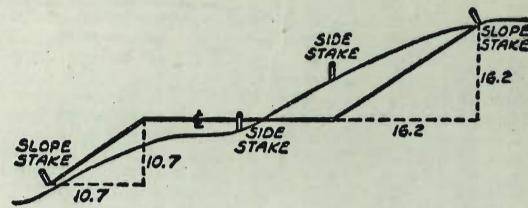


G - 308



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.

MICROFILMED

APR 15 1965

DIRECTIONS FOR USE OF TABLES

TABLE NO. VII

Directions for using tables, how to use them.

IMPROVED TABLES
AND
INFORMATION

Roberts
Cota
Moore
Morales
5-4-53

Grade Stakes For Curb
Private Street
Mission Bay High School

W.O. 62261

25 Rad ft.

1+13 Begin Island

0.16
1.82
F 1.71

2+50

1.54
2.22
F 0.68

1400

cb 0.33
1.79 1.12
67 F 0.79

2+25

0.89
2.15,
F 1.26

0+75

cb 0.01
1.71 1.04
67 F 1.03

2+00

1.44
2.08
F 0.64

0+50

Gutter

cb -0.51
1.67 0.97
67 F 1.48

1+75

0.99
2.00
F 1.01

0+18.13

cb 1.04
1.55 0.88
67 C 0.16

1+50

1.04
1.93
F 0.89

Begin of St.
0+00 No Line 121798

cb 1.65
1.50 0.83
67 C 0.82

1+25

0.19
1.86
F 1.67

TBM

-0.86 Conc. Mon. & Diver & P.L. Line

~~4+25~~

2.58
2.67
F0.09

5+75

2.70
3.01
F0.31

~~3+94.69 EC~~

2.14
2.61
F0.47

5+50

3.00
2.95
C0.05

~~3+58.98 BC~~

2.07
2.53
F0.46

5+25

2.60
2.90
F0.30

~~3+25~~

1.71
2.44
F0.73

5+00

2.60
2.84
F0.24

~~3+00~~

1.71
2.37
F0.66

4+75

2.75
2.79
F0.04

~~2+75.76 C~~

1.67
2.29
F0.62

4+50

2.64
2.73
F0.09

6+83.27 Bl. Cb Ret

296
3.24
F0.28

#3

187
3.58
F 1.71

#2

307
3.26
F0.19

#2

278
3.51
F 0.73

#1 End Cb.

235
3.33
F0.98

#1

334
3.45
F0.11

6+40.27 2nd Rad. Pt.
End Island

293
3.15
F0.22

7+43.24 BC.

320
3.38
F0.18

6+25

289
3.12
F0.23

7+25

333
3.33
GRADE

6+00

274
3.06
F0.32

7+00

321
3.28
F0.07

4

8+08.77 PRC

322
3.54
F0.32

#1 PRC End cb

367
3.91
F0.24

#3 PCC

347
3.55
F0.08

#3 End cb

301
3.90
F0.89

#2

328
3.75
F0.47

#2

323
3.81
F0.58

#1 End cb

317
3.80
F0.63

#1 PCC

353
3.74
F0.21

#5 PRC End cb

288
3.70
F0.82

8+51.41 BC, Ret

299
3.62
F0.63

#4

231
3.65
F1.34

8+28.50 EC

295
3.57
F 0.62

9+81.03 BC Ret

3.90
280
F 1.10

10/22.11 BC

3.99
360
F 0.39

9+50

3.83
377
F 0.06

#2

3.96
385
F 0.11

9+25

3.99
3.78
C 0.21

#1

4.01
381
F 0.20

9+08.50 EC Ret

3.06
3.75
F 0.69

BC End cb

4.11
336
F 0.33

#3

3.85
3.89
C 0.05

EC End cb

4.11
371
F 0.40

#2

3.97
3.85
C 0.12

Midpt.

4.00
375
F 0.25

End cb.
BC
Drive #2

4.34
400
F0.34

11+72.61 Rot
PRC

4.32
415
F0.17

712' End cb

4.32
418
F0.14

11+63.52 BC

4.30
352
F0.78

EC

4.20
390
F0.30

11+50

4.26
380
F0.46

Mid pt

4.13
375
F0.38

EC, 1H2533

4.21
372
F0.49

10+80.95 BC Ret

4.12
356
F0.36

#2

4.20
401
F0.19

10+50

4.05
307
F0.98

#1

4.27
395
F0.32

12+25

4.45
413
F 0.32

13+75

4.78
458
F 0.20

Rot
EC. 12+04.36

4.40
364
F 0.76

13+50

4.72
428
F 0.44

midpt.

4.96
440
F 0.06

13+25

4.67
461
F 0.06

BC End
BB

4.56
446
F 0.10

13+00

4.62
435
F 0.27

(drive #1)

EC End cb

4.41
439
F 0.02

12+75

4.56
436
F 0.20

midpt.

4.34
424
F 0.10

12+50

4.51
440
F 0.11

15±15 BC at Grand

606
5.10
C 0.96

15+00

5.06
4.96
F 0.10

14+75

535
4.99
C 0.36

14+56

4.98
4.94
C 0.04

14+25

4.88
4.81
F 0.07

14+00.

4.83
4.66
F 0.17

Roberts
Lote
Moor
Mirante
5-18-53

Grade stakes For Sewer Lot A, BK. I
Las Alturas No. 2

9

110.62317

1061416 FB 20057978

GRADE 146.84 Rod

Stab Elev 153.37

1430 DE.

C 6.43

15291

146.64

C 6.27

1400

15271

146.39

C 6.32

0+75

15307

146.14

C 6.93

0+50

15287

145.89

C 6.98

0+25

15293

145.64

C 7.29

NH.1 R 33rd
0+00 over Env. Survey

TBM

144.11 INVERT of NH 53rd Alley

Roberts
Cota
Moore
Morales
5-22-53

Grade Stakes For Curb
Grand Avenue
at Mission Bay High School

10

VMO #62261

9662-L

0+75

5.71
552

F0.19

5.05
397
F1.08

EC plus
135'

2 Red Pt
0+72

5.52
511

F0.41

lt
0+50
5.63
524
F0.39

5.06
420
F0.86

EC
Rt
0+70

5.95
5.23
C 0.72
BC

lt
0+30
5.58
508
F0.50

5.07
408
F0.99

605
5.19
C 0.86
#1

lt
0+10.
5.56
489
F0.67

5.08
393
F1.15

605
5.15
C 0.90
#2

West
0+00
5.57
450
END
F1.07

5.08
380
F1.28

BC

5.10
✓
EC
Finis

1485 6.64
551
F1.13

675
6.50
3+25 C0.25
7.11
603
F1.08

662
6.18
C0.44

1475 6.03
599
FO.04

606
5.61
C0.45

654
6.42
3+00 C0.12

613
6.09 TP
C0.04

1450 5.95
579 6.22
FO.16 555

5.52
541
FO.11

643
6.34
2+75 C0.09

641
5.99
C0.42

1425 5.87
563
FO.24

605
5.42
C0.63

6.26
623
2+50 F0.03

649
5.90
C0.59

1415 5.80
527
FO.53

6.19
606
2+25 F0.13

637
5.80
C0.57

1400 5.79
569 5.70
~~F1.0~~ 564
FO.06 C1.13

646

6.11
590
2+00 F0.21

609
5.71
C0.38

FO.10

5700	7.07 638 F0.69	7.01	7.01				
4755	7.01 6.98 C 003	7.01	7.01			7.43 584 F1.59	EC PWS 135
4750	6.90 676 F0.14	7.54 620 F 1.34	6.67 600 F0.67			7.15 586 F1.29	EC
4725	705 6.82 C 023	7.45 641 F 1.04	6.57 613 F0.74			7.01 632 F0.69	#2
4700	6.74 660 F0.14	7.37 645 F0.92	6.47 621 F0.26			6.88. 595 F0.93	#1
3755	698 6.66 C 0.32	7.28 640 F0.88	6 6.37 627 F0.10	4480	7.28	6.78 604 F0.74	BC
3750	6.92 6.58 C 0.34	7.20 617 F 1.03	651 6.28 C 0.23	3788 21 Rad Pg	7.20	7.64 664 F1.00	

END CONTRACT

5734.25

7.18

665

F0.53

6.98

621

F0.77

BC

7.03

591

F1.12

#1

7.08

636

F0.72

#2

7.13

597

F1.16

#3

7.18

599

F1.19

EC

Roberts
Cota
Moore
Monlez
5-26-53
W.O.#2098

Grade Stakes For Survey Balboa Park
(Arizona Canyon Replacement)
changed back to Line FB2205 pg. 20 per
Harvey Cota & Cameron.

