

Job _____

Sec. _____

T. _____

R. _____

Station _____

Date _____

Directions



N



Reference

Ties

Project	Station PT 5	Crew	Date	
To Point	*1	Hor. Reading	Directions	Mean
Pt 4	D	$\frac{000\ 00\ 30}{\quad}$ 32.5		
	R	180 00 35		
Pt 6	D	$\frac{106\ 04\ 40}{\quad}$ 37.5	106 04 05	
	R	286 04 35		
	D	_____		106 04 07.5
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	*2			Remarks
Pt 4	D	$\frac{090\ 00\ 36}{\quad}$ 38		<i>Compare Bearing From Pt 4 to Pt 6</i> 5306
	R	278 00 40		
Pt 6	D	$\frac{196\ 04\ 46}{\quad}$ 48	106 04 10	
	R	016 04 50		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	Vertical Angles	Slope Dist.	Hor. Dist.	
Pt 6	D	_____	135.75	
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____

Sec. _____

T. _____

R. _____

Station _____

Date _____

Directions



Reference

N

Ties



Project	Station	Crew	Date	
	Pt 4	JAT BT II	11/6/84	
To Point	*1	Hor. Reading	Directions	Mean
Pt 3	D	<u>000 00 30</u> 41		
	R	<u>180 00 52</u> —	249 41 17.5	
Pt 5	D	<u>249 41 46</u> 58.5		
	R	<u>069 42 11</u> —		
	D	—		249 41 14.25
	R	—		
	D	—		
	R	—		
	D	—		
	R	—		
	*2			Remarks
Pt 3	D	<u>90 00 34</u> 37	249.41 11	
	R	<u>270 00 40</u> —		
Pt 5	D	<u>339 41 43</u> 48.5		
	R	<u>159 41 54</u> —		
	D	—		
	R	—		
	D	—		
	R	—		
	D	—		
	R	—		
		Vertical Angles	Slope Dist.	Hor. Dist.
Pt 3	D	<u>89 02 34</u>	196.14	
	R	—		
Pt 5	D	<u>89 47 22</u>	572.48	
	R	—		
	D	—		
	R	—		
	D	—		
	R	—		

Job _____

Sec. _____

T. _____

R. _____

Station _____

Date _____

Directions



N



Reference

Ties

Project	Station Pt 3	Crew JA T BT U	Date 11/06/81
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To Point	*	Hor. Reading	Directions	Mean
Pt 2	D	<u>000 00 30</u> 31		
	R	<u>180 00 32</u>		
Pt 4	D	<u>240 55 50</u> 55	240 55 24	
	R	<u>060 56 00</u>		
	D	_____		240 55 22.75
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	* 2			Remarks
Pt 2	D	<u>090 00 36</u> 38	240 55 21.5	
	R	<u>270 00 40</u>		
Pt 4	D	<u>330 55 55</u> 59.5		
	R	<u>150 56 04</u>		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

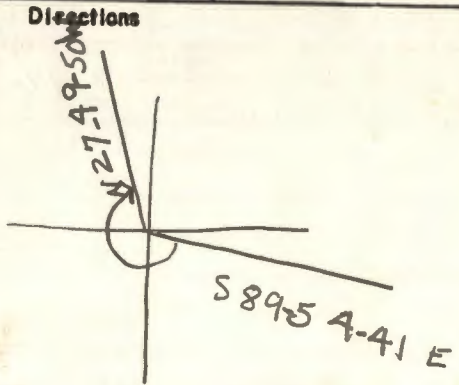
	Vertical Angles	Slope Dist.	Hor. Dist.
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station _____

Date _____

Directions



89 59 60
 89 54 41

 90-05-19
 27 49 50

89 59 60
 27 49 50

 62 10 10

References
 117 54 69

N
 90 00 00
 89 54 41

 241 64 51

242-04-51

117 54 69

 359 58 120

Project	Station Pt 2	Crew J A K B T M	Date 11/6/84
---------	-----------------	---------------------	-----------------

To Point	*1	Hor. Reading	Directions	Mean
SEC COR Pt 1	D	<u>000 00 30</u>		
	R	<u>180 00 39</u>		
Pt 3	D	<u>192 58 51</u>	192 58 20.5	
	R	<u>012 58 59</u>		
	D	_____		192 58 18.5
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

				Remarks
SEC COR Pt 1	D	<u>90 00 38</u>	192 58 16.5	
	R	<u>270 00 40</u>		
Pt 3	D	<u>282 58 51</u>		
	R	<u>102 59 00</u>		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

		Vertical Angles	Slope Dist.	Hor. Dist.
Pt 1	D	_____	554.67	
	R	<u>90 04 11</u>		
Pt 3	D	<u>90 05 16</u>	841.92	
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Walker

Job Establish NE 1/4 Sec. 20 T. 142N R. 27W

Station 2 Date 7/16/84

Directions

S.M.C. N1 - 1000
E1 - 1000

Assumed bearing

N88E

N2 1010.2821
E2 1294.4405

N3 991.0372
1578.4492

S86-07-24E

N4 965.6334
2255.4728

S87-5104E

00 1/16

N5 967.4373
2552.5373

N89-39-08E

Reference

Ties

off set to true line (3)

S 88-47-54 E

1552.8787

987.8787
1577.8729
S80-20-27W
3.21

True line + Dist.

1255.8787

(2) 993.8214
1294.5552
S 0-23-57 E
16.4611

973.6623
2255.6025 (4)
N 0 55-32 E
8.0299

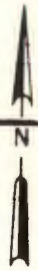
Project		Station	Crew	Date
Est. NW 1/4		2	CR-JA-GB	7/13/84
To Point	#	Hor. Reading	Directions	Mean
1	D	<u>00-00-30</u>		
	R	<u>180-00-49</u> 39.5		
3	D	<u>185-53-09</u>	185-52-36	185-52-35.5
	R	<u>5-53-22</u> 15.5		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	#2			Remarks
1	D	<u>270-00-40</u>		
	R	<u>90-00-25</u> 32.5		
3	D	<u>95-53-13</u>	185-52-35	
	R	<u>275-53-02</u> 7.5		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
1	D	<u>94-12-42</u>	295.42	294.62
	R	_____		
3	D	<u>87-28-45</u>	284.94	284.66
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions

N 88 E

$$\begin{array}{r}
 359 \text{ } 59 \text{ } 60 \text{ }^S \\
 88-43-36 \\
 \hline
 271 \text{ } 16 \text{ } 24
 \end{array}$$


Reference

Ties

$$\begin{array}{r}
 540 \\
 18 \\
 \hline
 542 \\
 36 \\
 \hline
 578
 \end{array}$$

$$\begin{array}{r}
 88 \text{ } 47 \text{ } 54 \text{ }^E \\
 5 \text{ } 55 \text{ } 52 \text{ }^W \\
 103 \text{ } 26 \\
 89.42 \\
 359 \text{ } 59 \text{ } 60 \\
 89 \text{ } 43 \text{ } 26 \\
 \hline
 270 \text{ } 16 \text{ } 44
 \end{array}$$


Project	Station 3	Crew	Date
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To Point	#1	Hor. Reading	Directions	Mean
2	D	<u>00-00-30</u> 39		
	R	<u>180-00-48</u>		
4	D	<u>178-16-53</u> 58.5	178-16-19.5	<u>178-16-20.5</u>
	R	<u>358-17-04</u>		
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____

				Remarks
	#2			
2	D	<u>90-00-28</u> 34		
	R	<u>270-00-40</u>		
4	D	<u>268-16-49</u> 55.5	178-16-21.5	
	R	<u>88-17-02</u>		
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	

		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

(3)

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions

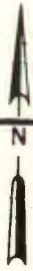
$$\begin{array}{r}
 1551.66 \\
 \hline
 1552.88
 \end{array}
 \begin{array}{r}
 13 \\
 \hline
 1318.68
 \end{array}$$

359 59 60
 11 53 40

1552.88 1319.71
 1551.66 1318.68

348-06-20

232.98
233.16



Reference

Ties

NW 1/4

N 995, 1103
 E 1233, 1087

S 76-06-20 W
 63.18"



92
 76-06-20
 168-06-20

89 59 60
 78 06 20
 11 53 41

Project	Station	Crew	Date
	4		
To Point	*1	Mer. Reading	Directions
3	D	<u>00-00-30</u>	
	R	<u>180-00-43</u> 36.5	
5 ^{cn/16}	D	<u>177-30-42</u> 48	177-30-11.5
	R	<u>357-30-54</u>	
	D	_____	177-30-11.5
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	*2		Remarks
3	D	<u>90-00-30</u> 35	
	R	<u>270-00-40</u>	
5 ^{cn/16}	D	<u>267-30-42</u> 46.5	177-30-11.5
	R	<u>87-30-51</u>	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
		Vertical Angles	Slope Dist.
3	D	<u>91-59-03</u>	
	R	_____	677.91'
5 ^{cn/16}	D	<u>91-08-00</u>	
	R	_____	297.13'
	D	_____	677.50
	R	_____	297.07
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	

NEW JOB - Blackduck

Job Co. R1307 Sec. 30 T. 198 R. 31

Station Z Date 7/26/84

Directions

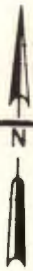
SL.

1/4 COR.

