G-117

DIETZGEN

ENGINEER'S

LEVEL BOOK

No. 340

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be 30.6 + (20—16) ÷ 2 or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1½ see inside of back cover.

Indexed HB

AUBURN DRIVE

Grades

NL. STA.	Ncb	Scb
-36.06 = PL ON SL		
-79.47 = EL Euclid on NL.	339.09	339.64
	339.27	
0+00 = EC ON SL	339.45	339.75
50 E	339.68	340.0
100	339.92	340.25
150	340.15	340.50
200	340.38	340.75
250	340.62	341.0
305.50 = PC	340.88	341.28
331.32 ① def. = 1°51' ch. = 25.82	341.0	341.42
357.14 ②	341.12	341.57
382.98 ③	341.24	341.71
408.82 ④	341.37	341.86
434.65 ⑤ = EC = Break	341.50	342.0
450	341.41	341.91
500	341.14	341.64
550	340.88	341.38
600	340.61	341.11
650	340.35	340.85

340.68 NW cor Univ. + Euclid 12/24/25 J Moore

340.68
1.70
342.38
5.92
344.46
3.91
346.37

NL 39.3 / 9.0 / 7.4 / +1.6 — 39.7 / 8.7 / 6.9 / +0.7 — 39.9 / 8.5 / 7.5 / +1.0 — 40.2 / 8.2 / 7.7 / +0.5 — 40.4 / 8.0 / 6.9 / +1.1 — 40.6 / 7.8 / 7.2 / +0.6 — 40.9 / 7.5 / 7.1 / +0.4 — 41.10 / 7.3 / 7.4 / -0.1 — 41.3 / 7.1 / 6.8 / +0.3 — 41.4 / 7.0 / 7.1 / -0.1

SL 39.9 / 5.5 / [illegible] / +3.9 — 40.0 / 5.4 / 5.5 / +2.9 — 40.3 / 8.1 / 5.5 / +2.6 — 40.5 / 7.9 / 5.3 / +2.6 — 40.8 / 7.6 / 5.1 / +2.5 — 41.0 / 7.4 / 5.8 / +1.6 — 41.3 / 7.1 / 5.9 / +1.2 — 41.5 / 6.9 / 6.3 / +0.6 — 41.7 / 6.7 / 6.6 / +0.1 — 41.8 / 6.6 / 6.1 / +0.5

NL 41.5 / 6.9 / 0.0 — 41.6 / 6.8 / 7.0 / -0.2 — 41.8 / 6.6 / 7.5 / -0.9 — 41.4 / 5.0 / 6.3 / -1.3 — 41.1 / 5.3 / 5.9 / -0.6 — 40.9 / 5.5 / 5.6 / -0.1 — 40.6 / 5.8 / [illegible] / +1.6

SL 42.3 / 6.2 / 0.0 — 42.1 / 6.3 / 6.6 / -0.3 — 42.3 / 6.1 / 6.0 / +0.1 — 41.9 / 4.5 / 3.9 / +0.6 — 41.6 / 4.8 / 3.9 / +0.9 — 41.4 / 5.0 / 3.8 / +1.2 — 41.1 / 5.3 / 3.2 / +2.1

340.68
4.31
344.99
4.11
340.88
5.34
346.22

= EC

Scb 339.64 / 5.35 — 39.59 / 5.40 — 39.62 / 5.37 — 39.66 / 5.33 — 39.69 / 5.30 — 39.72 / 5.27 — 39.75 / 5.24 — 340.0 / 4.99

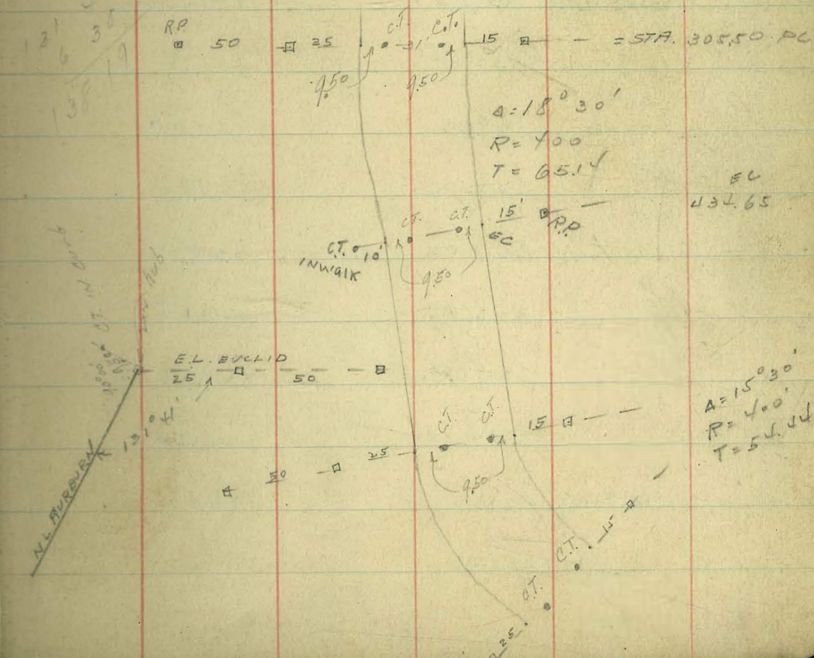
Ncb 338.95 / 6.04 — 38.99 / 6.0 — 39.03 / 5.96 — 39.10 / 5.89 — 39.27 / 5.72 — 39.45 / 5.54 — 39.68 / 5.31

Ncb 39.92 / 5.07 — 40.15 / 4.84 — 40.38 / 4.61 — 40.62 / 4.37 — 40.88 / 4.11 — 40.96 / 5.26 — 41.05 / 5.17 — 41.13 / 5.09 — 41.21 / 5.01 — 41.29 / 4.93

Scb 40.25 / 4.74 — 40.50 / 4.49 — 40.75 / 4.24 — 341.0 / 3.99 — 41.28 / 3.71 — 41.37 / 4.85 — 41.46 / 4.76 — 41.55 / 4.67 — 41.64 / 4.58

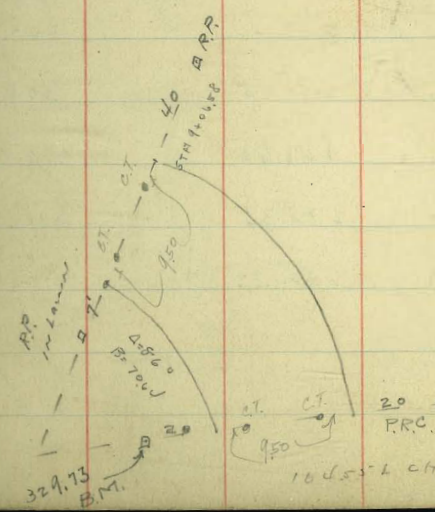
NCb 41.37 / 4.85 — 41.43 / 4.79 — 41.50 / 4.72 = EC — 41.41 / 4.81 — 41.14 / 5.08 — 40.88 / 5.34 — 40.61 / 5.61 — 40.35 / 5.87

Scb 41.73 / 4.49 — 41.84 / 4.38 — 41.91 / 4.31 — 340.0 / 4.22 — 41.91 / 4.31 — 41.64 / 4.58 — 41.38 / 4.84 — 41.11 / 5.11 — 40.85 / 5.37



AUBURN DRIVE

		NCL	SCL
680		340.19	340.69
715.25 = PC	= BREAK Δ 15° 30' def = 1° 26' 15" ch = 27.05 NL	340.0	340.50
	① + 30.73 SL	339.25	340.00
	②	338.50	339.50
	③	337.75	339.0
842.76	④ = EC = BREAK	337.0	338.50
906.50		334.96	336.46
906.58 =	P.C. = 86° 00' R = 70.6	332.9	334.4
	T = 65.87	332.03	333.53
	def = 4° 18' 00"	331.13	332.63
	8 + 18.09 = NL	330.4	331.74
	chords 10.59 = SL	329.35	330.85
	5	328.46	329.96
	6	327.56	329.06
	7	326.67	328.19
	8	325.78	327.28
	9	324.89	326.39
1087.66 =	10 = PRC = Break	324.0	325.50
	0	322.96	324.47



AUBURN DRIVE

		NCL		SCL	
Δ=27°	2	321.91		323.35	
R=239.5					
T=57.5	3	320.87		322.28	
defl.=1°55'42"					
	4	319.83		321.21	
	5	318.78		320.14	
	6	317.72		319.07	
12+60.52	7 PRC = Break	316.70		318.02	
Δ=40°	1	314.77		316.0	
R=108					
T=39.31	2	312.83		314.0	
defl.=4°00'	3	310.89		312.0	
	4	308.94		310.0	
13+10.82	5 PRC. Break	307.0		308.02	10
19.99 = chords defl=2°17'21"	1	304.33	19.42 of line; 18.5 = chords on SL 3 times defl=3°41'26"	306.83	9
	2	301.66		305.66	8
13+70.82	3 opposite 5' Radius on Wall Break	299.0		304.50	9
20.0 = chords on NL defl=2°17'44"	1	295.45		306.40	8
	2	291.90		308.30	7.29 = of L
	3	288.35	P.C.C. 3	310.21	ch=6.26 defl.=4°13'30"
			middle	311.31	
14+51.03 = E.C.	4	Break 284.80	E.C. opposite S.L.	312.42	

331.01 / 12.62 / 318.39 / 0.64 / 319.03 / 12.96 / 306.07 / 1.47 / 307.54 / 12.61 / 294.93 / 0.77 / 295.70

NL 322.1 / 8.9 / 9.1 / -0.2 — 21.1 / 9.9 / 9.7 / +0.2 — 20.1 / 10.9 / 10.3 / +0.6 — 319. / 12.0 / 10.5 / +1.5 — 318.0 / 13.0 / 11.0 / +2.0 — 316.9 / 14.1 / 13.3 / +0.8 — 315. / 4.0 / 7.5 / -3.5 — 313.1 / 5.9 / 8.9 / -3.0

SL 23.6 / 7.4 / 3.4 / +4.0 — 22.5 / 8.5 / 4.0 / +4.5 — 21.5 / 9.5 / 5.2 / +4.3 — 20.4 / 10.6 / 6.7 / +3.9 — 19.3 / 11.7 / 7.8 / +3.9 — 318.25 / 12.8 / 9.4 / 3.4 — 316.2 / 14.8 / 11.1 / +3.7 — 314.3 / 4.7 / 1.6 / +3.1

NL 311.2 / 7.8 / 11.5 / -3.7 — 309.2 / 8.8 / 13.2 / -4.4 — 307.2 / 0.3 / 4.7 / -4.4 — 304.6 / 3.0 / 6.5 / -3.5 — 302.0 / 5.5 / 9.7 / -4.2 — 299.2 / 8.3 / 15.1 / -6.8 — 295.7 / 0.0 / 5.8 / -5.8

SL 312.3 / 6.7 / 2.9 / +3.8 — 310.3 / 8.7 / 4.3 / +4.4 — 308.3 / 10.7 / 5.5 / +5.2 — 307.1 / 11.9 / 6.9 / +5.0 — 305.9 / 13.1 / 7.7 / +5.4 — 304.7 / 14.3 / 7.4 / +6.9 — 306.7 / 12.3 / 6.0 / +6.3 — 308.30 / 10.7 / 4.6 / +6.1

NL 292.1 / 3.6 / 8.0 / -4.4 — 288.6 / 7.1 / 10.6 / -3.5 — 285.0 / 10.7 / 14.5 / -3.8 — SL +.8 / -3.8 — 308. / 468

SL 310.5 / 8.5 / 3.3 / +5.2 — 312.7 / 6.3 / 1.7 / +4.6

327.00 / 318.27 / 12.76 / 305.51 / 7.17 / 312.68 / 12.05 / 300.63 / 0.64 / 301.27 / 12.92 / 318.25 (?) / 1.48 / 289.83 / 6.53 / 283.30

NCL 21.91 / 5.09 — 20.87 / 6.13 — 19.83 / 7.17 — 18.78 / 8.22 — 17.74 / 9.26 — 16.70 / 10.30 — 14.77 / 3.50

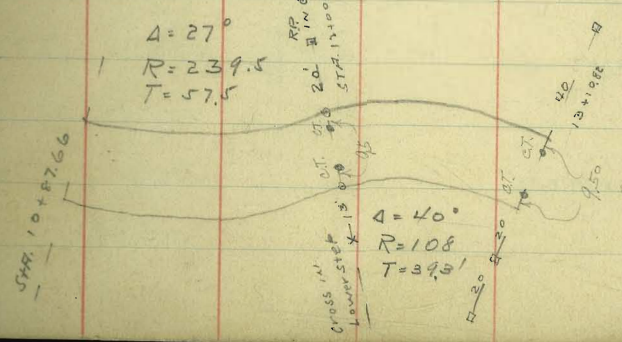
SCL 23.35 / 3.65 — 22.28 / 4.72 — 21.21 / 5.79 — 20.14 / 6.86 — 19.07 / 7.93 — 318.0 / 9.0 — 316.0 / 2.27

NCL 12.83 / 5.42 — 10.89 / 7.38 — 308.94 / 9.33 — 307.0 / 11.27 — 304.33 / 8.35 — 301.66 / 11.02 — 299.0 / 3.27

SCL 314.0 / 4.27 — 312.0 / 6.27 — 310.0 / 8.27 — 308.0 / 10.27 — 306.83 / 5.85 — 305.66 / 7.02 — 304.50 / 8.18 / 7.02 / +1.16

NCL 95.45 / 5.82 — 91.90 / 9.37 — 88.35 / 12.92 — 84.80 / 5.03

SCL 305.92 / 6.76 — 307.35 / 5.33 — 308.78 / 3.90 — 310.21 / 2.71 — 311.31 / 1.37 — 312.42 / 0.26



AUBURN DRIVE — Curb and Retaining Wall

		℄ ELEV.
End of ℄ on		
SL of South Auburn = 0+00		311.57
	ch = 12.13 defl = 4°18'30"	310.39
+94.33 = P.C.C. = BREAK		309.41
	ch = 14.72 defl = 4°28'05" ①	307.79
	②	306.35
	③	304.94
83.71 = EC 84.74 = PC of 5' Radius Curve	Break	303.50
Middle of ℄ = 5' Radius		301.75
95.77 = EC. 96.76 = PC	1.01' of Tangent	300.0
	①	297.16
	ch = 18.32 defl = 2°59'28" ②	294.34
	③	291.48
	④	288.64
199.99 = EC	⑤ Southerly end of wall	285.80

imaginary ℄ starts here
gutter elev. 10" below

Elev. for top of wall

Southerly End of wall = 0+00		1°37'55"	285.80
ch = 9.99 defl = 1°37'55"	①	3°15'50" 5°36'08" 7°56'26" 10°16'44" 12°37'03"	288.90
+20	② = BREAK	14°57'20"	292.0
	③		294.30

AUBURN DRIVE

	E cb		W cb
P.C. = 0+00	284.80		285.80
56.3 @ 5	276.37		277.37
11 @ .64	267.93		268.93
168.97	259.50	BREAK	260.50
@ 23.04	256.50		257.50
@ 77.11	253.50		254.50
331.20	250.50		251.50

Culvert Location

	Flowline
℄ Culvert #1 = 0+00	301.3 @
+ 20 = ℄ Culv. #1 @	@ 97.97
+ 76 = OUTLET	~~288.60~~ @ 87.10 Lowered 1.5

W	@ 286.0	@ 277.6	@ 269.2	@ 260.75	@ 252.25	@ 243.75	@ 235.25
	9.7	18.1	14.4	9.8	11.8	7.7	10.7
	3.4	11.7	7.4	8.0	11.1	7.2	9.9
	+6.3	+6.4	+6.8	+1.8	+0.7	+0.5	+0.8
E		276.6	268.2	259.75	252.75	243.7	235.8
		6.8	15.4	10.8	5.7	8.1	11.7
		5.5	18.2	12.0	6.5	8.8	14.1
		-1.7	-3.0	-1.2	-0.8	-0.1	-2.4

P.C. V.C. P.C. V.C.

P	@ 284.80	@ 261.30	@ 259.77	@ 258.5	@ 250.50	
	1.10	1.77	.80	3.73	12.07	
W	@ 285.80	@ 267.30	@ 260.77	@ 259.4	@ 251.50	
	1.10	.7	1.80	3.73	12.07	

@ 295.70 P

@ 319.03 P	@ 301.3 @	@ 297.97	@ 295.70	@ 295.7 0	
	17.71	1.06 @	10.6	8.4	
	10.36	10.6 @	8.6	@ 287.10	
	+5.35	+10.6 @	07.1	285.6	
			5.6	1.5	
			-1.5		

	@ 301.3 @	@ 297.50	@ 304.5 0	@ 303.5 0
	16.03	19.85	14.85	13.85 @
	11.69	10.77	11.69	10.77
	+4.34	-3.08	+1.16 = ck	-3.08 ck grade
	Flowline			

@ 299.17
5.70
4.47
@ 1.23 gutter

@ 298.50
11.87 = gutter
10.63
+0.84

@ 294.3 @
@ 293.50
@ 293.50
@

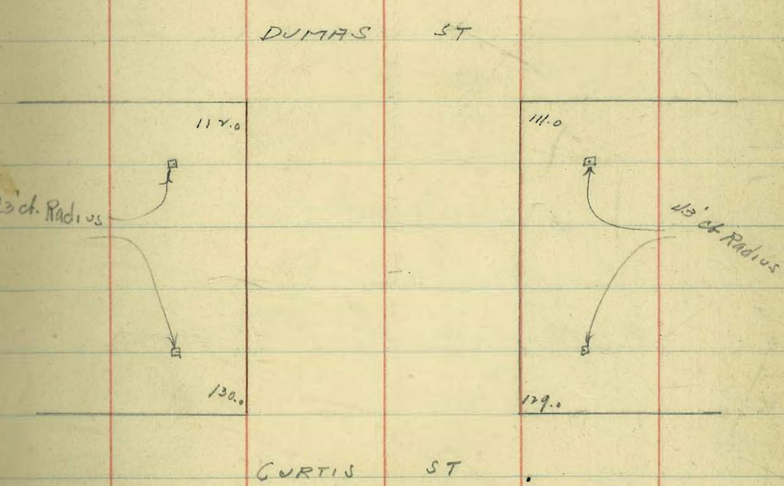
1/5/26 Moore PLUM ST (ROSEVILLE) 70' wide
18' c to c

	W.L	E.L
NL CURTIS	130.25	129.25
25' N = PC on ct	128.00	127.00
50' N	125.75	124.75
100 ✓	121.25	120.25
150 ✓	116.75	115.75
175 ✓ = PC on ct	114.50	113.50
200' = SL DUMAS	112.25	111.25

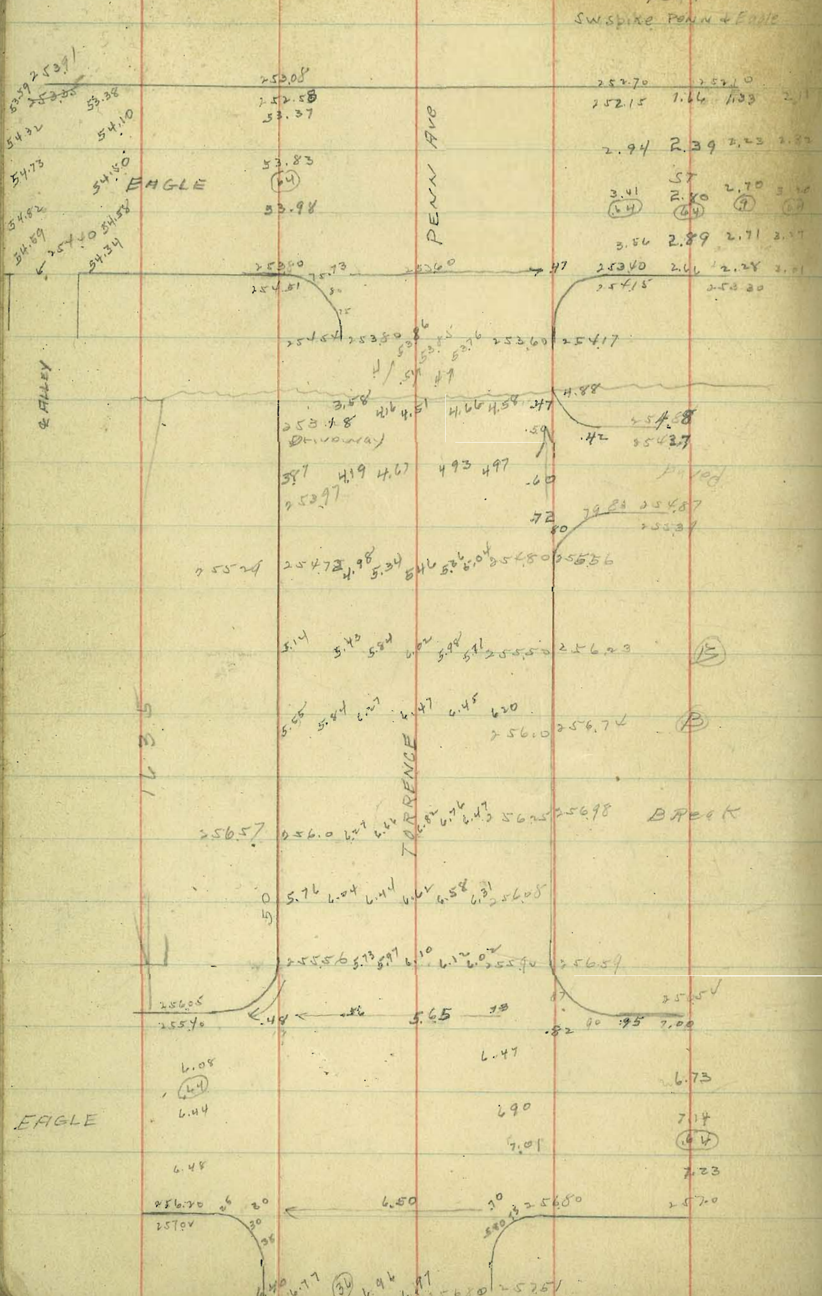
128.13
3.92
133.05

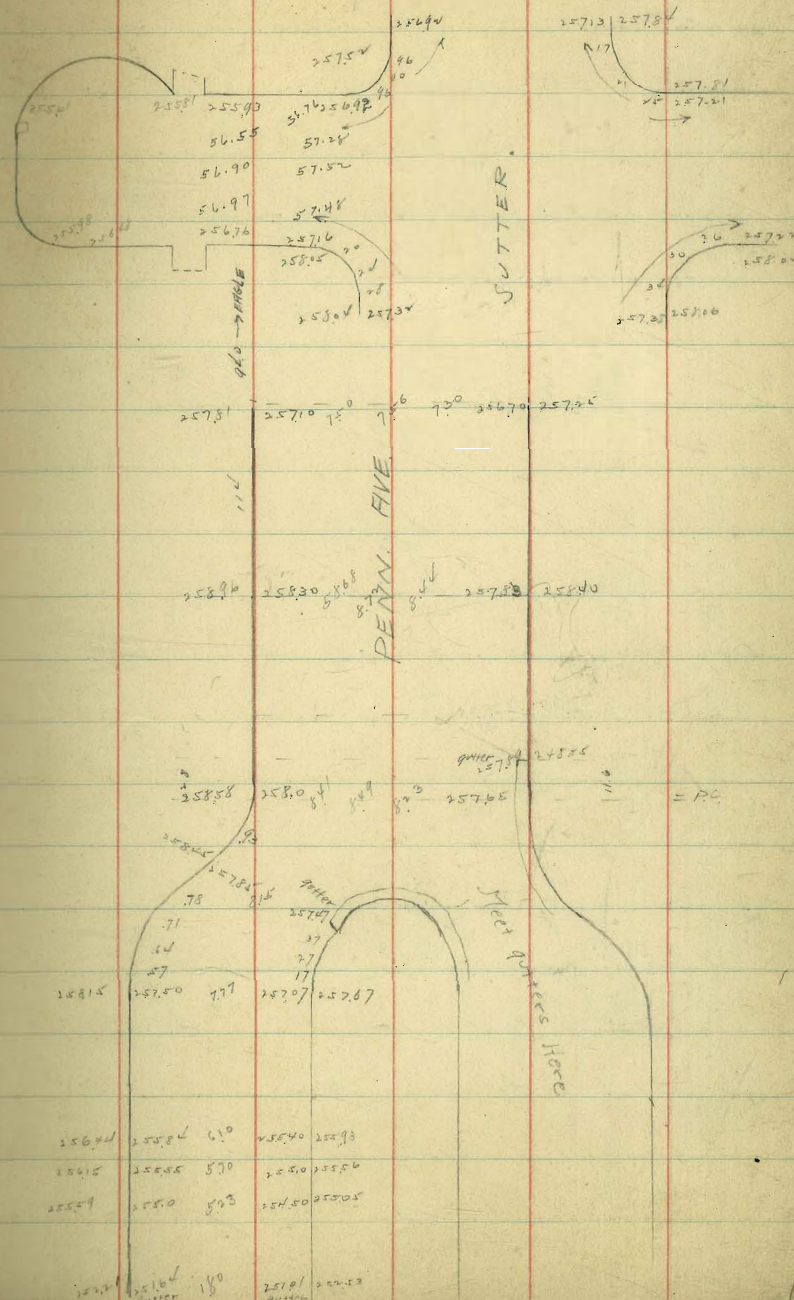
Chatsworth + ELLIOTT
S.E.B.P.

WL	114.50	116.75	121.25	125.75	128.0
	18.5	16.3	11.8	7.3	5.0
	11.1	9.1	5.4	3.2	2.4
	+7.4	+7.2	+6.4	+4.1	+2.6
EL	113.50	115.75	120.25	124.75	127.0
	19.5	17.3	12.8	8.3	6.0
	11.2	9.6	6.7	4.6	3.9
	+8.3	+7.7	+6.1	+3.7	+2.1