14

2131-D

5700

276.75
255.73
C 21.02

4475

275.78
255.80
C 18.98

4450

274.65
253.88
C 18.77

4425

273.87
253.95
C 12.92

0.37

4400

273.52
256.03
C 17.49

3+75 DMH #4

272.76
256.10
C 16.66

BM

NWBP
269.95 Upas & Arizona

6750

6725

6700

5775

5750

5725

277.86
255.28
C 22.58

277.50
255.35
C 22.15

277.24
255.43
C 21.81

277.31
255.50
C 21.81

277.35
255.58
C 21.77

277.17
255.65
C 21.52

7+99.49 MH #6

275.70
254.83
C 20.87

9+25

274.61
254.46
C 20.15

7+75

276.13
254.90
C 21.23

9+00

275.16
254.53
C 20.63

7+50

276.67
254.98
C 21.69

8+84.49 MH #7

275.09
254.57
C 20.52

7+25

277.37
255.05
C 22.32

8+75

275.13
254.61
C 20.52

7+00

277.93
255.13
C 22.80

8+50

275.35
254.68
C 20.67

6+75

278.05
255.20
C 22.85

8+25

275.64
254.75
C 20.89

10+68.30 E+st
NH

269.50

254.02

10+50

270.10
254.08
C 16.02

10+25

271.05
254.16
C 16.89

10+00

271.89
254.23
C 17.66

9+75

272.64
254.31
C 18.33

9+50

273.77
254.38
C 19.39

Roberts
Moore
Craig

Grade Stakes For Berm
Private Street

6-1-53
WD # 62261

5' Back & Berm
9664-L

17

2+50

2.22
172
F 0.80

4+74.62

3.68
014
F 3.54

2+00

2.08
174
F 0.34

4+74.62 Corner

3.80
0.11
F 3.69

1+50

1.93
118
F 0.75

4+03.00 Corner

3.22
- 051
F 3.73

1+00

1.79
120
F 0.59

3+53.86 EC

2.60
259
F 0.01

0+50

1.64
145
F 0.19

3+38.15 BC

2.63
2.49
C 0.14

0+00 Begin St. S. End

1.50
105
F 2.55

3+00

2.37
158
F 0.79

TBM

- 0.86

6700

2.77
084
F 1.93

9700

3.43
250
F 0.93

Angle Point
5776.63 B.C.M.

2.72
116
F 1.56

8750

3.32
195
F 1.37

5756.63

2.78
040
F 2.38

8700

3.21
158
F 1.63

5736.63

2.81
030
F 2.51

7750

3.10
152 TP
F 1.58

5714.62

3.06
026
F 2.74

7400

2.99
115
F 1.84

4794.62

3.23
022
F 3.01

6750

2.88
142
F 1.46

1413.66 BC

3.93
168
F 2.25

12+94.97 EC

4.35
328
F 1.07

1400

3.90
184
F 2.06

12+80.61 BC

4.30
262
F 1.68

10+50

3.79
205
F 1.74

12+50

4.23
210 TP
F 2.13

10+00

3.68
167
F 2.01

12+00

4.13
213
F 2.00

9+48.49 EC.

3.57
273
F 0.84

11+50

4.02
197
F 2.05

9+25.48 BC

3.50
238
F 1.12

11+20.92 EC

3.95
178
F 2.17

sky Line
16712 ft Grand East Curb

5.05
5.07

15450

4.91
374
F 1.17

15700

4.80
378
F 1.02

14450

4.69
398
F 0.71

9 14700

4.58
376
F 0.82

9 13750

4.47
318
F 1.29

Roberts
Cota
Moore
Morantz
6-2-53

Grade Stakes For Sewer Balboa Park
(Arizona Canyon Replacement)
[Contd From Page 14]

21

No. # 20988

3131-D

27100

263.65

C 7.35

1+25

2+75

27378

264.53

C 9.23

1+00

27234

263.50

C 8.84

2+50

27451

264.40

C 10.11

0+75

27215

263.35

C 8.80

2+25

27279

264.25

C 8.54

0+50

27223

263.20

C 9.03

2+00

27271

264.10

C 8.61

0+25

27261

263.05

C 9.56

1+75

27197

263.95

C 8.02

0+00

27290

262.90

C 10.00

1+50

27141

263.80

C 7.61

min } 256.10

Line }

C 16.80

Shuffle Board Corot Line, contd

Main Line

22

26776
256.78
C 10.98

1+50

266.68
256.85
C 9.23

1+25

266.39
256.93
C 9.46

1+00

265.40
257.00
C 8.40

NH#5
273.95
265.00
C 8.95

0+75

264.02
257.08
C 6.94

273.83
264.85
C 8.98

0+50

263.96
257.14
C 6.82

274.39
264.70
C 9.69

0+27.90 NH#3

"
0+00 in other Directions
Alley 8 up to East of Arizona

3+25

3+00

2+00

27222
256.33
C 15.89

2+75

27202
256.40
C 15.62

2+50

27107
256.48
C 14.59

2+25

27059
256.55
C 14.04

3475.00 DMH #4

256.10
See pg. 21

2+00

27017
256.63
C 13.54

3450

27312
256.18
C 16.94

1+75

26988
256.70
C 13.18

3425

27301
256.25
C 16.76

1+25

26242
257.64
C 478

1+00

26267
257.54
C 513

0+75

26294
257.44
C 550

Make Conn.
0+75.33 Existing
west of Alley

258.12
Exists

26476
257.79
C 6.97

0+50

26327
257.34
C 593

0+50

26374
257.46
C 6.28

0+25

26360
257.24
C 6.36

0+25

0+00 NH #3.
Upas & Alley

257.14
Sugg 22

0+00 NH #3

257.14
See pg 22

25

2+75

26409
258.24
C 5.85

2+50

26283
258.14
C 4.69

2+25

26200
258.04
C 3.96

2+00

26145
257.94
C 3.51

Make Connection
3+57.68 in Eust. M.H.

260.07
EXITS

1+75

26161
257.84
C 3.77

3+28.65 MH^{#2}
0700 to Scout House
Alley, & upper East of Arnold

26753
258.45
C 9.08

1+50

26208
257.74
C 4.34

3+00

265.75
258.34
C 7.41

1425

26101
258.95
C 2.06

1400

26084
258.85
C 1.99
2+42.00 MH#1
At Scout House

0475

26156
258.75
C 2.81
2+25

0750

26166
258.65
C 9.01
2700

0425

26880
258.55
C 19.25
1475

0400 MH#2

"
3+28.65
21 May - Open East of Arnold

258.45
Suppg 25
1450

26251
259.42
C 3.09

26213
259.35
C 2.78

26149
259.25
C 2.24

26130
259.15
C 2.15

26126
259.05
C 2.21

Add-24-

Make
1+24 Conn. to Exit
Alleg. North of Upas

Plans 257.88
Exists
actual 256.87

042
~~30~~
1.260.
~~25.081~~
258.13

0+94 BC.

