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FCDMC 88-39

MARYLAND AVENUE BRIDGE

FIELD SURVEY NOTES

A118.942

Horizontal Control
20th St. & Maryland Bridge
7/4/89 R. Bert
M. Stowman

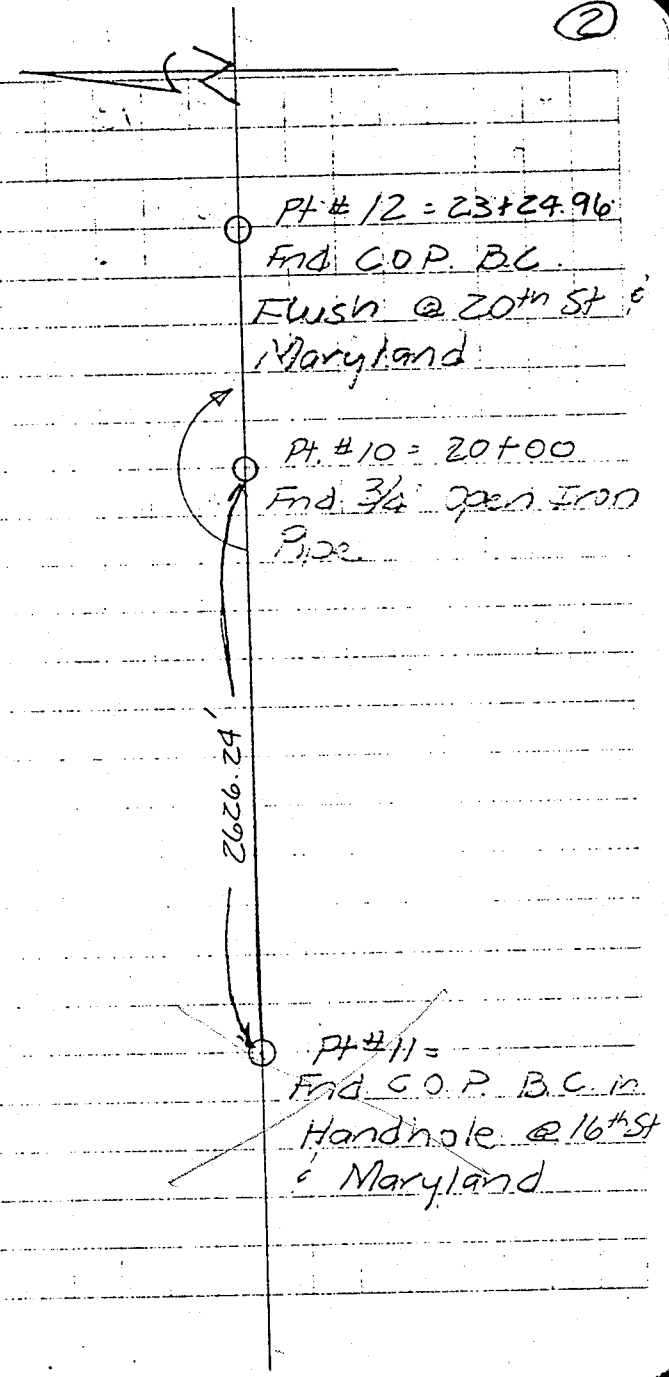
T @	10	BS 11	FS 12
		37-46-51	
1		217-46-54	180-00-03
2		37-46-54	180-00-00
3		217-46-55	180-00-01
4		37-46-51	179-59-56
M			180-00-00

Dist. 10 TO 11
2626 48 @ 90-46-04
HD= 2626.24

Dist 10 TO 12
325.02 @ 88-53-57
HD= 329.96

Received
July 4 1989
TYLI PHOENIX

2



π @ 12 BS 10 FS 13

01-02-12

① 75-24-00 74-21-48

② 149-45-37 74-21-37

Dist 12 TO 13

277.00 @ 270-40-24

π @ 12 BS 10 FS 14

231-55-47

① 296-29-10 64-33-23

② 01-02-12 64-33-02

Dist 12 TO 14

540.54 @ 270-14-07

π @ 12 BS 10 FS 15

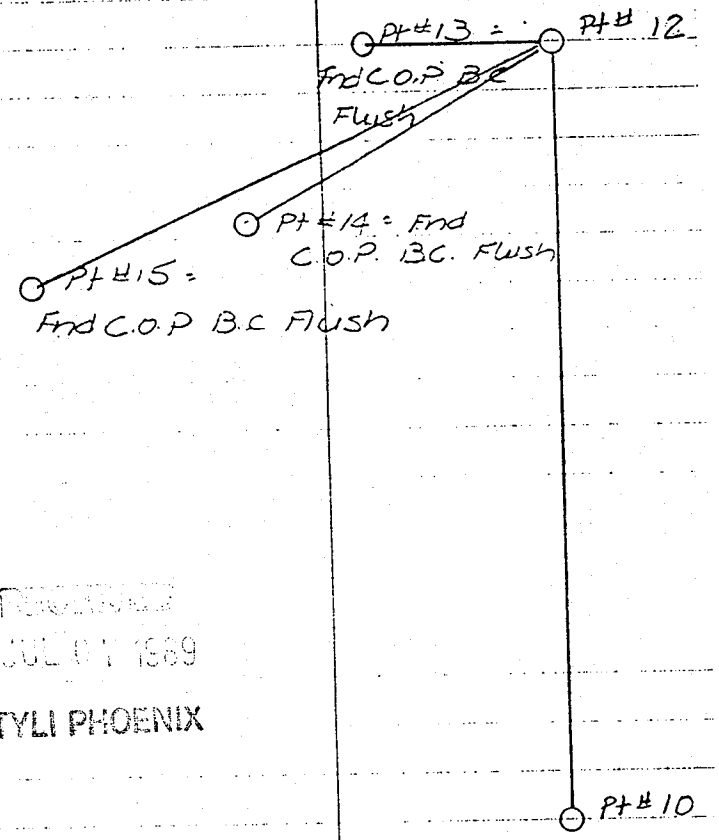
35-43-44

① 102-13-24 66-29-40

② 168-43-12 66-29-48

Dist 12 TO 15

733.30 @ 89-46-28



JUL 1969
TYLI PHOENIX

T.Y.L.I.
CALCULATIONS

Cross Sections on Maryland Ave.