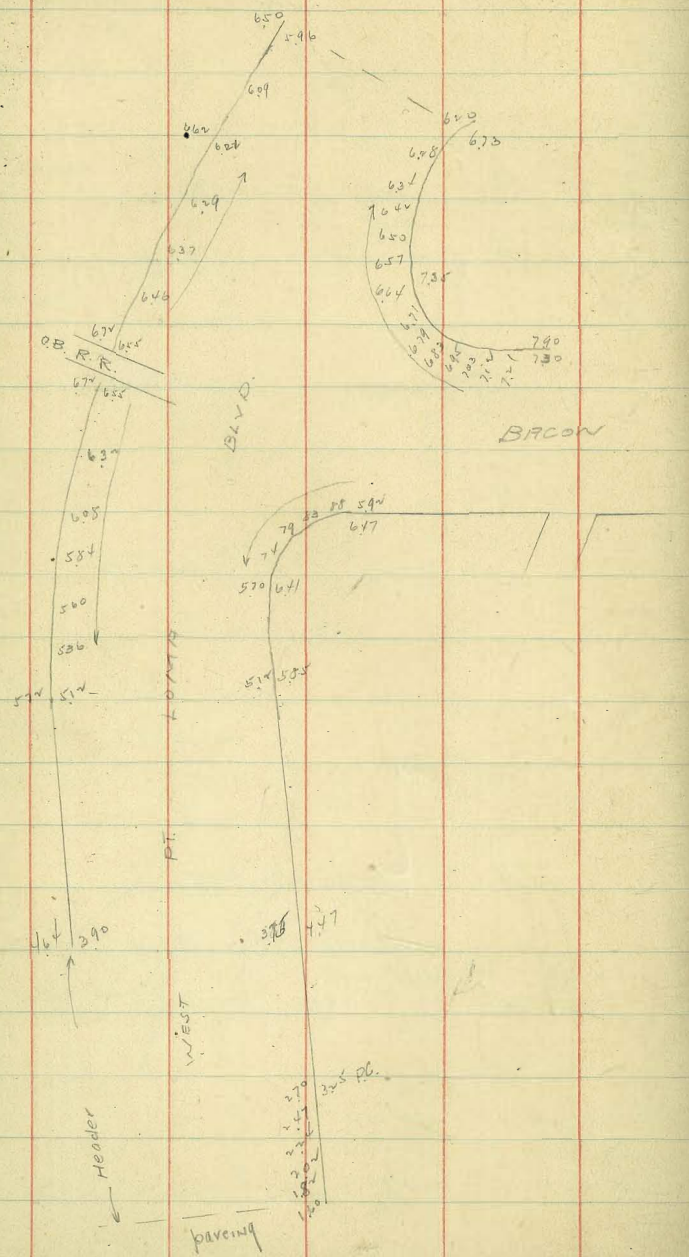


EAGLE & PENN. AVE
PAVING

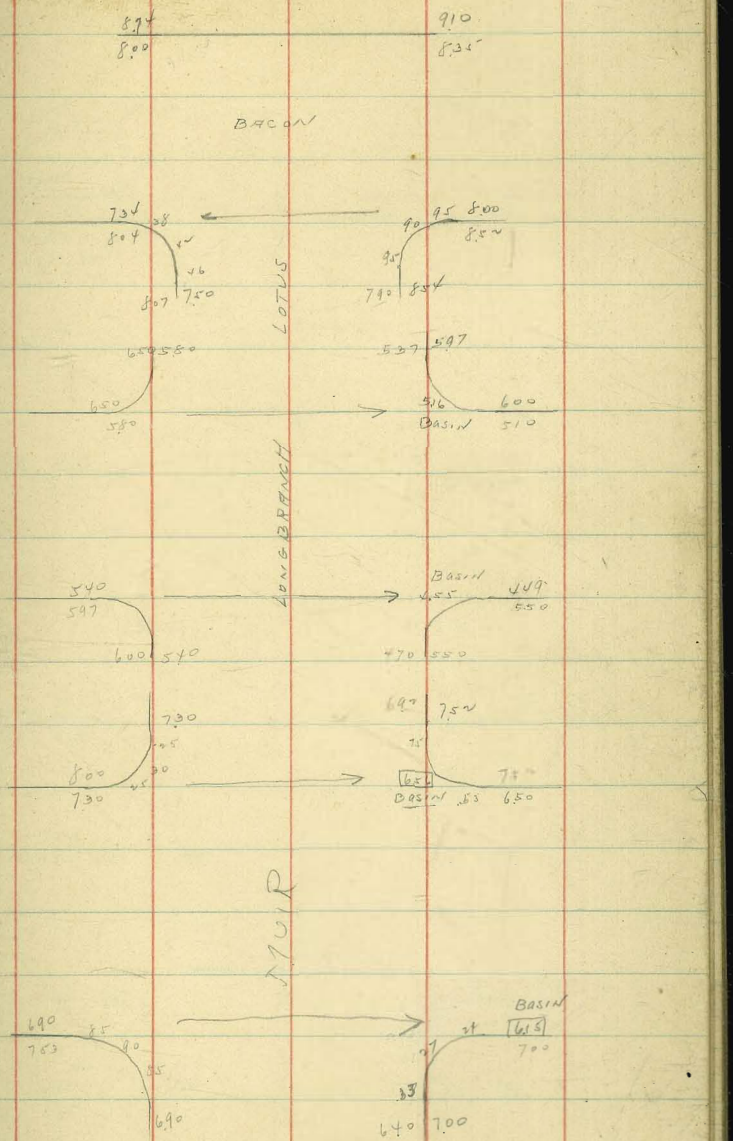


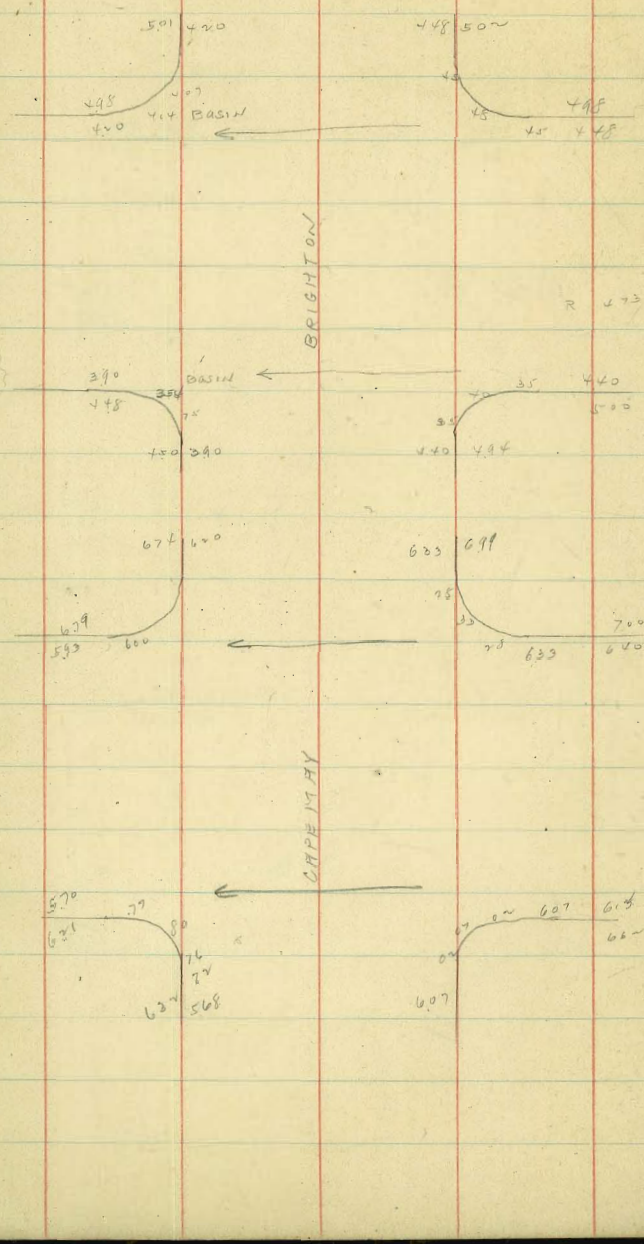


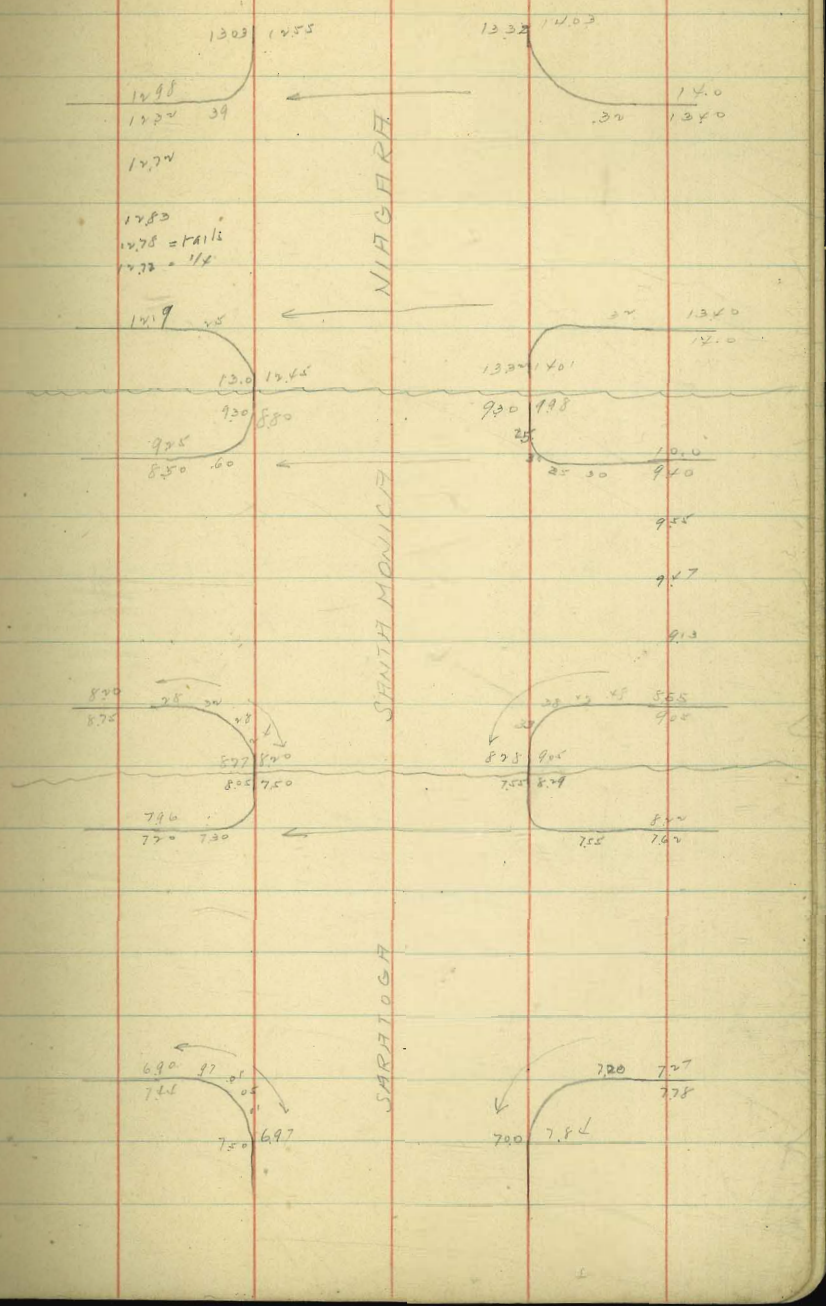
BACON ST PAVING

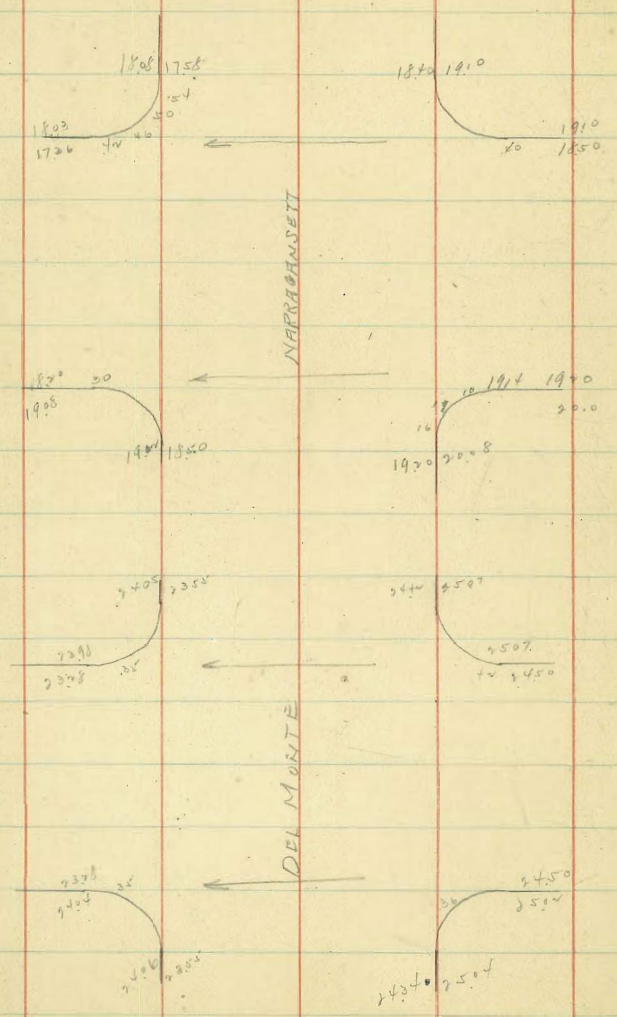


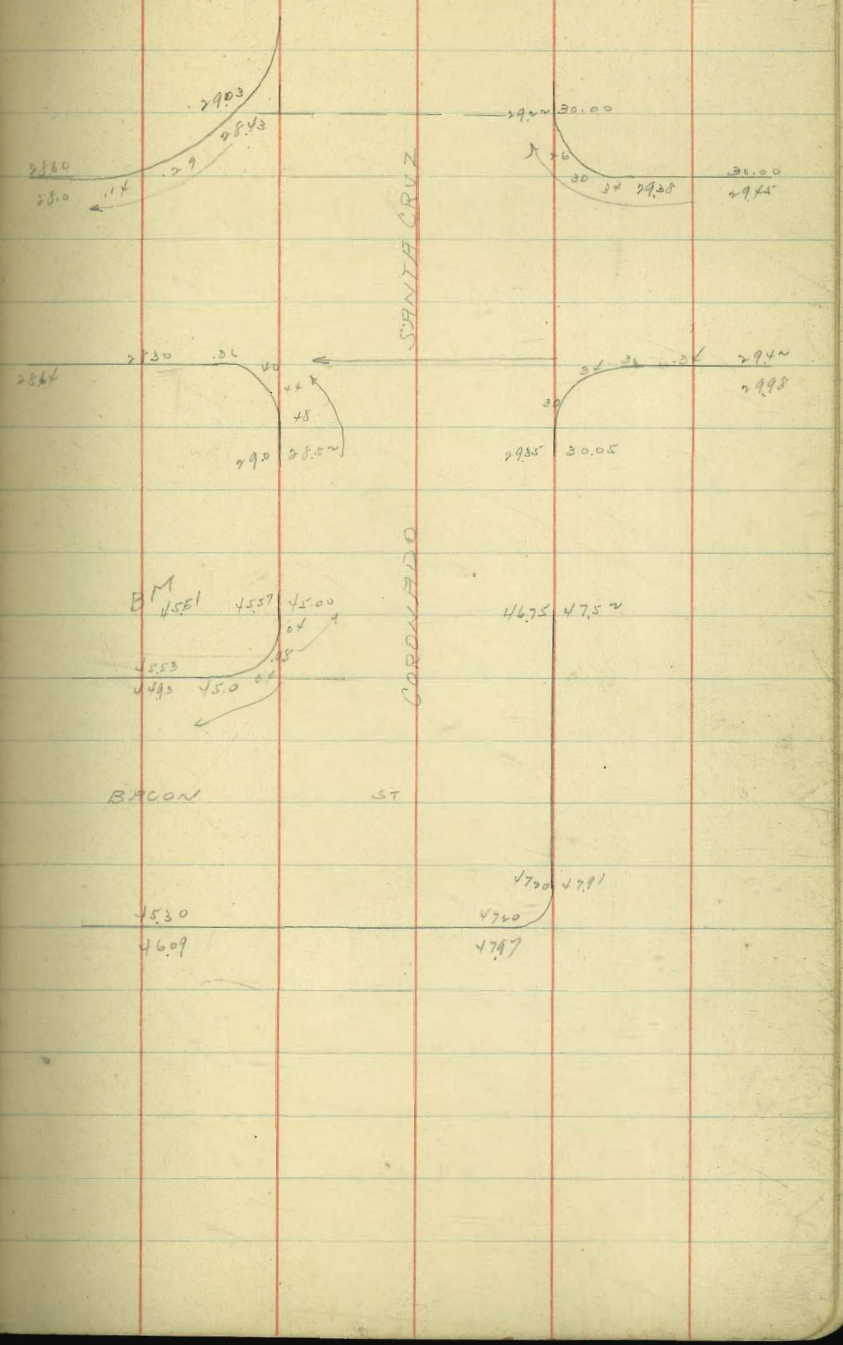
BACON




BRIGHTON
CAPE MAY
BASIN
BASIN


NIAGARA
SANTA MONICA
SARATOGA


NARRAGANSETT
DEL MONTE


SANTA CRUZ
CORONADO
BACON ST

Univ Ave
Lincoln
Illinois
Iowa

ALLEY PAVING
BLK 209 UNIV. HGTS. 1/21/26

		WL		EL	Moore
			362.4 old cut		Cb cut 362.36
N.L. LINCOLN		362.78		362.72	
25' S	BREAK	362.62	+0.10	362.56	-0.20
50 S		362.45		362.40	
100		362.12		362.08	
150		361.79		361.76	
200		361.46		361.44	
250		361.13		361.12	
300 = BREAK		360.80	+1.08	360.80	-0.15
350		360.31	-0.05	360.27	-0.69
400		359.82	-0.15	359.74	+0.69
450		359.33	+0.62	359.23	-0.12
500		358.84	+0.26	358.70	+0.2
550		358.35	+0.8	358.18	+0.17
600 S = N.L. UNIV.		357.86	✓	357.66	✓

NWBP UNIV & ILL. 20' wide 11

357.98
4.74
362.72
3.47
359.25
4.78
364.03
2.93
361.10
5.61
366.71

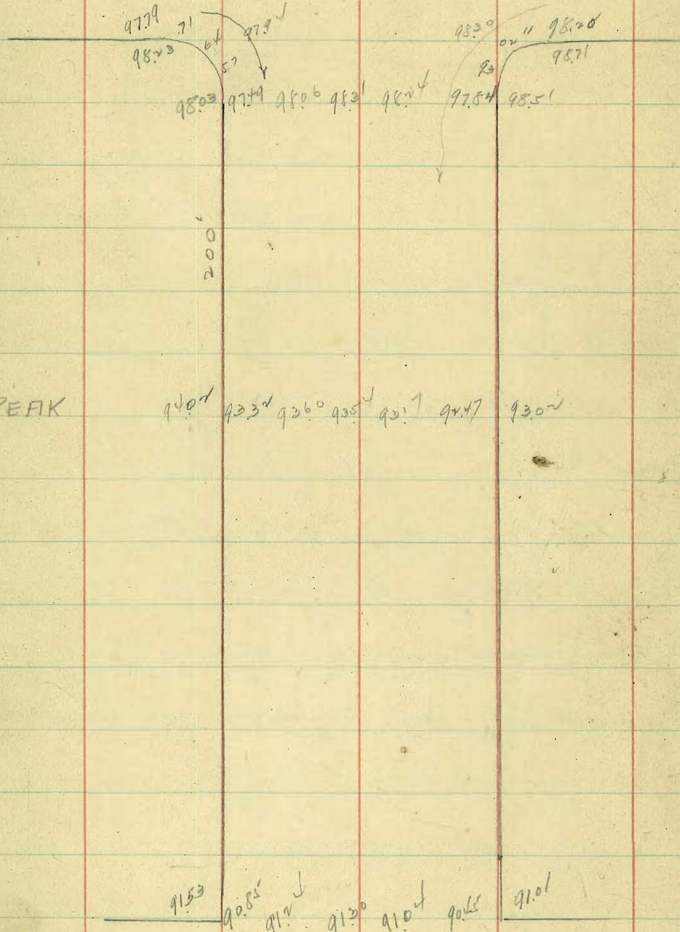
W	362.78 / 3.93	362.45 / 4.26 / 3.14 / +1.12	362.12 / 4.59 / 4.52 / +0.07	361.79 / 4.92 / 3.65 / +1.27	361.46 / 5.25 / 5.07 / +0.18
E	362.72 / 3.99	362.40 / 4.31 / 4.22 / +0.09	362.08 / 4.63 / 4.33 / +0.30	361.76 / 4.95 / 1.26 / +3.69	361.44 / 5.27 / 5.14 / +0.13
W	361.13 / 5.58 / 5.31 / +0.27	360.80 / 3.23 / 2.15 / +1.08	360.31 / 3.72 / 3.77 / -0.05	359.82 / 4.21 / 4.36 / -0.15	359.33 / 3.39 / 2.77 / +0.62
E	361.12 / 4.91 / T.P. 4.93 / -0.02	360.80 / 3.23 / 3.38 / -0.15	360.27 / 3.76 / 4.45 / -0.69	359.74 / 4.29 / 3.60 / +0.69	359.23 / 3.49 / 3.61 / -0.12
W	358.84 / 3.88 / 3.62 / +0.26	358.35 / 4.37 / 3.53 / +0.84	357.86		
E	358.70 / 4.02 / 3.68 / +0.34	358.18 / 4.54 / 4.37 / +0.17	357.66		

PAVING 25' S of S.L. Line W 362.20 / 4.09 / 4.39 / -0.30; E 362.56 / 4.15 / 4.25 / -0.10

357.98
4.71
362.69
1.35
361.35
5.41
366.76

W	58.35 / 4.36	58.84 / 3.85	59.33 / 3.36	59.82 / 4.87	360.31 / 2.38	60.80 / 1.89	61.13 / 5.63	61.46 / 5.30
E	58.18 / 4.51	58.70 / 3.99	59.23 / 3.42	59.74 / 4.95	60.27 / 2.42	60.80 / 1.89	61.12 / 5.64	61.44 / 5.32
W	61.79 / 4.97	62.12 / 4.64	62.45 / 4.31	62.62 / 3.14	62.78 / 3.3			
E	61.76 / 5.00	62.08 / 3.68	62.40 / 3.36	62.56 / 3.20	62.72 / 3.40			

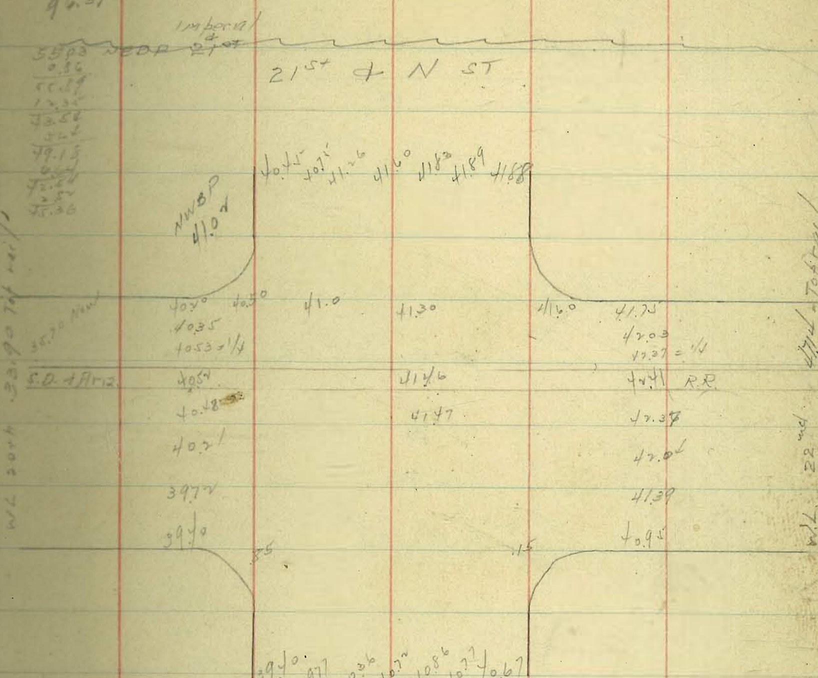
SOUTHLOOK AVE. PAVING



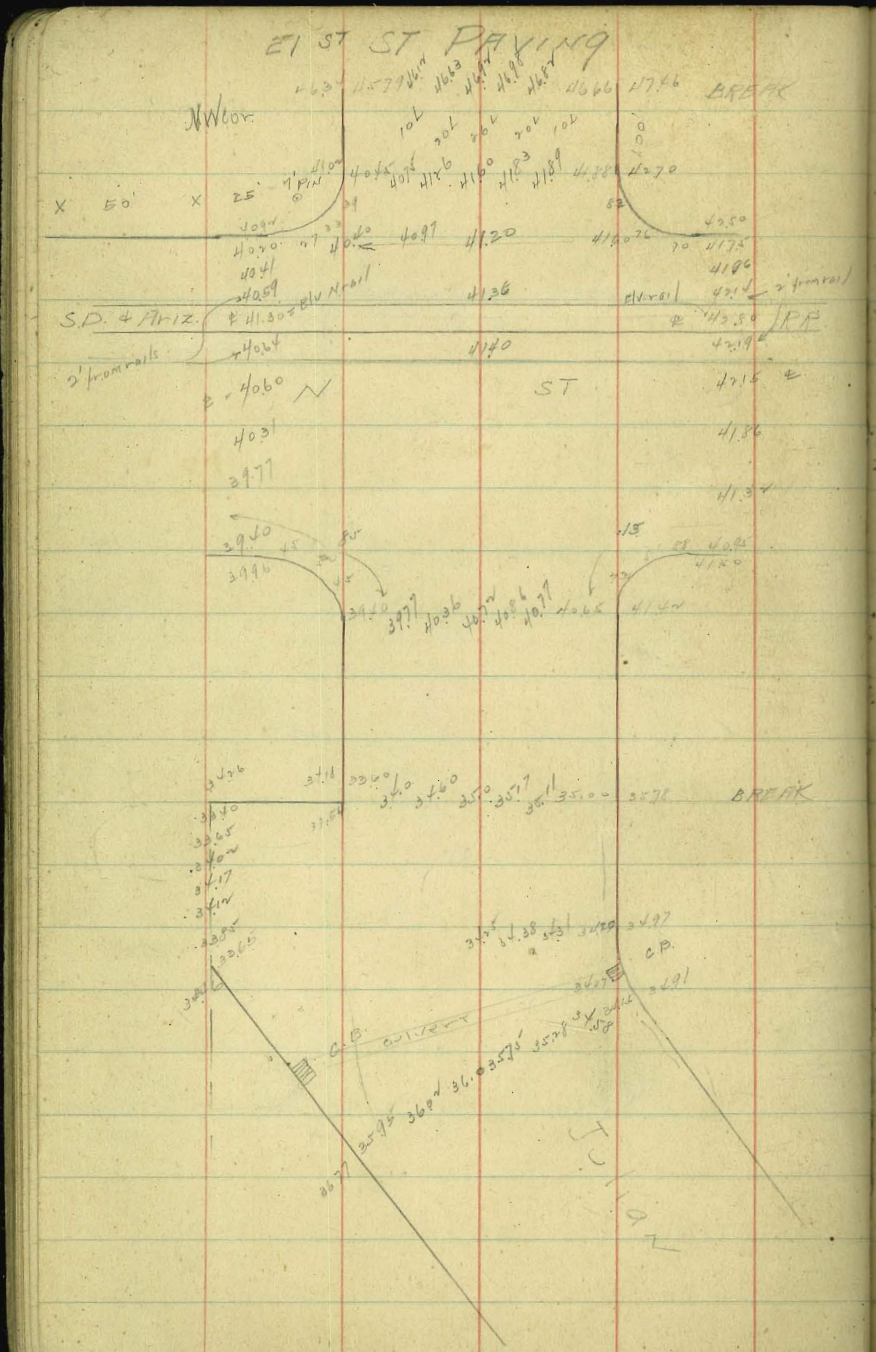
S.E. Top Hyd7.
Imperial + 38th

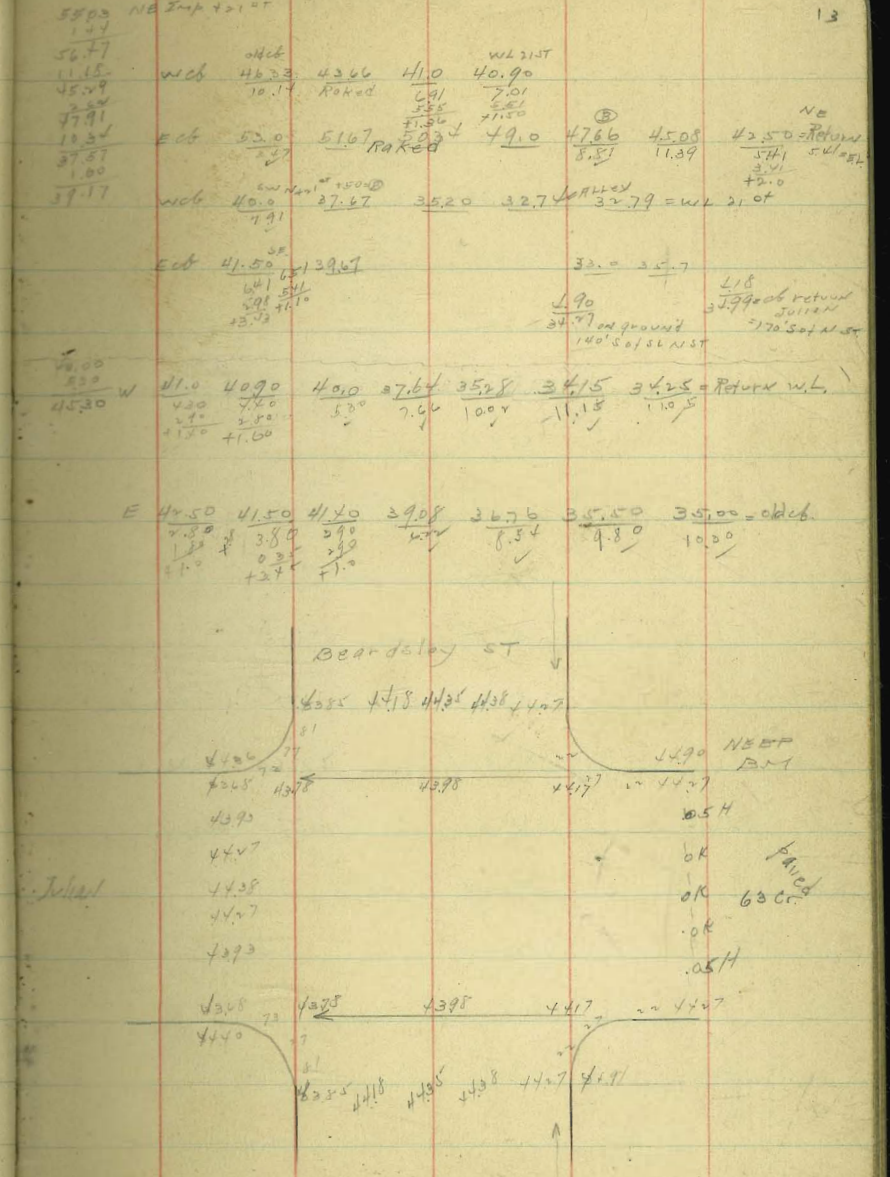
98.58
6.17
104.75
6.03
98.72
103.14
93.02
3.35
96.37

97.06



21 ST ST PAVING





Blk 68 Park Villas Paving

		W L		EL	
NL Landis		327.15		328.35	
30' N = 0+00 (B)		330.70		331.0	
35		330.21			
70		330.7			
120		332.45			
170		333.18			
220		333.91			
270		334.65			
320		335.37			
370		336.10			
400		336.55			
450 (B)		337.0		337.30	
470		336.50			
500 (B)		336.0		336.35	
540	7.0 6.0	333.60		333.80	6.8 4.89 1.93
570 = SL Wightman		327.15		328.35	

338.40
1.04
339.44
12.61
326.83
9.63
336.46
2.06
334.40
6.22
340.62
11.41
329.21
2.96
332.17

Ocean Beach Sewer Outfall

"B" LINE

	2.1 N	4.68		2.56	TP on rock	
				Elv.	Grade	
0+00 = 8" C.I. Beardatank			2.73	+1.95	1.95	
0+24	spike	rock	4.65	+0.03	-3.0	+3.03
0+45	spike	"	7.37	-2.69	-3.42	+0.73
0+60	spike	"	8.15	-3.47	-3.73	+0.26
0+90	spike	"	10.08	-5.40	-4.34	-1.06 ± pier
1+00	sand		10.8	-6.1	-4.54	
1+50	spike	"	5.93	-1.25	-5.55	+4.30
1+75	sand		11.4	-6.7	-6.05	
2+00	sand		12.4	-7.7	-6.57	
2+70	spike	rock	11.28	-7.20	-8.0	+0.80
3+36	sand	end of outfall.	14.3	-9.6	-9.3	

Ocean Beach Outfall
& Bermuda

"C" Line Δ 44° 28' S of ℄ Street

NWCOP	5.55	6.66		21.11	Bermuda & Dafoe
TP	1.1	15.76	12.54	14.14	
TP	2.14	4.68	12.70	2.56	Grade
℄ Bend = 0+00 flow line			2.73	1.95	1.95
0+35	on rock = CUT		4.84	-0.16	
0+70	" " = CUT		8.49	-3.81	
1+00	on sand		11.48	-6.50	
1+20	on rock = CUT		6.41	-1.73	
1+30	" sand		11.39	-6.71	
1+50	" " in hole		13.25	-8.57	
1+60	" rock = CUT		9.87	-5.19	
1+65	" sand		12.30	-7.6	
3+00	" "		12.70	-8.0	
3+00	" "		14.3	-9.6	
3+36	" " End outfall		14.4	-9.7	

4.68 ↑

"B" Line Δ 57°55' S of ℄ Bermuda

0+00		1.95 = Grade Flow line			Line of bend at tank
			Grade	Cut & Fills	
+45	rock 7.37	-2.69	0.46	+3.15	= No. 1
+90	rock 10.08	-5.40	-1.03	-4.37	= No. 1
1+00	Sand 10.8	-6.12	-1.36	+1.77	
1+50	rock 5.93	-1.25	-3.02		= No. 1
1+75	Sand 11.4	-6.7	-3.85		
2+00	Sand 12.4	-7.7	-4.68		
2+70	rock 11.88	-7.20	-7.00	+0.20	= 5 spikes
3+36	end 14.3	-9.6	-9.19		

