

Dr. 6 Bk 112A

OFFICE OF
RAMSEY COUNTY SURVEYOR

TOPOGRAPHIC SURVEY
BEAVER LAKE

A.W. LINDAHL

APRIL 1935

NOTE FILE NO. 11
MAP FILE NO. R-363

Page.....Transit.....Obs. LINDAHL Line.....BEAVER LAKE SURVEY
 Date.....Rec. STEINMAN.....

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			
NEW CANADA TOWNSHIP								
49.50 49.28 HIGH PT. ON ROCK								
59.28								
59.42								
Φ T.P.								
90° 56'								
64.01								
15" OAK								
1321.74								
P.P. Φ 35.95								
59.28								
59.42								
Φ T.P.								
90° 56'								
64.01								
15" OAK								
1321.74								
P.P. Φ 35.95								
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Φ T.P.								
90° 56'								
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15" OAK								
1321.74								
P.P. Φ 35.95								
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Φ T.P.								
90° 56'								
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15" OAK								
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15" OAK								
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90° 56'								
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P.P. Φ 35.95								
59.28								
59.42								
Φ T.P.								
90° 56'								
64.01								
15" OAK					</			

Page 1 Transit Obs. LINSAHL Line Beaver Lake Survey
Date March 12, 1935 Rec. STEINMAN

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. = 981.62				
AT MONT. W $\frac{1}{4}$ -SEC. 25								
To MONT. N.W. COR. SEC. 25	0°-00'			= NORTH				
CHECK AZIM. CHIMNEY	355°-49'							
Δ #1 (ICE)	74°-44'	5.24	✓	- 3°-10'	28.92	5.00	33.92	947.70 ¹⁴
B.M.						6.46		975.16
	H.I. 5 ⁰⁵			952.75 ²				
				951.88 ³				
				H.I. 952.19				
At. Δ #1 (On Ice)				<u>CORRECTED WITH LEVEL</u>				947.14
To Mont. W $\frac{1}{4}$ -SEC. 25	254°-44'	5.24						
To Δ #2	302°-57'	6.57						947.14
Shore Line	256°-25'	2.72						
Slope Line	253°-50'	3.50				0.00		952.20
B.M.		5.10	509.3	+ 3°-04'	27.28	4.00	+23.28	975.16
S. L.	237°-20'	2.24						
Toe Slope	233°-30'	3.66				3.70		948.49
Slope Line	235°-30'	3.96				0.30		951.89
S. L.	127°-10'	3.13						

Page... 2 ... Transit. Obs. Line.
 Date... 3-12-35 ... 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.			
Toe Slope	124° 50'	4.25					4.10		948.09
Top "	126° 40'	4.85		+	1° 37'	+13.68	5.00	+8.68	940.30 960.87
S. L.	279° 40'	3.50							
Toe Slope	276° 00'	3.80					3.70		948.49
Slope Line	274° 50'	4.05					0.20		952.00
S. L.	107° 20'	3.50							
Toe Slope	111° 15'	4.24					4.30		947.89
Top "	111° 40'	4.60		+	1° 05'	+8.70	5.00	+3.70	953.89
S. L.	292° 50'	4.66							
Top Slope	289° 30'	5.18					0.60		951.59
S. L.	88° 50'	3.76							
Toe Slope	89° 30'	4.46					3.75		948.44
Top "	90° 00'	4.80		+	0° 30'	+4.19	3.00	+1.19	953.38
S. L.	300° 55'	6.48							
Top Slope	296° 30'	6.48		+	0° 25'	+4.71	0.00	+4.71	956.90
S. L.	70° 50'	4.33							
Toe Slope	71° 50'	4.44					5.00		947.19

Page 3 Transit Obs. Line
 Date 3-13-25 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.			
Top Slope	74° 10'	5.06		+	1° 00'	8.80	3.00	+5.80	957.99
S. L.	194° 05'	1.56							
S. L.	59° 20'	5.20							
Toe Slope	60° 00'	5.30					4.80		947.39
Top Slope	61° 35'	5.63		+	1° 10'	11.43	4.00	+7.43	959.62
S. L.	159° 40'	2.77							
S. L. + Q Creek	151° 30'	3.72							
	H.I. 5.02								
At Δ#2									947.14
To Δ#1	122° 57'	6.57							947.14
Δ#3	286° 25'	5.89							947.14
S. L.	276° 20'	1.28							
Toe Slope	253° 15'	1.30					2.40		949.76
Top "	239° 30'	1.40		+	5° 05'	12.40	3.00	+9.40	961.56
S. L.	273° 35'	2.94							
Toe Slope	259° 50'	2.90					2.60		949.56
S. L.	280° 20'	4.53							

Page 4 Transit Obs. Line
 Date 3-12-35 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.		
Top Slope	252° 55'	3.00		+	2° 30'	13.10	3.00	+10.10 962.26
S. L.	273° 40'	4.68						
Top Slope	255° 10'	4.88		+	2° 10'	18.45	5.00	+13.45 965.61
Toe "	262° 00'	4.77					0.90	951.26
								H.I. 981.35
At Mont.								
To Δ Mont. "A"	116° 23'	6.21		-	2° 38'	28.50	5.00	33.50 947.85 ^v
To B.M.							6.19	975.16
	953.85 } 952.58 }							H.I. 952.72
At Δ Mont. "A"								947.82 947.85
To Mont.	296° 23'	6.21						
To B.M.		6.17		+	2° 34'	27.58	5.00	+22.58 975.16
Toe Slope	278° 10'	3.86					2.50	950.22
Gen. On Slope	278° 10'	4.30		+	1° 10'	8.73	5.00	+3.73 956.45
Toe Slope	260° 40'	4.65					2.50	950.22
Top Slope	261° 00'	5.30		+	1° 17'	11.87	5.00	+6.87 959.59
Toe Slope of Rd.	248° 50'	5.63		+	0° 45'	7.38	5.00	+2.38 955.10

Page 5 Transit Obs. Line
 Date 3-15-35 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.			
Toe Slope of Rd.	239° 20'	6.00		+	1/2	+3.0	0.00	+3.0	955.72
" "	239° 00'	4.43					0.20		952.52
G. Elv.	250° 00'	3.60					4.25		948.47
Top Slope	236° 10'	4.43		+	1° 30'	+11.60	5.00	+6.60	959.32
Toe "	236° 30'	2.18					3.90		948.82
Top "	227° 40'	2.35		+	1° 30'	+6.15	2.00	+4.15	956.87
Toe "	214° 00'	1.00					3.00		949.72
Top "	206° 15'	1.20		+	5° 17'	+11.04	6.00	+5.04	957.76
" "	142° 30'	1.07		+	5° 00'	+9.32	10.00	-.68	952.04
Toe "	136° 55'	.90					3.75		948.97
Gen. "	118° 15'	1.73		+	1/2	+8.6	0.50	+3.6	953.08
Toe "	102° 30'	1.75					5.20		947.52
Q Creek	105° 25'	2.70					5.15		947.57
Top of Dam	107° 40'	2.70					3.45		949.27
Top of Culv. 3'-6" To F.L.	111° 42'	2.86					2.33		950.39 -
Toe Slope	101° 30'	2.80					5.25		947.47
Top "	103° 30'	3.10					1.10		951.62

Page... 6 ... Transit ... Obs. ... Line ...
 Date... March ... 12, 1935 ... 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.			
Shore Line	80° 05'	2.58					5.10		947.62
Gen. on Slope	81° 00'	3.00		+	1/2	+1.5	0.70	+80	953.52
S. L.	63° 45'	1.18							
Elv. of Ice							4.99		947.72
Gen. Elv.	339° 00'	.91					5.05		947.67
" "	285° 15'	1.86					4.95		947.77
" "	253° 45'	1.40					5.03		947.69
℄ Still Rd.	134° 10'	1.99		+	1	+2.00	1.15	+85	953.57
Gen. Elv.	250° 00'	2.43					5.00		947.72
℄ Still Rd.	224° 55'	2.70		+	3	+8.10	3.30	+4.80	957.52

VIT. PIPE OUTLET FLOW LINE

℄ RD. 26' SO. HEADWALL

℄ RD. = 5.9' ABOVE F. LINE

946.90

952.80

Page 7 Transit Obs. Line
 Date 3-12-35 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>ON ICE</i>									
Rt Δ #3	H.I. 5.09								947.14
To Δ #2		106° 25'	5.89						
Δ #4		307° 35'	5.59				4.00		948.23
S. L.		197° 30'	1.00						
Toe Slope		184° 40'	2.30				0.20		952.00
Top "		156° 45'	2.93	+	4	+11.72	0.50	+11.22	963.45
Toe "		215° 30'	2.90	+	1/2	1.45	2.60	1.15	951.08
Top "		185° 30'	2.74	+	3° 12'	15.29	3.00	+12.29	964.52
S. L.		240° 30'	1.67						
Top Slope		202° 00'	3.33	+	2° 45'	15.98	4.00	11.98	964.21
Gen. Elev.		235° 00'	2.59				3.75		948.48
& Draw		214° 05'	3.86	+	1° 45'	11.77	4.00	+7.77	960.00
Toe Slope		227° 40'	3.45				0.00		952.23
Gen. "		227° 00'	4.00	+	1° 55'	13.36	5.00	+8.36	960.59
Toe "		245° 10'	4.08				1.60		950.63
Top "		244° 25'	4.42	+	2° 25'	18.61	5.00	+13.61	965.84
S. L.		264° 25'	2.80						

Page 8 Transit Obs. Line
 Date 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.		
Top Slope	259° 25'	5.20		+	1° 20'	+12.06	4.00	+8.06 960.29
Toe "	265° 10'	4.93		+	1/2	+2.46	4.20	1.74 950.49
S. L.	283° 00'	3.66						
S. L.	274° 50'	4.28						
Gen. Elev.	283° 45'	5.00				4.35		947.88
S. L.	291° 45'	4.42						
H.I. 5.21		953.44 } H.I. 953.42						
Ht. #4		953.39 }						
To Δ #3	127° 35'	5.59				6.25		947.14
To Δ #4 A	270° 18'	5.83		+	1/2	2.91	2.63	+2.28 953.70
To Δ #5	3° 22'	5.92				4.10		949.32
S. L. & Creek	100° 00'	0.52						
£ Creek	194° 15'	0.85						
Gen. Elev.	198° 30'	0.85				5.55		947.87
£ Creek	190° 00'	1.28						
Gen. Elev.	184° 00'	2.63				5.85		947.57
Toe Slope	194° 30'	3.63				3.00		950.42

Page 9 Transit March 13, 1935 Obs. March 13, 1935 Line March 13, 1935
 Date March 13, 1935 Rec. March 13, 1935

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.			
Bottom Creek	213° 20'	2.53					6.30		947.12
Gen. Elev.	215° 10'	2.20					4.60		948.82
Toe Slope	199° 15'	3.68		+	1/2	1.84	0.95	+1.90	954.32
& Ice Rd.	245° 20'	1.54					4.30		949.12
Toe Slope	215° 15'	3.77					3.50		949.92
& Bvr. Lk. Rd.	214° 15'	4.73		+	1/2	2.36	0.90	+1.46	954.88
Flowline 30" Culv.							6.00		947.42
& Rd - Top of "	235° 55'	3.17					2.25		951.17
Inlet of Culv.							5.95		947.47
& B. L. Rd.	271° 15'	2.63		+	1/2	1.30	0.30	+1.0	954.42
Gen. Elev.	270° 40'	2.30					2.00		951.42
Gen. On Slope	301° 45'	2.17		+	1/2	1.10	0.10	+1.0	954.42
Gen. Elev.	273° 15'	1.05					5.90		947.52
Toe Slope	303° 15'	2.02					3.25		950.17
S. L.	310° 00'	1.12							
Ground Line at Shack	322° 25'	2.15					2.40		951.02
S. L.	337° 30'	2.40							

Page 10 Transit Obs. Line
 Date 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.			
Toe Slope	331°00'	2.70					1.80		951.62
Top "	331°30'	3.35		+	505'	29.68	5.00	+24.68	978.10
S. L.	355°30'	3.38							
Top Slope	347°45'	3.92		+	3°00'	20.50	5.00	+15.50	968.92
Toe "	352°00'	3.69					4.10		949.32
Top "	354°50'	4.10					0.60		952.82
Toe "	2°10'	4.60					5.55		947.87
Top "	0°30'	4.81					0.30		953.12
S. L.	5°10'	5.53							
Top Slope	1°30'	5.08		+	1		0.00	+5.10	958.52
S.W. Cor. House	357°15'	5.20		+	1		0.00	+5.20	958.62
Toe Slope + S. L.	4°50'	5.52							
Top "	1°30'	5.70		+	2	11.40	5.60	+5.80	959.22
ℓ Ice Rd.	69°30'	0.20					5.20		948.22
H.I. 5.09		958.79 958.82	} H.I. 958.80						
At #4 A									953.71 953.70
To #4	90°18'	5.83					10.61		948.21 948.19

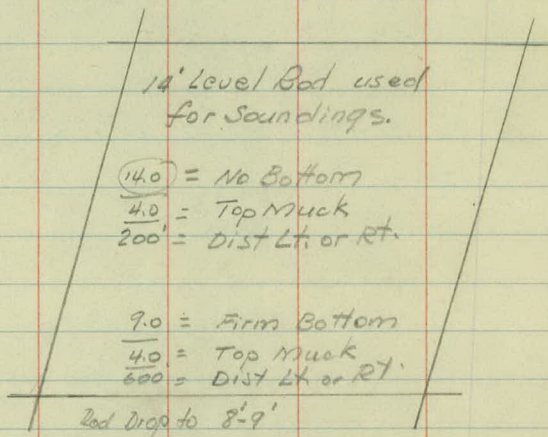
Elevation
and Depth of Water & Muck
Beaver Lake.

