EL CAPITAN

PIPE LINE SURVEY

Levels No 1

W189

B.M. Nail in CG + E Pole = 345.855
Sta - 659

Lev. Stk 344.838

#189

Preliminary Survey El Capitan
Pipe Line

Bench Marks (Bissell) Page 7 to 8
Levels and Profile
from 0+00 to 725+00 - 8 to end of book
C.M. Boren

MICROFILMED
JAN 8 1965

Sta	+	−	⊼	Elv
℄ Bridge +15		11.8		319.7
681		11 −		320.5
680		6.5		325.0
679		6.7		324.8
Top Stk			331.49	326.70 ✓
678	5.797	4.855	341.898	336.111 ✓
Gas Co Pole* 75591				327.202
675+90=30' L Spk.	BM.	3.332		327.634
678		5 −		325.5
677		5.5		325.0
676		5.5		325.0
675		4.7		325.9
674		4.3		326.3
673		3 −		327.5
Top. Stk			330.55	327.15
672	3.402	7.424	340.966	337.564 ✓
672		7.2		327.2
671		6.8		327.6
670		5.6		328.8
669		5.0		329.4
668		3.9		330.5
667		3.6		330.8
Top Hub			332.31	331.23
666+00	3.144	5.424	344.788	341.644 ✓
666		5.5		331.1
665		5.4		332.2
664		4.8		332.8
663		4.3		333.3
			336.65	
J.P. Top Stk	4.435		347.068	
Sta 662+00	347.068			332.419 ✓
				342.838

Sta	+	−	⊤	Elv.
699		4.9		324.7
698		4.6		325.0
697		4.3		325.3
Top Stk			329.63	325.17
696	4.506	5.433	~~340.032~~	~~335.526~~
696		5.6		324.0
695		5.7		324.9
694		5.4		325.2
693+67		5.7		324.8
B.M. Pepper Tree Spk				326.80 — D.L.B.
Stk Sta 694+00		3.748		~~329.211~~
693		5.8		324.7
692		5.9		324.6
691		5.9		324.6
Top Stk			330.15	324.85
690	5.705	3.873	~~340.159~~	~~335.264~~
690		4 —		324.7
689		4.3		324.4
688		4.6		324.1
687		5.1		323.6
686		5 —		323.7
685		4.9		323.8
Top Stk			328.7	323.54
684	5.178	7.949	~~339.127~~	~~333.949~~
684		8 —		323.5
683		8.3		323.2
682		7.9		323.6
681+75		6.6		324.9
			331.49	
			~~341.898~~	

Sta	+	−	⊼	Elv.
716		3.7		317.0
+46		3.6		317.1
+30		6.9		313.8
715		6.9		313.8
+89		6.7		314.0
714+76		6.1		314.6
Tp. Stk.			330.68	317.81
714	2.870	5.41	~~331.067~~	~~313.197~~
714		5.4		319.8
713		5.2		318.0
712		4.9		318.3
711		4.8		318.4
710		2.9		320.3
709		3.2		319.9
Top. R.W Hub			~~330.324~~	320.41
Sta. 708+00	2.813	7.195	~~330.608~~	~~330.795~~
708		7.3		320.2
707		6.3		321.2
706		5.3		322.2
705		4.5		323.0
704		3.5		324.0
703		2.8		324.7
Top Stk			~~327.55~~	335.07
702	2.410	4.502	~~331.940~~	335.530
702		4.6		325.0
701		4.3		325.3
700+00		4.6		325.0
			329.63	
			~~340.032~~	
			10.40	~~329.63~~

Sta	+	—	∧	Elv.	
734		5.6		311.3	
733		5.8		311.1	
732		3.5		313.4	
Top Hub			316.89	313.26	
Sta 731+73	3.630	6.970	~~327.240~~	323.610	✓
+73		7 —		313.2	
731		7.5		312.7	
730		7.5		312.7	
729		7 —		313.2	
728		4.4		315.8	
727		4.8		315.4	
726+25 BM 57'L				318.39	D.L.B.
Spk in Euc. Tree				~~318.555~~	
Top. Stk		20 5	320.18	315.22	
726	4.965	3.885	~~330.580~~	~~335.615~~	✓
726		4 —		315.1	
725		4		314.6	
724		4.7		314.4	
723		4.7		314.4	
722		6 —		313.1	
721		4 —		315.1	
Top. Stk			319.11	315.05	
720	4.060	5.630	~~329.500~~	~~325.437~~	✓
720		5.8		314.9	
719		7 —		313.7	
718		5.9		314.8	
+35		4.5		316.2	
717		4.2		316.5	
			320.68		
			~~331.067~~		

Sta	+	−	⊼	Elv.	
Top Stk			318.88	306.12	
752	12.760	3.060	~~329.192~~	~~316.432~~	
751		3.3		305.8	
750		3.9		305.2	
Nail in Sag Tree		5.8		303.3	
Sol. Sta 749+75	B.M.	2.838		306.346	D.L.B.
749		6.1		~~308.654~~	
Top Hub			309.15	303.0	
Sta. 748	6.857	8.994	~~319.49~~	300.29	
748		9.0		~~312.635~~	
747		8,3		302.3	
746		4.7		303.0	
745		2.4		306.6	
Top Stk.			311.28	308.9	
Sta 744	1.069	2.650	~~321.629~~	310.21	
744		2.9		~~320.560~~	
743		1.8		310.0	
750		1.5		311.1	
742		1.7		311.4	
741		6.2		311.2	
740		7.5		306.7	
739		6.7		305.4	
Top Stk			312.86	306.2	
738	4.732	8.762	~~323.210~~	308.13	
738		8.9		~~318.478~~	
737		8.2		308.0	
736		5.5		308.7	
735		4.6		311.4	
			316.89	312.3	
			327.240		

Sta	+	−	⊼	Elv.
Top Stk				
757		3.646		~~315.43~~ ~~329.546~~
757		4.7		314.2.
756		3.		315.9.
755		3.2		315.7.
754		5.3		313.6.
753		9.7		309.2.

318.86
329.192

No. of B.M.	B.M. El.	from Capitan Dam site		
1	571.460	nail in Tree	3'L 1+69	
2	570.564	Scy Tree	10+05	
3	570.171	Top large bldr. 50'R	19+50	
4	568.844	Oak Tr.	3'R 31+65	
5	543.678	Top large bldr. 15'R	40+85	
6	539.618	Oak Tr.	30'R 52+50	
7	546.027		5'L 60+42	
8	547.160	On large bldr. 20'R	69+80	
9	539.924	Oak Tr.	76+75	
10	547.366		3'L 84+40	
~~10~~	~~544.402~~		~~20'R~~ 96+	
11	545.997 546.043		96+85	
13	508.445	El. pole	100'L 121+0	
~~16~~ 14	503.054	# 7610	134+0	C'L 134+0
~~17~~ 15	502.184	Oak Tr.	6'R ~~138+30~~	137+70
~~19~~ 17	500.758	Scy Tr.	158+	
~~20~~ 20	504.635	Oak Tr.	167+40	
~~22~~ 22	491.346	On Pole	183+50	
~~18~~	~~487.684~~	~~On large rock~~	~~206+34~~	
27	480.800	Oak Tr.	15'L 221+40	
20	486.569	On cor. fencepost.	226+80	
21	463.134	Scy Tr.	262+	
22	455.786		275+65	Sc 4 Lr 15'L
23	443.824		303+	

No. 24	439.071	U.S.G.S. Pump plant	317+	
25	450.817	on pole #74387	338+25	
26	466.279	# 74389	351+16	
27	458.835		363+	
28	403.676	# 76129	392+75	
29	478.634	Guy Pole opp. # 76126	400+60	wrong
30	400.400	Co. B.M. #19 Tree	486+	
31	394.140	# 20 pole	449+70	
32	393.632	pole 72476	457+50	
33	384.057	Top Conc. Culv. E. Side	470+80	
34	383.083	El. pole 72947	474+30	
35	381.949	Co. B.M. #18	480+40	
36	374.021	End RY Struct.	506+25	
37	376.708	El. pole 72413	509+75	
38	365.717	Co. B.M. #16	515+05	365.627
39	362.764	Top of post RY culv. # 34	537+45	
40	361.955	Co. B.M. #15	545+	
41	369.157	# 13	556+50	
42	365.844	# 12	571+50	
43	365.444	# 11½	580+50	
44	369.682	# 11 Turn of Rd. Surface		
45	364.547	El. pole 72280	595+85	
46	343.642		617+70	

No.				
47	336.883	El. pole		641+
48	335.492	″ ″		660+
49	329.242	″ ″		675+40
50	326.837	Pep. Tr.		694+
51	317.674	Euc. Tr.		725+30
52	318.248	″ ″		776+25
53	306.390	Soy	″	749+75