OCEAN BEACH SEWER

Thru Blk 43 thence East betw. Bermuda & W. Pt. Loma Blvd

- 78 Tank inlet	8.66
- 39	10.33
235' W. Defoe DMH.	12.00
✓ ✓ ✓ = Flowline thru Blk 44	17.00
41.66 E	12.20
83.33 E	12.40
125' E = M.H. & South thru Blk 43	12.60 ✓
150	12.70 ✓
200	12.91 ✓
250	13.12 ✓
300	13.33
315.20 = MH & Alleys Blk 43	13.40
350	13.57
400	13.82
440.2 = MH 15' E of W. Defoe	14.00
500	14.59
550	15.09
600	15.48
650	15.98

W111
448
25.59

NW Defoe & Bermuda

Top tank = INLET

12.00 / 13.59 / 3.10 / +10.49	8.66 / 16.93 / 3.10 / +13.83	10.33 / 15.26 / 3.20 / +12.06	12.00 / 13.59 / 3.99 / +9.60	12.00 / 8.59 / 3.99 / +4.60	12.20 / 13.39 / 3.82 / +9.57	13.19 / 3.89 / +9.30	
12.99 / 4.13 / +8.86	12.89 / 4.50 / +8.39	12.91 / 12.68 / 5.63 / +7.05	13.12 / 12.47 / 5.80 / +6.67	13.33 / 12.26 / 5.82 / +6.44	13.40 / 12.19 / 5.74 / +6.45	13.57 / 12.02 / 5.99 / 6.03	13.82 / 11.77 / 5.86 / +5.91
14.00 / 11.59 / 6.10 / +5.49	14.59 / 11.00 / 5.72 / +5.28	15.09 / 10.50 / 5.63 / +4.87	15.48 / 10.11 / 5.36 / +4.75	15.98 / 9.61 / 4.36 / +5.25			

OCEAN BEACH SEWER
Between Bermuda + W. Pt. Lom Blvd

700	16.49
745 = M.H.	17.00
800	19.52
850	21.82
900	24.11
950	26.41
1000	28.70
1050	31.00
1100	33.27
11+13.5 = MH & Ebers	34.00
1150	35.76
1200	38.18
1250	40.60
1300	43.02
1350	45.44
1400	47.86
1443.5 = M.H.	50.00
1500	52.84
1550	55.315

T

12.53

25.59
1.92
23.67
12.86
36.53
0.88
35.65
12.33
47.98
0.44
47.54
6.97
54.51
1.25
53.26
12.84
66.10

16.49	17.00	19.52	21.52	24.11	26.41	25.70	31.00
9.10	8.59	17.01	14.71	12.42	10.12	7.83	16.98
2.94	1.92	10.09	7.66	5.52	2.92	0.88	1.052
+6.16	+6.67	+6.92	+7.05	+6.90	+7.20	+6.95	+6.46
33.27	34.00	35.76	38.18	40.60	43.02	45.44	
14.71	13.98	18.75	16.33	13.91	11.49	9.07	
8.92	8.14	12.53	8.85	4.71	2.21	1.25	
+5.79	+5.84	+6.22	+7.48	+9.20	+9.28	+7.82	
47.86	50.00	52.84	55.35				
18.24	16.10	13.26	10.75				
10.50	9.10	6.41	3.85				
+7.74	+7.00	+6.85	+6.90				

Ocean Beach Sewer
Bermuda + W Pt Loma Blvd

1600	57.87
1650	60.38
1700	62.90
1750	65.41
1771.5 = M.H. & Froude	66.50
1800	67.84
1850	70.18
1900	72.53
1950	74.88
2000	77.23
2050	79.58
2101.5 = M.H.	82.0
2150	86.85
2200	91.85
2250	96.85
2300	101.85
2311.50 = BREAK	103.0
2350	109.08
2400	116.99
2431.5 = M.H. & Guard	122.0

Ocean Beach Sewer
betw. Bermuda + Ptloma Ave

2+50	123.59
2+00	127.87
1+50	132.16
1+00	136.45
0+50	140.73
0+00	145.01
11+11.5 = 11 H.	146.0
0+50	150.27
1+00	155.70
1+50	161.18
2+00	166.66
2+50	172.14
3+00	177.62
3+11.5 = D.E.	180.0

123.59	127.87	132.16	136.45	140.73	145.01	146.0
13.33	10.13	15.84	11.55	18.94	14.66	13.67
4.85	9.45	3.77	0.31	9.00	6.16	5.34
+7.48	+16.68	+17.07	+10.84	+9.94	+8.50	+8.33
150.27	155.70	161.18	166.66	172.14	177.62	
9.45	15.87	10.39	17.45	11.77	15.62	
1.90	5.49	3.71	9.67	4.06	6.76	
+7.55	+10.40	+7.10	+7.78	+7.71	+8.86	
180.00						
13.27						
3.54						
+9.70						

18+26 swap Sewer Bermuda + Ptloma Ave

3711.5
31.0
3680.5

Ocean Beach Sewer Construction

0 MH ¢ Bermuda = 0+00		17.00	+4.58
+50		17.52	+5.70
1 –		18.05	+5.44
+50		18.57	+5.81
1+89.70 = MH ¢ Alley Bermuda & Pescadero	Δ 90° LT	19.00	+7.60
2 –		19.10	+7.52
+50		19.54	+8.10
3 –		19.98	+9.36
3+14.7 = MH	Δ 90° RT	20.10	+9.62
+50		20.46	+9.69
4 –		20.96	+10.17
+50		21.46	+10.72
5+04.4 = MH ¢ Pescadero	Δ 90° LT.	22.00	+10.71
+54.4		22.17	+11.17
6+04.4 = MH " "	Δ 90° RT	22.34	+11.71
+50		22.50	+9.46
7		22.67	+6.00
+50		22.84	+5.26
+94.3 = MH ¢ Alley bet. orchard Pescadero		23.00	+4.69
8+00		23.06	+4.46

Next page

21.11
9.63
30.74
1.82
29.72
8.19
37.91

17.00	17.52	18.05	18.57	19.00	19.10	19.54
13.74	13.22	12.69	12.17	11.74	11.64	11.20
9.16	7.52	7.25	6.36	4.14	4.12	3.10
+4.58	+5.70	+5.44	+5.81	+7.60	+7.52	+8.10
19.98	20.10	20.46	20.96	21.46	22.00	
10.76	10.64	17.45	16.95	16.45	15.91	
1.40	1.02	7.76	6.78	5.73	5.20	
+9.36	+9.62	+9.69	+10.17	+10.72	+10.71	
22.17	22.34	22.50	22.67	22.84	23.00	
15.74	15.57	15.41	15.24	15.07	14.91	
4.57	3.86	5.95	9.24	9.81	10.22	
+11.17	+11.71	+9.46	+6.00	+5.26	+4.69	
23.06						
14.85						
10.39						
+4.46						

Ocean Beach Sewer

Cont. from page 21

8+50	23.58	+4.14
9 –	24.11	+4.44
+50	24.63	+13.47
9+84 = D.M.H. & Orchard & 90° LT & 11" Dr	25.00	+14.96
" " D.M.H. " " " "	29.00	+8.96
10+00	29.36	+8.88
+50	30.47	+8.70
11. –	31.58	+8.45
+50	32.69	+8.77
12 –	33.80	+8.29
+54 = D.E. 70' W of WL of Cable ST	35.00	+8.30

37.91 / 1.01 / 37.90 / 6.86 / 44.76

11.53 / 33.23

D.M.H.

23.58	24.11	24.63	25.00	29.00	29.36
14.33	13.80	13.28	19.76	15.76	15.40
10.19	9.38	0.01	6.80	6.90	6.52
+4.14	+4.42	+13.34	+19.96	+8.86	+8.88

30.47	31.58	32.69	33.80	25.00	= D.E.
14.29	13.18	14.07	10.96	19.76	70' W of WL Cable
6.59	4.73	8.30	2.67	1.76	
+8.70	+8.45	+8.77	+8.47	+8.30	

33.1 S.E. Cable + Dalmar

Sewer Construction
between Orchard and Pescadero

7+94.3=0+00	23.6	+4.64
50'E	23.16	+5.40
100	23.33	+5.84
150	23.49	+6.56
2	23.63	+7.39
+45=MH	23.81	+7.55
3	23.99	+7.73
+50	24.15	+6.97
4	24.32	+4.32
+50	24.48	+4.09
+75=MH Defoe	24.57	+3.95
5	24.65	+4.07
+50	24.81	+3.17
6	24.98	+2.50
+50	25.15	+2.72
7	25.33	+4.85
+50=MH.	25.50	+7.38
8	28.87	+7.38
+50	32.25	+7.51
9	35.62	7.7

Sewer Construction
betw. Orchard + Pescadero

9+50	39.0	7.26
10	42.37	7.30
+50	45.75	7.67
11	49.12	7.29
+48 / +50 = MH & Ebers	52.50	7.73
12	55.90	8.14
+50	59.31	7.94
13	62.71	7.32
+50	66.12	6.90
14	69.52	6.89
+50	72.93	7.93
+80 = MH	75.00	8.78
15	76.45	9.13
+50	80.08	10.88
16	83.72	12.80
+50	87.35	13.18
17	91.00	12.34
+50	94.63	11.88
18	98.26	11.63
+07 / +10 = MH Froudé	99.00	11.26

18+50	102.12	+11.34
19	105.57	+12.68
+50	109.39	13.18
20	113.02	17.47
+50	116.66	13.10
21	120.30	11.26
21+37 = MH	123.0	11.54
+50	124.44	11.13
22	129.57	14.04
+50	135.32	+6.98
23	140.77	+6.79
+50	146.24	+10.24

T.P. Rock

Sewer bet Orchard &

24		151.67	+15.56
+50		157.12	+15.17
24+67	= MH & GUIZOT	159.00	+12.85
25		161.06	+14.10
+50		164.18	+13.40
26		167.31	+12.82
+27 =	BREAK	169.0	13.50
+50		170.30	12.95
27		176.30	8.21
+50		181.30	7.22
+97 =	M.H.	186.0	7.30
28+27		189.0	7.67
28+57	BREAK	192.0	+7.53
29		198.23	5.79
+50		205.48	5.87
30		212.73	6.02
+57 =	D.E.	221.0	7.31

177.81
5.08
177.73
12.76
190.49
0.49
190.00
12.95
202.95
0.22
202.73
12.27
215.00
0.00
215.00
12.33
227.33
0.16
227.17
8.75
235.92
5.70
230.22

151.67	157.12	159.0	161.06	164.18	
26.14	20.69	18.81	16.75	26.31	
10.58	5.52	5.96	2.65	12.91	
+15.56	+15.17	+12.85	+14.10	+13.40	
167.31	169.0	170.30	176.30	181.30	186.0
23.18	21.49	20.19	14.19	9.19	16.95
10.36	7.99	7.24	5.98	1.97	9.65
+12.82	+13.50	+12.95	+8.21	+7.22	+7.30
189.0	192.0	198.23	205.48	212.73	
13.95	10.95	16.77	9.52	14.60	
6.28	3.42	10.98	3.65	8.58	
+7.67	+7.53	+5.79	5.87	+6.02	
221.0					
14.92					
7.61					
+7.31					

230.32 Nelmon Poscadero + Santa Barbara

Sewer betw. Bermuda + Pescadero

MH = 0+00	19.0	+7.20
+50	19.16	+5.85 ✓
1	19.33	+5.76 ✓
+50	19.49	+5.44 ✓
2	19.66	+4.67 ✓
+50 = MH. Defoe	19.83	+3.87 ✓
3	20.00	+4.40 ✓
+50	20.16	+3.38 ✓
4	20.33	+3.40 ✓
+50	20.49	+3.26 ✓
5	20.66	+4.58 ✓
+50	20.84 ✓	+6.68 ✓
+95 = DMH	21.00	+9.93 ✓
6 ✓	25.00	+5.93 ✓
6+50	27.83	6.63 ✓
7	30.40	7.96 ✓
+50	32.98	7.83 ✓
8	35.55	7.60
+50	38.13	~~7.43~~ 7.30
9	40.70	~~5.01~~ 7.43

21.11 / 7.80 / 29.01 / 7.80 / 27.21 / 10.78 / 37.99 / 3.24 / 37.35 / 14.35 / 49.70 / 9.01 / 49.69 / 15.34 / 62.41 / 3.31 / 62.20 / 12.74 / 74.94

19.0 / 10.01 / 3.37 / 7.64 — 19.16 / 9.85 / 4.00 / 5.85 — 19.33 / 9.68 / 3.92 / 5.76 — 19.49 / 9.52 / 4.08 / 5.44 — 19.66 / 9.35 / 4.68 / +4.67 — 19.83 / 9.18 / 5.31 / 3.87 — 20. / 9.01 / 4.61 / +4.40 — 20.16 / 8.85 / 5.47 / +3.38 — 20.33 / 8.68 / 5.28 / 3.40

20.49 / 1.54 / 3.36 / 3.26 — 20.66 / 8.35 / 3.77 / 4.58 — 20.84 / ~~17~~ 15 / .47 / 6.68 — 21.00 / 16.99 / 7.06 / 9.93 — 25.00 / 12.99 / 7.06 / 5.93 — 27.83 / 10.16 / 3.53 / 6.63 — 30.40 / 19.30 / 11.34 / 7.96 — 32.98 / 16.77 / 8.94 / 7.83 — 35.55 / 14.15 / 6.55 / 7.60

38.13 / 17.57 / 4.27 / 7.30 — 40.70 / 9.10 / 1.67 / 7.43 — 42.00 / 7.70 / .63 / 7.07 — 43.64 / 18.77 / 10.73 / 8.04 — 46.76 / 15.65 / 6.54 / +9.11 — 49.87 / 12.54 / 5.94 / 6.60 — 53.00 / 9.41 / 3.40 / 6.01 — 56.10 / 18.84 / 12.21 / 6.63

59.20 / 15.74 / 9.93 / 5.81 — 62.50 / 12.44 / 7.44 / 5.00 — 65.31 / 9.63 / 4.58 / 5.05

9+23.6 MH = Ebers ℄	42.00	~~+.41~~	7.07
+50	43.64 ✓	+6.60	8.04
10	46.76	+6.01	9.11
+50	49.87	6.63	6.60
11	53.00	5.81	6.01
+50	56.10		6.63
12	59.20		5.81
+53.6 = MH	62.50		5.00
13	65.31		5.05

	Sewers betw.		Bermuda & Pescadero	Cuts.
13+50			6834	505
14			7138	562
+50			7441	617
15			7745	620
+50			8050	626
15 +82.4 = MH Froude			82.50	486
16			83.54	628
+50			86.50	646
17			89.45	620
+50			92.40	522
18			95.35	431
+50			98.30	486
19			101.26	785
+12.4 = M.H.			102.0	890
19+50			105.17	956
20			109.40	714
+50			113.64	523
21			117.87	446
+50			122.11	512
22			126.34	767

74.94
0.00
74.94
12.39
87.33
0.07
87.26
12.89
100.15
0.83
99.42
12.41
111.83
0.21
111.62
12.48
124.10
0.47
123.63
13.35
98
135.1
1.30
134.68
12.32
147.00

68.34 / 6.60 / 1.55 / 5.05
71.38 / 15.95 / 10.33 / 5.62
74.41 / 12.92 / 6.75 / 6.17
77.45 / 9.88 / 3.68 / 6.20
80.50 / 6.83 / 0.57 / 6.26
82.50 / 17.65 / 12.79 / 7.86 / +5.86
83.54 / 16.61 / 10.33 / 6.28
86.50 / 13.65 / 7.19 / 6.46

89.45 / 10.70 / 450 / 620
92.40 / 7.75 / 2.53 / 5.22
95.35 / 16.48 / 12.17 / 431
98.30 / 13.53 / 8.67 / 486
101.26 / 10.57 / 2.72 / 7.85
102.0 / 9.83 / 0.93 / 8.90
105.17 / 18.93 / 9.37 / 9.56

109.40 / 14.70 / 7.56 / 7.14
113.64 / 10.46 / 5.23 / 5.23
117.87 / 6.23 / 1.77 / 4.46
122.11 / 13.87 / 8.75 / 5.12
126.34 / 9.64 / 1.97 / 7.67

100.15
82.50
17.65
12.79
4.86

Sewer betw. Bermuda + Pecadero

		cuts
22 + 43 D.M.H. Guzot	130.0	9.62
✓ ✓ ✓ ✓	135.0	4.62
23	142.80	8.56
+50	149.64	9.86
24	156.49	11.43
+33 = BREAK	161.0	16.93
+50	162.22	17.31
25	165.79	18.58
+50	169.36	19.47
+73 = M.H.	171.0	19.38
26	173.81	18.21
+50	179.01	15.60
27	184.22	12.55
+50	189.42	10.46
28	194.63	10.65
+13 = D.F.	196.0	10.84

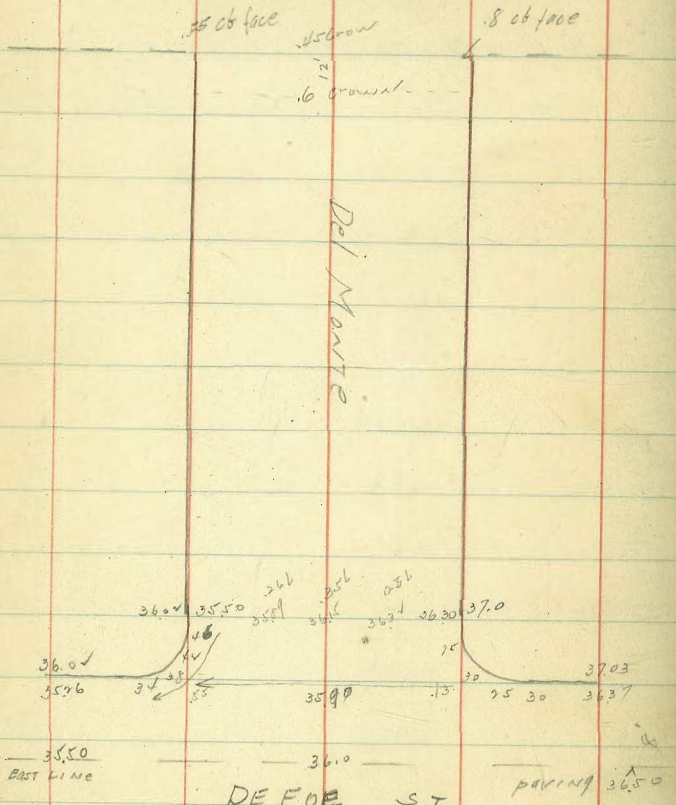
147.00
0.84
146.16
12.45
158.61
0.16
158.45
11.95
170.40
0.20
170.20
11.56
181.76
0.61
181.15
11.70
192.85
0.13
192.72
12.12
204.84
0.35
204.54
12.11
216.65
0.16
216.49
11.44
227.93
0.85
227.08
5.21
232.49
1.93
230.36

130.0	135.0	142.80	149.64	156.49	161.0
17.00	12.00	15.81	20.76	13.91	20.76
7.38	7.38	7.25	10.90	2.48	3.83
9.62	4.62	8.56	9.86	11.43	16.93
162.22	165.79	169.36	171.0	173.81	
19.54	27.09	23.52	21.88	31.08	
2.23	8.51	4.05	2.50	12.87	
17.31	18.58	19.47	19.38	18.21	
179.01	184.22	189.42	194.63	196.0	
25.88	20.67	15.47	12.02	20.65	
10.28	8.12	5.01	11.37	9.81	
15.60	12.55	10.46	10.65	10.84	

23032 Pecadero + ~~Santa Barbara~~ new Mon

DEL MONTE PAVING

EBERS ST



37.05 SE BP Del Monte + DeFoe

BRANT
Albatross
Washington
Lewis

ALLEY PAVING 15' wide 2/17/26
BLK 3 FLORENCE HGTS. Moore

		W		E	
NL Washington = 0+00		267.58	Meet paving for grade	268.58	= paving
20 N	= BREAK W ONLY	270.70	+4.17	271.02	+6.0
60	BREAK	275.60	+0.55	275.90	+1.46
106		276.78	+0.04	277.08	+0.65
152		277.96	+1.32	278.26	+0.75
198		279.14	-0.41	279.44	+0.99
244		280.32	-0.30	280.62	+0.26
290		281.50	+0.64	281.80	+0.02
325		282.10	-0.26	282.40	-0.41
360		282.70	+1.06	283.0	+0.71
390		282.95	+1.07	283.25	+1.23
420		283.20	-0.25	283.50	+0.81
460		283.40	-0.49	283.70	+0.07
500	= SUMMIT	283.60	-0.91	283.90	+0.62
536.67		283.47	-0.46	283.77	+0.51
573.33		283.33	-0.23	283.63	+0.74
610		283.20	+0.47	283.50	+2.12
640 = SL Lewis		280.90	+2.65	281.20	+3.06

276.99
0.89
277.88
2.12
275.76
5.57
281.33
0.52
281.31
6.73
288.04
4.52
283.52
5.15
288.37

NW BP Washington + Albatross

30

W	267.58 10.20 BUNK	270.70 7.18 3.01 +4.17	275.60 6.23 5.68 +0.55	276.78 5.05 5.01 +0.04	277.96 3.87 2.55 +1.32	279.14 2.69 3.10 -0.41
E	268.58 9.30	271.02 6.86 0.86 +6.00	275.90 5.93 4.47 +1.46	277.08 4.75 4.10 +0.65	278.26 3.57 2.82 +0.75	279.44 2.39 1.40 +0.99
W	280.32 1.51 1.81 -0.30	281.50 6.54 5.90 +0.64	282.10 5.94 6.20 -0.26	282.70 5.34 4.28 +1.06	282.95 5.09 4.02 +1.07	283.20 4.84 5.09 -0.25
E	280.62 1.21 0.95 +0.26	281.80 6.24 6.22 +0.02	282.40 5.64 6.05 -0.41	283.0 5.04 4.33 +0.71	283.25 4.79 3.56 +1.23	283.50 4.54 3.73 +0.81
W	283.40 4.64 5.13 -0.49	283.60 4.44 5.35 -0.91	283.47 4.90 5.36 -0.46	283.33 5.04 5.27 -0.23	283.20 5.17 4.70 +0.47	280.90 7.47 4.82 +2.65
E	283.70 4.34 4.27 +0.07	283.90 4.14 3.52 +0.62	283.77 4.60 4.09 +0.51	283.63 4.74 4.00 +0.74	283.50 4.87 2.75 +2.12	281.20 7.17 4.11 +3.06

1.33
284.07

284.01 SE BP Lewis + Albatross

Alley Paving Blk 5 Florence Hgts

CHANGE of GRADE

		W	E
257 W of Washington			280.9
290 N	281.50	281.50	281.50
325		282.0	282.10
360		282.50	282.70
390		282.85	282.95
420		283.00	283.00
460			283.55
500			283.90
St Louis		282.40	282.70

276.99
1.77
278.70
5.01
273.75
7.00
266.41
3.64
262.77
5.41
257.35

2/27/26
Moore

E 280.94 (5.44) 281.50 (4.91) 282.10 (4.21) 282.70 (3.71) 282.95 (3.46)

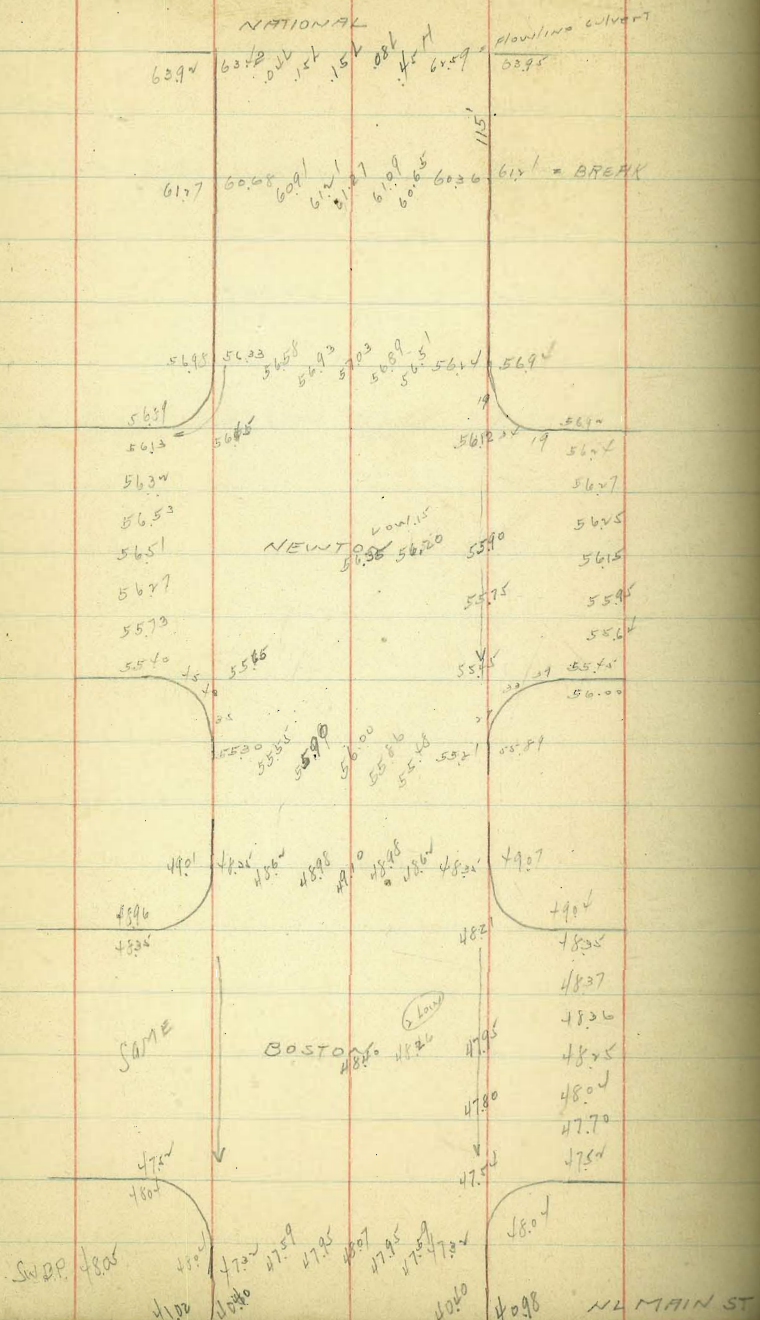
E 283.00 (3.21) 283.55 (2.86) 283.90 (2.51)

W 281.50 (4.91) 282.10 (4.41) 282.50 (3.91) 282.85 (3.56) 283.00 (3.21)

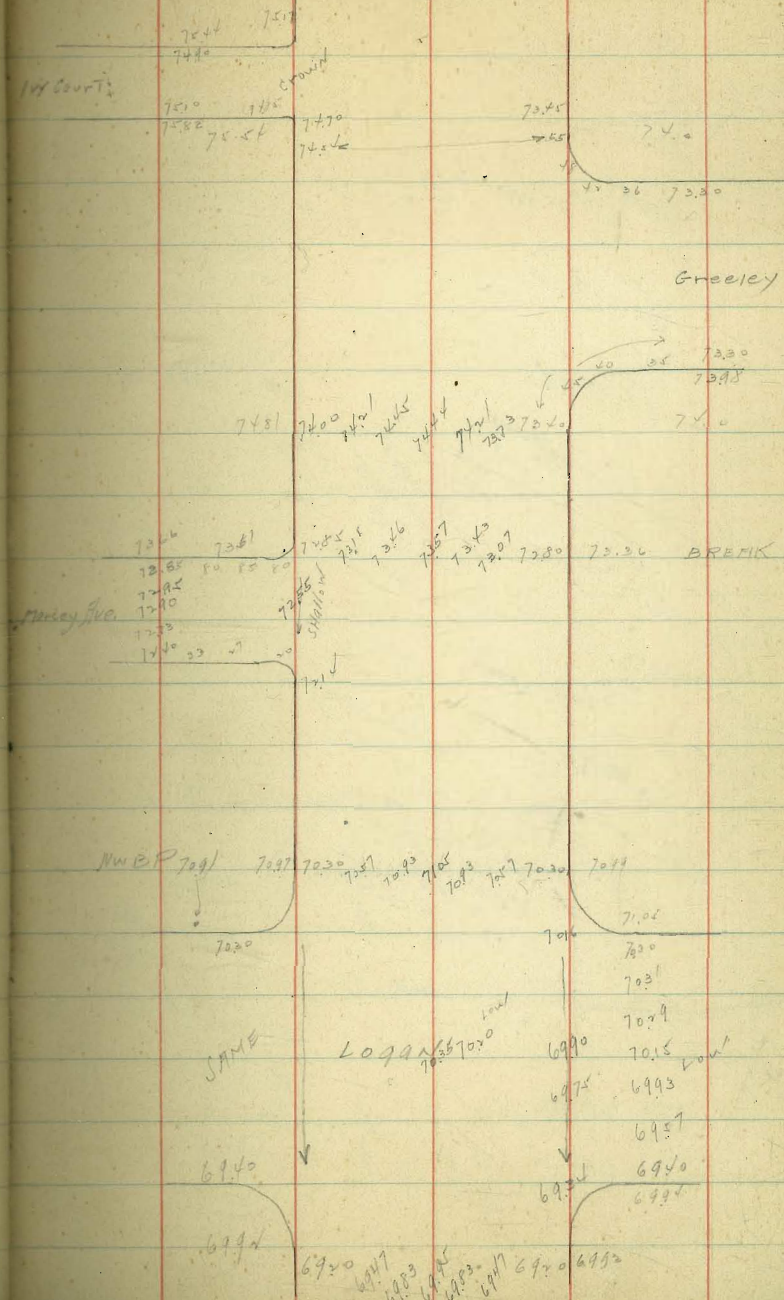
W 282.40
5.05
4.55
4.00
E 282.70
5.55
4.00
1.55

