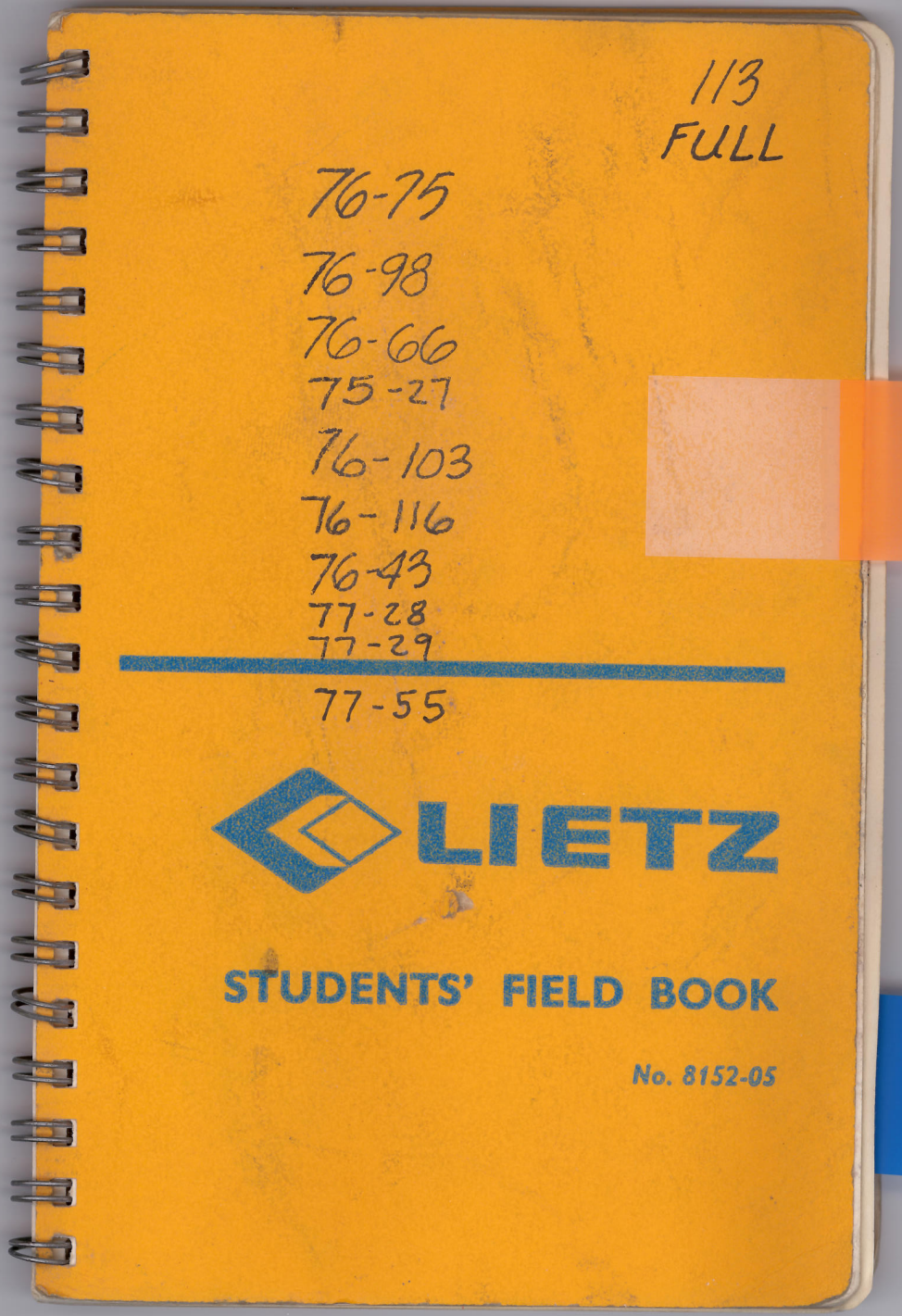
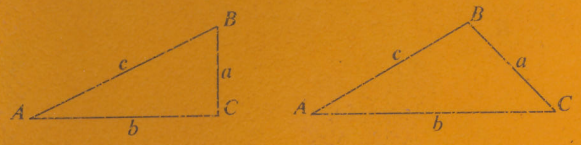
The plat, field notes and office calculations were all donated by Jim Samer with Samer and Associates in October 2008.
Job #76-75


113
FULL
76-75
76-98
76-66
75-27
76-103
76-116
76-43
77-28
77-29
77-55
LIETZ
STUDENTS' FIELD BOOK
No. 8152-05

FORMULAE FOR SOLVING RIGHT TRIANGLES



$$\text{Sin } A = \frac{a}{c} = \text{Cos } B \qquad \text{Cot } A = \frac{b}{a} = \text{Tan } B$$

$$\text{Cos } A = \frac{b}{c} = \text{Sin } B \qquad \text{Sec } A = \frac{c}{b} = \text{Cosec } B$$

$$\text{Tan } A = \frac{a}{b} = \text{Cot } B \qquad \text{Cosec } A = \frac{c}{a} = \text{Sec } B$$

Given	Required	Solution
A, c	B, a, b	$B = 90° - A, a = C \sin A, b = C \cos A.$
A, b	B, a, c	$B = 90° - A, a = b \tan A, c = \frac{b}{\cos A}.$
A, a	B, b, c	$B = 90° - A, b = a \cot A, c = \frac{a}{\sin A}.$
a, c	A, B, b	$\sin A = \frac{a}{c}, \cos B = \frac{a}{c}, b = \sqrt{(c+a)(c-a)}$
a, b	A, B, c	$\tan A = \frac{a}{b}, \cot B = \frac{a}{b}, c = \sqrt{a^2 + b^2}$

FORMULAE FOR SOLVING OBLIQUE TRIANGLES

Given	Required	Solution
A, a, b	B, c	$\sin B = \frac{b \sin A}{a}, c = \frac{a \sin C}{\sin A}$
A, B, a	b	$b = \frac{a \sin B}{\sin A}$
a, b, C	A, c	$A + B = 180° - C, C = \frac{a \sin C}{\sin A}$
a, b, c	Area	side $\frac{a+b+c}{2}$, area $= \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	area $= \frac{bc \sin A}{2}$
A, B, C, a	Area	area $= \frac{a^2 \sin B \sin C}{2 \sin A}$

Printed in England

Job No	Page
76-25	1-9
76-58	11
76-66	
75-27	13
76-103	15
76-116	19
76-43	21
77-28	23
77-29	25
77-55	27

A Survey of
A Portion of The Boundary
of The Gila Bend Gunnery
Range in T6S, R5W
and T6S, R6W, G&S.R.B.&M.

July-Sept, 1976

Job No. 76-75

Ø Paarola & Hersey
π Barr
Wright, Brown

Note: All found Mesquite Posts (M.P.)
are irregularly shaped branches, with
one or ~~both~~ ~~and/or~~ ends artificially cut.
All posts were found lying on ground and
in various stages of decomposition

See file for other corners found in
area and for computations

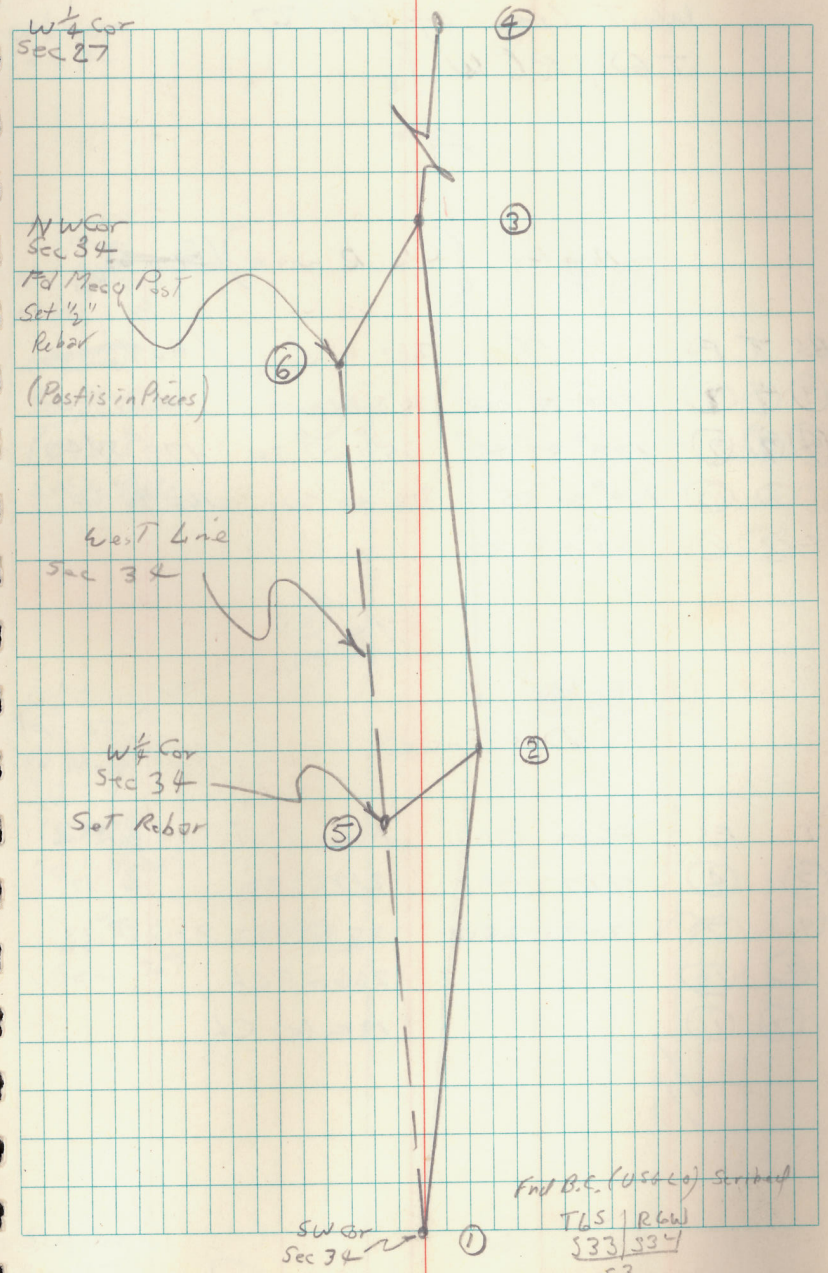
West Line of Section 34
T6S, R6W

Angles (All angles Turned Clockwise) ~~(From South)~~

BS.	℄	FS.	1st	2nd	Avg
①	②	③	179° 41' 30"	359° 23' 00"	179° 41' 30"
②	③	④	180° 03' 50"	360° 07' 10"	180° 03' 35"
①	②	⑤	12° 32' 56"		
②	③	⑥	10° 34' 20"	21° 09' 00"	10° 34' 30"

Distances

℄		FS.	Slope Dist	Horiz Dist	Vert ∠
①	②		2781.350	2781.339	0° 9' 30"
②	③		2763.560	2763.548	0° 10' 00"
②	⑤		143.85 Ch		
③	⑥		267.28 Ch		



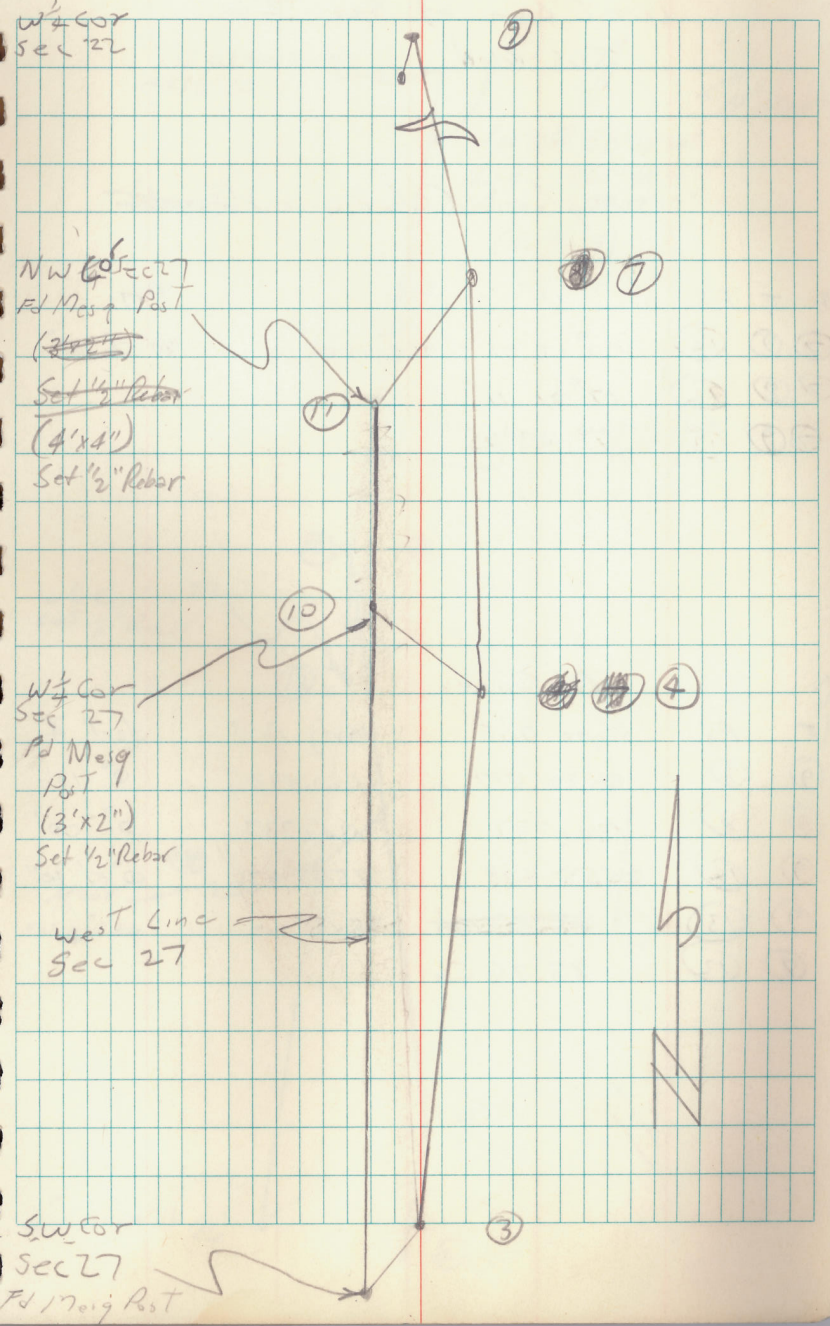
West Line of Sec. 27
T65, R6W

Angles (Clockwise) ~~(From ⑤)~~

B.S.	T	F.S.	1st	2nd	Avg
③	④	⑦	179° 18' 00"	358° 36' 00"	179° 18' 00"
④	⑦	⑩	179° 33' 40"	359° 07' 20"	179° 33' 40"
③	④	⑩	164° 20' 05"	328° 40' 20"	164° 20' 10"
④	⑦	⑪	19° 43' 30"		

Distances

T	F.S.	Slope Dist.	Horiz Dist	Vert ∠
③	④	2123.798	2123.772	0° 17'
④	⑦	3030.240	3030.222	0° 12'
④	⑩		266.45 Ch	
⑦	⑪		134.60 Ch	