Nov 16 - 1925
Profile El Capilan Conduit

Boren
McCarty
Simpson

S	+	HI	−	Elev	BM.
0+0				571.460	#0
	8.666	580.126			
0-56			6.1	574.0	
0+0			9.0	571.1	
1+0			0.5	579.6	
+10			0.0	580.1	
T.P.			0.891	579.235	TP
	6.309	585.544			
1+63.1			0.1	585.4	
+74.1			4.4	581.1	
2+0			5.3	580.2	
TP			4.645	580.899	
	0.480	581.299			
3+0			2.6	578.7	
3+54.3			4.8	576.5	
+85			11.0	570.3	
4+00			8.3	573.0	
T.P.	7.734		7.734	573.565	
	6.403	579.968			
+98			5.1	574.9	
TP			0.617	579.351	
	4.147	583.498			
5+90			3.1	580.4	
6+00.3			3.2	580.3	

Sta 0+0

S	+	HI	−	Elev. HCM	
Chg.		583.498			
6+60			4.1	579.4	✓
6+86.1			5.0	578.5	✓
7+0			5.2	578.3	✓
+10			8.7	574.8	✓
T.P.			9.137	574.361	✓
	1.662	576.023			✓
7+99.8			5.3	570.7	✓
9+00			4.5	571.5	✓
+10			6.6	569.4	✓
+99.5			3.0	573.0	✓
T.P. on	B.M. #1		5.459	570.564	✓
	5.588	576.152			
11+00			4.4	571.8	✓
+30			3.9	572.3	✓
+45			5.7	570.5	✓
T.P.			7.686	568.466	✓
	11.677	580.143			✓
+98.1			3.5	576.6	✓
13+00			1.6	578.5	✓
13+73			1.7	578.4	✓
14+0			0.5	579.6	✓
T.P.			0.630	579.513	✓
	2.211	581.724			✓
14+04.6			1.2	580.5	✓

BM #1 opposite 10+05 on Tree

Bookkeeper 570.561

Elevations Checked By [illegible]

S	+	T	−	Elev	
14+48		581.724	11.5	570.2	✓
T.P.			10.667	571.057	✓
	2.953	574.010			✓
15+0			4.8	569.2	✓
15+40			3.6	570.4	✓
16+0			8.6	565.4	✓
+20			11.9	562.1	✓
+50			10.9	563.1	✓
+60			6.0	568.0	✓
T.P.			4.070	569.940	✓
	2.051	571.991			
18+00			3.1	568.9	✓
18+29.9			3.3	568.7	✓
+46			3.5	568.5	✓
+80			7.2	564.8	✓
+92			7.5	564.5	✓
19+00			5.9	566.1	✓
T.P.		~~1.380~~	1.380	570.611	
	10.864	581.475			
			11.368	570.107	Record Elev 570.171

Returned to T.P. on Rock and Checked as follows.

			569.940	PT on
	2.085	572.025		
			1.853	570.172 Record Elev 570.171 ✓

guil Hare 4.25 P.M. Stone ~~Peg~~ near Sta 17+00

* at T.P. on stone which is a large Rounded Boulder we discovered that 4 different Readings Could be had and the Rod be apparently upon the Point. After Several Trials the Rod was Read while Resting Exactly ~~only~~ upon the Keel Mark. A Fore Sight to the B.M. gave a Check as noted below

(Nov 17 1925) C.M.B. W.H.S. P.E.R.

570.171
570.107
.064 on B.M. on Rock North of Rd opp 19+50

* See Note above

Rock Set. Last P.M.

S	+	T	−	E	
14+				570.171	B.M.
T.P	11.072	581.243			
	19+40		4.3	576.9	
15	+54.3		4.8	576.4	
15	20+00		5.1	576.1	
16	+17		11.7	569.5	
	+21		6.9	574.3	
	T.P.		7.462	573.781	
	8.367	582.148			
T	20+44.8		8.1	574.0	
	+80		8.1	574.0	
18	21+00		8.6	573.5	
18	+25		10.0	572.1	
	+40		12.0	570.1	
	+81.2		12.3	569.8	
	22+0		12.2	569.9	
19	+24		5.2	576.9	
	T.P.		0.968	581.180	
	11.199	592.379			
	23+00		7.6	584.8	
	+53		3.6	588.8	
	+98		3.3	589.1	
	24+25		4.1	588.3	
	TP		3.162	589.217	
	11.641	600.858			

North of Sta 19+50

Top of onward slope Sta 24+

S	+	↑	–	El
		600.858		
24+75			5.2	595.7
25+00			6.1	594.8
25+25			4.1	596.8
+45			1.2	599.7
TP.		604.948	2.360	598498
	6.450	594.408		
26+00			5.2	599.7 / 587.2 / 602 8
+60			9.1	593.3
+91			5.6	599 3 / 588.8
27+17			7.4 / 3.6	597.5 / 590.8
+25.6			7.6	597.3
TP		591.046	11.432	593,516 / 582.976
	0.530	583.506		
27+50			1.4	592.6 / 587.0
24+83			7.0	576.5
TP.		582.961	11.580	582,466 / 571.926
	0.495	572.421		
28+0			2.1	580.9
+50			10.5	572.5
TP.		574.604	10.442	572.519
	2.085	564.064		
29+00			5.5	569.1
29+27			5.4	569.2
29+63.3			8.5	566.1

Sta	+	⊼	−	El	Item
TP		574.684 ~~564.864~~			
			9.077	565.527 ~~554.987~~	
	7.195	572.722 ~~562.177~~			
30+0			6.7	566.0 ✓	
+50			8.1	564.6 ✓	
31+0			6.8	565.9 ✓	
			3.929	568.793 ✓ ~~558.248~~	
Peg Line from BM # 2					
				570.171	
	5.313	575.484 ✓			
			0.245	575.239 ✓	
	11.575	586.814 ✓			
			0.717	586.094 ✓	
	5.755	591.852 ✓			
			11.471	580.381 ✓	
	0.360	580.741			
			11.632	569.109 ✓	
	0.080	569.189 ✓			
			3.420	565.769 ✓	
	5.278	571.047			
			2.203	568.844	True Elev

BM # 3 on oak Sta 31+65 Record Elev = 568.840

Correct Elev.

Here 4 P.M. Tues Nov 17

Thursday Nov 19

{Baren
{Simpson

S	+	T	−	Elev Hcm	BM
					568.844
	4.311	573.155			
31+05			4.7	568.4	5
32+23			7.6	565.5	6
32+95			4.5	568.6	7
T.P.			10.968	562.187	
	2.440	564.627			
34+00			3.6	561.0	
35+00			8.1	556.5	
36+00			11.6	553.0	
T.P.			5.980	558.647	
	5.790	564.437			
37+00			2.1	562.3	
+14			3.1	561.3	
+45			6.3	558.1	
+80			1.3	563.1	
38+00			4.1	560.3	
T.P.			5.169	559.268	
	8.136	567.404			
38+95			1.2	566.2	
39+20			3.7	563.7	
T.P.			11.536	555.868	
	6.135	562.003			
39+75			14.8	547.2	Rd Boat
40+00			15.4	546.6	

	+	H.I.	−	E	Hcm
		562.003			
40+38			16.7	545.3	Boosted
+58			9.0	553.0	
+78.2			2.5	559.5	
~~B.M.~~ T.P.			7.395	554.608	
	0.975	555.583			
41+00			4.5	551.0	
B.M.			11.905	543.678	
41+55			13.7	541.8	
+65			13.9	541.6	
42+00			4.6	550.8	
+15			7.2	548.4	
+35.7			7.7	547.9	
+71			5.5	550.0	
+85			12.0	543.5	
43+00			1.5	554.0	
T.P.			11.094	554.474	
	6.356	560.830			
43+55			3.5	557.3	
44+00			4.4	556.4	
+75			9.0	551.8	
45+00			9.6	551.2	
T.P.			9.433	551.397	
	4.464	555.861			
45+89			5.0	550.9	

This is an old B.M. on Tree at Sta 41+7
Is used as T.P

Sta 40+85

Rock 15' R ↑ Record Elev 543.675 ~~40+85~~

	+	−	Elev
		555.861	
46+00		6.9	548.9 (9.0)
T.P.		10.887	544.974
	5.967	550.941	
47+00		14.8	536.1
48+00		12.6	538.3
+75		1.7	549.2
+90		2.6	548.3
49+00		4.2	546.7
+30		7.4	543.5
50+00		6.0	544.9
T.P.		5.324	545.617
	1.736	547.353	
50+45		4.2	543.1 (2)
51+00		3.9	543.4 (5)
+75		10.3	537.0 (1)
52+00		11.0	536.4 (4)
T.P.		10.995	536.358
	3.887	540.245	
BM #6		0.627	539.618
	0.904	540.522	
52+75		4.4	536.1
53+0		4.5	536.0
54+00		4.7	535.8
+60		4.1	536.4
T.P.		1.873	538.649

Record Elev 539.648 appears not correct
See check on BM. #6 next Page
C.B

S	+	=	+	= Elev
				538.649
	3.234	541.883 ✓		
54+75			2.0	539.8 ✓
+90			2.4	539.4 ✓
55+00			4.4	537.4 ✓
+20			1.4	540.4 ✓
+50			6.5	535.3 ✓
56+00			6.9	534.9 ✓
57+0			6.7	535.1 ✓
+80			6.9	534.9 ✓
TP			6.113	535.770 ✓
	0.832	536.602 ✓		
58+0			1.1	535.5 ✓
+84			3.9	532.7 ✓
59+00			3.8	532.8 ✓
+25			6.5	530.1 ✓
T.P.			0.776	535.826 ✓
	10.203	546.029 ✓		
+60+00			0.90	545.1 ✓
+15			1.6	544.4 ✓
BM #6 ⑦			0.002	546.027 ✓
61+00			4.5	541.5 ✓
T.P.			4.687	541.342 ✓
	0.341	541.683 ✓		
62+0			2.7	538.9 ✓

