. 1-12-40 Rec. NADON

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
				Down-	or Angle	Equiv.			
FE. LINE IN Ditch.	38° 49'	3.06					11.9		
⊥ Ditch BEG. CURVE.	38° 16'	4.52					13.8		
FE CORNER E-NE.	38° 50'	4.52					10.7		
	(H. 1.5.25)	964.79			H. 1. = 964.84				
ATA #4									959.59
									959.13
To A #3	214° 23'	7.87					2.40		962.39
Δ #5 on sec. line	47° 28'	9.10					12.10		952.74 ✓
CTR. of CURVE IN Ditch.	208° 03'	2.88					12.1		
END OF CURVE " "	206° 45'	2.44					12.4		
FE. LINE ALONG Ditch.	204.57	2.46							
FE. CORNER RUNS PARALLEL WITH ^{RD.}	188° 13'	0.92					11.6		
⊥ Ditch.	175° 00'	1.00					14.3		
END 36" CONC. CULV.	172° 38'	1.40					14.92		949.92
⊥ ST. H. #36 APPROX.	88° 44'	2.86					6.0		58.84
" " " "	271° 55'	2.85					4.0		
END 36" CONC. CULV.	40° 03'	0.71					15.97		48.87
FE. CORNER RUNS NE-W	30° 21'	2.44		-	2° 37'		5.25		

Page 4 Transit Obs. ANKER Line DITCH #4
 Date 1-12-40 Rec. NADON

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
FC CORNER RUNS N-E.	5° 32'	2.10							
BEG FE LINE RUNS N	0° 00'	2.08							
£ Ditch.	28° 53'	2.37		-	2° 51'		5.25		
" "	27° 11'	4.20		-	1° 46'		5.25		
	(H. 15.40)		H. 1 =	958.14	✓				
At Δ #5									952.74 ✓
To Δ #4	227° 28'								
Δ #1	180° 00'								
Δ #6 Ctr. sec. 9	0° 00'	6.00					2.97		955.17 ✓
FE CORNER RUNS S-N-W	265° 06'	3.77					9.8		
BEG CURVE IN Ditch.	265° 17'	3.81					10.5		
FE CORNER RUNS S.-S.E.	267° 30'	3.70					9.0		
END OF CURVE IN Ditch.	267° 03'	3.55					10.7		
£ Ditch.	261° 20'	2.03					11.0		
FE CORNER RUNS W-N.	201° 06'	0.55							
END OF BARREL 3' X 3' Mono. Culv.	205° 18'	0.53					11.23		946.91
" "	156° 00'	0.55					12.05		946.09

Page 5.....Transit.....Obs. ANKER.....Line. Ditch #4
 Date. 1-12-40.....Rec. NADON.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
A Ditch.	147° 22'	0.59				11.8		
⊥ Ditch. 7' DEEP 4' WIDE	35° 55'	0.56				11.6		
" "	5° 56'	3.10				11.6		
	(H.I. 5.45)	^{960.625} 960.645			H.I. = 960.63 ✓		B.M. =	955.18 955.17 ✓
ATA #6 ctr. sec. 9								
To A #5	180° 00'	6.00				7.90		952.74
A #7	61° 53'	7.55				8.20		952.43 ✓
A Ditch.	92° 30'	0.43				14.5		
⊥ Ditch 8' DEEP 4' WIDE	91° 06'	1.54				15.2		
	(H.I. 4.32)	^{956.75} 956.775			H.I. = 956.76 ✓			
ATA #7								952.43 ✓
To A #6	241° 53'	7.53				1.59		955.18 ✓
A #8	42° 41'	1.82				13.29		943.47 ✓
⊥ Ditch 4' WIDE 5' DEEP	237° 54'	5.31				12.3		
A Ditch 2' DEEP 4' W	219° 24'	4.62				13.1		
BEG. FC. RUNS E.	218° 45'	4.58				11.4		
⊥ Ditch 1' DEEP 3' WIDE.	228° 35'	3.88				12.5		

