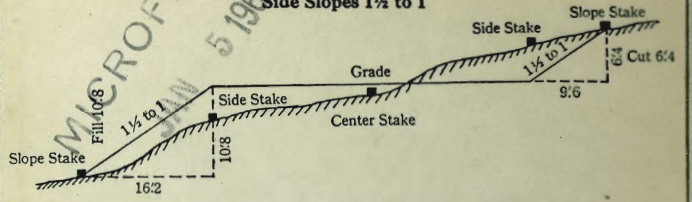
2280

AERIAL SURVEY —

ONLY

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width
Side Slopes 1½ to 1



In the figure above: Opposite 6 under "Cut or Fill" and under .4 read 9:6 the distance from the side stake to the slope stake at right. Opposite 10 under "Cut or Fill" and under .8 read 16:2, the distance from the side stake to the slope stake at the left.

Cut or Fill	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	Cut or Fill
	Distance out from Side or Shoulder Stake										
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

EUGENE DIETZGEN CO.

2280

Property of City of San Diego

Address Civic Center

Phone F 9-7511 - Ext. 246

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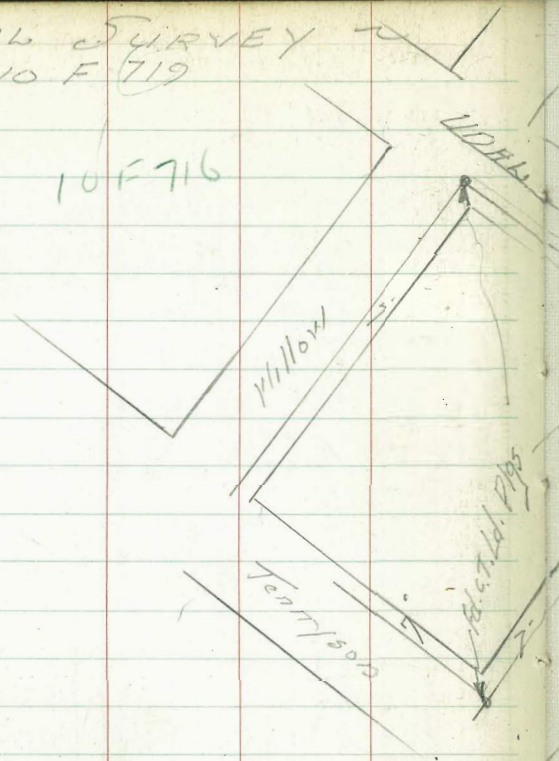
AERIAL SURVEY

Walker Pope 1-12-83

10 F 719



AERIAL SURVEY

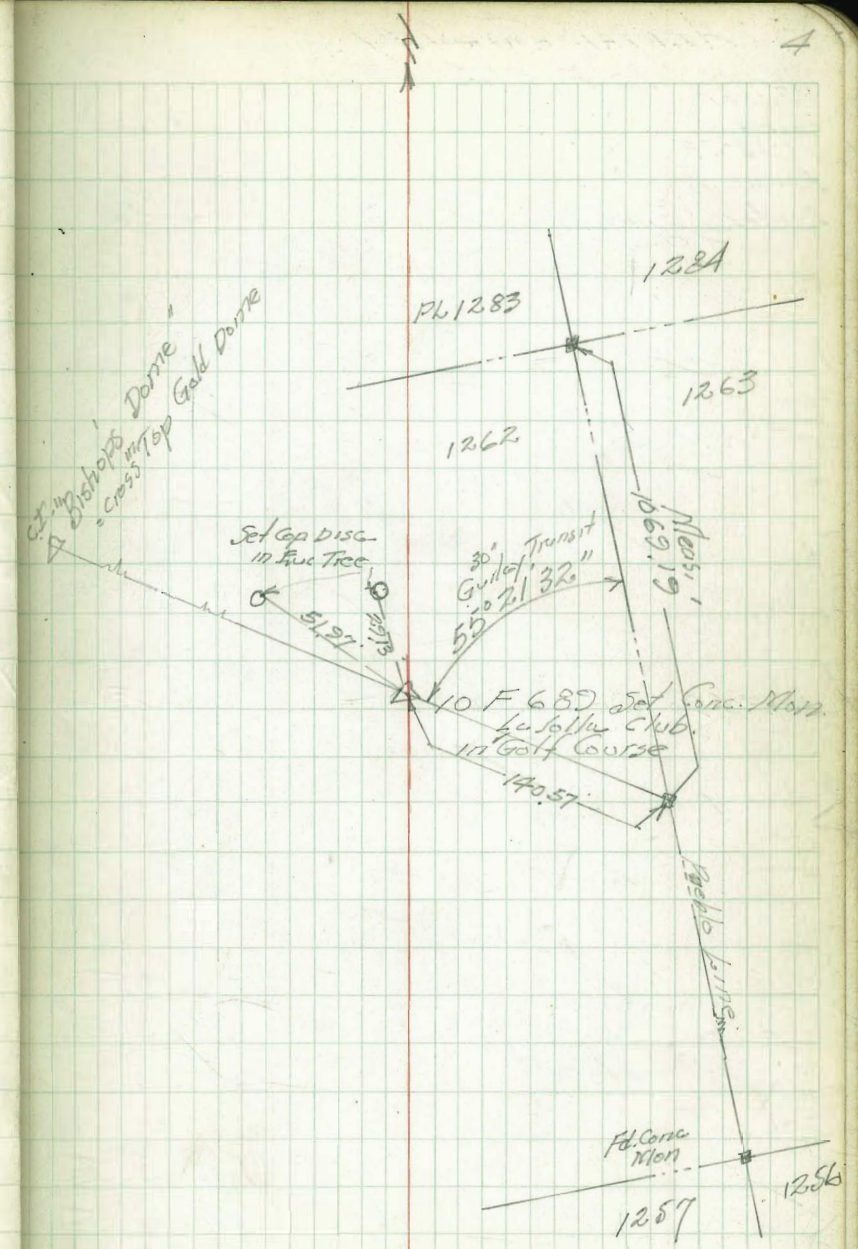
10 F 689

Walker
Pope

1-19-53

(Brennan
Hunter) Fairchild's crew

10 F 689 Set Conc. Mon. (Filer. O.K.
Set by Fairchilds)

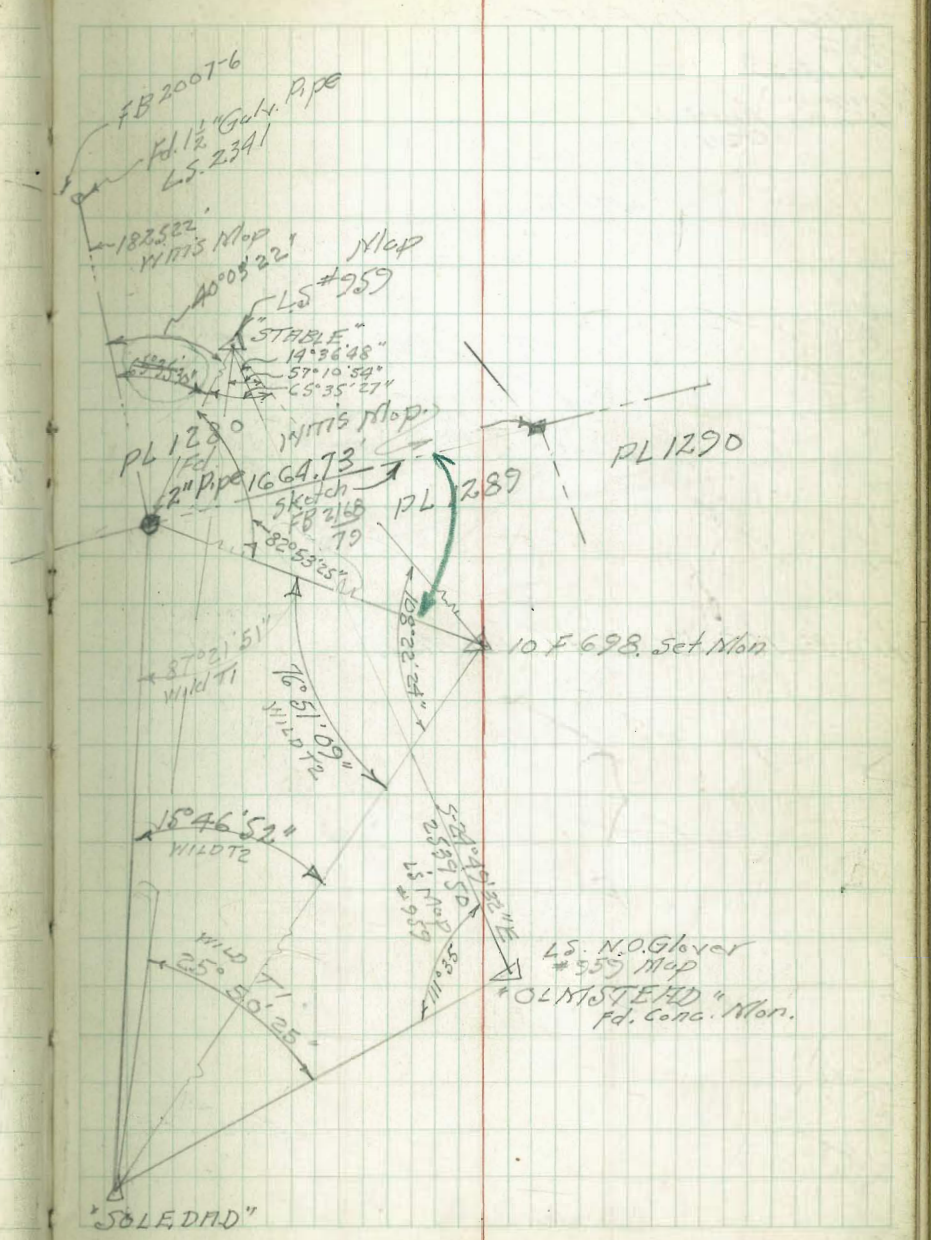


AERIAL SURVEY

10 F 698

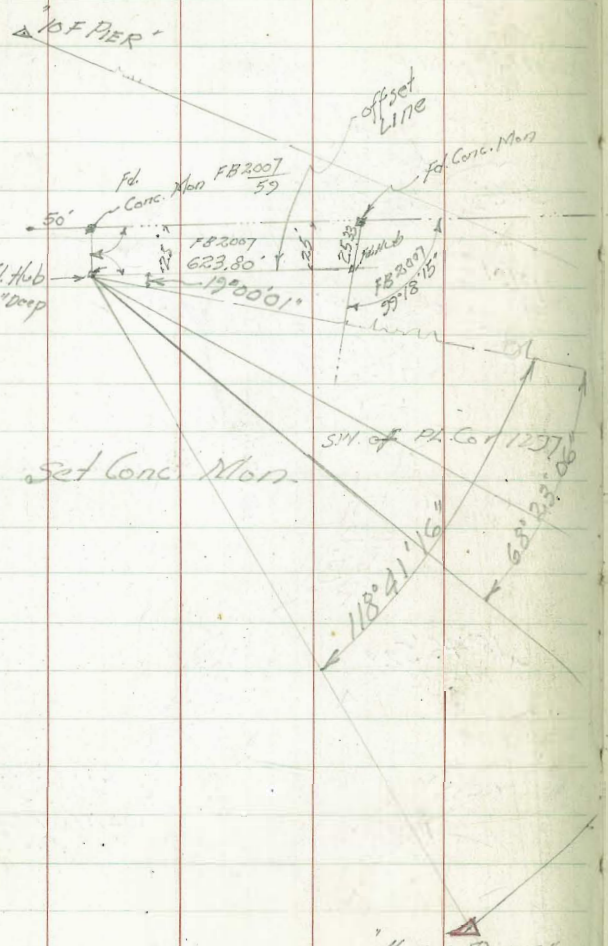
Walker
Pope 11-13-53
Brennan
Hunter } Fairchild Crew

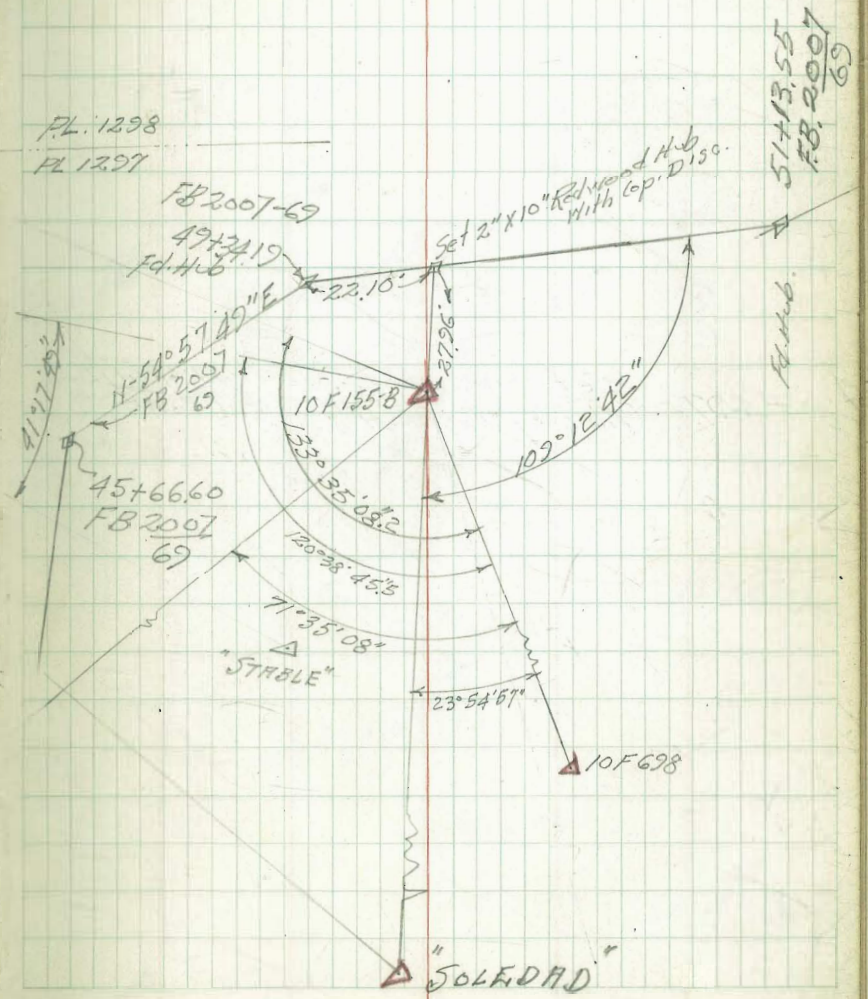
10 F 698 Set Conc. Mon. Elev. by Fairchild's Crew



AERIAL SURVEY

Walker 10 F 155-B
Pope
1-13-53
(Brennan Hunter) Fairchild
Crew

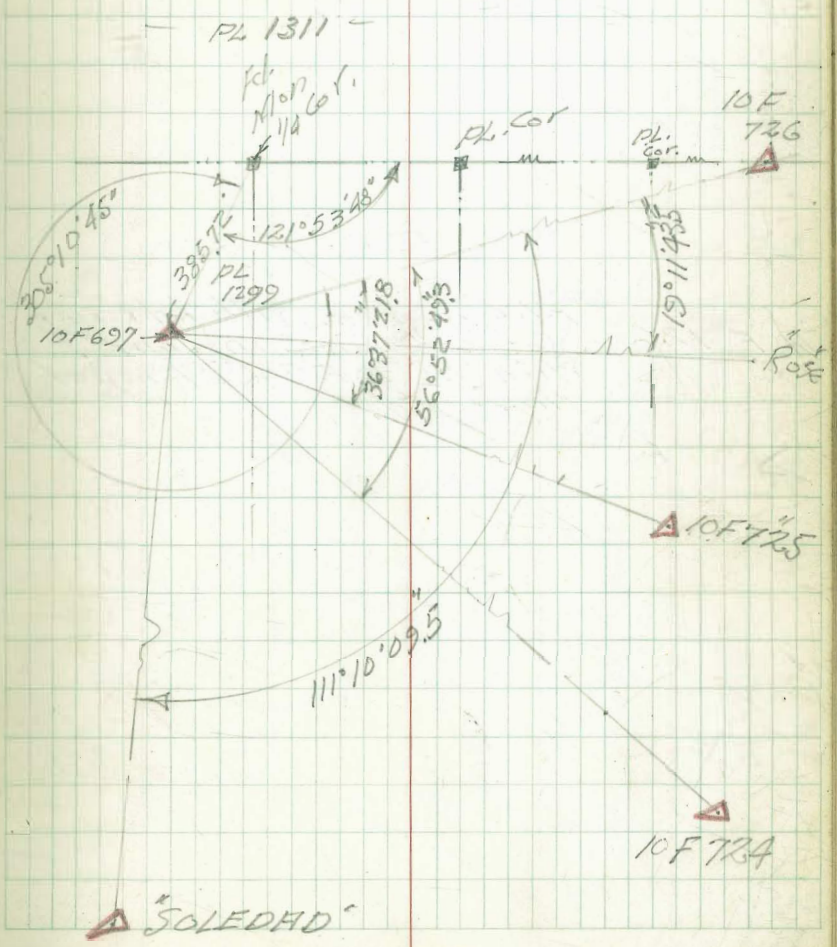




AERIAL SURVEY

Walker 10 F 697
Pope 1-13-53
(Brennon Hunter) Fairchild Party
Angles = "WILD THEODOLITE" T2