Pt 1

Pt 2

Pt 3



Reference

Ties

Pt 1 1000
 1000

954.06
1306.07

589 E

589 3129 E
2260.13

Pt 2 983.2661
 1958.6834

589 54 41 E

Pt 3 981.2566
 3260.0529

1/4 992.0860
 1954.0272
N 27 49 50 W
 9.97'

Project		Station	Crew	Date
		R 2	GB T JR 00 CK	
To Point	*1	Hor. Reading	Directions	Mean
NW SEC 30	D	<u>000 00 30</u>		
	R	<u>180 00 26</u> 28		
N 1/4 SEC 30	D	<u>179 05 49</u>	179 05 19	
	R	<u>359 05 45</u> 47		
	D	_____		179 05 18 ^F
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	*2			Remarks
NW P1 SEC 30	D	<u>070 00 32</u>	179 05 18	54 36 18
	R	<u>270 00 40</u> 36		
N 1/4 P12 SEC 30	D	<u>269 05 54</u>		
	R	<u>089 05 54</u> 54		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
NW SEC 30	D	<u>90 03 38</u>	958.83	
	R	_____		
N 1/4 SEC 30	D	<u>89 47 14</u>	1301.88	1301.77
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job

Sec. _____

T. 149

R. 30

Station

Date

Directions

Reference

N

Ties

Project	Station P+2	Crew JA • R GB W CK JB	Date 3/10/83
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To Point	#	Mer. Reading	Directions	Mean
P+1	D	000 00 30		
	R	180 00 14		
P+3	D	181 42 39	181-42-14	181-42-11.75
	R	001 42 33	(36)	
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	#2			Remarks
P+1	D	090 00 52		
	R	270 00 40	46	
P+3	D	091 42 54	181-42-95	
	R	271-42-57	(55.5)	
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

	Vertical Angles	Slope Dist.	Hor. Dist.
P+1	D 84 43 15	1232.25	
	R _____		
P+3	D 91 32 26	580.75	
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job _____

Sec. _____ T. _____ R. _____

Station _____

Date _____

Directions



Reference

Ties



Project	Station 9	Crew	Date 3/14/83
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To Point	* Mer. Reading	Directions	Mean
8	D <u>00-00-30</u> 27		
	R <u>180-00-24</u>		
10 <small>Sec. Cor. 28, 29, 32, 33 10</small>	D <u>220-27-15</u> 12.5	<u>220-26-45.5</u>	
	R <u>40-27-09</u>		
8	D <u>90-00-44</u> 42		
	R <u>270-00-40</u>		
10	D <u>310-27-29</u> 25	<u>220-21-43</u>	<u>220-26-44.5</u>
	R <u>130-27-21</u>		
	* 2 10		Remarks
9	D <u>00-00-30</u> 25	<u>149-55-45</u> ^{43.5}	<p>88 68.5 44 25 44 42.5</p> <p>Mean 149-55-43.5</p>
	R <u>180-00-20</u>		
11	D <u>149-56-12</u> 8.5		
	R <u>329-56-05</u>		
9	D <u>90-00-48</u> 44		
	R <u>270-00-40</u>		
11	D <u>239-56-29</u> 28	<u>149-55-44</u>	
	R <u>59-56-27</u>		

	Vertical Angles	Slope Dist.	Hor. Dist.
9	D <u>89-14-53</u>	1343.74	
	R _____		
11	D <u>89-29-59</u>	507.00	
	R <u>89-29-59</u>		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

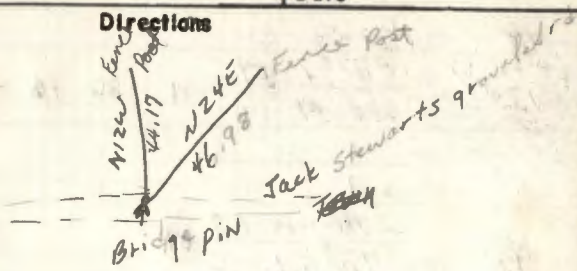
Job _____ Sec. _____ T. _____ R. _____

Station

Date

10
10

Directions

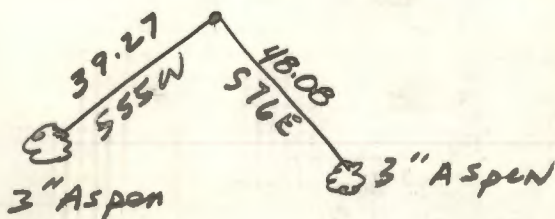


Reference

Ties



pt 11



Project	Station 11	Crew	Date
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To Point	*1	Hor. Reading	Directions	Mean
10	D	<u>00-00-30</u> 25		
	R	<u>180-00-20</u>		
12	D	<u>188-47-14</u> 11	188-46-46	
	R	<u>008-47-08</u>		
10	D	<u>90-00-52</u> 46		
	R	<u>270-00-40</u>		
12	D	<u>278-48-07</u> 01	188-46-15	
	R	<u>98-47-55</u>		
	D	_____		
	R	_____		

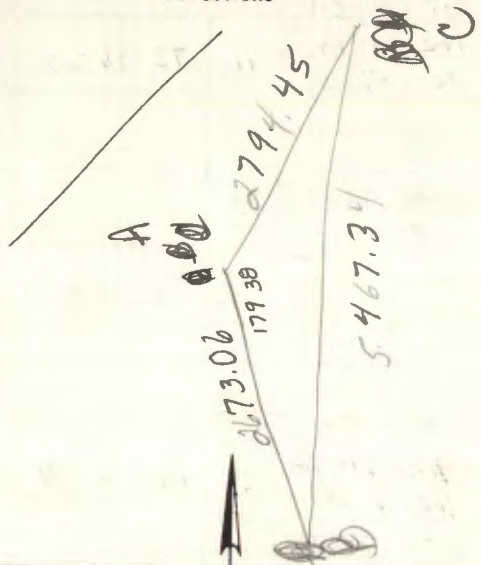
*2 11				Remarks
10	D	<u>00-00-30</u> 24.5		
	R	<u>180-00-19</u>		
12	D	<u>188-47-16</u> 5	188-46-40.5	
	R	<u>08-47-11</u>		
10	D	<u>90-00-45</u> 42.5		
	R	<u>270-00-40</u>		
12	D	<u>278-47-24</u> 24	188-46-41.5	
	R	<u>98-47-24</u>		
	D	_____		
	R	_____		

	Vertical Angles	Slope Dist.	Hor. Dist.
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions



Reference

Ties

$$\begin{array}{r} 55 \\ 7 \\ \hline 48 \\ 87^{10} \\ 42.5 \\ \hline 41.5 \end{array}$$

$$\begin{array}{r} 4 \\ 65^{10} \\ 24.5 \\ \hline 40.5 \end{array}$$

$$\begin{array}{r} 9 \\ 25 \\ \hline 46 \end{array}$$

$$\begin{array}{r} 5611 \\ 46 \\ \hline 15 \end{array}$$

Project	Station	Crew	Date
	12		
To Point	*1 Hor. Reading	Directions	Mean
11	D <u>00-00-30</u> R <u>180-00-20</u> 25		
13	D <u>172-46-44</u> R <u>352-46-38</u> 41	172-46-16	
	D _____ R _____		
11	D <u>90-00-47</u> R <u>270-00-40</u> 43.5		
13	D <u>262-46-55</u> R <u>82-46-49</u> 52	172-46-08.5	
	*2 13		Remarks
12	D <u>00-00-30</u> R <u>180-00-14</u> 22		47.0 D 43.5
14	D <u>192-41-36</u> R <u>12-41-22</u> 29	192-41-7	08.5
12	D <u>90-00-45</u> R <u>270-00-40</u> 42.5	192-41-04.5	25° A.M. Bright sun
14	D <u>282-41-46</u> R <u>102-41-43</u> 44.5	192-41-2	Frost 90 min out, 35 P.M.
	D _____ R _____		
	Vertical Angles	Slope Dist.	Hor. Dist.
12	D <u>90-03-45</u>	621.05	
13	R _____		
11	D <u>89-38-34</u> R <u>27</u>	2125.14	
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

Job

Sec. _____

T. _____

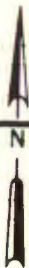
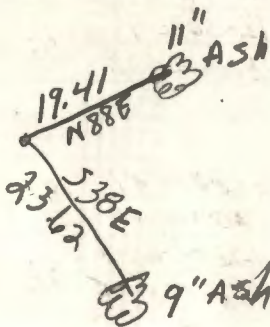
R. _____

Station

Date

Directions

Pt. 13



Reference

Ties

Project	Station	Crew	Date
	11		
To Point	*1 Mer. Reading	Directions	Mean
13	D <u>000-00-30</u> 29 R <u>180-00-28</u>	172-49-59.5	
15	D <u>172-50-34</u> 28.5 R <u>352-50-23</u>		
13	D <u>90-00-37</u> 38.5 R <u>270-00-40</u>		
32, 33, 46 15	D <u>262-50-41</u> 38 R <u>82-50-36</u>	172-49-59.5	
	*2 15		Remarks
14	D <u>00-00-30</u> 26.5 R <u>180-00-23</u>		818.5 27
16	D <u>258-33-21</u> 17.5 R <u>78-33-14</u>	258-32-51	59.5 87.0 98.0 38.5 88.5 42.5
14	D <u>90-00-45</u> 42.5 R <u>270-00-40</u>		59.5 76.0
16	D <u>348-33-33</u> 38.5 R <u>168-33-24</u>	258-32-46	27.5 26.5 0
	D _____ R _____		
14	Vertical Angles	Slope Dist.	Hor. Dist.
15	D <u>90-13-05</u> R _____	1538.19	
13	D <u>90-57-41</u> R _____	424.89	
	D _____ R _____		
Sit at 15	D _____ R _____		
Sighted 16	D <u>28-41-28</u> R <u>206</u>	265.57	

Job

Sec. _____

T. _____

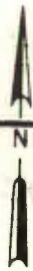
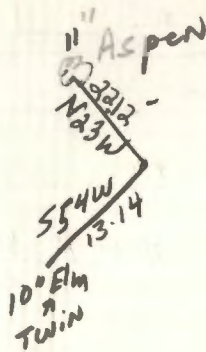
R. _____

Station

Date

pt. 14

Directions



Reference

Ties

Project Temp. 25 Cloudy Station 16 Crew JA-CK-GB Date 3/15/83

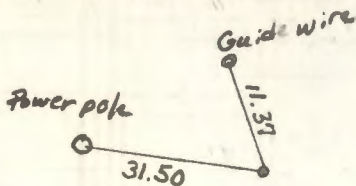
To Point	#	Mer. Reading	Directions	Mean
15	D	<u>00-00-30</u>		
	R	<u>180-00-22</u> 26		
17 ^{1/4} ₃₂	D	<u>194-12-04</u>	194-11-28.5	
	R	<u>14-11-53</u> 58.5		
15	D	<u>90-00-40</u>		
	R	<u>270-00-40</u> 40		
17	D	<u>284-12-13</u>	194-11-30	154-11-29.25
	R	<u>104-12-07</u> 10		
	#2	17		Remarks
16	D	<u>00-00-30</u>		58.5 26 57 177-53.68
	R	<u>180-00-22</u> 26		
18	D	<u>177-54-08</u>	177-53-37	79 79 37 45 42 34
	R	<u>357-53-68</u> 03		
16	D	<u>90-00-50</u>		
	R	<u>270-00-40</u> 45		
18	D	<u>267-54-23</u>	177-53-34	
	R	<u>87-54-15</u> 19		
17		Vertical Angles	Slope Dist.	Hor. Dist.
16	D	<u>89-29-46</u>	2378.53	
	R			
18	D	<u>89-14-09</u>	1829.06	
	R			
	D			
	R			
	D			
	R			
	D			
	R			

