

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

789

352 + 50
Start Summit

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JAN 14 1965

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Please Return to
City of San Diego Water Dept.
Room 268 Civic Center
Telephone Main 5161

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14
30°	.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39
35°	.11	.22	.34	.47	.58	.69	.79	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46
85°	.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89
90°	.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	.51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60
120°	.62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.266	.353	.440	.528	.618	.707	.797	.887	.977	1.07	1.18	1.29
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

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LOCATION OF CATHODIC STATION H 58. ✓
also

BEATTY
ROGERS
FINNEY

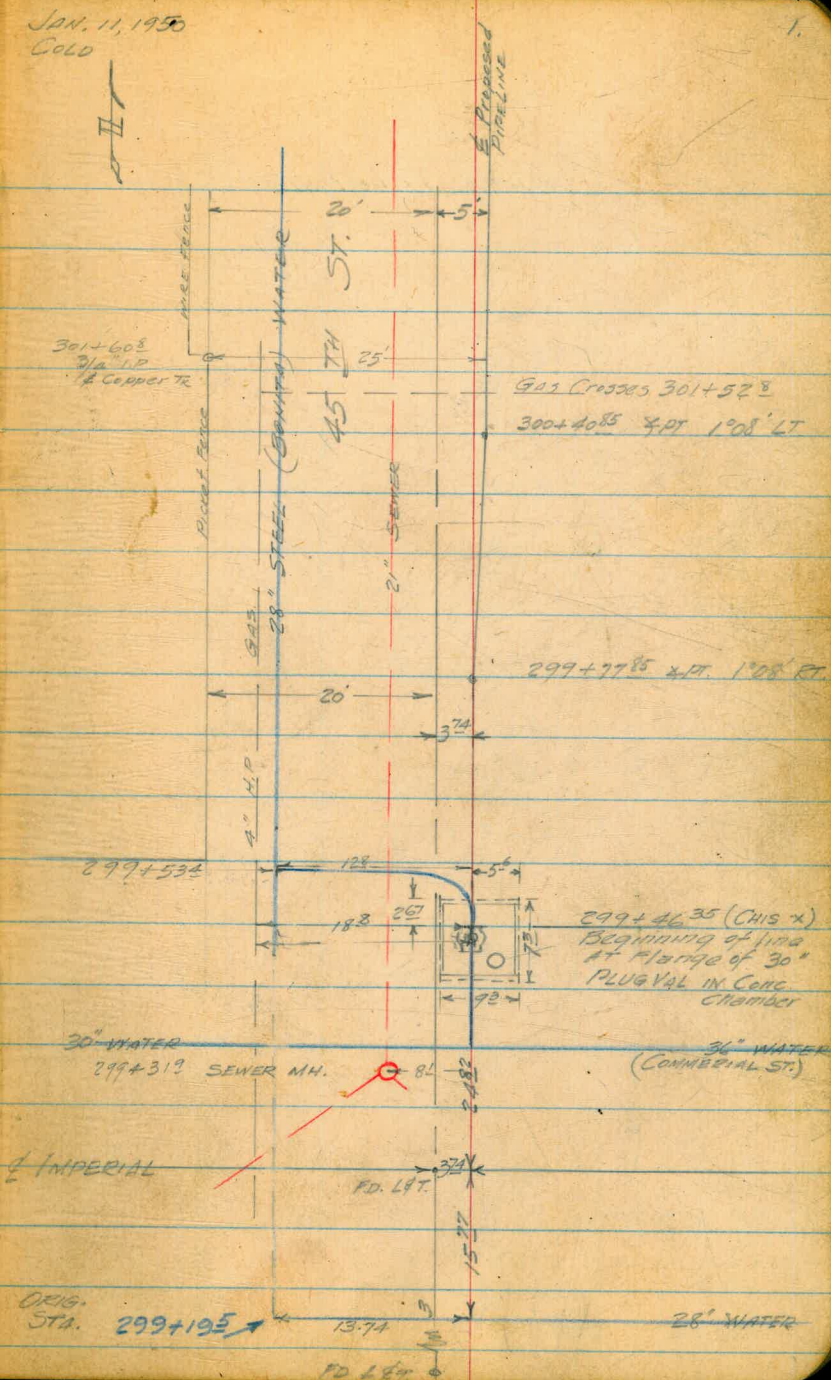
JAN. 11, 1950
GOLD

PRELIMINARY ALIGNMENT
PROPOSED REPLACEMENT BONITA
PIPE LINE

P.I. 300+40.85 1°08' LT

P.I. 299+77.85 1°08' RT

BEGINNING 299+46.35 (CHIS X - Top of Chamber)
OF LINE AT
FLANGE OF 30"
PLUG VALVE.



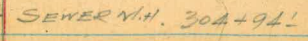
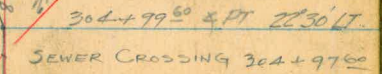
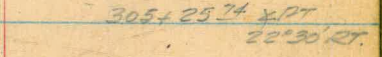
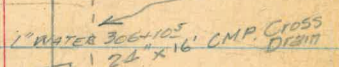
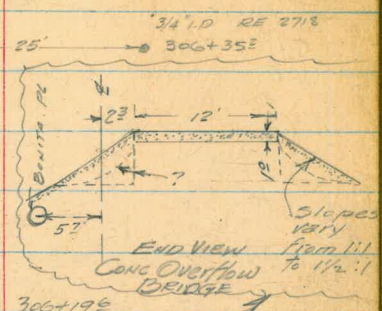
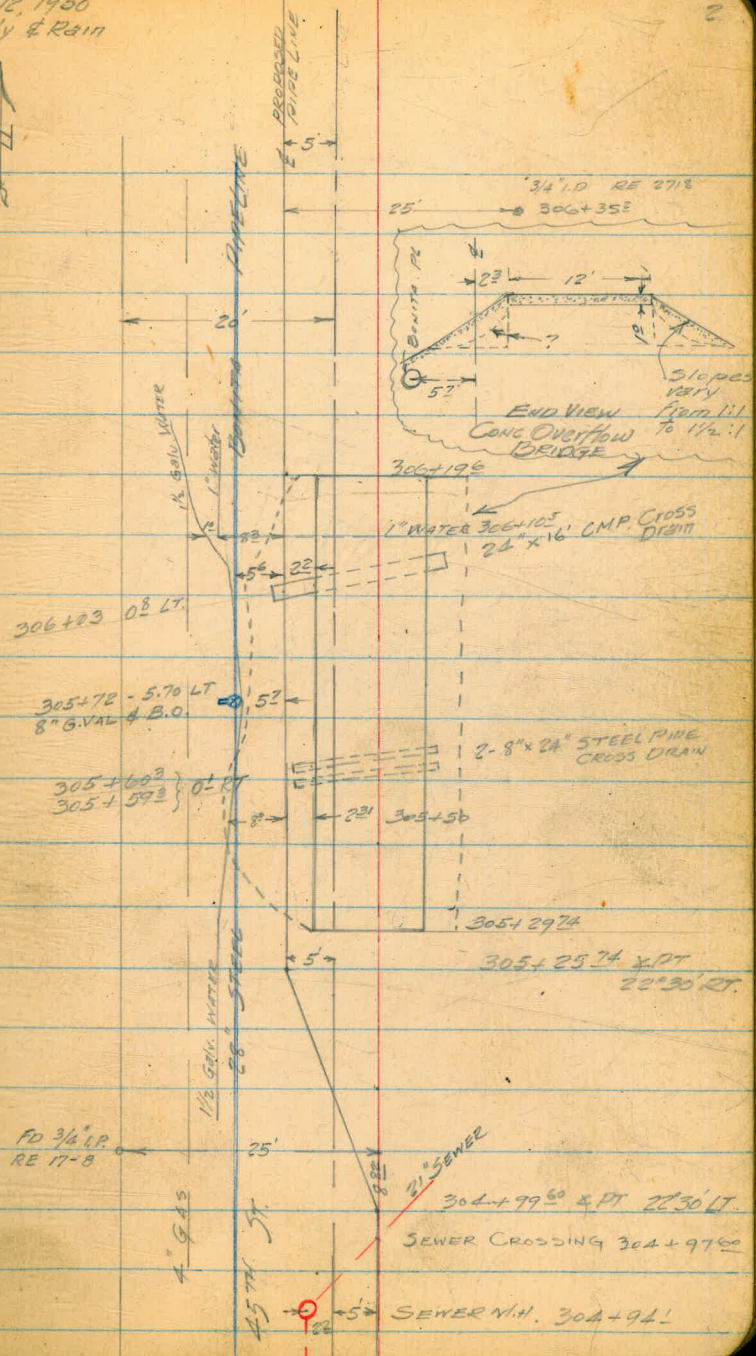
BONITA PIPELINE

Jan. 12, 1950
Cloudy & Rain



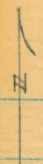
P.I. 305+25.74 22°30' RT.

P.I. 304+99.60 22°30' LT.



1/12/50

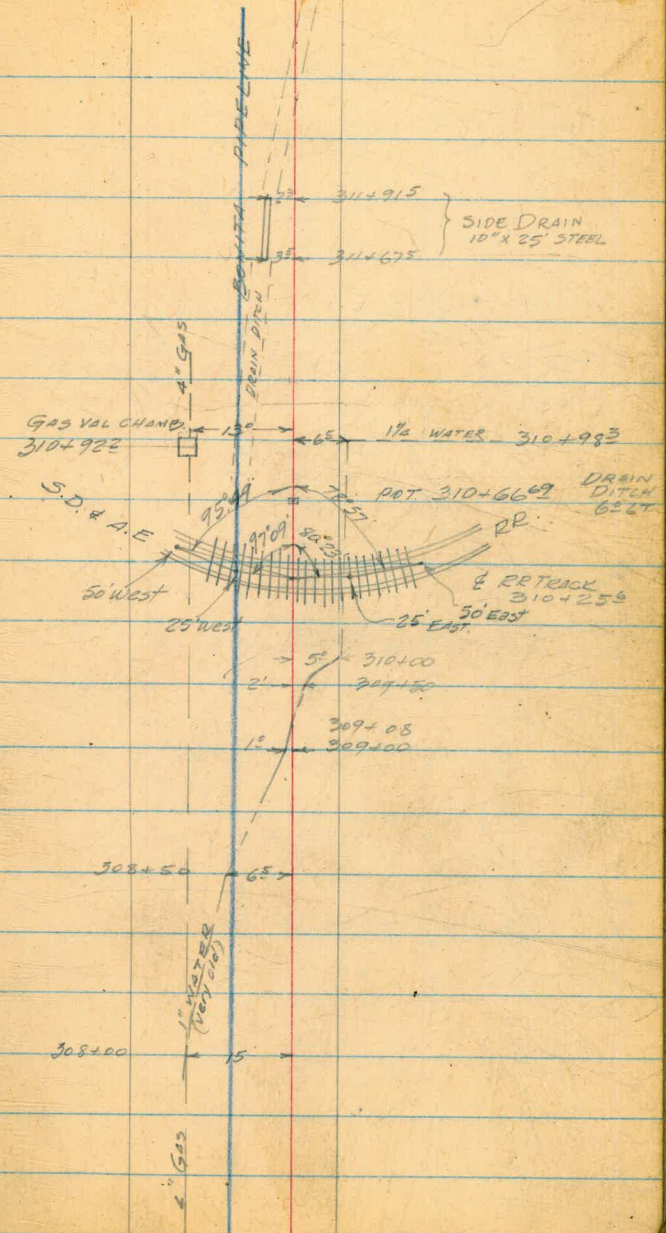
BONITA PIPELINE



POT. 310+66.69

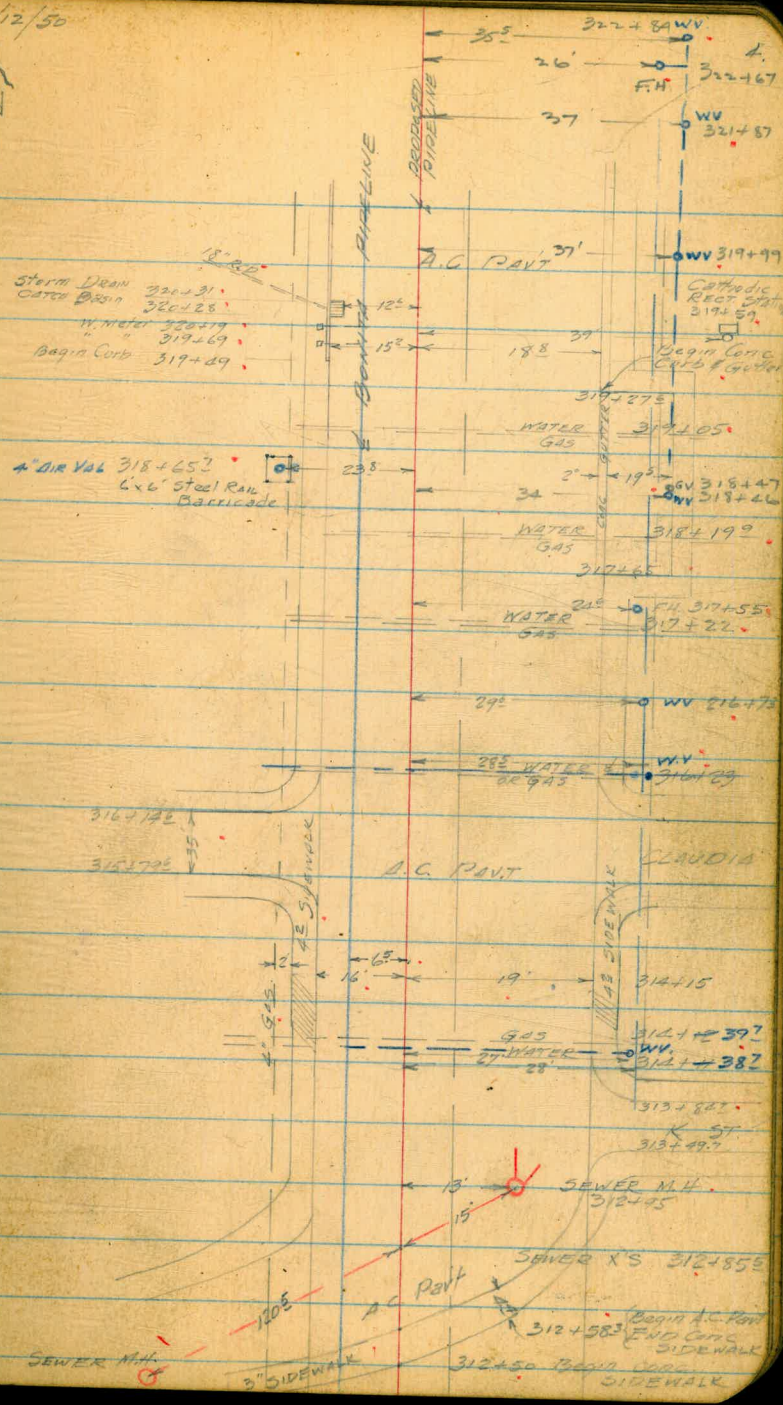
POT. 310+25.6

RR TRACK



BONITA PIPELINE

1/12/50



SEWER M.H.