281.50
7.05
4.00
305

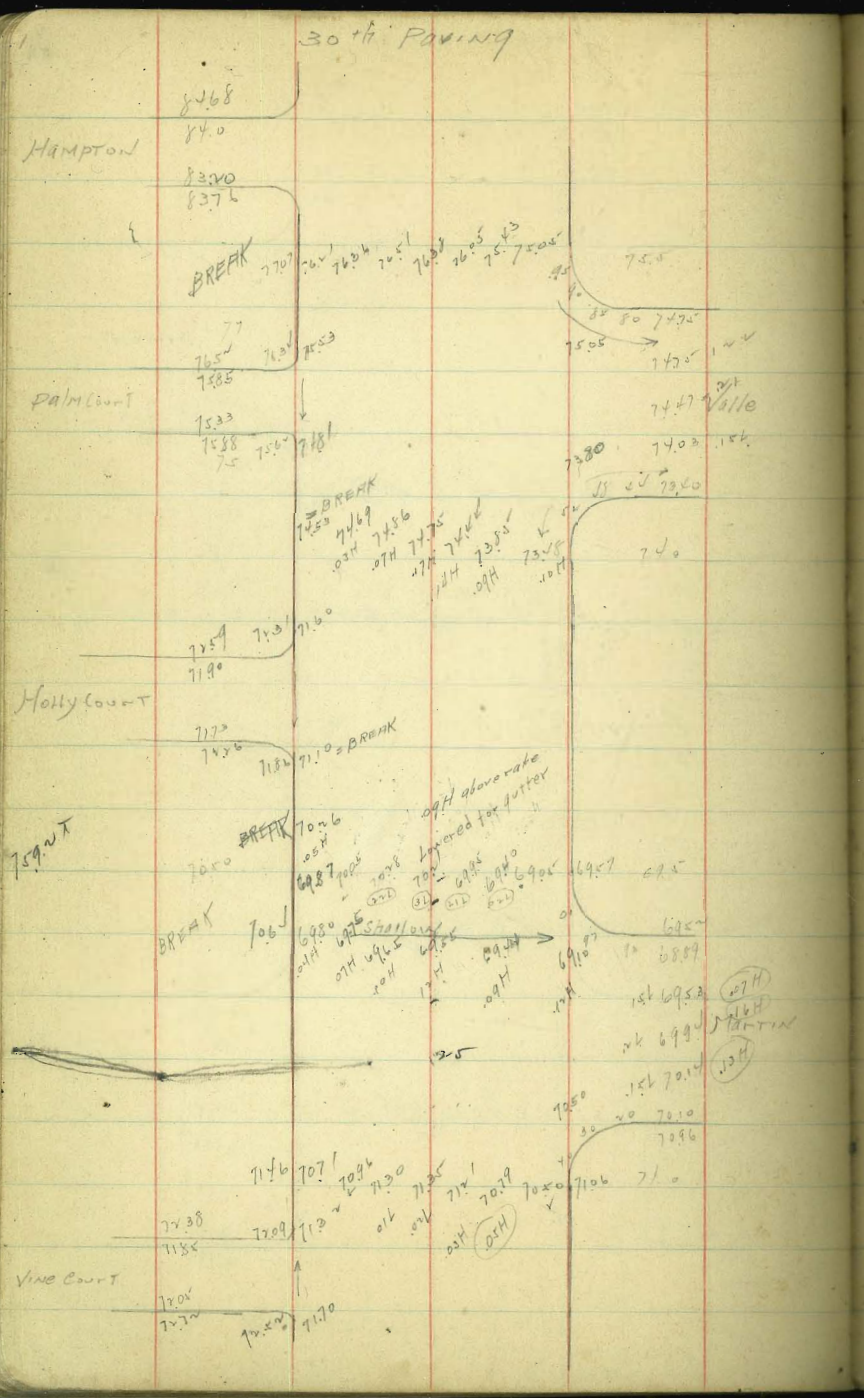
30th ST PAVING



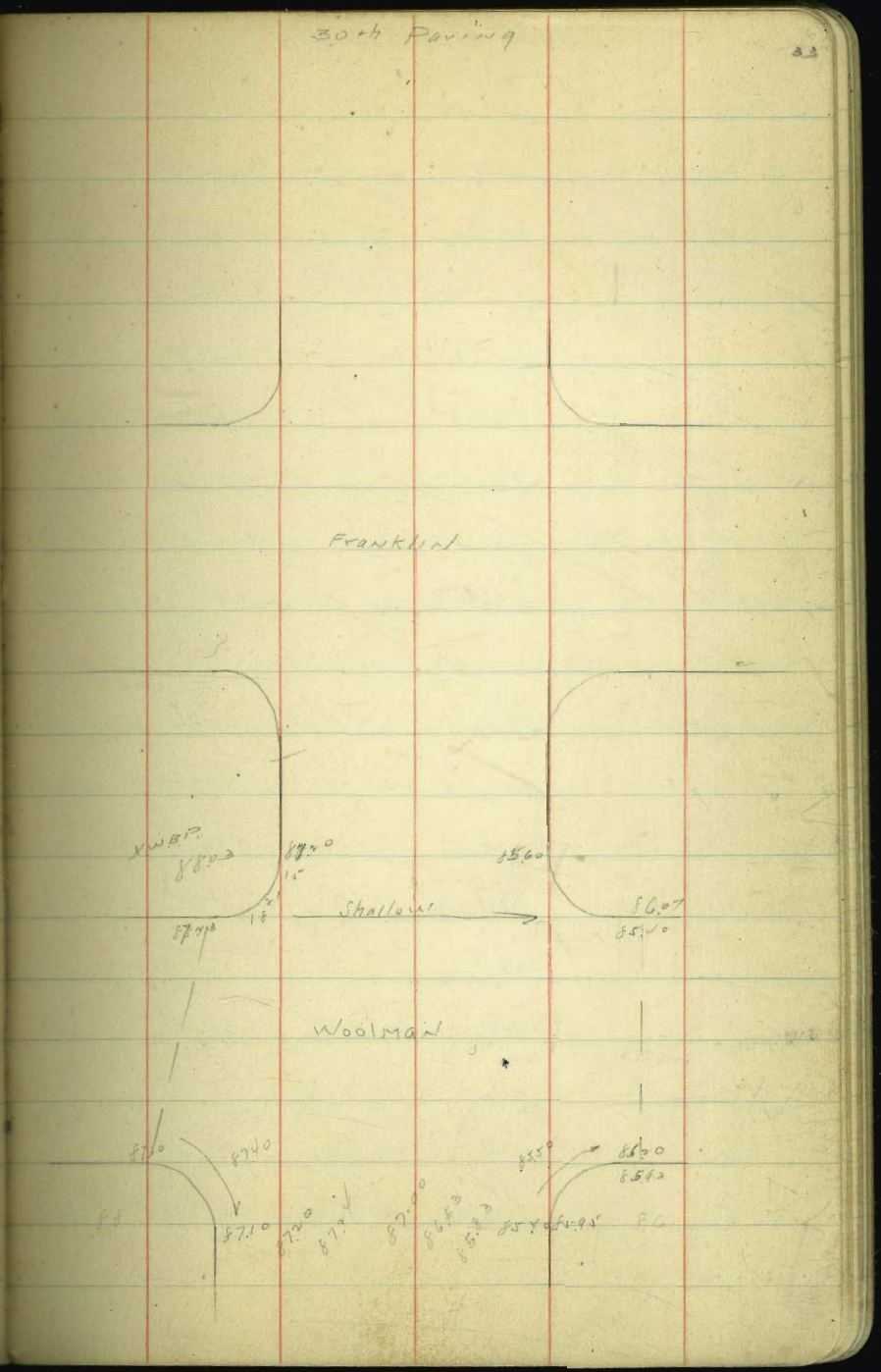
30th. Paving



30th Paving



30th Paving



Howard Ave Grading

	NL	cb N		cb S	SL.
EL Miss		319.00		318.00	
50 E		321.0	331.0 / 8 / 331.8	320.16	
100 E		323.0	12.9 / 318.9	322.33	
150		325.0	5.0 / 324.49	324.50	
200		327.0	318. / 6.49 (6.16)	326.67	
250		329.0	319. / 5.49	328.83	
WL Louisiana		331.0		331.0	331. / 33
EL		331.0		330.0	
50 E		326.25		325.75	
100		321.50		321.50	
130 = BREAK		318.65		318.95	
155		316.62		317.12	
180		315.31		315.90	
205		314.69		315.27	
230		314.78		315.24	
265		315.39		315.62	
300 = WL Texas		316.0		316.0	
EL Texas		318.0		318.0	
50 E		320.0		319.91	
100		322.0		321.83	

3300 SE Texas & Howard

NL	319.85 / 5.4	21.25 / 3.4 / 3.6 / -0.2	23.25 / 10.6 / 10.7 / -0.1	25.25 / 8.6 / 8.8 / 0.2	27.25 / 6.6	29.25 / 4.6	31.25 / 3.6 / 0.0	331.0 / 2.89
SL	318.0 / 6.6				26.90 / 7.0 / 7.0 / 0.0	29.10 / 4.8 / 4.4 / +0.4	331.0 / 2.89	330.25 / 3.6 / 0.0
NL	326.50	21.75 / 0.57 / 6.0 / 0.0	18.90 / 3.4 / 2.2 / +1.2	16.90 / 5.4 / 6.6 / -1.2	15.50 / 6.8 / 7.0 / -0.2	14.90 / 7.4 / 7.2 / +0.2	315.00 / 7.3 / 7.3 / 0.0	15.60 / 6.7 / 6.2 / +0.5
SL	326.0 / 7.9 / 7.4 / +0.5	21.75 / 0.6 / 3.3 / -2.7	19.20 / 3.1 / 7.6 / -4.5	17.40 / 4.9 / 8.7 / -3.8	16.15 / 6.2 / 8.7 / -2.5	15.50 / 7.8 / 8.1 / -0.3	15.50 / 6.8 / 8.4 / -1.6	15.57 / 6.5 / 6.0 / +0.5
NL	316.0 / 6.3	315.0	320.25 / 10.5 / +4.9	322.25 / 8.5 / 5.9 / +2.6				
SL	316.0 / 6.3		320.16 / 10.6 / 9.0 / +1.6	322.08 / 8.7 / 6.4 / +2.3		318.9 / 3.7 / 3.5 / 1.2		

El Cajon & Louisiana

					Alley	Return P.L.	El P.L. Ret
N	331.0 / 33	326.25 / 8.09	321.50 / 12.84	318.65 / 3.94	318.08 / 4.51	318.10 / 4.49 / +2.0	316.60 / 5.99
S	330.0 / 4.3	325.75 / 8.59	321.50 / 12.84	318.95 / 3.64	318.44 / 4.15	318.48 / 4.11	317.11 / 5.48
N Alley	316.20 / 6.39	315.31 / 7.28	314.69 / 7.90	314.78 / 7.81	315.39 / 7.20	316.0 / 6.59	
S	316.73 / 5.86	315.90 / 6.69	315.27 / 7.32	315.24 / 7.35 / 6.92 / 6.88 / +0.04	315.62 / 6.97	316.0 / 6.59	

2+00 = NL Box Top		315.40		318.0 / 1.6 / 319.61	
0+25 = Junc. Culv. #2 = flowline		311.30	11.02 / 5.57 / 5.45		
0+75 = " #3 = "		310.79	11.53 / 8.43 / +3.10	Culv. #1 & #2	
1+00		310.54	11.78 / 8.96 / +2.82		
1+50		310.03	12.29 / 9.29 / +3.00		
2+00		309.52	12.80 / 10.12 / +2.68		
2+50		309.00	13.32 / 11.15 / +2.17	315.25 / 4.36 / 5.16 / -.80	314.71 / 4.90 / 4.90 / 00 = cb
2+98 = Outlet		308.50	13.82 / 12.28 / +1.54		
cb inlet #1	Top cb.	314.71	= flowline	311.88 / 7.73 / 4.80 / +2.93 = flowline	7.61 / 7.78 / -0.17 = cb
" " #2	" "	315.25	" "	312.42 / 7.19 / 5.16 / +2.03 = Flowline	7.07 / 7.88 / -0.81 = cb

Howard Ave. Grading

	N cb	S cb
150	324.0	323.75
200	326.0	325.66
250	328.0	327.58
300 = WL Ariz.	330.0	329.50
EL ✓	332.0	331.50
50' E	336.75	336.10
100	341.51	340.69
150	346.26	345.28
200	351.02	349.88
250	355.78	354.48
310 = WL Hamilton	361.50	360.0
EL Ham.	363.0	361.50
55 E	365.50	364.25
110 = Break	368.0	367.0
160 = Break	370.0	369.25
210' = Break	371.50	371.0
260	372.75	372.50
310 = WL Oregon	374.0	374.0

360.10 B.M. = SW 7' tack Howard + Hamilton

330.74
2.15
330.59
12.72
343.31
13.35
356.96
13.30
356.26
0.53
355.73
8.65
364.37
4.27
360.10 TP on SW c. tack
12.85
372.95
2.15
370.83
7.88
378.71

N	324.25 / 6.5 / 5.9 / +0.6	326.25 / 4.5 / 0.0	328.25 / 4.5 / 3.3 / -0.8	330. / 0.74 ✓	332.0 / 11.31	337.0 / 6.31 / 7.4 / -1.1	
S	324.0 / 6.7 / 5.4 / 1.3	325.9 / 4.8 / 4.1 / +0.7	327.8 / 2.9 / 3.2 / -0.3	329.50 / 1.24 ✓	331.50 / 11.81 ✓	336.3 / 7.0 / 8.6 / -1.6	
N	341.8 / 1.5 / 3.5 / -2.0	346.50 / 9.7 / 9.1 / +0.6	351.30 / 5.0 / 3.6 / +1.4	356.0 / 8.4 / 6.0 / +2.4	361.50 / 2.87 / 3.07 / .20 cb low		
S	340.9 / 2.4 / 4.0 / -1.6	345.50 / 10.7 / 11.4 / -0.7	350.10 / 6.2 / 6.4 / -0.2	354.70 / 1.6 / 1.6 / 0.0	360.0 / 4.37		
N	363.0 / 9.98 / .09 H	365.75 / 7.2 / 4.2 / +3.0	368.25 / 4.7 / 3.1 / +1.6	370.25 / 2.7 / 2.3 / +0.4	371.75 / 1.2 / 0.6 / +0.6	373.0 / 5.7 / 5.2 / +0.5	374.0 / 4.71
S	361.50 / 11.48 / .10 H	364.50 / 8.4 / 5.8 / +2.6	367.25 / 5.7 / 3.0 / +2.7	369.50 / 3.5 / 2.9 / +0.6	371.25 / 1.7 / 2.2 / -0.5	372.75 / 6.0 / 5.3 / 0.7	374.0 / 4.71

~~375.05~~ NE Capon + Oregon
360.10 SW 7' tack Howard + Hamilton
12.56
372.66
1.66
371.00
4.13
375.13

N	363.0 / 9.66 / .03 H	65.50 / 7.14 ✓	368.0 / 4.66 ✓	369.48 / 3.18 ✓	369.85 / 2.81	370.39 / 2.27 ✓	70.55 / 2.11
							371.50 / 1.16 ✓
S	61.50 / 11.16 / .07 H	64.25 / 8.41 ✓	367.0 / 5.66 ✓	368.67 / 3.99	369.05 / 3.61	369.85 / 2.81 ✓	369.70 / 2.96 ✓
							371.0 / 1.66
N	372.75 / 2.38	374.0 / 1.13 / .02 H					
S	372.50 / 2.63 ✓	374.0 / 1.13 / .02 H					

33 2
310) 29.500 (.095
361.50
27 90
1600

300) 12.000 (.04
1200

5 1/2 / 5 / M 00

Campus ALLEY PAVING Blk 44 Univ Hgts 20' wide 3/19/26

North

	WL	EL	Moore
NL Monroe	348.20 + Paving	348.20 + paving	
+ 50' N	348.55	348.54	
100	348.91	348.89	
150	349.26	349.22	
200	349.61	349.58	
250	349.97	349.94	
300	350.32	350.27	
350	350.68	350.61	
400	351.03	350.96	
450	351.38	351.30	
500	351.74	351.65	
550	352.10	352.0	
600 = SL Madison	352.45 + paving	352.35 + paving	

34901 NW Campus + Monroe 4830 5.13

36

NL	48.55	48.91	49.26	49.61	49.97	50.32	50.68
	4.75	4.54	4.07	3.72	5.95	5.60	5.24
	3.77	3.39	3.67	4.20	5.08	4.72	4.55
	+1.51	+1.33	+1.40	-0.48	+0.87	+1.38	+0.69
E	48.54	48.89	49.23	49.58	49.94	50.27	50.61
	4.79	4.44	4.10	3.75	6.00	5.65	5.31
	6.01	4.16	3.00	2.83	4.80	4.85	3.39
	-1.22	+0.28	+1.10	+0.92	+1.20	+0.80	+1.92
WL	51.03	51.38	51.74	52.10	52.45		
	4.89	4.54	4.18	3.82	3.77		
	4.42	4.34	3.99	3.15			
	+0.47	+0.20.	+0.19	+0.67			
E	50.96	51.30	51.65	52.0	52.35		
	4.96	4.62	4.27	3.92	3.57		
	4.00	4.26	3.43	3.68			
	+0.96	+0.36	+1.34	+1.24			

Cleveland + Campus

ALLEY PAVING
BLK 43 UNIV HGTS

20' wide 3/18/26 Moore

Station	W/L	E/L
N L Monroe	348.88 = Paving	348.84 = Paving
50	349.08	349.07
100	349.30	349.30
150	349.50	349.53
200	349.70	349.76
250	349.91	349.99
300	350.11	350.22
350	350.32	350.45
400	350.52	350.68
450	350.73	350.91
500	350.93	351.14
550	351.14	351.37
600 = S L Madison	351.34 = Paving	351.60 = Paving

344pl NW Monroe + Campus

356.03 T
5.32
350.71
3.22
354.31

W	48.88 / 5.43 ✓	49.08 / 5.23 / 440 / +0.83	49.30 / 5.01 / 4.77 / +0.24	49.50 / 4.81 / 4.76 / +0.05	49.70 / 4.61 / 4.14 / +0.47	49.91 / 4.40 / 3.36 / +1.04	50.11 / 4.20 / 2.76 / +1.44
E	48.84 / 5.47 ✓	49.07 / 5.24 / 514 / +0.10	49.30 / 5.01 / 439 / +0.62	49.53 / 4.78 / 471 / +0.07	49.76 / 4.55 / 4.85 / -0.30	49.99 / 4.32 / 2.78 / +1.54	50.22 / 4.09 / 307 / +1.02
W	50.32 / 5.71 / 537 / +0.34	50.52 / 5.51 / 3.75 / +1.76	50.73 / 5.30 / 443 / +0.87	50.93 / 5.10 / 514 / -0.04	51.14 / 4.89 / 493 / -0.04	51.34 / 4.69 ✓	
E	50.45 / 5.58 / 547 / +0.11	50.68 / 5.35 / 4.43 / +0.92	50.91 / 512 / 530 / -0.18	51.14 / 4.89 / 512 / -0.23	51.37 / 4.66 / 4.95 / +0.29	51.60 / 4.43 ✓	

350.68
.92
351.60
3.80
355.40
350.52
4.88

WATER MAIN CONSTRUCTION — Moore

49th ST Imperial to "R" ST. 5' E of ℄

151.3 ✓ / 7.69 / 159.03 ⊼

48.5 / 9.5 / 7.6 / +1.9   17.9 / 11.1 / 9.2 / +1.7

Station	Elev.	Calc.
Imperial Ave Ex. 28" W Main = 0+00	148.50	
50' S	147.90	
100 S	147.30	11.7 / 9.3 / +2.4
125' S (B)	147.0	12.0 / 9.8 / +2.2
150	147.27	11.7 / 8.7 / +3.0
200	147.82	11.2 / 8.2 / +3.0
250	148.38	10.6 / 7.9 / +2.7
305 (B)	149.0	10.0 / 7.3 / +2.7
350		10.0 / 3.2 / +6.8
400		10.0 / 1.7 / +8.3
450		10.0 / 4.4 / +5.6
500		10.0 / 4.7 / 5.3
525' S (B)	149.0	10.0 / 5.4 / +4.6
550	148.62	10.2 / 6.0 / +4.2
600	147.87	11.1 / 7.8 / +3.3
650	147.12	11.9 / 9.4 / +2.5
700	146.37	12.6 / 10.0 / +2.6
725' S (B)	146.0	13.0 / 10.2 / +2.8
750	145.87	12.8 / 10.9 / +1.9

159.03 ⊼ / 12.45 / 146.58 / 1.17 / 147.75 ⊼ / 12.58 / 135.17 / 0.34 / 135.51 ⊼ / 12.73 / 122.78 / 9.18 / 131.96 / 0.66 / 131.30 / 12.53 / 143.83

6.77 / 128.77 ✓

Station	Elev.	Calc.	Remarks
800' S	145.62	13.2 / 10.0 / +3.2	
850	145.37	13.6 / 8.7 / +4.9	
900	145.12	13.9 / 7.7 / +6.2	
925' S (B)	145.0	14.0 / 7.5 / +6.5	
950	144.28	14.7 / 7.0 / +7.7	
1000	142.85	16.2 / 7.8 / +8.4	
1065 (B)	141.0	18.0 / 11.4 / +6.6	
1100	137.96	10.7 / 4.2 / +6.5	
1150	133.65	14.1 / 9.8 / +4.3	
1200	129.33	6.2 / 3.8 / +2.4	
1250	125.02	10.5 / 8.9 / +1.6	
1285 (B)	122.0	13.5 / 11.5 / +2.0	
1325 = 10' S of ℄ "R" = Δ 90° Rt	120.0	15.5 / 13.3 / +2.2	WEST ON Woolman
1390 W (B)	125.0	10.5 / 7.3 / +3.2	
1450 W (B)	126.0	9.5 / 5.7 / +3.8	
1510 (B)	119.0	12.9 / 10.0 / +2.9	
1550 (B)	119.0	12.9 / 10.3 / +2.6	
1610 (B)	132.0	11.8 / 8.1 / +3.7	
1645	134.0	9.8 / 4.4 / +5.4	
1680 = 10' E at ℄ Gloria	136.0	7.8 / 2.6 / +5.2	

WATER MAIN CONSTRUCTION
Woolman 49th West to 45th

Station		Grade		
				143.83 / 4.31 / 139.52 T.P.
1700		135.94	7.9 / 1.5 / +6.4	1.01 / 140.53
1750		135.78	8.1 / 1.0 / +7.1	12.85 / 127.68 / 3.08 / 130.76
1800		135.62	8.2 / 1.6 / +6.6	
1850		135.46	8.4 / 2.8 / +5.6	
1900		135.30	8.5 / 2.5 / +6.0	
1950		135.14	8.7 / 3.0 / +5.7	
1990 = Ⓑ		135.0	8.8 / 4.2 / +4.6	9.2 / 5.4 / +3.8
2005 = 10' E ℄ 48th St.		134.6	Here Woolman line jogs 15' N (5' N ℄	
2050		133.40	7.1 / 3.6 / +3.5	
2100		132.08	8.5 / 6.0 / +2.5	
2150		130.76	9.8 / 7.3 / +2.5	
22		129.44	11.1 / 8.0 / +3.1	
+50		128.12	12.4 / 8.3 / +4.1	
23		1 32 / 126.80	13.7 / 10.1 / +3.6	
+30 = 10' E ℄ Escuela		126.0	14.5 / 10.7 / +3.8	
+65		125.30	15.2 / 11.2 / +4.0	
24+00		124.60	15.9 / 12.9 / +3.0	
+50		123.60	7.2 / 4.5 / +2.7	
25		122.61	8.2 / 4.8 / +3.4	
+50		121.63	9.2 / 3.0 / +6.2	

Station		Grade			
				130.76 / 8.90 / 121.86	121.90 / 1.51 / 123.41
26		120.65	10.2 / 4.6 / +5.6		12.12 / 111.29 T.P.
+69 = 10' E ℄ 47th		119.30	11.5 / 7.5 / +4.0		1.53 / 112.82 / 12.01 / 100.81 T.P.
+84 = 5' W ℄ 47th		119.00	11.8 / 8.5 / +3.3 Woolman Line here 10' S of ℄)		100.81 / 1.29 / 102.10
27		118.0	5.4 / 2.1 / +3.3		
+50		114.90	9.50 / 5.1 / +4.3		
28		111.78	11.6 / 8.8 / +2.8		
+50		108.67	14.7 / 12.2 / +2.5		
29+09 Ⓑ		105.0	7.8 / 5.1 / +2.7		
+51.5		103.50	9.3 / 7.1 / +2.2		
+94 = 10' E ℄ East St.		102.0	10.8 / 8.1 / +2.7		
30+50		100.77	12.0 / 9.9 / +2.1		
31		99.68	13.1 / 10.9 / +2.2		
+50		98.59	14.2 / 12.0 / +2.2		
32		97.50	4.6 / 2.2 / +2.4		
+69 Ⓑ		96.0	6.1 / 4.1 / +2.0		
33+29 = 10' E ℄ 46th		95.0	7.1 / 4.6 / +2.5	= 80' wide	
33+89 Ⓑ		94.0	8.1 / 5.1 / +3.0		
34+50			7.1 / 5.5 / +2.6		
35			8.1 / 5.4 / +2.7		
+50			8.1 / 5.2 / +2.9		

Woodman Water Main

	Grade	
36		
+64 = 10'E & W of 1st	94.0	
37	93.60	
+50	93.0	
38+09 (B)	92.50	
+50	90.98	
39	89.12	
+50	87.76	
+89 = 10'E & W of 4th St.	86.0	

Water Main Construction — Gloria St.

10'E of ℄

	Grade
S.L. Franklin = 0+00	146.0
50's	145.75
100	145.50
150	145.25
200 (B)	145.0
250	143.75
300	142.50
350	141.25
400 (B)	140.0
450	139.18
500	138.35
550	137.54
600	136.73
645.5 = 10.5 o/E & W of Woodman (B)	136.0
700	135.23
750	134.53
800	133.83
860 = (B)	133.0
900	133

GLORIA ST. CONT'D

	Grade	
950	133.0	7.5 / 3.0 / +4.5
1000	133.0	7.5 / 1.9 / +5.6
1060 (B)	133.0	7.5 / 1.6 / +5.9
1120	131.26	9.2 / 3.2 / +6.0
1180 (B)	129.53	11.0 / 4.7 / +6.3
1222.5	127.06	13.4 / 10.8 / +2.6
1265'S=NLT ST.	124.60	15.9 / 13.4 / +2.5

48th ST WATER MAIN. 10'E of ℄

19'N of St QST=0+00	137.0	11.5 / 2.6 / +8.9
40 S	137.25	11.2 / 6.1 / +5.1
80	137.50	11.0 / 5.3 / +5.7
120	137.75	10.8 / 4.6 / +6.2
160 B	138.0	10.5 / 6.9 / +3.6
200	137.6 ✓	10.9 / 5.9 / +5.0
+50	137.15	11.2 / 6.2 / +5.0
3	136.67	11.8 / 6.5 / +5.3
+50	136.18	12.2 / 8.3 / +3.9
4	135.70	12.7 / 9.2 / +3.5

48th ST Main

4+20 (B)	135.50	13.0 / 9.6 / +3.4
+50	135.40	13.1 / 5.9 / +7.2
5	135.19	13.8 / 8.0 / +5.8
+50	135.0	13.5 / 6.9 / +6.6
6	134.81	13.7 / 7.1 / +6.6
6+44.3=5'N & R	134.65	6.1 / 1.1 / +5.0
6+59.3=10'S & R	134.60	6.1 / 2.2 / +3.9
7	133.0 ✓	7.7 / 3.7 / +4.0
+50	131.08	9.7 / 6.2 / +3.5
8	129.14	11.6 / 7.5 / +4.1
+50	127.20	13.5 / 9.7 / +3.8
9	125.26	15.4 / 8.8 / +6.6
+50	123.32	17.2 / 8.1 / 9.0
10	121.38	19.2 / 10.1 / +9.1
+50	119.44	19.0 / 7.5 / +11.5
11 = B	117.5	18.9 / 5.8 / 13.1
+50	116.80	17.6 / 5.0 / +12.6
12	116.10	13.3 / 3.7 / +9.6
+50	115.40	14.0 / 10.9 / +3.1
+79.3=NLT ST.	115.0	14.4 / 11.2 / +3.2

ESCUELA WATER MAIN

Station	Grade		
			127.95 = paving / 0.99 / 128.94 — 10' E ℄
Ex Main Imperial = 0+00	125.0	3.9 / 0.8 / +3.1	
+50	122.0	6.9 / 3.5 / +3.4	
1 00 (B)	119.0	9.9 / 6.0 / +3.9	
+50	118.67	10.2 / 7.3 / +2.9	
2	118.33	10.5 / 8.1 / +2.4	
+50	118.0	10.9 / 7.9 / +3.0	
3	117.67	11.2 / 9.1 / +2.1	
+50	117.33	11.6 / 9.6 / +2.0	
4 (B)	117.0	11.9 / 9.5 / +2.4	
+50		11.9 / 8.7 / +3.2	
5		11.9 / 7.2 / +4.7	
+50		11.9 / 6.8 / +5.1	
6		11.9 / 6.7 / +5.2	
+50		11.9 / 8.1 / +3.8	
7 (B)	117.0	11.9 / 9.0 / 2.9	
+50	116.72	12.2 / 9.5 / +2.7	
8	116.43	12.5 / 9.5 / +3.0	
+50	116.16	12.7 / 9.2 / +3.5	
+80 (B)	116.0	12.9 / 9.2 / +3.7	
9 +30	116.50	12.4 / 8.5 / +3.9	

Station	Grade		
			128.94 / 0.48 / 128.46 / 9.80 / 138.26
9+80 (B)	117.0	11.9 / 8.3 / +3.6	
10	117.53	11.4 / 8.1 / +3.3	
+50	118.86	10.1 / 6.1 / +4.0	
11	120.20	8.7 / 5.0 / +3.7	
+50	121.53	7.4 / 3.5 / +3.9	
12	122.86	6.1 / 2.0 / +4.1	
+50	124.20	4.7 / 0.8 / +3.9	
13 +18 = 5' N ℄ "R" St"	126.0	12.3 / 8.5 / +3.8	

47th ST WATER SYSTEM

10'S & Imp. = 0+00 EXISTING MAIN	117.50	6.8 / 3.7 / +3.1	115.40 / 3.85 / 119.25 / +.47 / 110.78 / 11.56 / 122.34 — S adjustment 47th & Imp.
+50' S	112.44	6.9 / 2.8 / +4.1	
1	112.35	7.0 / 3.0 / +4.0	
+50	112.27	7.1 / 3.8 / +3.3	
2 (B)	112.20	7.1 / 3.7 / +3.4	
+50	111.65	7.7 / 3.9 / +3.8	
3	111.10	8.2 / 2.7 / +5.5	
+50	110.55	8.8 / 5.5 / +3.3	
4 (B)	110.0	9.3 / 6.2 / +3.1	
+60	109.50	9.8 / 7.4 / +2.4	
5 +20 (B)	109.0	10.3 / 7.5 / +2.8	
+50		10.3 / 7.1 / +3.2	
6		10.3 / 6.6 / +3.7	
+50		10.3 / 6.0 / +4.3	
7		10.3 / 7.1 / +3.2	
+60 (B)	109.0	10.3 / 7.6 / +2.7	
8	108.70	11.2 / 5.0 / +6.2	
+50	108.35	14.0 / 11.5 / +2.5	
9	108.10	14.3 / 12.3 / +2.0	
+50	107.63	14.7 / 12.7 / +2.0	

Imp. To Logan

10	107.78	15.0 / 13.2 / +1.8	122.34 / 0.16 / 122.18 / 7.91 / 130.09 / 0.58 / 129.51 / 5.16 / 124.67
10+40 (B)	107.0	15.3 / 12.2 / +3.1	
+80	108.0	14.3 / 11.9 / +2.4	
11 +20	109.0	13.3 / 10.4 / +2.9	
+60	111.50	10.8 / 7.6 / +3.2	
12	114.0	8.3 / 5.1 / +3.2	
+40	116.5	5.8 / 2.5 / +3.3	
+80 (B)	119.0	11.1 / 6.7 / +4.4	
13+16.7=5 N & R ST.	119.0	11.1 / 6.8 / +4.3	
+31.7 = 10'S & R ST	119.0	11.1 / 7.6 / +3.5	
14+00 (B)	119.0	11.1 / 7.5 / +3.6	
+50	118.75	11.9 / 8.2 / +3.7	
15	117.50	12.6 / 10.1 / +2.5	
+50	116.75	13.4 / 11.7 / +1.7	
16	116.0	14.1 / 12.2 / +1.9	
+50	118.0	12.1 / 10.6 / +1.5	
17	120.0	10.1 / 5.1 / +2.0	
+50	120.0	8.1 / 5.6 / +2.5	
18	124.0	6.1 / 2.2 / +3.9	
+50	124.50	5.6 / 1.6 / +4.0	

47th ST CONT.