10 F 697 Set Conc. Mon. North of City Dump
(Elev. by Fairchild) Near Road



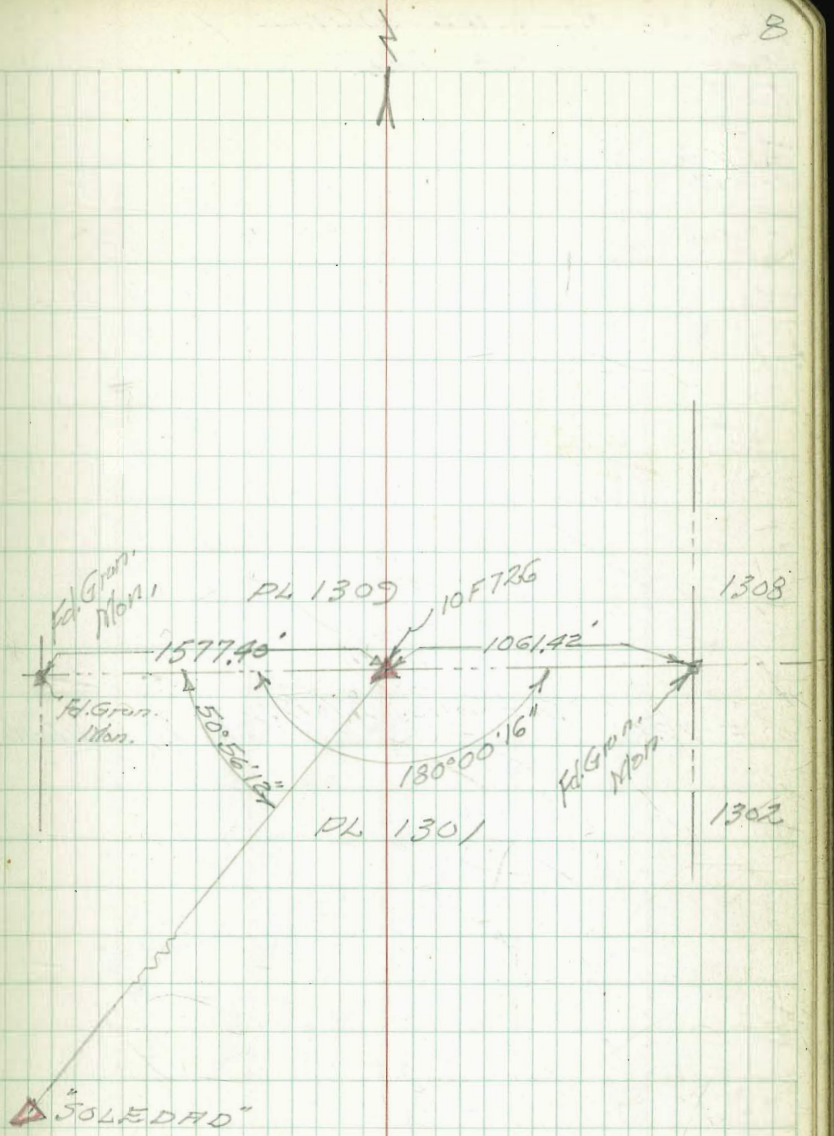
AERIAL SURVEY

Walker 10 F-726

Pope 1-13-52

(Brannon Hunter) Fairchild's Party

10 F 726 Fd. Conc. Mon. With Lds Tack Set c/t/j Disc. in Sand. With No "10 F 726" Stamped in Lead.

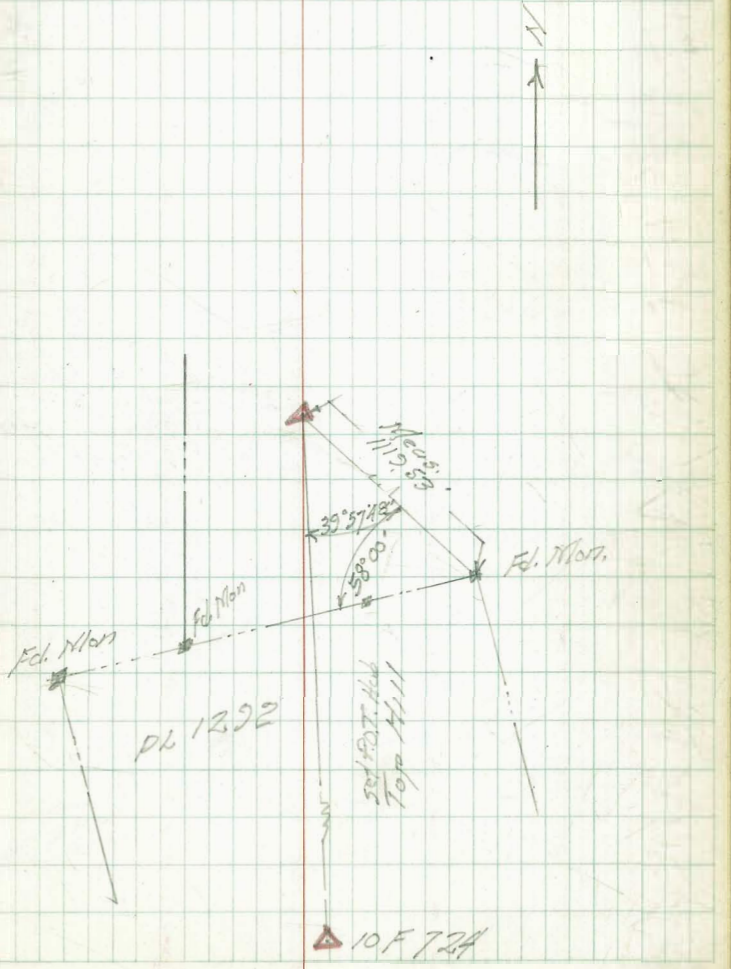


Walker
Tape
Jan 1953

AERIAL SURVEY
10 F 725

Ties Made
2-16-53

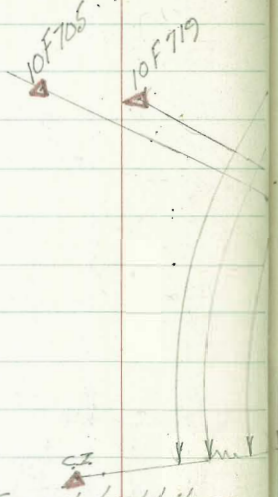
10 F 725 Set Conc. Mon. (Elev. by Fairchilds)

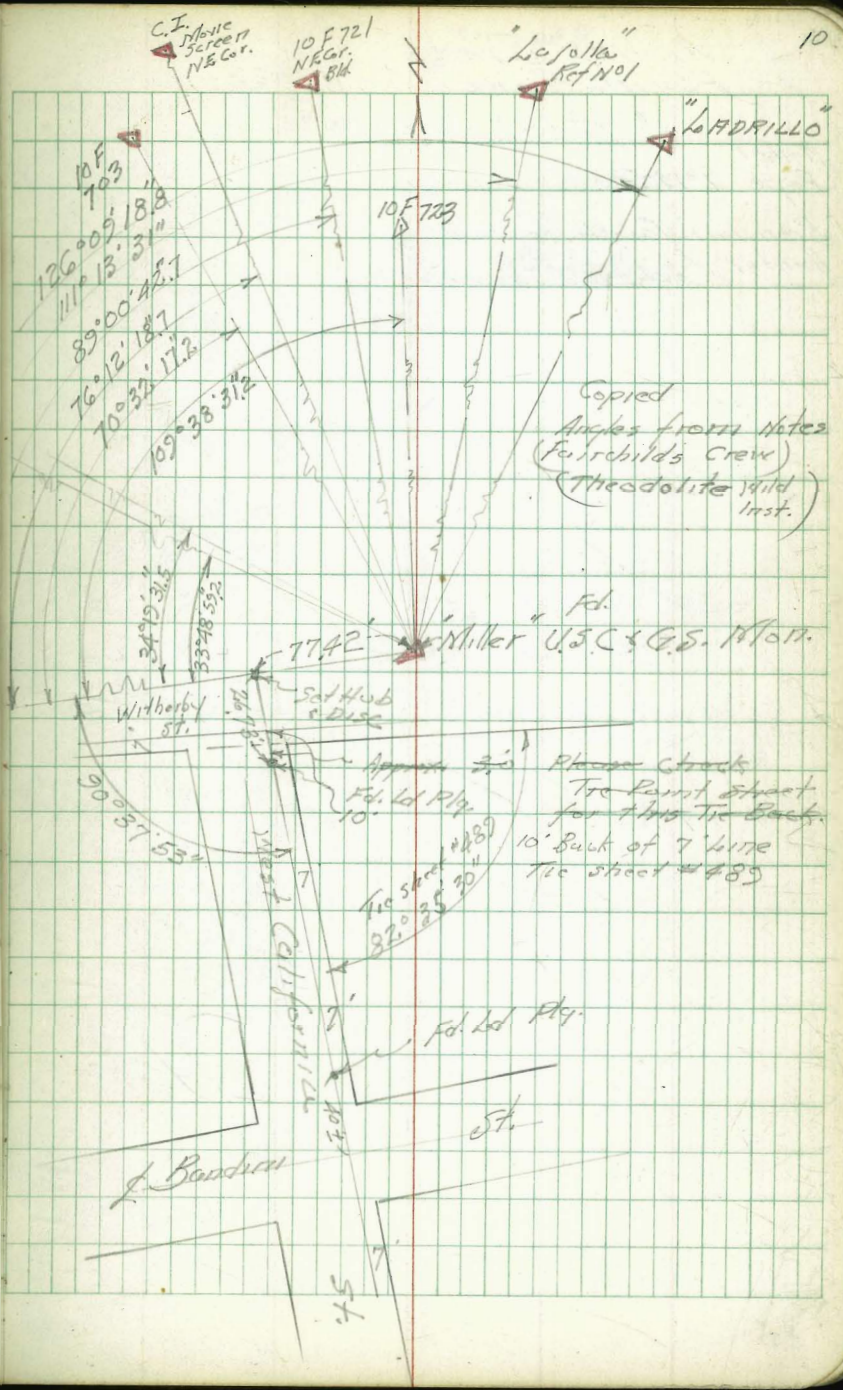


AERIAL SURVEY

△ "MILLER" - USC&GS

Walker
Kopec 1-14-53
(Brennan Hunter) Fairchilds Crew.
Angles - WILD Theodolite T2

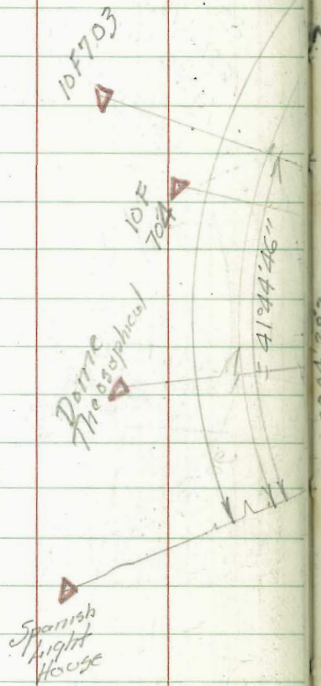


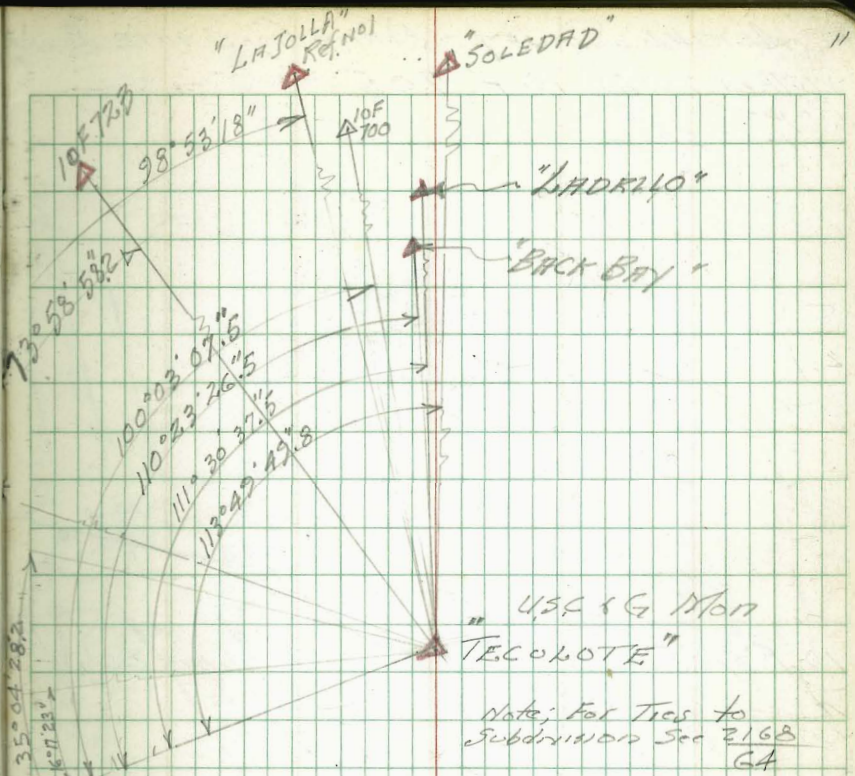


AERIAL SURVEY
PLANE COORDINATE POSITIONS
"TECOLOTE"

Walker
Pope 1-14-53

(Brennan / Hunter) Fairchild's Crew
Angles = Wild Theodolite





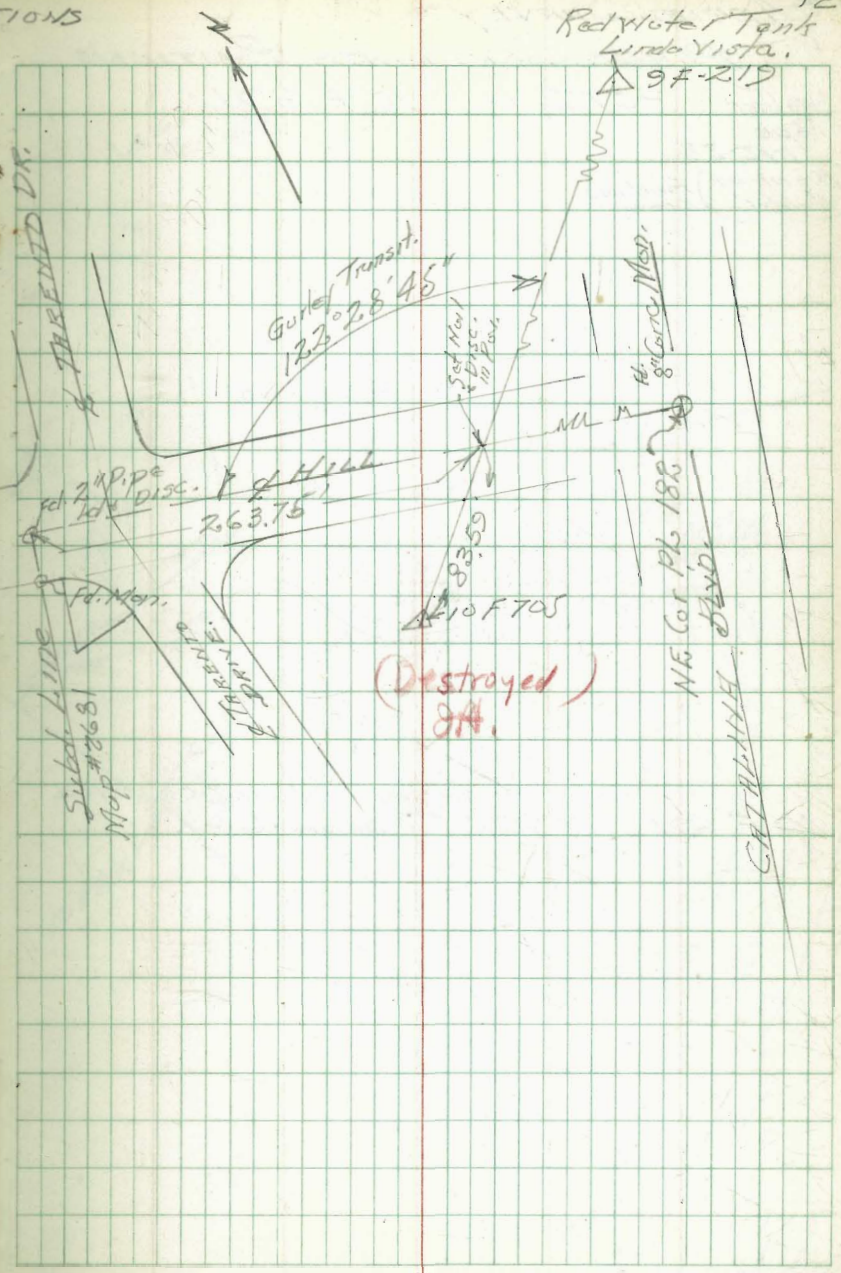
Note; For Ties to Subdivision See B168 64

AERIAL SURVEY — PLANE COORDINATE POSITIONS

Walker
Pope
1-14-53

~ 10 F 705 ~

Fd. Pipe
10 F 705 Set Conc. Mon. To Same Elev.