W. H. Carlson
March 17, 1937

	$\pm$	π	-	Elev.
B.M.	2.73	977.89		975.16
T.P.	0.79	967.97	10.71	967.18
✓	1.98	957.40	12.55	955.42
W.S.			10.75	946.65
Approx H.W.			9.1	948.3

Point
2642.36 Record Mon.

1845 No. Shore Line



840

640

4438 So. Shore Line

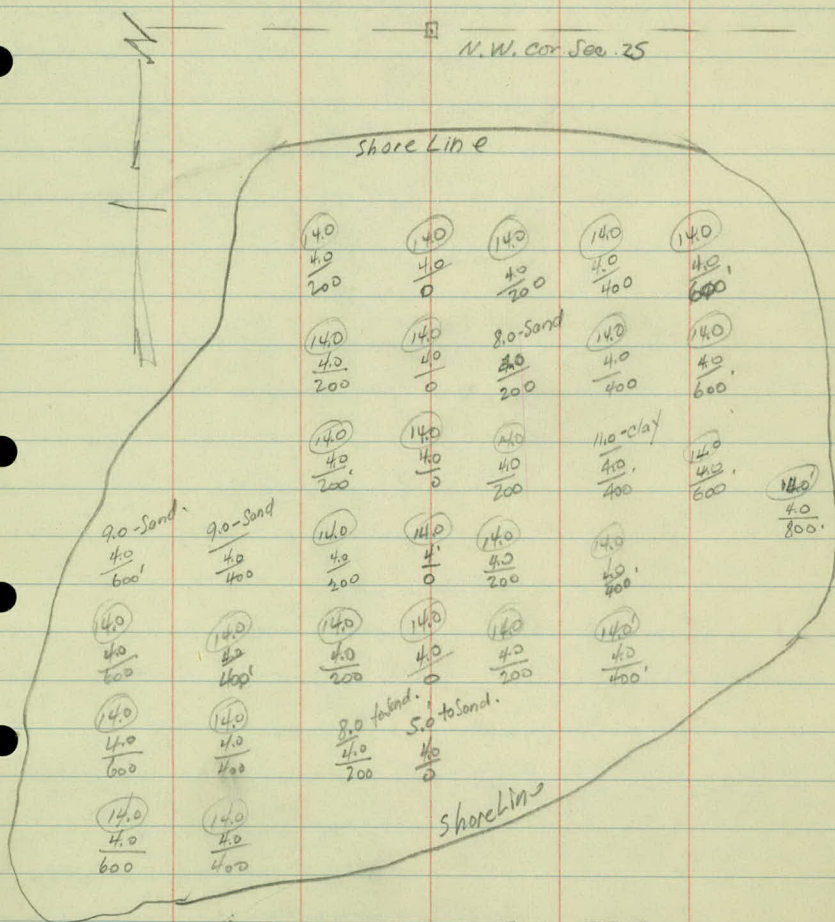
240

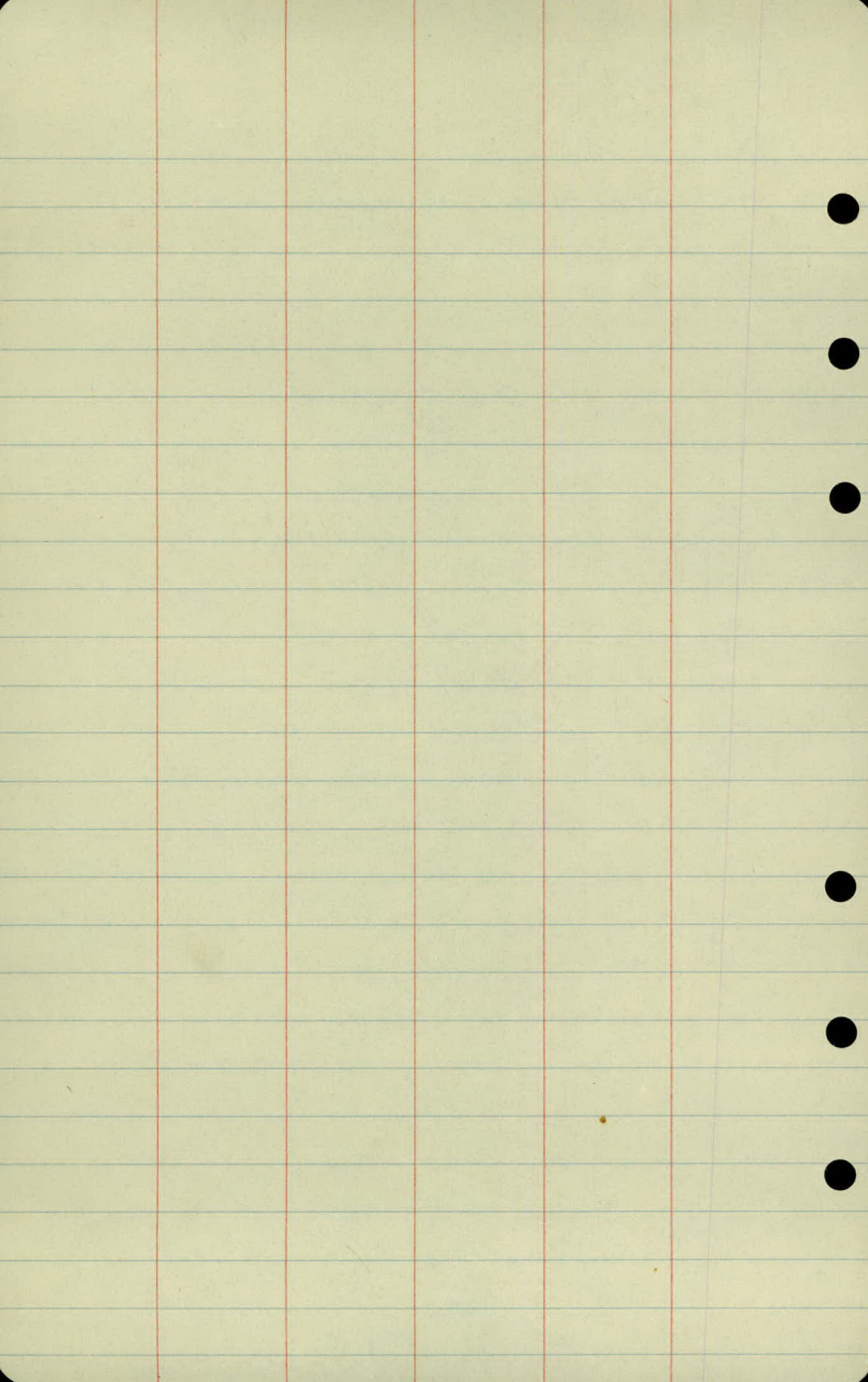
0400 Mon.

W.H.C.
 K.A. March 17/1936
 C.B.H.
 A.M.

Spike in P. Pole W. 1/4 cor. Sec. 25-

Spike in 953°





Page...11... Transit..... Obs..... Line.....
 Date..... Rec.....

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
Toe Slope	134° 30'	3.40					9.50		949.30
Gen. on Slope	140° 30'	3.67					2.30		956.50
Gen. Elv.	128° 00'	2.51					8.90		949.90
" "	143° 30'	1.63					8.30		950.50
Toe Slope	159° 45'	2.33					8.10		950.70
Gen. on Slope	165° 30'	2.76					1.90		956.90
" " "	195° 00'	2.41		+	1/2	1.20	0.60	+ .60	959.40
£ Draw	194° 30'	1.88					7.30		951.50
" "	248° 15'	1.36					5.70		953.10
Toe Slope	274° 15'	0.44					6.80		952.00
Gen. on Slope	68° 45'	0.50					3.70		955.10
" " "	78° 30'	1.50					4.40		954.40
" " "	80° 30'	2.70					7.50		951.30
" E Iv.	102° 45'	2.45					9.20		949.60
" "	107° 15'	1.63					8.50		950.30
" "	142° 30'	0.90					7.50		951.30
" "	69° 00'	2.70					0.00		958.80

Page 12 Transit Obs. Line
 Date 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 #5	H. I. 4.90	954.22 } 954.24 }	H. I.	954.23				949.33
To Δ #4		183° 22'	5.92			6.05		948.18
S. L.		10° 00'	0.42			7.25		946.98
Ice E.l.v.						7.01		947.22
Toe Slope		289° 20'	0.97			1.80		952.43
S. L.		339° 30'	1.40			7.05		947.18
Toe Slope		299° 30'	1.86			3.00		951.23
S. L.		1° 10'	2.67					
Top Slope		288° 30'	1.86	+	4° 30'	14.58	2.00	+12.58 966.81
Gen. E.l.v.		339° 15'	3.01			6.70		947.53
Top Slope		307° 00'	3.40	+	3° 40'	21.73	3.00	+18.73 972.96
Toe "		314° 30'	3.25			3.00		951.23
" "		317° 45'	4.96			1.20		953.03
" "		323° 25'	4.57			4.30		949.93
To Δ #5A		330° 09'	6.03			2.36		951.87
To Δ #6		44° 10'	7.75			4.35		949.88
Gen. E.l.v.		350° 25'	3.88			7.00		947.23

Page 13 Transit Obs. Line
 Date 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			
S. L.	11° 50'	3.54						
Gen. Elev.	5° 00'	4.45				6.90		947.33
S. L.	27° 00'	4.25						
At Δ#6	H.I. 4.94							
To Δ#5	224° 10'	7.75				5.65		949.88
To Δ#7.	85° 32'	5.33		+	1	5.33	3.02 + 2.31	949.33
To Δ#6A	343° 16'	2.36				0.28		957.13
Ice Elev.						7.60		954.54
Gen. Elev.	266° 00'	2.05				7.45		947.22
S. L.	210° 00'	1.43						947.37
Gen. Elev.	250° 00'	0.88				7.05		947.77
" "	149° 45'	1.02				7.15		947.67
" "	94° 45'	0.65				6.90		947.92
S. L.	129° 00'	2.27				7.50		947.32
Gen. Elev.	89° 50'	1.60				6.80		948.02
S. L.	137° 45'	3.00				7.70		947.12

H.I. ^{954.82}
~~954.90~~

Page. 14. Transit. Obs. Line.

Date. Rec.