Job _____ Sec. _____ T. _____ R. _____

Station _____

Date 3/15/83

Directions

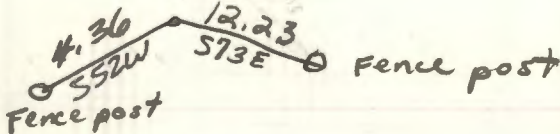


Pt. 16



Reference

Ties



Pt 18

Project	Station 18	Crew	Date
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To Point	*1	Mer. Reading	Directions	Mean
17	D	<u>00-00-30</u>		
	R	<u>180-00-23</u> 26.5		
sec. 5, 6, 19 3132	D	<u>182-17-18</u>	182-16-49.5	
	R	<u>02-17-14</u> 16		
	D	_____		
	R	_____		
17	D	<u>90-00-42</u>		
	R	<u>270-00-40</u> 41		
19	D	<u>272-17-31</u>	182-16-48.5	182-16-49
	R	<u>92-17-28</u> 29.5		

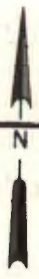
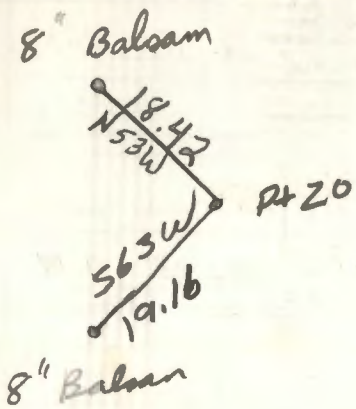
	*2	19	Remarks
18	D	<u>00-00-30</u>	
	R	<u>180-00-20</u> 25	47.5 26.5
20	D	<u>266-51-21</u>	49.5
	R	<u>86-51-13</u> 17	89.5 7 98
	D	_____	
	R	<u>266-50-52</u> 15.1	48.5 44.5 5
18	D	<u>90-00-49</u>	
	R	<u>270-00-40</u> 44.5	77 41 53
20	D	<u>356-51-40</u>	
	R	<u>176-51-36</u> 38	52 57

	Vertical Angles	Slope Dist.	Hor. Dist.
20	D <u>89-22-27</u>	4541.00	
	R _____		
18	D <u>88-36-02</u>	808.29	
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions



Reference

Ties

Project	Station 20	Crew	Date
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To Point	*1	Mer. Reading	Directions	Mean
19	D	<u>00-00-30</u>		
	R	<u>180-10-19</u> 24.5		
21	D	<u>180-32-05</u>	180-37-38	
	R	<u>00-38-04</u> 02.5		
	D	_____		
	R	_____		
19	D	<u>90-00-15</u>		
	R	<u>270-00-40</u> 27.5		
21	D	<u>270-27-48</u> 45.5	180-37-18	
	R	<u>90-27-43</u>		

*2 20				Remarks
19	D	<u>00-00-30</u>		1/2.5
	R	<u>180-00-22</u> 26		24.5 562.5
21	D	<u>180-28-07</u>	180-27-36.5	38.0 26
	R	<u>00-27-58</u> 02.5		40 36.5
	D	_____		1.5
	R	_____		348.5 670.0
19	D	<u>90-00-45</u> 42.5		27.5 42.5
	R	<u>270-00-40</u>		18.0 27.5
21	D	<u>270-28-11</u> 10	180-27-27.5	670.0 10.0
	R	<u>90-28-09</u>		42.5 27.5

	Vertical Angles	Slope Dist.	Hor. Dist.
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		

Job _____

Sec. _____

T. _____

R. _____

Station _____

Date _____

Directions



N

Reference

Ties

Project		Station	Crew	Date
		20		
To Point	#	Mer. Reading	Directions	Mean
19	D	<u>00-00-30</u> 26.5		
	R	180-00-23		
21	D	<u>180-28-01</u> 59	180-27-32.5	
	R	00-27-57		
	D	_____		
	R	_____		
19	D	<u>90-00-42</u> 41		
	R	270-00-40		
21	D	<u>270-28-14</u> ¹³ 02	180-27-32	180-27-32.25
	R	90-28-12		
	# 2			Remarks
19	D	<u>000 00 30</u> 26	180-27-37	8 59 73 26.5 4
	R	180-00-22		
21	D	<u>180 28-06</u> 03		32.5 32
	R	000 28-00		
	D	_____		62 ²³ 26
	R	_____		41
19	D	<u>070 00-44</u> 48	180-27-29	21 37
	R	270-00-40		
21	D	<u>180-28-26</u> 22		27
	R	000 28-18		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____

Sec. _____

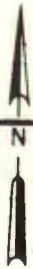
T. _____

R. _____

Station _____

Date _____

Directions



Reference

Ties

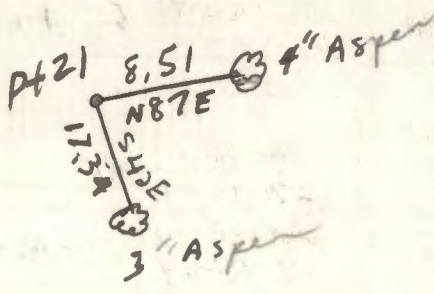
Project	Station 21	Crew	Date
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To Point	#1	Mer. Reading	Directions	Mean
20	D	<u>00-00-30</u>		
	R	<u>180-00-24</u> 27		
22	D	<u>201-48-55</u>	201-48-28	
	R	<u>21-48-55</u> 55		
	D	_____		
	R	_____		
20	D	<u>90-00-48</u>		
	R	<u>270-00-40</u> 44		
22	D	<u>291-49-18</u>	201-48-30	201-48-29
	R	<u>111-49-10</u> 14		
	#2	22		Remarks
21	D	<u>00-00-30</u>		74
	R	<u>180-00-22</u> 26		44
23	D	<u>146-18-09</u>	146-17-39.5	30
	R	<u>326-18-02</u> 5.5		585.5
	D	_____		26
	R	_____		39.5
21	D	<u>90-00-36</u>		69.5
	R	<u>270-00-40</u> 38		30
23	D	<u>236-18-10</u>	146-17-31.5	31.5
	R	<u>56-18-09</u> 9.5		

	Vertical Angles	Slope Dist.	Hor. Dist.
21	<u>88-42-42</u>		
20	_____	1073.65	
22	<u>91-30-26</u>	270.67	
APP'X SEC COR P.O.T.	<u>89 42 50</u>	340.58	
	D _____		
	R _____		
	D _____		
	R _____		

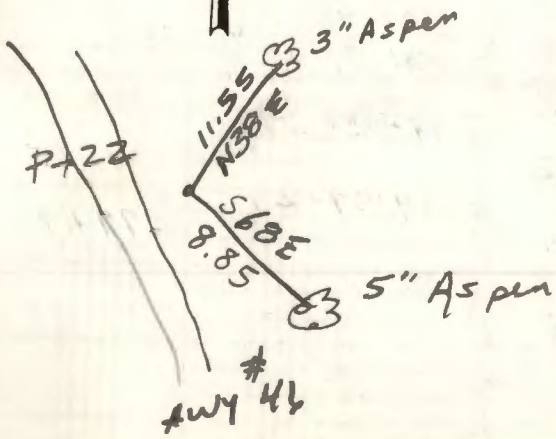
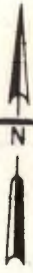
Job _____ Sec. _____ T. _____ R. _____
 Station _____ Date _____

Directions



Reference

Ties



Project	Station	Crew	Date
	22		

To Point	Mer. Reading	Directions	Mean
21	D <u>00-00-30</u> 26 R <u>180-00-22</u>		
23	D <u>146-18-09</u> 5.5 R <u>326-18-02</u>	146-17-39.5	
	D _____ R _____		
21	D <u>90-00-43</u> 41.5 R <u>270-00-40</u>		
23	D <u>236-18-21</u> 20 R <u>56-18-19</u>	146-17-38.5	146-17-39

			Remarks
* 2 23			
22	D <u>00-00-30</u> 28 R <u>180-00-26</u>		180.0 41.5
24	D <u>211-37-57</u> 54 R <u>31-37-51</u>	211-37-26	211.5 219.5 19.5
	D _____ R _____	211-37-26	211.5 19.5
22	D <u>90-00-50</u> 45 R <u>270-00-40</u>	211-37-19.5	38.5 45 19.5
24	D <u>301-38-06</u> 4.5 R <u>121-38-03</u>		45.0 19.5

	Vertical Angles	Slope Dist.	Hor. Dist.
22	D <u>89-52-25</u> R _____	2063.75	
24	D <u>89-37-29</u> R _____	2774.27	
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

Job

Sec. _____

T. _____

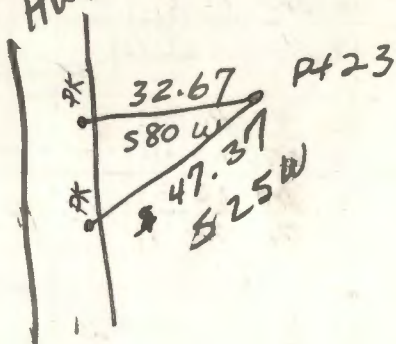
R. _____

Station

Date

Directions

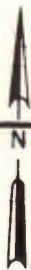
Hwy #46



Reference

N

Ties



Project	Station 24	Crew	Date
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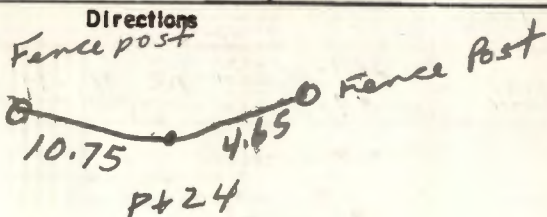
To Point	#	Mer. Reading	Directions	Mean
23	D	_____		
	R	_____		
23	D	<u>00-00-30</u>	76-06-49	
	R	<u>180-00-23</u> 26.5		
25	D	<u>76-07-17</u>		
	R	<u>256-07-14</u> 15.5		
23	D	<u>90-00-48</u>		
	R	<u>270-00-40</u> 44		
25	D	<u>166-07-32</u>	76-06-46.5	76-06-47.5
	R	<u>346-07-21</u> 30.5		
	#2	25		Remarks
24	D	<u>00-00-30</u>		45.5 26.5 49.0 90.5
	R	<u>180-00-23</u> 26.5		
1	D	<u>356-14-59</u>	356-14-30.5	57.0 26.5 30.5
	R	<u>176-14-55</u> 57		
	D	_____		
	R	_____		
24	D	<u>90-00-49</u>	356-14-30.25	44 46.5 74.5 44.5 30.0
	R	<u>270-00-40</u> 44.5		
1	D	<u>86-15-16</u>	356-14-30	
	R	<u>266-15-13</u> 14.5		

	Vertical Angles	Slope Dist.	Hor. Dist.
24	D <u>89-06-06</u>	584.17	
	R _____		
1	D <u>89-14-43</u>	822.76	
	R _____		
26	D <u>89-06-06</u>	1849.31	
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