B.M. #7 on oak Left Sta 60+42 Recorded Elev 546.033

Sta	+	π	−	Elev Hum
		541.683		
+30			4.3	537.8 4 ✓
+50			8.9	532.7 8 ✓
63+00			7.9	533.7 8 ✓
+31			6.9	534.7 8 ✓
TP			6.987	534.696 ✓
	11.252	545.948 ✓		
+85			11.0	534.9 ✓
+95			14.2	531.7 ✓
64+00			12.2	533.7 ✓
+20			7.6	538.3 ✓
65+00			0.0	545.9 ✓
TP			0.737	545.211 ✓
	9.072 ~~9.007~~	554.283 ✓		
65+50			4.7	549.5 6 ✓
66+00			2.1	552.2 2 ✓
+83			3.5	550.7 8 ✓
TP			4.072	550.211 ✓
	1.662	551.873 ✓		
TP			10.068	541.805 ✓
	0.368	542.173 ✓		
67+35			6.7	535.5 5 ✓
68+00			6.1	536.0 1 ✓
TP			6.405	535.768 ✓
	11.708	547.476 ✓		

	+	A	−	Elev HCM
		547.476		
68+15			10.7	536.7
+90			0.0	547.4
TP			0.719	546.757
	9.584	556.341		
69+00			4.6	551.7
+75			4.0	552.3
70+00			6.2	550.1
BM			9.180	547.161
			9.180	547.161
+70			8.3	548.0
70+06			4.4	551.9
TP			4.368	551.973
	392.2	555.895		
+30			3.4	552.5
71 +95			7.1	548.8
72+00			7.8	548.1
	11.568		11.568	544.327
	0.293	544.620		
73+0			0.4	544.2
+90			6.3	538.3
74+0			3.3	541.3
+70			2.7	541.9
75+0			5.8	538.8
TP			6.433	537.987

BM #8 Record Elev 547.180

Sta	+	↑	−	A.C.L. - checked T.P.'s
				537.987
	2.923	540.910		
+75	+60		5.4	535.5
	+70		4.7	536.2
	+85		8.5	532.4
76	+0		10.4	530.5
TP			10.406	530.504
	4.331	534.835		
76	+75		8.2	526.6
77	+0		7.8	527.0
	+35		3.7	531.1
	+78		2.4	532.4
78	+0		3.3	531.5
	+95		2.4	532.4
	+85		4.4	530.4
79	+0		3.2	531.6
	+55		2.1	532.7
TP			1.327	533.438
	1.560	534.998		
79	+80		2.8	532.2
80	+0		2.8	532.2
	+45		4.5	530.5
81	+00		4.7	530.3
	+60		8.1	526.9
82	+00		7.7	527.3
TP			11.690	523.308

Here Nov 19 - 5 P.M.

B.M. #8 was unintentionally missed. Being not expected before about St. 80 where as, it is near 76 and was passed by.

	+	℄	−	E A.G.L.
				523.308
	9.185	532.493		
83+0			4.7	525.8
+35			7.2	525.2
TP			1.546	530.947
	11.773 @	542.720		
83+65			5.2	537.5
84+00			3.3	539.4
TP			0.435	542.285
	9.480	551.765		
84+25			9.2	512.6
B.M. #10			4.399	547.366
+50			4.9	543.8
+75			4.2	547.6
85+0			8.0	543.8
+10			10.8	540.8
+36.8			7.9	543.9
TP			7.848	543.917
	9.592	553.509		
+45			13.7	539.8
86+0			16.5	537.0
+50			13.3	540.2
+85			13.4	540.1
87+00			10.6	542.9
+37			4.5	549.0

Record Elev 547.382 St. 84+40

Rod "Boosted"

A.C.L. – checked T.P.'s

+	T	E	
	553.509	~~553.509~~	
		2.9	550.6 ✓
88+00		3.1	550.4 ✓
+20		0.8	552.7 ✓
+90		0.5	553.0 ✓
TP		0.842	552.667 ✓
	10.440 ✓	563.107 ✓	
89+00		4.9	558.2 ✓
TP	~~0.687~~ ✓	0.687	562.420 ✓
	6.289 ✓	568.709 ✓	
89+25		2.2	566.5 ✓
+40		1.9	566.8 ✓
+65		10.0	558.7 ✓
89+95		8.5	560.2 ✓
TP		11.422	557.287 ✓
	5.412 ✓	562.699 ✓	
90+00			546.4 ✓
91+00		11.3	557.8 ✓
+35		1.4	561.2 ✓
T.P.		1.867 ✓	560.832 ✓
	9.698 ✓	570.530 ✓	
92+0		3.3	567.2 ✓
+50		7.0	563.5 ✓
93+0		11.8	558.7 ✓
+60		4.4	566.1 ✓

is 13.8' Lower than 89+95 abrupt drop.

	+	H.C.I. H	−	E
		570.530		
TP			4.511	566.019
	0.575	566.594		
94+0			2.0	564.5 6
+10			2.1	564.4 5
TP			10.602	555.992
	0.375	556.367		
95+0			4.5	551.8 9
+20			1.7	554.6 7
+85			4.7	551.6 7
96+0			8.6	547.8 8
TP			8.372	547.995
	1.429	549.424		
96+			4.5	542.9
+85			4.9	544.5
BM.	2' L 96+85		3.427	545.997
97+00			2.7	546.7
+15			3.1	546.3
B.M.	(Temporary)		1.084	548.340
+52			5.4	544.0
TP			10.814	538.610
	0.998	539.596		
98+00			2.0	537.6 6
+85			7.5	532.1 1
99+00			10.1	529.5 4

546.043
545.993
000.050

Note BM #10 Noted as being "20' R. of 96+" Elev 544.402 Could not be found. A B.M at 2' Left Sta 96+85 was found. Up on an oak which Leans So that it is impossible to plumb the Rod. We got an Elevation here = 545.997 I should Estimate this is Not reliable Nearer than 0.05 This is Noted as "N BM Elev 546.043 2' Left Sta 97+40 Point on Ledge of Rock Set BM on pt ↑

	+	RCL.	−	E	
		539.598			
T.P			10.643	528.955	
	3.910	532.865			
99+35			8.3	524.56	
+70			4.6	528.23	
100+00			5.8	527.09	
+15			5.6	527.21	
+75			1.3	531.56	
+85			2.0	530.89	
101+00			5.2	527.71	
+16			3.7	529.12	
TP			3.484	529.381	
	2.600	531.981			
+35			6.7	525.23	
+55			3.6	528.34	
102+00			1.3	530.64	
+10			0.6	531.34	
+30			2.9	529.01	
+60			6.5	525.45	
103+00			5.5	526.45	
TP			6.996	524.985	
	1.696	526.681			
B.M.			5.790	520.891	
104+0			3.7	522.93.0	
+69			8.1	518.36	

Set Round peg at foot of post N. of Rd opp Sta 103+40

	+	Adj. H.I.	−	Elev
		526.681		
TP			6.426	520.255
	11.802	532.057		
105+0			9.5	522.6
106+0			2.1	529.9 30.0
+40			5.3	526.8
107+0			7.5	524.6
+85			2.0	530.1
TP			1.924	530.133
	0.365	530.501		
108+0			1.3	529.2
+50			11.0	519.5
109+0			11.1	519.4
TP			11.030	519.471
	8.217	527.688		
110+0			12.2	515.5
+50			13.0	514.7
+85			16.9	510.8
111+00			7.0	520.7
TP			0.485	527.203
	10.468	537.671		
111+65			3.8	533.9
TP			1.478	536.193
	11.405	547.598		
111+80			2.7	544.9

	+	H.I. A.C.L. 547.598	−	Elev.
TP			0.628	546.970
	11.862	558.832		
112+0			9.1	549.7
TP			9.177	558.655
	11.621	570.276		
TP			0.996	569.280
	9.696	578.976		
112+55			10.3	568.7
+65			3.9	575.0
+78			3.3	575.7
+88			4.4	574.5
113+00			11.0	567.9
B.M.			4.610	574.366
TP			11.469	567.507
	1.660	569.167		
T.P.			11.704	557.463
	0.264	557.727		
113+20			3.2	554.5
TP			10.820	546.907
	0.563	547.470		
T.P.			11.294	536.176
	0.607	536.783		
T.P.			11.508	525.275

8.0

Nail in 12" oak 20' L Sta 112+78 not Recorded in List of B.M.

Here Friday 5 P.M. Nov 19.

