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FEMA Review

**CHANDLER / GILBERT
FLOODPLAIN DELINEATION STUDY
PHASE 3
UPRR/Arizona Avenue Watershed**

CONTRACT FCD 2008C042

TECHNICAL DATA NOTEBOOK

Volume 1
(Sections 1, 2 & 3
Appendix A, B, & C)

June 2010

Prepared for:

Federal Emergency Management Agency
Risk Studies Division
Federal Insurance Administration
500 C Street, SW Room 422
Washington, DC 20472

Submitted by:

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on behalf of:

Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009
(602) 506-1501

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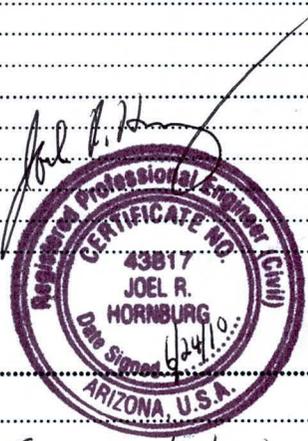
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Preface

This floodplain delineation study was conducted for the Flood Control District of Maricopa County (FCDMC) by David Evans and Associates, Inc. (DEA). The study area is divided into three (3) Phases. Phase 1 consists of the area between the East Maricopa Floodway and Eastern Canal, which results in floodplain delineation along the Eastern Canal. Phase 2 consists of the area between the Eastern Canal and the Consolidated Canal, which results in floodplain delineation along the Consolidated Canal. Phase 3 consists of the area between the Consolidated Canal and Union Pacific Railroad, which results in floodplain delineation along the Union Pacific Railroad. Each Phase is further subdivided into north and south regions. This report addresses Phase 3 – South and North, UPRR/ Arizona Avenue Watershed.

David Evans and Associates prepared the hydrologic and hydraulic analyses for Phase 3 - South, and Project Engineering Consultants (PEC) prepared the hydrologic and hydraulic analyses for Phase 3 - North.



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Section 1: INTRODUCTION

1.1 Purpose of study

The Chandler / Gilbert study area has experienced a tremendous amount of development since the original Gilbert – Chandler Flood Insurance Study (Reference 1) was performed in 1990. The purpose of this floodplain delineation re-study is to update the current floodplain boundaries within the Chandler / Gilbert Study area.

The information presented in this study will be used to update existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). The information will also be used by local and regional planners and floodplain administrators to further promote sound land use practices and floodplain development.

This study consists of approximately eleven (11) linear miles of floodplain delineation along the Eastern Canal between Baseline Road and Hunt Highway; approximately eleven (11) linear miles of floodplain delineation along Consolidated Canal between Baseline Road and Hunt Highway; approximately, six (6) linear miles along the Union Pacific Railroad (UPRR) from US 60 and between the Consolidated Canal and the Eastern Canal; approximately twelve (12) linear miles along the Union Pacific Railroad between US 60 and Hunt Highway; and approximately six (6) linear miles along the raised portion of Arizona Avenue (SR87) between US 60 and Hunt Highway.

1.2 Authority for study

David Evans and Associates, Inc. (DEA) performed this study under contract with the Flood Control District of Maricopa County (FCDMC). DEA's Project Manager for this project is Jason Coleman, P.E. This study was originated under contract number is FCD 2002C023 and completed under contract number FCD 2008C042. Copies of both contracts are located in Appendix B.5. The FCDMC is located at 2801 West Durango Street, Phoenix, AZ 85009 (602) 506-1501. The Project Manager for the FCDMC is Kathryn Gross, CFM, M.A.

1.3 Location of study reach

The Chandler / Gilbert FDS Phase 3 study area is located in southeastern Maricopa County, Arizona (see Figure 1.3.1 and Figure 1.3.2). The watershed encompasses approximately 25 square miles and is bounded by Arizona Avenue to the west, the Consolidated Canal to the east, the U.S. 60 Highway to the north and Hunt Highway alignment to the south.

The climate is semi-arid and precipitation is typically divided into two seasons of comparative rainfall depths: summer and winter. The summer storms are associated with warm, moist

tropical air masses that enter the state from the Gulf of Mexico producing moderate to intense afternoon and evening thundershowers. Winter precipitation originates from the Pacific Ocean and produces light to moderate precipitation over relatively large areas.

Figure 1.3.1 Location Map

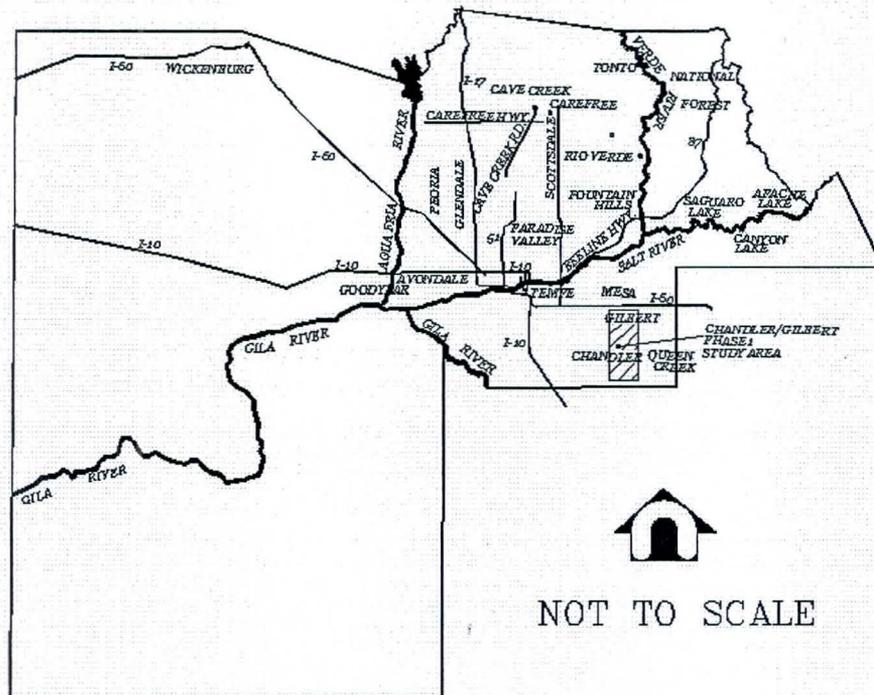
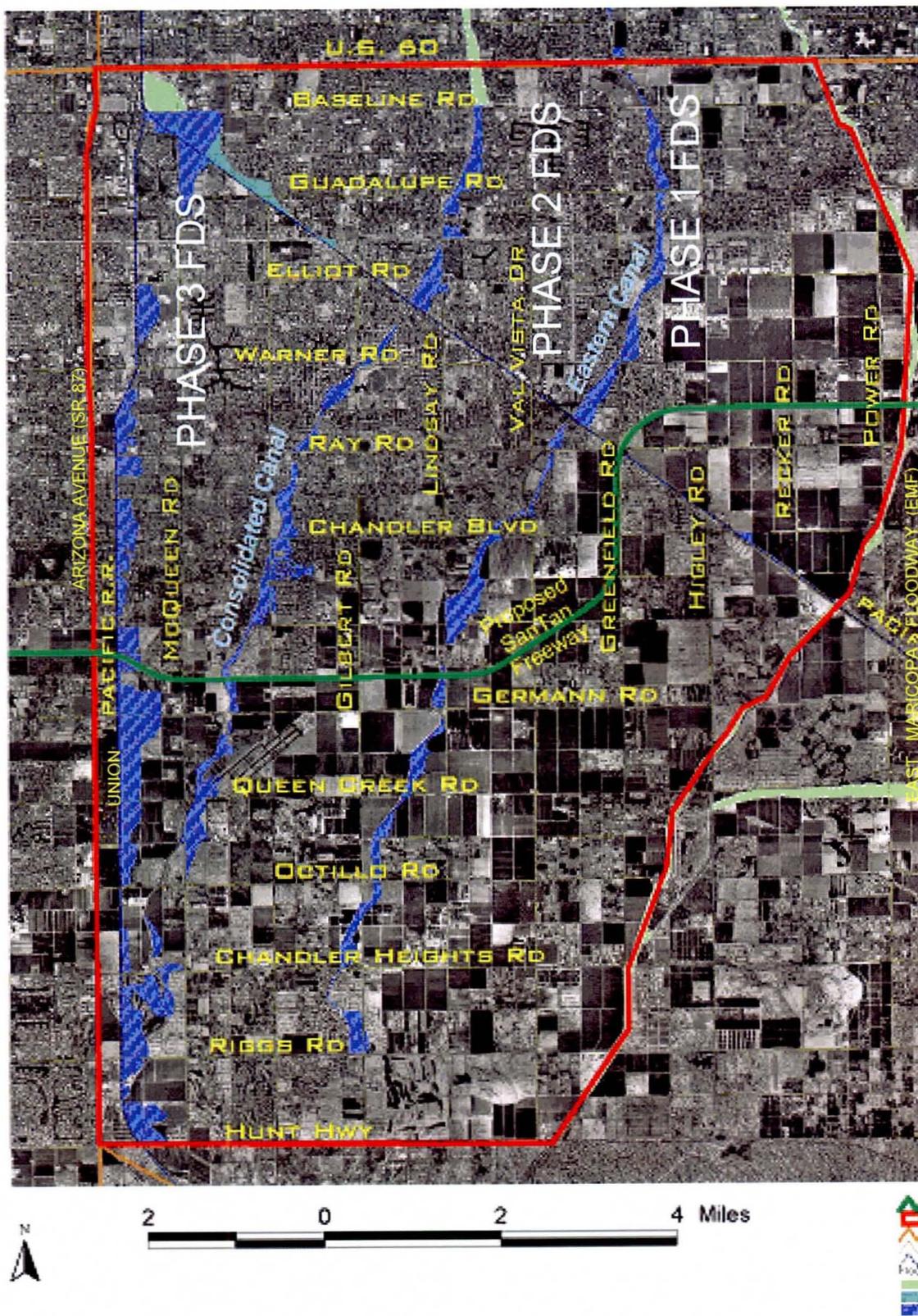


Figure 1.3.2 Vicinity Map



1.4 Methodology

1.4.1 Hydrology

The U.S. Army Corp of Engineers computer program HEC-1, Version 4.1, was used to determine the peak flows at structures, major road crossings, confluences and control features along the canals and railroads within the study area. Phase 3 was divided into two (2) sections, Phase 3-North and South, with the boundary between the two generally being Cooper Road and Elliot Road. Separate HEC-1 models were prepared for each section. The watershed receives weir flow that spills across the Consolidated Canal from the Phase 2 portion of this study and resulting hydrographs are read from the dss file. Please reference Section 4S.4.4 and 4N.4.4 for further discussion of the dss files.

The preparation of the input data necessary for the analysis included sub-basin delineation, determination of drainage path lengths, precipitation calculations, soil texture classification for the calculation of rainfall losses, and overland and channel flow lengths and slopes to generate the hydrographs. The District's DDMSW Version 2.1.0 software was used to develop sub-basin and routing parameters. The sub-basin delineation was based on 10 foot contour mapping provided by the FCDMC. Rainfall depths for the 100-year, 6-hour and 24-hour storms were determined from NOAA Atlas 2 (see Appendix DS & DN.1, Volume 2). The Clark Unit Hydrograph method was utilized to develop the unit hydrographs for each sub-basin. Soil and land use classifications were utilized to determine rainfall losses using the Green and Ampt Loss procedures. Normal-Depth routing was applied for routing of flow and storage routing was applied for areas of ponding.

Much of the floodplain within this study area consists of ponding areas along the upstream side of canals and other earthen embankment barrier structures. Stage-storage-discharge rating tables for these ponding areas were incorporated into the HEC-1 models and the resulting high-water elevations were used to map the extent of the floodplain. Refer to Sections 4S and 4N, Volume 2, for the hydrologic analyses.

1.4.2 Hydraulics

The U.S. Army Corp of Engineers computer program, HEC-RAS 3.1.3, was used to perform step-backwater profile calculations to determine detailed 100-year floodplain limits in areas of conveyance between ponding areas. Floodplain limits were drafted using Autodesk Land Desktop. Cross section locations are shown on Exhibit F, in Volume 4. Refer to Sections 5S and 5N, Volume 3, for a more detailed description of the hydraulic analyses.

1.5 Study Results

1.5.1 Final Hydrologic Results

Separate models for the Phase 3 – South and North were generated for the 100-year, 6-hour and 24-hour storm duration events. The floodplains were delineated for each pond using the maximum ponding water surface elevation between the two storm durations. A Summary of

HEC-1 Ponding Results is included in Section DS4 and Table 4S.6 provides a Summary of Discharge Rates by storm duration at each HEC-1 identifier.

The detailed floodplain delineation is shown in the reduced-scale maps in Section 5S & 5N, located in Volume 3, and in full-scale maps contained in Exhibit F, located in Volume 4 of this TDN.

1.5.2 Verification of Results

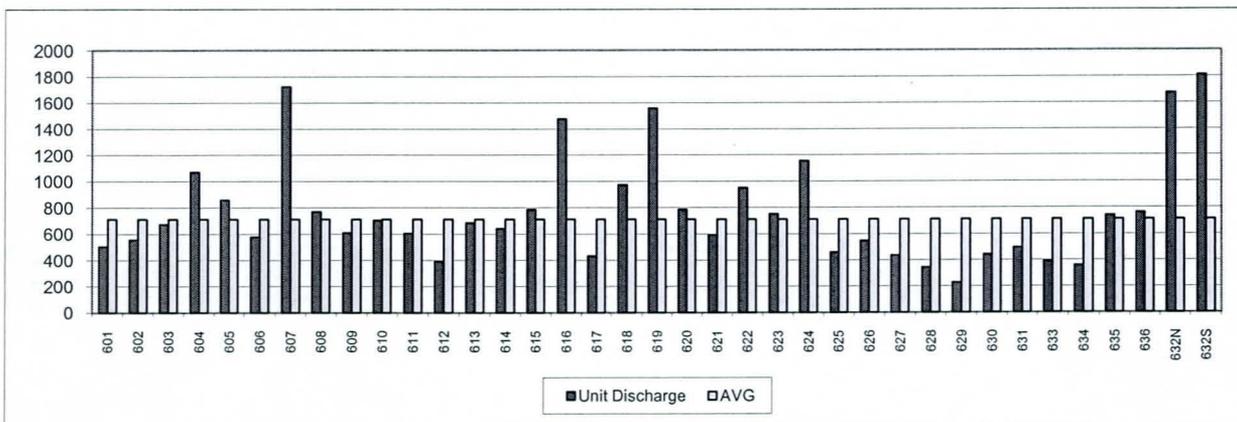
The peak flow rates generated as runoff at the sub-basin level for Phase 3, UPRR/ Arizona Avenue Watershed, were verified using the methods described below:

- The Phase 3 discharge results are compared at each sub basin with the average of all sub basins in the form of discharge per square mile. The unit discharge rates appear reasonable when compared to other sub basins within the study watershed. The comparison data summary sheets with the details of the results of these comparisons are located on the next pages, one sheet for the North region and one for the South region.
- The Phase 3 results were plotted against three envelope curves; USGS Comparative Graphs for Central Arizona (12) Region, Malvick's Comparative Graph, and Boughton's Comparative Graph. The FCDMC DDMSW program was used to produce each of the graphs. Both peak flows vs. drainage area and unit discharge vs. drainage area were plotted. These plots are located on the following pages. Graphs labeled CGFDSP3N are the results from the Phase 3, North HEC-1 model. Graphs labeled MARI40_SW are the results from the Phase 3, South HEC-1 model for the 24-hour storm, while MARI40_SW6HR is used for the 6-hour storm.

Generally, the results fall below the envelope curves, which are explained by the very flat slopes and retention diversions.

Figure 1.5.2 Verification of Results
 Chandler/Gilbert FDS Phase 3 South
 HEC-1 Unit Discharge Check

Sub Basin	Q	Area	Unit Discharge	AVG
	cfs	mi ²	cfs/mi ²	cfs/mi ²
601	256	0.51	502	712
602	283	0.51	555	712
603	202	0.30	673	712
604	214	0.20	1070	712
605	429	0.50	858	712
606	219	0.38	576	712
607	224	0.13	1723	712
608	883	1.15	768	712
609	231	0.38	608	712
610	381	0.54	706	712
611	175	0.29	603	712
612	102	0.26	392	712
613	144	0.21	686	712
614	269	0.42	640	712
615	291	0.37	786	712
616	251	0.17	1476	712
617	95	0.22	432	712
618	311	0.32	972	712
619	187	0.12	1558	712
620	55	0.07	786	712
621	302	0.51	592	712
622	95	0.10	950	712
623	451	0.60	752	712
624	150	0.13	1154	712
625	193	0.42	460	712
626	71	0.13	546	712
627	91	0.21	433	712
628	93	0.27	344	712
629	59	0.26	227	712
630	141	0.32	441	712
631	148	0.30	493	712
633	90	0.23	391	712
634	25	0.07	357	712
635	111	0.15	740	712
636	114	0.15	760	712
632N	251	0.15	1673	712
632S	471	0.26	1812	712



Chandler/Gilbert FDS Phase 3 North
 HEC-1 Unit Discharge Check

SB	PF	SQM	CFS/SQM	AVG
500	561	1.100	510	716
501	716	1.232	581	716
502	589	1.016	580	716
503	1377	1.428	964	716
504	319	0.322	991	716
505	29	0.038	763	716
506	197	0.347	568	716
508	308	0.487	632	716
509	319	0.370	862	716
510	142	0.130	1092	716
511	325	0.471	690	716
512	124	0.205	605	716
513	30	0.059	508	716
516	196	0.361	543	716
517	302	0.356	848	716
518	301	0.469	642	716
519	171	0.247	692	716
521	285	0.346	824	716
522	428	0.706	606	716
523	217	0.251	865	716
524	236	0.364	648	716
525	132	0.218	606	716

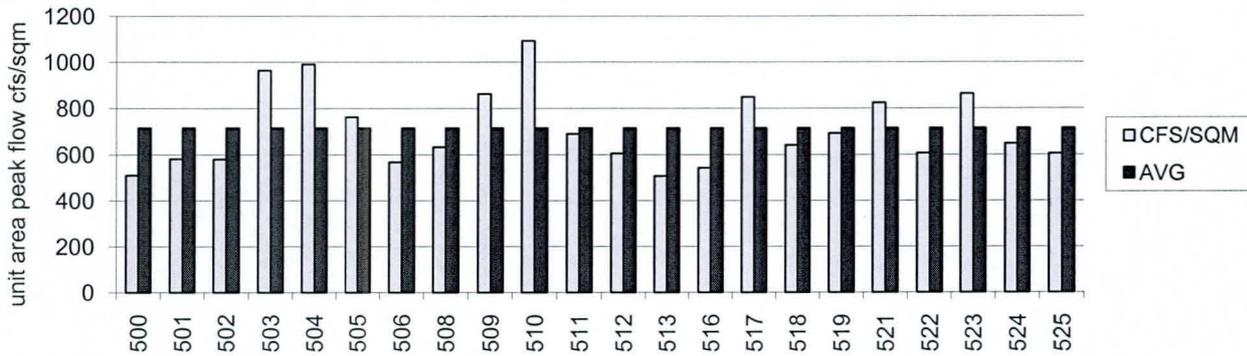
Notes:

Sub-basins 504 and 510 are small and have shorter times of concentration. Shorter Tc may cause higher unit discharge.

The concentration point of sub-basin 503 is not located exactly as shown in the exhibits. It is located near the intersection of McQueen and the RR. When the stormwater piles high enough around this intersection, it starts flow into the ADOT basin to the northwest. The ADOT basin is designated as the concentration point on the exhibits and schematics because the ADOT basin is the lowest point in this sub-basin. It is not the concentration point for modeling. The short flow path (therefor a short Tc) caused the higher unit discharge.

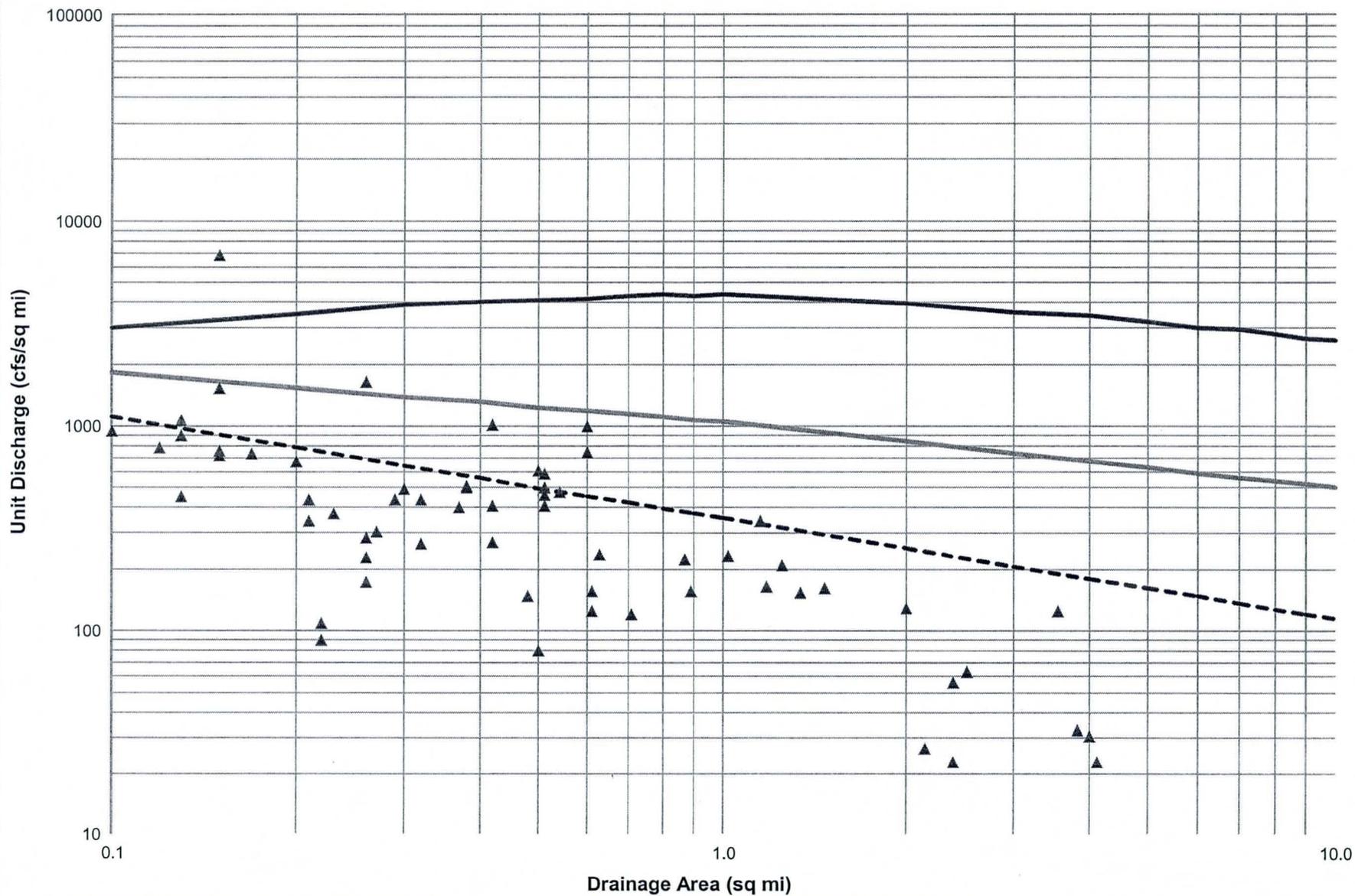
There can be some different ways to model the Zone AH at sub-basin 503. Finally, it is the storm water volume flowing toward 503 that determines the final water surface elevation. Peak flows are not important.

HEC1 sub-basin unit area peak flow check for Phase 3





100 Year Unit Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
MARI40_SW_6HR - Basin: 01



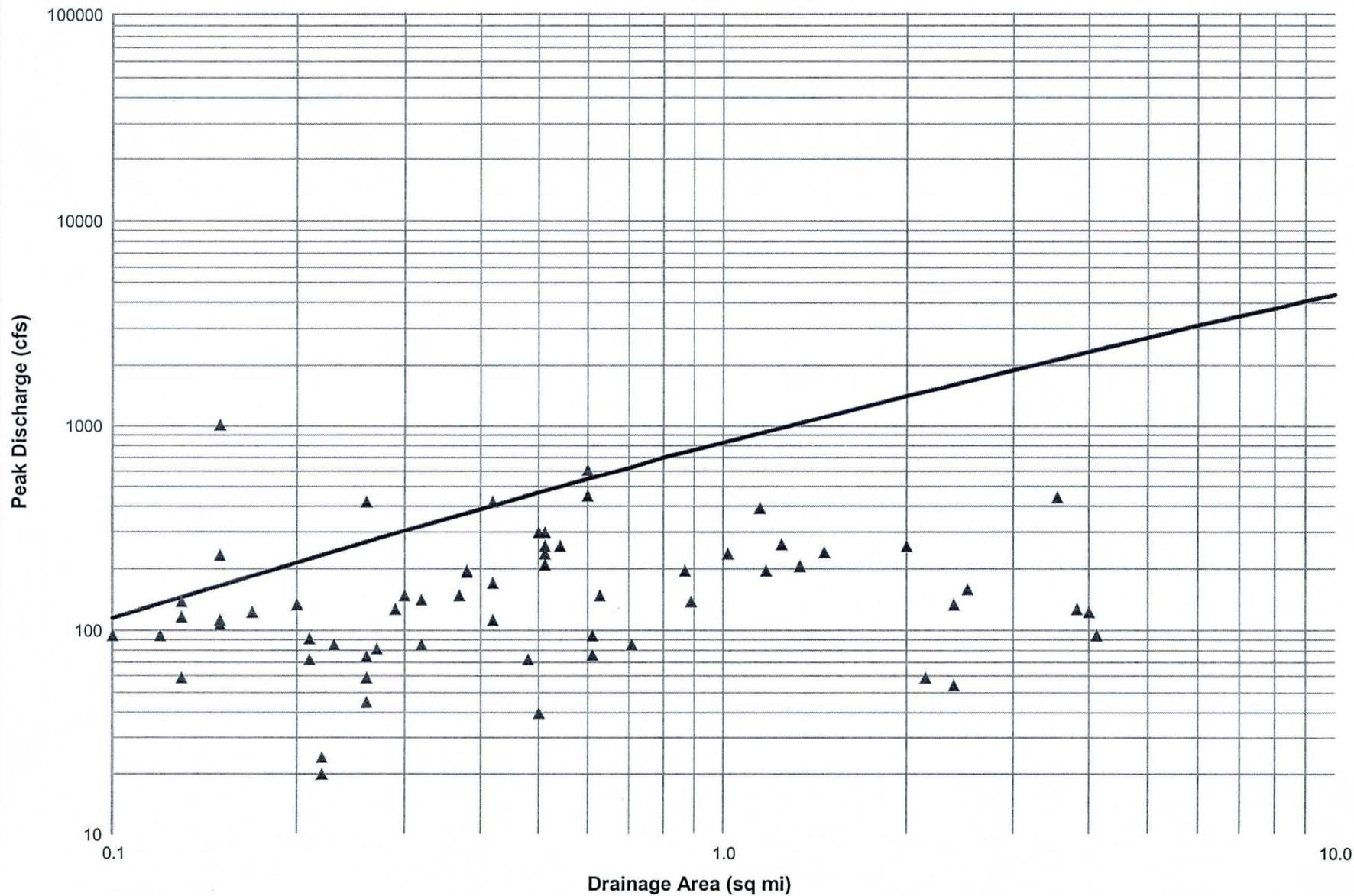
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· · · Low-Mid Elevation

▲ Sub Basins and Combined Flows

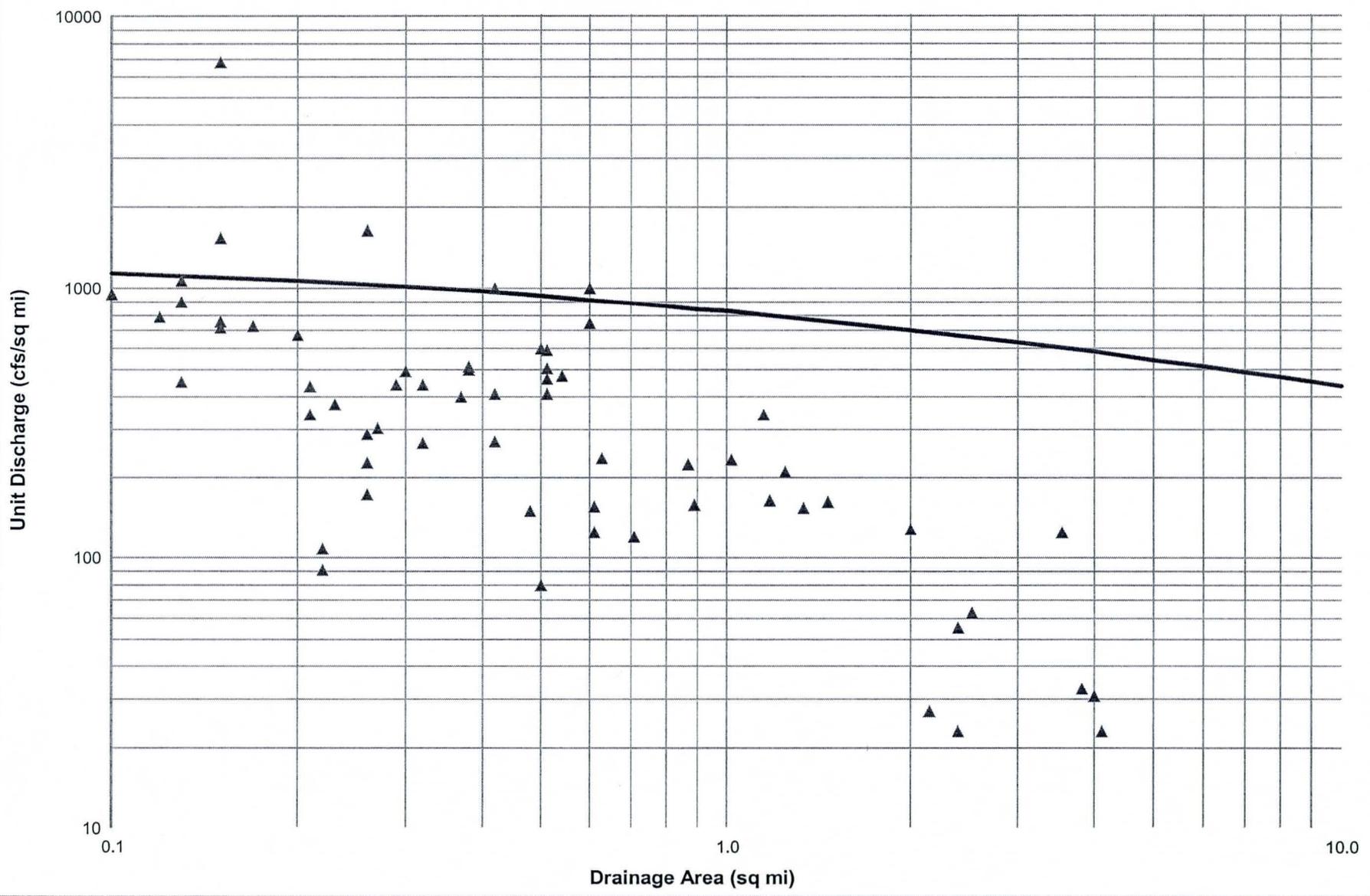
100 Year Peak Discharge - Drainage Area
Malvick's Comparative Graph
MARI40_SW_6HR - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

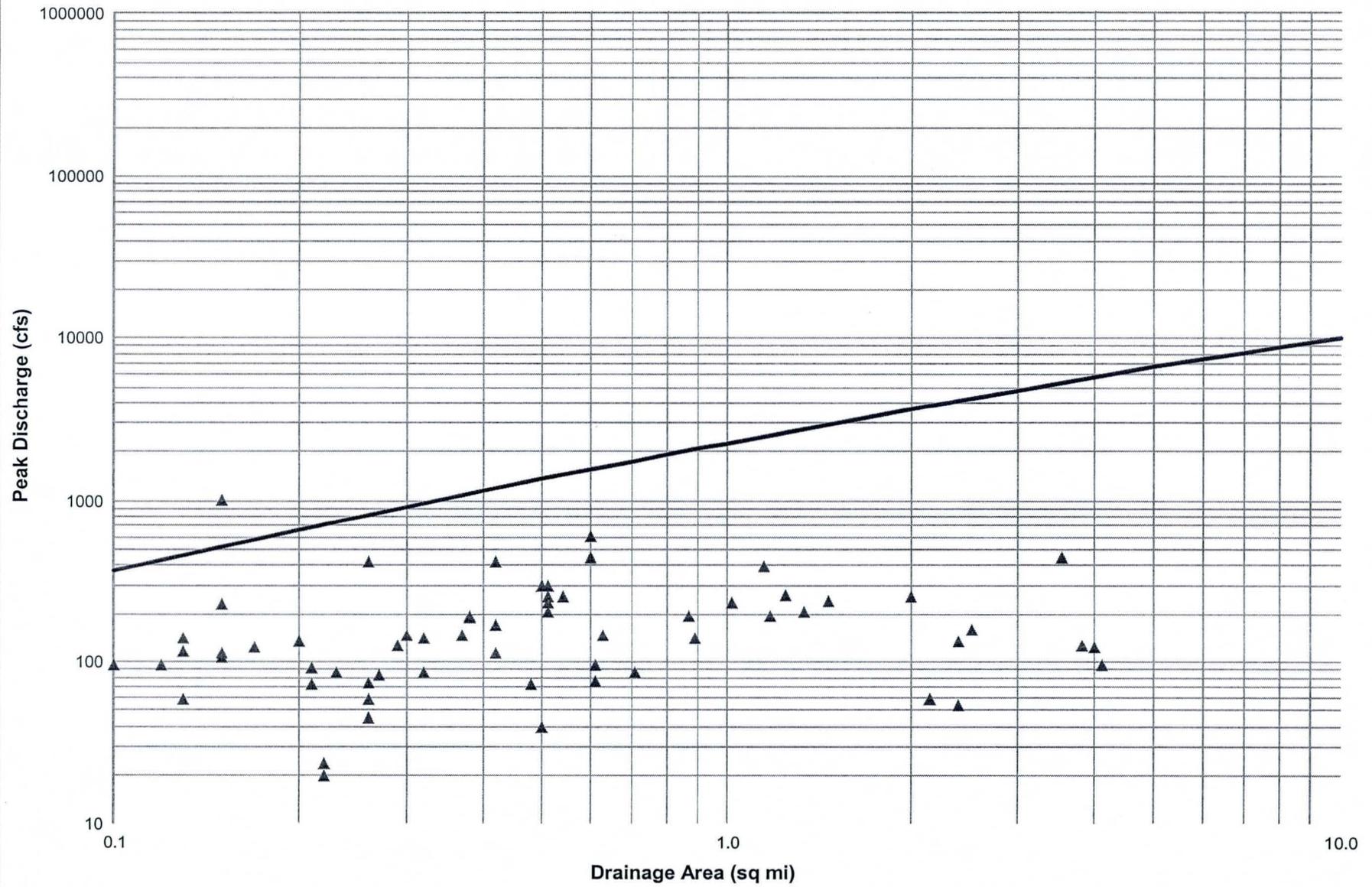
100 Year Unit Discharge - Drainage Area
Malvick's Comparative Graph
MARI40_SW_6HR - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