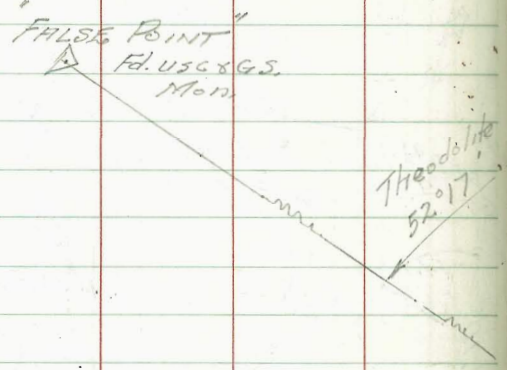


~AERIAL SURVEY~

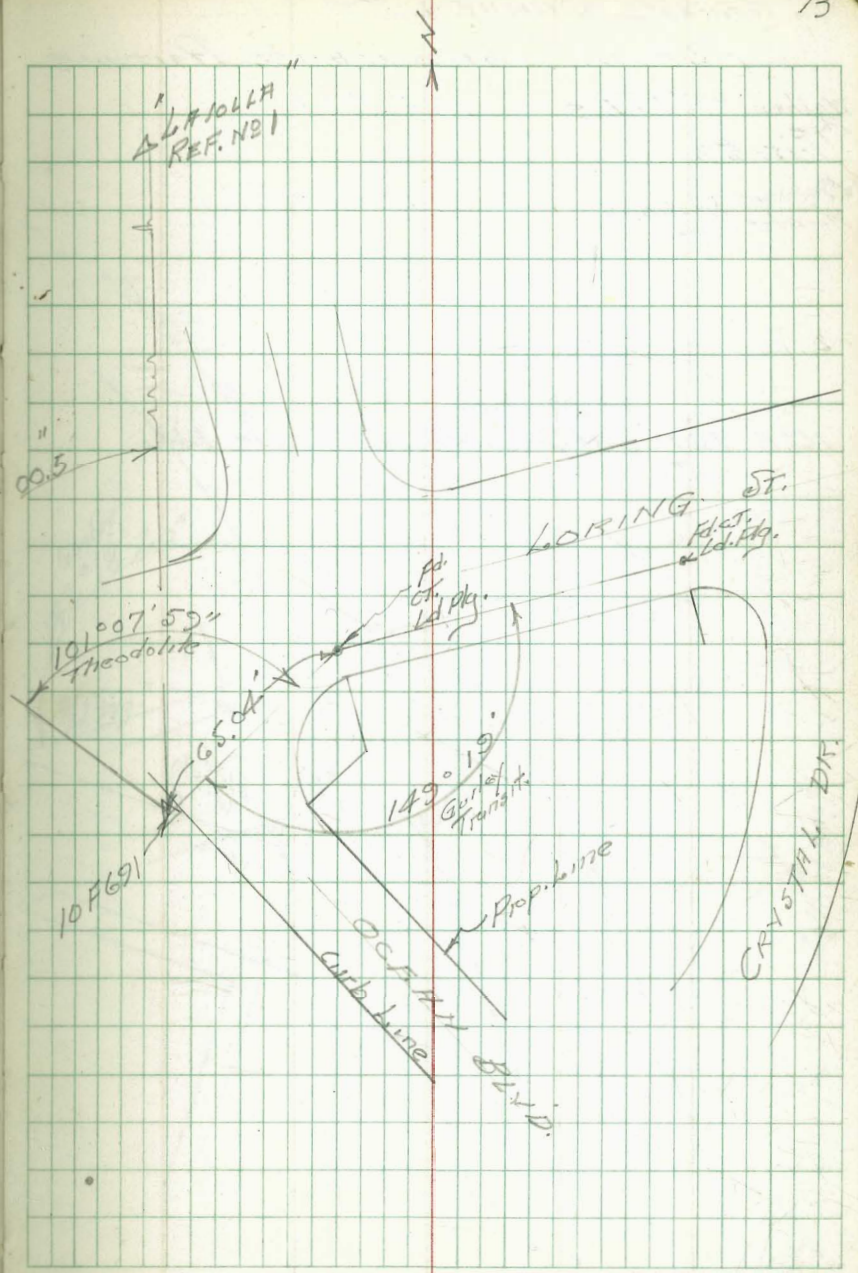
PLANE COORDINATE POSITIONS

~Ties~ 10 F 691

Walker
Pope
1-15-53
(Brennan
Hunter) Fairchild's
Crew



Fd. Pipe Before station occupied.
10 F 691 Set Mon. To Same Elev.



~ AERIAL SURVEY ~

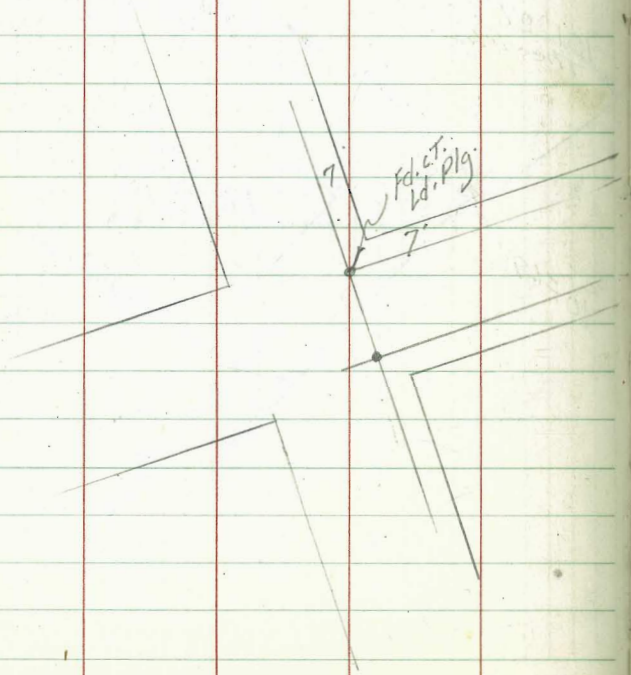
PLANE COORDINATE POSITIONS

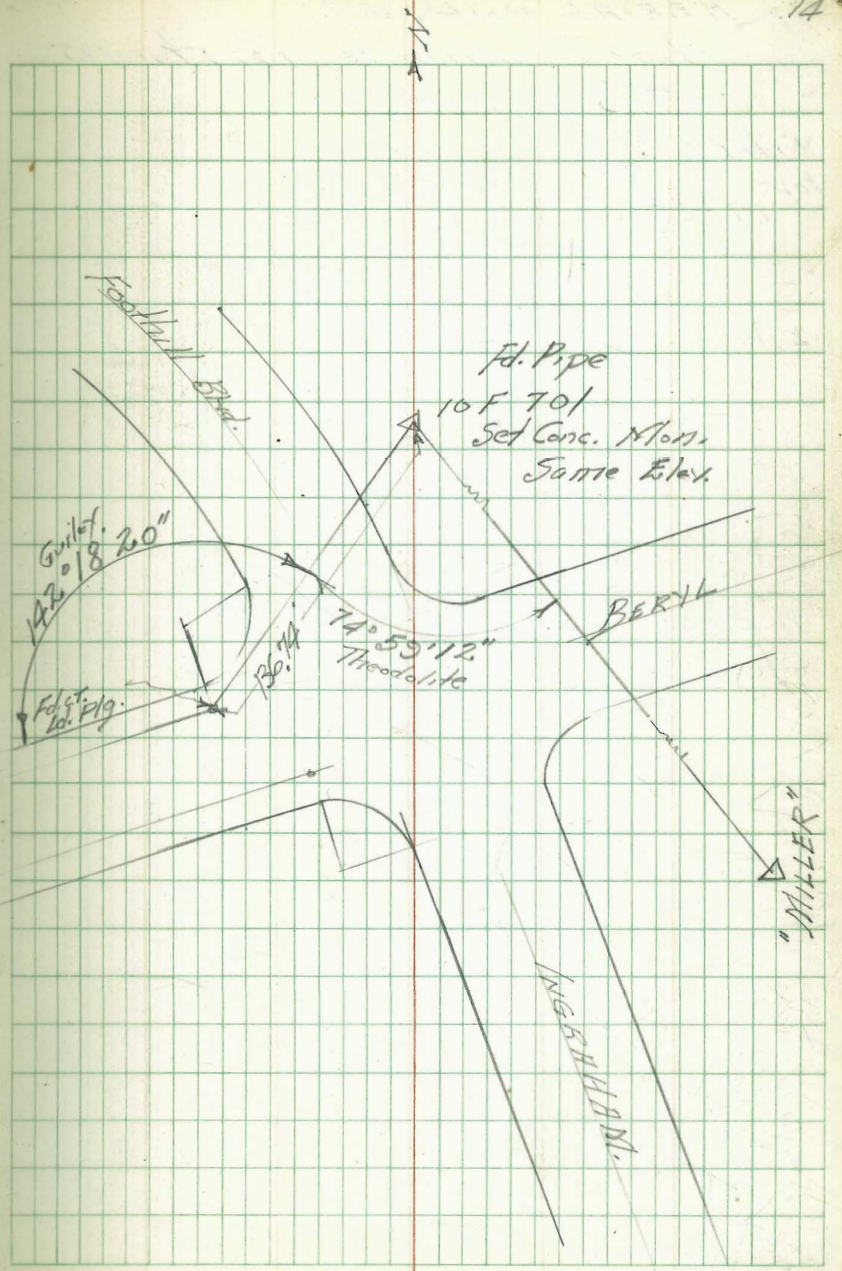
Walker ~ TIES ~ 10 F 701

Pope.
1-15-53

(Brennan
Hunter) Fairchild's Crew

Fd ½" Pipe.
10 F 701 Set Conc. Mon to Same Elev.





AERIAL SURVEY
Plane Coordinate Positions
~TIES ~ 10F690

Walker
Pope 1-17-83

10F690 Dirt Road W Marklands Elev. OK.
set Conc. Mon.

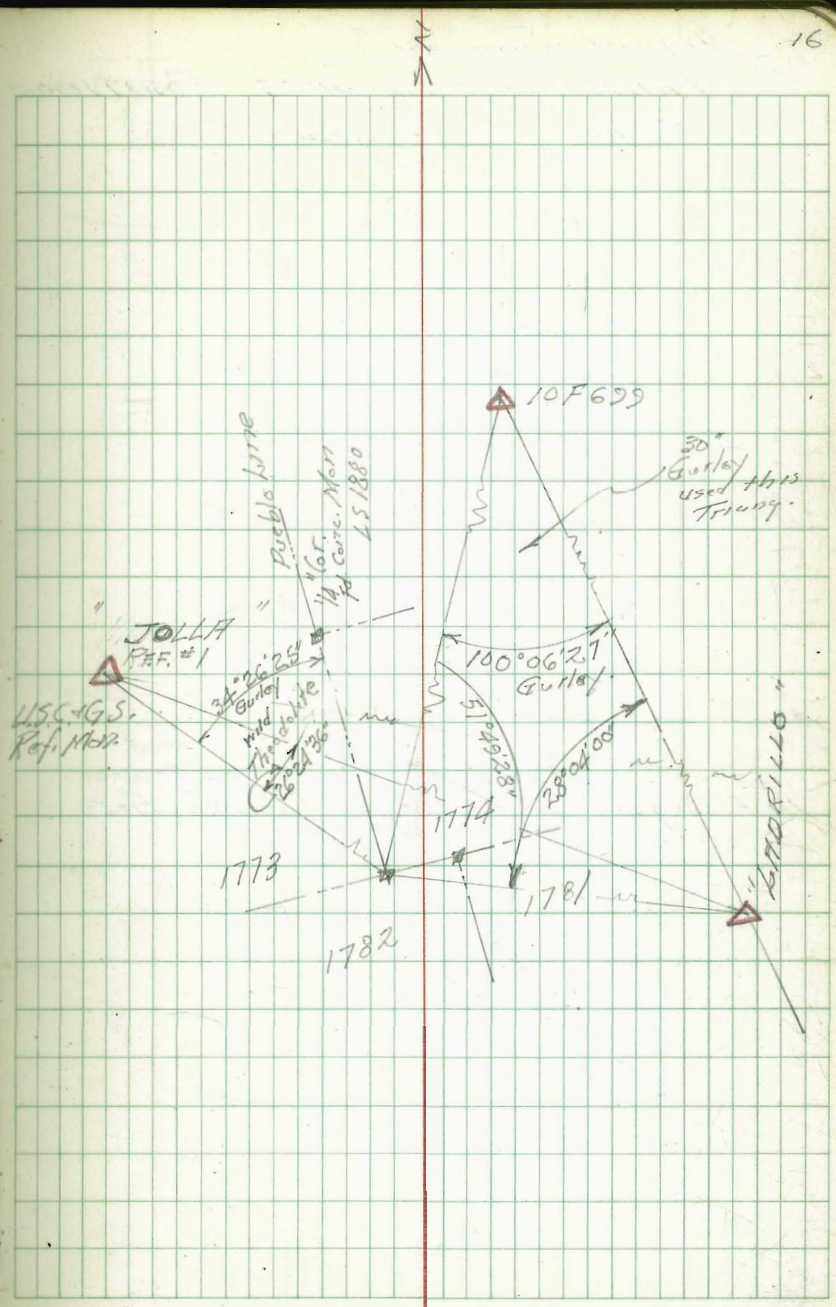
AERIAL SURVEY
PLANE COORDINATE POSITIONS

Walker
Pope

TIES "JOLLA"

1-17-53

"JOLLA" Fd. U.S.C.&G. Ref. #1



AERIAL SURVEY
PLANE COORDINATE POSITIONS
TIES "10 F PIER"

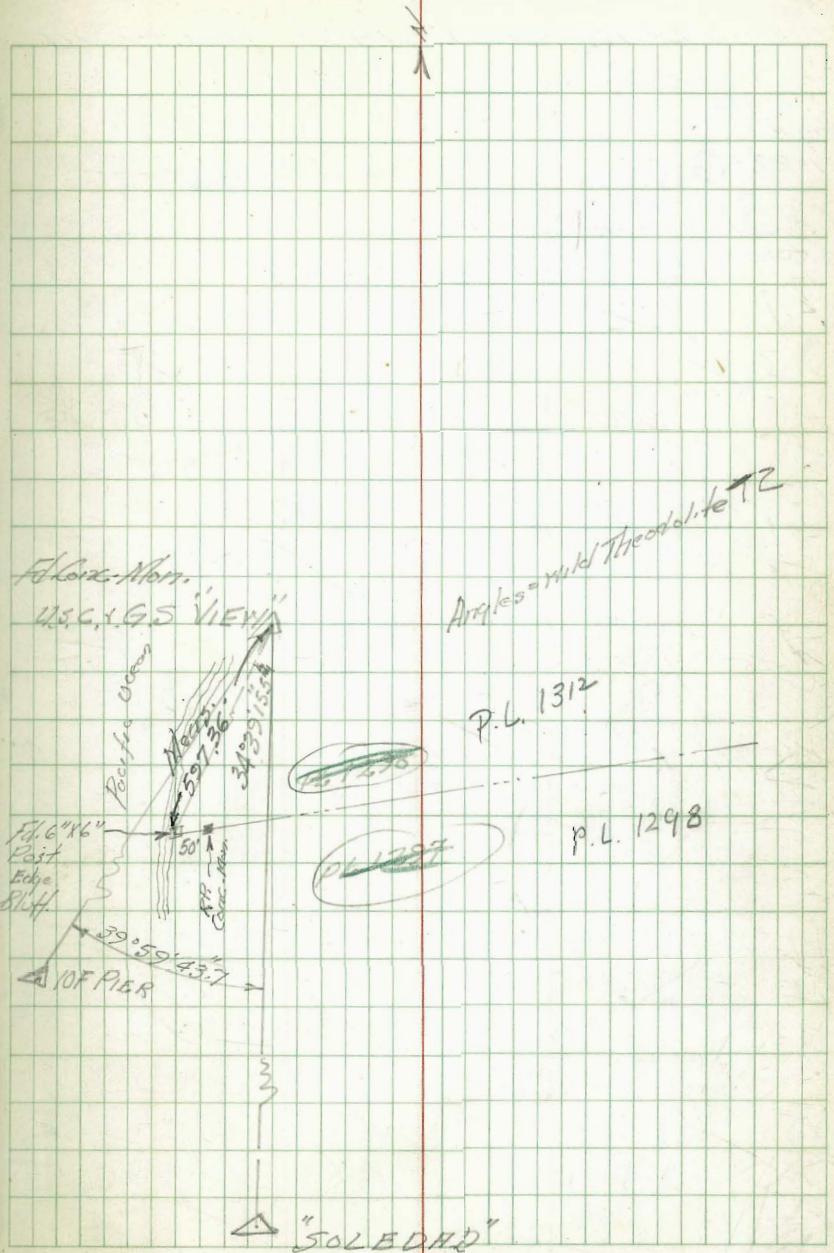
10 F Pier. — Set Ld Plg. & Disc. in Wood Pier Deck Near West end Scripps Pier, (No Change in Elev.)