263.77
257.70
C 6.07

945
54
999

263.77
347
268.24
999
259.25 - actual at plus 921

0+73

263.96
257.59
C 6.37

269.25
256.87 .051
92/2.38
21.0
280

0+50

263.78
257.44
C 6.34

263.47
257.29
C 6.18

0+25

0+00 NH #3

257.14
See pg 22

Roberts
Cato
Miralce
6-5-53
WD 20849

Grade Stakes For Drain
Rosecrans & Midway

9414-L

Grade Stake For Curb
Rosecrans & Midway

28

#6

2.42
147
F 0.95

	Top Grate	
	2.72	2.72
1408	Q Inlet	+ 2.23
	Type 3	- 0.73
		C 0.49
		C 3.49

#5

2.40
157
F 0.83

0+81		2.59
		- 1.00
		C 3.59

#4

2.40
130
F 1.10

0+54		2.38
		- 1.25
		C 3.63

#3

2.40
137
F 1.03

0+27		2.21
		- 1.50
		C 3.71

#2

2.40
129
F 1.11

0+00	E Inlet	1.99
	Type 4	- 1.75
		C 3.74

#1

10.96 wgt of
Inlet

2.37
182
F 0.55

#9

Gut 185

2.35
154

F 0.81

#8

200 .04

Meet 240
165

F 0.75

#7

2.44
159
F 0.85

Roberts
Cota
Moore
Metcalfe
6-15-53
MID 32175

Rough Grade Stake List Data St.
Asher to Little Field

30

100732

1+75

42.83
39.37
F 3.4

43.33
42.30
F 1.0

1+85

42.61
39.77
F 3.8

43.11
42.37
F 0.7

1+35 81C

42.46
38.44
F 9.0

42.96
42.59
F 0.4

1+00

42.24
39.08
F 3.1

44.30
42.74
C 1.6

6+50

42.21
41.94
C 0.3

45.41
42.44
C 3.0

0+13 BC Asher

41.72
40.49
F 1.3

44.99
42.22
C 2.8

4736
ab 55' ssly side
3+62.17 BC L. Little Field
C 1.3

4780
45.70
3+45 BRK
C 1.9

4711
45.05
3+00
C 2.0

43.24
44.11
2+50
C 1.1

43.45
41.98
2+15 EBC
F 1.5

43.10
40.44
1+95
F 2.7

4926
46.73
C 2.6

4895
46.40
C 2.6

4901
45.55
C 3.4

4739
44.61
C 2.8

44.27
43.95
C 0.3

43.60
42.70
F 0.9

56.94

Liesta, Rough Grade
Tonopah to Asher

31

11.99

10/676

2450	42.05 41.41 F.0.6	43.16 42.36 C.0.8
------	-------------------------	-------------------------

2700	42.36 42.34 GRADE	43.59 42.60 C.1.0
------	-------------------------	-------------------------

1450	42.87 42.66 C.0.2	44.00 42.84 C.1.2
------	-------------------------	-------------------------

1400	43.87 42.97 C.0.9	45.70 43.08 C.2.6	41.22 40.40 F.0.8	42.90 41.71 C.1.2
------	-------------------------	-------------------------	-------------------------	-------------------------

0+50	43.42 43.27 C.0.1	46.42 43.32 C.3.1	41.44 40.52 F.0.9	42.01 41.88 C.0.1
------	-------------------------	-------------------------	-------------------------	-------------------------

0+13 BC	43.50 43.32 F.0.2	47.3 43.50 C.3.8	41.75 40.35 F.1.4	42.12 41.89 F.0.2
---------	-------------------------	------------------------	-------------------------	-------------------------

Asher, Rough Grader

32

10072 L

1750

5016
47.35 ✓
C 2.9

4702
46.71 ✓
C 0.3

1700

4819
48.29 ✓
45.55
C 2.7

4504 ✓
45.02 ✓
GRADE

EXIST 51.57
0+86.57 cb.

51.25

0+50

4707 ✓
43.95
C 3.2

4337 ✓
43.34 ✓
GRADE

5298 ✓
51.49 ✓
C 1.5

5229 ✓
51.19 ✓
C 1.1

0+13 BC} Elg Side

44.99
42.59 ✓
C 2.4

42.90
42.09 ✓
C 0.8

5299 ✓
51.40 ✓
C 1.59
1.6

5030 ✓
50.96 ✓
C 1.3

0+21.59 BC} Wly 2nd

40.90
40.47
F 0.4

40.39
40.40
GRADE

53.74 ✓
51.27 ✓
C 2.4

5085 ✓
50.60 ✓
C 0.3

8+00 WL Sub'd

39.89
39.72
F 0.1

39.39
39.16
F 0.2

52.73 ✓
49.90 ✓
C 2.3

49.30 ✓
47.74 ✓

2+00

51.60 ✓
48.95 ✓
C 2.6

F 1.4
48.39 ✓
47.70 ✓
F 0.7

Morenci, Rough Grades
Asher to Littlefield

33

10074L

2+62 PVC

57.98
55.69 55.90
C1.2

60.02
58.76 ✓
C1.2

F2.3

F2.1

2+00

56.20
55.55
F0.6

58.28
56.96 ✓
C1.3

cb) 1/2 side 56.78
3+62.27 B9 Littlefield 58.55 ✓
F0.2

64.79
60.80 ✓
C4.0

1+50

54.79
54.78
GRADE

57.94
57.77
55.52
C2.3
C2.4

3+42

58.88
58.63 ✓
F0.3

63.07
60.50 ✓
C2.6

1+00

54.31
53.35
C0.9

56.41
54.08 ✓
C2.3

3+22

58.91
58.34 ✓
F0.6

62.34
60.17 ✓
C2.1

0+50

52.13
51.93 ✓
C0.8

54.20
52.64 ✓
C1.6

3+02

58.92
58.83
58.77
GRADE
C0.1

62.14
59.78 ✓
(2.3)

0+13 cb) 1/2 side
BC Asher

52.23
50.88 ✓
C1.3

53.74
51.58 ✓
C2.1

2+82

58.41
58.45
57.61
FAT

61.66
59.30 ✓
C2.4

GRADE

Morenci, Rough Grades
Tonopah to Asher

34

10166 L

2+33

4563
45.21
C0.4

4591
45.25 ✓
C0.6

3+87 cb) S13 S12
BC) Asher

4953
4994 ✓
F16

5085
50.01 ✓
C0.8

2+13 PKC

4546
45.00
C0.5

4546
45.00 ✓
C0.5

3+33 ER

4
47.54
4691
F0.5
F0.6

4989
4992
47.86
C2.0
C2.0

1+63

4542
44.63
C0.8

4528
4542
44.50
C0.9
C0.8

3+13

46.90
46.74
F0.2

4997
47.16 ✓
C1.8

1+13

4597
45.69
44.25
C1.4
C1.7

4547
4546
44.00
C1.5
C1.5

2+93

46.37
46.32
F0.1

4868
4785
46.54
C1.3
C1.5

0+63

4638
43.88
C2.5

4568
45.67
43.50
C2.8
C2.2

2+73

46.38
45.95
C0.4

4744
4704
46.02
C1.0
C1.4

0+13 cb) w/g 2020
BC) Tonopah

4678
43.50
C3.3

4570 ✓
43.00 ✓
C2.1

2+53

46.08
45.52
C0.6

46.21
45.59 ✓
C0.7

Roberts
Cota
Moore

6-24-53

WD #32131

Kaugh Grade Stake Broadway
41st to 42nd

55

101516

18112

174.04

C 7.1

173.54

171.88

F 1.6

174.50

172.06

C 2.4

171.56

170.31

F 1.3

1450

19082

173.43

C 7.4

172.93

171.95

F 1.0

3+20

175.03

172.85

C 2.1

172.35

171.14

F 1.2

1400

178.65

172.83

C 5.8

172.33

171.27

F 1.0

3+00

176.45

173.48

C 2.0

172.98

171.61

F 1.4

0450

176.48

172.23

C 4.3

171.73

169.81

F 1.9

2+80

178.34

173.90

C 4.4

173.40

171.84

F 1.6

0+20 Curb BC

176.38

171.87

C 4.5

171.37

169.67

F 1.7

2+60

179.09

174.14

C 5.0

173.64

172.19

F 1.4

0+00 E.L. 41st

0-60

171.00

169.04

F 2.0

172.64

170.80

C 1.84

2+20

180.26

174.18

C 6.1

173.68

172.14

F 1.6

B.M.