OBJECT	AZIMUTH <i>H.I. = 954.82</i>	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.			
Gen. E-lv.	76° 45'	1.30					4.80		950.02
S. L.	142° 30'	4.00							
Top Knoll	38° 20'	1.40					2.50		952.32
Toe "	57° 00'	1.70					6.10		948.72
Gen. E-lv.	135° 00'	4.20					4.60		950.22
" "	56° 30'	2.45					5.75		949.07
E Ridge	116° 45'	3.95					4.40		950.42
Gen E-lv	50° 15'	2.78					3.05		951.77
E Ridge	100° 45'	4.50					4.00		950.82
Gen. E-lv.	67° 45'	5.04					3.05		951.77
" "	84° 00'	4.96		+	1/2	2.50	1.00	+1.50	956.32
E Draw	79° 10'	2.43					6.70		948.12
Gen. Slope	60° 50'	4.95		+	1	4.95	2.45	+2.50	957.32
Gen. E-lv,	84° 50'	3.55					6.60		948.22
Top Knoll	51° 45'	4.70		+	2° 30'	20.49	5.00	+15.49	970.31
Gen. E-lv,	67° 45'	3.78					0.00		954.82
Top Knoll	37° 00'	4.10		+	4° 00'	28.58	4.00	+24.58	979.40

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			
Gen. Elev.	57° 40'	4.25		+	1/2	2.12	0.00	956.94
" "	45° 50'	3.46		+	2	6.92	2.70	959.04
At A#6A	H.I. 5.05	On Knoll						954.54
To A#6	163° 16'	2.36				9.87		949.88
Gen. Elev.	162° 40'	1.09				10.80		948.87
Top Knoll	165° 30'	2.17				6.10		953.57
" "	183° 00'	2.05				8.10		951.57
Toe "	230° 00'	0.92				11.05		948.62
" "	281° 45'	0.78				11.30		948.37
" "	313° 00'	0.86				10.40		949.27
" "	354° 30'	1.04				7.20		952.47
Gen. Elev.	238° 45'	2.12				11.90		947.77
Toe Slope	31° 30'	1.47				1.00		958.67
" "	295° 30'	2.00				10.70		948.97
Top Knoll	35° 00'	0.30				3.80		955.87
Gen Slope	305° 30'	2.30				2.00		957.67

Page 16 Transit Obs. Line
 Date MARCH 14, 1935 Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
Toe Slope	287° 00'	2.65		Down-	or Angle	Equiv.	10.85		948.82
Gen. "	295° 15'	2.75					3.50		956.17
Toe "	313° 30'	1.26					9.70		949.97
Gen. Elv.	266° 30'	2.45					12.20		947.47
" Slope	323° 30'	1.63					2.05		957.62
Toe "	284° 50'	3.50					11.60		948.07
Gen. "	291° 00'	3.90					4.70		954.97
Toe "	276° 30'	4.20					11.10		948.57
Gen. "	282° 10'	4.36					1.65		958.02
" Elv.	276° 30'	4.97					11.25		948.42
(E Rd. Over 36" Culv.)			956.92 956.91	} H.I. 956.91					
At Δ#5A H.I. 5.05	150° 09'	6.03					7.58		951.87
To Δ#5	150° 09'	6.03					7.58		949.33
To Δ#5B	358° 37'	4.94					3.37		953.54
Outlet Culv.	90° 00'	0.17					9.03		947.88
Inlet "	270° 00'	0.17					8.37		948.54
Toe Slope	294° 40'	0.77					7.30		949.61

Page 17 Transit March 14, 1935 Obs. March 14, 1935 Line March 14, 1935
 Date March 14, 1935 Rec. March 14, 1935

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod Equiv.			
Toe Slope	313° 10'	1.60	✓				7.30		949.61
Gen. "	188° 30'	1.32					2.00		954.91
Toe "	328° 15'	2.79	✓				7.30		949.61
Gen. "	255° 15'	1.22					0.30		956.61
" E/v.	343° 10'	3.40	✓				7.30		949.61
" Slope	290° 15'	2.00		+	1/2	+1.00	0.60	+40	957.31
Toe of Rd.	357° 30'	2.90	✓				7.30		949.61
Gen. Slope	314° 15'	2.70	✓				0.70		956.21
" E/v. (Through Ice)	339° 20'	1.22	✓				8.50		948.41
" "	227° 00'	3.47					2.25		954.66
ℓ Bvr. Lk. Rd.	0° 15'	0.76					7.05		949.86
Top of Ice (E. of Rd.)							7.30		949.61
ℓ Bvr. Lk. Rd.	0° 15'	1.80					7.25		949.66
Gen. E/v.	33° 30'	1.18					9.35		947.56
ℓ Bvr. Lk. Rd.	00° 00'	3.35					6.25		950.66
Gen. E/v.	105° 00'	0.97					9.00		947.91
" "	67° 50'	1.28					9.40		947.51

Page 18 Transit Obs. Line
 Date 3-14-35 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.			
Gen. E Iv.	103° 15'	1.84					9.10		947.81
& Brr bk Rd.	180° 00'	1.25					0.00		956.91
Toe of Rd.	205° 00'	0.38					6.65		950.26
(Shoulder Rd.)									
At. Δ#5B. H.I. 505			958.59 958.57 }						953.54
To Δ#5A.	178° 31'	4.94					6.70		951.87
Toe of Rd.	182° 00'	0.70					8.15		950.43
Gen. E Iv.	222° 30'	1.20					8.00		950.58
Toe Slope	231° 00'	2.14					7.40		951.18
Gen. "	231° 30'	2.61					1.40		957.18
Toe "	263° 15'	2.60					4.50		954.08
Gen. "	263° 15'	3.05		+	1/2	1.52	0.30	+1.22	959.80
Toe "	285° 15'	2.34					4.55		954.03
Gen. "	286° 00'	2.85		+	1/2	1.42	0.00	+1.42	950.00
Toe "	312° 30'	2.27					3.42		955.16
Gen. E Iv.	285° 00'	1.31					5.80		952.78
" "	335° 30'	1.50					4.00		954.58

Page 19 Transit Obs. Line
 Date 3-14-35 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.			
Gen. Elev.	227° 30'	0.55					7.85		950.73
" "	312° 30'	0.52					5.80		952.78
Int. Rd.	10° 20'	0.60					1.40		957.18
Toe "	158° 30'	0.79					8.35		950.23
Gen. Elev.	49° 10'	0.65					1.95		956.63
Toe Slope	109° 45'	1.70					9.30		949.28
Gen. Elev.	105° 00'	0.74					4.10		954.48
Toe Slope	115° 00'	2.76					8.70		949.88
Gen. "	88° 00'	1.60					0.70		957.88
Toe "	121° 50'	3.42					10.05		948.53
Gen. "	98° 20'	2.56		+	1/2	1.28	0.40	+ .88	959.46
" Elev.	130° 20'	4.06					10.80		947.78
" Slope	112° 15'	3.33					0.40		958.18
" Elev.	143° 30'	2.32					10.00		948.58
" "	148° 00'	1.74					10.15		948.43
" "	158° 30'	2.30					10.50		948.08
" "	152° 30'	2.80					10.30		948.28

Date 3-14-35 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			
Toe Rd.	171°45'	1.96				10.10		948.48
ℓ Bvr. LK Rd.	90°00'	0.08				5.00		953.58
Gen. Elev.	137°45'	0.80				7.00		951.58
At Δ#7	H.I. 5.09							
To Δ#6								
To Δ#8								
To Mont. N.W. Cor. Sec. 25								
Gen. Elev.								
" "								
" "								
At Δ#8	H.I. 5.09							
To Δ#7								
To Δ#9								
Gen. Elev.								
Ice Elev.								

Page. 21 Transit Obs. Line
 Date. 3-14-35 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.			
Gen. Elev.	343°30'	2.45		+	1/2		0.00	+1.22	955.01
" "	8°30'	2.66		+	1		0.00	+2.66	956.45
S. L.	268°00'	5.95							
Gen. Elev.	269°30'	5.50					2.00		951.79
Top Knoll	37°15'	2.53		+	2		0.00	+5.06	958.85
Toe "	37°00'	2.08					0.70		953.09
Gen. Elev.	272°45'	4.35					4.35		949.44
S. L.	269°45'	4.05							
Gen. Elev.	70°15'	2.53		+	1/2	1.26	0.30	+94	954.73
Toe Knoll	71°50'	2.36					1.50		952.29
Top "	91°00'	2.75		+	1/2	1.37	1.20	+17	953.96
Toe "	93°30'	2.63					2.20		951.59
S. L.	272°45'	1.86					6.60		947.19
Gen. Slope	117°45'	2.87					0.70		953.09
Toe "	117°45'	2.65					2.50		951.29
Gen. "	139°45'	3.03					1.10		952.69
Toe "	139°30'	2.75					4.30		949.49

Page 22 Transit Obs. Line
 Date. 3-14-35 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.			
S.L.	258°00'	0.68							
Top knoll	117°40'	3.28		+	2 1/2	+8.20	0.50	+7.70	961.49
Gen. Elev	325°00'	1.32					2.40		951.39
" "	14°30'	1.00					2.90		950.89
" "	86°00'	1.14					4.30		949.49
Top knoll	140°00'	3.38		+	1 1/2	5.02	1.10	+3.92	957.71
Gen. Elev.	130°00'	1.74					4.90		948.89
" Slope	153°30'	3.38		+	1/2	1.69	1.40	+2.29	954.08
" Elev.	133°30'	1.00					5.60		948.19
Toe Slope	154°00'	2.70					5.00		948.79
S.L.	161°00'	0.51							
Gen. Slope	159°30'	3.80					0.50		953.29
Toe "	162°00'	3.75					5.25		948.54
S. L.	157°00'	2.30							
" "	166°30'	3.73							
Toe Slope	160°10'	4.55					5.65		948.14 ?

Page 23 Transit Obs. Line.
 Date 3-14-35 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.			
Top Knoll	160°15'	4.55		+	1/2	2.27	2.30	0.0	953.79
S. L.	169°45'	4.60							
	952.91 }								
	952.80 }								
At Δ#9	H.I. 4.75								948.10
To Δ#8	341°29'	5.50					4.10		948.75
To Δ#10	137°22'	6.08							
Ice E. V.							5.68		947.17
S. L.	219°00'	0.06							
" "	311°00'	0.40							
Toe Knoll	337°00'	0.34					4.40		948.45
Top "	2°30'	0.36					+0.50		953.35
" "	104°45'	0.73					0.00		952.85
Toe "	121°00'	0.70					4.40		948.45
S. L.	127°00'	1.55							
Top Knoll	118°50'	2.14		+	1/2	1.07	0.70	+ .37	953.22
Toe "	126°00'	2.75					4.10		948.75
Top "	122°30'	2.75		+	1	2.75	0.50	+2.25	955.10

Page 24 Transit Obs. Line
 Date 3-14-35 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.			
Toe Slope	129°00'	2.76					5.75		947.10
" "	130°45'	3.75					5.85		947.00
Top Knoll	125°00'	3.90		+	1	3.90	0.20	+3.70	956.55
Toe "	128°00'	3.86					2.20		950.65
Top "									
(Slope)									
At Δ # 10 H.I. 4.80									951.00
To Δ # 9	317°22'	6.08					7.03		948.16
To Mont. W $\frac{1}{4}$ -Sec. 25	229°24'								
Ice Ely.							8.62		947.20
S.l.	285°00'	0.25							
" "	330°30'	1.34							
Gen. Slope	340°15'	1.28					4.70		951.10
Top "	349°00'	1.33		+	2°20'	5.41	2.00	+3.41	959.21
" "	68°00'	0.26					+1.00	+1.00	956.80
" "	163°00'	1.48		+	2°50'	7.31	2.00	+5.31	961.11
Gen. "	171°00'	1.42					5.20		950.60

H.I. 955.80

Page 25 Transit Obs. Line
 Date. 3-14-35 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.			
S. L.	176° 15'	140							
" "	180° 45'	2.50							
Gen. Slope	177° 45'	2.55					5.60		950.20
Top "	172° 15'	2.64		+	1° 55'	8.82	3.00	+5.82	961.62
" "	177° 40'	3.50		+	1° 15'	7.63	4.00	+3.63	959.43
Gen. "	180° 30'	3.47					4.80		951.00
S. L.	183° 30'	3.45					8.60		947.20
At Mont. W $\frac{1}{4}$ SEC. 25									
To Δ #10	49° 24'								
To Mont. N.W. COR. SEC. 25	359° 59'				(360°-00')				

Page 26 Transit Obs. Line
 Date. March 20, 1935 Rec. RAIN & COLD

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.		
At Mont. NW Sec #25								
To Mont W 1/4 Sec #25	180° 00'							
To Δ #100	0° 48'	5.07						
To Δ #101								
At Δ #100								
To Mont. NW Sec #25	180° 48'	5.07						
To Δ #101	311° 55'	9.25						
At Δ #101								
To Δ #100	131° 55'	9.25						
To Δ #102	318° 20'	17.50						
℄ Div. Tracks	23° 00'	3.00						
At Δ #102								
To Δ #101	138° 20'	17.50						
To Δ #103	299° 30'	9.20						

Page 50 Transit Obs. Line

Date..... Rec.....