	Lt			Rt		
17+00	35.1	34.10	33.85	33.53	33.47	33.95
	40.4	19.8	0.0	18.4	19.8	20.4
	Fence	EP		Lip	℄	T/C
					34.0	34.02
					29.9	24.5
					Fence	B/W
16+50	33.3			32.81		
	33.0			33.0		
16+00	32.60	32.12	32.20	31.98	31.72	31.67	31.81
	20.6	20.0	18.7	0.0	18.5	19.7	20.4
	T/C	℄	Lip		Lip	℄	T/C
	32.65	32.3	32.6			32.09	32.27
	24.6	31.0	40.0			33.0	24.5
	B/W	Fence					B/W

* NOTE: Used U.S.G.S. B.C. on Bridge Elev = 1244.22 for all Elevations

C.O.P. Elev = 1244.16

Δ .06

Δ - .08 per MRE

ENGINEERING
JUL 14 1969
TYLI PHOENIX

	Lt.			℄		Rt	
	36.8	37.02	37.15	36.95	36.57	36.51	36.99
19+00	33.0	23.4	8.1	0.0	18.1	19.4	20.0
		EP	Crown Line		Lip	℄	T/C
	36.8					37.5	37.06
	40.0					29.1	24.1
						Fence	B/W
18+50		36.6			36.2		
		33.0			30.0		
	35.98	35.57	35.54	35.29	34.82	34.77	35.25
18+00	33.0	20.0	5.5	0.0	18.3	19.6	20.2
		EP	Crown Line		Lip	℄	T/C
	36.21					35.9	35.35
	40.0					30.0	24.2
						Fence	B/W
17+50		35.7	35.4			34.9	
		40.0	33.0			30.0	

RECEIVED
JUL 1989
TYLI PHOENIX

	Lt.			℄	Rt		
							⑦
21+00	4429	4338	4339	4356	4349	4337	
	263	260	235	00	30	260	
	Top of Conc. Barrier	℄ on Deck	EP		EP Begin Conc.	Edge of Conc.	
					432	433	
					400	330	
20+50	435	433			417	365	
	400	330			255	400	
20+00	401	4066	4047	4045	4016	4009	4056
End Curb, Gutter & Sidewalk	260	213	100	00	183	196	202
		EP	Crown Line		Lip	℄	T/C
	391	379			366	389	4063
	330	400			400	300	242
							B/W
19+50	373	371			382		
	400	330			300		

RECEIVED
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TYLI PHOENIX

	Lt.			Rt		
23+00	45.57	45.58	45.65	45.23	45.06	43.7	43.9
	39.4	36.3	11.1 Crown Line	0.0	2.9	33.0	40.0
	Æ	L.P.			EP		
	45.97	46.02					
	40.4	45.0					
	T/C	B/W					
22+50		44.5	44.6		44.0		
		40.0	33.0		40.0		
22+00	44.1	43.95	44.20	44.08	44.06	43.7	43.9
	33.0	24.8	10.2 Crown Line	0.0	2.5	33.0	40.0
		EP			EP		
	44.0						
	40.0						
21+50		43.7	43.7		43.78		
		40.0	33.0		26.0		

RECEIVED
JUL 1 1989
TYLI PHOENIX

	Lt.				Rt.	
25+00	51 36	50 90	50 96	50 58	49 6	49 1
	20 9	20 3	19 0	0 0	25 0	40 9
	T/C	℄	Lip	EP		Fence
	51 13	51 20	51 3	51 3		
	25 7	29 6	33 0	40 0		
	F/W	B/W				
24+50	49 8	49 6			48 2	
	40 0	33 0			40 0	
24+00	48 35	47 90	47 99	47 75	47 59	47 3	46 9
	20 6	20 0	18 2	0 0	2 9	25 0	40 3
	T/C	℄	Lip		EP		Fence
	48 15	48 16	48 1				
	27 5	31 6	40 0				
	Front of Walk	B/W					
23+50	46 9	46 9			45 7		
	45 0	40 0			40 5		
					Fence		

RECEIVED
TELEPHONE

	Lt		Rt
26+00	53.22	53.29	52.54
	21.6	20.2	13
	AL	LP	EP
	53.66	53.69	53.66
	22.2	34.1	38.0
	T/C	F/W	B/W
25+50		52.3	49.8
		40.0	40.0

52.4	51.1	50.7			
0.0	25.0	40.0			
53.5					
40.0					

Radial Topo 6-26-89

R. Bert

m Stowman

T@ 10 BS 11

Shot #	Horiz Angle	Dist	Elev.	Description
100	4-17-24	403.18		Begin Stucco Fence
	3-49-08	397.84		F/H
	3-33-27	396.66		Brick Planter
	4-21-12	348.22	32.91	G/W
	4-06-49	342.70	32.88	End C & G & SW
			33.38	L.P
			33.48	E
				T/C
	4-30-17	342.42		B/W
	5-02-34	343.28		P/P w/str. Lt. E-W NE-SE
	6-41-21	343.54		End Planter / End Stucco Fence
	5-49-12	330.66		Begin Block Fence
	4-32-33	336.94		W/M
	4-36-08	333.88		G/W
	3-50-14	286.90	34.28	Speed Limit Sign
	7-56-21	284.56	34.31	W. Edge of D/W @ EP
	8-43-12	267.60	34.95	W. Edge of D/W 1' South of End of Block Fence
	6-13-56	263.32		E Edge of D/W
	4-11-18	261.80	34.68	Telco Pedestal
	7-50-03	223.84		E. Edge of D/W @ EP
	5-16-27	223.40	35.15	W/m
	9-21-20	221.06	36.02	W. Edge of D/W @ EP
	9-27-31	192.76	36.17	W. Edge of D/W
120	8-09-36	190.99		E Edge of D/W Begin Oleanders
				P/P Line E-W

