Higley Area Drainage Master Plan

Technical Report Annex

FCD #98-13
November, 2000

prepared for:

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

FLOOD CONTROL DISTRICT
of
MARICOPA COUNTY
1959

prepared by:

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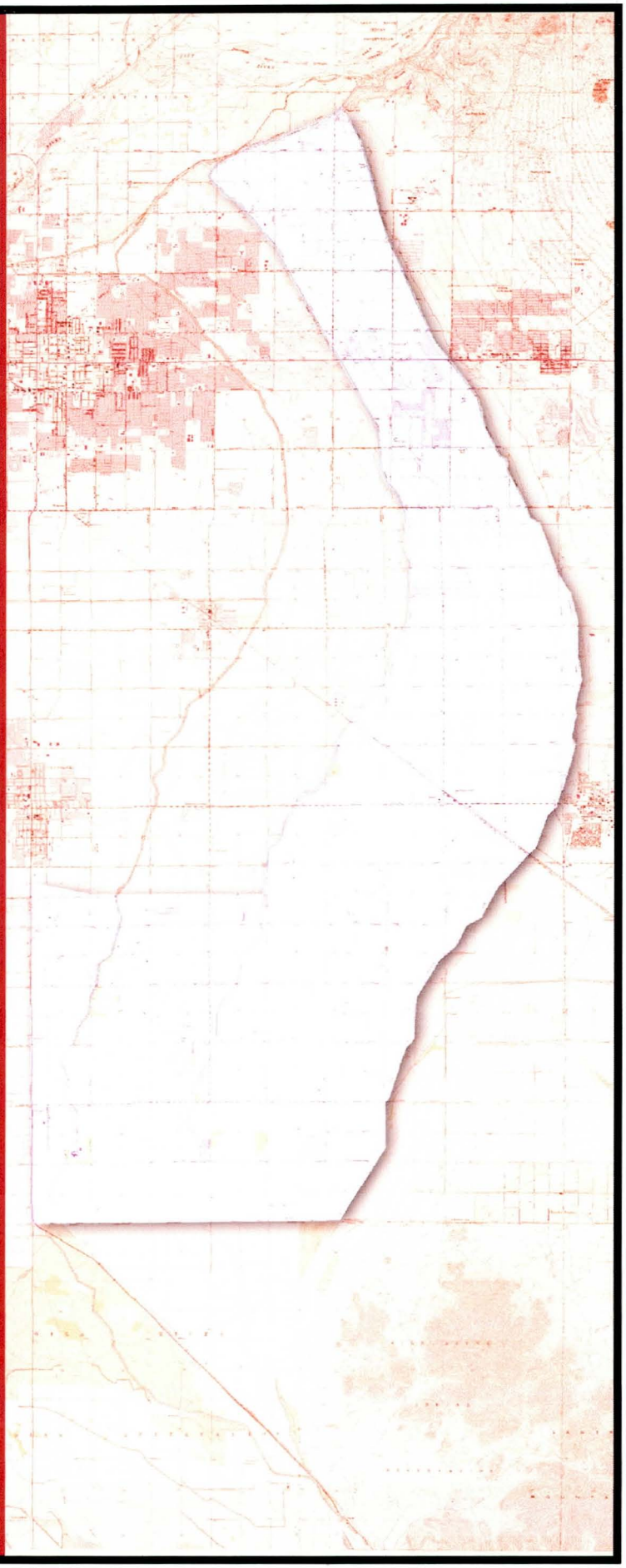
Since 1962



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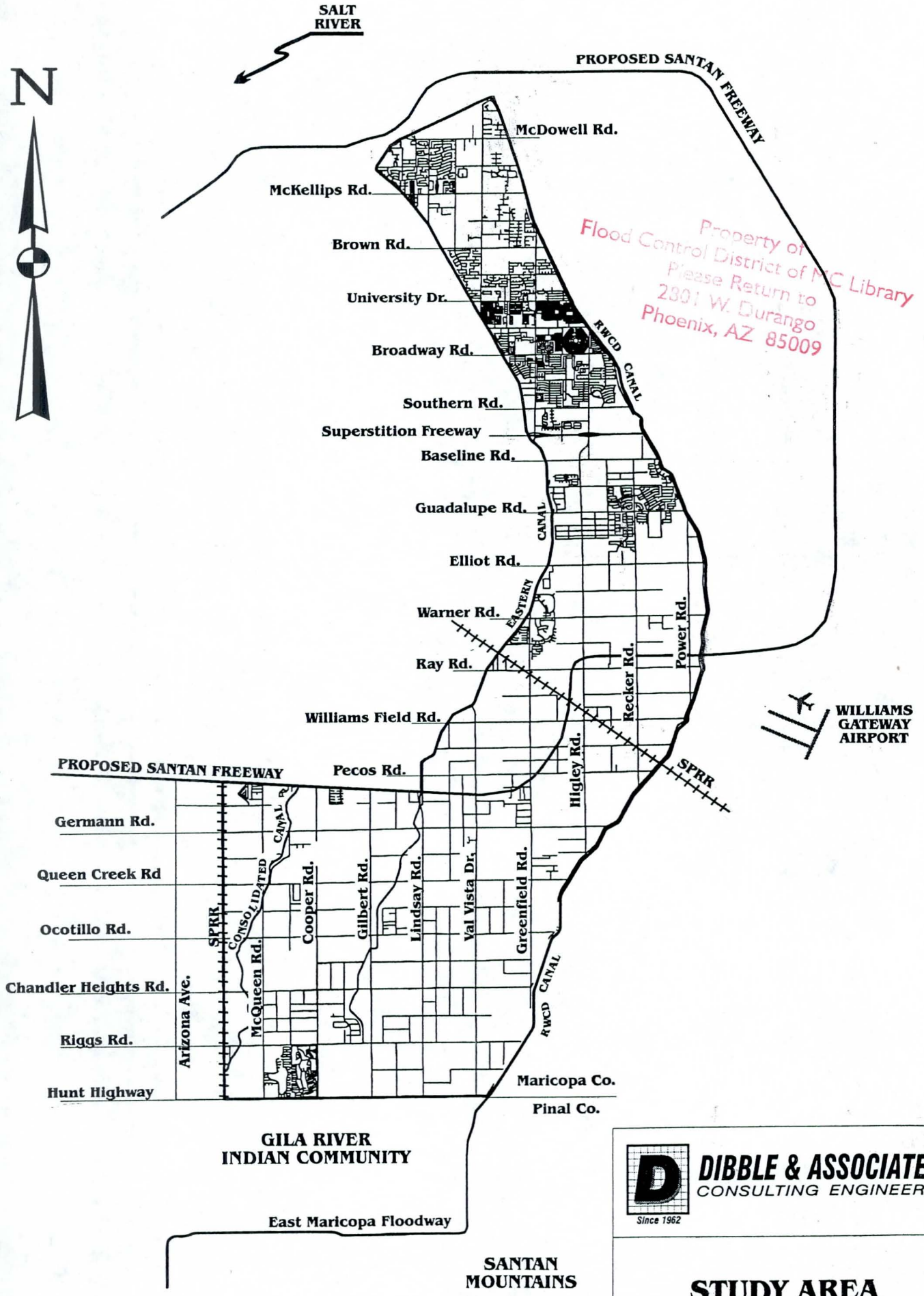

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TO: FCDMC

DATE: October 9, 2000

RE: FCD 98-13, Higley ADMP

ATTENTION: Kathryn Gross

FAX TO: 602-506-4601

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Sincerely,
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Dan C. Frank, E.I.T.

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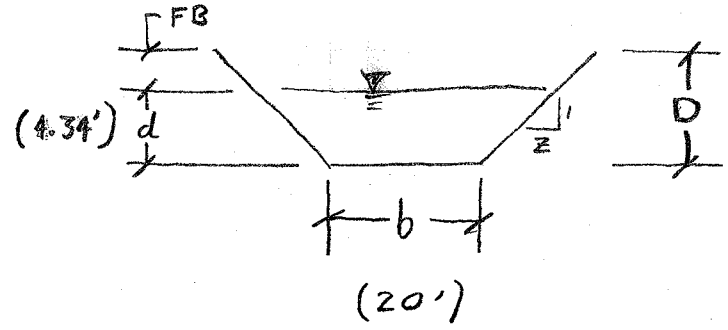
CALC DCF DATE 10/9/00 JOB 9829
CHKD _____ DATE _____ SHT 1 OF 1

TITLE EXAMPLE CHANNEL CALC.
(MANNING'S EQ)

REACH 13b

L = 1228'
Q = 440 cfs
n = .025 (EARTH)
U.S. FL = 73.1
D.S. FL = 72.5
z = 4:1



$$\text{SLOPE} = \frac{73.1 - 72.5}{1228'} = \underline{.0005'/ft}$$

$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2} \quad , \quad R = \frac{A}{P}$$

$$A = (b + zd)d = [20 + 4(4.34)]4.34 = \underline{162 \text{ SF}}$$

$$P = b + 2z\sqrt{1+z^2} = 20 + 2(4.34)\sqrt{1+4^2} = \underline{55.8 \text{ FT}}$$

$$R = \frac{162 ft^2}{55.8 ft} = 2.9$$

$$\underline{Q = 439 \text{ cfs} \approx 440 \text{ cfs} \therefore \text{OK}}$$

$$V = \frac{Q}{A} = \frac{440}{162} = 2.7 \text{ fps}$$

$$F = \frac{V}{\sqrt{d_H g}} \quad , \quad d_H = \frac{(b+zd)d}{b+2zd} = 2.96 \Rightarrow \underline{F = .28}$$

SUB-CRITICAL

$$\text{Design Depth} = \text{depth of flow} + \left(1 + \frac{V^2}{2g}\right) = 4.34 + 1.11 = \underline{5.45'}$$

$$\text{Top Width} = b + 2zD = 20 + 2(4)(5.45) = \underline{63.6'}$$

CURRENT DATE: 10-09-2000
CURRENT TIME: 11:09:10

FILE DATE: 10-09-2000
FILE NAME: BASELINE

FHWA CULVERT ANALYSIS
HY-8, VERSION 6.0

CULV NO.	SITE DATA: INLET ELEV. (ft)	SITE DATA: OUTLET ELEV. (ft)	SITE DATA: CULVERT LENGTH (ft)	CULVERT SHAPE, MATERIAL, INLET: BARRELS SHAPE MATERIAL	SPAN (ft)	RISE (ft)	MANNING n	INLET TYPE
1	73.42	73.37	100.00	1 RCB	6.00	4.00	.012	CONVENTIONAL
2								
3								
4								
5								
6								

FILE: BASELINE CULVERT HEADWATER ELEVATION (ft) DATE: 10-09-2000

DISCHARGE (cfs)	1	2	3	4	5	6	ROADWAY
0	73.42	0.00	0.00	0.00	0.00	0.00	0.00
15	74.45	0.00	0.00	0.00	0.00	0.00	0.00
30	75.01	0.00	0.00	0.00	0.00	0.00	0.00
45	75.46	0.00	0.00	0.00	0.00	0.00	0.00
60	75.91	0.00	0.00	0.00	0.00	0.00	0.00
75	76.31	0.00	0.00	0.00	0.00	0.00	0.00
90	76.67	0.00	0.00	0.00	0.00	0.00	0.00
105	77.02	0.00	0.00	0.00	0.00	0.00	0.00
120	77.33	0.00	0.00	0.00	0.00	0.00	0.00
130	77.57	0.00	0.00	0.00	0.00	0.00	0.00
150	77.98	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The last row, if not 0, is for a point above the roadway.

CURRENT DATE: 10-09-2000 FILE DATE: 10-09-2000
CURRENT TIME: 11:09:10 FILE NAME: BASELINE

PERFORMANCE CURVE FOR CULVERT 1 - 1(6.00 (ft) BY 4.00 (ft)) RCB

DIS-CHARGE FLOW (cfs)	HEAD-WATER ELEV. (ft)	INLET CONTROL DEPTH (ft)	OUTLET CONTROL DEPTH (ft)	FLOW TYPE <F4>	NORMAL DEPTH (ft)	CRIT. DEPTH (ft)	OUTLET DEPTH (ft)	TW DEPTH (ft)	OUTLET VEL. (fps)	TW VEL. (fps)
0.00	73.42	0.00	-0.05	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
15.00	74.45	0.89	1.03	3-M2t	1.05	0.58	0.69	0.69	3.63	0.96
30.00	75.01	1.41	1.59	3-M2t	1.70	0.92	1.03	1.03	4.87	1.21
45.00	75.46	1.85	2.04	3-M2t	2.27	1.21	1.29	1.29	5.80	1.38
60.00	75.91	2.25	2.49	3-M2t	2.81	1.46	1.52	1.52	6.59	1.51
75.00	76.31	2.62	2.89	3-M2t	3.32	1.70	1.72	1.72	7.28	1.63
90.00	76.67	2.95	3.25	2-M2c	4.00	1.92	1.92	1.90	7.83	1.72
105.00	77.02	3.28	3.60	2-M2c	4.00	2.12	2.12	2.06	8.24	1.80
120.00	77.33	3.59	3.91	2-M2c	4.00	2.32	2.32	2.22	8.62	1.87
130.00	77.57	3.80	4.15	2-M2c	4.00	2.45	2.45	2.32	8.85	1.92
150.00	77.98	4.22	4.56	2-M2c	4.00	2.69	2.69	2.50	9.28	2.00

El. inlet face invert 73.42 ft El. outlet invert 73.37 ft
El. inlet throat invert 0.00 ft El. inlet crest 0.00 ft

***** SITE DATA ***** CULVERT INVERT **********

INLET STATION	0.00 ft
INLET ELEVATION	73.42 ft
OUTLET STATION	100.00 ft
OUTLET ELEVATION	73.37 ft
NUMBER OF BARRELS	1
SLOPE (V/H)	0.0005
CULVERT LENGTH ALONG SLOPE	100.00 ft

***** CULVERT DATA SUMMARY **********

BARREL SHAPE	BOX
BARREL SPAN	6.00 ft
BARREL RISE	4.00 ft
BARREL MATERIAL	CONCRETE
BARREL MANNING'S n	0.012
INLET TYPE	CONVENTIONAL
INLET EDGE AND WALL	SQUARE EDGE (30-75 DEG. FLARE)
INLET DEPRESSION	NONE

CURRENT DATE: 10-09-2000
CURRENT TIME: 11:09:10

FILE DATE: 10-09-2000
FILE NAME: BASELINE

TAILWATER

******* REGULAR CHANNEL CROSS SECTION **********

BOTTOM WIDTH	20.00 ft
SIDE SLOPE H/V (X:1)	4.0
CHANNEL SLOPE V/H (ft/ft)	0.001
MANNING'S n (.01-0.1)	0.025
CHANNEL INVERT ELEVATION	73.37 ft
CULVERT NO.1 OUTLET INVERT ELEVATION	73.37 ft

******* UNIFORM FLOW RATING CURVE FOR DOWNSTREAM CHANNEL

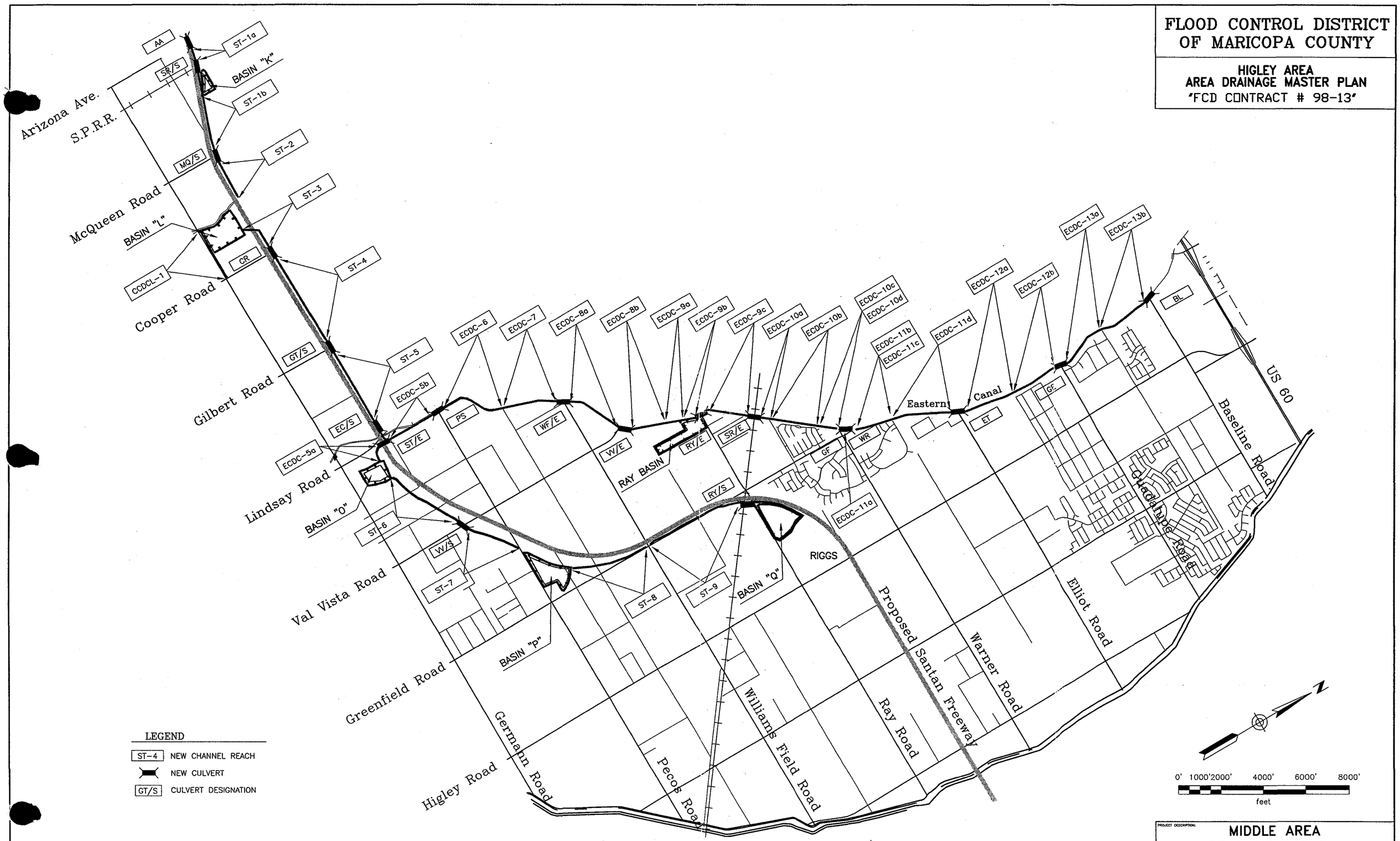
FLOW (cfs)	W.S.E. (ft)	FROUDE NUMBER	DEPTH (ft)	VEL. (f/s)	SHEAR (psf)
0.00	73.37	0.000	0.00	0.00	0.00
15.00	74.06	0.203	0.69	0.96	0.02
30.00	74.40	0.211	1.03	1.21	0.03
45.00	74.66	0.214	1.29	1.38	0.04
60.00	74.89	0.217	1.52	1.51	0.05
75.00	75.09	0.218	1.72	1.63	0.05
90.00	75.27	0.220	1.90	1.72	0.06
105.00	75.43	0.221	2.06	1.80	0.06
120.00	75.59	0.222	2.22	1.87	0.07
130.00	75.69	0.222	2.32	1.92	0.07
150.00	75.87	0.223	2.50	2.00	0.08

ROADWAY OVERTOPPING DATA

ROADWAY SURFACE	PAVED
EMBANKMENT TOP WIDTH	100.00 ft
CREST LENGTH	100.00 ft
OVERTOPPING CREST ELEVATION	1280.00 ft

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HIGLEY AREA
AREA DRAINAGE MASTER PLAN
"FCD CONTRACT # 98-13"



PROJECT DESCRIPTION:

MIDDLE AREA RECOMMENDED PLAN

CONSULTANT:

DIBBLE & ASSOCIATES
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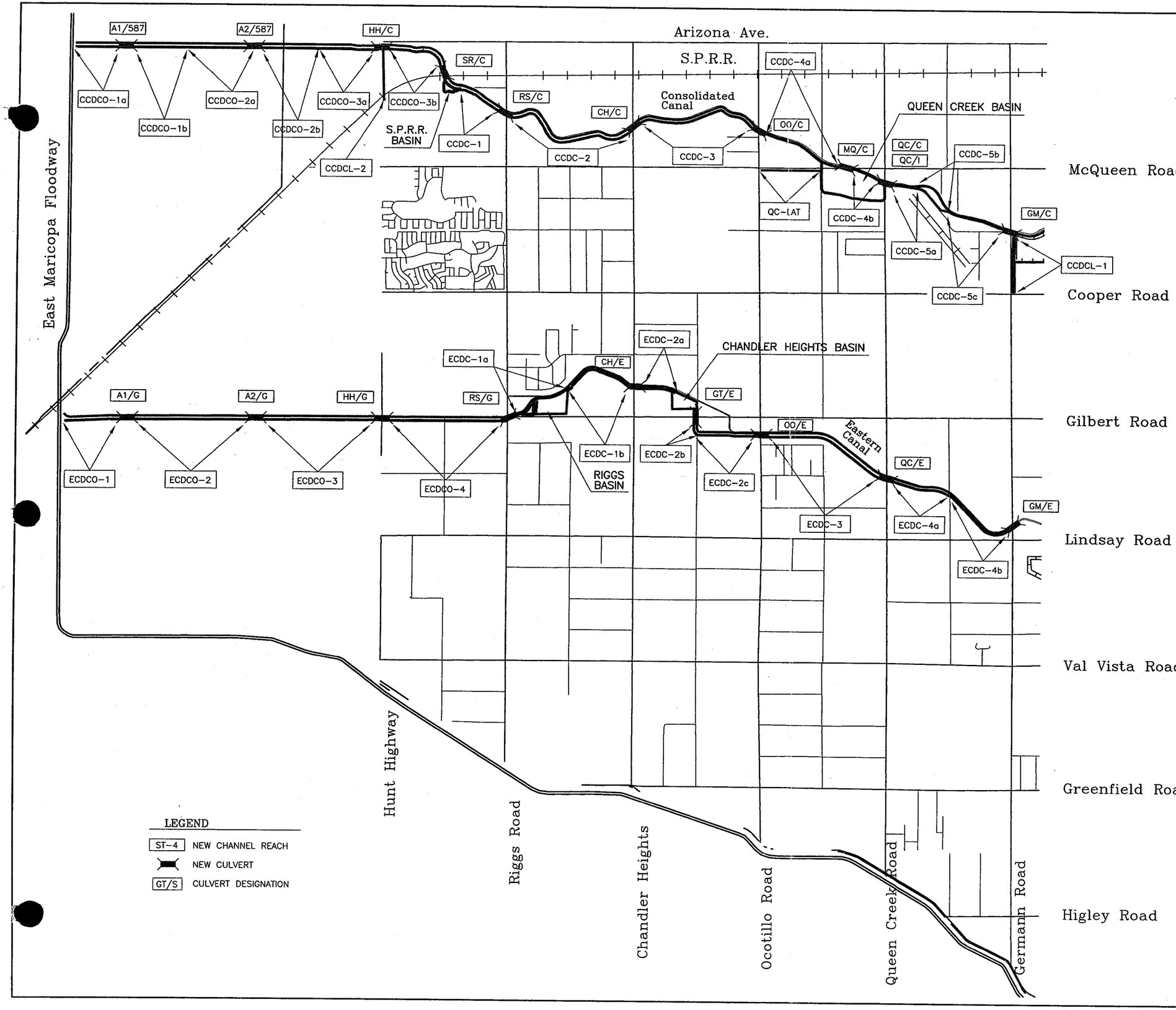
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

HIGLEY AREA AREA DRAINAGE MASTER PLAN

"FCD CONTRACT # 98-13"



PROJECT DESCRIPTION:

SOUTH AREA RECOMMENDED PLAN

CONSULTANT:

DIBBLE & ASSOCIATES CONSULTING ENGINEERS
Since 1962

DS Station (ft)	US Station (ft)	DS Ground Elevation (ft)	US Ground Elevation (ft)	Computed Natural Ground Slope (ft/ft)	ID	Design Q100 (cfs)	Comp. Capacity (cfs)	Downstream Invert Elevation (ft)	Upstream Invert Elevation (ft)	Downstream Top of Chennel Elevation (ft)	Upstream Top of Channel Elevation (ft)	Length (ft.)	Computed Invert. Slope (ft./ft.)	Design Invert Slope (ft./ft.)	Ground Slope Differential (ft.)	No. of Drops	Vertical Drop Height(ft.)	Material Type	Manning's "n" Value	Bottom Width, W (ft.)	Depth of Flow(ft.)	Sideslope (H:1) Left (HL)	Sideslope (H:1) Right (HR)	Area (sf.)	Perimeter (ft.)	Flow Top Width (ft)	Hydraulic Depth (ft)	Froude Number	Type of Flow	Velocity (fps)	Freeboard (ft.)	Design Depth (ft)	Channel Topwidth (ft)
20630	21445	1269.4	1269.4	0.0001	ECDC-10a	385	387	**1263.14**	**1263.55**	1268.1	1271.6	815	0.0005	0.0005	-0.4	0	0.0	E	0.0300	10.0	4.7	6	6	180.9	67.4	66.7	2.7	0.23	Sub	2.1	1.2	5.9	81.0
21445	23500	1269.4	1266.8	-0.0013	ECDC-10b	2400	2400	**1263.55**	**1264.58**	1271.6	1272.6	2055	0.0005	0.0005	-3.7	0	0.0	E	0.0300	80.0	6.4	6	6	760.4	158.1	157.0	4.8	0.25	Sub	3.2	1.6	8.1	176.7
23500	23947	1266.8	1266.5	-0.0007	ECDC-10c	2400	2400	**1264.58**	**1264.80**	1272.6	1271.7	447	0.0005	0.0005	-0.5	0	0.0	C	0.0150	60.0	5.5	2	2	390.7	84.6	82.0	4.8	0.50	Sub	6.1	1.5	7.0	88.1
23947	24701	1266.5	1270.9	0.0058	ECDC-10d	2400	2400	**1264.80**	**1265.17**	1272.8	1273.2	754	0.0005	0.0005	4.0	0	0.0	E	0.0300	80.0	6.4	6	6	760.4	158.1	157.0	4.8	0.25	Sub	3.2	1.6	8.1	176.7
24833	25271	1271.2	1275.2	0.0091	ECDC-11a	2263	2263	**1265.22**	**1265.44**	1273.2	1273.1	438	0.0005	0.0005	3.8	0	0.0	LE	0.0400	90.0	7.2	4	4	852.4	149.2	147.4	5.8	0.19	Sub	2.7	1.8	9.0	162.0
25429	26560	1276.1	1266.2	-0.0087	ECDC-11b	2263	2263	**1265.49**	**1266.05**	1273.5	1273.8	1131	0.0005	0.0005	-10.4	0	0.0	LE	0.0400	90.0	7.2	4	4	852.4	149.2	147.4	5.8	0.19	Sub	2.7	1.8	9.0	162.0
26560	27600	1266.2	1266.8	0.0005	ECDC-11c	2263	2263	**1266.05**	**1266.57**	1273.8	1273.9	1040	0.0005	0.0005	0.0	0	0.0	C	0.0150	50.0	5.6	2	4	387.7	90.6	89.0	4.4	0.49	Sub	5.8	1.5	7.1	92.6
27600	30483	1266.8	1274.6	0.0027	ECDC-11d	1454	1454	**1266.57**	**1268.01**	1274.3	1275.7	2883	0.0005	0.0005	6.3	0	0.0	LE	0.0400	75.0	6.1	4	4	610.1	125.6	124.0	4.9	0.19	Sub	2.4	1.6	7.7	136.5
30610	33250	1272.6	1276.2	0.0014	ECDC-12a	940	940	**1268.06**	**1269.39**	1275.8	1276.4	2640	0.0005	0.0005	2.3	0	0.0	LE	0.0400	45.0	5.4	8	8	479.9	132.5	131.8	3.6	0.18	Sub	2.0	1.4	6.8	153.8
33250	35861	1276.2	1280.9	0.0018	ECDC-12b	940	940	**1269.39**	**1270.69**	1276.4	1276.9	2611	0.0005	0.0005	3.5	0	0.0	E	0.0300	50.0	5.0	4	4	347.4	91.0	89.8	3.9	0.24	Sub	2.7	1.3	6.2	99.9
35965	40000	1278.0	1279.1	0.0003	ECDC-13a	450	450	**1270.74**	**1272.76**	1276.9	1278.6	4035	0.0005	0.0005	-0.9	0	0.0	E	0.0300	30.0	4.2	4	4	194.4	64.4	63.3	3.1	0.23	Sub	2.3	1.1	5.2	71.8
40000	41228	1279.1	1280.4	0.0010	ECDC-13b	450	450	**1272.76**	**1273.37**	1278.6	1279.2	1228	0.0005	0.0005	0.7	0	0.0	E	0.0300	30.0	4.2	4	4	194.4	64.4	63.3	3.1	0.23	Sub	2.3	1.1	5.2	71.8
1190	3800	1212.7	1216.5	0.0015	ST-1a	39	39	**1209.30**	**1211.20**	1212.7	1214.6	2610	0.0007	0.0007	2.0	0	0.0	LE	0.0400	4.0	2.4	4	4	32.4	23.7	23.1	1.4	0.18	Sub	1.2	1.0	3.4	31.1
3800	6750	1216.5	1220.0	0.0012	ST-1b	291	291	**1211.20**	**1214.68**	1215.3	1218.8	2950	0.0012	0.0012	-0.1	0	0.0	LE	0.0400	25.0	3.1	6	6	135.4	62.8	62.3	2.2	0.26	Sub	2.1	1.0	4.1	74.3
6850	8985	1220.0	1236.6	0.0078	ST-2	291	291	**1214.79**	**1226.22**	1220.0	1231.5	2135	0.0054	0.0028	10.6	0	0.0	LE	0.0400	4.0	4.2	4	4	86.3	38.4	37.4	2.3	0.39	Sub	3.4	1.1	5.3	46.1
10704	12030	1233.8	1236.4	0.0020	ST-3a	350	350	**1228.75**	**1231.25**	1233.2	1235.7	1326	0.0019	0.0019	0.1	0	0.0	LE	0.0400	16.0	3.5	6	6	127.9	58.2	57.7	2.2	0.32	Sub	2.7	1.0	4.5	69.7
12150	17332	1236.8	1262.8	0.0050	ST-4	350	350	**1231.42**	**1244.92**	1235.6	1249.1	5182	0.0026	0.0026	12.6	0	0.0	LE	0.0400	16.0	3.2	6	6	114.0	55.2	54.7	2.1	0.37	Sub	3.1	1.0	4.2	66.7
17432	22150	1250.0	1262.8	0.0027	ST-5	350	350	**1245.17**	**1253.55**	1249.5	1257.9	4718	0.0018	0.0018	4.3	0	0.0	LE	0.0400	20.0	3.3	6	6	131.8	60.2	59.7	2.2	0.32	Sub	2.7	1.0	4.3	71.7
25413	29417	1271.4	1281.6	0.0025	ST-6	584	584	**1264.30**	**1270.68**	1269.8	1276.1	4004	0.0016	0.0016	3.8	0	0.0	LE	0.0400	20.0	4.3	6	6	200.3	72.9	72.2	2.8	0.31	Sub	2.9	1.1	5.5	85.6
28420	31741	1277.4	1281.8	0.0013	ST-7	584	584	**1270.85**	**1276.18**	1276.3	1281.6	3321	0.0016	0.0016	-0.9	0	0.0	LE	0.0400	20.0	4.3	6	6	200.3	72.9	72.2	2.8	0.31	Sub	2.9	1.1	5.5	85.6
33904	37720	1284.7	1285.3	0.0002	ST-8	560	560	**1278.00**	**1279.90**	1284.0	1285.9	3816	0.0005	0.0005	-1.3	0	0.0	LE	0.0400	35.0	4.8	6	6	305.7	93.3	92.5	3.3	0.18	Sub	1.8	1.2	6.0	107.1
42697	37825	1285.3	1281.2	0.0008	ST-9	448	448	**1276.36**	**1279.67**	1281.9	1285.2	4872	0.0007	0.0007	0.7	0	0.0	LE	0.0400	25.0	4.4	6	6	225.5	78.4	77.7	2.9	0.21	Sub	2.0	1.1	5.5	91.0
100	985	1230.0	1230.0	0.0000	ST-3b	350	350	**1225.00**	**1226.00**	1230.4	1231.4	885	0.0011	0.0011	-1.0	0	0.0	LE	0.0400	10.0	4.3	6	6	155.1	62.5	61.8	2.5	0.25	Sub	2.3	1.1	5.4	75.0
29200	32045	1252.4	1251.9	-0.0002	ECDC-1a	100	100	**1243.40**	**1244.90**	1247.8	1249.3	2845	0.0005	0.0005	-1.9	0	0.0	LE	0.0400	4.0	3.4	6	6	81.2	44.9	44.3	1.8	0.16	Sub	1.2	1.0	4.4	56.3
32045	35095	1251.9	1252.0	0.0000	ECDC-1b	659	659	**1244.90**	**1246.30**	1251.1	1252.5	3050	0.0005	0.0005	-1.4	0	0.0	LE	0.0400	40.0	5.0	6	6	347.1	100.5	99.7	3.5	0.18	Sub	1.9	1.3	6.2	114.7
35195	36900	1252.3	1253.9	0.0010	ECDC-2a	591	591	**1246.35**	**1247.20**	1251.8	1252.6	1705	0.0005	0.0005	0.8	0	0.0	LE	0.0400	50.0	4.3	6	6	327.8	102.5	101.8	3.2	0.18	Sub	1.8	1.1	5.4	114.9
38000	38350	1254.5	1255.6	0.0031	ECDC-2b	1025	1025	**1247.25**	**1247.50**	1254.4	1254.7	350	0.0007	0.0007	0.8	0	0.0	LE	0.0400	40.0	5.7	6	6	423.1	109.4	108.4	3.9	0.22	Sub	2.4	1.4	7.2	125.8
38450	41717	1255.9	1257.2	0.0004	ECDC-2c	1025	1025	**1247.56**	**1249.85**	1253.5	1255.8	3267	0.0007	0.0007	-1.0	0	0.0	LE	0.0400	65.0	4.7	6	6	443.0	122.7	121.9	3.6	0.21	Sub	2.3	1.2	5.9	136.4
41817	47597	1255.5	1259.3	0.0007	ECDC-3	1025	1025	**1249.91**	**1252.69**	1255.5	1258.3	5780	0.0005	0.0005	0.9	0	0.0	LE	0.0400	90.0	4.5	6	6	523.2	144.5	143.7	3.6	0.18	Sub	2.0	1.1	5.6	157.3
47697	50438	1259.8	1260.9	0.0004	ECDC-4a	748	748	**1252.71**	**1254.00**	1258.4	1259.7	2741	0.0005	0.0005	-0.3	0	0.0	LE	0.0400	60.0	4.5	6	6	395.6	115.2	114.4	3.5	0.18	Sub	1.9	1.1	5.7	128.2
50438	53569	1260.9	1260.3	-0.0002	ECDC-4b	406	406	**1254.00**	**1255.57**	1259.7	1261.3	3131	0.0005	0.0005	-2.2	0	0.0	LE	0.0400	25.0	4.5	6	6	237.3	80.3	79.5	3.0	0.17	Sub	1.7	1.1	5.7	93.3
1000	1550	1264.0	1261.7	-0.0042	ECDC-5a	665	665	**1252.90**	**1253.16**	1258.1	1258.4	550	0.0005	0.0005	-2.6	0	0.0	LE	0.0400	63.0	4.2	6	6	366.7	113.7	113.0	3.2	0.18	Sub	1.8	1.1	5.2	125.7
1850	4887	1261.6	1263.6	0.0007	ECDC-5b	765	765	**1253.35**	**1255.25**	1258.7	1260.6	3037	0.0006	0.0006	0.2	0	0.0	LE	0.0400	63.0	4.3	6	6	379.4	115.1	114.3	3.3	0.20	Sub	2.0	1.1	5.4	127.4
4987	8383	1265.0	1263.2	-0.0005	ECDC-6	704	704	**1255.32**	**1256.92**	1260.5	1262.1	3396	0.0005	0.0005	-3.5	0	0.0	LE	0.0400	70.0	4.1	6	6	387.6	119.8	119.2	3.3	0.18	Sub	1.8	1.0	5.1	131.6
8383	11137	1263.2	1266.8	0.0013	ECDC-7	704	704	**1256.92**	**1258.22**	1262.1	1263.4	2754	0.0005	0.0005	2.2	0	0.0	LE	0.0400	70.0	4.1	6	6	387.6	119.8	119.2	3.3	0.18	Sub	1.8	1.0	5.1	131.6
11263	13975	1268.6	1261.8	-0.0025	ECDC-8a	629	629	**1258.28**	**1259.57**	1263.7	1264.9	2712	0.0005	0.0005	-8.2	0	0.0	LE	0.0400	50.0	4.3	8	8	361.4	119.1	118.6	3.0	0.18	Sub	1.7	1.1	5.4	135.9
14220	16000	1263.6	1266.0	0.0013	ECDC-8b	629	629	**1259.93**	**1260.89**	1265.5	1266.5	1780	0.0005	0.0005	1.5	0	0.0	LE	0.0400	50.0	4.5	6	6	342.6	104.3	103.6	3.3	0.18	Sub	1.8	1.1	5.6	117.1
16000	17134	1266.0	1267.7	0.0015	ECDC-9a	629	629	**1260.89**	**1261.45**	1266.7	1267.3	1134	0.0005	0.0005	1.1	0	0.0	LE	0.0400	45.0	4.7	6	6	339.0	101.6	100.8	3.4	0.18	Sub	1.9	1.2	5.8	114.9
17134	18084	1268.7	1267.7	-0.0011	ECDC-9b	75	75	**1261.45**	**1261.91**	1265.4	1265.9	950	0.0005	0.0005	-1.5	0	0.0	LE	0.0400	4.0	3.0	6	6	65.6	40.4	39.9	1.6	0.16	Sub	1.1	1.0	4.0	51.9
18163	20530	1268.7	1267.7	-0.0004	ECDC-9c	466	466	**1291.91**	**1263.09**	1296.9	1268.1	2367	-0.0122	0.0005	-2.2	0	0.0	LE	0.0400	45.0	4.0	6	6	273.8	93.4	92.7	3.0	0.17	Sub	1.7	1.0	5.0	104.8
100	2315	1216.9	1216.8	0.0000	CCDCO-1a	1304	1304	**1208.40**	**1209.06**	1214.5	1215.2	2215	0.0003	0.0003	-0.7	0	0.0	E	0.0300	95.0	4.9	6	6	609.2	154.6	153.8	4.0	0.19	Sub	2.1	1.2	6.1	168.7
2415	5200	1214.8	1211.4	-0.0012	CCDCO-1b	1304	1304	**1209.09**	**1209.93**	1215.2	1216.1	2785	0.0003	0.0003	-4.3	0	0.0	E	0.0300	95.0	4.9	6	6	609.2	154.6	153.8	4.0	0.19	Sub	2.1	1.2	6.1	168.7
5200	7595	1211.3	1211.0	-0.0001	CCDCO-2a	1240	1240	**1209.93**	**1210.64**	1215.9	1216.6	2395	0.0003	0.0003	-1.1	0	0.0	E	0.0300	95.0	4.8	6	6	588.6	152.9	152.2	3.9	0.19	Sub	2.1	1.2	6.0	166.6
7695	11000	1211.2	1212.5	0.0004	CCDCO-2b	1240	1240	**1210.68**	**1211.67**	1216.7	1217.6	3305	0.0003	0.0003	0.3	0	0.0	E	0.0300	95.0	4.8	6	6	588.6	152.9	152.2	3.9	0.19	Sub	2.1	1.2	6.0	166.6
11000	12874	1212.5	1217.2	0.0025	CCDCO-3a	1240	1240	**1211.67**	**1212.23**	1217.6	1218.2	1874	0.0003	0.0003	4.1	0	0.0	E	0.0300	95.0	4.8	6	6	588.6	152.9	152.2	3.9	0.19	Sub	2.1	1.2	6.0	166.6
12974	16250	1216.0	1217.7	0.0005	CCDCO-3b	1240	1240	**1212.26**	**1213.24**	1218.2	1219.2	3276	0.0003	0.0003	0.7	0	0.0	E	0.0300	95.0	4.8	6	6	588.6	152.9	152.2	3.9	0.19	Sub	2.1	1.2	6.0	166.6
16350	19385	1218.6	1220.9	0.0007	CCDC-1	1219	1219	**1213.29**	**1214.81**	1219.6	1221.2	3035	0.0005	0.0005	0.7	0	0.0	LE	0.0400	85.0	5.1	6	6	583.9	146.6	145.7	4.0	0.18	Sub	2.1	1.3	6.3	161.1
19510	25426	1219.9	1220.2	0.0001	CCDC-2	1219	1219	**1214.86**	**1217.82**	1221.2	1224.2	5916	0.0005	0.0005	-2.7	0	0.0	LE	0.0400	85.0	5.1	6	6	583.9	146.6	145.7	4.0	0.18	Sub	2.1	1.3	6.3	161.1
25712	31300	1222.4	1224.5	0.0004	CCDC-3	889	889	**1217.96**	**1220.75**	1224.0	1226.8	5588	0.0005	0.0005	-0.7	0	0.0	LE	0.0400	64.0	4.8	6	6	450.3	122.9	122.1	3.7	0.18	Sub	2.0	1.2	6.1	136.8
31400	35518	1226.6	1225.4	-0.0003	CCDC-4a	384	384	**1220.80**	**1222.85**	1226.5	1228.6	4118	0.0005	0.0005	-3.2	0	0.0	C	0.0150	10.0	4.5	2	2	86.2	30.2	28.1	3.1	0.45	Sub	4.5	1.2	5.7	32.9
35881	37200	1227.2	1228.2	0.0008	CCDC-4b	350	350	**1223.03**	**1223.69**	1228.7	1229.4	1319	0.0005	0.0005	0.4	0	0.0	E	0.0300	10.0	4.5	6	6	167.9	65.0	64.3	2.6	0.23	Sub	2.1	1.1	5.7	78.0
37300	38500	1227.2	1226.2	-0.0008	CCDC-5a	1086	1086	**1223.75**	**1224.35**	1229.3	1229.9	1200	0.0005	0.0005	-1.6	0	0.0	C	0.0150	40.0	4.3	2	2	210.7	59.4	57.3	3.7	0.47	Sub	5.2	1.2	5.5	62.1
38500	40251	1226.2	1225.2	-0.0006	CCDC-5b	1086	1086	**1224.35**	**1225.23**	1229.9	1230.7	1751	0.0005	0.0005	-1.9	0	0.0	LE	0.0400	100.0	4.4	6	6	554.9	153.4	152.7	3.6	0.18	Sub	2.0	1.1	5.5	166.1
40251	43083	1225.2	1232.1	0.0024	CCDC-5c	536	536	**1225.23**	**1226.64**	1230.8	1232.2	2832	0.0005	0.0005	5.5	0	0.0	C	0.0150	25.0	4.4	0	0	110.2	33.8	25.0	4.4	0.41	Sub	4.9	1.2	5.6	25.0
43083	45916	1232.1	1240.0	0.0028	CCDCL-1	536	536	**1226.64**	**1234.05**	1232.1	1239.5	2833	0.0026	0.0026	0.6	0	0.0	LE	0.0400	10.0	4.3	6	6	154.6	62.4	61.7	2.5	0.39	Sub	3.5	1.1	5.4	75.2
100	2450	1212.0	1216.0	0.0017	CCDCL-2	327	327	**1212.00**	**1213.65**	1216.5	1218.1	2350	0.0007	0.0007	2.4	0	0.0	E	0.0300	20.0	3.5	6	6	143.5	62.6	62.0	2.3	0.26	Sub	2.3	1.0	4.5	74.0
100	2933	1226.0	1226.0	0.0000	QCLAT	581	581	**1223.00**	**1224.42**	1228.6	1230.0	2833	0.0005	0.0005	-1.4	0	0.0	E	0.0300	30.0	4.4	6	6	252.3	84.1	83.4	3.0	0.23	Sub	2.3	1.1	5.6	97.0
10000	12668	1233.0	1235.4	0.0009	ECDCO-1	1264	1264	**1232.59**	**1234.08**	1237.1	1238.6	2668	0.0006	0.0005	1.1	0	0.0	E	0.0300	130.0	3.5	6	6	536.8	173.2	172.6	3.1	0.24	Sub	2.4	1.0	4.5	184.6
13076	18250	1237.7	1241.1	0.0007	ECDCO-2	1264	1264	**1234.13**	**1236.72**	1238.7	1241.3	5174	0.0005	0.0005	0.8	0	0.0	E	0.0300	130.0	3.5	6	6	536.8	173.2	172.6	3.1	0.24	Sub	2.4	1.0	4.5	184.6
18350	23550	1241.5	1252.9	0.0022	ECDCO-3	1240	1240	**1236.72**	**1239.37**	1241.2	1243.9	5200	0.0005	0.0005	8.8	0	0.0	E	0.0300	130.0	3.5	6	6	530.1	172.7	172.1	3.1	0.23	Sub	2.3	1.0	4.5	184.1
23650	28860	1250.7	1251.5	0.0002	ECDCO-4	1240	1240	**1239.42**	**1242.02**	1243.9	1246.5	5210	0.0005	0.0005	-1.8	0	0.0	E	0.0300	130.0	3.5	6	6	530.1	172.7	172.1	3.1	0.23	Sub	2.3	1.0	4.5	184.1

Location	ID	HEC-1 Flow I.D.	Design Q100 (cfs)	Comp. Capacity (cfs)	Length (ft.)	Inlet Inv. (ft.)	Outlet Inv. (ft.)	Slope (ft./ft.)	Material/ Barrel Type	Manning's "n" Value	Number of Barrels	Culvert Dia./ Height	Unit	Width ft)	Barrel/ Material	Entrance (Wingwall, Headwall or Project)	Tailwater (channel) Depth (ft.)	Allowable HW depth (ft)	Allowable HW (elev.)	Computed Headwater	Computed HW/D	Control	Length of Pipe/ Box Culvert (ft.)
Santan/East	ST/E	DIBASO	665	665	300	1253.4	1253.2	0.0006	C	0.0120	3	4	ft.	10	RCBC	Wingwall	4.2	5.0	1258.4	5.02	1.25	TW	300
Pecos	PS	HC31A	704	704	100	1255.3	1255.3	0.0007	C	0.0120	3	4	ft.	10	RCBC	Wingwall	4.3	5.3	1260.6	5.10	1.27	TW	100
Williams Field/East	WF/E	HC30	629	629	126	1258.3	1258.2	0.0005	C	0.0120	3	4	ft.	10	RCBC	Wingwall	4.1	5.1	1263.4	4.77	1.19	TW	126
Val Vista/E	VV/E	HC30	629	629	245	1259.9	1259.6	0.0015	C	0.0120	3	4	ft.	10	RCBC	Wingwall	4.3	5.0	1264.9	4.80	1.20	TW	245
Ray	RY/E	HC29	466	466	104	1261.9	1261.9	0.0001	C	0.0120	3	4	ft.	10	RCBC	Wingwall	3.0	4.0	1265.9	3.37	0.84	TW	104
SPRR/East	SR/E	CBSNCR	385	385	100	1263.1	1263.1	0.0005	C	0.0120	3	4	ft.	10	RCBC	Wingwall	3.0	2.8	1265.9	3.21	0.80	TW	100
Warner	WR	HC6	2263	2263	132	1265.2	1265.2	0.0004	C	0.0120	5	6	ft.	10	RCBC	Wingwall	6.4	8.0	1273.2	7.81	1.30	TW	132
Greenfield	GF	HC6	2263	2263	158	1265.5	1265.4	0.0004	C	0.0120	5	6	ft.	10	RCBC	Wingwall	7.2	7.7	1273.1	8.60	1.43	TW	158
Elliot	ET	HC4	940	940	127	1268.1	1268.0	0.0004	C	0.0120	4	5	ft.	8	RCBC	Wingwall	6.1	7.7	1275.7	6.99	1.40	TW	127
Guadalupe	GE	HC3	450	450	104	1270.7	1270.7	0.0005	C	0.0120	2	4	ft.	10	RCBC	Wingwall	5.0	6.2	1276.9	5.74	1.44	TW	104
Baseline	BL	HC2	130	130	103	1273.4	1273.4	0.0005	C	0.0120	1	4	ft.	6	RCBC	Wingwall	4.2	5.7	1279.2	4.91	1.23	TW	103
Arizona	AA	CBASK	39	39	179	1209.3	1209.2	0.0007	C	0.0120	1	4	ft.	4	RCBC	Wingwall	2.4	5.3	1214.6	2.79	0.70	OC	179
SPRR/Santan	SR/S	CBASK	39	39	143	1210.3	1210.2	0.0009	C	0.0120	1	4	ft.	4	RCBC	Wingwall	2.4	5.4	1214.6	2.77	0.69	OC	143
McQueen/Santan	MQ/S	HC48	291	291	100	1214.8	1214.7	0.0011	C	0.0120	2	4	ft.	8	RCBC	Wingwall	3.1	4.0	1218.8	3.54	0.88	TW	100
Santan/Con	ST/C	HC39A	350	350	300	1228.8	1227.7	0.0035	C	0.0120	2	4	ft.	8	RCBC	Wingwall	0.0	1.3	1230.0	3.97	0.99	IC	300
Cooper	CR	HC39A	350	350	120	1231.4	1231.3	0.0014	C	0.0120	2	4	ft.	8	RCBC	Wingwall	3.5	4.3	1235.7	4.11	1.03	TW	120
Gilbert/Santan	GT/S	HC39A	350	350	100	1245.2	1244.9	0.0025	C	0.0120	2	4	ft.	8	RCBC	Wingwall	3.2	4.0	1249.1	3.97	0.99	IC	100
Eastern Canal/Santan	EC/S	DIOL	100	100	450	1254.0	1253.6	0.0010	C	0.0120	1	4	ft.	6	RCBC	Wingwall	3.3	3.9	1257.9	3.63	0.91	TW	450
Val Vista/Santan	VV/S	SUB32	584	584	100	1270.9	1270.7	0.0017	C	0.0120	2	5	ft.	10	RCBC	Wingwall	4.3	5.3	1276.1	5.03	1.01	TW	100
Ray/Santan	RY/S	D30B	448	448	400	1276.4	1276.0	0.0011	C	0.0120	2	5	ft.	8	RCBC	Wingwall	4.8	9.5	1285.9	5.51	1.10	TW	400
Access 1/587	A1/587	HCB1	1304	1304	100	1209.1	1209.1	0.0003	C	0.0120	4	4	ft.	12	RCBC	Wingwall	4.8	7.5	1216.6	5.91	1.48	TW	100
Access 2/587	A2/587	CP17	1240	1240	100	1210.7	1210.6	0.0004	C	0.0120	4	4	ft.	12	RCBC	Wingwall	4.8	5.9	1216.6	5.79	1.45	TW	100
Hunt/Con	HH/C	CP17	1240	1240	100	1212.3	1212.2	0.0003	C	0.0120	4	4	ft.	12	RCBC	Wingwall	4.8	7.0	1219.2	5.80	1.45	TW	100
SPRR/Con	SR/C	CP17	1219	1219	100	1213.3	1213.2	0.0005	C	0.0120	4	4	ft.	12	RCBC	Wingwall	4.8	5.9	1219.2	5.74	1.44	TW	100
Riggs/Con	RS/C	CP7	1219	1219	125	1214.9	1214.8	0.0004	C	0.0120	4	5	ft.	12	RCBC	Wingwall	5.1	6.3	1221.2	5.67	1.13	TW	125
Chandler Heights/Con	CH/C	CP6	889	889	286	1218.0	1217.8	0.0005	C	0.0120	3	5	ft.	10	RCBC	Wingwall	5.1	6.2	1224.2	6.01	1.20	TW	286
Ocotillo/Con	OO/C	DIV42	384	384	100	1220.8	1220.8	0.0005	C	0.0120	2	4	ft.	8	RCBC	Wingwall	4.8	6.0	1226.8	5.73	1.43	TW	100
McQueen/Con	MQ/C	HC41	350	350	363	1223.0	1222.9	0.0005	C	0.0120	2	5	ft.	8	RCBC	Wingwall	4.5	5.6	1228.6	5.02	1.00	TW	363
Queen Creek/Con	QC/C	DIV42	350	350	100	1223.8	1223.7	0.0005	C	0.0120	2	4	ft.	8	RCBC	Wingwall	4.5	5.0	1229.4	5.25	1.31	TW	100
Queen Creek Basin Inl	QC/I	DBSNQC	763	763	100	1225.0	1224.1	0.0090	C	0.0120	3	4	ft.	12	RCBC	Wingwall	3.3	5.2	1229.4	3.87	0.97	IC	100
Access 1/Gilbert	A1/G	CP5P	1264	1264	100	1234.1	1234.1	0.0005	C	0.0120	5	4	ft.	12	RCBC	Wingwall	3.5	4.5	1238.6	4.21	1.05	TW	100
Access 2/Gilbert	A2/G	CP4P2	1240	1240	100	1236.8	1236.7	0.0005	C	0.0120	5	4	ft.	12	RCBC	Wingwall	3.5	4.5	1241.3	4.18	1.04	TW	100
Hunt/Gilbert	HH/G	CP4P2	1240	1240	100	1239.4	1239.4	0.0005	C	0.0120	5	4	ft.	12	RCBC	Wingwall	3.5	4.5	1243.9	4.14	1.04	TW	100
Riggs/Gilbert	RS/G	SRPLF	100	100	340	1243.4	1242.0	0.0041	C	0.0120	1	4	ft.	4	RCBC	Wingwall	3.5	3.1	1246.5	4.35	1.09	IC	340
Chandler Heights/East	CH/E	BASCH	591	591	100	1246.4	1246.3	0.0005	C	0.0120	3	4	ft.	10	RCBC	Wingwall	5.0	6.2	1252.5	5.55	1.39	TW	100
Gilbert/East	GT/E	OC2	1025	1025	100	1247.6	1247.5	0.0006	C	0.0120	3	5	ft.	12	RCBC	Wingwall	5.7	7.1	1254.7	6.45	1.29	TW	100
Ocotillo/East	OO/E	OC2	1025	1025	100	1249.9	1249.9	0.0006	C	0.0120	4	4	ft.	12	RCBC	Wingwall	4.7	5.9	1255.8	5.41	1.35	TW	100
Queen Creek/East	QC/E	HC35A	748	748	100	1252.7	1252.7	0.0002	C	0.0120	3	4	ft.	10	RCBC	Wingwall	4.5	5.6	1258.3	5.46	1.36	TW	100
Germann/East	GM/E	HC34	406	406	110	1255.6	1255.6	0.0004	C	0.0120	2	4	ft.	8	RCBC	Wingwall	4.5	5.6	1261.3	5.57	1.39	TW	110

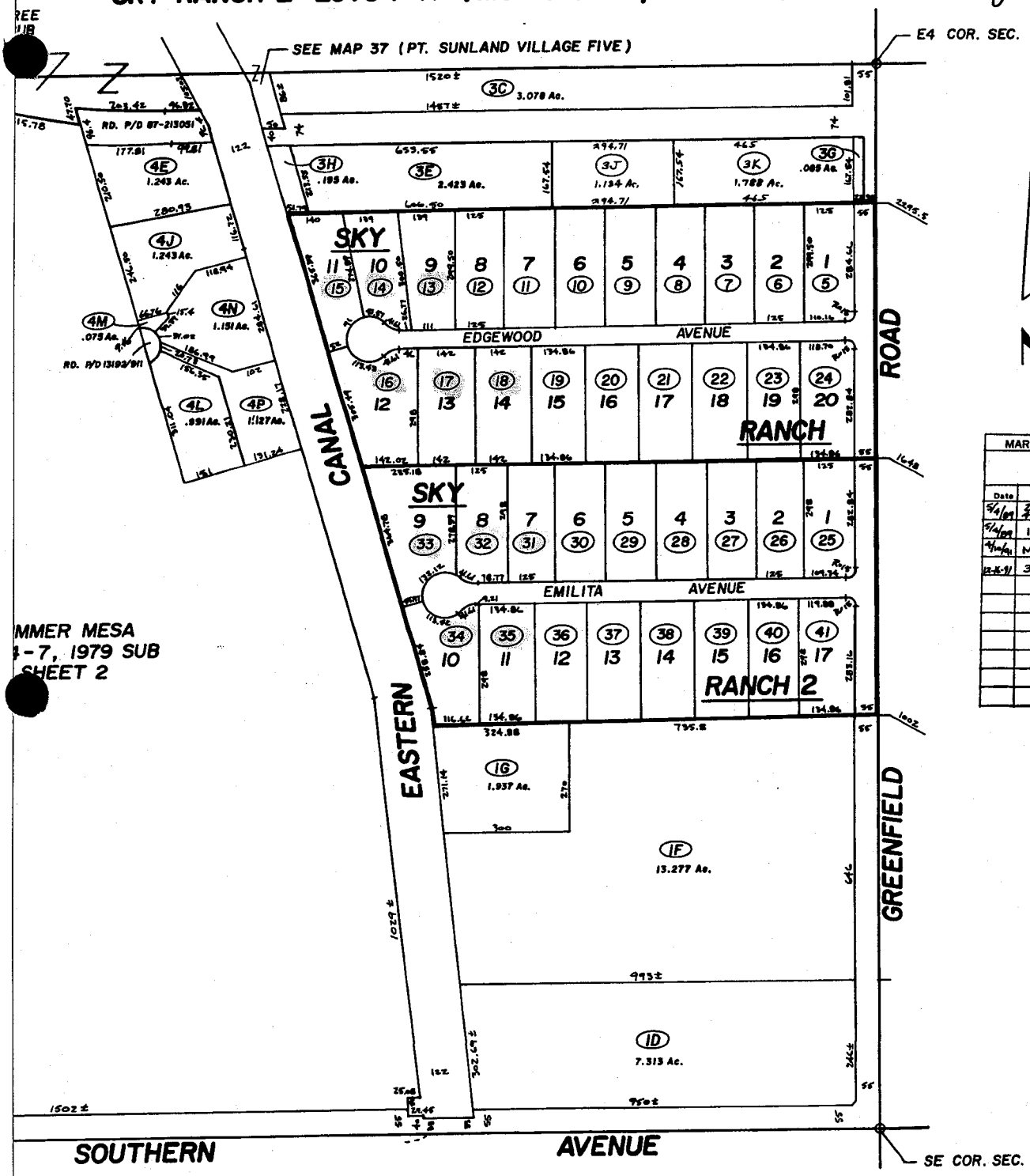
I.D.	Basin Excavation Volume (cy)	Unit Cost ($/cy)	**Detention Basin Excavation Cost**	Length of Drain Pipe/ Box Culvert (ft.)	# Of Manholes	Manhole Unit Cost ($)	**Manhole Total Cost ($)**	Unit Cost ($/ft.)	**Pipe/Box Culvert Cost**	Headwall	Unit Cost (Ea.)	**Headwall Cost**	Inflow Spillway Area (ft^2)	Inflow Spillway Unit Cost ($/sf)	**Inflow Spillway Cost ($/sf)**	Length of Fencing (ft)	Unit Cost ($/lf)	**Fence Cost**	Basin Top Area (ac)	Required Land Acquisition (Ac.)	Landscape Restoration (sf)	Landscape Unit Cost ($/sf)	Landscape Cost	Zoning	Unit Cost ($/sf)	Total Land Acquisition Cost	Total Construction Cost	Total Landscape Cost	Total Construction, Land, and Landscape Costs
Queen Creek Basin	128,812	$6	**$772,872**	300	0	$4,500	**$0**	$55	**$16,500**	1	$1,100	**$1,100**	1644.06	$5	**$8,220**	0	$12	**$0**	63	78.8	3430350	$2.20	$7,546,770	Res.	$0.99	$3,396,047	$798,692	$7,546,770	$11,741,509
Riggs Basin	0	$6	**$0**	0	0	$4,500	**$0**	$55	**$0**	0	$1,100	**$0**	1668.42	$5	**$8,342**	0	$12	**$0**	29	36.3	599323	$2.20	$1,318,511	Res.	$0.99	$1,563,260	$8,342	$1,318,511	$2,890,112
Chandler Heights Basin	0	$6	**$0**	0	0	$4,500	**$0**	$55	**$0**	0	$1,100	**$0**	1600	$5	**$8,000**	0	$12	**$0**	9	11.3	180580	$2.20	$397,276	Res.	$0.99	$485,150	$8,000	$397,276	$890,426
Ray Basin	303,617	$6	**$1,821,702**	16476	41	$4,500	**$185,355**	$55	**$906,180**	1	$1,100	**$1,100**	128.7	$5	**$644**	0	$12	**$0**	31	38.8	1687950	$2.20	$3,713,490	Res.	$0.99	$1,671,071	$2,914,981	$3,713,490	$8,299,541
Basin "K"	155,089	$6	**$930,534**		0	$4,500	**$0**	$55	**$0**	1	$1,100	**$1,100**	2604.45	$5	**$13,022**	0	$12	**$0**	10	12.5	544500	$2.20	$1,197,900	Res.	$0.99	$539,055	$944,656	$1,197,900	$2,681,611
Basin "L"	1,202,867	$6	**$7,217,202**	7030	18	$4,500	**$79,088**	$55	**$386,650**	1	$1,100	**$1,100**	6259.74	$5	**$31,299**	0	$12	**$0**	45	56.3	2450250	$2.20	$5,390,550	Res.	$0.99	$2,425,748	$7,715,338	$5,390,550	$15,531,636
Basin "O"	737,218	$6	**$4,423,308**	14350	36	$4,500	**$161,438**	$55	**$789,250**	2	$1,100	**$2,200**	7765.56	$5	**$38,828**	0	$12	**$0**	24	30.0	1306800	$2.20	$2,874,960	Res.	$0.99	$1,293,732	$5,415,023	$2,874,960	$9,583,715
Basin "P"	808,141	$6	**$4,848,846**	7812	20	$4,500	**$87,885**	$55	**$429,660**	1	$1,100	**$1,100**	1260	$5	**$6,300**	0	$12	**$0**	42	52.5	2286900	$2.20	$5,031,180	Res.	$0.99	$2,264,031	$5,373,791	$5,031,180	$12,669,002
Basin "Q"	898,540	$6	**$5,391,240**	4170	10	$4,500	**$46,913**	$55	**$229,350**	1	$1,100	**$1,100**	4965.36	$5	**$24,827**	0	$12	**$0**	54	67.5	2940300	$2.20	$6,468,660	Res.	$0.99	$2,910,897	$5,693,429	$6,468,660	$15,072,986
Riggs WQ Basin	33,719	$6	**$202,314**	140	0	$4,500	**$1,575**	$55	**$7,700**	0	$1,100	**$0**	5000	$5	**$25,000**	0	$12	**$0**	2.9	3.6	157905	$2.20	$347,391	Res.	$0.99	$156,326	$236,589	$347,391	$740,306
SPRR WQ Basin	42,915	$6	**$257,490**	0	0	$4,500	**$0**	$55	**$0**	0	$1,100	**$0**	2600	$5	**$13,000**	0	$12	**$0**	3.2	4.0	174240	$2.20	$383,328	Res.	$0.99	$172,498	$270,490	$383,328	$826,316

SE4 SEC. 28 T1N R6E

Still in floodplain on new study

SKY RANCH: LOTS 1-20 (MCR 116-50, 1968 SUB)
SKY RANCH 2: LOTS 1-17 (MCR 121-20, 1969 SUB)

BOOK 140
MAP 48
SHEET 1 of 2



MARICOPA COUNTY ASSESSORS OFFICE					
SCALE 1" = 240'					
REVISIONS:					
Date	Was	Is	Docket	Draft	Check
5/4/89	2A 4K	4N,7	89-094981	RHP 2648	—
5/4/89	1E	1F,G	8 167341	RHP 2648	—
4/10/91	MAP REDRAWN-No CHANGE			LWC 2765	—
12-5-91	3F	3J;3K	91-139167	N.J. 2072	—

2985.000 Feet

MetroScan / Maricopa

Parcel #	:140 48 013	BldgId #	:1 of 1	FCV Total	:$113,778
Owner	:Smith John G & Carol A			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$88,778
Site	:4222 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:4222 E Edgewood Ave Mesa Az 85206			LPV Amount	:$113,778
Xfered	:07/22/1996	Doc #	:96-511185	% Improved	:78
Price	:$140,000	Deed	:Joint Tenant	% Owned	:100
Loan Amt	:$126,000	Lender	:Fleet Mortgage C	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Joint Tenant			1998 Tax	:$1,096.74
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-985-1865
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 9			Tract	:4225.04
	:			Block	:1

TotalRooms	:6	Patio	:None	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1972
Stories	:1	Parking	:Carport	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:1,553	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:1,553	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:140 48 014	BldgId #	:1 of 1	FCV Total	:$104,607
Owner	:Moore Kenneth L & Dana B			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$79,607
Site	:4208 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:4208 E Edgewood Ave Mesa Az 85206			LPV Amount	:$95,781
Xfered	:07/31/1978	Doc #	:13059-0564	% Improved	:76
Price	:	Deed	:	% Owned	:
Loan Amt	:	Lender	:	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:			1998 Tax	:$953.42
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-832-7899
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 10			Tract	:4225.04
	:			Block	:1

TotalRooms	:6	Patio	:Slab	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:1	Lot Acres	:
BthFixture	:6	Pool SqFt	:468	Year Built	:1969
Stories	:1	Parking	:Garage	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:1,840	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:1,840	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

MetroScan / Maricopa

Parcel #	:140 48 015	BldgId #	:1 of 1	FCV Total	:$136,151
Owner	:Hatch David A & Susie Kay			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$111,151
Site	:4202 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:9444 N 64Th Dr Glendale Az 85302			LPV Amount	:$136,151
Xfered	:08/17/1984	Doc #	:84-362580	% Improved	:82
Price	:	Deed	:	% Owned	:
Loan Amt	:	Lender	:	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:			1998 Tax	:$1,312.34
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 11			Tract	:4225.04
	:			Block	:1
TotalRooms	:9	Patio	:Slab	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:1	Lot Acres	:
BthFixture	:6	Pool SqFt	:500	Year Built	:1969
Stories	:1	Parking	:None	Units	:
Quality	:Fair	Parking Sp	:	A/C Type	:Refrig
Roof Matl	:Asbestos	Bldg SqFt	:1,783	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:1,783	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:140 48 016	BldgId #	:1 of 1	FCV Total	:$126,272
Owner	:Stevenson Chris & Coopersmith Jenni			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$101,272
Site	:4207 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:PO Box 40422 Washington Dc 20016			LPV Amount	:$126,272
Xfered	:09/09/1998	Doc #	:98-800938	% Improved	:80
Price	:$209,000	Deed	:Warranty	% Owned	:100
Loan Amt	:$148,000	Lender	:First Union Mort	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Communit Ppty			1998 Tax	:$1,217.12
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 12			Tract	:4225.04
	:			Block	:1
TotalRooms	:8	Patio	:Slab	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:1	Lot Acres	:
BthFixture	:6	Pool SqFt	:512	Year Built	:1970
Stories	:1	Parking	:Carport	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Other	Bldg SqFt	:2,361	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:2,361	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