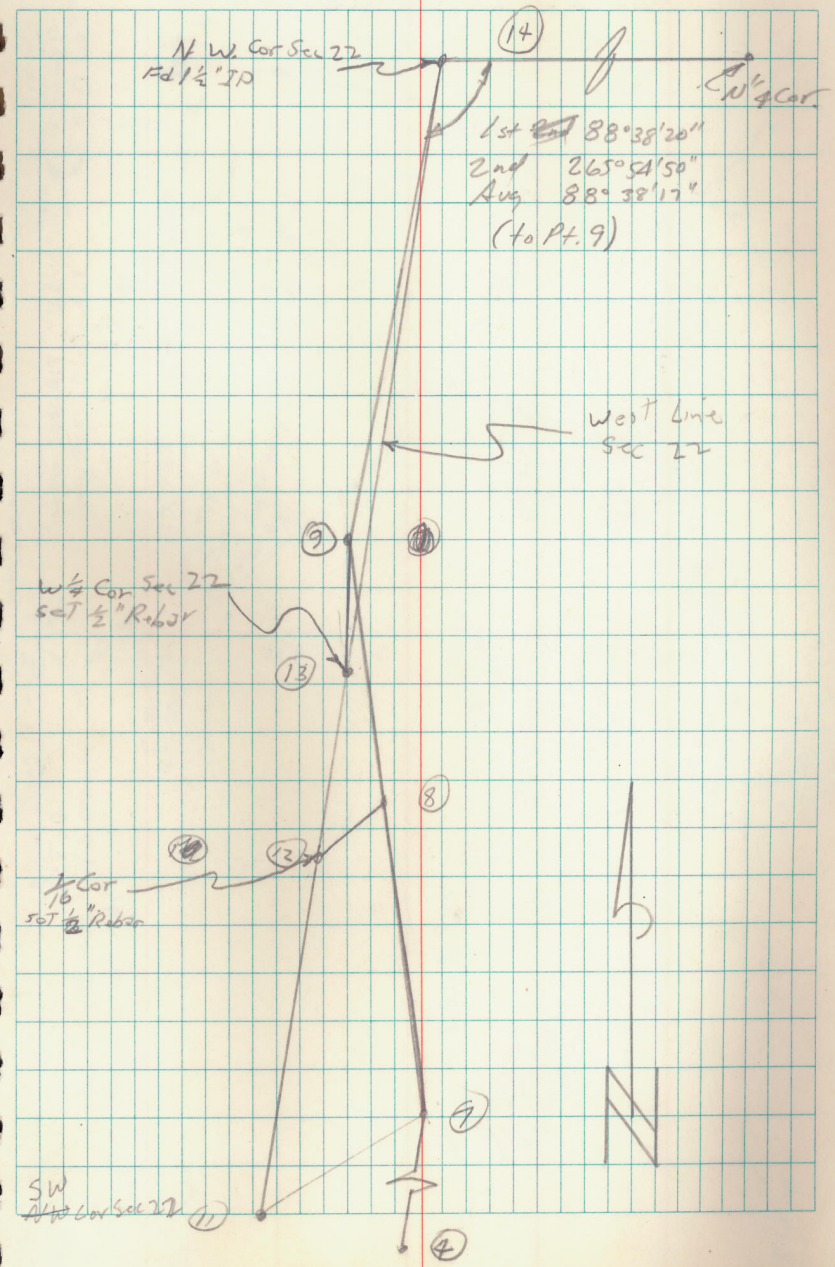
West Line of Sec 22
T6S R6W

Angles (Clockwise) ~~(from 8)~~

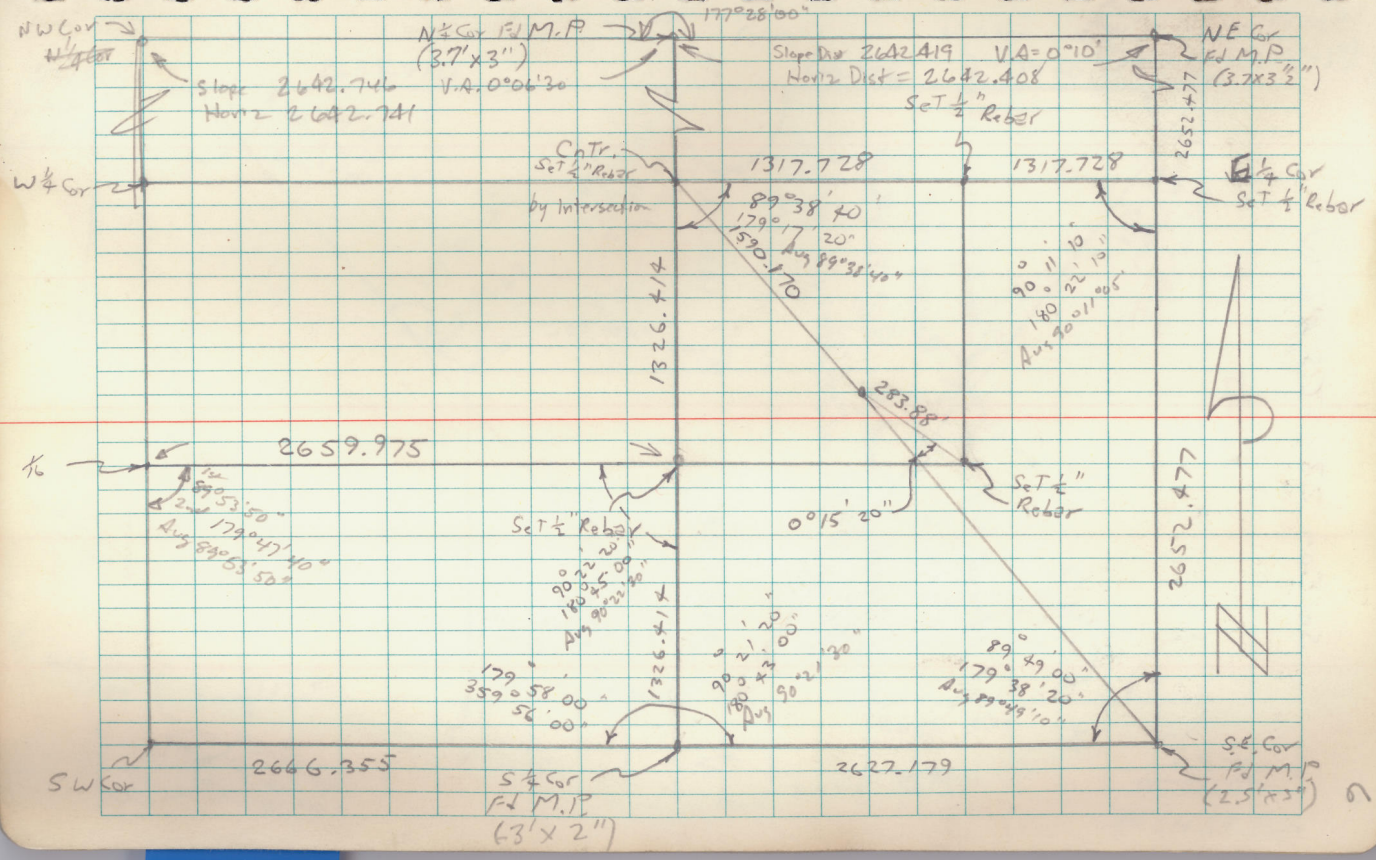
Bs.	Π	F.S.	1st	2nd	Avg.
7	9	14	180° 56' 00"	361° 52' 00"	180° 56' 00"
7	8	12	17° 01' 11"		
7	9	13	1° 23' 35"		

Distances

Sta.		F.S.	Slope Dist	Horiz Dist	Vert ∠
9		7	2620.517	2620.498	0° 13'
9		8	134.737	134.737	0° 00'
9		14	2555.488	2555.476	0° 10' 40"
9		13	~~83.26 Ch~~	95.88 Ch	
8		12	83.26 Ch		



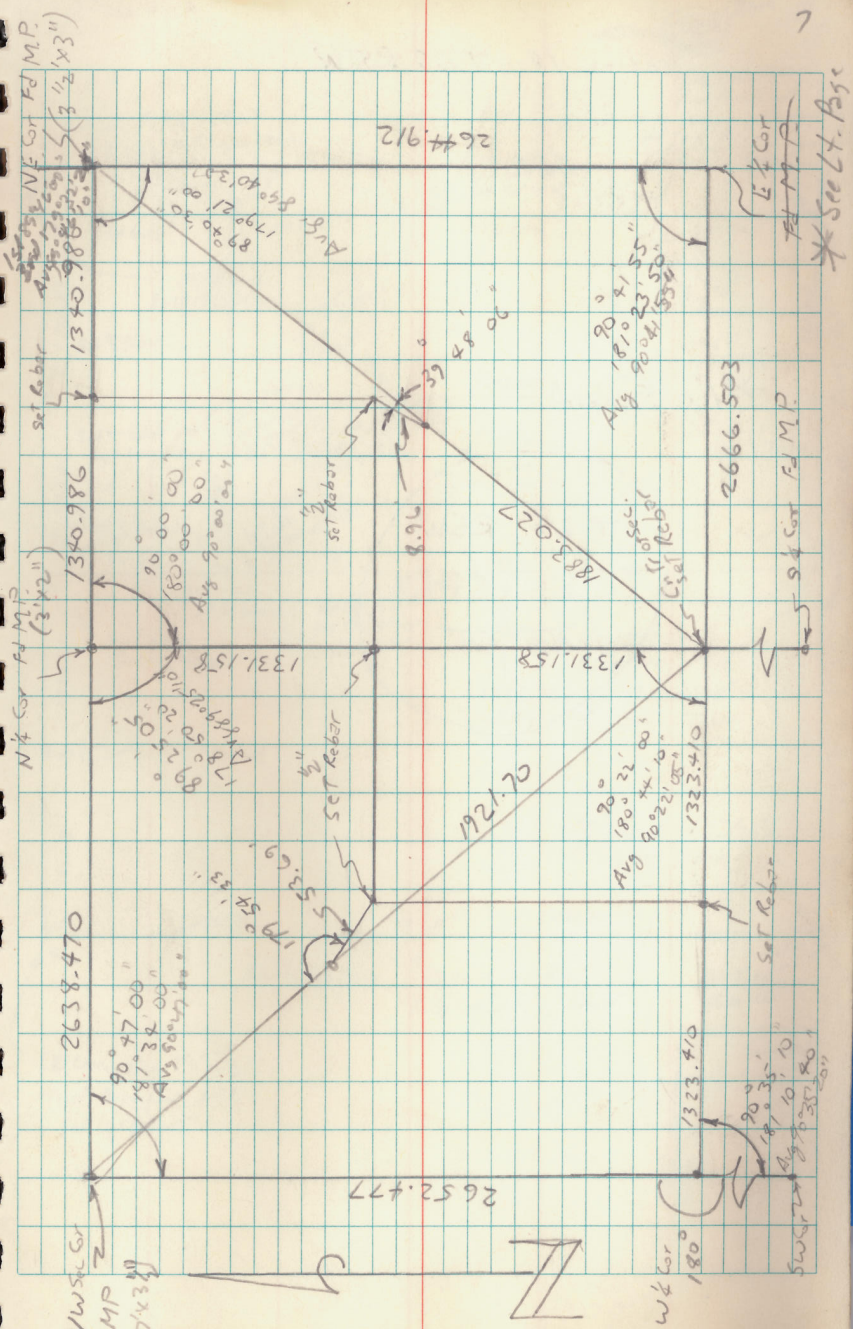
Section 22, T65, R6W



Section 23, T6S, R6W

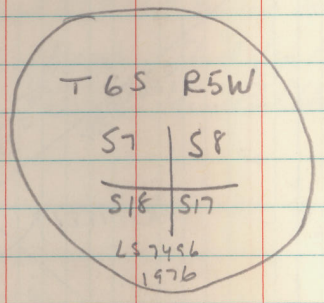
* E. 1/4 Cor.

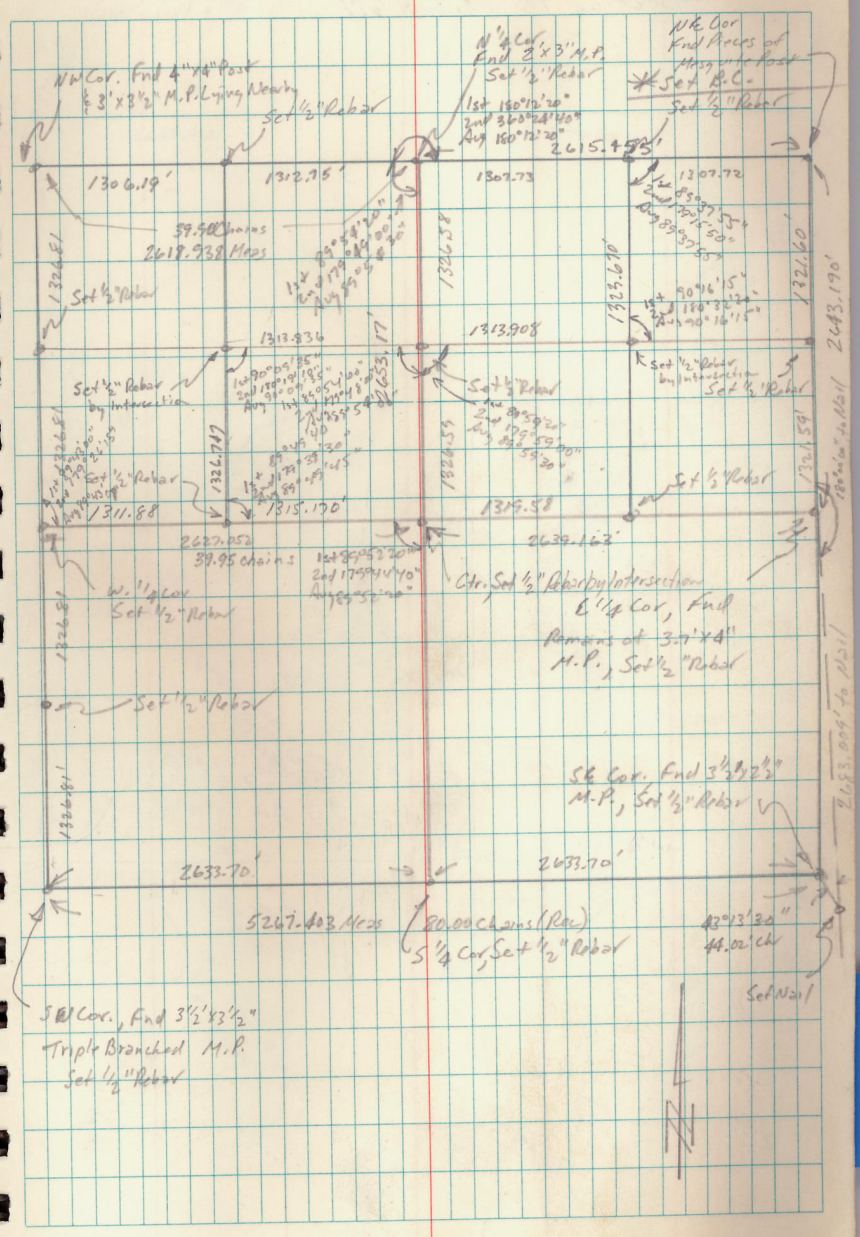
Fnd Mound & Filled in Pits N&S
& Pieces of 3'x1½" Broken Mesquite Post
Lying Nearby. Stood Up Post in Mound
& Raised Small Mound of Stone.