Sat Nov 21

Sta	+	H	−	Elev
				525.~~575~~ 275
	9.150	525.425 ✓		
114+0			5.7	519.7 ✓
TP			11.083	514.342 ✓
	1.126	515.468 ✓		
114+25			4.2	511.~~8~~ 3 ✓
115+0			5.0	510.~~8~~ 5 ✓
116+0			5.1	510.~~7~~ 4 ✓
117+0			5.6	509.~~8~~ 9 ✓
118+0			6.4	509.~~0~~ 1 ✓
TP			~~6.427~~ 6.427	509.042 ✓
	3.410	512.452 ✓		
119+0			3.9	508.~~5~~ 6 ✓
120+0			4.1	508.~~1~~ 4 ✓
B.M. # ~~12~~ 15			4.007	506445 ✓ 508.491

This BM is a nail driven so close up that it is difficult to hold Rod on it.

121+0			4.9	507.~~1~~ 6 ✓
122+0			4.9	507.~~1~~ 6 ✓
TP			4.930	507.522 ✓
	4.156	511.678 ✓		
123+0			4.1	507.~~5~~ 6 ✓
124+0			4.3	507.~~3~~ 4 ✓
125+0			4.6	507.~~1~~ 1 ✓
126+0			5.4	506.~~1~~ 1 ✓

+ Record Elev

508.491
508.445
.046

Sta	+	π	−	Elev	
		511.678			
TP			6.049	505.629	
	4.449	510.078			
126+31			4.2	505.8	
127+0			4.8	505.3	
128+0			5.2	504.9	
+50			4.4	505.7	
129+0			4.7	505.4	
130+0			5.3	504.8	
131+0			6.0	504.1	
132+0			6.5	503.6	
TP			6.600	503.478	
	3.183	506.661			
133+0			3.60	503.1	
134+0			4.1	502.6	
B.M.	#~~15~~16		3.607	503.054	503.146
135+0			4.6	502.1	
136+0			4.8	501.9	
137+0			5.0	501.7	
+08			5.3	501.4	
138+0			4.7	501.0	
T.P.			4.780	501.884	
	4.640	506.521			
B.M.	#~~18~~17		4.318	502.203	502.347

Record Elev

Record Elev

184

184

C'R 137+70

503.146 506.661 360 3.521
503.054 .092

502.347

4.696
3.835
0.861

503.054
502.203
.851

0.869

Sta	+	⊼	−	Elev
				502.203 B.M.
	3.806	506.009		
139+00			4.6	501.4
+50			4.5	501.5
140+0			3.9	502.1
+25			2.8	503.2
TP			1.060	504.949
	8.870	513.819		
+75			5.5	508.3
141+0			7.4	506.4
142+0			1.9	511.9
TP			1.203	512.616
	11.721	524.337		
143+0			6.6	517.7
+68			1.1	523.2
144+0			0.4	523.9
145+0			1.0	523.3
+32			1.3	523.0
146+0			6.6	517.7
TP			11.502	512.835
	0.240	513.075		
147	is about 0.7' Too high To Read			
148+0			5.2	507.9
149+0			7.3	505.8
150+00			7.8	505.3

Sta	+	513075 ⊼	−	Elev	
B.M.	#18		3.820	509.255	Sta 149.
150+0			7.8	505.7	3
150+85			10.2	502.9	
~~151+0~~			10.4	502.7	
151+0			11.717	501.358	
TP.					
	6.704	508.062			
152+0			7.6	500.5	
153+0			9.3	498.8	
154+0			10.6	497.5	
155+0			9.9	498.2	
156+0			6.6	501.5	
TP.			5.185	502.877	
	6.391	509.268			
157+0			6.7	502.6	
157+59			6.7	502.6	Record Elev
BM #	19.		8.510	500.758	500.823
158+00			5.4	503.9	
+68			5.2	504.1	
159+0			9.1	500.2	
160+0			9.3	500.0	
161+0			6.8	502.5	
TP.			5.857	503.411	
	2.317	505.728			
162+00			5.5	500.2	

Nail in fence Post South of Rd opp. St. 149.

500 823
500 758
.065

15' R Sta 158+0 Scy Tr

505.728

Sta	+	℄	−	Elev.	
163+0			4.7	501.0 ✓	
164+0			9.7	496.0 ✓	
164+81			6.5	499.2 ✓	
TP			6.396	499.332	
	5.900	505.232			
165					
166+00			8.7	496.5 ✓	
+70			7.5	497.7 ✓	
167+0			5.3	499.9 ✓	
+33 (PI)			7.7	497.5 ✓	
168+0			8.2	497.0 ✓	
169+0			10.2	495.0 ✓	
170+0			7.6	497.6 ✓	
TP			7.242	497.990	Record Elev.
B.M. #28	Sta 167+40		0.597	504.635	504.689
	7.96 ×3	505.954			
170+68			4.8	501.2 ✓	
171+0			4.8	501.2 ✓	
+15			8.9	497.1 ✓	
172+07			10.4	495.6 ✓	
173+0			12.0	494.0 ✓	
TP	+0.		10.394	495.559 ✓	
	6.640	502.199			
+50			6.8	495.4 ✓	
174+0			8.9	493.3 ✓	

Checked on B.M. Before moving

504.63
504.689
504.635
54

20'L 167+40

Sta	+	=	−	Elev
		502.199		
174+68			11.5	490.7 ✓
175+0			10.0	492.2 ✓
176+0			9.1	493.1 ✓
TP			7.809	494.390
	3.991	498.381		
177+0			5.4	493.0 ✓
178+0			7.8	490.6 ✓
179+0			9.4	489.0 ✓
180+0			9.6	488.8 ✓
181+0			9.8	488.6 ✓
182+0			11.7	486.7 ✓
183+0			11.4	487.0 ✓
TP on B.M. #~~23~~ 22			7.015	491.366 491.438 ~~491.358~~
	1.120	492.486 ~~2.558~~		
184+0			4.0	486.5 ✓
5+0			4.4	488.1 ✓
186+0			4.3	488.2 ✓
187+0			5.3	487.2 ✓
188+0			4.6	487.9 ✓
+75			3.1	489.4 ✓
189+0			2.1	490.4 ✓
T.P. & B.M. #23 (Peg near 189) Sun down			1.067	491.419

✓ Record Elev

B.M. #21 492.472 4' Rt 177+63 on fence post

491.438
491.366
72

Nov 23-1925

Pcs 491.419

Sta	+	−	Elev
	5.815	497.234	
190+0		3.8	493.4
191+0		4.2	493.0
2+0		5.7	491.5
3+0		6.2	491.0
4+0		8.4	488.8
5+0		9.4	487.8
~~6+0~~ TP		10.682	486.552
	6.070	492.622	
6+0		7.7	484.9
197+0		8.7	483.9
198+0		6.3	486.3
199+0		2.3	490.3
200+0		5.9	486.7
201+0		7.5	485.1
203+0		6.6	486.0
204+0		5.6	487.0
205+0		7.9	484.7
TP. V B.M. #25 Nail in tel pole 36' left of sta 205		6.340	486.282
	7.573	493.855	
206+0		9.5	484.4
206+34		9.1	484.8
207+0		8.3	485.6
208+0		5.7	488.2

B.M. #24 490.912 Nail in Pole # 73938
Jo'L 198+10

202 Being omitted in Transitting

Sta	+	↑	—	Elev	
		493.855			
209+00			5.6	488.3	
210+0			11.2	482.7	
211+0			13.9	480.0	
TP			11.170	482.685	
	3.962	486.147			
212+0			6.5	479.6	
213+0			5.1	481.0	
214+0			4.2	481.9	
215+0			4.6	481.5	
216+0			4.9	481.2	
217+0			6.3	479.8	
218+0			5.7	480.4	
219+0			7.2	478.9	
220+0			7.5	478.6	
221+0			6.71	479.4	↓ Record Elev
B.M.	#21 (+TP)		5.347	480.800	480.874
	4.058	484.858			
222+00			4.5	480.4	
+82			4.4	480.5	
223+0			4.1	480.8	
+47			3.9	481.0	
+57			8.5	476.4	
+67			8.5	476.4	
224+0			7.5	477.4	

212+65 BM 30' L Prov. Pole 78929
El-484.342

15' L 221+90

Sta	+	484.858 ⊼	−	Elev	
~~224+15~~			6.4	478.5	✓
225+0			8.8	476.5	✓
226+0			8.4	476.5	✓
+81			5.2	479.7	✓
~~BM #29~~	T.P.		4.915	479.943	
	11.272	491.215			
BM #28			4.733	486.482	486.569
227+0			12.6	478.6	✓
228+0			11.2	480-0	✓
TP			2.673	488.542	
	6.553	495.095			
228+85			5.9	489.2	✓
~~229+0~~			4.4	490.7	✓
+25			3.3	491.8	✓
+42			4.3	490.8	✓
+80			3.7	491.4	✓
TP			5.438	489.657	✓

Record Elev

Cor tenc Po

Nov 25

Sta	+	⊼	−	Pcg 489.657 Elev	
	0.417	490.074			
230+0			2.8	487.3	
231+0			6.8	483.3	
232+0			10.0	480.1	
TP +50			1.583	488.491	TP is flush with surface Sta 232+50
	10.348	498.839			
+85			4.3	494.5	
233+0			2.7	496.1	
+15			2.1	496.7	
234+0			4.5	494.3	
T.P.			6.999	491.835	
	3.355	495.190			
+35			4.5	490.7	
235+0			6.0	489.2	
236+0			8.3	486.9	
236+50	(PI Knocked out)		11.9	483.3	
237+0			9.9	485.3	
B.M. 5' R	237+10		10.065	485.125	Hub nailed on Tel. Plc
238+0			11.5	483.7	
TP			11.257	483.933	
	3.818	487.751			
+70			6.1	481.7	
239+0			3.9	483.9	
+	(PI)		3.5	484.3	

Sta	+	↑	−	Elev
		487.751		
240+0			5.4	482.4
241+0			10.7	477.1
~~242+0~~ TP.			11.562	476.189
	0.185	476.374		
242+0			1.8	474.6
+25			3.0	473.4
243+0			5.3	470.9
244+0			9.5	466.9
245+0			10.5	465.9
TP			10.537	465.837
	5.480	471.317		
246+0			6.4	464.9
247+0			6.3	465.0
247+40			5.9	465.4
248+0			5.5	465.8
+35			2.1	469.2
249+0			5.1	466.2
+92			6.0	465.3
250+0			7.2	464.1
251+0			9.4	461.9
252+0			10.4	460.9
253+0			10.4	460.9
B.M. 253+75	(31)		~~10.~~ 9.970	461.347
	10.600	471.947		

Sta 247+40

BM #30 Nail in Post 2R El 465.854

~~Hub Nailed~~ Nail in fence post on North side of gate.