Book 1 of 1

TOPOGRAPHIC SURVEY
BEAVER LAKE

A.W. LINDAHL
W.A. ANDERSON

OCTOBER 1935

ORIGINAL SURVEY NOTES IN RAMSEY
COUNTY SURVEYOR'S OFFICE

Note File NO. 11

VERTICAL ANGLES.
ERROR 0% 07.
ON + SHOTS - SUBTRACT FROM REAP.
ON - " ADD TO READING

Page 1 Transit Obs. LINDAHL Line BEAVER LAKE
Date OCT. 31, 1935 Rec. ANDERSON

Page 2 Transit.....Obs.....Line.....Date.....Rec. Anderson Snow + Rain

980.95

OBJECT

AZIMUTH

STADIA

DIS-
TANCE

INTERVALS OR VER. ANGLE

Up+ No. of Int.
Down- or AngleRod
Equiv.READ.
ON
RODDIFF.
OF
ELEV.ELEVATION
ABOVE
DATUM

G. E.

205-00

200

1.7 -1.7

978.8

G. E.

221-50

200

+ 0-46 2.7

2.0+0.7

981.2

G. E.

238-30

204

+ 0-57 3.4

2.0+1.4

981.9

G. E.

251-45

217

1.45 -1.4

979.1

To Δ #11

269-41

3.17

+2 ~~0-78~~ +1.50

0.78 +.80

981.77

G. E.

343-50

82

6.6 -6.6

973.9

S.W. Corn House 24'x48'

306-50

107

5.2 -5.2

975.3

NW " "

321-50

145

5.3 -5.3

975.2

G. E. Yard

285-50

110

4.4 -4.4

976.1

G. E. Yard

300-00

72

5.8 -5.8

974.7

987.09 ^(986.89) _{987.29}H. I. = ~~987.29~~ 986.91At Δ #11 HI 5.14 & Rd 8' N.

Rd 18' Top Surface 982.15

981.77

To MONT.

89°41'

318

11.19

975.68

 Δ 12

181°-03'

392

6.69

980.20

SW. Ch. Coop 10'x10

49-20

275

-1 one

12.00 -12.0

974.9

SE Ch "

47-10

273

-1 one

12.00 -12.0

974.9

SW Garage 20'N 16'E

39-50

254

12.3 -12.3

974.6

Page 3 Transit. Obs. Line.
 Date OCT. 22, 1935 Rec. Snow & Rain

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.			
S.W. Ch Goop 16x52	37-00		238				10.4	-10.4	976.5
S E " "	24-40		210				7.1	-7.1	979.8
G. E.	3-00		175	+	3-00	9.2	10.0	-0.8	986.1
Q Draw	316-20		222	+	1-00	3.9	10.0	-6.1	980.8
W. Slope	284-20		260	+	1-45	7.9	2.0	+5.9	992.8
CL Road	272-45		271	+	1-25	6.7	0.0	+6.7	993.6
Toe Slope	282-40		126				1.9	-1.9	985.0
G. E.	303-20		145				1.3	-1.3	985.6
G. E.	338-20		118				3.6	-3.6	983.3
NE Corn. Berry Patch	2-40		127				2.3	-2.3	984.6
G. E. " "	43-40		102				6.6	-6.6	980.3
N.W. 24' W. to Road	46-30		204				9.0	-9.0	977.9
Toe Slope	7-30		28				8.3	-8.3	978.6
W. E. Wood	253-40		113				1.6	-1.6	985.3
Edge "	213-00		200				0.0	-0.0	986.9
G. E.	198-20		200				3.6	-3.6	983.3
G. E.	185-40		244				5.6	-5.6	981.3

Page 4 Transit Obs. Line
 Date 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.			
G.E.	173-20		265				6.0	-6.0	980.9
G.E.	156-00		275				7.0	-7.0	979.9
On Knoll	143-00		160				5.3	-5.3	981.6
Cl Drawn	166-30		142				10.4	-10.4	976.5
Toe Slope	204-00		85				9.7	-9.7	977.2
Fence Line	182-00		25				8.3	-8.3	978.6
G.E.	211-20		143				3.5	-3.5	983.4
G.E.	211-00		169				3.7	-3.7	983.2
Toe Rd Grade	104-00		45				8.3	-8.3	978.6
" " "	175-00		10				9.0	-9.0	977.9
" " "	261-00		56				4.7	-4.7	982.2
" " "	266-40		112				1.6	-1.6	985.3
G.E.	257-30		14.5	up	1		0.0	-0.7	986.2
G.E.	261-00		202	+	3-35	12.6	6.0	+6.6	993.5
Knoll	239-00		205	+	2-40	9.5	3.0	+6.5	993.4
G.E.	228-00		228	+	2-30	10.0	3.0	+7.0	993.9
G.E. S. slope	214-00		260	+	0-55	4.2	3.0	+1.2	988.1

Page 5 Transit..... Obs..... Line.....
 Date..... 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.			
Toe of Knoll	207-00		275				4.8	-4.8	982.1
985.30 { 985.30 - { 985.30 -	H. I. =		785.15		985.10				
A+ Δ 12 H. I. = 4.90									980.20
To Δ 11	1-03		392				3.35		981.77
^{24'} Inters. Kerwin St & East Ave	128-00		403	-	4-40	32.8	5.00	-37.8	947.3
Q East Ave	114-00		349	-	4-50	29.4	5.00	-34.4	950.7
Q " "	97-30		324	-	4-40	26.4	5.00	-31.4	953.7
Q " "	80-20		326	-	0-45	4.3	10.00	-14.3	970.8
Top of Ridge	120-00		60				7.7	-7.7	977.4
Q Kerwin St	143-50		354	-	2-15	13.9	2.0	-15.9	969.2
Q Draw	76-30		95				11.7	-11.7	973.4
Q K St.	166-00		304				9.5	-9.5	975.6
Top Knoll	72-50		203				6.2	-6.2	978.9
Q K St	189-20		278				3.4	-3.4	981.7
Q K St	211-20		304	+	1-30	8.0	5.0	+3.0	988.1
Fence Line	74-30		305	-	1°-30'	8.0	10.0	-18.0	967.1
" "	214-30		277	+	1-46	8.6	4.0	+4.6	989.7

Page 6 Transit. Obs. Line.
Date. 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.			
Fence Line	87-30		290	down	5		12.0	-12.0	972.4
" "	194-00		254				2.4	-2.4	982.7
Top Knoll	93-00		264				12.0	-12.0	973.1
Fence Line	170-15		267				9.4	-9.4	975.7
Colvert #7520 18"	113-20		315	-	4-25	24.2	5.0	-29.2	955.9
G.E.	114-20		312	-	4-10	22.6	5.0	-27.6	957.5
Fence Line	147-30		310	-	2-20	12.6	5.0	-17.6	967.5
Fence Corn.	130-10		370	-	2-30	16.1	5.0	-21.1	964.0
Q Draw	138-20		295	-	2-10	11.1	10.0	-21.1	964.0
G.E.	128-00		335	-	2-45	16.1	5.0	-21.1	964.0
G.E.	127-00		304	-	2-40	14.1	10.0	-24.1	961.0
G.E.	142-40		220	-	2-15	8.6	5.0	-13.6	971.5
Q Draw	110-40		180	-	2-00	6.3	10.0	-16.3	968.8
G.E.	163-40		172				7.4	-7.4	977.7
G.E.	34-00		68				1.0	-1.0	984.1
G.E.	202-10		188				1.9	-1.9	983.2
Q Draw	317-00		67				7.0	-7.0	978.1

Page 7 Transit Obs. Line
 Date 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.			
G. E.	223-00	170	+	2-05	6.2	5.0	+1.2	986.3
Slope W.	231-30	188	+	4-40	15.3	5.0	+10.3	995.4
Toe of Knoll	300-30	115				6.8	-6.8	978.3
" "	278-30	117	+	3-00	6.1	10.0	-3.9	981.2
On W. slope	233-30	273	+	5-20	25.3	5.0	+20.3	1005.4
Toe of "	251-30	123	+	5-00	10.7	6.0	+4.7	989.8
G. E.	191-30	20				3.0	-3.0	982.1
Top Knoll	263-40	76	+	4-30	6.0	3.0	+3.0	988.1
G. E.	193-20	195				3.0	-3.0	982.1
G. E.	121-00	133				12.0	-12.0	973.1
G. E.	184-20	214				6.1	-6.1	979.0
G. E.	125-20	240	-	2-45	11.5	7.0	-18.5	966.6
G. E.	157-40	138				9.9	-9.9	975.2
G. E.	195-30	100				6.0	-6.0	979.1
Δ 12 A	224-30	384	+	3-12	21.4	10.0	+11.4	996.5
Δ 13	255-15	356	+	6-05	37.95	5.0	+32.95	1017.24

Page 8 Transit Obs. Line
 Date 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 A 12 A H.I. 5.1			H.I. = 1001.6						996.5
To A 12	44-30		384	-	1-07	7.5	12.0	19.5	980.20
CL Kerwin	14-40		34	-	1-44	1.0	7.0	-8.0	993.6
"	304-00		100				3.3	-3.3	998.3
Dip. "	315-40		109				4.7	-4.7	996.9
"	300-00		220	+	1-03	4.0	1.0	+3.0	1004.6
"	301-20		352	+	2-13	13.6	5.0	+8.6	1010.2
"	302-00		520	+	2-03	18.5	5.0	+13.5	1015.1
Inter s " + W.B.Rd.	302-30		880	+	1-47	27.2	12.0	+15.2	1016.8
$\frac{1023.52 \times}{1022.38} \text{ H.I.} = \frac{1023.52}{1022.38} \times 1001.6 = 1022.90 \quad 1022.51$									
At A 13 H.I. 5.27			330				8.71		1017.24
To A 12	75-15		358	-	6-14	38.88	3.0	41.88	980.20
Fence	130-00		188	-	6-19	20.3	6.0	-26.3	996.2
"	173-00		86				10.9	-10.9	1011.6
G.E.	121-30		135	-	3-36	8.5	8.0	-16.5	1006.0
Fence	257-40		120				5.2	-5.2	1017.3
G.E.	74-40		128	-	2-50	6.3	10.0	-16.3	1006.2

Page 9 Transit Obs. Line
 Date 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.			
G.E.	41-00		208	-	4-30	16.2	5.0	-21.2	1001.3
Fence	283-00		265				4.5	-4.5	1018.0
G.E.	18-20		222				11.1	-11.1	1011.4
Fence	290-20		395				7.3	-7.3	1015.2
G.E.	18-10		102				6.5	-6.5	1016.0
Fence Corn.	293-20		535				7.9	-7.9	1014.6
G.E.	214-00		35				6.3	-6.3	1016.2
Fence	301-30		580				10.4	-10.4	1012.1
G.E.	279-00		121				4.0	-4.0	1018.5
G.E.	301-20		470				9.1	-9.1	1013.4
G.E.	307-00		360				7.6	-7.6	1014.9
G.E.	325-00		120				3.9	-3.9	1018.6
G.E.	311-30		220				4.5	-4.5	1018.0
G.E.	345.00		240				5.4	-5.4	1017.1
To A 14	341-30		330				8.71		1013.72