3\"/>

312+50 BEGIN CORP.

312+583 END CORP.

SIDEWALK

SIDEWALK

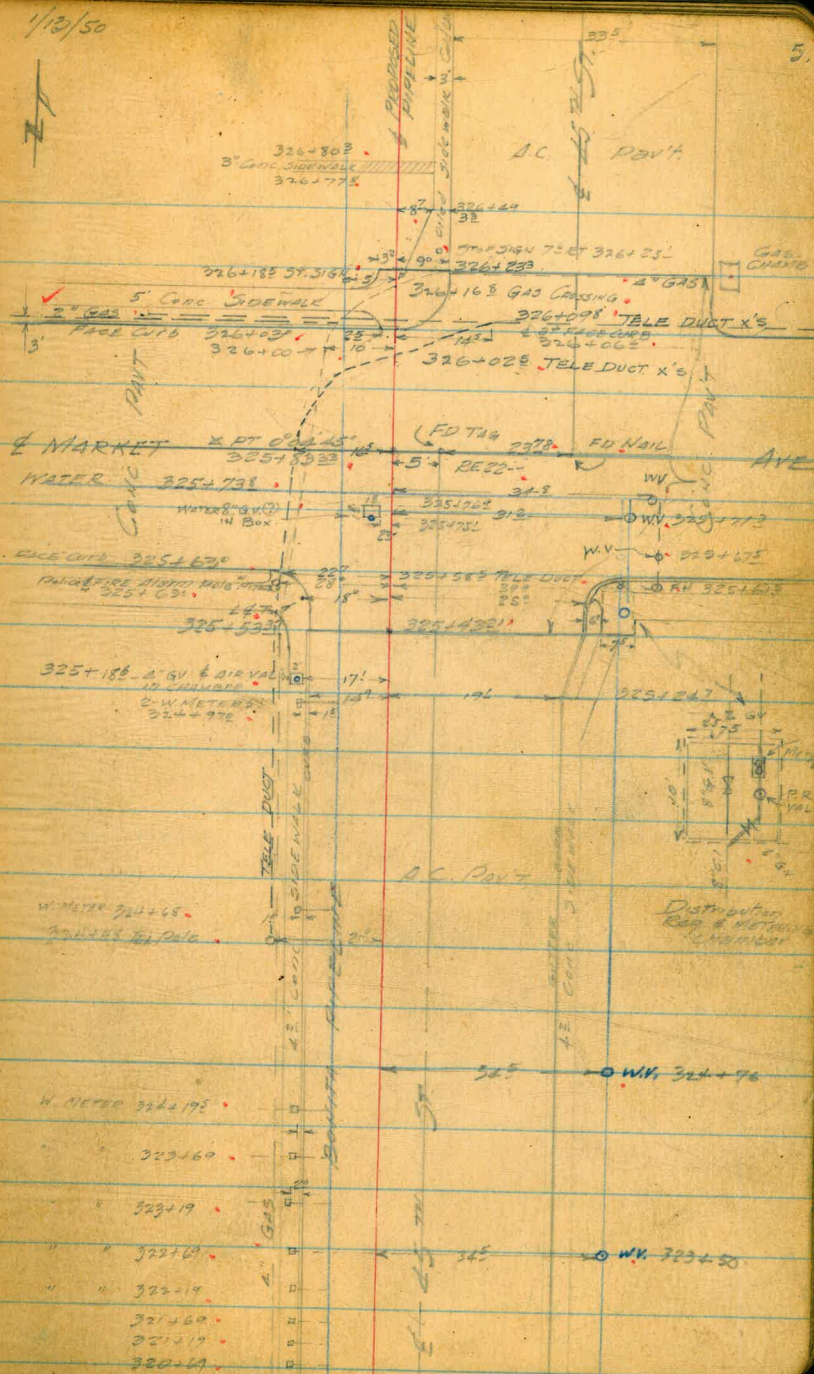
BEATTY
ROGERS
FINNEY

1/13/50

ZT

BONITA PIPELINE

RL 325+83³³ 0°04'45" RT & MARKET ST



BONITA PIPELINE

1/13/50

6.

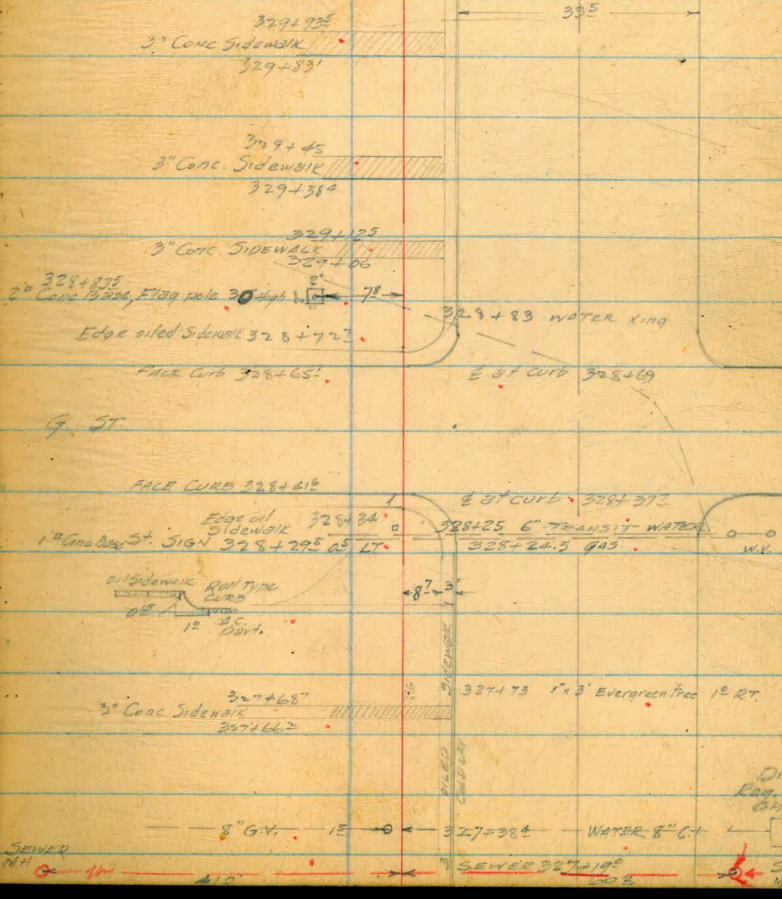
↑

BONITA PIPELINE

PROPOSED PIPELINE

E 45TH ST.

A.C. PAVT



G. ST.

DIST. REG. & MET. CHANG.

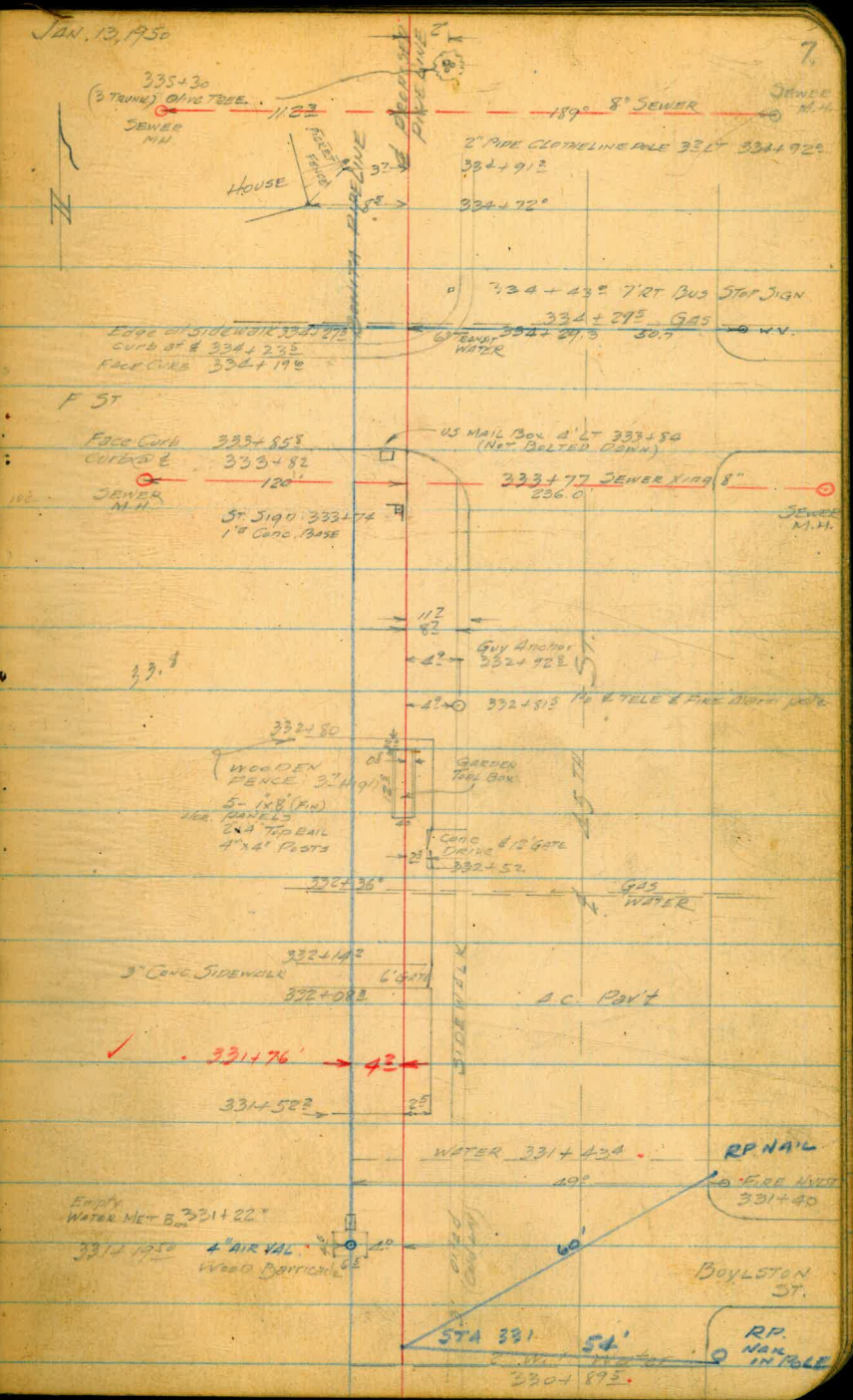
SEWER 327+10

SEWER 327+10

JAN. 13, 1950

7.

BONITA PIPELINE



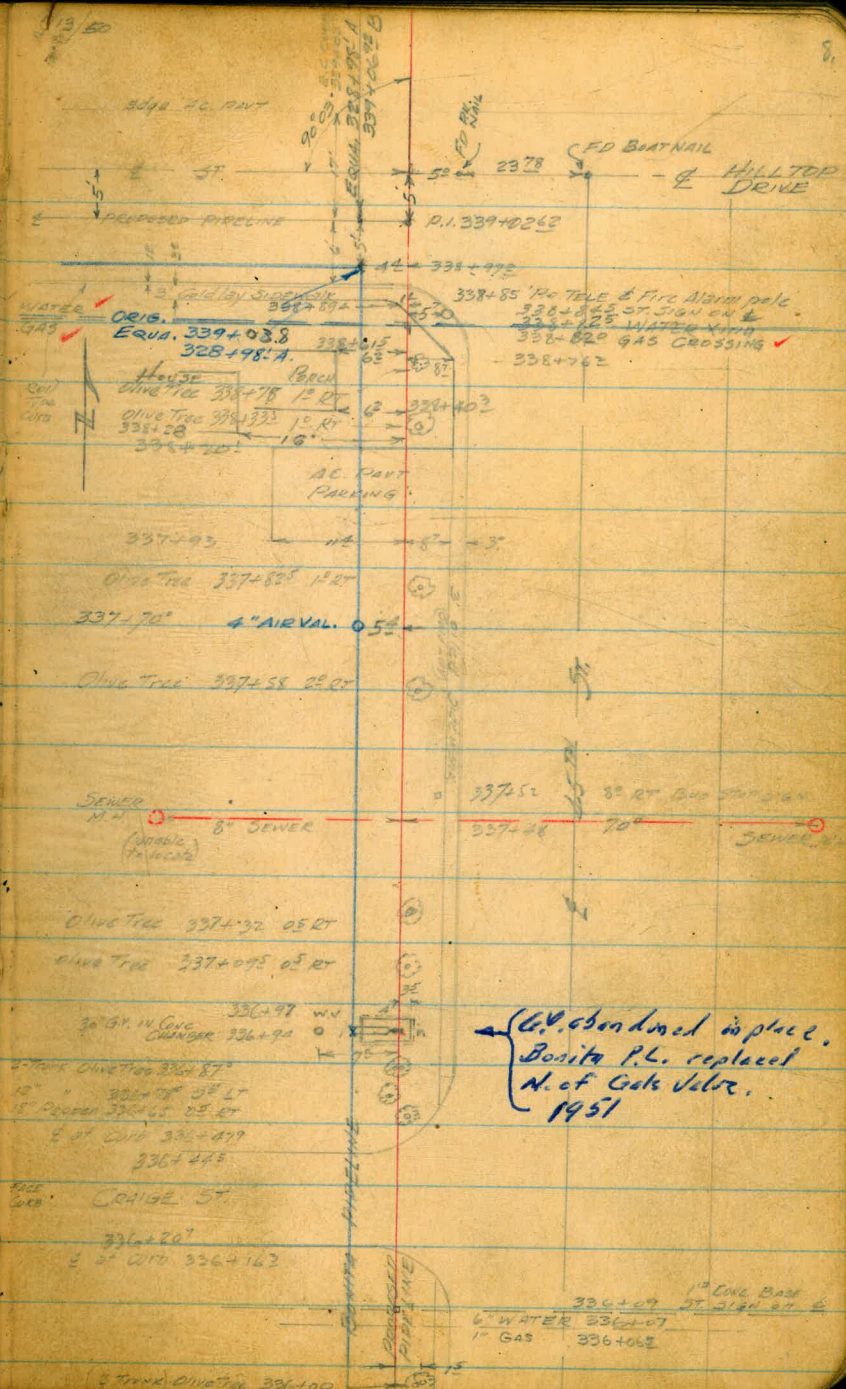
BONITA PIPELINE

EQUATION 328+98' AHEAD
339+06' BACK

5.89° W

P.I. 339+02.62 90° 03' LT.