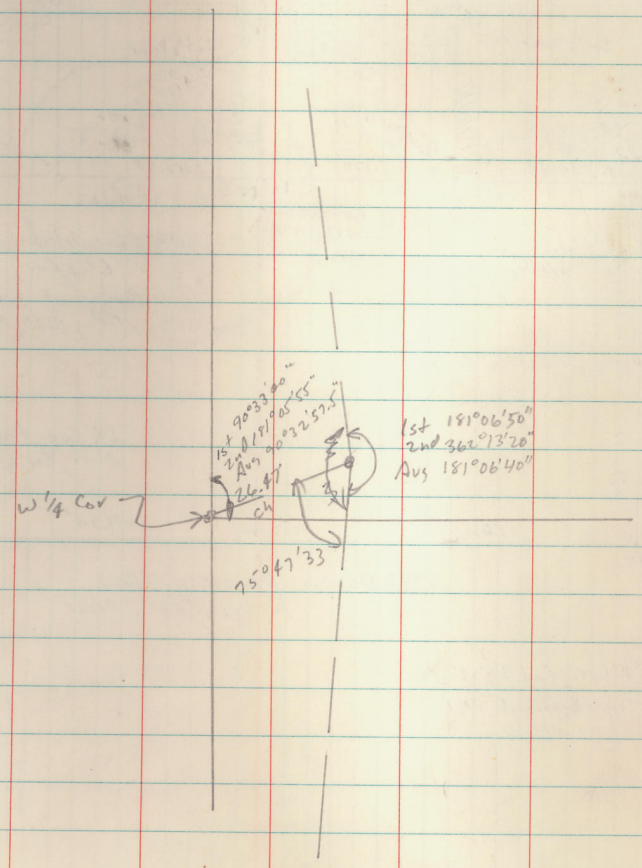
Section 18, T6S R5W

* B.C. Scribed

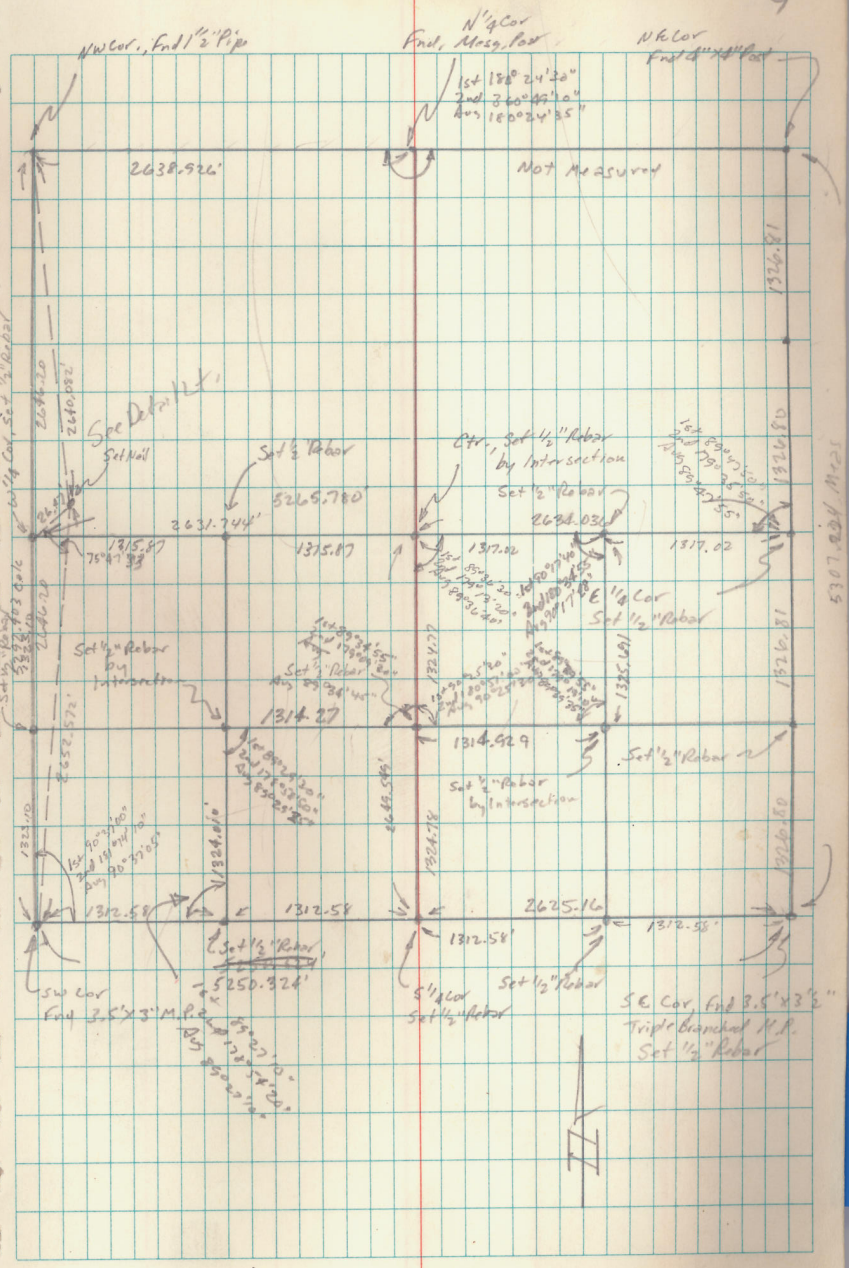




Section 13, T6S R6W

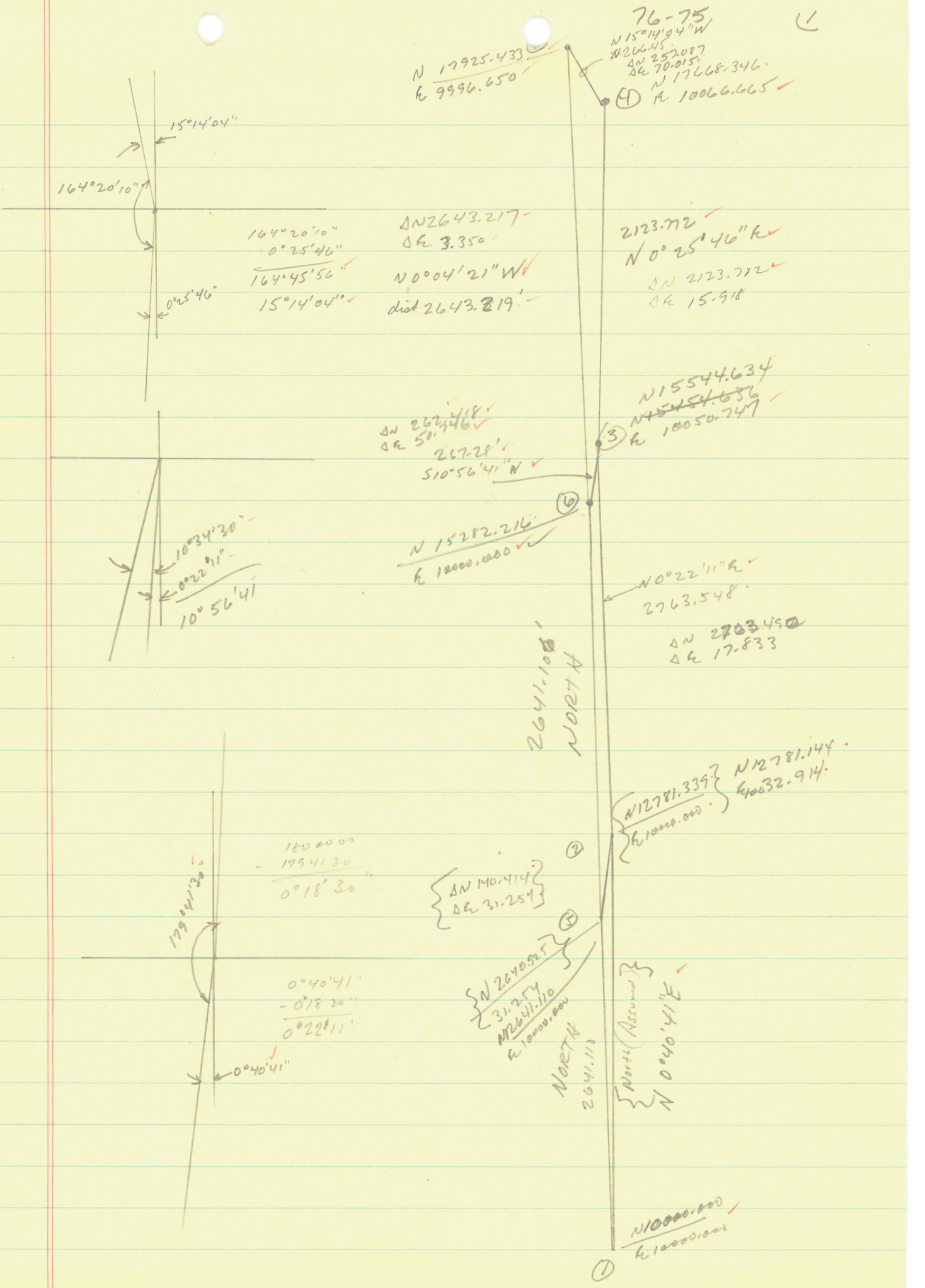


9



76-75
Gila Bend Survey

Line	Distance	Bearing
1-5	2641.110	NORTH
5-6	2641.106	NORTH
6-10	2643.217	N 0°04'21"W
10-11	2646.186	N 0°14'08"E
11-12	1325.667	N 0°04'30"E
12-15	2659.975	S 89°39'20"E
15-18	1315.73	S 85°40'30"E
18-19	1326.40	N 0°03'28"E
19-20	1317.728	S 89°40'30"E
20-23	1323.410	N 89°33'05"E
23-28	1328.97	N 0°01'29"E
28-32	1321.11	N 89°27'26"E
32-31	1337.242	S 89°53'37"E
31-33	1326.80	N 0°04'53"E
33-29	1340.986	N 89°55'10"E
29-SE Cor. SW¼SW¼ Sec 13	1312.58	S 89°31'25"E
SE Cor SW¼SW¼ Sec 13-NE Cor SW¼SW¼ Sec 13	1324.010	N 0°04'15"W
NW Cor SE¼SW¼ Sec 13-NE Cor SE¼SW¼ Sec 13	1314.27	S 89°33'40"E
NW Cor SW¼SE¼ Sec 13-NE Cor SW¼SE¼ Sec 13	1314.929	S 89°33'25"E
SW Cor NE¼SE¼ Sec 13-NW Cor NE¼SE¼ Sec 13	1325.691	N 0°06'10"E
NW Cor NE¼SE¼ Sec 13-E¼ Cor Sec. 13	1317.02	S 89°36'22"E
W¼ Cor Sec 18-SE Cor SW¼NW¼ Sec. 18	1311.88	N 89°54'10"E
SE Cor SW¼NW¼ Sec 18-NE Cor SW¼NW¼ Sec 18	1326.747	N 0°04'25"E
NW Cor SE¼NW¼ Sec 18-NE Cor SE¼NW¼ Sec 18	1313.836	N 89°54'50"E
SW Cor NW¼NE¼ Sec 18-SE Cor NW¼NE¼ Sec 18	1313.908	S 89°58'40"E
SE Cor NW¼NE¼ Sec 18-NE Cor NW¼NE¼ Sec 18	1323.670	N 0°14'55"W
NW Cor NE¼NE¼ Sec 18-NE Cor Sec 18	1307.72	S 89°52'50"E


76-75
N 15°14'04" W
N 2664.45
ΔN 252.087
ΔE 70.015
N 17668.346
E 10066.665
N 17925.433
E 9996.650
15°14'04"
164°20'10"
164°20'10"
0°25'46"
164°45'56"
15°14'04"
0°25'46"
ΔN2643.217
ΔE 3.350
N 0°04'21" W
dist 2643.219'
2123.772
N 0°25'46" E
ΔN 2123.772
ΔE 15.918
N15544.634
N15547.656
E 10050.747
ΔN 267.418
ΔE 50.446
267.28'
S10°56'41" W
N 15282.216
E 10000.000
10°34'30"
0°22'11"
10°56'41
N 0°22'11" E
2763.548
ΔN 2763.450
ΔE 17.833
2641.108
NORTH
N12781.335
E10000.000
N12781.144
E10032.914
180°00'00"
179°41'30"
0°18'30"
179°41'30"
ΔN 140.414
ΔE 31.254
N 2640.525
31.254
N2641.110
E 10000.000
0°40'41"
-0°18'30"
0°22'11"
0°40'41"
NORTH
2641.110
North (Assumed)
N 0°40'41" E
N10000.000
E10000.000

76-75 (2)

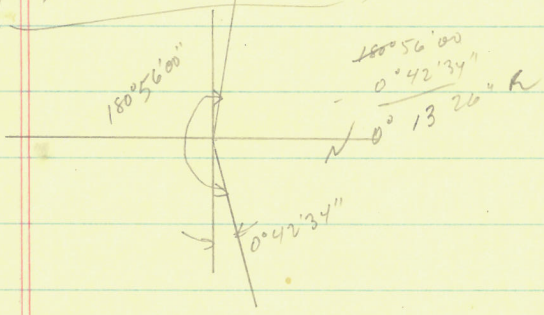
Pt 11 to Pt 14

ΔN ~~5295.422~~ 5302.668

ΔE 22.372

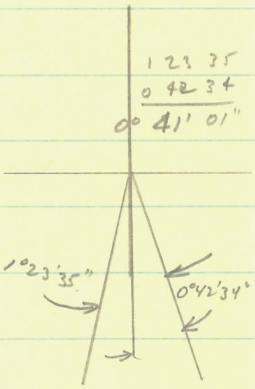
Dist ~~5295.469~~ 5302.715

Bg N 0° 14' 30" E



(14) N 25874.287
E 10029.898

N 0°13'26" E
2555.476
ΔN 2555.456
ΔE 9.986



N 23318.831
E 10019.912

From Pt 13
N 23222.458
E 10018.768

0° 44' 43"
0° 42' 34"
0° 27' 17"

134.76'

ΔN 92.255
ΔE 1.200
dist 92.263
Bg S 0°44'43" W
ΔL 23220.596

N 23222.453
E 10018.712 ~~E 10018.712~~

(13) (6)

N 0°42'34" W
overall 2620.498'
ΔN 2620.297
ΔE 32.444

ΔN 2647.711
ΔE 11.186

175°33'40"
16'14"
175°17'26"
0°42'34"
0°16'14"

N 21977.197
E 10036.523

Pt 12 from 8
N 21897.288
E 10013.140

ΔN 1278.663
ΔE 15.833

(8)

83.26'

(12)

~~N 21902.421~~
~~E 10013.119~~

N 21892.284
E 10013.119

126.915'

~~ΔN 1323.856~~
~~ΔE 5.553~~

134.60'

S 15°27'16" W

15°43'30"

0°16'14"

19°43'30"
0°16'14"
19° 27'16"

0°16'14"

175°18'00"
0°25'46"
175°43'46"
0°16'14"

175°18'00"

0°25'46"

(11)

ΔN ~~49.669~~
ΔE ~~44.830~~
44.830

20571.619
N ~~20598.856~~
E 10007.526

2646.212
2646.186

ΔN ~~2653.472~~
ΔE 10.876

~~N 0°14'05" E~~
Dist
Bg N 0°14'05" E

(7)

N 20698.534
E ~~14.356~~
W 10052.356

N 0°16'14" W
3030.222
ΔN 3030.186
ΔE 14.309

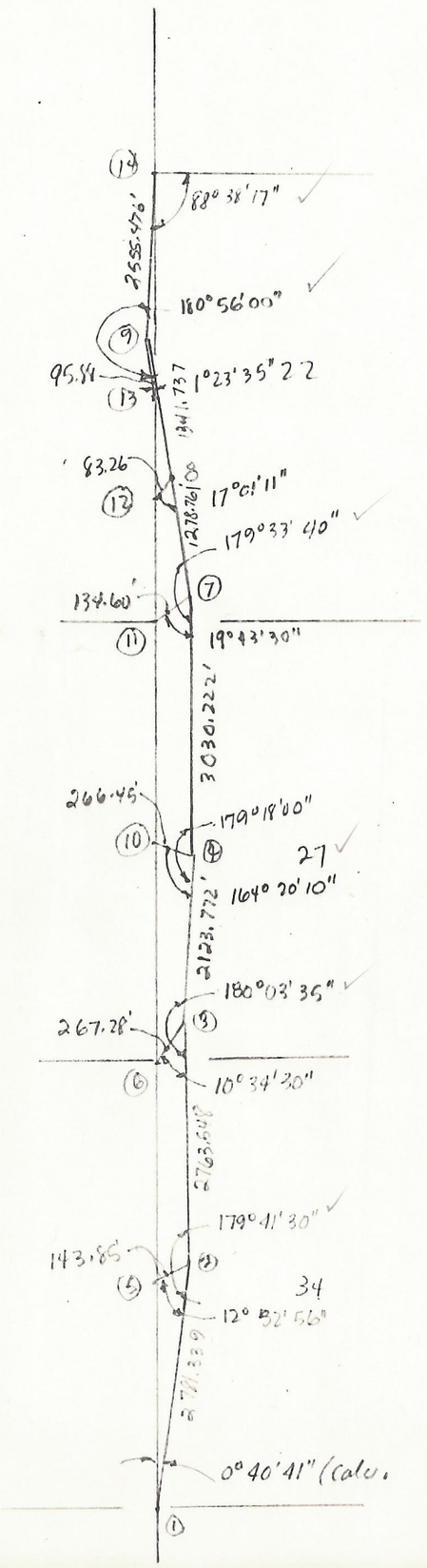
17°01'11"
0°42'34"
S 16°18'37" W

17 01 11
- 0 42 34
16 18 37

(10)

JAMES M. SAMER / ENGINEER
4250 NORTH NINETEENTH AVENUE
PHOENIX, ARIZONA 85015

Project Lake No. 76-75
Location Gila Bend Range
Client USAF
By JMS Date 9/21/76



Assumed Bearings for Lines

(1)-(2) N 0° 40' 41" E, 2781.339'
(1)-(5) NORTH, ~~2641.11~~
(2)-(5) S 13° 33' 37" W, 143.85'
(1)-(3) N 0° 22' 11" E, 2763.548'
(3)-(6) ~~S 11° 01' 41" W~~ 10° 56' 41" W, 267.28'
(5)-(6) ~~NORTH~~ 2641.11
(3)-(4) N 0° 25' 46" E, 2153.772'
(4)-(10) ~~N 15° 13' 54" W~~ 15° 14' 10" W 266.45'
(6)-(10)
(9)-(1) N 0° 16' 14" W 3030.222'
(7)-(11) S 19° 27' 16" W, 134.60'
(10)-(11) ~~N 0° 14' 05" E~~ 2653.454
(1)-(8) N 0° 42' 34" W, 1278.761'
(8)-(12) S 16° 18' 37" W, 83.26'
(11)-(12) ——, ——
(8)-(9) N 0° 42' 34" W, 1341.737'
(9)-(13) S 0° 41' 01" E, 95.88'
(12)-(13) ——, ——
(9)-(14) N 0° 13' 26" E, 2555.476'

Sh. 1 of

PROJECT NO. 76-75

ARIZONA HIGHWAY DEPARTMENT

TRAVERSE SHEET

PARCEL NO. [illegible] SHEET [illegible]

DATE

LINE	BEARING	DISTANCE	COSINE	SINE	LATITUDE N	LATITUDE S	DEPARTURE E	DEPARTURE W	D.M.D.		COORDINATES LATITUDE DOUBLE NORTH	DEPARTURE AREA SOUTH
										(12)	22057 25	10,020 14
12-15	S 80-40-50 E	2659 95	0.[illegible]°			14 83	2659 10			(15)	22042 42	12,680 04
15-16	N 0-06-40 E	1326 41	1.[illegible]°		1326 40		2 57			(16)	23368 82	12,682 61
16-21	S 0-06-40 W	1326 41	"			1326 40		2 57		(21)	20716 07	12,677 47
21-22	S 89-31-40 E	2627 18	0.[illegible]°			21 65	2627 07			(22)	20694 37	15 306 [illegible]
4-22	S 44° 26' 27" E		S 44 26 [illegible]° E			2673 63	2621 93			1		
16-17	S 44-26-27 E	1590 17				1135 33	1113 39			(17)	22233 49	13 796 00
17-18	S 24-41-47 E	2[illegible] [illegible]	44.696388°			201 74	199 67			(18)	22031 70	13 995 67
16-19	S 89-32-00 E	1317 73	0.[illegible]°			10 73	1317 68			(19)	23358 09	14 000 [illegible]
19-20	S 89-32-00 E	1317 73	"			10 73	1317 68			(20)	23 [illegible] 36	15 [illegible] 77
15-16	S 89-32-00 E	✓1316 73	0.[illegible]°			10 73	1315 63			1		
13-19	N 0°11' 52" E	✓1326 46	0.[illegible]°		1326 39		4 62					
20-26	N 0°16-55 E	2652 43	0.[illegible]°		2652 43		13 05			26	25[illegible] 79	15 321 02
25-26	N 89-24-53 E	2638 47	89.[illegible]°		23 09		2638 36			25	26022 88	17969 38
33-32	S 89-55-15 E	1340 99	89.920833°			1 85	1340 97			33	26021 03	19310 35
32-29	"	1340 99	"			1 65	1340 97			29	26019 18	20651 32
20-23	N 89-41-25 E	1323 41	89.[illegible]°		7 09		1323 38			23	23354 45	16 641 35
23-24	N 89-41-25 E	1323 41	"		7 09		1323 39			24	23361 54	17964 73
24-32	N 0-03-25 E	1331 16	0.066666°		1331 15		1 55			32	24692 69	17966 28
26-26	N 44-57-51 W		44.952°		2638 25			2633 71		1		
26-27	"	1921 70			1359 99			1357 70		27	24721 53	16607 03
27-28	S 45-02-34 E	53 96	45.042777°			38 12	38 18			28	24683 41	16645 21
24-[illegible]	N 45-18-42 E		45.317°		2657 64		2686 59			1		
24-30	"	1883 03			1324 22		1338 74			30	24685 76	19303 47
[illegible]-31	N 5-30-37 E	[illegible] 96	5.510277777		[illegible] 92		[illegible] 86			31	24694 68	19304 33
30-32	N 89-35-56 E	✓1321 11	89.599°		9 28		1321 07			1		
32-31	N 89-54-57 E	1338 96	89.916°		1 99		1338 95			1		
31-[illegible]	N 0-15-36 E	1326 26	0.260004°		1326 25		6 02			1		
[illegible] 28	N 0-9-59 E	✓1328 97	0.16641°		1328 96		3 86					

337.24
1326.80
.70

AHD 60-552 5/63

FIGURED BY

CHECKED BY

COUNTY Luke-Gila Bend Range

TOTAL DOUBLE AREAS

DIFFERENCE

SINGLE AREA = (DIFF. ÷ 2)