CITY OF PHOENIX
JUL 11 1989

Shot #	Horiz. ∡	Dist	Elev.	Description
121	6-21-21	190.06	35.59	E Edge of D/W @ EP
	9-43-54	179.34		W/M
	10-30-28	125.72	36.42	W. Edge of Dirt D/W
	14-39-47	126.84	36.60	W. Edge of D/W / End Oleanders
	19-44-30	117.54	36.62	E Edge of D/W Begin Block Fence to N.
	355-31-06	394.50	32.26	Gate Post @ Face of 6" Curb @ E-Edge of D/W
	356-26-00	393.56	32.36	E. Edge of D/W @ B/W
	356-58-05	386.86	32.35	E Wing of D/W @ TBC
	355-34-03	388.84		NW Corn. Block-Planter 3' High
	355-11-25	358.78		NE " " " "
	356-43-16	357.76	32.93	W. Wing of D/W @ TBC
	356-02-08	353.36	33.06	W. Edge of D/W @ B/W Begin 6" Curb S.
	355-01-07	353.56	32.81	Gate Post @ W. Edge of D/W
	354-36-54	326.82	33.24	Gate Post @ E " " "
	355-42-03	326.26	33.54	E. Edge of D/W @ B/W Begin 6" Curb S.
	356-20-04	319.44	33.62	E Wing of D/W @ TBC
	357-36-42	314.12	H.Rim - 33.36 Nut - 32.28	W/V
	355-12-18	314.80		F/H
	354-18-54	301.90		∡Pt. in 3' Block Wall
	352-25-06	255.20		P/P Lines E-W-NW
	352-31-18	247.10		W/M
	352-37-25	232.86		End 3' Block Wall
	352-29-20	231.88	35.57	Gate Post @ W. Edge of D/W
	353-52-53	228.74	34.96	W. Edge of D/W @ B/W Begin 6" Curb S.
145	355-02-06	234.82	34.77	W. Wing of D/W @ TBC

Shot #	Horiz ∡	Dist	Elev.		Desc.
146	354-14-38	202.80	35 18		E Wing of D/W @ TBC
	353-20-18	210.00	35 21		E Edge of D/W @ B/W Begin 6" Curb S.
	351-47-12	213.70	35 18		Gate Post @ E Edge of D/W
	351-53-04	212.44			Begin 4' Block & Wrought Iron Fence
	347-54-39	126.96			No Parking Sign
	322-26-20	49.30			∡ Pt in Block & Wrought Iron Fence
	319-44-51	43.84	40.32		B.C. on SRP Irrig Box SRVWUA BM
	320-14-06	42.44			N.E. Corn. of 4'x7'x2' SRP Irrig. Box
	319-42-15	46.52			N.W. " " " " " "
	307-39-22	49.62			∡ Pt in Block & Wrought Iron Fence
	307-13-23	45.06			End Block & Wrought Iron Fence
	304-21-38	46.74			W. End 3' Wrought Iron Gate
	287-26-44	40.54			E. END " " " "
	275-32-37	24.66			No Parking Sign
	270-34-00	20.06			End Curb, Gutter & Side Walk @ TBC
	33-32-42	42.20	N Rim	39 16	w/v
			Nut	37 32	
	32-50-30	38.54	N Rim	39 13	w/v
			Nut	37 61	
	37-07-35	33.57	N. Rim	39 32	w/v
			Nut	36 21	
	42-43-07	30.55	N. Rim	39 62	w/v
			Nut	37 65	
	59-44-42	23.31	N Rim	39 95	w/v
			Nut	35 53	
	348-27-18	49.26	N Rim	38 39	w/v
			Nut	36 20	
	355-55-36	41.84	N Rim	38 76	w/v
			Nut	37 12	
	343-16-45	40.01	N. Rim	38 75	w/v
			Nut	36 64	
	348-46-43	23.71	N. Rim	39 53	w/v
			Nut	36 94	
170	11-58-21	112.90	36.74		W. Edge of D/W @ EP