*----------: **MetroScan / Maricopa** :----------*

Parcel #	:140 48 017	BldgId #	:1 of 1	FCV Total	:$141,966
Owner	:Gonzales Pete & Dolores D			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$116,966
Site	:4223 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:4223 E Edgewood Ave Mesa Az 85206			LPV Amount	:$141,966
Xfered	:07/27/1998	Doc #	:98-645064	% Improved	:82
Price	:$145,000	Deed	:Warranty	% Owned	:100
Loan Amt	:$116,000	Lender	:Firstar Home Mor	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Communit Ppty			1998 Tax	:$1,368.44
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 13			Tract	:4225.04
	:			Block	:1

TotalRooms	:7	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:3	Lot Acres	:
BthFixture	:6	Pool SqFt	:450	Year Built	:1970
Stories	:1	Parking	:Carport	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Wd Shingle	Bldg SqFt	:2,160	Heat Type	:Forced
Wall Matl	:Adobe	All Bldg SF	:2,160	Bldg Cond	:Avg

*----------: **MetroScan / Maricopa** :----------*

Parcel #	:140 48 018	BldgId #	:1 of 1	FCV Total	:$111,438
Owner	:Adair Sandra Lee			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$86,438
Site	:4241 E Edgewood Ave Mesa 85206			Assessed %	:10.0
Mail	:4241 E Edgewood Ave Mesa Az 85206			LPV Amount	:$111,438
Xfered	:07/23/1998	Doc #	:98-636152	% Improved	:78
Price	:	Deed	:Quit Claim	% Owned	:100
Loan Amt	:$85,400	Lender	:Meritage Mortgag	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Adjustable	ExemptType	:
Vest Type	:Unmarried Person			1998 Tax	:$1,074.16
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-924-7486
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch			*CENSUS*	
Legal	:SKY RANCH LOT 14			Tract	:4225.04
	:			Block	:1

TotalRooms	:7	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:1	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1979
Stories	:1	Parking	:Garage	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:1,870	Heat Type	:Forced
Wall Matl	:Adobe	All Bldg SF	:1,870	Bldg Cond	:Avg

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MetroScan / Maricopa

Parcel #	:140 48 031	BldgId #	:1 of 1	FCV Total	:$107,598
Owner	:Raitter John S & Karen K			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$82,598
Site	:4246 E Emelita Ave Mesa 85206			Assessed %	:10.0
Mail	:4246 E Emelita Ave Mesa Az 85206			LPV Amount	:$107,199
Xfered	:12/21/1995	Doc #	:95-786101	% Improved	:77
Price	:$143,900	Deed	:Joint Tenant	% Owned	:100
Loan Amt	:$129,510	Lender	:Gmac Mortgage	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Joint Tenant			1998 Tax	:$1,034.64
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch 2			*CENSUS*	
Legal	:SKY RANCH 2 LOT 7			Tract	:4225.04
	:			Block	:1
TotalRooms	:5	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:2	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1972
Stories	:1	Parking	:Garage	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:1,481	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:1,481	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:140 48 032	BldgId #	:1 of 1	FCV Total	:$101,280
Owner	:Duskey Ernest Jr & Gloria J			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$76,280
Site	:4232 E Emelita Ave Mesa 85206			Assessed %	:10.0
Mail	:4232 E Emelita Ave Mesa Az 85206			LPV Amount	:$101,112
Xfered	:08/19/1977	Doc #	:12386-1060	% Improved	:75
Price	:	Deed	:	% Owned	:
Loan Amt	:	Lender	:	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:			1998 Tax	:$975.16
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch 2			*CENSUS*	
Legal	:SKY RANCH 2 LOT 8			Tract	:4225.04
	:			Block	:1
TotalRooms	:6	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:2	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1971
Stories	:1	Parking	:Garage	Units	:
Quality	:Fair	Parking Sp	:3	A/C Type	:Refrig
Roof Matl	:Other	Bldg SqFt	:1,664	Heat Type	:Forced
Wall Matl	:Other	All Bldg SF	:1,664	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

MetroScan / Maricopa

Parcel #	:140 48 033	BldgId #	:1 of 1	FCV Total	:$202,804
Owner	:Hawkes Richard M			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$177,804
Site	:4218 E Emelita Ave Mesa 85206			Assessed %	:10.0
Mail	:4218 E Emelita Ave Mesa Az 85206			LPV Amount	:$202,804
Xfered	:10/04/1995	Doc #	:95-609745	% Improved	:88
Price	:	Deed	:Quit Claim	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Unmarried Person			1998 Tax	:$1,954.76
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-832-1097
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch 2			*CENSUS*	
Legal	:SKY RANCH 2 LOT 9			Tract	:4225.04
	:			Block	:1
TotalRooms	:8	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:1	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1972
Stories	:1	Parking	:Carport	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Wd Shingle	Bldg SqFt	:3,764	Heat Type	:Forced
Wall Matl	:Slump Blk	All Bldg SF	:3,764	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:140 48 034	BldgId #	:1 of 1	FCV Total	:$133,646
Owner	:Letourneau Darren T/Judith A/Hayes Bever			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$108,646
Site	:4221 E Emelita Ave Mesa 85206			Assessed %	:10.0
Mail	:4221 E Emelita Ave Mesa Az 85206			LPV Amount	:$133,646
Xfered	:05/02/1997	Doc #	:97-296314	% Improved	:81
Price	:$185,000	Deed	:Warranty	% Owned	:100
Loan Amt	:$163,000	Lender	:Banc One Mortgag	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Communit Ppty			1998 Tax	:$1,288.24
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-924-8235
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch 2			*CENSUS*	
Legal	:SKY RANCH 2 LOT 10			Tract	:4225.04
	:			Block	:1
TotalRooms	:9	Patio	:Covered	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:2	Lot Acres	:
BthFixture	:6	Pool SqFt	:400	Year Built	:1970
Stories	:1	Parking	:Garage	Units	:
Quality	:Fair	Parking Sp	:3	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:2,701	Heat Type	:Forced
Wall Matl	:Slump Blk	All Bldg SF	:2,701	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

*----------: ***MetroScan / Maricopa*** :----------*

Parcel #	:140 48 035	BldgId #	:1 of 1	FCV Total	:$109,040
Owner	:Delmet Dale A & Beverly A			FCV Land	:$25,000
CoOwner	:			FCV Struct	:$84,040
Site	:4239 E Emelita Ave Mesa 85206			Assessed %	:10.0
Mail	:4239 E Emelita Ave Mesa Az 85206			LPV Amount	:$108,550
Xfered	:08/09/1996	Doc #	:96-562332	% Improved	:77
Price	:	Deed	:Warranty	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Communit Ppty			1998 Tax	:$1,048.00
DevelopTy	:Res			*PHONE*	
Land Use	:0131 Res,Sfr,Graded 010-3,Urban,Subdiv			Owner	:602-830-3801
Map Grid	:479 F4			Tenant	:
Sub/Plat	:Sky Ranch 2			*CENSUS*	
Legal	:SKY RANCH 2 LOT 11			Tract	:4225.04
	:			Block	:1

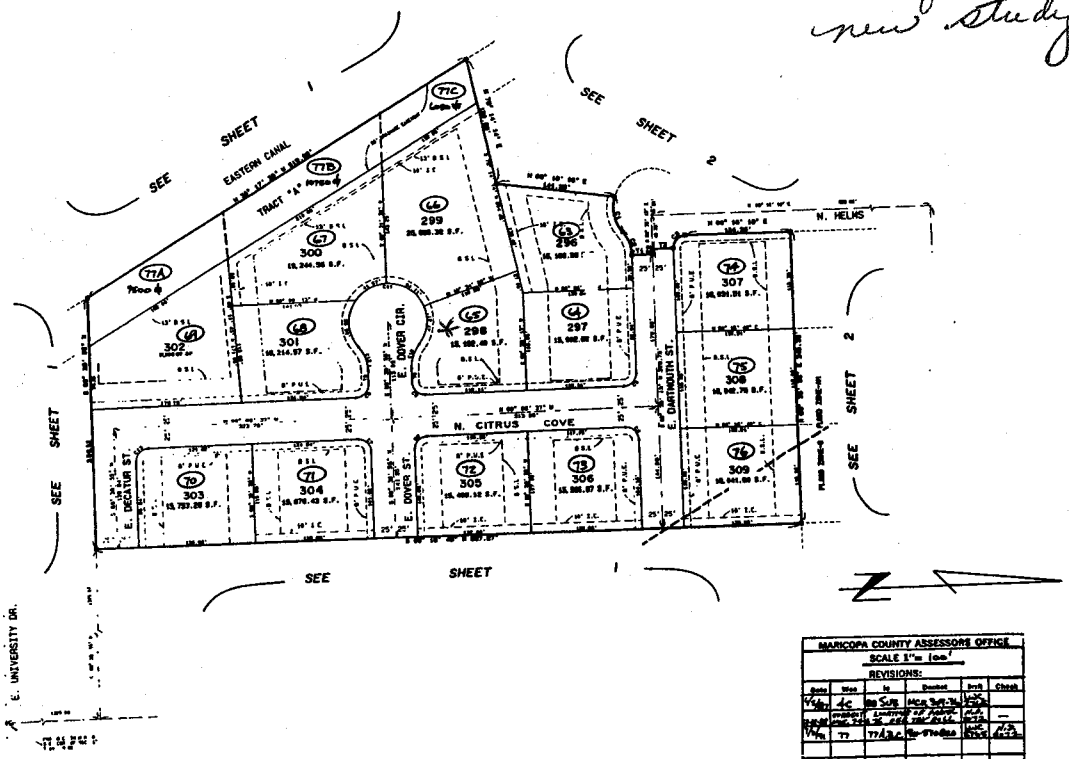
TotalRooms	:6	Patio	:None	Lot SqFt	:
Bathrooms	:2.00	Patio Num	:	Lot Acres	:
BthFixture	:6	Pool SqFt	:	Year Built	:1972
Stories	:1	Parking	:Carport	Units	:
Quality	:Fair	Parking Sp	:2	A/C Type	:Refrig
Roof Matl	:Asphalt	Bldg SqFt	:1,698	Heat Type	:Forced
Wall Matl	:Brick	All Bldg SF	:1,698	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

PT. NW4 SE4 SEC. 17 - T1N R6E
THE GROVES UNIT 5- PHASE 2 : LOTS 296-309, TR. A
MCR 309-36, 1988 SUB

BOOK 140
MAP 12
SHEET 3

Still in floodplain on new study



MARICOPA COUNTY ASSESSORS OFFICE
SCALE 1" = 100'
REVISIONS:

Date	Map	Lot	Description	Drft	Chkd
1/4/91	4C	296 Sub	MCR 309-36		
3-8-91			Location of Parcel		—
1/1/93	77	77/A.B.C.	Re-Platted		

1825.000 Feet

*----------: **MetroScan / Maricopa** :----------*

Parcel #	:140 12 065	BldgId #	:1 of 1	FCV Total	:$177,597
Owner	:Burd Bobby J Tr			FCV Land	:$35,000
CoOwner	:			FCV Struct	:$142,597
Site	:3344 E Dover Cir Mesa 85213			Assessed %	:10.0
Mail	:3344 E Dover Cir Mesa Az 85213			LPV Amount	:$177,597
Xfered	:12/24/1996	Doc #	:96-892675	% Improved	:80
Price	:	Deed	:Warranty	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Trust\Trustee			1998 Tax	:$1,711.86
DevelopTy	:Res			*PHONE*	
Land Use	:0151 Res,Sfr,Graded 010-5,Urban,Subdiv			Owner	:602-981-1161
Map Grid	:469 D6			Tenant	:
Sub/Plat	:Groves Unit 5 Phase 2			*CENSUS*	
Legal	:THE GROVES UNIT 5 PHASE 2 MCR			Tract	:4207.04
	:309-36 LOT 298			Block	:2

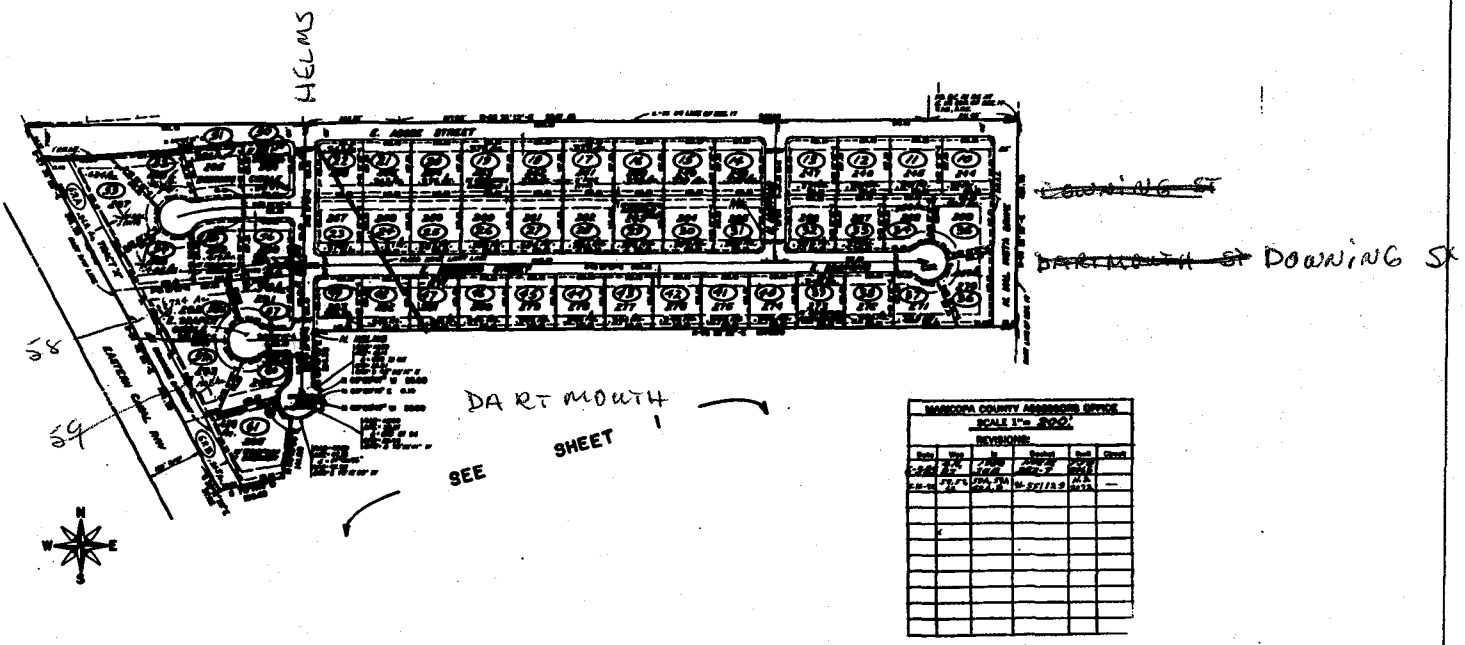
TotalRooms	:8	Patio	:Covered	Lot SqFt	:
Bathrooms	:3.00	Patio Num	:1	Lot Acres	:
BthFixture	:9	Pool SqFt	:	Year Built	:1995
Stories	:1	Parking	:Garage	Units	:
Quality	:Good	Parking Sp	:3	A/C Type	:Refrig
Roof Matl	:Other	Bldg SqFt	:2,946	Heat Type	:Forced
Wall Matl	:Wood	All Bldg SF	:2,946	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

PT. N2 SE4 SEC 17, T-1N R-6E
THE GROVES UNIT 5, LOTS 244-295, TRACT "A",
(MCR 282-7 1986 SUB)

BOOK 140
MAP 12
SHEET 2

Still in floodplain
on new study



1825.000 Feet

MetroScan / Maricopa

Parcel #	:140 12 034	BldgId #	:1 of 1	FCV Total	:$192,839
Owner	:Wallace Jerome W & Judith K			FCV Land	:$48,000
CoOwner	:			FCV Struct	:$144,839
Site	:3540 E Downing Cir Mesa 85213			Assessed %	:10.0
Mail	:3540 E Downing Cir Mesa Az 85213			LPV Amount	:$192,839
Xfered	:08/31/1992	Doc #	:92-485077	% Improved	:75
Price	:$220,000	Deed	:Warranty	% Owned	:100
Loan Amt	:$176,000	Lender	:3002	TaxRt Area	:041003
Loan	:Conventional	Int Ty	:Fixed	ExemptType	:
Vest Type	:Married Persons			1998 Tax	:$1,858.78
DevelopTy	:Res			*PHONE*	
Land Use	:0151 Res,Sfr,Graded 010-5,Urban,Subdiv			Owner	:602-641-1709
Map Grid	:469 D6			Tenant	:
Sub/Plat	:Groves Unit 5			*CENSUS*	
Legal	:THE GROVES UNIT 5 MCR 282-7 LOT 268			Tract	:4207.04
	:			Block	:2
TotalRooms	:8	Patio	:Covered	Lot SqFt	:
Bathrooms	:4.00	Patio Num	:1	Lot Acres	:
BthFixture	:12	Pool SqFt	:450	Year Built	:1987
Stories	:1	Parking	:Garage	Units	:
Quality	:Good	Parking Sp	:3	A/C Type	:Refrig
Roof Matl	:Wd Shingle	Bldg SqFt	:3,030	Heat Type	:Forced
Wall Matl	:Wood	All Bldg SF	:3,030	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:140 12 058A	BldgId #	:1 of 1	FCV Total	:$213,578
Owner	:Stillwell Logan W Iii Tr			FCV Land	:$48,000
CoOwner	:			FCV Struct	:$165,578
Site	:3302 E Draper Cir Mesa 85213			Assessed %	:10.0
Mail	:3302 E Draper Cir Mesa Az 85213			LPV Amount	:$213,578
Xfered	:02/04/1992	Doc #	:92-058189	% Improved	:78
Price	:	Deed	:	% Owned	:
Loan Amt	:	Lender	:	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:			1998 Tax	:$2,058.70
DevelopTy	:Res			*PHONE*	
Land Use	:0151 Res,Sfr,Graded 010-5,Urban,Subdiv			Owner	:602-924-3693
Map Grid	:469 D6			Tenant	:
Sub/Plat	:Groves Unit 5			*CENSUS*	
Legal	:THE GROVES UNIT 5 MCR 282-7 LOT 292			Tract	:4207.04
	:& ALSO THAT			Block	:2
TotalRooms	:8	Patio	:Covered	Lot SqFt	:
Bathrooms	:4.00	Patio Num	:1	Lot Acres	:
BthFixture	:12	Pool SqFt	:	Year Built	:1992
Stories	:1	Parking	:Garage	Units	:
Quality	:Good	Parking Sp	:4	A/C Type	:Refrig
Roof Matl	:Other	Bldg SqFt	:3,411	Heat Type	:Forced
Wall Matl	:Wood	All Bldg SF	:3,411	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

MetroScan / Maricopa

Parcel #	:141 08 046	BldgId #	:3 of 4	FCV Total	:$1,329,388
Owner	:Sadey A J/Nichols J S/Karim J M/Zachman			FCV Land	:$77,109
CoOwner	:			FCV Struct	:$1,252,279
Site	:2020 N Winterhaven Mesa 85213			Assessed %	:10.0
Mail	:30 Sendero Rcho Sta Marg Ca 92688			LPV Amount	:$1,210,000
Xfered	:02/11/1998	Doc #	:98-103398	% Improved	:94
Price	:	Deed	:Deed	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Single Person			1998 Tax	:$14,061.12
DevelopTy	:Comm			*PHONE*	
Land Use	:0366 Res,Apartments,25-99 Units,2 Story			Owner	:
Map Grid	:469 B3			Tenant	:602-890-9073
Sub/Plat	:Citrus Highlands Unit 1			*CENSUS*	
Legal	:CITRUS HIGHLANDS UNIT 1 MCR 212-25			Tract	:4203.00
	:TRACT A			Block	:2
TotalRooms	:	Patio	:	Lot SqFt	:
Bathrooms	:	Patio Num	:	Lot Acres	:
BthFixture	:	Pool SqFt	:	Year Built	:1985
Stories	:2	Parking	:	Units	:4
Quality	:Fair	Parking Sp	:	A/C Type	:Refrig
Roof Matl	:	Bldg SqFt	:15,440	Heat Type	:Forced
Wall Matl	:Frame	All Bldg SF	:31,060	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:141 08 046	BldgId #	:4 of 4	FCV Total	:$1,329,388
Owner	:Sadey A J/Nichols J S/Karim J M/Zachman			FCV Land	:$77,109
CoOwner	:			FCV Struct	:$1,252,279
Site	:2020 N Winterhaven Mesa 85213			Assessed %	:10.0
Mail	:30 Sendero Rcho Sta Marg Ca 92688			LPV Amount	:$1,210,000
Xfered	:02/11/1998	Doc #	:98-103398	% Improved	:94
Price	:	Deed	:Deed	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Single Person			1998 Tax	:$14,061.12
DevelopTy	:Comm			*PHONE*	
Land Use	:0366 Res,Apartments,25-99 Units,2 Story			Owner	:
Map Grid	:469 B3			Tenant	:602-890-9073
Sub/Plat	:Citrus Highlands Unit 1			*CENSUS*	
Legal	:CITRUS HIGHLANDS UNIT 1 MCR 212-25			Tract	:4203.00
	:TRACT A			Block	:2
TotalRooms	:	Patio	:	Lot SqFt	:
Bathrooms	:	Patio Num	:	Lot Acres	:
BthFixture	:	Pool SqFt	:	Year Built	:1985
Stories	:1	Parking	:	Units	:4
Quality	:	Parking Sp	:	A/C Type	:
Roof Matl	:	Bldg SqFt	:180	Heat Type	:
Wall Matl	:	All Bldg SF	:31,060	Bldg Cond	:

The Information Provided Is Deemed Reliable, But Not Guaranteed.

*----------: **MetroScan / Maricopa** :----------*

Parcel #	:140 12 059A	BldgId #	:1 of 1	FCV Total	:$302,297
Owner	:Sexton Blake Robert & Doreen L			FCV Land	:$48,000
CoOwner	:			FCV Struct	:$254,297
Site	:3301 E Draper Cir Mesa 85213			Assessed %	:10.0
Mail	:3301 E Draper Cir Mesa Az 85213			LPV Amount	:$302,297
Xfered	:08/27/1998	Doc #	:98-762147	% Improved	:84
Price	:	Deed	:	% Owned	:100
Loan Amt	:	Lender	:	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:			1998 Tax	:$2,913.84
DevelopTy	:Res			*PHONE*	
Land Use	:0151 Res,Sfr,Graded 010-5,Urban,Subdiv			Owner	:
Map Grid	:469 D6			Tenant	:
Sub/Plat	:Groves Unit 5			*CENSUS*	
Legal	:THE GROVES UNIT 5 MCR 282-7 LOT 293			Tract	:4207.04
	:& ALSO THAT PT OF TRACT A IN SD ...			Block	:2

TotalRooms	:11	Patio	:Covered	Lot SqFt	:
Bathrooms	:5.00	Patio Num	:2	Lot Acres	:
BthFixture	:15	Pool SqFt	:500	Year Built	:1986
Stories	:1	Parking	:Garage	Units	:
Quality	:Good	Parking Sp	:4	A/C Type	:Refrig
Roof Matl	:Tile	Bldg SqFt	:4,540	Heat Type	:Forced
Wall Matl	:Wood	All Bldg SF	:4,540	Bldg Cond	:Avg

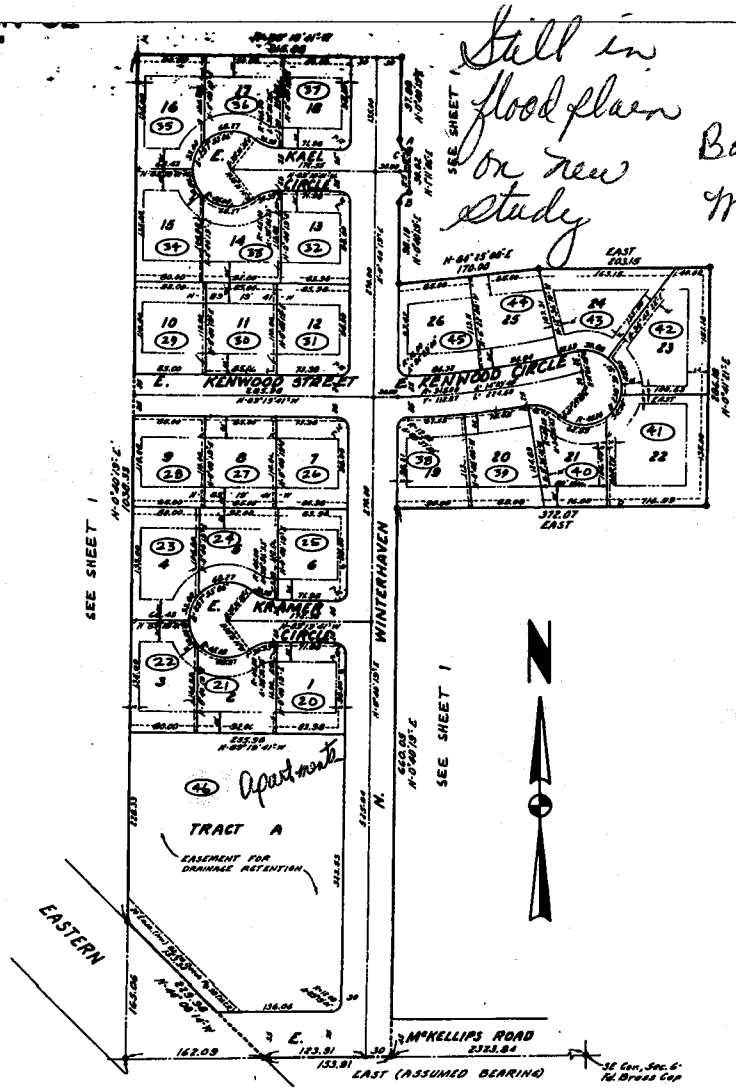
The Information Provided Is Deemed Reliable, But Not Guaranteed.

CITRUS HIGHLANDS UNIT I
LOTS 1-26; TRACT A
(MCR 212-25, 1980 SUB)

BOOK 141
MAP 8
SHEET 2

Still in flood plain on new study

Book 141 Map 8



MARICOPA CO. ASSESSOR'S OFFICE
SCALE 1" = 100'

Date	Work	Check
11/79	1980 SUB PER 212-25	

1825.000 Feet

MetroScan / Maricopa

Parcel #	:141 08 046	BldgId #	:1 of 4	FCV Total	:$1,329,388
Owner	:Sadey A J/Nichols J S/Karim J M/Zachman			FCV Land	:$77,109
CoOwner	:			FCV Struct	:$1,252,279
Site	:2020 N Winterhaven Mesa 85213			Assessed %	:10.0
Mail	:30 Sendero Rcho Sta Marg Ca 92688			LPV Amount	:$1,210,000
Xfered	:02/11/1998	Doc #	:98-103398	% Improved	:94
Price	:	Deed	:Deed	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Single Person			1998 Tax	:$14,061.12
DevelopTy	:Comm			*PHONE*	
Land Use	:0366 Res,Apartments,25-99 Units,2 Story			Owner	:
Map Grid	:469 B3			Tenant	:602-890-9073
Sub/Plat	:Citrus Highlands Unit 1			*CENSUS*	
Legal	:CITRUS HIGHLANDS UNIT 1 MCR 212-25			Tract	:4203.00
	:TRACT A			Block	:2
TotalRooms	:	Patio	:	Lot SqFt	:
Bathrooms	:	Patio Num	:	Lot Acres	:
BthFixture	:	Pool SqFt	:	Year Built	:1985
Stories	:2	Parking	:	Units	:4
Quality	:Fair	Parking Sp	:	A/C Type	:Refrig
Roof Matl	:	Bldg SqFt	:9,264	Heat Type	:Forced
Wall Matl	:Frame	All Bldg SF	:31,060	Bldg Cond	:Avg

MetroScan / Maricopa

Parcel #	:141 08 046	BldgId #	:2 of 4	FCV Total	:$1,329,388
Owner	:Sadey A J/Nichols J S/Karim J M/Zachman			FCV Land	:$77,109
CoOwner	:			FCV Struct	:$1,252,279
Site	:2020 N Winterhaven Mesa 85213			Assessed %	:10.0
Mail	:30 Sendero Rcho Sta Marg Ca 92688			LPV Amount	:$1,210,000
Xfered	:02/11/1998	Doc #	:98-103398	% Improved	:94
Price	:	Deed	:Deed	% Owned	:100
Loan Amt	:	Lender	:No New Mortgage	TaxRt Area	:041003
Loan	:	Int Ty	:	ExemptType	:
Vest Type	:Single Person			1998 Tax	:$14,061.12
DevelopTy	:Comm			*PHONE*	
Land Use	:0366 Res,Apartments,25-99 Units,2 Story			Owner	:
Map Grid	:469 B3			Tenant	:602-890-9073
Sub/Plat	:Citrus Highlands Unit 1			*CENSUS*	
Legal	:CITRUS HIGHLANDS UNIT 1 MCR 212-25			Tract	:4203.00
	:TRACT A			Block	:2
TotalRooms	:	Patio	:	Lot SqFt	:
Bathrooms	:	Patio Num	:	Lot Acres	:
BthFixture	:	Pool SqFt	:	Year Built	:1985
Stories	:2	Parking	:	Units	:4
Quality	:Fair	Parking Sp	:	A/C Type	:Refrig
Roof Matl	:	Bldg SqFt	:6,176	Heat Type	:Forced
Wall Matl	:Frame	All Bldg SF	:31,060	Bldg Cond	:Avg

The Information Provided Is Deemed Reliable, But Not Guaranteed.

SECTION Price Road - Jct U.S. 60 R/W FEDERAL ID NO. RAM-600-7-801
HIGHWAY SANTAN FREEWAY DISTRICT E COUNTY Maricopa
R/W TRACS NO. 202L MA 000 H5325 01R
CONST. TRACS NO. N/A CONST. FED. ID NO. N/A

Arizona Department Of Transportation
Right of Way Group
Right of Way Plans Section

RECEIVED
FEB 2 1 2000
DIBBLE & ASSOC.