Aerial Survey
Plane Coordinate Positions
"Ties" "View"

Walker
Pope
1-19-53

"View" Fd. U.S.C. & G.S. Mon.

10 F Pier Set Ld. Plg. CHY Eng Disc. Near West end Scripps Pier.



AERIAL SURVEY

PLANE COORDINATE POSITIONS

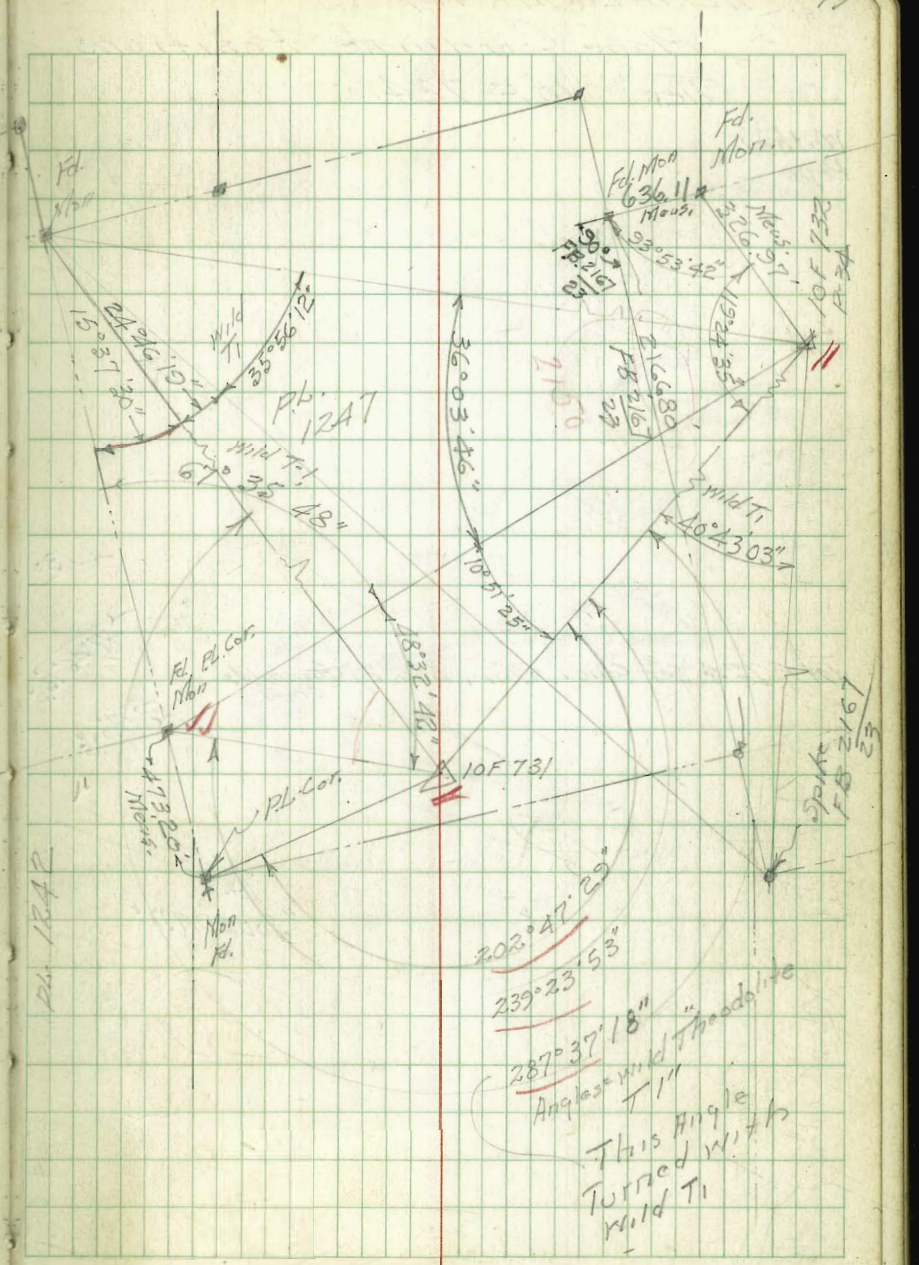
~TIES~ 10 F 731

Walker
Pope
1-22-53

(Bernard Hunter) = Fairchilds Gear
(Angles with 1" Wild Theodolite at station 10 F 731)

Pl. 1248

10 F 731 — Set Conc. Mon (Tied by Fairchilds)



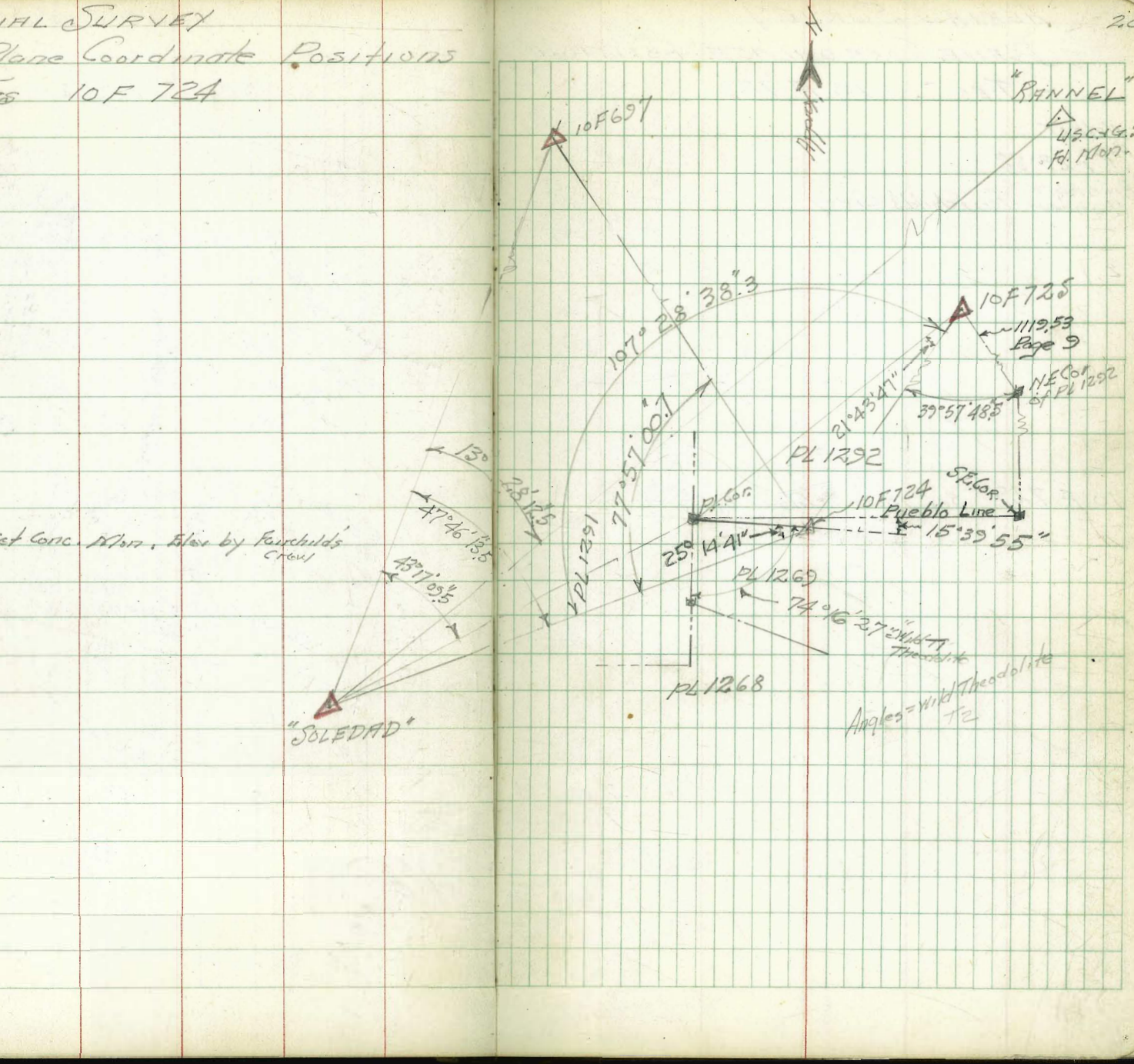
AERIAL SURVEY

Plane Coordinate Positions

Ties 10F 724

Walker
Pope
Jan 1953

10F 724 Set Conc. Mon. Elev. by Fairchild's Crew



AERIAL SURVEY
PLANE COORDINATE POSITIONS
~TIES~ 10 F 729

Walker
Pop 1-23-53
(Brennan Hunter) Fairchild's Crew

10 F 729 Set iron Elev. by Fairchilds.

AERIAL SURVEY

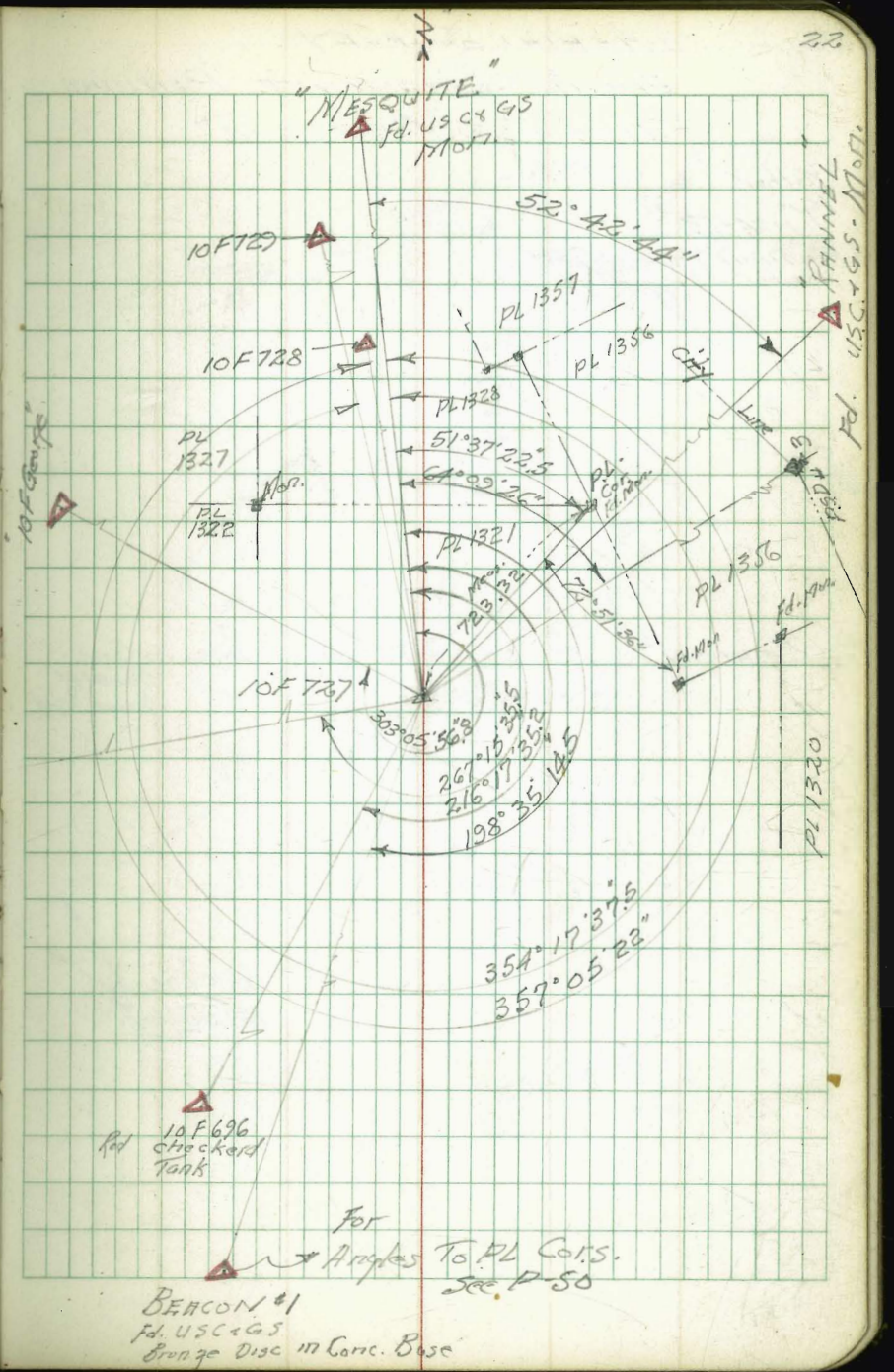
PLANE COORDINATE POSITIONS

"TIES" ~ 10 F 727

Walker
Pope
1-24-53
(Brennan + Hunter) Fairchild's Crew
Angles = Wild Theodolite

10 F 727 — Set Conc. Mon. (Elev. by Fairchilds)

S.E. RANGE

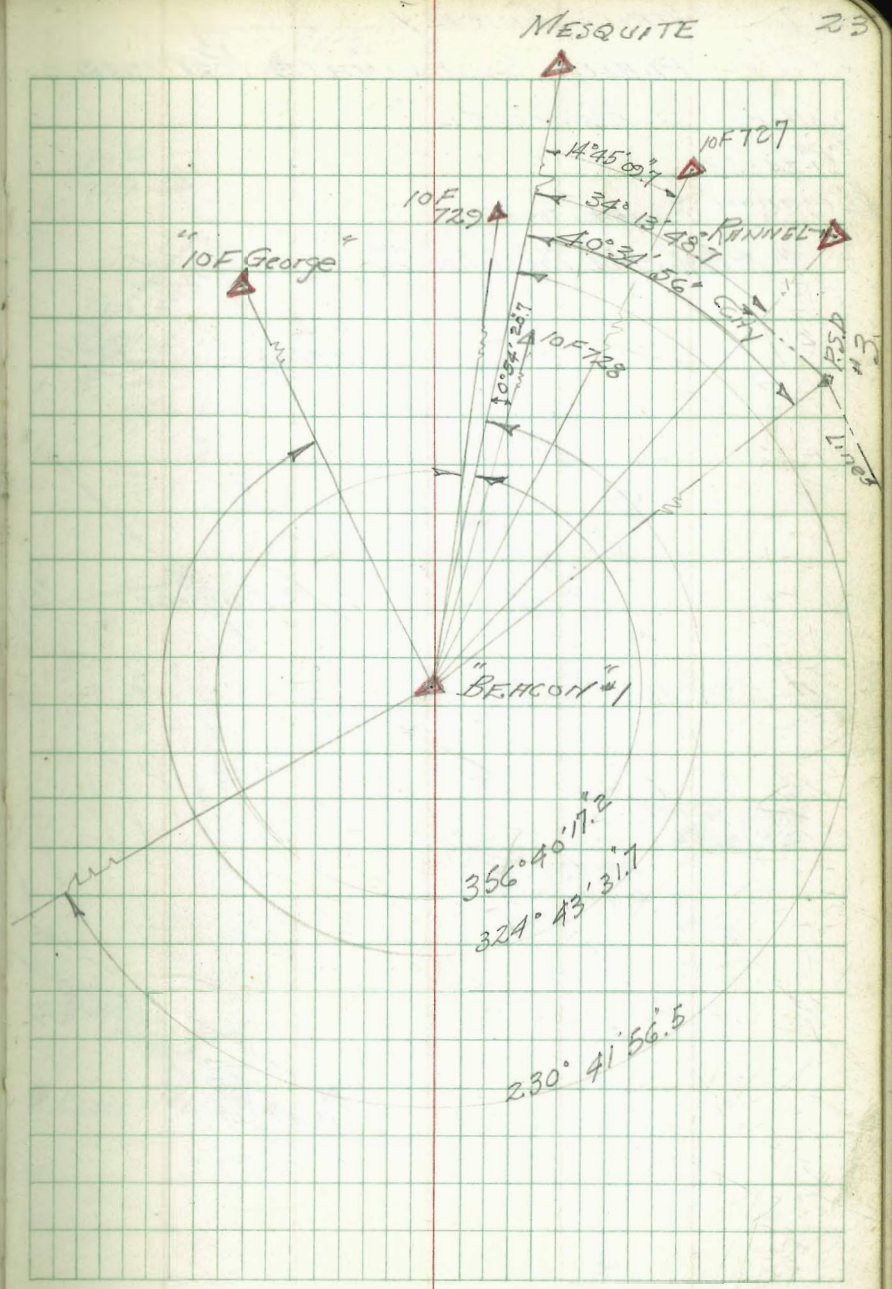


AERIAL SURVEY
PLANE COORDINATE POSITIONS
TIES "BEACON"