			134.67 ⊼	105.26 10.05 115.97 1.33 114.61 7.89 122.50
19		125.0	9.7 4.2 +5.5	
+50		125.50	9.2 3.2 +6.0	
20 Ⓑ		126.0	8.7 1.9 +6.8	
+50			8.7 3.0 +5.7	
21			8.7 3.3 +5.4	
+50			8.7 4.5 +4.2	
22		126.0	8.7 6.0 +2.7	
+50		124.60	10.1 8.0 +2.1	
23		123.22	11.5 9.5 +2.0	
+40		122.11	12.6 9.8 +2.8	
+80 Ⓑ		121.0	13.7 10.8 +2.9	
24			13.7 11.0 +2.7	
+50			13.7 11.3 +2.4	
25			13.7 10.8 +2.9	
+50			13.7 10.5 +3.2	
26+23.7 = 12' S of N L Logan		121.0	13.7 9.8 +3.9	

EAST ST

10' E of ℄

12' S of N L Logan = 0+00		112.0	10.5 7.6 +2.9	122.50 ⊼ 11.87 110.63 2.55 113.18
56 N		111.50	11.0 7.0 +4.0	
112 N = Break		111.00	11.5 6.6 +4.9	
172		109.50	13.0 9.2 +3.8	
232 = Break		108.0	14.5 11.5 +3.0	
292		108.0	14.5 12.3 +2.2	
352 = Break		108.0	14.5 11.8 +2.7	
398.67		109.33	13.2 10.1 +3.1	
445.33		110.67	11.8 7.7 +4.1	
492 = Break		112.0	10.5 5.5 +5.0	
542			10.5 4.0 +6.5	
592			10.5 4.1 +6.4	
642			10.5 4.1 +6.4	
692 = Break		112.0	10.5 5.7 +4.8	
752		109.50	13.0 9.7 +3.3	
812 Break		107.0	15.5 11.9 +3.6	
862		106.0	7.2 3.5 +3.7	
912		105.0	8.2 5.4 +2.8	
962		104.0	9.2 6.5 +2.7	
1012 = Break		103.0	10.2 7.1 +3.1	

EAST ST. CON'T.

Station	Note	Elev.	Computation
1062	Logan?	103.0	10.2 / 7.3 / +2.9
1112			10.2 / 7.3 / +2.9
1162			10.2 / 7.7 / +2.5
1212 (+0)	= Break	103.0	10.2 / 7.3 / +2.9
1252		102.50	10.7 / 7.7 / +3.0
1292	= Break = Woodman	102.0	11.2 / 8.4 / +2.8
1332	= N.L. Woodman = angle	101.15	12.1 / 8.7 / +3.4
1372 (50)		100.27	6.2 / 3.6 / +2.6
1412		99.42	7.1 / 3.7 / +3.4
1452		98.56	8.0 / 4.4 / +3.6
1492		97.70	8.8 / 4.4 / +4.4
1532		96.85	9.7 / 6.2 / +3.5
1572 (55)	= Break	96.0	10.5 / 7.9 / +2.6
1627		95.25	11.3 / 4.8 / +6.5
1682		94.50	12.0 / 4.0 / +8.0
1737		93.75	12.8 / 9.6 / +3.2
1792 (40)	= Break	93.0	13.5 / 8.3 / +5.2
1832		94.37	12.2 / 5.6 / +6.6
1872		95.75	10.8 / 4.9 / +5.9
1912		97.12	9.4 / 5.6 / +3.8

113.18 π
8.74
104.44
2.04
106.48 π
5.65
100.83
12.24
113.07

Station	Note	Elev.	Computation
1952 (40)		98.50	14.6 / 12.9 / +1.7
1992		99.87	13.2 / 9.0 / +4.2
2032		101.25	11.9 / 7.5 / +4.4
2072 (40)		102.62	10.5 / 6.5 / +4.0
2112	= Break	104.0	9.1 / 5.8 / +3.3
2162			9.1 / 4.7 / +4.4
2212			9.1 / 4.0 / +5.1
2262			9.1 / 4.2 / +4.9
2312			9.1 / 4.5 / +4.6
2362			9.1 / 5.0 / +4.1
2412	= Break	104.0	9.1 / 5.4 / +3.7
2465		103.50	9.6 / 6.1 / +3.5
2518		103.0	10.1 / 5.9 / +4.2
2571		102.50	10.6 / 7.0 / +3.6
2624	= Ex. Main Imperial	102.0	11.1 / 7.4 / +3.7

113.07 π
7.77
105.30

105.23 - paving

46th ST WATER MAIN

El. Main Imperial = 0+00

	97.0	16.4 / 14.3 / +2.4	105.26 / 1.04 / 106.30
50' S	97.25	16.2 / 13.4 / +2.8	7.21 / 99.09 / 9.26 / 108.35
100	97.50	15.9 / 13.1 / +2.8	10.81 / 97.54 / 4.55 / 102.09
150	97.75	15.7 / 12.4 / +3.3	3.42 / 99.67 / 7.76 / 107.43
200 = Break	93.0	15.4 / 10.8 / +4.6	
240	94.0	14.4 / 5.6 / +5.8	
280	95.0	13.4 / 8.0 / +5.4	
320	96.0	12.4 / 7.7 / +4.7	
360 = Break	97.0	11.4 / 7.1 / +4.3	
420	98.0	10.4 / 4.3 / +5.1	
480	99.0	9.4 / 2.7 / +6.7	
540	100.0	8.4 / 2.0 / +6.4	
600 = Break	101.0	7.4 / 2.1 / +5.3	
655	99.62	8.8 / 4.0 / +4.8	
710	98.25	10.2 / 6.5 / +3.7 Hydt SL Front	
765	96.87	11.5 / 8.4 / +3.1	
820	95.50	12.9 / 9.6 / +3.3	
875	94.12	14.3 / 10.8 / +3.5	
930	92.75	9.4 / 5.6 / +3.8	
985	91.37	10.7 / 7.2 / +3.2	

For Spike Woolman & EAST

1040 = Break		90.0	12.1 / 9.0 / +3.1
1090		87.5	14.6 / 11.8 / +2.8
1140 = Break		85.0	17.1 / 14.8 / +2.3
1188		87.50	14.6 / 11.1 / +3.5
1236		90.0	12.1 / 8.8 / +3.3
1284		92.50	9.6 / 6.0 / +3.6
1332	Woolman = Break	95.0	7.1 / 4.6 / +2.5 Hydt. SE Corn.
1366		95.50	6.6 / 3.5 / +3.1
1400 = Break		96.0	6.1 / 2.6 / +3.5
1470			6.1 / 2.5 / +3.6
1540			6.1 / 2.6 / +3.5
1610			6.1 / 2.8 / +3.3
1680 = Break		96.0	6.1 / 2.8 / +3.3
1740		96.42	5.7 / 2.4 / 3.3
1800		98.85	10.6 / 7.4 / +3.2
1860		97.27	10.1 / 7.6 / +2.5
1920		97.70	9.7 / 7.2 / +2.5
1980		98.13	9.1 / 6.2 / +2.9
2040		98.56	8.9 / 5.9 / +3.0
2100 = Break		99.0	8.4 / 5.5 / +2.9

46th cont.

Station			Elev.		
2155			99.87	7.5 / 5.2 / +2.3	107.43 ⊼ / 0.82 / 106.61 / 5.57 / 112.18 x / 12.88 / 99.30 / 1.12 / 100.42
2210			100.74	6.7 / 4.1 / +2.6	
2265			101.61	5.8 / 3.1 / +2.7	
2320			102.49	4.9 / 2.3 / +2.6	
2375			103.36	4.1 / 1.6 / +2.5	
2430			104.24	3.2 / 0.8 / +2.4	
2485			105.12	7.1 / 4.0 / +3.1	
2540	Break		106.0	6.2 / 2.2 / +4.0	
2584.6			106.25	6.0 / 3.1 / +2.9	
2629.3	end		105.5	6.7 / 5.2 / +1.5	

WEST ST. WATER MAIN

Station		Elev.		
205 Woolman = 0+00		94.0	6.5 / 3.1 / +3.4	100.52 ⊼
56		93.50	7.0 / 3.4 / +3.6	
112		93.0	7.5 / 4.4 / +3.1	
168		92.50	8.0 / 4.7 / +3.3	
224		92.0	8.5 / 5.4 / +3.1	
280 = Break		91.50	9.0 / 6.0 / +3.0	
330		91.32	9.2 / 6.1 / +3.1	
380		91.13	9.4 / 6.1 / +3.3	
430		90.94	9.6 / 6.3 / +3.3	
480		90.75	9.8 / 7.1 / +2.7	
530		90.56	9.8 / 6.9 / +3.0	
580		90.37	10.1 / 6.6 / +3.5	
630		90.18	10.3 / 6.8 / +3.5	
680 = Break		90.0	10.5 / 6.5 / +4.0	100.42 x
			10.5 / 6.1 / +4.4	6.35 / 94.07 / 6.45 / 100.52 / 2.02 / 98.50 / 10.34 / 108.84 / 3.54 / 105.30
730	Levels Backed up	10.4 / 6.4 / +4.0		
780		10.4 / 7.1 / +3.3		
830		10.4 / 6.9 / +3.5		105.26
880		10.4 / 7.1 / +3.3		
930		10.4 / 7.4 / +3.0		
980				

WEST ST Water MAIN

1030	90.0	10.4 7.6 +2.8	100.42
1080		10.4 7.4 +3.0	
1130		10.4 8.0 +2.4	
1180		10.4 7.9 +2.5	
1230		10.4 7.8 +2.6	
1292 = 12'S of N.L. Logan	90.0	10.4 5.2 +5.2	Levels Backed up

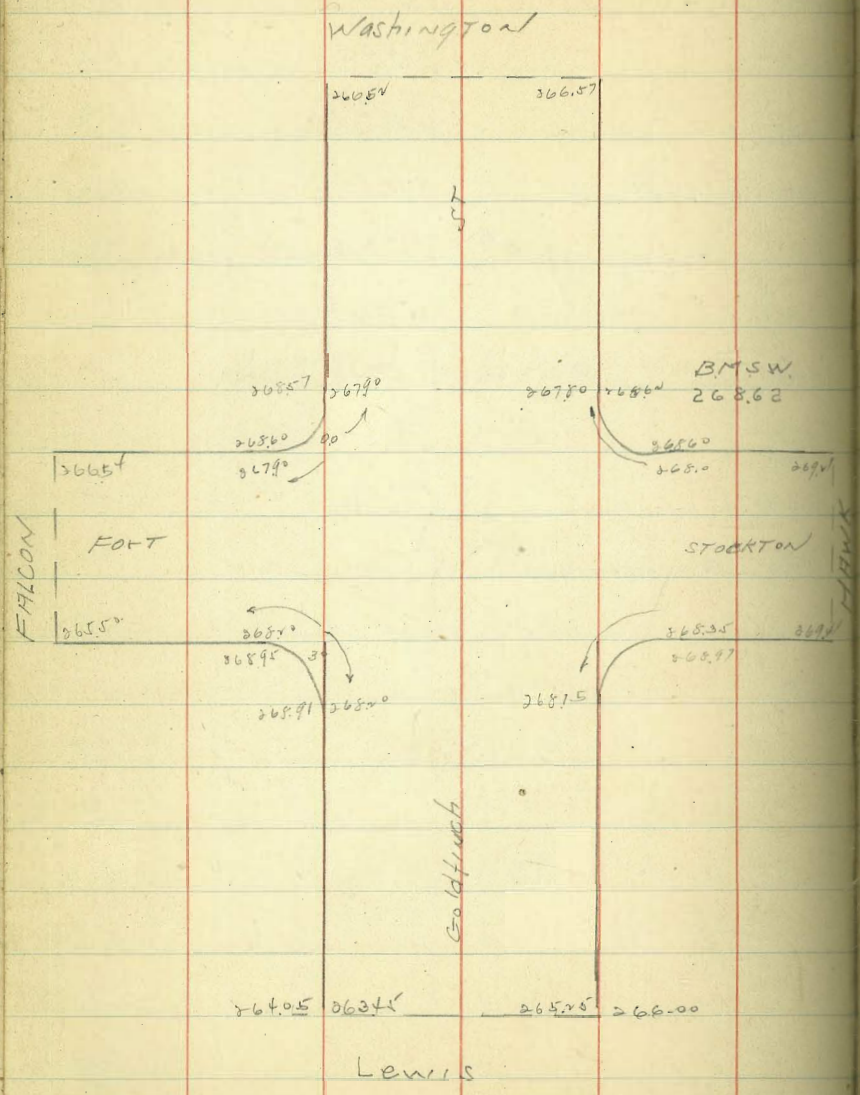
45th ST WATER MAIN

10' S Eubol Ran = 0+00	86.0
50	86.5
100	87.0
150	87.50
200 = BREAK	88.00
260	87.63
320	87.25
380	86.87
440	86.50
500	86.12
560	85.75
620	85.37

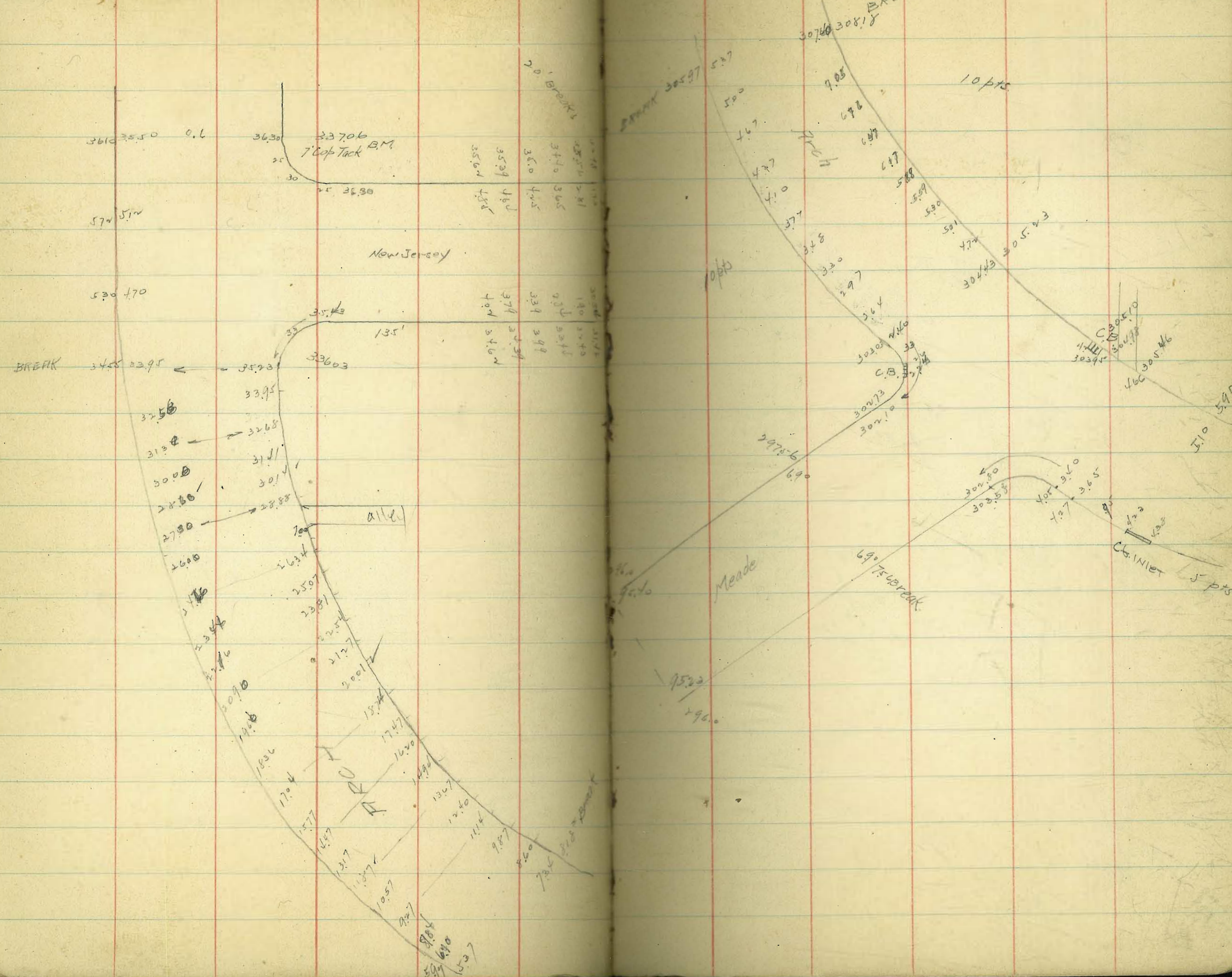
45th ST WATER

680 = BREAK	85.0
740	85.25
800	85.50
860	85.75
920 = Break	86.0
982	85.83
1044	85.64
1106	85.48
1168	85.32
1230	85.16
1292 = 12'S of N.L. Logan	85.0