ACRES

TRAVERSE SHEET

DATE _____

Dist

LINE	BEARING	DISTANCE	COSINE	Bearing SINE	LATITUDE N	LATITUDE S	DEPARTURE E	DEPARTURE W	D.M.D.		COORDINATES LATITUDE DOUBLE AREA NORTH	COORDINATES DEPARTURE AREA SOUTH
1-2	N 0-40-41 E	2781 34	0.6720555°		2781 34		32 91			②	12781 34	10039 91
2-5	S 12-23-27 W	143 35	12.5602777°			139 24		32 73		⑤	12641 50	10006 18
2-3	N 0-22-11 E	2763 55	0.3697222°		2763 47		17 23			③	15544 21	10057 74
3-6	S 11-31-41 W	267 28	11.0280555°			262 34		51 13		⑥	15282 47	10006 61
3-4	N 0-29-46 E	2123 77	0.4294444°		2123 71		15 92			④	17668 52	10073 66
4-7	N 0-16-14 W	3030 22	0.2705555		3030 16			14 31		⑦	20698 68	10059 35
4-10	N 15-13-54 W	266 45	15.2316666°		257 09			70 00		⑩	17925 61	10003 66
4-8	N 0-42-24 W	1278 76	0.7044444°		1278 76			15 83		⑧	21977 34	10043 52
7-11	S 14-27-16 W	134 60	14.4544444°			126 92		46 23		⑪	20571 76	10064 52
8-9	N 0-42-34 W	1341 74	0.7044444°		1341 63					⑨	23318 77	10 02695
9-12	S 16-12-37 W	33 26	16.8102777°			79 21		23 38		⑫	22057 25	10020 14
9-14	N 0-13-26 E	2555 48	0.2238888°		2555 45		9 99			⑭	25874 92	10036 94
9-13	S 0-41-01 E	95 88	0.6836111°			95 87	1 14			⑬	23223 10	10028 09
1-5	N 0°32-05 E	2641 53	N 0.1344444 E	NORTH	2641 50		6 18					
5-6	N 0°05-40 E	2641 00	N 0.0944444°E	NORTH	2640 97		0 43					
6-10	N 0° 08'-50 W	2643 16	N 0.0839444°W	N 0°04'21"W	2643 14			2 95				
10-11	N 0°41-08 E	2646 18	N 0.2355° E	N 0°14'08"E	2646 15		10 86					
11-12	~~S 0°12'00" E~~	~~1165 51~~	N 0.21676°E	N 0°14'30"E	1165 09		5 62					
12-13	~~S 0°22'-26 E~~	~~1165 88~~	N 0.39066°E	N 0°14'30"E	1165 85		7 95					
13-14	~~N 0° 11'-28° E~~	2651 35	N 0.1924 E	N 0°14'30"E	2651 32		8 15					

2641.110
2641.106
2643.219
~~2651.148~~
26 46.208
1325.667
1325.667
2651.334

AHD 60-552 5/63

FIGURED BY _____

CHECKED BY _____

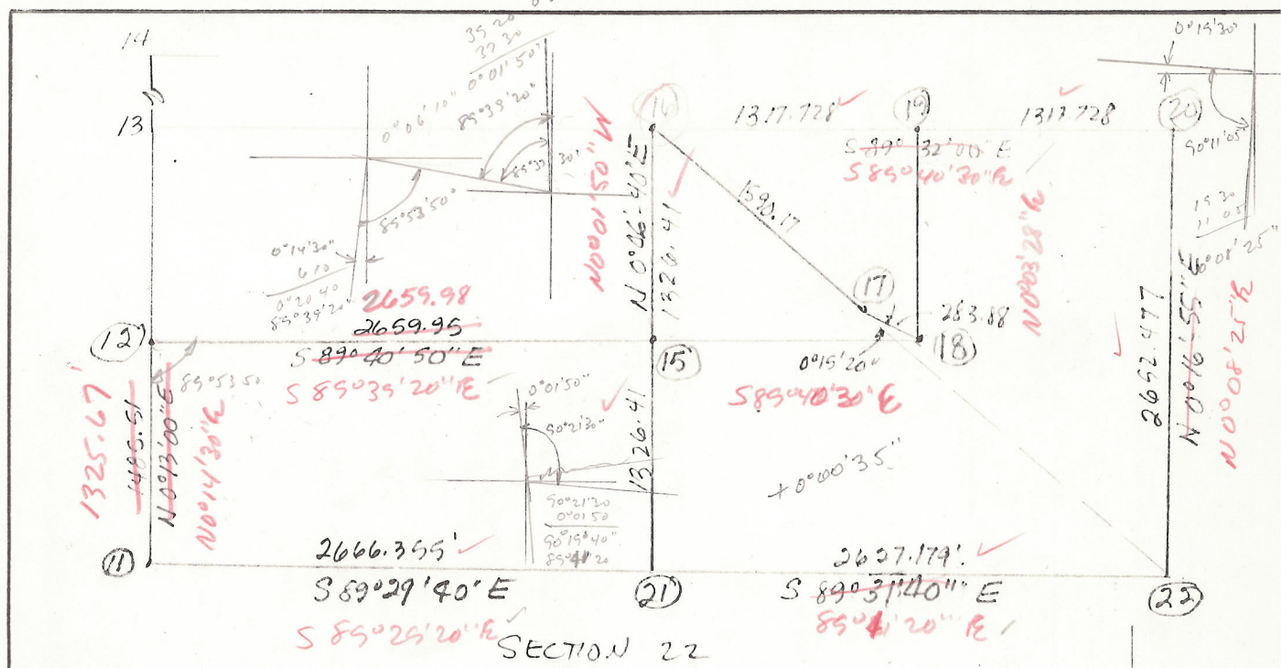
COUNTY Lake - Gila Road Range

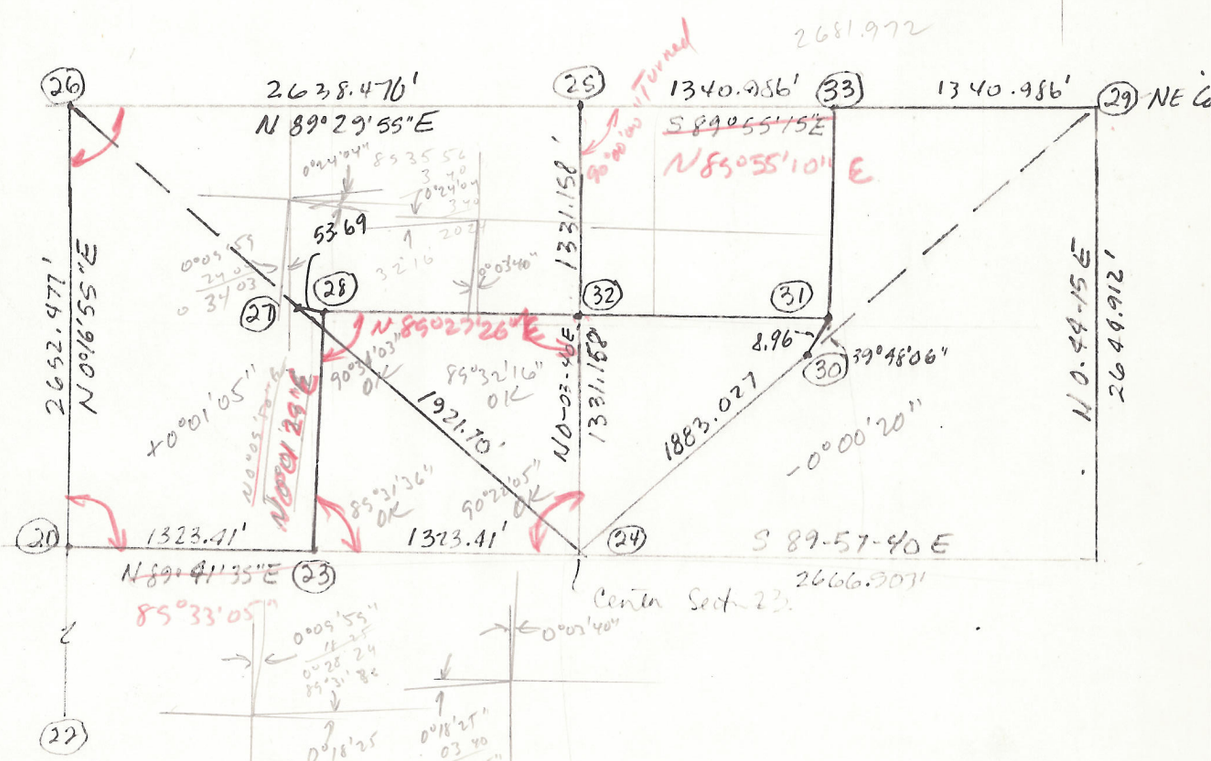
TOTAL DOUBLE AREAS
DIFFERENCE
SINGLE AREA = (DIFF ÷ 2)
ACRES

Sh. 2 of

JAMES M. SAMER / ENGINEER
4250 NORTH NINETEENTH AVENUE
PHOENIX, ARIZONA 85015

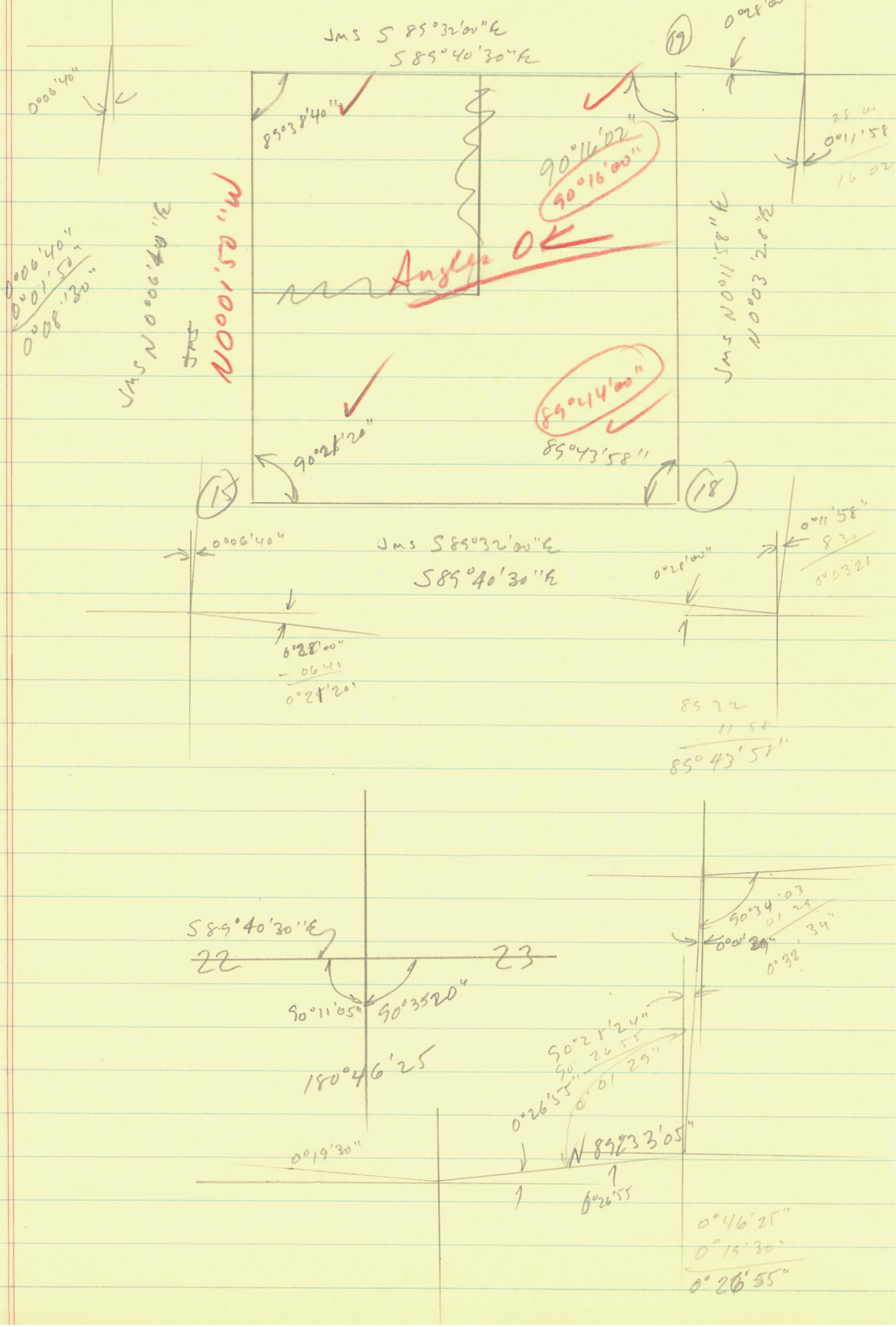
Project Tube No. 76-75
Location Gila Bend Range
Client USAF
By JMS Date 9/1/76





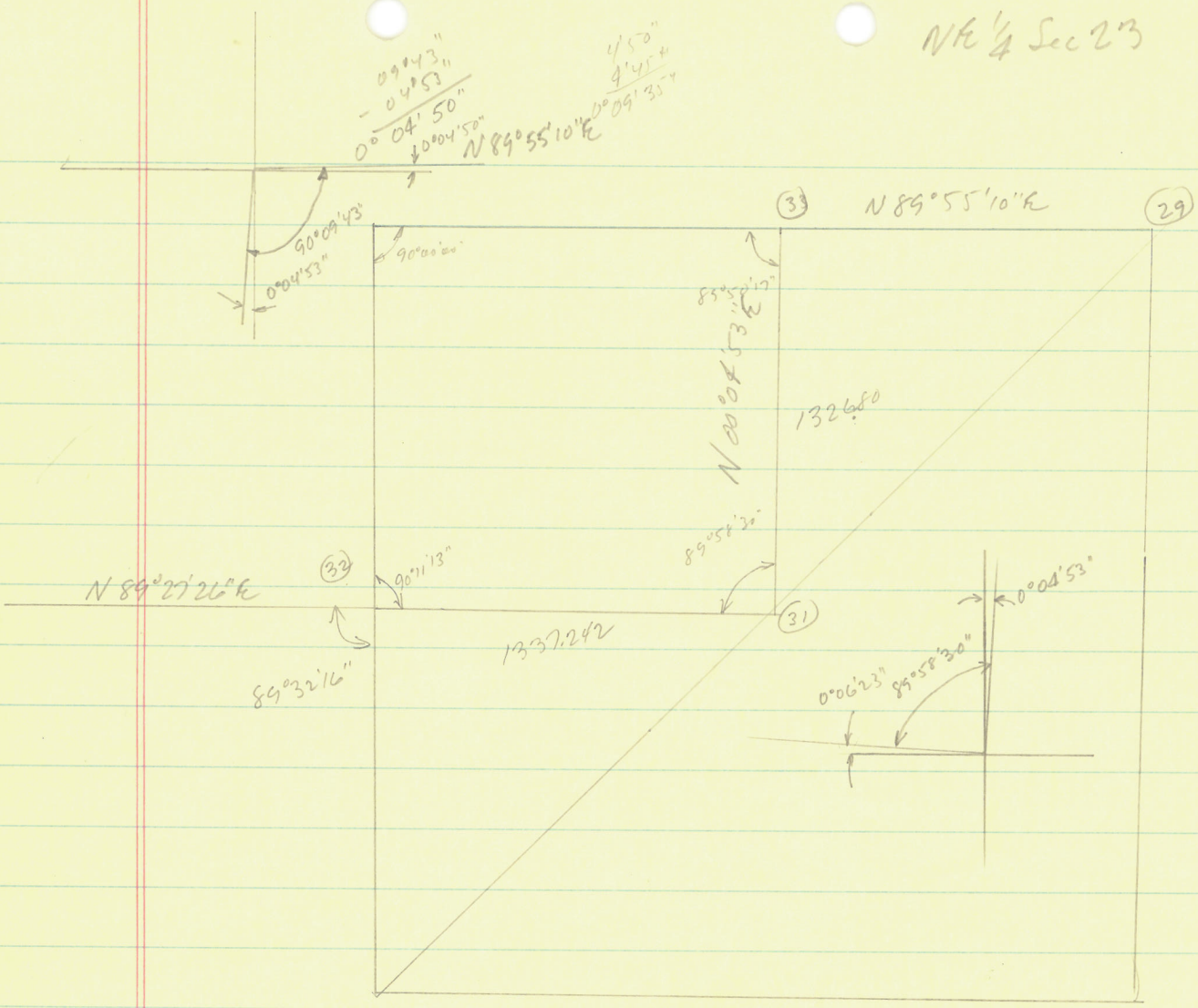
Sh. 3 of

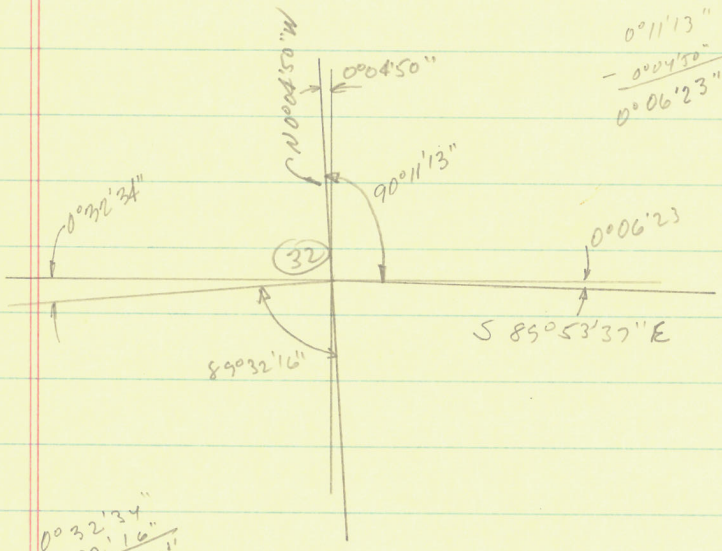
SE 1/4 Sec 22



JMS S 85°32'00"E
S 89°40'30"E
19
0°28'00"
0°06'40"
89°38'40"
90°16'02"
90°16'00"
Angle 0
0°11'58
28 00
16 02
0°06'40"
0°01'50"
0°08'30"
JMS N 0°06'40"E
JMS
N 0°01'50"W
JMS N 0°11'58"E
N 0°03'28"E
85°44'00"
90°28'20"
85°43'58"
15
18
0°06'40"
JMS S 85°32'00"E
S 89°40'30"E
0°11'58"
8 30
0°03'28
0°28'00"
0°28'00"
- 06 40
0°28'20"
85 32
11 58
85°43'58"
S 89°40'30"E
22
23
90°11'05"
90°35'20"
180°46'25
90°34'03
01 29
0°32'34"
0°01'29"
90°28'24"
90 26 55
0°01 29"
0°26'55"
N 89°33'05"
0°19'30"
0°26'55
0°46'25"
0°19'30"
0°26'55"