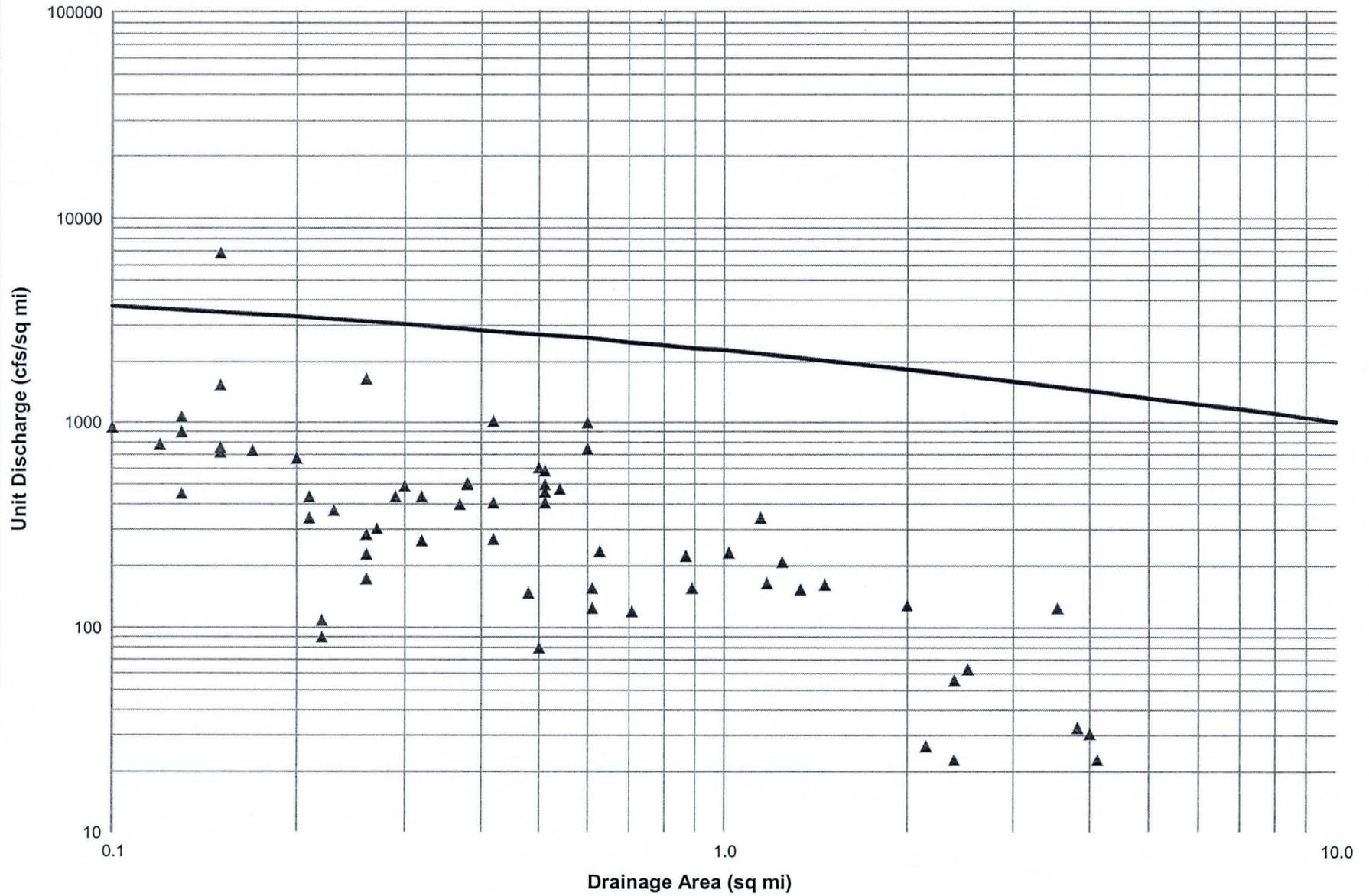
100 Year Peak Discharge - Drainage Area
Boughton's Comparative Graph
MARI40_SW_6HR - Basin: 01



— Boughton's Envelope Curve

▲ Sub Basins and Combined Data

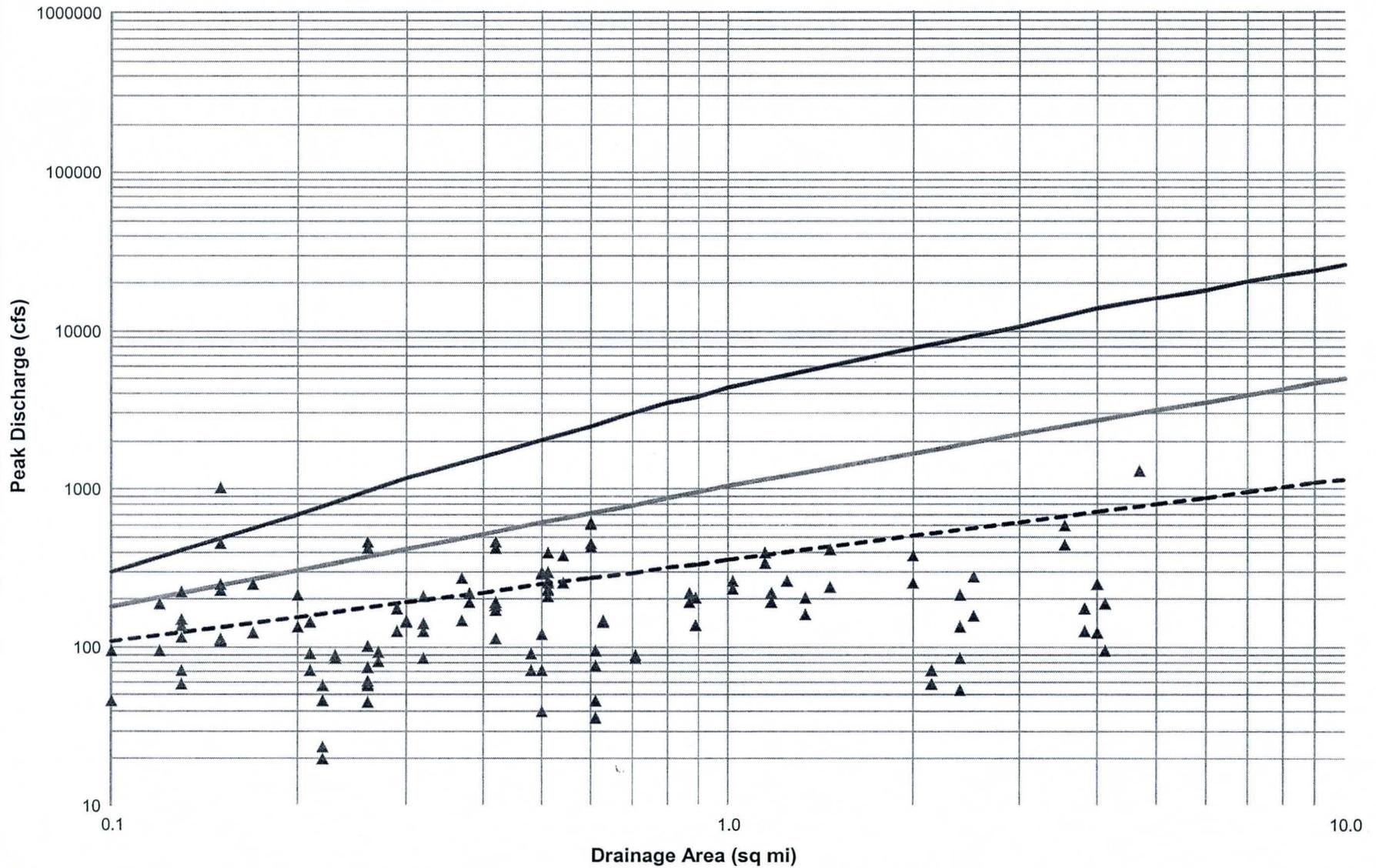
100 Year Unit Discharge - Drainage Area
Boughton's Comparative Graph
MARI40_SW_6HR - Basin: 01



— Boughton's Envelope Curve

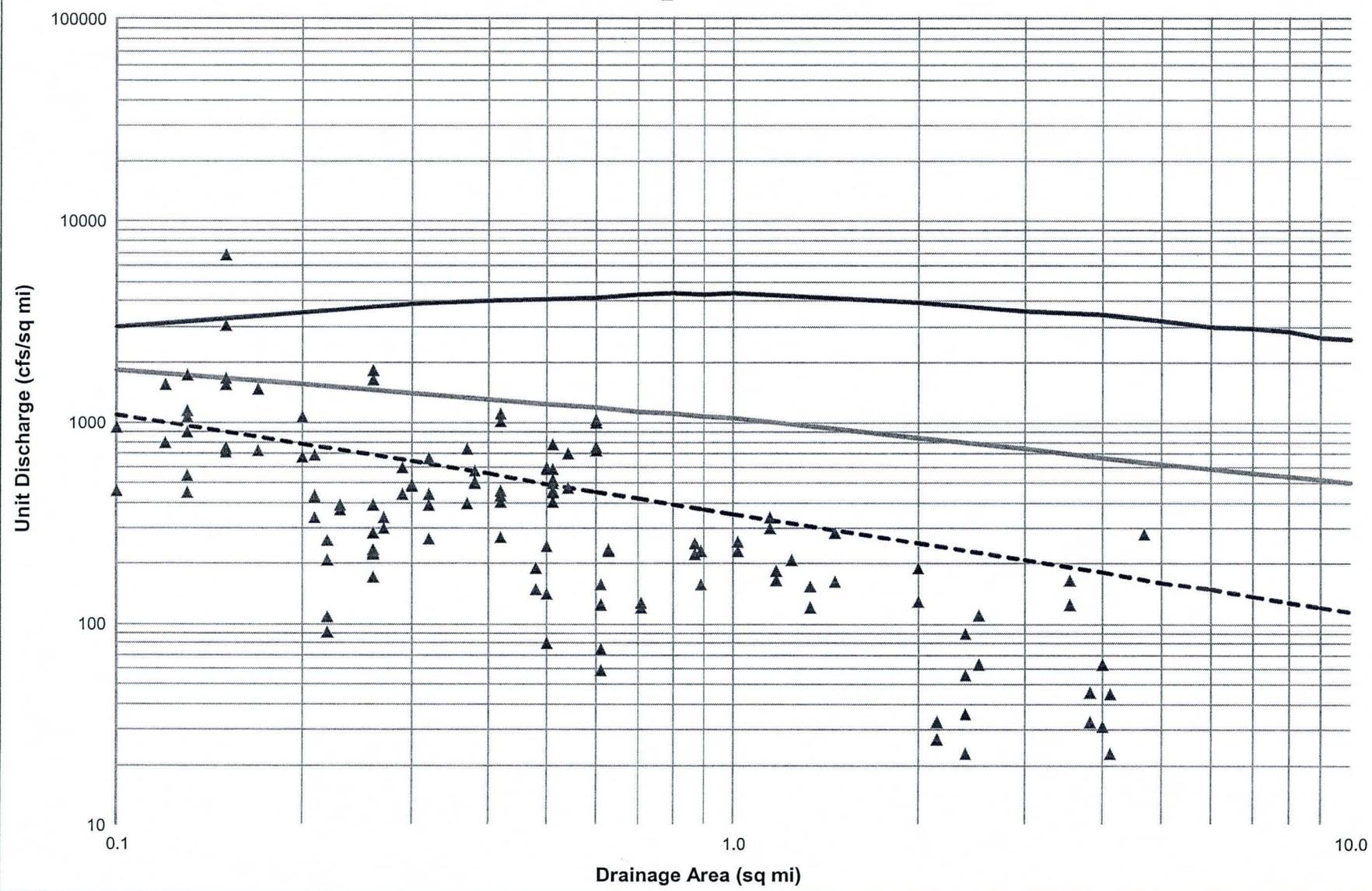
▲ Sub Basins and Combined Data

100 Year Peak Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
MARI40_SW - Basin: 01



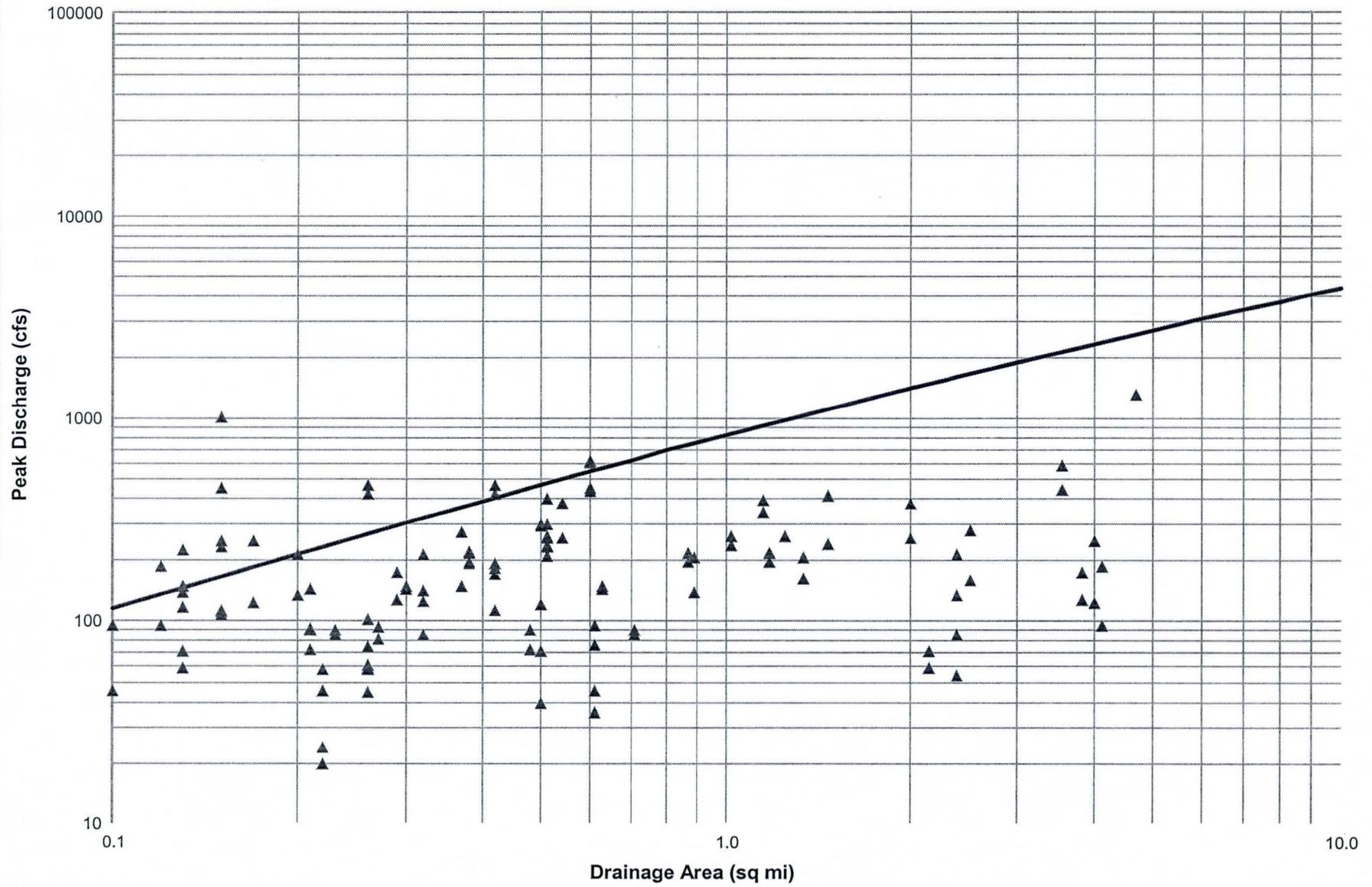
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100 Year Unit Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
MARI40_SW - Basin: 01



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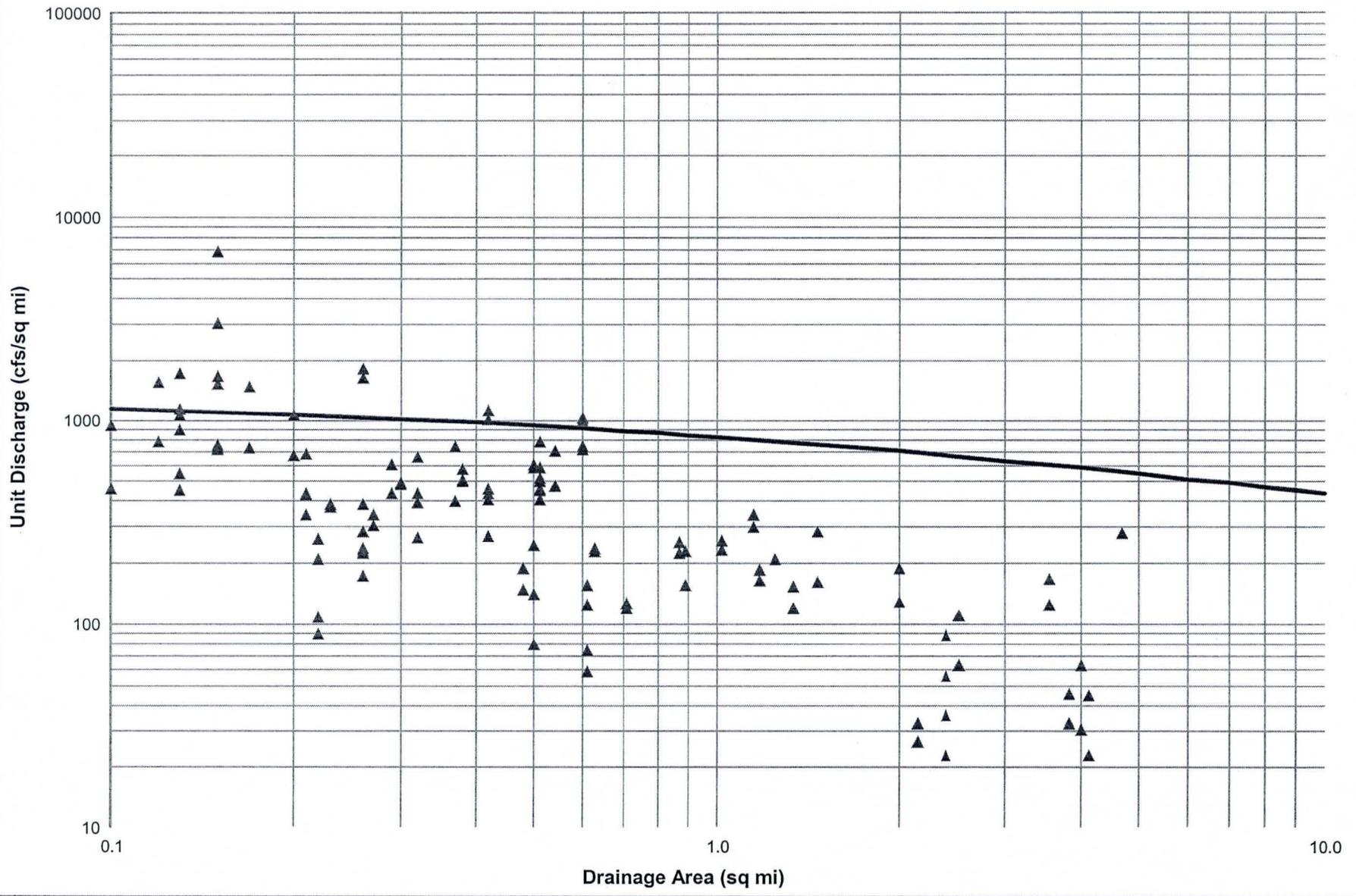
100 Year Peak Discharge - Drainage Area
Malvick's Comparative Graph
MARI40_SW - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

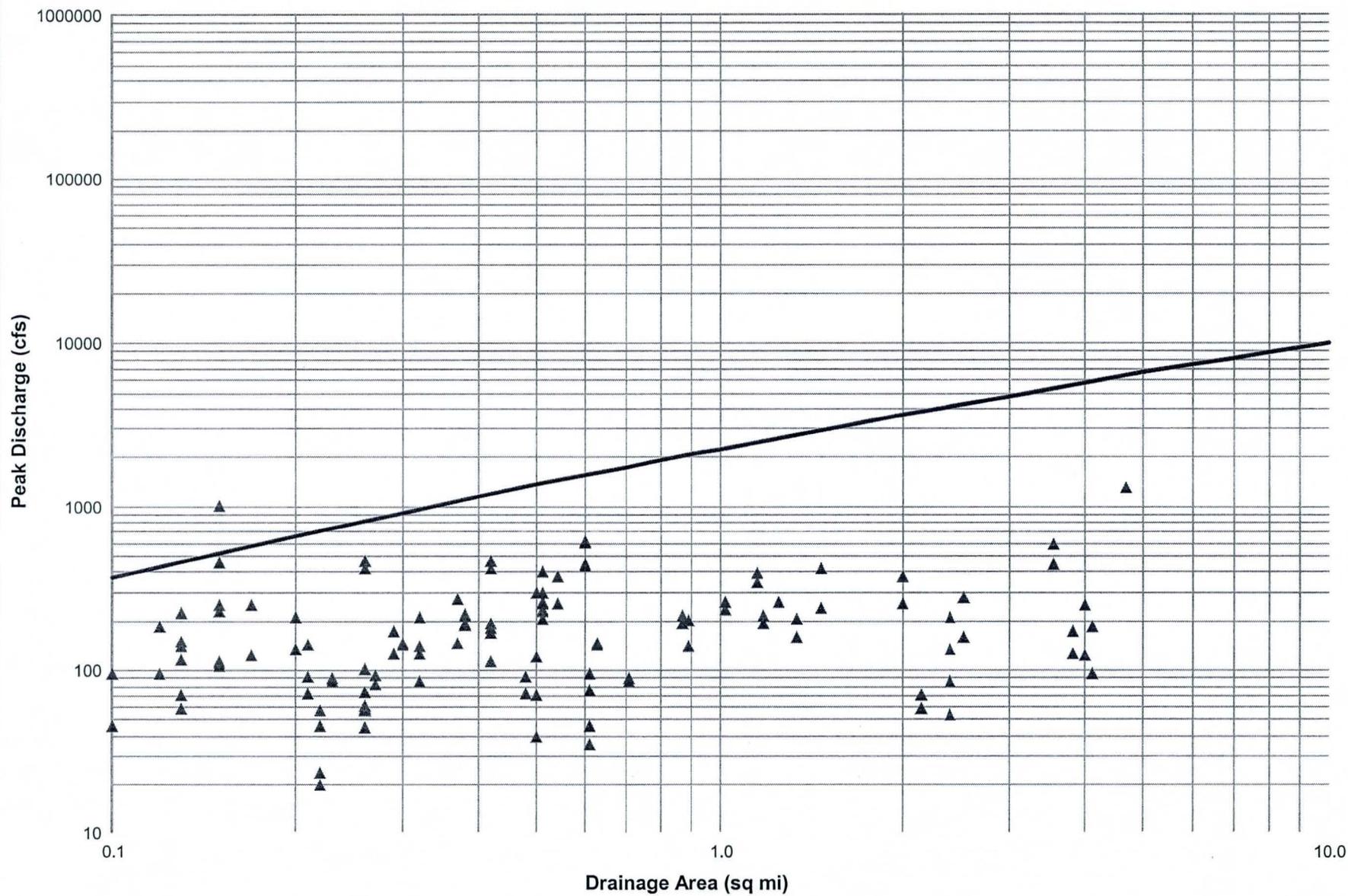
100 Year Unit Discharge - Drainage Area
Malvick's Comparative Graph
MARI40_SW - Basin: 01



— Malvick's Envelope Curve

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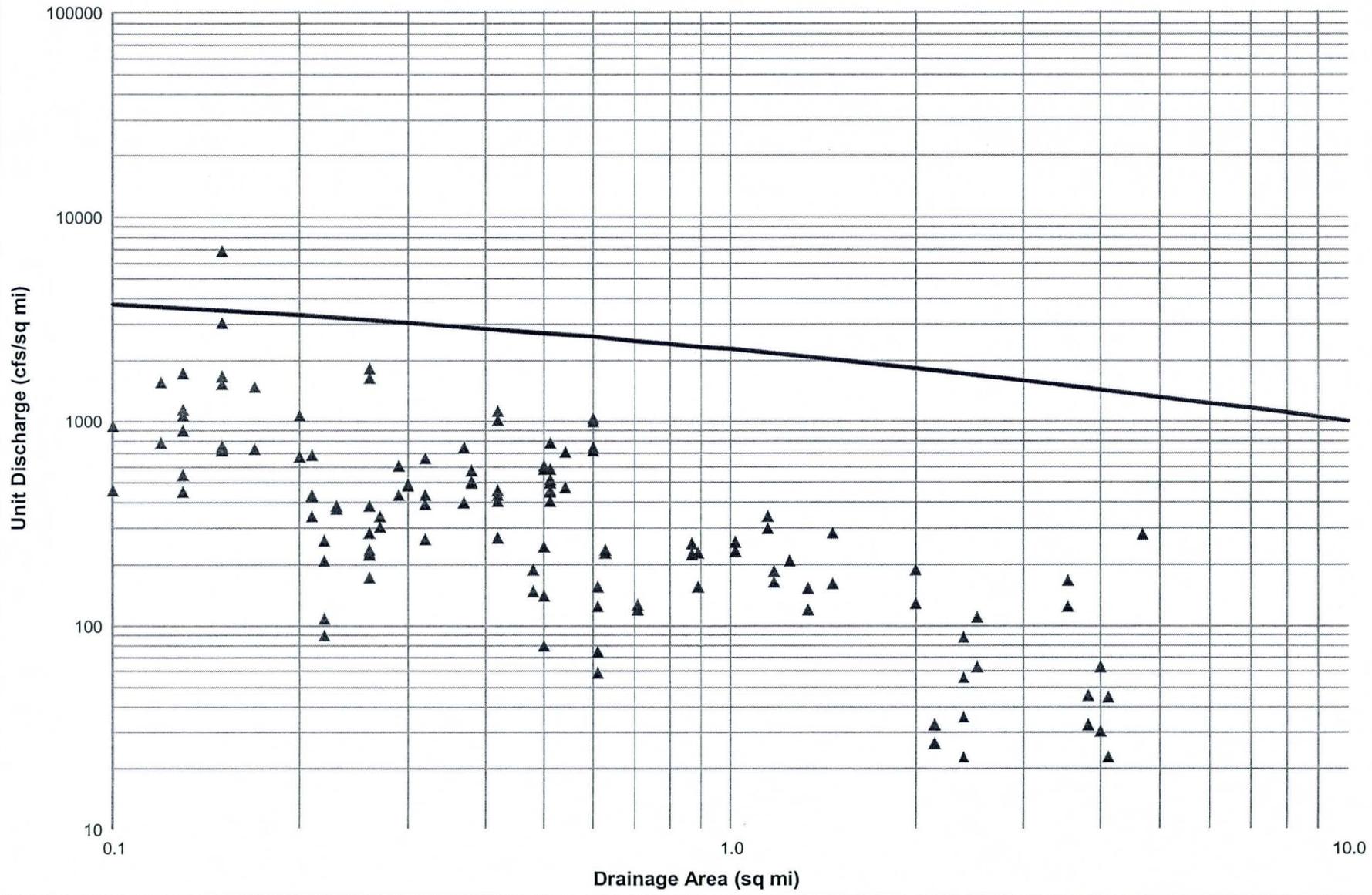
100 Year Peak Discharge - Drainage Area
Boughton's Comparative Graph
MARI40_SW - Basin: 01



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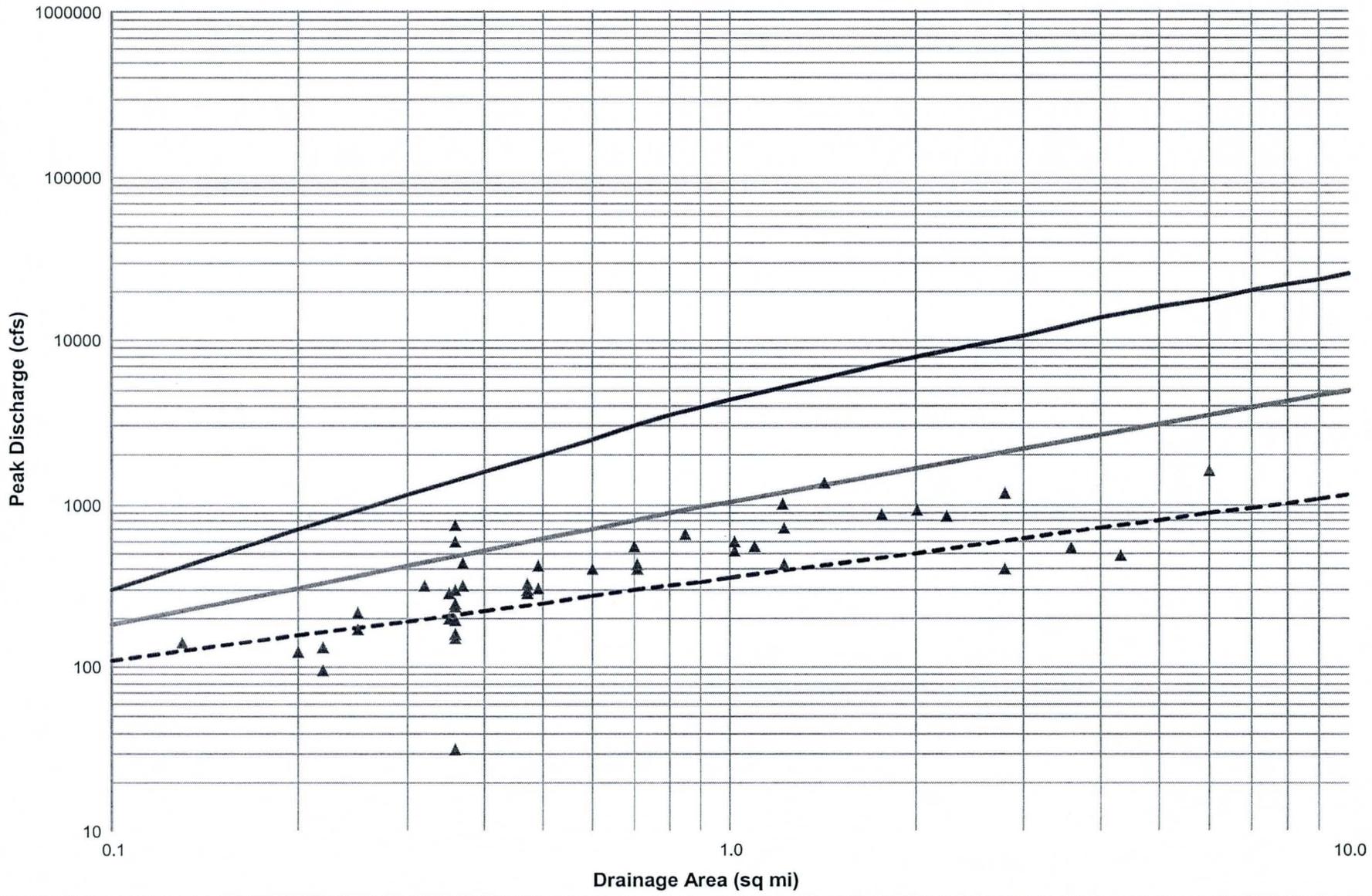