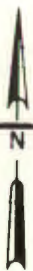
Job _____ Sec. _____ T. _____ R. _____

Station _____

Date _____



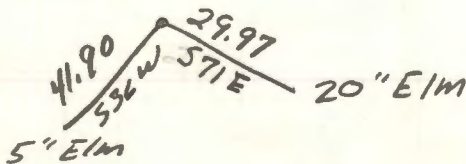
Reference



Ties

Approx Sec. cor.
19, 20, 29, 30

P425



Project	Station	Crew	Date
	25		

To Point	*1	Hor. Reading	Directions	Mean
1	D	$\frac{00-00-30}{180-00-22}$ 26		
26	D	$\frac{267-20-06}{87-20-00}$ 03	267-19-37	
	D	_____	_____	
	R	_____	_____	
1	D	$\frac{90-00-42}{270-00-40}$ 41		
26	D	$\frac{357-20-18}{177-20-11}$ 14.5	267-19-33.5	267-19-35.25

*2				Remarks
	D	_____	_____	503 26 37 74.5 41
	R	_____	_____	
	D	_____	_____	74.5 41
	R	_____	_____	
	D	_____	_____	33.5 37 33.5
	R	_____	_____	
	D	_____	_____	41.5 14.5 33.5 270.5
	R	_____	_____	

		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____

Sec. _____

T. _____

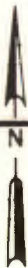
R. _____

Station _____

Date _____

Directions

Reference



Ties

Project _____ Station 1 J.A. Crew Temp 27 Date 3/16/83
 G.B. C.K. Cloudy

To Point	*1	Mer. Reading	Directions	Mean
25	D	<u>00-00-30</u>		
	R	<u>180-00-16</u> 23		
2	D	<u>181-05-27</u>		
	R	<u>01-05-25</u> 26	181-05-03	
Bearing	NG from 1 to 2		S89E	
25	D	<u>90-00-41</u>		
	R	<u>270-00-40</u> 40.5		
2	D	<u>271-05-41</u>		
	R	<u>91-05-41</u> 41	181-05-00.5	181-05-1.75
	*2	26		Remarks
25	D	<u>00-00-30</u>		54.5
	R	<u>180-00-22</u> 26		26 1.75 28.5
27	D	<u>180-34-59</u>		68
	R	<u>00-34-50</u> 54.5	180-34-28.5	44 24
25	D	<u>90-00-48</u>		
	R	<u>270-00-40</u> 44	180-34-26.25	
27	D	<u>270-35-08</u>		
	R	<u>90-35-08</u> 08	180-34-24	

	Vertical Angles	Slope Dist.	Hor. Dist.
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		
D	_____		
R	_____		

Job _____

Sec. _____

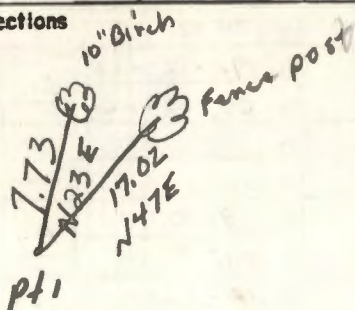
T. _____

R. _____

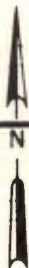
Station _____

Date _____

Directions



Pt 27 is $\frac{1}{4}$ bet. sec. 19/20



Reference

Ties

Project	Station	Crew	Date
	27		

To Point	*1	Mer. Reading	Directions	Mean
24	D	$\frac{00-00-30}{180-00-20}$ 25		
28	D	$\frac{92-30-00}{272-29-49}$ 54.5	92-29-29.5	
	R			
26	D	$\frac{90-00-48}{270-00-40}$ 44		
	R			
28	D	$\frac{182-30-12}{02-30-06}$ 09	92-29-25	92-29-27.25
	R			

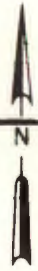
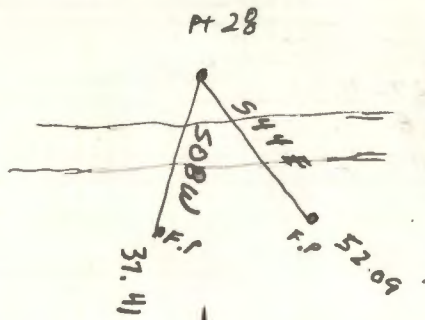
	*2	28	Remarks
27	D		44.5
	R		25
29	D		29.5
	R		92-29-30.00
	D		92-29-30
	R		69 14.5
	D		44
	R		25
	D		
	R		

	27	Vertical Angles	Slope Dist.	Hor. Dist.
26	D	89-08-51		
	R		780.69	
28	D	89-20-34		
	R		2617.34	
	D			
	R			
	D			
	R			
	D			
	R			

Job _____ Sec. _____ T. _____ R. _____

Station 28 Date _____

Directions



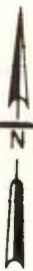
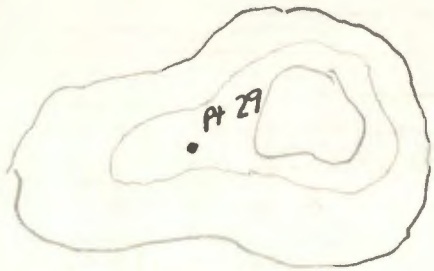
Reference _____ Ties _____

Project	Station	Crew	Date	
	28			
To Point	#1	Hor. Reading	Directions	Mean
27	D	<u>000 00 30</u> 25		
	R	<u>180 00 20</u>		
27	D	<u>190 52 15</u> 11	190 51 46	
29	R	<u>010 52 07</u>		
	D	_____		
	R	_____		
27	D	<u>90 06 45</u> 42.5	190 51 42.5	
	R	<u>270 00 40</u>		
29	D	<u>200 52 28</u> 25		
	R	<u>100 52 22</u>		
	#2			Remarks
	D	_____		
	R	_____		
	D	_____		71
	R	_____		35
	D	_____		116
	R	_____		85.5
	D	_____		42.5
	R	_____		_____
	D	_____		42.5
	R	_____		
	D	_____		
	R	_____		
28	Vertical Angles	Slope Dist.	Hor. Dist.	
29	D	<u>90 24 14</u>		
	R	_____	2124.19	
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____
Station 29 Date 3/22/83

Directions

Hill



Reference

Ties

P+30

P+29

P+28

Project	Station 29	Crew GBA CK JA W BS	Date
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To Point	#1	Hor. Reading	Directions	Mean
28	D	1		
	R			
30	D	153 24 55		
	R	253 38 27		
	D			153 24 51
	R			
28	D	153 25 00	153 24 46	
	R			
30	D	253 39 05		
	R			

#2	Remarks
D	
R	
D	
R	
D	
R	
D	
R	
D	
R	

Vertical Angles	Slope Dist.	Hor. Dist.
D		
R		
D		
R		
D		
R		
D		
R		
D		
R		

Job _____	Sec. _____	T. _____	R. _____
Station 30	Date _____		
Directions			
Reference		Ties	

Project		Station	Crew	Date
		30		
To Point	* 1	Hor. Reading	Directions	Mean
29	D	<u>102 40 00</u>		
	R	_____	102 39 50	102 39 55
31-PI	D	<u>050 39 20</u>		
	R	_____		
	D	_____		
	R	_____		
29	D	_____		
	R	_____		
31-PI	D	_____		
	R	_____		
	* 2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
29	D	<u>86 59 20</u>		
	R	_____	375.82	375.30
31-PI	D	<u>87 58 20</u>		
	R	_____	359.66	359.66
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station *31-P1* Date _____

Directions

• P31 - *1/4* cor
P-1
ties recorded



N



Reference

Ties

• Pt 30

• Pt 31 *1/4* cor SEC 19

• Pt 32

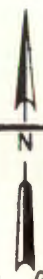
Project	Station 31-P1	Crew	Date
---------	------------------	------	------

To Point	*1	Hor. Reading	Directions	Mean
30	D	<u>180 13 20</u>		
	R	180 13 10		180 13 15
32	D	<u>000 53 20</u>	180 13 20	
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	*2			Remarks
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			

	Vertical Angles	Slope Dist.	Hor. Dist.
	D		
	R		
	D		
	R		
	D		
	R		
	D		
	R		
	D		
	R		

Job _____	Sec. _____ T. _____ R. _____	
Station 32	Date _____	
Directions		
<p style="margin-left: 100px;">Bakson 8" 3.80 West NW</p> <p style="margin-left: 100px;">Pt 32</p> <p style="margin-left: 100px;">Aspen 10" 3.63 South SW</p>		
Reference	N	Ties
<p style="margin-left: 100px;">• P 31</p> <p style="margin-left: 100px;">• P 32</p> <p style="margin-left: 100px;">• P 33</p>		



Project	Station	Crew	Date	
	32			
To Point	*1	Mer. Reading	Directions	Mean
31	D	<u>180 04 00</u>	180 04 00	
	R	_____		
33	D	<u>850 16 00</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	*2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
32		Vertical Angles	Slope Dist.	Hor. Dist.
31	D	<u>91 56 00</u>	521.13	520.83
	R	_____		
33	D	<u>90 01 20</u>	1661.23	1661.23
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job	Sec. _____	T. _____	R. _____
Station	33		Date
Directions			
<p>Aspen 3" 6.49 WNW</p> <p>•</p> <p>•</p> <p>• Pt 33</p> <p>Aspen 2" 5.75 W.SW</p>			
Reference			Ties
	<p>• Pt 32</p> <p>• Pt 33</p> <p>• Pt 24</p>		

Project	Station 33	Crew	Date 3/22/83
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To Point	#1	Hor. Reading	Directions	Mean
32	D	<u>199 55 40</u>	179 55 35	179 55 37.5
	R	_____	_____	_____
34-R1	D	<u>359 42 20</u>	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	#2			Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	

	Vertical Angles	Slope Dist.	Hor. Dist.
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job	Sec. _____	T. _____	R. _____
Station	34 - R1		Date
Directions			
<p>• pt 34 - Sec Cor. R-1</p>			
Reference		 N 	Ties
<p>• R-33</p> <p>• Pt 34</p> <p>• Pt 35</p>			

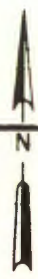
Project	Station 34	Crew	Date
---------	---------------	------	------

To Point	*1 Mer. Reading	Directions	Mean
33	D <u>180 07 18</u> R _____	180 07 24	180 07 21
35	D <u>000 29 35</u> R _____	_____	_____
	D _____ R _____	_____	_____
	D _____ R _____	_____	_____
	D _____ R _____	_____	_____
	*2		Remarks
	D _____ R _____	_____	
	D _____ R _____	_____	
	D _____ R _____	_____	
	D _____ R _____	_____	
	D _____ R _____	_____	
	D _____ R _____	_____	