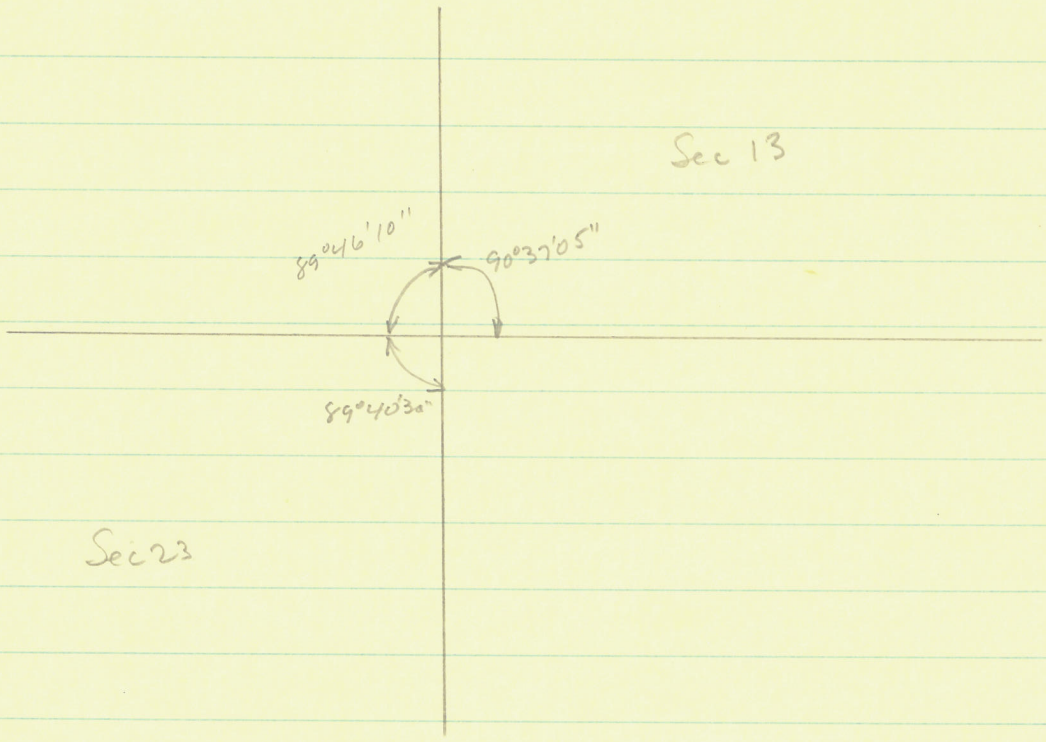
NE ¼ Sec 23

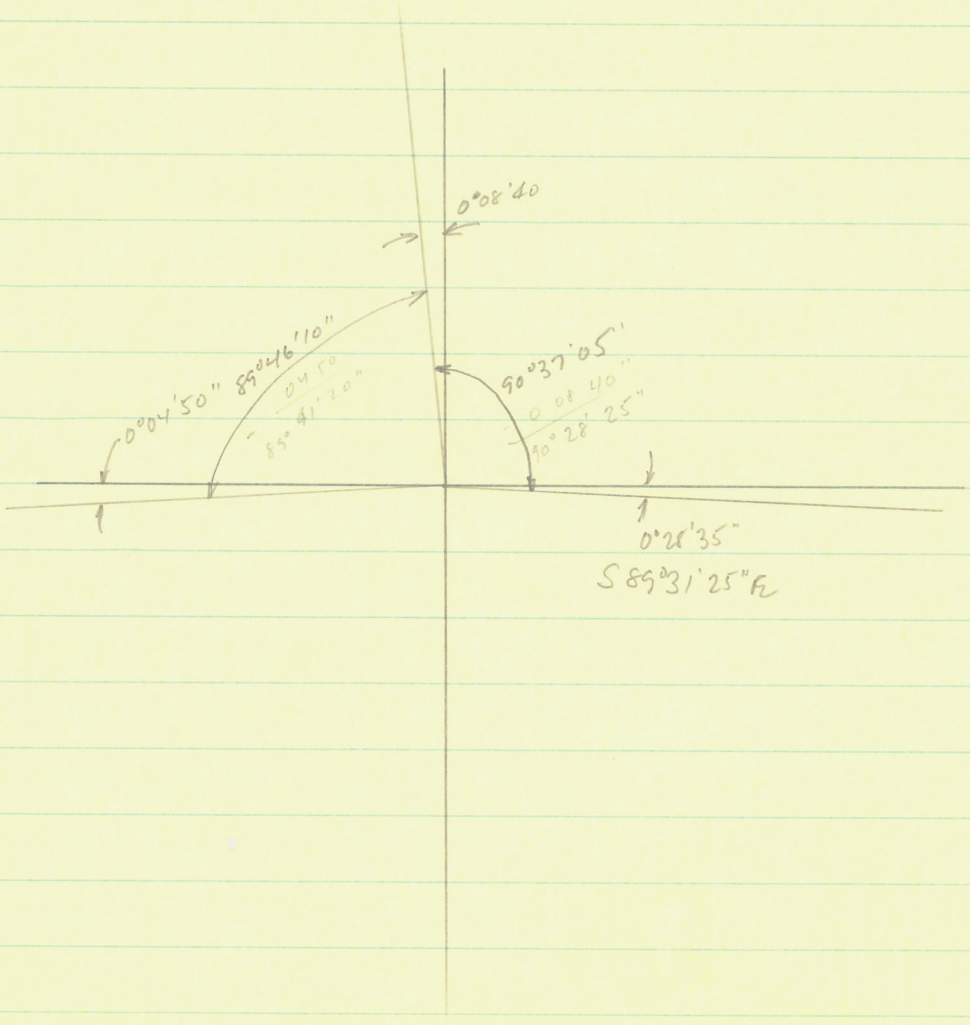




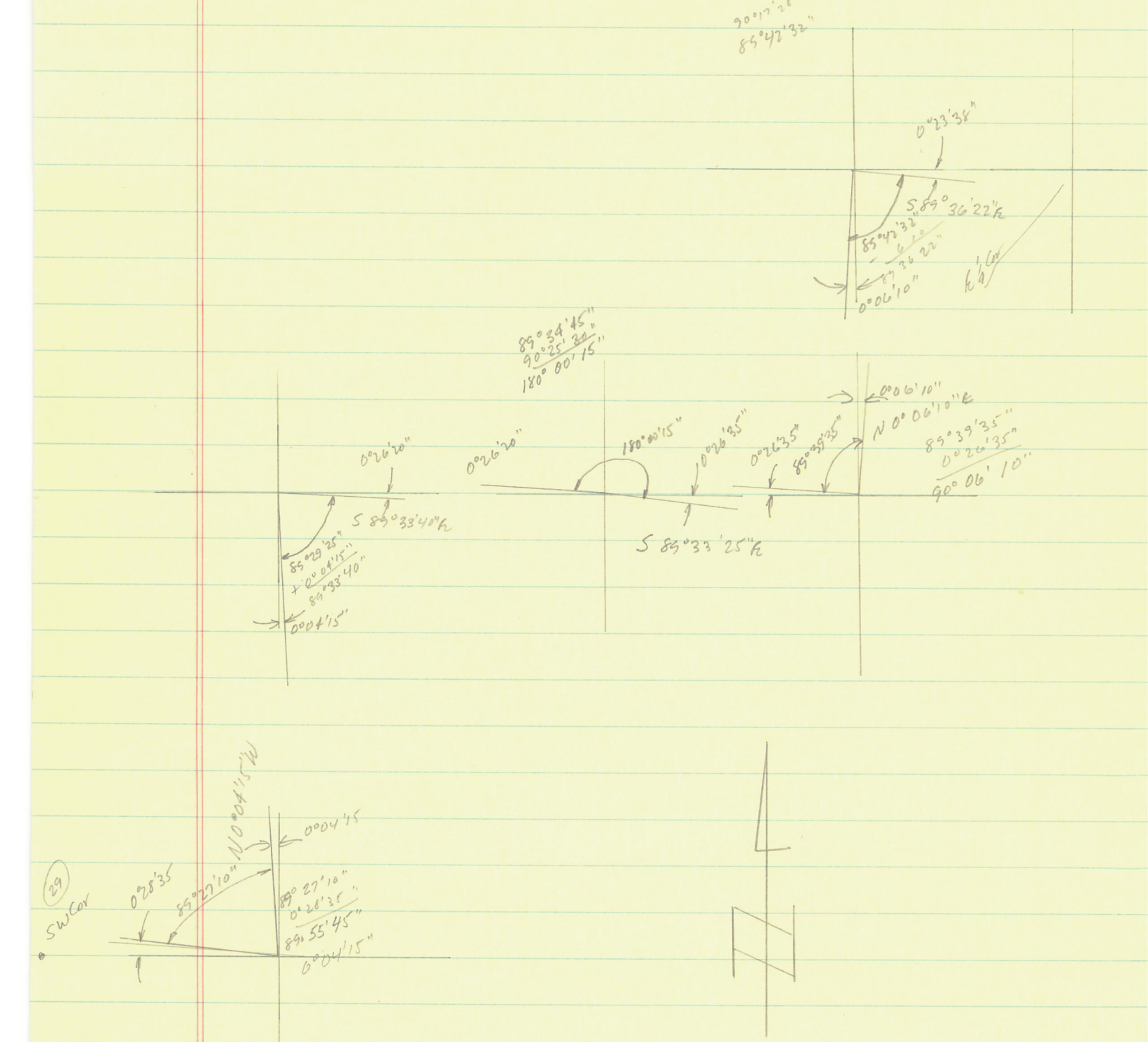
0°32'34"
89°32'16"
90° 04' 50"

76-75


Sec 13
89°46'10"
90°37'05"
89°40'30"
Sec 23

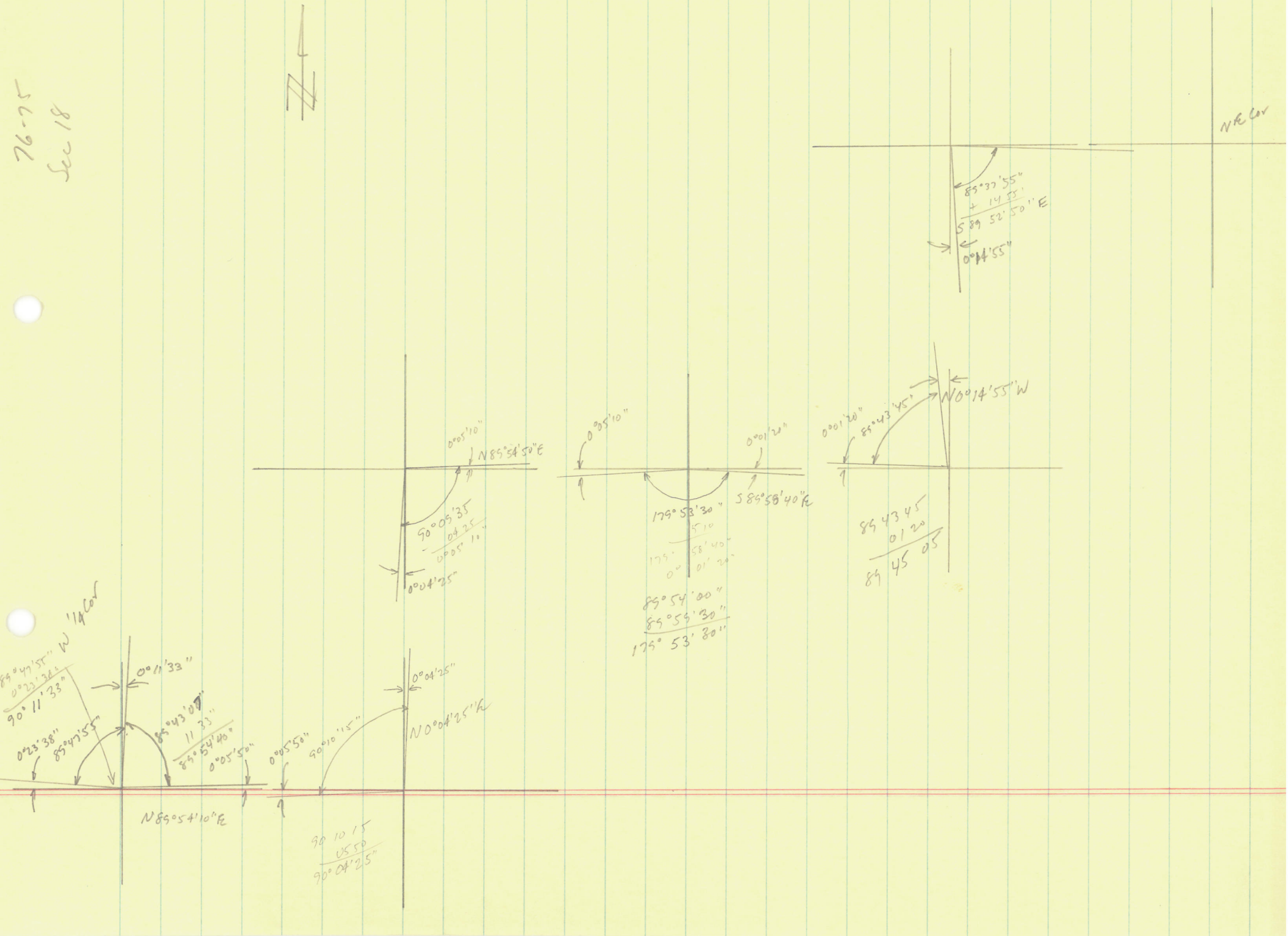

0°08'40
0°04'50"
89°46'10"
90°37'05"
0°28'35"
S 89°31'25" E

76-75
Sec 13

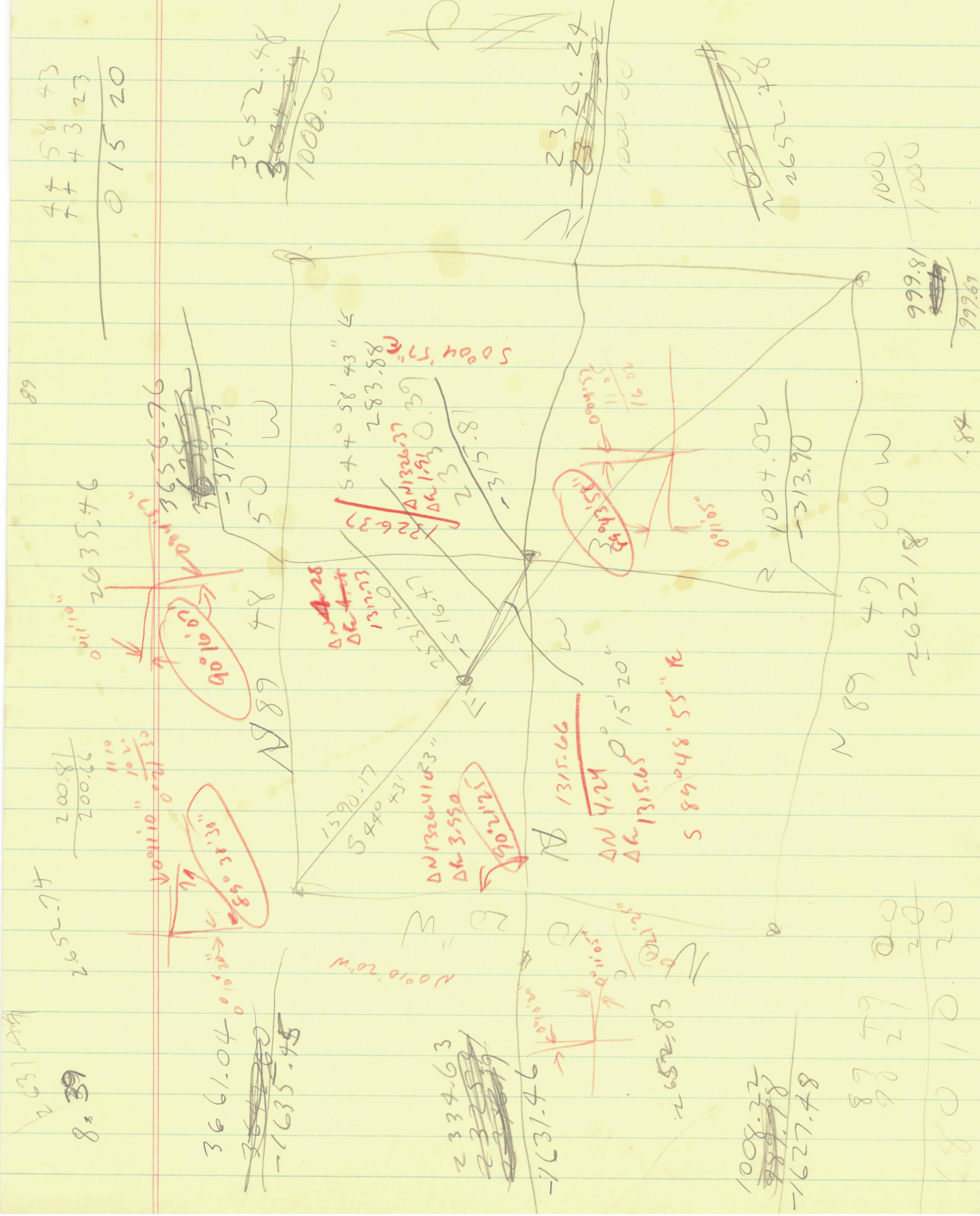

90°17'28"
85°42'32"
0°23'38"
S 89°36'22" E
85°42'32"
0°06'10"
89°34'45"
90°25'30"
180°00'15"
0°26'20"
0°26'20"
180°00'15"
0°26'35"
0°26'35"
85°39'35"
0°06'10"
N 0°06'10" E
85°39'35"
0°26'35"
90°06'10"
S 85°33'25" E
0°26'20"
S 85°33'40" E
85°29'25"
+ 0°04'15"
89°33'40"
0°04'15"