— Boughton's Envelope Curve

▲ Sub Basins and Combined Data

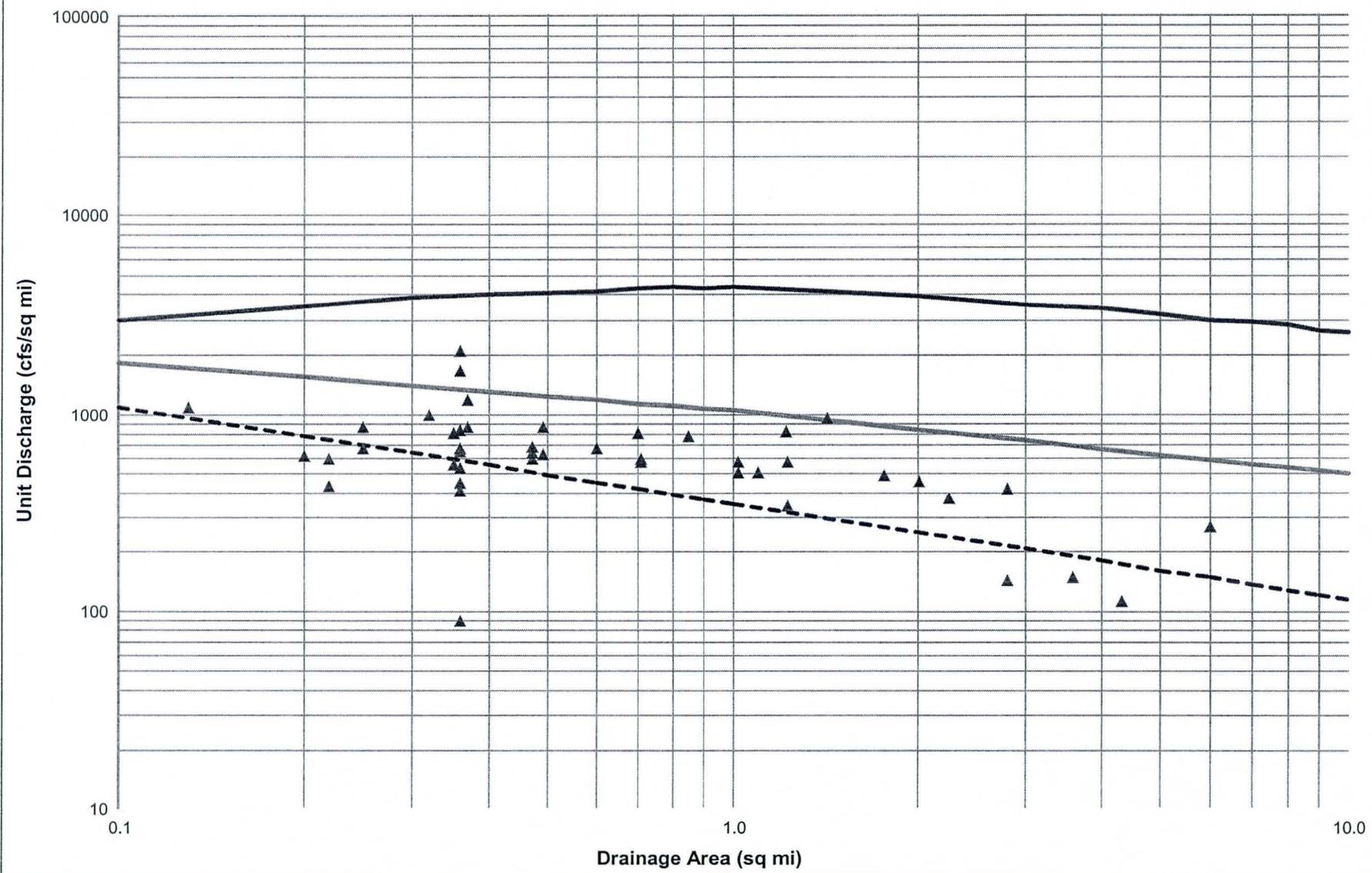


100 Year Peak Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
CGFDS3N-6 - Basin: 01



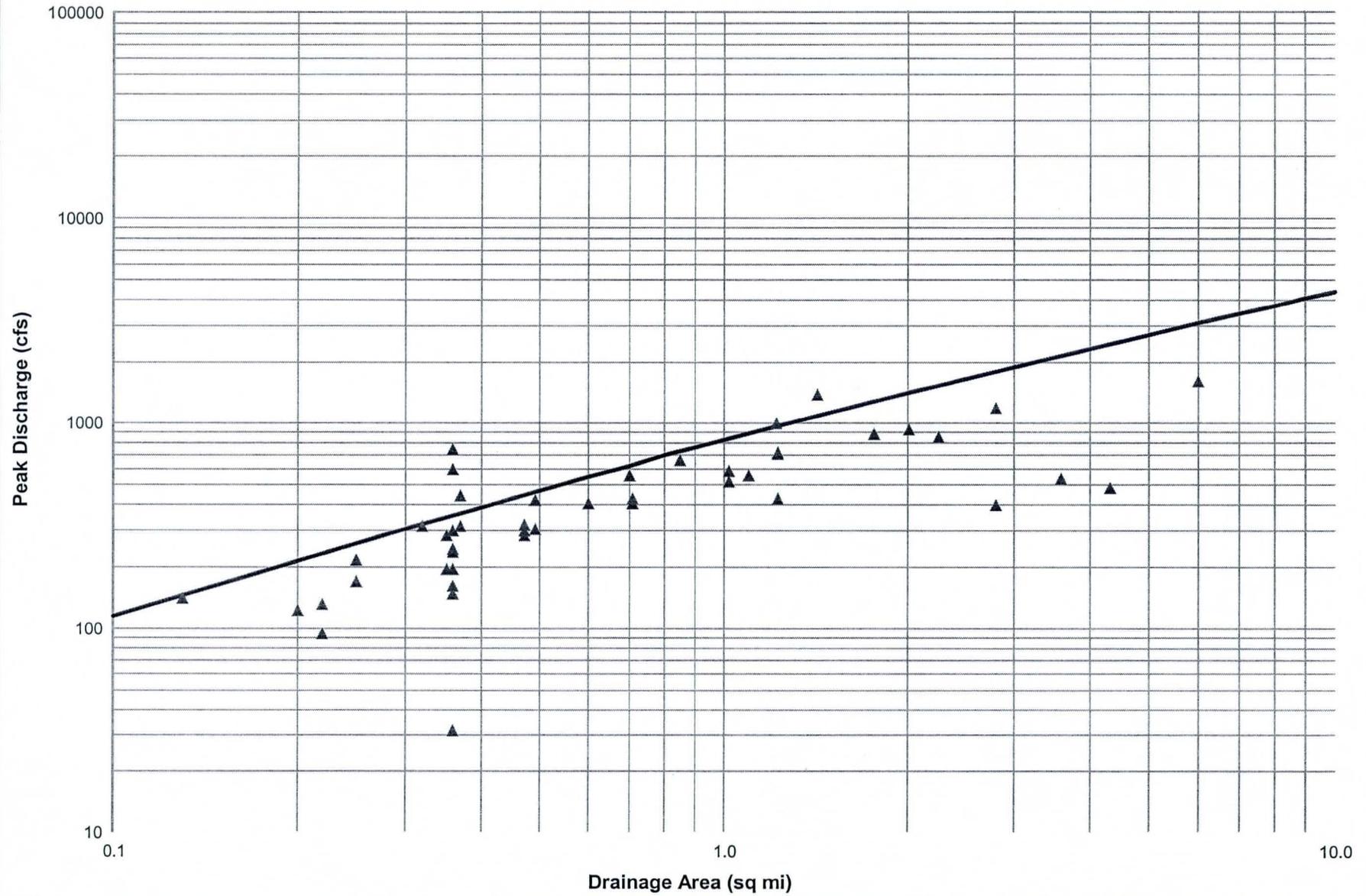
— Envelope — Region - - Low-Mid Elevation ▲ Sub Basins and Combined Flows

100 Year Unit Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
CGFDS3N-6 - Basin: 01



— Envelope — Region - - - Low-Mid Elevation ▲ Sub Basins and Combined Flows

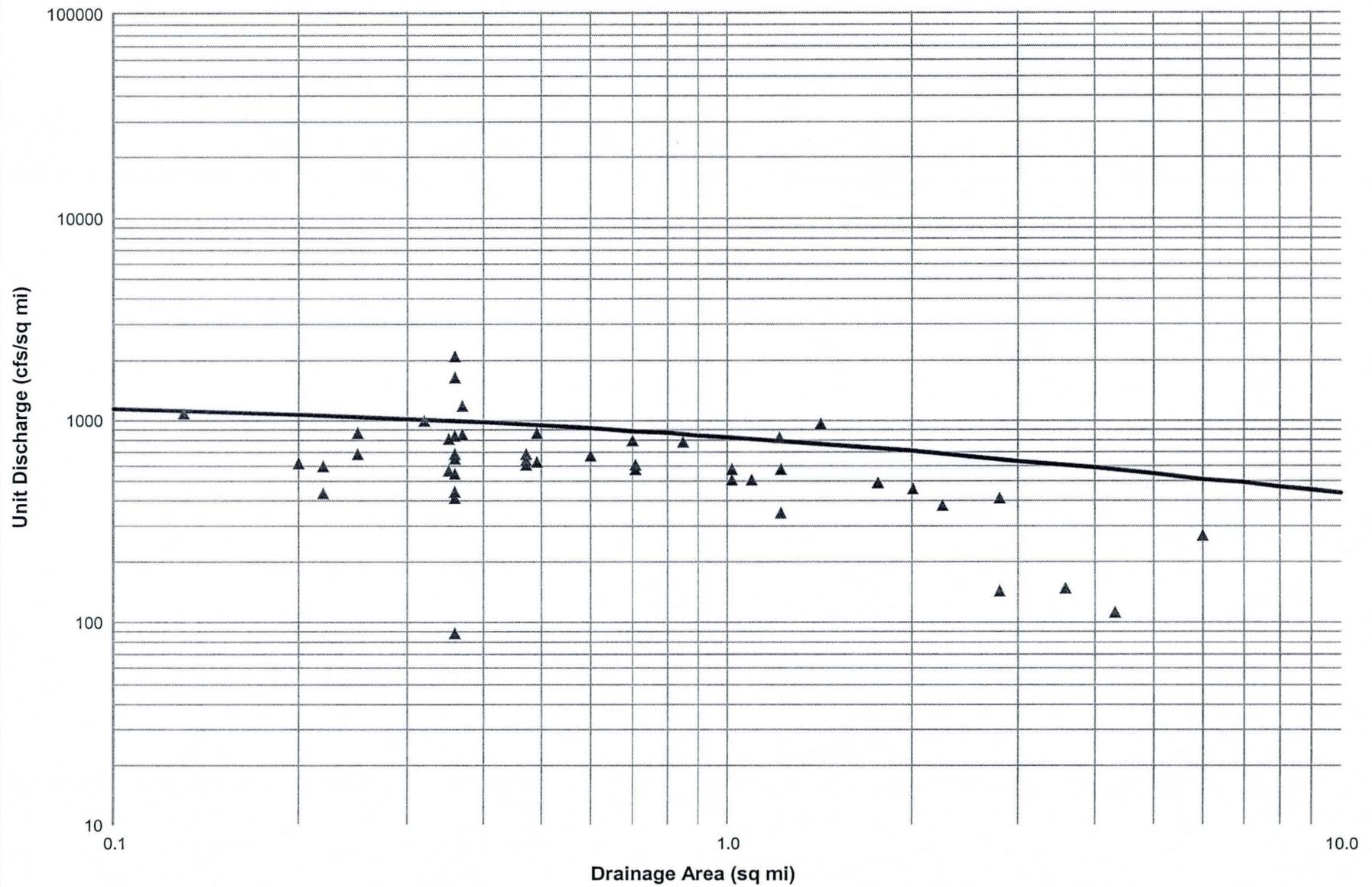
100 Year Peak Discharge - Drainage Area
Malvick's Comparative Graph
CGFDS3N-6 - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

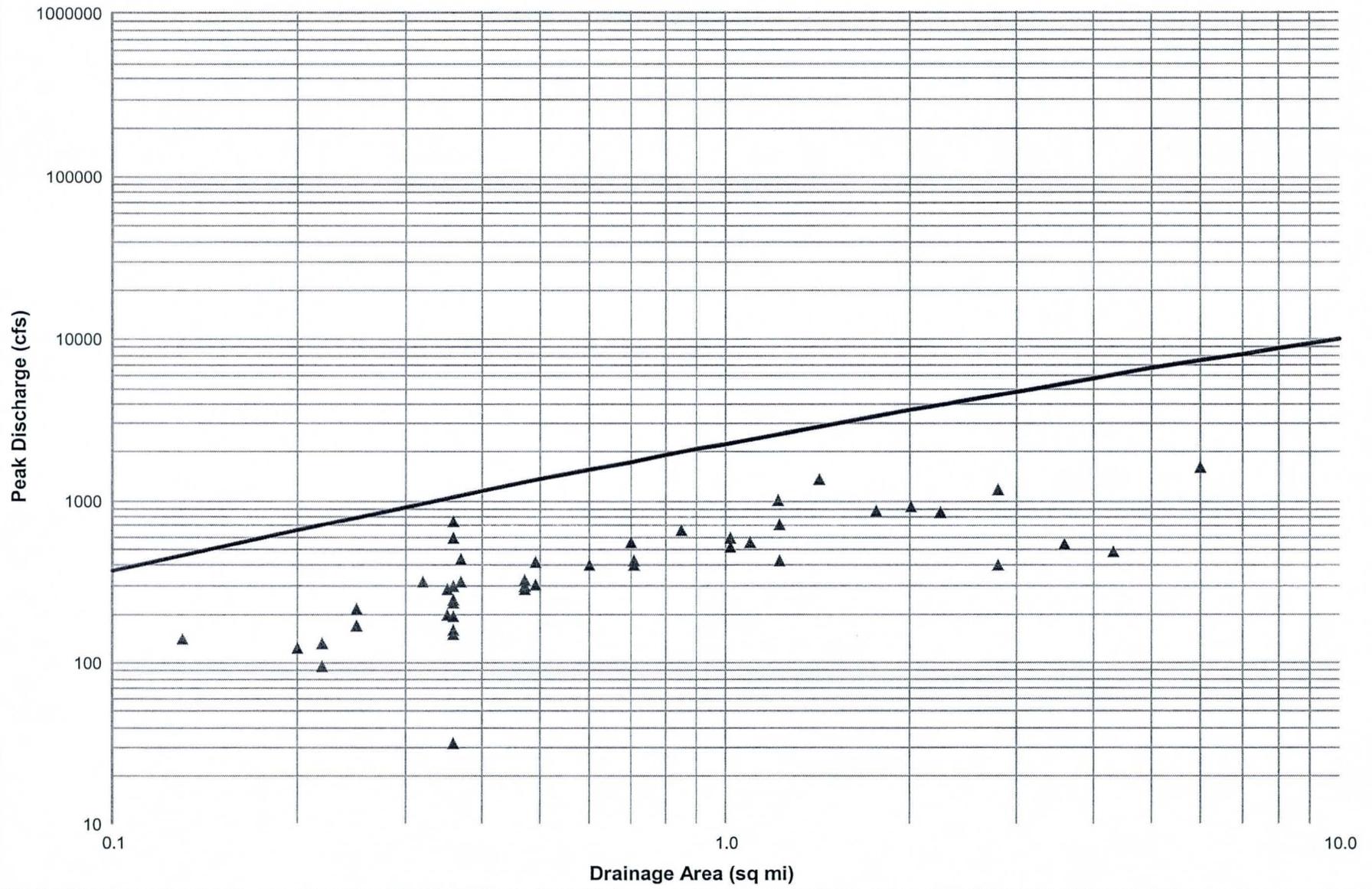
100 Year Unit Discharge - Drainage Area
Malvick's Comparative Graph
CGFDS3N-6 - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

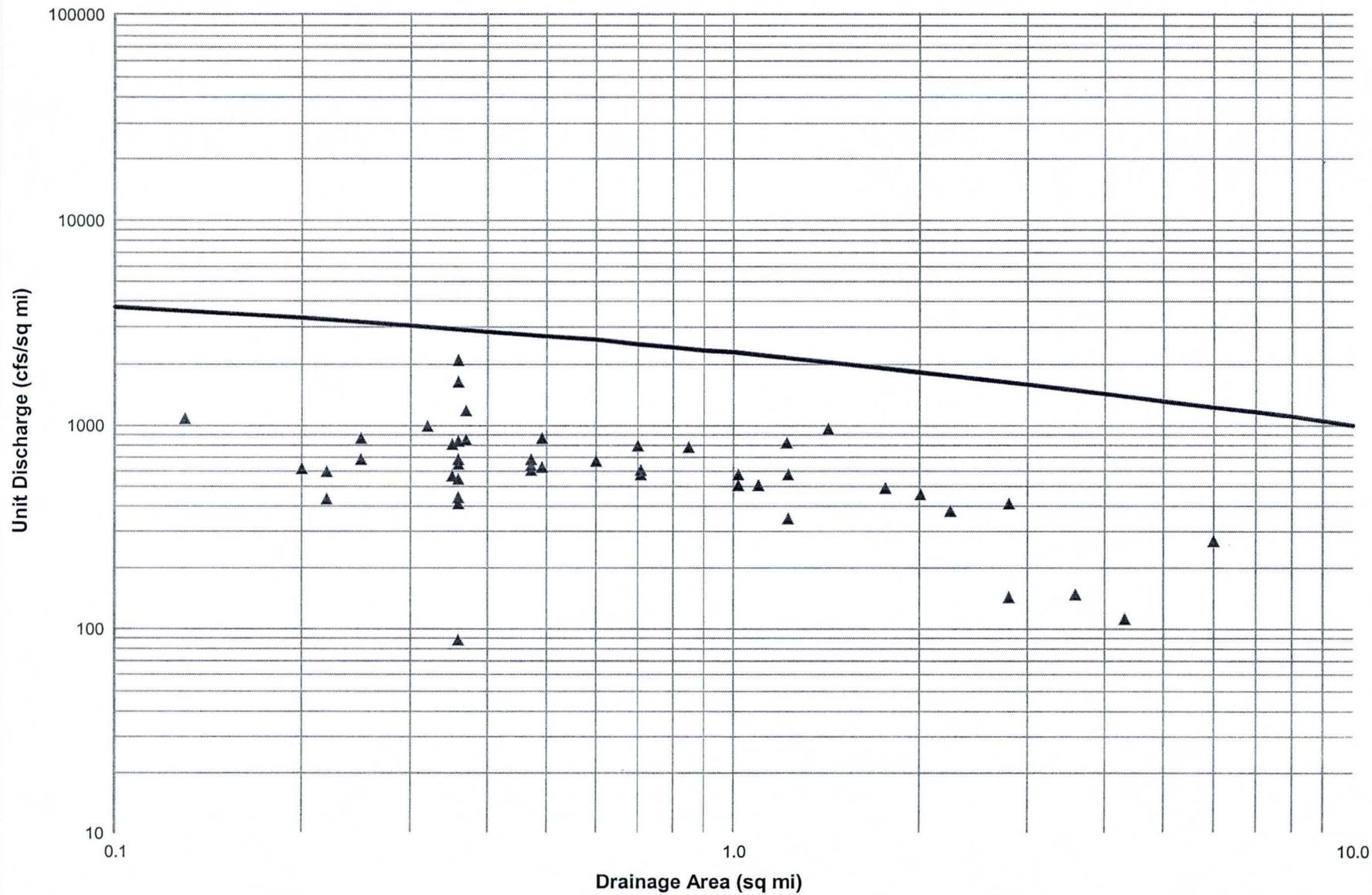
100 Year Peak Discharge - Drainage Area
Boughton's Comparative Graph
CGFDS3N-6 - Basin: 01



— Boughton's Envelope Curve

▲ Sub Basins and Combined Data

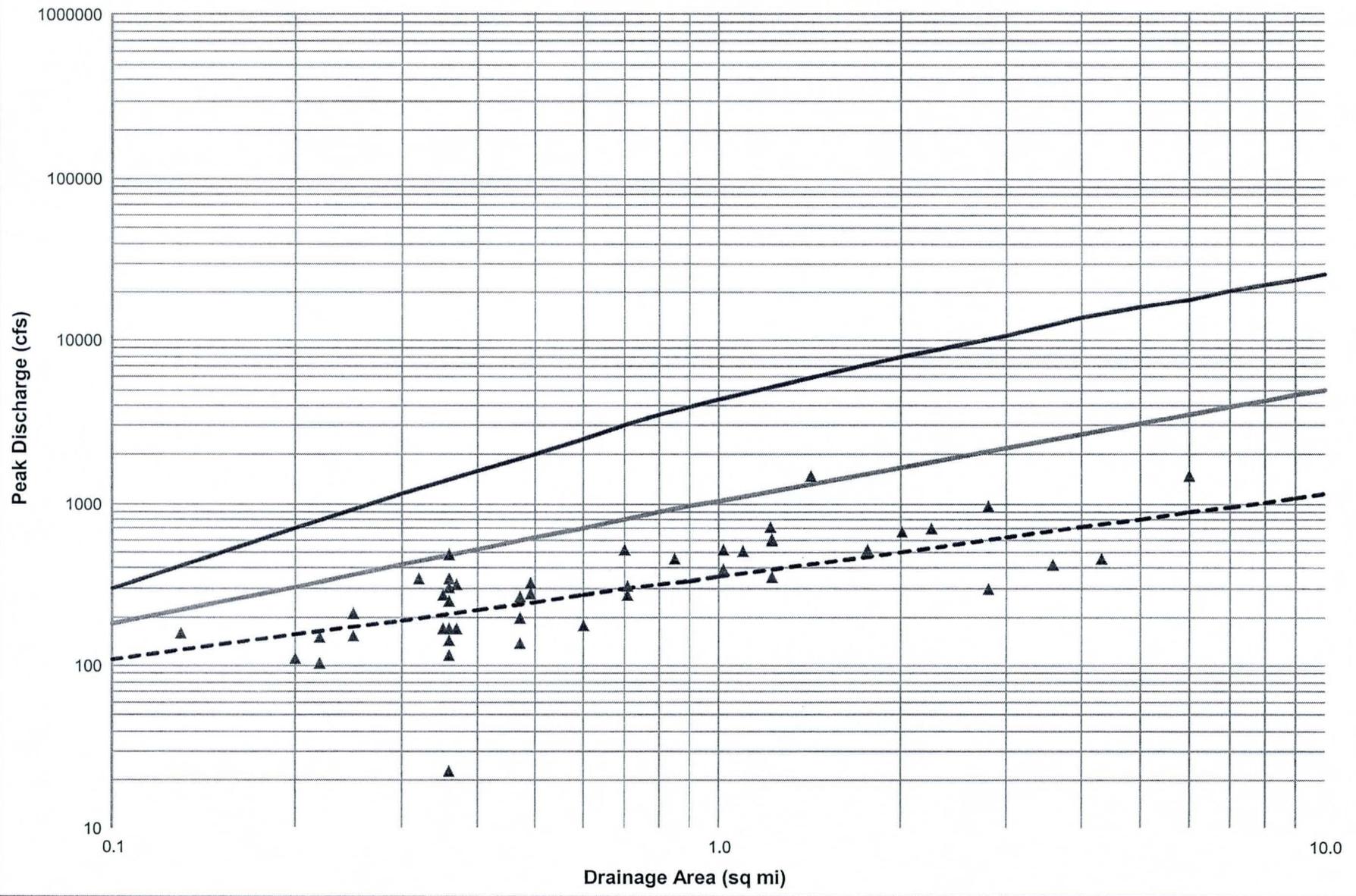
100 Year Unit Discharge - Drainage Area
Boughton's Comparative Graph
CGFDS3N-6 - Basin: 01



— Boughton's Envelope Curve

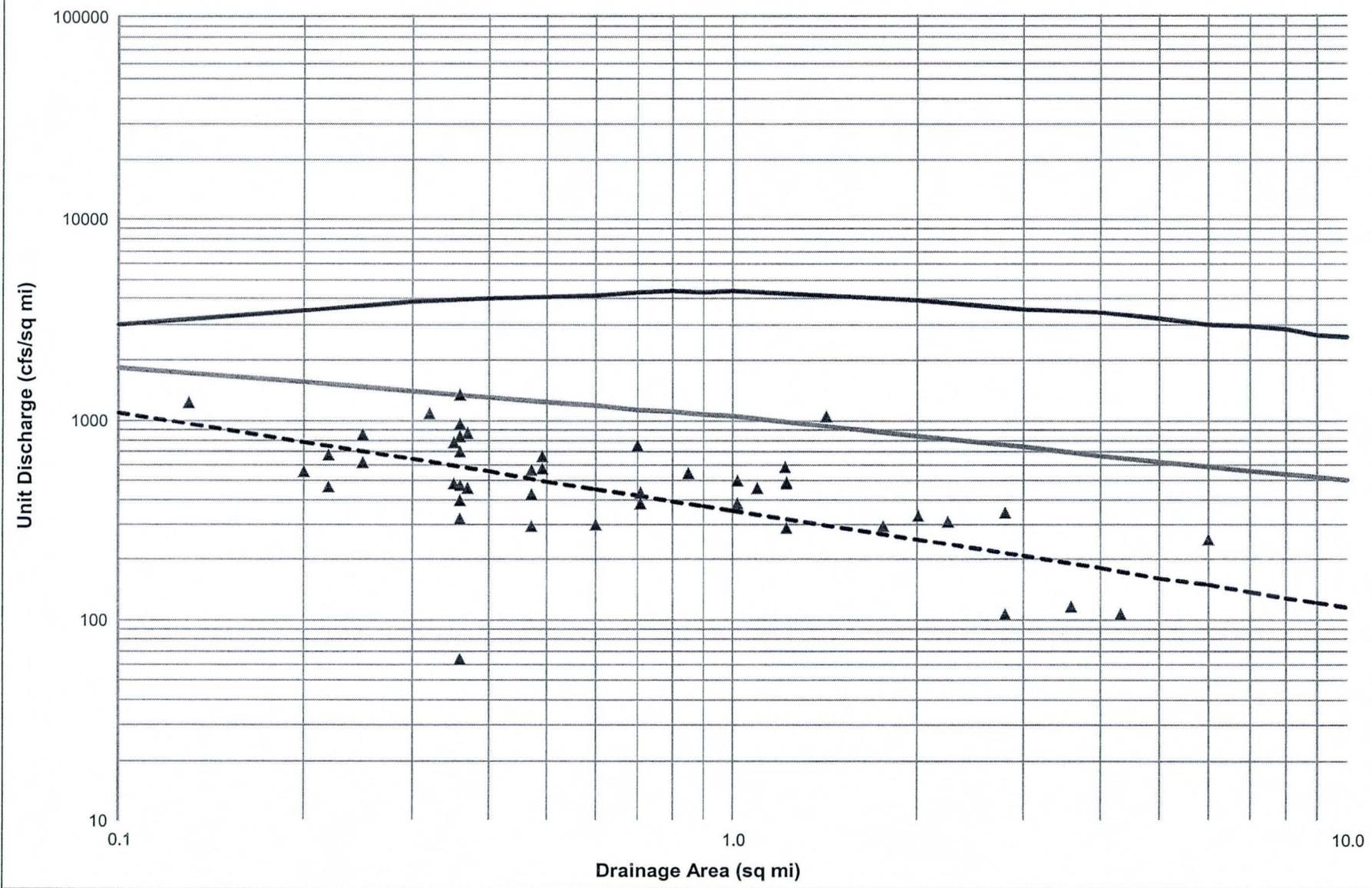
▲ Sub Basins and Combined Data

100 Year Peak Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
CGFDS3N-24 - Basin: 01



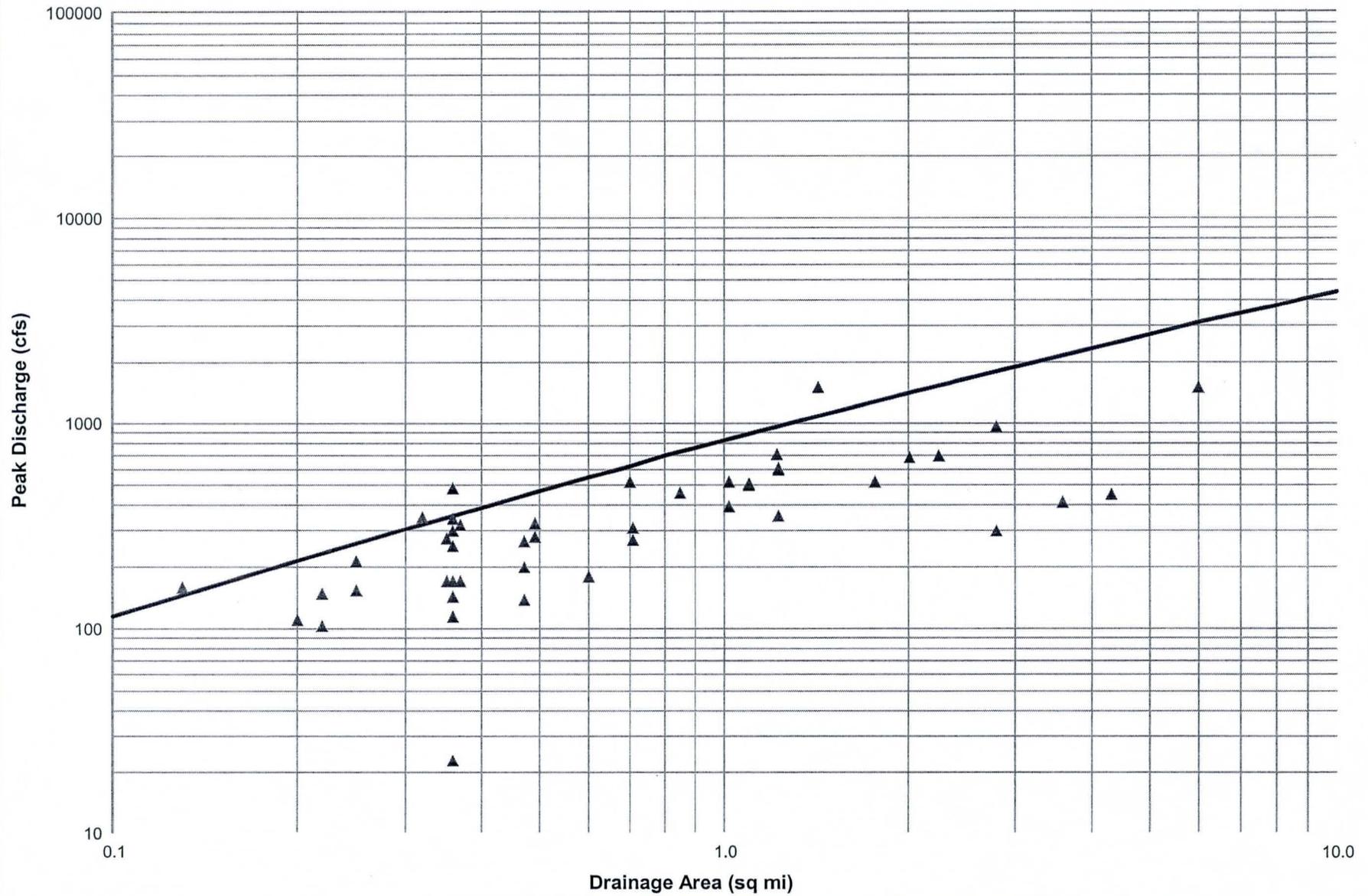
— Envelope — Region - - Low-Mid Elevation ▲ Sub Basins and Combined Flows

100 Year Unit Discharge - Drainage Area
USGS Comparative Graphs - Central Arizona (12) Region
CGFDS3N-24 - Basin: 01



— Envelope - - - Region - - - Low-Mid Elevation ▲ Sub Basins and Combined Flows

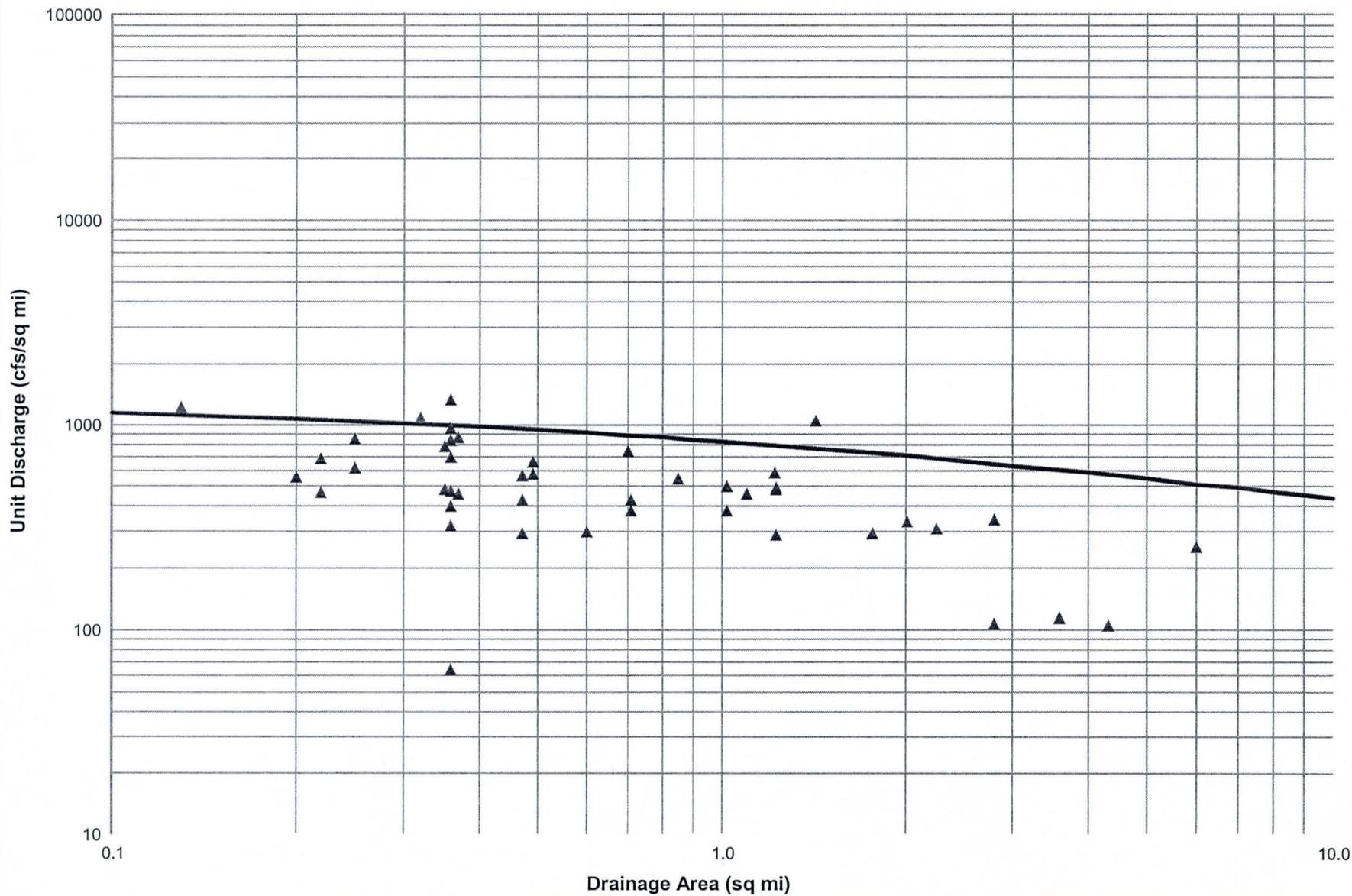
100 Year Peak Discharge - Drainage Area
Malvick's Comparative Graph
CGFDS3N-24 - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