Walker
Pope
1-24-53
(Brennan) Fourbolds crew
Hunter "Wild Theodolite" T2

BEACON #1 Fd. U.S.C. & G.S. Bronze Disc. in Conc. Base of Beacon Light

10 F 696
Red checkered Tank



AERIAL SURVEY

PLANE COORDINATE POSITIONS

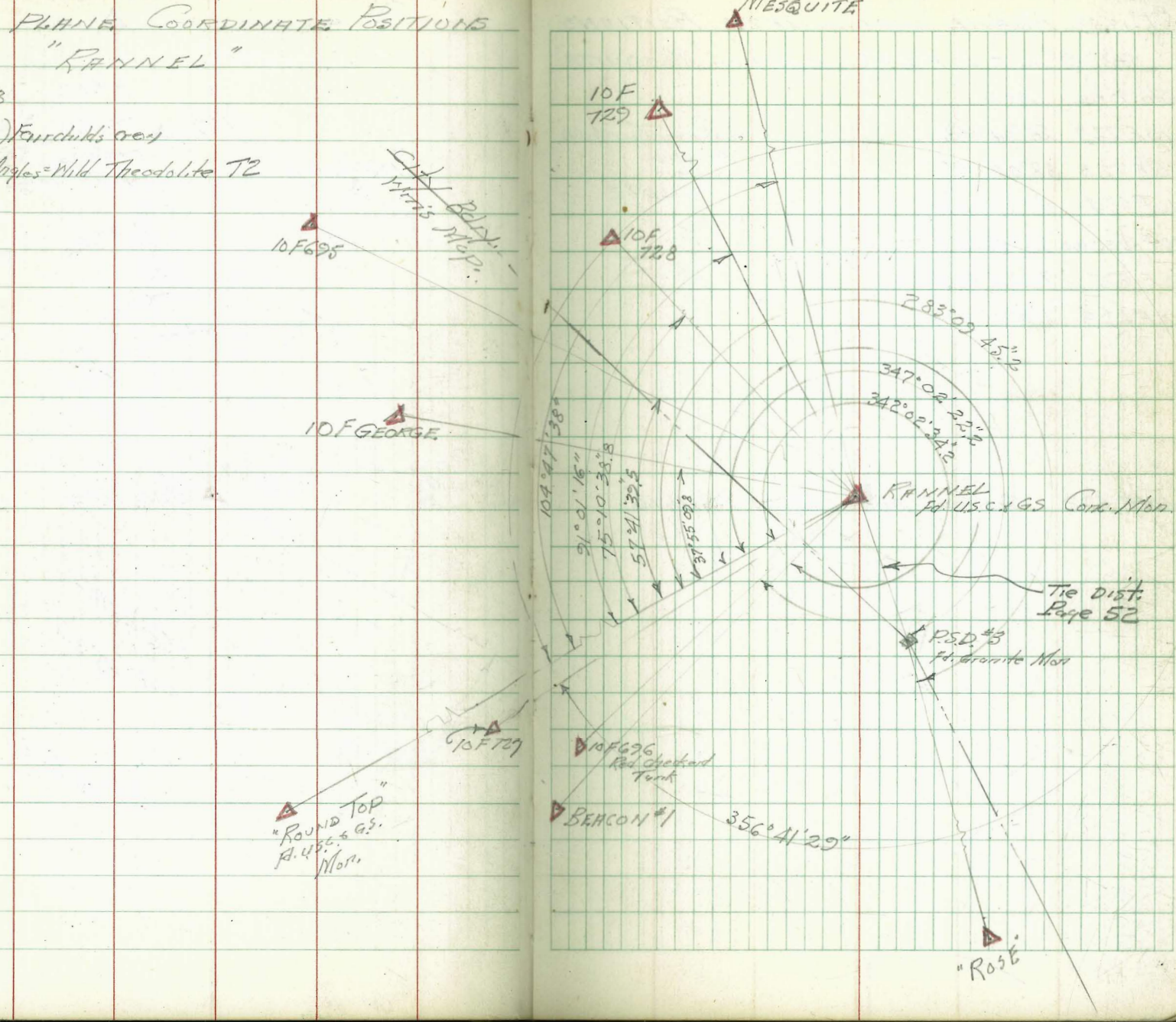
"RANNEL"

Walker
Pope
1-24-53

(Brennan
Hunter)

Faurchild's area

4 = Angles = Wild Theodolite T2



Walter Pope
Jan-19.53

AERIAL SURVEY

PLANE COORDINATE POSITIONS

Sta. OCC = 10F692, Initial on "MESQUITE"

Sta. Obs.	Angle	
10F729	24°04'00".3	Angles by Fairchilds Brantley Wuntar "WILDTZ"
10F728	38°04'03"	
10F694	51°17'04".8	
10F GEORGE	66°48'05".5	
10F 695	80°44'36".5	
10F693	113°01'41".3	

10F 692 Set Conc. Mon. Elev. by Fairchilds

AERIAL SURVEY

Winkler Rope Jun-1953

PLANE COORDINATE POSITIONS

Sta. O.C.C. = 10 F 693, Initial H-53

Sta. Obs.	Angle
10 F 692	67°45'11"
10 F 729	131°45'12.5"
10 F 694	157°48'51.8"
10 F 728	150°56'42.2"

Angles = Fairchilds
Brenton
Hunter
"Wilcox"

10 F 693 Set Conc. Mon. Elev. by Fairchilds

Walter Pope Jan 1953

AERIAL SURVEY

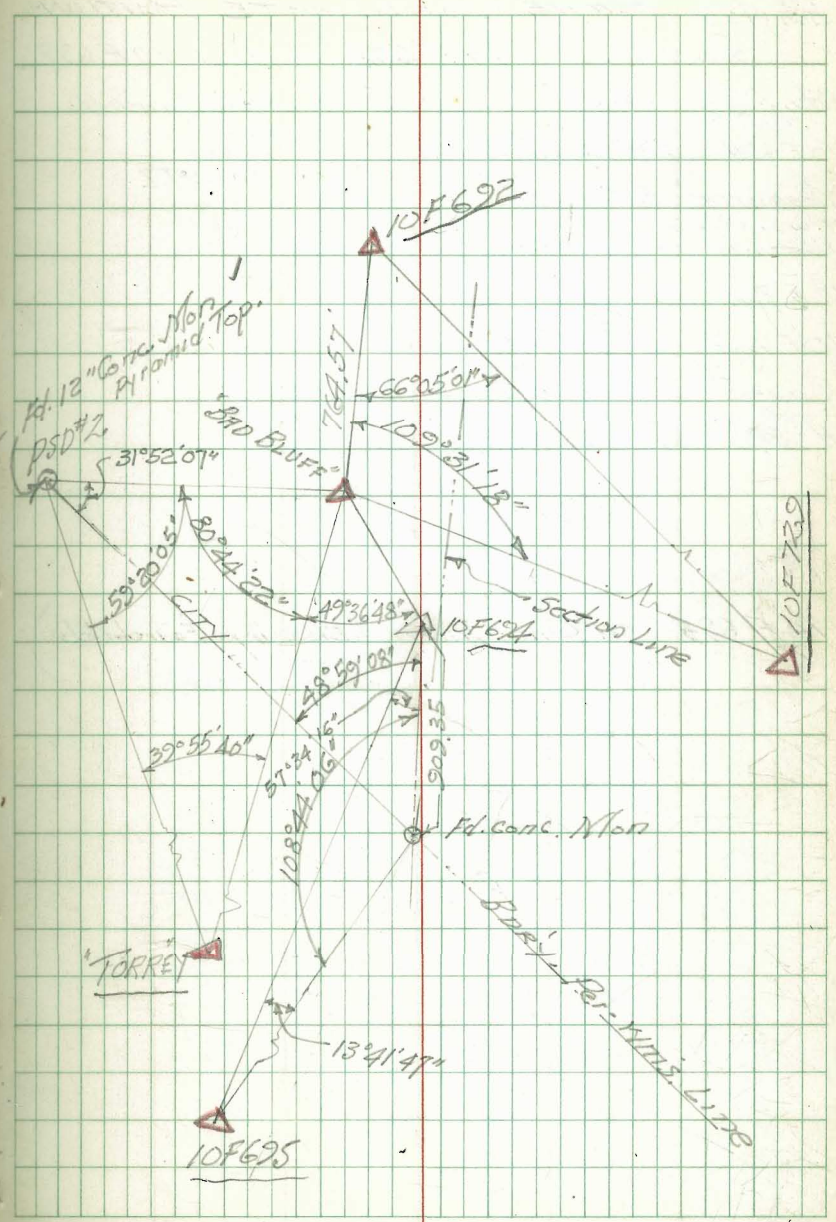
PLANE COORDINATE POSITIONS

Sta OCC. 10F694, Initial 10F695

Sta Obs	Angle
10F693	48°06'37.2"
"H-53"	61°11'25.8"
10F692	96°18'09.2"
Mon cityline Hill Sec 15	302°25'43.5'

Angles by Fairchilds Brennan Hunter "WILDTZ"

10F694 Set Conc. Mon. Elev. by Fairchilds



Walker
Pope
Jan 1953

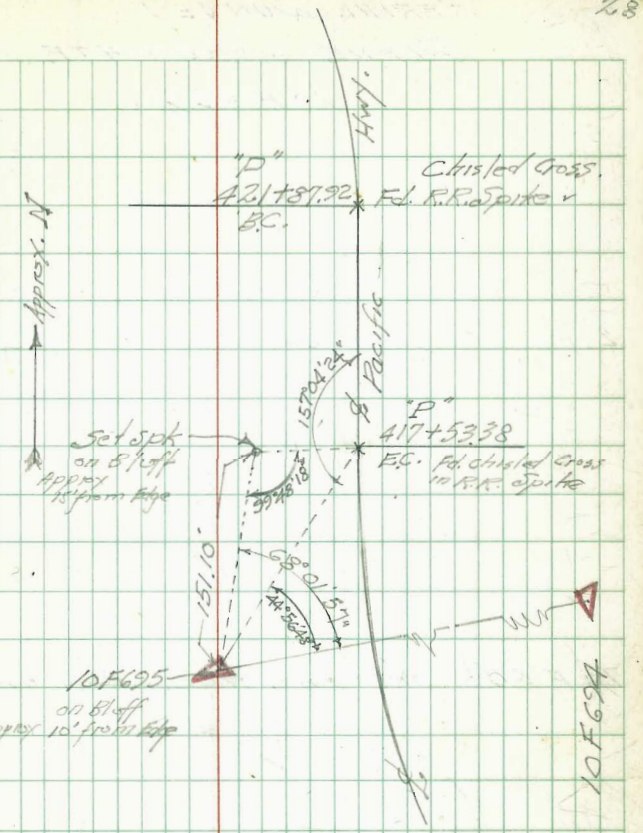
AERIAL SURVEY

PLANE COORDINATE POSITIONS

Sta. OCC = 10F695, Initial 10F692.

Sta. Obs.	Angle	Angles = Fairchilds Brunton Hunter "WILDT2"
10F694	54°14'25"	
"MESQUITE"	56°52'08.5"	
Mon. city limit Mk. Sec. 19	67°56'12"	
10F729	74°25'25"	
10F728	102°46'22.8"	
"Round"	114°22'53.5"	
"H-53"	323°21'53.5"	

10F695 Set Conc Mon. (Elev. by Fairchilds)



AERIAL SURVEY
PLANE COORDINATE POSITIONS
10F696

10F696 set Conc. Mon. Elev. by Fairchilds

AERIAL SURVEY.
PLANE COORDINATE POSITIONS
1 OF 703

1 OF 703 Tower North Toth
Set ~~Conc. Mon.~~, Elev by Fairchilds

AERIAL SURVEY
PLANE COORDINATE POSITIONS
10F 719

10F 719 Set Conc. Mon. Elev. by Fairchilds

△

AERIAL SURVEY

Walker
RDC
Jan-1953

PLANE COORDINATE POSITIONS

Sta. Occ. = 10F 728, Initial on "Tunnel"

Sta. Obs.	Angle
10F 727	45°53'35"
USC+GS "Beacon #1	53°32'28"
10F GEORGE	108°24'05.2
10F-695	158°54'37"
10F 693	163°31'02.8
10F 729	218°25'27.8
"MESQUITE" USC 695	231°21'02.5

Angles by Fairchilds
Crew = Brannon
Hunter
Inst. = "WILD T2"

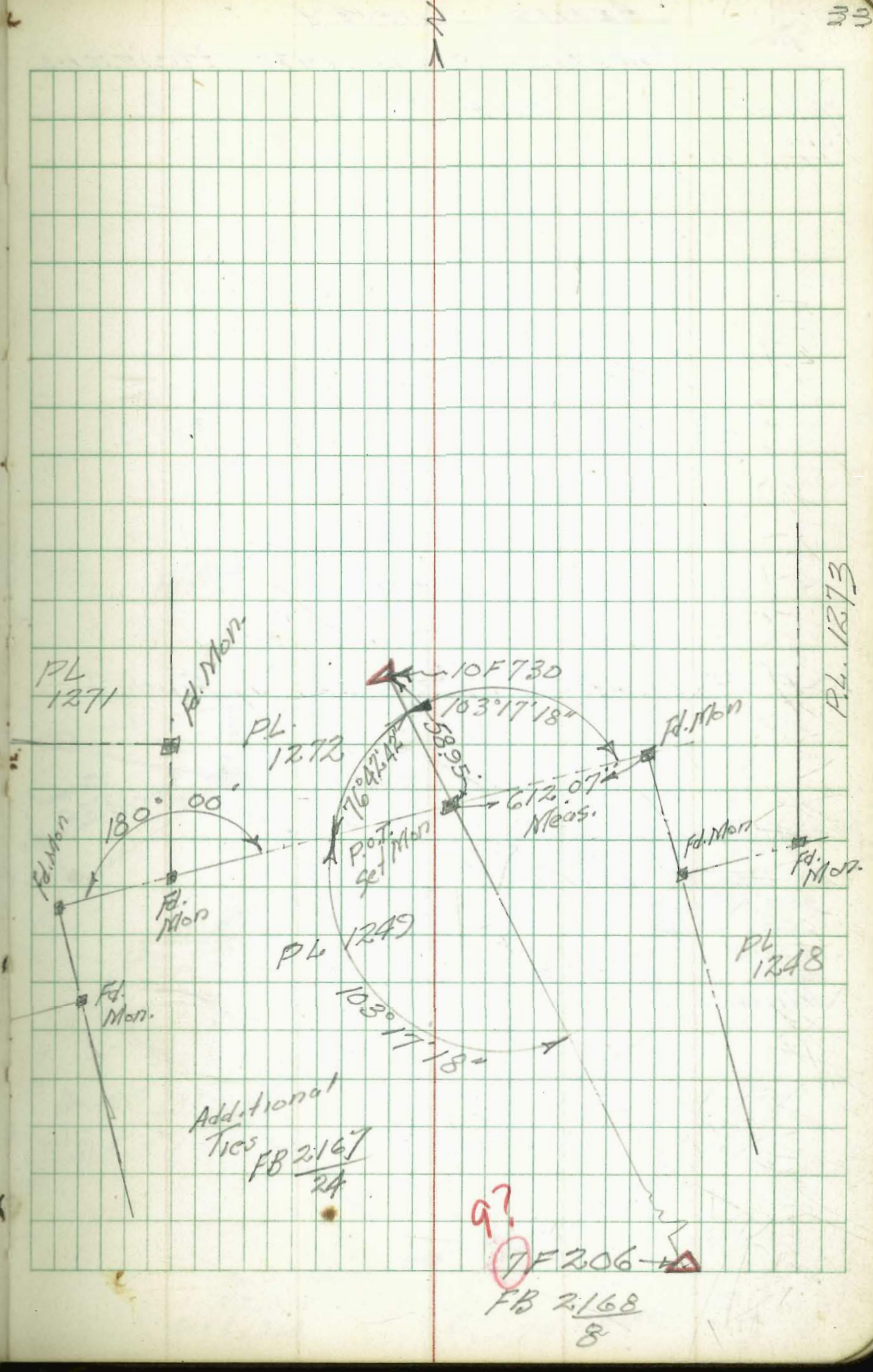
on Hill West of Twp 10N15E North of city Bldg.