Letter of Transmittal

Date: **February 18, 2000**

TO:
- ☐ Project manager
- ☐ R/W Project Management
- ☐ Design Team Leader
- ☒ other **Brian Fry, Dibble and Associates**

FROM: R/W Plans Section **Ben Gurney 712-8869**

Transmitted for your use are the following:

1 Set of Prints of Results of Survey by Keith Hubbard dated 7-12-99

Comments:

g:\9340\ben\transmit\h5325_1e.doc

RESULTS OF SURVEY

BASELINE SURFACE COORDINATES

PT.	NORTHING	EASTING	DESC.
H1	833507.79283	688231.67356	BC
H2	834157.17913	704372.38584	BC
H3	831259.97734	723184.62546	BC
H4	839297.78841	754980.15206	BC
H5	847961.28874	770203.24450	BC
KELL1	889964.63075	781560.47722	NGS
PECOST1	832156.77213	738891.92188	NGS
PROV1	833958.53574	670163.65442	NGS
QUEEN1	860510.33984	783178.55245	NGS

TOWNSHIP LINE AT BASELINE ROAD

PT.	NORTHING	EASTING	DESC.
3012	865739.94387	780411.92693	CALCED
3013	865729.75618	783073.31105	CALCED
3014	865718.97788	785735.06352	CALCED

R/W SURVEY & SURFACE COORDINATES

PT.	NORTHING	EASTING	DESC.
20085	833819.06412	701789.46820	POB 2188+55.39
20086	833945.89070	707102.41839	PC 2241+69.854
20088	833205.16447	709712.17085	PT 2269+23.932
20089	832899.83910	710181.28079	PC 2274+83.653
20091	832157.84986	712701.36329	PT 2301+48.051
20092	832202.61459	723108.14702	PC 2405+54.931
20094	831463.01079	725624.56063	PT 2432+14.952
20095	831219.98397	725998.73433	PC 2436+61.123
20097	830480.83232	728562.76236	PT 2463+68.761
20099	830728.84711	745444.96613	PC 2632+52.787
20101	831383.87365	747535.28268	PT 2654+74.119
20104	834850.36955	752683.02178	PC 2716+80.230
20106	838040.38998	754372.82297	PT 2754+39.408
20109	842821.80044	754354.30132	PC 2802+20.855
20111	847040.93997	758515.03755	PT 2867+57.001
20113	847052.71943	759685.33078	PC 2879+67.354
20115	847087.33108	760734.66829	PT 2890+17.354
20116	847132.42430	761540.79884	PC 2898+24.744
20118	847166.52892	762544.34917	PT 2908+28.954
20119	847196.53344	765031.71937	PI 2933+16.505
20120	847220.12696	776375.42934	PC 3046+60.240
20122	847663.01545	778922.92236	PT 3072+58.449
20123	848191.17912	780405.70887	PC 3088+32.493
20125	852577.00471	783450.83789	PT 3145+31.942
20127	860752.43309	783329.70305	PC 3227+08.268
20129	862308.75870	782977.21338	PT 3243+15.567
20132	863672.21327	782350.83899	PC 3258+16.018
20134	865482.57515	782004.27949	PT 3276+77.293
20152	868406.55611	782157.51885	EOP 3306+05.286

U.S. 60 & SURFACE COORDINATES

PT.	NORTHING	EASTING	DESC.
20153	868402.18970	776172.58566	CALCED
20154	868405.86885	781478.42646	CALCED
20155	868411.22996	786775.83819	CALCED

SURFACE COORDINATES

PT.	NORTHING	EASTING	DESCRIPTION
100	836319.57346	707154.10040	BC IN HH
101	833686.23319	707171.53844	BC 3FT DEEP
102	832497.10581	707175.16645	BC 1 FT DEEP
103	831176.74017	707179.38445	BC 1 FT DEEP
104	830721.54126	707180.41146	NAIL IN 2IN PIPE
105	828040.50290	707189.12047	COCH BC FLUSH
106	829856.03153	707183.43646	BC .5FT DEEP
107	830762.76034	709830.99476	BC IN HH
108	830804.04243	712474.78104	BC IN HH
109	828151.04612	712485.23707	REBAR
110	833682.05718	712465.62403	BC IN HH
114	836340.32750	712448.58299	BC IN HH
115	833708.81024	715108.44631	BC IN HH
116	833735.06029	717750.20660	BC IN HH
117	830901.50662	717800.94670	BC IN HH
118	828204.22123	715165.58443	COTTON SPINDLE
119	830852.67952	715137.39637	REBAR
120	833755.64133	720397.47089	BC IN HH
121	833774.87137	723049.48819	BC IN HH
122	833774.70537	723032.50716	BC FLUSH
123	831989.65080	723093.00128	BC FLUSH
124	832253.41833	723082.23226	BC FLUSH
125	830986.92979	723067.43623	BC IN HH
126	830987.62779	723100.00830	BC FLUSH
127	828337.82449	723087.32927	BC IN HH
128	828337.33949	723056.83721	BC FLUSH
129	830944.47971	720442.66498	1 PIN
130	833756.29133	724473.24404	CL RR
131	833790.16540	725694.36448	BC IN HH
132	833802.52242	728340.88578	BC IN HH
133	831087.58099	728362.57182	BC FLUSH
134	828438.66670	728376.14985	BC IN HH
136	828388.31260	725732.05656	BC IN HH
137	829079.30598	724508.75711	CL RR
138	831037.34289	725713.70952	REBAR
139	831024.27087	724494.02108	CL RR
200	833824.58447	730984.39906	PIPE
201	833848.07351	733629.17135	BC IN HH
202	831153.37113	733646.55739	BC IN HH
203	828511.23584	733664.21442	CONC
204	828474.80777	731020.48214	BC IN HH
206	831120.49806	731002.48310	LS15925 CAP
207	829872.49956	730937.62897	SRP REBAR
208	830131.93108	730899.53089	SRP CAP
209	830441.20970	730775.56665	SRP BAR
210	830542.65790	730750.10460	SRP CAP
211	830660.35814	730737.22357	SRP CAP
212	833869.39556	736279.73865	BC IN HH
213	833891.22260	738922.24994	NAIL IN PIPE
214	831248.21431	738926.64295	CONC IN HH
215	828605.21803	738930.61396	PIPE IN HH
216	828558.17093	736297.44269	PK IN PIPE
217	831200.66422	736288.73367	BC FLUSH
218	833919.71166	741453.98200	PIPE
219	833943.12970	743610.73232	BC IN HH
221	831282.70438	741451.02300	REBAR CAP
222	833948.62872	744096.59829	BC IN HH
225	831319.07746	744101.32130	BC FLUSH
226	831201.52922	744101.53230	BC FLUSH
227	828699.52022	744106.22931	BC IN HH
228	829616.63505	744104.51930	BC FLUSH
229	830682.24418	743924.11494	BC FLUSH
230	830915.71665	743843.20978	BC FLUSH
231	830941.13370	743916.52493	BC FLUSH
232	831057.19693	743794.17268	BC FLUSH
235	832124.24807	743614.01732	BC FLUSH
238	833979.22178	746723.24654	REBAR
239	834010.31184	749350.10380	BC IN HH
240	831385.54359	749405.86391	REBAR
241	828735.98129	749462.33602	BC IN HH
242	828717.76225	746784.44866	BC IN HH
243	831352.22652	746754.01360	REBAR
244	834040.22690	751990.27508	COTTON SPINDLE
245	834071.16896	754630.85436	REBAR
246	831414.55865	754691.51448	COTTON SPINDLE
248	828739.35630	754752.67560	BC
249	828737.43929	752107.45731	BC IN HH
250	831399.95362	752048.64419	REBAR CAP25393
252	836658.37814	749341.11978	BC IN HH
253	839306.29343	749332.48676	BC IN HH
254	839323.38447	751972.14104	BC IN HH
255	839340.49550	754612.03432	BC IN HH
256	836705.84823	754621.00834	REBAR
257	836681.91018	751981.33406	CAP 15573
258	844576.80397	749316.19673	BC IN HH
259	841940.68570	749323.46974	REBAR
260	844592.38000	751953.93500	BC IN HH
261	844607.46203	754591.61728	BC IN HH
262	844494.47381	754571.42924	CL RR
263	841957.74873	751963.20102	PIPE
264	847209.76424	749305.13171	BC IN HH
265	848365.04055	749318.91873	CL RR
266	849842.75350	749293.64468	BC IN HH
268	849857.21853	751935.52097	BC IN HH
271	847241.89430	754583.31726	BC IN HH
272	847226.06027	751944.43598	REBAR
300	849899.63262	757182.25446	BC IN HH
301	849927.22967	759787.17667	BC IN HH
302	847293.47441	759807.63771	BC IN HH
306	844633.56909	757209.80951	BC IN HH
307	842027.07187	759848.12979	BC IN HH
308	840610.78004	759841.58278	CL RR
309	839394.56061	759868.41583	BC IN HH
312	849951.22172	762392.78788	CAP FLUSH
313	849975.24677	764998.34509	PIPE
314	847346.33951	765030.22516	REBAR
315	844714.82625	765062.57222	BC IN HH
316	844687.15219	762445.05199	BC IN HH
317	847320.00548	762418.93193	PIPE
318	850001.68582	767605.85031	REBAR
319	850027.99787	770213.24352	BC IN HH
320	847399.84162	770255.20961	BC IN HH
321	844771.90736	770297.36069	BC IN HH
322	844743.48931	767675.05645	BC IN HH
324	847373.00156	767643.03438	PIPE
328	849921.75166	785972.46604	BC IN HH
330	844651.27812	785995.92409	BC IN HH
331	849939.58370	783330.43976	PIPE
332	849959.92874	780692.19348	PIPE
333	849979.42678	778039.43517	PIPE
334	849999.31382	775386.26687	BAR
335	844752.60632	772796.30569	BC
336	844738.66830	775433.54196	BC
337	844716.25225	778081.95626	BC
338	844693.41021	780726.93055	RB
339	844675.40317	783364.79882	BC
340	847367.84255	775390.63988	REBAR
341	847328.32048	780675.73045	BC
404	870900.43931	786769.14532	BC IN HH
405	870897.64581	784118.89467	BC IN HH
406	870895.99436	781466.05842	BC IN HH
409	870893.95061	778815.37573	BC IN HH
410	870892.16260	776165.45143	BC IN HH
412	868252.19032	776173.01544	BC IN HH
414	868261.23050	786776.24150	BC IN HH
415	865735.81715	781481.17403	BC IN HH
416	865714.57063	786782.07033	BC IN HH
417	865718.92926	785735.06457	BC IN HH
418	865725.72764	784131.55618	BC IN HH
419	865729.90814	783073.30812	BC IN HH
420	865739.41415	780411.93896	BC IN HH
421	865746.04531	778831.02076	BC IN HH
422	865750.36632	777764.21462	BC IN HH
423	865756.71233	776173.47645	BC IN HH
424	863093.34801	785791.49268	BC IN HH
425	860454.90973	785833.91176	BC IN HH
426	860470.12076	783174.94044	PIPE
427	860485.90279	780515.63713	BC IN HH
428	863108.00603	780471.69504	BC IN HH
429	863100.96402	783123.99834	CAP
431	857922.99666	785836.47177	CL POWER
432	855182.48118	785913.51292	BC IN HH
433	855198.26821	783257.19761	BC IN HH
434	855216.41525	780603.13630	BC IN HH
436	857955.35573	780574.48724	CL POWER
439	852559.37294	785940.20098	BC IN HH
440	852596.46301	780648.77739	PIPE
441	852577.93497	783293.60668	PIPE
442	846001.06082	771754.22260	475+00
443	845889.01360	771732.61556	PC476+14.12
444	846492.05480	771848.99979	470+00
445	846890.36560	771925.83795	PT465+94.41
501	833684.09419	709821.57874	E REBAR
503	836329.93848	709783.66466	BC FLUSH
504	828650.75912	741447.52899	BC HH
505	849871.72156	754576.95025	BC HH
508	844659.66314	759828.17875	BC HH
509	839367.20155	757240.82958	BC HH
514	847286.92039	785983.82106	BFLUSH
515	857818.68646	785873.64684	BC HH
516	857835.38449	783216.30053	RODLS5068
517	857851.87952	780559.42921	1.5 PIPE
600	850013.89475	772742.23529	REBAR W/CAP
700	860487.31889	780530.95235	NAIL
1003	828534.98689	707187.57247	CALCED
3002	868254.15072	781479.18002	½ REBAR
3003	841973.86877	754601.82630	CALCED
3004	842000.47382	757225.31955	CALCED
3005	847267.68935	757195.99249	CALCED
3007	868258.14889	784125.22327	ADOT BC
3008	847384.17647	772769.26097	CALCED
3009	847347.87579	778060.69542	CALCED
3010	847307.48126	783347.61937	CALCED
3011	868253.16953	778823.40134	CALCED

R/W SURVEY & INT. SURFACE COORDINATES

PT.	NORTHING	EASTING	DESCRIPTION
20200	833947.00374	707169.81161	POC 2242+37.257
20201	833684.96725	708739.93170	POC 2258+37.202
20202	833132.73861	709823.35567	POT 2270+56.593
20203	832162.67497	712470.46354	POC 2299+17.076
20204	832168.27248	715124.38500	POT 2325+71.095
20205	832179.68724	717778.05847	POT 2352+24.793
20206	832191.06283	720422.62409	POT 2378+69.383
20207	832202.40582	723059.61244	POT 2405+06.396
20208	831406.79463	725711.11326	POT 2433+18.159
20209	831048.18988	726285.62929	POC 2439+95.595
20210	830482.17474	728365.67506	POC 2461+71.654
20211	830516.73436	731006.59060	POT 2488+12.853
20212	830555.58109	733650.86184	POT 2514+57.41
20213	830594.36316	736290.73189	POT 2540+97.564
20214	830633.10064	738927.56713	POT 2567+34.684
20215	830670.16054	741460.20982	POT 2592+57.599
20216	830709.12455	744102.46411	POT 2619+10.140
20217	830980.81828	746758.30435	POC 2645+96.917
20218	831361.62233	747501.86410	POC 2654+33.97
20219	832625.78019	749379.51127	POT 2676+97.52
20220	834034.34572	751471.22811	POT 2702+19.292
20221	834383.09134	751989.11462	POT 2708+43.656
20222	836701.45493	754136.55463	POC 2740+72.537
20223	839338.91240	754367.79291	POT 2767+37.940
20224	841972.37668	754357.59172	POT 2793+71.424
20225	844234.61468	754593.06261	POC 2816+60.733
20226	844608.99707	754745.56106	POC 2820+65.138
20227	846815.39128	757198.36497	POC 2854+55.462
20228	847054.30573	759809.50298	POC 2880+91.536
20229	847164.69974	762420.47269	POC 2907+05.064
20230	847196.53416	765032.06659	POT 2933+16.853
20231	847201.96899	767645.11721	POT 2959+29.909
20232	847207.40408	770258.29623	POT 2985+43.094
20233	847218.08380	775393.08360	POT 3036+77.892
20234	847350.10318	777762.83831	POC 3060+55.663
20235	847411.80771	778060.17892	POC 3063+59.359
20236	847212.63024	772771.02396	POT 3010+55.827
20237	848299.71583	780681.80738	POC 3091+29.210
20238	849944.70089	782666.86705	POC 3117+42.531
20239	851380.86317	783310.31857	POC 3133+24.083
20240	852576.83221	783450.84045	POC 3145+31.770
20241	855197.34812	783412.01242	POT 3171+52.573
20242	857834.40021	783372.93937	POT 3197+89.915
20243	860469.21141	783333.89953	POT 3224+25.015
20244	861868.08099	783147.87116	POC 3238+42.704
20245	863102.32168	782612.64859	POT 3251+88.865
20246	865733.77567	782017.44435	POT 3279+28.838
20247	868255.16370	782149.58471	POT 3304+53.686

GENERAL NOTES

Four NGS control stations were used to establish the Control Baseline for this survey and they are as follows:

Kell NAD 83(1992) 33°26'44.76232"(N) 111°38'58.87001"(W) Elev 1632.
Queen NAD 83(1992) 33°21'53.34213"(N) 111°38'40.68469"(W) Elev 1405.
Pecost NAD 83(1992) 33°17'13"68542"(N) 111°47'23.20805"(W) Elev 1256.
Prov NAD 83(1992) 33°17'31.60411"(N) 112°00'52.78415"(W) Elev 1183.

The above values were entered into a Trimble Data Collector Model TSC1 with the following parameters set for the basis of this survey:

System: United States State Plane 1983
Zone: Arizona Central 0202
Datum: North American 1983 (Conus) equivalent to WGS-84
Geoid Model: GEO1096 (Continental US)

Five additional control points were set named H1, H2, H3, H4 & H5. A Trimble 4800 GPS Equipment was used for all field survey measurements. Direct satellite measurements were made on each point on the North American Datum of 1983 with automatic translations made to the State Plane Grid System.

GPS calibration and translation to the surface was performed by Trimble Survey Office Software. A scale factor of 1.00016 and coordinate values of NO.000, EO.000 were used for the translation to the surface.

All Bearings are grid bearings and Distances are surface distances.

MONUMENT VERIFICATION AND ACCEPTANCE

The monumentation shown on this "Results of Survey" was based on an observation and evaluation of physical corroborating evidence in the field; and a review and analysis of existing drawings, plats, and notes readily available at the time the survey was prepared.

REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN/DATE	JDC MAY 1999
CHECKED	BG MAY 1999

KEITH W. HUBBARD
PROFESSIONAL ENGINEER

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO.: RAM-600-7-801
TRACS NO.: 202L MA 000 H5325 01R
ROUTE: SR 202L
SECTION: Jct. S.R. 101L - Jct. U.S. 60

REGISTERED LAND SURVEYOR CERTIFICATE NO. 15817 JAMIE D. CRAIG 7-12-99 ARIZONA, U.S.A.

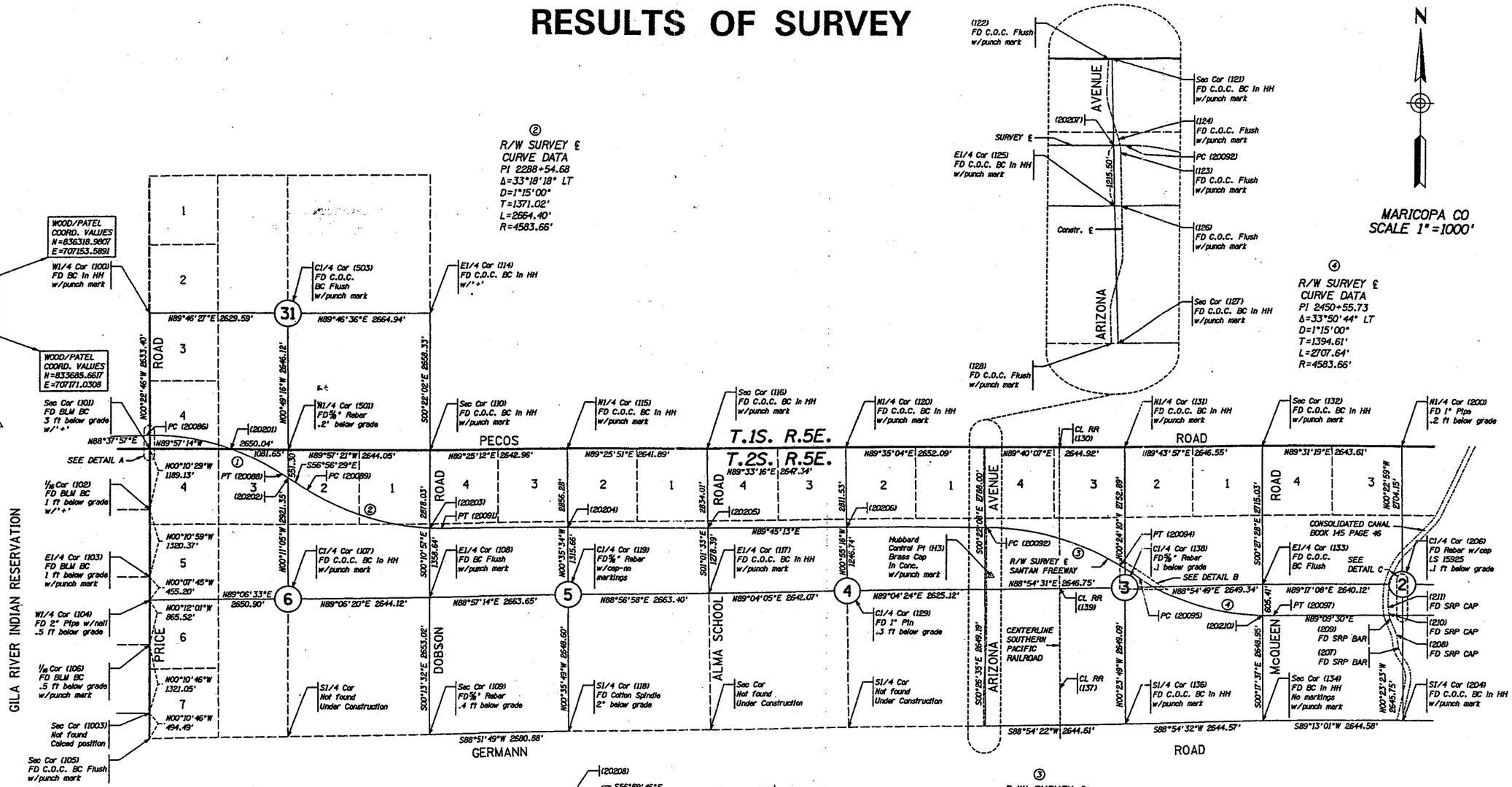
SHEET 1 OF 6

ccccccSYSTIMEccccc ccccccDGNcSPECIFICATIONcccccc

JUL 1999

RW Plans

RESULTS OF SURVEY



REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN /DATE	JDC MAY 1999
CHECKED	BG MAY 1999
KEITH W. HUBBARD PROFESSIONAL ENGINEER	
ROUTE	SR 202L
SECTION	Jct. S.R. 101L - Jct. U.S. 60

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO. RAM-600-7-801
TRACS NO. 202L MA 000 H5325 01R

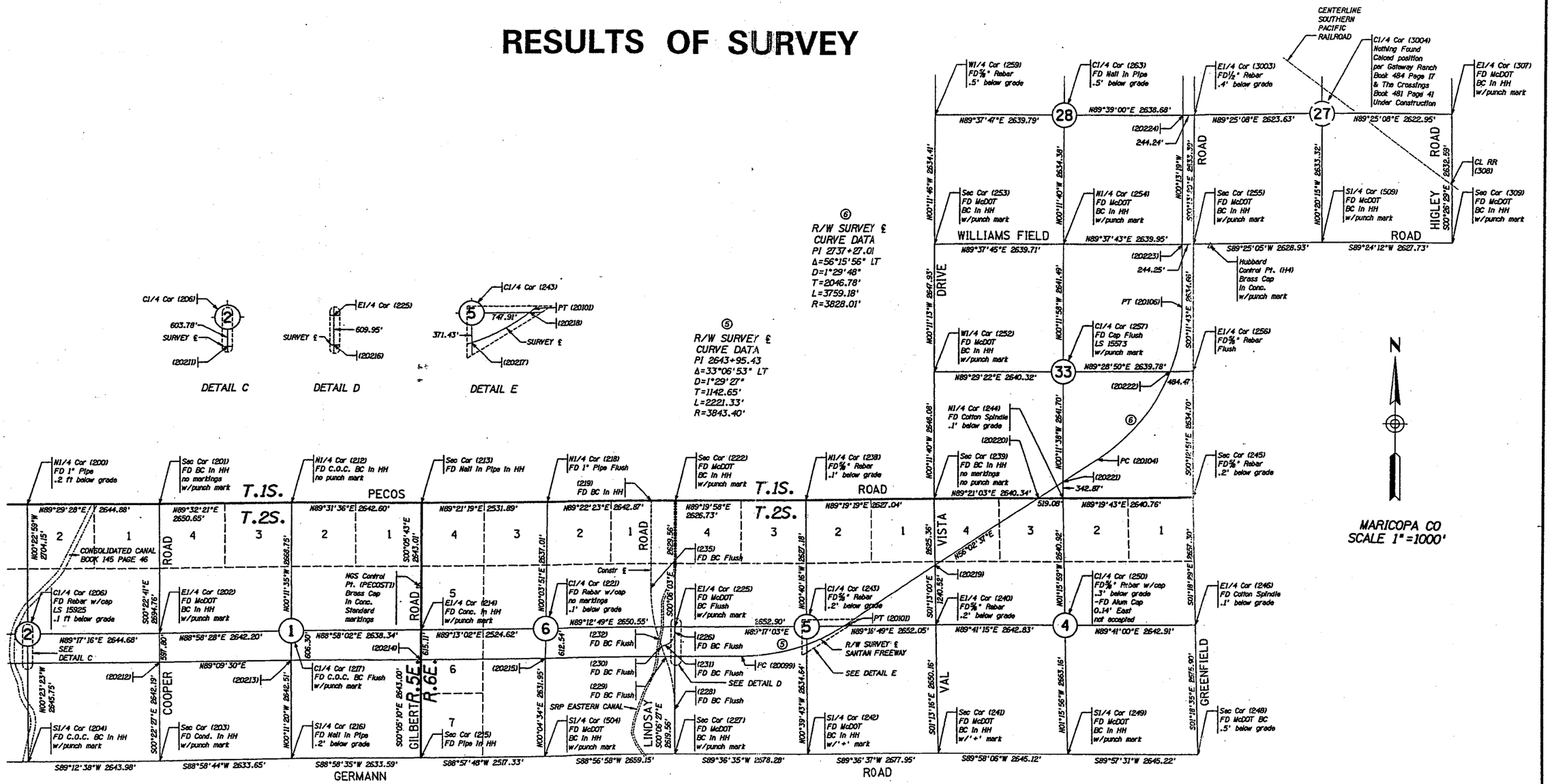
REGISTERED LAND SURVEYOR CERTIFICATE NO. 19817 JIMMIE D. CRUMP 4-7-99 ARIZONA U.S.A.

SHEET 2 OF 6

ccccccSYSTIMEcccccc cccccDGNcSPECIFICATIONcccccc

JUL 12 1999

RESULTS OF SURVEY



REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN /DATE	JDC MAY 1999
CHECKED	BG MAY 1999
KEITH W. HUBBARD PROFESSIONAL ENGINEER	
ROUTE	SR 202L
SECTION	Jct. S.R. 101L - Jct. U.S. 60

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO.: RAM-600-7-801
TRACS NO.: 202L MA 000 H5325 01R

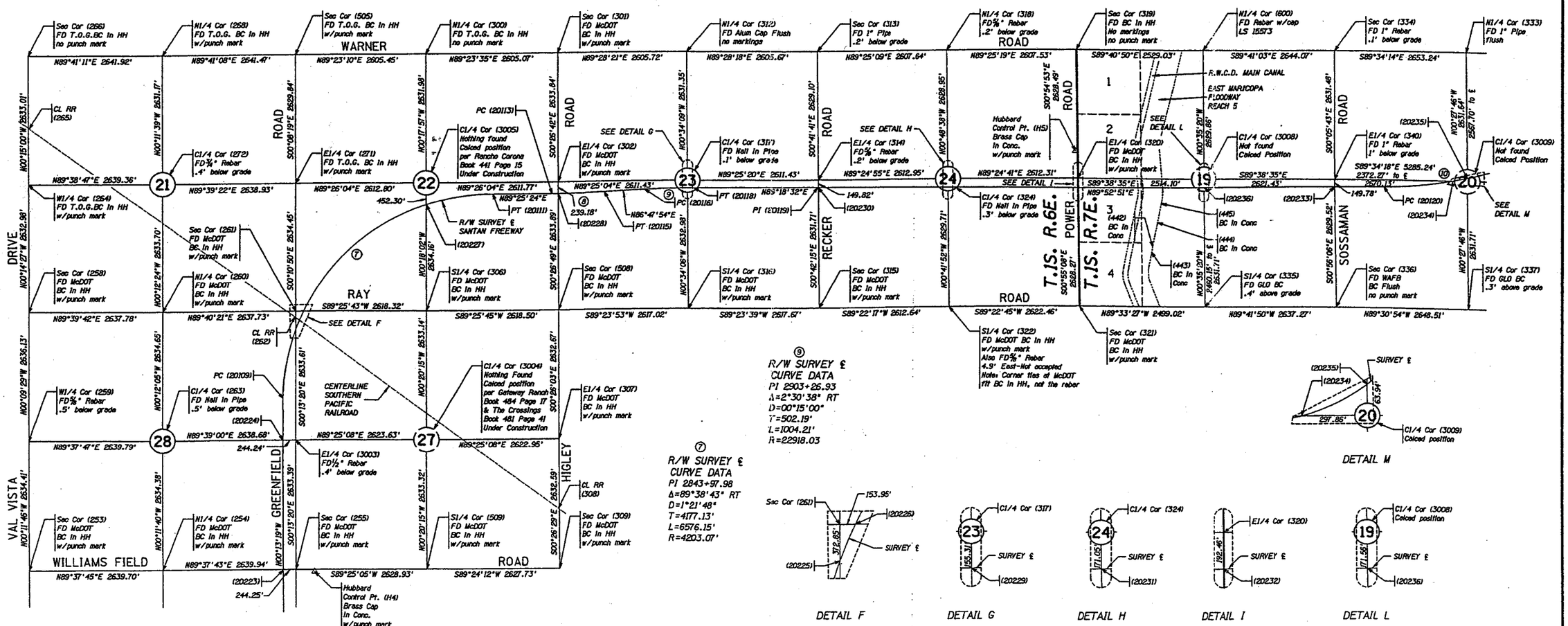
REGISTERED LAND SURVEYOR CERTIFICATE NO. 19817 JAMIE D. CRUME 7-12-99 ARIZONA U.S.A.

SHEET 3 OF 6

ccccccSYSTIMEcccccc cccccDGNcSPECIFICATIONcccccc

JUL 12 1999

RESULTS OF SURVEY



REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN/DATE	JDC MAY 1999
CHECKED	BG MAY 1999
KEITH W. HUBBARD PROFESSIONAL ENGINEER	
ROUTE	SR 202L
SECTION	Jct. S.R. 101L - Jct. U.S. 60

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO.: RAM-600-7-801
TRACS NO.: 202L MA 000 H5325 01R

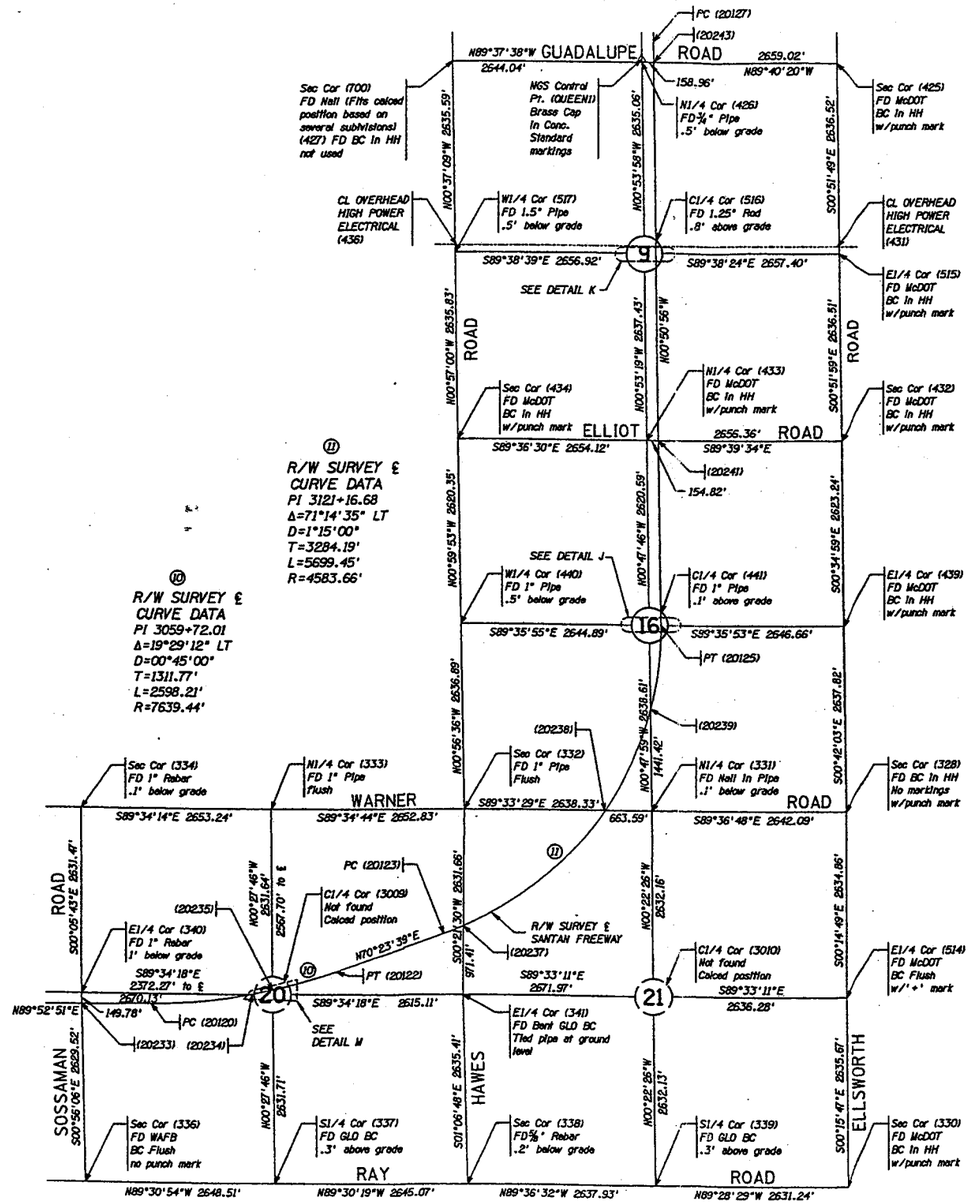
REGISTERED LAND SURVEYOR
CERTIFICATE NO. 19817
JAMES D. CRUME
7-12-99
ARIZONA U.S.A.