	Vertical Angles	Slope Dist.	Hor. Dist.
33	D <u>87 42 50</u> R _____	462.42	462.05
35	D <u>87 33 20</u> R _____	243.41	243.19
	D _____ R _____	_____	_____
	D _____ R _____	_____	_____
	D _____ R _____	_____	_____

Job _____	Sec. _____	T. _____	R. _____
Station <u>35</u>	Date _____		
Directions			
Reference	Ties		
<p>• Pt 36 114602 T-1</p>			

Project	Station	Crew	Date	
	35			
To Point	# 1	Hor. Reading	Directions	Mean
34	D	<u>180 02 23</u>	180 02 30	180 02 26.5
	R	_____	_____	_____
36-T1	D	<u>000 10 00</u>	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	# 2			Remarks
	D	_____	_____	Tough shot! heat issue around swamp
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
35		Vertical Angles	Slope Dist.	Hor. Dist.
36-T1	D	<u>90 17 40</u>	2396.05	2396.02
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____

Job	Sec. _____	T. _____	R. _____
Station	36 T1		Date
Directions			
<p>T1</p> <p>• Pt 36 - 1/4 cov</p> <p>Ties recorded</p>			
Reference	Pt 35 •	N	Ties
			
<p>• Pt 36 - 1/4 cov</p> <p>T1</p>			
<p>• Pt 37</p>			



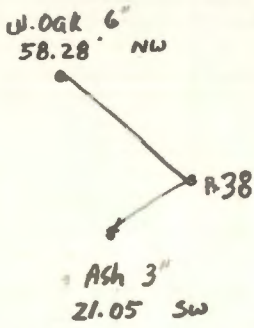
Project	Station	Crew	Date	
*	36-T1			
To Point	*1	Hor. Reading	Directions	Mean
35	D	<u>199 03 45</u>	<u>199 04 10</u>	<u>199 03 58</u>
	R	_____	_____	_____
37	D	<u>76 16 40</u>	_____	<u>1</u>
	R	_____	_____	_____
35	D	<u>199 04 00</u>	<u>199 04 20</u>	_____
	R	_____	_____	_____
37	D	<u>76 17 20</u>	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	*2			Remarks
35	D	<u>199 03 57</u>	<u>199 04 21</u>	bubble going out
	R	_____	_____	
37	D	_____	_____	
	R	<u>76 17 25</u>	_____	
	D	_____	_____	
	R	_____	_____	
35	D	<u>199 03 57</u>	_____	
	R	_____	_____	
37	D	_____	_____	
	R	_____	_____	
		Vertical Angles	Slope Dist.	Hor. Dist.
35	D	<u>89 43 20</u>	<u>2396.05</u>	<u>2396.04</u>
	R	_____	_____	_____
37	D	<u>87 07 40</u>	<u>407.43</u>	<u>406.92</u>
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____

Job _____	Sec. _____	T. _____	R. _____
Station <u>37</u>		Date _____	
Directions			
Reference	N	Ties	
• 38	• 37	• 36	

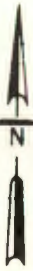
Job _____ Sec. _____ T. _____ R. _____

Station 38 Date _____

Directions



Reference



Ties

• 37

• 36

• 39

Project	Station 38	Crew	Date
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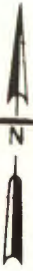
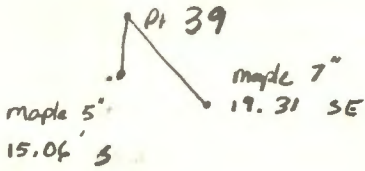
To Point	*1	Mer. Reading	Directions	Mean
37	D	121 58 40	121 58 33	121 58 36.5
	R	_____	_____	_____
38	D	127 54 10	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____

*2				Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	

38	Vertical Angles	Slope Dist.	Hor. Dist.
37	D 88 31 00	404.78	404.70
	R _____	_____	_____
39	D 89 07 40	742.18	742.09
	R _____	_____	_____
	D _____	_____	_____
	R _____	_____	_____
	D _____	_____	_____
	R _____	_____	_____

Job _____ Sec. _____ T. _____ R. _____
 Station 39 Date _____

Directions



Reference

Ties

P. 38 •

A 39 •

• P140

Project	Station 39	Crew	Date 3/22/83
----------------	----------------------	-------------	------------------------

To Point	#1	Hor. Reading	Directions	Mean
38	D	<u>151 03 40</u>	151 03 40 →	
	R	_____		
40	D	<u>244 14 40</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	#2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		

		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station 40 Date 3/24/83

Directions

Basswood .4"
9.90 W

7 ft 40

Birch 3"
13.33 S SW



Reference

N

Ties

• pt 39



• pt 40

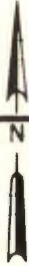
• pt 41 - v1

Project	Station 40	GA Crew JA CK	Date 5/24/83
---------	---------------	------------------	-----------------

To Point	*1 Mer. Reading	Directions	Mean
39	D <u>194 14 20</u>	194 14 25	
	R _____		
41-V1	D <u>56 57 40</u>		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

*2			Remarks
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

	Vertical Angles	Slope Dist.	Hor. Dist.
39	D <u>90 52 00</u>	427.11	427.06
	R _____		
41-V1	D <u>90 35 20</u>	956.48	956.43
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job	Sec. _____	T. _____	R. _____
Station	41-VI	SEC COR	Date
Directions • P+40 • P+41-VI • P+42 			
Reference	N	Ties	
• P+41-VI SEC COR ties rounded			

Project	Station	Crew	Date
	41-V1		
To Point	#1 Hor. Reading	Directions	Mean
40	D 195-15-00 R _____		195-15-09
42	D 175 R 61-00-35		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	#2		Remarks
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	Vertical Angles	Slope Dist.	Hor. Dist.
42	D 90-11-20 R _____	619.71	619.71
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

Job

Sec. _____

T. _____

R. _____

Station

42

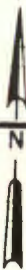
Date

Directions

• Pt 41-VI

• Pt 42

Pt 43 •



Reference

Ties

Made 7"
Pt 42 14.59 E

Aspen Stg.
6.01 SE

Project	Station	Crew	Date	
	42			
To Point	#1	Hor. Reading	Directions	Mean
41-VI	D	<u>180 37 35</u>	180 37 29	
	R			
43	D	<u>002 29 55</u>		
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	#2			Remarks
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
		Vertical Angles	Slope Dist.	Hor. Dist.
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			

Job

Sec. _____

T. _____

R. _____

Station

Date

Directions

• H 42

• P 43

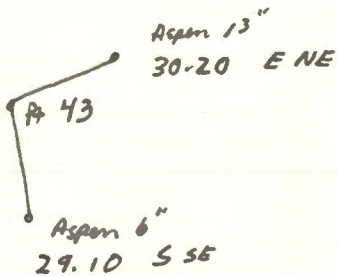
• P₃ 44-X1



N

Reference

Ties



Project	Station 43	Crew	Date
---------	---------------	------	------

To Point	#	Mer. Reading	Directions	Mean
42	D	<u>174-49-40</u>		
	R	_____		
44	D	<u>339-17-20</u>		<u>174-49-20</u>
	R	_____		
	D	_____		
	R	_____		
42	D	<u>174-49-35</u>		
	R	_____		
44-xi	D	<u>339-17-20</u>		<u>174-49-20</u>
	R	_____		
	#2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

	Vertical Angles	Slope Dist.	Hor. Dist.
42	D <u>89-29-40</u>	1736.29	1736.22
	R _____		
44-xi ^{1/4}	D <u>92-04-30</u>	300.12	299.92
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job

Sec. _____

T. _____

R. _____

Station

44-X1

Date

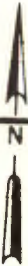
Directions

• 43

• P+44-X1

• 45

Reference



Ties

• P+44 X1 (orig)
ties recorded

Project	Station	Crew	Date	
	44-X1			
To Point	*1	Hor. Reading	Directions	Mean
43	D	192 12 32	192-12-51	
	R			
45	D	048 51 25		
	R			
	D			
	R			
43	D	192 12 38	192 12 46	
	R			
45	D	048 51 05		
	R			
	*2			Remarks
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
		Vertical Angles	Slope Dist.	Hor. Dist.
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			

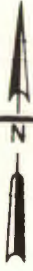
Job _____ Sec. _____ T. _____ R. _____
Station 45 Date _____

Directions

• 44-X1

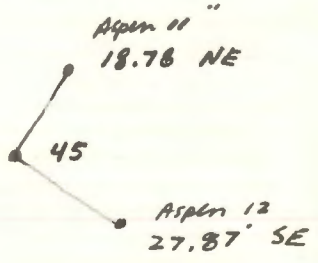
• 45

• 446



Reference

Ties



Project	Station 45	Crew	Date
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To Point	*1 Mer. Reading	Directions	Mean
44-x1	D <u>172 42 50</u> R _____	173 11 #	
46	D <u>332 44 00</u> R _____		
	D _____ R _____		
44-x1	D <u>172 42 40</u> R _____	172 42 20	
46	D <u>330 49 20</u> R _____		

*2			Remarks
44-x1	D <u>172 42 32</u> R _____	172 42 40	
46	D <u>330 50 40</u> R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

	Vertical Angles	Slope Dist.	Hor. Dist.
44-x1	D <u>91 19 00</u> R _____	204.35'	204.30
46	D <u>89 50 45</u> R _____	2435.71'	2435.70
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

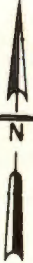
Job _____ Sec. _____ T. _____ R. _____
Station 46 _____ Date _____

Directions

pt 45

pt 46-21

pt 47



Reference

Ties

. pt 46-21 sec cor
ties recorded

Project	Station 46-21	Crew	Date
---------	------------------	------	------

To Point	#1	Mer. Reading	Directions	Mean
45	D	085 56 45	85 56 40	
	R	_____	_____	_____
47	D	343 46 40		
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____

#2				Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	

		Vertical Angles	Slope Dist.	Hor. Dist.
47	D	89 10 40		
	R	_____	514.17	514.12
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

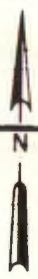
Station 47 Date _____

Directions

• Pt 46-21 • Pt 47 • Pt 48

Reference

Ties



Pt 47

Aspen Slip
15.45 SW

Birch 1"
6.24 S

Project		Station		Crew		Date	
		47					
To Point	#	Hor. Reading		Directions		Mean	
46-21	D	179 50 20		179 49 48			
	R	_____		_____		_____	
48	D	359 18 40		_____		_____	
	R	_____		_____		_____	
	D	_____		_____		_____	
	R	_____		_____		_____	
46-21	D	179 50 05		179 50 05		_____	
	R	_____		_____		_____	
48	D	359 20 20		_____		_____	
	R	_____		_____		_____	
	#2	_____		_____		Remarks	
	D	_____		_____			
	R	_____		_____			
	D	_____		_____			
	R	_____		_____			
	D	_____		_____			
	R	_____		_____			
	D	_____		_____			
	R	_____		_____			
	Vertical Angles		Slope Dist.		Hor. Dist.		
	D	_____		_____		_____	
	R	_____		_____		_____	
	D	_____		_____		_____	
	R	_____		_____		_____	
	D	_____		_____		_____	
	R	_____		_____		_____	
	D	_____		_____		_____	
	R	_____		_____		_____	