10F 728 3rd Cons. Mon. Elev. by Fairchilds

AERIAL SURVEY
PLANE COORDINATE POSITIONS
10F 730

(Walker, Cotes, Presley) = Ties 1-26-53

10F 730 on North Side San Clemente Canyon.
Set Conc. Mon. (Elev. by Fairchild)



AERIAL SURVEY
PLANE COORDINATE POSITIONS

Walker
Pope
Jan. - 1953

10F 732

10F 732. Set Conc. Mon. Elev. by Fairchilds

10F 730
Page 33

Turned
18°35'04"

(Angles From 10F 730
10F 732
And Pipe RE. 1534
Were Measured
Oct 1, 1954
Walker
Pope
Ottman
Wild T2

Sec P. 54

Fd. Mon.

P-19
Meas.
636.11'

Fd Mon

89°59'39"

93°53'42"
P-19

Tics
P-19

10F 732

PL 1247

PL 1546

Turned
87°04'43"

73°41'46"
Turned

56°42'18"
Turned

10F 731
P-19

Meas. = 143.27'

Fd. 3/4" Pipe
RE 1534
Oct 1, 1954

Fd. Spike P-19

AERIAL SURVEY

PLANE COORDINATE POSITIONS

H-53

H-53 N.Y.I.Co. Pamaquitos Bridge
Fd. Bronze Disc U.S.G.S. B.M.

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"BALL"

"BALL" Fd. U.S.C.&G.S. Mon on Bluff Near Ocean

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"EASTER CROSS"

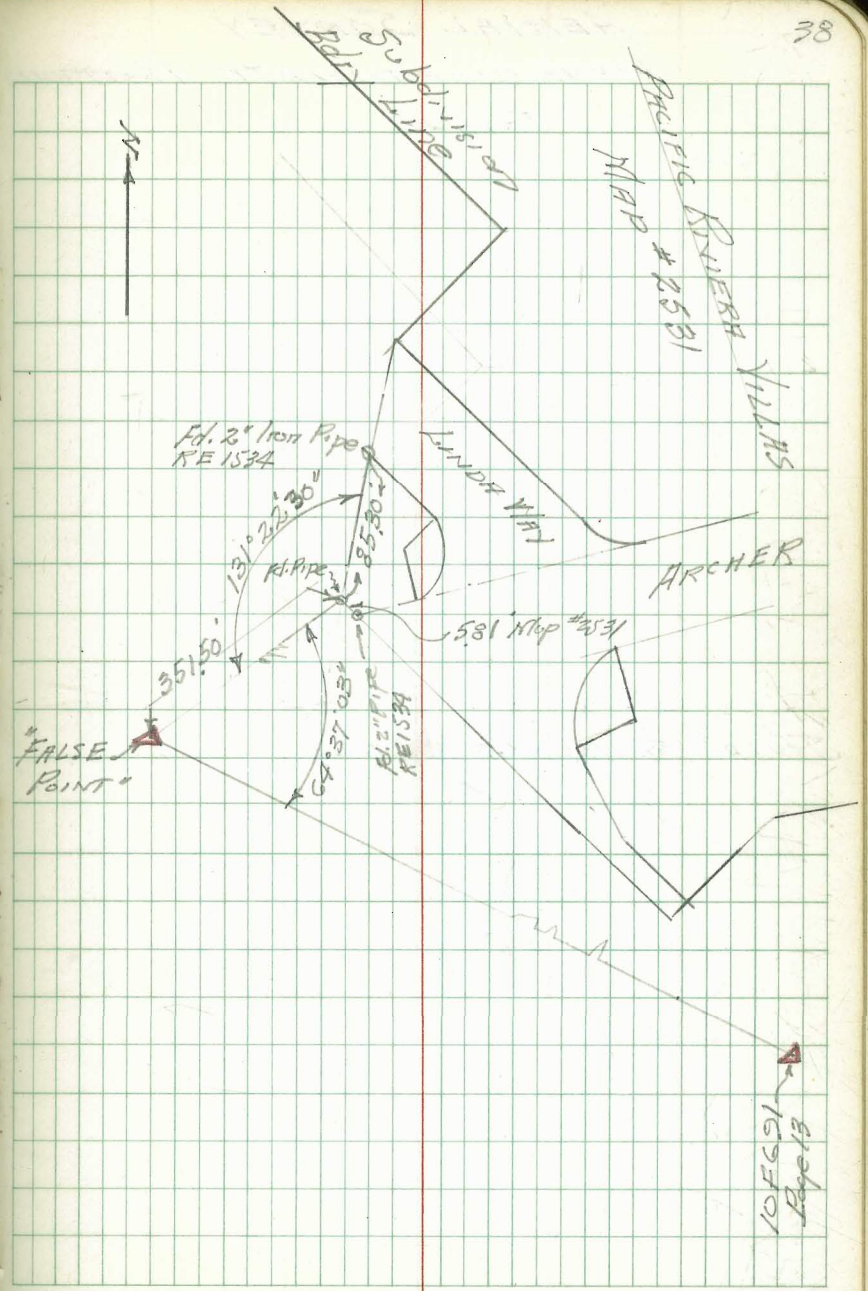
EASTER CROSS	Fd ½" Iron Pipe	See Note	FB 2168-79

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"FALSE POINT"

Walker
Pope
Brayton
3-3-53

Near Ocean Bluff. old Anti Aircraft Point So. Lupulla

"FALSE POINT" Fd. U.S.C.& G.S Mon.



AERIAL SURVEY
PLANE COORDINATE POSITIONS
"JOLLA"

"JOLLA" Ft. U.S.C.&G.S. Ref NO. 1

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"ROSE"

"ROSE" Fd. U.S.C.&G.S. Mon.

AERIAL SURVEY

PLANE COORDINATE POSITIONS

Walker Pope Jan, 1953

Sta. OCC. = 10 F "GEORGE"

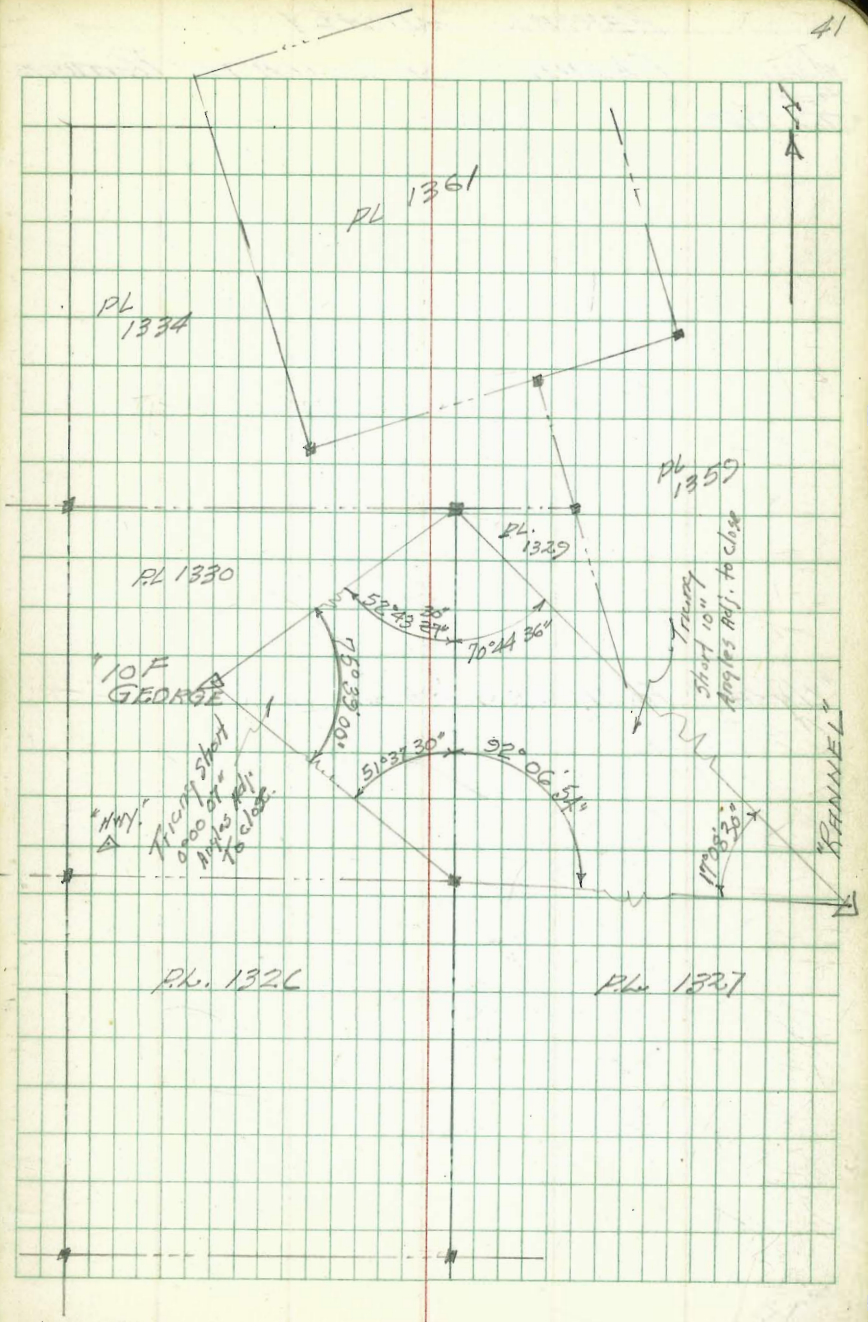
Initial on 10 F 692

Sta. Obs.	Angle
"Mesquite"	42°21'53"
10 F 729	47°18'10.5"
10 F 728	74°12'24.8"
"Kennel"	108°32'48"
P.S.D. #3	113°25'06"
10 F 727	137°42'22.5"
10 F Beacon "L" Tank	163°09'49.8"
10 F 696	185°50'57.8"

Angles: Fairchilds
Brenner
Hunter
"WILDTZ".

"10 F GEORGE" Set Conc. Mon (Elev. by Fairchilds)

= Fd. Conc. Mon.



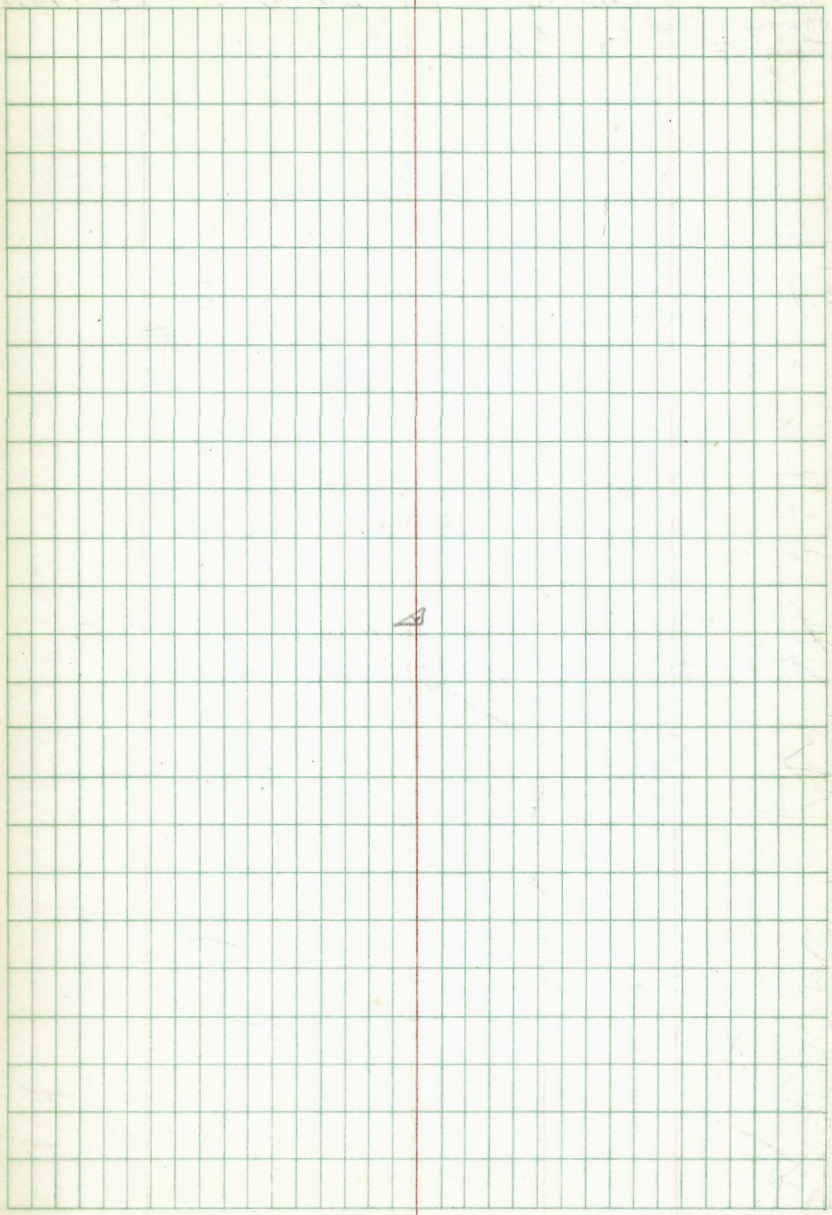
AERIAL SURVEY

PLANE COORDINATE POSITIONS

"WASH"

Walker
Pope.
Jan. 1953

"WASH" Fd. U.S.C.&G.S. Mon.



AERIAL SURVEY

Walker Pope. Jan. 1953

PLANE COORDINATE POSITIONS

"MESQUITE"

In High Brush North of Dairy

"MESQUITE" Ft. Mad U.S.C.&G.S.

Walker
Pop. Jan. 1953

AERIAL SURVEY
PLANE COORDINATE POSITIONS

Sta occ = "ROUND TOP" #2
Initial Round

Sta. Obs.	Angle
"SOLEDAD"	130°24'13.5"
"BALL"	232°01'10"
S.W. Range	253°25'29"
NW "	275°25'43"
SE "	295°00'02.5

"ROUND TOP #2 Fd USC&G.S. Mon.

AERIAL SURVEY

Walker Pope Jan. 1953

PLANE COORDINATE POSITIONS

"HWY"

"HWY" Fd. USC & GS Mon.

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"BAY POINT"

Walker
Pope
Jan-1953

"BAY PT." Fd. USC+GS Mon

AERIAL SURVEY
PLANE COORDINATE POSITIONS

"TORRREY ~~PILES~~" Fd. U.S.C. & G.S. Mon.

1 692 077.39 X

276 118.08 Y

AERIAL SURVEY
PLANE COORDINATE POSITIONS

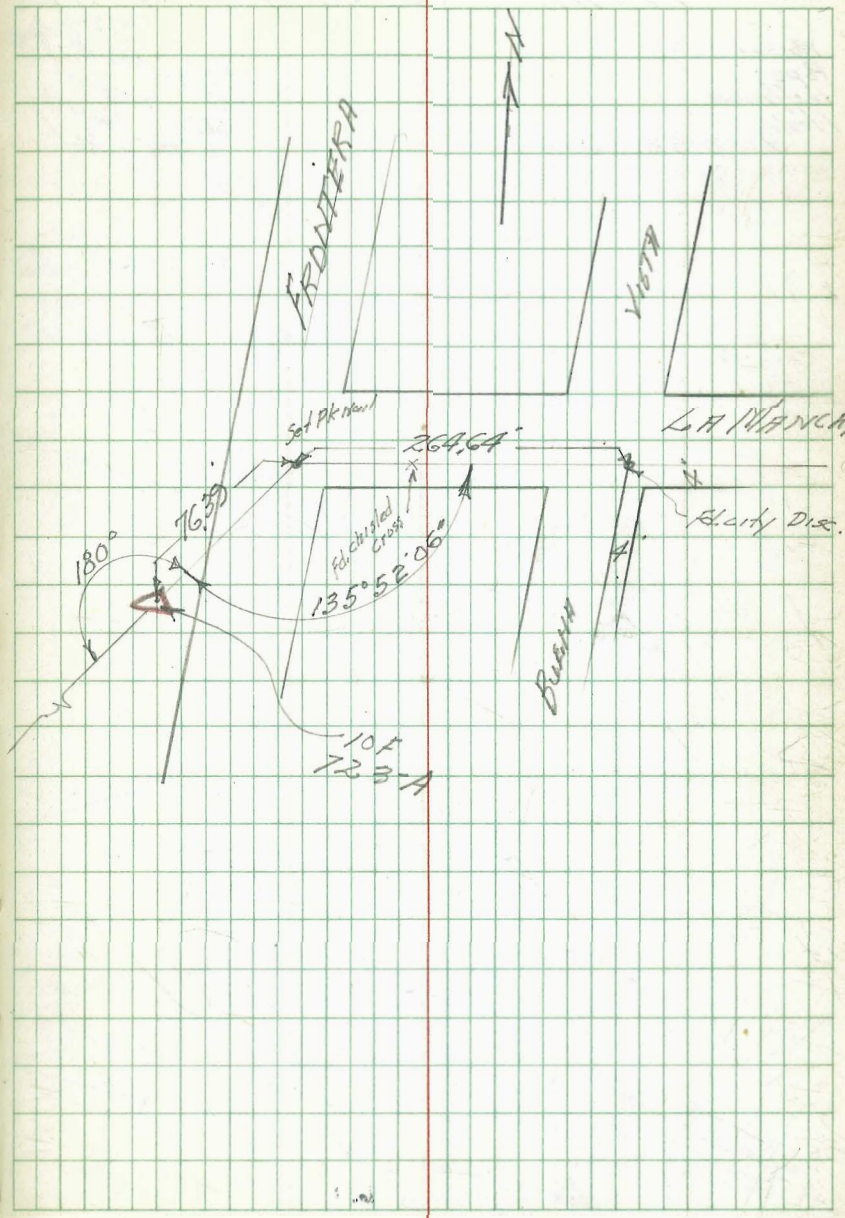
Walker
Pope
Coast Mkd Tr
1-28-53

10 F 723-A

10 F 723-A Set Conc. Mon.
Elev. by Fairchilds

△ "COASTER"