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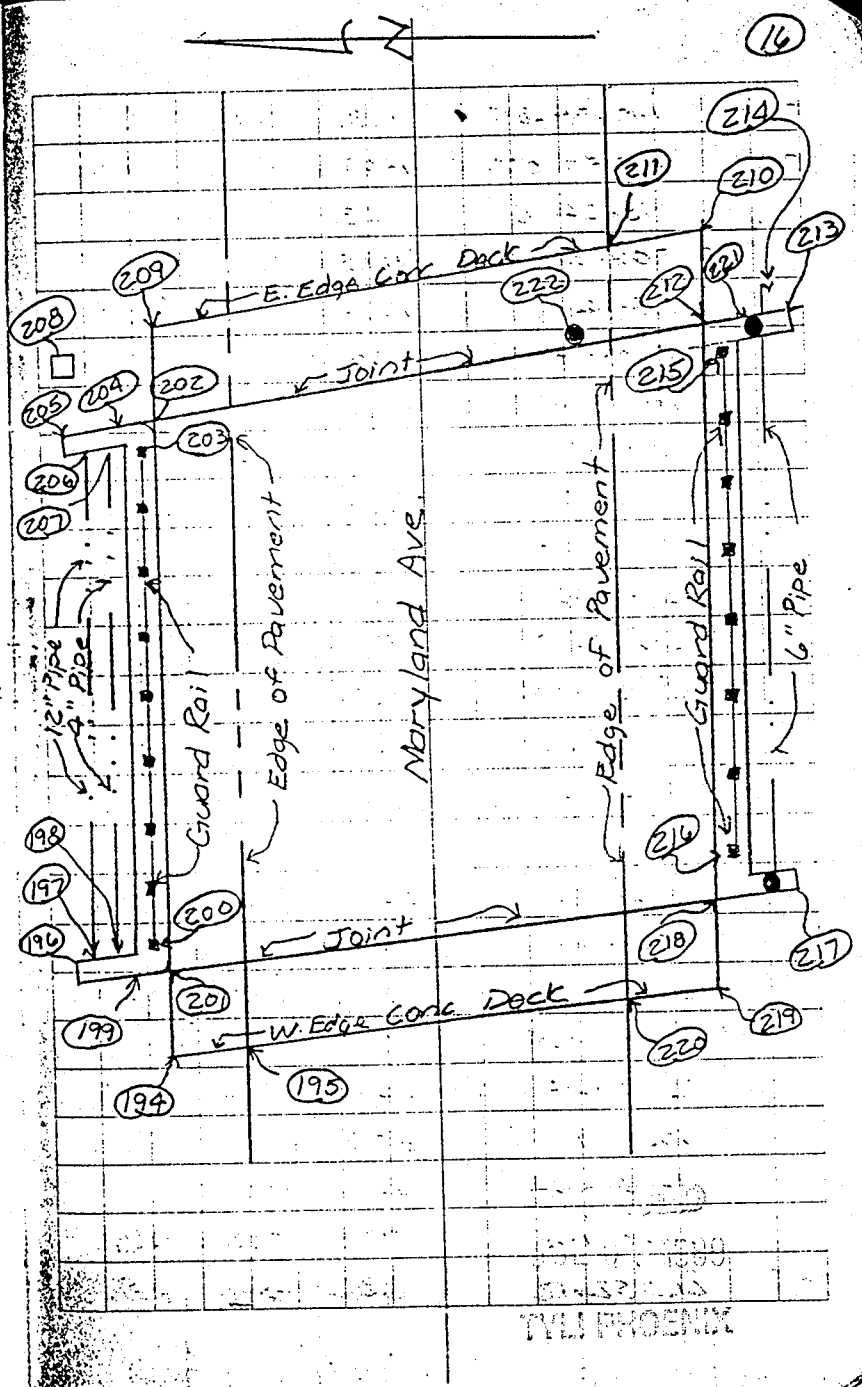
Shot #	Horiz ∠	Dist	Elev.	Desc.
171	34-16-42	61.96	37 40	Mail Box Edge of D/W
	36-15-12	61.24		F/H
	25-17-09	54.74	38 45	E Edge of D/W @ EP
	40-36-32	51.88		W/M
	52-16-21	46.46	37 75	S.E. Corn Dirt Parking Lot
	57-18-38	59.58	37 13	E Edge of Dirt Parking Lot
	48-10-09	48.60		Shrub
	50-49-04	42.18	N/G = 38 9	Shrub
	46-41-54	36.78	N/G = 39 4	G/W
	62-03-41	31.26	N/G = 40 0	P/P Lines E-W-N
	92-46-18	42.12		S.E Corn Fence
	103-47-22	40.00	36 88	⌀ 30" Conc Pipe S.E Flow
	100-25-43	42.66	36 90	⌀ 8" Conc Pipe N.W. Flow
	101-02-30	38.52	39 90	SW Corn. of Top of Headwall
	96-52-42	41.82		NW Corn. " " " "
	112-21-15	45.66	42 9	Top of Bank
	121-03-12	40.30	N/G = 42 6	P/P Lines S-NW
	132-28-52	52.94	N/G = 43 4	G/W
	107-22-48	67.58	44 0	Top of Bank
	123-30-44	82.86	43 7	Top of Bank
	124-09-57	86.62	42 30	Top of Conc Liner
	136-41-31	59.32	N.Rim = 43 43	SS. M. H. E⌀ - 29.68 SW⌀ = 29.48
	145-55-06	41.48	42 08	W. Edge Canal Access Rd @ EP
	156-25-45	65.08	42 64	N.W. Corn Conc Bridge Deck
195	159-26-18	65.32	42 80	EP @ W. Edge of Bridge Deck

RECEIVED JUL 0 1 1980 TULLI HOUSING

Shot #	Horiz ∠	Dist.	Elev.	Desc.
196	156-33-42	78.78	43 97	
197	157-32-40	79.06		
198	158-37-12	79.22		
199	158-38-15	78.58		
200	159-32-57	78.96	43 96	
201	160-42-24	78.84	43 00	
202	169-31-57	143.92	43 69	
203	168-47-09	142.36	44 64	
204	168-21-57	142.78		
205	167-11-16	141.72	44 66	
206	167-18-57	139.04		
207	167-57-35	138.90		
208	167-20-09	143.26		Bike Route Sign
209	170-48-09	163.36	43 73	
210	187-39-48	193.06	43 81	
211	180-44-12	178.02	44 13	
212	188-33-18	173.52	43 86	
213	191-01-33	179.50		
214	190-17-36	179.70		
215	190-02-21	176.88	44 66	
216	195-51-34	112.68	44 19	
217	197-31-10	115.00	44 22	
218	193-56-49	107.66	43 40	
219	196-09-03	93.24	43 13	
220	182-33-48	76.60	43 17	



221	190-39-05	178.16	44.70 ✓	*
222	179-57-07	156.66	44.08	43.71 *
	198-04-18	114.30	44.11	
	200-22-48	119.54	44.20	
	198-44-03	113.46	43.26	
	200-44-43	117.84	43.39	
	196-51-26	114.11	1244.22 ✓	*
	203-12-54	131.10	42.79	
	204-30-22	128.86	43.5	
	205-10-00	84.94	42.9	
	204-20-32	62.62	42.3	
	216-55-06	45.22	41.4	
	232-47-09	42.06		
	206-50-03	36.64		
	197-30-18	50.08	41.80	
	190-22-13	46.00		
	192-07-00	30.34	N Rim = 41.37	
	252-46-44	33.76		
	271-48-12	40.62	36.1	N/G
	276-06-24	40.70		
	227-29-18	55.60	36.5	
	238-39-25	49.40		
	214-38-24	59.66		
	212-21-21	77.78	37.2	N/G
245	212-52-12	71.32		

(17)

2" B.C. U.S.C.E.
Copper Welded Rod Labeled AC-38 USCE
N.W. Corn. Trash Rack
S.W. Corn. Trash Rack
N.W. Corn. Conc. Pad in Front of Trash Rack
S.W. " " " " " " "
3" BC. U.S.G.S. B.M. City of Phoenix Datum = 1244.16 ✓
T.O.L. Canal W. Side
T.O.B.
T.O.B. W Edge Access Rd.
T.O.B.
T.O.B.
P/P w/Transformer Lines E-W N-S
Left Turn Sign
S.E. Corn Asphalt Pad
N.E. " " "
S.S.M.H. NE = 28.57 WE = 28.37
Willow Tree
4' Metal Corral Fence N.W. Corn.
Shrub
Toe of Slope @ Fence
Palo Verde Tree
2 - 4" Mesquite Trees
N.E. Corn 4' Corral Fence
Palo Verde Tree