Job	Sec. _____	T. _____	R. _____
Station	18		Date
Directions			
• R 47	• R 48	• R 49	
Reference	N	Ties	
	• Pl 48	• Willow 4" 9.47 ENE	• Willow ST 6.70 ESE

Project	Station	Crew	Date	
	48			
To Point	* 1	Hor. Reading	Directions	Mean
47	D	<u>180 18 10</u>	180 18 05	
	R	_____	_____	
49	D	<u>001 12 20</u>		
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	* 2			Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
		Vertical Angles	Slope Dist.	Hor. Dist.
47	D	<u>270 56 40 S</u>	574.66	1973.03
	R	<u>89 03 20 S</u>	1973.30	
49	D	<u>88 36 25</u>	574.66	574.90
	R	<u>271 23 35</u>	1973.30	
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job

Sec. _____

T. _____

R. _____

Station

50

Date

Directions

Aspen 11"
13.93 SW

Pt 50

Aspen 11
16.70 SSW



Reference

Ties

47
Pt

Pt 51

Pt 50

Project	Station	Crew	Date
	50		

To Point	*1	Hor. Reading	Directions	Mean
49	D	<u>120-58-05</u>	<u>120 57 40</u>	
	R	_____	_____	
51	D	<u>123-50-40</u>	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
49	D	<u>120 58 00</u>	_____	_____
	R	_____	_____	_____
51	D	<u>123 50 50</u>	_____	_____
	R	_____	_____	_____

	*2		Remarks
49	D	<u>120-58-00</u>	
	R	_____	
51	D	<u>123-50-45</u>	
	R	_____	
	D	_____	
	R	_____	
49	D	<u>120-58-00</u>	
	R	_____	
51	D	<u>123 51-00</u>	
	R	_____	

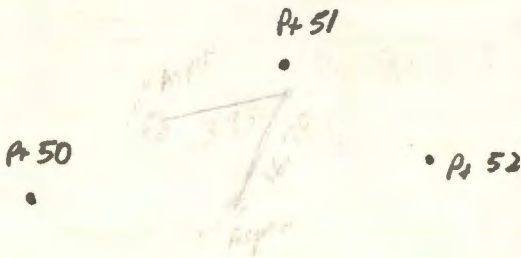
	Vertical Angles	Slope Dist.	Hor. Dist.
49	D <u>89-23-40</u>	409.05	409.03
	R _____		
51	D <u>90-26-40</u>	421.69	421.68
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job _____ Sec. _____ T. _____ R. _____

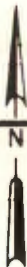
Station 51

Date 3/24/83

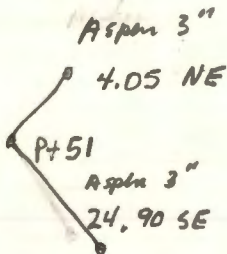
Directions



Reference



Ties



Project	Station	Crew	Date	
	51		3/24/83	
To Point	#1	Hor. Reading	Directions	Mean
50	D	<u>230-37-35</u>		230-37-35
	R	_____		
52	D	<u>202-30-20</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	#2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

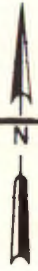
Station 52 Date 3/25/83

Directions

P451

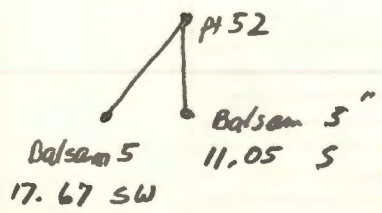
P452

P453



Reference

Ties



Project	Station 52	GB K Crew JA 00 LK-SETUP	Date 3/25/83
---------	---------------	-----------------------------	-----------------

To Point	*1	Hor. Reading	Directions	Mean
R 53	D	<u>151 00 20</u>	150 59 30	
	R	_____		
Pt 51	D	<u>243 58 00</u>		151 00 20
	R	_____		
	D	_____		
	R	_____		
Pt 53	D	<u>151 00 20</u>	151 00 00	
	R	_____		
Pt 51	D	<u>244 00 00</u>		
	R	_____		
	*2			Remarks
Pt 53	D	<u>151 00 20</u>	151 00 20	
	R	_____		
Pt 51	D	<u>244 01 20</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
53	D	<u>89 12 10</u>	467.67	467.62
	R	_____		
51	D	<u>88 07 20</u>	311.13	310.96
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

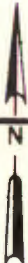
Job	Sec. _____	T. _____	R. _____
Station	53		Date
Directions			
Reference		Ties	

Project		Station	Crew	Date
		53		
To Point	*1	Hor. Reading	Directions	Mean
52	D	<u>181 17 45</u>	181 17 45	
	R	_____		
54	D	<u>005 11 00</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	*2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____	Sec. _____	T. _____	R. _____
Station <u>54</u>	Date _____		
Directions			
• Pt 53	• Pt 54	• Pt 55-Z-5	
Reference	N ↑ ↓	Ties	
	Pt 54		
Aspen 2' 9.94 SW	↙	Aspen 3 2.88 SE	

Project	Station	Crew	Date	
	54			
To Point	*1	Hor. Reading	Directions	Mean
53	D	183 04 00	183 03 30	
	R	_____	_____	_____
55-25 (19)	D	012 14 00		
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
53	D	183 04 00	183 04 03	
	R	_____	_____	_____
55-25 (19)	D	012 16 10		
	R	_____	_____	_____
	*2			Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
		Vertical Angles	Slope Dist.	Hor. Dist.
(19) 55-25	D	91 30 20		
	R	_____	244.31	244.23
53	D	88 50 40		
	R	_____	299.70	299.64
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Road Survey

Job	Sec. _____	T. _____	R. _____
Station	19	Date	3/25/81
Directions			
• Pt 20			
• Pt 19 sec cor			
• Pt 54			
Reference		Ties	
			

Project	Station	Crew	Date	
	19			
To Point	*1	Hor. Reading	Directions	Mean
54	D	82 56 04	82 55 43	
	R	_____	_____	
20	D	331 42 50		
	R	_____	_____	
	D	82 55 45	82-55-35	
	R	331-42-10		
54	D	82 56 05	82 55 45	
	R	_____	_____	
20	D	331 43 00		
	R	_____	_____	
	*2			Remarks
	D	82 56 17		End of Tia Jaffe
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

ROAD SURVEY

Job	Sec. _____	T. <u>141N</u>	R. <u>30W</u>
Station	Date <u>4/5/83</u>		
Directions			
pt. 0 • N1/4			
• P+1			
• P+2			
Reference	N	Ties	

Project	Station P+1	Crew CK-JA-GB	Date 4/5/83
---------	----------------	------------------	----------------

To Point	#1	Hor. Reading	Directions	Mean	
P+0 N114	D	600 00 00		179 59 17	
	R	_____			
P+2	D	179 59 17			
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			
	#2				Remarks
	D	_____			
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			

P+1	#1	Vertical Angles	Slope Dist.	Hor. Dist.	
P+0 N114	D	92 49 30	621.06'	620.31	
	R	_____			
P+2	D	88 57 20	372.87'	372.81	
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			
	D	_____			
	R	_____			

Job	Sec. _____	T. _____	R. _____
Station	Pt 2		Date
Directions			
• Pt 1			
• Pt 2			
• Pt 3			
Reference	N		Ties

Project	Station	Crew	Date	
	P+2			
To Point	#	Hor. Reading	Directions	Mean
P+1	D	<u>00-00-00</u>		
	R	_____		
7+3	D	<u>179-43-40</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	#	2		Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job _____ Sec. _____ T. _____ R. _____

Station *Pt 3* Date *4/5/83*

Directions

• *Pt 2*

• *Pt 3*

• *Pt 4 with COR*



Reference _____ N _____ Ties _____



Project	Station P+3	JAR GBT	Crew CK	Date
---------	----------------	------------	------------	------

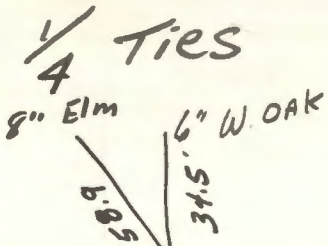
To Point	*1	Hor. Reading	Directions	Mean
2	D	<u>000 00 00</u>		
	R	_____		
Wt-CV 4	D	<u>180 15 23</u>		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	*2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

P+3	Vertical Angles	Slope Dist.	Hor. Dist.
P+2	D <u>89 30 30</u>		
	R _____	1217.81	1217.77
Wt-Cor P+4	D <u>93 39 40</u>		
	R _____	402.22	401.40
		89.78	
	D _____	491.98	
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

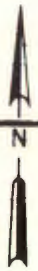
Job $\frac{1}{4}$ Sec. 12/13 T. 141N R. 30W

Station _____ Date 4/8/83

Directions



1" x 36" steel pin
B.C. along side.