157.66 SWBP 41st & 41st

	16896			
4740	165.83 ✓	165.33 ✓		
	C 3.2	163.56 ✓		
		F 1.7		
	16868			
4720	166.89 ✓	166.39 ✓	16740	162.85
	C 1.8	163.58 ✓	163.35 ✓	162.33 ✓
		F 2.8	C 4.0	F 0.6
	16888			
4700	167.69 ✓	167.19 ✓	16764	163.45
	C 1.8	163.89 ✓	163.95 ✓	162.37
		F 3.3	C 3.7	F 1.1
	16934 ✓			
3780	168.69 ✓	168.19 ✓	16843	163.75
	C 0.6	166.92 ✓	164.25 ✓	162.06 ✓
		F 1.3	C 4.1	F 1.7
	17080			
3760	169.87 ✓	169.37 ✓	16923	164.23
	C 0.9	167.37 ✓	164.73 ✓	162.37
		F 2.0	C 4.5	F 1.6
	17115 ✓			
3740	171.05 ✓	170.55 ✓	16903	164.91
	C 0.1	169.77 ✓	163.41 ✓	162.75 ✓
		F 0.8	C 3.6	F 2.1
	4760			

Roberts
Cota
Moore
Morales
6-25-53
W.O.#32131

Rough Grades 41st Street
Broadway to "C"

37

10152h

0+86

173.31

170.55

F 2.7

176.65

173.81

C 2.9

2+50

185.05

183.79

C 1.3

186.47

184.29

C 2.2

0+66

172.54

170.08

F 2.4

176.71

173.04

C 3.7

2+30

183.75

182.58

C 1.2

185.90

183.08

C 2.8

0+46

171.95

169.81

F 2.2

174.05

172.46

C 1.6

1488

180.98

179.64

C 1.4

184.72

180.14

C 4.6

0+26

171.55

169.78

F 1.8

174.96

172.05

C 2.9

1446

176.70

176.17

F 0.5

179.71

177.20

C 2.5

0+10

171.31

169.04

F 2.3

176.38

171.80

C 4.6

1426

175.39

171.35

F 4.0

178.18

175.89

C 2.3

0+06 N.E. Broadway

1406

174.26

170.65

F 3.6

177.05

174.76

C 2.3

2+90 cb BC
at "C" st.

185.14

185.05

C.0.1

186.8

185.58

C.1.2

2+70

185.13

184.62

C.0.5

186.81

185.12

C.1.7

Roberts
Cota
Morales
7-7-53
W.O.*

Grade Stakes For Sewer Penney's Store
"T" Alley - Univ. - Wrightman - Ray - Gram
City Forces

39

0.6872 Grade

7' offset to left

1+00
35465
350.63
C 4.02

0+75
35495
350.46
C 4.49

0+50
35537
350.29
C 5.08

Man Hole
0+39 8" T's
35530
350.22
C 5.08

0+25
35573
350.12
C 5.61

0+00 EXIST DE
349.95

BM
SEBP
35163 Wrightman & Ray

NEW DE
1741 5' East of
East Line Ray

1+25

354.05
350.92 ← Desired by
Private Eng.

35431
350.86
C 3.51

Roberts
Cota
Morales
7-10-53
W.O. #32131

Grade Stakes for Sewer
Hill & Broadway

40

0+34 Lat (6)

172.11
167.65 ✓
C 4.46

176.0

171.25
164.64 ✓
C 6.61

0 0740

172.39
163.80 ✓
C 8.59

175.4 Lat (1)

176.28
167.08 ✓
C 9.20

Sewer
0+00 East DE

163.52
root

172.0

171.40
164.36 ✓
C 7.04

- 415' W. Lat (5)

172.67
168.28 ✓
C 4.39

170.59
166.92 ✓
C 3.67

215' W. Lat (4)

166.92
162.86 ✓
C 4.06

170.04 Lat (2)

177.46 ✓
167.63
C 9.83

180' W. of W.L. 42nd Lat (3)

168.49 ✓
161.89
C 6.60

0+80

172.12 ✓
164.08
C 8.04

Total 20' W

3+20

17276

166.01

C 6.75

2+80

17175

165.64

C 6.11

2+69 Lat (8)

17123

166.40

C 4.83

2+40

17200

165.26

C 6.74

2+14 NH[#])

17169

165.02

C 6.67

2+00

17103

164.92

C 6.11

4+10

17941

168.02

C 11.39

4+34 Lat (12)

18397

174.65

C 9.32

4+24 Lat (9)

180⁰⁰

173.40

C 6.60

4+14 NH[#] 2

17762

166.90

C 10.72

4+00

17662

166.76

C 9.86

3+60

17422

166.39

C 7.83

5+54 DE

18552
172.92
C 12.60

5+20

18429
171.46
C 12.83

4494 Lat ⑩

18506
178.20
C 6.86

4489 Lat ⑪

18590
178.45
C 7.35

4486

18212
169.74
C 12.38

Robert Grade Stakes For Draining Ditch
Cota
Mondez
7-14-53
W.H. 21092

43

Block 1 Emerson 4 tr

4883-B FB224 Pg. 7

1400 2640
2402
C 2.38.

0+75 2722
2415
C 3.07

2+25

23.40
GRANDED ON E
OK

0+50 2882
2427
C 4.55

2+00

2529
23.52
C 1.77

0+25 2889
2440
C 4.49

1+75

2552
23.65
C 1.87

0+13.58 L.Rt 29.17
24.45
C 4.72

-10 west

1+50

3549
23.77
C 1.72

0+00 End 24"
RMP 24.52 I.E.

1+25

2566
23.90
C 1.76

BM

SEED
36.98 Nat/E36

44

Sewer Grades

ASHER ST.

7-17-53

C.H.S.

Cota

Boggs

Schellin

Sheet #
" " 10071-L
" " 10074-L

0+00 = Existing Stub
Morena Blvd + Asher.

Stakes 4^{5'} Rt. of +

B.M.=X on M.H.
E.I.= 1A.73
F.B. 1836-P 62

3+00

26.42
19.31
C 7.11

2+50

24.87
17.49 ✓
C 7.38

2+00

23.37
15.67
C 7.70

1+50

21.58
13.85
C 7.73

1+00

19.60
12.03
C 7.57

0+50

17.14
10.21
C 6.93

0+00

8.39

7+00

6+50

6+00

5+50

5+00

4+50

4+00

3+55-

3+50

10071-L
12.00
10074-L
10070-L

30.71

29.36

28.01

26.66

25.31

23.96

22.61

21.64

20.13

18.03

40.62

31.21

29.91

39.33

29.77

29.56

37.26

28.34

28.92

35.20

26.90

26.30

32.85

25.47

27.58

31.21

24.03

27.18

29.56

27.60

26.96

28.31

21.31

27.00

28.16

21.13

27.03

Stake Sewer Lata St
Btwn Asher & Littlefield

sewers - cont p 52

stakes 43 ft off up grade

9799.53	ESMH #3 2 Morenous Asher St	39 36	48 ²⁰ C 9 ⁵⁴	37 40	Plug DE.	35 07	44 ²⁵ C 9 ⁶⁸
9750		38 01	47 ⁸⁵ C 9 ⁸⁴	27 95		34 60	44 ⁰² C 9 ⁹²
9700		36 65	46 ⁶⁹ C 10 ⁰⁹	27 45		34 07	43 ⁰³ C 8 ²⁶
8750	ESMH #2 2 Morenous	35 39	45 ⁴⁰ C 10 ¹¹	17 95	10/01	33 54	42 ⁵⁰ C 8 ⁹⁶
8700		33 93	44 ³¹ C 10 ³⁸	17 45		33 01	41 ⁹³ C 8 ⁹²
7750		32 57	42 ⁸⁶ C 10 ²⁹	07 95		32 48	41 ⁶¹ C 9 ¹³
Lata St. M.H. #2		31.47	40 ⁵⁹ C 9 ¹²	07 45		31 95	41 ¹⁶ C 9 ²¹
7709.4							
BM		46 22					
				ESMH #2 2 Lata 07 00 Asher		31 47	
				NEBP Littlefield Lata			