✓ = Additional Detail
2/2/50



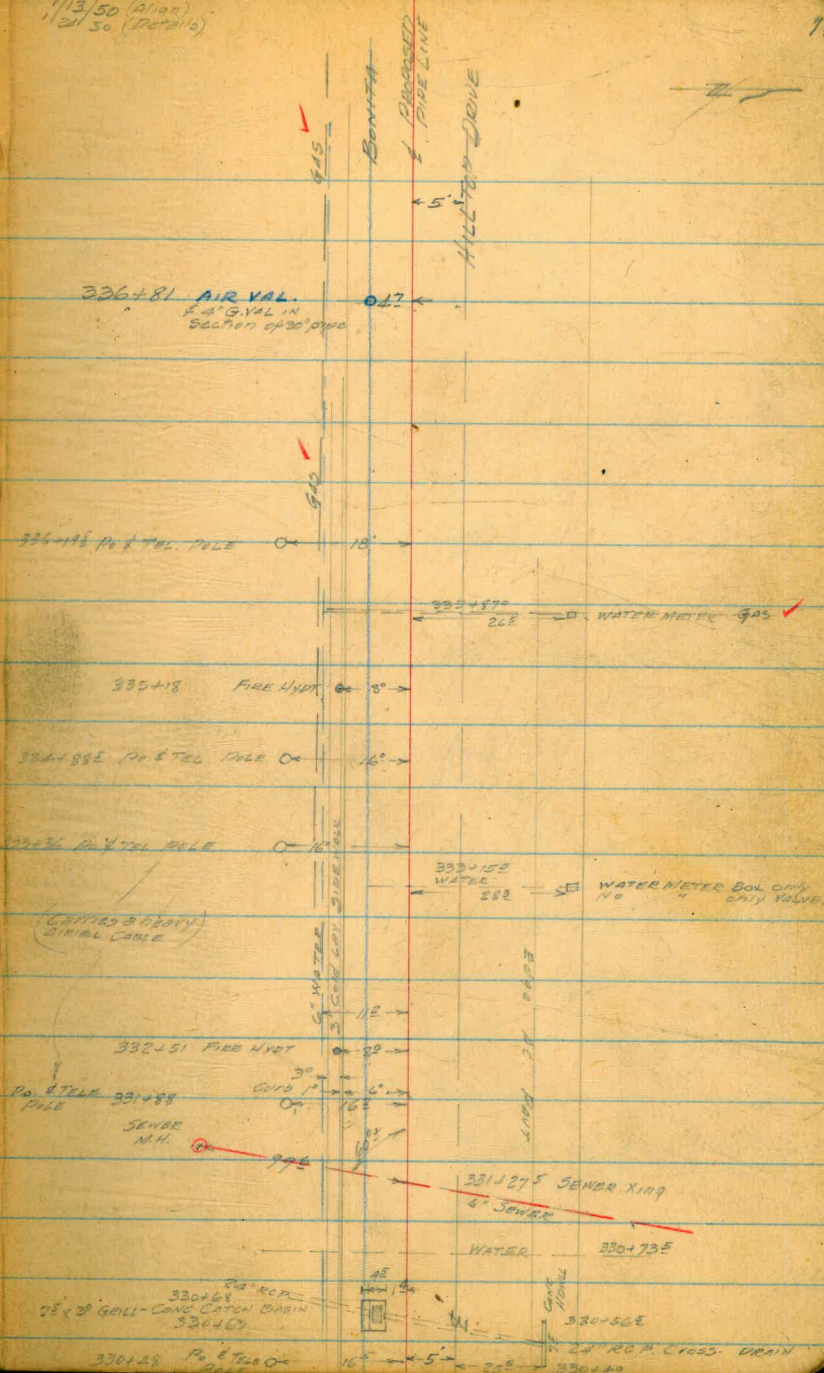
(C.C. abandoned in place.
Bonita P.L. replaced
N. of Gate Valve.
1951

5" TRUNK OIL GAS 336+00

12" CONC. BASE
6" WATER 336+07
1" GAS 336+06

BONITA PIPELINE

1/13/50 (Align)
1/21/50 (Detail)



336+81 AIR VAL.
8" A.G. VAL IN
SECTION OF 30" PIPE

334+18 PO & TEL POLE 18'

333+90 WATER METER GAS

335+18 FIRE HYD 8'

334+88 PO & TEL POLE 16'

334+36 PO & TEL POLE 16'

333+15 WATER METER BOX ONLY
NO CHY VALVE

(CANTON & GRAY)
21" RAIL CABLE

332+51 FIRE HYD 11'

PO & TEL POLE 331+88 16'

SEWER M.H.

331+27.5 SEWER XING
8" SEWER

330+68 24" RCP
24" x 36" GULLY - CONC CATCH BASIN
330+60

WATER 330+73.5

330+58 PO & TEL POLE 16'

330+58

24" RCP CROSS-DRAIN
330+40

BONITA PIPELINE

P.O.T. 337+98.22

S 89° W

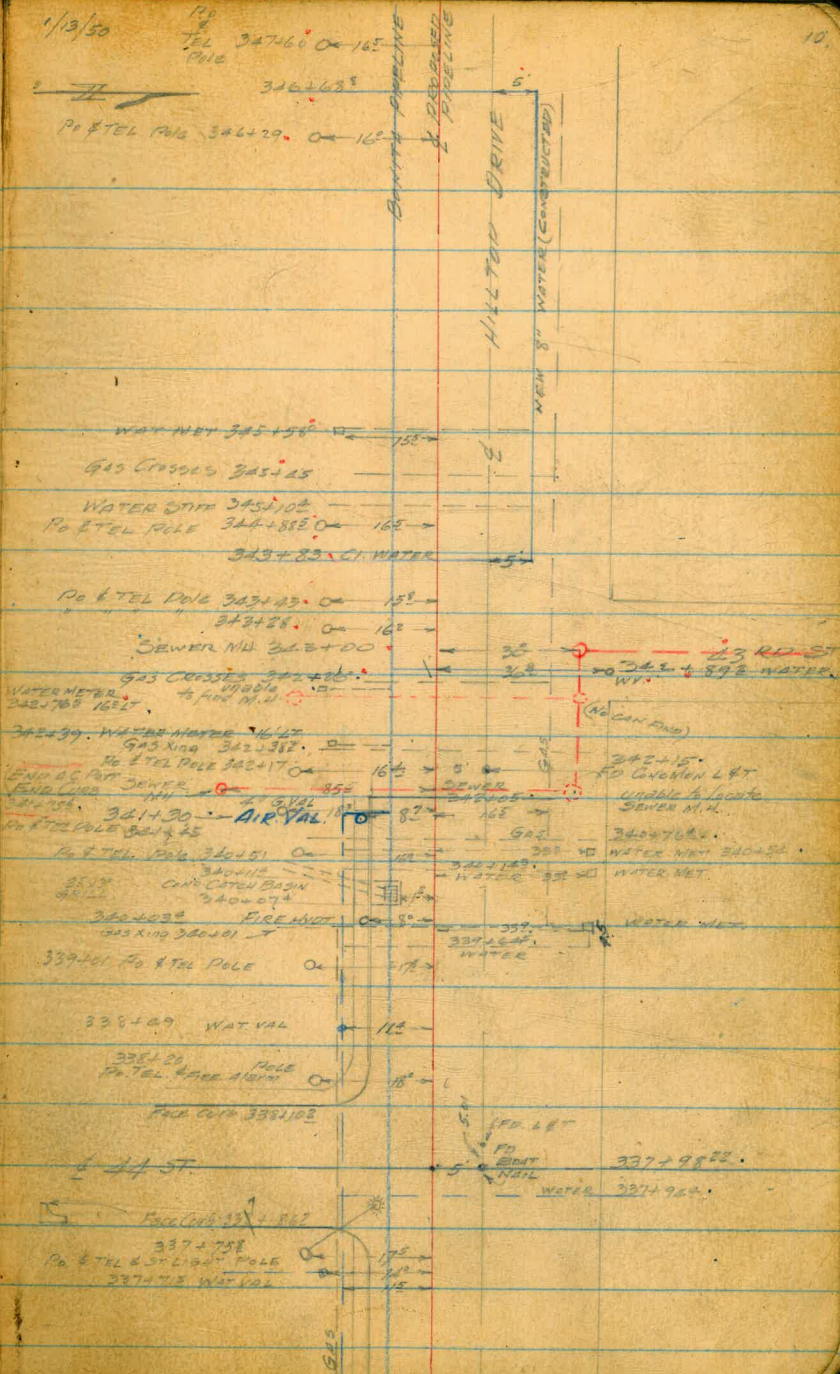
E 44TH ST

S 89° W

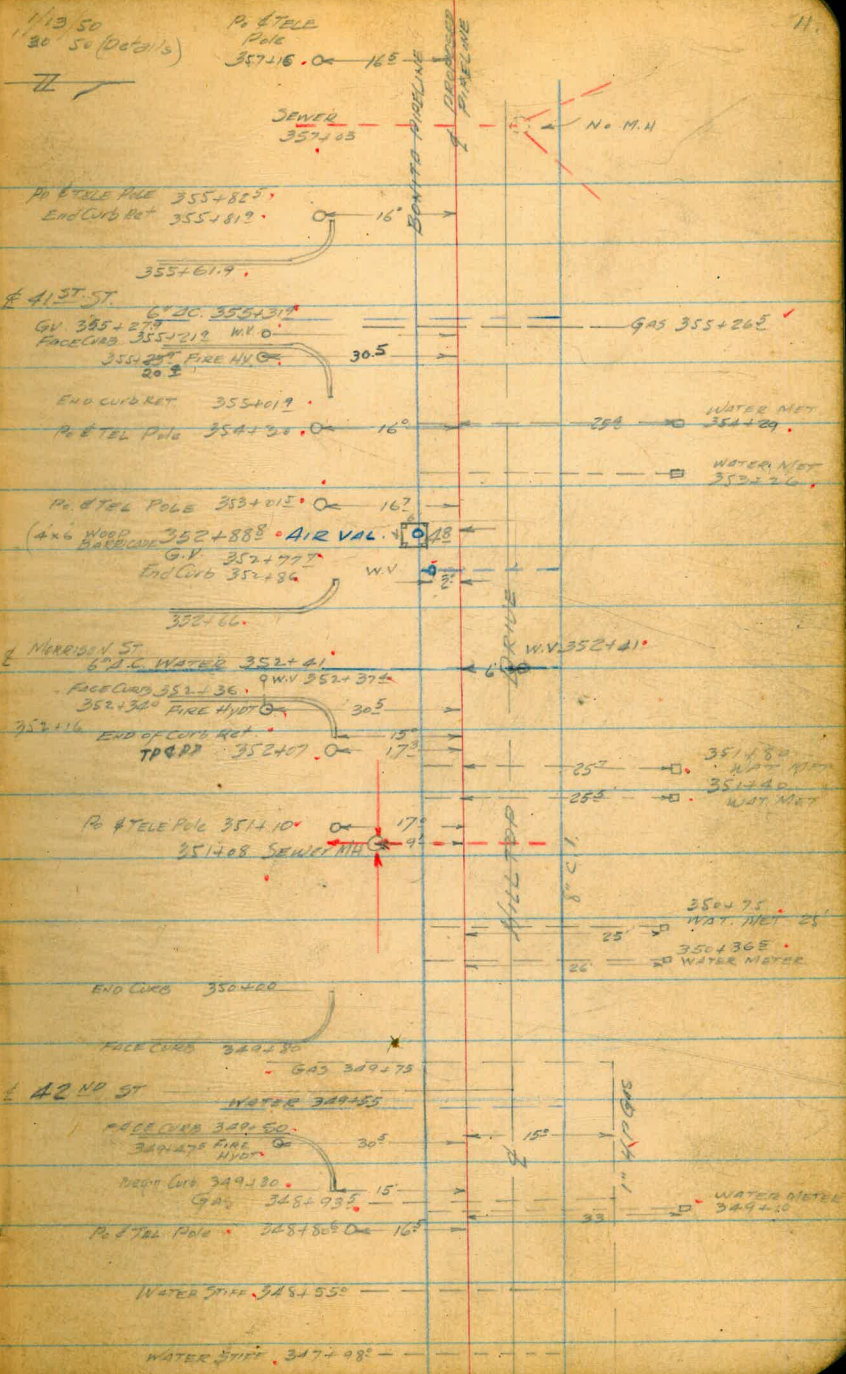
1/13/50

P.O.
TEL 347460 OR 165
P.O.