Page 6.....Transit.....Obs. ANKER.....Line Ditch #4
 Date 1-12-40.....Rec. NADAN.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
A Ditch.	239° 44'	3.35				12.5		
BEG CURVE IN Ditch.	228° 47'	1.57				13.9		
ON CURVE " " " 6' DEEP	215° 20'	1.26				13.9		
" " " " 4' WIDE	188° 50'	1.16				14.1		
" " " "	151° 10'	1.25				14.3		
" " " "	130° 45'	1.29				14.4		
END 18" VIT. CURV. END OF CURVE	120° 26'	1.80				14.7		
" " " "	111° 45'	1.05				15.4		
	(41.5.16)							
ATA #8								943.47✓
To A#7	222° 41'	1.82						
A#9	3° 45'	4.25				13.90		934.73✓
BEG CURVE Ditch 3' WIDE 3' DEEP	192° 05'	1.46				8.4		
ON CURVE " " 4' " 4' "	195° 00'	1.50				9.4		
END "	184° 30'	0.64				10.4		
BEG CURVE Ditch.	149° 50'	0.50				11.6		
CTR. OF CURVE " 4' DEEP 3' W	121° 15'	0.48				12.1		

H.I. = 948.63✓

Page 7 Transit ANKER Line Ditch #4
 Date 1-12-40 Rec. NADAN

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
END CURVE IN DITCH	84° 00'	0.43					13.6		
A DITCH	23° 53'	0.80					15.3		
FE. CORNER RUNS N-W	48° 45'	2.51							
	(H.I. 5.06)								
ATA #9									934.73 ✓
TO A #8	183° 45'	4.24							
A #10	355° 21'	0.96	dr side				13.52		926.27 ✓
FE. LINE CRISSES DITCH. 7' DEEP. 7' WIDE	175° 20'	2.57					8.30		
BEG CURVE IN DITCH; 7' DEEP.	171° 40'	2.07					10.0		
ON CURVE " " 9' WIDE	169° 25'	1.34					11.1		
END CURVE " " 6' DEEP	178° 45'	0.86					12.8		
BEG " " " 5' WIDE	218° 40'	0.67					13.8		
CTR. " " "	244° 10'	0.67					15.1		
END " " "	271° 20'	0.65					15.7		
	(H.I. 5.26)								
ATA #10									926.27 ✓
TO A #9	175° 21'	0.96							

Page... 8 Transit *N.E. 15311* Obs. *Ankar* Line..... *Ditch #4*Date... *1-13-40* Rec. *Nader*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION * ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>A#11</i>	<i>354° 20'</i>	<i>7.69</i>					<i>8.28</i>		<i>923.25</i>
<i>E DITCH</i>	<i>270° 40'</i>	<i>0.50</i>					<i>9.1</i>		
<i>" " 3' WIDE 3' DEEP.</i>	<i>333° 30'</i>	<i>1.38</i>					<i>11.2</i>		
<i>FE. CORNER RUNS S-W.</i>	<i>30° 56'</i>	<i>3.50</i>							
<i>BEG. CURVE IN DITCH 3' WIDE 1' DEEP.</i>	<i>346° 50'</i>	<i>2.88</i>					<i>12.2</i>		
<i>ON CURVE " " 2' DEEP.</i>	<i>348° 09'</i>	<i>3.06</i>					<i>13.7</i>		
<i>END CURVE " " 3' WIDE</i>	<i>351° 30'</i>	<i>3.37</i>					<i>14.3</i>		
	<i>(H.I. 5.19)</i>	<i>928.49</i>							<i>928.47</i>
<i>ATA #11</i>									<i>923.28</i>
<i>To A#10</i>	<i>174° 20'</i>	<i>7.69</i>					<i>2.22</i>		<i>926.27</i>
<i>A#12</i>	<i>305° 36'</i>	<i>4.78</i>					<i>9.94</i>		<i>918.53</i>
<i>BEG. CURVE IN DITCH 2' DEEP. 4' WIDE.</i>	<i>155° 04'</i>	<i>2.109</i>					<i>13.6</i>		
<i>CTR. " " "</i>	<i>144° 53'</i>	<i>1.65</i>					<i>13.4</i>		
<i>END " END 36" C.M. CULV.</i>	<i>106° 30'</i>	<i>1.04</i>					<i>13.6</i>		
<i>END 36" C.M. CULV.</i>	<i>94° 15'</i>	<i>0.99</i>					<i>13.6</i>		
<i>FE. CORNER RUNS S.W.</i>	<i>97° 43'</i>	<i>0.58</i>							