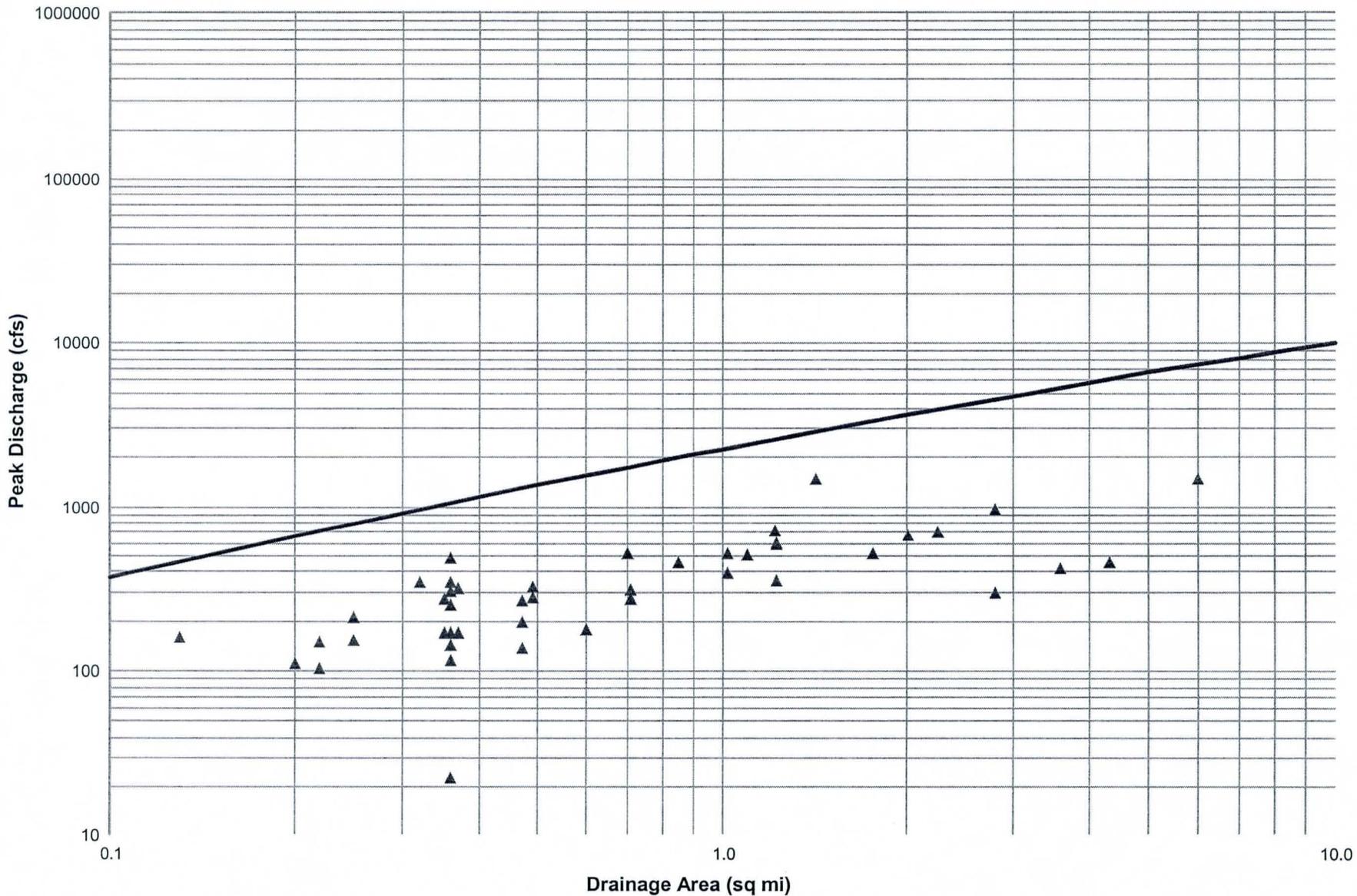
100 Year Unit Discharge - Drainage Area
Malvick's Comparative Graph
CGFDS3N-24 - Basin: 01



— Malvick's Envelope Curve

▲ Sub Basins and Combined Data

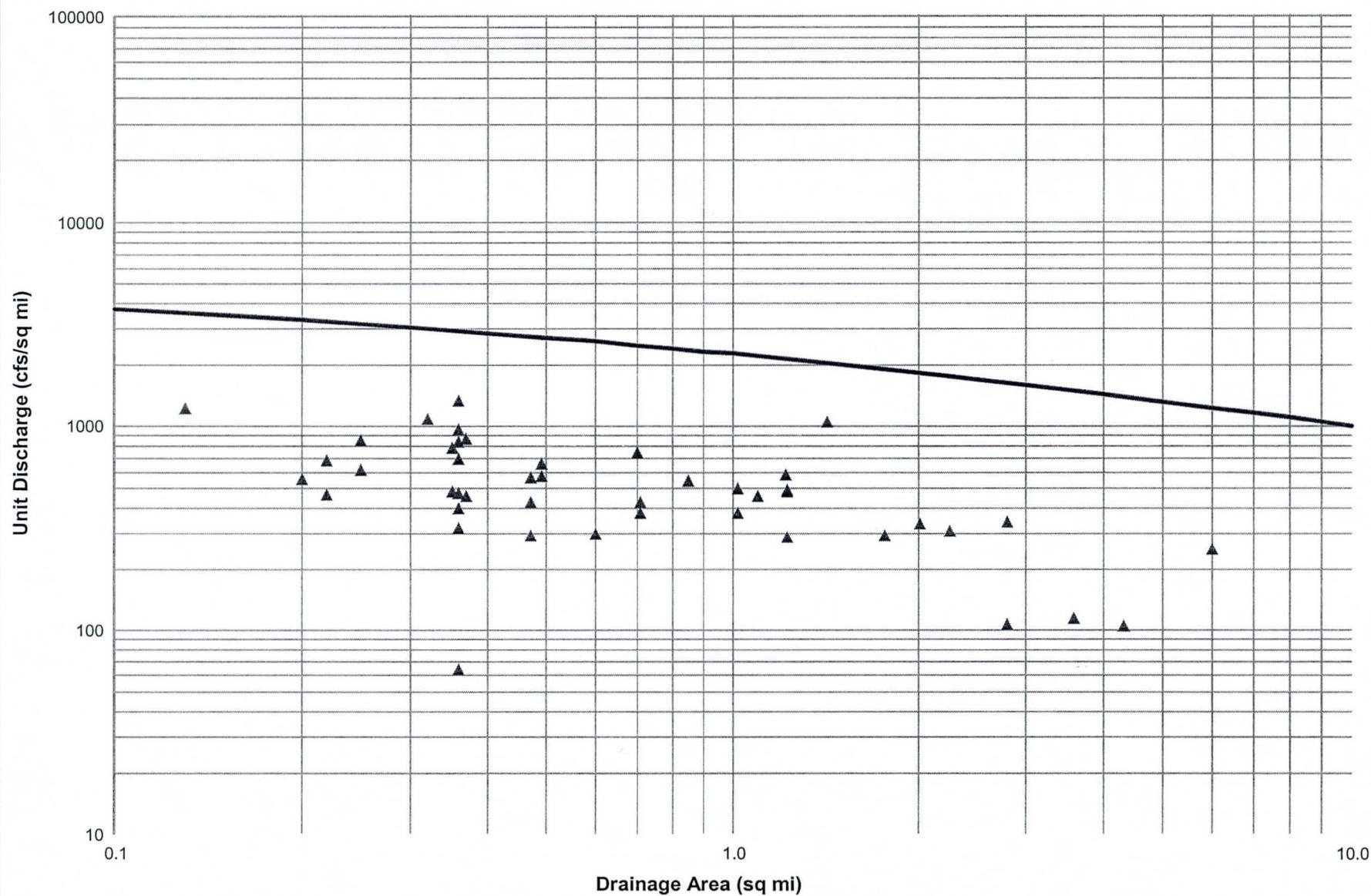
100 Year Peak Discharge - Drainage Area
Boughton's Comparative Graph
CGFDS3N-24 - Basin: 01



— Boughton's Envelope Curve

▲ Sub Basins and Combined Data

100 Year Unit Discharge - Drainage Area
Boughton's Comparative Graph
CGFDS3N-24 - Basin: 01



— Boughton's Envelope Curve

▲ Sub Basins and Combined Data



Section 2: ADWR/FEMA Forms and Local Government/ADWR Abstracts

2.1 Study Documentation Abstract for FEMA Submittals

Study Documentation Abstract For FEMA Submittals	Initial Study	Restudy	X CLOMR	LOMR	X Other
Section 2.1: Study Documentation Abstract for FEMA Submittals					
2.1.1	Date Study Accepted				
2.1.2	Study Prime Contractor	David Evans and Associates, Inc.			
	Contact(s)	Jason Coleman, P.E.			
	Address	2141 E. Highland Avenue, Suite 200 Phoenix, AZ 85016			
	Phone	(602) 678-5151			
	Internal Reference Number	MARI0000-0047			
2.1.2	Study Sub-Contractor	Project Engineering Consultants, LTD.			
	Contact(s)	Mike Heaton, P.E., CFM			
	Address	2310 W. Mission Lane, Suite 4, Phoenix, AZ 85021			
	Phone	(602) 906-1901			
	Internal Reference Number	PEC PN 2069			
2.1.2	Sub Study Sub-Contractor				
	Contact(s)				
	Address				
	Phone				
	Internal Reference Number				
2.1.3	FEMA Technical Review				
	Contractor	Michael Baker, Jr.			
	Contact(s)	Mounir Boudjemaa			
	Address	3600 Eisenhower Ave. Suite 600 Alexandria, VA 22304			
	Phone	703-317-6224			
	Internal Reference Number				
2.1.4	FEMA Regional Reviewer	Michael Baker, Jr. Engineering			
	Phone	(703) 960-8800			
2.1.5	State Technical Reviewer	Arizona Department of Water Resources			
	Phone	(602) 417-2400			
2.1.6	Local Technical Reviewer	Flood Control District of Maricopa County (FCDMC)			
	Phone	(602) 506-1501			
2.1.7	Reach Description	Chandler / Gilbert FDS, Phase 3, UPRR/ Arizona Avenue Watershed			
2.1.8	USGS Quad Sheet(s) with original photo date & latest photo revision date	Chandler, AZ, 1973; Higley, AZ, 1973; Gila Butte, AZ, 1973; Chandler Heights, AZ, 1973			
2.1.9	Unique Conditions and Problems				
2.1.10	Coordination of Peak Discharges (Agency, Date, Comments)				

2.2 FEMA Forms

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hour per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, U.S. Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

A. REQUESTED RESPONSE FROM DHS-FEMA

This request is for a (check one):

- CLOMR: A letter from DHS-FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).
- LOMR: A letter from DHS-FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See 44 CFR Ch. 1, Parts 60, 65 & 72)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Ex: 480301	City of Katy	TX	480301	0005D	02/08/83
480287	Harris County	TX	48201C	0220G	09/28/90
	PLEASE SEE ATTACHED LIST				

2. a. Flooding Source:

- b. Types of Flooding: Riverine Coastal Shallow Flooding (e.g., Zones AO and AH)
- Alluvial fan Lakes Other (Attach Description)

3. Project Name/Identifier: Chandler/ Gilbert Floodplain Delineation Study, Phase 3, UPRR Watershed

4. FEMA zone designations affected: AH, AE, X (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

a. The basis for this revision request is (check all that apply)

- Physical Change Improved Methodology/Data Regulatory Floodway Revision Base Map Changes
- Coastal Analysis Hydraulic Analysis Hydrologic Analysis Corrections
- Weir-Dam Changes Levee Certification Alluvial Fan Analysis Natural Changes
- New Topographic Data Other (Attach Description)

Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following structures (check all that apply)

- Structures: Channelization Levee/Floodwall Bridge/Culvert
- Dam Fill Other (Attach Description)

C. REVIEW FEE

Has the review fee for the appropriate request category been included? Yes Fee amount: \$_____ No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtml for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Kathryn Gross, M.A., CFM	Company: Flood Control District of Maricopa Count	
Mailing Address: 2801 West Durango Street Phoenix, Arizona 85009	Daytime Telephone No.: 602-506-1501	Fax No.: 602-506-4601
	E-Mail Address: kag@mail.maricopa.gov	
Signature of Requester (required): <i>Kathryn Gross</i>	Date: 4/30/09	

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: <i>Sheina Hughes Asst PWD Dir / City Engineer</i>	Community Name: City of Chandler, Arizona	
Mailing Address: <i>Mail Stop 408 PO Box 4008 Chandler Az 85244-4008</i>	Daytime Telephone No.: <i>480 782 3334</i>	Fax No.:
	E-Mail Address: <i>Sheina.Hughes@Chandleraz.gov</i>	
Community Official's Signature (required): <i>Sheina Hughes</i>	Date: 02/17/10	

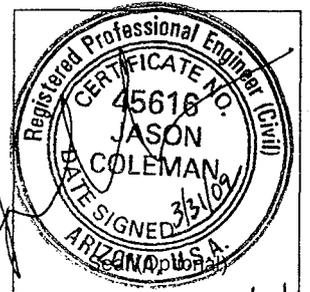
CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting data. All documents submitted in support of this request are correct to the best of my knowledge. All analyses have been performed correctly and in accordance with sound engineering practices. All project works are designed in accordance with sound engineering practices to provide protection from the 1% annual chance flood. If "as-built" conditions data/plan provided, then the structure(s) has been built according to the plans being certified, is in place, and is fully functioning. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Jason Coleman, P.E.	License No.: 45616	Expiration Date: 12/31/09
Company Name: <i>David Evans and Associates, Inc.</i>	Telephone No.: 602-678-5151	Fax No.: 602-678-5155
Signature: <i>Jason Coleman</i>	Date: 3/31/09	

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
<input checked="" type="checkbox"/> Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
<input type="checkbox"/> Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
<input type="checkbox"/> Coastal Analysis Form (Form 4)	New or revised coastal elevations
<input type="checkbox"/> Coastal Structures Form (Form 5)	Addition/revision of coastal structure
<input type="checkbox"/> Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans



EXPIRES 12/31/09

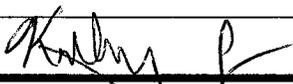
C. REVIEW FEE

Has the review fee for the appropriate request category been included? Yes Fee amount: \$ _____
 No, Attach Explanation

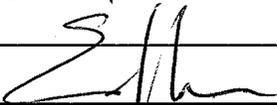
Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

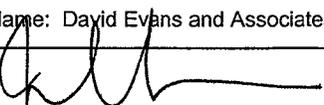
Name: Kathryn Gross, M.A., CFM	Company: Flood Control District of Maricopa Count	
Mailing Address: 2801 West Durango Street Phoenix, Arizona 85009	Daytime Telephone No.: 602-506-1501	Fax No.: 602-506-4601
	E-Mail Address: kag@mail.maricopa.gov	
Signature of Requester (required): 	Date: 4/30/09	

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: EDGAR MEDINA, P.E. FLOODPLAIN ADMINISTRATOR	Community Name: Town of Gilbert, Arizona	
Mailing Address: 70 EAST CIVIC CENTER DRIVE GILBERT, AZ, 85296	Daytime Telephone No.: 480.503.6754	Fax No.: 480.503.6170
	E-Mail Address: EDGAR.MEDINA@gilbert.az.us	
Community Official's Signature (required): 	Date: Dec. 12. 09	

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting data. All documents submitted in support of this request are correct to the best of my knowledge. All analyses have been performed correctly and in accordance with sound engineering practices. All project works are designed in accordance with sound engineering practices to provide protection from the 1% annual chance flood. If "as-built" conditions data/plan provided, then the structure(s) has been built according to the plans being certified, is in place, and is fully functioning. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Jason Coleman, P.E.	License No.: 45616	Expiration Date: 12/31/09
Company Name: David Evans and Associates, Inc.	Telephone No.: 602-678-5151	Fax No.: 602-678-5155
Signature: 	Date: 3/31/09	

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
<input checked="" type="checkbox"/> Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
<input type="checkbox"/> Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
<input type="checkbox"/> Coastal Analysis Form (Form 4)	New or revised coastal elevations
<input type="checkbox"/> Coastal Structures Form (Form 5)	Addition/revision of coastal structure
<input type="checkbox"/> Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans



EXPIRES 12/31/09

C. REVIEW FEE

Has the review fee for the appropriate request category been included?

Yes Fee amount: \$ _____

No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtml for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Kathryn Gross, M.A., CFM

Company: Flood Control District of Maricopa Count

Mailing Address:
2801 West Durango Street
Phoenix, Arizona 85009

Daytime Telephone No.: 602-506-1501

Fax No.: 602-506-4601

E-Mail Address: kag@mail.maricopa.gov

Signature of Requester (required): *Kathryn Gross*

Date: 7/28/2010

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Timothy S. Phillips, P.E. *Chief Engineer and General Manager*

Community Name: City of Mesa, Arizona

Mailing Address:
2851 West Durango St.
Phoenix, AZ 85009

Daytime Telephone No.: 602 506-1501

Fax No.: 602 506-4601

E-Mail Address: tsp@mail.maricopa.gov

Community Official's Signature (required): *TSP*

Date: 7/28/10

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting data. All documents submitted in support of this request are correct to the best of my knowledge. All analyses have been performed correctly and in accordance with sound engineering practices. All project works are designed in accordance with sound engineering practices to provide protection from the 1% annual chance flood. If "as-built" conditions data/plan provided, then the structure(s) has been built according to the plans being certified, is in place, and is fully functioning. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Jason Coleman, P.E.

License No.: 45616

Expiration Date: 12/31/09

Company Name: Davis Evans and Associates, Inc.

Telephone No.: 602-678-5151

Fax No.: 602-678-5155

Signature: *Jason Coleman*

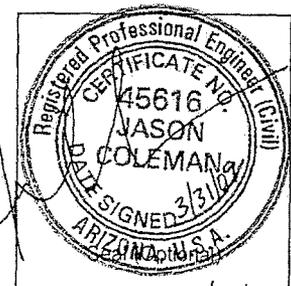
Date: 3/31/09

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)

Required if ...

- Riverine Hydrology and Hydraulics Form (Form 2) New or revised discharges or water-surface elevations
- Riverine Structures Form (Form 3) Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
- Coastal Analysis Form (Form 4) New or revised coastal elevations
- Coastal Structures Form (Form 5) Addition/revision of coastal structure
- Alluvial Fan Flooding Form (Form 6) Flood control measures on alluvial fans



EXPIRES 12/31/09



20 E Main St Suite 500
PO Box 1466
Mesa, Arizona 85211-1466

April 5, 2010

Kathryn Gross
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, AZ 85009-6399

Subject: Chandler-Gilbert Floodplain Delineation Study

Dear Ms. Gross:

Thank you for providing us a copy of the above referenced study. We have no comments on the study and rely on the Flood Control District of Maricopa County on the technical accuracy of the study. You also requested the City of Mesa to sign the community acknowledgment of the study. We do not believe that this is necessary or required as the Flood Control District is the sole administrator for the National Flood Insurance Program within the City of Mesa.

Should you have any questions, please let me know.

Sincerely,

Beth Hunning, P.E.
City Engineer

cc: Kelly Jensen
Fred Rustam
Gordon Haws
Shahir Safi
File No. M99-2009-014

C. REVIEW FEE

Has the review fee for the appropriate request category been included? Yes Fee amount: \$ _____
 No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtm for Fee Amounts and Exemptions.

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Kathryn Gross, M.A., CFM		Company: Flood Control District of Maricopa Count	
Mailing Address: 2801 West Durango Street Phoenix, Arizona 85009		Daytime Telephone No.: 602-506-1501	Fax No.: 602-506-4601
		E-Mail Address: kag@mail.maricopa.gov	
Signature of Requester (required): <i>[Signature]</i>		Date: 7/7/2010	

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title: Timothy S. Phillips, P.E., Chief Engineer & General Manager		Community Name: Maricopa County, Arizona	
Mailing Address: 2801 West Durango Street Phoenix, Arizona 85009		Daytime Telephone No.: 602-506-1501	Fax No.: 602-506-4601
		E-Mail Address: tsp@mail.maricopa.gov	
Community Official's Signature (required): <i>[Signature]</i>		Date: 7/15/10	

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting data. All documents submitted in support of this request are correct to the best of my knowledge. All analyses have been performed correctly and in accordance with sound engineering practices. All project works are designed in accordance with sound engineering practices to provide protection from the 1% annual chance flood. If "as-built" conditions data/plan provided, then the structure(s) has been built according to the plans being certified, is in place, and is fully functioning. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Jason Coleman, P.E.	License No.: 45616	Expiration Date: 12/31/09
Company Name: David Evans and Associates, Inc.	Telephone No.: 602-678-5151	Fax No.: 602-678-5155
Signature: <i>[Signature]</i>	Date: 3/31/09	

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
<input checked="" type="checkbox"/> Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
<input type="checkbox"/> Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
<input type="checkbox"/> Coastal Analysis Form (Form 4)	New or revised coastal elevations
<input type="checkbox"/> Coastal Structures Form (Form 5)	Addition/revision of coastal structure
<input type="checkbox"/> Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans



Part B. Overview of MT-2 Form 1 - Overview and Concurrence Form

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
040037, 040044, 040048	Maricopa County, Town of Gilbert, City of Mesa	AZ	04013C	2190G	9/30/2005
040037, 040040, 040044, 040048	Maricopa County, City of Chandler, Town of Gilbert, City of Mesa	AZ	04013C	2655G	9/30/2005
040037, 040040, 040044	Maricopa County, City of Chandler, Town of Gilbert	AZ	04013C	2660G	9/30/2005
040037, 040040	Maricopa County, City of Chandler	AZ	04013C	2665G	9/30/2005
040037, 040040	Maricopa County, City of Chandler	AZ	04013C	3030H	9/30/2005

PAPERWORK REDUCTION ACT

Public reporting burden for this form is estimated to average 3.25 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, U.S. Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

Flooding Source: Ponding Area along UPRR - US60 to Hunt Highway
Note: Fill out one form for each flooding source studied

A. HYDROLOGY

1. Reason for New Hydrologic Analysis (check all that apply)

- Not revised (skip to section B)
 No existing analysis
 Improved data
 Alternative methodology
 Proposed Conditions (CLOMR)
 Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	Effective/FIS (cfs)	Revised (cfs)
See attached			

3. Methodology for New Hydrologic Analysis (check all that apply)

- Statistical Analysis of Gage Records
 Precipitation/Runoff Model HEC-1
 Regional Regression Equations
 Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters) and documentation to support the new analysis.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Was sediment transport considered? Yes No If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation for why sediment transport was not considered.

B. HYDRAULICS

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.)	
			Effective	Proposed/Revised
Downstream Limit	Union Pacific Railroad north of Hunt Hwy			
Upstream Limit	Union Pacific Railroad south of US60			

2. Hydraulic Method/Model Used

HEC-1 storage routing with weir hydraulics

B. HYDRAULICS (CONTINUED)

3. Pre-Submittal Review of Hydraulic Models

DHS-FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. These review programs may help verify that the hydraulic estimates and assumptions in the model data are in accordance with NFIP requirements, and that the data are comparable with the assumptions and limitations of HEC-2/HEC-RAS. CHECK-2 and CHECK-RAS identify areas of potential error or concern. **These tools do not replace engineering judgment.** CHECK-2 and CHECK-RAS can be downloaded from http://www.fema.gov/plan/prevent/fhm/fhm_soft.shtm. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS. Review of your submittal and resolution of valid modeling discrepancies may result in reduced review time.

4. Models Submitted

	<u>Natural Run</u>	<u>Floodway Run</u>	<u>Datum</u>
Duplicate Effective Model*	File Name: _____	Plan Name: _____	File Name: _____
Corrected Effective Model*	File Name: _____	Plan Name: _____	File Name: _____
Existing or Pre-Project Conditions Model	File Name: _____	Plan Name: _____	File Name: _____
Revised or Post-Project Conditions Model	File Name: _____	Plan Name: _____	File Name: _____
Other - (attach description)	File Name: _____	Plan Name: _____	File Name: _____

* For details, refer to the corresponding section of the instructions.

Digital Models Submitted? (Required)

C. MAPPING REQUIREMENTS

A **certified topographic map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

Digital Mapping (GIS/CADD) Data Submitted

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach a **copy of the effective FIRM and/or FBFM**, annotated to show the boundaries of the revised 1%- and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%- and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area of revision.

Annotated FIRM and/or FBFM (Required)

D. COMMON REGULATORY REQUIREMENTS*

1. For LOMR/CLOMR requests, do Base Flood Elevations (BFEs) increase? Yes No
 - a. For CLOMR requests, if either of the following is true, please submit **evidence of compliance with Section 65.12 of the NFIP regulations**:
 - The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot.
 - The proposed project encroaches upon a SFHA with or without BFEs established and would result in increases above 1.00 foot.
 - b. For LOMR requests, does this request require property owner notification and acceptance of BFE increases? Yes No
 If Yes, please attach **proof of property owner notification and acceptance (if available)**. Elements of and examples of property owner notification can be found in the MT-2 Form 2 Instructions.
2. Does the request involve the placement or proposed placement of fill? Yes No
 If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(a)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.
3. For LOMR requests, is the regulatory floodway being revised? Yes No
 If Yes, attach **evidence of regulatory floodway revision notification**. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being added. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)
4. For LOMR/CLOMR requests, does this request have the potential to impact an endangered species? Yes No
 If Yes, please submit documentation to the community to show that you have complied with Sections 9 and 10 of the Endangered Species Act (ESA). Section 9 of the ESA prohibits anyone from "taking" or harming an endangered species. If an action might harm an endangered species, a permit is required from U.S. Fish and Wildlife Service or National Marine Fisheries Service under Section 10 of the ESA.

 For actions authorized, funded, or being carried out by Federal or State agencies, please submit documentation from the agency showing its compliance with Section 7(a)(2) of the ESA.

* Not inclusive of all applicable regulatory requirements. For details, see 44 CFR parts 60 and 65.

PAPERWORK REDUCTION ACT

Public reporting burden for this form is estimated to average 3.25 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, U.S. Department of Homeland Security, Federal Emergency Management Agency, 500 C Street, SW, Washington DC 20472, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

Flooding Source: Ponding Area along UPRR - Gilbert Road to US60

Note: Fill out one form for each flooding source studied

A. HYDROLOGY

1. Reason for New Hydrologic Analysis (check all that apply)

- Not revised (skip to section B)
 No existing analysis
 Improved data
 Alternative methodology
 Proposed Conditions (CLOMR)
 Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	Effective/FIS (cfs)	Revised (cfs)
See attached			

3. Methodology for New Hydrologic Analysis (check all that apply)

- Statistical Analysis of Gage Records
 Precipitation/Runoff Model HEC-1
 Regional Regression Equations
 Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters) and documentation to support the new analysis.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Was sediment transport considered? Yes No If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation for why sediment transport was not considered.

B. HYDRAULICS

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.)	
			Effective	Proposed/Revised
Downstream Limit	Union Pacific Railroad at US60			
Upstream Limit	Union Pacific Railroad at Western Canal			

2. Hydraulic Method/Model Used

HEC-RAS, HEC-1 storage routing w/ weir hydraulics

B. HYDRAULICS (CONTINUED)

3. Pre-Submittal Review of Hydraulic Models

DHS-FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. These review programs may help verify that the hydraulic estimates and assumptions in the model data are in accordance with NFIP requirements, and that the data are comparable with the assumptions and limitations of HEC-2/HEC-RAS. CHECK-2 and CHECK-RAS identify areas of potential error or concern. **These tools do not replace engineering judgment.** CHECK-2 and CHECK-RAS can be downloaded from http://www.fema.gov/plan/prevent/fhm/firm_soft.shtm. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS. Review of your submittal and resolution of valid modeling discrepancies may result in reduced review time.

4. Models Submitted	Natural Run	Floodway Run	Datum		
Duplicate Effective Model*	File Name:	Plan Name:	File Name:	Plan Name:	_____
Corrected Effective Model*	File Name:	Plan Name:	File Name:	Plan Name:	_____
Existing or Pre-Project Conditions Model	File Name: CGFDP3N.prj	Plan Name:	File Name:	Plan Name:	<u>NAVD</u>
Revised or Post-Project Conditions Model	File Name:	Plan Name:	File Name:	Plan Name:	_____
Other - (attach description)	File Name:	Plan Name:	File Name:	Plan Name:	_____

* For details, refer to the corresponding section of the instructions.

Digital Models Submitted? (Required)

C. MAPPING REQUIREMENTS

A **certified topographic map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

Digital Mapping (GIS/CADD) Data Submitted

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach a **copy of the effective FIRM and/or FBFM**, annotated to show the boundaries of the revised 1%- and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%- and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area of revision.

Annotated FIRM and/or FBFM (Required)

D. COMMON REGULATORY REQUIREMENTS*

1. For LOMR/CLOMR requests, do Base Flood Elevations (BFEs) increase? Yes No
 - a. For CLOMR requests, if either of the following is true, please submit **evidence of compliance with Section 65.12 of the NFIP regulations**:
 - The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot.
 - The proposed project encroaches upon a SFHA with or without BFEs established and would result in increases above 1.00 foot.
 - b. For LOMR requests, does this request require property owner notification and acceptance of BFE increases? Yes No
 If Yes, please attach **proof of property owner notification and acceptance (if available)**. Elements of and examples of property owner notification can be found in the MT-2 Form 2 Instructions.
2. Does the request involve the placement or proposed placement of fill? Yes No
 If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(a)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.
3. For LOMR requests, is the regulatory floodway being revised? Yes No
 If Yes, attach **evidence of regulatory floodway revision notification**. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being added. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)
4. For LOMR/CLOMR requests, does this request have the potential to impact an endangered species? Yes No
 If Yes, please submit documentation to the community to show that you have complied with Sections 9 and 10 of the Endangered Species Act (ESA). Section 9 of the ESA prohibits anyone from "taking" or harming an endangered species. If an action might harm an endangered species, a permit is required from U.S. Fish and Wildlife Service or National Marine Fisheries Service under Section 10 of the ESA.

 For actions authorized, funded, or being carried out by Federal or State agencies, please submit documentation from the agency showing its compliance with Section 7(a)(2) of the ESA.

* Not inclusive of all applicable regulatory requirements. For details, see 44 CFR parts 60 and 65.

Attachment for MT-2 Form 2:

Riverine Hydrology and Hydraulics For, Section A.2 Comparison of Representative 1%-
Annual Chance Discharges

Union Pacific Railroad – US 60 to Hunt Highway

Location*	Area (sq mi)*	FIS (cfs)	Revised (cfs)
S.A. 15 Pt16b\CP519 - UPRR at Western Canal	3.42\2.80	1109	1177
S.A. 18 Pt1b\CP601 - UPRR at Elliot Road	0.5\0.51	728	256
S.A. 20A Pt2c\CP610 - UPRR at Chandler Blvd	1.75\3.54	1458	591
S.A. 26 Pt1b\CP6271 - UPRR at Queen Creek Rd	0.62\0.48	1487	72
S.A. 26 Pt3d\CP630 - UPRR at Ocotillo Rd	0.46\0.32	574	141

*Table order is Previous Flood Insurance Study\Revised Study

Riverine Hydrology and Hydraulics For, Section A.2 Comparison of Representative 1%-
Annual Chance Discharges

Union Pacific Railroad – Gilbert Road to US 60

Location*	Area (sq mi)*	FIS (cfs)	Revised (cfs)
S.A. 7 Pt4c\CP516 - UPRR at Western Canal	.53\0.36	300	749

*Table order is Previous Flood Insurance Study\Revised Study



Section 3: SURVEY AND MAPPING INFORMATION

3.1 Field Survey Information

Refer to the Chandler / Gilbert Flood Delineation Study, Phase 1 Eastern Canal Watershed, Technical Data Notebook, Volume 2, for all previous survey information relative to Phase 3 of the study.

Additional Survey - 2009

In December, 2008 DEA performed survey work using SERVCO's SPIDERNET Real Time GPS Network (RTN) to provide additional topographic survey data for determining retention basin volumes for hydrologic modeling. The areas surveyed included Vagabond Park, Festiva Court subdivision, and Tumbleweed Park. All survey data was collected in NAD83 (1992) and NAVD88, to match the original survey control.

The attached spreadsheets show the checks made to NGS (GDACS) control monuments (NAVD88) and City of Chandler monuments (NGVD29) within Phase 3. NGVD29 elevations were derived using the U. S. Army Corps of Engineers CORPSCON program.

An ASCII file of all points collected and copies of the field notes are included on CD ROM in Appendix C-1.



Additional Survey – Pinelake Estates

Additional field survey will be performed by the Flood Control District of Maricopa County along the lake in Pinelake Estates (P630) to determine the extent of ponding along the southern portion of the lake. The data will be added to Appendix C.



APPENDIX A: REFERENCES

See Chandler/Gilbert Flood Delineation Study, Phase 1, Eastern Canal, Technical Data Notebook, Appendix A, Volume 1 for references for this study.



**APPENDIX B: GENERAL DOCUMENTATION AND
CORRESPONDENCE**

Appendix B: Table of Contents

- B.1 SPECIAL PROBLEM REPORTS
- B.2 CONTACT (TELEPHONE) REPORT
- B.3 MEETING MINUTES OR REPORTS
- B.4 GENERAL CORRESPONDENCE
- B.5 CONTRACT DOCUMENTS
- B.6 PUBLIC NOTIFICATION
- B.7 FEMA CORRESPONDENCE



B.1 Special Problem Reports

There are no additional special problems to report for this study.



B.2 Contact (telephone) Report

Chandler contacts.