		471.947		
Sta	+	℄	−	Elev
254+0			10.6	461.3
255+0			10.4	461.5
256+0			10.2	461.7
257+0			9.8	462.1
258+0			5.9	466.0
258+	(PI)		5.4	466.5
259+0			7.2	464.7
260+0			8.3	463.6
261+0			10.1	461.8
262+0			11.2	460.7
TP			10.784	461.163
	2.031	463.194		
BM #32 in Sy c Tr			0.060	463.134 463.239
263+0			3.0	460.2
4+0			3.2	460.0
5+0			2.6	460.6
266+0			4.8	458.4
7+0			4.8	458.4
8+0			5.1	458.1
9+0			5.6	457.6
TP			5.596	457.598
	1.850	459.448		
270+0			2.0	457.4
1+0			3.2	456.2
2+0			4.7	~~453.8~~ 454.7

Record Elev

463.239
463.134
.105

about 40' R

459.448

Sta	+	π	−	Elev	
+50			5.1	454.3	
273+0			6.0	453.4	
274+0			4.2	453.2	
275+0			6.0	453.4	
TP			5.940	453.508	
	3.038	456.546			
276+0			2.4	454.1	Record Elev
BM # 33			0.760	~~455.786~~	455.965
Return to BM ~~# 21~~ Sta 253+75					
				461.347 BM	
	11.315	472.662			Record Elev
Rod on BM #21			9.527	463.135	463.239
	E.731	465.866			
			7.789	458.077	
	2.900	460.977			
	4.500 ~~4.45~~	458.020	7.457	453.520	
On B.M. # 22			2.205	455.815	Record Elev 455.965

"Red" says weare thinking too much about turkey.
And that is the only explanation I can find for our variation of 0.029 in our 2 Runs from BM 21 to BM 22

965
786
.179

96
906

815
786
.029

104

463 239
463 135
104

134

965
815
150

150

NOV 27

BM-22 - 455.815

Sta	+	=	Elev
	1.288	457.103	
277+00		4.9	452.2
+30		5.5	451.6
+35		1.9	455.2
+70		0.2	456.9
278+00		0.9	456.2
+10		0.2	456.9
+40		1.1	456.0
+55		5.0	452.1
279+00		4.7	452.4
280+00		3.7	453.4
281+00		3.6	453.5
T.P.		3.150	453.953
	4.817	458.768	
282+00		5.8	453.0
283+00		~~4.5~~	455.5 ← Corrected Elevation. Correction Made Dec 16. BY CM Baron
		~~Data~~	See Letter Dated Dec 16 Notes By Leach Asst Baron
284+00		2.5	456.3
284+66 ± (PI)		1.4	456.4
T.P.		1.171	457.595
	0.090	457.685	
285+00		1.6	456.1
286+00		2.6	455.1
B.M.	#94	11.065	446.620 On 12" Cottonwood 90° R 286+70 Nail in fork
287+00		3.4	454.3
288+00		5.0	452.7

Sta	+	℄	−	Elev	
		457.685			
288+40			6.2	451.5	✓
289+0			4.4	453.3	✓
+15			6.5	451.2	✓
290+0			9.0	448.7	✓
291+0			9.4	448.3	✓
TP			~~9.514~~ 9.1516	448.169	
		✓	9.515	448.170	✓
	5.977	454.147	✓		
292+0			6.6	447.5	✓
+50			7.3	446.8	✓
293+0			6.7	447.4	✓
1+0			5.4	448.7	✓
295+0			3.5	450.6	✓
+06			3.1	451.0	✓
296+0			4.2	447.9	✓
297+0			7.1	447.0	✓
297+63			7.3	446.8	✓
TP			7.164	446.983	✓
	2991	449.974	✓		
B.M. #25			1.098	448.876	✓
294+0			3.2	446.8	✓
9+3			4.2	445.8	✓
300+00			4.9	445.1	✓
301			4.7	445.3	✓

On Large Sycamore 25' Right 298+0

Sta	+	⊼	Ele	Elev	
		449.974			
302+0			5.6	444.4	
B.M. (County Rd) 34			3.873	446.101	445.910 County
303+0			6.8	443.2	
B.M. # 37			6.150	443.824	443.972
T.P.			6.980	442.994	
	3.880	446.874			
304+0			5.9	441.0	
305+0			4.1	442.8	
+55			4.8	442.1	
306+0			4.4	442.5	
307+0			4.8	442.1	
+54			5.6	441.3	
9+0			5.6	441.3	
+37			5.9	441.0	
TP			5.675	441.200	
	2.290	443.490			
310+0			3.2	440.3	
311+0			4.5	439.0	
312+0			4.5	439.0	
312+80			4.6	438.9	
313+00			8.7	434.8	
+35.2			9.1	434.4	
+55			9.1	434.4	
314+0			4.1	439.4	
TP					

445.920
~~446.101~~

446.101
445.920
000.181

B.M. on El Pole # 72749
Elev Mkd. 445.920
443.972
443.824
.148 Below Bisect
.181 above County

Cross Section Elev. = ~~436.2~~
" " " = ~~436.5~~
Profile is Correct Here. CMB

Sta.	+	⊼	−	Elev.	
		443.490			
TP			3.540	439.950	
	9.319	449.269			
314+00			9.4	439.9	
314+70			10.3	439.0	
+893			3.4	445.9	
315+0			5.4	~~444.6~~ ~~443.9~~ 438.9	
+40			10.4	438.9	
316+0			10.4	438.9	
TP			10.391	438.878	
	3.035	441.913			
BM U.S.Geol			2.981	438.932	439.83
Top of Res. Wall			3.0	438.9	
" " 12" Inlet Pipe			5.4	436.5	
317+0			4.1	437.8	
317+95			4.3	437.6	
318+00			4.4	437.5	
319+00			4.4	437.5	
320+0			4.9	437.0	
321+0			5.8	436.1	
TP			5.320	436.593	
	3.535	440.128			
322+0			3.9	436.2	
322+92			4.2	435.9	
323+0			3.5	436.6	

Stamped on Top of Bronze Plug. Elev. 439.071

Sta. 314+0 Profile is Correct C.M.B. Dec 76.

Cross Section Elev. = ~~439.2~~

Corrected Elev (C.M.B.) Dec 76

Cross Section Elev. = ~~444.4~~

439.071

439.071
438.932
430.139

4
439.83
438.932
.898

Reported as 24"

Sta	+	±	−	Elev
		440.128		
324+0			5.0	435.1
325+0			5.6	434.5
326+0			5.5	434.6
327+0			5.4	434.7
TP			5.498	434.630
	8.949	443.579		
328+0			8.4	4352 435.1
329+0			8.2	435.4
330+0			5.7	437.9
+40			4.2	439.4
331+0			5.0	438.6
332+0			4.6	439.0
333+0			2.0	441.6
TP			1.331	442.248
	6.350	448.598		
+55			7.3	441.3
+75			4.2	444.4
334+0			3.8	444.8
335+0			6.5	442.0
+10			6.5	442.0
B.M.			7.320	441.278
336			5.4	443.0
337+0			3.0	445.4
TP			1.210	447.388

on Guy post 40'R 335+10

Sta	+	=	−	Elev	Record Elev
			Peg	447.388	
	11.505	458.893			
338+0			9.8	449.1	
B.M. # 5540			8.7.76	450.117	450317
339+0			6.2	452.7	
340+0			3.4	455.5	
TP			0.462	458.431	
	8.990	467.421			
341+0			6.5	460.9	
2+0			2.8	464.6	
TP			0.100	467.321	
	9.225	476.546			
343+0			7.9	468.6	
344+0			2.8	473.7	
TP			0.225	476.321	
	5.833	482.154			
345+0			2.5	479.7 / 479.6	
345+82			2.9	479.3	
346+0			3.2	479.0	
347+0			6.2	476.0	
348+0			9.8	472.4	
TP			11.792	470.362	
	0.305	470.667			
349+0			2.1	468.6	
350+0			4.4	466.3	