Robts
Cota
Montez
7-24-53
W.D. 32131
1st & Broadway

(Broadway)

Water lateral
on Right

1495

167⁴⁵

167⁴⁹ cor 7 cb

16459

161,68

C 2.91

1460

4450

4400 EVC

1420

163 34

160.58

C 2.96

0480 M

162 91

159.80

C 3.11

water lateral
0470 on Right

164⁰¹
163⁸⁵
cor 6 cb

0440

162 57
159.40
C 3.17

Fire Hydrant
0425 on Left
163 13
162⁹⁰
cor 22 cb.

W.L. 42nd

0400

162 81
158.80
C 4.00

46

17247

→ 167.26 ←

C 3.21

17264

169.89

C 2.75

17250

169.99

C 2.51

3460

3420

171 99

169.33

C 2.66

170 85

167.91

C 2.94

2480

16877

165.72

C 3.05

2440

166 60
163.54
C 3.06

2400

(4150)

17787

174.75

C 3.12

175.16

172.04

C 3.12

172.72

169.96

C 2.96

171.52

168.61

C 2.91

6+60 West Line
41st

172.41

167.15

C 5.26

6+00

170.65

167.33

C 3.32

1736

0+96

5+75 Fire Hydrant
on Left 171⁵³
171⁴³ C0 10.06

171.13

168.00

C 3.13

5+50

5+40 Water Lateral
on Left 172⁰⁴
171⁸⁵ C0 19.06

171.74

168.63

C 3.11

5+00

Water lateral

0+70 on Left

171.79

171³³

C0 41.06

Na Line
Broadway

172.20

167.83

C 4.37

0+00

Next

3750 So 2120
" C 54

18559
181.81
C 3.78

3720

18416
181.27
C 2.89

2780

18216
179.23
C 2.93

2756

18069
177.55
C 3.14

2748 Water lateral
on Right

18038
180.28 C 0.5 C 6

CURB STAKES BROADWAY, 41ST. TO 42ND.

49

COTA
POPE
ACUNA
MORALEZ

W.O. # 32131

LT.

RT.

LT.

RT.

1450	173.44 173.13 C 0.01	173.30 172.93 C 0.37	2480	173.70 173.48 C 0.22	173.68 172.98 C 0.10
------	----------------------------	----------------------------	------	----------------------------	----------------------------

1425	173.32 173.13 C 0.19	173.03 172.63 C 0.40	2460	173.94 173.90 C 0.04	173.10 173.35 F 0.05
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1400	172.94 172.83 C 0.11	172.47 172.33 C 0.14	2440	174.32 174.11 C 0.18	173.64 173.57 F 0.07
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1475	172.76 172.53 C 0.23	172.36 172.03 C 0.33	2420	174.13 174.18 F 0.05	173.68 173.60 F 0.08
------	----------------------------	----------------------------	------	----------------------------	----------------------------

0450	172.50 172.23 C 0.27	172.03 171.73 C 0.30	2400 P.V.C.	174.04 173.87 F 0.17	173.61 173.54 C 0.07
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0420 CURB B.C. 41ST	172.07 171.87 C 0.20	171.37 171.29 F 0.08	1475	173.68 173.73 F 0.05	173.60 173.23 C 0.37
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CURB STAKES BROADWAY (CONT'D.)

50

	LT.	RT.		LT.	RT.
1 4700	167.69 167.34 F 0.35	167.29 167.19 C 0.10	5720 FVC	164.18 163.95 C 0.23	163.88 163.15 C 0.43
1 3480	168.74 168.69 C 0.05	168.32 168.19 C 0.13	5700	164.69 164.25 C 0.44	163.92 163.75 C 0.17
1 3460	169.87 169.47 F 0.40	169.37 169.36 F 0.01	1180	165.33 164.73 C 0.60	164.23 164.17 F 0.06
3410	171.05 170.91 F 0.14	170.65 170.55 C 0.10	1160	165.38 165.01 F 0.03	164.91 164.71 F 0.20
3420	172.18 172.06 C 0.12	171.59 171.56 C 0.03	1140	166.21 165.83 ✓ C 0.38	165.33 165.30 F 0.03
3400	173.19 172.85 C 0.34	172.60 172.35 C 0.25	1120	166.91 166.89 C 0.02	166.39 166.33 F 0.06

CURB STAKES, BROADWAY (CONT'D.)

51

LT.

RT.

END CURB.

	16465
	163.65
	C 1.00

	16322
	162.65
	C 0.77

#1

	16394
	163.40
	C 0.54

	16316
	162.70
	C 0.46

N° 18'

5180 B.C. AT 42 ND	16353
	163.35
	C 0.18

	16320
	162.85
	C 0.35

5150

	16365
	163.55
	F 0.10

	16341
	163.45
	C 0.26

Stake Sewer Lieta St
Asher to Tonopah St
Stake 45 ft up grade

Plug DE
3480 38-27 42⁴¹ C-7¹⁷

3445 3492 42²⁵ C-7³³

34045 3452 42⁰³ C-7⁵¹

24045 3382 41⁵⁶ C-7⁵⁹

24045 3352 41²⁸ C-7⁷⁶

14545 3282 41⁰⁶ G8⁰⁴

14045 3252 4069 G8¹⁷

64545 3102 40⁴³ G8⁴¹

ESMH#2
Asher
0+00 Lieta

Stake Sewer Morenci St

Stakes 45 ft up grade
Line S by Asher St

Plug DE
3480 38-45 45⁸⁸ G428

3445 4074 4537 C463

34045 4058 4519 C411

24045 4038 4509 C471

Plug DE
1460 43⁵⁷ 5547 G1190 24045 4018 4512 C501

14155 42⁴⁴ 5475 G1231 14045 5928 4666 C668

0755 4133 5372 G1239 14045 3978 4755 C722

07355 4029 5160 G1131 07545 3958 4852 C824

ESMH#3
Morenci
0+00 Asher

SMH#3
0+00 3936

52

14

Roberts Grade Stake Water Line
Cota Morenci Street
Moore Moralez

53

2+50

462
41.9
C 43

2+00

454
41.2
C 4.2

1+50

454
40.7
C 4.7

1+00

455
40.2
C 5.3

0+50

460
39.7
C 6.3

My Line
0+00 Tonopah

46.9
39.1
C 7.8

5+50

5+00

4450.30 My Line
Other

3+50

3+00

50.0

537
48.6
C 5.1

514
47.5
C 3.9

493
46.6
C 2.7

483
44.9
C 3.4

474
43.1
C 4.3

8740.0 Lake Conception

8725.6 Sly Line
Wittfield 4/21

610

57.1

C 3.9

609

56.8

C 4.1

594

55.9

C 3.5

577

54.3

C 3.4

562

52.9

C 3.3

556

51.4

C 3.2

6700

6750

7700

7750

Roberts
Cota
Moore
Moralez
9-20-53

Curb Stake 41st Street

Broadway to "C"