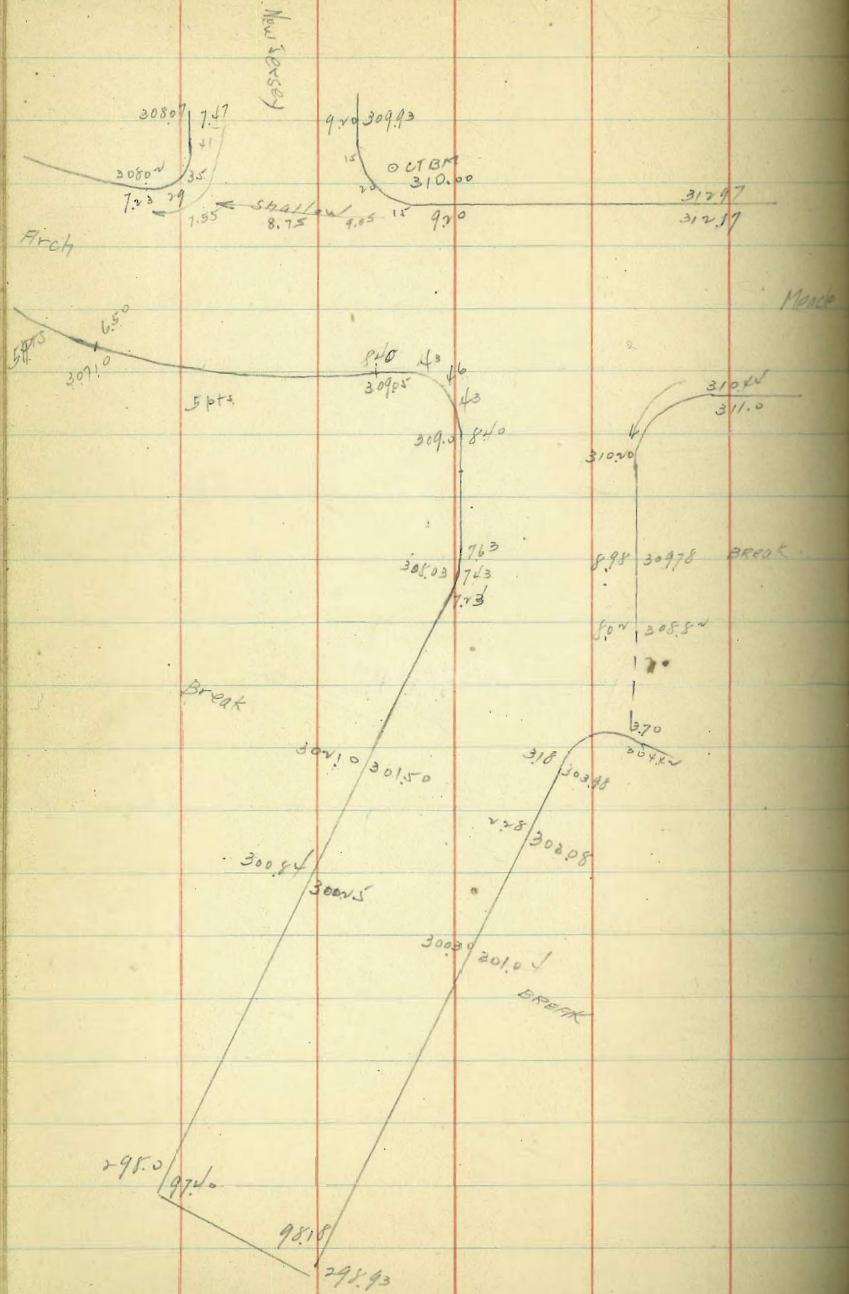
Goldfinch & FT. STOCKTON Paving



MONROE - MEADE - ARCH ST

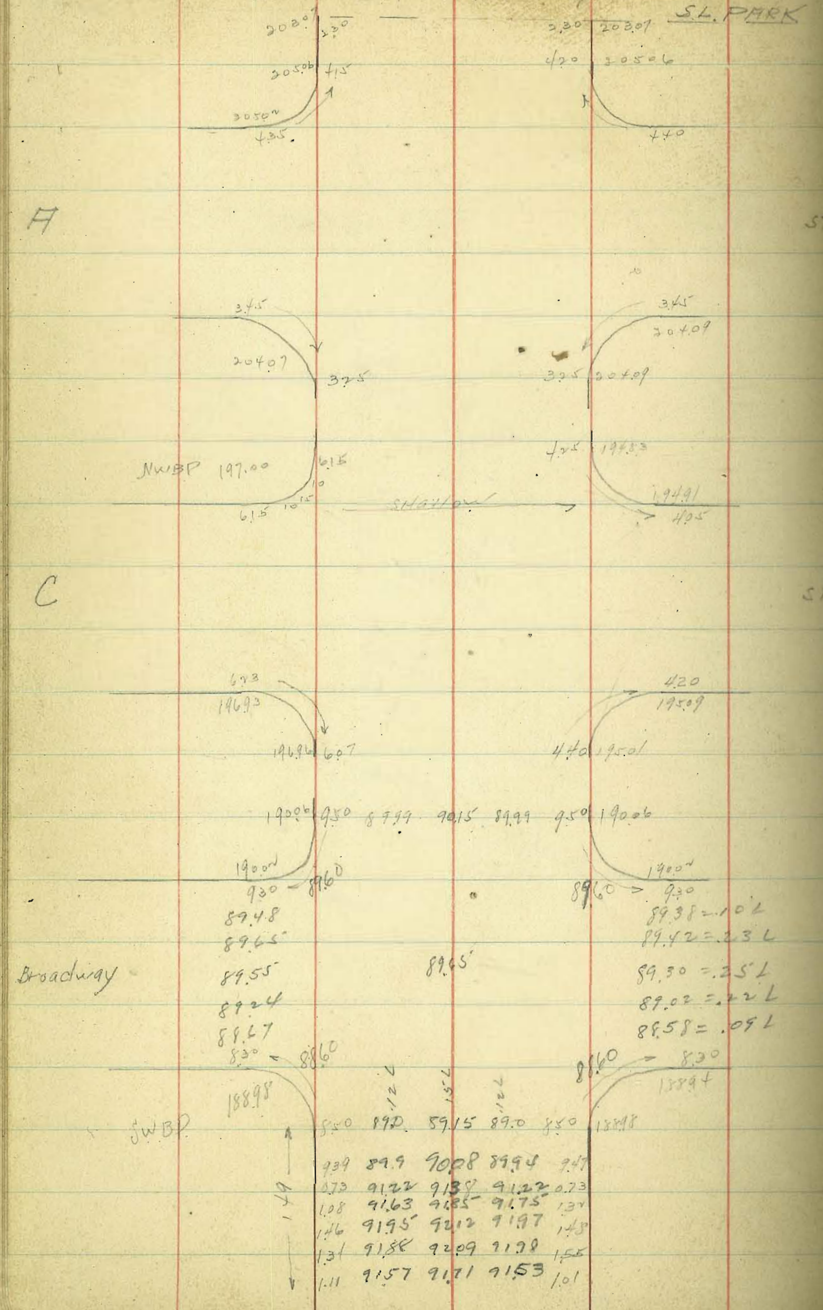


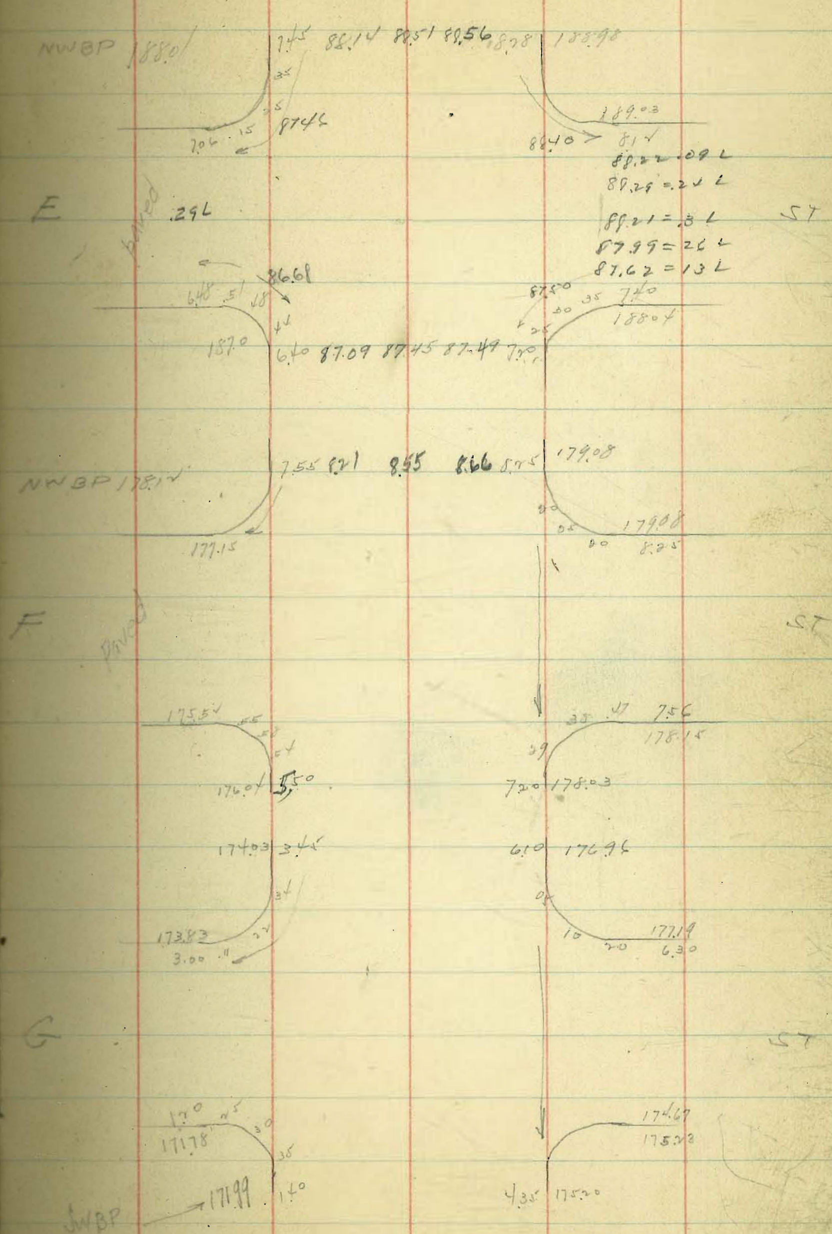
Meade - Monroe - Arch St

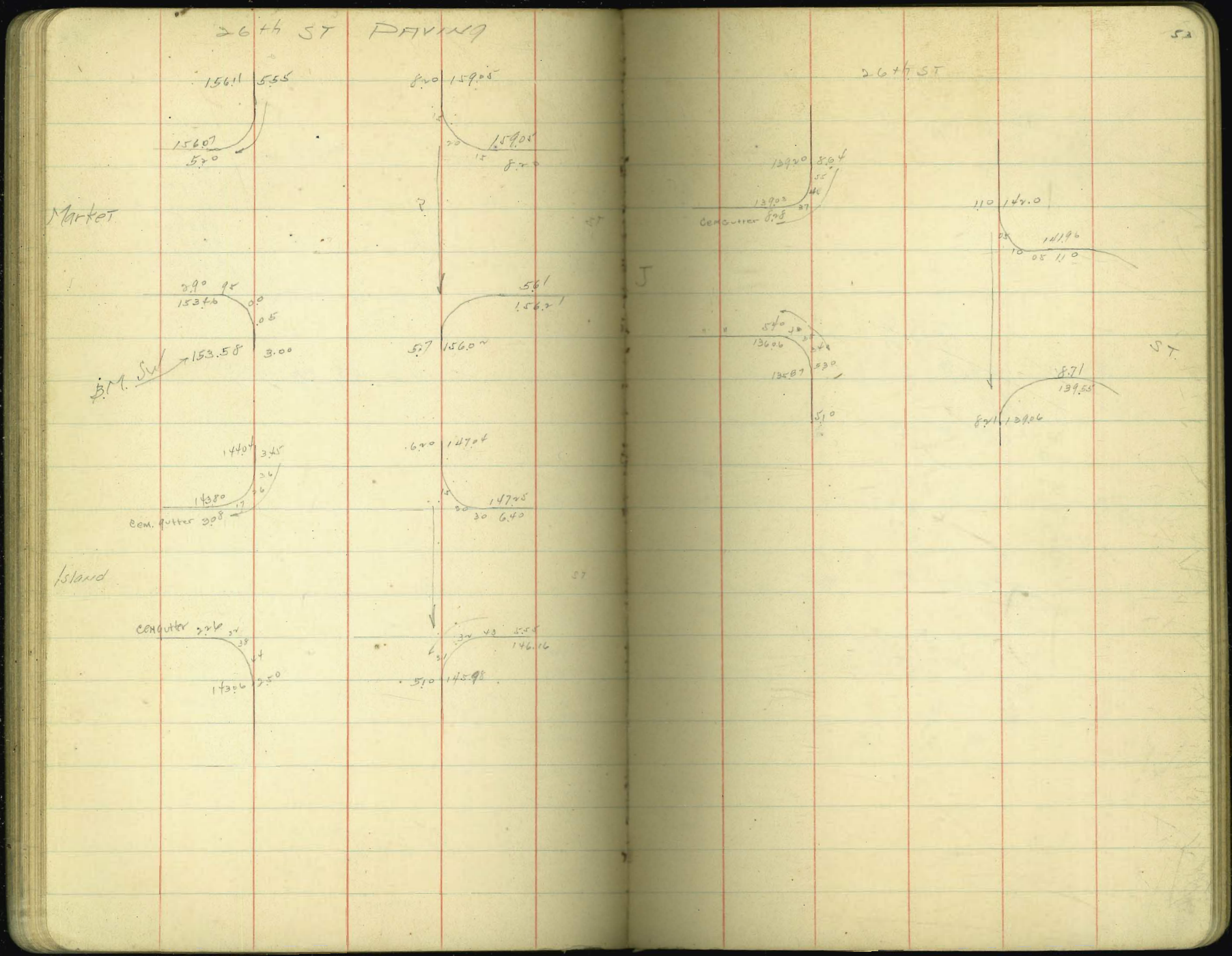


26th ST PAVING

SL. PARK

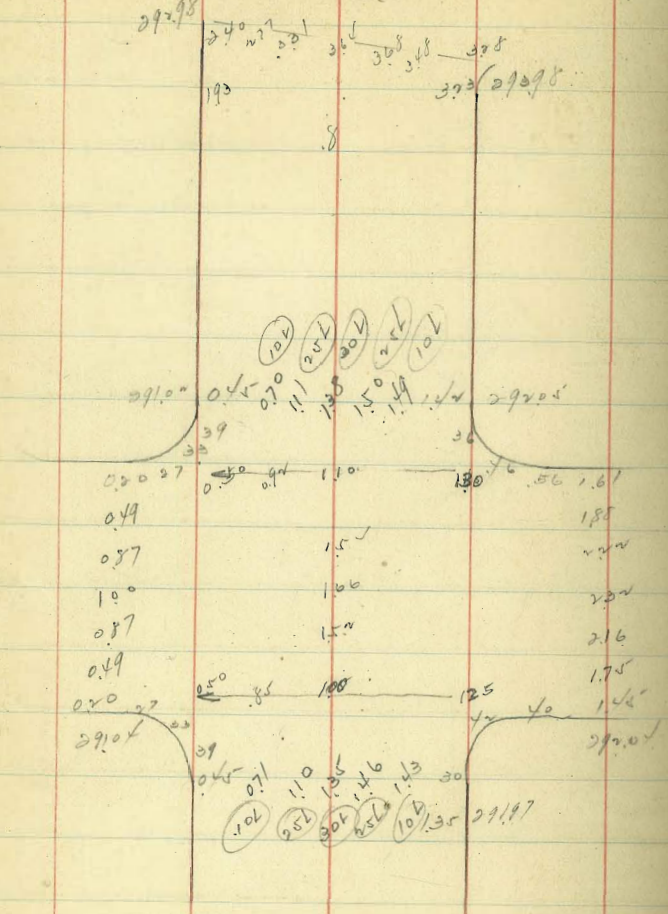




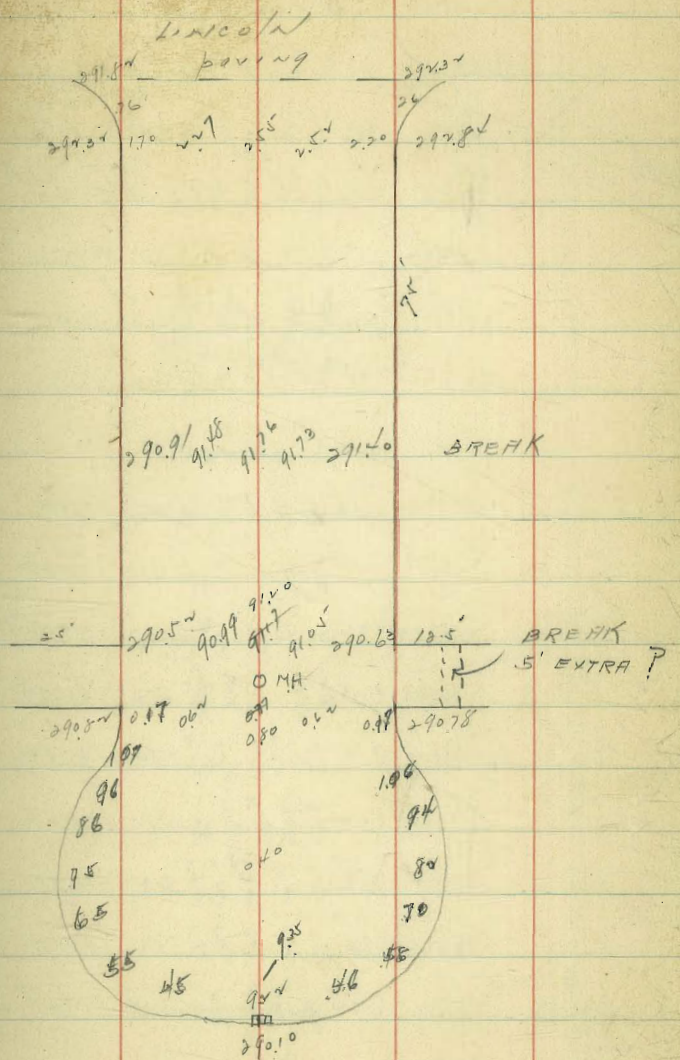

26th ST PAVING
156.11
5.55
156.07
5.70
Market
3.90
153.40
0.0
.05
3.00
B.M. Sq
153.58
144.04
3.45
143.80
cem. gutter 3.08
Island
cem gutter 3.24
143.06
3.50
8.20
159.05
159.05
8.20
5.61
156.71
5.7
156.02
6.20
147.04
147.25
6.40
146.16
5.10
145.98
26th ST
139.20
8.64
139.03
cem gutter 8.98
5.40
136.06
135.87
5.10
J
ST
110
142.0
141.96
10
05
11.0
8.71
139.55
8.71
139.26

Vermont St Paving

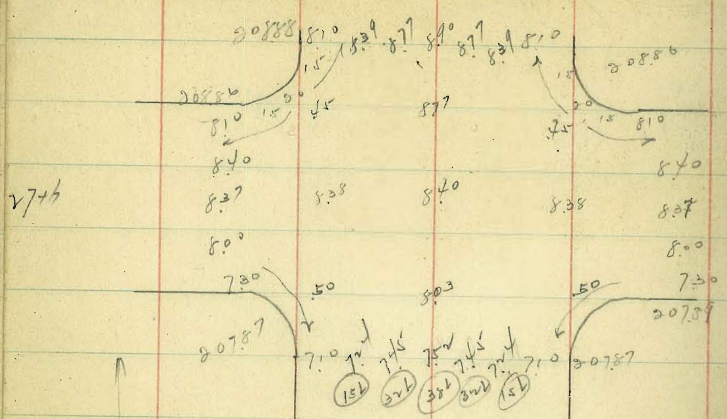
Johnson



Lincoln Paving Con't.



F1 ST Paving



30' BREAKS

197.03	6.43	6.75	7.20	7.40	7.33	7.02	6.77	197.57
195.14	4.54	4.88	5.37	5.42	5.60	5.32	5.11	195.91
193.36	2.76	3.11	3.61	3.86	3.64	3.60	3.37	194.17
191.68	91.08	1.42	1.95	2.22	2.22	1.98	1.76	192.56
190.18	9.45	9.79	[illegible]	[illegible]	[illegible]	[illegible]	190.0	190.80
188.66	8.06	8.52	8.92	9.23	9.2	9.01	8.80	189.60
188.10	7.55	7.90	8.40	[illegible]	[illegible]	[illegible]	8.13	188.93
187.65	6.95	7.30	7.80	8.06	8.03	7.78	7.57	188.42
= C.B. 187.46	6.50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7.2	188.2 = C.B.
187.33	6.60	6.96	7.39	7.77	7.76	7.56	7.35	188.06
187.31	6.95	7.1	7.63	7.9	7.9	7.68	7.47	188.22

275' 265'

STA. 3+00

3+20	187.51	6.95	7.31	7.88	8.13	8.15	7.92	7.71	188.51
	187.86	7.26	7.62	8.14	8.42	8.42	8.18	7.97	188.77
	188.44	7.84	8.21	8.72	9.04	9.04	8.81	8.62	189.42
	189.17	8.57	8.92	9.49	9.79	9.76	9.59	9.41	190.21
	190.13	9.53	9.90	10.41	10.72	10.77	10.54	0.35	191.15
	191.17	0.57	0.90	1.46	1.78	1.77	1.62	1.45	192.27
	192.22	1.62	2.01	2.62	2.91	3.06	2.91	2.72	193.56
	193.81	3.20	3.59	4.18	4.52	4.60	4.43	4.25	195.07

10'

28th ST

MYRTLE. ST Grading
Arizona to Texas

	N cb	282.38 7.79 290.17	S cb	
WL Arizona	275.0		274.50	
50' W	279.07	~~11.40~~ 11.13	278.57	~~11.60~~ 11.…
100	283.16	~~7.01~~ 7.02	282.66	~~7.51~~ 7.5…
140 = B	286.42	3.75	285.92	4.25
160	287.71	2.46	287.21	2.96
180	288.32	1.85	287.82	2.35
200	288.26	1.91	287.76	2.41
220	287.51	2.66	287.01	3.16
240	286.07	4.10	285.57	4.60
EL Texas 2.7°	283.0	7.17 .10	282.50	7.67 .10

60' wide
10' Stwl in ℄
3' gutter

282.38
4.50
282.88
0.05
282.20
10.73
292.93

S.E. OF. Myrtle + Arizona

NL	cb 275.0 9.88 .05L	279.3 3.6 2.5 +1.1	283.2 9.5 8.7 +0.8	286.7 6.2 5.2 +1.0	288.0 4.9 4.4 +0.5	288.6 4.3 3.6 +0.7
SL	cb 274.50 8.38 .15L	278.8 4.1 4.4 -0.3	282.9 10.0 10.6 -0.6	286.2 6.7 7.3 -0.6	287.5 5.4 6.6 -1.2	288.1 4.8 5.8 -1.0
NL	288.5 4.2 3.9 +0.5	287.5 5.1 4.0 +1.1	284.3 6.6 4.8 +1.8	283.0 = cb 9.93 .15L		
SL	288.0 4.9 5.6 -0.7	287.3 5.6 5.1 +0.5	285.8 7.1 5.4 +1.7	282.50 = cb 10.43 .15L		

4.4
2.6
1.8
1.7

5/2/26
Moore

ALLEY PAVING
BIK 46 · SHERMANS ADD

20' wide

	N Top cb		S T.p.cb	
El ground	66.32	65.81 = paving	~~65.18~~	65.00 = paving
20' E	65.20	+2.22	64.56	-0.46
40	64.50	+3.46	64.13	-0.71
60 E = Break N+S	64.00	+2.0	63.70	-0.77
95	63.75	+2.0	63.47	0.0
130	63.50	+0.22	63.25	0.0
165	63.25	+0.40	63.02	0.0
200 = BREAK	63.00	+1.0	62.80	+1.0
240	62.50	+1.0	62.35	+1.0
280	62.0	+1.0	61.90	+1.0
320	61.50	+1.0	61.45	-1.0
360 = BREAK	61.00	+0.12	61.00	
408.4 = w line 4th Top cb	5898		58.52	

L+M
32+24

5644
1290
6934
582
6350
392
6742
597
6145
613
[558]

NWDP J Mp. ground

65.81 = paving

N	66.32 / 3.02	65.20 / 4.14 / 1.92 / +2.22	64.50 / 4.84 / 1.38 / +3.46	64.00 / 5.34 / 3.34 / +2.00	63.75 / 5.59 / 3.59 / +2.0	63.50 / 3.92 / 3.70 / +0.22	63.25 / 4.17 / 3.77 / +0.40
S	65.00 / 4.34	64.56 / 4.78 / 5.24 / -0.46	64.13 / 5.21 / 5.92 / -0.71	63.70 / 5.64 / 6.41 / -0.77	63.47 / 5.87 / 0.0	63.25 / 4.17 / 417 / 0.0	63.02 / 4.40 / 4.40 / 00
N	63.00 / 442 / 342 / +1.0	62.50 / 4.92 / 392 / +1.0	62.00 / 542 / 442 / +1.0	61.50 / 4.08 / 308 / +1.0	61.0 / 4.58 / 4.46 / +0.12	58.98 = cb / 6.60	
S	62.80 / 4.62 / 362 / +1.0	62.35 / 5.07 / 407 / +1.0	61.90 / 5.52 / 452 / +1.0	61.45 / 4.13 / 513 / -1.0	61.0 / 4.58 / 358 / +1.0	58.52 = cb / 7.06	

ALLEY PAVING 15' wide betw 28th St & Pershing

Blk 66 PARK VILLAS

		W		E	
– 4' = edge paving		326.81 = paving		327.06 = paving	
NL Upas		327.02 = ct gr. est. 326.89 ct. cut at NL Upas		327.39 = est. ct grade 327.14 = NL ct cut	
40'N	+1.0	327.74		327.97	+1.72
80'N = BREAK	+0.16	328.60	check Bob's Teddy O.K.	328.80	+2.0
120	+1.0	328.73		328.93	+1.0
160	+1.0	328.85		329.05	+1.0
200	+1.0	328.98		329.18	+1.0
240	+0.49	329.11		329.31	+1.0
280	+1.0	329.24		329.44	+2.0
320	+2.0	329.37		329.57	
360 = SL Myrtle		329.50 = paving grade 329.60 = est. ct grade		329.70 = paving grade 329.88 = est ct grade	

332.5
1.67
334.18
2.40
336.58
6.87
333.59
4.50
339.09
5.11
334.20
3.99
330.21
3.78
333.99

NE Myrtle & 28th

W	326.89	327.74 5.85 4.85 +1.0	328.60 4.99 4.83 +0.16	328.73 5.47 4.47 +1.0	328.85 5.35 4.35 +1.0
E	327.14	327.97 5.62 3.90 +1.72	328.80 4.79 2.79 +2.0	328.93 5.27 4.27 +1.0	329.05 5.15 4.15 +1.0
W	328.98 5.22 4.22 +1.0	329.11 5.09 4.60 +0.49	329.24 4.96 3.96 +1.0	329.37 4.62 2.62 +2.0	329.50 4.49 4.32 +0.17	
E	329.18 5.02 4.02 +1.0	329.31 4.89 3.89 +1.0	329.44 4.76 2.76 +2.0	329.57 4.42 2.42 +2.0	329.70 4.29	

BRIGHTON AVE PAVING

Bacon paved

N.W.B.M. 4.53 3.35 | 4.45 | 4.60 4.90 | 50.0 Break 5 side only

Abbott paved

1496 1420 | 1420 1496

1505 1420 | 1496 1420

Cable

1340 1405 | 1340

1386 1370 | 1370 SWBP 14.00

35.56 34.84 | 34.84 35.59

35.58 34.84 | 35.56 34.84

Ebers

33.96 34.55 N.W.B.P. 34.49 | 34.55 33.80 | 33.80 34.55 | 33.96 34.51

100.0

29.02 28.25 | 28.25 29.00 BREAK

105 104.95 curb in question

GUIZOT ST

104.90 104.25 | 104.90 105.75

82.35 81.70 | 82.55 83.40 BREAK 50

78.0 77.35 | 78.12 78.97 BREAK 50

74.18 73.53 | 74.32 75.17 BREAK 50

70.94 70.29 | 71.10 71.95 BREAK 50

68.22 67.67 | 68.39 69.24 BREAK

100

60.50 59.85 | 60.65 61.50

59.65 | 60.65

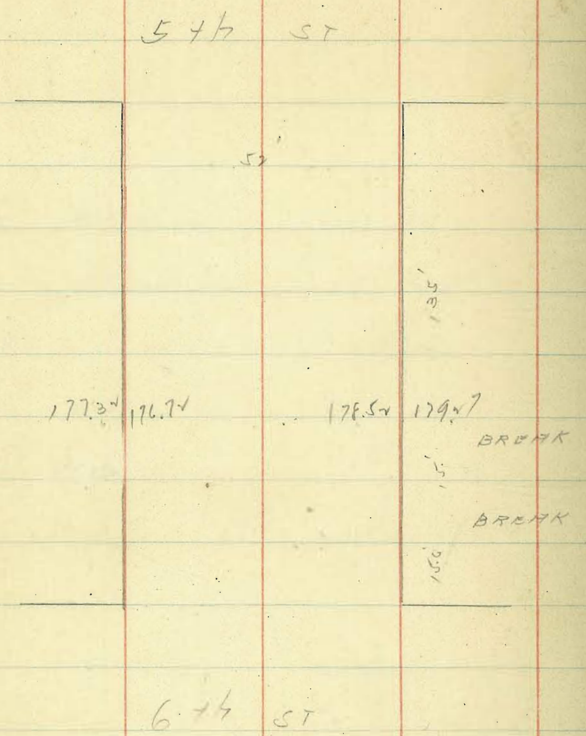
FROUDE

58.85 | 59.85

59.50 58.85 | 59.65 sw top wall 61.67

Grape ST Paving
5th to 6th

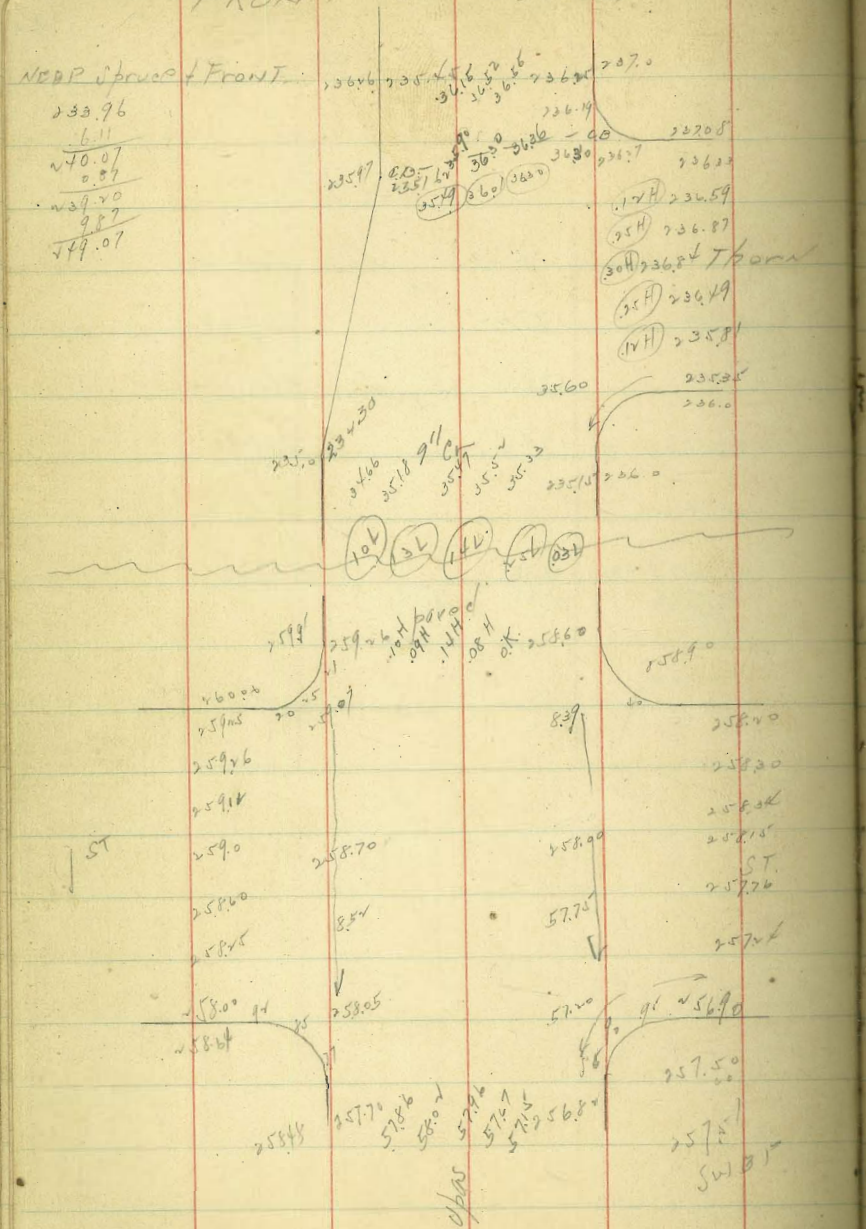
N.W.B.P. 178.51 / 6.48 / 184.99



5/5/26

	S cb		N cb	
135' E of E.L. 5th	177.20		179.20	
150.	178.0	6.99 / 6.93 sct	180.0	.99
165.5 = W.L. 6th St	179.0		181.92	
185.9 NL				
178.51 / 5.94 / 184.45	7.13 / 177.32	5.18 / 179.27 / 7.5 / 5.93		

FRONT ST Paving



Meade Ave Grading

	S CL	N CL
EL Georgia	343.60	344.60
40' E	341.56	342.56
60	340.40	341.40
80	338.96	339.96
100	337.23	338.23
120	335.23	336.23
140	332.94	333.94
160	330.36	331.36
210	323.57	324.57
260	316.78	317.78
310 = W/L Florida	310.0	311.0
EL Florida	309.0	310.0
30 E	308.50	309.50
50	308.27	309.27
70	308.26	309.26
90	308.43	309.43
110	308.58	309.58
130	309.52	310.52
150 E	310.37	311.37

Meade + Georgia SEBP

343.60
1.10
344.70
12.95
331.75
0.06
331.81
12.65
319.16
0.42
319.58
11.57
308.01
5.41
313.42
2.34
311.08
8.99
320.07

N	344.60 ✓	42.80 / 1.9 / 1.2 / +0.7	41.60 / 3.1 / 1.7 / +1.4	40.20 / 4.5 / 2.5 / +2.0	38.50 / 6.2 / 3.5 / +2.7	36.50 / 8.2 / 4.8 / +3.4	34.20 / 10.5 / 7.2 / +3.3
S	343.60 ✓	41.80 / 2.9 / 1.2 / +1.7	40.60 / 4.1 / 1.8 / +2.3	39.20 / 5.5 / 3.3 / +2.2	37.50 / 7.2 / 5.5 / +1.7	35.50 / 9.2 / 8.3 / +0.9	33.20 / 11.5 / 9.8 / +1.7
N	31.60 / 13.1 / 10.5 / +2.6	24.80 / 7.0 / 6.5 / +0.5	318.0 / 1.6 / 2.6 / -1.0	311.0 CL ✓	310.0 CL ✓	309.75 / 3.7 / 5.3 / -1.6	
S	30.60 / 1.2 / 1.2 / 0.0	23.80 / 8.0 / 8.1 / -0.1	317.0 / 2.6 / 4.8 / -2.2	310.0 = CL ✓	309.0 = CL ✓	308.75 / 4.7 / 5.5 / -0.8	
N	309.50 / 3.9 / 6.2 / -2.3	309.50 / 3.9 / 5.9 / -2.0	309.67 / 3.8 / 5.4 / -1.6	310.10 / 3.3 / 3.6 / -0.3	310.80 / 2.6 / 2.8 / -0.2	311.60 / 1.8 / 2.4 / -0.6	
S	308.50 / 4.9 / 6.3 / -1.4	308.50 / 4.9 / 7.8 / -2.9	305.67 / 4.8 / 8.1 / -3.3	309.10 / 4.3 / 6.9 / -2.6	309.80 / 3.6 / 5.5 / -1.9	310.60 / 2.8 / 5.5 / -2.7	

So. End Culvert No 1 2-24-33

Moore
Sisson
Northern

B.M. 318.87 S.E.B.P. Meade + Alabama
1.21
320.08

So. End
308.50 Flow Line
16.58
10.37
+6.21

No End
304.50
15.58
9.33
+6.25

310.0
2.95
312.95

Culvert #1 Inlet = 304.50

304.50
8.45
4.05
+4.40

304.0
8.95
3.90
+5.05

303.50
9.45
5.50
+3.95

Outlet = 303.50

8.92
6.60
+2.32 Flowline

9.93
7.95
+1.98 ✓

9.4
7.4
+2.0 Center Culvert

Meade Ave grading

		S cb		N cb		
203.33 E Florida		312.91		313.91		
256.67		315.45		316.45		
310 = W L Alabama		318.0		319.0		
E L Alabama		319.0		320.0		
50' E		322.0		323.0		
100' E = Break		325.0		326.0		
125 ✓		326.40	/	327.38		
150 ✓	Rel 27.36 2697	327.58		328.54	27.94	Rel 28.33
175 ✓	Rel 28.22 28.09	328.56		329.46	29.02	Rel 29.16
200 ✓		329.3 ✓		330.17		
250		330.67		331.33		
300 = W L Miss		332.0		332.50		
E L Miss		332.50		333.0		
50' E		332.65		333.12 ✓		
100		332.80	-1	333.25		
150		332.95		333.37		
200		333.10		333.50		
250		333.25		333.6 ✓		
300 = W L Louisiana		333.40		333.75 = curb 334.0 Est grade		

next page

320.07 T.
1.25
318.82
318.87 = SEEP

Meade + Ala.

332.70
2.33
334.93 (?)
10.85
329.08
1.22
330.30
0.43
329.87
7.51
337.38

N ✓ 314.16 / 6.0 / 7.7 / -1.7 — 316.70 / 3.4 / 5.8 / -2.4 — 319.0 cb / .732 — cb 320.0 / 10.3 ✓ — 23.25 / 7.1 / 6.3 / +0.8 — 26.25 / 4.1 / 2.8 / +1.3

S 313.16 / 7.0 / 10.5 / -3.5 — 315.70 / 4.4 / 6.0 / -1.6 — 318.0 cb / .144 — cb 319.0 / 11.30 ✓ — 22.25 / 8.1 / 8.0 / +0.1 — 25.75 / 5.1 / 4.5 / +0.6

N 27.6 / 2.7 / 1.0 / +1.7 — 28.8 / 8.6 / 6.9 / +1.7 — 29.7 / 7.7 / 5.4 / +2.3 — 30.40 / 7.0 / 4.6 / +2.4 — 31.6 / 5.8 / 2.6 / +3.2 — cb 32.50 / 4.88 ✓ — cb 33.0 / 6.93 / .71 — 33.4 / 6.5 / 4.8 / +1.7

S 26.65 / 3.7 / 2.7 / +1.0 — 27.8 / 2.5 / 1.6 / +0.9 — 28.5 / 8.6 / 8.1 / +0.5 — 29.6 / 7.8 / 6.7 / +1.1 — 30.9 / 6.5 / 3.1 / +3.4 — cb 332.0 / 5.88 ✓ — cb 32.50 / 7.43 ✓ — 32.9 / 7.0 / 3.7 / +3.3

N 33.50 / 6.5 / 5.0 / +1.4 — 33.6 / 6.3 / 5.2 / +1.1 — 33.75 / 6.2 / 5.6 / +0.6 — 33.9 / 6.0 / 6.1 / -0.1 — 333.75 cb / 6.18 / 6.05 / .13 H

S 33.05 / 6.9 / 4.4 / +2.5 — 33.2 / 6.7 / 4.8 / +1.9 — 33.35 / 6.6 / 5.9 / +0.7 — 33.5 / 6.4 / 6.8 / -0.4 — 333.40 cb / .053 ✓

Meade Ave grading

	S cb	N cb
E.L Louisiana	332.80	333.40 est. grade 333.29 = curb
50' E	332.42	333.00
100	332.04	332.70
150	331.66	332.40
200	331.28	332.10
250	330.90	331.80
300 W.L Texas	330.52 curb 330.40 est.	331.50 cb 331.4 est grade.