Page 10 Transit..... Obs..... Line.....
 Date..... 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.			
^{1019.21} 1019.205	H.I. =			1019.30		1018.72			
At A14 H.I. 5.0									1013.72
To A13	161-30		330	+	0-40	3.84	5.0	-1.16	1017.24
Top Slope	244-30		71				2.9	-2.9	1015.8
" "	256-00		190				7.2	-7.2	1011.5
" "	266-30		295				8.4	-8.4	1010.3
Fence Line	270-20		380				7.7	-7.7	1011.0
Toe Slope	280-00		290	-	3-52	19.5	2.0	-21.5	997.2
Top "	149-00		37				0.6	-0.6	1018.1
Toe "	279-30		184	-	8-02	25.1	4.0	-29.1	989.6
" "	323-40		100	-	12-40	21.0	6.0	-27.0	991.7
F.L. To Rd.	327-00		176	-	8-45	26.1	4.0	-30.1	988.6
Top Sl.	110-10		113				3.1	-3.1	1015.6
Toe Sl.	74-30		160	-	3-55	10.9	7.0	-17.9	1000.8
" Sl.	63-00		112	-	7-56	15.1	5.0	-20.1	998.6
G.E.	7-20		141	-	4-20	10.5	10.0	-20.5	998.2
G.E.	40-20		118	-	8-06	16.0	6.0	-22.0	996.7

Page 11 Transit Obs. Line
 Date 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.			
G.E.	18-20		60	-	8-03	8.0	9.0	-17.0	1001.7
TO Δ #15	331-00		476	-	2-34	21.31	5.0	-20.31	991.90
	^{997.59} 996.46				H.I. 997.02	996.50			
AT Δ #15 H.I. 4.6	151-00		476	+	2-45		5.0		991.90
Δ #14	151-00		476	+	2-45	12.84	5.0	+17.84	1013.72
Δ #16	285-20	323	325	-	4-09	23.52	5.0	-28.52	967.60
Δ									
Φ RD	150-00		2.65				2.8	-2.8	993.7
Φ RD	180-00		2.30				4.4	-4.4	992.1
S.E. COR. ^{14x31} BARN	119-00		3.15	+	0-52	4.8	5.0	-0.2	996.3
N.E. " "	113-40		3.00	+	0-42	3.7	5.0	-1.3	995.2
Φ RD	133-00		3.44	+	0-43	4.3	5.0	-0.7	995.8
S.E. F.C.	116-40		2.70				4.0	-4.0	992.5
TOE RD	139-40		2.72				7.2	-7.2	989.3
N.E. COR. CHICK. COOP	108-30		2.98				5.3	-5.3	991.2
TOP CUT	129-40		3.33	+	1-28	8.5	5.0	+3.5	1000.0
" "	134-20		3.80	+	1-16	8.4	5.0	+3.4	999.9

Page 12 Transit Obs. Line
 Date 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.			
N.W. COR. CHICH. COOP ^{14'x28'}	106-40		3.24				4.8	-4.8	991.7
TOP CUT	169-20		2.14				1.8	-1.8	994.7
" "	170-30		2.52				0.0	0.0	996.5
F.L.	91-40		2.18	-	3-32	13.4	5.0	-18.4	978.1
S.W. COR. HO. ^{25'x35'}	182-20		1.70				6.7	-6.7	989.8
F.L.	50-40		2.88	-	8-01	38.8	5.0	-43.8	952.7
N.W. COR. HO.	182-50		1.32				7.0	-7.0	989.5
TOE	52-00		1.70	-	8-44	25.0	3.0	-28.0	968.5
± DRAW	71-00		1.68	-	8-02	23.0	5.0	-28.0	968.5
"	96-00		1.45	-	5-30	13.9	5.0	-18.9	977.6
N.E. CHICH. COOP ^{24'x12'}	339-40		.43				7.5	-7.5	989.0
N.W. " "	212-00		.24				5.6	-5.6	990.9
± DRAW	127-00		1.56				9.8	-9.8	986.7
N.W. F.C.	351-40		.39				9.1	-9.1	987.4
N.W. F.C.	101-00		2.95				11.4	-11.4	985.1
N.E. F.C.	313-40		.63				10.9	-10.9	985.6
F.C.	91-40		3.76	-	0-43	4.7	10.0	-14.7	981.8

Page 14 Transit Obs. ANDERSON Line
 Date OCT 23, 1985 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.			
972.40 973.75 H.I. =									
At A16 H.I. = 4.90									967.60
To A15	105-20		325	+	4-21	24.65	5.0	+19.65	991.90
N.W. Corn, Ch. Coop 8x22	113-00		237	+	1-45	7.2	3.0	+4.2	976.7
Top Cut	182-40		258	+	7-30	33.4	4.0	+29.4	1001.9
N.E. Corn, Ch Coop	114-20		226	+	0-53	3.5	1.0	+2.5	975.0
Q E. Ave.	158-30		318	+	3-55	21.6	5.0	+16.6	989.1
S.E. Corn Ch. Coop.	119-00		238	+	2-05	8.6	3.0	+5.6	978.1
Q E. Ave	178-00		173	+	4-42	14.1	5.0	+9.1	981.6
G.E.	151-10		153				3.8	-3.8	968.7
NW. Corn Barn 20x20	124-40		242	+	3-05	13.0	4.0	+9.0	981.5
NE " "	127-30		223	+	3-06	12.0	4.0	+8.0	980.5
Fence Corn	90-00		220	+	2-08	8.2	3.0	+5.2	977.7
NW. Corn Garage 14-18	123-40		268	+	3-25	15.9	5.0	+10.9	983.4
G.E.	103-00		115				9.6	-9.6	962.9
Toe Rd Grade	138-40		20				9.3	-9.3	963.2
Q E. Ave.	202-20		20				3.2	-3.2	969.3

Page 15 Transit Obs. Line
 Date 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.			
NE Corn House ²⁴⁻⁴⁰	140-40		270	+	4-04	19.1	5.0	+14.1	986.6
SE	145-20		298	+	3-22	17.5	3.0	+14.5	987.0
Fence Corn	15-30		48				8.6	-8.6	963.9
Culv 3727 16"	157-30		345	+	3-07	18.7	5.0	+13.7	986.2
Fence	199-20		270	+	8-10	38.0	3.0	+35.0	1007.5
Fence	159-00		362	+	3-15	20.5	5.0	+15.5	988.0
G.E.	219-40		127	+	6-10	13.6	2.0	+11.6	984.1
Fence Corn	162-00		476	+	3-58	32.8	2.0	+30.8	1003.3
Fence	150-30		520	+	3-20	30.0	5.0	+25.0	997.5
Toe Rd Grade	214-20		45				6.4	-6.4	966.1
G.E.	171-00		316	+	5-17	47.4	5.0	+42.4	1014.9
G.E.	176-40		430	+	6-14	48.5	10.0	+38.5	1011.0
Top Slope	291-00		338	+	5-44	33.7	3.0	+30.7	1003.2
G.E.	331-40		290	+	1-48	9.1	5.0	+4.1	976.6
Fence Corn	182-40		325	+	7-17	41.0	5.0	+36.0	1008.5
G.E.	327-00		123				11.4	-11.4	961.1
G.E.	174-00		328	+			5.0	+36.0	1002.5

Page 16 Transit Obs. Line
 Date 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.			
Top Rd Grade	155-40		295	+	3-38	18.6	7.0	+11.6	984.1
Q E Ave	356-10		119				11.1	-11.1	961.4
Top Rd. Cut.	7-40		128	+	1-32	3.4	3.0	-1.6	970.9
Fence	79-20		123				6.0	-6.0	966.5
G. E.	62-40		173				1.0	-1.0	971.5
G. E.	51-40		200	+	2-17	8.0	5.0	+3.0	975.5
G. E.	61-20		253	+	2-45	12.2	3.0	+9.2	981.7
G. E.	290-40		186				3.0	-3.0	969.5
To A 17	358-06		523	-	1-47	16.27	5.0	-21.27	951.00
At #17 H.I. 5.0'	957.31								
	956.22								
	H. I. =		956.77			956.00			
To A #16	178-06		522	+	1-55	17.46	5.0	+12.46	967.60
To A #18	8°-36	473	475	+	4-16	35.34	5.0	+30.34	985.36
Q E. Ave	175-30		134				4.0	-4.0	952.0
Fence	186-40		130				4.3	-4.3	951.7
G. E.	245-00		220				3.0	-3.0	953.0
Q E. Ave	4-00		122				2.5	-2.5	953.5

Page 17 Transit Obs. Line.
 Date Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
G. E.	261-30		453	+	1-33	12.2	5.0	+7.2	963.2
Ditch	10-40		129				5.8	-5.8	950.2
"	355-50		125				6.8	-6.8	949.2
G. E.	281-00		543	+	1-09	10.8	5.0	+5.8	961.8
G. E. Ave	1-00		418	+	3-30	25.4	5.0	+20.4	976.4
Top Rd Cut	5-10		436	+	4-43	35.7	5.0	+30.7	986.7
G. E.	301-50		618	+	0-47	8.4	5.0	+3.4	959.4
Top Rd. Cut	358-10		382	+	4-04	27.0	5.0	+22.0	978.0
Fence	300-40		770	+	2-24	32.2	5.0	+27.2	983.2
" Corn	358-40		483	+	3-48	32.0	5.0	+27.0	983.0
"	288-00		705	+	2-50	34.8	5.0	+29.8	985.8
"	351-00		482	+	2-21	19.7	5.0	+14.7	970.7
"	275-20		664	+	3-40	42.2	5.0	+37.2	993.2
"	339-30		508	+	3-00	26.6	5.0	+21.6	977.6
"	260-00		675	+	5-31	64.5	5.0	+59.5	1015.5
"	311-30		452	+	2-01	15.9	5.0	+10.9	966.9
" Corn	293-40		342				3.3	-3.3	952.7

Page 18 Transit Anderson Line
 Date Oct 23 1935 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.			
G. E.	318-40		345	+	2-30	15.1	5.0	+10.1	966.1
G. E.	238-00		615	+	6-03	64.5	5.0	+59.5	1015.5
G. E.	330-30		304	+	1-15	6.6	2.0	+4.6	960.6
G. E.	220-20		495	+	6-16	54.0	5.0	+49.0	1005.0
G. E.	347-20		293	+	2-12	11.2	2.0	+9.2	965.2
Fence Corn	354-50		180				6.7	-6.7	949.3
G. E.	219-20		315	+	4-05	22.4	3.0	+19.4	975.4
Fence	183-10		242	+	1-53	8.0	5.0	+3.0	959.0
G. E.	288-40		315				5.1	-5.1	950.9
G. E. W.L.	267-40		262				6.35	-6.4	949.6
G. E. Driveway	172-00		274	+	0-35	2.8	4.00	-1.2	954.8
G. E.	273-10		106				6.5	-6.5	949.5
NE. Corn. Garage ^{15x20}	161-10		284				0.8	-0.8	955.2
NW " "	158-10		290				0.7	-0.7	955.3
SE Corn House ^{28x35}	152-40		280	+	1-00	4.9	3.0	+1.9	957.9
NE " "	146-30		260	+	0-46	3.5	2.0	+1.5	957.5
G. E.	145-00		182				6.6	-6.6	949.4

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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			
$\Delta^{\#} 4$	60-23		317			8.1	-8.1	947.9
W.L.						8.37	-8.37	947.63
$\frac{991.99}{990.73}$	H. I. =		991.36					990.24
At $\Delta 18$	H. I. = 4.88							985.36
To $\Delta 17$	188-36		475	-	4-06	33.96	5.0	-38.96 951.00
To $\Delta 19$	329-30		835			4.85		985.35
To $\Delta^{\#} 4$	146-39		375	-	5-42	5.0		
Top of Slope	194-20		119	-	4-31	9.3	5.0	-14.3 975.9
" " "	166-30		104	-	4-23	7.9	10.0	-17.9 972.3
" " "	97-40		52	-	9-02	7.9	5.0	-14.9 975.3
" " "	56-30		120	-	4-50	10.0	5.0	-15.0 975.2
" " "	12-40		150	-	3-10	8.3	2.0	-10.3 979.9
S.E. Corn Coop ^{10x28}	16-00		300	-	3-26	18.0	10.0	-28.0 962.2
SW " "	21-20		308	-	3-42	19.8	10.0	-29.8 960.4
SW Corn Garage	29-20		315	-	3-46	20.6	10.0	-30.6 959.6
SE " " 12X18	26-00		306	-	3-50	20.4	10.0	-30.4 959.8
SE " House	35-40		260	-	4-30	20.4	10.0	-30.4 959.8