Reference

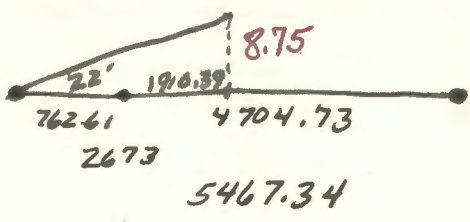
Ties

Project		Station	Crew	Date	
To Point		#1	Hor. Reading	Directions	Mean
Sec. 001 11, 12, 13, 14 0		D	00-00-00		
		R			
7, 12, 13, 14 2		D	180-00-00		
		R			
		D			
		R			
		D			
		R			
		D			
		R			
		#2			Remarks
		D			
		R			
		D			
		R			
		D			
		R			
		D			
		R			
		D			
		R			
		Vertical Angles	Slope Dist.	Hor. Dist.	
0		D	91-11-40		
		R		762.78	762.61
2		D	90-21-20		
		R		4704.82	4704.73
3		D			
		R			5467.34
3		D	91-11-20		
		R		1909.70 Moved east 1.10	1909.28 1910.39
		D			
		R			

Job _____ Sec. _____ T. _____ R. _____

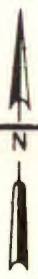
Station _____ Date _____

Directions

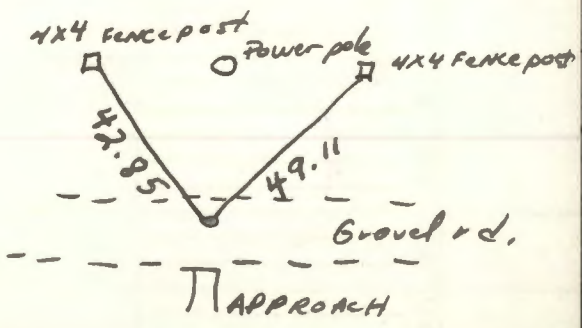


Reference

Ties



Pt. 1



APPROACH

Project		Station	Crew	Date
To Point	# 1	Hor. Reading	Directions	Mean
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	# 2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	Vertical Angles	Slope Dist.	Hor. Dist.	
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job Pit Survey Sec. 34 T. 150 R. 26

Station _____ Date 8/29/83

Directions

• Pt 3

• Pt 2

~~261.4139~~

~~266.2686~~

S11E

• Pt 1

SEC CDR



Reference

Ties

N



268.51
" 44
" Pt 2
N77° 51' 44" E
267.46
" 11W
S11E

SEC CDR

Project	Station PT 2	Crew JA 613 CK	Date
---------	-----------------	-------------------	------

To Point	*1	Hor. Reading	Directions	Mean
PT 1	D	<u>200 00 00</u>		
SEC COR	R	_____		202 55 10
	D	<u>202 55 10</u>		
PT 3	R	45 50 20		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

*2				Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

		Vertical Angles	Slope Dist.	Hor. Dist.
PT 1	D	<u>90.04 45</u>		
	R	_____	1289.20'	1289.21
PT 3	D	<u>91 45 50</u>		
	R	_____	559.41	559.14
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job *Pit Survey*

Sec. _____

T. _____

R. _____

Station *Pt 3*

Date _____

Directions

Pt 4
1465R

Pt 3

Pt 2



Reference

Ties

2643 .5337
30 .9636

N 40° 16'

1812 .6079
130 .5102

1265 .5236
245 .9929

349
.401C

2643.71

N 11° W

N 00° 40' 16" E

00
00

169

2643.7

1321.85

70

1321.7598

15.4826

Project	Station	Crew	Date
	ft 3		

To Point	*1	Mer. Reading	Directions	Mean
ft 2	D	<u>000 00 00</u>		179 04 40
	R	_____		
ft 4 1/4	D	<u>179 04 40</u>		
CR	R	<u>358 09 20</u>		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

	*2		Remarks
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	

	Vertical Angles	Slope Dist.	Hor. Dist.
ft 4	D <u>91 55 30</u>	846.95	846.47
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		
	D _____		
	R _____		

Job _____

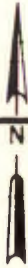
Sec. _____ T. _____ R. _____

Station _____

Date _____

Directions

Reference



Ties

Project	Station 1	Crew	Date 4/183
---------	--------------	------	---------------

To Point	#1	Hor. Reading	Directions	Mean
	D	2		
	R			
1	D			
	R			
	D	5 11-41-30	46-46-00	11-41-30
	R			
1+05	D	89-55-30	1234,98	1234,98
	R			
	D			
	R			

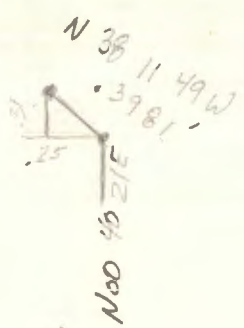
#2				Remarks
Pt 2	D	00-00-00		
	R			
Pt 5	D	11-41-00	11-41-14	
	R	46-46-55		
	D			
	R			
	D			
	R			
	D			
	R			

	Vertical Angles	Slope Dist.	Hor. Dist.
Pt 5	D 90-00-00	1321.55	
	R		
Pt 1	D		
	R		
	D		
	R		
	D		
	R		

Job _____ Sec. _____ T. _____ R. _____

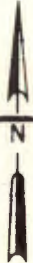
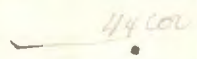
Station _____ Date _____

Directions



Reference

Ties



2643.5379
31.0294

1321.8600
1321.7689
13,5748

N 00 40 21 E
2643.72

1321.4560
15.7610

sec cor 00

Project	Station	Crew	Date	
Tropics	5	CK JA-GD	9/18/2	
To Point	*1	Hor. Reading	Directions	Mean
1	D	00-00-00		
	R			
4	D	179-54-50		179-54-50
	R	359-54-50		
	D			
	R			
	D			
	R			
	D			
	R			
	*2			Remarks
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
		Vertical Angles	Slope Dist.	Hor. Dist.
5	D			
	R		91-33-20	1322.66
4	D	91-33-20		
	R		1322.66	1322.17
	D			
	R			
	D			
	R			
	D			
	R			

Job

Sec. _____

T. _____

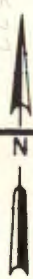
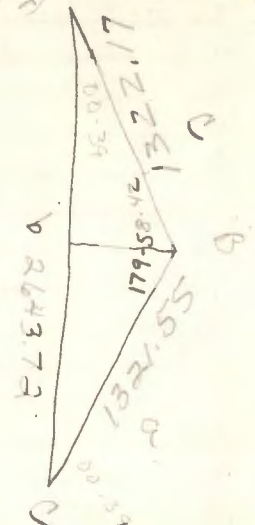
R. _____

Station

Date

Directions

5241
1935
3494627527



Reference

Ties

$\sin A = \frac{179.5842}{264372}$
 $\sin B = \frac{179.5842}{132217}$
 $179.5842 =$

Project 146-31-57	Station 1	Crew CK-JA-GB	Date 9/26/83
----------------------	--------------	------------------	-----------------

To Point	#1	Hor. Reading	Directions	Mean
1/4	D	_____	_____	_____
	R	_____		
SMC	D	180.03	_____	_____
	R	_____		
	D	_____	_____	_____
	R	_____		
	D	_____	_____	_____
	R	_____		
	D	_____	_____	_____
	R	_____		

	#2		Remarks
1/4	D	_____	to SMC 31.42
	R	_____	
	D	_____	2073.72
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	

	Vertical Angles	Slope Dist.	Hor. Dist.
1/4	D	90-04-00	767.17
	R	_____	
SMC	D	90-14-00	1305.77
	R	_____	
	D	_____	2072.92
	R	_____	
W.C. to SMC	D	90-26	1290.56
	R	_____	
	D	_____	15.23
	R	_____	

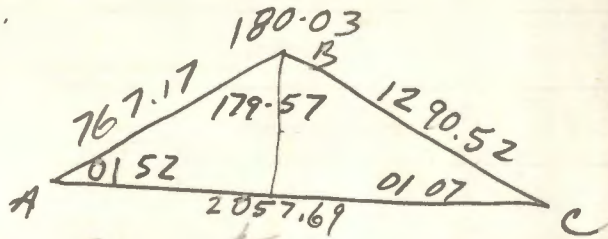
Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions

.42

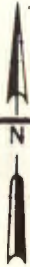
1.1



$$\frac{a}{\sin A} = \frac{b}{\sin B}$$

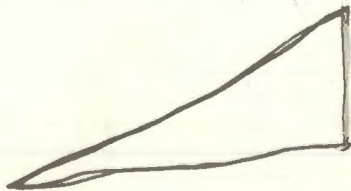
$$\sin A = \frac{x}{1}$$

$$\frac{1}{\sin B} = \frac{c}{\sin C}$$

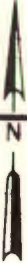


Reference

Ties



Project		Station	Crew	Date
John Kolchun Site		1	OK-JA-GB	9/19/83
To Point	*1	Hor. Reading	Directions	Mean
0 NW 1/4 S.1	D	_____	_____	_____
	R	_____	_____	_____
2 SMC S.1	D	_____	_____	_____
	R	_____	_____	_____
0	D	_____	_____	_____
	R	_____	_____	_____
3 W. 2+0 S.M.C.	D	_____	_____	_____
	R	_____	_____	_____
	*2			Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
		Vertical Angles	Slope Dist.	Hor. Dist.
0	D	90- 48 -00	476.71	477.99
	R	_____		476.66
2	D	90-35-06	562.71	562.68
	R	_____		
3	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job	Sec. <u>1</u>	T. <u>144</u>	R. <u>30</u>
Station	Date		
Directions			
<p>Setting Witness corner for the S.M.C. on south side of Lower Sucker Lake.</p>			
Reference		Ties	

Project John Johnson Site	Station 1	Crew CK-GG-JA	Date 9/19/83
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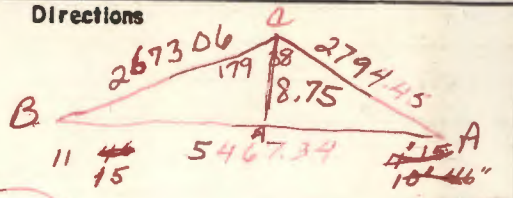
To Point	#	Hor. Reading	Directions	Mean
0 N.W. 1/4 Sec. 1	D	_____	_____	_____
	R	_____	_____	_____
2 S.W. 1/4 Sec. 1	D	179-57-40	_____	_____
	R	_____	_____	_____
	D	_____	_____	_____
	R	_____	_____	_____
2 S.W. 1/4	D	_____	_____	_____
	R	_____	_____	_____
3 W.C.	D	_____	_____	_____
	R	_____	_____	_____
	# 2			Remarks
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	
	D	_____	_____	
	R	_____	_____	

	Vertical Angles	Slope Dist.	Hor. Dist.
0	D	90-41-00	
	R	_____	478.45
2	D	90-35-00	
	R	_____	562.37
3	D	90-48-00	
	R	_____	553.13
	D	_____	
	R	_____	
	D	_____	
	R	_____	

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions



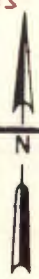
8.75'

$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C} = 1040.76$$

~~sin B = x~~

$$\sin 10^{\circ} 45' = \frac{x \sin B}{2794.45} = \frac{b}{a}$$

$$\sin 11^{\circ} 15' = \frac{b}{2673.06}$$

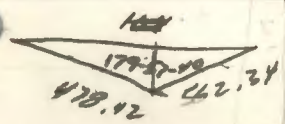
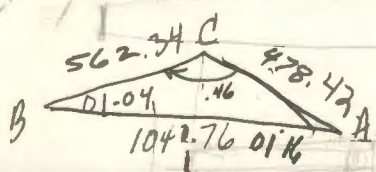