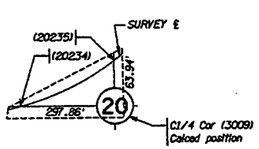
SHEET 4 OF 6

ccccccSYSTIMEccccc cccccDGNcSPECIFICATIONcccccc

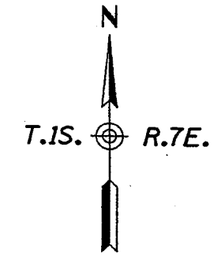
JUL 12 1999

RESULTS OF SURVEY

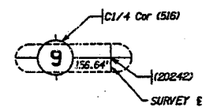




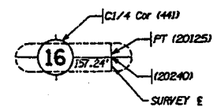
DETAIL M



MARICOPA CO
SCALE 1"=1000'



DETAIL K



DETAIL J

REVISIONS			
C.C. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN/DATE	JDC MAY 1999
CHECKED	BG MAY 1999
KEITH W. HUBBARD PROFESSIONAL ENGINEER	
ROUTE	SR 202L
SECTION	Jct. S.R. 101L - Jct. U.S. 60

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO.: RAM-600-7-801
TRACS NO.: 202L MA 000 H5325 01R

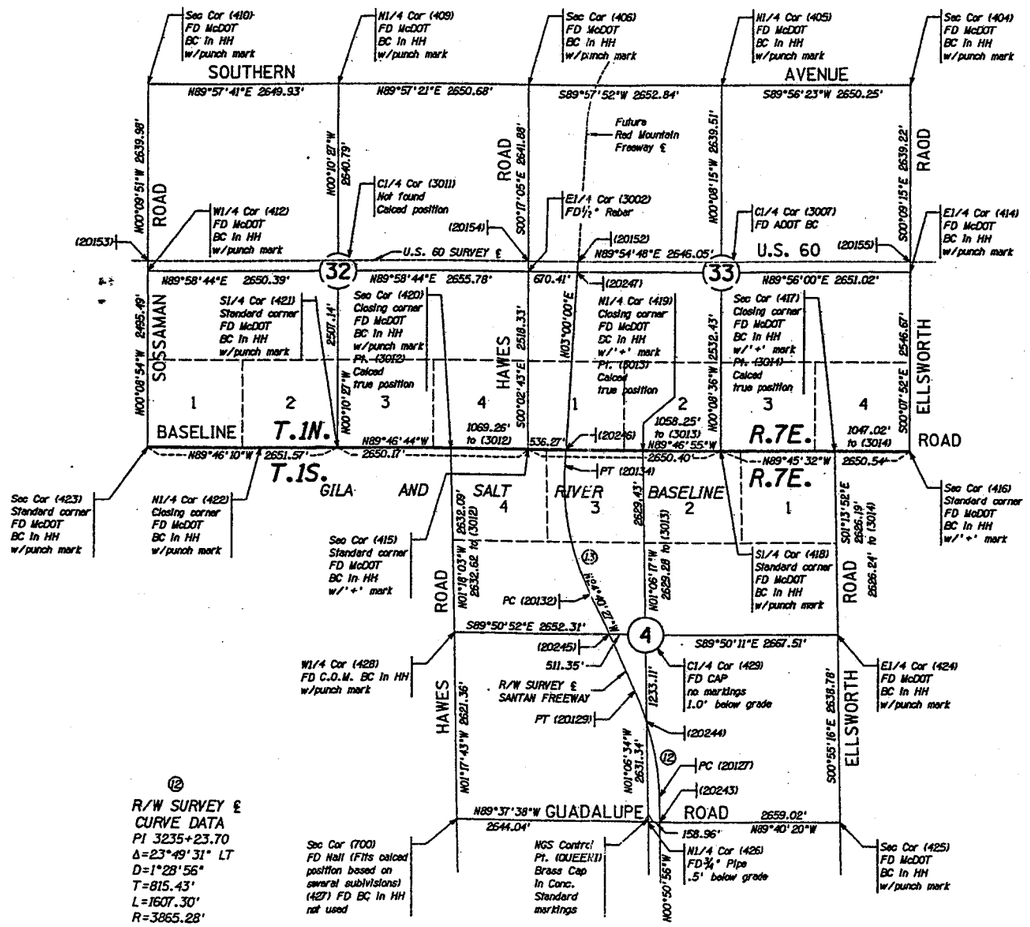
REGISTERED LAND SURVEYOR CERTIFICATE NO. 13817 JAMES D. CRUME 7-12-99 ARIZONA U.S.A.

SHEET 5 OF 6

ccccccSYSTIMEccccc cccccDGNcSPECIFICATIONccccc

JUL 12 1999

RESULTS OF SURVEY



MARICOPA CO
SCALE 1"=1000'

REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION

DRAWING NO.	D-7-T-866
HARD COPY	
DRAWN/DATE	JDC MAY 1999
CHECKED	BG MAY 1999
KEITH W. HUBBARD PROFESSIONAL ENGINEER	
ROUTE	SR 202L
SECTION	Jct. S.R. 101L - Jct. U.S. 60

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY: SANTAN FREEWAY
PROJECT NO.: RAM-600-7-801
TRACS NO.: 202L MA 000 H5325 01R

REGISTERED LAND SURVEYOR CERTIFICATE NO. 19817 JIMMIE D. CRUME 7-12-99 ARIZONA U.S.A.

SHEET 6 OF 6

ccccccSYSTIMEccccc ccccccDGNcSPECIFICATIONcccccc

JUL 12 1999

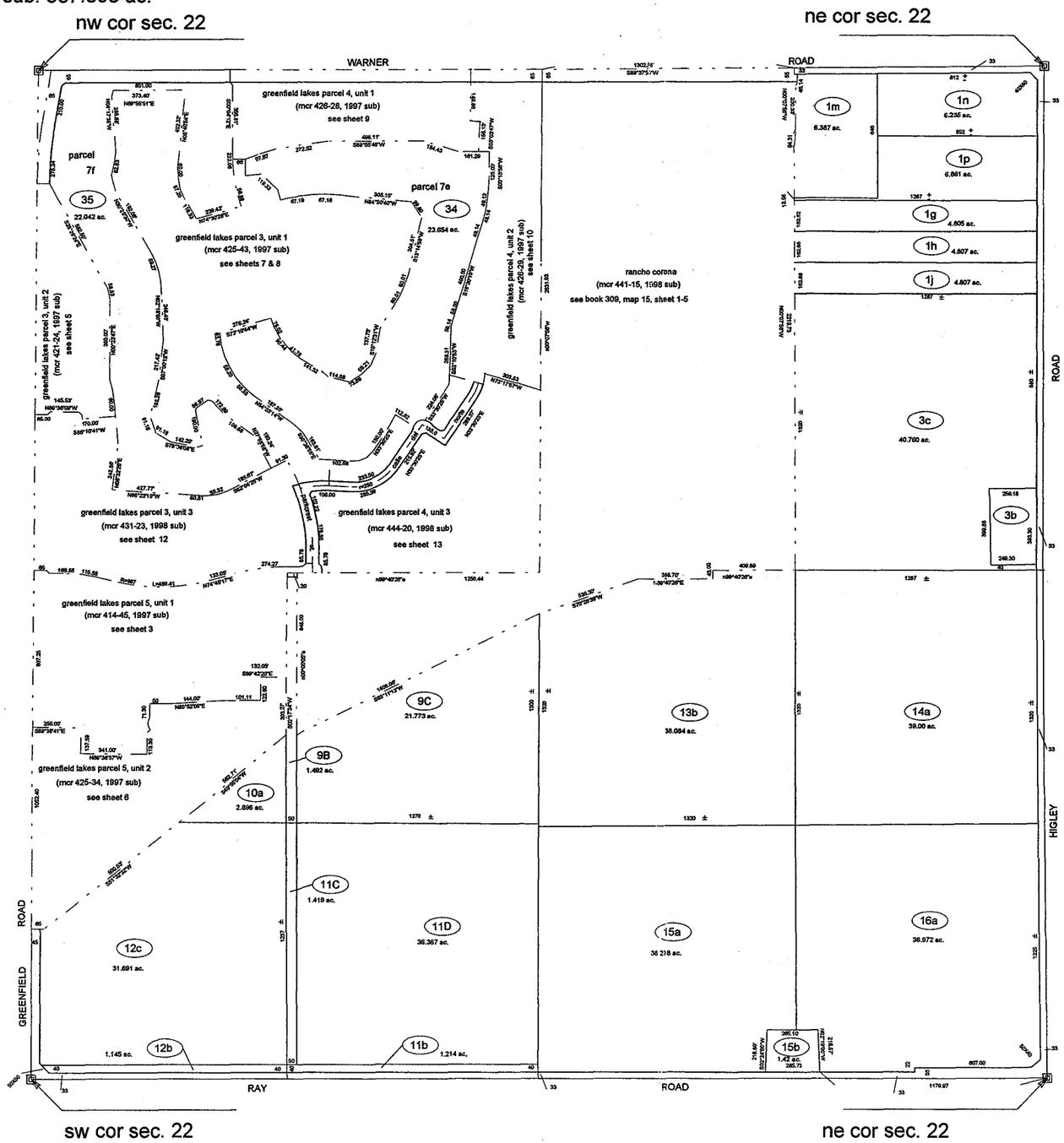
THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

sec. 22, t1s-r6e

pt. greenfield lakes: parcels 7e,7f, (mcr 413-45, 1997 sub)

gross area sub: 337.808 ac.



SCALE: 1" = 500

DATE	WAS	IS	DOCKET	DRAFT	CHECK
9/1/92	2 & n.a.	2a	92-166028	nd2072	----
9/1/92	13 & n.a.	13a	92-166028	nd2072	----
9/1/92	14 & n.a.	14a	92-166028	nd2072	----
6/28/93	map redrawn			rc3123	nd2072
7/10/97	see note 1	see note 2	mcr 413-45	jwc2920	----
8/18/97	----	correct map		jwc2920	----
8/19/97	28a	98 sub	mcr 431-23	jwc2920	----
8/19/97	30a,31a,32	98 sub	mcr 444-20	jwc2920	----
8/26/97	1e,1f,3a,12a, 6,12b	1e,1f,3a,12a, 98 sub	mcr 441-15	jwc2920	----
10/27/97	12c	correct acreage		nd 2072	----
8/26/98	1K,1l	1m,1n,1p	97-261280	sb 3341	----
9/30/98	----	CHANGED	SHEET NUMBER	JWC2920	----
2/24/99	8A	9B,9C	92-375089	JTW3360	----
2/24/99	11A	11C,11D	92-375089	JTW3360	----

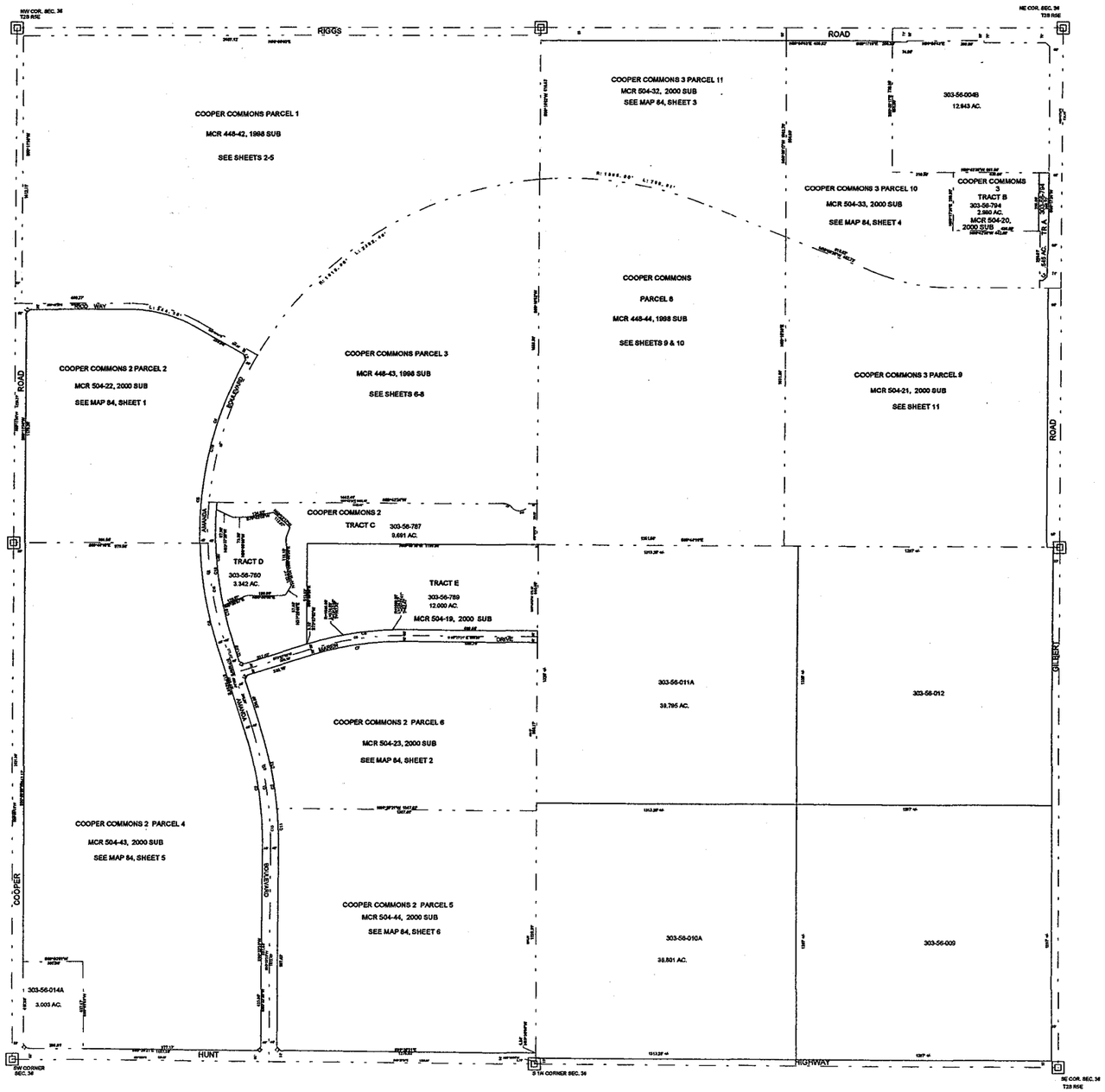
note 1: was: 304-20-6,8-10,304-27-5a,8a,7a,8a,10,12a,
note 2: is: 301-27-10e,12c,pt. 97 sub.

THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

SEC. 36 T2S R5E

BOOK 303
MAP 56
SHEET 1 OF 10



N

SCALE: 1" = 500'

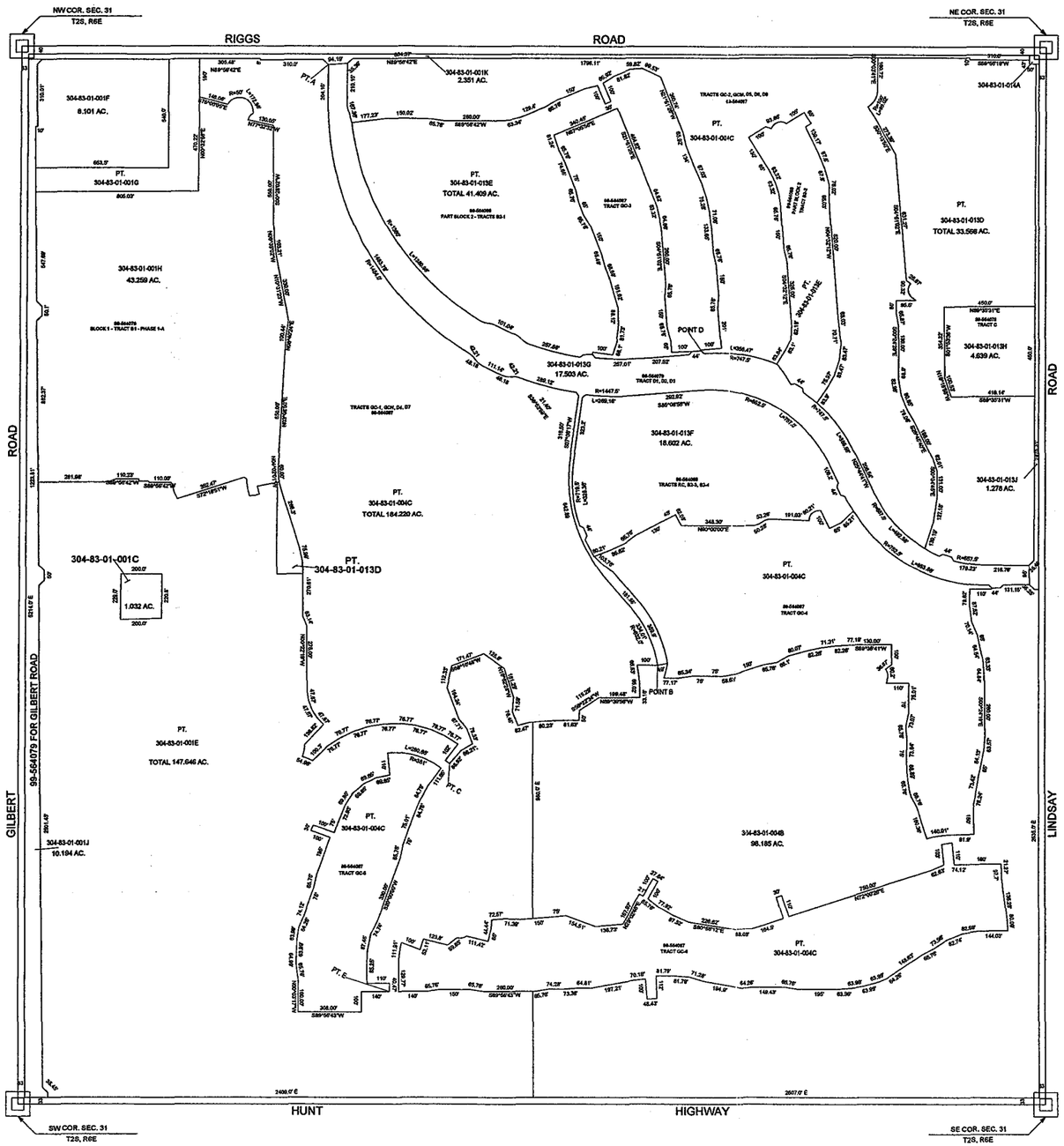
DATE	WAS	IS	DOCKET	DRAFT	CHECK
07/06/67	10,11,	10A,11A,	67-238165	RHP2648	ND2072
----	13,16	13A,16A	----	----	----
01/21/98	3A,5,6,	3B,5A,6A,	MCR 448-42	DRM3182	----
----	7A,8A	98 SUB	----	----	----
01/21/98	5,6,8A	5A,6A,98 SUB	MCR 448-43	DRM3182	----
01/21/98	2,3A	2A,3B,98 SUB	MCR 448-44	DRM3182	----
7/31/98	14	14a, 14b	98-63276	nd 2072	----
7/21/99	5A,9A,13A, 14b,15,16A,	00 SUB	MCR 504-19	JWC2920	----
----	777,779	----	----	----	----
7/21/99	1,2A,3B,4A, 265,775,778	4B,778A,00SUB	MCR 504-20	JWC2920	----
7/21/99	780	00 SUB	MCR 504-21	JWC2920	----
7/21/99	780,785	00 SUB	MCR 504-22	JWC2920	----
7/21/99	783	00 SUB	MCR 504-23	JWC2920	----
7/21/99	792	00 SUB	MCR 504-32	JWC2920	----
7/21/99	791	00 SUB	MCR 504-33	JWC2920	----
7/21/99	781,786	00 SUB	MCR 504-43	JWC2920	----
7/21/99	782	00 SUB	MCR 504-44	JWC2920	----

SEC. 31, T2S, R6E

BOOK	304
MAP	83
SHEET	01

THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP



N

*NOTE 1: 1G,H,J,K,4B,C,13D,E,F,G,H,J,

SCALE: 1" = 500'

DATE	WAS	IS	DOCKET	DRAFT	CHECK
8/09/99	MANUAL MAP	304-83-01 CAD FILE		JTW3360	—
8/23/99	1E, 4A, 13C	*NOTE 1:	99-564086 & OTHERS	JTW3360	—

THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

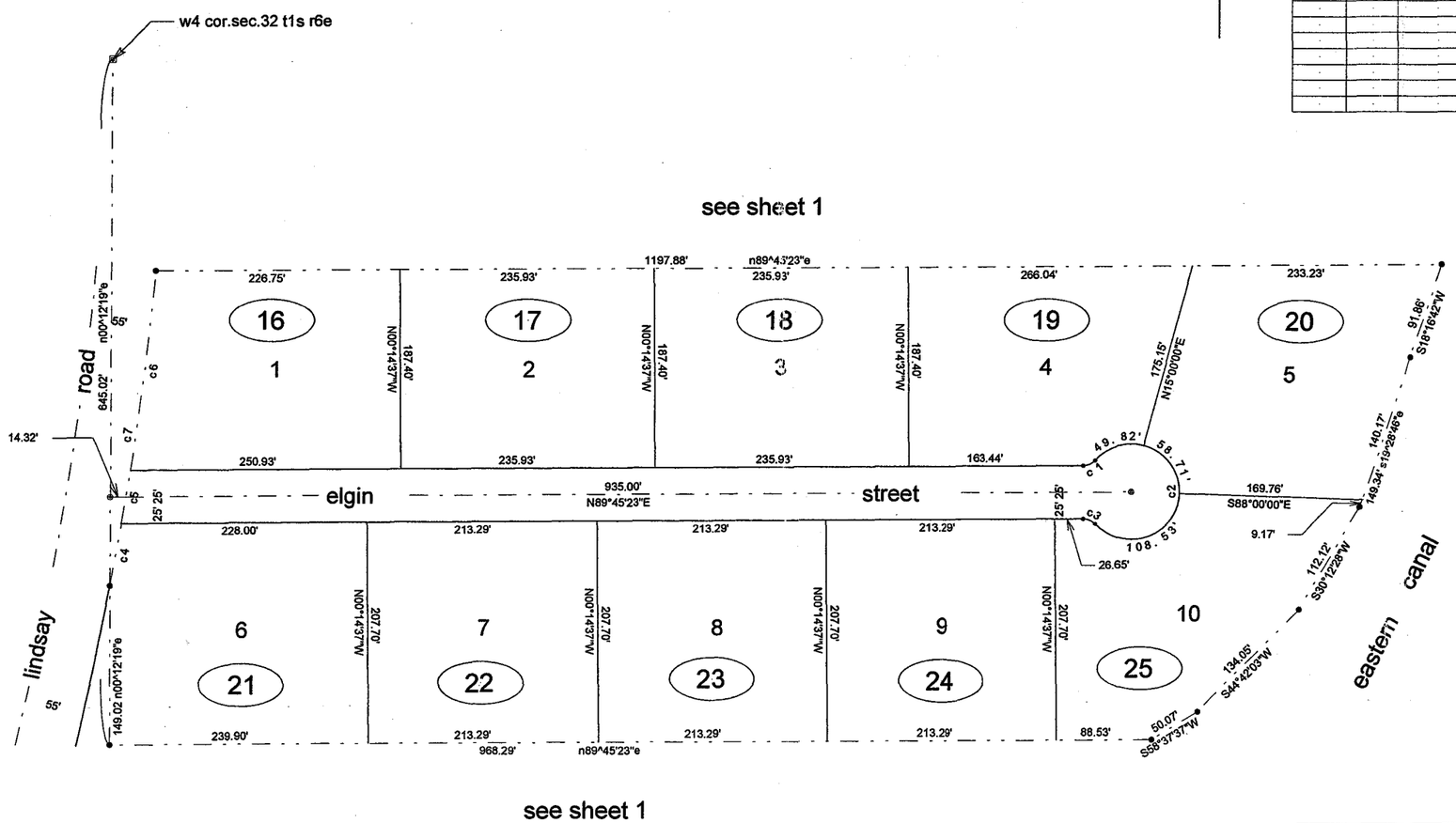
pt.sw4 sec.32 - t1s r6e

lindsay meadow estates: lots 1 thru 10 (mcr 435-26,1998 sub)
gross area sub: 11.527 ac.

BOOK	304
MAP	45
SHEET	02

SCALE: 1" = 100'

DATE	WAS	IS	DOCKET	DRAFT	CHECK
07/29/97	9b,9c	1998 sub	mcr 435-26	rhp2848	—



CURVE TABLE			
NO.	RADIUS	ARC	DELTA
C1	15.00'	12.62'	48^11'23"
C2	45.00'	217.06'	276^22'46"
C3	15.00'	12.62'	48^11'23"
C4	3329.04'	59.65'	01^01'36"
C5	3329.04'	50.68'	00^52'20"
C6	3329.04'	188.98'	03^15'09"
C7	3329.04'	299.33'	05^09'06"

PT.SE4 SEC.29 AND W2 SEC.28 T1S R6E

GILBERT RANCH UNIT 1: LOTS 1-230 TRS.A-N (MCR.454-27 1999 SUB.)

BOOK	304
MAP	41
SHEET	06

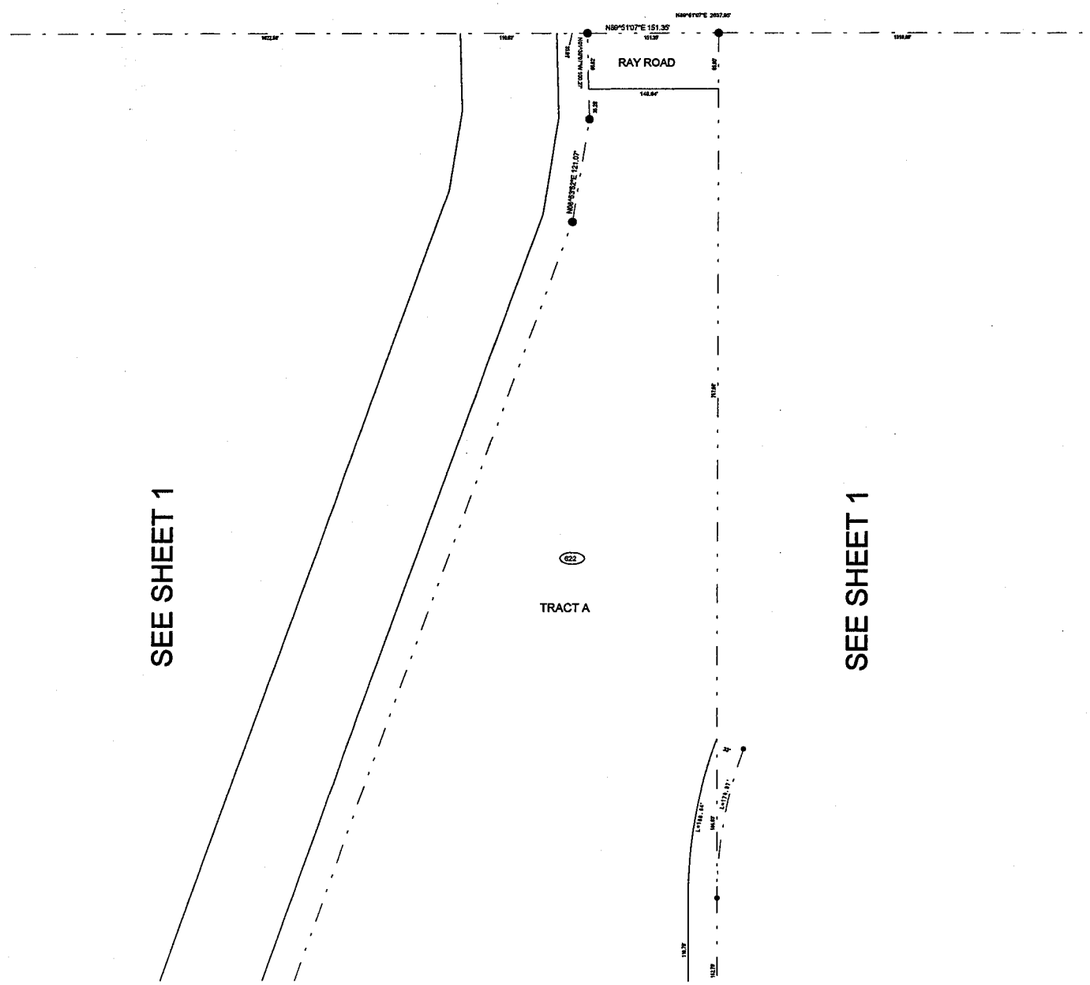
GROSS AREA SUB.64.912 AC.

THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

SCALE: 1" = 120'

DATE	WAS	IS	DOCKET	DRAFT	CHECK
8/1/99	99-41-1E, 10.1Ac.	304-41-1E 1999 SUB.	MCR 454-27	KMP 3/3/99	
	304-05-09				



MATCH SHEET 2

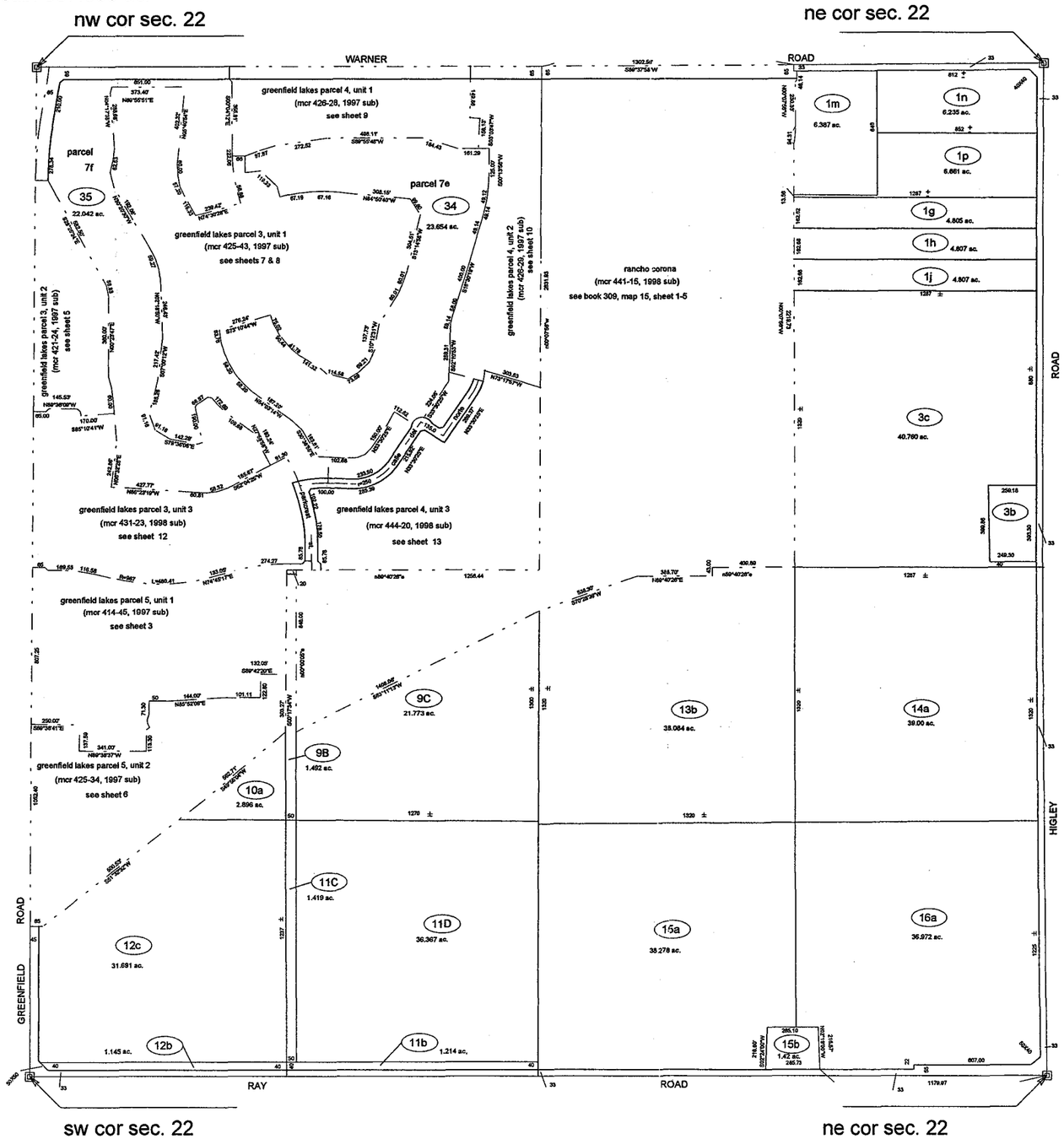
THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

sec. 22, t1s-r6e

pt. greenfield lakes: parcels 7e,7f, (mcr 413-45, 1997 sub)

gross area sub: 337.808 ac.



SCALE: 1" = 500					
DATE	WAS	IS	DOCKET	DRAFT	CHECK
9/1/92	2 & n.a.	2a	92-166028	nd2072	----
9/1/92	13 & n.a.	13a	92-166028	nd2072	----
9/1/92	14 & n.a.	14a	92-166028	nd2072	----
6/28/93	-	map redrawn		rc3123	nd2072
7/10/97	see note 1	see note 2	mcr 413-45	jwc2920	----
8/18/97	----	correct map		jwc2920	----
8/19/97	28a	98 sub	mcr 431-23	jwc2920	----
8/19/97	20a,31b,32	98 sub	mcr 444-20	jwc2920	----
8/26/97	14,17a,f & 15b	15,6,8a,12b, 98 sub	mcr 441-15	jwc2920	----
10/27/97	12c	correct acreage		nd 2072	----
6/26/98	1K,1l	1m,1n,1p	97-281280	sb 3341	----
9/30/98	----	CHANGED	SHEET NUMBER	JWC2920	----
2/24/99	9A	9B,9C	92-375089	JTW3360	----
2/24/99	11A	11C,11D	92-375089	JTW3360	----

note 1: was: 334-20-6,8-10,304-27-5a,9a,7a,8a,10,12a,
note 2: is: 304-27-10a,12c,pt. 97 sub.