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 Date.....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.			
S.W. Corn House ^{24x32}	41-30		278	-	4-09	20.1	10.0	-30.1	960.1
Top Cut W.	341-10		124	+	1-41	3.6	4.0	-0.4	989.8
" " E.	332-40		184	+	1-04	3.4	5.0	-1.6	988.6
991.41 991.36	H.I. =		991.32			990.25			
A + A 19 H.I. = 4.9									985.35
To A 18	149-30		835				4.88		985.36
To A 20	40-13		568	-	3-26	-34.02	5.0	-39.02	950.54
G.E.	269-00		88				4.0	-4.0	986.2
Fence + Top slope	275-30		200				7.9	-7.9	982.3
G.E.	228-40		290	-	4-11	21.1	6.0	-27.1	963.1
Q E Ave	120-00		440	-	1-26	11.0	6.0	-17.0	973.2
G.E.	213-00		472	-	2-54	23.8	5.0	-28.8	961.4
Top Rd. Cut	126-20		405				8.8	-8.8	981.4
G.E.	208-40		605	-	0-59	10.4	5.0	-15.4	974.8
G.E.	155-20		455				12.0	-12.0	978.2
G.E.	203-30		770				8.5	-8.5	981.7
G.E.	193-30		720	-	1-48	22.6	10.0	-32.6	957.6

Page 21 Transit Obs. Line
 Date Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
G. E.	169-00		350				13.0	-13.0	977.2
G. E.	191-30		720	-	2-00	25.0	10.0	-35.0	955.2
G. E.	163-40		252	-	2-41	11.8	10.0	-21.8	968.4
G. E.	192-10		372	-	2-25	24.0	10.0	-34.0	956.2
G. E.	203-00		538	-	2-30	23.4	10.0	-33.4	956.8
G. E.	92-00		300	-	5-32	28.7	5.0	-35.7	954.5
Toe Rd Grade E	90-20		345	-	5-21	32.1	5.0	-37.1	953.1
& E. Ave	89-30		360	-	4-46	29.8	5.0	-34.8	955.4
G. E.	209-00		262	-	4-46	21.6	10.0	-31.6	958.6
Toe Rd Gr. W	89-00		385	-	4-30	30.1	10.0	-40.1	950.1
G. E.	204-00		205	-	3-09	11.3	10.0	-21.3	968.9
Culvert W 7533 ³⁸	75-30		355	-	5-06	31.4	10.0	-41.4	948.8
& Rd over Culvert	76-10		370	-	5-08	-33.10	5.0	-38.10	952.1
G. E.	18-00		272	-	3-24	16.1	5.0	-21.1	969.1
G. E.	354-40		273	-	1-24	6.7	5.0	-11.7	978.5
G. E.	355-00		445				0.6	-0.6	989.6

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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.			
955.82 957.52	H.I. = 956.67								
At A20 H.I. 5.16									950.59
To A19	220-13		568	+	3-36	35.66	5.0	+30.66	985.35
To A [#] 21	72-33		512	+	3-35	34.97	5.0	+29.97	985.16
G.E.	207-30		272				5.6	-5.6	950.1
G.E. W.L.	244-46		150				7.0	-7.0	948.7
Corner of E. Ave.	357-20		220	+	1-50	7.0	5.0	+2.0	957.7
G.E.	290-00		282				2.1	-2.1	953.6
S.E. Corn House ^{21x30}	8-50		272	+	3-03	14.5	5.0	+9.5	965.2
S.W. " "	13-30		275	+	3-04	14.8	5.0	+9.8	963.5
G.E.	284-20		435	+	4-27	33.5	5.0	+28.5	984.2
G.E.	302-40		408	+	2-06	14.9	5.0	+9.5	965.2
4 Rd.	36-10		260	+	4-04	18.4	5.0	+13.4	969.1
G.E.	313-20		446	+	3-07	24.2	5.0	+19.2	974.9
G.E.	325-10		500	+	1-34	13.6	5.0	+8.6	964.3
4 Rd.	60-20		422	+	4-30	33.0	5.0	+28.0	983.7
G.E.	341-00		460	+	2-16	18.2	5.0	+13.2	968.9

Page 23 Transit Anderson Line
 Date Oct 23 1935 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.			
G.E.	357-20		400	+	1-30	10.4	5.0	+5.4	961.1
Top slope	6-00		800	+	4-06	57.0	5.0	+52.0	1007.7
"	19-10		680	+	4-24	52.0	10.0	+42.0	997.7
Oct 24 1935									
$\left. \begin{array}{l} 991.69 \\ 990.46 \end{array} \right\}$									
991.06 990.21									
A7 Δ 21 H: 5.05									985.16
To A 20	252-33		512	-	3-48	33.93	5.0	-38.93	950.54
To Δ 22	86-10		865	-	0-11	2.76	10.0	-12.76	976.38
Cl. Rd.	301-20		90				4.6	-4.6	985.6
Top Rd Cut	282-20		105	+	2-43	5.0	5.0	0.0	990.2
G.E.	229-40		108	-	10-46	19.6	7.0	-26.6	963.6
G.E.	208-10		192	-	8-57	29.5	12.0	-41.5	948.7
G.E.	232-40		260	-	6-34	29.6	8.0	-37.6	952.6
G.E.	235-40		196	-	5-44	19.5	5.0	-24.3	965.7
Top rd Cut	64-20		45				8.4	-8.4	981.8
Cl Rd	75-20		148	-	1-32	4.00	10.0	-14.00	976.2
G.E.	86-10		195	-	2-30	10.00	10.0	-20.0	970.2

Page 24 Transit Obs. Line
 Date Oct 24 '35 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.			
SW. Corn House ^{28x36}	257-40		171	-	3-32	10.5	5.0	-15.5	974.7
NW " "	270-00		168	-	1-08	3.3	11.0	-14.3	975.9
NE Corn House ^{22x33}	91-20		244	-	1-07	4.7	8.0	-12.7	977.5
SE " "	99-00		245	-	1-06	4.7	10.0	-14.7	975.5
GRd at Drive Way	81-30		248	=	0-50	3.6	10.0	-13.6	976.6
To Rd. Cut	89-20		390				6.9	-0.9	983.3
& Rd	85-10		392	+	0-52	5.9	10.0	-15.9	974.3
^{983.53} ^{981.21} 982.37 981.61									
At A #22 H.I. 5.23									976.38
To A #21	266-10	8.65		+	0-39	+9.80	5.0	+4.80	985.16
To A #23	102-26	6.05		+	1-16	+13.37	5.0	+8.37	989.27
MONT.	232-04	0.39					9.96	-9.96	971.65
E Rd	266-10	4.35					9.7	-9.7	971.9
EDGE KNOLL	259-00	3.90					1.7	-1.7	979.9
TOP " IN CULT.	258-00	4.47		+	1-01	7.9	5.0	+2.9	984.5
EDGE CULT.	250-20	3.87					8.8	-8.8	972.8
TOP KNOLL	239-10	3.16		+	0-41	3.7	5.0	-1.3	980.3

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 Date Rec. 1100446

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.			
TOE KNOLL	261-20	3.40		-	2-03	12.1	5.0	-17.1	964.5
DN "	213-30	2.56					9.7	-9.7	971.9
£ RD 18'	262-40	2.20		-	3-14	12.3	5.0	-17.3	964.3 ✓
TOP EDGE 24" DEEP DIT	197-10	2.38		-	3-28	14.3	5.0	-19.3	962.3
£ POTHOLE	253-00	2.10		-	4-07	15.0	5.0	-20.0	961.6
G.E. MEADOW	190-40	4.65		-	2-56	23.7	5.0	-28.7	952.9
" KNOLL	97-00	0.89					1.1	-1.1	980.5
" MEADOW	175-40	4.80		-	2-10	18.1	5.0	-23.1	958.5
TOP KNOLL	68-30	1.26		+	3-25	7.5	4.0	+3.5	985.1
B.E. MEADOW	162-00	4.63		-	2-00	16.1	5.0	-21.5	960.1
" KNOLL	129-40	2.00					7.0	-7.0	974.6
" EDGE MEAD.	153-20	5.80		-	1-35	16.0	5.0	-21.0	960.6
" " "	146-00	1.08		-	3-07	5.9	5.0	-10.9	970.7
TOP KNOLL	144-00	4.65					7.3	-7.3	974.3
G.E.	147-40	1.03		-	5-17	9.5	5.0	-14.5	967.1
£ RIDGE	135-30	4.70					7.5	-7.5	974.1
"	121-00	4.85					2.3	-2.3	979.3 -

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 Date..... Rec. LINDAHL.....

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.			
G.E. ^{ON} RIDGE	110-00	5.30					5.4	-5.4	976.2
G.E.	118-20	2.45					6.4	-6.4	975.2
EDGE SWP.	109-20	3.90					7.9	-7.9	973.7
E "	108-40	2.70					11.7	-11.7	969.9
TOP EDGE DITCH 24" DEEP	132-00	3.05					10.3	-10.3	971.3
EDGE SWP.	93-20	2.55		+	115	5.6	10.0	-4.4	977.2
G.E.	122-40	0.9	90				7.7	-7.7	973.9
G.E.	150-30	1.03		-	5-36	10.0	5.0	-15.0	966.6
G.E.	175-46	0.88		-	7-26	11.2	6.0	-17.2	964.4
Top Ridge	140-10		35				6.0	-6.0	975.6
	995.06								
	994.37								
A+Δ [#] 23 H.I. 5.1	TOP OF KNOLL								989.27
To A [#] 22 H.I.	282-26	6.05		-	1°-09'	12.14	5.0	-17.14	976.38
To A [#] 24	152-15	8.60					4.50		989.76
E RIDGE	279-00	1.48		-	3-13	8.3	5.0	-13.3	981.1
TOE KNOLL	315-20	1.93		-	2-54	9.8	10.0	-19.8	974.6
E RIDGE	342-50	1.80		-	2-17	7.2	5.0	-12.2	982.2

Page 27 Transit Obs. Line
 Date 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.			
4 DRAW	270-00	1.12		-	3-22	6.5	10.0	-16.5	977.9
4 POTHOLE	6-20	1.72		-	1-49	8.4	10.0	-18.4	976.0
G.E.	214-00	1.32		-	3-08	7.2	10.0	-17.2	977.2
TOP KNOLL	12-40	2.78					1.1	-1.1	993.3
4 POTHOLE	176-00	1.57		-	7-58	21.5	5.0	-26.5	967.9 ✓
4 RIDGE	34-40	2.30					1.8	-1.8	992.6
TOP KNOLL	168-20	3.62		-	1-37	10.2	10.0	-20.2	974.2
4 RIDGE	59-30	1.45					6.7	-6.7	987.7
POTHOLE	66-30	.75		-	7-06	9.1	5.0	-14.1	980.3
G.E.	180-20	3.60		-	3-47	23.6	5.0	-28.6	965.8
4 HAYROAD- 8' WIDE	31-20	.92					9.8	-9.8	984.6 ✓
EDGE SWP. MEADOW	186-30	3.65		-	4-22	27.9	8.0	-35.9	958.5
G.E.	81-20	2.20		-	2-10	8.3	5.0	-13.3	981.1
EDGE RIDGE	202-40	2.38		-	4-30	18.6	5.0	-23.6	970.8
4 DRAW	113-20	1.95		-	3-27	11.7	5.0	-16.7	977.7 ✓
" "	140-40	2.20		-	4-10	15.9	5.0	-20.9	973.5
" RIDGE	229-20	3.86		-	2-17	15.7	5.0	-20.7	973.7

Page. ^{Young + son} 28 Transit. 9928 Obs. Anderson Line. Beaver Lake Topo. Surv.
Date. Oct. 24 1935 Rec. " Clear & Cool Mod. Wind.