R.J. Thomas	C.O.C. Civil Plan Review	480-782-3117
Ying Xu	PEE	602-906-1901
Sam Sherrill	C.O.C.	480-782-3124
Alon Zimmerman	C.O.C.	480-782-3301
Peter Jensen	C.O.C. Plan Review	480-782-3128
Greg Jones	DEA	602-678-5151
David Jeffers	Civil Plan Review	480 782 3149
Charles Haganson	Civil Plans Review	480-782-3134
Mike Heaton	Project Engineering Consultants	602-906-1501
Kathryn Gross	FEDMC	602 506-4837
Geoff Brownell	DEA	602-678-5151
Teri George	DEA	602 678-5151
JULIE COX	FEDMC	602 506 8401



B.3 Meeting Minutes or Reports



B.4 General Correspondence



DAVID EVANS
AND ASSOCIATES INC.

March 31, 2009

Kathryn Gross, CFM, M.A.
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

SUBJECT: FCD 2008C042 – TDN FOR PHASE 3 NORTH AND SOUTH – KAG COMMENTS

Dear Kathryn:

The comments from your March 24, 2009 letter are included below followed David Evans and Associates' responses in italics:

North Watershed

Hydrology

1. Please see memo by Julie Cox (attached). At this time the watershed hydrology is approved. There still are some outstanding issues from the previous review regarding routing length differences between the model and the submitted spreadsheets.

PEC - Spreadsheets updated.

2. There appears to be a discrepancy in the supporting documentation for P503 and what is in the model. Please see Julie's comments.

PEC - See response to Julie's comments.

3. PEC comments are 7-16.

HEC-RAS model

1. Discharges being used are reasonable.
2. Boundary conditions are reasonable.
3. Cross-sections appear reasonable.
4. Please update the project name from finaldraftupdate.prj.

PEC - Updated to "CGFDP3N".



South Watershed

Hydrology model

1. Please address the comments from Julie Cox (attached).

DEA – Julie’s comments have been addressed. Please find the accompanying response letter.

2. DEA’s comments are 1-6 and 17-18.

DEA – Noted.

Floodplain Delineation/Workmaps - North

1. Comments regarding the floodplain delineations and other items on the workmaps are included as red-lines on the sheets submitted.

PEC – Work maps updated.

2. For all sheets please update the study name to UPRR\Arizona Avenue in the title block and update “UPRR Watershed” to “UPRR\Arizona Avenue Watershed”

PEC – Title revised.

3. For all sheets please update the study contract number to the current contract number.

PEC – Contract number changed.

4. On a few sheets the ERM label on the map is missing the “-1”. Please add the “-1” to the map label.

PEC – Labels updated.

5. Please address the “smoothing/floodplain limit” modifications listed on the workmaps.

PEC – Line work modified.

6. On sheet 9 please label the Consolidated Floodplain limit as not part of the study or remove.

PEC – Note added.

7. On sheet 8, please add a note and arrows stating where the floodplain is contained in the basins and streets.

PEC – Notes added.

8. All technical data shown on the maps matches the models.



Floodplain Delineation/Workmaps – South

1. Comments regarding the floodplain delineations and other items on the workmaps are included as red-lines on the sheets submitted.

DEA – The red-line comments have been addressed. Please find the revised work maps included in the Final TDN.

2. For all sheets, please present the water surface information data to the tenths place.

DEA – All water surface elevation values have been revised to be shown to the tenths.

3. For all sheets, please update “UPRR Watershed” to “UPRR\Arizona Avenue Watershed”

DEA – The watershed name has been revised on all sheets.

4. For sheets 4 and 5, please correct the note stating the hydraulic baseline is Consolidated Canal.

DEA – The note has been changed on Sheets 4 and 5.

5. For all sheets, please update the “Williamsfield Road” label with “Chandler Blvd” for the index map.

DEA – The sheets have been revised to show Chandler Boulevard instead of Williams Field Road.

6. For sheet 5, please address the following:

- add a “flows contained in streets and basins” note to portion of P601

DEA – The note has been added to P601.

- For P606-3, please add the FD-5.1 note to the end of the special problems note or remove completely. The special problem section can point interested persons to the FD-5.1 sheet.

DEA – The FD-5.1 note has been moved to the end of the special problems note.

7. For sheet 4, please address the following:

- Add a “flows containing in streets and basins” note to a portion of P610-9.

DEA – The note has been added to P610-9.

- Please consider “smoothing” the floodplain delineation where identified on the workmap.

DEA – The delineation has been smoothed where identified.

8. For sheet 2, please remove the “flows contained in basin” note for P627, and P628. Please provide arrows for use with the “flows” note for P630 since it will only apply to the northern portion of the pond.



DEA – The note has been removed from P62 and, P62. It has also been removed from P630 since it is not all contained within the basin.

9. For sheet 1, please remove the “flows contained in basin” note for P634. Also, the “see special problems section” note may be able to be removed for P632N and P632S.

DEA – The flow note has been removed from P634 and the special problems notes have been removed from P632N and P632S.

TDN Comments

Volume 1

1. Section 1.1. Add the Arizona Avenue mileage to the list of study mileage in the third paragraph.

DEA – The Arizona Avenue mileage has been added to Section 1.1 of the TDN.

2. Section 2 FEMA Forms. Part B. Panel listings. Remove 2195G and 2670G from the list.

DEA – Panels 2195G and 2670H have been removed from the panel listings.

3. Section 3.1. Need to add a discussion regarding the survey performed as part of the Phase 3 analysis for Espee, Festiva and the RR. Supporting documentation will be in Appendix C.

DEA – The narrative in Section 3.1 has been revised and the ASCII point files and field notes are included on CD-ROM in Appendix C-1

4. Appendix A. Consider placing the subdivision information/as-builts for the study as part of the data collection. See Phase 2's Appendix A.

DEA – The subdivision information/ as-builts are included in Appendix DS and DN7 – Pertinent Excerpts.

5. Update pertinent sections for the final TDN.

DEA – Pertinent sections have been updated.

6. Appendix C. Place the survey documents here.

DEA – The narrative in Section 3.1 has been revised and the ASCII point files and field notes are included on CD-ROM in Appendix C-1

Volume 2

1. Section 4S.4.1, revise the first sentence. Do not use “As per direction...”

DEA – This sentence has been revised.

2. Section 4S.4.2 fourth paragraph. Remove “Consolidated Canal” from first sentence.



DEA – “Consolidated Cana” has been removed from the text.

3. Section 4.S.4.4. Correct typo “form” in the last sentence of the first paragraph.

DEA – The typo has been corrected.

4. Section 4S.5.3. This section could be removed. I do not think that the modeling of the golf course was anything special that would require it be noted as a “special problem”. If renumbering the sections is anticipated to become an issue than keep it in the report.

DEA – This section was left in the TDN to avoid renumbering. The discussion is based on the rationale for breaking up Basin 632 into a north and south basin.

5. Section 4S.5.4. Need to discuss this section. I will need to verify the storage relationship and see if it matches the existing topo or if the relationship matches the AZ Reflections grading plans. If I recall, I believe I might have gotten the plans back from DEA on AZ Reflections. If needed I will make a copy for inclusion in the TDN.

DEA – This comment will be addressed by the district. DEA used the stage-volume relationship from the ADOT Basin K plans and did not include the AZ Reflections data in the SE/SV cards.

6. Section 4S.5.5. Please correct “subbasin 606 west of the UPRR” with “subbasin 606 east of the UPRR” in the second paragraph.

DEA – It has been changed from west to east.

7. Section 4N.3.2. Please correct the last sentence and replace “Eastern Canal” with “UPRR”

DEA – “Eastern Canal” has been replaced with “UPRR”.

8. Section 4N.4.1, revise the first sentence. Do not use “As per direction...”

DEA – This sentence has been revised.

9. Section 4N.4.2. Please update the retention diversion section text to match the 4S.4.2 text.

DEA – Section 4S.4.2 text was copied and pasted into Section 4N.4.2.

10. Section 4N.4.4. Update the text to reflect that there are two dss files. A 6-hr and a 24-hr dss file.

DEA – The text has been revised.

11. Appendix DS.4, please address the following:

- For P606-3, please include the FD-5.1 sheet floodplain sheet in this section instead of with the workmaps.

DEA – The exhibit has been moved and reference to the exhibit is made in Section 4S.5.5.



12. Appendix DN.4, please address the following:

- For P503 and P505, the station and elevation information is missing from the pond summary tables

PEC – P503 and P505 both contain the runoff within the sub-basin. No weir flow occurs in these two ponds.

- For P503, P505, P506, and P512, there is no supporting documentation provided. This may be more important for P506 and P512 where discharge information is listed in the summary sheet.

DEA – The supporting documentation will be provided under separate cover.

13. Exhibit DN.5. The retention exhibits for the north watershed were not included. These maps were developed by DEA. Please make sure they are included in the next submittal.

DEA – The exhibit has been added.

Volume 3

1. Section 5N.1, 5N.3, 5N.4.5, and 5N.6. Please correct the RAS version number listed in the text. It should be RAS 3.1.3.

DEA – The text has been revised.

2. Appendix EN.1. The manning's n values presented in the table do not correspond to the changes made. Please provide an updated table?

DEA – The manning's n value table values were copied directly from the HEC-RAS model. The model and table values are in agreement.

Please let me know if you have any questions.

Sincerely,

DAVID EVANS AND ASSOCIATES, INC.

Jason Coleman, P.E.
Water Resources Project Manager



DAVID EVANS
AND ASSOCIATES INC.

March 31, 2009

Kathryn Gross, CFM, M.A.
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

SUBJECT: FCD 2008C042 – TDN FOR PHASE 3 NORTH AND SOUTH – JRC COMMENTS

Dear Kathryn:

The comments from Julie Cox in her March 24, 2009 letter are included below followed David Evans and Associates' responses in italics:

Phase 3 South

1. For the 100-yr 6-hr model for Phase 3 South, remove Part F from the ZR records for COO524 and COO525. The resulting peak flow and volume for COO524 is 129 cfs and 54 ac-ft. The resulting peak flow and volume for COO525 (6-hr) is 96 cfs and 7 ac-ft.

DEA – Part F has been removed from the ZR record for COO524 and COO525. The resulting peak flow and peak volume are consistent with the North model.

2. For the 100-yr 24-hr model for Phase 3 South, remove Park F from the ZR records for COO524 and COO525. The resulting peak flow and volume for COO524 is 93 cfs and 48 ac-ft. The resulting peak flow and volume for COO525 is 104 cfs and 8 ac-ft.

DEA – Part F has been removed from the ZR record for COO524 and COO525. The resulting peak flow and peak volume are consistent with the North model.

3. For Phase 3 South, remove CON418 from Exhibit E.

DEA – CON418 has been removed from Exhibit E.

4. Refer to the Phase 3 South models for Pond P606-3. The SV records in the data table do not match the SV records in the KK block P606-3. Check and revise as necessary.

DEA – The records were correct in the HEC-1 model. The data table has been revised to be consistent.

5. For Phase 3 South, the SQ records 4.6, 32.79, and 62.36 cfs are not included in the Culvertmaster printout for Pond P624. Are these interpolated values?



DEA – The Culvertmaster rating table output has been revised to include more detailed elevation data and corresponding flow data. The SE/SQ records were correct but the Culvertmaster output was presenting sufficient detail. Please find the revised Culvertmaster output.

6. For Phase 3 South, the SQ record 0.97 cfs is not included in the Culvertmaster printout for Pond P631. Is this an interpolated value?

DEA – Please see response to comment above.

Phase 3 North

7. Refer to the Phase 3 North models for Pond P503. The SV records in the data table do not match the SV records in the KK block P503. In addition, there is no station/elevation data and no SQ values in the data table. Is there a reason for this? Check and revise as necessary.

PEC- Spreadsheet updated. There is no station/elevation data because the 100-year storm water will be fully contained in the ponding area. There is no weir flow at the 1214.5 ft level.

8. Refer to the Phase 3 North models for Pond P519. The last column in the rating table for P519 is not shown in the data table. Check and revise as necessary.

PEC – Spreadsheet updated. More modeling notes added to the spreadsheet.

9. Refer to the Phase 3 North data table for Pond P505. There is no station/elevation data and no SQ values in the data table. Is there a reason for this? Check and revise as necessary.

PEC – There is no station/elevation data because the 100-year storm water will be fully contained in the ponding area. There is no weir flow at the 1212 ft level.

10. See Phase 3 North Routing Table. Route 508516 is not in the table. Revise as necessary.

PEC – Spreadsheet updated.

11 Route 508509 is not in the Phase 3 North models. Revise as necessary.

PEC – Spreadsheet updated.

12. For CON501, DDMSW and the HEC-1 models show lengths of 5500 ft, but the spreadsheet shows 5650 ft. Revise as necessary.

PEC – Spreadsheet updated.

13. For CON516, DDMSW and the HEC-1 models show lengths of 6500 ft, but the spreadsheet shows 6300 ft. Revise as necessary.

PEC – Spreadsheet updated.

Kathryn Gross, CFM, M.A.
March 31, 2009
Page 3



14. For 502503, DDMSW and the HEC-1 models show lengths of 5500 ft, but the spreadsheet shows 6200 ft. Revise as necessary.

PEC – Spreadsheet updated.

15. For Phase 3 North, add section lines and section labels to Exhibits A and B.

PEC –

16. The Phase 3 North models still show the PB regions as “Updated PB & PC’s per 10/03/2008 FCDMC memo”. This should be changed to “per 6/4/08 memo”.

PEC – Exhibits revised.

Report

17. See TDN, Volume 1. The Table of Contents lists Figure 1.5.2 on Page 1-5. There is no figure labeled Figure 1.5.2. Should the HEC-1 Unit Discharge Checks be labeled Figure 1.5.2?

DEA – The Unit Discharge Checks have been labeled as Figure 1.5.2 and the Table of Contents has been revised to update the page number.

18. See TDN, Volume 1. The narrative does not discuss the use of DSS files to transfer hydrographs from one model to another. There should be a paragraph or two explaining the DSS files and mentioning that there are both 6-hr and 24-hr DSS files.

DEA – Sections 4S.4.4 and 4N.4.4 are specific to the dss file transfer and a detailed discussion is located in these sections. Section 1.4.1 references Sections 4S.4.4 and 4N.4.4 for a further discussion of the dss files.

Please let me know if you have any questions.

Sincerely,

DAVID EVANS AND ASSOCIATES, INC.

Jason Coleman, P.E.
Water Resources Project Manager

File Name: P:\Mari0000-0040\Admin\corres\Review Response KAG 31Mar2009 -JRC Comments.doc
Project Number: MARI-0047



Flood Control District of Maricopa County

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Phoenix, Arizona 85009
Phone: 602-506-1501
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TT: 602-505-5897

March 24, 2009

Mr. Jason Coleman, P.E.
Water Resources Project Manager
David Evans and Associates
2141 East Highland Avenue, Suite 200
Phoenix, Arizona 85016

RE: Phase 3 – UPRR/Arizona Avenue Submittal of March 13, 2009

Dear Jason:

We have finished our review of the February 2009 submittal. Please review the following comments from myself and Julie Cox regarding the North and South submittals and make corrections as necessary.

North Watershed

Hydrology

1. Please see memo by Julie Cox (attached). At this time the watershed hydrology is approved. There still are some outstanding issues from the previous review regarding routing length differences between the model and the submitted spreadsheets.
2. There appears to be a discrepancy in the supporting documentation for P503 and what is in the model. Please see Julie's comments.
3. PEC comments are 7-16.

HEC-RAS model

1. Discharges being used are reasonable.
2. Boundary conditions are reasonable.

Letter to Jason Coleman, P.E
March 24, 2009
Page 2 of 5

3. Cross-sections appear reasonable.
4. Please update the project name from finaldraftupdate.prj.

South Watershed

Hydrology model

1. Please address the comments from Julie Cox (attached).
2. DEA's comments are 1-6 and 17-18.

Floodplain Delineation/Workmaps - North

1. Comments regarding the floodplain delineations and other items on the workmaps are included as red-lines on the sheets submitted.
2. For all sheets please update the study name to UPRR\Arizona Avenue in the title block and update "UPRR Watershed" to "UPRR\Arizona Avenue Watershed"
3. For all sheets please update the study contract number to the current contract number.
4. On a few sheets the ERM label on the map is missing the "-1". Please add the "-1" to the map label.
5. Please address the "smoothing/floodplain limit" modifications listed on the workmaps.
6. On sheet 9 please label the Consolidated Floodplain limit as not part of the study or remove.
7. On sheet 8, please add a note and arrows stating where the floodplain is contained in the basins and streets.
8. All technical data shown on the maps matches the models.

Floodplain Delineation/Workmaps – South

1. Comments regarding the floodplain delineations and other items on the workmaps are included as red-lines on the sheets submitted.
2. For all sheets, please present the water surface information data to the tenths place.
3. For all sheets, please update "UPRR Watershed" to "UPRR\Arizona Avenue Watershed"
4. For sheets 4 and 5, please correct the note stating the hydraulic baseline is Consolidated Canal.

Letter to Jason Coleman, P.E
March 24, 2009
Page 3 of 5

5. For all sheets, please update the "Williamsfield Road" label with "Chandler Blvd" for the index map.
6. For sheet 5, please address the following:
 - add a "flows contained in streets and basins" note to portion of P601
 - For P606-3, please add the FD-5.1 note to the end of the special problems note or remove completely. The special problem section can point interested persons to the FD-5.1 sheet.
7. For sheet 4, please address the following:
 - Add a "flows containing in streets and basins" note to a portion of P610-9.
 - Please consider "smoothing" the floodplain delineation where identified on the workmap.
8. For sheet 2, please remove the "flows contained in basin" note for P627, and P628. Please provide arrows for use with the "flows" note for P630 since it will only apply to the northern portion of the pond.
9. For sheet 1, please remove the "flows contained in basin" note for P634. Also, the "see special problems section" note may be able to be removed for P632N and P632S.

TDN Comments

Volume 1

1. Section 1.1. Add the Arizona Avenue mileage to the list of study mileage in the third paragraph.
2. Section 2 FEMA Forms. Part B. Panel listings. Remove 2195G and 2670G from the list.
3. Section 3.1. Need to add a discussion regarding the survey performed as part of the Phase 3 analysis for Espee, Festiva and the RR. Supporting documentation will be in Appendix C.
4. Appendix A. Consider placing the subdivision information/as-builts for the study as part of the data collection. See Phase 2's Appendix A.
5. Update pertinent sections for the final TDN.
6. Appendix C. Place the survey documents here.

Volume 2

1. Section 4S.4.1, revise the first sentence. Do not use "As per direction..."
2. Section 4S.4.2 fourth paragraph. Remove "Consolidated Canal" from first sentence.
3. Section 4.S.4.4. Correct typo "form" in the last sentence of the first paragraph.
4. Section 4S.5.3. This section could be removed. I do not think that the modeling of the golf course was anything special that would require it be noted as a "special problem". If renumbering the sections is anticipated to become an issue than keep it in the report.
5. Section 4S.5.4. Need to discuss this section. I will need to verify the storage relationship and see if it matches the existing topo or if the relationship matches the AZ Reflections grading plans. If I recall, I believe I might have gotten the plans back from DEA on AZ Reflections. If needed I will make a copy for inclusion in the TDN.
6. Section 4S.5.5. Please correct "subbasin 606 west of the UPRR" with "subbasin 606 east of the UPRR" in the second paragraph.
7. Section 4N.3.2. Please correct the last sentence and replace "Eastern Canal" with "UPRR"
8. Section 4N.4.1, revise the first sentence. Do not use "As per direction..."
9. Section 4N.4.2. Please update the retention diversion section text to match the 4S.4.2 text.
10. Section 4N.4.4. Update the text to reflect that there are two dss files. A 6-hr and a 24-hr dss file.
11. Appendix DS.4, please address the following:
 - For P606-3, please include the FD-5.1 sheet floodplain sheet in this section instead of with the workmaps.
12. Appendix DN.4, please address the following:
 - For P503 and P505, the station and elevation information is missing from the pond summary tables
 - For P503, P505, P506, and P512, there is no supporting documentation provided. This may be more important for P506 and P512 where discharge information is listed in the summary sheet.
13. Exhibit DN.5. The retention exhibits for the north watershed were not included. These maps were developed by DEA. Please make sure they are included in the next submittal.

Letter to Jason Coleman, P.E
March 24, 2009
Page 5 of 5

Volume 3

1. Section 5N.1, 5N.3, 5N.4.5, and 5N.6. Please correct the RAS version number listed in the text. It should be RAS 3.1.3.
2. Appendix EN.1. The manning's n values presented in the table do not correspond to the changes made. Please provide an updated table?

There are no more comments at this time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathryn', followed by a long horizontal flourish.

Kathryn Gross, CFM M.A.
Project Manager



DAVID EVANS
AND ASSOCIATES INC.

March 13, 2009

Kathryn Gross, CFM, M.A.
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

SUBJECT: PHASE 3 – UPRR SUBMITTAL OF FEBRUARY 2009

Dear Kathryn:

The comments regarding the February 2009 submittal from your March 2, 2009 letter are included below followed David Evans and Associates' and Project Engineering Consultants' responses in italics:

North Watershed

Hydrology

1. Please see memo by Julie Cox (attached). At this time the watershed hydrology is approved.

Comment noted.

HEC-RAS model

(Please see response to the following comments immediately after the comments)

1. Discharges being used are reasonable.
2. Boundary conditions are reasonable.
3. There are additional concerns regarding the placement of levees in the model.
 - 2.461, 2.386, 2.310, 2.084, 2.007, 1.931, 1.855, 1.704 – 1.306
4. For cross-section 2.386 and 2.310, why was Golden Key Road not modeled as ineffective?
5. For cross-section 2.158 – why was the effective conveyance next to the RR decreased from the last submittal. Extending the cross-section information can be accomplished by using the as-builts from Silverhawke III.
6. For cross-section 2.234 the addition of a block obstruction at the end of the cross-section may be appropriate.



7. Modeling approach. We essentially have three ways the RR model could be handled. We have been waiting for input from Town of Gilbert. At this time I recommend we move forward with the last bullet item.
 - 1 model option – model the block wall and make adjustments where necessary to hopefully not raise any flags at FEMA. In this option the subdivisions would not be included in the delineation.
 - 1 model option – do not model the block wall at all. Subdivisions would be mapped in homes with lowest adjacent grades above the WSEL would be mapped into Zone X islands. Area between RR and subdivisions would have a potentially lower WSEL than could be expected.
 - 2 model option – run both scenarios and place a “gutterline” in the floodplain delineation at the wall location. On the RR side of the wall the higher WSEL would be reported for the wall being in place. On subdivision side of the wall the WSEL from the model without the wall would be reported.

8. It is recommended that PEC and FCD have a technical meeting to make specific corrections to the model.

PEC – PEC met with FCD and discussed the hydraulic model on March 3. The hydraulic model has been revised per that discussion. PEC will use the as-builts to determine the pad elevations of the homes.

South Watershed

Hydrology model

1. Please address the comments from Julie Cox (attached). All comments are minor in nature.

DEA – Please find responses to comments from Julie as separate letter attached.

2. Please re-verify the schematic regarding how flow is reaching P623-5 and P621. Presently in the model P623-5 flows to P621 and P621 has no outflow. However, P623-5's water surface elevation is lower than P621 and flows start spilling into P621 at 1215. P621 has a final WSEL of 1219.3 versus P623-5's WSEL of 1217.5. This would indicate that P621 would spill back over into P623-5. Please look into this issue. I believe this issue was raised back in 2005 by Mike Duncan and those comments were submitted to DEA at that time.

DEA – Germann Road has been elevated since the comment by Mike Duncan in 2005. Ponds P632-5 and P621 now act independently of each other. This change was made prior to the February 2009 submittal. Please reference the Pond Data Tables in Appendix D4 for roadway elevations and overtop details.

3. All ponds appear reasonable. However, we are still having difficulty verifying the volumes for P606-3. Any additional information that can be provided would be appreciated to help support our approval.

DEA – This comment was discussed with you on the phone and resolved per our conversation.

Kathryn Gross, CFM, M.A.
March 13, 2009
Page 3



4. P630 – I am tracking down the as-builts for the Pine Lake Estates subdivision to aid in the delineation of the final floodplain delineation. This is to verify if the Lake has containment on the south side.

DEA – The floodplain delineation has been revised per your direction.

5. Arizona Avenue floodplains. The District is meeting today to discuss Chandler's recommendations regarding the floodplains along Arizona Avenue. Most ponds will most likely stay on the floodplain workmaps. The results of the meeting will be passed on to DEA as soon as possible. Updates to the maps will need to be made.

DEA – DEA received your comments regarding the Arizona Avenue ponds on March 4, 2009. Please find responses to your comments in the attached response letter.

Please let me know if you have any questions.

Sincerely,

DAVID EVANS AND ASSOCIATES, INC.

Jason Coleman, P.E.
Water Resources Project Manager

File Name: P:\Mari0000-0040\Admin\corres\Review Response KAG 13 Mar2009 -feb09submittal.doc
Project Number: MARI-0047



DAVID EVANS
AND ASSOCIATES INC.

March 13, 2009

Kathryn Gross, CFM, M.A.
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

SUBJECT: PHASE 3 – UPRR SUBMITTAL OF FEBRUARY 2009 – JRC COMMENTS

Dear Kathryn:

The comments from Julie Cox in her February 27, 2009 letter are included below followed David Evans and Associates' responses in italics:

Phase 3 South (both 6-hr and 24-hr models)

1. Within the KK block D612, please change the KM record to show flow split at McQueen & Frye (not McQueen & Ray as it currently reads).

DEA – The KM record has been revised.

2. Within the KK block P610-9 and between elevations 1213 and 1216 ft, the SV records were changed from the November submittal. Please check and advise or change as necessary.

DEA – The SV records were revised to remove two retention basins on the east side of Hamilton Street just south of Ray Road. The floodplain has been revised in this Pond and no longer encompasses these basins. The retention volume was diverted, rather than used as storage routing and the SV records were updated accordingly for P610-9.

3. Within the electronic output (intermediate output for P628) at elevation 1220.9, the SV record of 15.0 shows as 50015.0 and the SE record of 1220.9 shows as 301220.9. This does not impact the modeling results but it would be nice to have it cleaned up.

DEA – The SV and SE records have been corrected.

4. Within the supporting documentation for P623-5, the Culvert Master Rating Table Reports show two different Qs for the same elevation 1217.2 ft. Please check and advise or change as necessary.

DEA – The CulvertMaster rating tables have been revised. The pond outlet is based on two culverts, a 30-inch CMP that drains the area ponding behind the railroad spurs and a 60-inch RCP that is located on the downstream side of the railroad spurs. The spurs are overtopped at an elevation of 1217.2 so all release from P623-5 happens through the 30-inch below an elevation of 1217.2 and once the spurs are overtopped the release is governed by the 60-inch. The rating table for the 60-inch now starts at 1217.3.

Kathryn Gross, CFM, M.A.
March 13, 2009
Page 2



5. Within the updated SQ records for the KK block P632S, there is a typo in the SQ record at elevation 1215. Please change to read 18.29.

DEA – The SQ record has been revised.

6. For the first, second, and third PB regions, please change the date of the memo from 10/3/08 to 6/4/08.

DEA – The date has been revised for all PB regions.

Phase 3 North (both 6-hr and 24-hr models)

No comments.

Comment noted.

Please let me know if you have any questions.

Sincerely,

DAVID EVANS AND ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'Jason Coleman', with a long horizontal flourish extending to the right.

Jason Coleman, P.E.

Water Resources Project Manager

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Project Number: MARI-0047



DAVID EVANS
AND ASSOCIATES INC.

March 13, 2009

Kathryn Gross, CFM, M.A.
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, Arizona 85009

**SUBJECT: PHASE 3 – UPRR SUBMITTAL OF FEBRUARY 2009 – COMMENTS REGARDING
ARIZONA AVENUE ADDENDUM RESPONSES**

Dear Kathryn:

The comments regarding the Arizona Avenue Ponds from your March 4, 2009 letter are included below followed David Evans and Associates' responses in italics:

1. For Ponds P629, P631, and P633 the floodplain limits and associated text should be removed from the maps. At this time do not remove the supporting documentation from the report.

DEA – Per your direction we have removed the floodplain mapping and annotation from the work maps for Ponds P629, P631 and P633. The supporting documentation and modeling is still included in the TDN.

2. For Ponds P624 and P626 please update the floodplain limits if an appreciable difference has occurred. Update the associated text as well.

DEA – The floodplain limits and annotation have been updated for Ponds P624 and P626.

Please let me know if you have any questions.

Sincerely,

DAVID EVANS AND ASSOCIATES, INC.

Jason Coleman, P.E.
Water Resources Project Manager

File Name: P:\Mari0000-0040\Admin\corres\Review Response KAG 13 Mar2009 azave.doc
Project Number: MARI-0047



Flood Control District of Maricopa County

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March 4, 2009

Mr. Jason Coleman, P.E.
Water Resources Project Manager
David Evans and Associates
2141 East Highland Avenue, Suite 200
Phoenix, Arizona 85016

RE: Phase 3 – UPRR Submittal of February 2009 – Comments regarding Arizona Avenue
Addendum

Dear Jason:

We have heard back from the City of Chandler so I am able to provide guidance regarding the Arizona Avenue floodplains.

For Ponds P629, P631, and P633 the floodplain limits and associated text should be removed from the maps. At this time do not remove the supporting documentation from the report.

For Ponds P624 and P626 please update the floodplain limits if an appreciable difference has occurred. Update the associated text as well.

There are no more comments at this time.

Sincerely,

A handwritten signature in black ink, appearing to read "Kathryn Gross", is written over a horizontal line.

Kathryn Gross, CFM M.A.
Project Manager



Flood Control District of Maricopa County

Board of Directors
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March 2, 2009

Mr. Jason Coleman, P.E.
Water Resources Project Manager
David Evans and Associates
2141 East Highland Avenue, Suite 200
Phoenix, Arizona 85016

RE: Phase 3 – UPRR Submittal of February 2009

Dear Jason:

We have finished our review of the February 2009 submittal. Please review the following comments from myself and Julie Cox regarding the North and South submittals and make corrections as necessary.

North Watershed

Hydrology

1. Please see memo by Julie Cox (attached). At this time the watershed hydrology is approved.

HEC-RAS model

1. Discharges being used are reasonable.
2. Boundary conditions are reasonable.
3. There are additional concerns regarding the placement of levees in the model.
 - 2.461, 2.386, 2.310, 2.084, 2.007, 1.931, 1.855, 1.704 – 1.306
4. For cross-section 2.386 and 2.310, why was Golden Key Road not modeled as ineffective?

Letter to Jason Coleman, P.E
March 2, 2009
Page 2 of 3

5. For cross-section 2.158 – why was the effective conveyance next to the RR decreased from the last submittal. Extending the cross-section information can be accomplished by using the as-builts from Silverhawke III.
6. For cross-section 2.234 the addition of a block obstruction at the end of the cross-section may be appropriate.
7. Modeling approach. We essentially have three ways the RR model could be handled. We have been waiting for input from Town of Gilbert. At this time I recommend we move forward with the last bullet item.
 - 1 model option – model the block wall and make adjustments where necessary to hopefully not raise any flags at FEMA. In this option the subdivisions would not be included in the delineation.
 - 1 model option – do not model the block wall at all. Subdivisions would be mapped in homes with lowest adjacent grades above the WSEL would be mapped into Zone X islands. Area between RR and subdivisions would have a potentially lower WSEL than could be expected.
 - 2 model option – run both scenarios and place a “gutterline” in the floodplain delineation at the wall location. On the RR side of the wall the higher WSEL would be reported for the wall being in place. On subdivision side of the wall the WSEL from the model without the wall would be reported.
8. It is recommended that PEC and FCD have a technical meeting to make specific corrections to the model.

South Watershed

Hydrology model

1. Please address the comments from Julie Cox (attached). All comments are minor in nature.
2. Please re-verify the schematic regarding how flow is reaching P623-5 and P621. Presently in the model P623-5 flows to P621 and P621 has no outflow. However, P623-5's water surface elevation is lower than P621 and flows start spilling into P621 at 1215. P621 has a final WSEL of 1219.3 versus P623-5's WSEL of 1217.5. This would indicate that P621 would spill back over into P623-5. Please look into this issue. I believe this issue was raised back in 2005 by Mike Duncan and those comments were submitted to DEA at that time.
3. All ponds appear reasonable. However, we are still having difficulty verifying the volumes for P606-3. Any additional information that can be provided would be appreciated to help support our approval.

Letter to Jason Coleman, P.E
March 2, 2009
Page 3 of 3

4. P630 – I am tracking down the as-builts for the Pine Lake Estates subdivision to aid in the delineation of the final floodplain delineation. This is to verify if the Lake has containment on the south side.
5. Arizona Avenue floodplains. The District is meeting today to discuss Chandler's recommendations regarding the floodplains along Arizona Avenue. Most ponds will most likely stay on the floodplain workmaps. The results of the meeting will be passed on to DEA as soon as possible. Updates to the maps will need to be made.

The next submittal will include updated modeling based on the above comments and submittal of the draft TDN. Updated floodplain workmaps should be included with the TDN. The public meeting has been scheduled and draft digital linework needs to be submitted to the District by March 18th. Further discussion is needed regarding the final name we are choosing for this project.

There are no more comments at this time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathryn Gross', with a long horizontal flourish extending to the right.

Kathryn Gross, CFM M.A.
Project Manager



Flood Control District of Maricopa County

INTEROFFICE MEMORANDUM

Date: February 27, 2009

To: Kathryn Gross, Project Manager
Planning & Project Management Division

From: Julie Cox, Senior Hydrologist
Engineering Division

Subject: Chandler/Gilbert FDS Phase 3 Submittal of February 20, 2009

I have reviewed the above referenced submittal and my comments are listed below.