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JUL 07 1989
CITY OF PHOENIX

T@ 12 BS 10

Shot #	Horiz ∡	Dist.	Elev.
300	344-01-14	233.04	437
	343-37-15	237.92	439
	343-08-23	248.82	369
	340-37-33	150.68	4245
	340-42-00	146.00	438
	340-36-54	130.78	438
	335-20-48	117.10	
	338-09-42	122.02	
	340-13-25	118.06	
	340-01-38	114.54	
	339-26-03	94.54	
	336-43-51	101.26	
	344-44-54	108.28	
	344-44-50	122.00	438
	358-30-25	121.94	4401
	345-51-07	97.82	N Rim: 4358
	358-10-31	60.94	4459
	347-01-42	56.24	4429
	323-43-12	66.40	4397
	325-25-51	70.40	
	323-21-17	68.04	
	309-46-57	52.08	4445
	306-45-00	49.90	
323	325-14-33	42.10	4446

JUL 01 1969
KENECOTT

Desc.
W. Edge Canal Access Rd
TOB
TOE
TOL E. Edge Canal
TOB W. Edge Canal Access Rd.
E. Edge Canal Access Rd.
G/W
G/W
G/W
12" Diam Palo Verde Tree
G/W
W. End 3½' Rock Fence
Guy Pole wire N.N.E. to P/P
P/P w/Str. Lt Lines S-N-W.
E. Edge Access Rd. @ EP
S.S.M.H.
W. Edge of D/W @ EP
∡ Pt. in W. Edge of D/W
W. Edge of D/W
E. End 3½' Rock Fence
Gate Post
Gate Post E. Edge of D/W
W. End 1½' Rock Fence
E. Edge of D/W

Shot #	Horiz ∡	Dist	Elev	Desc
324	344-48-00	29.60	44.86	∡ Pt. in E. Edge of D/W
	353-39-09	22.12	45.13	E. Edge of D/W @ EP
	14-22-10	208.82	41.98	T.O.L. E. Side Canal
	15-27-36	203.70	43.7	T.O.B.
	17-12-42	182.48	43.9	E. Edge Access Rd.
	8-52-51	157.90	43.70	E. Edge Access Rd @ EP
	15-32-06	173.70		S. End of 2' Redwood Fence
	26-41-43	225.64		Point on line of Redwood Fence
	26-48-18	224.68		Inside Face of 2" High 6" Curb conc. Begin Curve
	22-12-48	189.72		P.O.C. of Curb
	25-53-22	161.36		18" Diam Pine Tree
	17-35-33	144.34		W. End 3' Redwood Rail Fence
	23-31-18	140.02		P.O.C. of Curb
	19-53-15	128.42		E. End Redwood Fence
	18-11-18	129.18	N Rim = 44.08	S.S.M.H. E℄ = 36.78 W℄ = 36.73 N℄ = 36.83
	26-08-27	110.76	N Rim: 44.06 Nut 43.35	W/V
	25-17-57	112.60		W/M
	34-14-18	119.10		Rainbird Spr.
	39-24-24	128.44		10" Diam Pine Tree
	44-31-00	106.64		Herberger Pk # 2 Sign S. End
	48-45-18	106.80		" " " " N. End
	48-03-03	115.78		P.O.C in Curb
	56-29-30	141.92		12" Diam Willow Tree
	62-40-39	140.88		Metal Lt. Post
348	61-56-14	141.22		P.O.C. in Curb

Shot #	Horiz. ∠	Dist	Elev		Desc.
349.	30-40-12	53.46	45.48	Lip	S.W. Curb Return @ TBC Begin C & G & S/W
			45.47	℄	
			45.90	TIC	
	52-28-54	44.06	45.98	B/W	℄ Handicap Ramp @ TBC Elev = 45.57
	56-45-18	50.80			2-2" PVC Pipes 2' Above Ground
	62-11-24	55.00			Yield & Street Sign
	68-30-12	58.92	45.51	Lip	N.W. C.R @ TBC
			45.50	℄	
			45.90	TIC	
	89-10-30	40.06	45.81	B/W	C.O.P. B.C. Flush Elev. = 45.99
	113-51-49	49.18	46.36	Lip	N.E. C.R. @ TBC
			46.37	℄	
			46.83	TIC	
	24-56-18	76.36	46.94	B/W	P/P w/Str. Lt. Lines E-W NW-SW
	120-17-39	49.52			2-2" PVC Pipes 2' Above Ground
	130-52-44	32.24	N. Rim = 46.66		S.S.M.H. W℄ = 48.91 E℄ = 50.91
	134-31-37	36.30	56.65		℄ Handicap Ramp @ TBC
	155-29-54	49.14	56.97	Lip	S.E. C.R. @ TBC
			56.93	℄	
			57.40	TIC	
	162-48-03	69.56	57.52	B/W	S/W Breaks from Curb Begin Curve
	160-38-46	72.76			Front of Walk 4' wide
	151-31-37	51.00			B/W Begin Curve
	157-29-30	72.28			B/W
	159-58-48	90.06			Front of Walk
	162-01-42	105.32			P/P Lines E-W
	163-10-54	122.36			Front of Walk
	170-43-30	163.86			Front of Walk
	75-04-29	99.50	44.97		℄ @ ℄ of Scupper
	75-56-24	99.64	44.98		℄ 10' wide Valley Gutter @ Lp
	96-57-52	103.78	45.35		℄ 10' " " "
	97-39-39	104.42	45.38		℄ @ ℄ of Scupper
373	106-01-45	101.64			Palo Verde

Shot #	Horiz ∠	Dist	Elev	Desc
374	115-26-11	102.70		Mesquite Tree
375	123-33-11	98.52	North TB 465 ℄ 451 South TB 464	℄ 4' Swale
376	145-13-54	111.36	North TB 482 ℄ 474 South TB 480	℄ 4' Swale
377	160-07-23	157.46	North TB 502 ℄ 492 South TB 501	℄ 4' Swale
378	169-16-24	174.98		Palo Verde
	172-02-12	197.34		Front of Walk
	172-40-30	221.12		4" China Berry ?
	171-28-32	246.20		Front of Walk
	173-15-39	248.30		3" China Berry ?
	173-58-36	263.10		3" China Berry ?
	172-32-06	269.92		Front of Walk
	173-08-15	272.30		P/P w/Str. Lt. Lines E-W
	175-38-27	292.92		Front of Walk @ TBC End S/W Curves
	175-48-46	338.14		S.S.M.H.
	179-27-06	247.50	5235	E. Edge of D/W @ EP
	181-35-52	243.16	5175	E. Edge of D/W
	189-20-06	249.20		W. End of 2' Rock Fence
	189-20-10	246.62	4992	E. Edge of D/W
	190-01-16	231.28	4987	W. Edge of D/W
	190-09-36	228.22		E. Edge of 2' Rock Fence
	181-38-27	227.76	5149	W. Edge of D/W
395	179-21-20	223.66	5194	E.W. Edge of D/W @ EP