10.



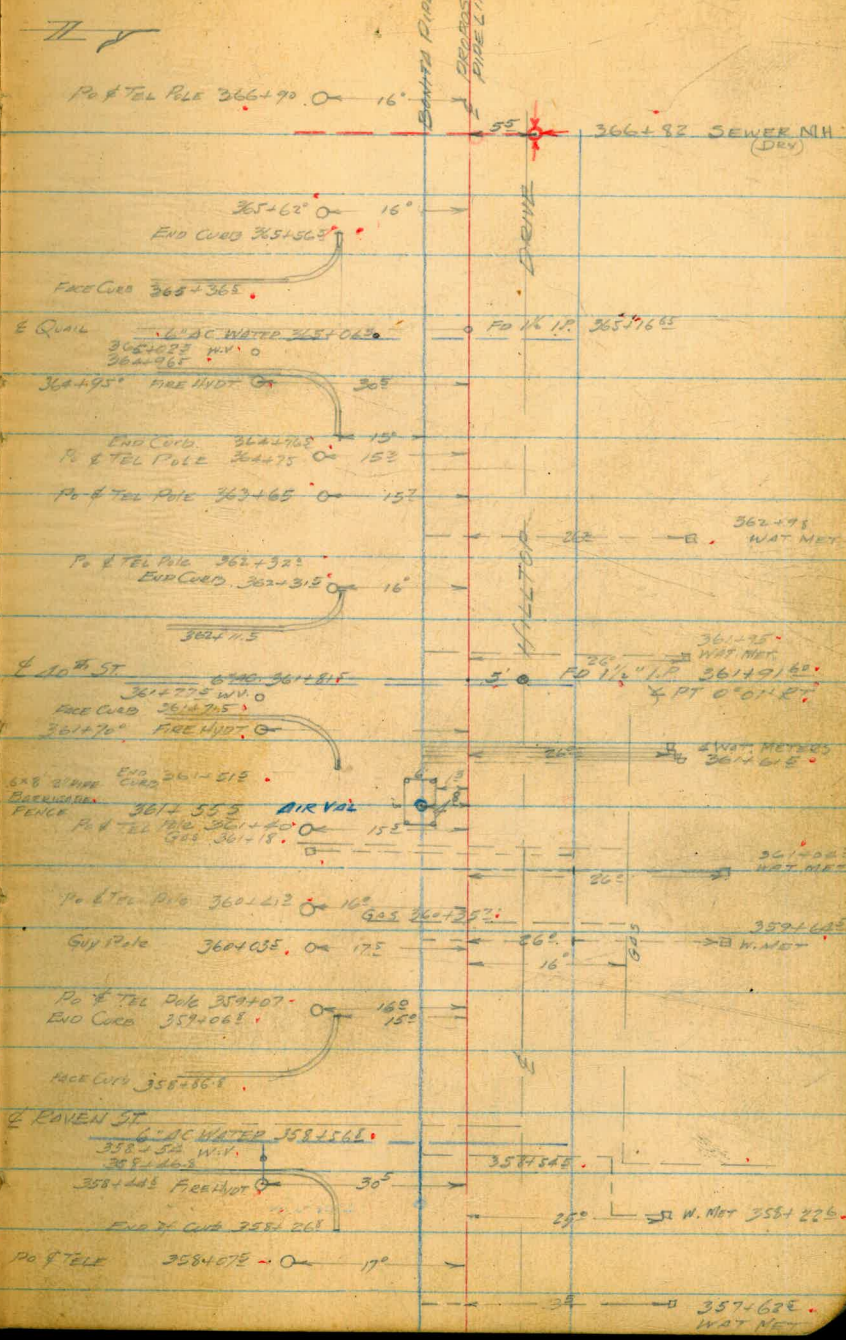
BONITA PIPELINE



BONITA PIPELINE

1/2/50

12



Pl. 361+91.6 0°01' RT (5° RT TO 1/2" I.P.)

5.89° W

5.89° W

4/3/50

BONITA PIPELINE

371+46.01 AT PUEBLO LOT LINE

N 82° W

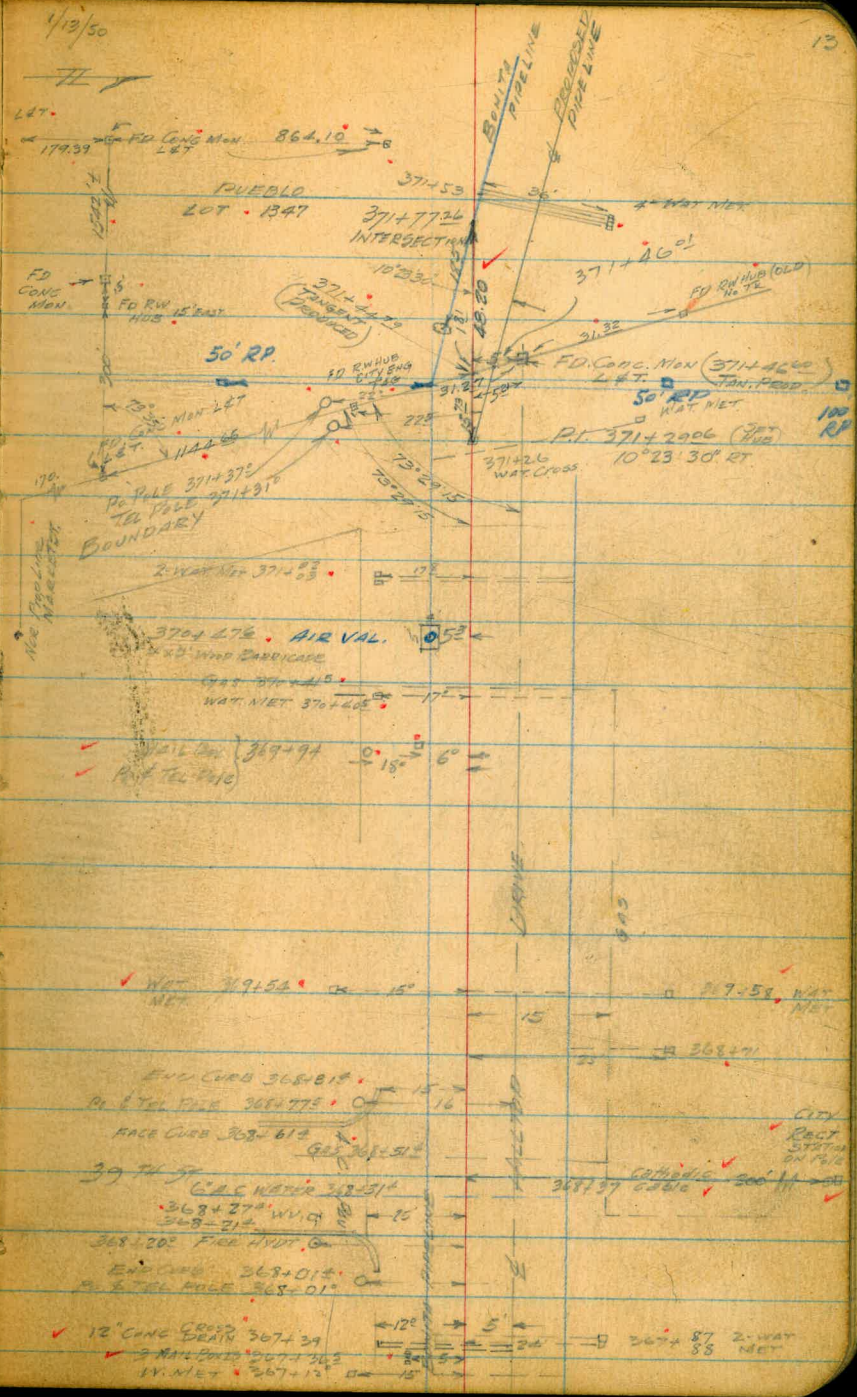
10° 23' 30" RT

S 88° W

P1 - 371+29.06

21.06	29.06
59.53	48.20
77.59	77.26
8	

Additional Detail 3/4/50



✓ NET 391.52 15°
 ✓ 371.58 WAT. NET
 ✓ 368.77
 ✓ 368.815
 ✓ 368.775
 ✓ 368.615
 ✓ 368.515
 ✓ 368.275 WVIC
 ✓ 368.215
 ✓ 368.202 FIRE HYDR.
 ✓ 368.015
 ✓ 368.015
 ✓ 12" CONC. CROSS DRAIN 367+39
 ✓ 2" WAT. MAIN 367+30.5
 ✓ 1" WAT. NET 367+12

BEATTY
ROGERS
FINNEY

JAN. 16, 1950

14.

HT

BONITA PIPELINE

P.O.T. 382+50

P.O.T.
382+50

4" AIR VAL. ← 71 → 381+445

P.O.T. 376+47³³

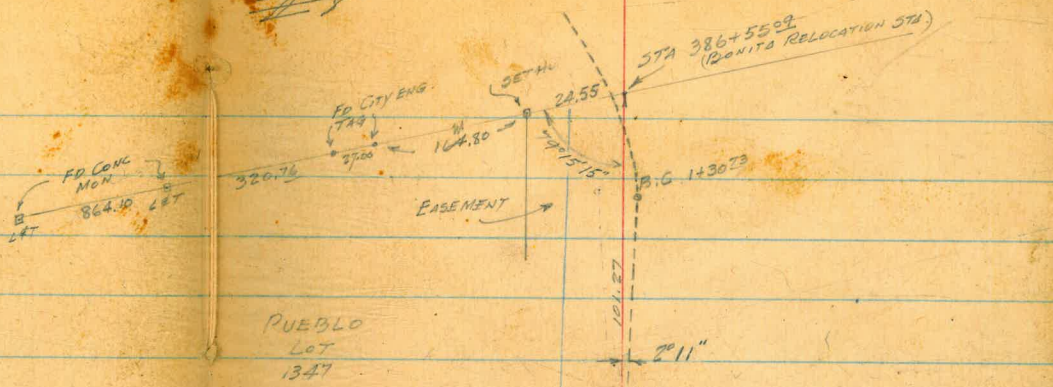
4" AIR VAL. ← 72 → P.O.T. 376+47³³

4" G.V. B.O.
6.3 CT ← 86 → 374+62

2" MARKER PIPE ← 72 → ← 82 → 372+83
(7/4)

JAN 16, 1950
JAN 17 "

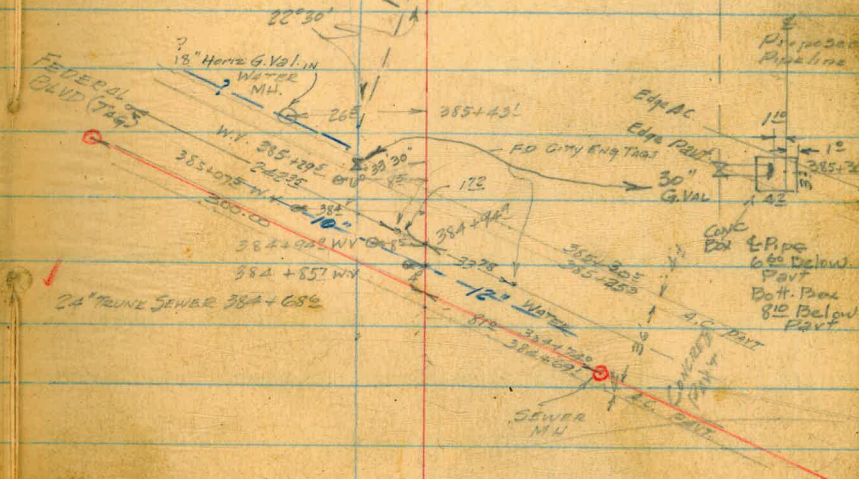
BONITA PIPELINE



BEGINNING WABASH-FED BLVD PIPE RELOCATION
P.I. 385+52.82
END BONITA RELOCATION

FUTURE LOCATION
WABASH CANAL
FREEWAY-PIPE
RELOCATION
SEE BE 718

385+5962 WABASH & FED RELOCATION
385+5382 (BONITA RELOCATION)



76
26
83
25

BEATTY
ROGERS
FINNEY

JAN. 18, 1950 - FAIR
WJB T #14897

BONITA PIPELINE REPLACEMENT
& PROFILE

BM.	0.65	112.82 112.89	112.17 112.24	
ID	0.25	100.32 100.39	12.75 100.14	
ID	0.44	87.73 87.80	13.03 87.36	
ID	0.35	75.06 75.13	13.02 74.78	
ID	2.14	64.20 64.27	13.00 62.13	
CK BM			4.33	59.94 = 59.87
{ RIND Sewer N.H.	4.31			59.89
{ 100.	18.9			45.30
{ RIND N.H. VAL CHAM.	4.66			59.54
{ Top 30" PIPE	8.50			55.70
299+46 ³⁵			4.85	59.35
+48 ⁰²			4.94	59.26
+77 ⁸⁵			6.4	57.80
300+00			7.0	57.20
+40 ⁸⁵			7.4	56.80
+50			7.4	56.80
301+00			7.4	56.80
+50			6.9	57.30
ID Pipe Co	7.70	64.06 64.13	7.84	56.36 56.23
302+00			6.9	57.16

COMMERCIAL ST. PIPELINE PLANS GIVE THIS ELEV.
TOP 3E Cor. Imperial & 47th CITY DATUM.

LAT @ 45th & IMPERIAL

Top CONC VAL CHAMBER

" " " "

X PT

X PT

3/4" IP 25' LT 301+60

CHECKED BY EWE 2-17-50

1/18/50

18.