Phase 3 South (both 6-hr and 24-hr models)

1. Within the KK block D612, please change the KM record to show flow split at McQueen & Frye (not McQueen & Ray as it currently reads).
2. Within the KK block P610-9 and between elevations 1213 and 1216 ft, the SV records were changed from the November submittal. Please check and advise or change as necessary.
3. Within the electronic output (intermediate output for P628) at elevation 1220.9, the SV record of 15.0 shows as 50015.0 and the SE record of 1220.9 shows as 301220.9. This does not impact the modeling results but it would be nice to have it cleaned up.
4. Within the supporting documentation for P623-5, the Culvert Master Rating Table Reports show two different Qs for the same elevation 1217.2 ft. Please check and advise or change as necessary.
5. Within the updated SQ records for the KK block P632S, there is a typo in the SQ record at elevation 1215. Please change to read 18.29.
6. For the first, second, and third PB regions, please change the date of the memo from 10/3/08 to 6/4/08.

Phase 3 North (both 6-hr and 24-hr models)

No comments.

I anticipate the next submittal will be the TDN for Phases 3 North and South. I expect to see the HEC-1, DSS, and DDMSW files; Exhibits; Pond Rating Table Documentation, Retention Volume Spreadsheets, Summary of HEC-1 Ponding Results Spreadsheets, 6/4/08 FCDMC memo regarding PC records, Supporting Documentation for Subdivisions and Parks (Festiva Court, Vagabond/Espee Park, etc.), Routing Tables, and Verification.



Flood Control District

of Maricopa County

Meeting Minutes

Chandler-Gilbert FDS – Phase 3 – UPRR Second Kickoff Meeting (PART 3)

DATE: February 10, 2009

Location: DEA

Attendees:

Kathryn Gross, FCD

Jason Coleman, DEA

Nathan Logan, DEA

Ying Xu, PEC (by phone)

1. PEC – Watershed Task Overview
 - a. Landuse and Retention Updates complete - YES
 - b. Address comments listed in comment letter - WILL ADDRESS
 - c. Other Miscellaneous modeling issues that have been identified
 - i. Delete the 503NOR from the model – this was “Commented out” by request on the last submittal. Now we are ready to fully remove it. – WILL REMOVE
 - ii. Verify if these were addressed (Julie did not mention one way or the other) – ALREADY ADDRESSED
 1. Additional comments provided by Julie:
 2. The KK block 517OUT contains a DT record named 509RET. The DT record should be named 517RET in both the 6-hr and 24-hr models.
 3. For sub-basin 500, the UC records are the same for both the 6-hr and 24-hr models. They should be different.
2. DEA – Watershed Task Overview
 - a. Landuse updates, completed? – COMPLETED
 - i. Islands subdivision modeled as non-contributing - OK
 - b. Retention analysis and update
 - i. Add additional basins shown in jpeg from FCD and incorporate onto Retention exhibit, tables and model – BEING DONE
 - c. Address comments listed in comment letter. – WILL ADDRESS
3. PEC- Floodplain Updates
 - a. Update RAS model based on comments from FCD –WILL ADDRESS
 - i. Starting water surface elevations
 - ii. Blocked obstructions- use ineffective flow at same limits of the blocked obstructions
 - iii. Re-align some cross-sections – will look into
 - iv. Discharges being used – will look into

- b. Update remaining delineations where floodplain water surface elevations may have changed due to watershed changes.
- c. No storage relationship updates for the North watershed.

4. DEA – Floodplain Updates

- a. Pond 601 - Re-verify the modeling of this pond. Make sure the culvert in the trestle is modeled.
- b. P603/606 – *Current analysis determined that the two ponds will intermingle. Will be modeled as one pond
 - i. - North split (P603)
 - 1. Survey needed
 - 2. A new separate storage relationship will be needed north of Knox. This is Espee Park.
 - ii. P603/606 - South split (P606).
 - 1. Survey needed to supplement Festiva Court as-builts
 - 2. A new separate storage relationship will be needed south of Knox to incorporate Festiva Court.
 - 3. South of the subdivision the original topo will be used. There is a chance that this may work best as two separate ponds. Whichever is easiest to accomplish should be done.
 - iii. May include an additional floodplain workmap that details/documents how the survey data and plan sheets were used to determine the floodplain limit shown on the floodplain workmap.
- c. P610/609 – Does not appear that a storage relationship change is needed but the delineation appears to need a little tweaking. Appears that the proposed floodplain is greater in this area than the original. There are two islands of houses mapped into the floodplain with a contour surrounding it greater than the proposed watershed. Please correct, if the new watershed data supports it.
- d. P618 – Hamilton Park. No additional work needed. We will leave our pond and the Zone A on the map.
- e. P623/625 – Tumbleweed Park, railroad museum spurs.
 - i. Survey needed
 - ii. Determine best way to handle this pond; one or two connected ponds.
 - iii. Based on discussions at the meeting the volume reaching the site may “drown out the spurs
- f. P621 – revise floodplain limits. Part of the delineation extends into the freeway. Might as well truncate the delineation if possible.
- g. P630 – re-delineate floodplain limit. Hopefully it can all be contained within the lake.
- h. P627 – verify that the limits are appropriate. Presently, higher spot elevations are contained within the floodplain limits.
- i. Arizona Avenue Ponds – P633, P631, P629, P624, and P626 will not be re-evaluated and will be removed from the delineation. No set of sheets for these ponds. Will discuss with Chandler whether they want the storage relationships in the model. Leave them in the model for next submittal.

5. Next submittal – February 20, 2009. Final TDN March 31, 2009.

6. Do not draw any new floodplain limits until modeling is approved. Want to draw only once to save time and money.

7. DSS file – District will re-develop DSS file for 6 and 24hour models to see if “corruption” resolves itself. If not, further discussion will be necessary to determine how to re-connect to the Phase 2 models.
8. FEMA forms
9. Public Meeting schedule – mid to late March. Looking at 19th, 26th and 31st. (added 2/11/09- 19th is out another FCD public meeting is scheduled for that day and most likely I have to be in attendance)
10. Other items
 - a. Mylar sheet – DEA needs to track down the Phase 3 mylar sheet. New contract number needs to be added and need to figure out how to revise title if possible. Mapper sealed all three cover sheets (Phase 1-3) back when we finalized Phase 1.



Flood Control District of Maricopa County

Board of Directors
Fuiton Brock, District 1
Don Stapley, District 2
Andrew Kunasek, District 3
Max Wilson, District 4
Mary Rose Wilcox, District 5

www.fcd.maricopa.gov

2801 West Durango Street
Phoenix, Arizona 85009
Phone: 602-506-1501
Fax: 602-506-4601
TT: 602-505-5897

February 5, 2009

Mr. Jason Coleman, P.E.
Water Resources Project Manager
David Evans and Associates
2141 East Highland Avenue, Suite 200
Phoenix, Arizona 85016

RE: Phase 3 – UPRR Submittal of October 2008

Dear Jason:

We have finished our review of the October 2008 submittal. Please review the following comments from myself and Julie Cox regarding the North and South submittals and make corrections as necessary.

North Watershed

HEC-RAS model

1. Please re-verify the discharges being used in the RAS model.
 - For the starting discharge used at cross-section 2.889, please consider using the outflow discharge of Pond516. Presently it appears the Consolidated Canal overflow is being used as the chosen discharge.
 - The discharge input at cross-section 2.084 of 1008 cfs is reasonable.
 - For the discharge input at cross-section 1.855, the discharge of 1690 cfs could not be verified in either HEC-1 model. Further discussion is necessary to determine the most appropriate discharge to use for this reach.
2. Boundary conditions – downstream water surface elevation. Please update to reflect the new ponding elevation.
3. The following cross-sections have no concerns: 2.613, 2.310, 2.234, 2.158, 1.780, 1.704, and 1.628.

letter to Jason Coleman, P.E
February 5, 2009
Page 2 of 2

4. Consider removing the levees or provide justification for the following cross-sections: 2.689, 2.537, 2.461, and 2.234.
5. Remove the obstructions from the following cross-sections: 2.084, 2.007, 1.931, 1.855, 1.552 (modify obstruction), 1.477, 1.401, and 1.306.
6. Consider re-aligning the following cross-sections:
 - 2.084, 2.007 (cut cross-section), 1.931, 1.855
 - 1.477, 1.401, 1.306
7. Regarding 2.386, further discussion is needed regarding the overtopping note included with the cross-section. Placement and usage of the levee station also needs to be discussed and if kept in place justification for its location and use will need to be added.
8. Re-evaluate the use of the right overbank n value of .1.

Hydrology model

1. Please address the comments from Julie Cox dated November 18, 2008 (attached).

South Watershed

Hydrology model

1. Please address the comments from Julie Cox dated December 4, 2008 (attached).

There are no more comments at this time.

Sincerely,



Kathryn Gross, CFM M.A.
Project Manager



Flood Control District

of Maricopa County

INTEROFFICE MEMORANDUM

Date: December 4, 2008

To: Kathryn Gross, Project Manager
PPM Division

From: Julie Cox, Senior Hydrologist
Engineering Division

Subject: Comments on Chandler-Gilbert FDS Phase 3 South Submittal – November 2008

I have reviewed the HEC-1 models, DDMSW files, and retention spreadsheets. My comments are listed below. I anticipate the exhibits (maps), routing table, HEC-1 ponding results spreadsheet, and verification will be included in the TDN.

1. Change the entry on the IO record from 5 to 3.
2. 6-hr and 24-hr models. For both KK blocks COO525 and COO524, remove Part F ("F=6HR") from the pathname.
3. 6-hr model. Change the Part B of the ZR records to the paths shown below for CON406, CON412, CON424, CON427, and CON432.
ZR =QI A=CONS B=CP406 C=FLOW E=5MIN
ZR =QI A=CONS B=CP412 C=FLOW E=5MIN
ZR =QI A=CONS B=CP424 C=FLOW E=5MIN
ZR =QI A=CONS B=CP427 C=FLOW E=5MIN
ZR =QI A=RR B=CP432 C=FLOW E=5MIN
4. 6-hr model. The PC records are not aligned properly. Please realign the PC records.
5. 6-hr and 24-hr models. For 612RET, the 5.37 is not aligned properly. This does not affect the model results.
6. 6-hr and 24-hr models. For 617RET, the 9.34 is not aligned properly. This does not affect the model results.



Flood Control District of Maricopa County

INTEROFFICE MEMORANDUM

Date: November 18, 2008
To: Kathryn Gross, Project Manager
PPM Division
From: Julie Cox, Senior Hydrologist
Engineering Division
Subject: Comments on Chandler-Gilbert FDS Phase 3 Submittal of 10/23/08

I have reviewed the HEC-1 models, DDMSW files, and retention spreadsheets. My comments are listed below. I anticipate the exhibits (maps), routing table, HEC-1 ponding result spreadsheet, and verification will be included in the TDN.

1. DSS files. The part B of the ZR records for CON314 should be changed to the paths shown below. The part F of the ZR records for CON314 should be removed. The resulting peak flow and volume for the 100-yr 6-hr model should be 162 cfs and 58 ac-ft. The resulting peak flow and volume for the 100-yr 24-hr model should be 54 cfs and 50 ac-ft.

ZR =QI A=CONS B=314_6 C=FLOW E=5MIN

ZR =QI A=CONS B=CP314 C=FLOW E=5MIN

2. The September 14, 2005 memo from Julie Cox to Michael Duncan contains comments mostly related to Phase 3 South. However, comments #5, 6, and 12 pertain to Phase 3 North. These comments are listed below for the convenience of the consultant and still need to be addressed.

Flood Control District Comment #5

The Pond Summary Spreadsheet for Phase 3 North has 2 minor errors.

- a. For P503, change the time to peak inflow for the 24-hr event from 14.42 to 12.42 hours.
- b. For P505, change the maximum stage from 1211.55 ft to 1211.65 ft.

Flood Control District Comment #6

See Phase 3 North Routing Table.

- a. Route 508516 is not in the table. Revise as necessary.
- b. Route 508509 is not in the models. Revise as necessary.

Flood Control Comment #12

- a. For CON501, DDMSW and the HEC-1 models show lengths of 5500 ft, but the spreadsheet shows 5650 ft. Revise as necessary.
- b. For CON516, DDMSW and the HEC-1 models show lengths of 6500 ft, but the spreadsheet shows 6300 ft. Revise as necessary.
- c. For 502503, DDMSW and the HEC-1 models show lengths of 5500 ft, but the spreadsheet shows 6200 ft. Revise as necessary.

3. DDMSW

The UC and LG records were changed for sub-basins 503, 522, and 523. The DDMSW and HEC-1 models reflect this. No further changes are necessary.

4. Retention

The KM record for 502RET for residential basins should be 49.41 ac-ft instead of 48.41. The total volume on the DT record in the model is correct.

For sub-basin 511, the total sub-basin retention should be 25.83 ac-ft instead of 25.82 ac-ft. Very minor and probably doesn't require a change.

For sub-basin 524, the total sub-basin retention should be 13.77 ac-ft instead of 13.76 ac-ft. Very minor and probably doesn't require a change.



DAVID EVANS
AND ASSOCIATES INC.

August 24, 2005

Ms. Kathryn Gross, M.A., CFM
Maricopa County Flood Control District
2801 West Durango Street
Phoenix, Arizona 85009

RE: Phase 3 – SPRR/Arizona Avenue Watershed Hydrology and Storage Relationship Review
November 2004 Submittal

Dear Kathryn:

This letter addresses your comments dated May 5, 2005 regarding the Phase 3, UPRR/Arizona Avenue Watershed Hydrology and Storage Relationship Review submittal. DEA and PEC responses are in italics.

We have finished our review of the November 2004 submittal and have the following comments. Comments are organized into General Discussion, comments from myself, and comments from Julie Cox.

General Discussion

The following are some general concerns and observations regarding the submittal.

1. DDMSW files: Verify the DDMSW projects reflect the study name and area.

DEA/PEC: OK.

2. HEC-1 models: Verify the hydrology models reflect the study name and area.

DEA/PEC: OK.

3. DSS files: Only one DSS file should be run with the models. It is CGFDS.DSS. All the 24-hr and 6-hr hydrographs are contained in this file. All phases will use this DSS file. To remove the K.DSS issue the model should be run outside of DDMSW with the CGFDS.DSS file. If this poses a problem please contact me so that we can work out an alternative method.

DEA/PEC: OK.

4. Please make sure that KO 3 are added to all ponds and pond diversion records to aid in the understanding of how flow volumes are being distributed.

DEA/PEC: OK.

5. The draft floodplain delineation work maps and, at the consultant's discretion, the draft TDN should be included with the next submittal.

DEA/PEC: *Work maps have been included, as well as all supporting calculations. TDN text will be included with the next submittal.*

6. With the next submittal the District will start its coordination efforts with the Town of Gilbert and City of Chandler to determine what subdivisions are proposed and how far in the process they are to determine their impact on our study.

DEA/PEC: *Noted.*

Review Comments from Kathryn Gross

DEA/South watershed

1. For the following concentration points no ponding relationship was performed. Please explain why no ponding relationship was necessary. If upon further review one is necessary please add it to the modeling. It may be a good idea to add a comment to each of these concentration point locations stating that no ponding area was needed.

- CP602, CP604, CP607, CP625, CP622

DEA: *These are developed areas with no ponding areas available with the exception of CP625. CP625 is diverted to sub-basin 623 and the ponding relationship for the two sub-basins is combined. Note added to HEC-1 models.*

2. Is there a schematic error where pond outflows from P613-615 are combined with CP610? It appears these flows would most likely be directed to 616.

DEA: *P613-615 weirs over the roadway into sub610 before overtopping the railroad into 616.*

3. Please verify that no flows will enter into sub basin 616.

DEA: *Flows overtop into 610, not 616.*

4. Please verify the ponding analysis consistency for locations along the freeway. For 618 should we be modeling a pond here or allow the flows to be diverted into the ADOT drainage system?

DEA: *A pond is modeled here because there is an existing retention basin adjacent to the freeway which then dumps into the freeway system.*

5. Please remove the retention diversion for sub basin 632N. The majority of the sub basin is golf course.

DEA: Retention diversion removed because available volume has been incorporated into stage/storage/discharge routine.

6. Should there be west overflows from Pond 632S?

DEA: There is no weiring over the railroad so no flow will escape. See Ponding Data included with this submittal.

7. Please verify the schematic. Should the outflow from 634 be routed to CP633 why not sub basin 635?

DEA: A pond is contained within sub634 and contains the volume generated; therefore, no overtopping occurs.

8. Ponding analysis support exhibits.

- For 603-606 please show the limit of calculated volume as a darker line.
- For 618 identify the proposed freeway corridor like shown on 621's sheet.
- Please make sure that Consolidated Canal, Arizona Avenue, and the SPRR are labeled on the exhibits. Some sheets do not have labels.

DEA: Corrected.

PEC/North

1. Several sub basins are missing from the model.
 - North of Baseline. The study area for Phase 3 extends to the Freeway not Baseline. Please add sub basins, and related combination points, routes and ponds for the area above Baseline Rd.
 - Sub basins 507, 514 and 520 are shown on the schematic but are not included in the model. Please add them to the modeling.

PEC: The area north of Baseline Rd has been included in the updated model. Sub-basins 507, 514 and 520 are deleted from the exhibits since no floodplain will be delineated against Arizona Ave.

2. Why are flows diverted to 508 prior to the combination with the CON303 flows?

PEC: Corrected.

3. The model shows that C310 is brought in with CON308. The schematic shows that CON305 should have been brought in. Please verify.

PEC: Corrected.

4. Should there be a pond at CP509?

PEC: The potential flooding area against the RR is included in the hydraulic analysis.

5. Presently it appears that inflows from north of the Freeway were not incorporated into the model. This will need to be accounted for in the next submittal. I believe Julie found a problem with the DSS inflows being taken from the Tempe Canal study. We may need to start the ponding relationship where these flows enter with a starting volume or water surface elevation instead of using the DSS inflow.

PEC: The flow from the north has been incorporated in the updated model

6. Ponding Analysis support exhibits. Please make sure roadways, consolidated canal, and the SPRR are appropriately labeled on the exhibits.

PEC: Exhibits were not labeled for Phase 1 or phase 2. Phase 3 exhibits should be consistent.

Review Comments from Julie Cox

I have reviewed the Phase 3 exhibits, HEC-1 models, spreadsheets, and DDMSW data and my comments on both Phase 3 South (600 sub-basins) and North (500 sub-basins) are listed below. I would be glad to meet with the consultants to discuss my recommendations.

DEA/Phase 3 South/600 sub-basins

1. Exhibits
 - a. Exhibit A – Sheets 1 and 2 should read “Drainage Area Boundary Map”.

DEA: Corrected.

2. Retention
 - a. Add documentation for sub-basin 632N retention volume of 88.6 af to the “Retention Volumes Spreadsheet”.

DEA: Retention diversion removed from both models. Volume is incorporated into stage/storage/discharge routine.

- b. Is the retention volume for sub-basin 630 25.4 af instead of 3.1 af? Revise as necessary.

DEA: 3.1 af is correct. The remaining volume is included in the storage volume calcs.

3. “Summary of HEC-1 Ponding Results Spreadsheet”

- a. Ten 6-hr ponds have the higher water surface elevation and nine 24-hr ponds have the higher water surface elevation. The higher elevation should be used to map the floodplain.

DEA: Due to model revisions the 6-hr pond elevations are used for all ponds. The 6-hr ponds for each PB region have a higher average elevation than the 24-hr model.

- b. For P601, correct the maximum inundation depth for the 6-hr.

DEA: Corrected.

- c. For P626, check and revise 24-hr results as necessary.

DEA: Revised.

- d. For P623-5, change the 24-hr peak storage from 41 to 185 af.

DEA: Due to model revisions the 24-hr peak storage is now 153 af.

4. Ponds

P601 – ok 6, 24

P603-6 – ok 6. In the data table, at elev 1218, change SV to 261.66.

DEA: HEC-1 models were changed to 261.56.

P609 – Delete SE record “12” that follows elev 1218 in both the 6-hr and 24-hr models.

DEA: Corrected.

P613-5 – ok 6, 24

P610 – ok 6, 24

P618 – ok 6, 24

P628 – ok 6, 24

P627 – ok 6, 24

P629 – ok 6, 24

P621 – ok 6, 24

P623-5 – ok 6, 24

P624 – ok 6, 24

P626 – ok 6, 24

P630 – ok 6, 24

P631 – ok 6, 24

P632N – ok 6, 24

P632S – ok 6, 24

P634 – ok 6, 24

P633 – ok 6, 24

5. Routes

- a. 633635 is not in either the 6-hr or 24-hr model. Revise as necessary.
- b. 633635 is not shown on Exhibit E. Revise as necessary.

DEA: 633635 was removed from Routing spreadsheet and is not in either model.

6. Verification

- a. Provide regional equation envelope curves with the results plotted to verify all of the analyses. Use DDMSW's Hydrology Graphing Feature for Unit Discharge. Graphs should include USGS, Boughton, and Malvick envelope curves. Include in the TDN and discuss results, particularly any outliers. Typically, 100-yr results should plot below Boughton, slightly below USGS, and at or higher than Malvick.

DEA: All requested graphs have been included with this submittal. The outliers are due to combination points that were needed for modeling purposes to keep within the allowable number of hydrographs.

- b. Include table with unit discharge (cfs/sq mi).

DEA: O.K.

PEC/Phase 3 North/500 sub-basins

7. Job Cards – use IO = 3 or use KO like DEA did in Phase 3 South.

PEC: OK.

8. The printout of the 100-yr 24-hr model is missing 16 pages between the end of the HEC-1 schematic and the beginning of the runoff summary. Please add missing pages to the next submittal.

PEC: Will check and make sure for the next submittal.

9. Exhibits

- a. Exhibits A and B – Identify the non-contributing area in sub-basin 518.
- b. Exhibits A, B and E - Label the Consolidated Canal.
- c. Exhibits A and B - Is there a reason sub-basin 515 is missing?
- d. Exhibit E – Add retention symbol to sub-basins 506, 512, and 515 if appropriate.

PEC: OK. Sub-basin 515 has been merged into sub-basin 516. The retention basins for 506 and 512 are delineated as floodplains.

10. Retention

- a. Add retention to both the 6-hr and 24-hr models for sub-basins 506, 512, 515, and 524 if appropriate.
- b. Add documentation for sub-basins 516 and 525 retention volumes to the "Retention Volumes Spreadsheet".

PEC: DEA will take care of this.

- c. Based on the "Retention Volumes Spreadsheet", change the DT record for 524RET from 17.7 to 35.3 af in both the 6-hr and 24-hr models.

PEC: 17.7 is correct.

- d. Based on the "Retention Volumes Spreadsheet, change the DT record for 508RET from 62.9 to 4.3 af in both the 6-hr and 24-hr models.

PEC: OK.

11. "Summary of HEC-1 Ponding Results Spreadsheet"

- a. For P505, use the 24-hr water surface elevation.

PEC: WS of 24-hr is about 1/10 of a foot higher than that of 6-hr. We prefer to stick with the 6-hr model output for consistency.

- b. For P513, change the 24-hr time of maximum stage from 25.33 to 30.83 hrs.

PEC: P513 is combined with P519 in the updated model.

12. Ponds

P503 – ok 6, 24

P505 – In both the 6-hr and 24-hr models, but no data table or aerial photo for documentation.

PEC: Stage-volume-outflow table is added to the analysis spread sheet.

P506 – Change SQ from 0 to 2.79 in the data table and both the 6-hr and 24-hr models.

PEC: P506 has been remodeled.

P512 – In the data table, change the 3rd and 4th entries in the "Q roadway" column to 20 and 100.

PEC: P512 has been remodeled

P513 – The SV records in the data table do not match those in the 6 hr or 24 hr model input. Revise as necessary.

PEC: P513 has been merged into P519.

P516 – ok 6, 24

P519 – ok 6, 24

13. Routes

- a. Include Flowmaster calculations for routing like DEA did in Phase 3 South.
- b. 508516 is on Exhibit E but not in the 6-hr and 24-hr models or the spreadsheet.
- c. 502503 and 516509 are not shown on Exhibit E.
- d. For CON501, DDMSW and the 6-hr and 24-hr models show 5500 ft, but the spreadsheet shows 5650 ft. Revise as necessary.
- e. For CON516, DDMSW and the 6-hr and 24-hr models show 6500 ft, but the spreadsheet shows 6300 ft. Revise as necessary.
- f. For 502503, DDMSW and the 6-hr and 24-hr models show 5500 ft, but the spreadsheet shows 6200 ft. Revise as necessary.

PEC: Model and exhibits updated. DEA conducted FlowMaster routing analysis. PEC uses DEA's information for HEC-1 modeling.

14. Verification

- a. Provide regional equation envelope curves with the results plotted to verify all of the analyses. Use DDMSW's Hydrology Graphing Feature for Unit Discharge. Graphs should include USGS, Boughton, and Malvick envelope curves. Include in the TDN and discuss results, particularly any outliers. Typically, 100-yr results should plot below Boughton, slightly below USGS, and at or higher than Malvick.

PEC: OK.

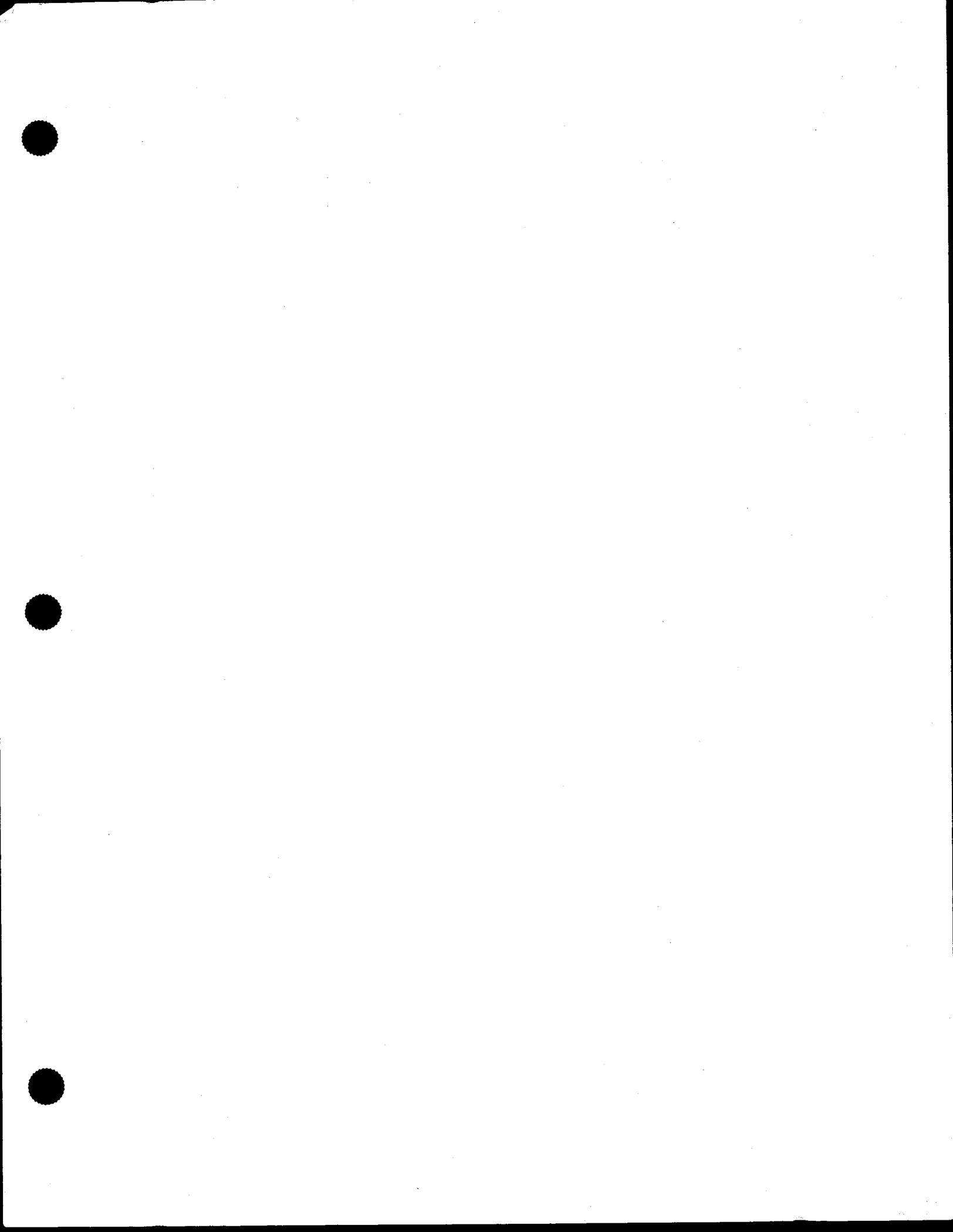
- b. Include table with unit discharge (cfs/sq mi).

PEC: OK.

Sincerely,



Tami Norton, E.I.T., CFM
Project Engineer



B.5 Contract Documents



Flood Control District

of Maricopa County

Date: January 5, 2009

To: Roger E. Baele, P.E., Vice President
David Evans and Associates, Inc.

From: Debee Rose, Contracts Specialist

Subject: Fee Schedule Request for Contract FCD 2008C042, On-Call Floodplain Delineation Services and FEMA Review

The Flood Control District of Maricopa County (District) is pleased to advise that your firm has been selected for the above referenced contract. Contract performance will be for a period of seven hundred thirty (730) calendar days after award or the expenditure of \$100,000.00, whichever occurs first.

Based on the enclosed Exhibit A – General Scope of Work, the District requests your Fee Schedule, which is also enclosed (*Exhibit B – Fee Schedule*), to be submitted as soon as possible. Please also sign the enclosed Affidavit of Compliance and return with your Fee Schedule.

Please provide any comments that you may have regarding the proposed General Scope of Work, such as suggested revisions or refinements and include with your proposed Fee Schedule.

The certificate of insurance form required by the District is enclosed. The Certificate of Insurance must be on file with the District prior to any work commencing. No Work Assignment will be issued until a satisfactory certificate of insurance has been accepted by the District.

Any additional information or requests for clarification should be directed to my attention at 602-506-2206.

Sincerely,

Debee Rose

Debee Rose
Contracts Specialist

Enclosures

EXHIBIT A



GENERAL SCOPE OF WORK

CONTRACT FCD 2008C042

**ON-CALL FLOODPLAIN DELINEATION SERVICES
AND FEMA REVIEW**

**EXHIBIT A
GENERAL SCOPE OF WORK**

CONTRACT FCD 2008C042

ON-CALL FLOODPLAIN DELINEATION SERVICES AND FEMA REVIEW

The CONSULTANT agrees to provide to the Flood Control District of Maricopa County complete engineering hydrology, hydraulics, and review services which include, but are not limited to the following:

1. General civil engineering, surveying, review, on an "as-needed" basis. The amount of work requested during the life of the contract is unknown; the least amount being zero and the maximum amount being limited to "not-to-exceed" amount of the contract. The services to be rendered under this contract shall conform to one of the following categories:
 - A. General Civil Engineering, including alternative analysis, design, floodplain delineation (including submitting studies to FEMA, where applicable) and floodplain review, HIS digital data production, and evaluation of proposed or existing civil engineering project and structures. Work shall include providing general consultation service as required.
 - B. Hydrology and hydraulics for project and floodplain delineation support.
 - C. Formal review of hydrology and hydraulics data and results submitted by other consultants.
 - D. Survey and engineering services not described above.

2. Civil Engineering work requested under this contract shall be completed under the responsibility of a civil engineer registered in the State of Arizona. All work submitted shall bear the "wet seal" and original signature of the responsible registered civil engineer.

All work initiated under this Contract must be completed on or before the expiration date of the Contract.

The District shall pay the Consultant upon completion of the work, as accepted by the District, provided the Consultant returns the executed Certificate of Performance furnished by the Agent. Progress payments may be made as billed by the Consultant based on approved monthly progress reports.



FLOOD CONTROL DISTRICT of Maricopa County
 2801 West Durango Street
 Phoenix, Arizona 85009
 (602) 506-1501
 Fax (602) 506-4601

NOTICE TO PROCEED

TO: Roger E. Baele, P.E., Vice President
 David Evans and Associates, Inc.
 2141 East Highland Avenue, Suite 200
 Phoenix, AZ 85016

February 2, 2009

SUBJECT: PCN ~~014.00.00~~ 014.00.00 Low Org 9176
 FCD Contract No. ~~014-06-01~~ 2008C042
 Assignment No. 1

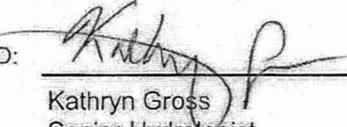
Chandler Gilbert FDS Phase 3, Union Pacific Railroad

Your not-to-exceed cost estimate of \$64,303.83 for Assignment No. 1 has been received and accepted for this project with a completion date of 4/30/2009. You are hereby authorized to proceed with the work for the referenced project as originally described in the Scope of Work. Please specify the contract title, contract number, assignment number, and the dates of the completed service on all related correspondence, including the invoice. Send the invoices and certificates of performance to the attention of Finance Department, Flood Control District of Maricopa County. The certificate of performance must be dated on or after the final invoice date and must accompany the final invoices.

The purpose of this assignment is to complete the hydrologic and hydraulic analysis along the Union Pacific Railroads that was initiated under the original Chandler/Gilbert FDS contract (FCD2002C023). The results of the assignment will be a completed TDN containing updated hydrology and hydraulic information and floodplain delineation workmaps identifying the updated floodplain.

If at any time during the project assignment a material change in the scope of services to be provided occurs, causing an increase in the original cost estimate shown here, you must provide the District with a written explanation of the additional work along with an estimate of additional costs. No additional work shall commence prior to written authorization by the District. No claims for additional work shall be accepted that have not received prior District approval.

SIGNED:


 Kathryn Gross
 Senior Hydrologist


 Timothy S. Phillips, P.E.
 Chief Engineer and General Manager



EXHIBIT A



SCOPE OF WORK

CONTRACT 2002C023

Chandler/Gilbert Floodplain Delineation Study

EXHIBIT A

SCOPE OF WORK

CONTRACT FCD 2002C023

Chandler/Gilbert Floodplain Delineation Study

GENERAL

The floodplain delineation re-study consists of approximately eleven (11) linear miles along Eastern Canal between Baseline Road and Hunt Highway; approximately eleven (11) linear miles along Consolidated Canal between Baseline Road and Hunt Highway; approximately six (6) linear miles along the Southern Pacific Railroad (SPRR) between US 60 and the Roosevelt Water Conservation District Canal (RWCD); approximately twelve (12) linear miles along the Southern Pacific Railroad (SPRR) between US 60 and Hunt Highway; and approximately six (6) linear miles along the raised portion of State Route 87 between US 60 and Hunt Highway.