Page. 10 Transit Obs. ANKER Line. Ditch #4 16° 01'

Date. 1-13-40 Rec. NADDON-Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
END 18" VIT CULV.	106° 55'	1.22					13.53		
☿ Ditch 1' DEEP 4' WIDE.	19° 57'	1.50					14.2		
" " 2' DEEP 4' WIDE	357° 46'	3.23					15.4		
	(H.I. 5.29) 923.33								
	Corr. from B.M. - Top Mount. N. Valcor. Sec. 9								
AT Δ #13									918.01
To Δ #12	179° 23'	8.04					4.79		918.53 -
Δ #14	17° 20'	8.89					9.0		914.30 -
N 1/4 Cor. Sec. 9	235° 35'	5.07							
E + W. Fence x S Ditch	201° 40'	2.50					14.4		
E + W. Fence x S ditch along Tracks	229° 36'	1.75					13.8		
F.I. So. End 36" Conc. Culv.	237° 48'	1.68					13.80		
☿ single R.R. Track	246° 31'	1.60					0.00		
☿ " R.R. "	180° 00'	0.71					0.90		
F.I. No. End 36" Conc. Culv.	253° 34'	1.45					14.5		
Δ in ditch 3' deep 3' wide	254° 57'	1.40					14.3		
Δ in ditch 2' " 3' "	244° 18'	0.60					14.9		
F.I. So. End 24" C.M. Culv.	248° 53'	0.57					15.55		

Page 9 Transit Obs. ANKER Line. Ditch #4
 Date 1-13-40 Rec. NADON

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
FELINE RUNS W.	243° 53'	0.98							
BEG. CURVE IN DITCH	72° 37'	1.05					13.6		
ON " " " 5' WIDE	52° 06'	0.96					13.9		
END " " " 4' DEEP	1° 55'	0.82					13.4		
FELINE RUNS NW.	4° 18'	1.58							
BEG. CURVE IN DITCH	327° 20'	0.70					13.6		
ON " " " "	290° 20'	1.00					13.9		
" " " "	283° 30'	1.38					14.4		
END " " " "	286° 44'	1.64					14.8		
BEG. CURVE " " 2' DEEP	297° 51'	2.39					15.7		
" " " " 5' WIDE									
	(41.5.27)	923.80 -							
		923.81							
		4.1. = 923.80 -							
AT A #12									918.53 ✓
To A #11	125° 36'	4.77					0.53		923.28 ✓
A #13	359° 23'	8.06					5.78		918.02
CTR CURVE IN DITCH 5' WIDE	132° 36'	2.13					13.2		
END " " " 2' DEEP	128° 16'	1.83					12.9		
END 18" VIT CULV.	110° 57'	1.28					13.3		

Page. 11. Transit *K.E. 15311* Obs. *Arker* Line. *Ditch #4*
 Date *Jan. 16, 1940* Rec. *Clark*