SEC. 27 - T1S, R6E

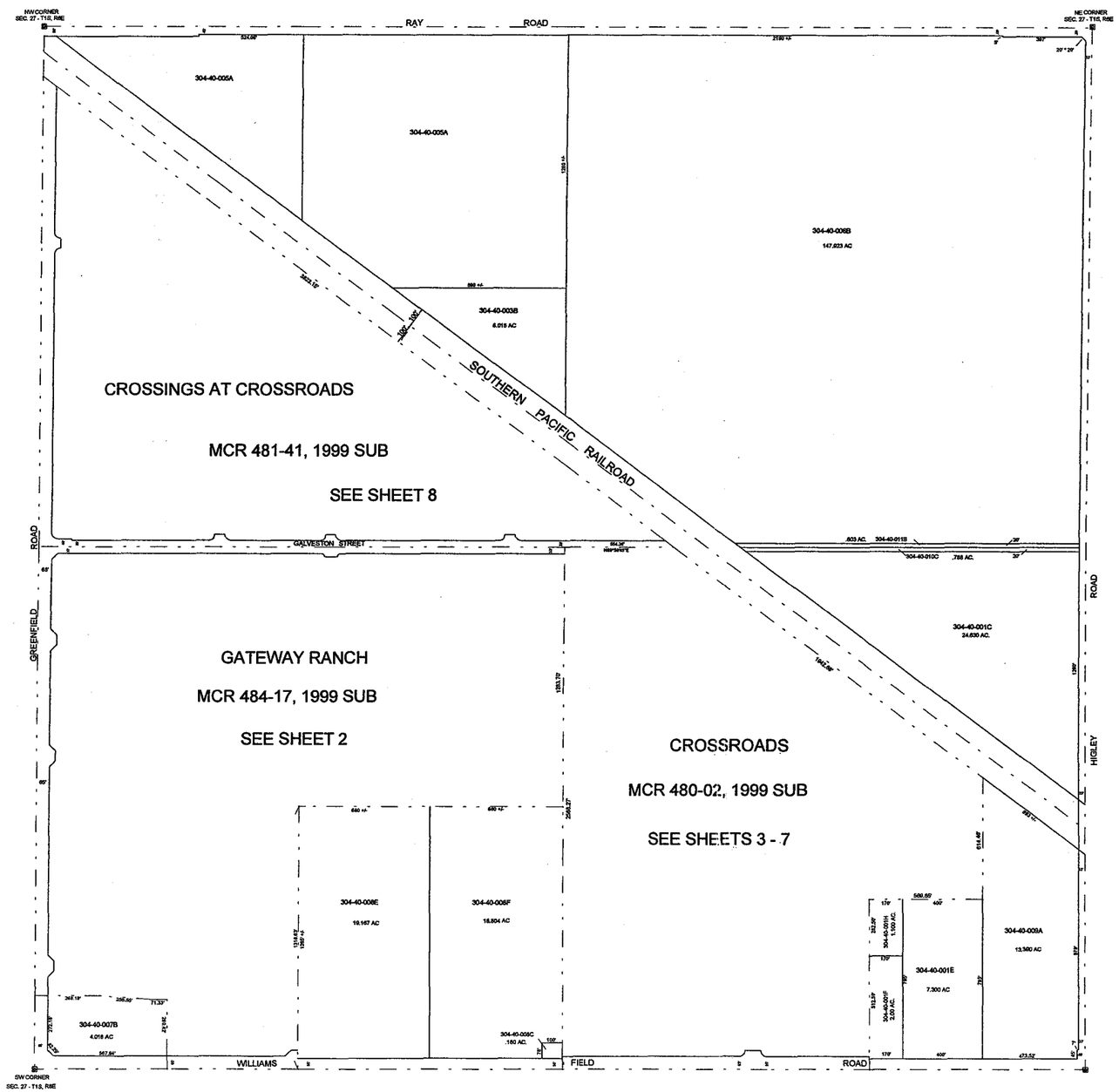
BOOK	304
MAP	40
SHEET	1 of 8

THE MARICOPA COUNTY ASSESSOR'S OFFICE MAKES NO CLAIM CONCERNING THE ACCURACY OF THIS MAP NOR ASSUMES ANY LIABILITY RESULTING FROM THE USE OF THE INFORMATION HEREON.

MARICOPA COUNTY ASSESSOR'S OFFICE: UNOFFICIAL MAP

SCALE: 1" = 500'

DATE	WAS	IS	DOCKET	DRAFT	CHECK
10/02/96	3A	3C,3D	96-159473	ND2072	
10/14/98	7A	7B,7C,RDSPLIT	97-594561 98-595563	ND2072	
10/14/98	12,13	RD SPLIT	97-594561	ND2072	
2/24/99	7C,12,13	99 SUB	MCR 484-17	JWC2920	
3/16/99	1G,10B	99 SUB	MCR 480-02	JWT3317	JWC2920
4/22/99	3C,D 4A	99 SUB	MCR 481-41	GE3330	
4/23/99		MAP REDRAWN		SB3341	JWC2920



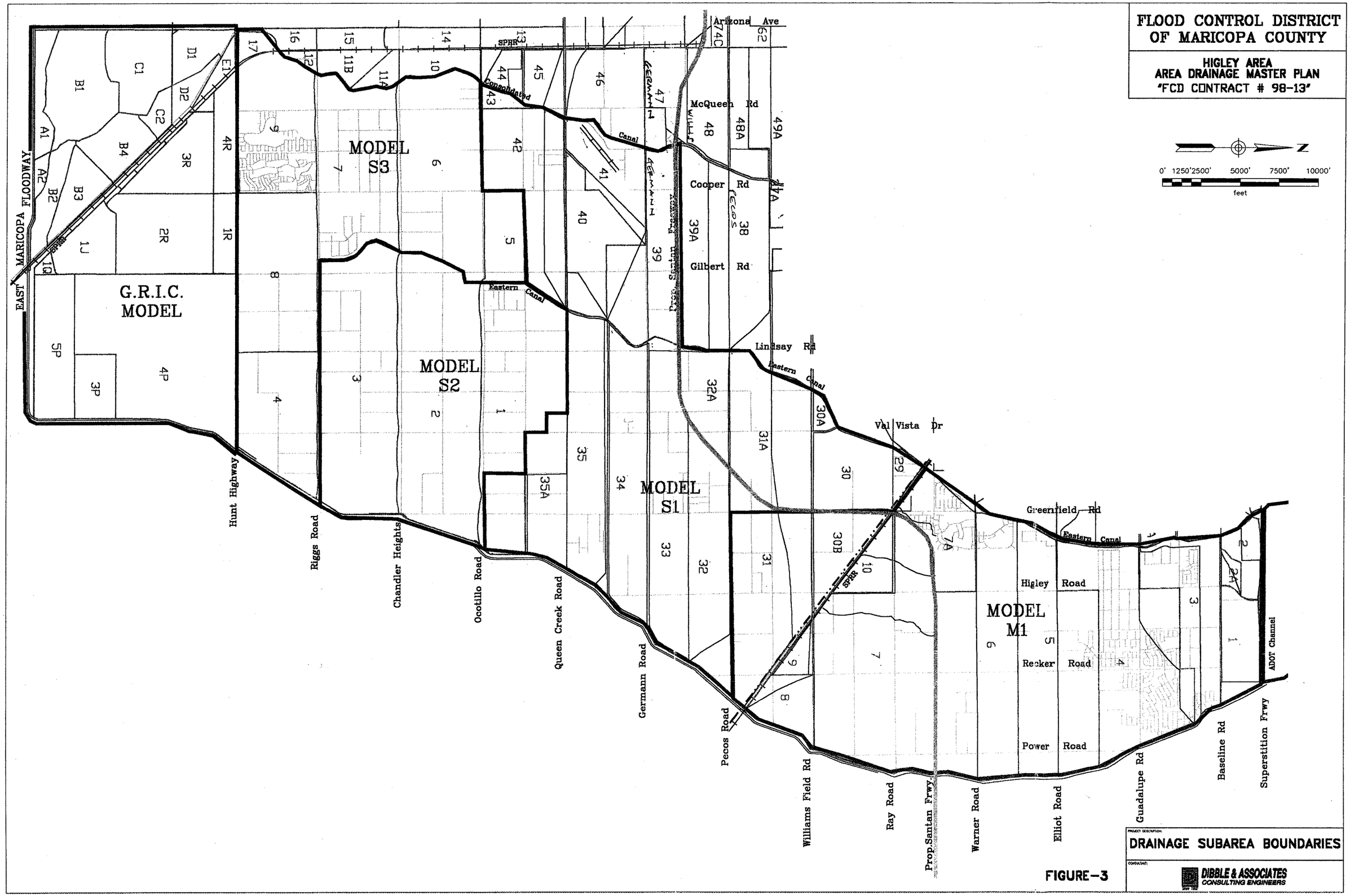
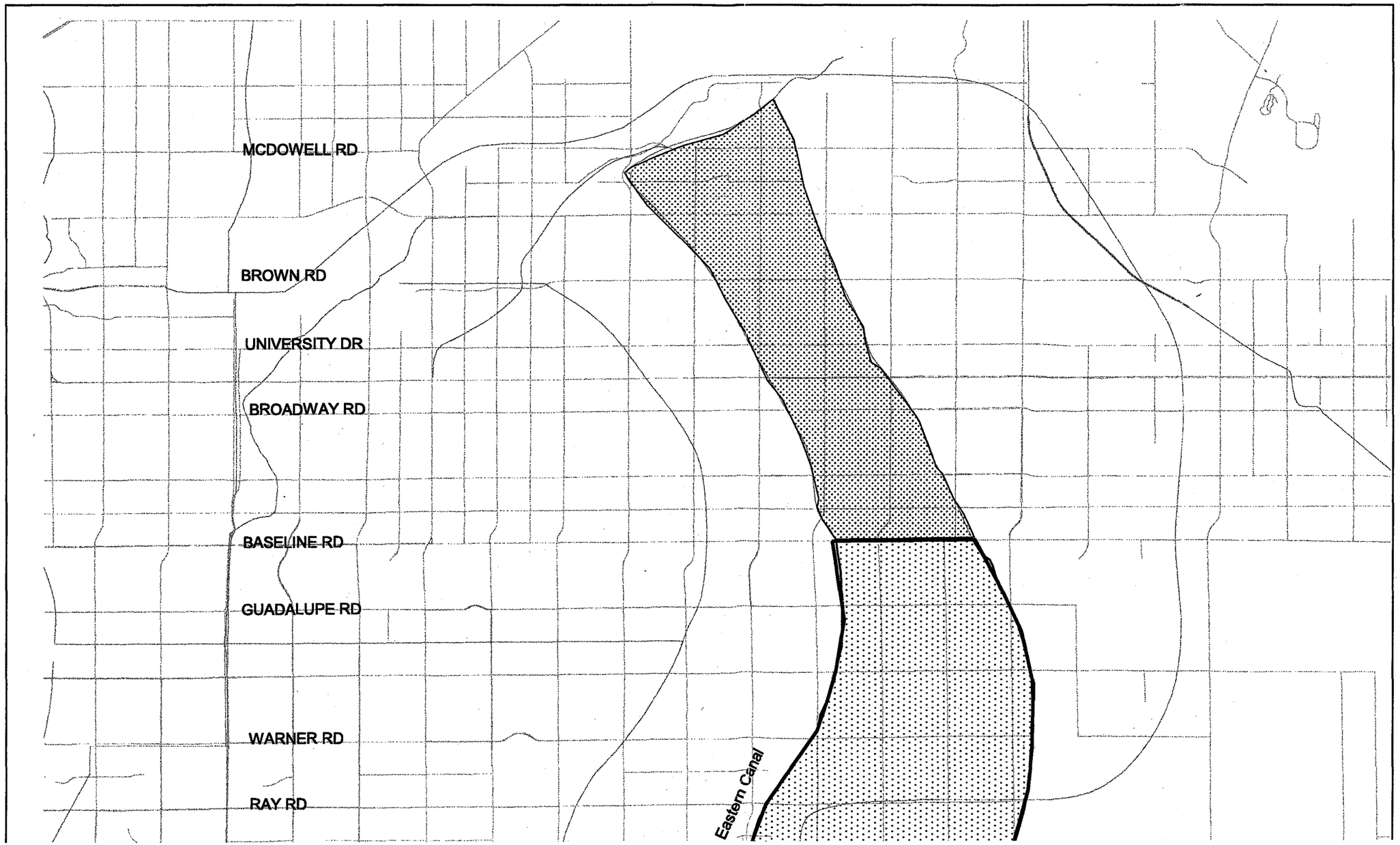
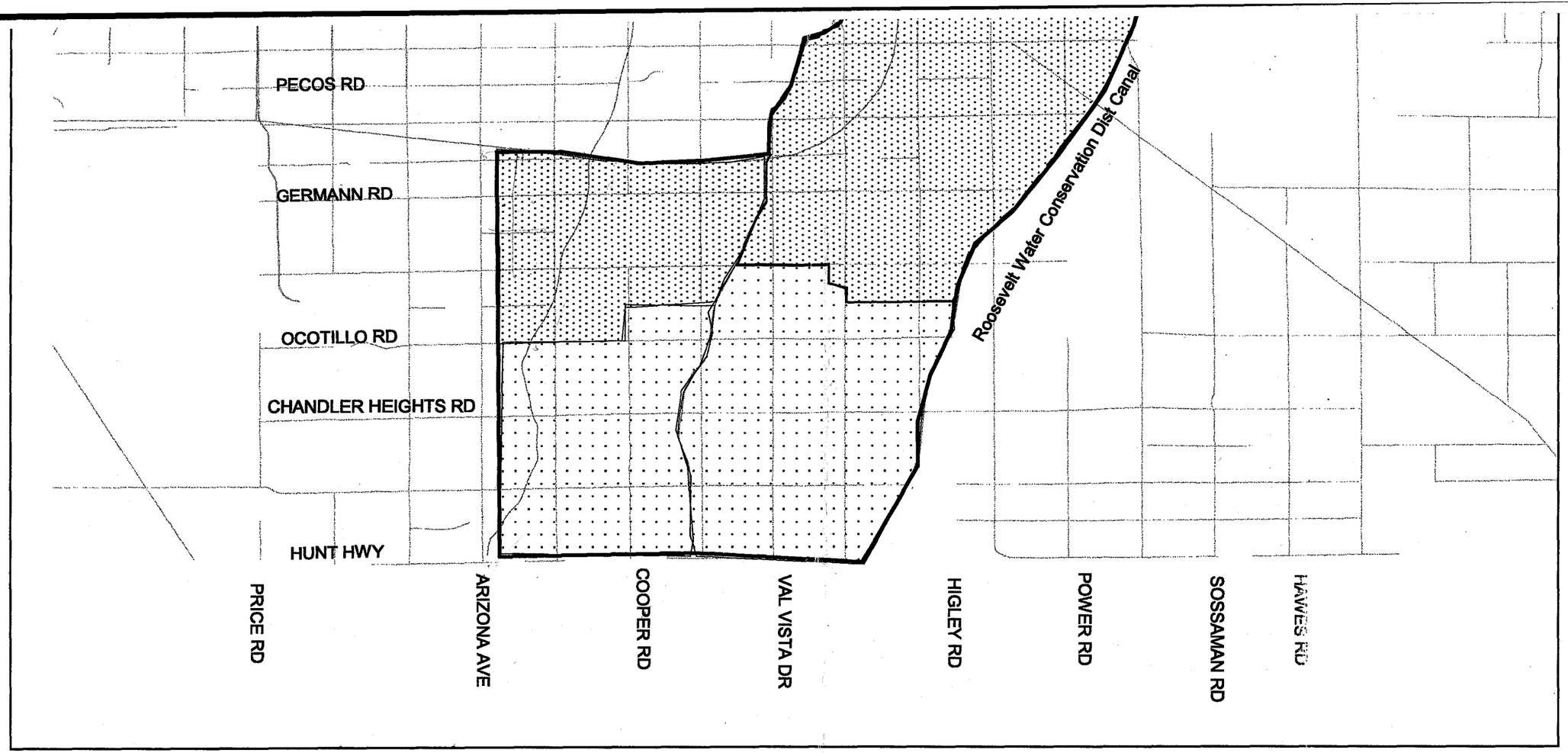

FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY
HIGLEY AREA
AREA DRAINAGE MASTER PLAN
"FCD CONTRACT # 98-13"
0' 1250' 2500' 5000' 7500' 10000'
feet
MODEL S3
MODEL S2
MODEL S1
MODEL M1
G.R.I.C. MODEL
EAST MARICOPA FLOODWAY
Arizona Ave
McQueen Rd
Cooper Rd
Gilbert Rd
Lindsay Rd
Val Vista Dr
Greenfield Rd
Higley Road
Recker Road
Power Road
Hunt Highway
Riggs Road
Chandler Heights
Ocotillo Road
Queen Creek Road
Germann Road
Pecos Road
Williams Field Rd
Ray Road
Prop.Santan Frwy
Warner Road
Elliot Road
Guadalupe Rd
Baseline Rd
Superstition Frwy
ADOT Channel
Eastern Canal
Consolidated Canal
SPRR
Prop. Santan Freeway
PROJECT DESCRIPTION:
DRAINAGE SUBAREA BOUNDARIES
CONSULTANT:
DIBBLE & ASSOCIATES
CONSULTING ENGINEERS

FIGURE-3

Higley ADMP Existing HEC-1 Model Locations





Gilbert-Chandler FIS (1990) 100-yr 24-hr existing condition

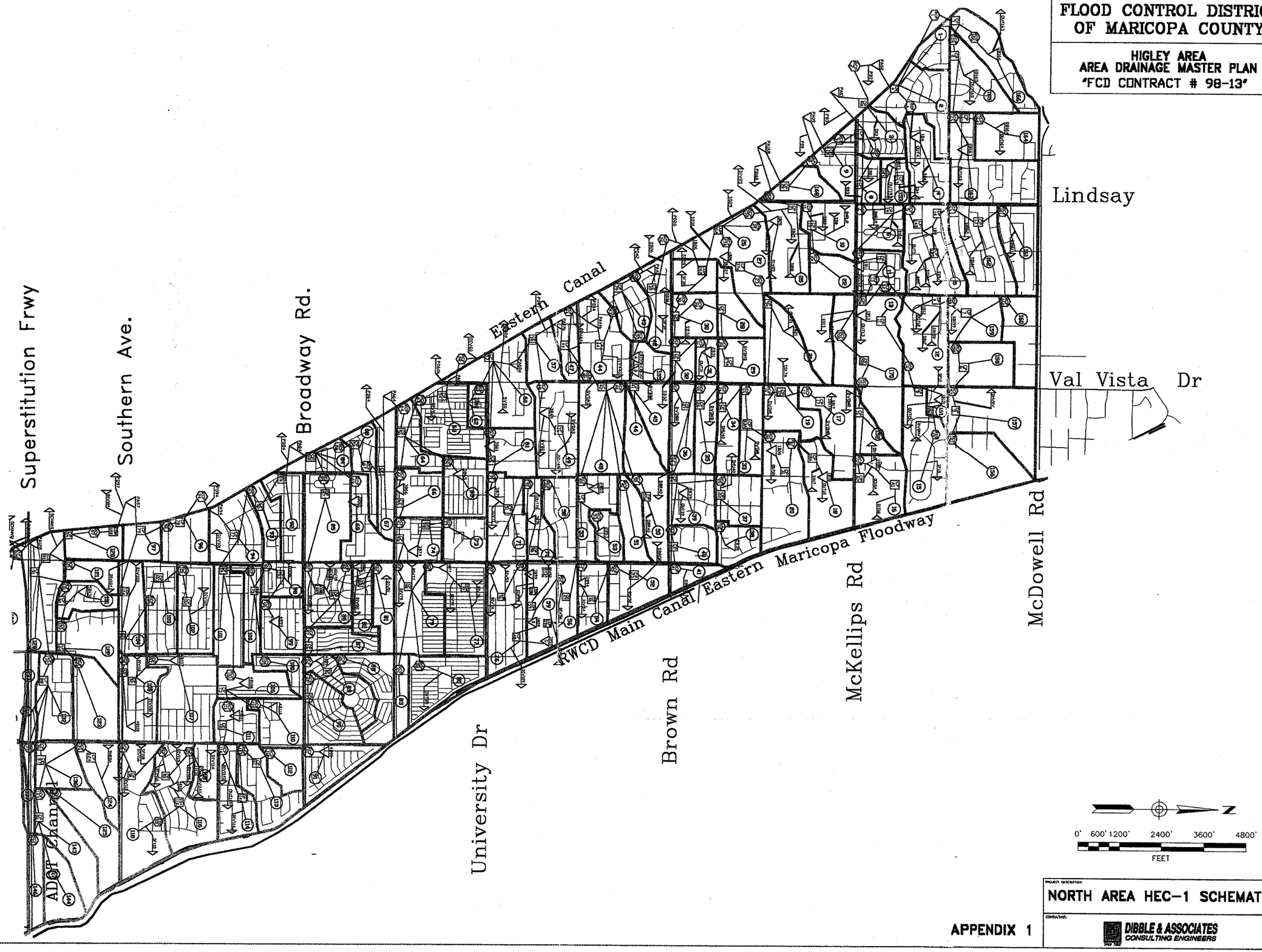
Gilbert-Chandler ADMS Addendum (1998) 100-yr 24-hr and 6-hr existing and future conditions

Gilbert-Chandler ADMS (1993) 100-yr 24-hr and 6-hr existing and future conditions

Eastern Canal FDS 100-yr 24-hr and 6-hr, and 10-yr 6-hr existing conditions

N

0 1 2 3 4 Miles



FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

HIGLEY AREA
AREA DRAINAGE MASTER PLAN
"FCD CONTRACT # 98-13"

PROJECT DESCRIPTION:
NORTH AREA HEC-1 SCHEMATIC

CONSULTANT:
DIBBLE & ASSOCIATES
CONSULTING ENGINEERS

APPENDIX 1

Slice Volume Results

Original Surface Model: **Basin K**
Final Surface Model: Constant Elevation 1212

Cut Compaction Factor 0
Fill Compaction Factor 0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1197.00 - 1198.00	168.86	6.25	6.25	**0.00**
1198.00 - 1199.00	6616.74	245.06	251.32	**0.16**
1199.00 - 1200.00	24385.48	903.17	1154.48	**0.72**
1200.00 - 1201.00	54958.93	2035.52	3190	**1.98**
1201.00 - 1202.00	94538.96	3501.44	6691.44	**4.15**
1202.00 - 1203.00	111405.9	4126.14	10817.59	**6.71**
1203.00 - 1204.00	119422.96	4423.07	15240.66	**9.45**
1204.00 - 1205.00	140622.98	5208.26	20448.92	**12.67**
1205.00 - 1206.00	162867.9	6032.14	26481.06	**16.41**
1206.00 - 1207.00	189454.8	7016.84	33497.91	**20.76**
1207.00 - 1208.00	223584.41	8280.9	41778.81	**25.90**
1208.00 - 1209.00	248863.04	9217.15	50995.96	**31.61**
1209.00 - 1210.00	265901.77	9848.21	60844.18	**37.71**
1210.00 - 1211.00	266403.29	9866.79	70710.96	**43.83**
1211.00 - 1212.00	266403.29	9866.79	80577.75	**49.94**

Slice Volume Results

Original Surface Model: **Basin L**
Final Surface Model: Constant Elevation 1220

Cut Compaction Factor 0
Fill Compaction Factor 0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1204.00 - 1205.00	681.15	25.23	25.23	**0.02**
1205.00 - 1206.00	14405.47	533.54	558.76	**0.35**
1206.00 - 1207.00	53599.77	1985.18	2543.94	**1.58**
1207.00 - 1208.00	125184.1	4636.45	7180.39	**4.45**
1208.00 - 1209.00	182761.37	6768.94	13949.33	**8.65**
1209.00 - 1210.00	234384.92	8680.92	22630.25	**14.03**
1210.00 - 1211.00	278625.02	10319.45	32949.7	**20.42**
1211.00 - 1212.00	638934.93	23664.26	56613.95	**35.09**
1212.00 - 1213.00	1065963.57	39480.13	96094.09	**59.56**
1213.00 - 1214.00	1105980.45	40962.24	137056.32	**84.95**
1214.00 - 1215.00	1189184.4	44043.87	181100.19	**112.25**
1215.00 - 1216.00	1274384.23	47199.42	228299.61	**141.51**
1216.00 - 1217.00	1336504.74	49500.18	277799.78	**172.19**
1217.00 - 1218.00	1382719.41	51211.83	329011.61	**203.93**
1218.00 - 1219.00	1414037.34	52371.75	381383.37	**236.39**
1219.00 - 1220.00	1431905.26	53033.53	434416.89	**269.27**
1220.00 - 1221.00	1511478.37	55980.68	490397.57	**303.97**
1221.00 - 1222.00	1596449.38	59127.75	549525.33	**340.61**
1222.00 - 1223.00	1644513.49	60907.91	610433.24	**378.37**
1223.00 - 1224.00	1673283.47	61973.46	672406.7	**416.78**
1224.00 - 1225.00	1705682.53	63173.43	735580.13	**455.94**
1225.00 - 1226.00	1728472.32	64017.49	799597.62	**495.62**
1226.00 - 1227.00	1796571.08	66539.67	866137.29	**536.86**
1227.00 - 1228.00	1913380.46	70865.94	937003.23	**580.79**
1228.00 - 1229.00	1915175.14	70932.41	1007935.64	**624.75** ← Top
1229.00 - 1230.00	1925504.2	71314.97	1079250.61	**668.96**
1230.00 - 1231.00	2032701.63	75285.25	1154535.86	**715.62**
1231.00 - 1232.00	2047777.76	75843.62	1230379.48	**762.63**
1232.00 - 1233.00	2047777.76	75843.62	1306223.1	**809.64**
1233.00 - 1234.00	2051683.98	75988.3	1382211.4	**856.74**

Slice Volume Results

Original Surface Model: **Basin O**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1237.00 - 1238.00	726.58	26.91	26.91	**0.02**
1238.00 - 1239.00	15135.45	560.57	587.48	**0.36**
1239.00 - 1240.00	86955.13	3220.56	3808.04	**2.36**
1240.00 - 1241.00	162360.86	6013.37	9821.41	**6.09**
1241.00 - 1242.00	300111.32	11115.23	20936.64	**12.98**
1242.00 - 1243.00	400328.08	14826.97	35763.61	**22.17**
1243.00 - 1244.00	482212.25	17859.71	53623.32	**33.24**
1244.00 - 1245.00	502354.06	18605.71	72229.03	**44.77**
1245.00 - 1246.00	519948.79	19257.36	91486.39	**56.71**
1246.00 - 1247.00	525890.62	19477.43	110963.82	**68.78**
1247.00 - 1248.00	542614.58	20096.84	131060.66	**81.24**
1248.00 - 1249.00	568424.65	21052.76	152113.42	**94.29**
1249.00 - 1250.00	589997.92	21851.77	173965.2	**107.83**
1250.00 - 1251.00	611032.74	22630.84	196596.04	**121.86**
1251.00 - 1252.00	665355.92	24642.81	221238.85	**137.13**
1252.00 - 1253.00	734645.77	27209.1	248447.95	**154.00**
1253.00 - 1254.00	744188.52	27562.54	276010.49	**171.08**
1254.00 - 1255.00	744188.52	27562.54	303573.03	**188.17**
1255.00 - 1256.00	751134.13	27819.78	331392.81	**205.41**
1256.00 - 1257.00	788725.74	29212.06	360604.88	**223.52**
1257.00 - 1258.00	819956.27	30368.75	390973.63	**242.34**
1258.00 - 1259.00	848723.16	31434.19	422407.82	**261.82**
1259.00 - 1260.00	884715.4	32767.24	455175.05	**282.13**
1260.00 - 1261.00	981521.49	36352.65	491527.7	**304.67**
1261.00 - 1262.00	1043580.48	38651.13	530178.83	**328.62**
1262.00 - 1263.00	1043580.48	38651.13	568829.96	**352.58**
1263.00 - 1264.00	1043580.48	38651.13	607481.09	**376.54**
1264.00 - 1265.00	1043773.15	38658.26	646139.35	**400.50**
1265.00 - 1266.00	1048509.46	38833.68	684973.04	**424.57**
1266.00 - 1267.00	1052188.07	38969.93	723942.97	**448.72**
1267.00 - 1268.00	1052188.07	38969.93	762912.89	**472.88**
1268.00 - 1269.00	1052188.07	38969.93	801882.82	**497.03**
1269.00 - 1270.00	1056020.75	39111.88	840994.7	**521.28**

Slice Volume Results

Original Surface Model: **Basin P**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1261.00 - 1262.00	1377.47	51.02	51.02	**0.03**
1262.00 - 1263.00	6958.95	257.74	308.76	**0.19**
1263.00 - 1264.00	22918.93	848.85	1157.61	**0.72**
1264.00 - 1265.00	109245.91	4046.14	5203.75	**3.23**
1265.00 - 1266.00	155391.34	5755.23	10958.99	**6.79**
1266.00 - 1267.00	215473.16	7980.49	18939.47	**11.74**
1267.00 - 1268.00	291211.03	10785.59	29725.07	**18.42**
1268.00 - 1269.00	391077.33	14484.35	44209.41	**27.40**
1269.00 - 1270.00	584721.92	21656.37	65865.78	**40.83**
1270.00 - 1271.00	764464.57	28313.5	94179.28	**58.38**
1271.00 - 1272.00	945106.85	35003.96	129183.2	**80.07**
1272.00 - 1273.00	1146785.3	42473.53	171656.7	**106.40**
1273.00 - 1274.00	1315463.5	48720.87	220377.6	**136.60**
1274.00 - 1275.00	1351334.1	50049.41	270427	**167.62**

Basin P doesn't need to be a deep as it is shown

basin bottom should be changed to be @ 1266

Here I don't [illegible]

HEC-1 Revised 10.12.00 DCE

Slice Volume Results

Original Surface Model: **Basin Q**
Final Surface Model: Constant Elevation

Cut Compaction Factor 0
Fill Compaction Factor 0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1257.00 - 1258.00	589.97	21.85	21.85	**0.01**
1258.00 - 1259.00	12966.67	480.25	502.1	**0.31**
1259.00 - 1260.00	51684.9	1914.26	2416.35	**1.50**
1260.00 - 1261.00	90530.98	3353	5769.35	**3.58**
1261.00 - 1262.00	190760.55	7065.21	12834.56	**7.96**
1262.00 - 1263.00	250067.84	9261.77	22096.33	**13.70**
1263.00 - 1264.00	428677.86	15876.96	37973.29	**23.54**
1264.00 - 1265.00	506548.77	18761.07	56734.35	**35.17**
1265.00 - 1266.00	715143.54	26486.8	83221.15	**51.58**
1266.00 - 1267.00	911530.8	33760.4	116981.55	**72.51**
1267.00 - 1268.00	1140853.94	42253.85	159235.4	**98.70**
1268.00 - 1269.00	1349773.7	49991.62	209227.02	**129.69**
1269.00 - 1270.00	1763858.69	65328.1	274555.12	**170.18**
1270.00 - 1271.00	1886827.81	69882.51	344437.63	**213.49**
1271.00 - 1272.00	1938875.34	71810.2	416247.83	**258.00**
1272.00 - 1273.00	2040144.44	75560.91	491808.73	**304.84**
1273.00 - 1274.00	2124860.92	78698.55	570507.29	**353.62**
1274.00 - 1275.00	2173683.86	80506.81	651014.1	**403.52**
1275.00 - 1276.00	2184916.78	80922.84	731936.94	**453.68**
1276.00 - 1277.00	0	0	731936.94	**453.68**
1277.00 - 1278.00	0	0	731936.94	**453.68**
1278.00 - 1279.00	0	0	731936.94	**453.68**
1279.00 - 1280.00	0	0	731936.94	**453.68**

Slice Volume Results

Original Surface Model: **Ray Rd. Bsn**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1254.00 - 1255.00	169.96	6.29	6.29	**0.00**
1255.00 - 1256.00	24920.32	922.97	929.27	**0.58**
1256.00 - 1257.00	106202.45	3933.42	4862.69	**3.01**
1257.00 - 1258.00	191691.18	7099.67	11962.37	**7.41**
1258.00 - 1259.00	289842.52	10734.91	22697.28	**14.07**
1259.00 - 1260.00	458961.39	16998.57	39695.85	**24.60**
1260.00 - 1261.00	670380.5	24828.91	64524.75	**39.99**
1261.00 - 1262.00	888218.7	32896.99	97421.74	**60.39**
1262.00 - 1263.00	1068305.9	39566.89	136988.6	**84.91**
1263.00 - 1264.00	1159990.9	42962.63	179951.2	**111.54**
1264.00 - 1265.00	1215218.1	45008.08	224959.3	**139.44**
1265.00 - 1266.00	1262505.2	46759.45	271718.7	**168.42**
1266.00 - 1267.00	1347738.1	49916.23	321635	**199.36**
1267.00 - 1268.00	1532076.2	56743.56	378378.5	**234.53**

Slice Volume Results

Original Surface Model: **Existing Ground @ CH Basin**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1242.00 - 1243.00	18.98	0.7	0.7	**0.00**
1243.00 - 1244.00	4348.2	161.04	161.75	**0.10**
1244.00 - 1245.00	19059.1	705.89	867.64	**0.54**
1245.00 - 1246.00	21419.32	793.31	1660.95	**1.03**
1246.00 - 1247.00	24236.23	897.64	2558.59	**1.59**
1247.00 - 1248.00	300273.68	11121.25	13679.83	**8.48**
1248.00 - 1249.00	368878.84	13662.18	27342.01	**16.95**
1249.00 - 1250.00	388948.68	14405.51	41747.52	**25.88**
1250.00 - 1251.00	406409.12	15052.19	56799.71	**35.21**
1251.00 - 1252.00	419881.47	15551.17	72350.88	**44.85**
1252.00 - 1253.00	880088.05	32595.85	104946.7	**65.05**
1253.00 - 1254.00	1577708.3	58433.64	163380.3	**101.27**
1254.00 - 1255.00	2151372.3	79680.46	243060.8	**150.66**
1255.00 - 1256.00	2437155.3	90265.01	333325.8	**206.61**
1256.00 - 1257.00	2497678.5	92506.61	425832.4	**263.95**
1257.00 - 1258.00	2506379.6	92828.87	518661.3	**321.48**
1258.00 - 1259.00	2509250.6	92935.21	611596.5	**379.09**
1259.00 - 1260.00	2510434.3	92979.05	704575.5	**436.72**
1260.00 - 1261.00	2510644.9	92986.85	797562.4	**494.36**
1261.00 - 1262.00	2511204.7	93007.58	890570	**552.01**
1262.00 - 1263.00	2511435.7	93016.14	983586.1	**609.66**
1263.00 - 1264.00	2511435.7	93016.14	1076602	**667.32**
1264.00 - 1265.00	2511435.7	93016.14	1169618	**724.97**
1265.00 - 1266.00	2511435.7	93016.14	1262634	**782.62**