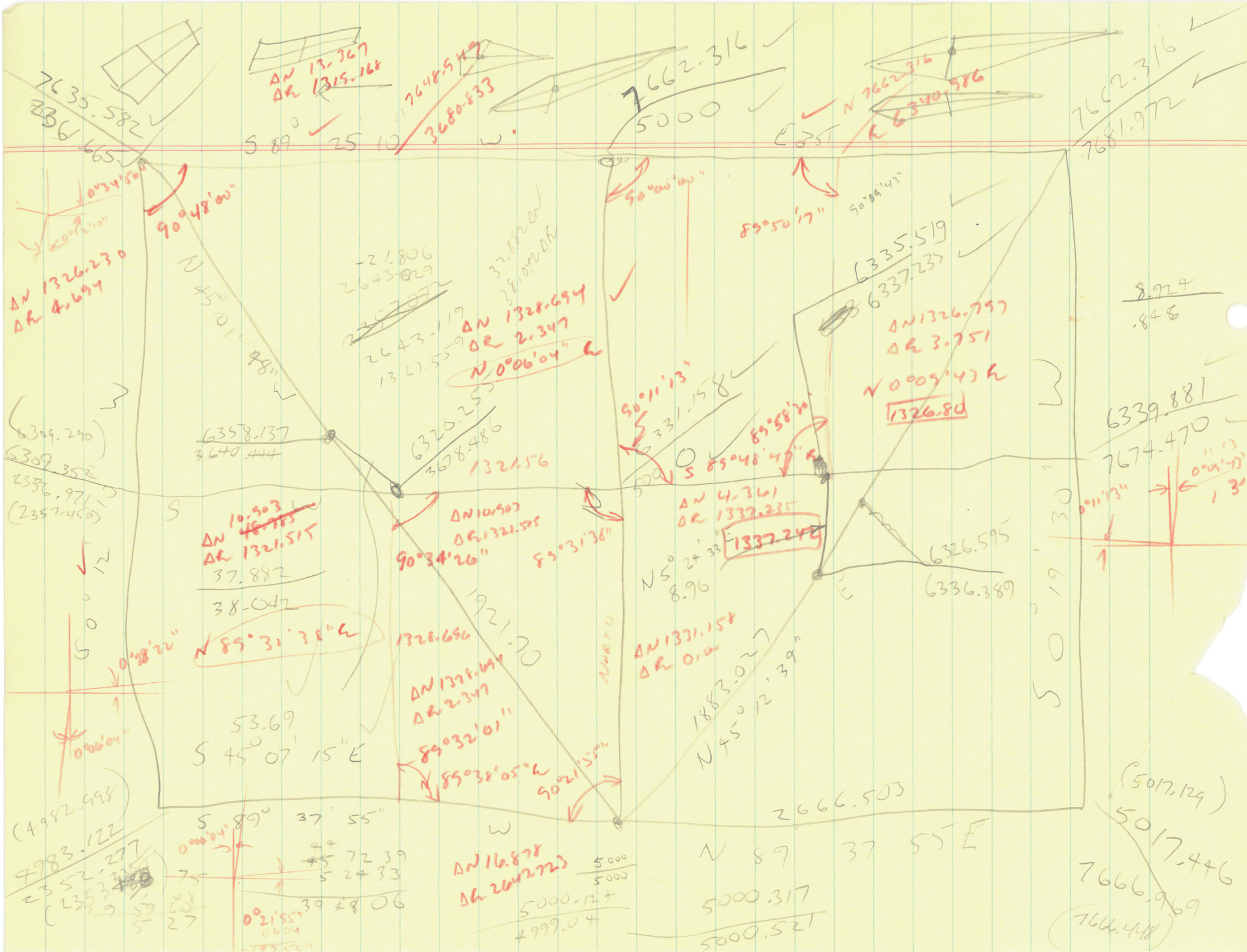
(29)
SW COR
0°28'35
85°27'10" N 0°04'15" W
0°04'15
89°27'10"
0°28'35"
89°55'45"
0°04'15"

76-75
Sec 18


N
NE Cor
89°37'55"
+ 14 55"
S 89 52' 50" E
0°14'55"
N85°54'50"E
0°05'10"
90°05'35"
- 04 25"
0°05' 10"
0°04'25"
0°05'10"
0°01'20"
S 85°58'40"E
179°58'30"
5 10
179° 58' 40"
0° 01' 20"
89°54'00"
89°55'30"
179° 53' 80"
0°01'20"
89°43'45"
N0°14'55"W
89 43 45
01 20
89 45 05
89°47'55" W
0°23'38"
90° 11' 33"
0°11'33"
0°23'38"
89°47'55"
89°43'07"
11 33"
89°54'40"
0°05'50"
N85°54'10"E
0°05'50"
90°10'15"
0°04'25"
N0°04'25"E
90 10 15
05 50
90°04'25"

SE 1/4 Sec 22




ΔN 13.767
ΔR 1315.168
3680.833
7662.316
5000
S 89° 25' 10" W
2635.582
90°48'00"
0°34'50"
ΔN 1326.230
ΔR 4.694
-21.806
2643.829
2643.119
1321.559
ΔN 1328.694
ΔR 2.347
N 0°06'04" E
6326.255
3678.486
1321.56
6358.137
3640.444
(6309.240)
6309.352
2356.971
(2357.450)
ΔN 10.503
ΔR 1321.515
37.882
38.047
N 85°31'38" E
0°28'22"
0°06'04"
53.69
S 45° 07' 15" E
(4982.698)
4983.122
2352.277
(2353.348)
S 89° 37' 55" W
0°00'04"
0°21'55"
39 48 06
ΔN 16.878
ΔR 2642.723
5000.124
4999.04
90°34'26"
85°31'38"
ΔN 10.503
ΔR 1321.515
ΔN 1328.694
ΔR 2.347
89°32'01"
85°38'05" E
90°21'55"
90°00'00"
90°11'13"
S 89°48'47" E
ΔN 4.361
ΔR 1332.235
1337.245
N 5° 24' 33" E
8.96
1883.077
N 45° 12' 39" E
ΔN 1331.158
ΔR 0.000
2666.503
N 89 37 55 E
5000.317
5000.521
7662.316
5000
N 7662.316
E 6340.586
85°50'17"
90°09'43"
6335.519
6337.237
ΔN 1326.797
ΔR 3.751
N 0°09'43" E
1326.84
6326.595
6336.389
6339.881
7674.470
7681.972
8.924
.848
0°11'13"
0°09'43"
(5017.124)
5017.476
7666.969
(7664.448)

2635.456

SE 1/4 Sec 22

S 89°38'50" E

N 3636.601
E 3635.406

0°21'40"

90°11'40"

0°10'40"

N 3652.828
E 1000.000

85°38'40"
Adj 89°38'50"

90°11'05"
Adj 90°11'10"

S 0°10'40" W
S 0°01'00" W

NORTH

90°21'30"
Adj 90°21'40"

85°49'10"
Adj 85°49'20"

N 984.138
E 3626.919

0°10'40"

85°49'20"

89°49'20"

0°10'40"

10'40

21'20

89°38'40"

89°38'

S 89°38'20" E

N 983.412
E 3627.127

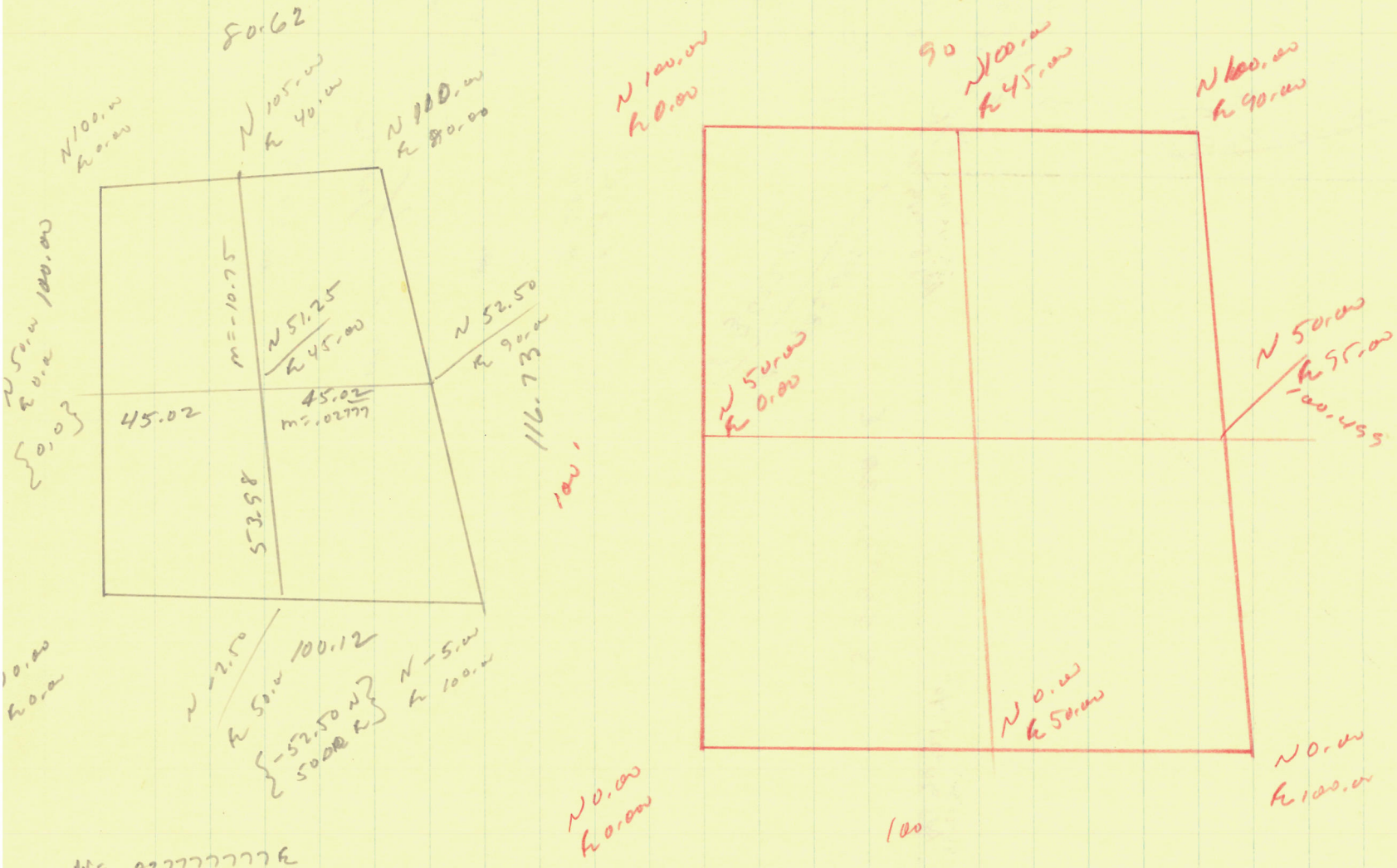
N 1000.000
E 1000.000

0.656'
0.208'

0.727

error = 1/145136

= .0000688'/'



$N = .02777777777h$

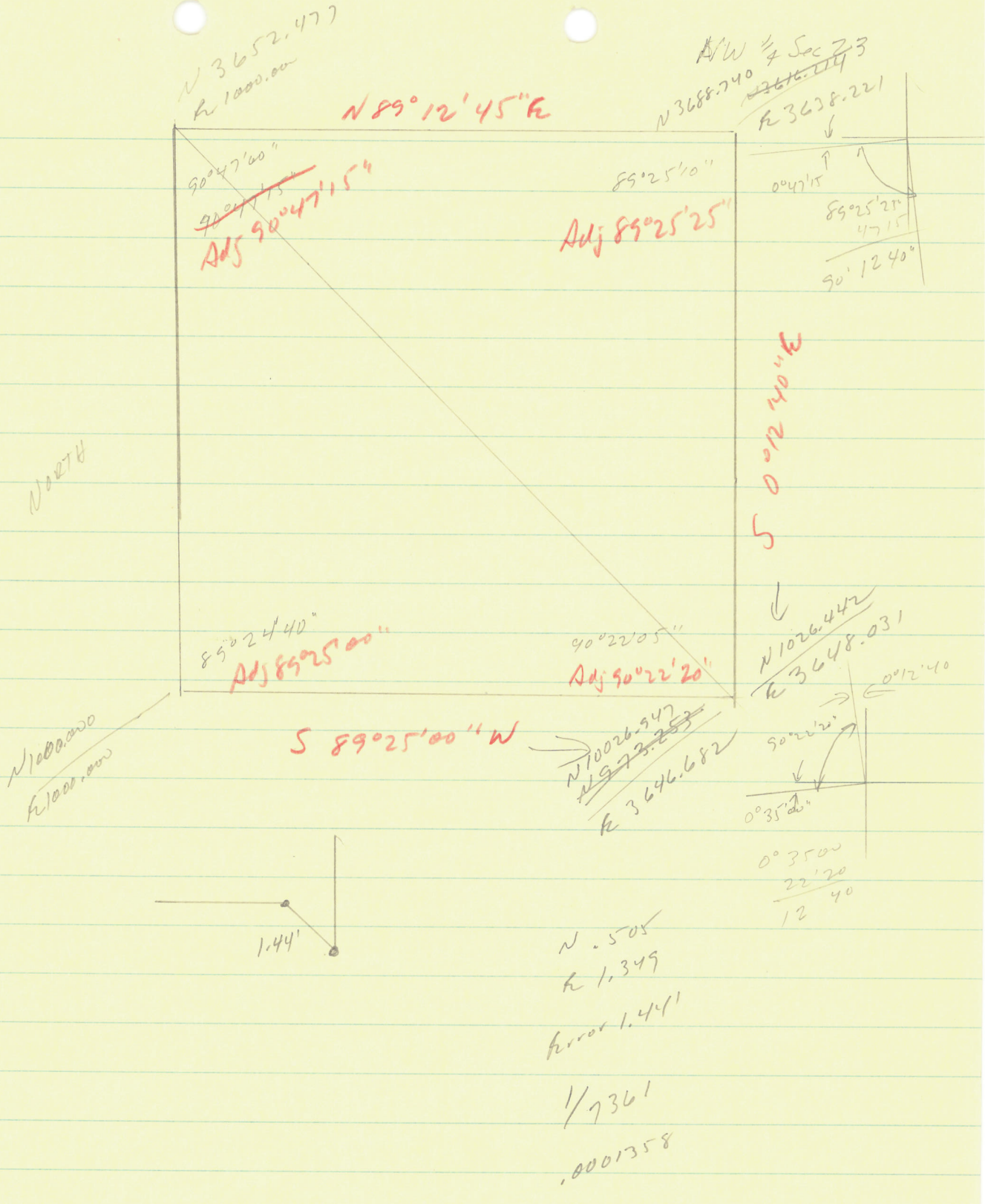
$\frac{N + 52.50}{h - 50.00} = -10.75$

$\frac{.02777777h + 52.50}{3} = -10.75h + 537.50$

$10.77777777h = 485$

$h = 45.00$

$N\ 1.25$


N 3652.477
E 1000.000
N 89°12'45" E
NW ¼ Sec 33
N 3688.740
E 3638.221
90°47'60"
Adj 90°47'15"
89°25'10"
Adj 89°25'25"
0°47'15"
89°25'25"
47'15"
90°12'40"
S 0°12'40" E
NORTH
89°24'40"
Adj 89°25'00"
90°22'05"
Adj 90°22'20"
N 1026.442
E 3648.031
0°12'40"
90°22'20"
0°35'00"
0°35'00
22'20
12 40
N 1000.000
E 1000.000
S 89°25'00" W
N 1002[illegible]
E 3646.682
1.44'
N .505
E 1,349
Error 1.44'
1/736'
.0001358

N 3662.316
E 1400.000

N/E 1/4 Sec 23

0°00'05"

S 85°55'55" E

85°40'25"

0°19'40"

90°00'00"
Adj ~~89°59'55"~~ 89°59'55"

N 3662.251
E 3681.572
E 85°40'30"
Adj 85°40'25"

S 0°19'40" W

North

85°37'55"
Adj 85°37'50"

90°41'55"
Adj 90°41'50"

N 1017.382
E 3666.841

0°22'10"

N 1000.000
E 1000.000

S 85°37'50" W

N 1017.194
E 3666.448

90°41'50"

0°22'10"

N 0.188
E 0.393

Error 0.436

1/2440

.0000107

Pg. 1

76-75

Notes:

Post Lying on Ground indicates Mesquite or Ironwood, ~~branch~~ irregular shaped

X indicates did not look for corner

No indicates did not find

R6W

T6S

T7S

1½" Pipe

Post Lying in Area Did not realize significance when found

2"x2" Hub (Doubtful Corner)

13

3½'x3" Post

~~Cotton Picker Spindle~~ (Verify if Corner Monument) Ground

No

Lying

4"x4" Post

3½'x3' Post Lying Alongside

No

18

Remains of Pits N, S & Mound

3'x1½" Post Lying on Ground 25 feet away (broken)

No Stone Post in Mound

4"x4" Post Lying on Ground Remains of Mound & Pits No Stone Stood Up Post

2

No

No

No

Fnd 3"x2" Corner Bottle 18" Deep & Down (w/ cotton)

No Good

~~4"x5"x12"~~ Gray Volcanic Imi Stone on Surface (Doubtful Corner)

Fnd Mound & Pits

Fnd Scattered Pile of Stones

No Buried Marked Stone

Fnd Remains of 4"x 3.7' Post Lying 15' W. (Down Small Wash)

17"x10"x8" Black Volcanic Stone on Surface (Doubtful Corner)

No Good

U.S. GENERAL LAND OFFICE SURVEY

Typical Brass Cap

2.2'x2½" Post Lying on Ground

25

Possible ??

2"x2" Hub in Pile of Stones

Dug, Fnd, Nothing

Reset Hub & Pile of Stones

2.2'x2½" Post Lying on Ground & Remains of Mound

No Stone Stood up Post

X

6"x4"x4" Gray Volcanic Stone w/ "X"

1' Dn. in Ctr. of Mound

Reburied in Mound

~~Reset~~ Pile of Stones over Cor.

2.5'x1½" Post Lying on Ground

36

X

USGLO B.C.

T6S R6W

S35 | S36

S2 | S1

T7S R6W

1933

USGLO B.C.

T6S R6W

S36

S2 | S1

R6W | R5W

T7S

1933

T7S

USGLO B.C.