Sta	+	±	−	Elev	
		470.667			
351+0			5.1	465.6	← Record Elev.
B.M. #41			1.395	466.272	466.419
352+0			6.0	464.7	
353+0			9.6	461.1	
TP			9.916	460.751	
	2.71 X 0	463.471			
354+00			3.6	459.9	
54 00			3.6	459.9	
+12			4.4	459.1	
+25			7.7	455.8	
+50			4.8	458.7	
356+0			4.2	459.3	
7+0			4.1	459.4	
358+0			3.1	460.4	
TP +St. 359+0			1.5	462.0	15.0 ± Elev. + Level Alone Pole which is Loose
	3.530	464.96	2.040	461.431	
				464.0	
360+0			1.0	464.9	
360+92			0.2	464.8	
361+0			0.2	464.8	
2+0			3.5	461.5	Record Elev + Level Alone Pole which is Loose
3+0			5.6	459.4	
B.M. # 42			6.926	458.035	458208
I.S.C. a Nail in ~~fence post~~ Eucal. plus 40 S.			6.926		

466.272
466.133
.148
147
.296

466.419
466.272
.147

Sta	+	X	−	Elev.
		464.961		
364			6.9	458.1
365+0			8.9	456.1
TP			8.539	456.422
	0.120	456.582	(Nov 28-1925)	
366+0			2.2	454.3
7+0			3.9	452.6
8+0			4.9	451.6
9+0			4.3	450.2
370+00			7.5	449.0
371+0			7.9	448.6
372+0			6.3	450.2
+60			6.6	449.9
373+0			6.8	449.7
TP			11.695	444.827
	0.280	445.187		
374+0			4.2	440.9
375+0			7.5	437.6
6+0			6.1	439.0
7+0			8.2	436.9
TP			11.817	433.310
	2.527	435.887		
8+0			4.0	431.8
B.M. #43			2.841	432.996

Hub nailed on eucalyptus 6'L 378+45

Sta	T	H	—	Elev
		435.837		
379+0			6.5	429.3 428.3
380+0			11.1	424.7
TP			11.812	424.025
	0.155	424.180		
381+0			5.5	428.7
2+0			8.9	415.3
3+0			10.2	414.0
4+0			11.5	412.7
TP			11.583	412.597
	2.261	414.838		
385+0			3.7	411.2 411.1
386+0			5.4	409.5 409.2
387+0			6.4	408.5 408.4
8+0			6.8 ~~7.4~~	408.1 408.0
9+0			7.2	407.7
+45			6.6	408.3
390+0			8.8	406.1
TP			8.706	406.152
	1.885	408.037		
1			4.2	403.8
2			4.7	403.3
3			4.8	403.2
B.M. ~~#50~~ (AA)			4.260	403.857
+60			3.1	404.9

On Root of stump @ L 393 +10

Sta	+	=	−	Elev
		408.031		
TP			0.362	407.675
	11.261	418.936		
394+0			10.8	408.1
5+0			3.6	415.3
TP			0.650	418.286
	9.027	427.313		
396+0			7.8	419.5
7+0			4.9	422.4
8+0			2.2	425.1
TP			0.562	426.751
	8.147	434.898		
399+0			7.6	427.3
400+00			5.9	429.0
1+00			4.4	430.5
2+00			3.3	431.6
3+00			3.2	431.7
4+00			2.7	432.2
5+00			4.6	430.3
B.M. #45			4.486	430.412 ~~430.392~~ ~~428.052~~ ← Record Elev
				430.396 ← Correct

434.898

Sta	+	⊼	−	Elev.
TP			4.446	430.452
	0.070	430.522		
406+0			1.9	428.6
7+0			4.1	426.4
408+00			7.6	422.9
9+0			10.7	419.8
TP			11.917	418.605
	4.810	423.415		
410+0			5.4	418.0
411+0			7.4	416.0
412+0			7.6	415.8
413+0			5.0	418.4
414+0			3.7	419.7
415+0			6.9	416.5
+42			7.6	415.8
416+0			6.4	417.0
TP			7.137	416.278
	0.994	417.272		
417+0			4.2	413.1
+	PI		3.4	413.9
~~416+60~~ ~~418+0~~	418+00	→	7.8	409.5
418+60			9.8	407.5
419+0			9.7	407.6
TP			10.580	406.692
	4.230	410.922		

Sta	+	−	Elev.
		410.922	
419+ ?	PI	4.3	406.6
420+0		4.4	406.5
1+0		4.9	406.0
2+0		5.0	405.9
+35		5.3	405.6
423+0		5.2	405.7
4+0		5.1	405.8
+16	PI	5.1	405.8
425+0		5.2	405.7
6+0		6.0	404.9
TP		5.202	405.720
	3.380	409.100	
427+0		4.7	404.4
428+45		4.6	404.5
+60		1.6	407.5
+70		4.2	404.9
428+00		2.9	406.2
+ 25	Edge Pav.	1.1	408.0
+49	" "	1.7	407.4
+64	PI	1.7	407.4
429+0		3.6	405.5
430+0	Bottom Culv. C'L	7.9	401.2
" "	Surface	7.7	401.4
431+0		8.2	400.9

Bot Culv

Sta	+	409.100 ✓	−	Elev
432+0			8.7	400.4
TP			7.726	401.374
	3.188	404.562		
433+0			4.4	400.2
434+0			5.4	399.2
5+0			6.1	398.5
436+0			7.1	397.5
B.M. # 29			~~4.335~~	~~404.765~~ 400.227
~~437~~	3.475	403.702		
437+00			4.6	397.1
438+0			6.8	396.9
439+0			7.6	396.1
+15	Bottom of Br 8' Left		8.6	395.6
440+0			8.1	395.6
1+0			8.3	395.4
TP			8.587	395.115
	5.680	400.795		
2+0			6.2	394.6
3+0			6.5	394.3
4+0			7.0	393.8
5+0			6.1	394.7
6+0			5.4	395.4
~~TP~~			0.785	
			~~395.010~~	~~.785~~ Nail in Pole R

Record Elev

P.I. on Br.

Corrected to 400.256

Nov 30

Sta.	+	H	−	BM 400.227
Reg from BM	1.154	401.381		
			5.586	395.795
	1.295	397.090		
447+0			3.5	393.6
8+0			4.5	392.6
9+0			4.4	392.5
BM #50			3.141	393.949 394.140
450+0			5.3	391.8
1+0			6.7	390.4
2+0			7.0	390.1
TP			7.105	389.985
	7.000	396.985		
453+0			6.9	390.1
4+0			5.6	391.4
5+0			5.0	392.0
+30			4.2	392.8
456+0			5.8	391.2
7+0			6.2	390.8
BM #51			3.545	393.440 393.632
458+0			7.1	389.9
459+0			8.4	388.6
TP			7.185	389.800
	1.742	391.542		
460+0			5.0	386.5
1+0			5.2	386.3

Record Elev Mind 394.176

Record Elev

394.140
393.949
.191

22'

400.400
.044
400.356

393.632
393.440
.192

40' L 457+50

Sta.	+	X	−	Elev	
		391.542			
462+00			4.9	386.6	
3+00			6.0	385.5	
+01	Bottom Curb	X Drive	5.9	385.6	
+25	"	"	5.9	386.2	
			6.2	385.3	
464+00			7.5	384.0	
5+00			8.1	383.4	
TP			7.056	384.486	
	3.640	388.126			
466+00			5.3	382.8	
7+00			5.4	382.7	
8+00			5.9	382.2	
9+00			7.1	381.0	
B.M. #52			4.269	383.857	384.057
470+00			7.1	381.0	
1+00			7.6	380.5	
2+00			7.7	380.4	
3+00			7.2	380.9	
TP			4.837	383.289	
	3.920	387.209			
474+00			5.0	382.2	
5+00			6.9	380.3	
476+00			6.3	380.9	
477+00			6.7	380.5	
478+00			7.7	379.5	

← Record Elev

384.057
383.857
0.200

Sta	+	T	—	E	
		387.209			
479+0			9.7	377.5	✓
480+0			7.3	379.9	✓
TP			6.839	380.370	✓
	4.302	384.672			
B.M. Co #18			2.955	381.717	
+26			4.4	380.3	✓
481+0			5.6	379.1	✓
482+0			4.8	379.9	✓
483+0			5.1	379.6	✓
484+0			6.1	378.6	✓
5+0			7.4	377.3	✓
6+0			7.2	377.5	✓
7+0			7.1	377.6	✓
TP			5.863	378.809	✓
	3.480	382.289			
8+0			4.4	377.9	✓
9+0			4.5	377.8	✓
490+0			5.1	377.2	✓
491+0			5.3	377.0	✓
492+0			6.5	375.8	✓
493+0			5.9	376.4	✓
493+12	Culv.		8.2	374.1	✓
494+0		7.6	~~7.6~~	374.7	✓
TP			4.603	377.686	✓