W.O. #32131

101522

55

1

17212
170.98
C.14

2

17196
171.70
C.026

0+66

17273
172.54
C.019

1
173.84
172.96
F.0.08

1

17207
171.77
C.030

0+46

17195
171.61
F.0.34

17268
172.46
C.0.22

3

171.21
171.19
F.0.06

0+26

17167
171.55
C.0.12

17266
172.05
C.0.61

2

17110
170.93
C.0.17

0+10/BC

17191
171.31
C.0.60

17286
171.80
C.1.06

PL 41st

17257
170.67
C.1.90

1

170.97
170.61
C.0.36

3

17222
171.18
C.1.07

4
17325
171.72
C.1.55

PL Broadway

17227
170.13
C.2.14

PL

170.29
170.24
C.0.05

2

17204
171.04
C.1.00

3
17312
171.69
C.1.43

NE Return

END Alley Rat PL.	176.46 172.41 F 4.05	178.36 177.05 C 1.30	2709	181.41 181.11 C 0.30	181.85 181.61 C 0.24
Alley EC	176.36 ✓ 175.86 F 0.58	176.92 176.82 F 0.10	1488	179.98 179.64 C 0.34	180.39 180.14 C 0.25
H36 Alley Rad BC	176.06 175.91 F 0.15	176.72 176.60 C 0.12	1467	176.17	178.67
1426	175.39 175.26 F 0.13	175.90 175.89 C 0.01	1764 Alley Rad BC	177.97 177.71 F 0.26	178.68 178.54 C 0.14
H06	174.47 174.26 C 0.21	174.76 174.72 F 0.04	Alley EC	177.75 177.60 F 0.15	178.64 178.34 C 0.30
0486	173.44 173.31 C 0.13	173.81 173.69 F 0.18	End Alley Rat PL	179.18 177.85 C 1.33	182.68 178.47 C 4.21

End Curb RL "C"

185.15
184.90
F 0.25

186.11
185.66
C 0.45

2+70 BC at "C"

185.05
184.97
F 0.08

185.78
185.58
C 0.20

2+70

184.65
184.62
C 0.03

185.82
185.66
F 0.06

2+50

183.87
183.79
C 0.08

184.29
184.26
F 0.03

2+30

182.81
182.58
C 0.23

183.22
183.08
C 0.14

Roberts

9-20-53

Grade Stakes Water Line Lieta
Tonopah to Littlefield

58

2+50

413
38.4
C 2.7

5+50

419
38.7 39.1
C 3.0

2+00

417
38.9
C 2.8

5+00

415
38.6
C 2.9

1+50

417
39.2
C 2.5

N.Y. Line
4450.10 Asher

410
38.1
C 2.9

1+00

421
39.5
C 2.6

S.Y. Line
4400.10 Asher

40.6
37.9
C 2.7

0+50

423
39.7
C 2.6

3+50

40.7
38.2
C 2.5

N.L.
0+00 Tonopah

426
39.9
C 2.7

3+00

411
38.4
C 2.7

Ashen Water Line 59

3+60 N. Ketcham

3+00

47.9
45.4
C 2.5

8+25.27 Sig Line
Bottlegreen

462
43.0
C 3.2

8+00 ~~stacked~~

454
42.3
(3.1

7+50

447
41.0
C 3.7

7+00

439
40.1
C 3.8

6+50

429
39.8
C 3.1

6+00

423
39.3
C 3.0

2+50

2+00

1+50

1+00

0+50

0+00 Wly. Line
Bull

46.5
43.6
C 3.0

44.9
41.9
C 3.0

43.9
40.3
C 3.6

42.3
38.6
C 3.7

40.6
37.4
C 3.2

39.4
35.8
C 3.6

Roberts
Cota
Moore
Morales
9-10-53
W.O. #32175

Grade Stake - Curb 21eta St.
Tonopah to Asher

60

11.89
→ 41.93
2+75 F.004

0211
42.24 ←
F.013

1+00 43.00
42.98
C.0.02

43.74
43.08
C.0.66

4220
42.09
C.0.12

4240
42.36
C.0.04

0+75 4341
43.13
C.0.28

44.12
43.20
C.0.92

4234
42.23
C.0.11

42.96
42.48
C.0.48

D+3'0 43.66
43.28
C.0.38

43.91
43.32
C.0.59

4215
42.38
C.0.07

4289
42.60
C.0.29

D+25 43.83
43.43
C.0.40

44.24
43.44
C.0.80

4270
42.53
C.0.17

4296
42.72
C.0.24

0+13 BC 4283
43.56
C.0.67

44.16
43.50
C.0.66

4284
42.68
C.0.16

43.19
42.84
C.0.35

0+00 PL. Tonopah
13.04 STAKE
4345 GRADE
C.0.41

46.34
43.52
C.2.82

43.11
42.83
C.0.29

43.39
42.96
C.0.43

Lita
Asher to Littlefield

#2

→
40.48
40.73
F 0.25

41.82 ←

41.62
41.79
F 0.17

42.38
42.29 41.29
C 0.09

#1

40.65
41.00
F 0.35

41.70

41.69
41.72
F 0.03

42.28
42.22
C 0.06

3+87 BC
at Asher

41.08
41.22
F 0.14

41.91
41.71
C 0.20

41.58
41.56
C 0.02

42.25

3+75

41.17
41.33
F 0.16

41.99 41.99
42.76 41.77
F 0.77 C 0.22

41.53
41.23
C 0.30

42.35

3+50

41.10
41.48
F 0.08

42.15 42.15
42.68 41.88
F 0.73 C 0.27

40.98
40.96
C 0.08

42.59

3+25

41.30
41.63
F 0.33

42.69
42.00
C 0.69

40.55
40.40
C 0.15

42.09

3+00

41.67
41.78
F 0.11

42.29
42.12
C 0.17

START

1755
1230
42.61
F 0.31

1230
43.10
43.11
F 0.01

2+90

1508
44.86
C 0.22

1580
45.36
C 0.14

1735 PNC
1218
42.46
F 0.28

1299
42.96
C 0.03

2+65

1259
44.39
C 0.20

1535
44.89
C 0.46

1725
1227
42.39
F 0.12

1302
41.89
01.13

2+40

1385
43.92
F 0.07

4468
44.42
C 0.22

1700
1217
42.24
F 0.07

1302
41.74
C 1.28

2+15 EK

13.38
43.45
F 0.07

4401
43.95
C 0.09

0+75
1203
42.09
F 0.06

1295
41.59
C 0.36

1795

1269
43.18
F 1.01

4363
43.68
C 0.03

0+50
1204
41.94
C 0.10

1268
41.44
C 0.24

1775

1221
42.83
F 0.02

4324
43.33
F 0.09

ON Asher

2159' west 8
E C Asher
§ Liota

39.13
39.39
So. F 0.26
39.90
39.89
No. C 0.01

#1 Ph.

46.16
45.99
C 0.17
47.23
47.25
F 0.02

3+62.17 B.C. et Little.

45.54
46.07
F 0.53
48.15
46.73
C 1.72

3+45.17

45.70
45.90
F 0.20
46.91
46.40
C 0.51

3+15

45.46
45.33
C 0.13
46.27
45.83
C 0.44

Roberts
Cota
Moore
Morales
9-11-53
W.O. # 32108

Grade Stakes Alley Blk 69, Park Villas

10307L

64

0+80 EVC

32118
319.00
318.94
F.0.6

324.87
323.86
C 1.01

0+60

319.99
317.92
C 2.07

323.61
322.83
F 0.78

0+40

319.13
316.03
C 3.10

325.14
323.26
C 1.88

0+20

316.93
313.31
C 3.62

324.79
322.59
C 2.20

0+10

315.91
311.75
C 4.16

323.75
321.76
C 1.99

N. Line
0+00 Dwight

310.48

311.68

323.31
320.92
C 2.39

BM

SEBP
324.01 Dwight &
Pershing

321.56
319.84
C 1.72

322.60
320.09
C 2.51

3+55	325.86 324.93 C 0.93	326.46 325.18 C 1.28	4470	326.91 325.94 F 0.97	327.87 327.17 C 0.76
3+30	325.14 324.80 C 0.34	326.44 325.05 C 1.39	4450	326.34 326.30 C 0.04	327.49 326.55 C 0.94
3+05	324.68 324.46 F 0.22	327.46 324.93 C 2.53	4430	326.36 325.90 C 0.66	326.57 326.00 C 0.57
2+80 EKC	324.95 324.55 C 0.40	326.63 324.80 C 1.83	4410	326.09 325.30 C 0.79	326.52 325.65 C 0.87
2+60	324.38 323.67 F 0.71	325.55 324.63 C 0.92	3+90 PVC	325.10 324.71 F 0.39	325.60 325.35 C 0.25
2+40	324.07 322.86 F 1.21	325.51 324.32 C 1.19	3+80	325.05 324.50 F 0.55	325.76 325.30 C 0.46