332.70
1.14
333.84

Meade + Louisiana
SEBP

							cb
N	333.29 0.55 ✓	33.25 0.6 1.5 -0.9	33.0 0.8 3.2 -2.4	32.65 1.2 4.4 -3.2	32.35 1.5 3.6 -2.1	32.05 1.8 2.9 -1.1	331.50 2.34 ✓
S	32.80 1.04 ✓	32.67 1.2 2.2 -1.0	32.30 1.5 2.9 -1.4	31.90 1.9 5.1 -3.2	31.50 2.3 5.5 -3.2	31.15 2.7 3.9 -1.2	30.52 3.32 ✓

331.41
6.20
337.61

SE Meade + Texas

Culvert # 2

329.04 8.57 7.53 +1.04	328.32 9.29 5.67 +3.62	327.60 10.01 7.87 +2.14			
			Inlet	328.50	5.34 3.97 +1.37
				327.00	6.84 5.77 +1.07
			Center	327.75	6.09 5.03 +1.06

E edge of pipe = E L Alley

ALLEY PAVING 20' wide
Blk 57 City Hgts. betw. 37th + Cherokee

	W		E	
St Univ = 0+00	354.41 est 354.44 = paving		353.91 = est 353.96 = paving	
50's	353.48	+0.36	353.07	+1.0
100	352.52	+0.31	352.18	−0.23
150	351.56	+1.0	351.29	+1.0
200 + Break	350.60	+0.57	350.40	−0.17
247.5	350.20	−0.40	350.0	+1.0
285	349.80	−0.17	349.60	0.0
327.5	349.40	−0.50	349.20	−0.29
370 + Break	349.0	+1.0	348.80	−0.24
412.5	348.40	−0.14	348.20	−0.30
455	347.80	+1.0	347.60	+1.0
497.5	347.20	+1.0	347.0	+0.13
540 + Break	346.60	+0.67	346.40	−0.03
570	344.60	+2.29	344.40	+1.96
600 + NL Lightman	342.60 342.04	+1.39	342.40 342.56	+0.68

5/10/26 65

Moore

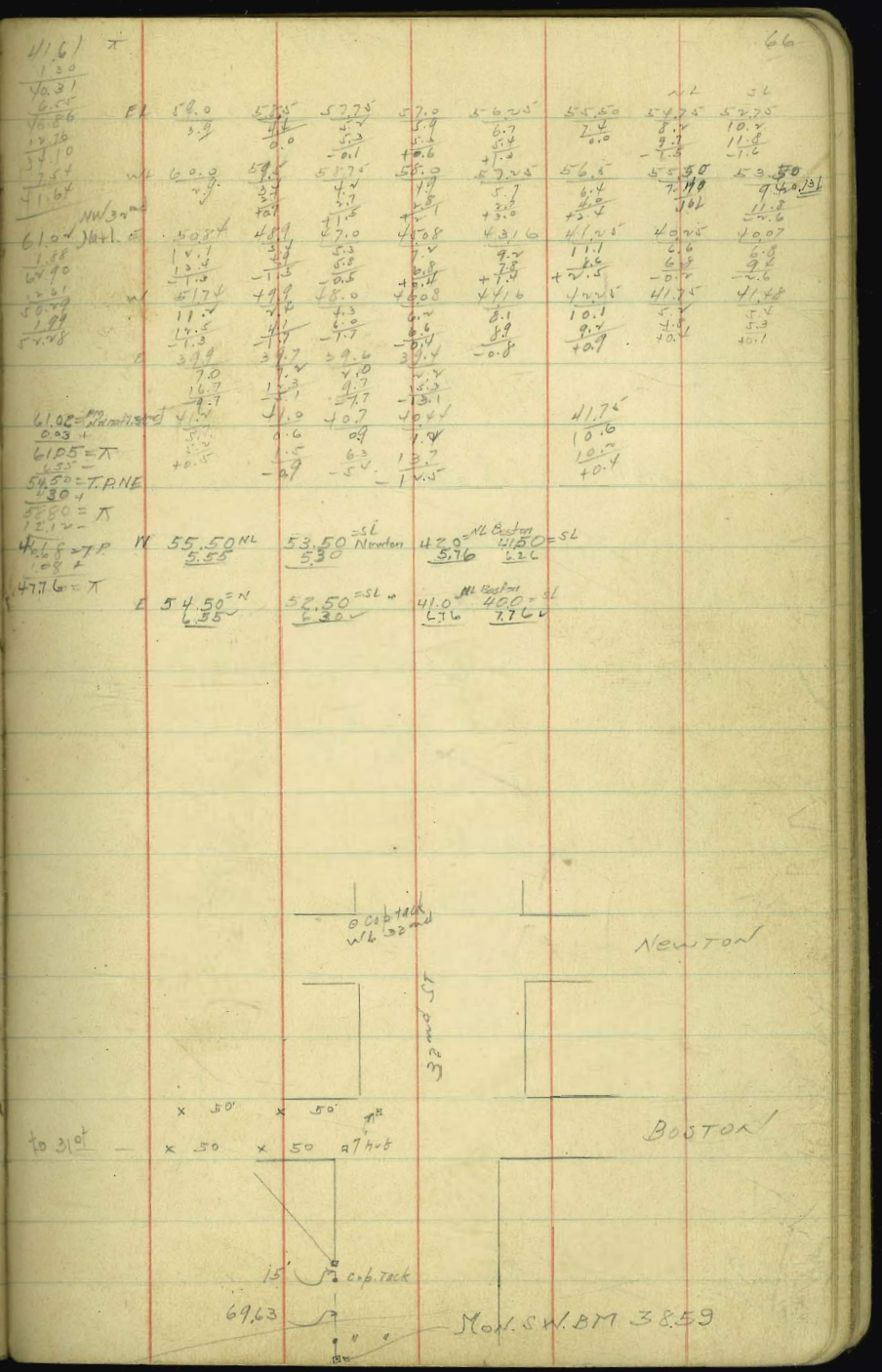
357.64 NW BP Cherokee + Univ.
0.96
358.60
7.52
351.08
2.83
353.91
5.64
348.49
1.59
349.88
1.01
350.89

N/	53.48	52.52	51.56	50.60	50.20	49.86	49.40	49.0
	5.12	6.08	7.04	3.31	3.71	4.11	4.51	4.91
	11.76	5.73	6.04	3.74	4.14	4.28	5.01	3.91
	+0.36	+0.31	+1.0	+0.57	−0.40	−0.17	−0.50	+1.0
E	53.07	52.18	51.29	50.40	50.0	49.60	49.20	48.80
	5.53	6.42	7.31	3.51	3.91	4.31	4.71	5.11
	4.53	6.65	6.31	3.68	2.91	4.31	5.00	5.35
	+1.00	−0.23	+1.0	−0.17	+1.0	0.0	−0.29	−0.24
W/	48.40	47.80	47.20	46.60	44.60	42.60		
	5.51	6.11	7.68	3.48	5.48	7.48		
	5.65	5.11	1.63	2.61	2.99	5.39		
	−0.14	+1.0	+1.0	+0.67	+2.49	+1.39		
E	48.20	47.60	47.0	46.40	44.40	42.40		
	5.71	7.28	2.88	3.48	5.48	7.48		
	6.01	1.28	3.75	3.51	3.52	6.20		
	−0.30	+1.0	+0.13	−0.03	+1.96	+0.68		

238.5 NW
37th + NL Lightman

32nd ST GRADING

	E C6	W C6
SL Nat'l = 0+00	59.0	60.0
+50	58.25	59.25
1	57.50	58.50
+50	56.75	57.75
✓	56.0	57.0
+50	55.25	56.25
3 = NL Newton	54.50	55.50
0+00 = SL ✓	52.50	53.50
+50	50.59	51.59
1	48.66	49.66
+50	46.75	47.75
✓	44.83	45.83
+50	42.91	43.91
3 = NL Boston ✓	41.0	42.0
SL ✓	40.0	41.50
+50	39.84	41.83
1	39.64	40.97
+50	39.47	40.71
✓	39.30	40.45
+50	39.11	40.19



32nd ST GRADING

	ECb	Wcb
3	38.97	39.93
+50	38.76	39.67
4	38.59	39.41
+21 = NL Main on WL	38.51	39.30
+68 = " " " EL	38.35	
37.75 = paving on cb line =		38.47

Nat'l. to Logan

	Wcb	ECb
NL Nat'l.	61.0	60.0
20	61.18	60.18
40	61.22	60.22
60	61.13	60.13
80	60.90	59.90
100	60.53	59.53
120	60.02	59.02
140	59.38	58.38
160	58.59	57.59
180	57.68	56.68
200	56.62	55.62
250	53.81	52.81
300	51.0	50.0

38.59
3.02
41.61 π

E 39.2 / 2.4 / 16.4 / -14.0 — 39.0 / 2.6 / 11.7 / 8.1 — 38.74 / 2.9 / 3.9 / -1.0 — 38.70 / 2.8 / 3.3 / -0.5 — 38.6 / 3.0 / 4.0 / -1.0

W 40.2 / 1.4 / 1.9 / -11.5 — 39.9 / 1.7 / 5.2 / -3.5 — 39.66 / 1.9 / 0.0 — 39.30 = cb / 2.3

61.02 Nat'l
5.87
66.89
12.55
54.34
1.83
56.17

Nat'l & 32nd

Wcb 61.0 / 5.89 — 61.47 / 5.5 / 3.0 / +2.5 — 61.15 / 5.8 / 3.0 / +2.8 — 60.27 / 6.6 / 2.3 / +4.3 — 58.81 / 8.1 / 4.0 / +4.1 — 56.87 / 10.0 / 5.0 / +5.0 — 54.06 / 12.8 / 8.5 / +4.3 — 51.25 / 5.0 / 3.2 / +1.8

EV 6.89 — 6.5 / 5.0 / +1.5 — 6.8 / 4.6 / +2.2 — 7.6 / 4.3 / +3.3 — 9.1 / 5.3 / +3.8 — 11.0 / 6.1 / +4.9 — 13.8 / 8.9 / +4.9 — 50.25 / 6.0 / 11.1 / 4.9

51.0 = T.P. on stake SW Cor Logan & 32nd
13.18 +
64.18 = π

W (= SW Cor Logan) 51.0 / 13.18 — 53.81 / 10.37 — 56.62 / 7.56 — 57.68 / 6.50 — 58.59 / 5.59 + / 5.71 = 3' N — 59.38 / 4.80 / 4.69 = 3' S — 60.02 / 4.16 — 60.53 / 3.65 — 60.90 / 3.28 — 61.13 / 3.05

W 61.22 / 2.16 — 61.18 / 3.00 — 61.0 / 3.18 = .1 high

38.59
5.07 +
43.66 = π

E (SE Cor Logan) 50.0 / 14.18 — 52.81 / 11.37 — 55.62 / 8.56 — 56.68 / 7.50 — 57.59 / 6.59 + / 6.69 = 3' N Alley — 58.38 / 5.80 - / 5.71 = 3' S Alley — 59.02 / 5.16 — 59.53 / 4.65 — 59.9 / 4.58

E 60.13 / 4.05 — 60.22 / 3.96 / 3.90 — 60.18 / 4.00 / 3.97 — 60.0 / 4.18 / 4.10 = .1 H

E 38.35
5.31
5.71
-0.40

32nd ST Grading

	WC6	EC6
-14.11 ON EAST		66.0
SL Imperial 20+00 ON WEST	67.0	66.18
+50	67.67	66.8
1	68.33	67.45
+50	69.0	68.08
2	69.67	68.72
+50	70.33	69.36
3 = NL N ST	71.0	70.0
SL N ST	72.0 ✓	71.0
+25	76.35	75.65
+85 = BREAK	80.70	80.30
1+05 ✓	82.35	82.0 ✓
1+25 ✓	83.77 ✓	83.49 ✓
1+45 ✓	84.96	84.77
1+65 ✓	85.93 ✓	85.79 ✓
1+85 ✓	86.68	86.58
2+05 ✓	87.19 ✓	87.13
2+25 ✓	87.48	87.45
2+45 ✓	87.54 ✓	87.5
2+65 ✓	87.38	87.38
2+85 = NL Webster	87.00	87.00

67.03
8.45
75.48
1.03
74.45
10.60
85.05
0.81
84.24
4.21
93.45
8.33
85.12 ✓ T.P.
Captack
Tie out
Sw Webster & 32nd

W 67.25	67.92	68.58	69.25	69.92	70.58	73.25	
8.3	7.6	6.9	6.3	5.6	5.0	4.3	
5.3	1.7	2.7	3.3	4.4	1.5	4.6	
+3.0	+5.9	+4.2	+3.0	+1.2	+3.5	-0.3	
E 66.22	66.33	67.06	67.70	68.33	68.97	69.6	70.25
9.3	9.2	8.5	7.8	7.2	6.5	5.9	5.3
1.2	1.5	2.4	3.3	4.9	4.3	3.3	6.3
+8.1	+7.7	+6.1	+4.5	+2.3	+2.2	+2.6	-1.0
W 72.25	76.60	80.95	84.0	86.18	87.44 ✓	87.8	87.00
12.9	8.5	12.6	9.5	7.3	6.1	5.7	6.45
7.1	3.1	8.5	6.5	5.0	4.4	3.5	
+5.8	+5.4	+4.1	+3.0	+2.3	+1.7	+2.2	
E 71.25	75.9	80.55	83.74	86.0	87.2	87.76	87.0
13.9	17.6	13.0	9.8	7.5	6.1	5.7	6.45
3.9	8.4	6.0	4.2	3.2	2.5	3.8	
+10.0	+9.2	+7.0	+5.6	+4.3	+3.6	+1.9	

N.W. BP 32nd Imp.
67.03
4.83
71.86 = H.I.

W 67.0
4.84

71.0 = NL
3.96 ✓

72.0 = SL
2.96 ✓
1.46
+1.50

67.03
7.93
74.96 = π

E 66.0 = -14.11
3.68

66.18
5.68
5.18
+0.50

S.L. N St
Ecb 71.0
2.96 ✓

67.03
4.65
71.68 π

72.0 Ecb NL N St
12.15 +
84.15 π
0.63 −
83.52
7.81
91.33

70.0
4.96 ✓

85.12
4.67
89.79

W 76.35	80.70	82.35	83.53	85.11	85.93	86.68	87.19
7.80 ✓	3.45 ✓	1.80 ✓	0.62	6.22 ✓	5.40 ✓	4.65 ✓	4.14

85.12 BR.
5.31
90.43 π
10.13 −
80.30
1.22 +
81.52 π

W 87.48	87.54	87.38	87.00	E 83.49	82.02	80.30	75.65
3.85 ✓	3.79 ✓	2.95 ✓	4.33 ✓	.14	8.41 ✓	10.13	5.84
				83.35			
				7.08 ✓			

E 87.0	87.38	87.51	87.45	87.13	86.58	85.79	84.91
3.43 ✓	3.05	2.92 ✓	2.98 ✓	3.30 ✓	3.85 ✓	4.24 ✓	5.52 ✓

X 50' — X 25 ▫ 16' ▫ 25' X S7 Line of N ST
S.W. 7' hub SE 7' hub

32nd ST Grading

	W c6	E c6
SL Webster	85.0	85.0
+50.	83.83	84.0
1	82.67	83.0
+50	81.50	82.0
2	80.33	81.0
+50	79.67	80.0
3 = NL Clay	78.0	79.0
SL Clay	77.0	78.0 ✓
+50	76.50	77.33
1	76.0	76.67
+50	75.50	76.0
2	75.0	75.33
+50	74.50	74.67
3 = NL Franklin	74.0	74.0
SL "	73.0	73.0
0+50	71.67	
1	70.33	
+50 = BREAK	69.0	69.0
2	65.67	

5.2

85.12 / 3.07 / 87.19 / 9.22 / 77.97 / 2.44 / 80.41 / 5.19 / 75.22 / 0.53 / 75.75

N. BOLT Top Hydt ✓ S.W. Franklin + 32nd

WL	85.0 / .19	84.07 / 2.5 / 3.3 / +0.8	82.92 / 4.3 / 4.6 / -0.3	81.75 / 5.5 / 5.1 / +0.4	80.58 / 6.6 / 6.4 / +0.2	79.92 / 7.3 / 7.0 / +0.3	78.0 / 9.19	10.2 low
EL	85.0	84.25 / 3.0 / 3.3 / -0.3	83.25 / 4.0 / 3.8 / +0.2	82.25 / 5.0 / 4.7 / +0.3	81.25 / 6.0 / 5.3 / +0.7	80.25 / 7.0 / 6.6 / +0.4	79.0 / 8.19	1.02 low

85.12 / 4.67 + / 89.79

W	77.0 / 10.19 / .05	76.75 / 3.7 / 3.2 / +0.5	76.25 / 4.2 / 4.0 / +0.2	75.75 / 4.7 / 7.3 / -2.6	75.25 / 5.2 / 7.7 / -2.5	74.75 / 5.7 / 4.5 / +1.2	74.25 / 6.2 / 5.8 / +0.4	73.25 / 7.2 / 6.9 / +0.3
E	78. / 9.19 / 1.2 low	77.58 / 2.8 / 2.4 / +0.4	76.92 / 3.5 / 3.1 / +0.4	76.25 / 4.2 / 4.7 / -0.5	75.58 / 4.8 / 3.6 / +1.2	74.92 / 5.5 / 4.1 / +1.4	74.25 / 6.2 / 5.4 / +0.8	73.25 / 7.2 / 7.7 / -0.5

85.12 / 1.68 + / 86.80 / 8.46 – / 78.34 / 5.08 / 83.42 ⊼

W	71.92 / 3.9 / 3.2 / +0.7	70.58 / 5.2 / 4.4 / +0.8	69.25 / 6.5 / 5.8 / +0.7	65.92 / 9.9 / 7.3 / +2.6
E	3.9 / 4.2 / -0.3	5.2 / 4.8 / +0.4	6.5 / 5.4 / +1.1	9.9 / 6.0 / +3.9

W 85.0 / 4.79 – 83.83 82.67

W = NL clay 78.00 / 5.42 ✓

E = NL 79.0 / 4.42 ✓

75.22 / 3.45 / 78.67 / 75.22 / .01 / 75.23 ⊼

E 85.0 Webster / 4.79

E = SL clay 78.0 / 5.42

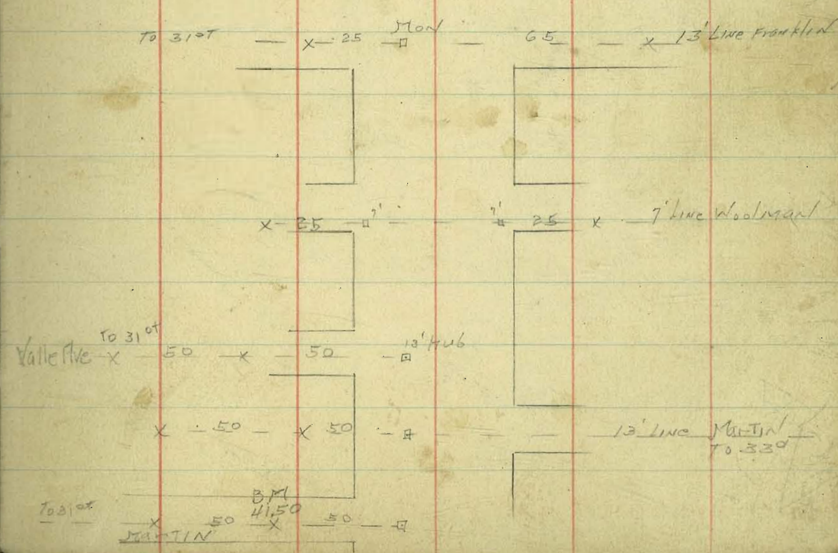
W = SL clay 77.0 / 6.42

W = SL Franklin 73.0 / E = 5.67 ✓

NL 74.0 / 4.67 ✓

E = NL Franklin 74.0 / 4.67 ✓

W 69.0 = Brk / 6.23 / 6.34 / 0.11



32nd St Grading

	W cb	E cb
2 +50	62.33	
3 = NL Woodman	59.0	59.0
SL ✓	58.0	58.0
+50	57.50	57.34
1	57.01	56.69
+50	56.53	56.05
2	56.05	55.41
+50	55.57	54.77
3+10 = NL Valle Ave.	55.0	54.0
0+00 = SL 60' 10' cbs ✓	53.50	52.50
+60	49.70	48.70
1 +10	46.5 ✓	45.5 ✓
+60	43.35	42.35
2 +05 NL Martin on East	40.50	39.50
2 +55 = SL ✓ ✓ ✓	40.0	39.0
3+20 = NL Martin on West 60' wide 10' cbs	39.0	38.39
0+00 = SL ✓ ✓ ✓	38.0 ✓	37.50 ✓
0 +60	36.10	35.75
1 +10	34.50	34.29

Sw Top Hydt Woodman + 32nd

60.40 = BM
0.32 +
60.72 = π

W = N.L. Valle Ave 55.0 5.72
E = 54.0 = SL Valle 6.72
W = SL Valle 53.50 7.22
E = SL Valle 52.50 8.22

41.50 = BM
2.15 +
43.65 = π

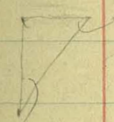
W 40.0 3.65 — 2+05 40.05 3.15 — 3+20 39.0 4.65 — 38.0 5.65

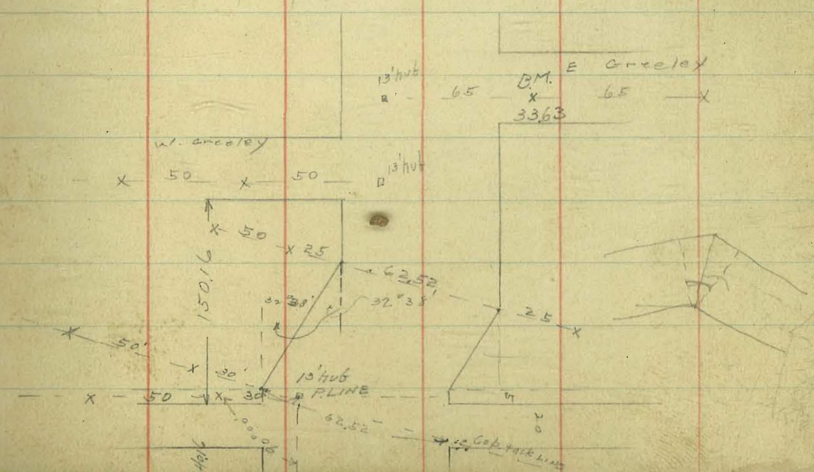
E 39.0 4.65 — 2+05 39.5 4.15 — 38.39 5.24 — 37.5 6.15

16° 19'

1.04197
46
625182
416788
479306

1.04197
7.29379
25





32nd ST. GRADING

Station		W Cb			E Cb	
(1+73)						
1+63? = NL Greeley (EAST)		32.80 ✓			32.73 ✓	
2+33 / 2+23 = old SL (60', 10' cbs)	✓ ✓	31.06 ✓			32.0 ✓	
2+00 / 0+10 old SL Greeley East		30.50			31.50	
0+27.05 Break		28.72 ✓				
0+47.05	✓	27.72 ✓			28.9 ✓ ✓	Break
0+67.05	✓	26.97			28.07	✓
0+87.05 = NL Greeley		26.48 ✓			27.43 ✓	✓
1+07.05	Break (60)	26.42 ✓			27.03	✓
1+37.05		26.2			26.86 ✓	✓
1+47.05 New SL Greeley (West)		26.32 ✓			26.90 ✓	
1+57.05 = old SL Greeley (West)		26.45			26.9	✓
+77.08		26.94			27.25	
2+18.85 = Δ on West		28.65 ✓	1+71.75 Δ on East		28.5 ✓	
2+88 ✓	✓	35.8 ✓	✓ ✓ ✓		34.7 ✓	
2+93.5 = NL Alley		36.23			34.24 X	
3+33.5		39.9			38.40	
3+73.5		43.61			42.27	
4+13.5		47.30			46.13	
4+53.5		51.0			50.0	

45.53
4.03
41.50 = TP 1st RP on West Martin
11.90 = RP ✓ ✓ EAST Greeley

33.63 ✓ 9.64 43.27 12.71 30.56 0.16 30.72

W: 33.0 / 10.3 / 1.9 / 41.2; 31.3 / 2.0 / 14.8 / -21.5; 29.0 / 1.7 / 6.9 / -5.2; 28.0 / 2.7 / 10.7 / -8.0; 26.7 / 1.6 / 10.5 / -12.2; 26.5 / -1.4 / 11.4 / -12.8; 26.6 / 1.5 / 10.3 / -11.8

E: 33.0 / 10.3 / 6.8 / +3.5; 32.25 / 11.0 / 11.2 / -0.2; 29.2 / 1.5 / 4.2 / -2.7; 27.7 / 3.0 / 10.4 / -7.4; 27.10 / 8.0 / 10.4 / -12.4; 27.1 / 2.0 / 11.6 / -13.6

18.15 6.91 25.06 2.19 22.87 13.33 38.20 0.63 37.56 11.30 48.86 1.35 47.51 6.27 53.78

W: 27.2 / 2.1 / 5.1 / 8.0; 28.9 / 3.8 / 4.1 / -9.A; 36.08 / 2.2 / 7.0 / -1.45; 36.5 / 1.7 / 3.7 / -2.0; 40.2 / 8.7 / 10.5 / -1.5; 43.8 / 5.1 / 5.8 / -0.7; 47.50 / 6.3 / 4.1 / +2.2; 51.0 / 2.0

E: 27.6 / 4 / 1.3 / 14.7; 28.7 / -3.6 / 0.0 / -3.6; 35.0 / 13.9 / 6.6 / +7.3; 34.8 / 14.1 = Alley / 7.5 / +6.6; 38.6 / 10.3 / 4.7 / +5.6; 42.50 / 6.4 / 1.5 / +4.9; 46.4 / 7.4 / 4.0 / +3.4; 50.25 / 3.5 / 2.8 / +0.7

E 32.73 32.0
2.70 ✓ 3.43 ✓

33.63 = BMRP 1st RP on east Greely
1.80 +
35.43 π

W 32.80 31.06 30.50
2.63 ✓ 4.37 ✓ 4.93 ✓

~~33.63 = BM 1st RP on East Greeley~~
1.40
35.03 = π
0.99 −
34.04 = TP
8.02 +
42.06 = π
8.02
34.04
6.62
40.66 = π
0.96 −
39.70 = TP
12.97 +
52.67 π

E 31.50 (3.53) 28.94 (6.09) [= P.V.C] 28.07 (6.96) 27.43 (7.60) 27.03 (8.00) 26.86 (8.17) 26.94 (8.09) [Vertex] 27.25 (7.78) 27.79 (7.24) 28.31 (6.72)

E 28.57 (6.46) [= P.C] 28.89 (6.14) [= E.C] 29.20 (5.83) 29.58 (5.45) 29.77 (5.26) 30.84 (4.19) 32.32 (2.71) 34.06 = E.V.C (0.97)

W [= P.V.C] 28.72 (6.31) 27.72 (7.31) 26.97 (8.06) 26.69 (8.34) 26.32 (8.71) [= Vertex] 26.45 (8.58) 26.94 (8.09) 27.52 (7.51) [= P.C] 28.38 (6.65) [= E.C] 28.69 (6.34)

W 29.88 (5.15) 31.36 (3.67) [= E.V.C] 33.08 (1.95) 51.0 (1.67)

E 50.0 (2.67)

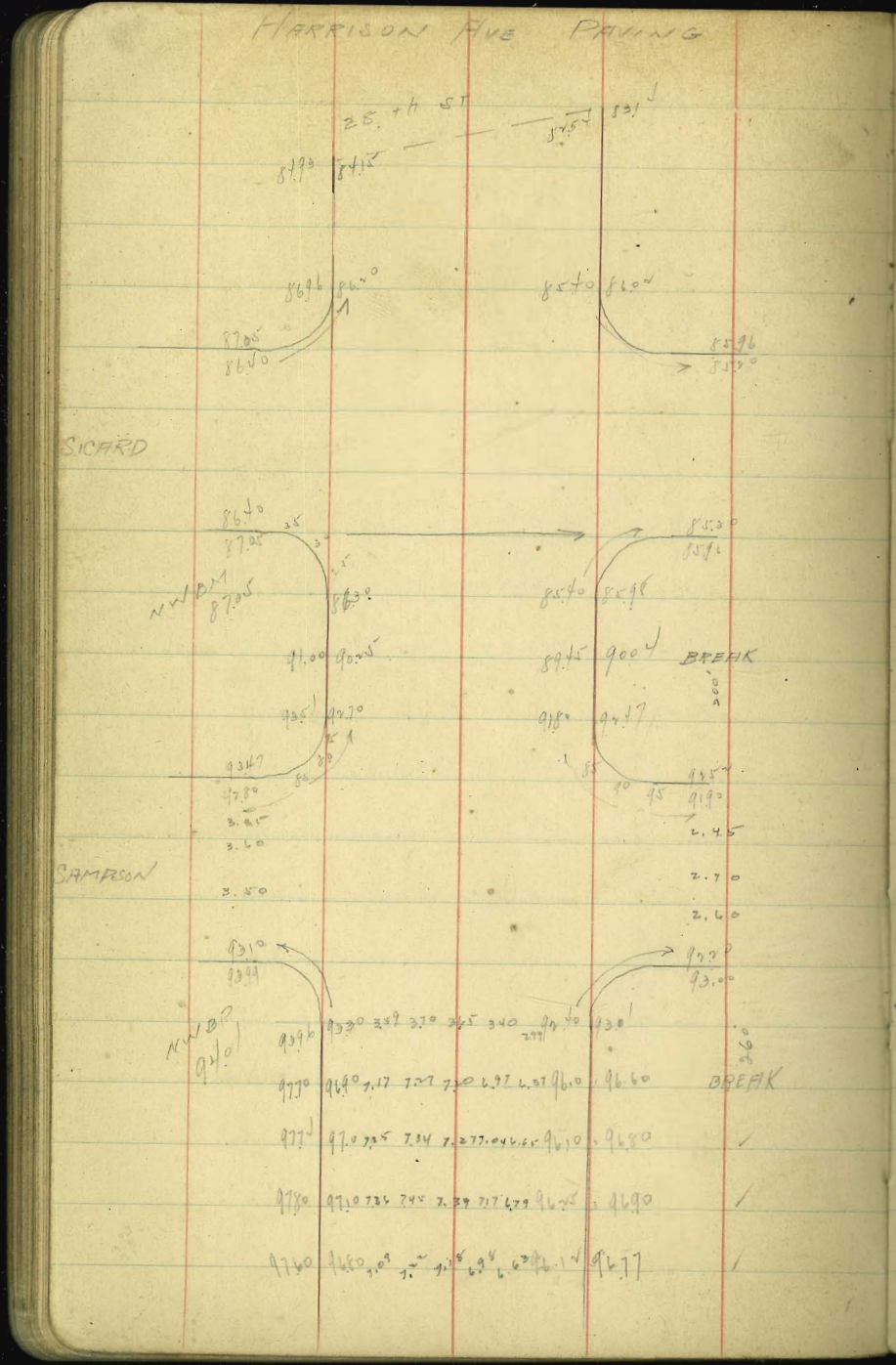
	3.10	403.10		400.0 Elev at 00	
0+00			3.1	400.00	
+50			2.9	400.0	
1			3.7	399.4	
+50 = PI			3.4	399.7	
2			5.5	394.6	
+25			5.6	397.5	
+55			9.4	393.7	
3			12.8	390.3	
TP	1.06	391.64	12.52	390.58	
4			8.3	383.3	
T.P	1.75	381.49	11.90	379.74	
5			3.9	377.6	
6			7.0	374.5	
+50			5.5	376.0	
7			13.2	368.3	
TP	3.00	371.25	13.25	368.25	
8			5.0	366.2	
+50			7.2	364.0	
9			10.2	361.0	