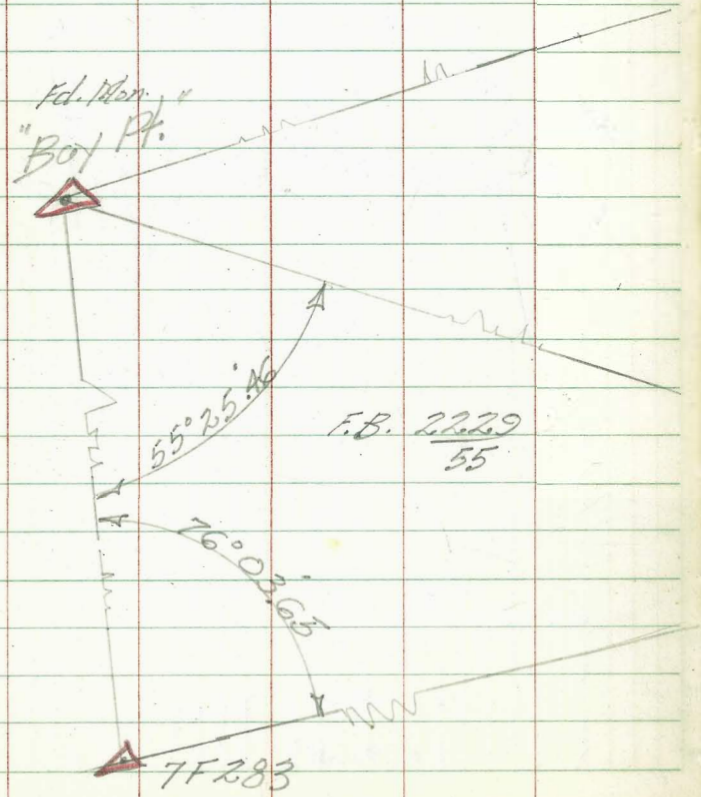
1693 339.88 = X
221 536.14 = Y

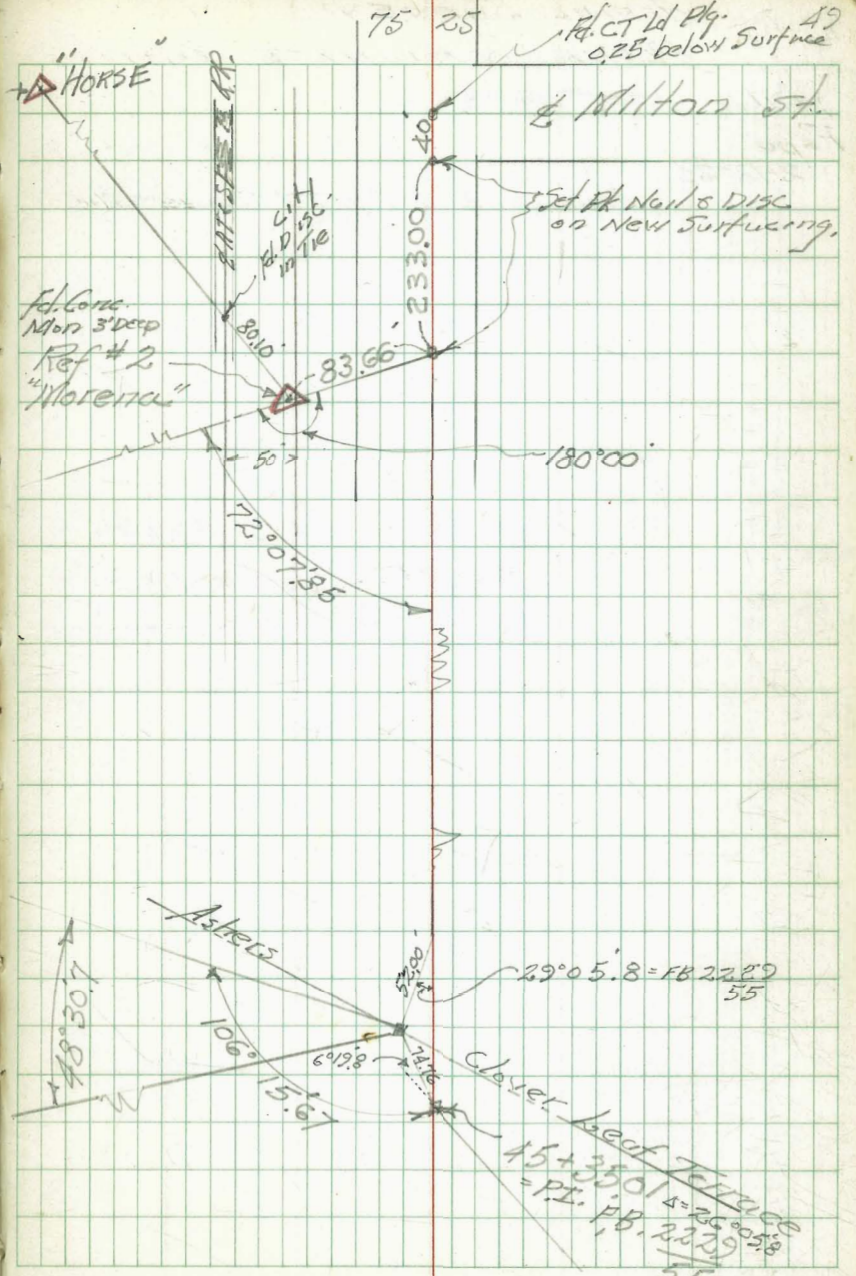


AERIAL SURVEY
PLANE COORDINATE POSITIONS

Walker
Pope
Huffman
Presley 2-2-53

(This Point = C.I. Mission Bol Project Data)





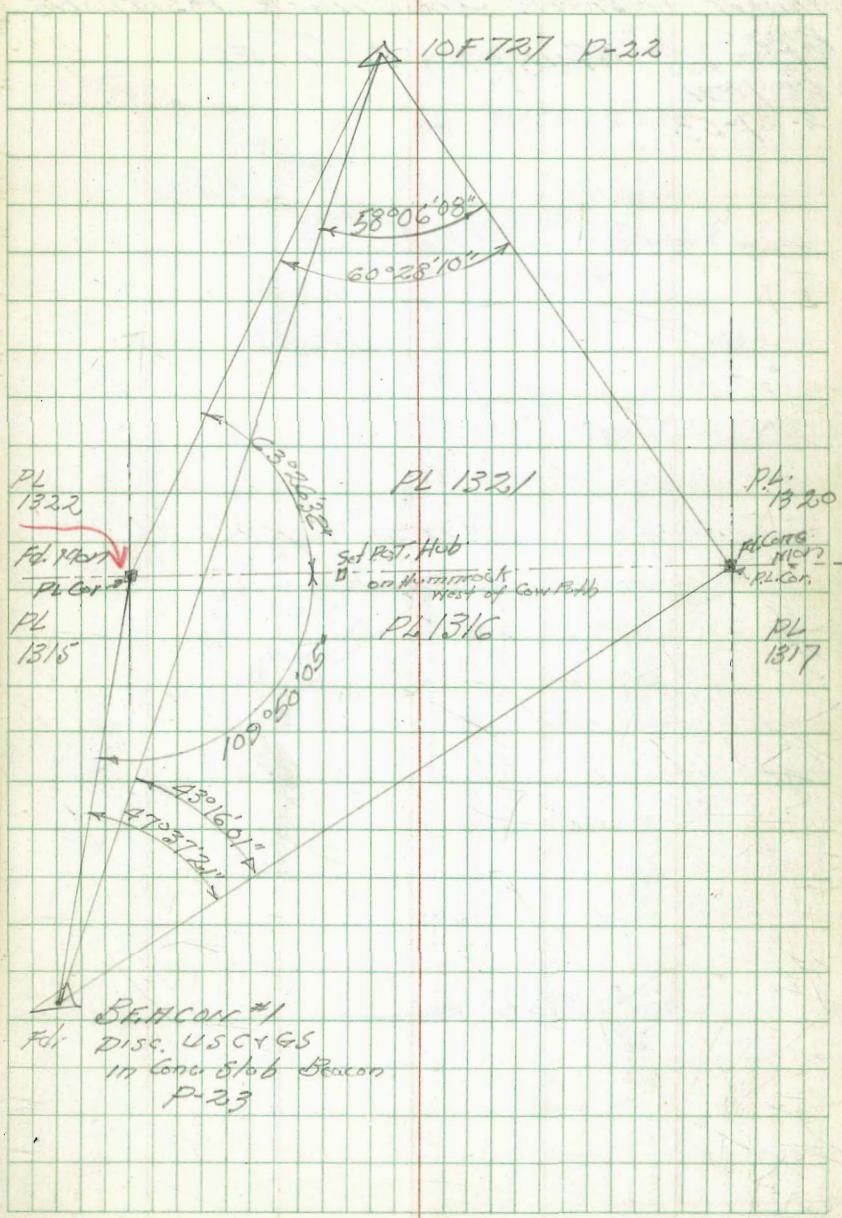
AERIAL SURVEY
PLANE COORDINATE POSITIONS

Walker
Pope
2-18-53

~TIES~

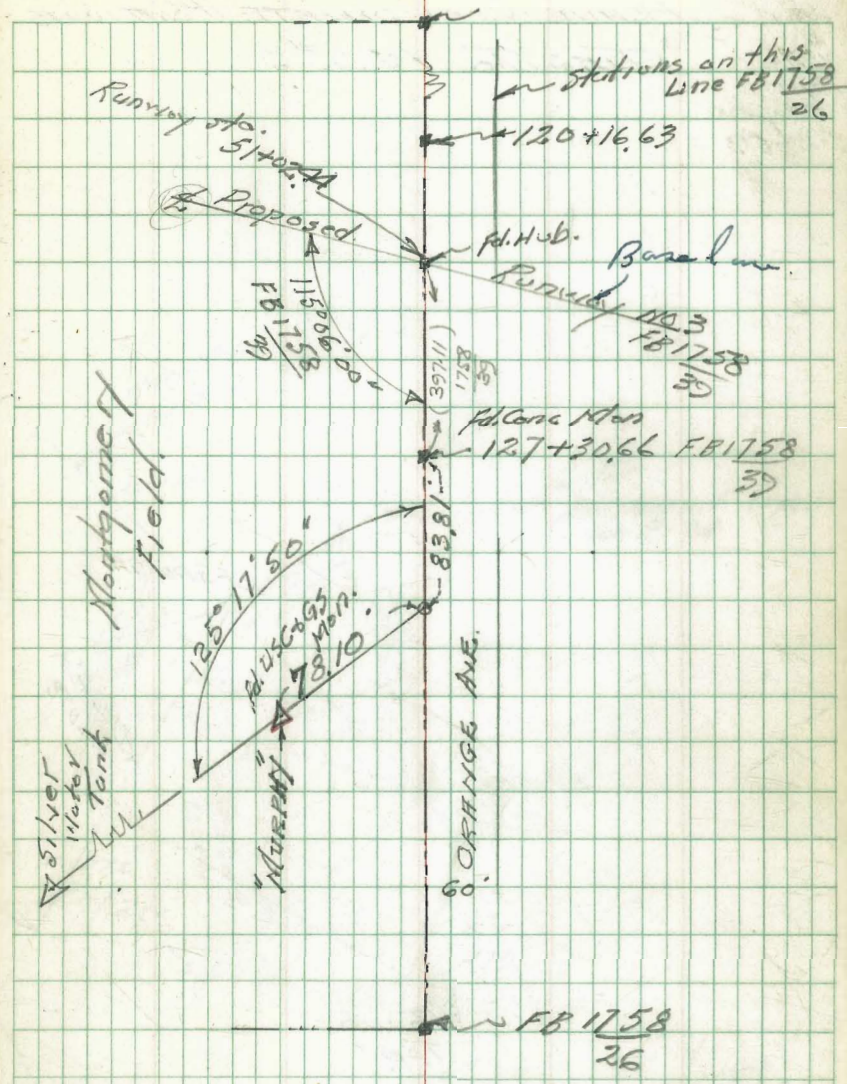
Angles with WILD T1 ~~Transit~~ Theodolite