Shot #	Horiz ∡	Dist	Elev		Desc.
396	179-42-50	107.98	48 76		E. Edge of D/W @ E.P.
	201-13-57	111.14	47 91		W. End of Rock Fence @ E. Edge of D/W
	204-55-30	96.14	47 59		E. End of Rock Fence @ W. Edge of D/W
	180-02-42	90.42	48 26		W. Edge of D/W @ EP
			N.Rim	46 17	W/V
	203-23-15	40.30	Nut	41 79	W/V
			N.Rim	46 13	W/V
	204-48-30	36.15	Nut	41 38	
			N.Rim	46 36	
	191-31-39	29.80	Nut	42 85	Delineator Sign
	226-38-38	35.75			W/V
			N.Rim	45 95	W/V
	211-46-57	31.01	Nut	42 65	
			N.Rim	45 80	W/V
	225-05-08	28.10	Nut	43 57	W/V
			N.Rim	45 71	W/V
	220-43-21	22.67	Nut	43 68	W/V
			N.Rim	46 22	
	193-48-33	23.00	Nut	42 43	F/H
			N.Rim	46 20	Delineator Sign
	199-23-22	18.02	Nut	43 85	Not a Thru Street Sign
	234-32-48	31.50			W/V
	245-02-24	28.48			S.S.M.H. ⌀N=36 39 ⌀S=36 69 ⌀W=36 79
	255-24-51	14.98			N.W. Corn Pump Fence - Chain Link 6' High
			N.Rim	46 35	
	140-10-57	15.08	Nut	45 37	
413	63-12-35	685.94	N.Rim=	45 04	
414	82-13-53	362.22			
	CWIR (#222)				
	TP AC 38	BS 10			
Shot #	Horiz ∡	Dist	Elev		Desc
			N.Rim	44 01	S.S.M.H. ⌀N=37 36 ⌀S.=37 61 ⌀E.=37 41
500	230-07-46	580.64			
415	84-45-48	336.24			S.W. Corn Pump Fence
416	85-51-15	340.40			S.E. Corn Pump Fence

RECEIVED JUL 07 1999 DEL PHOENIX

Level Loop Between BC. in H.H @ 16th St & Maryland and USGS BC. on Bridge. 7-4-89 Z Bert M. Stowman

+	HI	−	Elev	Desc.
			1244.16	USGS BM Elev = 1244.22 *
				C.O.P Datum : 1244.16
2.68				
		11.68		
1.91				
		8.36		
1.29				
		7.65		
4.61				
		7.03		
1.95				
		9.4		
1.93				
		7.50		
3.07				
		3.05	1202.64	C.O.P BC Elev = 1202.67 *
17.49		5.01		16th St & Maryland

RECEIVED
JUL 0 1 1989
TVL PARKER

MARYLAND AVENUE BRIDGE

+ OFFSET ARE TO THE LEFT
- OFFSET ARE TO THE RIGH

CONTROL POINTS

STATION		NORTH	EAST	
POINT 221		920682.87	463142.54	✓✓ JRJ
POINT 227		920681.93	463076.62	✓✓
POINT 11		920682.44	460341.01	✓ 920,699.74/460,341.80
1700		920710.13	462667.09	✓
1800		920711.32	462767.08	✓
1900		920712.51	462867.07	✓
2000	POINT 10	920713.71	462967.07	✓ 920,714.89/462,967.81
2100		920714.90	463067.06	✓
2200		920716.09	463167.05	✓
2300		920717.28	463267.04	✓
2324.96	POINT 12	920717.57	463292.00	✓
2400		920718.47	463367.04	✓
2500		920719.66	463467.03	✓
2600		920720.85	463567.02	✓ DRS

POINT	STA	OFFSET	NORTH	EAST
10	2000	0	920713.71	462967.07
100	1597.950	30.160	920739.08	462564.68
101	1603.043	26.497	920735.47	462569.82
102	1604.104	24.613	920733.60	462570.90
103	1652.785	26.432	920736.00	462619.56
104	1658.183	24.583	920734.22	462624.98
105	1658.638	26.894	920736.53	462625.41
106	1658.049	30.174	920739.81	462624.78
107	1658.799	40.017	920749.66	462625.41
108	1671.044	33.530	920743.32	462637.73
109	1664.118	26.685	920736.39	462630.89
110	1667.197	26.790	920736.53	462633.97
111	1713.743	19.200	920729.50	462680.60
112	1718.167	39.304	920749.65	462684.78
113	1735.493	40.570	920751.12	462702.09
114	1738.236	28.586	920739.17	462704.98
115	1738.899	19.121	920729.72	462705.76
116	1778.249	30.511	920741.57	462744.97
117	1777.546	20.535	920731.59	462744.38
118	1781.880	35.936	920747.04	462748.53
119	1809.861	31.677	920743.12	462776.56
120	1810.993	27.102	920738.55	462777.75
121	1811.108	21.040	920732.50	462777.94
122	1823.241	30.315	920741.91	462789.96
123	1876.388	22.927	920735.16	462843.19
124	1877.291	32.108	920744.35	462843.98
125	1889.368	39.703	920752.09	462855.97
126	1606.706	-30.826	920678.20	462574.17
127	1607.202	-24.483	920684.55	462574.59
128	1613.682	-20.462	920686.65	462581.02
129	1612.323	-30.051	920679.04	462579.77
130	1642.483	-30.083	920679.37	462609.93
131	1642.826	-20.463	920689.99	462610.16
132	1647.486	-24.430	920685.08	462614.87