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.			
PRIDGE	150-30	3.30		-	1-57	11.2	5.0	-16.2	978.2
TOE "	218-10	4.38		-	3-50	29.2	5.0	-34.2	960.2
" "	135-20	3.34		-	1-20	7.8	5.0	-12.8	981.6
" "	113-00	3.00					4.1	-4.1	990.3
TOE KNOLL	164-30	1.00		-	8-26	14.5	5.0	-19.5	974.9
TOP "	131-00	.50					6.8	-6.8	987.6
" "	322-30	.45					6.9	-6.9	987.5
" RIDGE	100-00	3.10					3.2	-3.2	991.2
" HAYROAD.	82-00	3.25					8.6	-8.6	985.8
" "	70-00	2.95					6.3	-6.3	986.1
TOE KNOLL	340-20	1.30		-	4-48	10.9	5.0	-15.9	978.5
DN.W. SLOPE	65-00	3.50					12.2	-12.2	982.2
" DRAW	36-30	1.55					12.0	-12.0	982.4
DN N.W. SLOPE	79-20	3.95					11.8	-11.8	982.6
Toe Slope	166-20	7.15		-	2-24	29.8	5.0	-34.8	959.6
G.E.	164-40	6.35		-	2-25	27.6	10.0	-37.6	956.8

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 Date Oct. 24, 1935 Rec. U

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.
995.69 995.61			995.65		994.89				
A + A [#] 24 HI 5.13								989.76	
To A [#] 23	332-15	8.60				5.65		989.27	
To A [#] 25	163-13	6.82		-	0-24-4.76	10.0	-14.76	978.90	
Intersect Rd.	23-40	7.52				7.7	-7.7	987.2	
E Rd	27-40	6.20				2.6	-2.6	992.3	
G E	36-20	5.95				5.7	-5.7	989.2	
G. E	43-30	5.90				9.8	-9.8	985.1	
G. E.	40-50	4.90				7.4	-7.4	987.5	
E Hay Rd	35-20	4.60				7.4	-7.4	987.5	
G. E	339-10	1.11				5.1	-5.1	989.8	
G. E.	47-40	3.55				3.2	-3.2	991.7	
G. E.	326-40	1.29				11.7	-11.7	983.2	
N.E. Corn Cult. Field	54-20	3.45				3.9	-3.9	991.0	
G. E	275-50	2.92		-	6-13	31.6	5.0	-36.6	958.3
G. E.	64-40	4.80				4.9	-4.9	990.0	
G. E.	272-20	3.40		-	6-28	38.0	5.0	-43.0	951.9

Page 30 Transit.....Obs.....Line.....
 Date.....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.		
G. E.	60-00	5.60				9.2	-9.2	985.7
G. E.	259-30	2.85		-	5-21	26.5	5.0	963.4
G. E.	74-10	7.05				6.4	-6.4	988.5
G. E.	250-00	4.18		-	5-20	38.8	5.0	951.1
G. E.	233-10	4.42		-	3-47	29.0	5.0	960.9
G. E.	85-40	6.70				8.0	-8.0	986.9
G. E.	220-20	5.48		-	3-14	30.8	5.0	959.1
G. E.	214-10	5.35		-	3-50	35.7	5.0	954.2
G. E.	87-50	4.60				7.5	-7.5	987.4
G. E.	166-10	4.50		-	1-52	14.6	10.0	970.3
G. E. Edge-Field	88-30	2.75				7.5	-7.5	987.4
4 Rd	91-10	2.45				7.8	-7.8	987.1
G. E.	178-00	2.68		-	2-54	13.5	5.0	976.4
G. E.	79-00	1.18				6.9	-6.9	988.0
G. E.	198-20	2.98		-	4-33	23.6	5.0	966.3
G. E.	215-40	3.52		-	5-05	31.2	5.0	958.7
G. E.	239-10	2.38		-	5-14	21.6	5.0	968.3

Page. 31 Transit Obs. Line.
 Date. 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.			
	260-00	1.68		-	5-42	16.6	5.0	-21.6	973.3
SE: Corn Cultiv. Field	146-00	5.26		-	0-22	3.4	10.0	-13.4	981.5
^{986.14} ^{984.22}	985.18								984.15
ATA 25 H.I.=3.25									978.90
To A 24	343-13	6.82		+	0-57	11.30	5.0	+6.30	989.76
To A 26	175-13	5.20					9.60		974.50
Top Slope	283-00	0.81					7.2	-7.2	977.0
On "	282-40	1.75		-	3-41	11.2	5.0	-16.2	968.0
Top Bank	280-00	4.25		-	3-23	25.0	5.0	-30.0	954.2
G.E.	275-20	4.00		-	3-10	22.0	10.0	-32.0	952.2
Old D #10	217-06	3.32		-	3-54	22.58	10.0	-32.58	951.57
G.E.	233-40	2.56		-	4-10	18.5	5.0	-23.5	960.7
G.E.	213-20	2.85		-	3-07	15.4	10.0	-25.4	958.8
G.E.	199-20	4.52		-	2-04	16.3	5.0	-21.3	962.9
	220-00	1.65		-	2-48	8.0	10.0	-18.0	966.2
	177-30	4.40		-	0-35	4.5	5.0	-9.5	974.7
	199-00	2.42		-	3-00	12.5	7.0	-19.5	964.7

Page 32 Transit Obs. ANDERSON Line
 Date OCT. 25, 1935 Rec. LINDAHL

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.			
G. E.	172-20	3.80					11.4	-11.4	972.8
G. E.	177-20	2.78					10.4	-10.4	973.8
G. E.	193-40	3.18		-	2-36	14.4	5.0	-19.4	964.8
G. E.	141-00	2.60					7.0	-7.0	977.2
G. E.	171-30	1.50					6.9	-6.9	977.3
G. E.	97-20	2.05					4.9	-4.9	979.3
OCT. 25-1935	^{980.76} _{980.78}			980.77					979.68
AT Δ 26 H.I. 5.18									974.50
TO Δ 25	355-13	5.20					0.85		978.90
TO Δ 27	193-45	8.38					6.40		973.28
G. E. ONE-W. RD.	174-40	6.22					8.00	-8.00	971.7
"	73-20	.78					7.80	-7.8	971.9
Δ N+S. DRAW (ONE-W. RD.)	162-30	6.55		-	0-33	6.3	10.0	-16.3	963.4
G. E.	87-00	2.60					5.0	-5.0	974.7
EDGE DRAW (ONE-W. RD.)	153-40	7.00					10.2	-10.2	969.5
Δ "	87-00	3.80					9.6	-9.6	970.1
G. E.	149-00	6.15					9.8	-9.8	969.9

Page. 33 Transit. Obs. Line.
 Date. Rec.

OBJECT	AZIMUTH	STADIA	DIS- TANCE	INTERVALS OR VER. ANGLE			READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+	No. of Int.	Rod			
G.E.	88-00	4.55					5.2	-5.2	974.5
ON SLOPE	154-40	5.55					11.9	-11.9	967.8
EDGE DRAW	110-00	3.90					7.1	-7.1	972.6
£ "	159-10	5.33		-	1-03	9.8	6.0	-15.8	963.9
£ "	109-30	3.25		-	1-08	6.4	5.0	-11.4	968.3
G.E.	176-20	4.90					7.2	-7.2	972.5
£ DRAW	132-30	3.78		-	1-09	7.5	5.0	-12.5	967.2
ON SLOPE	191-00	4.70					6.2	-6.2	973.5
£ RIDGE	141-20	2.80					7.8	-7.8	971.9
G.E.	192-00	3.75					9.2	-9.2	970.5
TOP DRAW	184-40	3.52					8.0	-8.0	971.7
G.E.	143-00	4.80					9.7	-9.7	970.0
£ DRAW	185-30	2.70					11.6	-11.6	968.1
" "	144-40	4.12		-	0-30	3.6	10.0	-13.6	966.1
" "	168-20	3.25					12.0	-12.0	967.7
" "	146-20	3.65		-	0-28	3.0	10.0	-13.0	966.7
" "	156-00	4.00		-	0-41	4.8	10.0	-14.8	964.9

Page 34 Transit Obs. Line
 Date 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 DRAW	158-30	3.00				8.8	-8.8	970.9
G.E.	163-00	2.25				7.1	-7.1	972.6
EDGE DRAW	116-00	1.84				10.5	-10.5	969.2
EDGE "	181-00	1.70				7.4	-7.4	972.3
G.E.	137-20	1.02				5.8	-5.8	973.9
TOP SLOPE	223-20	1.50				8.7	-8.7	971.0
G.E.	27-50	.61				7.4	-7.4	972.3
TOP SLOPE	267-20	1.16				9.7	-9.7	970.7
EDGE SLOPE	272-20	2.03		-	3-28	12.2	5.0	-17.2 962.5
" "	242-20	2.47		-	3-22	14.5	5.0	-19.5 960.2
Δ# 10	316-40	3.52		-	3-22	20.67	7.0	-27.67 953.10
	979.46 979.43	979.44						978.37
ATA 27 H.I.	5.09							973.28
TO A 26	13-45	8.38				3.85		974.50
TO A 28	298-15	5.65		-	1-15	12.32	5.00	-17.32 959.90
MONT.								

Page 35 Transit Obs. Line
 Date 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.			
✓ DRAW	46.20	1.07					8.3	-8.3	970.1
TOP "	46.20	1.90					5.3	-5.3	973.1
" "	66.00	3.20					7.7	-7.7	970.7
✓ "	80.00	4.10		-	1-33	11.1	5.0	-16.1	962.3
TOP SLOPE	34.20	2.21					4.8	-4.8	973.6
✓ POT HOLE	83.10	3.00		-	1-35	8.3	5.0	-13.3	965.1
G.E.	16.40	1.92					7.8	-7.8	970.6
→ N.E. COR. SHED ^{10x30}	88.50	3.20		-	0-26	2.3	10.0	-12.3	966.1
→ ON SLOPE	354.20	1.96		-	2-33	8.7	10.0	-18.7	959.7
→ S.E. COR. SHED	92.00	3.20					11.9	-11.9	966.5
TOP SLOPE	335.20	2.30		-	3-10	12.7	10.0	-22.7	955.7
N.E. COR. GARAGE ^{14x16}	92.40	2.96					9.1	-9.1	969.3
TOP SLOPE	310.00	1.72		-	2-56	8.8	10.0	-18.8	959.6
S.E. COR. - GARAGE	96.00	3.00					8.5	-8.5	969.9
TOP SLOPE	280.00	1.45		-	2-05	5.2	10.0	-15.2	963.2
" "	233.20	1.63		-	3-02	5.8	10.0	-15.8	962.6
N.E. COR. HO. ^{20'x40'}	103.40	3.40		-	0-37	3.7	4.0	-7.7	970.7

Page 36 Transit.....Obs.....Line.....
 Date.....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.		
TOP SLOPE 40' WIDE TO HOUSE	219-50	2.00		-	2-54	10.1	10.0	958.3
S.E. COR. ORCHARD	113-20	1.75				6.9	-6.9	971.5
G.E. GARDEN	93-40	1.67				10.7	-10.7	967.7
& RD. (LONG.)	216-00	2.53		-	3-20	15.0	10.0	953.4
G.E.	92-00	.90				8.2	-8.2	970.2
TOP CUT	192-40	1.80		-	2-15	7.0	10.0	961.4
G.E.	131-20	.81				4.9	-4.9	973.5
TOP CUT	169-10	1.70				11.7	-11.7	966.7
G.E.	141-00	1.27				6.4	-6.4	972.0
INT. PAVE. & RD. (WAUKON ST.)	168-20	2.10		-	2-20	8.5	10.0	959.9
TOP CUT	146-20	1.94				6.9	-6.9	971.5
G.E.	152-00	1.55				8.5	-8.5	969.9
S.E. COR. Ho. 20' x 40'	110-40	3.45		-	0-32	3.2	4.0	971.2
G.E.	181-10	1.09				9.3	-9.3	969.1
INT. PAVE. & RD.	122-20	3.40		-	0-35	3.5	10.0	964.9
G.E.	215-20	1.18		-	1-56	4.0	10.0	964.4
TOP CUT	120-30	3.04				7.4	-7.4	971.0