SEE TIES FROM
ARL#6 SCRIPPS HOSPITAL
PROPPOSED SITE



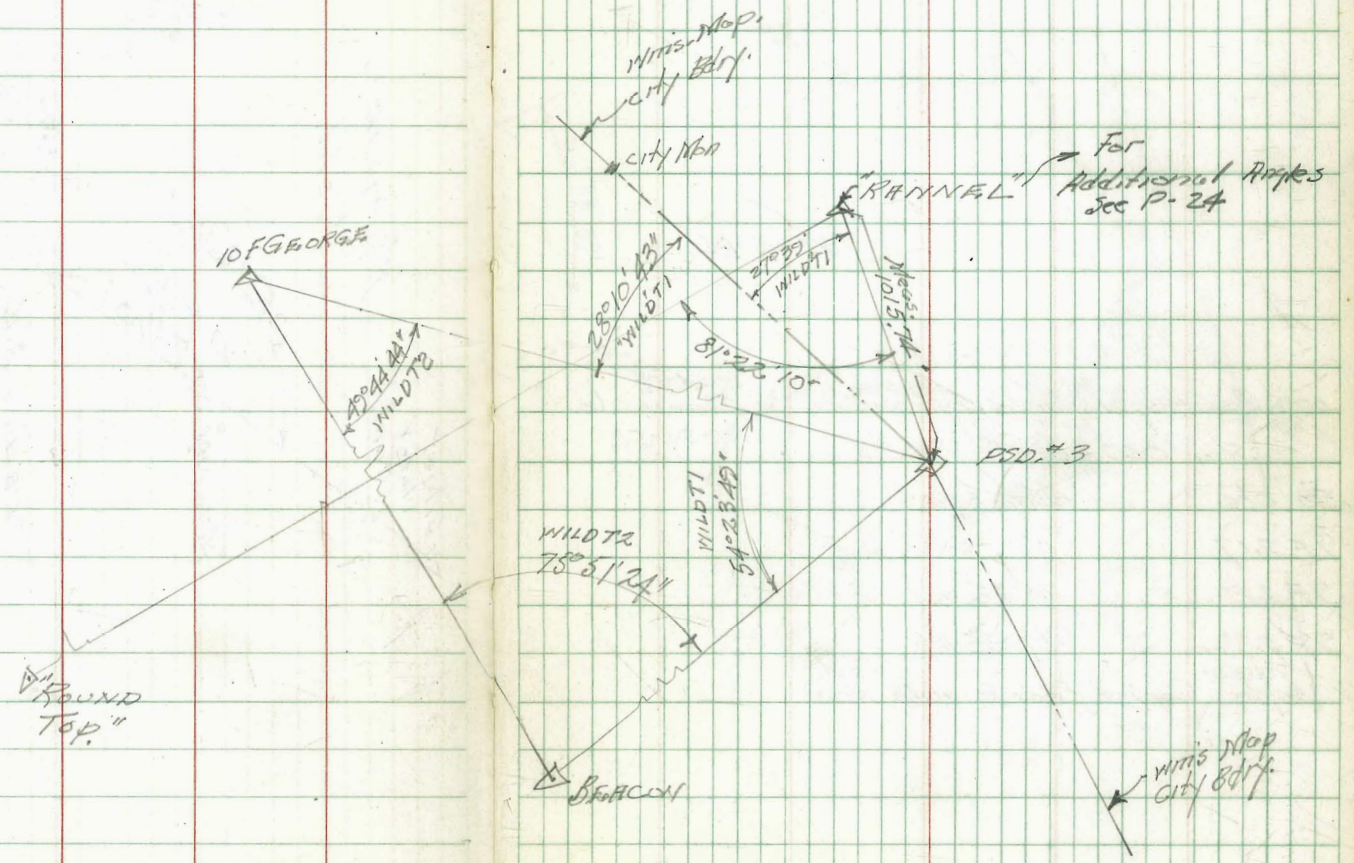
Walker
Pope
Brayton
2-27-53

AERIAL SURVEY
PLANE COORDINATE POSITIONS
"MURPHY" TIES



AERIAL SURVEY
PLANE COORDINATE POSITIONS
TIED TO PSD. #3

Walker
Pope
Brayton
3-2-53

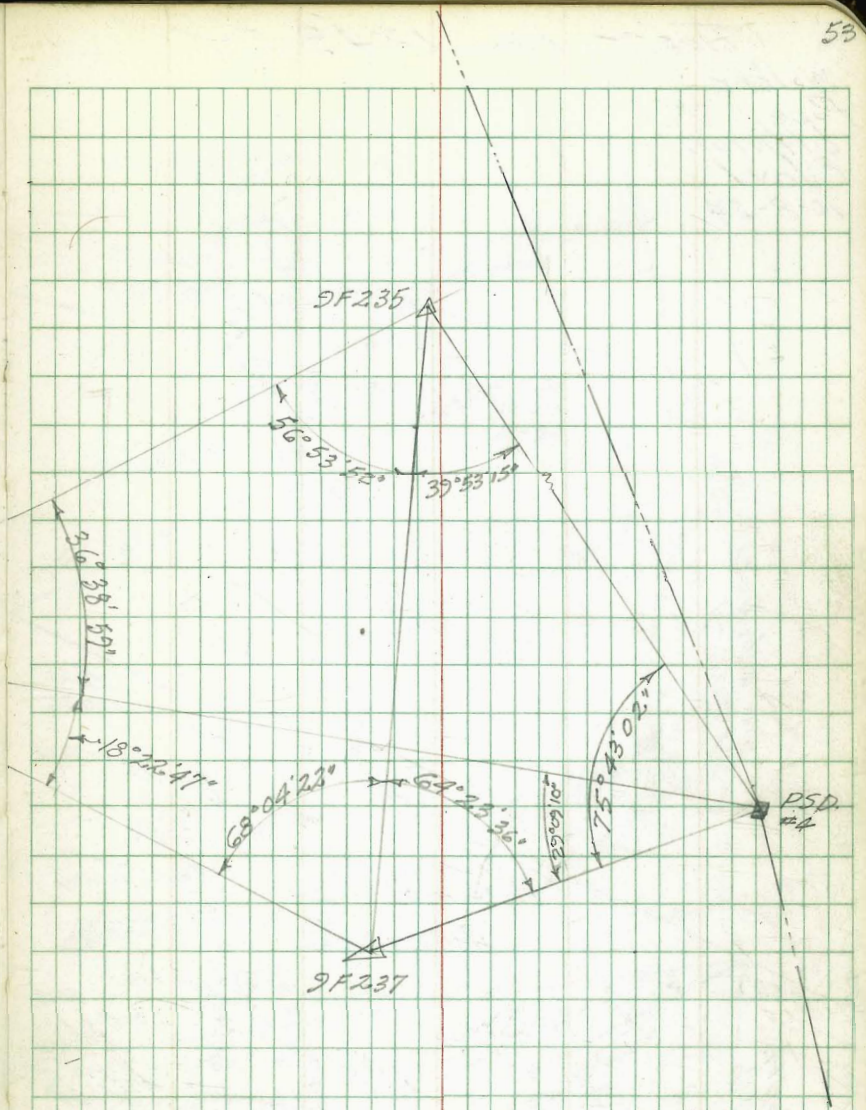


AERIAL SURVEY
PLANE COORDINATE POSITIONS

Walker
Pope
Brayton
3-10-53

TIES P.S.D. #4

Each Angle Turned 4 Forward 4 Reverse
With Wild T1.
No Attempt to Adjust Angles to close.



Additional Angles by Fairchilds Co. Wild T2 Jones-Obs. 1-30-52

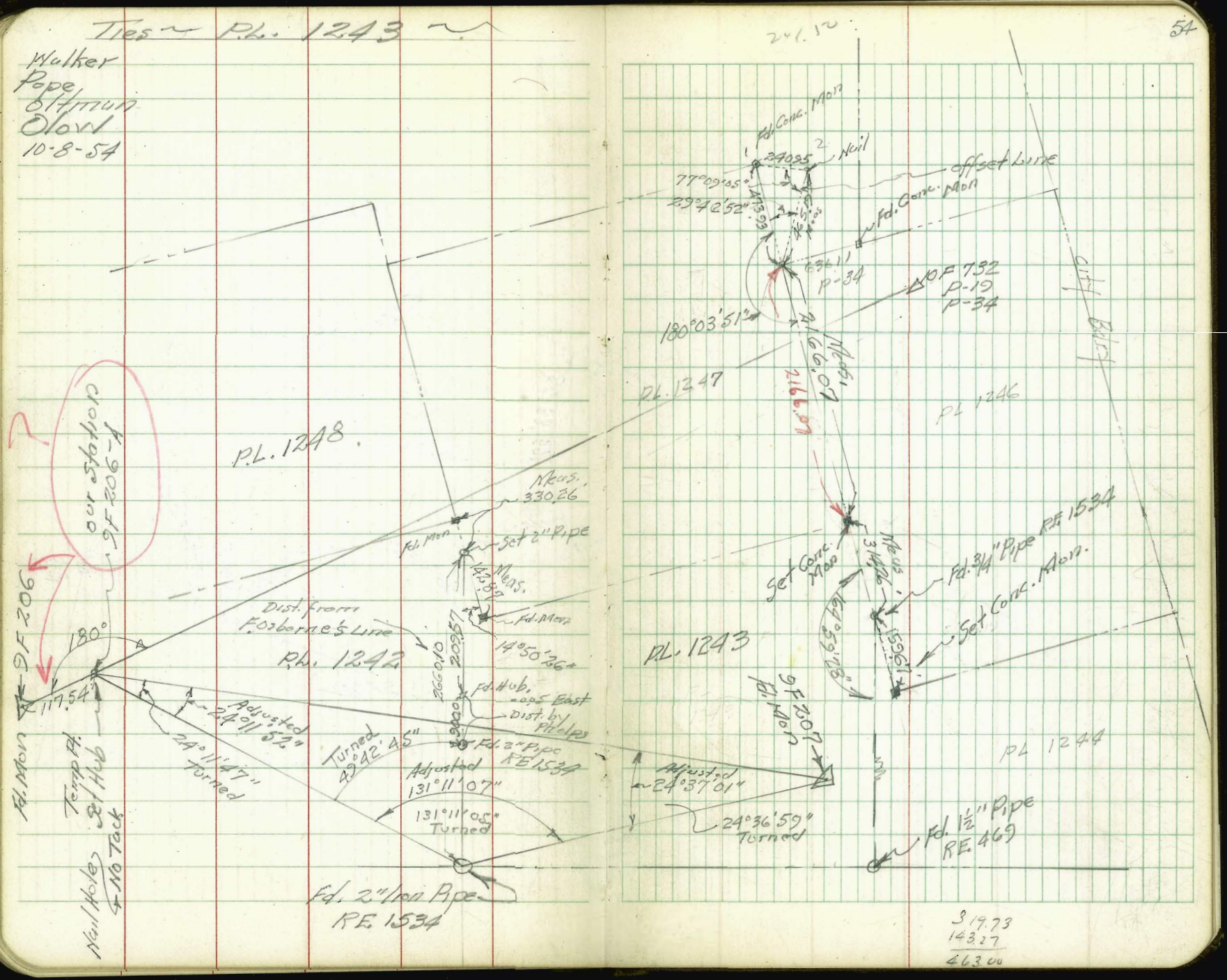
Sta. occupied = P.S.D. #4

Sta obs.	Mean Angle
9F 217	0°00'00"
9F 219	20°32'18.6
9F 239	87°55'11.5

Above Angles Copied from Fairchilds Field Notes.

Ties ~ P.L. 1243 ~

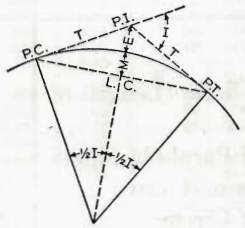
Walker
Pape
Ottmon
Olson
10-8-54



3 19.73
143.27
463.00

CURVE AND REDUCTION TABLES

Published by Eugene Dietzgen Co.



CURVE FORMULAS

1. Radius : $R=\frac{50}{\sin D/2}$
2. Degree of Curve: $D=100\frac{I}{L}$. Also, $\sin D/2=\frac{50}{R}$
3. Tangent : $T=R\tan \frac{1}{2} I$. Also, $T=\frac{\text{T for 1° curve}}{D}+C.$
4. Length of Curve: $L=100\frac{I}{D}$
5. Long Chord : $L.C.=2R\sin \frac{1}{2} I.$
6. Middle Ordinate: $M=R\,(1-\cos \frac{1}{2} I)$
7. External : $E=\frac{R}{\cos \frac{1}{2} I}-R.$ Also, $E=T\tan \frac{1}{4} I.$

EXPLANATION AND USE OF TABLES

Given P.I. Sta. 83+40.7, I = 45° 20′ and D = 6°30′ find:

Stations—P. C. = P. I. − T. $T=\frac{\text{T for 1° Curve}}{D}+$ C. From Tables V and VI $T=\frac{2398.8}{6.5}+.197=368.32=3+68.32.$ Sta. P. C. = 83+40.7 − (3+68.32) = 79+72.38. P. T. = P. C. + L, and $L=100\frac{I}{D}=100\frac{45.33}{6.5}=697.38$ Therefore, P. T. = (79+72.38) + (6+97.38) = 86+69.76.

Offsets—Tangent offsets vary (approximately) directly with D and with the square of the distance. From Table III Tangent Offset for 100 feet = 5.669 feet. Distance = 80 − Sta. P. C. = 27.62. Hence offset $=5.66\times\left(\frac{27.62}{100}\right)^2=.432$ ft. Also, square of any distance, divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(27.62)^2\div(2\times881.95)=.432$ ft.

Deflections—Deflection angle = ½ D for 100 ft., ¼ D for 50 ft., etc. For "X" ft., Deflection Angle (in minutes) = .3 × X × D. For Sta. 80 of above curve Deflection Angle = .3 × 27.62 × 6.5 = 53.86′. Also Deflection Angle = dfl. for 1 ft. from Table III × X = 1.95 × 27.62 = 53.86′. For Sta. 181 Deflection Angle $=53.86'+\frac{6°\,30'}{2}=4°\,8.86'.$

Externals—From Table V for 1° curve, with central angle of 45° 20′, E = 479.6. Therefore, for 6° 30′ curve, $E=\frac{479.6}{6.5}+$ Correction from Table VI = 7.378 + .039 = 7.417.

Table X.—Calculation of Earthwork.

Width	HEIGHT														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	.02	.04	.06	.07	.09	.11	.13	.15	.17	.18	.20	.22	.24	.26	.28
2	.04	.07	.11	.15	.18	.22	.26	.30	.33	.37	.41	.44	.48	.52	.56
3	.06	.11	.17	.22	.28	.33	.39	.44	.50	.56	.61	.67	.72	.78	.83
4	.07	.15	.22	.30	.37	.44	.52	.59	.67	.74	.81	.89	.96	1.04	1.11
5	.09	.19	.28	.37	.46	.56	.65	.74	.83	.93	1.02	1.11	1.20	1.30	1.39
6	.11	.22	.33	.44	.56	.67	.78	.89	1.00	1.11	1.22	1.33	1.44	1.55	1.67
7	.13	.26	.39	.52	.65	.78	.91	1.04	1.16	1.30	1.42	1.55	1.68	1.81	1.94
8	.15	.30	.44	.59	.74	.89	1.04	1.19	1.33	1.48	1.63	1.78	1.92	2.08	2.22
9	.17	.33	.50	.67	.83	1.00	1.17	1.33	1.50	1.67	1.83	2.00	2.17	2.33	2.50
10	.18	.37	.56	.74	.93	1.11	1.30	1.48	1.67	1.85	2.04	2.22	2.41	2.59	2.78
11	.20	.41	.61	.82	1.02	1.22	1.43	1.63	1.83	2.04	2.24	2.44	2.65	2.85	3.06
12	.22	.44	.67	.89	1.11	1.33	1.56	1.78	2.00	2.22	2.44	2.67	2.89	3.11	3.33
13	.24	.48	.72	.96	1.20	1.44	1.68	1.92	2.16	2.41	2.65	2.89	3.13	3.37	3.61
14	.26	.52	.78	1.04	1.30	1.55	1.81	2.08	2.33	2.59	2.85	3.11	3.37	3.63	3.89
15	.28	.56	.83	1.11	1.39	1.67	1.94	2.22	2.50	2.78	3.06	3.33	3.61	3.89	4.17
16	.30	.59	.89	1.18	1.48	1.78	2.07	2.37	2.67	2.96	3.26	3.56	3.85	4.15	4.44
17	.31	.63	.94	1.26	1.57	1.89	2.20	2.52	2.83	3.15	3.46	3.78	4.09	4.41	4.72
18	.33	.67	1.00	1.33	1.67	2.00	2.33	2.67	3.00	3.33	3.67	4.00	4.33	4.67	5.00
19	.35	.70	1.06	1.41	1.76	2.11	2.46	2.82	3.17	3.52	3.87	4.22	4.57	4.92	5.28
20	.37	.74	1.11	1.48	1.85	2.22	2.59	2.96	3.33	3.70	4.07	4.44	4.81	5.18	5.56
21	.39	.78	1.17	1.55	1.94	2.33	2.72	3.11	3.50	3.89	4.28	4.67	5.06	5.44	5.83
22	.41	.81	1.22	1.63	2.04	2.44	2.85	3.26	3.67	4.07	4.48	4.89	5.30	5.70	6.11
23	.43	.85	1.28	1.70	2.13	2.56	2.98	3.41	3.83	4.26	4.68	5.11	5.54	5.96	6.39
24	.44	.89	1.33	1.78	2.22	2.67	3.11	3.56	4.00	4.44	4.89	5.33	5.78	6.22	6.67
25	.46	.92	1.39	1.85	2.31	2.78	3.24	3.70	4.17	4.63	5.09	5.56	6.02	6.48	6.94
26	.48	.96	1.44	1.92	2.41	2.89	3.37	3.85	4.33	4.82	5.30	5.78	6.26	6.74	7.24
27	.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
28	.52	1.04	1.55	2.07	2.59	3.11	3.63	4.15	4.67	5.18	5.70	6.22	6.74	7.26	7.78
29	.54	1.07	1.61	2.15	2.68	3.22	3.76	4.30	4.83	5.37	5.91	6.44	6.98	7.52	8.06
30	.56	1.11	1.67	2.22	2.78	3.33	3.89	4.44	5.00	5.55	6.11	6.67	7.22	7.78	8.33
31	.57	1.15	1.72	2.30	2.87	3.44	4.02	4.59	5.17	5.74	6.32	6.89	7.46	8.04	8.61
32	.59	1.18	1.78	2.37	2.96	3.56	4.15	4.74	5.33	5.92	6.52	7.11	7.70	8.30	8.89
33	.61	1.22	1.83	2.44	3.05	3.67	4.28	4.89	5.50	6.11	6.72	7.33	7.94	8.55	9.17
34	.63	1.26	1.89	2.52	3.15	3.78	4.40	5.04	5.67	6.29	6.93	7.56	8.18	8.81	9.44
35	.65	1.30	1.94	2.59	3.24	3.89	4.53	5.18	5.83	6.48	7.13	7.78	8.42	9.08	9.72
36	.67	1.33	2.00	2.67	3.33	4.00	4.66	5.33	6.00	6.67	7.33	8.00	8.67	9.33	10.00
37	.68	1.37	2.06	2.74	3.42	4.11	4.79	5.48	6.17	6.85	7.54	8.22	8.91	9.59	10.28
38	.70	1.41	2.11	2.82	3.52	4.22	4.92	5.63	6.33	7.03	7.74	8.44	9.15	9.85	10.56
39	.72	1.44	2.17	2.89	3.61	4.33	5.05	5.78	6.50	7.22	7.95	8.67	9.39	10.11	10.83
40	.74	1.48	2.22	2.96	3.70	4.44	5.18	5.92	6.67	7.41	8.15	8.89	9.63	10.37	11.11

Table X gives the number of cubic yards in a TRIANGLE 1 foot deep for a given width and height. CAUTION: Values obtained from the above tables are for only the one TRIANGLE of the cross-section under consideration.

Corrections for tenths of feet in width and height may be made by considering the numbers on the table from 1 to 9 as tenths and taking one tenth the values found in the tables. For example, to find the number of cubic yards when Width = W = 16.2 and Height = H = 5.3, opposite 16 in "Width" column and under 5 in the "Height" column read 1.18. To correct for additional 0.2 foot of width, opposite 2 in the "Width" column and under 5 in the "Height" column read 0.18 and correct to .018. To correct for additional 0.3 foot in height, under 3 in "Height" column and opposite 16 in "Width" column read 0.89 and correct to .089. Therefore, the total cubic yards in the given TRIANGLE for a depth of 1 foot = 1.48 + .018 + .089 = 1.587 or approximately 159 cu. yds. per 100 feet.

If width exceeds 40 feet, use one half real width and multiply result by 2. If both width and height are larger than values given on table use one half of each value and multiply result by 4.

305 10 45
111 10 10

194.00 35