133	1647.775	-30.700	920678.81	462615.23
134	1674.622	-30.671	920679.16	462642.08
135	1674.658	-24.458	920685.38	462642.04
136	1681.213	-20.423	920689.49	462648.54
137	1686.153	-13.090	920696.88	462653.40
138	1686.302	-26.314	920683.66	462653.70
139	1699.585	-29.906	920680.22	462667.03
140	1747.031	-33.671	920677.03	462714.51
141	1755.002	-32.160	920678.63	462722.47
142	1769.067	-29.896	920681.06	462736.50
143	1770.110	-30.311	920680.66	462737.55
144	1772.563	-24.381	920686.62	462739.93
145	1766.061	-20.323	920690.60	462733.38
146	1798.323	-20.340	920690.96	462765.54
147	1791.418	-24.361	920686.86	462758.79
148	1788.492	-30.529	920680.66	462755.94
149	1789.688	-29.990	920681.21	462757.12
150	1875.856	-26.590	920685.64	462843.25
151	1960.920	-30.054	920683.19	462928.35
152	1966.541	-28.328	920684.98	462933.95
153	1967.377	-27.146	920686.17	462934.77
154	1964.518	-30.086	920683.20	462931.94
155	1969.686	-39.264	920674.06	462937.22
156	1972.742	-35.881	920677.50	462940.24
157	1973.620	-38.584	920674.81	462941.15
158	1987.846	-38.675	920674.89	462955.37
159	1997.618	-24.545	920689.13	462964.98
160	1999.802	-20.059	920693.65	462967.11
161	1964.828	23.319	920736.60	462931.62
162	1967.620	20.901	920734.22	462934.44
163	1973.234	20.262	920733.65	462940.06
164	1977.555	20.725	920734.16	462944.37
165	1988.255	20.135	920733.70	462955.08
166	1951.737	-9.859	920703.27	462918.92
167	1958.266	-2.972	920710.24	462925.37
168	1961.682	-11.511	920701.74	462928.89
169	1976.743	-4.614	920708.81	462943.86
170	1889.556	23.430	920735.81	462856.35
171	1943.802	34.897	920747.99	462915.45
172	1950.615	36.215	920749.33	462917.25
173	1950.505	33.381	920736.50	462917.29
174	1960.614	33.768	920747.00	462927.28
175	1971.571	36.747	920750.11	462938.20
176	1957.822	50.143	920763.46	462934.29
177	1967.587	36.213	920749.53	462934.22
178	1973.351	32.695	920746.08	462940.03
179	1974.775	26.767	920740.17	462941.52
180	1985.354	27.617	920741.15	462952.09
181	2002.037	42.071	920755.80	462968.60
182	2009.534	38.847	920752.66	462976.14
183	2007.722	41.955	920755.75	462974.29
184	2007.377	37.807	920751.60	462973.99
185	2005.008	41.519	920755.28	462971.58
186	2017.366	42.229	920756.14	462993.93
187	2020.788	34.525	920748.47	462987.44
188	2035.753	39.043	920753.17	463002.35

189	2020.187	64.495	920778.44	462986.48	
190	2045.749	69.086	920783.33	463011.94	
191	2048.645	71.671	920785.95	463014.85	
192	2043.166	40.689	920754.90	463009.74	
193	2034.355	23.244	920737.36	463001.14	
194	2059.650	26.024	920740.44	463026.40	
195	2061.159	22.941	920737.37	463027.95	
196	2072.260	31.336	920745.90	463038.97	
197	2073.065	30.198	920744.77	463039.77	
198	2073.768	28.880	920743.46	463040.48	GA
199	2073.181	28.624	920743.20	463039.90	
200	2073.983	27.589	920742.17	463040.71	
201	2074.412	26.049	920740.64	463041.16	
202	2141.525	26.147	920741.53	463108.27	
203	2139.642	27.686	920743.05	463106.37	
204	2139.847	28.793	920744.16	463106.56	
205	2138.191	31.427	920746.78	463104.87	
206	2135.647	30.530	920745.85	463102.34	
207	2135.844	28.974	920744.29	463102.55	GA
208	2139.775	31.408	920746.77	463106.46	
209	2161.260	26.111	920741.73	463128.00	
210	2191.336	-25.745	920690.24	463158.69	
211	2178.005	-2.289	920713.54	463145.08	
212	2171.589	-25.813	920689.94	463138.95	
213	2176.187	-34.330	920681.48	463143.65	
214	2176.808	-32.110	920683.70	463144.24	
215	2174.172	-30.834	920684.95	463141.59	
216	2108.391	-30.793	920684.20	463075.81	
217	2109.666	-34.618	920680.39	463077.14	
218	2104.486	-25.949	920689.00	463071.85	
219	2089.560	-25.936	920688.84	463056.93	
220	2076.523	-3.426	920711.19	463043.62	✓ DRS
221	2175.090	-32.930	920682.87	463142.54	
222	2156.660	0.131	920715.70	463123.71	
223	2108.661	-35.457	920679.54	463076.14	
224	2112.057	-41.629	920673.41	463079.61	
225	2107.449	-36.441	920678.55	463074.94	
226	2110.200	-41.741	920673.28	463077.75	✓ DRS
227	2109.207	-33.091	920681.93	463076.62	
228	2120.485	-51.677	920663.47	463088.16	
229	2117.252	-53.450	920661.65	463084.94	
230	2076.877	-36.121	920678.50	463044.37	
231	2057.053	-25.811	920688.57	463024.42	
232	2036.153	-27.163	920686.97	463003.54	
233	2025.438	-33.496	920680.51	462992.90	
234	2032.694	-16.540	920697.56	462999.95	
235	2047.761	-15.064	920699.21	463015.00	
236	2045.249	-8.280	920705.96	463012.41	
237	2029.664	-6.368	920707.69	462996.80	
238	2009.995	-32.247	920681.58	462977.44	
239	1998.722	-40.600	920673.09	462966.27	
240	1995.670	-40.469	920673.19	462963.22	
241	2037.571	-40.985	920673.17	463005.12	
242	2025.696	-42.191	920671.82	462993.26	
243	2049.085	-33.912	920680.38	463016.55	
244	2065.704	-41.626	920672.86	463033.26	