The project consists of topographic mapping, development of the 100-year hydrology for the 6- and 24-hour rainfall events, and the delineation of the 100-year floodplains along the canals and railroads located within unincorporated Maricopa County as well as the City of Chandler, Town of Gilbert, and City of Mesa. The CONSULTANT shall also include the proposed San Tan Freeway in the base model. The watershed encompasses approximately ninety-five (95) square miles and consists of approximately forty-six (46) total linear miles of floodplain delineations. The limits of the project are as shown on attached Exhibit A1. For this study the CONSULTANT will develop all the necessary topographic data to delineate the floodplain. In order to do the watershed modeling required for this study, the CONSULTANT may have to develop additional topographic data outside the area being delineated. The CONSULTANT will develop the hydrology for the contributing watershed using the U.S. Army Corps of Engineer's HEC -1 computer model, and the floodplain delineations using their HEC-RAS computer model. The CONSULTANT must use sound engineering judgement in the development of the hydrologic and hydraulic models. The CONSULTANT must analyze the results of the models carefully and make refinements to the input parameters in order to obtain the most realistic results. All work must meet Arizona Department of Water Resources (ADWR) and Federal Emergency Management Agency (FEMA) requirements for floodplain delineations. Prior to the finalization of this contract, FEMA and the DISTRICT must review and accept the results of this study, and all items called for in this Scope of Work must be delivered to the DISTRICT.

All work must be completed within nine hundred ten (910) days from the Notice to Proceed (NTP). The FEMA submittal package must be completed within five hundred fifty (550) days (which includes at least one hundred twenty (120) days for DISTRICT reviews). The remaining three hundred sixty (360) days is allotted for obtaining FEMA approval, and the completion of those tasks called for after FEMA approval is obtained.

TASK 1 - COORDINATION

- 1.1 Within fourteen (14) days of the NTP, the CONSULTANT will submit a project schedule to the DISTRICT's Project Manager showing coordination meetings and completion dates for each task identified in the scope of work (SOW). The CONSULTANT will update this project schedule when appropriate.

- 1.2 The CONSULTANT will participate in regular coordination meetings (at least every four [4] weeks) with the DISTRICT's Project Manager and in milestone coordination meetings in the development of the hydrologic and hydraulic analyses. The CONSULTANT is responsible for the minutes of any meetings. Coordination and milestone meetings should be combined whenever possible.
- 1.3 The CONSULTANT will submit an estimate of the monthly billing within fourteen (14) days of the NTP. Thereafter, this estimate will be updated and submitted to the DISTRICT's project manager at least ten (10) days before the end of each quarter.
- 1.4 The CONSULTANT will submit monthly progress reports at least five (5) days before submittal of monthly invoices. The report shall be brief and should be no longer than two (2) typed pages. At a minimum, the monthly report shall contain the following:
 - a. A description of the work accomplished by task during the reporting month.
 - b. Percent (%) completed for the month and percent (%) cumulative completed for each task.
 - c. A brief description of the work to be accomplished in the month following, and
 - d. A description of any problems encountered.
- 1.5 The DISTRICT is responsible for placing the legal advertising at the beginning of the study and of notifying the public of the study. The advertisement will be run in a widely circulated newspaper twice, with approximately one (1) week between runs. The advertisement will also run twice in a local newspaper that serves the area being studied. After the newspapers run the advertisement, the DISTRICT will supply the CONSULTANT with the original affidavit of publication from each newspaper for each day that the advertisement ran for placement in the TDN.
- 1.6 The DISTRICT will notify property-owners by mail to obtain any necessary Rights-of-Entry at the request of the CONSULTANT within the study area. The DISTRICT will provide the CONSULTANT with a list of all the property owners notified and a copy of the Rights-of-Entry letter.
- 1.7 The CONSULTANT will meet with officials from the DISTRICT, the cities, the county and state transportation departments. The purpose of this meeting is to identify local flooding problems and obtain information on current and planned public works projects, channel modifications, storm-drainage systems, development, and corporate limits.
- 1.8 The DISTRICT will prepare and mail a project flyer to individuals within the existing floodplain. This flyer will be mailed to announce the beginning of the study and inform them of its purpose and scope.
- 1.9 The CONSULTANT will attend five (5) public meetings in conjunction with this study. The meetings will be to inform the public and obtain public comment on the study results and shall take place prior to the submittal of the final report to FEMA. The DISTRICT will be responsible for the preparation of the graphic displays for these meetings. At least one (1) representative from the CONSULTANT will attend each of the meetings. The CONSULTANT will respond to the public's comments and make revisions to the study if necessary.
- 1.10 CONSULTANT/DISTRICT Performance Evaluations will be performed. An informal evaluation will be performed at the completion of the hydrologic analysis. A formal evaluation will be performed at the completion of the project upon receipt of all deliverables.

TASK 2 - DATA COLLECTION

- 2.1 The CONSULTANT will collect and review pertinent data from the DISTRICT and other outside sources. Data to be collected will include previous flood hazard reports and hydrology for the study area; existing topographic mapping; historical flooding information; as-built plans for existing structures; FEMA Flood Hazard Boundary Maps and any Letters of Map Amendment and/or Revisions, and other pertinent information. The DISTRICT will provide the CONSULTANT with any pertinent data from the DISTRICT's GIS database for use in the analysis.
- 2.2 A data collection summary will be submitted to the DISTRICT for information purposes. A preliminary draft is due within one hundred twenty (120) days of the NTP. The final will be included in Appendix A of the Technical Data Notebook.

TASK 3 - TOPOGRAPHIC MAPPING

- 3.1 The CONSULTANT as part of this contract shall retain an aerial survey subcontractor. The CONSULTANT will coordinate all the aerial surveying work with the aerial surveying subcontractor to ensure that the specifications of the aerial surveying work are met. The CONSULTANT is responsible for ensuring that the topographic mapping completely covers the area of delineation. The accuracy of the mapping and quality control on surveys will be per FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, February 2002.
- 3.2 Digital contour and planimetric data for this study will be developed and delivered according to the DISTRICT's C.A.D.D. Data Delivery Specifications Rev. 1.0 January 2000.
- 3.3 The aerial survey subcontractor will fly the entire watershed (approximately 96 sq. mi.) bounded by US 60 on the north, Hunt Highway on the south, Arizona Avenue on the west and the RWCD canal on the east using aerial GPS methods. (See Exhibit A2.)
- 3.4 The aerial survey subcontractor shall use a Digital Terrain Model to develop topographic mapping with a contour interval of two (2) feet, and horizontal scale of one (1) inch = 200 feet, with spot elevations for the strips identified along the Eastern Canal, Consolidated Canal, the NW-SE trending SPRR between US 60 and the RWCD Canal, and the SPRR/Arizona Ave corridor (see Exhibit A2). Along with the DTM, the planimetrics to be provided for the mapped area are roadways, culverts, building footprints (greater than 1,000 sq. ft.), canals, and railroads.
- 3.5 Ground Control:
 - a. Survey control will be on the Arizona Coordinate System Central Zone 1983 North American Datum (NAD), horizontally; and the North American Vertical Datum 1988 (NAVD 88), vertically.
 - b. The CONSULTANT shall systematically set panel points and establish horizontal and vertical control throughout the areas to be mapped for use in compilation by the aerial survey contractor. Field control will be sufficient to readily allow for compilation of maps by the aerial survey contractor at the desired map scale and contour interval, and will be based on the North American Vertical Datum 1988 (NAVD 88). The CONSULTANT will provide a conversion factor to the National Geodetic Vertical Datum 1929 (NGVD 29), including documentation of how it was derived, to allow comparison of NAVD 88 elevations to NGVD 29 elevations. The documentation on the conversion factor will be included in the Technical Data Notebook.

- c. The horizontal and vertical control points shall be located and marked by the CONSULTANT. The controls for the aerial mapping will be in sufficient numbers and will be in locations that will be compatible with the accuracy of the mapping requirements. Section corners, quarter corners, mid-section points, and GDACS points will be used for control points wherever possible.
- d. In addition to the aerial targets required for the photogrammetry, additional "blind" aerial targets shall be set, spaced uniformly throughout the project area, and both horizontal and vertical values established. The number of additional aerial targets will be **one per linear mile of reach to be mapped**. The AERIAL MAPPING SUBCONTRACTOR will not be provided with the surveyed elevations and coordinates at these additional targets. The AERIAL MAPPING SUBCONTRACTOR shall provide, to the DISTRICT, the elevation and coordinates of these blind targets, with one hundred percent (100%) of the points meeting the accuracy requirements established in FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, February 2002 for the required project accuracy prior to proceeding with the topographic mapping.
- e. All aerial target materials are to be removed following completion of the topographic mapping. The actual markers will be set flush and be of a permanent nature.
- f. Where applicable, control points from surrounding studies will be incorporated into the ground control for the existing study.

TASK 4 - FIELD SURVEY

- 4.1 The CONSULTANT will prepare topographic mapping with a contour interval of two (2) feet and a horizontal scale of one (1) inch = 200 feet, with spot elevations on all section line and mid-section line roads, for all floodplain/floodway delineation areas.
- 4.2 Ground Control for Floodplain Delineations:
 - 4.2.1 All topographic mapping and survey work will meet or exceed current FEMA minimum criteria as defined in FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, February 2002. This includes, but is not limited to: the establishment of "permanent" elevation reference marks (ERMs); field control; and verification of profiles by the ground survey profile procedure.
 - 4.2.2 Obtain GDACS points and use data to establish ERMS.
 - 4.2.3 Horizontal and Vertical Control: Systematically set panel points and establish horizontal and vertical control throughout the area to be mapped for use in compilation by the aerial survey contractor. Field control shall be sufficient, at least one (1) "permanent" point per mile, such point(s) being used as Elevation Reference Marks (ERMs). Surveys will be based on the North American Vertical Datum of 1988 (NAVD 88), per FEMA guidelines. The CONSULTANT will provide a conversion factor, including documentation of how it was derived, to allow comparison of NAVD 88 elevations to National Geodetic Vertical Datum of 1929 (NGVD 29) elevations. The documentation on the conversion factor will be included in the Technical Data Notebook. "Permanent" survey points will consist of existing monuments, such as brass caps or similar survey monuments. Where additional monuments are needed, survey markers conforming to Maricopa Association of Governments (MAG) Uniform Standard Detail for Public Works Construction, detail 120-1, Type C, shall be placed two (2) inches +/- above grade, and topped with a brass cap.

Elevation Reference Marks will be labeled on available maps and described so that they can be easily located in the field.

- 4.2.4 All aerial target materials are to be removed following completion of the topographic mapping. The actual markers will be set flush and be of a permanent nature.
- 4.3 The CONSULTANT shall verify the accuracy of the mapping by the procedures called for in FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners or other methods approved by FEMA. This shall include the verification of cross sections used in the floodplain delineation.
- 4.4 Field surveys of bridges, culverts, and hydraulic structures are to be obtained by the CONSULTANT when as-built plans are not available or when changes significant to the HEC-RAS modeling, such as sedimentation, have occurred since the date of the as-built plan. This information should be reduced and compiled into an 11"x 17" (maximum size) drawing for inclusion in the final report. The information presented in the drawing should be in a format appropriate for use in the HEC-RAS model. Field surveys of bridges, culverts, hydraulic structures, and routing reaches must also be obtained where necessary for proper hydrologic modeling. It may be necessary to field survey some structures since the as-built plans may not be on the same datum as the study.
- 4.4.1 **OPTIONAL ITEM** – The CONSULTANT may be authorized to survey additional structures or roadways if field investigations identify more structures than the original task authorizes (50 structures) or if modifications to certain structures and roadways require re-survey for proper hydraulic analysis. **This OPTIONAL TASK is not authorized with the Notice to Proceed; it may be authorized in writing by the DISTRICT based upon specific need as determined by the DISTRICT during the contract period.**
- 4.5 Additional road/canal and road/railroad profiles and cross-section work supporting the delineations will be conducted by GPS RTK methods and will meet or exceed the technical requirements of the aerial mapping.
- 4.6 Copies of the survey field books and office calculations must be included in the Technical Data Notebooks. If DISTRICT approval is obtained, this information can be submitted separately.

TASK 5 - HYDROLOGY

- 5.1 The hydrologic study of the watershed will be delivered to the DISTRICT under separate cover from the hydraulic analysis. The CONSULTANT shall use the U.S. Army Corps of Engineers computer program HEC-1, 1997 Version 4.1 to develop a hydrologic model for the area. The latest version of the DISTRICT's DDMSW software should be used to develop subbasin and routing parameters. Using appropriate hydrologic judgement, sub-basins are to be identified that provide reasonable depiction of the watershed condition. The sub-basins must be as homogeneous as possible, using watershed area, watershed type (mountainous and flat lands or urban and undeveloped areas), and time of concentration as criteria. Sub-basin break-downs will be done in sufficient detail to provide peak discharges at structures, major road crossings, confluences, and any other control feature located along the canals and railroads being studied. An appropriate time step and number of ordinates is to be selected that allows for complete calculation of the flood hydrograph without sacrificing resolution of the flood peak.

- 5.1.1 The peak discharges for the 100-year 6- and 24-hour storms will be developed.
- 5.1.2 The base hydrology model will be developed as if the San Tan Freeway is in place.
- 5.2 The Drainage Design Manual for Maricopa County, Volume I, Hydrology, Revision January 1995 shall be used. A computer program, DDMSW, may also be used in conjunction with the manual. The specific hydrologic techniques to be used in this study are:
- a. Rainfall Depth: Point precipitation values will be determined using the information and procedures described in the Drainage Design Manual for Maricopa County, Volume I, Hydrology (1995).
 - b. Rainfall Distribution: Peak discharges and peak volumes for the 100- year 6-hour storm will be estimated using the DISTRICT's Distribution(s). Peak discharges and peak volumes for the 100-year 24-hour storm will be estimated using the SCS Type II rainfall distribution.
 - c. Areal Reduction: The point precipitation values will be areally reduced for critical concentration areas. Modifications to the original methodologies (Areal reduction for the 6-hour rainfall duration will be applied using the curves in the Drainage Design Manual for Maricopa County, Volume I, Hydrology (1995). NOAA HYDRO-40 will be used with the 24-hour rainfall reduction) will be necessary due to watershed constraints. The modified methods will need to be approved by the DISTRICT prior to application in the modeling.
 - d. Rainfall Excess: The Green and Ampt methodology will be used for estimating the rainfall losses.
 - e. Unit Hydrograph: The Clark and S-Graph method should be used following the procedures outlined in the Drainage Design Manual for Maricopa County, Volume I, Hydrology (1995). The choices in methodology will be to the discretion of the CONSULTANT, with consent from the DISTRICT.
 - f. Time of Concentration and S-Graph Lag Equation: The Papadakis method should be used with the Clark unit hydrograph, along with the DDMSW computer program, to determine the time of concentration. If this method results in unsuitable times of concentration, other method(s) must be used and compared for the most realistic result. The S-graph lag equation, along with the DDMSW computer program, should be used with the appropriate S-graph (Phoenix mountain or Phoenix Valley).
 - g. Channel Routing: Channel routing will be accomplished using the methods in the Drainage Design Manual for Maricopa County, Volume I, Hydrology (1995). The choice of methodology will be at the discretion of the CONSULTANT, with consent from the DISTRICT. Average cross sections will be developed using the available mapping and field reconnaissance data. Sufficient field cross sections will be taken to ensure that routing reaches are reasonable and representative of field conditions. The HEC-1 routing parameters for the reaches modeled using HEC-RAS will be adjusted after the HEC-RAS cross sections are available. The resulting velocities and depths, for all reaches, must be assessed for realistic values.
 - h. Reservoir Routing: Detailed analysis of structures and ponding areas will be accomplished using the Modified Puls reservoir routing option of HEC-1. Stage versus discharge tables for hydraulic structures will be estimated using appropriate hydraulic methodology.
- 5.3 The DISTRICT will provide appropriate references to facilitate parameter estimation.
- 5.4 The CONSULTANT shall clearly identify and incorporate appropriate comments in the hydrologic model.

- 5.5 The CONSULTANT shall include all inflows into the watershed in and along Eastern Canal, Consolidated Canal, the UPRR, and the outflow from Heritage Park on the north side of US 60. The DISTRICT will provide DSS files to the CONSULTANT for incorporation into their models.
- 5.6 Retention volume shall be accounted for in the modeling.
- 5.6.1 The CONSULTANT shall identify and survey, using rough methods, up to three major retention basins per subbasin (approx 1 sq. mi.). The method of survey to be used is rod and hand level. No detailed survey is required.
- 5.6.2 Retention volume shall be modeled using diversion records.
- 5.6.3 Basin efficiency shall be taken into consideration when determining volume to be modeled and the potential for flow passing the inlets.
- 5.7 **OPTIONAL TASK** - Significant storm drain systems between subbasins shall be modeled using diversion records. Diversion discharges will be based on simple pipe capacity calculations at controlling sections of the storm drain at or above the subbasin outlet. **This OPTIONAL TASK is not authorized with the Notice to Proceed; it may be authorized in writing by the DISTRICT based upon specific need as determined by the DISTRICT during the contract period.**
- 5.8 Major Street intersection diversions will be developed using slope-area methods. Areas will be derived from typical street sections. Slopes will be derived from the ten (10) foot topography provided to the CONSULTANT from the DISTRICT.
- 5.9 The CONSULTANT shall identify and model all hydraulic controls along the canals and railroads within the study area. The location of all control points will be identified on a map and submitted to the DISTRICT for approval.
- 5.10 Stage/Storage/Discharge relationships will need to be developed at all critical locations along the canals and railroads. Detailed analysis of structures and ponding areas shall be accomplished using the Modified Puls reservoir routing option within HEC-1. Stage/Storage/Discharge tables for hydraulic structures shall be estimated using appropriate hydraulic methodologies approved by the DISTRICT.
- 5.10.1 The existing canal elevation shall be used when developing the Stage/Storage/Discharge relationships.
- 5.10.2 The canal will be assumed to be operating at full capacity.
- 5.10.3 Openings, such as railroad trestles, should be included in the storage relationship.
- 5.10.4 Any flows in excess of the Stage/Storage/Discharge relationship at the canals and railroads shall be diverted either into the next westerly subbasin or out of the model.
- 5.11 **OPTIONAL TASK** - If the analysis warrants the CONSULTANT shall incorporate the canal routing/capacity information for use with the ponding overflows. The routing and capacity information will be taken directly from the original Gilbert-Chandler FIS models. The DISTRICT will provide the canal information locations to the CONSULTANT. **This OPTIONAL TASK is**

not authorized with the Notice to Proceed; it may be authorized in writing by the DISTRICT based upon specific need as determined by the DISTRICT during the contract period.

- 5.12 All calculations, or assumptions used in developing sub-basin and routing parameters shall be documented and made a part of the appendix for the hydrology report. Field surveys may need to be taken for HEC-1 modeling purposes.
- 5.13 Output of the computer model must be reviewed to see if the peak flows and volumes are realistic. Adjustments to input for obtaining the most realistic results are normal to the scope.
- 5.14 Every attempt must be made to recover historic stream gage and flooding data, and use it to compare with the results obtained by the hydrologic model. Where gage data is unavailable, the CONSULTANT shall compare the study results to the results of adjacent studies. Major differences must be discussed in the final report.
- 5.15 The CONSULTANT is required to obtain the approval of the DISTRICT at each of the following steps:
 - a. Subbasin boundaries
 - b. Soil maps, watershed boundary maps, land use maps and HEC-1 parameter estimation
 - c. HEC-1 flow diagram and input parameters
 - b. Locations of hydraulic barriers
 - c. HEC-1 results
- 5.16 The CONSULTANT will attend two (2) field trips with DISTRICT staff. One (1) field trip at the start of the project to scope out the critical points of the watershed and problem areas and the second field trip may be scheduled at the end of the modeling for verification of the results.
- 5.17 The CONSULTANT shall meet with the DISTRICT as necessary to discuss critical modeling issues and to address review comments. These meetings are to be combined with progress meetings when possible.
- 5.18 The Hydrologic Report
 - 5.18.1 The findings of the hydrologic study will be presented in Section 3 of the Technical Data Notebook and will be prepared in accordance with ADWR State Standards Attachment 1-97 (SSA 1-97). The report will be organized as specified by the DISTRICT, following SSA 1-97 format.
 - 5.18.2 Tables and Figures for the appendices:
 - a. Topographic base map(s) showing the sub-basins, routing reaches, Tc flow paths or lag flow paths, major man-made structures, and references (i.e., street names, Township, Range, Section, etc.) at a scale of one (1) inch = 2000 feet.
 - b. Soils map(s) at the same scale as the base map (with References).
 - c. Land use map(s) at the same scale as above (with References).
 - d. Schematic map for the HEC-1 showing the topography, sub-basins (area, Tc), the flow paths, the routing reaches (length, slope, friction, width, velocities, transmission losses, etc.), order of combining the hydrographs, channel, pipe or culvert dimensions (where

appropriate). On the final version of the HEC-1 schematic include peak discharges at major concentration points.

- e. Pertinent data on all the structures in the watershed (such as spillway elevation, rating curves, etc.).
- f. One set of study maps (i.e., sub-basin boundary maps, flow path maps, soils maps, land use maps) to be folded and delivered in a binder.

5.19 Hydrology CADD submittal. It is recommended that the Hydrology CADD deliverables be submitted to the DISTRICT when the Hydrology Report is approved. The line work used to develop the hydrology maps should be the basis, if not the same, for the CADD deliverables. Specific hydrology deliverables are listed in Task 7.

5.20 Specific deviations from this hydrologic scope shall not be undertaken without the specific written concurrence from the DISTRICT.

TASK 6 - FLOODPLAIN DELINEATION

- 6.1 Floodplain delineations must be obtained using the U.S. Army Corps of Engineers latest release of HEC-RAS and methodology acceptable to FEMA. The CONSULTANT will prepare the study using the guidelines established in FEMA's Guidelines and Specifications for Flood Hazard Mapping Partners, February 2002, and FIA Document 12, Appeals, Revisions, and Amendments to Flood Insurance Maps, December 1993.
- 6.2 The delineation work shall meet requirements for floodplain delineations as prescribed by FEMA and the Arizona Department of Water Resources.
- 6.3 The delineation study shall be based on the final results of the hydrologic study as directed by the DISTRICT.
- 6.4 The CONSULTANT is to make refinements to both the HEC-1 and HEC-RAS models based on review of the model results by the DISTRICT, ADWR, FEMA, and FEMA's Technical Evaluation Contractor. The CONSULTANT shall review the HEC-1 and HEC-RAS model results for reasonableness. Adjustments to the input parameters for obtaining the most realistic results are normal to the scope.
- 6.5 Ponding areas identified as floodplains shall be analyzed using the HEC-1 model and the CONSULTANT shall provide the DISTRICT with the water surface elevations for these ponding areas and identify them as Zone AH.
- 6.6 If appropriate, the CONSULTANT will delineate up to 14 miles of conveyance areas between the ponding areas with water surface elevations, BFE's and identify these delineations as Zone AE. **OPTIONAL** -- The CONSULTANT may be authorized to delineate an additional 14 miles if the hydrology warrants. Authorization of this Optional Task will also allow the concurrent release of funds to support the review of this additional data (Task 6.7). **This OPTIONAL TASK is not authorized with the Notice to Proceed; it may be authorized in writing by the DISTRICT based upon specific need as determined by the DISTRICT during the contract period.**

6.6.2 Field Reconnaissance

- 6.6.2.1 The CONSULTANT will conduct a field reconnaissance of the full study reach. This will include observation of channel and floodplain conditions for estimating Manning's "n" values; photographic documentation of floodplain characteristics; determination of channel bank stations; observation of possible overflow areas; inspection of levees or other flood control structures; and measurement of bridge dimensions.
- 6.6.2.2 Manning's "n" values are to be determined using the methodology in the USGS report, Estimated Manning's Roughness Coefficients for Stream Channels and Flood Plains in Maricopa County, Arizona, April 1991. Copies of the report are available through the DISTRICT.
- 6.6.2.3 A draft report on the field reconnaissance will be submitted to the DISTRICT for review and approval prior to beginning the HEC-RAS modeling. The report will present the determination of channel and overbank "n" values using captioned color photographs or color photocopies. The report will also discuss floodplain conditions affecting the delineation, describe structures and obstructions, and provide color photos or photocopies of major hydraulic structures. Photo locations, structures, and "n" values will be displayed on reduced scale mapping and included in the Final Report.

6.6.3 Cross Sections

- 6.6.3.1 The location and alignment of cross sections and channel centerline will be submitted for the DISTRICT's review and approval before digitizing the cross section data. Cross section stationing will be from left to right looking downstream with the thalweg as station 10,000. Cross sections will be spaced approximately every five hundred (500) feet, unless geographic or structural constraints dictate otherwise, and will extend the full width of the area inundated by 100-year floodwaters. Identification of cross sections will be in river miles, increasing upstream. The stationing will tie into the specified river mile of the existing FEMA studies. The cross section may need to be reoriented or altered after running the HEC-RAS model to ensure that they are perpendicular to flow per FEMA criteria. Cross sections developed by the HEC-RAS interpolation feature are not to be used.
- 6.6.3.2 All cross-section plots will show water surface profiles, ineffective flow areas, "n" values, encroachments, channel stationing and other pertinent information. All plots are to be accompanied by a legend. These plots should be available at all reviews.
- 6.6.4 Bridges and culverts must be modeled according to HEC-RAS modeling requirements for the selected routine. Where multiple bridges occur, each bridge will be modeled separately.
- 6.6.5 Side weirs will be modeled in HEC-RAS where the hydraulics indicates water surface elevations are above the canal bank. The results will be input back into the hydrology model.

6.7 The CONSULTANT must obtain DISTRICT approval at each of the following steps:

- a. Pondered floodplain delineation.
- b. Field reconnaissance report and estimation of Manning's "n" values for conveyance corridors.
- c. Alignment of the cross sections and channel centerline for conveyance corridors.
- d. Conveyance corridor floodplain delineation.

If the Optional Task of 6.6 is authorized, additional approvals as shown in Task 6.7 will be necessary. This **OPTIONAL TASK** is not authorized with the Notice to Proceed; it may be authorized in writing by the DISTRICT based upon specific need as determined by the DISTRICT during the contract period.

- 6.8 Flood zones must be determined according to FEMA criteria and clearly labeled on the final drawings.
- 6.9 The findings of the floodplain delineation study will be presented in Section 4 of the Technical Data Notebook and will be prepared in accordance with ADWR State Standards Attachment 1-97 (SSA 1-97). The report will be organized as specified by the DISTRICT standards, following SSA 1-97 format.
- 6.10 The CONSULTANT shall fill out all the forms required by FEMA for the submittal of a Floodplain Delineation Study.
- 6.11 Hydraulics CADD submittal. It is recommended that the Hydraulics CADD deliverables be submitted to the DISTRICT when Section 4 of the TDN is approved. The line work used to develop the floodplain workmaps should be the basis, if not the same, for the CADD deliverables. Specific hydraulics deliverables are listed in Task 7.

TASK 7 – DIGITAL DATA

- 7.1 Digital data shall be delivered in a CADD standard binary DXF format from either AutoCAD or MicroStation outlined in the DISTRICT's "CADD Data Delivery Specifications Rev 1.0 January 2000" and will be prepared in conformance with the above standards. The following themes are generally used for the data developed for Floodplain Delineation Studies. However, for this study there may not be data for every theme identified here, or the CONSULTANT might develop data for themes not listed here. Therefore, only those themes for which there is data need to be completed. If the CONSULTANT has data that does not fit one of the themes listed here, the DISTRICT's Project Manager shall be contacted to determine the appropriate theme for that data.
- a. NDXPRJ (FCD Project Map Index)
 - b. PRJ (Project Boundaries)
 - c. CARTO (Cartographic Features) (separate submittals for Mapping and Flood Delineation)
 - d. CORNERS (if any)
 - e. CTRL (Miscellaneous Control Survey Points)
 - f. LNDUSECUR and LNDUSEFUT (Current and future Land Use, if not provided by the DISTRICT)
 - g. STRCT (Structure)
 - h. DQ (Data Quality)

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| i. PRJ (Project Identification) | r. ELV (Elevation (Land)) |
| j. FPCTLFCD (FCD Reference Marks) | s. SOIL (Soil Type Area, if not provided by FCD) |
| k. FPSRFFCD (Floodplain FCD Water Surface Elevation) | t. DRNBSN (Drainage Sub-basin Area) |
| l. FPXFCD (Floodplain FCD Cross Section) | u. CULVERTS (if any) |
| m. FPZNFCD (Floodplain FCD Zone) | v. PRJDAT (project identification) |
| n. FPBLN (Floodplain Baseline Route System) | w. DRNPTH (Drainage Path) |
| o. CNL (Canal System, if any) | x. LAKE (if any) |
| p. RR (Railroad System, if any) | y. RIVER (if any) |
| q. STRTDTL (Street Detail) | |

TASK 8 - DELIVERABLES

- 8.1 Prior to FEMA Submittal: The CONSULTANT will deliver the following items to the DISTRICT before delivering the FEMA submittal package:
- 8.1.1 Copies of the Original Affidavits of Publication of the legal advertisements to be included in the Technical Data Notebook.
- 8.1.2 One (1) complete set of 9" X 9" contact prints of the aerial stereo photographs sequentially numbered and catalogued. An exhibit showing the flight path shall also be included.
- 8.1.3 All topographic and related data for the DISTRICT's Hydrologic Information System that is not subject to change during FEMA's review should be submitted at this time. The Digital Terrain Model and related data should also be submitted at this time.
- 8.1.4 If bound separately from the Technical Data Notebook, three (3) copies of the field survey notes and office calculations.
- 8.2 Submittal to Local Jurisdictions: Once the DISTRICT has approved the preliminary Technical Data Notebook the CONSULTANT shall provide copies to the local jurisdiction for their review and comments. The CONSULTANT shall address the comments from the local jurisdictions through the DISTRICT.
- 8.3 FEMA Submittal: The CONSULTANT will submit the following items to the DISTRICT for review by FEMA and any other appropriate governmental agency. All of the following products are considered deliverables for the FEMA submittal:
- 8.3.1 Two (2) complete sets of blackline topographic base maps with the floodplain delineations shown. All drawings will be signed and sealed by persons of appropriate professional registration(s). Each registrant will provide a specific statement as to what service they performed.
- 8.3.2 Two (2) complete copies of the Technical Data Notebook, including HEC-1 and HEC-RAS input/output files on cd. The Technical Data Notebook will be prepared in accordance with ADWR State Standards Attachment 1-97 (SSA 1-97). The notebook will be organized as specified by the DISTRICT, following SSA 1-97 format.

- 8.3.3 Two (2) copies of the current FIRM panels showing the proposed delineation.
- 8.4 Final Submittal: The following products are considered deliverables for the final submittal to the DISTRICT after FEMA approval is issued:
- 8.4.1 One (1) complete set of mylars and four (4) complete sets of sealed blackline topographic base maps with the floodplain delineations shown. All drawings will be signed and sealed by persons of appropriate professional registration(s). Each registrant will provide a specific statement as to what service they performed.
- 8.4.2 All remaining hydrologic and floodplain delineation data in conformance with the DISTRICT's HIS Specifications.
- 8.4.3 Four (4) complete copies of the Technical Data Notebook including HEC-1 and HEC-RAS input/output files on cd. The Technical Data Notebook will be prepared in accordance with ADWR State Standards Attachment 1-97 (SSA 1-97). The notebook will be organized as specified by the DISTRICT, following SSA 1-97 format. This submittal of the Technical Data Notebook shall include any correspondence and/or meeting minutes with the reviewing agencies and shall reflect any revisions required by those reviewing agencies. Revisions may include, but are not limited to, modifications to the delineation maps, the HEC-1 model, the HEC-RAS model, and/or the Final Report.
- 8.4.4 Four (4) sets of cds containing the complete TDN submittal in pdf format.