BONITA REPLACEMENT PIPELINE
 & PROFILE

302+50	64.13 64.06	6.5	57.56						
303+00		5.9	58.16						
+50		5.7	58.36						
304+00		5.1	58.96						
+50		4.9	59.16						
Dim Sewer M.H.	72 LT 304+94	4.33	59.73						
Inv.	" "	12.1	49.96						
+99.60		4.6	59.46						
305+25.74		5.2	58.66						
+29.70		5.6	58.46						
+36.5		7.5	56.56						
+50		7.5			8.4	7.5	6.1	6.0	(on conc ford & apron)
+50		7.5	56.56		3		1.6	13.6	
RTOL { 305+60.3 305+59.3		8.73	55.33		8.8	8.3	7.5	6.5	6.5
Inv. 8" Cross Drains		8.73	55.33		7.5	1.6	2.2	14.2	" "
+62		7.9	56.15						
Top 28" pipe	5.6 LT 305+91	8.06	56.00		9.7	9.1	8.6	7.9	6.7
					9	3.2	2.5	2.3	6.7
									14.3
306+00		5.97	58.09						
08 LT, 306+03		7.38	56.68		7.05	7.56	6.0	5.2	5.3
Inv. 24" Cross drain		7.38	56.68		5.7	4.5	2.0	12.	" "
					Top 3.6" pipe	Conc			
306+19.6		4.66	59.40						
	Conc. ground	3.7	60.36		3.8	3.7	3.71	3.74	" "
					5		1.6	19.6	
					Not GED				

1/18/50

19.

BONITA REPLACEMENT PIPELINE

~~44.05~~
~~64.15~~
 ♀ PROFILE

 IP prep cor 12.73 ~~75.99~~
 75.92 0.87 ~~43.19~~
 43.26

24' IP 25' RT 306+335

306+50 12.7 63.22

307+00 7.8 68.12

+50 3.8 72.12

IP rock 12.33 ~~88.12~~
 88.19 0.13 ~~75.79~~
 75.86

308+00 11.8 76.32

+50 8.0 80.12

+62 6.8 81.32

+83 2.1 86.02

IP rock 12.97 ~~100.97~~
 101.04 0.12 ~~88.00~~
 88.07

309+00 11.2 89.77

+37 2.8 100.17

SET IP 1.33 99.64

Top Bolt on Conc pier
25' RT 309+35IP rock 12.27 ~~112.85~~
 112.92 0.39 ~~100.58~~
 100.65

+50 8.0 104.85

+55 5.0 107.85

+61 2.9 109.95

+63 3.1 109.75

+71 0.8 112.05

BONITA REPLACEMENT PIPELINE
& PROFILE

11	TP	12.03	124.98 112.83 124.69 124.62	0.26	112.59 112.66
30	309+87			5.2	119.42
30	TP	10.83	135.21 135.38	0.24 0.14	124.38 124.55
	310+00			7.6	127.61
11	+02			5.9	129.31
30	+08			6.3	128.91
	+15			5.6	129.61
	+19.5			4.4	130.81
	+23			3.57	131.64
	+25			4.0	131.21
TP	+28			3.82	131.39
30	+28			4.2	131.01
	+35			3.6	131.61
SE	TP	12.53	127.06 127.23	0.68	134.53 134.70
TP	+41			11.1	135.96
	+50			7.8	137.26
	+62			3.4	143.66
	+311+00			2.6	144.46
	+50			2.6	144.46

NAIL IN pole stump (NEAR POW. POLE)
10' LT 309+95

Edge of ballast

Top/Rail
& TRACK
Top/Rail

DONITA REPLACEMENT PIPELINE

E PROFILE

	7.28	144.55 144.72
	8.2	143.6
311+75	7.1	144.7
	8.1	143.7
+90	7.0	144.8
312+00	7.7	144.1
	9.18	142.65
+15	7.6	144.2
+26	7.0	144.8
312+50	6.69	145.14
+58	6.6	145.19
+58.2	6.74	145.09
	6.66	145.17
313+00	6.96	144.87
+50	6.49	145.34
314+00	5.51	146.32
+50	4.61	147.22
315+00	3.71	148.12
+50	2.92	148.91
316+00	2.50	149.33
+50	2.17	149.66

100' LT 312+20 RIM SEWER MH.
" " " " " "

1/19/50

21

Inter sidewalk 20' LT 312+10

100 10" Cross drain 35' LT 311+65

100 12" " 23' LT 311+95

10 small drain ditches

7.0 6.8 7.6 7.2 7.0
6 2 2 2 6

on Conc sidewalk

" " " "

on A.C Pavt.

13' RT 312+95 SEWER MH

" " " "
(until further notice)

BEATTY
ROGERS
FINNEY

JAN 19, 1950
FAIR

22

BONITA REPLACEMENT PIPELINE
& PROFILE

TP	152.00			
	151.83			
317+00	4.83	155.14	1.69	150.14
		154.97		150.31
+50			4.46	150.51
318+00			4.04	150.93
SET TP			2.02	152.95
+50			3.91	151.06
319+00			4.59	150.38
+50			5.36	149.61
320+00			5.62	149.35
+50			5.63	149.34
321+00			5.02	149.95
+50			4.40	150.57
322+00			3.44	151.53
TP				
+50	10.50	163.37	2.10	152.87
		163.54		153.04
323+00			9.14	154.23
+50			7.87	155.50
324+00			7.10	156.27
+50			6.30	157.07
325+00			5.52	157.85
+50				

FM 22' RT 318+05

1/19/50

23

BONITA REPLACEMENT PIPELINE
& PROFILE

Station	Offset	Elevation	Description
325+49 ²	4.86	158.51	on conc pvt
+50	4.86	158.51	" " "
+64	4.92	158.45	
	4.76	158.61	Rim of Wat Val. M.H. Cover
325+83 ²	4.64	158.73	E MARKET ST.
326+00	4.67	158.70	
+065	4.71	158.66	gutter
+066	4.15	159.22	top curb
+23 ²	3.86	159.51	edge sidewalk
CR. B.N.	4.32	159.05 159.22 = 158.85	R.P. NW Cor. Market at 45 th
+50	3.3	160.1	
+77.8	3.2	160.2	
+80 ³	3.2	160.2	} Conc. Sidewalk
Rim Sewer M.H. COVERT	2.3	161.07	
" " " " " " " "	2.3	154.97	
Rim " " " " " " " "	13.2	149.97	
	19.4	160.4	143.97
327+00	3.0	160.4	
+50	2.5	160.9	
+66 ²	2.5	160.9	} Conc. Sidewalk
+68.2	2.4	161.0	
328+00	2.0	161.4	

BONITA REPLACEMENT PIPELINE
& PROFILE

328+34	163.58 163.37	1.8	161.6
+37 ²		1.8	161.6
+385		2.1	161.3
+50		2.0	161.4
+68		1.8	161.6
+69		1.6	161.8
+72.2		1.6	161.8
329+00	171.46 8.92 171.63	0.73	162.64 162.81
+06		8.22	163.24
+125		8.13	163.33
+384		7.53	163.63
+45		7.75	163.71
+50		7.7	163.8
+83 ¹		7.24	164.22
+93 ⁵		7.16	164.30
330+00		6.9	164.6
+50		5.7	165.8
331+00		5.0	166.5

1/19/50

24.

edge oil walk

top conc curb (roll type)

on A.C. Pavt.

" " " } G ST

on A.C. Pavt

top conc curb (roll type)

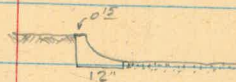
edge oil sidewalk

new Cor Flag pole foundation

} on conc sidewalk

} on conc sidewalk

} on Conc sidewalk



4/19/50

25

BONITA REPLACEMENT PIPELINE
& PROFILE

Top of BONITA PIPELINE

Station	Profile	Elevation	Notes	Top of Pipeline	Elevation	Notes
331+18	4.7	166.8		7.47	170.11	162.64 ✓
+22	4.8	166.7		Top 28" STEEL Pipe	331+76	7.10 163.01 ✓
+50	5.8	165.7		Top 28" " "	331+54	6.30 163.81 ✓
332	7.2	164.3		(43 LT)		
+083	7.2	164.3		} on conc sidewalk		
+143	7.3	164.2				
+50	8.7	162.8				
333+00	10.1	161.4				
+50	10.0	161.5				
+77	12.5	156.96	Rim Sewer MH 2T 120' INV. " " "			(no sidewalk)
	23.0	146.46				
+82	10.6	160.9	Rim Sewer MH 236 RT INV. " " "	on conc curb		
	3.0	168.5				
+83	10.9	158.26		on AC Pavt		
334+00	11.0	160.5		" " "		F ST
+222	10.8	160.7		on AC Pavt		
+295	10.5	161.0		on conc curb		
+272	10.3	161.2		edge oil sidewalk		
+50	9.6	161.9				
	13.8	157.66	Rim Sewer MH 129 RT INV. " " "			
	20.8	150.96				
335+00	8.6	162.96				
	2.65	168.81	Rim Sewer MH 1123 LT INV. " " "			
	8.65	162.81				
703	7.65	163.98		TOP CURB 50' RT	335+20	
		163.81				
+50	6.6	161.2				

	+71.01 170.84			
336+00		5.8	165.0'	
+163		5.8	165.0'	on conc curb
+173		6.1	164.7'	on A.C. Pav't
+47		6.0	164.8'	" " "
+47 ²		5.7	165.1'	on conc curb
+50		5.4	165.4'	
+65		4.3	166.5'	
		8.07	162.77	EI. 4 of 30" GY 336+95E ✓
		3.96	166.88	Rim M.H. WATER VAL 13 RT 336+95E
		6.66	164.18	Approx Top 28" PIPE
		9.76	161.08	Floor Conc VAL. Chamber
337+00	337+68 Rim of Sewer MH Inv.	3.9	166.9	
+50	337+68 Rim Sewer MH to RT Inv. " " "	2.4	168.44	
+83		3.8	167.0	
+93		5.3	165.5'	edge A.C. Pav't
338+00		5.4	165.4'	on " "
+20'		5.7	165.1'	edge " "
+30		5.1	165.7'	
+50		5.3	165.5'	
+77		5.9	164.9'	
TP	2.01 165.67 165.84	7.18	163.66 163.83	on Road Nail Intersect E 45° at Hilltop Dr
+82		1.6	164.1'	
				336+970 Top pipe 163.88 ✓ 337+120 Top pipe 163.28 ✓ (Found by bar) 336+86 Top Pipe 163.43 <hr/> 338+60 Top pipe 162.16 338+70 Top pipe 161.91

165.84
165.67

328+87.5 2.2 163.5

edge of sidewalk

+92.2 2.5 163.2

on conc curb

+93.2 2.8 162.9

A.C. Pav't
(until further notice)

329+00 2.8 162.9

+026.2 2.8 162.9

x RT

329+069.2 B 2.9 162.8

328+98.0 A

329+00 2.0 162.7

+50 4.4 161.3

330+00 5.5 160.2

+50 6.0 159.7

9.1 156.6

100 24" RCP 25' RT 330+53

9.8 155.9

100 24" RCP 10' LT 330+65

} Cross drain
also inv. of Conc
catch basin

+65 6.4 159.3

331+00 5.7 160.0

+27 { Rim SEWER M.H. 99' LT.

+50 4.9 158.3

332+00 5.2 160.5

+50 4.9 160.6

333+00 4.6 161.1

+50 4.4 161.3

4/19/50

28

334+00 ^{165.84} 165.67 4.1 161.6

+50 3.2 162.5

335+00 1.5 164.2

11 ^{174.87} 175.04 0.38 ^{165.29} 165.46

+50 7.9 167.0

336+00 5.1 169.8

+50 2.8 172.1

2.19 172.68

Run of AV. M.H. 336+845 47 LT

7. 173.9

337+00 1.9 173.0

+50 2.4 172.5

338+00 4.0 170.9

SET Π 4.65 ^{170.22} 170.37

NAIL IN POLE 18' LT 338+20+ (FIRE ALARM)

+50 5.8 169.1

339+00 7.6 167.3

+50 9.4 165.5

340+00 10.5 164.4

13.0 161.9

104 catch basin 15' LT 340+092
104 12" side drain 38' LT 340+093

+50 10.4 164.5

1/19/50

29

341+00		175.02 174.87	9.8	165.1
+50			9.6	165.3
+76.2			9.5	165.4
342+00			9.5	165.4
+05	{ Rim of Sewer M.H. 85' LT Inv. "	13.2 17.6	161.57 165.27	157.27
OK BM.	1.21	166.82 166.65	9.23	165.61 165.39
+50			1.2	165.45
343+00	{ Rim of Sewer M.H. 30' RT Inv. of SEWER M.H. "	0.3 5.6	166.45 161.85	
+50			1.6	165.05
+50			3.2	163.45
+83	(Top 6" WATER)		11.9	154.75
344+00			5.1	161.55
+50			7.0	159.65
345+00			8.6	158.05
+50			10.0	156.65
346+00			11.0	155.65
+50			11.8	154.85
TD	2.08	159.25 159.42	9.48	157.17 157.34
+68.8	Top 6" WATER G.I.		8.9	150.4
347+00			5.0	154.25
+50			5.4	153.85
348+00			5.4	153.85

End AC PAVT

on Conc. Man. 5' RT 342+15

NOTE

FROM STA.
342+ to 348+ the
Profile as shown
should be voided
as excavation has
been done for
lowering street
MAR 2, 1950

} ground line irregular
due to trenching for water line

pipe a of dia. pat. 35' RT 346+30

1/19/50

30.