245	2059.902	-38.708	920675.71	463027.42
12	2324.97	0	920717.57	463292
300	2100.925	-64.154	920650.75	463068.74
301	2096.696	-67.092	920647.76	463064.55
302	2086.836	-72.167	920642.57	463054.75
303	2182.813	-49.986	920665.89	463150.45
304	2187.165	-48.255	920667.67	463154.78
305	2201.594	-43.408	920672.69	463169.15
306	2218.534	-48.846	920667.46	463186.16
307	2211.697	-45.390	920670.83	463179.28
308	2213.863	-39.946	920676.30	463181.38
309	2217.309	-39.124	920677.16	463184.82
310	2236.445	-33.210	920683.30	463203.88
311	2231.937	-40.003	920676.46	463199.45
312	2220.494	-28.484	920687.84	463187.88
313	2207.258	-32.096	920684.07	463174.68
314	2203.061	-3.177	920712.94	463170.14
315	2230.107	-23.910	920692.53	463197.43
316	2264.051	-1.940	920714.90	463231.11
317	2270.155	-12.624	920704.29	463237.34
318	2271.433	-39.291	920677.64	463238.94
319	2266.990	-39.945	920676.93	463234.50
320	2270.368	-40.610	920676.31	463237.89
321	2291.635	-40.022	920677.15	463259.15
322	2295.104	-39.983	920677.23	463262.62
323	2290.372	-24.001	920693.15	463257.69
324	2296.396	-7.761	920709.46	463263.52
325	2302.976	-2.446	920714.86	463270.04
326	2122.673	51.824	920766.98	463089.11
327	2128.631	54.299	920769.52	463095.03
328	2150.652	53.996	920769.48	463117.06
329	2168.953	24.377	920740.08	463135.71
330	2157.606	46.522	920762.09	463124.10
331	2123.371	101.368	920816.53	463089.21
332	2124.423	101.321	920816.49	463090.27
333	2149.321	71.725	920787.19	463115.51
334	2179.794	70.456	920786.29	463146.00
335	2187.371	43.626	920759.55	463153.90
336	2196.574	55.881	920771.91	463162.95
337	2204.199	43.685	920759.81	463170.72
338	2202.234	40.322	920756.42	463168.80
339	2225.529	48.799	920765.18	463191.99
340	2223.160	48.119	920764.47	463189.63
341	2226.500	67.010	920783.40	463192.74
342	2225.720	81.536	920797.91	463191.79
343	2248.921	74.767	920791.42	463215.07
344	2254.496	80.363	920797.08	463220.58
345	2247.564	86.110	920802.75	463213.58
346	2246.612	118.334	920834.96	463212.24
347	2260.296	125.163	920841.95	463225.85
348	2258.525	124.617	920841.38	463224.08
349	2278.978	27.270	920744.29	463245.69
350	2298.127	34.947	920752.19	463264.75
351	2297.110	42.486	920759.72	463263.64
352	2299.300	48.647	920765.90	463265.76

353	2303.369	54.821	920772.13	463269.75
354	2324.383	40.056	920757.61	463290.94
355	2344.856	44.976	920762.77	463311.35
356	2255.720	32.197	920748.94	463222.38
357	2349.940	42.758	920760.62	463316.46
358	2346.060	24.376	920742.19	463312.80
359	2350.415	25.879	920743.75	463317.14
360	2369.675	20.379	920738.48	463336.46
361	2391.409	20.568	920738.92	463358.19
362	2393.608	24.113	920742.49	463360.35
363	2369.791	24.314	920742.41	463336.53
364	2391.734	27.670	920746.03	463358.43
365	2409.578	30.832	920749.40	463376.24
366	2425.141	32.496	920751.25	463391.78
367	2442.086	35.403	920754.36	463408.69
368	2486.678	26.410	920745.90	463453.39
369	2299.333	96.143	920813.40	463265.23
370	2300.754	96.655	920813.92	463266.64
371	2337.544	103.014	920820.72	463303.35
372	2338.880	103.488	920821.21	463304.68
373	2353.026	97.688	920815.58	463318.90
374	2369.071	92.745	920810.83	463335.00
375	2379.413	82.104	920800.31	463345.47
376	2416.438	63.504	920782.15	463382.71
377	2473.039	53.537	920772.86	463439.43
378	2496.882	32.568	920752.18	463463.52
379	2520.397	27.339	920747.23	463487.09
380	2544.275	28.192	920748.37	463510.96
381	2568.440	36.495	920756.96	463535.02
382	2571.544	29.138	920749.64	463538.22
383	2586.607	27.608	920748.29	463553.30
384	2592.592	35.068	920755.82	463559.19
385	2595.309	32.536	920753.32	463561.94
386	2617.033	22.264	920743.30	463583.78
387	2662.197	24.690	920746.27	463628.91
388	2572.449	2.369	920722.88	463539.44
389	2568.025	-6.780	920713.68	463535.12
390	2570.860	-40.422	920680.07	463538.36
391	2568.313	-40.008	920680.46	463535.81
392	2552.712	-40.245	920680.03	463520.21
393	2549.601	-40.257	920679.98	463517.10
394	2552.627	-6.522	920713.75	463519.72
395	2548.606	2.516	920722.74	463515.60
396	2432.939	0.539	920719.39	463399.96
397	2428.556	-40.250	920678.55	463396.06
398	2412.146	-40.516	920678.09	463379.66
399	2415.380	-0.071	920718.57	463382.41
400	2361.949	-15.997	920702.01	463329.17
401	2357.774	-15.168	920702.79	463324.99
402	2354.159	-5.955	920711.96	463321.26
403	2349.503	-25.994	920691.87	463316.85
404	2351.320	-16.333	920701.55	463318.55
405	2344.800	-19.899	920697.90	463312.07
406	2342.141	-14.790	920702.98	463309.35
407	2347.295	-5.490	920712.34	463314.39
408	2341.958	-5.982	920711.79	463309.06

409	2343.231	-25.660	920692.12	463310.57
410	2336.978	-25.820	920691.89	463304.32
411	2328.732	-14.497	920703.11	463295.94
412	2336.543	9.656	920727.36	463303.46
413	2015.789	612.313	921326.15	462975.56
414	2275.998	358.896	921075.85	463238.76
415	2294.271	334.837	921052.01	463257.32
416	2300.351	339.509	921056.76	463263.35
222			920715.9	463123.71
500	2528.882	-445.507	920274.72	463501.21