Page 37 Transit Obs. Line.
 Date. 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.			
ON SLOPE	269-00	.66					11.9	-11.9	966.5
G.E.	166-30	.50					4.8	-4.8	973.6
"	23-30	.60					6.7	-6.7	971.7
Q DRAW	17-50	.98					9.8	-9.8	968.6
G.E.	25-20	1.45					7.2	-7.2	971.2
Q DRAW	350-00	1.56		-	4-22	11.8	6.0	-17.8	960.6
967.39 966.07	H. I.	966.73							
At D 28	H.I. 5.27								959.90
To A [#] 27	68-15	5.65		+	1-24	13.80	5.0	+8.30	973.28
Top Slope	323-00	.22					6.2	-6.2	959.0
Bot "	335-00	.52		-	9-20	8.3	7.0	-15.3	949.9
" "	283-00	1.03		-	4-54	8.8	7.0	-15.8	949.4
Toe Cut	87-20	6.38		+	0-10	1.9	5.0	+3.1	962.1
Top "	258-30	.92					7.4	-7.4	957.8
Toe Cut	87-00	4.46					10.2	-10.2	955.0
Q Rd.	89-40	4.65					9.5	-9.5	955.7
On slope	250-20	2.05					10.0	-10.0	955.2

Page 38 Transit.....Obs.....Line.....
 Date.....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.			
Toe Slope	263-10	2.20		-	2-35	9.9	6.0	-15.9	949.3
Intersection Culu. + Pavement	89-05	3.13		-	0-23	2.1	10.0	-12.1	953.1
G. E.	264-20	3.26		-	1-48	10.2	5.0	-15.2	950.0
4 Small Rd at Edge Pave.	87-30	4.05					11.2	-11.2	954.0
4 " "	79-20	3.68		-	1-25	9.1	5.0	-14.1	951.1
Toe Slope	253-00	3.44		-	0-40	4.0	8.0	-12.0	953.2
a Rd	69-10	3.68		-	1-30	9.6	5.0	-14.6	950.6
on Slope	250-00	3.50					6.4	-6.4	958.8
Top Slope	248-40	4.15					5.6	-5.6	959.6
a Rd.	56-30	4.15					11.3	-11.3	953.9
G. E.	250-40	4.20					11.9	-11.9	953.3
G. E.	260-20	4.15		-	0-33	4.0	10.0	-14.0	951.2
G. E.	79-40	2.50		-	1-16	5.5	8.0	-13.5	951.7
Top Knoll	80-50	2.30					7.4	-7.4	957.8
Toe Slope	83-40	2.26					12.3	-12.3	952.9
" "	279-30	4.20		-	1-34	11.4	3.0	-14.4	950.8
on "	290-20	4.60					4.4	-4.4	960.8

Page 39 Transit Obs. Line
 Date 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.		
Toe Knoll	73-50	2.18		-	2-32	9.6	5.0	-14.6 950.6
Toe Slope	300-40	4.00		-	1-20	9.3	5.0	-14.3 950.9
G. E.	67-00	1.89		-	3-15	10.7	5.0	-15.7 949.5
Toe Slope	319-20	4.85		-	1-12	10.1	5.0	-15.1 950.1
G. E.	76-10	1.76		-	1-00	3.1	10.0	-13.1 952.1
G. E.	75-40	1.06		-	1-32	2.8	10.0	-12.8 952.4
On Slope	316-30	5.48					2.0	-2.0 963.2
Toe Cut	145-10	.11					9.4	-9.4 955.8
& Pave.	157-00	.28					9.7	-9.7 955.5
To A Mont	308-09	6.60		+	1-34	18.04	6.0	+13.04 975.68
& Rd.	247-40	1.55					7.9	-7.9 957.3
Fence + Toe Rd Cut	287-50	5.10		+	0-55	8.2	5.0	+3.2 968.4
" " " "	278-00	4.90					6.6	-6.6 958.6
" " " "	260-40	4.87					11.7	-11.7 953.5
" " Culv. 20"	257-20	4.90		-	0-58	8.3	3.0	-11.3 953.9
Fence Corn	248-30	5.20		+	0-12	1.8	10.0	-8.2 957.0
& Rd.	245-20	5.17					2.6	-2.6 962.6

Page 40 Transit.....Obs. Anderson Line.....
 Date Oct 25 1935 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 Shoulder	248-50	3.62				5.4	-5.4	959.8
" "	251-10	2.70				6.6	-6.6	958.6
" "	256-00	1.54				7.0	-7.0	958.2
Top Cut	252-40	0.15				4.4	-4.4	960.8
^{984.52} ^{982.39} H.I. = 981.43								
At Mont H.I. = 5.75'								975.68
To A 28	128-09	6.60		-	1-23	15.93	5.0	-10.93 959.90
To Chimney	355-11	(355°-49')						
H.I. = 981.43								
At Mont H.I. = 5.75'								975.68 976.10
To Chimney	355-49							
To A #11	269-40	3.18		+	0-32	2.96	2.0	+9.6 981.77 981.95
To Aux A 11 A	325-23	4.37				12.6	-12.6	968.83

Page 41 Transit Obs. Line
 Date 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.			
			H.I. = 973.66						
At Aux A ^B 11A			H.I. = 4.83						968.83
To Mont.	145-23	4.37		+	0-48	6.10	5.00	+1.10	974.76
Top Bank	78-40	1.38					11.2	-11.2	962.5
Fence Corn.	139-20	.61					5.4	-5.4	968.3
Top Bank	67-30	1.84		-	3.33	11.4	5.0	-16.4	957.3
" "	46-40	.93					11.1	-11.1	962.6
G.E.	196-20	.97		+	5-44	9.7	7.0	+2.7	976.4
G.E.	83-30	.57					6.0	-6.0	967.7
Fence Line	247-30	1.22		+	2-57	6.3	5.0	+1.3	975.0
Top Bank	350-10	.55					10.9	-10.9	962.8
G.E.	237-20	1.94		+	3-54	13.2	5.0	+8.2	981.9
Top Bank	299-00	.91					10.1	-10.1	963.6
Fence Line	258-20	2.36		+	1-46	7.3	7.0	+0.3	974.0
G.E.	288-50	1.20					12.2	-12.2	961.5
Fence Line	263-40	2.82		+	0-22	1.8	5.0	-3.2	970.5
" Corn	277-30	2.40					9.5	-9.5	964.2

Page..... Transit..... Obs. *ANDERSON* Line..... *CHECK LEVELS*.....

Date..... Rec..... OVER HUB LINE

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			
B.M. "Pole"						B.S H.I.	F.S	Elev.
# Monument						11.36	986.52	975.16
Δ #11							10.85	975.67
Δ #12							4.77	981.75
T.P.							6.35	980.17
							1.09	985.43
						11.64	997.07	
T.P.							0.45	996.62
						11.25	1007.87	
T.P.							0.15	1007.72
						11.34	1019.06	
Δ #13							1.86	1017.20
Δ #14							5.39	1013.67
T.P.							11.16	1007.90
						0.44	1008.34	
T.P.							9.87	998.47
						46.03		

Page.....Transit.....Obs.....Line.....
 Date.....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			
T.P.				B 5	H. I	F. S.	Elev	
							998.47	
Δ # 15				0.57	999.04			
T.P.						7.20	991.84	
						11.24	987.80	
T.P.				0.52	988.32			
						11.93	976.39	
Δ # 16				0.12	976.51			
T.P.						8.98	967.53	
						11.82	964.69	
T.P.				0.51	965.20			
						11.91	953.29	
Δ # 17				2.92	956.21			
Δ # 4				4.64		5.29	950.92	
Water Level						8.29	947.92	
T.P.						8.65	947.56	
						0.46	955.75	

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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			
						B.S HI	F.S	Elev
						10.42	966.17	955.75
T.P.							0.06	966.11
						10.78	976.89	
T.P.							0.08	976.81
						10.37	987.18	
T.P.							0.98	986.20
						6.70	992.90	
$\Delta^{\#} 18$							7.63	985.27
$\Delta^{\#} 19$							7.65	985.25
						0.41	985.66	
T.P.							11.92	973.74
						0.34	974.08	
T.P.							11.51	962.57
						0.43	963.00	
T.P.							11.87	951.13
						46.59 7.14	958.27	

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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.		
					B.S H.I	F.S. Elev.		
A#20					958.27	7.84	950.43	
T.P.						0.01	958.26	
					10.42	968.68		
T.P.						0.13	968.55	
					10.99	979.54		
T.P.						0.51	979.03	
					11.72	990.75		
A#21						5.71	985.04	
T.P.						8.15	982.60	
					3.00	985.60		
A#22						9.35	976.25	
T.P.						3.09	982.51	
					8.92	991.43		
A#23						2.30	989.13	
T.P.					45.05	5.01	986.42	

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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			
								986.42
						5.87	992.29	
Δ [#] 24							2.68	989.61
T.P.							11.41	980.88
						1.13	982.01	
Δ [#] 25							3.27	978.74
Δ [#] 26							7.68	974.33
						3.87	978.20	
Δ [#] 27							5.10	973.10
						3.14	976.24	
T.P.							11.37	964.87
						1.81	966.68	
Δ [#] 28							6.97	959.71
						11.32	971.03	
T.P.							1.32	969.71
						8.28	977.99	
B.M.						35.42	3.03	975.16 974.96

Page Transit Obs. *Rosen* Line *Beaver Lake*
Date *Oct. 25, 1935* Rec. *Anderson*

OBJECT	AZIMUTH	STADIA	DISTANCE	INTERVALS OR VER. ANGLE		READ. ON ROD	DIFF. OF ELEV.	ELEVATION ABOVE DATUM
				Up+ Down-	No. of Int. or Angle			
Soundings on Beaver Lake. $\frac{1}{2}$" Steel Rod with Sharp Point. Used. Hand Pressure Used To Sink.								
Station # 1. Online of East Ave. at Shore Line								
North. Sand Beach 50' out.								
100' out 5' Water								
3.5' Mud								
Hard Bol.								
West. Sand Beach 25' out.								
50' out 2.5' Water								
2.0' Mud.								
H. B.								
100' out 4.0' water								
2.5' Mud								
H. B.								

[illegible]

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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			
Station # 3								
East Shore Near Farm House								
Sand Point								
25' In Lake			2.5' Water					
			1.0' Mud - H. B.					
50' In Lake			3.0' Water					
			2.5' Mud - H. B.					
100' " "			3.5' Water					
			6.0' Mud H. B.					

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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.			
Station # 4									
Edge Reeds			2.5' Water						
			12' + Mud						
25' In Lake From Reeds			3' Water						
			12' + Mud						
50' " " " "			3' Water						
			12' + Mud						
100' " " " "			3' Water						
			12' + Mud						
At Culvert # 7533 W. End on Beaver Lake Rd.			8' Mud - H. B.						
200' S.W. From Culvert.			12' + Mud						
Station # 5. Center of Wooded Swamp			12' + Mud.						

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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.			
Station # 6									
Edge of Reeds on Line of East Ave. No. Shore									
2' Water - H.B.									
25' In Lake			2.5' Water						
			0.5' Mud - H.B.						
50' " "			3.0' Water						
			0.5' Mud - H.B.						
100' " "			4.0' Water						
			4.5' Mud - H.B.						
Station # 7									
West Shore Line									
5' In Lake			0.5' Water						
			12' + Mud						
25' " "			2.0' Water						
			10' + Mud						
50' " "			3.0' Water						
			10' + Mud						
100' " "			3.0' Water						
			10' + Mud.						

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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.			
Station # 8	West	Shore							
5' On Beach		0.5	Mud - H.B.						
Shore Line		2'	Mud - H.B.						
20' In Lake		2.5'	Water						
		1.5'	Mud - H.B.						
50' " "		4.0'	Water						
		5.5'	Mud - H.B.						
100' " "		4.5'	Water						
		8' +	Mud						
Station # 9.	West	Shore							
5' on Beach		Sand							
Shore Line		Sand							
5' in Lake		1'	Water - H.B.						
25' " "		2.5'	"						
		4.5'	Mud - H.B.						
50' " "		4.0'	Water; 8' + Mud						
100' " "		5.0'	" ; 8' + "						

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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			
Station #10	West	Shore						
50' in Lake		1' Water						
		12' + Mud						
100' " "		2' Water						
		12' + Mud						
Station #11	At Outlet	Culvert						
50' in open Channel		3' Water						
		1' Mud - H. B.						
100' in Lake		4' Water						
		1' Mud - H. B.						
Station #12								
Edge of Reeds		1' Water						
		12' + Mud						
Center of Swamp		12' + Mud						
200' on Shore From Water		12' + Mud						