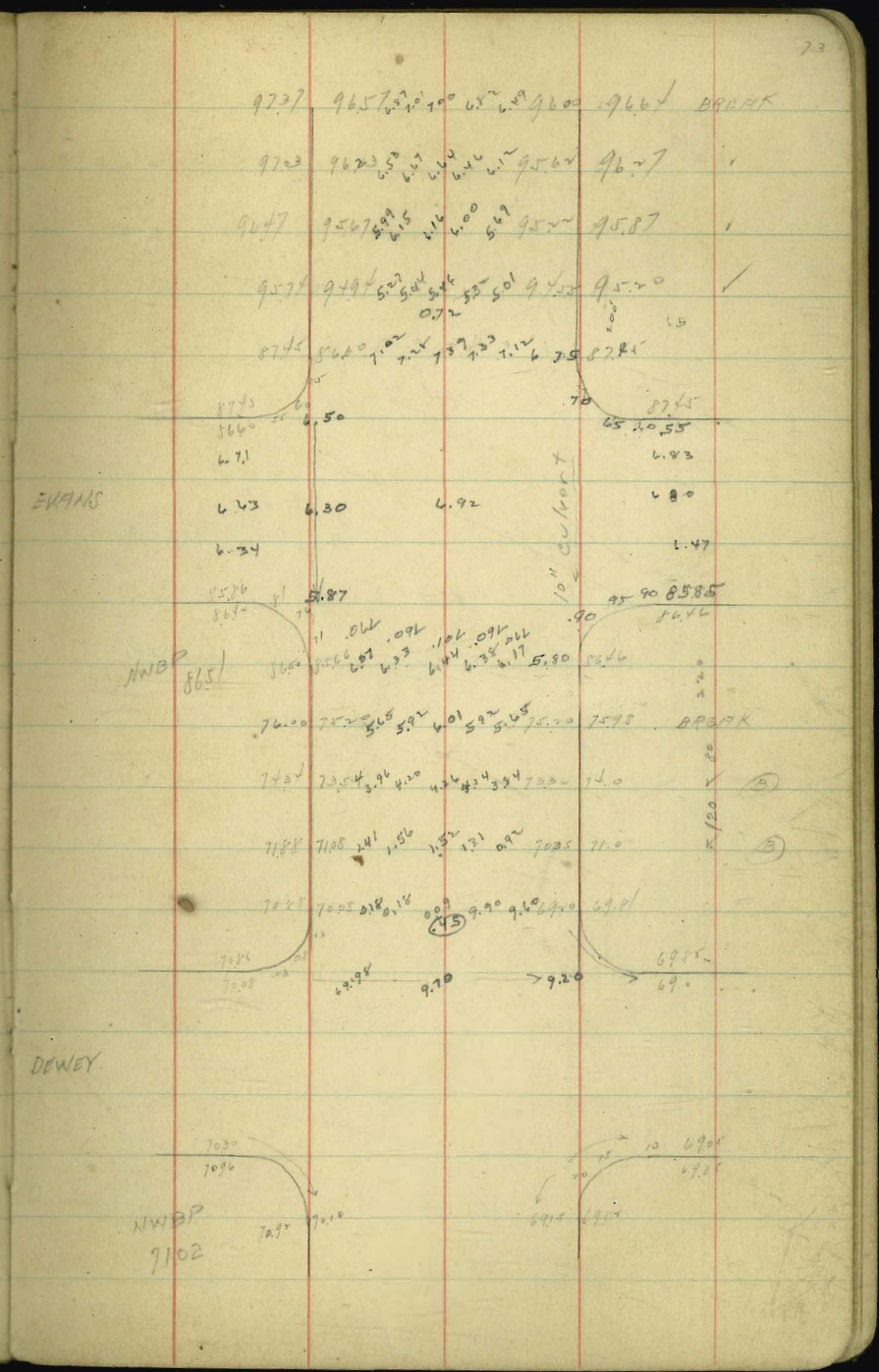
371.25

7

TP = 9+50	1.0	359.26	12.00	358.25	
10+50			8.0	351.3	

HARRISON AVE PAVING





HARRISON AVE

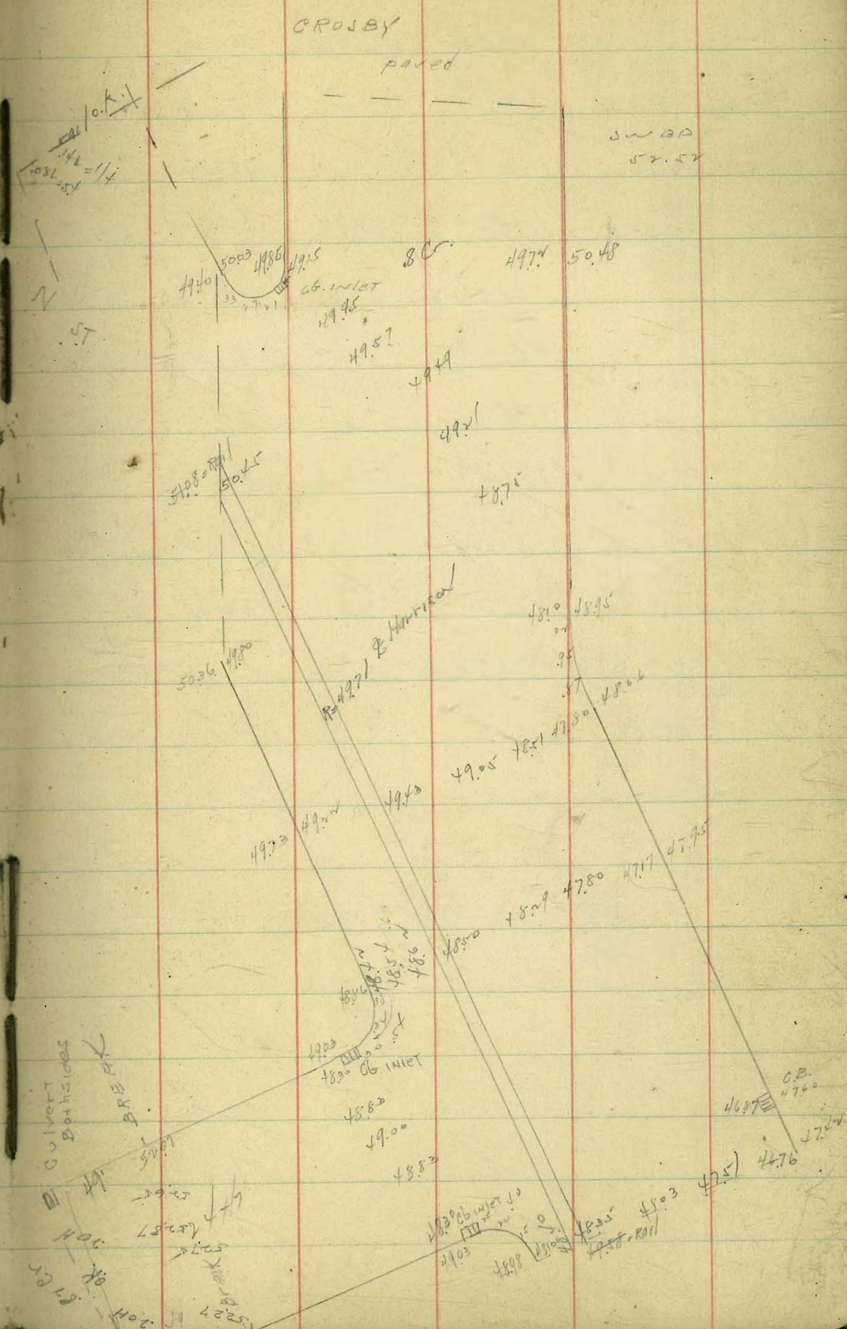
DEWEY

68.10	67.40	67.40	68.10	BREAK
67.56	66.90	66.90	67.65	✓
67.0	66.37	66.50	67.27	✓
66.24	65.62	65.68	66.48	✓
65.38	64.77	64.94	65.75	✓
64.36	63.75	64.25	65.06	✓
63.44	62.82	63.29	64.20	BREAK
56.20	55.59	56.80	57.60	BREAK
55.54	54.93	56.04	56.84	✓
55.0	54.39	55.28	56.08	✓
54.55	53.94	54.67	55.47	✓
54.17	53.56	54.12	54.92	✓
53.86	53.25	53.70	54.50	✓
53.64	53.03	53.38	54.18	BREAK

100' 170 160 100'

CROSBY

SWBP
52.52



Columbia ST, Grades (TITUS)

		WCb	WCb Elev	ECb	Moore ECb Elev.
NL Henry 0+00		174.50	174.77	176.0	176.20 180.38 - 75' N end EC cb
+40		176.92		178.33	15
+80	BREAK	179.39	179.94	180.67	181.15
1+05	"	180.66	180.64	181.88	182.34
+30	"	181.41	181.12	182.57	182.99
+50 end cb on West			181.24		
+55	"	181.65		182.70	183.15
+80	"	181.37		182.44	182.75
2+05	"	180.57		181.60	181.58
+30	"	179.2[illegible]		180.27	180.46
+40		178.52			
+50 end cb West					
+55	Break			178.43	178.43
+75 end cb on E				176.55	176.57
					176.08

AT Clark ST

NE Return	152.0
NW "	151.0
SW "	150.0
SE "	151.0

175.91
10.23
186.14

SW Top Hydt
Henry & Titus

E 176.0 / 10.14 / 4.94 / .20 H — 178.33 — Ex Cb 180.38 / 5.76 / 5.28 / .48 H

W 174.50 / 11.64 / 11.37 / .27 H — Cb 179.39 / 4.75 / 6.30 / .55 H — Cb 180.66 / 5.48 / 5.50 / .02 L — 181.41 / 4.73 / 5.02 / .29 L — 1+50 end Ex Cb on W 181.60 / 4.54 / 4.90 / .36 L

1+50 182.4, end Ex Cb on West; 5.25

OK

175.91
10.58
186.49

WCb 1+70	190	210	230	250
181.20 / 5.29	181.0 / 5.49	180.45 / 6.04	179.60 / 6.89	78.0 / 8.49

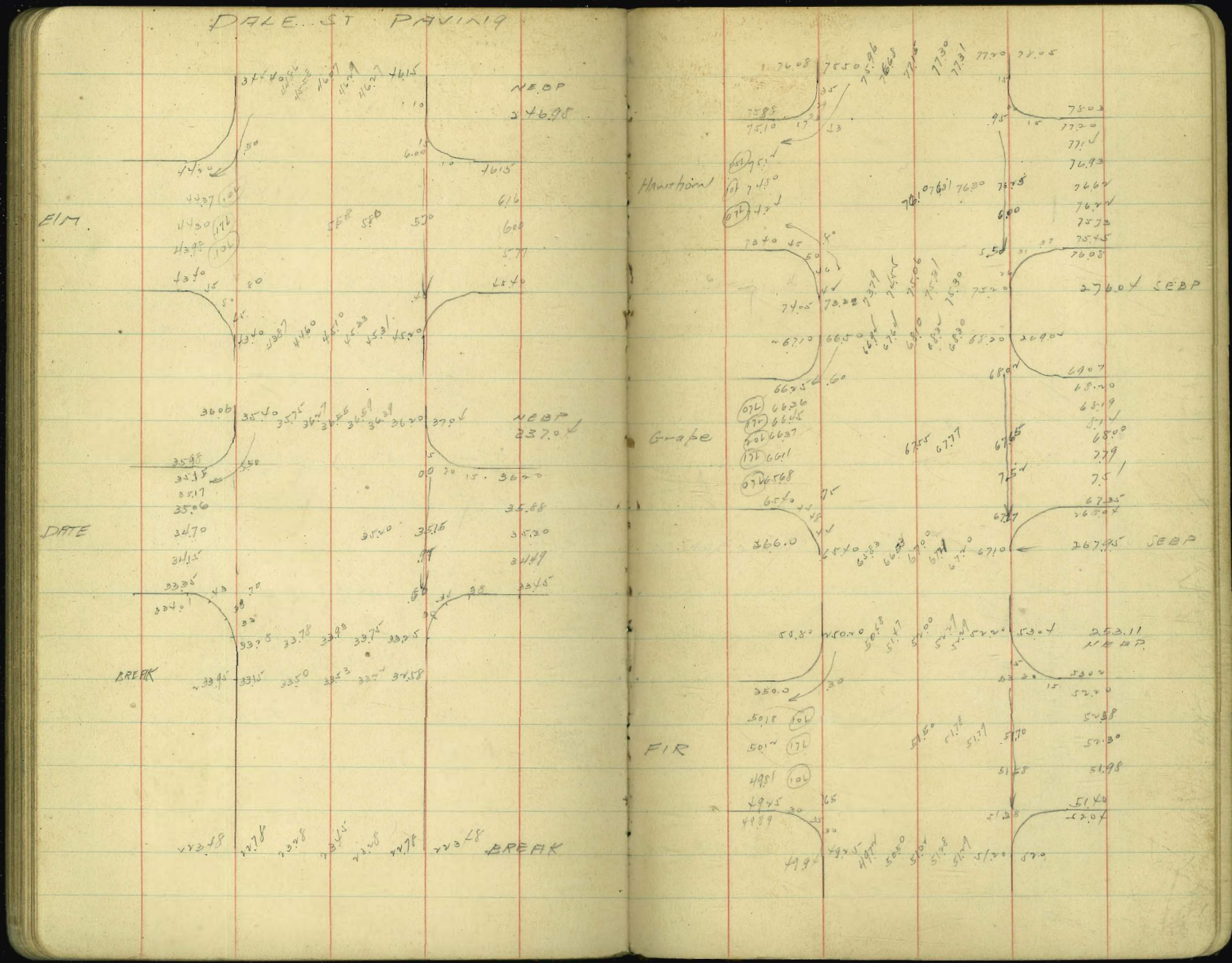
Ex Cb E	0+75	+93.75	1+22.5	1+46.25	1+70	1+93.75
	180.86 / 5.63	181.87 / 4.62	182.43 / 4.06	182.59 / 3.90	182.30 / 4.19	181.67 / 4.82

175.91
0.51
176.42
12.22
164.20
1.17
165.37
11.61
153.76
2.02
155.78

E	2+17.5	2+41.25	2+65	10'	2+75
	180.60 / 5.89	179.12 / 7.37	177.20 / 9.29 / 8.29 / +1.0		176.30 / 10.19 / 8.49 / +2.0

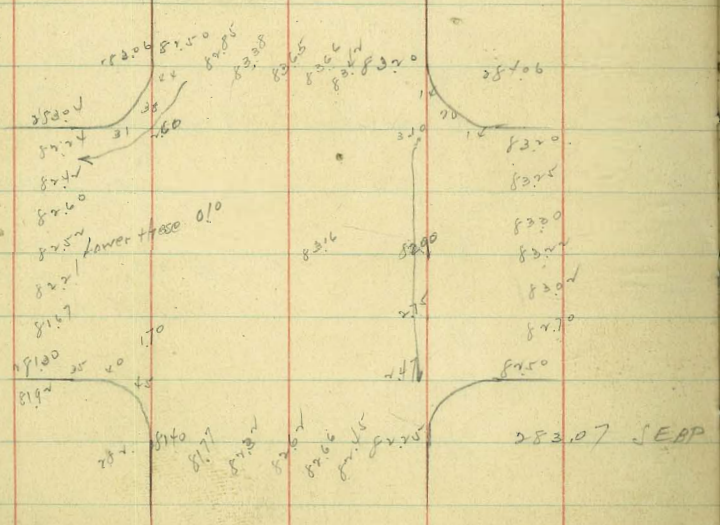
J. Knox 10/22 B22-12

378 478 578

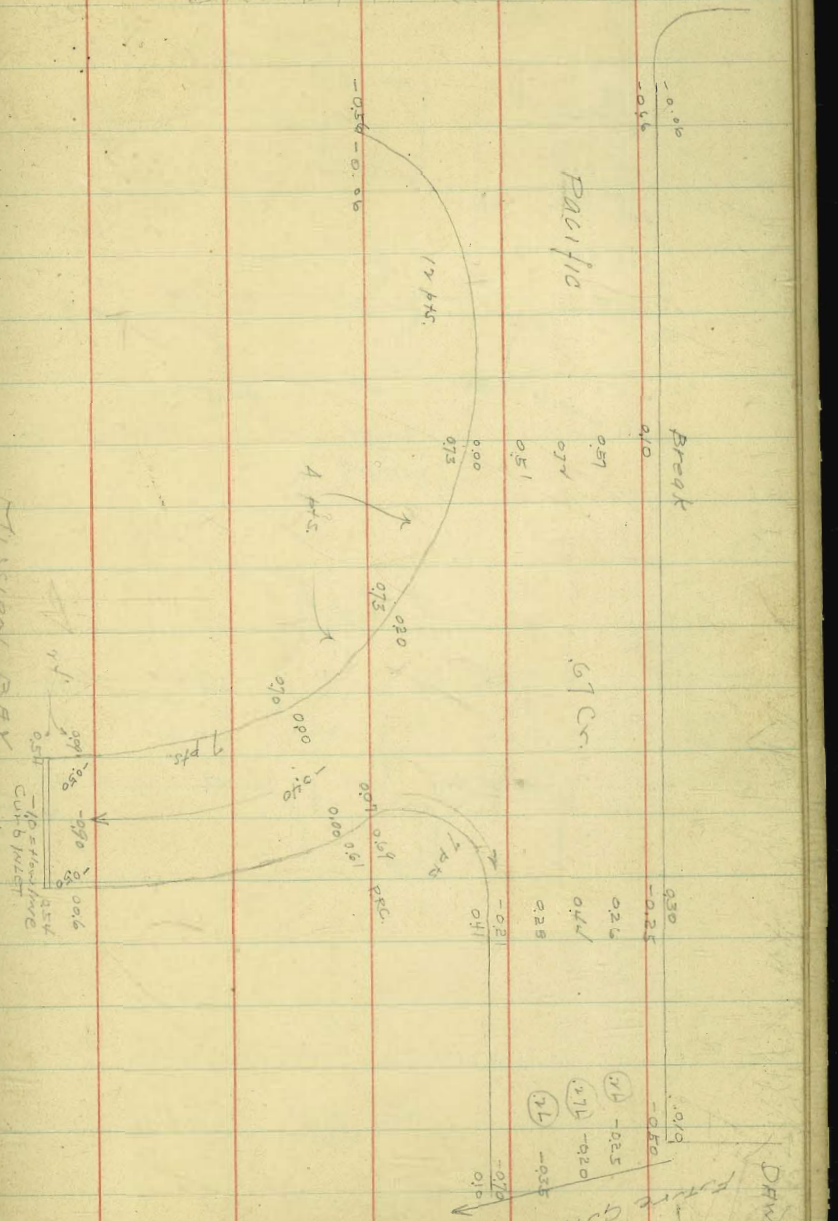

DALE ST PAVING
NEBP
246.98
ELM
NEBP
237.0
DATE
BREAK
BREAK
Hawthorne
Grape
276.0 SEBP
267.45 SEBP
253.11
NEBP
FIR

Dale St Paving

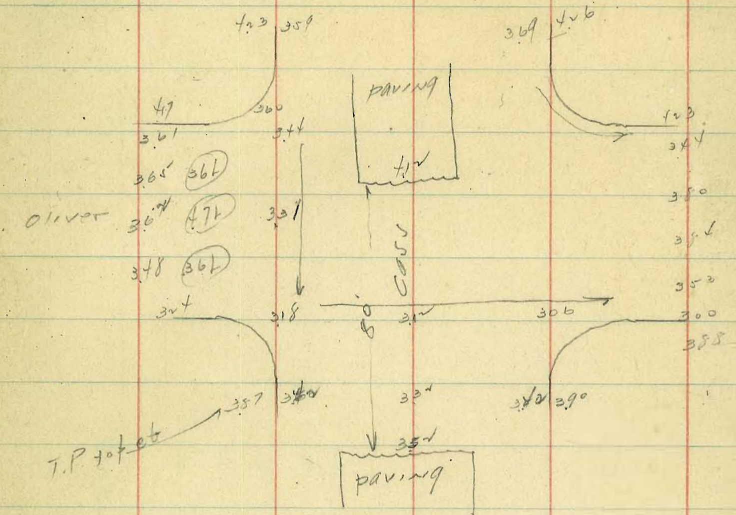
Juniper Paved

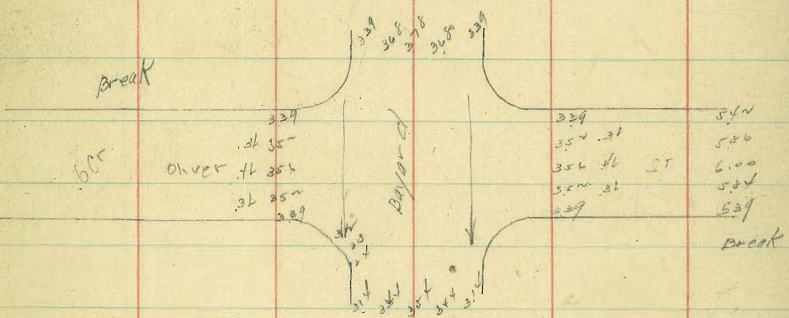


BRAEMAR PAVING

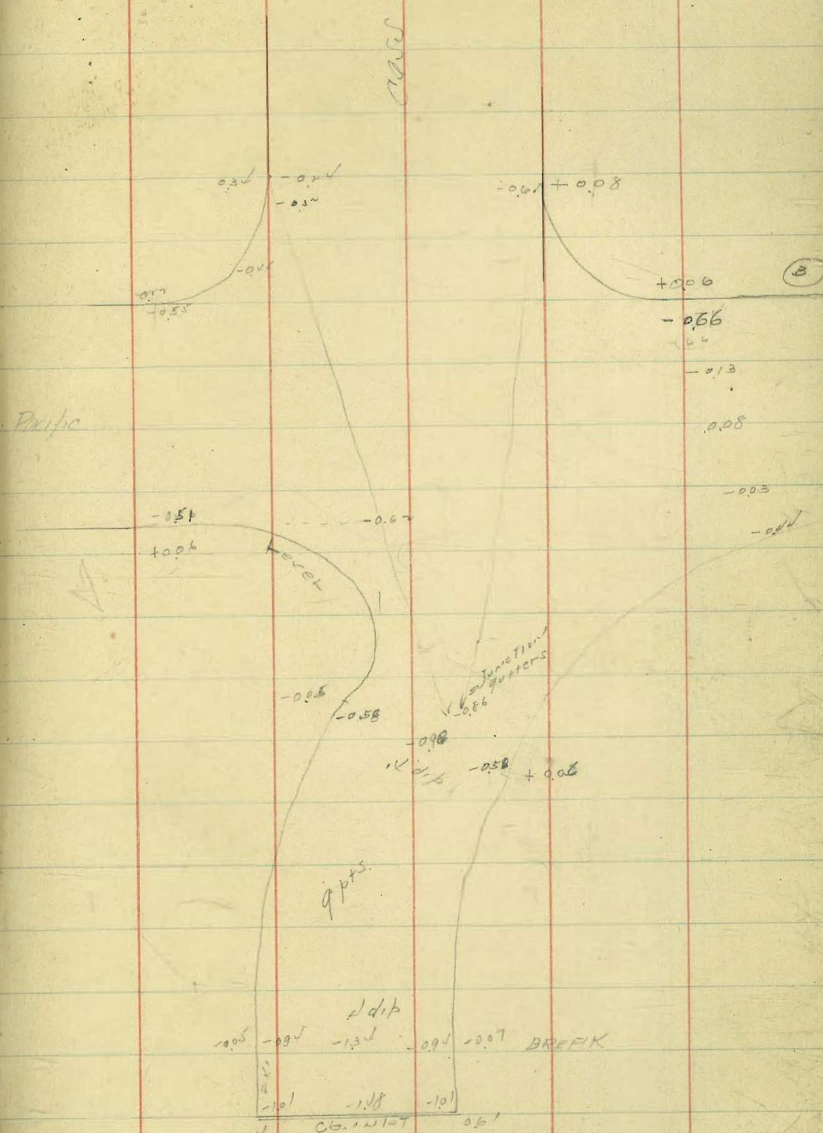


J6" Hydt Poo. & Bayard Cass. + Oliver





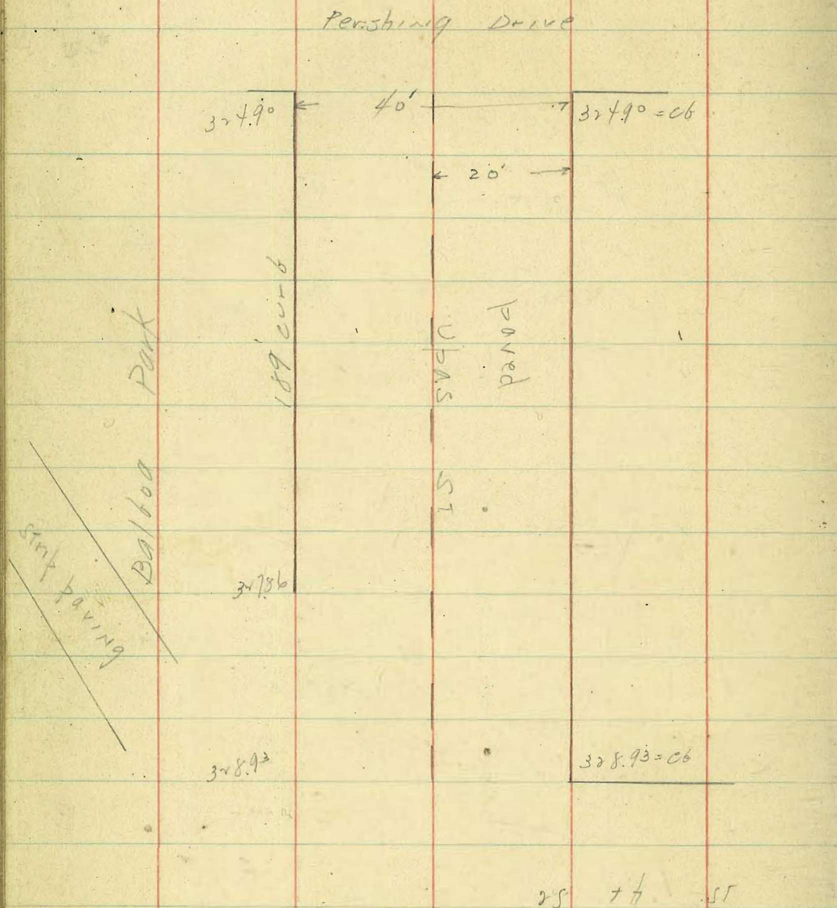
BRAEMAR PAVING



MISSION BAY

Upas St curb s side
Pershing to 28th

5/20/26
Moore



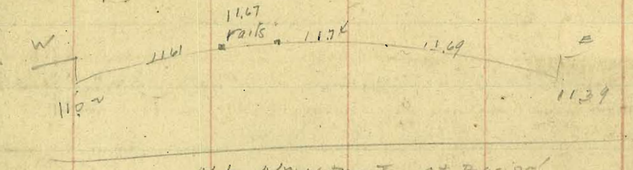
SEEP Upas + 28th

328.80
3.06
331.86

327.90	325.63	326.46	327.75	327.86
6.96	6.18	5.40	4.61	4.0

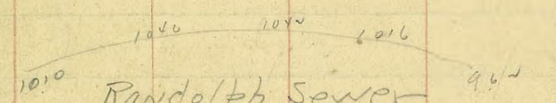
16.19 π

SL Newport at Bacon



NL Newport at Bacon

75' N of NL Newport



Randolph Sewer

SEBP
Arbor +
Palmetto

27.9.01
1.77
28.0.78
10.10
27.0.68
1.78
27.2.46

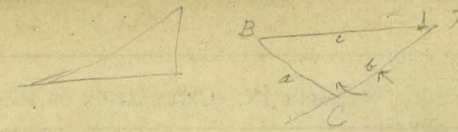
50' N of Plumosa = DE 50+00 259.51

150' N = Nedge paving 258.45

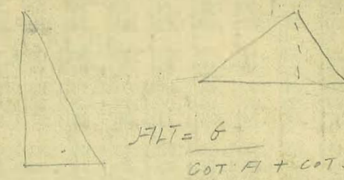
2595.1
17.95
8.58
+7.37

258.45
14.01
9.71
+4.30

38.07
15.20
??.20

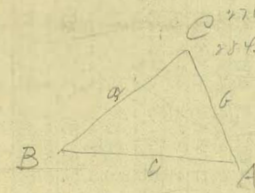


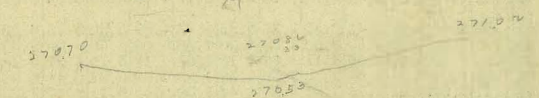
$$Area = \frac{b}{(\cot C + \cot A)\,2}$$



$$ALT = \frac{b}{\cot A + \cot B}$$

27.6.99 NW Wash Albatross
284.01 SE Lewis
84.96





575
380
195

80
55
135
288
153

Table IX.—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 gives cu. yds. in 1 ft. of a triangle of given width and height. Corrections for tenths of width are one tenth the values found under each height considering the widths from 1 to 9 as tenths and similarly the corrections for tenths of height are one tenth the figures opposite width considering the heights from 1 to 9 as tenths. Thus if w =16.2 and h =5.3, cu. yds. =1.48+.028+.089 =1.597 cu. yds. or practically 160 cu. yds. per 100 ft. If w exceeds 40 ft., use one half and multiply result by 2, if both w and h are large use one half of each and multiply result by 4. Any cross-section may be divided into triangles by the following rule. To the triangle of the sum of the outside cuts (or fills) =h, and ½ the roadbed =w, add the triangles formed by taking the distance out to each break in turn (=w's) by the difference between the cuts (or fills) on each side of it (=h's) always subtracting the outer from the inner.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½.

For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	25.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9+(20—16)÷2 or 2 ft. added to 41.9 =43.9. For slopes of 1 on 1 see inside of front cover.

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