3 348+50	159.42 159.25	4.1	155.15	
349+00		4.6	154.65	
+50		5.5	153.75	
3 SET II B.M.		6.09	$\frac{153.16}{153.33} = 152.91$	B.P. SW Cor 42 nd
3 350+00		4.8	154.45	
+50		3.4	155.85	
3 351+00		2.7	156.55	
4.08	Rim of Sewer M4 9' LT 100. " " " 9' RT.	2.4	156.85	
+50		11.0	148.25	
		2.0	157.25	
352+00		1.2	158.05	
TP	1.54 $\frac{162.76}{162.93}$	1.03	$\frac{158.22}{158.39}$	
3 CK TP		4.66	$\frac{158.10}{158.27} = 157.90$	NAIL IN POLE
CK B.M.		4.92	$\frac{157.84}{158.01} = 157.60$	B.P. SW Cor Morrison
3 +50		3.3	159.5	
353+00		2.3	160.5	
3 +50		3.2	159.6	
354+00		6.1	156.7	
3 +50		8.6	154.2	
355+00		9.3	153.5	
3 +50		9.4	153.4	

CK BM	^{162.93} 162.76	10.86	151.90
356+00		8.6	154.2
+50		6.2	156.6
357+00		2.4	160.8 160.4
IP Rock	12.41 ^{174.93} 175.18	0.24	^{162.52} 162.69
+50		10.2	164.7
358+00		6.6	168.3
+50		3.7	171.2
359+00		1.6	173.3
CK BM		3.34	^{171.59} 171.76 = 171.33
IP (Rock)	11.27 ^{186.09} 186.26	0.11	^{174.82} 174.99
+50		10.2	164.7 175.9
360+00		8.1	166.8 178.0
+50		6.7	168.2 179.4
361+00		5.9	169.0 180.2
+50		5.0	169.9 181.1
362		4.3	170.6 181.8
CK BM		4.63	^{181.26} 181.63 = 181.16
CK BM		5.73	^{180.36} 180.53 =

B.P. SW COR 41ST

B.P. SW COR RAVEN

16" IP 40th & Hilltop

B.P. SW COR 40th

1/19/50

32

362+50	186.26 186.09	5.2	180.9
363+00		6.4	179.7
+50		8.3	177.8
364+00		10.5	175.6
TP (Rock)	1.07	175.97 176.14	11.19
+50		2.1	173.87
365+00		3.7	172.27
+50		5.1	170.87
366+00		6.5	169.47
+50		8.9	167.07
+82	{ Rim Sewer M.H. 55 RT. 110V. " " 55 RT.	9.4	165.57
367+00		17.9	158.07
		11.1	164.87
+30		11.7	164.27
(+39 Flow line 12" Conc Pipe 12' LT.		12.9	
+50		11.3	169.67
368+00		8.8	167.17
+50		5.8	170.17
369+00		2.1	173.87
TP (Rock)	3.17	178.52 178.69	0.62
+50		2.3	176.2
370+00		1.5	177.0

BONITA REPLACEMENT PIPE LINE
& PROFILE

1/19/50

495
682
11.77

73

370+50	178.69 178.52	1.4	177.1
371+00		3.0	175.5
+20		3.7	174.8
+29.06		4.9	173.6
SET P		4.92	173.60
+50		7.1	171.4
+70		9.1	169.4
TP (Rock)	0.21 165.66 165.83	13.07	165.45 165.62
372+00		0.9	164.8
+50		7.4	158.3
373+00		13.6	153.1 152.1
TP (Rock)	0.07 152.65 152.82	13.08	152.58 152.75
+28		4.1	148.55
+30		3.0	149.65
+50		6.0	146.65

X PT.

NAIL IN POWER PILE

1.03	174.63	173.60
(TOP of 28" STEEL PIPE 18.9' E. of POINT Below)	9.51	165.12
(TOP of 28" " " 48.20 55.53 Ahead of P.I. 371+29.06 TANG. PRODUCED)	11.77	162.86

See Sketch pg. 13.

2.1 23 06 09 10 17 +05 +2.9
15 9 5 * 7 10 13 14

90 72 74 76 81 64 27
16 12 2 4 6 7

15.5 13.2 13.6 13.7 10.4 8.5
15 12 * 1 4 10

8.5 5.9 7.2 7.7 6.0 3.8 1.2
21 17 4 1 0 1 10

1/19/50

34

BONITA REPLACEMENT PIPE LINE
& PROFILE

373+55	152.82 152.65	8.8	143.85
374+00		14.4	138.25
+15		16.0	136.65
+20		18.3	134.35
+37		19.6	133.05
+43		22.2	130.45
+45		22.2	130.45
+48		20.1	132.55
+50		20.3	132.35
+59		21.2	131.45
+62		22.7	129.95
		20.6	132.05
+685		20.0	132.65
+73		20.6	132.05
375+00		16.7	135.95
+32		11.1	141.55
+50		5.9	146.75
+65		0.9	151.75
TP (Rock)	164.61 1235 164.78	0.39	152.26 152.43

15.0 13.9 15.5 11.5 10.2
14 6 13 15 20

Top 28" pipe 8' LT 374+62⁵

7/19/50

35

BONITA REPLACEMENT PIPELINE
 & PROFILE

376+00 ^{164.78} 167.61 2.0 162.6

IP (rock) 9.55 ^{173.90} 174.07 0.26 ^{164.35} 164.52

+08 8.5 165.4

+32 5.2 168.7

+50 4.8 169.1

SET IP 2.30 171.6

stud on Air Valve (wired blue)

+61 4.9 169.0

377+00 9.8 164.1

IP (rock) 0.78 ^{161.68} 161.85 13.00 ^{160.90} 161.07

+47 5.6 156.1

+60 7.7 154.0

378+00 12.0 149.7

IP (rock) 0.18 ^{148.86} 149.03 13.00 ^{148.68} 148.85

+28 2.8 146.81

+50 8.8 140.81

9.07 139.79

7³ RT 378+40

9.74 139.12

7³ RT 378+45

} Top 28" PIPE

IP (rock) 0.40 ^{136.25} 136.42 13.01 ^{135.85} 136.02

+82 6.8 129.45

1/19/50
126.50

BONITA Replacement Pipeline
& Profile

~~136.42~~
136.25

379+00		9.3	127.0'
+30		13.0	123.3'
PP (each)	5.14	128.32' 128.49	13.07 123.18' 123.35
+50		7.9	120.42'
+65		11.3	117.02'
+85		12.7	115.62'
380+00		14.9	113.42'
+16		16.0	112.32'
+50		12.6	115.72'
381+00		1.9	126.42'
PP (each)	2.96	130.58' 130.75	0.70 127.62' 127.72
+19		1.4	129.18'
+50		0.70	129.88'
50 FT PP		1.88	128.70'
+85		3.1	127.48'
+90		6.2	124.38'
382+00		5.7	124.88'
+12		5.6	124.98'
+30		7.1	121.48'
+30	(To 28" PDE 75 FT)	13.50	117.08'

+18 +09 20 20 +09 1.9 4.2 52 11.5
18 13 9 8 4 2 10 22 32

00 1.9 1.9 1.2 0.7 2.1 2.6 9.5
11 9 7 4 7 10 25 30

11.12
2' 50" 4.4

50 4.6 5.7 7.2 14.1
20 12 7 15 30

108 8.8 10.2 12.8 (13.5) 13.6 9.5 9.1 8.3 12.8
23 3 10 7 7.5 2 1.5 8 15
700 28"

BRATTY
ROGERS
FINNEY

JAN. 20, 1950
FAIR.

Bonita Replacement Pipeline
& Profile

Station	Offset	Left Elevation	Right Elevation	Dist	Dist	Dist	Dist	Dist	Dist	Dist	Dist	Dist	Dist
382+50		130.75 130.58	11.0	119.58	13.3	12.4	13.4	11.1	11.0	10.4	12.1	14.9	36.0
TP	0.46	117.95 118.12	13.09	117.49 117.62	25	12	8	3	8	14	20	40	
+65			0.6	117.35									
383+00		105.88	12.0	115.95	105.95								
TP (rock)	0.81	106.88 106.05	12.88	105.07 105.24									(outcrop gray soft sandstone at this Sta)
TP (rock)	0.17	93.21 93.38	12.84	93.04 93.21									(outcrop gray soft sandstone at this Sta)
+30													
+30			3.5	69.71	89.71	3.0	3.5	3.8	13.3				
+50			11.1	62.11	82.11	9.5	11.1	11.4	19.1	22.3			
+51			11.6	61.61	81.61	15		2	4	15			
TP (rock)	0.52	80.71 80.88	13.02	80.19 80.36									
+62			5.0	75.71									
+73			7.5	73.21									
+76			10.8	69.91									
384+00			14.2	66.51									
TP (rock)	0.30	68.04 68.21	12.97	67.74 67.91	14.0	14.2	11.52	9.5	8.6				
+30			4.4	63.60	15	8	7.1	10	17				TOP 28" PIPE

68.21
68.04

384+35	41	63.94
+39	22	65.84
+50	43	63.74
+57	51	62.94
+58	69	61.14
+63	88	59.24
+68 ⁶	8.15	59.89
+68 ⁶	10.35	57.69
+69 ¹	8.74	59.30
+74 ⁰	8.62	59.42
+94 ⁹	8.34	59.70
385+00	8.44	59.60
+153	8.83	59.21
+205	9.02	59.02
+26	9.2	58.84
+28	8.5	59.54
+37	9.2	58.84
+38	11.2	56.84
+44	10.9	57.14
+47	10.1	57.94
+50	10.7	57.34

Rim?

170 24" TRUNK SEWER 81° RT
170 24" TRUNK " 300° LT

37 43 40 76 80
12 4 4 10 20

Edge A.C PAVT
Edge Conc PAVT
FEDERAL BLVD
ON CONC PAVT
Edge Conc PAVT
Edge A.C PAVT

4/20/50

34

		68.21 68.04	13.0	55.04	
385+5760 BK					
385+5382 AH.			9.31	58.73	
SET TBM	3.68	62.41 62.58	9.31	58.73 58.90	
HP	2.71	59.46 59.63	5.66	56.75 56.92	
OK TBM			6.98	52.48 52.65	= 52.18
OK TBM			7.31	52.15 52.32	= 51.97

END of BONITA REPLACEMENT PIPELINE
 BEGIN WABASH FEDERAL BLVD " "
 Rim of N.H 27' LT 385+45

CHIS X ON CONC (Near Nor Edge) (Rim of N.H) 27' LT 385+45

COR CURB RET
 B.P NW COR 35TH FEDERAL

3/24/50

TBM	4.62	63.35		58.73	
Top 28" STEEL PIPE	7 ⁵ LT	384+624	3.47	59.88	
" " " " " "		384+714	4.49	58.86	

(very near surface of shldr.)

CHECKED BY EWB 2-17-50

51.97 BK
52.18 BK

2/20/50
BEATTY
ROGERS
PAYNE

BONITA RELOCATION 8TH ST - NATIONAL CITY TO DIVISION ST.

MAG BRG
N 19° W

1/4 SEC
104

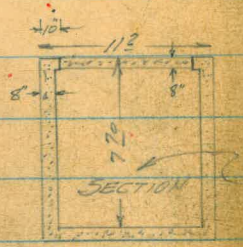
28" STEEL BONITA RL

1/2" of Permitt. PL.

8" FENCE

181+44 TEL POLE

180+66 LARGE CLUMP of Elderberry



1 1/2" IR Prop Cor
RE 622

179+800 TEL POLE
179+68° GUY ANCHOR

8" WV # B.O 179+372
6" PLENUM TUBE AT END OF FENCE

CONC. STORM DRAIN CHANNEL

179+312

179+28
179+19
179+19

50' RP NAIL

GUARD POST 179+29
179+258

100' RP NAIL

179+1994 P.I. 26°28' RT.
(NAIL RP 50' 100' EAST
NAIL RP 50' WEST)

FD CONC. MEN
24.7
NAIL IN POLE
59.4
POLE NAIL 10.37

650.69 8TH ST
C.W. & T. Co WATER LINE
179+034 (COMP.) ST. 14

178+973

178+81
178+773

178+8176 AT FLANGE OF 30" VALVE



FOR ALIGNMENT BACK SEE BK 778
Pg 43

TO 36" I.P. RP 50' W. & 100' TACK

2/21/50

BONITA RELOCATION

192+3823 POT

HUD RP 50' EAST
NAIL 50' 100 WEST

FD

CONC
MON
L&T

100'
RP
NAIL

192+42 2" WATER
4 TH ST 65223
(CHAINED)

5'
RP
NAIL

41

192+3823
FD. Very old 3/4" I.P.
Replaced with New 7/16"

50'
RP

9 → 191+84 WNET

11 → 190+81 TEL POLE

4" Evl. Tree 189+95
6"-10" DIAM.

6" Evl. Tree 189+40±
4' ± RT. R.A.M.