5790 327.76
 326.60
 C 1.16

332.63
327.40
C 5.23

5790 328.17
 327.12
 C 1.05

332.03
327.78
C 4.25

5790 329.33
 327.45
 C 1.88

329.63
327.98
C 1.65

5790 327.60
 327.27
 F 0.33

329.04
328.03
C 1.01

5790 327.56
 327.21
 F 0.35

328.95
327.91
C 1.04

4490 327.32
 326.55
 F 0.77

328.92
327.62
C 1.30

5799.69 So. Lime 326.29
 Lardis ✓

327.17

Roberts
Cota
Moore
Morales
9-17-53
W.A. #32175

Rough Grades Tonopah
Morenci Ely to Paving

67

10075L

25' ST.
7' abt PL.

0 + 86.57 Elast Pav. 40.98 40.95

0 + 76.57 4515
41.63 C 3.5 41.63

0 + 66.57 4537
41.94 C 3.4 41.94

0 + 39.98 4561
42.28 C 3.3 42.28

0 + 13 8c Morenci 4572
42.62 C 3.1 42.62

Roberts
Cota
Moore
Morales
9-17-53
W.O. # 23679

Rough Grades Montezuma

Camparielle Manor #1

Plane
Wrong

8349L

68

2730

45541

453.70

C1.7

2700

45500

453.24

C1.8

1750

45466

452.78

C1.9

452.78
128
454.06 ← Elevation

1700

45442

452.32

C2.1

0750

45410

451.86

C2.2

451.86
144
453.30

0700 P.L. BC at
Camparielle

451.40

Plane
Wrong

W15. Bdry.
3 + 95.09 Camparielle #1

45640

454.57

C1.8

45457

126

45643

✓ 56.43

3 + 47.36

45599

454.41

C1.6

3 + 17.36

45585

45427

C1.6

2 + 87.36

45541

454.04

C1.4

2 + 75.11

45551

453.93

C1.6

Roberts
Cota
Moore
Brunner
W.O. #33245

Grade Stakes Survey
Littlefield & Knoxville
10/1972

69

9-21-53

17.07

1+15 NH#1

12.70

actual 1+17.5

C 437

1+0.0

16.76

12.67

C 412

0+75

16.39

12.54

C 405

0+50

16.56

12.44

C 412

0+25

16.59

12.37 ✓

C 425

0+00 Exist DE
Littlefield

16.58

12.24

C 434

BW

SWBP

1880 Berryfield

2+50

18.03

13.24

C 479

2+25

17.80

13.14

C 466

2+00

17.82

13.04

C 478

1+75

17.69

12.94

C 475

1+50

17.73

12.84

C 489

1+25

16.90

12.74

C 416

3475
1882
13.74
C 5.08

3465 NH #2
1880
13.70
C 5.10

3456
1829
13.64
C 4.65

3425
1820
13.54
C 4.66

3400
1864
13.44
C 4.60

2475
1874
13.34
C 5.40

4495 DE
1935
14.22
C 5.13

4475

4450

4425

4400

1865
14.14
C 4.51

1859
14.04
C 4.55

1870
13.94
C 4.76

1871
13.84
C 4.87

Roberts
Cota
Moore

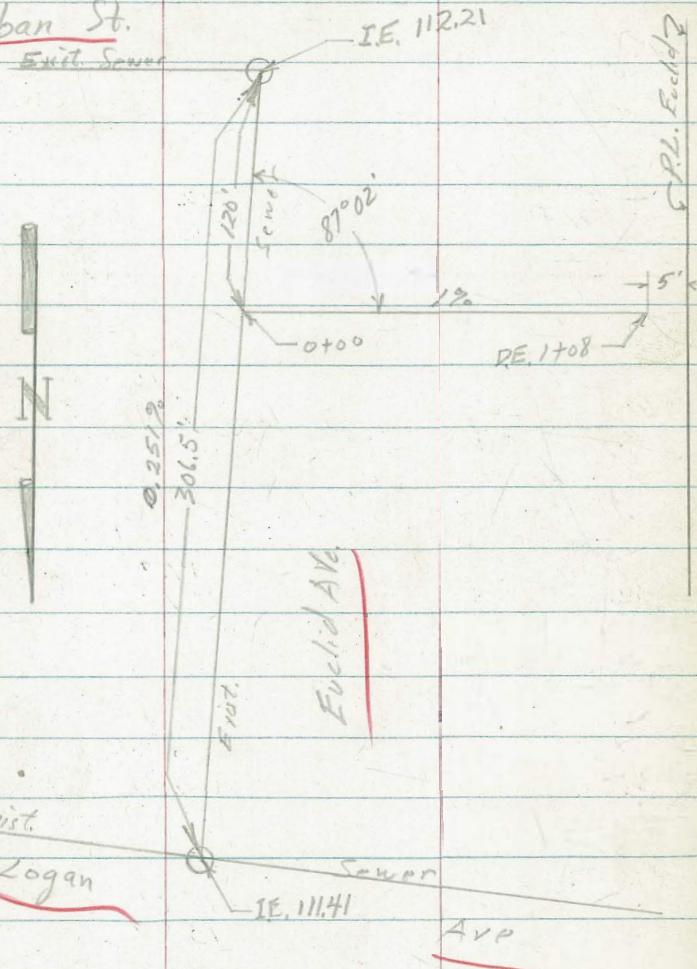
9-23-53

W.O. #20009

Grade Stake Survey in Euclid
South of Logan.
City Forces
Location & Grade per Station
(8" vitrified clay pipe)

71

Coban St.
Exit Sewer



0+50 GRD. 118.0

118.09

112.72

C 5.37

0+32 GRD 118.0

122.49

112.47

C 10.02

0+25 GRD 123.0

0+20 GRD. 125.1

125.574 - cb. g.

112.40

C 13.19

Gutt.

0+18 125.11

Mark Conn. Calc. 111.72 IE. 124.51
0+00 GRD 124.65 112.22 Conn.

C 12.29

BM 111.32 BP Headwall Culvert No. side Logan
100' west of Euclid.

1708 DE
5'E. of Prop.

GRD 118.4

118.58
113.30
C 5.28

1706 GRD. 118.4

118.52
113.22
C 5.30

0+75 Pav. 118.37

118.34
112.97
C 5.37

0+68 Approx. & Pav.
Pav. 118.44

118.41
112.90
C 5.51

Roberts
cata
Nicoce
Brunner
9-28-53
W.O. 32175

Gork Soaker Asher
Xieta to Morenci
100722

73

0+75	4480 44.71 C 0.09	4472 44.18 C 0.54	E Con Alley	46.16 46.54 F 0.38	45.99 45.26 F 0.13
------	-------------------------	-------------------------	-------------	--------------------------	--------------------------

0+50	44108 43.85 C 0.23	4372 43.33 C 0.39	P.L. End Alley Rot.	4787 46.64 C 1.23	46.65 46.09 C 0.56
------	--------------------------	-------------------------	------------------------	-------------------------	--------------------------

0+25	4312 43.00 C 0.12	4314 42.49 C 0.65	P.L. End Alley Rot.	4717 46.13 C 1.04	45.58 45.36 F 0.22
------	-------------------------	-------------------------	------------------------	-------------------------	--------------------------