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
<i>Ca Bl. "C."</i>	<i>88° 30'</i>	<i>1.80</i>							
<i>" " " "</i>	<i>276° 46'</i>	<i>1.62</i>							
<i>Δ in ditch</i>									
<i>F.L. 50. end 24 C.M. CULV. →</i>	<i>319° 20'</i>	<i>0.72</i>					<i>15.95</i>		
<i>Fence Cor runs No. + E.</i>	<i>51° 43'</i>	<i>0.75</i>							
<i>Fence line going E.</i>	<i>75° 01'</i>	<i>1.67</i>							
<i>Δ in ditch</i>	<i>41° 42'</i>	<i>1.03</i>					<i>15.3</i>		
<i>£ ditch 2' wide</i>									
<i>£ ditch 2' deep</i>	<i>18° 40'</i>	<i>2.76</i>					<i>15.8</i>		
<i>Fence line runs No.</i>	<i>16° 16'</i>	<i>2.70</i>					<i>14.6</i>		
	<i>H.I. 5.19</i>								
<i>At A¹⁴</i>									<i>914.30 ✓</i>
<i>To A¹³</i>	<i>197° 20'</i>	<i>8.88</i>					<i>15.4</i>		<i>918.01 ✓</i>
<i>Δ¹⁵</i>	<i>38° 03'</i>	<i>4.87</i>					<i>8.62</i>		<i>910.90 ✓</i>
<i>Δ in ditch 2' deep</i>									
<i>Δ in ditch 4' wide</i>	<i>201° 53'</i>	<i>4.42</i>					<i>12.1</i>		
<i>Δ in Fence</i>	<i>202° 51'</i>	<i>4.46</i>					<i>9.6</i>		
<i>£ ditch 1' deep</i>									
<i>£ ditch 3' wide</i>	<i>217° 00'</i>	<i>3.06</i>					<i>12.3</i>		
<i>Fence line</i>	<i>217° 54'</i>	<i>3.08</i>					<i>11.3</i>		
<i>Δ in ditch</i>	<i>249° 11'</i>	<i>2.18</i>					<i>12.8</i>		

919.49 ✓
H.I. 919.55 ✓ = H.I. 919.52 ✓

Page 14.....Transit.....Obs. Anker.....Line Ditch #4
 Date 1-16-40.....Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.			
Δ in Fence	249° 11'	2.26					11.5		
Δ in ditch	317° 45'	2.24					14.2		
Δ in Fence	317° 43'	2.34					13.0		
Fence Cor. going E.	348° 00'	3.10					12.1		
Δ in ditch	352° 54'	3.00					14.3		
Δ ditch 5' wide									
Δ ditch 2' deep	22° 51'	3.10					13.8		
Δ ditch 4' deep									
Δ ditch 5' wide	36° 06'	3.40					13.3		
	(529 H.I.)								
At A#15									910.90 -
To Δ #14	218° 03'	4.86							910.90
Δ #16	101° 09'	3.47					2.15		909.04 -
beg branch ditch from swamp	336° 50'	0.92					9.2		
Δ in branch ditch	27° 08'	0.43					8.2		
Int. of main ditch	144° 40'	1.68					10.7		
Fence line	142° 54'	1.98							
Δ in ditch 4' deep									
Δ in ditch 5' wide	133° 41'	2.30					10.9		
Δ in Fence	133° 41'	2.33							

H.I. = 916.19 ✓

Date 1-22-40 Rec. Clark

Page. 14. Transit. Obs. Ankal. Line. Ditch #4
 Date. 1-22-40. Rec. Clark.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(5.42 MI.)				H.I. = 907.42 ✓			
At A#17								902.00 ✓
To A#16	201° 29'	4.04						896.40
A#18	40° 08½'	7.35				11.02		896.40 ✓
beg. Curve	147° 31'	0.56				8.8		
Ctr. "	127° 45'	0.49				9.3		
Fo. line	125° 28'	0.52						
End Curve	104° 48'	0.42				9.4		
beg. "	7° 40'	1.42				11.7		
Ctr. "	8° 00'	1.84				11.6		
End. "	11° 02'	2.18				12.2		
	(5.19 MI.)				H.I. = 901.59 ✓			
At A#18								896.40 ✓
To A#17	220° 08½'	7.34						
A#19	22° 48'	4.05				57.6		895.83 ✓
Fence line	230° 25'	5.56						
£ ditch	237° 50'	4.17				6.7		

Page 15 Transit. Obs. Apker Line Ditch #1
 Date 1-22-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
Fence Cor.	237° 09'	4.15							
" " RUNS N. + W.	200° 20'	2.90							
ditch enters Pond	240° 05'	3.46					8.0		
bottom of Pond	251° 33'	2.76				ground	11.0		
Edge of pond.	252° 03'	3.45							
" " "	266° 25'	3.34							
" " "	271° 15'	4.45							
" " "	275° 30'	5.80							
Bottom of Pond	280° 40'	2.02				Top Water	9.05 11.4		
" " "	298° 18'	4.10				ground	12.2		
Edge of Pond	227° 10'	3.22							
" " "	216° 25'	2.15							
" " "	251° 45'	0.75							
ditch outlet From Pond.	323° 25'	0.60					9.0		
Fence Cor.	319° 50'	0.52							
Edge of Pond	341° 05'	1.05							
" " "	353° 00'	2.10							