T6S R6W

S35

S2 | S1

T7S | R6W

1933

X

USGLO B.C.

¼

S36

1933

Post Lying Alongside

450'±

Fnd USGLO B.C. Lying Down, Stood Up

T6S

R6W | R5W

S36 | S31

S1

T7S R5W

1933

T7S

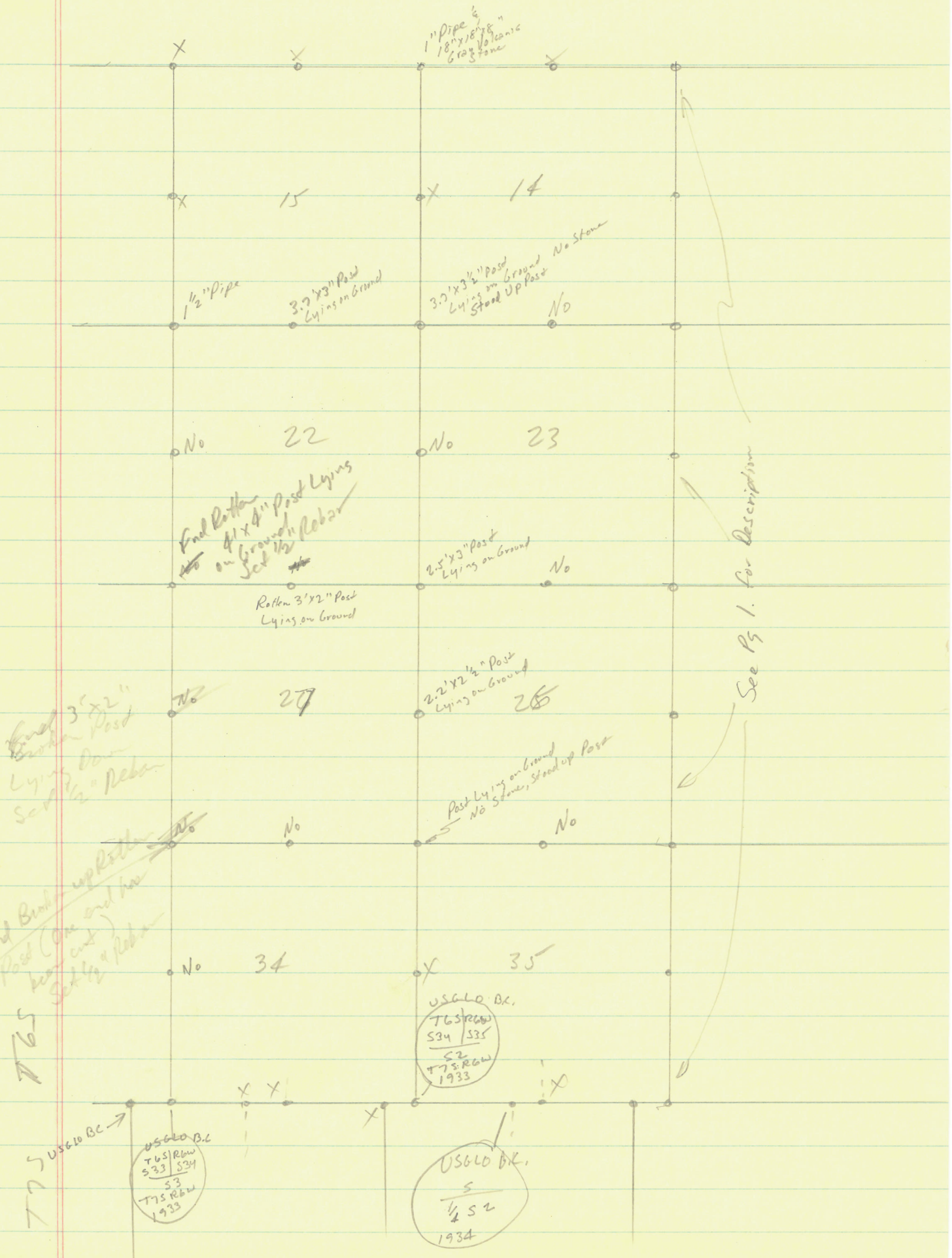
R6W

R5W

Pg 24

76-7

R 6W


1" Pipe
18"x18"x8" Granite Volcanic Stone
15
14
1 1/2" Pipe
3.3'x3" Post Lying on Ground
3.3'x3 1/2" Post Lying on Ground Stood UP Post No Stone
No
22
23
Found Rotten 4'x4" Post Lying on Ground Set 1/2" Rebar
2.5'x3" Post Lying on Ground
Rotten 3'x2" Post Lying on Ground
2.2'x2 1/2" Post Lying on Ground
27
26
See Pg 1. for Description
Found 3"x2" Wooden Post Lying Down Set 1/2" Rebar
Post Lying on Ground No Stone, Stood up Post
Found Brass cap Rotten Post (One end has been cut) Set 1/2" Rebar
34
35
USGLO BC.
T6S R6W S34 S35 S2 T7S R6W 1933
T6S
T7S
USGLO BC
USGLO B.C.
T6S R6W S33 S34 S3 T7S R6W 1933
USGLO BC.
S 1/4 S2 1934

Pg 3

76-75

R 7W | R6W

T6S

T7S

18 17 16

19 20 21

30 29 28

31 32 33

Fence Corner

Lg dk Intersection of Farm Roads

Metal Fence Post Intersection of Roads

Intersection of Farm Roads

Intersection of Farm Roads

No

Pipe

See Pg. 2 for Description

USGLO BC
T6S | R6W
S31 | S32
S5
T7S R6W
M93

In Both

~~Aug~~ Aug 31, 1976

Temp. 95 ÷ 105°

Set Environmental Correction to 2.5

Overall ΔN + 15873.524

Overall ΔE −158.341

Overall Dist 15874.314

Recorded Dist 15840.000'

Calculated N Coord A 100000.000

N. Coord. for True Corners

	Actual	Dist N from Random Pts
A	100 000.000	-0-
B	102445.587	+135.752
C	105291.175	-253.672
D	107936.762	+268.163
E	110582.349	-116.057
F	113227.937	-90.192
G	115873.524	-0-

G N 115573.524
E 99841.659

ΔN 2555.395
ΔE −20.380

N 0°27'25" W

2555.488
V.A. 0°10'40"
Corr. 2555.476

N 113318.129
E 99862.035

1st 180°56'00"
2nd 361°52'00"
Avg 180°56'00"

F

ΔN 2619.723
ΔE −63.707

Dist 1341.737'

N 1°23'35" W

2620.517
V.A. 0°13'
Corr. 2620.498

N 110698.406
E 99925.746

H' N 111976.789
E 99894.658

1st 179°33'40"
2nd 355°07'20"
Avg 179°33'40"

E

ΔN 3025.807
ΔE −50.167

N 0°56'55" W

3030.240
V.A. 0°12'
Corr. 3030.222

N 107668.599
E 99975.913

1st 179°18'00"
2nd 358°36'00"
Avg 179°18'00"

D

ΔN 2123.752
ΔE −9.215

N 0°14'55" W

2123.798
V.A. 0°11'
Corr. 2123.772

N 105544.847
E 99985.128

1st 180°03'50"
2nd 360°07'10"
Avg 180°03'35"

C

ΔN + 2763.508
ΔE − 14.872

N 0°18'30" W

2763.560
V.A. 0°10'00"
Corr. 2763.548

N 102781.339
E 100000.000

1st 179°41'30"
2nd 359°23'00"
Avg 179°41'30"

B

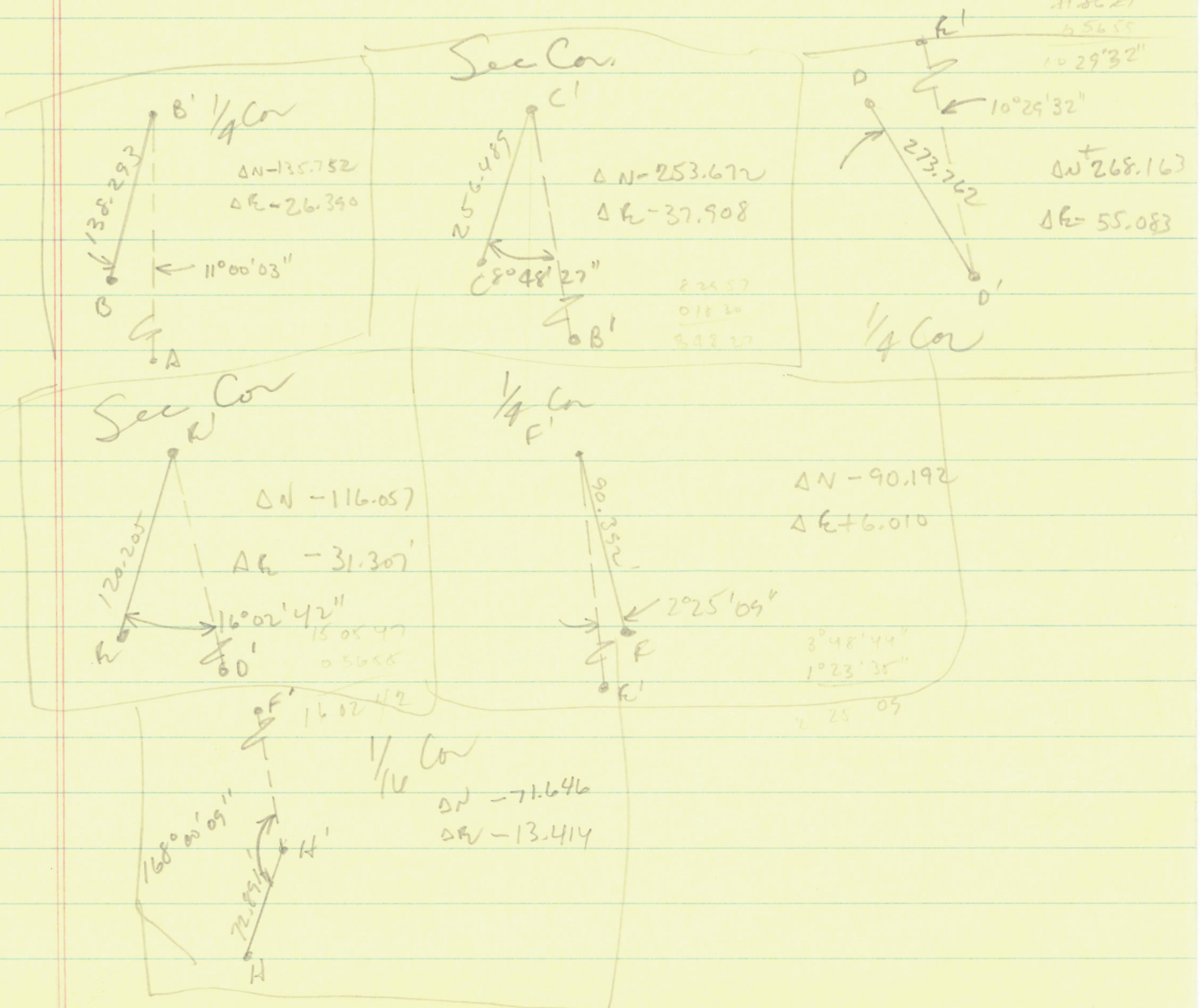
North (Assumed)
2781.350
V.A. 0°09'30"
Corr 2781.339

N 100,000.00
E 100,000.00

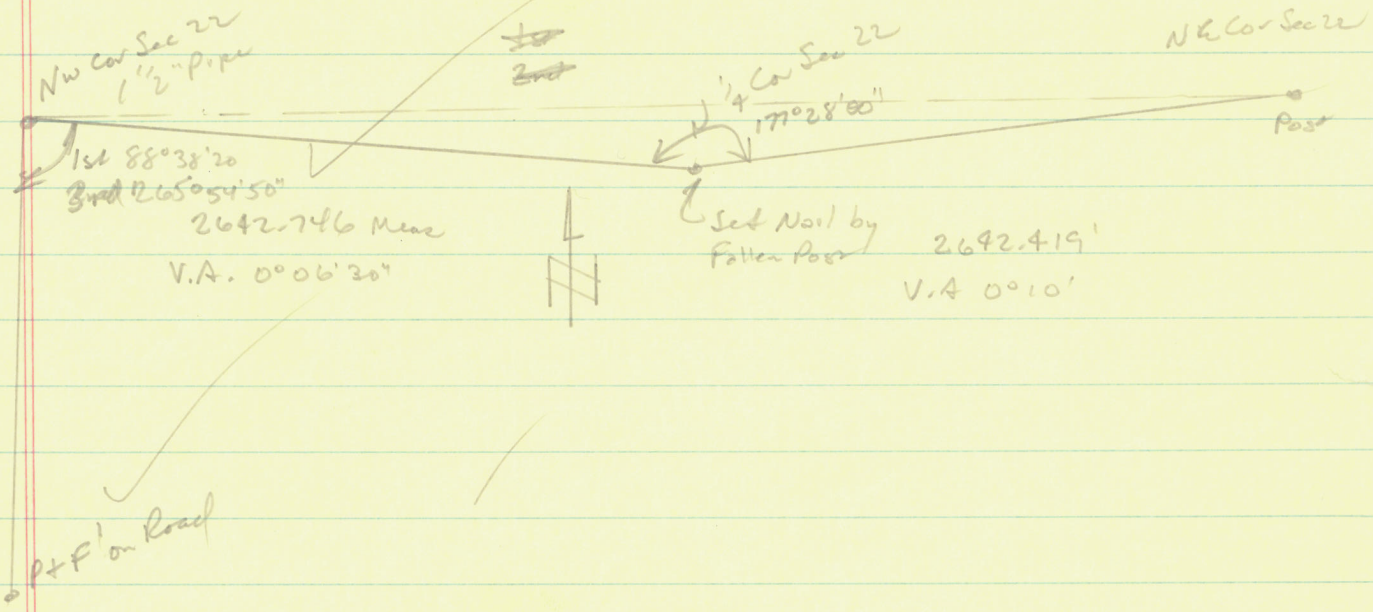
Pt "A"

Random Points | Points on Straight Line Between A & A'

Pt	N	E	Pt	N	E	Line	Dist.	Bg.
A'	100000.000	100000.000	A	100000.000	100000.000	A' to A	0	0
B'	102781.335	100000.000	B	102645.587	99973.160	B' to B	138.293'	S 11° 00' 03" W
C'	105544.847	99985.128	C	105291.175	99947.220	C' to C	256.489'	S 8° 29' 57" W
D'	107668.599	99975.913	D	107936.762	99920.830	D' to D	273.762'	N 11° 36' 27" W
E'	110698.406	99925.746	E	110582.349	99894.439	E' to E	120.205'	S 15° 05' 47" W
F'	113318.129	99862.039	F	113227.937	99868.049	F' to F	90.392'	S 3° 48' 44" E
G'	115873.524	99841.659	G	115873.524	99841.659	G' to G	0	0
H'	111976.789	99894.658	H	111905.143	99881.244	H' to H	72.891'	S 10° 36' 16" W

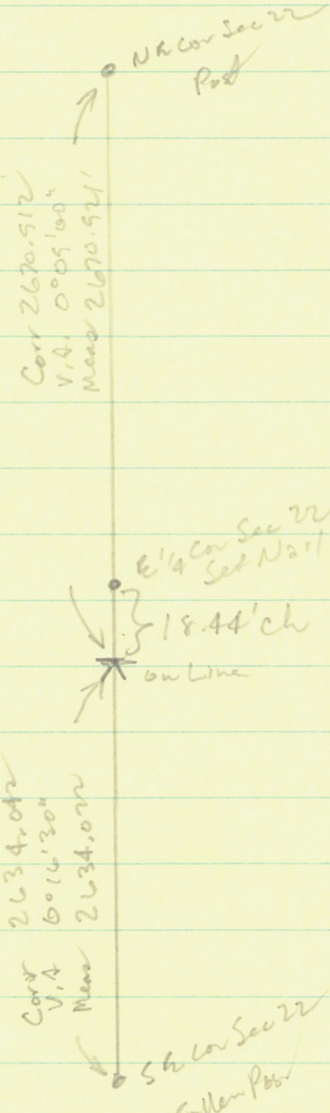


Aug 31, 1976 (continued)



Sept 1, 1976

Temp 90-105
Mets Setting 25

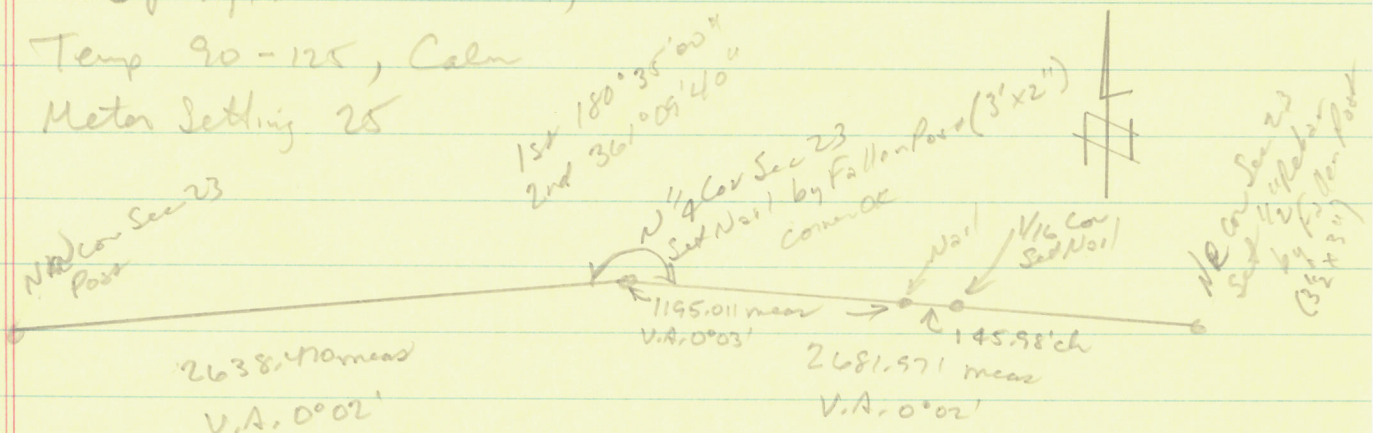


2634.042
2670.912
5304.954
÷2 = 2652.477
− 2634.042
18.435

Sept 1, 1976 (continued)