EC ab Rot 0+13 on Asher	42.59 42.56 F 0.03	430.8 42.09 C 0.99	E.C. on Alley	46.03 45.50 F 0.53	45.53 45.48 C 0.05
----------------------------	--------------------------	--------------------------	---------------	--------------------------	--------------------------

#2	42.35 42.67 F 0.28	4243 41.82 C 0.61	Alley Red. 1+10.5 BC on Asher	45.92 45.50 F 0.42	45.53 45.37 C 0.16
----	--------------------------	-------------------------	----------------------------------	--------------------------	--------------------------

#1	42.25 42.22 F 0.03	4217 41.70 C 0.47	1400	45.56 45.50 GRADE	45.25 45.02 C 0.23
----	--------------------------	-------------------------	------	-------------------------	--------------------------

B.C. + 0713 Morenci	5127 5125 F0.02	50.60 50.34 F0.26
------------------------	-----------------------	-------------------------

B.C. + 2727 Morenci	49.90 49.01 F0.89	49.30 48.58 F0.72
------------------------	-------------------------	-------------------------

Z700	48.97 48.60 F0.37	48.39 47.77 F0.62
------	-------------------------	-------------------------

1475	48.12 47.96 F0.16	47.55 47.19 F0.36	0786.74 Curb Actual 5157 Exit 5160	51.25 atual 51.27
------	-------------------------	-------------------------	---------------------------------------	----------------------

1450	49.26 47.26 GRADE	46.77 46.70 C0.07	0766.74	5 51.49 51.30 F0.19	51.19 50.91 F0.28
------	-------------------------	-------------------------	---------	------------------------------	-------------------------

1429.50 BL on Asher	Ales Red 46.57 46.16 F0.41	46.02 45.86 F0.16	0746.74	5146 51.40 C0.06	50.96 30.79 F0.17
---------------------	-------------------------------------	-------------------------	---------	------------------------	-------------------------

Roberts
Cota
Hoover
Muratore
10-9-53
M.O. # 23679

Curb Stake Montezuma
Campanille Manor #1
8349.6

75-

2787.3 C

45439
454.04 ←
C 0.35

1425

452.55
452.29
F 0.26

2775.11

45439
453.93
C 0.46

140.

452.32
452.15
F 0.17

2750

453.70
453.64
F 0.06

0+75

452.38
452.09
C 0.29

2725

453.47
453.21
F 0.26

0+50

451.89
451.86
C 0.03

2700

453.24
452.61
F 0.63

0+25

451.63
451.47
F 0.16

1475

453.01
452.45
F 0.56

0700 cb. EC

451.40

1450

452.78
452.45
F 0.33

3495.69 w/o bdry.

45587
454.51
C0.50

3447.36

45454
454.41
C0.13

3417.36

45463
454.27
C0.36

Roberts

Cota

Moose

Morelez

10-20-53

W.O. # 20009.

Grade Stakes For Sewer (City Forces)

Point Loma Aves - Sunset Cliffs Blvd, West
Location & Grade per Survey

F.B. 1837 pg 13

1355 D

77

16.45

15.90

C2.55

18.51

15.86

C2.65

18.89

15.69

C3.20

19.09

15.51

C3.58

19.47

15.34

C4.13

15.16

1405 DE

1400

0+73

0+50

0+23

0+00 Exist NH

INDEXED

NOV 2 - 1953

Vertical

105' Sewer under construction

Exist 15" Trunk Sewer

Sunset Cliffs Blvd.

Point Loma Ave.
Exist Sewer

B.M. SW 72d & C.T. Point Loma Ave
& Sunset Cliffs Blvd. 20.59

Roberts Grade Stakes For Sewer
Cota Marilou & Altadena
Moore
Morales
11-27-53
W.D. # 21009

78

City Forces
Grade 29.7 per station
140' Ely

1440 DE

1140 C T
102.80
11.26
107
C 10.19

1405

1140 C T
102.10
11.96
3.51
C 8.45

0+70

1140 C T
101.40
12.66
5.37
C 7.29

0+35.

1140 C T
100.70
13.36
6.94
C 6.42

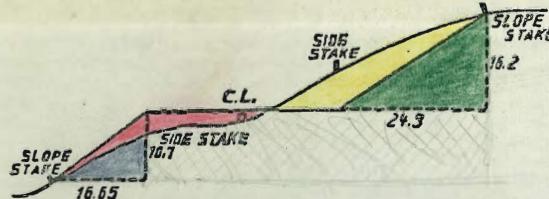
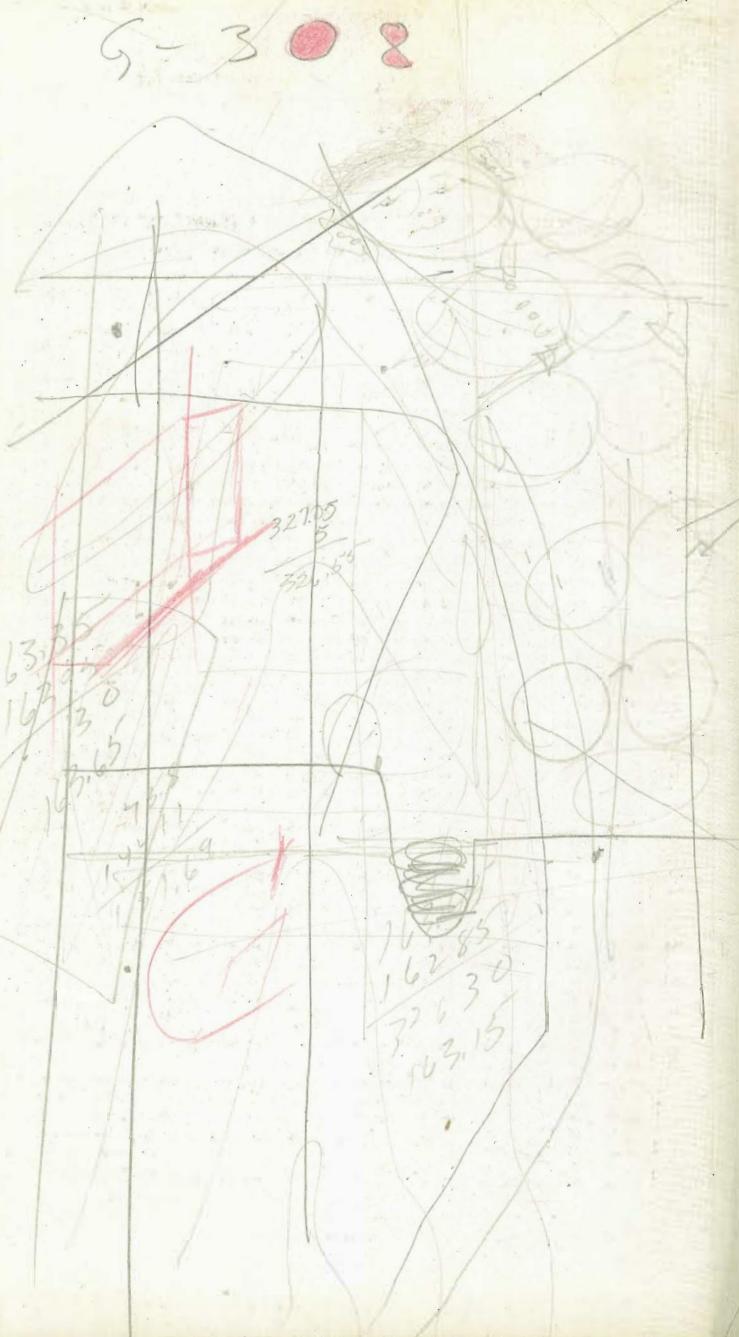
Existing
MH Marilou
and Altadena
0700

100.00 Assumed

EM 14.06 114.06 T

100.00 INVERT Existing
MH Assumed

80



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.
SLOPE $1\frac{1}{2}$ 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	71.20	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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