Page. 16. Transit. Obs. Anker. Line. Ditch #4.
 Date. 1-22-40. Rec. Clark.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Edge of Pond	355° 45'	3.05						
beg Curve	13° 40'	0.60				7.9		
ctr. "	36° 00'	0.75				7.7		
A in Fence	44° 37'	0.61						
End Curve	36° 37'	0.88				7.9		
A in ditch	25° 55'	2.60				8.3		
	(432 H.I.)	900.17 900.15						
AT A ^o 19								895.83-
To A ^o 18	202° 48'	4.04				3.77		896.40
A ^o 20	21° 39'	5.91				5.10		895.86-
To next	94° 54'	6.00						
East + W. Fence xs ditch	156° 50'	0.50				7.8		
Fence line	116° 25'	0.36						
1' deep								
2' wide	31° 08'	1.52				7.8		
Fence line	30° 25'	1.52						
2' ditch	23° 50'	3.18				7.7		
Fence	22° 56'	3.18						

H.I. = 900.16-

Page 17 Transit Ditch #4 Obs. Ditch #4 Line
 Date 1-22-40 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int. Down- or Angle	Rod Equiv.			
Δ in ditch	21°10'	4.95					7.7		
Δ in Fence	20°20'	4.95							
	(5.25 H.I.)	900.31 900.33							H.I. = 900.32
At Δ 20									895.06 ✓
To Δ 19	201°39'	5.90					4.50		895.83
Δ 21	319°24'	5.05					1.50		898.82 ✓
beg 24° C.M. Culv. F.I.	289°40'	0.63					8.80		
Δ in Fence	293°51'	0.70							
End 24° C.M. Culv. F.I.	299°56'	0.76					8.75		
ON Curve 2' deep 3' wide	313°21'	1.26					8.2		
Faxs ditch End of Curve	315°22'	1.89					8.5		
Δ in Fa.	316°16'	2.08							
Φ ditch 3' deep 4' wide	313°00'	3.18					8.2		
	(5.40 H.I.)	904.22 904.22							H.I. = 904.22 ✓
At Δ 21									898.82 ✓
To Δ 20	139°24'	5.05					9.16		895.06 ✓
Δ 22	311°57'	4.80							

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Δ in ditch	208° 00'	0.70				11.8		
Δ Fence	267° 15'	0.60						
5' deep ditch 6' wide	311° 50'	1.92				12.2		
Δ in ditch	318° 30'	2.70				12.4		
Beg. 18" C.M. Culv. F.I.	315° 57'	3.70				14.12		
(5.32 H.I.)								H.I. = 911.39 ✓
At Δ #22								906.07
To Δ #21	131° 57'	4.80				12.57		878.82 ✓
Δ #23	314° 08'	3.88				12.80		898.59 ✓
Fence Cor. Runs E. + W. + S. + E.	101° 45'	1.66						
✕ Rd.	90° 55'	1.72						
✕ Rd. Int. of drive	269° 30'	2.25						
✕ driveway 10' wide	297° 45'	1.44						
✕ " "	336° 45'	1.72				7.3		
✕ " "	349° 35'	2.35						
End 18" C.M. Culv. F.I.	342° 48'	0.72	69.4	- 15° 26'	19.04	5.32-24.36		887.03
Beg. 24" Conc. Culv. F.I.	328° 04'	1.06	104.2	- 10° 24'	19.135	5.32-24.45		886.94