95 → FD 3/4" I.P. 189+75
LS 2334

96 → FD 1" I.P. 189+22±
LS 2334

100 → 189+19± TEL POLE

110 → 187+80 TEL POLE

122 → 186+45

103 → 186+23 TEL POLE "559164"

112 → FD 2x2 RW & TACE
185+77 88

94 → 184+65 TEL POLE

90 → 182+45± FD 1 1/2" I.P. 22622

86 → 183+07 TEL POLE

7788
7657
13

BONITA RELOCATION

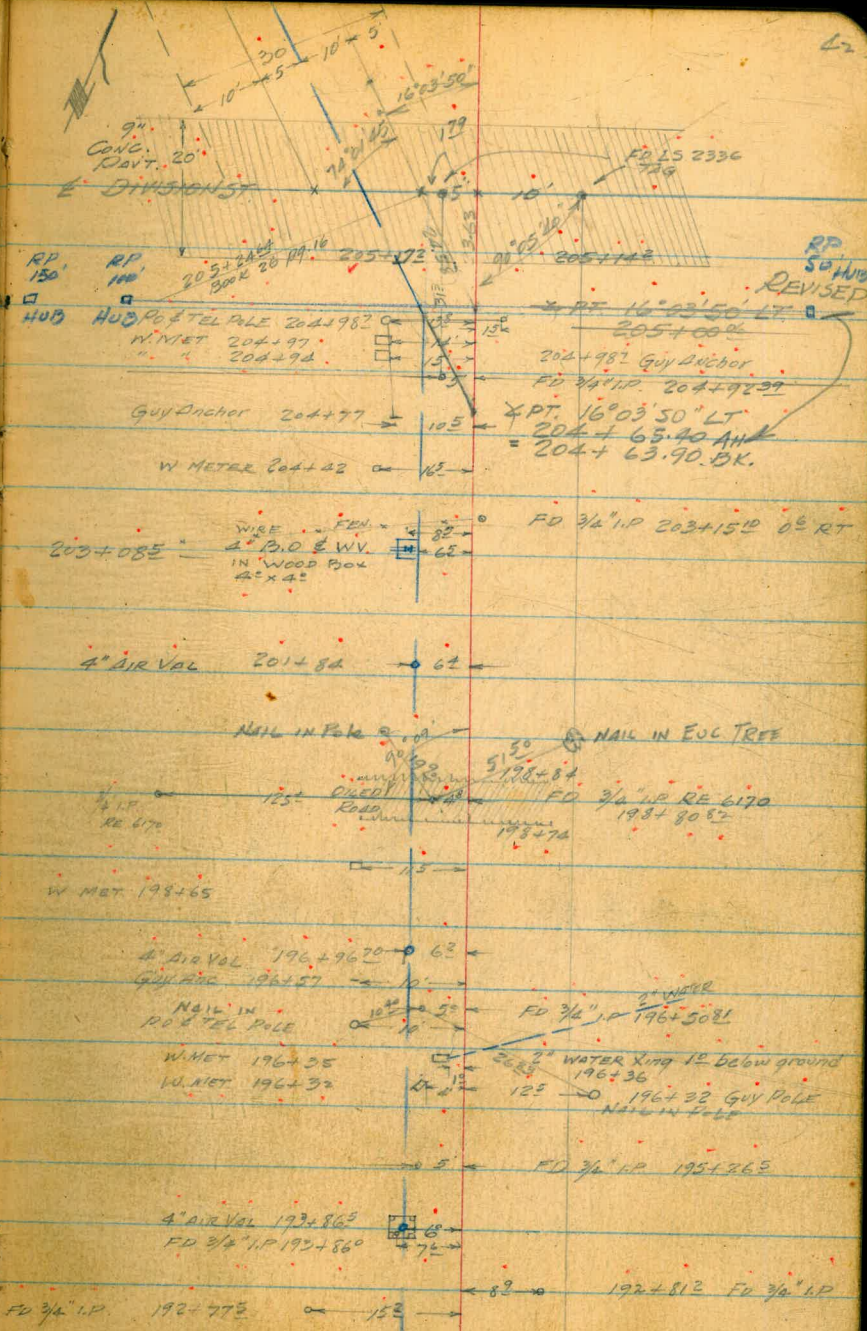
RAIL FENCE (OLD)

BONITA RELOCATION

205+24.64 E of DIVISION ST

205+00.04 P.I. 16°03'50" LT
 (50' EAST
 100' 150' WEST)

3/10/50
 3/13/50



26
 50
 25

BONITA REPLACEMENT
8TH ST. TO DIVISION ST.

± PROFILE

BM.	1.29	144.51	149.343	USGS DATUM
IP	0.80	132.92	143.22	CITY DATUM
IP	5.82	131.17	7.57	125.35
			8.04	123.1
			12.14	119.0
178+8176			204	129.1
178+849			2.0	129.2
+90			23	128.9
+973			2.16	129.0
179+00			2.11	129.1
+11			224	128.9
+1994 ± PT			2.57	128.6
+256			283	128.3
+28			2.83	128.3
+29			2.3	129.9
+317			3.1	128.1
+317			2.75	128.4
+325			2.77	128.4
+325			10.46	120.7

MAR. 10, 1950

BEATTY
ROGERS
PAYNE

43

DISC IN CONC MON SE COR. 8TH & HARRISON NATIONAL CITY

Top 30" STEEL PIPE AT FLANGE

Bottom WOOD VAL CHAMBER CONC FLOOR

Top of " " "

" " " "

Edge of A.C. PAVT.

± of oiled road

on A.C. Pavt

Edge " " "

on A.C. Sldr berm.

on Edge of conc wall of storm ditch

" " " " " " "

" bottom " " " " " "

3/10/50

44

BONITA RELOCATION

E PROFILE

	131.17.	12.43	118.7	..
179+422		10.45	120.7	..
+42L		2.77	128.4	..
+422		2.78	128.4	..
+422		3.7	127.5	..
+50		2.8	128.4	..
180+00		2.2	129.0	..
SET TBM		2.58	128.59	..
TP	4.63	134.19	1.61	129.56
+50		4.2	130.0	..
181+00		4.2	130.0	..
+50		2.6	131.6	..
182+00		1.5	132.9	..
+13		0.8	133.4	..
+17		2.8	131.4	..
+22		0.3	133.9	..
TP Rock	12.17	145.63	0.73	133.46
+50		10.4	135.2	..
183+00		8.1	137.5	..

BLOW-OFF
TOP 8" PIPE 7' LT

(8" GVAL 8' LT)

on bottom of CONC storm ditch

on edge of wall of " " "

" " " " " " " "

3.3

0.83

0.3

CHIS D on CONC storm ner of VAL CHAMBER
DRAIN
Channel

BEGIN HOLE

END HOLE

3/10/50

45

BONITA RELOCATION

E PROFILE

145.63

183+50 5.3 140.3

184+00 1.6 144.0

P rock 12.03 157.00 0.66 144.99

+50 10.2 146.8

185+00 7.8 149.2

+15 5.8 151.2

+17 5.2 151.8

+28 5.1 151.9

+32 6.2 150.8

+50 5.5 151.5

Set TBM Hub 4.45 152.6

186+00 1.9 155.1

P rock 12.97 169.70 0.27 156.73

+50 11.6 158.1

187+00 7.1 162.6

+27 4.7 165.0

+29 5.8 163.9

+34 5.4 164.3

162.1	161.2	162.2	162.5
16	8.5	7.5	7.2
9	11	13	16
			1.2
	11	13	16

3/10/50

LL

BONITA RELOCATION

E PROFILE

169.70

+38 4.0 165.7

+42 3.5 166.2

+44 4.2 165.5

+50 3.6 166.1

167.1	167.4	166.1	166.1	167.4	167.8
2.6	2.3	3.6	3.6	2.3	1.9
8	3	2	1	3	6

P rock 12.65 181.76 0.59 169.11

+55 15.6 166.2

+58 14.9 166.9

+60 15.2 166.6

+73 12.6 169.2

+79 11.8 170.0

+90 10.9 170.9

+94 9.8 172.0

+94 11.33 170.4

188+00 9.9 171.9

+50 3.5 178.3

ON FIRE 6' LEFT

172.5	172.5	171.3	170.5	173.6	172.8
9.3	9.3	10.45	11.3	8.2	7.0
12	9	6	5	4	10
178.1	178.2	177.2	175.7	176.2	178.3
3.7	3.6	4.63	6.1	5.6	2.5
11	9	6	5	5	10
13					13

P 12.90 192.43 0.23 181.53

+85 12.4 182.0

+89 12.7 181.7

189+00 10.5 183.9

184.4	192.4	182.3	182.8	183.9	188.3	190.3	192.0	188.0
10.0	12.0	12.1	11.55	10.5	6.1	4.1	2.4	1.2
17	10	25	6		7	7	10	15

3/10/50

47

BONITA RELOCATION
E PROFILE
194.23

189+10		10.51	183.9
+50		1.9	192.5
P	10.83	205.08	0.18
190+00		6.3	197.8
+13		3.5	201.6
+20		3.1	202.0
+50		0.6	204.5
P	11.79	216.59	0.33
191+00		6.8	209.7
+18		5.1	211.4
+50		4.2	212.3
192+00		1.4	215.1
SET TOM	10.26	226.06	0.74
+21		9.32	216.7
+11		8.35	217.7
+50		8.0	218.1
+58		7.9	218.2
+70		6.4	219.7
193+00		5.5	220.6

Top of pipe 6" LT

190.8	190.2	189.5	192.5	195.6	197.9	199.6	200.0
3.6	3.8	4.9	1.7	+1.2	+3.5	+5.2	+5.6
12	9	6	6	5	5	10	15

197.7	198.6	196.5	196.5	197.5	197.8	201.2	202.2
7.4	6.5	8.6	8.6	7.6	6.3	3.9	2.9
13	9	6	4	3	6	5	10

201.7	198.7	200.9	202.0	202.4	203.3
3.4	6.4	4.2	3.1	2.7	1.8
12	7	4	6	6	12

Spike in Guy pole SW Cor 4TH ST

Edge of piled road

" " " " (EE)

3/10/50

48.

BONITA RELOCATION

ϕ PROFILE

226.06

193+50	4.7	221.4	..
194+00	4.6	221.5	..
+50	6.6	219.5	..
195+00	7.4	218.7	..
+30	7.5	218.6	..
+50	7.3	218.8	..
196+00	5.2	220.9	..
+40	3.4	222.7	..
+50	3.8	222.3	..
TP	2.67	224.43	..
	4.30	221.76	..
197+00	2.2	222.2	..
+50	2.4	222.0	..
198+00	2.9	221.5	..
+50	3.4	221.0	..
+74	6.27	218.2	..
+84	6.55	217.9	..
+86	6.8	217.6	..
+90	6.1	218.3	..
199+00	7.2	217.2	..

12.6	11.8	7.5	8.0	7.8
13	8	2	10	

1" IR Prop Cor 5' ET 196+50

Edge of oiled road

" " " "

MAR 13 1950

49

BONITA RELOCATION

4 PROFILE

224.43

199 +25		10.1	214.3
+30		12.2	212.2
4 (Rock)	0.15	211.70	12.88 211.55
+50		3.8	207.9
(+82.5		11.85	199.9
4)	9.25	208.01	12.94 198.76
200+00		10.4	197.6
+01		9.7	198.3
+03		9.9	198.1
+06		13.4	194.6
(+11.5 Vertg RT in Bonita P.L.		11.95	196.1
+16		13.7	194.3
(+19		11.45	196.6
+21		9.9	198.1
+40		8.4	199.6
+50		7.1	200.9
201+00		3.9	204.1
+25		2.0	206.0
+50		2.4	205.6
+77		2.1	205.9

Top 28" steel pipe 6⁵ LTTop 28" steel pipe 6⁵ LT

" " " " " "

3/13/50

50

BONITA RELOCATION
 & PROFILE
 208.01

1	201+82	3.2	204.8
	+88	3.2	204.8
4	+92	2.5	205.5
	202+00	3.3	204.7
	+15	5.4	202.6
8	+50	9.8	198.2
H	0.79	198.71	10.09 197.92
	+63	4.0	194.7
	203+00	9.8	188.9
	+02	9.8	188.9
	(+03	11.42	187.3
	+05	10.8	187.9
	+05	11.3	187.4
	SET. TBM	12.39	186.32
	+06	11.2	187.3
	+07	11.0	187.7
	+07.5	11.45	187.26
	+12	9.1	189.6
	+25	7.2	191.5
	+33	5.6	193.1
	+37	4.2	194.5
	+50	1.4	197.3

TOP 28" PIPE 65 LT.

(ON SO. EDGE OF 4" GV. @ B.O.)

TOP 28" PIPE 65 LT.

3/13/50

57

BONITA RELOCATION
& PROFILE

	198.71		
P	11.88	209.95	0.64 198.07
+65			8.2 201.8
+75			7.4 202.6
+92			3.6 206.4
204+00			1.5 208.5
P	12.38	221.92	0.41 209.54
+30			8.3 213.6
+50			5.4 216.5
+61			3.5 218.4
+73			0.4 221.5
P	7.71	228.85	0.78 221.14
205+00			4.2 224.7
+05			3.9 225.0
+07			3.3 225.6
+09			3.3 225.6
+10			3.6 225.3
+14.2			3.55 225.3
+24.6			3.45 225.4
	(E TAG)		3.51 225.34 = 225.40
CK BM	(W TAG)		3.45 225.40

So. Edge Conc Pavt 9" Thick

& Conc Pavt

MAR. 17, 1950
(Horral for the Island)

52

Top 28" BONITA PIPE

B.M.	7.86	233.26	225.40
204+96		13.50	219.76
205+70		6.70	226.56
205+79		6.40	226.86
206+87.5		2.52	230.74
CK. B.M.	7.86		225.40

205+172	✓	10' LT.	7.91	225.35
205+172	✓	10' LT.	11.21	222.05

Elev. G.V. Box 204+54.31 ♀ G.V. (Plan 204+54.55)

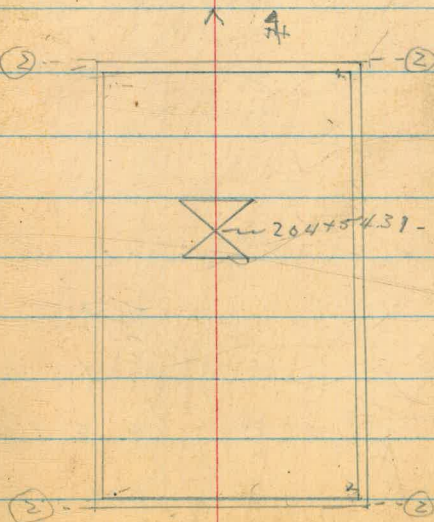
B.M.	180	227.20	225.40	W.Tac.	C. Subg.
S.E. Cor		11.01	216.19	208.36	7.83
N.E. Cor		9.16	218.04	208.15	9.89
N.W. Cor		8.89	218.31	207.85	10.46
S.W. Cor		10.85	216.35	208.25	8.10

Top of 28" pipe

"	"	"	"
"	"	"	"
"	"	"	"

Top edge of Conc Pav't

Top of Conc around 28" STEEL PIPE
3.30 lower than edge of pav't. Conc. appears flat on top and extends at least 2' from edge of pav't.



204+54.31 - Pipe 24
behind laying
sta.