Temp 90 - 125, Calm

Meter Setting 25

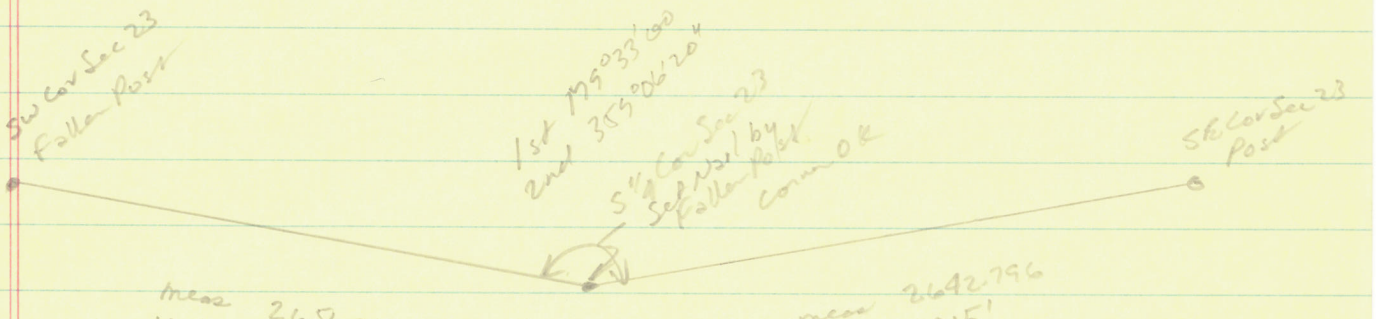


2681.971

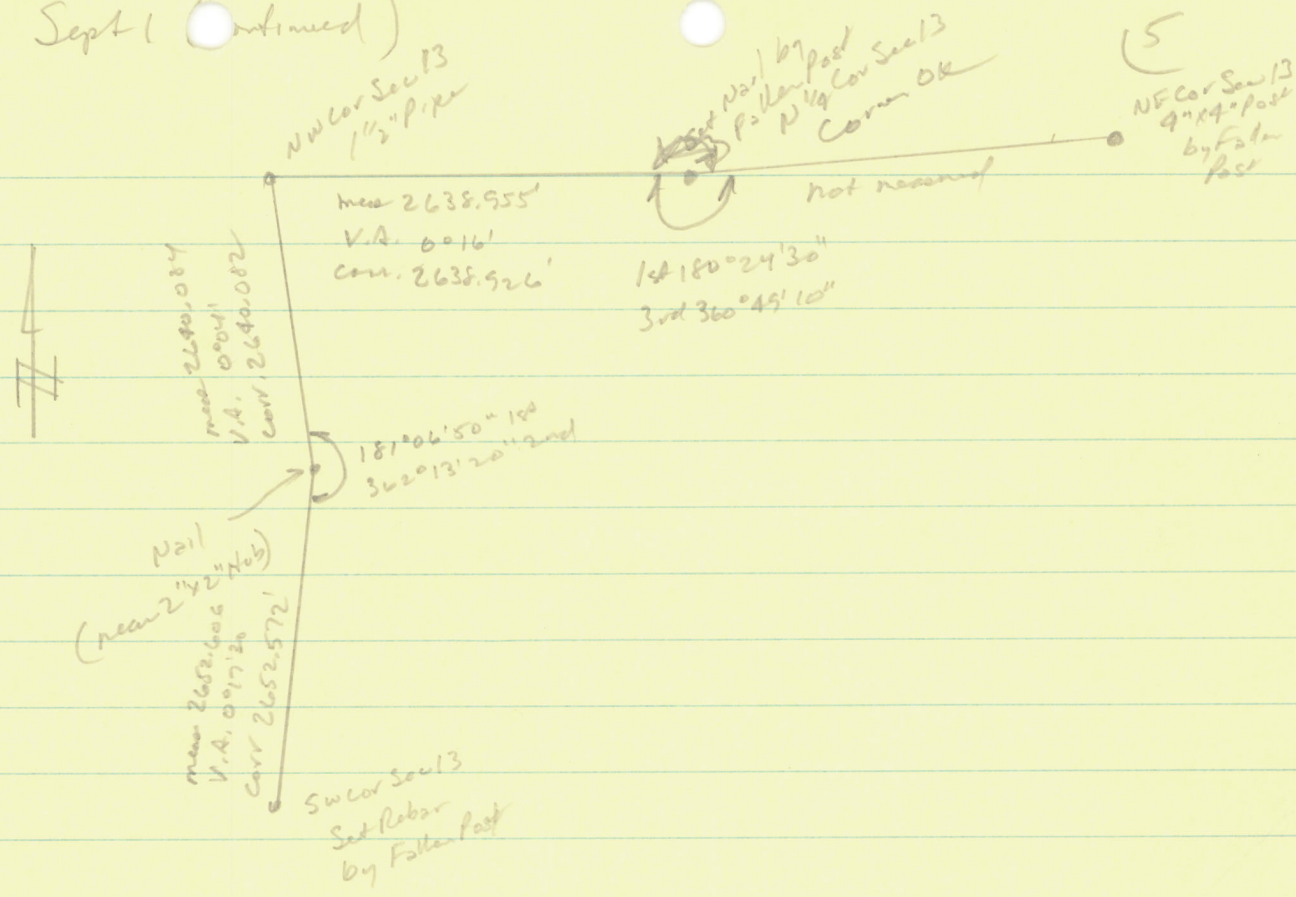
÷2 = 1340.986

− 1195.011

= 145.975

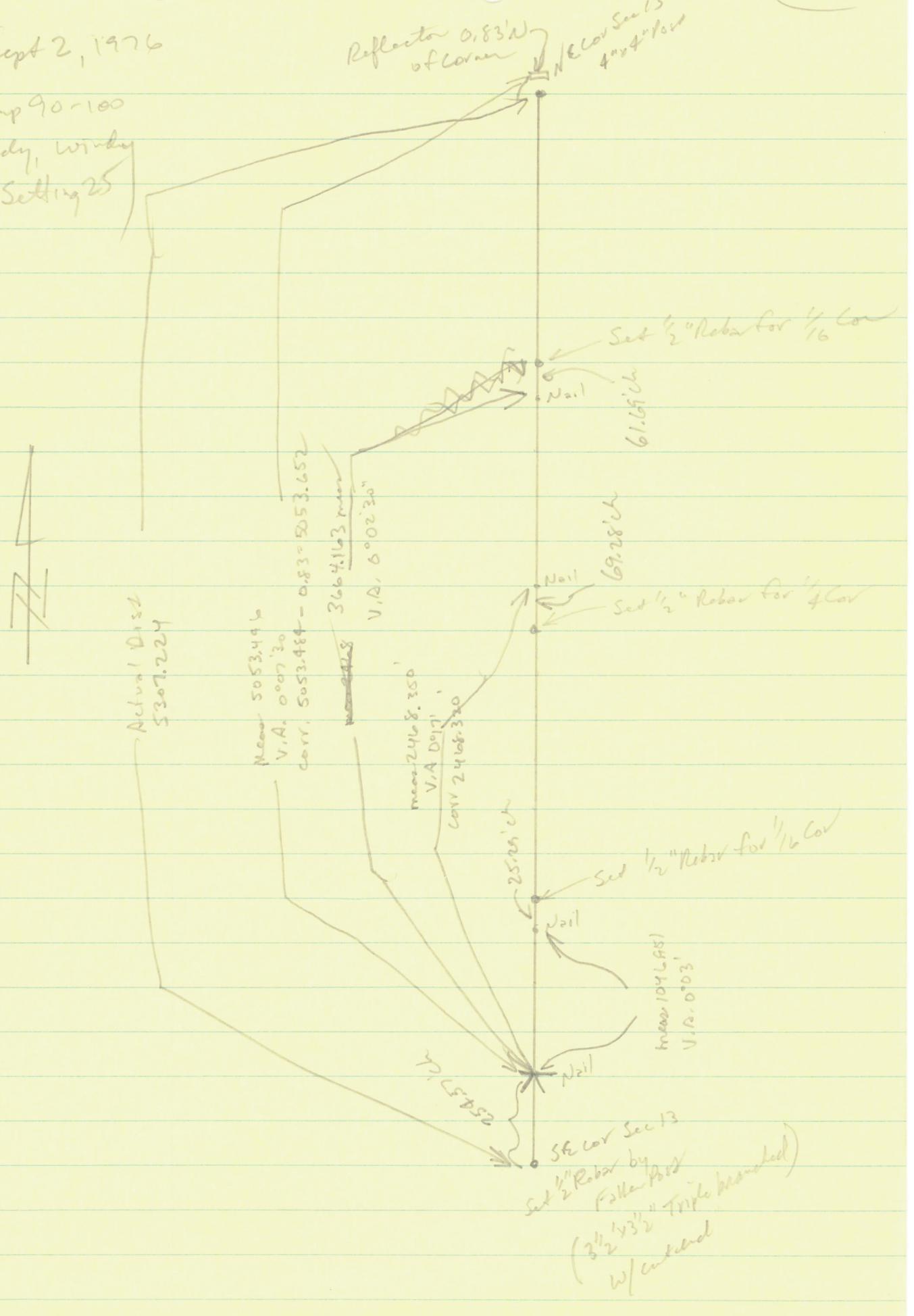


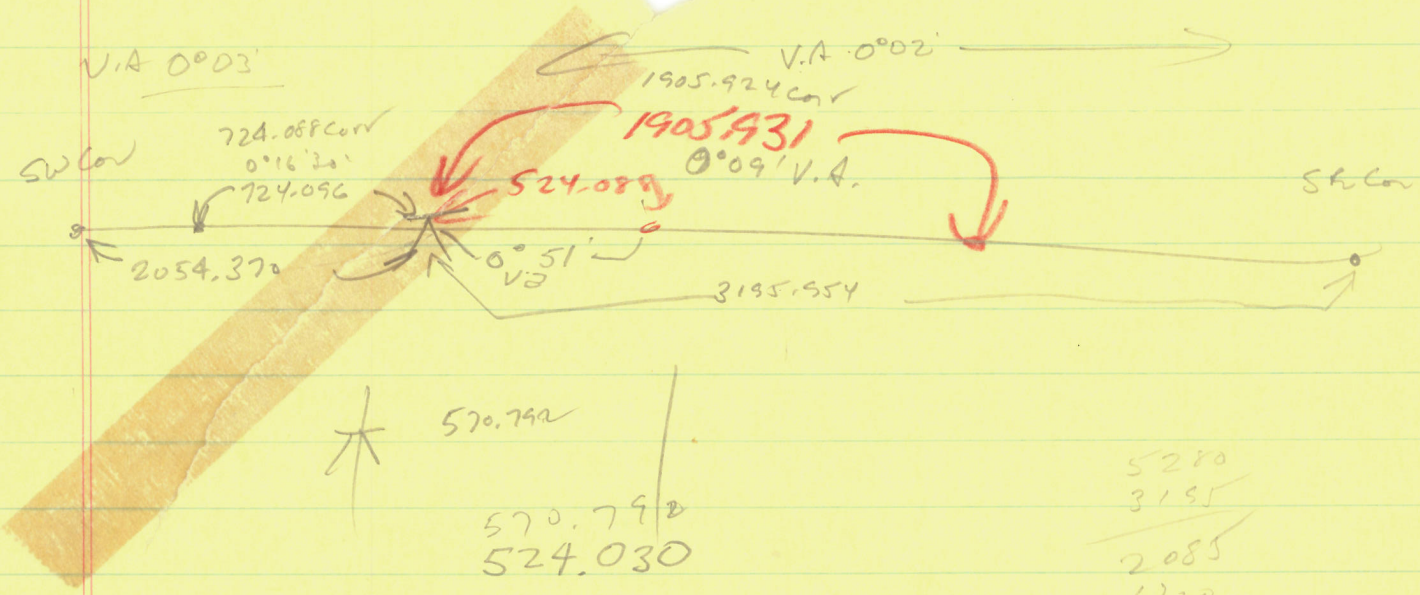
Sept 1 (Continued)



Sept 2, 1976

Temp 90-100
cloudy, windy
Meter Setting 25





570.792

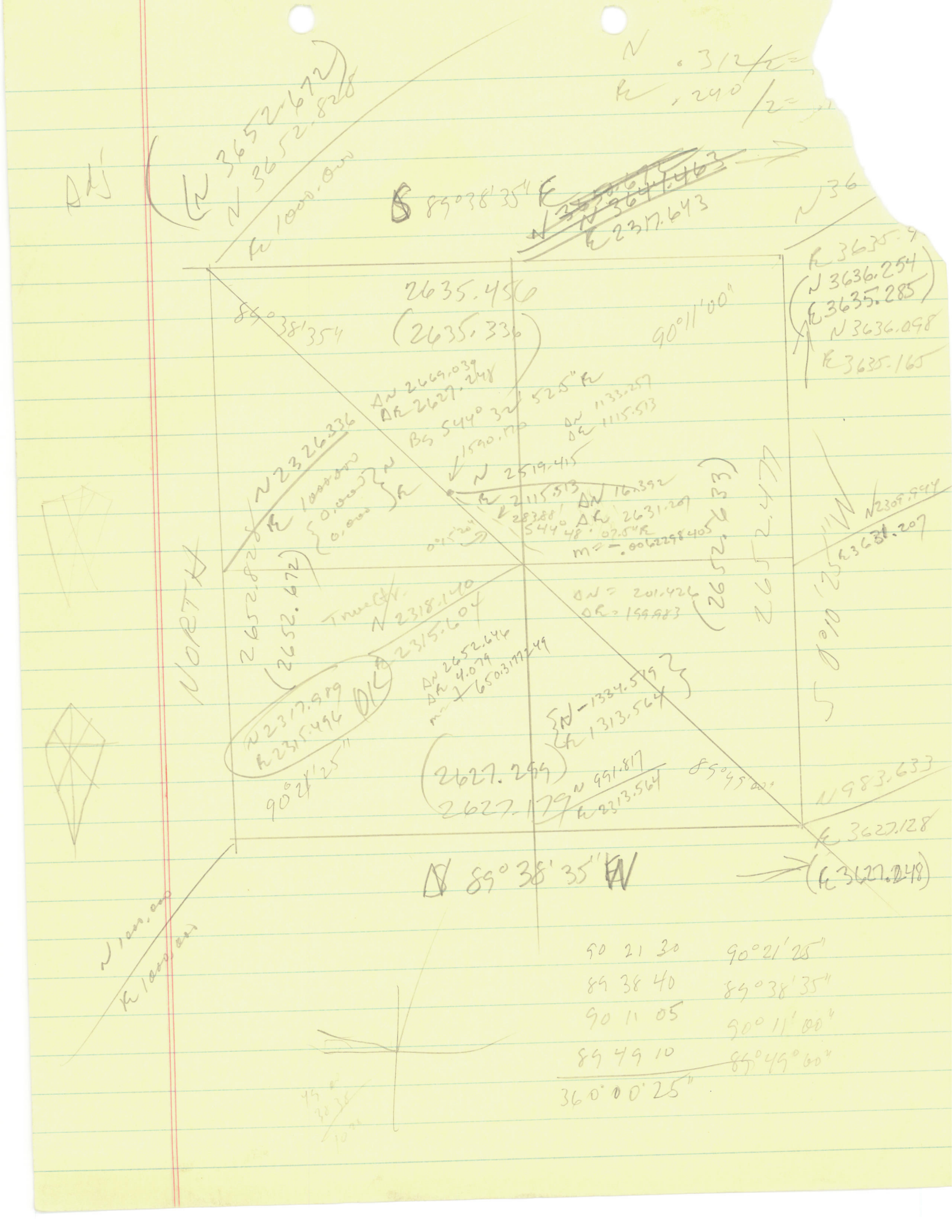
570.792
524.030
46.762

5280
3195
2085
1320
765

1312.581

22.551
17.701

1312.58


N 3652.672
E 1000.000
S 89°38'354" E
N 3644.463
E 2317.643
2635.456
(2635.336)
89°38'354
90°11'00"
N 2326.336
E 1000.000
0.000
0.000
(2652.672)
N 2669.039
ΔE 2627.248
Bg 544° 32' 52.5" E
1590.170
N 2519.415
E 2115.513
ΔN 16.392
ΔE 2631.207
544° 48' 02.5" E
m = -.0062298405
ΔN 1133.257
ΔE 1115.513
0°15'20"
True Ctr.
N 2318.140
E 2315.604
ΔN 2652.644
ΔE 4.079
m = +650.3177249
ΔN = 201.426
ΔE = 154.883
(2652.672)
N 2317.929
E 2315.496
90°21'25"
(2627.254)
2627.179
N 991.817
E 2313.564
N -1334.519
E 1313.564
89°45'00"
N 983.633
E 3627.128
(E 3627.248)
N 3636.254
(E 3635.285)
N 3636.098
E 3635.165
N 2309.944
E 3631.207
0°10'25"
N 1000.000
E 1000.000
89°38'35" W
90 21 30
89 38 40
90 11 05
89 49 10
360°00'25"
90°21'25"
89°38'35"
90°11'00"
89°49'00"

$N = -.00622984\,05R$

$$\frac{N - 991.817}{R - 1313.564} = 650.3177249$$

$$\frac{-.00622984\,05R - 991.817}{R - 1313.564} = 650.3177249$$

$-.00622984\,05R - 991.817 = 650.3177249R - 854233.952$ ~~$- 450455.677$~~

$-650.3239547R = -853242.135$ ~~$- 450559.441$~~ ~~$- 450355.860$~~

$R = 1312.026$ ~~1312.019~~

$N =$ ~~-8.193~~

$N = -.00622984\,05R$

$$\frac{N + 1334.519}{R - 1313.564} = 650.3177249$$

$$\frac{-.00622984\,05R + 1334.519}{R - 1313.564} = 650.3177249$$

$-.00622984\,05R + 1334.519 = 650.3177249R - 854233.952$

$-650.3239547R = -855568.471$

$R = 1315.6035 \quad N = -8.194$