User Name: DFrank
Project: Higley ADMP
Slice Volume Results

Date: 8/10/00
Time: 8:00:22
Page: 1

Slice Volume Results

Original Surface Model: **Existing Ground @ SRP-TWBasin**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1238.00 - 1239.00	502906.35	18626.16	18626.16	**11.55**
1239.00 - 1240.00	1002846.7	37142.47	55768.63	**34.57**
1240.00 - 1241.00	1021139.4	37819.98	93588.61	**58.01**
1241.00 - 1242.00	1053919.1	39034.04	132622.6	**82.20**
1242.00 - 1243.00	1077047.2	39890.64	172513.2	**106.93**
1243.00 - 1244.00	1097747.4	40657.31	213170.6	**132.13**
1244.00 - 1245.00	1117642.5	41394.17	254564.7	**157.79**
1245.00 - 1246.00	1130939.7	41886.66	296451.4	**183.75**
1246.00 - 1247.00	1143002.3	42333.42	338784.8	**209.99**
1247.00 - 1248.00	1167717.3	43248.79	382033.6	**236.80**
1248.00 - 1249.00	1201614.9	44504.26	426537.9	**264.38**
1249.00 - 1250.00	1258833.4	46623.46	473161.3	**293.28**
1250.00 - 1251.00	1336147.9	49486.96	522648.3	**323.96**
1251.00 - 1252.00	1378249.4	51046.27	573694.5	**355.60**
1252.00 - 1253.00	1423359.2	52717.01	626411.6	**388.27**
1253.00 - 1254.00	1459221.3	54045.23	680456.8	**421.77**
1254.00 - 1255.00	1468266.8	54380.25	734837	**455.48**
1255.00 - 1256.00	1468641.6	54394.14	789231.2	**489.19**

Slice Volume Results

Original Surface Model: **Queen Creek Basin**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1222.00 - 1223.00	5766.18	213.56	213.56	**0.13**
1223.00 - 1224.00	59605.19	2207.6	2421.16	**1.50**
1224.00 - 1225.00	318125.92	11782.44	14203.6	**8.80**
1225.00 - 1226.00	1423861.03	52735.59	66939.2	**41.49**
1226.00 - 1227.00	2090704.06	77433.48	144372.68	**89.49**
1227.00 - 1228.00	2439210.14	90341.12	234713.8	**145.48**

Slice Volume Results

Original Surface Model: **Existing Crossroads Park**
Final Surface Model: Constant Elevation

Cut Compaction Factor	0
Fill Compaction Factor	0

Elevation Interval	Fill Area (sf)	Fill Volume (cy)	Cumulative Fill (cy)	(af)
1246.00 - 1247.00	65622.87	2430.48	2430.48	**1.51**
1247.00 - 1248.00	258578.19	9576.97	12007.45	**7.44**
1248.00 - 1249.00	325466.84	12054.33	24061.77	**14.91**
1249.00 - 1250.00	371821.69	13771.17	37832.95	**23.45**
1250.00 - 1251.00	409277.14	15158.41	52991.36	**32.85**
1251.00 - 1252.00	455209.77	16859.62	69850.98	**43.30**
1252.00 - 1253.00	489076.09	18113.93	87964.91	**54.52**
1253.00 - 1254.00	540301.88	20011.18	107976.09	**66.93**
1254.00 - 1255.00	571285.89	21158.74	129134.83	**80.04**
1255.00 - 1256.00	616740.27	22842.23	151977.06	**94.20**
1256.00 - 1257.00	652575.73	24169.47	176146.53	**109.18**
1257.00 - 1258.00	671868.87	24884.03	201030.56	**124.61**
1258.00 - 1259.00	689023.21	25519.38	226549.94	**140.42**
1259.00 - 1260.00	714460.44	26461.5	253011.44	**156.83**
1260.00 - 1261.00	822702.71	30470.47	283481.91	**175.71**
1261.00 - 1262.00	983009.18	36407.75	319889.66	**198.28**
1262.00 - 1263.00	1053511.94	39018.96	358908.62	**222.46**
1263.00 - 1264.00	1095518.13	40574.75	399483.36	**247.61**
1264.00 - 1265.00	1188812.46	44030.09	443513.46	**274.91**
1265.00 - 1266.00	1338572.86	49576.77	493090.23	**305.63**
1266.00 - 1267.00	1511980.44	55999.28	549089.5	**340.34**
1267.00 - 1268.00	1610815.43	59659.83	608749.33	**377.32**
1268.00 - 1269.00	1730556.23	64094.68	672844.01	**417.05**
1269.00 - 1270.00	1972039.35	73038.49	745882.5	**462.32**
1270.00 - 1271.00	2212954.34	81961.27	827843.78	**513.13**
1271.00 - 1272.00	2481428.31	91904.75	919748.53	**570.09**

EARTHWORK CALCS

User Name: DFrank
Project: Higley ADMP
Prismoidal Volume Results

Date: 08-28-00
Time: 14:42:39
Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Basin K
Final Surface Model: Basin K
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 155088.51 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 155088.51 cu yd

Raw Fill Volume: 7.46 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 7.46 cu yd

User Name: DFrank
Project: Higley ADMP
Prismoidal Volume Results

Date: 08-28-00
Time: 14:43:04
Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Basin L
Final Surface Model: Basin 1
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 1202866.99 cu yd

1/5

Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 1202866.99 cu yd

Raw Fill Volume: 1484.65 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 1484.65 cu yd

User Name: DFrank
Project: Higley ADMP
Prismoidal Volume Results

Date: 08-28-00
Time: 14:43:21
Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Basin 0
Final Surface Model: Basin O
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 737217.99 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 737217.99 cu yd

Raw Fill Volume: 3.09 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 3.09 cu yd

User Name: DFrank
Project: Higley ADMP

Date: 08-28-00
Time: 14:43:39

Prismoidal Volume Results Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Basin P
Final Surface Model: Basin P
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 808140.83 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 808140.83 cu yd

Raw Fill Volume: 2.16 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 2.16 cu yd

User Name: DFrank Date: 08-28-00
Project: Higley ADMP Time: 14:43:56
Prismoidal Volume Results Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Basin Q
Final Surface Model: Basin Q
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 898539.89 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 898539.89 cu yd

Raw Fill Volume: 46.95 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 46.95 cu yd

User Name: DFrank
Project: Higley ADMP
Prismoidal Volume Results

Date: 08-28-00
Time: 14:44:17
Page: 1

Prismoidal Volume Results

==========

Original Surface Model: Existing ground @ Ray Rd. Bsn
Final Surface Model: Ray Rd. Bsn
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 303617.46 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 303617.46 cu yd

Raw Fill Volume: 2673.57 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 2673.57 cu yd

User Name: DFrank
Project: Higley ADMP
Prismoidal Volume Results

Date: 08-28-00
Time: 14:44:52
Page: 1

Prismoidal Volume Results

==========

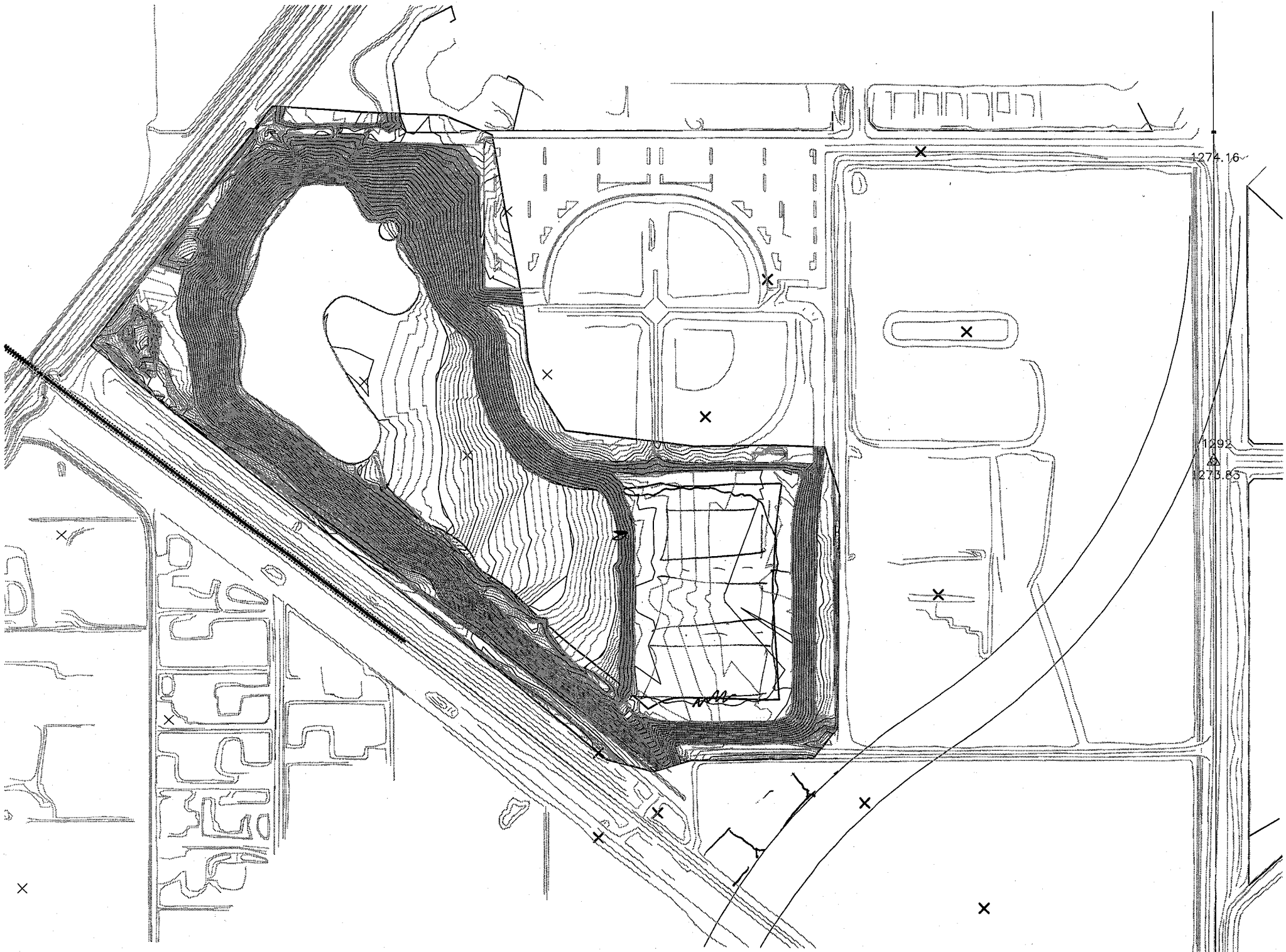
Original Surface Model: Existing Ground @ QC Basin
Final Surface Model: QUEEN CREEK BASIN
Cut Compaction Factor: 0.00
Fill Compaction Factor: 0.00

Raw Cut Volume: 128812.15 cu yd
Compacted Cut Volume: 0.00 cu yd
Total Cut Volume: 128812.15 cu yd

Raw Fill Volume: 2292.82 cu yd
Compacted Fill Volume: 0.00 cu yd
Total Fill Volume: 2292.82 cu yd

EXIST.
426 AF 69.2'

EXIST. CROSSROADS
PAR



CROSSROADS PARK
OUT FLOW

```
*********************************************
    UNEVEN WEIR FLOW PROGRAM
    FORTRAN VERSION 1.0
*********************************************

    PROJECT:
    ENGINEER:
    DATE:   6/19/2000
    TIME:  13:30. 4

---------------------------------------------
    INPUT PARAMETERS
---------------------------------------------

    STARTING WSEL:       1269.00
    MAXIMUM WSEL:        1276.00
    STEP SIZE:              0.10
    BREADTH OF WEIR:       20.00

*********************************************
    INPUT ELEVATION/STATION TABLE.
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*********************************************
```

POINT	ELEVATION	STATION	POINT	ELEVATION	STATION
1	1269.47	0.00	16	1271.12	98.62
2	1269.16	3.92	17	1271.12	98.71
3	1269.96	5.65	18	1271.19	117.66
4	1269.99	9.29	19	1271.17	120.34
5	1270.60	22.46	20	1271.11	126.57
6	1270.78	25.69	21	1271.36	131.32
7	1270.78	26.06	22	1271.75	141.38
8	1271.09	44.28	23	1272.34	147.76
9	1271.28	49.08	24	1272.76	156.22
10	1271.27	54.37	25	1272.95	164.87
11	1271.18	61.85	26	1273.56	172.37
12	1271.15	65.20	27	1273.90	175.75
13	1270.89	72.72	28	1274.52	181.76
14	1271.23	78.90	29	1274.55	190.13
15	1271.18	91.98	30	1274.61	195.07

```
*******************************************
    INPUT ELEVATION/STATION TABLE.
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*******************************************
```

POINT	ELEVATION	STATION	POINT	ELEVATION	STATION
31	1275.25	209.67	46	1273.11	280.85
32	1275.24	212.57	47	1272.85	281.88
33	1275.24	214.10	48	1270.77	290.36
34	1275.19	216.30	49	1270.32	292.15
35	1274.92	223.48	50	1269.26	299.97
36	1274.89	225.41	51	1269.27	303.66
37	1274.82	231.20	52	1269.26	316.82
38	1274.58	238.39	53	1269.49	321.92
39	1274.18	250.97	54	1269.09	356.09
40	1273.87	258.71	55	1269.12	367.97
41	1273.53	264.10	56	1269.40	399.19
42	1273.44	270.01	57	1269.39	409.98
43	1273.18	272.76	58	1271.70	449.45
44	1273.21	276.23	59	1271.70	450.61
45	1273.16	280.07	60	1271.66	452.87

```
*******************************************
    INPUT ELEVATION/STATION TABLE.
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*******************************************
```

POINT	ELEVATION	STATION	POINT	ELEVATION	STATION
61	1271.47	458.13	76	1269.23	619.72
62	1271.42	459.56	77	1269.24	639.45
63	1271.45	471.45	78	1268.75	676.15
64	1271.44	472.56	79	1269.06	690.61
65	1271.40	476.06			
66	1271.03	499.61			
67	1271.03	499.66			
68	1271.03	499.70			
69	1270.45	518.50			
70	1270.37	520.71			
71	1270.07	529.76			
72	1269.75	541.12			
73	1269.62	556.18			
74	1269.47	573.37			
75	1269.46	596.88			

```
*******************************************
    WEIR COEFFICIENT TABLE
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*******************************************
```

INPUT COEFFICENT VALUES.

POINT	HEAD	COEFFICIENT
1	0.00	2.8900
2	0.50	3.0100
3	1.00	3.0300
4	4.00	3.0400
5	15.00	3.0400

```
*********************************************
    UNEVEN WEIR FLOW PROGRAM
    FORTRAN VERSION 1.0
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*********************************************
```

ELEVATION	DISCHARGE (CFS)	ELEVATION	DISCHARGE (CFS)
1269.00	4.38	1270.50	1168.34
1269.10	10.26	1270.60	1324.69
1269.20	20.63	1270.70	1489.80
1269.30	38.95	1270.80	1663.52
1269.40	69.49	1270.90	1845.99
1269.50	113.35	1271.00	2037.84
1269.60	171.45	1271.10	2239.88
1269.70	241.96	1271.20	2454.04
1269.80	324.17	1271.30	2684.70
1269.90	416.59	1271.40	2930.95
1270.00	518.68	1271.50	3191.97
1270.10	630.34	1271.60	3467.71
1270.20	751.46	1271.70	3757.02
1270.30	881.67	1271.80	4058.96
1270.40	1020.68	1271.90	4372.86

```
*********************************************
    UNEVEN WEIR FLOW PROGRAM
    FORTRAN VERSION 1.0
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*********************************************
```

ELEVATION	DISCHARGE (CFS)	ELEVATION	DISCHARGE (CFS)
1272.00	4698.04	1273.50	10736.34
1272.10	5033.95	1273.60	11212.08
1272.20	5380.15	1273.70	11696.85
1272.30	5736.15	1273.80	12190.36
1272.40	6101.89	1273.90	12692.52
1272.50	6477.21	1274.00	13203.31
1272.60	6861.92	1274.10	13722.74
1272.70	7255.88	1274.20	14250.85
1272.80	7659.01	1274.30	14787.53
1272.90	8071.39	1274.40	15332.83
1273.00	8493.07	1274.50	15886.83
1273.10	8923.72	1274.60	16449.87
1273.20	9363.18	1274.70	17022.86
1273.30	9811.99	1274.80	17605.41
1273.40	10269.75	1274.90	18197.62

```
*********************************************
    UNEVEN WEIR FLOW PROGRAM
    FORTRAN VERSION 1.0
    PROJECT:
    DATE:   6/19/2000
    TIME:  13:30. 4
*********************************************
```

ELEVATION	DISCHARGE (CFS)
1275.00	18799.71
1275.10	19411.49
1275.20	20032.82
1275.30	20663.73
1275.40	21304.28
1275.50	21953.72
1275.60	22611.73
1275.70	23278.06
1275.80	23952.55
1275.90	24635.00

DIBBLE & ASSOCIATES
CONSULTING ENGINEERS
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2633 East Indian School Road, Suite 401
Phoenix, Arizona 85016-6763
Tel. (602) 957-1155
Fax (602) 957-2838

CIVIL ENGINEERING ■ Transportation ■ Airports ■ Drainage/Flood Control ■ Water Resources ■ Land Development ■ Surveying

FAX TRANSMITTAL

TO: Town of Gilbert
1025 South Gilbert Road
Gilbert, AZ 85296

DATE: June 20, 2000
RE: FCD 98-13, Higley ADMP

ATTENTION: Mr. Lonnie Frost
FAX TO: 497-4923 503.6842

Transmitted herewith are the following items:

Copies	Date	I.D. Number	Description
1			New Basin Location

These are transmitted as checked below:

- ❑ For Approval
- ❑ For Your Use
- ❑ As Requested
- ❑ Returned
- ■ For Review and Comment
- ❑ For Information Only
- ❑ For Use as Guideline Only
- ❑ Other
- ❑ Approve
- ❑ Disapprove
- ❑ Approve with Comments

REMARKS: Lonnie, Due to all of the constraints at Crossroads Park, we propose that we provide a detention basin approximately 1/2 mile south at Ray Road. Please take a look at the following sketch. I will give you a call later today to discuss this site. According to aerial photos, this and Crossroads are the only viable sites for a detention basin of this size.
Do you know is this site is still available?

Thanks,
Dan

Number of Pages (including transmittal cover page): 2

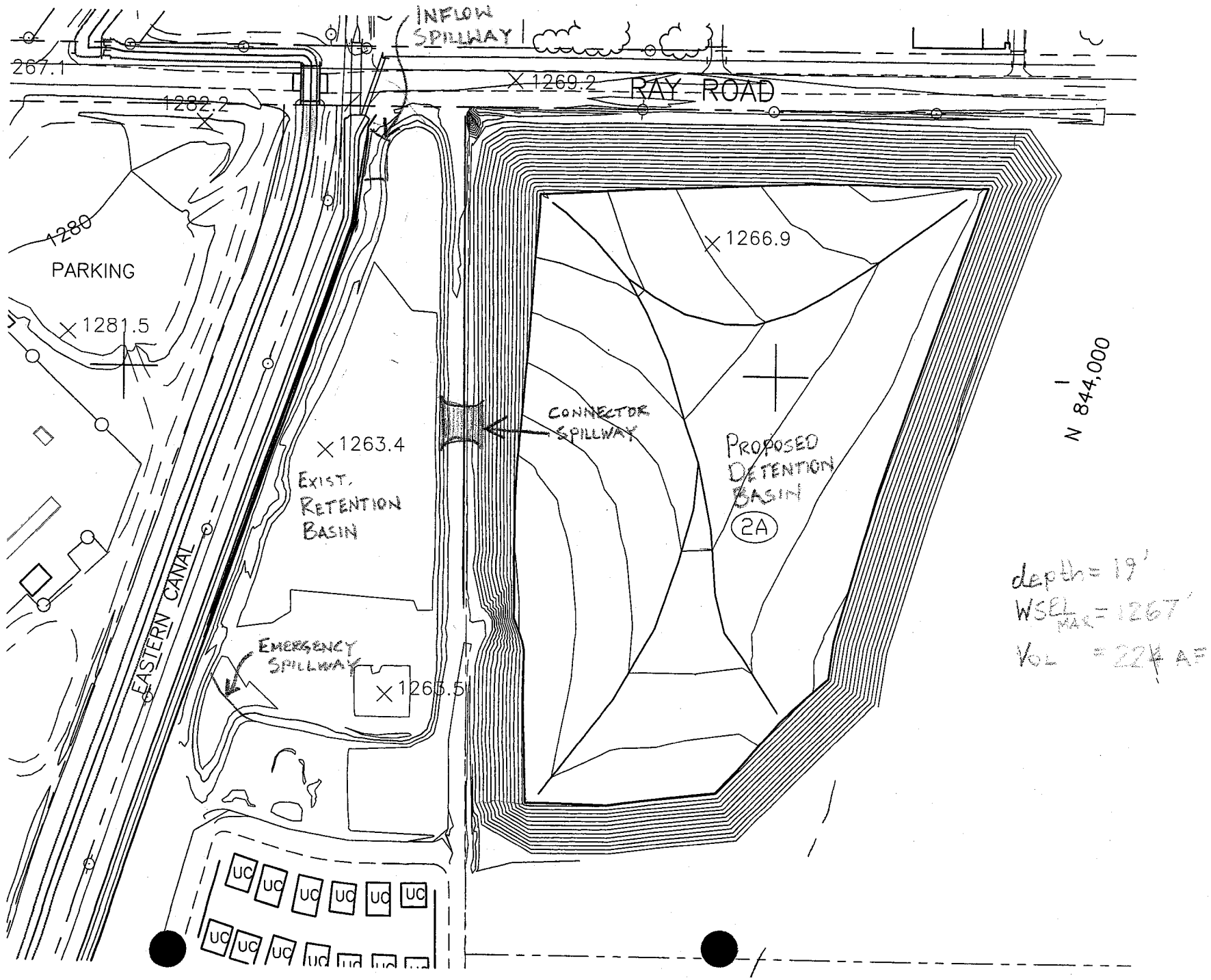
Originals to be: ■ Mailed ❑ Filed ❑ Del'd

copy: 9829

Sincerely,
DIBBLE & ASSOCIATES

Dan C. Frank, E.I.T.

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CONTACT US AT THE ABOVE NUMBER IMMEDIATELY


INFLOW SPILLWAY
267.1
1269.2
RAY ROAD
1282.2
1280
PARKING
1281.5
1266.9
CONNECTOR SPILLWAY
1263.4
EXIST. RETENTION BASIN
PROPOSED DETENTION BASIN
2A
N 844,000
EASTERN CANAL
EMERGENCY SPILLWAY
1263.5
uc
depth = 19'
WSEL MAX = 1267'
VOL = 22.4 AF

Town of Gilbert, Arizona
A Community of Excellence
Community Development
1025 South Gilbert Road
Gilbert, Arizona 85296

June 20, 2000

Mr. Dan Frank, EIT
Dibble & Associates
Sent Via FAX Transmittal to 602-957-2838, 1 Page

RE: Retention Basin Siting

Dear Mr. Frank:

The retention basin you proposed at the SEC of the intersection of the Eastern Canal and Ray Road is not viable. I just received the latest freeway alignment plans from ADOT. The plans indicate a basin in the SW1/4, SW1/4 of Section 22, T1S, R6E that is approximately 14 acres in size (by my scaling). Has this basin been considered in your analysis?

Sincerely,

Lonnie K. Frost
Director of Public Works

Area Code (480) 503-6000 Fax (480) 497-4923 TDD 503-6080

DIBBLE & ASSOCIATES
CONSULTING ENGINEERS
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FAX TRANSMITTAL

TO: Town of Gilbert
1025 South Gilbert Road
Gilbert, AZ 85296

DATE: July 12, 2000
RE: FCD 98-13, Higley ADMP
Ray Rd. Basin site

ATTENTION: Mr. Lonnie Frost
FAX TO: 480-503-6842

Transmitted herewith are the following items:

Copies	Date	I.D. Number	Description
1			Soccer Fields and Basin

These are transmitted as checked below:

- ❑ For Approval
- ■ For Your Use
- ❑ As Requested
- ❑ Returned
- ❑ For Review and Comment
- ❑ For Information Only
- ❑ For Use as Guideline Only
- ❑ Other
- ❑ Approve
- ❑ Disapprove
- ❑ Approve with Comments

REMARKS: Lonnie,
take a look at this sketch to see if you agree with it in concept. Also, note the size of the soccer fields... they are seemingly large. However, this is what the City of Mesa uses in their parks. We will proceed with this lay-out unless we hear otherwise.
Thanks,
Dan

Number of Pages (including transmittal cover page): 3

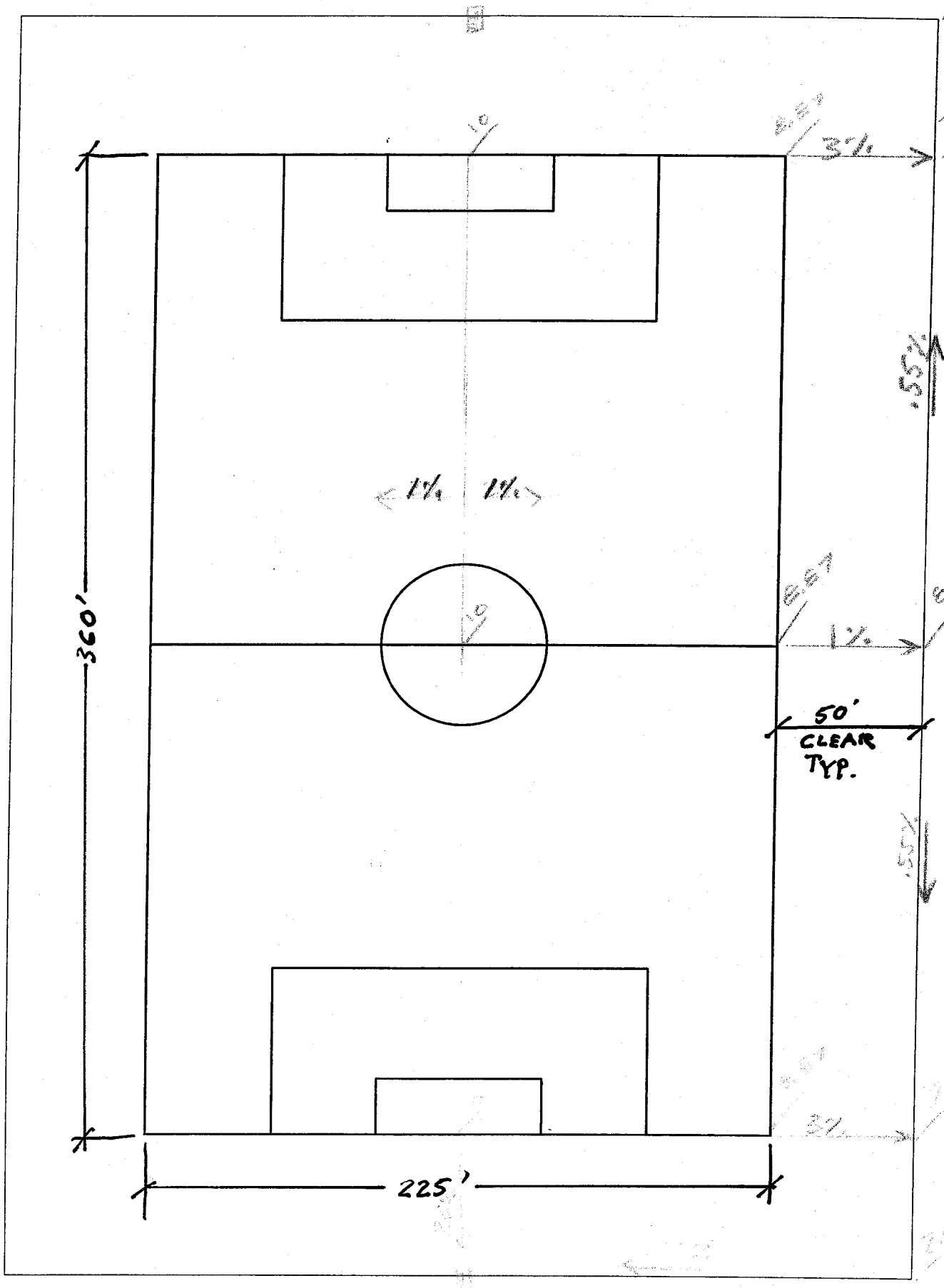
Originals to be: ❑ Mailed ■ Filed ❑ Del'd

copy: 9829 letter file
Maury Ahlman 480.503.6204

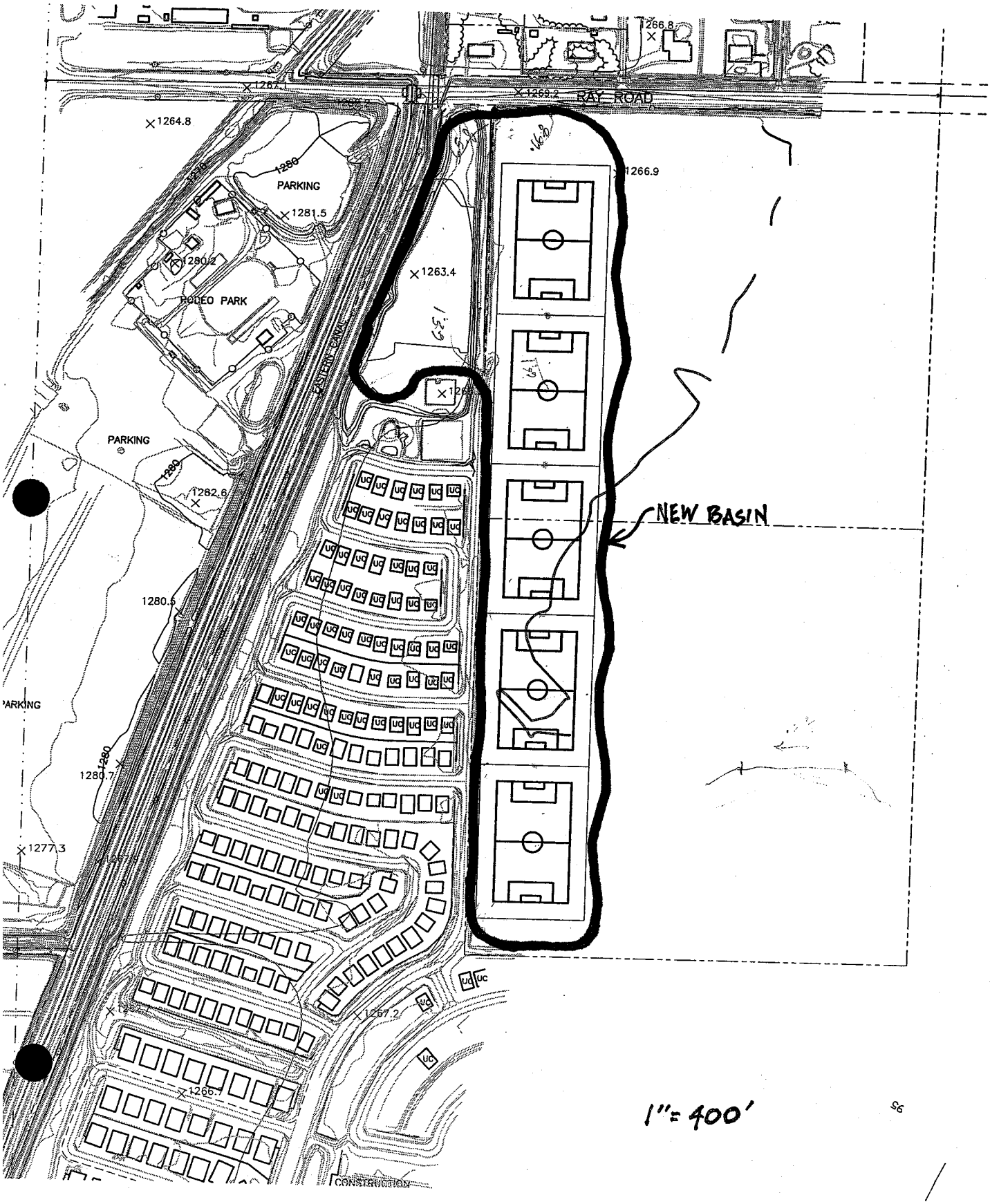
Sincerely,
DIBBLE & ASSOCIATES

Dan C. Frank, E.I.T.

IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CONTACT US AT THE ABOVE NUMBER IMMEDIATELY



1"=50'


RAY ROAD
1266.8
1264.8
1266.9
PARKING
1281.5
1280.2
RODEO PARK
1263.4
EASTERN CANAL
PARKING
1282.6
NEW BASIN
1280.5
1280.7
1277.3
1267.2
1266.7
CONSTRUCTION

1" = 400'

95

North Area, Recommended Plan

PROPERTY COSTS

PARCEL IDENTIFICATION NUMBER	NUMBER OF STRUCTURES PER PARCEL	STRUCTURAL FULL CASH VALUE PER PARCEL	DEMOLITION UNIT COST ($/house)	RELOCATION UNIT COST	HAZARDOUS MATERIALS UNIT COST	TITLE UNIT COST	LITIGATION UNIT COST	TOTAL REMOVAL & RELOCATION COST PER PARCEL	AVERAGE LOT SIZE (sf)	LANDSCAPE UNIT COST ($/sf)	LANDSCAPE COST PER PARCEL	Structural Value Per Parcel	Total Relocation and Removal Cost Per Parcel	Total Landscape Cost Per Parcel	Total Cost Per Parcel
136 04 003E	1	$0	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$0	$48,700	$9,000	$57,700
136 04 003F	1	$216,842	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$216,842	$48,700	$9,000	$274,542
136 04 003G	3	$74,924	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$74,924	$48,700	$9,000	$132,624
140 05 022	1	$137,293	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$137,293	$48,700	$9,000	$194,993
140 12 061	1	$161,022	$2,500	$30,000	$12,500	$700	$3,000	$48,700	8000	$1.50	$12,000	$161,022	$48,700	$12,000	$221,722
140 20 006	1	$638	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$638	$48,700	$9,000	$58,338
140 20 007F	2	$184,717	$2,500	$30,000	$12,500	$700	$3,000	$48,700	8000	$1.50	$12,000	$184,717	$48,700	$12,000	$245,417
140 21 009B	1	$54,616	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$54,616	$48,700	$9,000	$112,316
140 21 009D	1	$55,562	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$55,562	$48,700	$9,000	$113,262
140 21 009F	1	$117,361	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$117,361	$48,700	$9,000	$175,061
140 48 015	1	$62,572	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$62,572	$48,700	$9,000	$120,272
140 48 016	1	$83,873	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$83,873	$48,700	$9,000	$141,573
140 48 033	1	$144,078	$2,500	$30,000	$12,500	$700	$3,000	$48,700	8000	$1.50	$12,000	$144,078	$48,700	$12,000	$204,778
140 48 034	1	$92,806	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$92,806	$48,700	$9,000	$150,506
141 08 010N	1	$37,962	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$37,962	$48,700	$9,000	$95,662
141 08 010Q	1	$129,202	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$129,202	$48,700	$9,000	$186,902
141 08 010S	1	$120,216	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$120,216	$48,700	$9,000	$177,916
141 08 020	1	$77,859	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$77,859	$48,700	$9,000	$135,559
141 08 021	1	$89,207	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$89,207	$48,700	$9,000	$146,907
141 08 024	1	$75,541	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$75,541	$48,700	$9,000	$133,241
141 08 025	1	$80,544	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$80,544	$48,700	$9,000	$138,244
141 08 046	4	$1,346,691	$2,500	$30,000	$12,500	$700	$3,000	$48,700	8000	$1.50	$12,000	$1,346,691	$48,700	$12,000	$1,407,391
141 09 001N	1	$111,919	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$111,919	$48,700	$9,000	$169,619
141 09 001S	1	$37,856	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$37,856	$48,700	$9,000	$95,556
141 09 001T	1	$67,073	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$67,073	$48,700	$9,000	$124,773
141 09 003	1	$0	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$0	$48,700	$9,000	$57,700
141 09 004D	1	$0	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$0	$48,700	$9,000	$57,700
141 09 179A	1	$65,283	$2,500	$30,000	$12,500	$700	$3,000	$48,700	6000	$1.50	$9,000	$65,283	$48,700	$9,000	$122,983
											TOTALS	$3,625,657	$1,363,600	$264,000	$5,253,257
											CONTINGENCIES AT 30%				$1,575,977
											GRAND TOTAL				$6,829,234

South Area, Recommended Plan

Channel Cost

ID	Excavated Volume (cy)	Unit Cost ($/cy)	Excavation Cost	Concrete Volume (cy)	Unit Cost ($/cy)	Concrete Cost	No. of Utility Crossings	Unit Cost ($ per crossing)	Utilities Cost	Channel Length (ft)	Left Access Road Width (ft)	Right Access Road Width (ft)	6" ABC Access Road Unit Cost ($/sf)	Access Road Cost	Total Corridor Width-Channel+Access Rd (ft)	Existing Right-of-Way Width (ft.)	New Right-of-Way Width Required (ft.)	Landscape Unit Cost ($/sf)	Total Landscape Cost	Required Land Acquisition (Ac.)	Zoning	Land Acquisition Cost	Total Construction Cost	Total Contingencies Cost	Total Construction, Land, Landscape, and Contingencies Costs
CCDC-1	87755	$11	$965,302	0	n/a	n/a	4	$3,000	$12,000	3035	0	16	$0.65	$31,564	177.1	0	177	$2.20	1,182,667	12.3	Res.	$532,200	1,008,866	$302,660	**$3,026,393**
CCDC-2	171057	$11	$1,881,624	0	n/a	n/a	0	$3,000	$0	5916	0	16	$0.65	$61,526	177.1	0	177	$2.20	2,305,324	24.1	Res.	$1,037,396	1,943,150	$582,945	**$5,868,815**
CCDC-3	126002	$11	$1,386,024	0	n/a	n/a	1	$3,000	$3,000	5588	0	16	$0.65	$58,115	152.8	0	153	$2.20	1,878,162	19.6	Res.	$845,173	1,447,139	$434,142	**$4,604,616**
CCDC-4a	18774	$11	$206,515	3176	$310	$984,450	3	$3,000	$9,000	4118	0	16	$0.65	$42,827	48.9	0	49	$2.20	443,337	4.6	Res.	$199,501	1,242,792	$372,838	**$2,258,468**
CCDC-4b	12188	$11	$134,072	0	n/a	n/a	2	$3,000	$6,000	1319	0	0	$0.65	$0	78.0	0	78	$2.20	226,413	2.4	Res.	$101,886	140,072	$42,021	**$510,392**
CCDC-5a	12510	$11	$137,608	1570	$310	$486,815	2	$3,000	$6,000	1200	0	0	$0.65	$0	62.1	0	62	$2.20	163,845	1.7	Res.	$73,730	630,423	$189,127	**$1,057,125**
CCDC-5b	47486	$11	$522,341	0	n/a	n/a	0	$3,000	$0	1751	0	0	$0.65	$0	166.1	0	166	$2.20	639,664	6.7	Res.	$287,849	522,341	$156,702	**$1,606,556**
CCDC-5c	14683	$11	$161,514	2213	$310	$686,062	3	$3,000	$9,000	2832	0	0	$0.65	$0	25.0	0	25	$2.20	155,760	1.6	Res.	$70,092	856,576	$256,973	**$1,339,401**
CCDCL-1	24301	$11	$267,306	0	n/a	n/a	0	$3,000	$0	2833	0	16	$0.65	$29,463	91.2	0	91	$2.20	568,550	5.9	Res.	$255,847	296,769	$89,031	**$1,210,197**
CCDCL-2	18408	$11	$202,492	0	n/a	n/a	0	$3,000	$0	2350	0	16	$0.65	$24,440	90.0	0	90	$2.20	465,300	4.9	Res.	$209,385	226,932	$68,080	**$969,696**
CCDCO-1a	66406	$11	$730,468	0	n/a	n/a	0	$3,000	$0	2215	0	16	$0.65	$23,036	184.7	0	185	$2.20	899,934	9.4	Res.	$404,971	753,504	$226,051	**$2,284,460**
CCDCO-1b	83495	$11	$918,443	0	n/a	n/a	0	$3,000	$0	2785	0	16	$0.65	$28,964	184.7	0	185	$2.20	1,131,520	11.8	Res.	$509,184	947,407	$284,222	**$2,872,334**
CCDCO-2a	69286	$11	$762,148	0	n/a	n/a	0	$3,000	$0	2395	0	16	$0.65	$24,908	182.6	0	183	$2.20	962,369	10.0	Res.	$433,066	787,056	$236,117	**$2,418,607**
CCDCO-2b	95612	$11	$1,051,732	0	n/a	n/a	0	$3,000	$0	3305	0	16	$0.65	$34,372	182.6	0	183	$2.20	1,328,028	13.9	Res.	$597,613	1,086,104	$325,831	**$3,337,576**
CCDCO-3a	54214	$11	$596,353	0	n/a	n/a	0	$3,000	$0	1874	0	16	$0.65	$19,490	182.6	0	183	$2.20	753,018	7.9	Res.	$338,858	615,842	$184,753	**$1,892,471**
CCDCO-3b	94773	$11	$1,042,503	0	n/a	n/a	0	$3,000	$0	3276	0	16	$0.65	$34,070	182.6	0	183	$2.20	1,316,375	13.7	Res.	$592,369	1,076,574	$322,972	**$3,308,290**
ECDC-1a	13856	$11	$152,415	0	n/a	n/a	0	$3,000	$0	2845	0	16	$0.65	$29,588	72.3	0	72	$2.20	452,651	4.7	Res.	$203,693	182,003	$54,601	**$892,948**
ECDC-1b	54432	$11	$598,750	0	n/a	n/a	0	$3,000	$0	3050	0	16	$0.65	$31,720	130.7	0	131	$2.20	877,244	9.2	Res.	$394,760	630,470	$189,141	**$2,091,615**
ECDC-2a	28176	$11	$309,940	0	n/a	n/a	2	$3,000	$6,000	1705	0	16	$0.65	$17,732	130.9	0	131	$2.20	491,115	5.1	Res.	$221,002	333,672	$100,102	**$1,145,890**
ECDC-2b	7684	$11	$84,521	0	n/a	n/a	0	$3,000	$0	350	0	16	$0.65	$3,640	141.8	0	142	$2.20	109,187	1.1	Res.	$49,134	88,161	$26,448	**$272,930**
ECDC-2c	72451	$11	$796,958	0	n/a	n/a	0	$3,000	$0	3267	0	16	$0.65	$33,977	152.4	0	152	$2.20	1,095,108	11.4	Res.	$492,798	830,935	$249,280	**$2,668,121**
ECDC-3	148554	$11	$1,634,094	0	n/a	n/a	3	$3,000	$9,000	5780	0	16	$0.65	$60,112	173.3	0	173	$2.20	2,204,136	23.0	Res.	$991,861	1,703,206	$510,962	**$5,410,164**
ECDC-4a	54293	$11	$597,228	0	n/a	n/a	0	$3,000	$0	2741	0	16	$0.65	$28,506	144.2	0	144	$2.20	869,561	9.1	Res.	$391,303	625,734	$187,720	**$2,074,318**
ECDC-4b	39010	$11	$429,111	0	n/a	n/a	0	$3,000	$0	3131	0	16	$0.65	$32,562	109.3	0	109	$2.20	752,649	7.9	Res.	$338,692	461,673	$138,502	**$1,691,517**
ECDCO-1	70689	$11	$777,575	0	n/a	n/a	0	$3,000	$0	2668	0	16	$0.65	$27,747	200.6	0	201	$2.20	1,177,308	12.3	Res.	$529,789	805,322	$241,597	**$2,754,015**
ECDCO-2	137085	$11	$1,507,936	0	n/a	n/a	0	$3,000	$0	5174	0	16	$0.65	$53,810	200.6	0	201	$2.20	2,283,130	23.8	Res.	$1,027,409	1,561,745	$468,524	**$5,340,808**
ECDCO-3	136390	$11	$1,500,286	0	n/a	n/a	0	$3,000	$0	5200	0	16	$0.65	$54,080	200.1	0	200	$2.20	2,289,251	23.9	Res.	$1,030,163	1,554,366	$466,310	**$5,340,089**
ECDCO-4	136652	$11	$1,503,171	0	n/a	n/a	1	$3,000	$3,000	5210	0	16	$0.65	$54,184	200.1	0	200	$2.20	2,293,653	23.9	Res.	$1,032,144	1,560,355	$468,106	**$5,354,258**
QCLAT	37190	$11	$409,094	0	n/a	n/a	0	$3,000	$0	2833	0	16	$0.65	$29,463	113.0	0	113	$2.20	704,209	7.3	Res.	$316,894	438,558	$131,567	**$1,591,227**

Culvert Cost

Location	ID	Length (ft.)	Number of Barrels	Culvert Dia./ Height	Unit	Width ft)	Barrel/ Material	Length of Pipe/ Box Culvert (ft.)	Unit Cost ($/ft.)	Pipe/Box Culvert Cost	Inlet Headwall	Unit Cost (Ea.)	Inlet Headwall Cost	Outlet Headwall	Unit Cost (Ea.)	Outlet Headwall Cost	Culvert Materials Cost	Culvert Contingencies Cost	Total Land, Construction, and Contingencies Costs
Access 1/587	A1/587	100	4	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,800	$7,800	1	$7,800	$7,800	165600.0	$49,680	**$215,280**
Access 2/587	A2/587	100	4	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,800	$7,800	1	$7,800	$7,800	165600.0	$49,680	**$215,280**
Hunt/Con	HH/C	100	4	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
SPRR/Con	SR/C	100	4	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
Riggs/Con	RS/C	125	4	5	ft.	12	RCBC	125	$1,900	$237,500	1	$7,100	$7,100	1	$7,100	$7,100	251700.0	$75,510	**$327,210**
Chandler Heights/Con	CH/C	286	3	5	ft.	10	RCBC	286	$1,900	$543,400	1	$6,300	$6,300	1	$6,300	$6,300	556000.0	$166,800	**$722,800**
Ocotillo/Con	OO/C	100	2	4	ft.	8	RCBC	100	$1,050	$105,000	1	$3,900	$3,900	1	$3,900	$3,900	112800.0	$33,840	**$146,640**
McQueen/Con	MQ/C	363	2	5	ft.	8	RCBC	363	$1,500	$544,500	1	$4,300	$4,300	1	$4,300	$4,300	553100.0	$165,930	**$719,030**
Queen Creek/Con	QC/C	100	2	4	ft.	8	RCBC	100	$1,050	$105,000	1	$3,400	$3,400	1	$3,400	$3,400	111800.0	$33,540	**$145,340**
Queen Creek Basin Inlet	QC-I	100	3	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
Access 1/Gilbert	A1/G	100	5	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,800	$7,800	1	$7,800	$7,800	165600.0	$49,680	**$215,280**
Access 2/Gilbert	A2/G	100	5	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
Hunt/Gilbert	HH/G	100	5	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
Riggs/Gilbert	RS/G	340	1	4	ft.	4	RCBC	340	$300	$102,000	1	$2,000	$2,000	1	$2,000	$2,000	106000.0	$31,800	**$137,800**
Chandler Heights/East	CH/E	100	3	4	ft.	10	RCBC	100	$1,400	$140,000	1	$4,300	$4,300	1	$4,300	$4,300	148600.0	$44,580	**$193,180**
Gilbert/East	GT/E	100	3	5	ft.	12	RCBC	100	$1,900	$190,000	1	$6,800	$6,800	1	$6,800	$6,800	203600.0	$61,080	**$264,680**
Ocotillo/East	OO/E	100	4	4	ft.	12	RCBC	100	$1,500	$150,000	1	$7,000	$7,000	1	$7,000	$7,000	164000.0	$49,200	**$213,200**
Queen Creek/East	QC/E	100	3	4	ft.	10	RCBC	100	$1,400	$140,000	1	$4,300	$4,300	1	$4,300	$4,300	148600.0	$44,580	**$193,180**
Germann/East	GM/E	110	2	4	ft.	8	RCBC	110	$1,050	$115,500	1	$3,900	$3,900	1	$3,900	$3,900	123300.0	$36,990	**$160,290**

Detention Basin Cost

I.D.	Basin Excavation Volume (cy)	Unit Cost ($/cy)	Detention Basin Excavation Cost	Length of Drain Pipe/ Box Culvert (ft.)	# Of Manholes	Manhole Unit Cost ($)	Manhole Total Cost ($)	Unit Cost ($/ft.)	Pipe/Box Culvert Cost	Headwall	Unit Cost (Ea.)	Headwall Cost	Inflow Spillway Area (ft^2)	Inflow Spillway Unit Cost ($/sf)	Inflow Spillway Cost ($/sf)	Basin Top Area (ac)	Required Land Acquisition (Ac.)	Landscape Restoration (sf)	Landscape Unit Cost ($/sf)	Landscape Cost	Total Land Acquisition Cost	Total Construction Cost	Total Landscape Cost	Total Construction, Land, and Landscape Costs
Queen Creek Basin	128,812	$6	$772,872	300	0	$4,500	$0	$55	$16,500	1	$1,100	$1,100	1644.06	$5	$8,220	63	78.8	3430350	$2.20	$7,546,770	$3,396,046.50	$798,692	$7,546,770	**$11,741,509**
Riggs Basin	0	$6	$0	0	0	$4,500	$0	$55	$0	0	$1,100	$0	1668.42	$5	$8,342	29	36.3	599323	$2.20	$1,318,511	$1,563,259.50	$8,342	$1,318,511	**$2,890,112**
Chandler Heights Basin	0	$6	$0	0	0	$4,500	$0	$55	$0	0	$1,100	$0	0	$5	$8,000	9	11.3	180580	$2.20	$397,276	$485,149.50	$8,000	$397,276	**$890,426**
Riggs WQ Basin	33,719	$6	$202,314	140	0	$4,500	$0	$55	$7,700	0	$1,100	$0	5000	$5	$25,000	2.9	3.6	157905	$2.20	$347,391	$156,325.95	$236,589	$347,391	**$740,306**
SPRR WQ Basin	42,915	$6	$257,490	0	0	$4,500	$0	$55	$0	0	$1,100	$0	2600	$5	$13,000	3.2	4.0	174240	$2.20	$383,328	$172,497.60	$270,490	$383,328	**$826,316**

Middle Area, Recommended Plan

Channel Cost

ID	Excavated Volume (cy)	Unit Cost ($/cy)	Excavation Cost	Concrete Volume (cy)	Unit Cost ($/cy)	Concrete Cost	No. of Utility Crossings	Unit Cost ($ per crossing)	Utilities Cost	Channel Length (ft)	Left Access Road Width (ft)	Right Access Road Width (ft)	6" ABC Access Road Unit Cost ($/sf)	Access Road Cost	Total Corridor Width-Channel+Access Rd (ft)	Existing Right-of-Way Width (ft.)	New Right-of-Way Width Required (ft.)	Landscape Unit Cost ($/sf)	Total Landscape Cost	Required Land Acquisition (Ac.)	Zoning	Land Acquisition Cost	Total Construction Cost	Total Contingencies Cost	Total Construction, Land, Landscape, and Contingencies Costs
ECDC-10a	8,132	$11	$89,455	0	n/a	n/a	0	$3,000	$0	815	0	16	$0.65	$8,476	97.0	0	97.0	$2.20	$173,976	1.8	Res.	$78,289	$97,931	$29,379	**$379,575**
ECDC-10b	78,737	$11	$866,104	0	n/a	n/a	2	$3,000	$6,000	2055	0	16	$0.65	$21,372	192.7	0	192.7	$2.20	$871,261	9.1	Res.	$392,068	$893,476	$268,043	**$2,424,848**
ECDC-10c	8,612	$11	$94,728	806	$310	$249,978	0	$3,000	$0	447	0	16	$0.65	$4,649	104.1	0	104.1	$2.20	$102,370	1.1	Res.	$46,067	$349,355	$104,806	**$602,598**
ECDC-10d	28,889	$11	$317,782	0	n/a	n/a	0	$3,000	$0	754	0	16	$0.65	$7,842	192.7	0	192.7	$2.20	$319,674	3.3	Res.	$143,854	$325,624	$97,687	**$886,839**
ECDC-11a	18,403	$11	$202,431	0	n/a	n/a	4	$3,000	$12,000	438	0	16	$0.65	$4,555	178.0	0	178.0	$2.20	$171,541	1.8	Res.	$77,193	$218,987	$65,696	**$533,417**
ECDC-11b	47,520	$11	$522,717	0	n/a	n/a	1	$3,000	$3,000	1131	0	16	$0.65	$11,762	178.0	0	178.0	$2.20	$442,952	4.6	Res.	$199,328	$537,479	$161,244	**$1,341,003**
ECDC-11c	19,510	$11	$214,610	1,944	$310	$602,551	0	$3,000	$0	1040	0	0	$0.65	$0	92.6	0	92.6	$2.20	$211,910	2.2	Res.	$95,360	$817,161	$245,148	**$1,369,580**
ECDC-11d	86,754	$11	$954,291	0	n/a	n/a	0	$3,000	$0	2883	0	16	$0.65	$29,978	152.5	0	152.5	$2.20	$966,951	10.1	Res.	$435,128	$984,269	$295,281	**$2,681,629**
ECDC-12a	66,073	$11	$726,800	0	n/a	n/a	1	$3,000	$3,000	2640	0	16	$0.65	$27,456	169.8	0	169.8	$2.20	$986,092	10.3	Res.	$443,741	$757,256	$227,177	**$2,414,266**
ECDC-12b	45,258	$11	$497,833	0	n/a	n/a	2	$3,000	$6,000	2611	0	16	$0.65	$27,154	115.9	0	115.9	$2.20	$665,983	6.9	Res.	$299,692	$530,987	$159,296	**$1,655,959**
ECDC-13a	39,783	$11	$437,618	0	n/a	n/a	2	$3,000	$6,000	4035	0	16	$0.65	$41,964	87.8	0	87.8	$2.20	$779,654	8.1	Res.	$350,844	$485,582	$145,675	**$1,761,756**
ECDC-13b	12,105	$11	$133,156	0	n/a	n/a	1	$3,000	$3,000	1228	0	16	$0.65	$12,769	87.8	0	87.8	$2.20	$237,229	2.5	Res.	$106,753	$148,925	$44,677	**$537,585**
ECDC-5a	10,034	$11	$110,369	0	n/a	n/a	0	$3,000	$0	550	0	16	$0.65	$5,720	141.7	0	141.7	$2.20	$171,408	1.8	Res.	$77,134	$116,089	$34,827	**$399,458**
ECDC-5b	57,437	$11	$631,810	0	n/a	n/a	0	$3,000	$0	3037	0	16	$0.65	$31,585	143.4	0	143.4	$2.20	$957,943	10.0	Res.	$431,075	$663,395	$199,018	**$2,251,431**
ECDC-6	65,105	$11	$716,153	0	n/a	n/a	1	$3,000	$3,000	3396	0	16	$0.65	$35,318	147.6	0	147.6	$2.20	$1,102,870	11.5	Res.	$496,292	$754,472	$226,341	**$2,579,975**
ECDC-7	52,797	$11	$580,767	0	n/a	n/a	0	$3,000	$0	2754	0	16	$0.65	$28,642	147.6	0	147.6	$2.20	$894,377	9.3	Res.	$402,470	$609,409	$182,823	**$2,089,078**
ECDC-8a	50,145	$11	$551,595	0	n/a	n/a	1	$3,000	$3,000	2712	0	16	$0.65	$28,205	151.9	0	151.9	$2.20	$906,441	9.5	Res.	$407,898	$582,800	$174,840	**$2,071,978**
ECDC-8b	30,798	$11	$338,776	0	n/a	n/a	2	$3,000	$6,000	1780	0	16	$0.65	$18,512	133.1	0	133.1	$2.20	$521,209	5.4	Res.	$234,544	$363,288	$108,986	**$1,228,027**
ECDC-9a	19,567	$11	$215,234	0	n/a	n/a	0	$3,000	$0	1134	0	16	$0.65	$11,794	130.9	0	130.9	$2.20	$326,612	3.4	Res.	$146,976	$227,027	$68,108	**$768,723**
ECDC-9b	3,922	$11	$43,147	0	n/a	n/a	0	$3,000	$0	950	0	16	$0.65	$9,880	67.9	0	67.9	$2.20	$141,869	1.5	Res.	$63,841	$53,027	$15,908	**$274,646**
ECDC-9c	32,708	$11	$359,791	0	n/a	n/a	2	$3,000	$6,000	2367	0	16	$0.65	$24,617	120.8	0	120.8	$2.20	$628,962	6.6	Res.	$283,033	$390,408	$117,122	**$1,419,526**
ST-1a	5,754	$11	$63,299	0	n/a	n/a	1	$3,000	$3,000	2610	16	16	$0.65	$54,288	63.1	0	63.1	$2.20	$362,435	3.8	Res.	$163,096	$120,587	$36,176	**$682,293**
ST-1b	22,253	$11	$244,785	0	n/a	n/a	3	$3,000	$9,000	2950	16	16	$0.65	$61,360	106.3	0	106.3	$2.20	$689,567	7.2	Res.	$310,305	$315,145	$94,544	**$1,409,561**
ST-2	10,409	$11	$114,496	0	n/a	n/a	4	$3,000	$12,000	2135	16	16	$0.65	$44,408	78.1	0	78.1	$2.20	$366,678	3.8	Res.	$165,005	$170,904	$51,271	**$753,858**
ST-3a	9,410	$11	$103,505	0	n/a	n/a	0	$3,000	$0	1326	16	16	$0.65	$27,581	101.7	0	101.7	$2.20	$296,600	3.1	Res.	$133,470	$131,086	$39,326	**$600,482**
ST-3b	7,547	$11	$83,022	0	n/a	n/a	0	$3,000	$0	885	0	16	$0.65	$9,204	91.0	0	91.0	$2.20	$177,194	1.8	Res.	$79,737	$92,226	$27,668	**$376,825**
ST-4	33,525	$11	$368,779	0	n/a	n/a	1	$3,000	$3,000	5182	16	16	$0.65	$107,786	98.7	0	98.7	$2.20	$1,125,168	11.7	Res.	$506,326	$479,565	$143,869	**$2,254,929**
ST-5	34,504	$11	$379,544	0	n/a	n/a	3	$3,000	$9,000	4718	16	16	$0.65	$98,134	103.7	0	103.7	$2.20	$1,076,227	11.2	Res.	$484,302	$486,678	$146,003	**$2,193,212**
ST-6	42,801	$11	$470,813	0	n/a	n/a	0	$3,000	$0	4004	16	16	$0.65	$83,283	117.6	0	117.6	$2.20	$1,035,890	10.8	Res.	$466,150	$554,097	$166,229	**$2,222,366**
ST-7	35,500	$11	$390,502	0	n/a	n/a	2	$3,000	$6,000	3321	16	16	$0.65	$69,077	117.6	0	117.6	$2.20	$859,188	9.0	Res.	$386,635	$465,579	$139,674	**$1,851,076**
ST-8	60,286	$11	$663,143	0	n/a	n/a	0	$3,000	$0	3816	16	16	$0.65	$79,373	139.1	0	139.1	$2.20	$1,167,450	12.2	Res.	$525,353	$742,516	$222,755	**$2,658,074**
ST-9	57,629	$11	$633,917	0	n/a	n/a	8	$3,000	$24,000	4872	16	16	$0.65	$101,338	123.0	0	123.0	$2.20	$1,318,888	13.8	Res.	$593,500	$759,255	$227,776	**$2,899,419**

Culvert Cost

Location	ID	Length (ft.)	Number of Barrels	Culvert Dia./ Height	Unit	Width ft)	Barrel/ Material	Right-of-Way Width (ft)	Length of Pipe/ Box Culvert (ft.)	Unit Cost ($/ft.)	Pipe/Box Culvert Cost	Inlet Headwall	Unit Cost (Ea.)	Inlet Headwall Cost	Outlet Headwall	Unit Cost (Ea.)	Outlet Headwall Cost	Culvert Materials Cost	Culvert Contingencies Cost	Total Land, Construction, Land Contingencies Costs
Santan/East	ST/E	300	3	4	ft.	10	RCBC		300	$1,400	$420,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$428,600	$128,580	**$557,180**
Pecos	PS	100	3	4	ft.	10	RCBC		100	$1,400	$140,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$148,600	$44,580	**$193,180**
Williams Field/East	WF/E	126	3	4	ft.	10	RCBC		126	$1,400	$176,400	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$185,000	$55,500	**$240,500**
Val Vista/E	VV/E	245	3	4	ft.	10	RCBC		245	$1,400	$343,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$351,600	$105,480	**$457,080**
Ray	RY/E	104	3	4	ft.	10	RCBC		104	$1,400	$145,600	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$154,200	$46,260	**$200,460**
SPRR/East	SR/E	100	3	4	ft.	10	RCBC		100	$1,400	$140,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$148,600	$44,580	**$193,180**
Warner	WR	132	5	6	ft.	10	RCBC		132	$1,900	$250,800	1.00	$5,800	$5,800	1.00	$5,800	$5,800	$262,400	$78,720	**$341,120**
Greenfield	GF	158	5	6	ft.	10	RCBC		158	$1,900	$300,200	1.00	$6,900	$6,900	1.00	$6,900	$6,900	$314,000	$94,200	**$408,200**
Elliot	ET	127	4	5	ft.	8	RCBC		127	$1,500	$190,500	1.00	$5,300	$5,300	1.00	$5,300	$5,300	$201,100	$60,330	**$261,430**
Guadalupe	GE	104	2	4	ft.	10	RCBC		104	$1,400	$145,600	1.00	$3,700	$3,700	1.00	$3,700	$3,700	$153,000	$45,900	**$198,900**
Baseline	BL	103	1	4	ft.	6	RCBC		103	$300	$30,900	1.00	$2,800	$2,800	1.00	$2,800	$2,800	$36,500	$10,950	**$47,450**
Arizona	AA	179	1	4	ft.	4	RCBC		179	$300	$53,700	1.00	$2,000	$2,000	1.00	$2,000	$2,000	$57,700	$17,310	**$75,010**
SPRR/Santan	SR/S	143	1	4	ft.	4	RCBC		143	$300	$42,900	1.00	$2,000	$2,000	1.00	$2,000	$2,000	$46,900	$14,070	**$60,970**
McQueen/Santan	MQ/S	100	2	4	ft.	8	RCBC		100	$1,050	$105,000	1.00	$3,200	$3,200	1.00	$3,200	$3,200	$111,400	$33,420	**$144,820**
Santan/Con	ST/C	300	2	4	ft.	8	RCBC		300	$1,050	$315,000	1.00	$4,700	$4,700	1.00	$4,700	$4,700	$324,400	$97,320	**$421,720**
Cooper	CR	120	2	4	ft.	8	RCBC		120	$1,050	$126,000	1.00	$4,700	$4,700	1.00	$4,700	$4,700	$135,400	$40,620	**$176,020**
Gilbert/Santan	GT/S	100	2	4	ft.	8	RCBC		100	$1,050	$105,000	1.00	$4,700	$4,700	1.00	$4,700	$4,700	$114,400	$34,320	**$148,720**
Eastern Canal/Santan	EC/S	450	1	4	ft.	6	RCBC		450	$300	$135,000	1.00	$2,000	$2,000	1.00	$2,000	$2,000	$139,000	$41,700	**$180,700**
Val Vista/Santan	VV/S	100	2	5	ft.	10	RCBC		100	$1,500	$150,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$158,600	$47,580	**$206,180**
Ray/Santan	RY/S	400	2	5	ft.	8	RCBC		400	$1,500	$600,000	1.00	$4,300	$4,300	1.00	$4,300	$4,300	$608,600	$182,580	**$791,180**

Detention Basin Cost

I.D.	Basin Excavation Volume (cy)	Unit Cost ($/cy)	Detention Basin Excavation Cost	Length of Drain Pipe/ Box Culvert (ft.)	# Of Manholes	Manhole Unit Cost ($)	Manhole Total Cost ($)	Unit Cost ($/ft.)	Pipe/Box Culvert Cost	Headwall	Unit Cost (Ea.)	Headwall Cost	Inflow Spillway Area (ft^2)	Inflow Spillway Unit Cost ($/sf)	Inflow Spillway Cost ($/sf)	Basin Top Area (ac)	Required Land Acquisition (Ac.)	Landscape Restoration (sf)	Landscape Unit Cost ($/sf)	Landscape Cost	Total Land Acquisition Cost	Total Construction Cost	Total Landscape Cost	Total Construction, Land, and Landscape Costs
Ray Basin	**$303,617**	$6.00	$1,821,702	16476	41	$4,500	$185,355	$55	$906,180	1	$1,100	$1,100	129	$5	$644	31	39	1687950	$2.20	$3,713,490	$1,671,071	$2,914,981	$3,713,490	**$8,299,541**
Basin "K"	**$155,089**	$6.00	$930,534		0	$4,500	$0	$55	$0	1	$1,100	$1,100	2604	$5	$13,022	10	13	544500	$2.20	$1,197,900	$539,055	$944,656	$1,197,900	**$2,681,611**
Basin "L"	**$1,202,867**	$6.00	$7,217,202	7030	18	$4,500	$79,088	$55	$386,650	1	$1,100	$1,100	6260	$5	$31,299	45	56	2450250	$2.20	$5,390,550	$2,425,748	$7,715,338	$5,390,550	**$15,531,636**
Basin "O"	**$737,218**	$6.00	$4,423,308	14350	36	$4,500	$161,438	$55	$789,250	2	$1,100	$2,200	7766	$5	$38,828	24	30	1306800	$2.20	$2,874,960	$1,293,732	$5,415,023	$2,874,960	**$9,583,715**
Basin "P"	**$808,141**	$6.00	$4,848,846	7812	20	$4,500	$87,885	$55	$429,660	1	$1,100	$1,100	1260	$5	$6,300	42	53	2286900	$2.20	$5,031,180	$2,264,031	$5,373,791	$5,031,180	**$12,669,002**
Basin "Q"	**$898,540**	$6.00	$5,391,240	4170	10	$4,500	$46,913	$55	$229,350	1	$1,100	$1,100	4965	$5	$24,827	54	68	2940300	$2.20	$6,468,660	$2,910,897	$5,693,429	$6,468,660	**$15,072,986**