SEPT. 15 1950

54

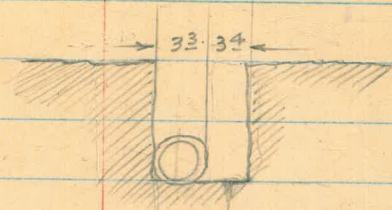
BEGINNING OF GUNNITE SECTION

ELEV. TOP OF 28" STEEL PIPE

END
BEGINNING OF GUNNITE SECTION

352+18.0

BEGINNING



Typical Section of Ditch Excav
For Removal
of Gunnited Benita
PIPELINE

11)	1.47	162.00	160.53
350+50		8.08	153.92
351+00		7.73	154.27
351+50		7.63	154.37

Top 28" STEEL PIPE (Gunnite broken off.)

" " "
" " "

SEPT 16, 1950
BETTY
LEONARD

55

ELEV Top 6" MAIN 42nd & HILLTOP

BN 6.69 160.85 153.16 pg 30.

11.18 148.67

CK BN 6.69 153.16

OP SW Cor 42nd ST

Top 6" MAIN 42nd ST Sta 349+55

IP 3.97 161.14 157.17

11.00 150.14

5.58 155.36

5.46 155.68

5.70 155.44

CK IP 3.97 157.17

C of drive gate - pg 29

Top 6" C.I. MAIN TOYNE ST. 346+68⁸

" " " " DENBY ST 343+83 on E

" " " " " " " " 1' RT

1' LT

IP 9.97 167.14 157.17

8.48 158.66

8.39 158.75

CK

SET TBM 7.23 162.91

Top 8" Vit. Clay San. Sewer 342+05

Top 8" (Bell) 05 RT & 342+05

Nail in Pa Pole SE Cor DENBY & Hilltop

LOCATION OF
CATHODIC STATION D
Bonita Pipeline
FILE 3826

Nov. 6 1952
BEATTY
POWELL
ALEXANDER

56.

3+30⁰⁵ 3/4" I.P. 54⁸⁰ RT
2+54 " 10⁵ RT & 52⁵ RT
2+25¹⁵ " 6⁵ RT
1+62 " 5⁷ RT
1+62 Anode 8³ RT
0+81³ " " " " 13¹⁰ LT 14¹⁵ RT
0+479 Fdn forms for house 9⁰ LT, 14¹⁰ RT
0+41 Anode 9⁰ RT
0+33 Anode 9⁰ RT & 190¹ LT
0+30 Prop. line 25¹⁵ LT & 24¹⁵ RT 1/2" I.P. Lot 60
0+00 = & DIVISION.

90°00' RT STA 11+30⁴¹

12+60⁶¹ L&T & Harbison

11+30⁴¹ L&T

10+76⁴⁴ TAG RE 622

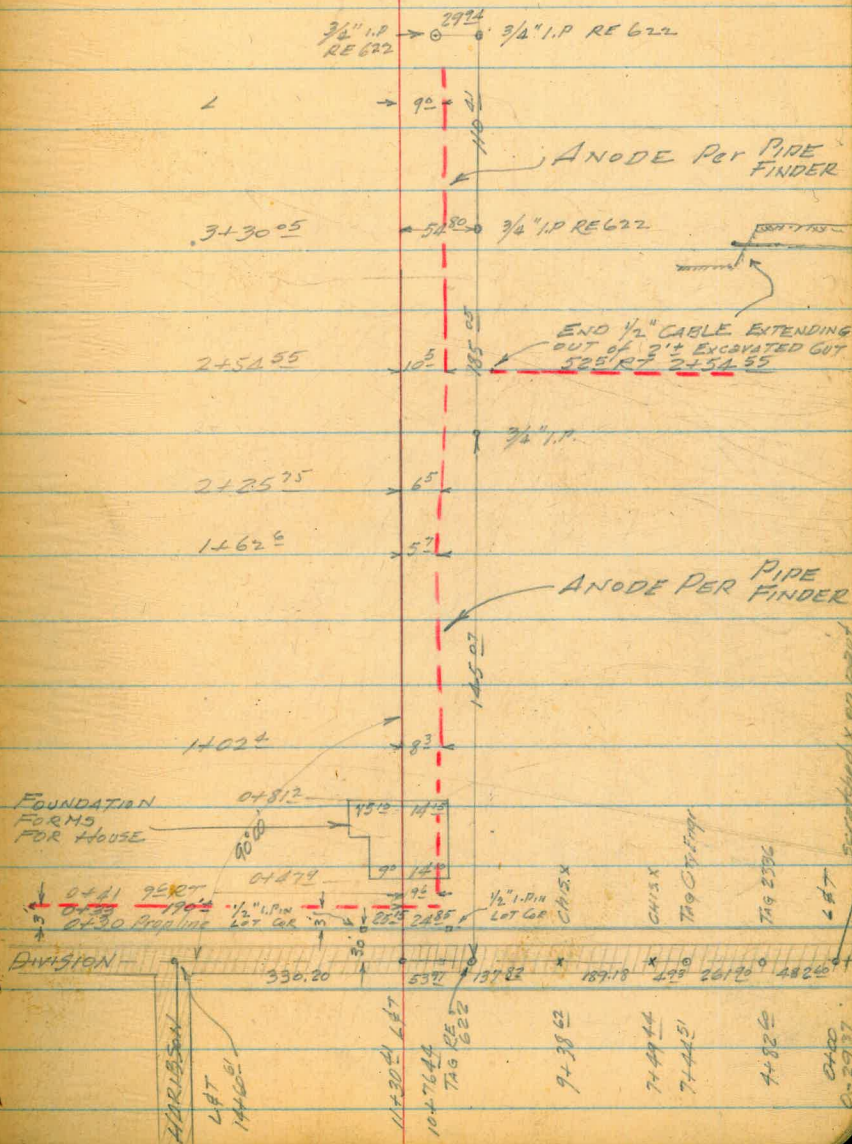
9+38⁶² Chis +

7+49⁴⁴ Chis +

7+42⁵¹ TAG City Engr

4+82⁶⁰ TAG RE 2326

0+00 = L&T SELV Car Los Altos Villas



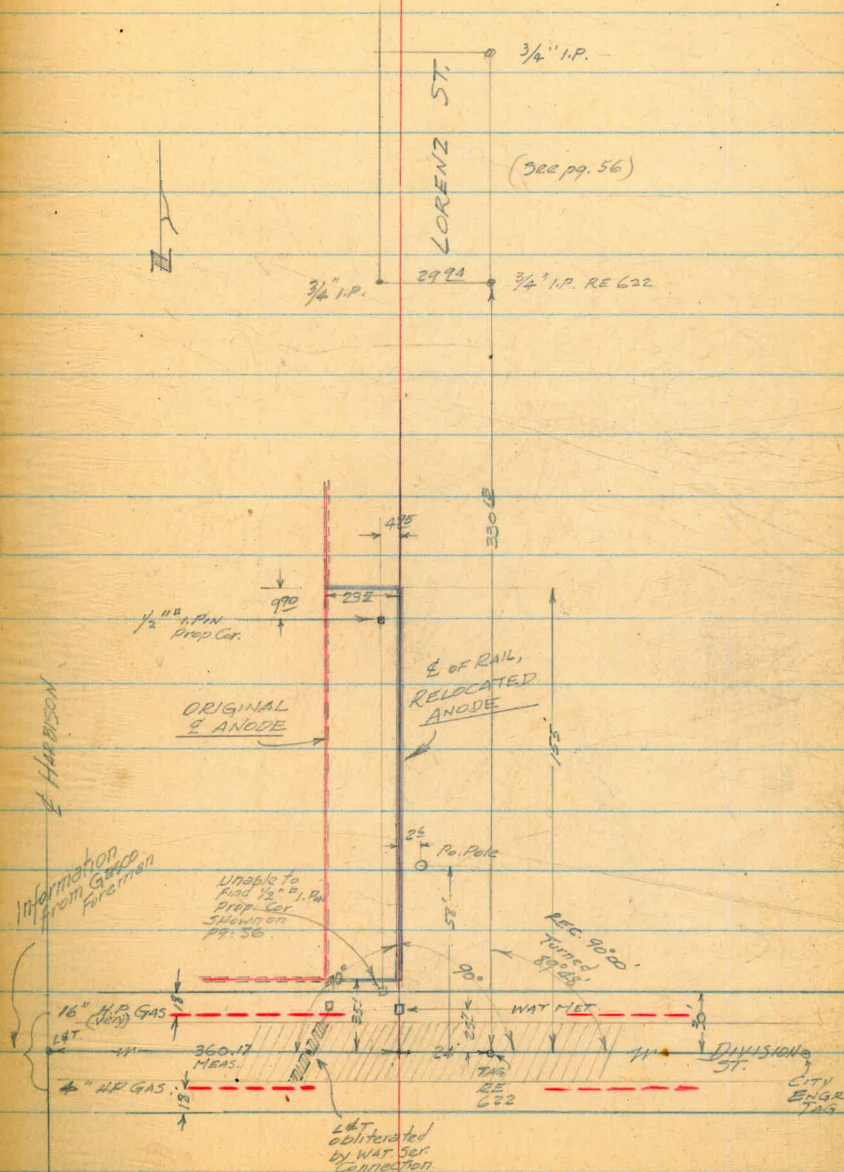
LOCATION OF PORTION OF
CATHODIC STATION D
AFTER RELOCATION
BONITA PIPELINE

FEB. 3, 1953

57.

BETTY
WILLIAMS
KEMP
ALEXANDER

- (235 to Orig. Anode)
- 1+55 ✕ PT. $\frac{1}{2}$ of ANODE Turn West
- 1+45¹⁰ 4.95 LT to $\frac{1}{2}$ " I.P. Lot Cor.
- 0+58 2⁶ RT To P. Pole
- 0+35¹⁰ ✕ PT. $\frac{1}{2}$ of ANODE (Turns West)
- 0+25? $\frac{1}{2}$ WAT on line
- 0+00 $\frac{1}{2}$ DIVISION ST.



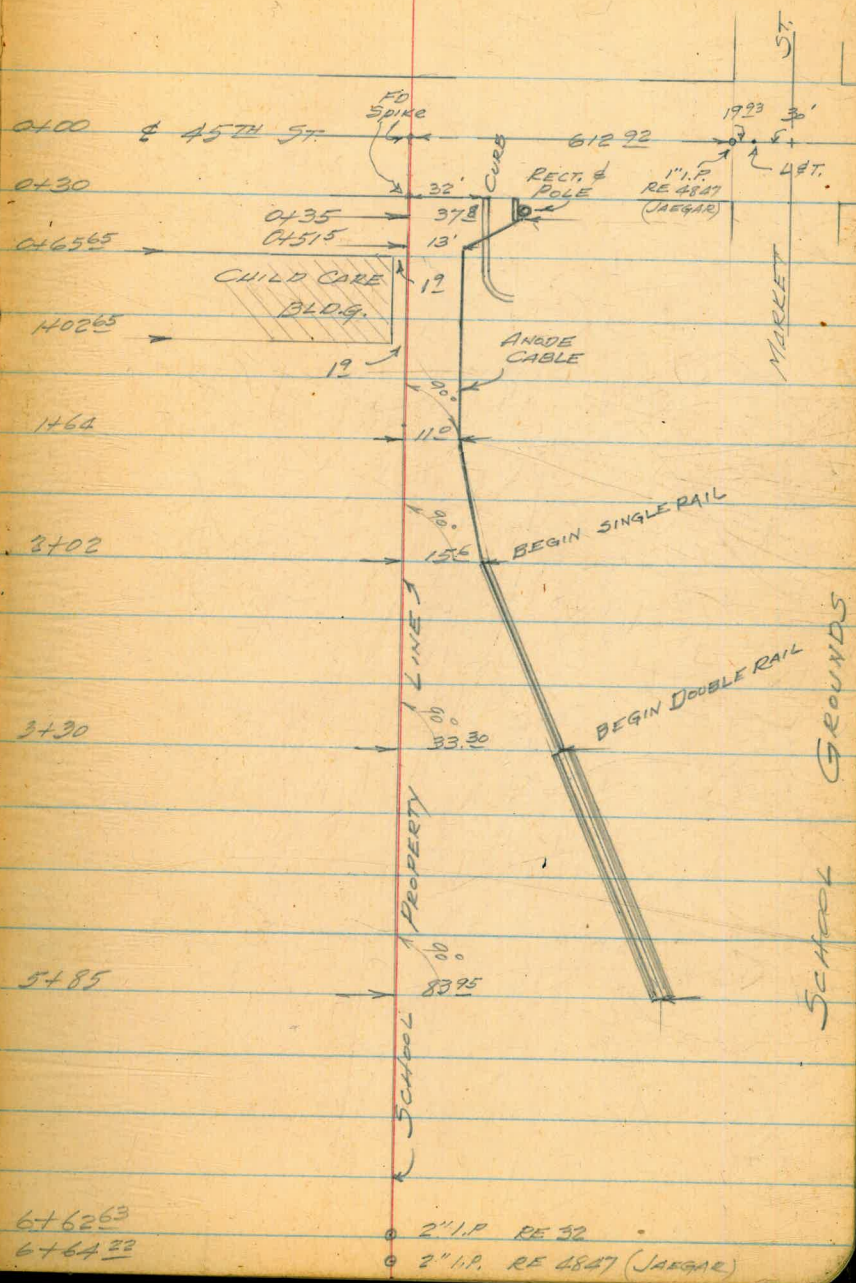
LOCATION OF CATHODIC RECTIFIER
& ANODE STATION H.
DONITA PIPELINE

JULY 12, 1954

BEATTY
SHOREY
ALEXANDER

ZY

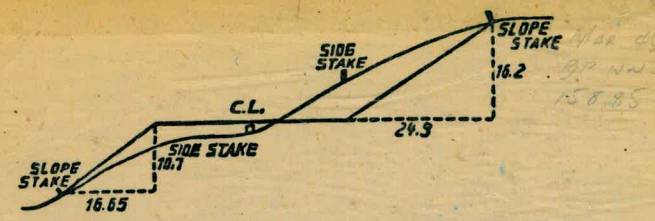
58



210,33



5.58
5.46
5.70



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.
SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.25	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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