Stamped 381.811 on pole 381.949 out of record

381.949 − 381.717 = .232

381.811 − 381.717 = .094

Reg 377.686

Sta	T	Δ	—	Elev	
	5.862	383.548			
495+0			7.5	376.0	✓
+60			5.8	377.7	✓
+90			1.8	381.7	✓
496+0			3.7	379.8	✓
CoBM #17-2 R 496+01	(50)		4.040	379.508	379.708
496+20			6.1	377.4	✓
497+0			7.5	376.0	✓
496+0			6.4	377.1	✓
499+0			5.7	377.8	✓
TP			0.535	383.013	✓
	11.733	394.746			
+97.9			8.2	386.5	✓
500+00			8.2	386.5	✓
1+00			5.6	389.1	✓
2+0			3.1	391.6	✓
+95	Guard St gone N ub.		5.6	389.1	✓
3+00			5.5	389.2	✓
4+00			7.3	387.4	✓
TP			4.250	390.496	✓
	0.300	390.796			
		390.796			
505+00			6.6	384.2	✓
6+0			5.9	384.9	✓
7+0			4.2	384.8	✓
507+07			5.0	386.6	✓
508+0			11.2	385.8	✓
				379.6	✓
				~~379.8~~	

skeiled on plt
24982

Sta	+	℄	−	Elev	
		390.796			
TP			11.400	379.396	✓
	0.290	379.686			
509+00			4.1	375.6	✓
510+00			5.8	373.9	✓
511+00			6.2	373.5	✓
+25			6.7	373.0	✓
512+00			10.4	369.3	✓
TP			10.736	368.950	✓
	2.900	371.850			
513+00			5.7	366.2	✓
514+00			4.8	367.1	✓
+25			5.0	366.9	✓
515+00			6.5	365.4	✓
B.M. # 38 = Cut BM on L			6.340	365.510	365.712
516+00			7.3	364.6	✓
517+00			7.7	364.2	✓
518+00			8.6	363.3	✓
519+00			8.8	363.1	✓
520+00			10.9	361.0	✓
TP			6.887	364.963	✓
	2.140	367.103			
521+00			6.6	360.5	✓
B.M.	Concrete Pillow block on ~~Power pole #~~ which Carries water pipe back of Pump House		0.900	366.203	

365.631 Stenciled on B.M. ← Record Elev

365.712
365.510
.202

365.631
365.510
.121

Sta	+	367.103 ±	−	Elev	
522+00			6.5	360.6	
3+00			6.1	361.0	
4+00			5.4	361.7	
5+00			6.9	360.2	
6+0			6.9	360.2	
527+0			6.4	360.7	
8+0			6.5	360.6	
TP			4.630	362.473	
	4.411	366.884			
529+0			6.8	360.1	
530+00			6.6	360.3	
531+00			6.6	360.3	
532+00			6.8	360.1	
533+00			6.8	360.1	
4+00			7.6	359.3	
5+0			7.1	359.8	
TP			4.251	362.633	
	4.485	367.118			
536+00			8.2	358.9	
7+00			7.8	359.3	
538+00			7.9	359.2	
9+0			7.0	360.1	← Record Elev
BM. #39			4.530	362.588	362.764
540+0			5.2	361.9	
1+0			4.2	362.9	

537+45

Sta	+	367.118	−	Elev	
542+00			3.8	363.3	
3+00			4.3	362.8	
TP			4.232	362.886	
	3.210	366.096			
4+0			3.9	362.2	361.922 Signalization on Br.
5+0			5.1	361.0	
BM #60	= Co BM 1A		4.317	361.779	361.955
546+00			5.5	360.6	
547+00			5.6	360.5	
548+0			4.9	361.2	
549+0			5.1	361.0	
550+00			5.2	360.9	
1+00			5.8	360.3	
TP			5.040	361.056	
	7.646	368.702			
552+0			9.7	359.0	
553+0			9.4	359.3	
4+0			8.0	360.3	
5+0			4.3	364.4	
6+0			2.4	366.3	
TP			2.320	366.382	369.157 Signalized on B.M.
	5.185	371.567			
BM #61			2.535	369.032	369.157
557+00			5.3	366.3	
558+0			7.5	364.1	

361.955
361.779
-176

361.922
779
+143

155
147
032
12

Sta	+	371.567 ⊼	−	Elev	
559+0			8.3	363.3	
560+0			7.7	363.9	
1+00			5.5	366.1	
2+0			1.4	370.2	
TP			0.920	370.647	
	5.300	375.947			
562+0			3.7	372.2	
563+73			3.8	372.1	
564+0			3.8	372.1	
5+0			5.3	370.6	
566+0			5.5	370.4	
567+00			5.4	370.5	
568+00			5.8	370.1	
569+0			8.0	367.9	
TP			6.270	369.677	
	3.800	373.477			
570+0			7.6	365.9	
1+0			7.6	365.9	
B.M. #62			7.715	365.762	365.844
+48	Culv 12" Extends 5' Past Line		Top 9.4 Bk 10.4	364.0 363.8	Grade may be Kept above this pt
572+00			7.3	366.2	
573+0			4.5	369.0	
574+0			5.1	368.9	
5+0			3.9	369.6	
TP			3932	369.645	

Stamped on BM. 365.850 ← Record of Elev

8AP 462 5/8 0

Sta	+	=	−	Elev	
				Peg 369.545	
	5.425	374.970			
576+0			5.3	369.7	
7+0			5.6	369.0 / 368.4	
8+0			6.0	369.0 / ~~368.9~~	
9+0			5.2	369.8	✓
580+00			6.	369.0	✓
B.M. # 63			9.601	365.369	365.444 .075
581+00			9.3	365.7	✓
582+00			9.3	365.7 / ~~364.7~~	✓
3+00			9.4	365.6 / ~~364.6~~	
TP Wood Hub			9.850	365.120	✓
	Dec 1				
	3.420	368.540			
584+0			4.0	364.5 / ~~364.5~~	✓ ✓
5+0			4.6	363.9	
6+0			5.8	362.7	✓
7+0			7.1	361.4	✓
8+0			7.1	361.4	✓
9+0			4.5	364.0	✓
+44			2.5	366.0	✓
TP			1.490	367.050	✓
	6.765	373.815			
+67	Top of X Tie Cent Spur track		6.5	367.3	✓
+80	" Main "		6.3	367.5	✓
+95	" Spur "		6.3	367.5	✓

365.49 ← Recorded Elev

Sta	+	℄	−	Elev	
		373.815			
590+0			6.6	367.2	✓
+35	℄ Street		6.4	367.4	✓
+55			6.5	367.3	✓
+80			5.7	368.1	✓
591+00			6.0	367.8	✓
2+00			5.6	368.2	✓
3+00			7.0	366.8	✓
4+0			8.2	365.6	✓
5+0			9.4	364.4	✓
TP			9.316	364.499	✓
	3.121	367.620			
6+0			4.7	362.9	✓
+25			4.9	362.7	✓
597+0			4.8	362.8	✓
8+0			5.1	362.5	✓
599+00			5.0	362.6	✓
600+00			5.8	361.8	✓
1+00			7.3	360.3	✓ ← Record Elev
BM #65			3.095	364.525	364.547
2+00			8.9	358.7	✓
TP			8.816	358.804	✓
	2.050	360.854			
603+0			2.8	358.1	✓
4+0			4.5	356.4	✓

Near Sta 597

Sta	+	360.854 =	−	Elev	
605+0			5.7	355.2	✓
606+00			5.9	355.0	✓
606+35 P.I. Pole 23530					
T.P. on B.M. #46			6.105	354.749	✓
	1.685	356.834			
7+00			3.7	352.7	✓
8+00			5.2	351.2	✓
609+0			4.9	351.5	✓
610+0			6.0	350.4	✓
1+0			5.9	350.5	✓
2+0			5.0	351.4	✓
TP			8.431	347.973	✓
	1.145	349.088			
3+0				348.7	✓
614+00			0.4	~~349.7~~	
5+0			2.2	346.9	✓
6+0			4.7	344.4	✓
7+0			4.5	344.6	✓
BM # 47			4.7	~~344.4~~ 345.1	✓
			5.495	343.593	343.642
618+0			6.1	343.0	✓
619+0			6.4	342.7	✓
TP			6.380	342.708	✓
	4.040	346.748			
620+00			4.0	342.7	✓
1+0			3.9	342.8	✓

Record Elev

Sta	+	346.748 =	−	Elev	
622+0			4.2	342.5	✓
3+0			4.8	341.9	✓
4+0			5.2	341.5	✓
625+0			5.8	340.9	✓
TP			5.640	341.08	✓
	3.675	344.783			
626+0			4.1	340.7	
B.M. #68	Pole 72292		2.351	342.432	
627+0			4.4	340.4	✓
8+0			4.6	340.2	✓
9+0			4.9	339.9	✓
630+0			5.7	339.1	✓
631+00			6.3	338.5	✓
TP			6.220	338.563	✓
	3.990 ✓	342.553			
632+0			4.5	338.1	✓
3+0			4.3	338.3	✓
4+0			4.5	338.1	✓
5+0			4.7	337.9	✓
B.M. 635+65	#69 Pole #72295		3.160	339.393	
6+0			5.1	337.5	✓
7+0			5.3	337.3 ~~337.4~~	✓
TP			6.082	336.471	✓
	3.821	340.292			
638+0			3.7	336.6	✓