Reference

Ties

N	E
478.4200	80000
1040.7599	.3817

$$\frac{a}{\sin A} = \frac{c}{\sin C}$$



$$\sin B = \frac{b}{a} = \frac{478.42}{1042.76} = .46$$

1040.76

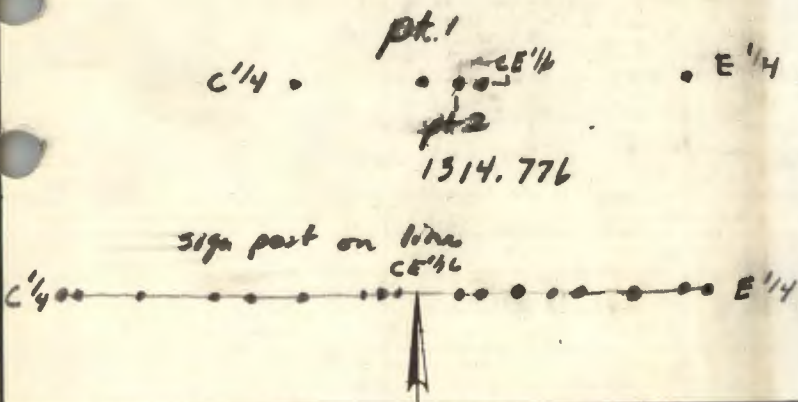
.18

Project	Station	GB K JA 11	Crew CK SETUP	Date
T150 R26 SCL 29	73 1116 Lot.			1/13/84
To Point	#	Hor. Reading	Directions	Mean
72	D	000 00 00		
	R			
69 1/4	B'	91 16 20	91 16 04	
	R	05 04 15		
	D			
	R			
	D			
	R			
	D			
	R			
Occur	#	2 69		Remarks
73	D	00-00-00		
	R			
23 July	D	174-07-40	174-07-30	
	R	336-30-00		
	D			
	R	69		
23	D	82-50-20	82-50-08	
	R	331-20-30		
22	D			
	R			
		Vertical Angles	Slope Dist.	Hor. Dist.
69 1/4	D	90 07 30	3970.02	
	R			
69 to 23	D	89-33-20	335.38	
	R	89-33-20		
69 to POT	D	89-31-06	264.85	
	R			
	D			
	R			
	D			
	R			

Job JA PRAK Sec. 25 T. 179 R. 31

Station _____ Date 4/6/82

Directions



Reference	
E'14 to C'14	
sta 1	66
sta 2	250
sta 3	500
sta 4	750
sta 5	1000
sta 6	1307
sta 7	1316
sta 8	1500
sta 9	1850
sta 10	2000
sta 11	2300
sta 12	2620

Ties

Moved 2.936' to the East from pt. 2 for true position of CE'14'

13

1314.776

1311.84

2.936

Project	Station	Crew	Date	
	pt 1			
To Point	* 1	Mer. Reading	Directions	Mean
E 1/4	D	00 00 30		
	R			
C 1/4	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	* 2			Remarks
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
	D			
	R			
		Vertical Angles	Slope Dist.	Hor. Dist.
E 1/4	D	90 51 25	1861.650	1861.442
	R			
C 1/4	D	90 40 30	762.970	762.816
	R			
pt 2	D	91 18 05	546.807	546.6
	R			
conty	D	91 13 00		
	R			
6	D			
	R			

Job JA PR AK

Sec. 25

T. 149

R. 31

Station

Date

4/7/82

Directions

E 1/4



move north
 6.57' from pt 1
 for true position &
 S 1/4'



Reference

Ties



Project	Station	Crew	Date
To Point	*1	Mer. Reading	Directions
	D	_____	_____
	R	_____	_____
	D	_____	_____
	R	_____	_____
	D	_____	_____
	R	_____	_____
	D	_____	_____
	R	_____	_____
	D	_____	_____
	R	_____	_____
	*2		Remarks
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
		Vertical Angles	Slope Dist.
E 114	D	90 28 30	2641.683
	R	_____	2641.592
pt 1	D	91 10 55	1314.552
	R	_____	1314.272
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	

Job _____ Sec. 25 T. 149 R. 31

Station _____ Date 4/7/82

Directions

C/14
• Pt. 103

Pt 110
•
RE 116

•
Pt B



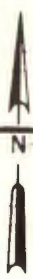
Reference

Ties

Reference Ties

[Faint, illegible handwritten notes in the Reference and Ties sections]

Project	Station pt B	Crew	Date
To Point	1	Hor. Reading	Directions
pt 110	D	<u>000 00 00</u>	
	R	_____	
pt 103	D	<u>180 58 50</u>	180 58 50
	R	<u>001 57 20</u>	_____
	D	<u>182 56 05</u>	
	R	_____	180 58 46
	D	<u>542.560</u>	180 58 42
	R	<u>180 58 42</u>	_____
	D	_____	
	R	_____	
	2		Remarks
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	
		Vertical Angles	Slope Dist.
pt 110	D	<u>91 13 10</u>	550.618
	R	_____	550.493
pt 103	D	<u>90 37 25</u>	764.410
	R	_____	764.364
	D	_____	
	R	_____	
	D	_____	
	R	_____	
	D	_____	
	R	_____	

Job	Sec. <u>25</u>	T. <u>149</u>	R. <u>31</u>
Station <u>Sta 8A</u>	Date <u>4/29/82</u>		
Directions			
	Δ Sta.		
	•		
• Pt 9	• Pt 8A	• Pt 7	
			
Reference	N	Ties	

Project	Station Pt 8A	Crew JA JO	Date 4/27/82
---------	------------------	---------------	-----------------

To Point	Mer. Reading	Directions	Mean
Pt 7	D <u>000 00 00</u> R _____		
Pt 7	D _____ R _____		
Pt. 9.	D <u>180 25 45</u> R <u>180 26 01</u>		
	D <u>000 52 05</u> R <u>181 18 07</u>		<u>180 26 01.5</u>
A Sta	D <u>257 23 19</u> R _____		
	*2 <u>180 26 02</u>		Remarks
	D 180 26 00 R <u>541 18 00</u>		
	D <u>541 17 39</u> R _____		
	D _____ R _____		
	D _____ R _____		
	D _____ R _____		

	Vertical Angles	Slope Dist.	Hor. Dist.
Pt 7	D <u>90 15 25</u> R _____	<u>863.808</u>	
Pt 9	D <u>90 31 40</u> R _____	<u>1694.972</u>	
Δ Sta	D <u>90 32 00</u> R _____	<u>214.092</u>	
	D _____ R _____		
	D _____ R _____		

Job

Sec. _____

T. _____

R. _____

Station

Date

Directions



N

Reference

Ties

Project	Station	Crew	Date
---------	---------	------	------

To Point	*1	Hor. Reading	Directions	Mean
7	D	<u>000 00 40</u> ³⁵		
	R	<u>180 00 30</u>		
9	D	<u>180 26 40</u> ³¹	180 25 56	
	R	<u>000 26 22</u>		
	D	<u> 25</u> ⁹		
	R	<u> </u>		
	D	<u> 91</u>		
	R	<u> 31</u>		
	D	<u> 55</u>		
	R	<u> </u>		

	*2		Remarks
7	D	<u>270 00 40</u> ³²	
	R	<u>090 01 25</u>	
9	D	<u>090 26 52</u> ^{53.5}	180 26 21
	R	<u>270 26 55</u> ⁵²	
	D	<u> </u>	
	R	<u> </u>	
	D	<u> </u>	
	R	<u> </u>	
	D	<u> </u>	
	R	<u> </u>	

	Vertical Angles	Slope Dist.	Hor. Dist.
	D <u> </u>		
	R <u> </u>		
	D <u> </u>		
	R <u> </u>		
	D <u> </u>		
	R <u> </u>		
	D <u> </u>		
	R <u> </u>		

Job _____ Sec. _____ T. _____ R. _____

Station _____ Date _____

Directions

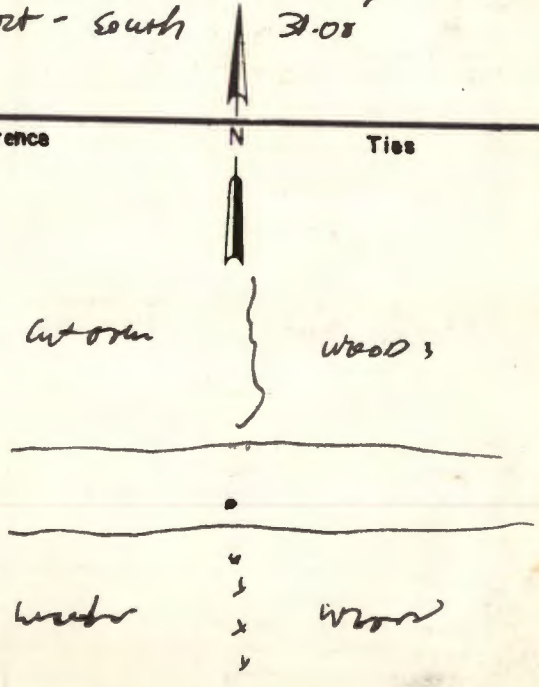
R-22 W 1/4 Sec 25 & 24

Birch	Birch	W. Spruce	Ash
568W	559E	16"	6"
28.52'	32.62'	N 29E	S 05W
CLT	Tags apl.	Tag & apl	73.40
Blanged & scrimed			Ally 65.

Sty post - south 31.08'

Reference

Ties



Project		Station	Crew	Date
To Point	#1	Hor. Reading	Directions	Mean
R1	D	_____		
	R	_____		
T-1	D	_____		
	R	_____		
V-1	D	_____		
	R	_____		
X-1	D	_____		
	R	_____		
Z-1	D	_____		
	R	_____		
	#2			Remarks
402.22	D	_____	1620.03	
	R	_____	621.06	
217.81	D	_____	2241.09	
42003	R	_____	372.87	
	D	_____		
	R	_____		
	D	_____	2613.96	
	R	_____		
	D	104.55		
	R	859.72		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____	1351.70	
	D	_____	491.98	
	R	_____	859.72	
	D	_____		
	R	_____	5170	
	D	_____		
	R	_____		
	D	_____		
	R	_____		

Job

Sec. _____

T. _____

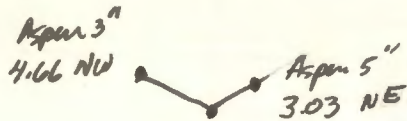
R. _____

Station

49

Date

Directions



Reference

N

Ties

• R48

• R49

• R50

Project	Station	Crew	Date	
	49			
To Point	* 1	Hor. Reading	Directions	Mean
48	D	<u>223-33-10</u>		
	R	_____		223-33-31
50	D	<u>174-14-03</u>		
	R	_____		
	D	_____		
	R	_____		
	D	<u>223-33.40</u>		
	R	_____		
	D	<u>174-14-20</u>		
	R	_____		223-33-35
	* 2			Remarks
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
		Vertical Angles	Slope Dist.	Hor. Dist.
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		
	D	_____		
	R	_____		