Page 19.....Transit.....Obs. Anker.....Line Ditch #4
 Date 1-23-40.....Rec. Clark.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
	(5.28 H.I.)				H.I. = 903.87 ✓			
At A#23								898.59 ✓
To A#22	134° 08'	3.88						
A#24	16° 17½'	2.50				13.18		890.69 ✓
End 24" Conc. Culv. F.I.	130° 08'	2.07				18.0		
ON Curve	132° 06'	1.50				16.3		
" "	130° 25'	1.11				16.5		
End of Curve	85° 55'	0.59				18.2		
Fence line No. 450.	169° 18'	1.19						
	(5.08 H.I.)				H.I. = 895.77 ✓			
At A#24								890.69 ✓
To A#23	190° 17½'	2.50						898.59
A#25	322° 46'	1.08				13.55		882.22 ✓
beg. Curve	182° 06'	1.20				12.6		
ON "	233° 49'	0.58				13.2		
Int. with Branch ditch	260° 43'	0.65				14.2		
Δ in branch ditch	261° 30'	0.50				11.6		

Page 20 Transit Di. 76 H 9 Line Di. 76 H 9
 Date 1-23-41 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle	Rod Equiv.		
$\Delta^{\#} 24A$	$98^{\circ} 39'$	2.12		+	$13^{\circ} 02'$	47.81	5.08	938.50
$\frac{1}{2}$ branch ditch	$138^{\circ} 00'$	1.00					2.9	92.9
								H.I. = 921.39 with level
At $\Delta^{\#} 24A$								
To $\Delta^{\#} 24$	$278^{\circ} 39'$	2.12						
$\frac{1}{2}$ branch ditch 3' deep 7' wide	$222^{\circ} 45'$	1.18					19.0	902.4
End " "	$187^{\circ} 43'$	1.47					13.2	908.2
$\frac{1}{2}$ 10' driveway	$181^{\circ} 15'$	1.83					12.6	908.8
$\frac{1}{2}$ 10' .. beg. Curve E.	$100^{\circ} 39'$	0.39						
ON Curve	$58^{\circ} 32'$	0.76						
To $\Delta^{\#} 22$	$176^{\circ} 56'$	4.87						
	(5.38) mi							H.I. = 887.60
At $\Delta^{\#} 25$								882.22 ✓
To $\Delta^{\#} 24$	$142^{\circ} 46'$	1.08						891.69
$\Delta^{\#} 26$ 3' deep	$355^{\circ} 43'$	4.45					9.55	878.05 ✓
ON Curve 6' wide	$220^{\circ} 13'$	0.68					7.3	
" "	$282^{\circ} 10'$	0.65					8.4	

Page 21 Transit Obs. Anker Line Ditch #4
 Date 1-23-40 Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
End of ditch Approx. shore line	314° 55'	1.32				8.8		
Approx. Shore line	346° 15'	1.46						
" " "	307° 25'	2.03						
" " "	16° 10'	2.17						
" " "	307° 10'	3.27						
" " "	17° 48'	3.17						
	(523 H.I.)							H.I. = 883.28 ✓
At A ⁿ 26								878.05 ✓
To A ⁿ 25	175° 43'	4.45						883.22
A ⁿ 27	355° 13½'	6.70						
Elev. of water	351° 00'	0.85				5.45		877.83
Lake bottom	358° 09'	2.36				24.7		
" "	357° 12'	3.85				40.0		
" "						46.1		
								H.I. = 883.35 from Lake Elev.
At A ⁿ 27								Lake Elev. = +5.52 877.83
To A ⁿ 26	175° 13½'	6.68						879.05

Page 22... Transit No. 45311... Obs. Asher... Line Ditch #4
Date 1-23-40... Rec. Clark

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
M. C. 865 East N. 1/4 Cor. Sec. 4-27-23	244° 00'	3.86						
bottom of Lake	165° 45'	1.33				30.7		
Approx. Shore line	342° 55'	2.33						
Ditch leaves Lake	0° 33'	3.44				5.1		
Approx. shore line	18° 20'	3.45						
£ ditch	359° 32'	4.60				6.1		
beg 24" C.M. Culv. F.I.	0° 37'	6.50				5.77		
End 24" C.M. Culv.	0° 53'	6.76				5.58		
End of Ditch and Shore Line	1° 24'	7.16						
Lake Johanna								

Elev Lake = 6.00

877.35 Against

Lake Elev taken 1-22-40 = 877.40