Sta.	+	340.292 ∧	−	Elev	
639+00			3.9	336.4	✓
640+00			4.2	336.1	✓
1+00			4.8	335.5	✓
~~BM~~ 2+00			5.3	335.0	✓
TP			4.897	335.395	✓
	4.262 ✓	339.657			← Record Elev
B.M. # 70			2.830 ✓	336.827	336.883
643+00			4.9	334.8	✓
4+00			4.9	334.8	✓
5+00			4.3	335.4	✓
6+00			4.6	335.1	✓
7+00			4.9	334.8	✓
TP			4.845	334.812	✓
	4.200 ✓	339.012			
648+00			4.4	334.6	✓
9+00			4.6	334.4	✓
650+00			5.2	333.8	✓
BM (71) on pole # 23566			3.335	335.677	✓
651+00			5.4	333.6	✓
2+00			4.9	334.1	✓
3+00			4.0	335.0	✓
4+00			4.3	334.7	✓
TP			4.360	334.652	✓
	4.372	339.024			
655+00			3.4	335.6	✓

Sta	+	339.024	−	Elev.	
656+0			3.5	335.5	
7+0			4.6	334.4	Record Elev
8+0			4.8	334.2	
9+0			5.0	334.0	
BM #72			3.632	335.392	335.492
660+0			6.2	332.8	
TP			6.115	332.909	
	4.125	337.034			
1+0			4.1	332.9	
2+0			4.9	332.1	
3+0			4.7	332.3	
4+0			5.2	331.8	
5+0			5.9	331.1	
6+0			5.9	331.1	
TP			5.861	331.173	
	2.963	334.136			
7+0			3.4	330.7	
668+0			3.7	330.4	
9+0			4.8	329.3	
670+0			5.4	328.7	
1+0			6.5	327.6	
2+0			7.0	327.1	
3+0			6.8	327.3	
TP			7.980	326.156	
	4.905	331.061			

Sta	+	331.060	−	Elev	
674+00			4.9	326.1	
675+00			5.2	325.8	
B.M. # 19			3.860	327.200	327.242
676+00			6.0	325.2	
677+00			6.2	324.9	
678+00			6.2	324.9	
679+00			6.4	324.7	
680+00			6.2	324.9	
TP			6.148	324.913	
	2.971	327.884			
680+22			2.3	325.6	
+25			3.7	324.2	
+75			5.0	322.9	
681+00			7.7	320.2	
+75			3.1	324.8	
682+00			4.2	323.7	
Top of Bridge Caps = bottom of Floor Structure			2.1	325.8	
683+00			4.8	323.1	
4+00			4.4	323.5	
684+00 B.M.	Pole # 23594		2.607	325.277	
685+00			3.9	324.0	
686+00			4.3	323.6	
TP			4.198	323.686	
	5.590	329.276			

242
201
41

Sta	+	329.276 =	−	Elev	
687+00			5.6	323.7	✓
8+0			5.2	324.1	✓
9+0			4.9	324.4	✓
690+00			4.7	324.6	✓
1+00			4.7	324.6	✓
2+00			4.7	324.6	✓
3+0			4.5	324.8	✓
TP			4.538	324.738	✓
	5.740	330.478			
694+00			5.4	325.1	✓
BM #75			3.717	326.761	326.837
695+00			5.6	324.9	✓
6+0			5.6	324.9	✓
697+0			5.3	325.2	✓
698+0			5.6	324.9	✓
699+0			5.7	324.8	✓
700+00			5.5	325.0	✓
TP			5.695	324.783	✓
	5.045	329.828			
701+0			4.6	325.2	✓
702+0			4.9	3249 / 324.9	
3+0			5.2	324.6	✓
4+0			5.9	323.9	✓
5+0			6.8	323.0	✓
B.M. Hub spike at fence corner post 705+40			4.465	325.363	

← Record Elev

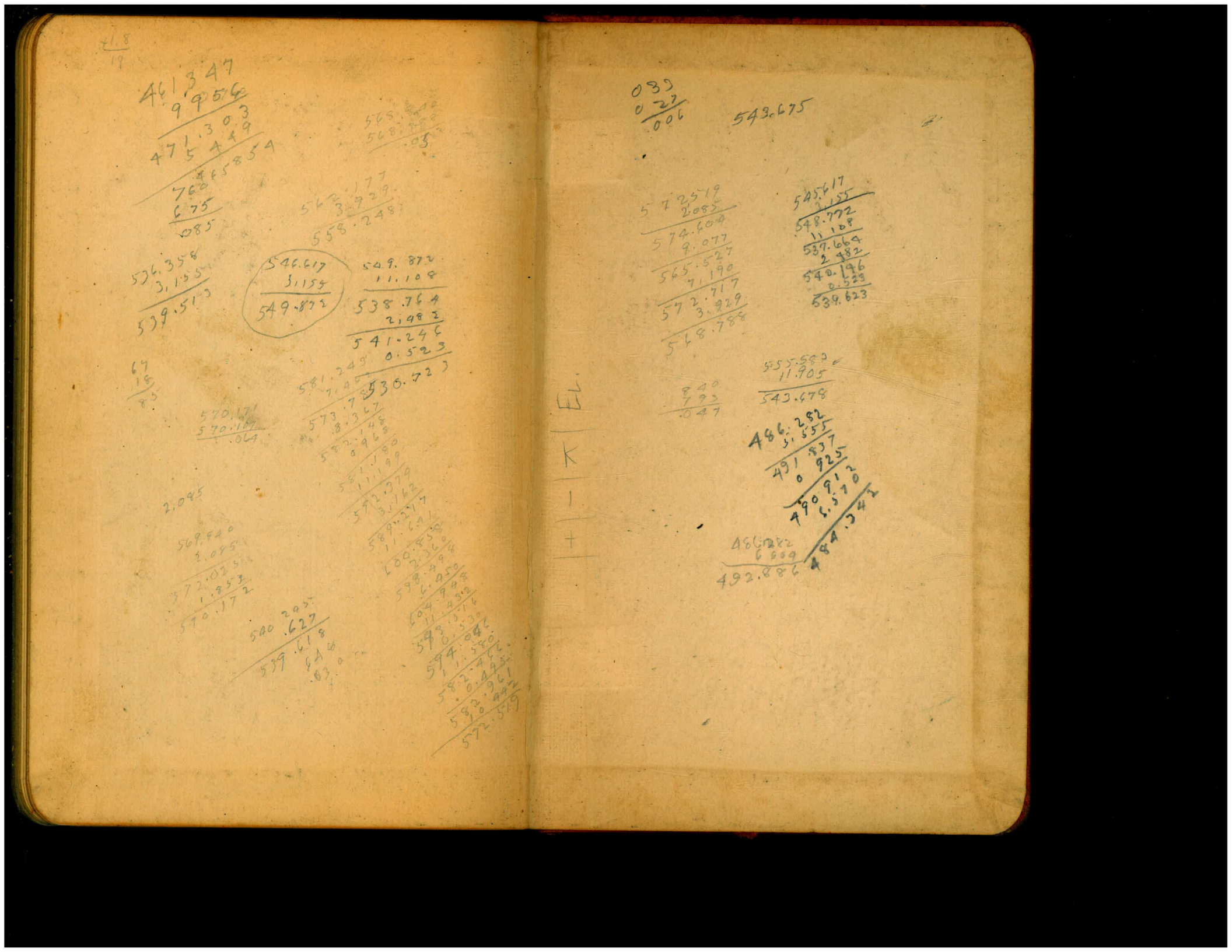
Nail on ⅜ Pepper to

Sta	+	329.828 −	−	Elev	
706+0			7.7	322.1	✓
TP			7.715	322.113	✓
	2.270	324383			
707+0			3.2	321.2	✓
708+0			4.3	320.1	✓
709+0			4.5	319.9	✓
710+0			5.0	319.4	✓
711+0			6.2	318.2	✓
712+0			6.3	318.1	✓
TP			6.220	318.163	✓
	3.263 ✓	321.426			
713+0			3.6	317.8	✓
714+0			3.8	317.6	✓
+26			6.9	314.5	✓
+45			9.7	311.7	✓
+50			7.6	313.8	✓
+55			7.9	313.5	✓
+60			11.0	310.4	✓
+65			8.1	313.3	✓
+89			7.6	313.8	✓
715+0			7.7	313.7	✓
+30			7.7	313.7	✓
+46			4.4	317.0	✓
B.M. 77	Fence post		2.605	318.821	

321.426

Sta	+	⊼	−	Elev	
716+00			4.5	316.9	✓
717+00			5.0	316.4	✓
+35			5.3	316.1	✓
+53			5.7	315.7	✓
+60			8.5	312.9	✓
+70			6.0	315.4	✓
718+0			6.8	314.6	✓
TP			6.586	314.840	✓
	4.935	319.775			
719+00			6.2	313.6	✓
720+0			5.0	314.8	✓
721+0			4.4	315.0	✓
+95			7.5	312.3	✓
722+0			6.8	313.0	✓
723+0			5.4	~~315.4~~ 314.7	✓
TP			5.290	314.485	✓
	6.095	320.580			
724+0			6.2	314.4	✓
725+0			6.0	314.6	✓
B.M. #78			3.050	317.530	317.674

Record Elev

474
530
944
.1

IMPROVED TABLES
AND
INFORMATION