EXHIBIT A1

CHANDLER/GILBERT FLOODPLAIN DELINEATION STUDY



Profree

 Study Area

 Arterial

 Railroad

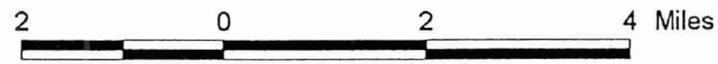
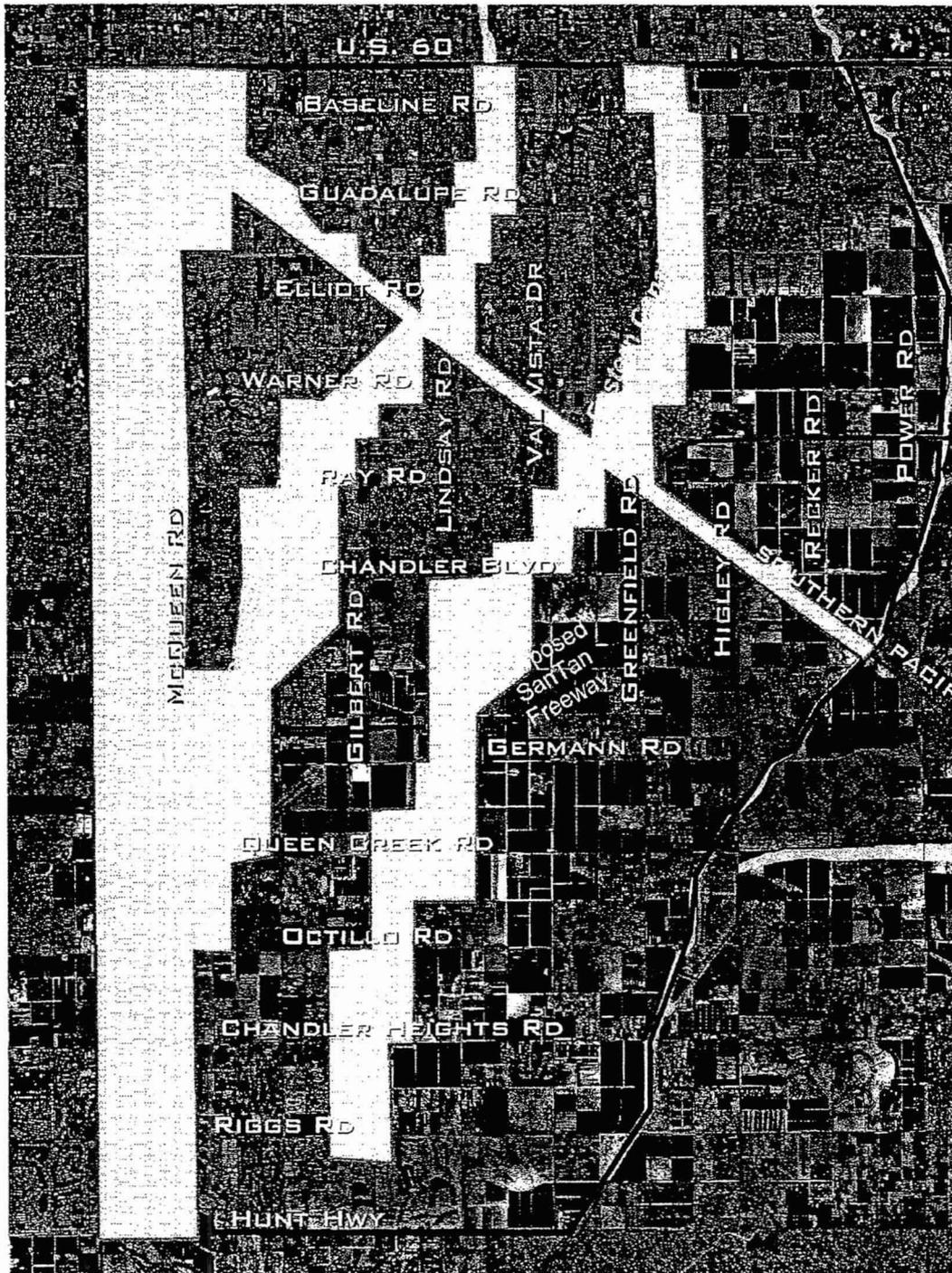
 Floodplan

 AE

 AH

EXHIBIT A2

Chandler/Gilbert Area FDS Mapping limits exhibit



- Map limits.shp
- Pr ofree
- Study Area
- State rd
- Aerial shp
- Railroad.shp
- Floodplain
- A
- AE
- AH

CONSULTANT CHANGE ORDER - FCD APPROVAL
Flood Control District of Maricopa County (FCDMC)

Date:	09/02/2005	Change Order Number:	1	File No:	FCD2002C023
Contract No:	FCD 2002C023	Amount:	\$ -	PCN No:	014.06.01
Consultant Name:	David Evans and Associates, Inc.				
Contract Title:	Chandler/Gilbert Floodplain Delineation Study				
Initial Amount:	\$1,492,804.89	Contract Award Date:	02/19/2003	Total Previous Change Orders:	\$0.00

By mutual agreement of the parties, the following contract change(s) are incorporated into the above-identified contract. All other contract terms and conditions remain unchanged.
 Change Order #1 authorizes a 500-day time extension to complete deliverables, and for review/processing of the project's two submittals to the Federal Emergency Management Agency (FEMA).

With this Change Order, the total amount of this contract has increased 0%.
 By reason of this proposed change 500 days extension of time will be allowed.
 The contract completion date is: 01/11/2007

The following financial information is submitted:

Initial Contract Amount	\$	1,492,804.89
Amended Contract Amount w/ previous change orders	\$	1,492,804.89
Current Change Order Request	\$	-
Amended Contract Amount w/ current change order	\$	1,492,804.89

FCDMC AUTHORIZATION LIMIT:	\$	97,500.00
Total Requested Change Orders	\$	-
Change Order Authorization Remaining	\$	97,500.00

We, the undersigned Consultant, do hereby agree that upon execution of this change order that we will perform all work as identified above, and as may be described in attachment(s), and will accept the above specified amount(s) as full payment thereof.

Consultant Name: David Evans and Associates, Inc.
 Consultant Address: 2141 East Highland Avenue, Suite 200
Phoenix, AZ 85016

[Handwritten Signature: Roger E. Baie]
 Printed Name: Roger E. Baie
 Title: SVP, Mgr Principal
 Date: 9/19/05

DISTRICT APPROVAL

I certify that this change is required to accomplish the overall task for which this contract is initiated.	Division Concurrence
<i>[Signature: Michael D. Dunham]</i> 9/21/05	<i>[Signature: E. Raleigh]</i> 9/21/05
Project Manager Date	Division Manager Date
I certify that funds are available to accomplish this Change Order.	I certify that this change is within the limits authorized by the County Procurement Code.
<i>[Signature: Michael A. Alford]</i> 9/22/05	<i>[Signature: Charles W. Wasley]</i> 9/23/05
Controller Date	Contracts Branch Manager Date
General Manager Approval	County Engineer Approval
<i>[Signature: M. S. R.]</i> 9/22/05	Signature Not Required
Chief Engineer and General Manager Date	County Engineer Date

Copy to: Contract File, Controller, Division Manager, Project Manager



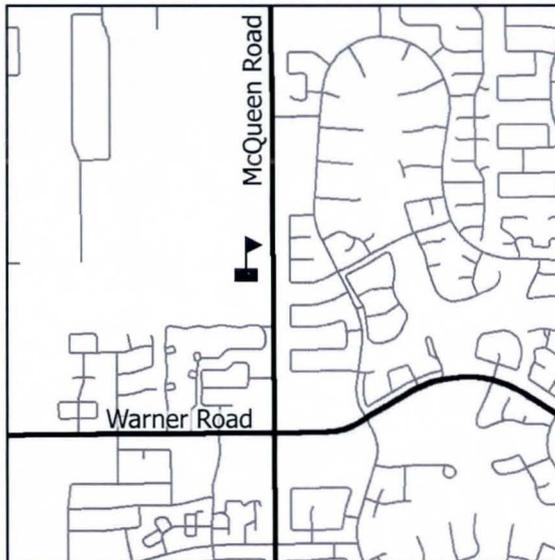
B.6 Public Notification

Open House

6:00–7:30PM

March 25, 2009

Mesquite High School Library
500 S. McQueen, Gilbert



Contact:

Kathryn Gross

Project Manager

Flood Control District of Maricopa County

(602) 506-4837

kag@mail.maricopa.gov

Si usted tiene preguntas o comentarios acerca de la Fase 3 del Chandler/Gilbert Estudio de la Zona de Inundacion y como este puede afectar su propiedad, por favor llame al (602) 506-1501.

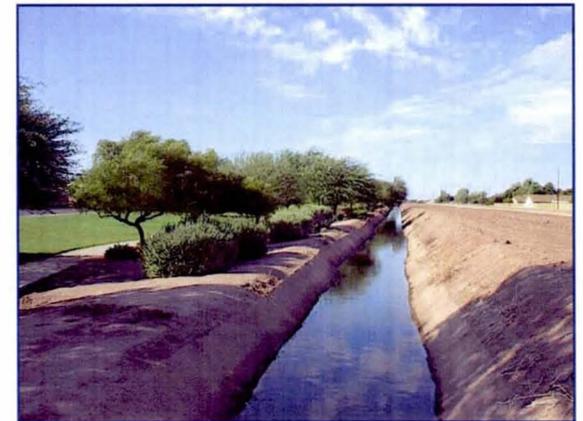
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix Arizona 85009



March 2009

Chandler/Gilbert Floodplain Delineation Study

Phase 3 Union Pacific Railroad/
Arizona Avenue



Open House

A N N O U N C E M E N T

Maricopa County Supervisor:

Fulton Brock, District 1

Don Stapley, District 2

www.fcd.maricopa.gov

The Flood Control District of Maricopa County (District), Town of Gilbert, and Cities of Mesa and Chandler invite all interested people to attend an open house presenting the results of the updated floodplain/floodway delineation performed along the Union Pacific Railroads and portions of Arizona Avenue as part of the Chandler-Gilbert Floodplain Delineation Study.

Exhibits of the updated floodplain delineation will be on display and representatives from the project team will be available to discuss the study and answer your questions.

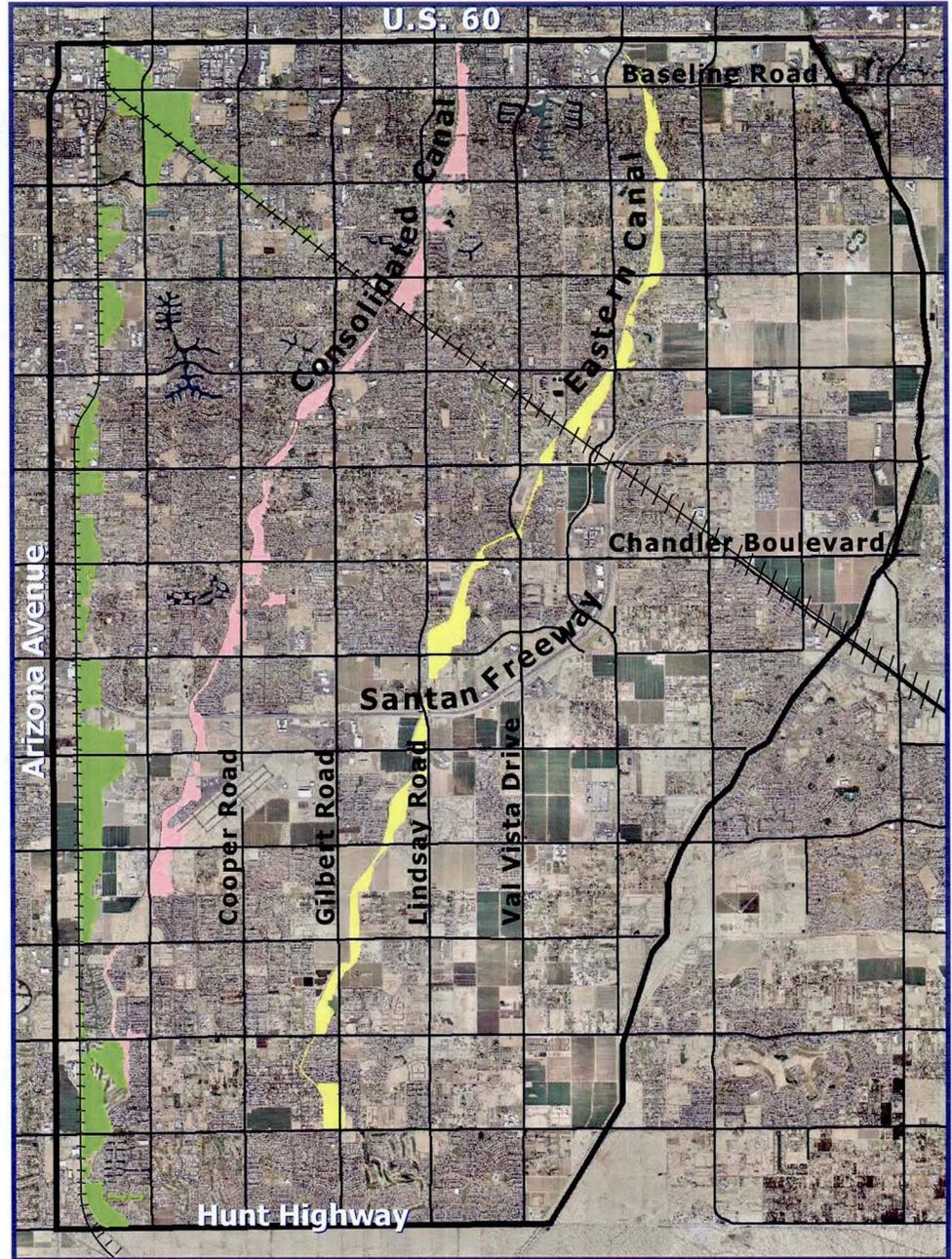
Phase 3 of the study re-evaluated the floodplain delineation along the Union Pacific Railroads and portions of Arizona Avenue. The study involved topographic mapping, hydrologic and hydraulic analysis of approximately 18 linear miles along the railroads and one mile along Arizona Avenue.

The study is composed of three phases; the first phase revised

the floodplains along the Eastern Canal, the second phase revised the floodplains along the Consolidated Canal. The third and final phase and the focus of the meeting, revises the floodplain along the two railroads and a segment along Arizona Avenue in the western portion of the study area.

When the study is completed, the results will be sent to the Federal Emergency Management Agency (FEMA) for approval and adoption, which typically takes approximately one year. FEMA uses these studies to update the Flood Insurance Rate Maps for the National Flood Insurance Program. In the interim the District and other jurisdictions will use the data as the "best available information" for floodplain management.

The floodplains in this study are managed by two jurisdictions. The District manages floodplains located within unincorporated Maricopa County and the Cities of Chandler and Mesa. The Town of Gilbert manages floodplains within the Town.



map not to scale

ADDRESS 1

643 E LINDA LN
 11407 E GERMANN
 1111 S SIRRINE
 3757 E MALLORY ST
 C/O COMMERCIAL PROPERTIES INC
 1111 S SIRRINE
 1111 S SIRRINE
 1450 W GUADALUPE RD STE 132 BLDG 4
 2150 E HIGHLAND AVE NO 207
 C/O COMMERCIAL PROPERTIES INC
 6040 E MONTECITO AVE
 6423 S ASH
 1490 W CHANDLER BLVD
 11710 TIOGA ST
 1404 W SAN PEDRO
 5833 E INDIAN SCHOOL RD
 3450 PENROSE PL STE 150
 5136 S DESERT VIEW DR
 2150 E HIGHLAND AVE #207
 9701 E HAPPY VALLEY RD
 2850 S COUNTRY CLUB DR
 105 E BASELINE RD
 105 E BASELINE RD
 4485 S VIRGINIA WAY
 4026 W TONOPAH DR
 2920 E CHAMBERS ST
 20036 COLE LN
 PO BOX 8124
 410 E CANYON WAY
 5407 VILLAGE PARK DR SE APT 3233
 676 W SCOTT AVE
 743 E EL MONTE PL
 1716 W DESERT LN
 397 S HIDALGO RD
 571 E FRESNO
 417 E TONTO PL
 412 E MEAD DR
 11540 E CARIBBEAN LN
 845 N QUAIL LN
 541 W PRINCETON AVE
 1101 S MAVERICK ST
 416 S SPUR

ADDRESS 2

2323 W UNIVERSITY DR

2323 W UNIVERSITY DR

ADDRESS 3

CITY	STATE	ZIP
CHANDLER	AZ	852253980
CHANDLER	AZ	852481351
MESA	AZ	852108718
MESA	AZ	852151715
TEMPE	AZ	852817223
MESA	AZ	852108718
MESA	AZ	852108718
GILBERT	AZ	85233
PHOENIX	AZ	850164721
TEMPE	AZ	852817223
SCOTTSDALE	AZ	852511943
TEMPE	AZ	852833657
CHANDLER	AZ	852246226
BOISE	ID	837093351
GILBERT	AZ	852332413
PHOENIX	AZ	850186104
BOULDER	CO	803011800
APACHE JUNCTION	AZ	85220
PHOENIX	AZ	850164721
GILBERT	AZ	852344616
MESA	AZ	852108304
GILBERT	AZ	852331100
GILBERT	AZ	852331100
CHANDLER	AZ	852495320
GLENDALE	AZ	853084746
PHOENIX	AZ	850403725
BRISTOL	VA	242023762
SCOTTSDALE	AZ	852528124
CHANDLER	AZ	852493094
BELLEVUE	WA	980065591
GILBERT	AZ	852333233
CHANDLER	AZ	852250936
GILBERT	AZ	852331710
CHANDLER	AZ	852256352
CHANDLER	AZ	85224
CHANDLER	AZ	852495307
CHANDLER	AZ	852495330
SCOTTSDALE	AZ	852558948
GILBERT	AZ	852333227
GILBERT	AZ	852333280
CHANDLER	AZ	852861492
MESA	AZ	852042717

1046 W JUANITA AVE
600 N EXETER ST
400 E TULSA ST
422 E LAREDO ST
498 E HORSESHOE PL
22212 E MERLOT ST
155 N HAMILTON ST
JEFF BERGHOFF
559 E ORCHID LN
2170 N ITHICA ST
907 W COOLEY DR
997 W JUANITA AVE
745 N GILBERT RD # 124313
1266 N ITHICA ST
15880 N GREENWAY HAYDEN LOOP, STE 100
471 N KINGSTON ST
710 N ITHICA ST
1014 W LEAH LN
PO BOX 15
5225 E THOMAS RD
529 E JUANITA AVE
69 N SACRAMENTO ST
115 N SACRAMENTO ST
12215 S BANNOCK ST
290 N EXETER ST
646 E EL MONTE PL
150 N PASADENA
797 W GUADALUPE RD
1645 W SUNRISE BLVD
225 E 3RD AVE
1850 W MERRILL LN
405 E LYNX WAY
3922 E UNIVERSITY DR STE E1
390 E KENT AVE
554 E IRONWOOD DR
358 E ORCHID LN
1261 N FRESNO ST
587 E DETROIT ST
460 N HAMILTON ST
3151 SHRIVER DR
461 N KINGSTON ST
RUBEN CORREA & ALFRED LOPEZ
10807 LAUREL ST

1141 W PALO VERDE ST

APT 115

184 W MORELOS ST

GILBERT	AZ	852332558
CHANDLER	AZ	852253716
CHANDLER	AZ	852254635
CHANDLER	AZ	852253737
CHANDLER	AZ	852493096
QUEEN CREEK	AZ	852428876
CHANDLER	AZ	852255616
GILBERT	AZ	852334765
CHANDLER	AZ	852251196
CHANDLER	AZ	852250942
GILBERT	AZ	852332529
GILBERT	AZ	852332550
GILBERT	AZ	852343375
GILBERT	AZ	852331739
SCOTTSDALE	AZ	852601649
GILBERT	AZ	852334010
GILBERT	AZ	852334002
GILBERT	AZ	852331909
GILBERT	AZ	852990015
PHOENIX	AZ	85018
MESA	AZ	852046536
CHANDLER	AZ	852255562
CHANDLER	AZ	852255546
PHOENIX	AZ	850443105
CHANDLER	AZ	852254657
CHANDLER	AZ	852251334
GILBERT	AZ	852335012
GILBERT	AZ	852333213
GILBERT	AZ	852335018
ESCONDIDO	CA	920254203
GILBERT	AZ	85233
CHANDLER	AZ	852495329
PHOENIX	AZ	850347223
CHANDLER	AZ	852251218
CHANDLER	AZ	852251297
CHANDLER	AZ	852251172
CHANDLER	AZ	852251199
CHANDLER	AZ	852254928
CHANDLER	AZ	852254741
SAN JOSE	CA	951322851
GILBERT	AZ	852334010
CHANDLER	AZ	852256242
RANCHO CUCAMONGA	CA	91730

% RW OPERATIONS
2009 N 7TH ST
2534 W GREGG DR
PO BOX 21666
C/O CARETAKER INC
PLANNED DEVELOPMENT SERVICES
301 W JEFFERSON 10TH FL
206 S 17TH AVE
436 E TULSA ST
1201 N KINGSTON CT
402 E HARRISON ST
1114 S MAVERICK CT
42 S HAMILTON PL STE 101
2424 CAMNER ST
1108 N ELDON CT
1112 S BOGLE CT
ATT: JOHN BERTRAM
660 W SCOTT AVE
762 W SCOTT AVE
737 W SCOTT AVE
442 E LAREDO ST
689 E FLINT ST
472 E TULSA ST
1033 W JUANITA AVE
205 S 17TH AVE
1335 E PARKSIDE DR
PO BOX 660776
2401 W BELL RD
11514 E PRATT
1104 S MAVERICK CT
659 E COLT CT
412 E TULSA ST
1261 N LAYMAN ST
382 E MONTEREY ST
1775 W ASPEN AVE
1278 N ITHICA ST
692 E COLT CT
894 W STRAFORD AVE
496 E TULSA ST
2332 E BISHOP DR
720 N ITHICA ST
991 W JUANITA AVE
520 E COMMONWEALTH AVE

205 S 17TH AVE STE 612E

PO BOX 4171

2150 E HIGHLAND AVE STE 207

PHOENIX	AZ	850073212
PHOENIX	AZ	850062102
CHANDLER	AZ	852241615
PHOENIX	AZ	85036
MESA	AZ	852114171
LITCHFIELD PARK	AZ	850022590
PHOENIX	AZ	850032143
PHOENIX	AZ	850073213
CHANDLER	AZ	852254635
GILBERT	AZ	852331723
CHANDLER	AZ	852253729
CHANDLER	AZ	852491453
GILBERT	AZ	852335516
FORT LEE	NJ	070243902
GILBERT	AZ	852332534
CHANDLER	AZ	852491313
PHOENIX	AZ	850164721
GILBERT	AZ	85233
GILBERT	AZ	852333238
GILBERT	AZ	852333237
CHANDLER	AZ	852253737
CHANDLER	AZ	852254728
CHANDLER	AZ	852254635
GILBERT	AZ	852332556
PHOENIX	AZ	850073212
GILBERT	AZ	852345405
MIAMI	FL	33166
PHOENIX	AZ	850233203
MESA	AZ	852121949
CHANDLER	AZ	852491453
CHANDLER	AZ	852251333
CHANDLER	AZ	852254635
GILBERT	AZ	852331744
CHANDLER	AZ	852253743
GILBERT	AZ	852333502
GILBERT	AZ	852331739
CHANDLER	AZ	852251330
GILBERT	AZ	852334713
CHANDLER	AZ	852254635
TEMPE	AZ	852823017
GILBERT	AZ	852334002
GILBERT	AZ	852332550
CHANDLER	AZ	852255573

1120 W ENCINAS ST
995 W LEAH LN
2380 PERFORMANCE DR RGV-D7-450
201 S 42ND PL
713 E EL MONTE PL
1010 W LEAH LN
1621 E YELLOWSTONE PL
452 E MONTEREY ST
1013 W STANFORD AVE
905 W ENCINAS ST
ONE GATEWAY CENTER
1805 CLEARVIEW RD
561 N KINGSTON ST
463 E MONTEREY ST
1332 N JACKSON ST
107 WINDERS LN
1013 W COOLEY DR
411 E CANYON WAY
1005 W ENCINAS
460 E CRESCENT PL
387 N 2ND AVE 2A
PO BOX 222
920 W ENCINAS ST
1361 N KINGSTON ST
360 E KENT AVE
3662 E PINON CT
2323 W UNIVERSITY DR
1037 W COOLEY DR
531 N FRESNO ST
1262 E HAMILTON AVE UNIT 2
2401 W BELL RD
PO BOX 4008
840 N BOGLE CT
264 N FRESNO ST
1102 N WHIPPLE CT
1719 W COMMERCE AVE
9920 S RURAL RD STE 108 PMB NO 14
175 S HAMILTON PL STE NO 108
956 W COOLEY DR
380 E KENT AVE
1107 MACIAS LN
1050 N LAYMAN ST
9748 E LOMPOC AVE

426 N 44TH ST STE 100

GILBERT	AZ	852332508
GILBERT	AZ	852331915
RICHARDSON	TX	750824333
PHOENIX	AZ	850343049
CHANDLER	AZ	852250935
GILBERT	AZ	852331909
CHANDLER	AZ	85249
CHANDLER	AZ	852253745
GILBERT	AZ	852332516
GILBERT	AZ	852332505
PHOENIX	AZ	85008
SANTA BARBARA	CA	931014923
GILBERT	AZ	852334004
CHANDLER	AZ	852253747
GILBERT	AZ	852331715
GRAFTON	VA	236923042
GILBERT	AZ	852332540
CHANDLER	AZ	852493095
GILBERT	AZ	852332507
CHANDLER	AZ	852495326
PHOENIX	AZ	85003
GILBERT	AZ	852990222
GILBERT	AZ	852332504
GILBERT	AZ	852331716
CHANDLER	AZ	852251218
GILBERT	AZ	852343102
TEMPE	AZ	852817223
GILBERT	AZ	852332542
CHANDLER	AZ	852254672
CAMPBELL	CA	950080837
PHOENIX	AZ	850233203
MESA	AZ	852114008
CHANDLER	AZ	85225
CHANDLER	AZ	852254659
GILBERT	AZ	852332525
GILBERT	AZ	852334015
TEMPE	AZ	852844100
GILBERT	AZ	852335508
GILBERT	AZ	852332536
CHANDLER	AZ	852251218
SAN JOSE	CA	951204284
GILBERT	AZ	852332318
MESA	AZ	852092554

625 E BASELINE
1013 W STANFORD AVE
1018 W LEAH LN
3550 N CENTRAL AVE STE 200
441 E CANYON WAY
462 E KAIBAB PL
721 W SCOTT AVE
1270 S BOGLE CT
7630 N 67TH AVE
1499 W MELODY DR
440 N FRESNO ST
1724 W MERRILL LN
4808 S FRESNO ST
500 E CHICAGO DIR
C/O STERLING COLLISION CENTERS INC
349 E ORCHID LN
357 E SHEFFIELD AVE
25668 S HOWARD DR
1135 S FRESNO CT
2150 N ITHICA ST
450 E BART DR
471 E CRESCENT PL
939 BELSON ST
17701 NEFF RANCH RD
473 E HARRISON ST
5734 TONOPAH CT
500 E KENT AVE
490 E KENT AVE
489 E CRESCENT WAY
408 S HAMILTON CT
381 E DEL RIO ST
434 E COCONINO PL
5134 N CENTRAL AVE STE 200
723 E EL MONTE PL
1205 N MCQUEEN RD
410 E CRESCENT PL
2313 WHEELER PEAK NE
1897 E CARMEN
3050 S EAGLE DR
356 E SHEFFIELD AVE
245 E PALO VERDE ST
500 E ERIE ST
1017 W LEAH LN

SUITE 101

9 TECH CIR

GILBERT	AZ	85233
GILBERT	AZ	852332516
GILBERT	AZ	852331909
PHOENIX	AZ	850122129
CHANDLER	AZ	852493095
CHANDLER	AZ	852495309
GILBERT	AZ	852333237
CHANDLER	AZ	852494261
GLENDALE	AZ	863011104
GILBERT	AZ	852331204
CHANDLER	AZ	852254661
GILBERT	AZ	852331721
CHANDLER	AZ	852493077
CHANDLER	AZ	852255572
NATICK	MA	017601023
CHANDLER	AZ	852251182
CHANDLER	AZ	852251120
SUN LAKES	AZ	852486820
CHANDLER	AZ	852491082
CHANDLER	AZ	852250941
CHANDLER	AZ	852253702
CHANDLER	AZ	852495327
TORRANCE	CA	905022917
YORBA LINDA	CA	928869014
CHANDLER	AZ	852253732
SIMI VALLEY	CA	930632024
CHANDLER	AZ	852251285
CHANDLER	AZ	852251242
CHANDLER	AZ	852493049
GILBERT	AZ	852335521
CHANDLER	AZ	852253709
CHANDLER	AZ	852495315
PHOENIX	AZ	850121477
CHANDLER	AZ	852250935
GILBERT	AZ	852331751
CHANDLER	AZ	852495326
RIO RANCHO	NM	871446707
TEMPE	AZ	852834205
CHANDLER	AZ	852492200
CHANDLER	AZ	852251299
GILBERT	AZ	852961030
CHANDLER	AZ	852254618
GILBERT	AZ	852331908

4465 S VIRGINIA WAY
925 W JUANITA AVE
916 W HARVARD AVE
805 W ENCINAS ST
1113 S MAVERICK CT
1216 N FARRELL ST
955 W COOLEY DR
1107 N LELAND CT
1677 W COMMERCE AVE
1926 W ASPEN AVE
1816 W REDFIELD RD
4747 WILLIAMS DR
2263 N ITHICA CT
433 E KAIBAB PL
3045 S 7TH ST
1521 E BRIARWOOD TER
3800 S CLUBHOUSE DR UNIT 9
850 N ABILENE DR
PO BOX 1026
1897 W REDFIELD RD
11234 E PETERSON AVE
440 E BART DR
123 N SACRAMENTO ST
1274 N ITHICA ST
402 E MONTEREY ST
411 E SPRINGFIELD PL
4550 S FRESNO ST
4415 W CHAMA DR
ULTAMAR DIAMOND SHAMROCK # 1608
354 N HAMILTON ST
450 N ROGER WAY
1714 W MERRILL LN
1390 S BOGIE CT
550 E DETROIT ST
2201 E CAMELBACK RD STE 108A
1008 N REVERE
1230 N MONDEL DR
282 N FRESNO ST
798 W KINGBIRD DR
3006 S ARTESIA ST
3006 S ARTESIA ST
740 N ITHICA ST
1640 W SUNRISE BLVD

PO BOX 690110

CHANDLER	AZ	852495319
GILBERT	AZ	852332551
GILBERT	AZ	852333105
GILBERT	AZ	852332503
CHANDLER	AZ	852491453
GILBERT	AZ	852331906
GILBERT	AZ	852332535
GILBERT	AZ	852332539
GILBERT	AZ	852334008
GILBERT	AZ	852333531
GILBERT	AZ	852333532
GEORGETOWN	TX	78628
CHANDLER	AZ	852250938
CHANDLER	AZ	852495308
PHOENIX	AZ	850401170
PHOENIX	AZ	850489412
CHANDLER	AZ	852484275
GILBERT	AZ	852333232
WILLIAMS	AZ	860461026
GILBERT	AZ	852333521
MESA	AZ	852121986
CHANDLER	AZ	852253702
CHANDLER	AZ	852255546
GILBERT	AZ	852331739
CHANDLER	AZ	852253745
CHANDLER	AZ	852491019
CHANDLER	AZ	852493083
GLENDALE	AZ	853105133
SAN ANTONIO	TX	782690110
CHANDLER	AZ	852254926
CHANDLER	AZ	852254225
GILBERT	AZ	852331721
CHANDLER	AZ	852494284
CHANDLER	AZ	852254674
PHOENIX	AZ	850163495
MESA	AZ	852013213
GILBERT	AZ	852331807
CHANDLER	AZ	852254659
CHANDLER	AZ	852487605
SANTA ANA	CA	927046102
SANTA ANA	CA	927046102
GILBERT	AZ	852334002
GILBERT	AZ	852335006

406 E TONTO PL
19302 E VIA DE ARBOLES
3137 S CHERRY CIR
1824 W ASPEN AVE
442 E HARRISON ST
1043 W JUANITA AVE
501 N KINGSTON ST
1055 N LAYMAN ST
1390 AUBREY LN
943 N LAYMAN ST
806 W HARVARD AVE
650 E FLINT ST
456 E SAN CARLOS WY
2135 N SAN VINCENTE DR
1111 S SIRRINE
1684 W MERRILL LN
834 N ABILENE DR
1345 N HOBSON ST
736 N MEADOWS DR
1114 N VELMA CT
1770 W GOODHUE AVE
8665 E HARTFORD DR STE 200
1814 W SAN ANGELO ST
5767 W OAKLAND ST
373 E LAREDO ST
340 N FRESNO ST
125 E COMMONWEALTH AVE
3 CHARTER OAK PL
644 E CHANDLER BLVD
450 NEWPORT CENTER DR STE 595
3 CHARTER OAK PL
C/O CEMEX INC
200 W COMMONWEALTH AVE
450 E CHANDLER HEIGHTS RD
1015 S VAL VISTA DR NO 78
1035 W ENCINAS ST
1733 W COMMERCE AVE
163 N SACRAMENTO ST
2323 W UNIVERSITY DR
1066 N LAYMAN ST
637 E FLINT ST
4580 S FRESNO ST
630 E FLINT ST

PO BOX 1500

CHANDLER	AZ	852495307
QUEEN CREEK	AZ	852429734
MESA	AZ	852108302
GILBERT	AZ	852333535
CHANDLER	AZ	852253729
GILBERT	AZ	852332556
GILBERT	AZ	852334011
GILBERT	AZ	852332319
HOLLISTER	CA	950239370
GILBERT	AZ	852332919
GILBERT	AZ	852333102
CHANDLER	AZ	852554729
CHANDLER	AZ	852495332
CHANDLER	AZ	852251354
MESA	AZ	852108718
GILBERT	AZ	852331719
GILBERT	AZ	852333232
GILBERT	AZ	852331208
CHANDLER	AZ	852243528
GILBERT	AZ	852332547
ANAHEIM	CA	928045512
SCOTTSDALE	AZ	852557807
GILBERT	AZ	852332922
CHANDLER	AZ	852262761
CHANDLER	AZ	852253736
CHANDLER	AZ	852255017
CHANDLER	AZ	852240893
HARTFORD	CT	061061915
CHANDLER	AZ	852255636
NEWPORT BEACH	CA	926607650
HARTFORD	CT	061061915
HOUSTON	TX	772511500
CHANDLER	AZ	85225
CHANDLER	AZ	852495576
MESA	AZ	852045677
GILBERT	AZ	852332507
GILBERT	AZ	852334015
CHANDLER	AZ	852255546
TEMPE	AZ	852817223
GILBERT	AZ	852332318
CHANDLER	AZ	852254728
CHANDLER	AZ	852493083
CHANDLER	AZ	852254729

423 E HARRISON ST
1864 W SAN ANGELO ST
4771 S VISTA PL
122 N EXETER ST
851 N BOGLE CT
170 S WILLIAM DILLARD DR STE 108
389 E ORCHID LN
640 E IVANHOE ST
473 N WASHINGTON ST
1000 TECHNOLOGY DR MS314
PO BOX 4008
REAL ESTATE SERVICES
CAROLYN A CLARK
5421 S EUCALYPTUS DR
JOHN DAVID CLARK AND JULIE H CLARK TR
2164 W 9140 S
210 N PASADENA ST
818 W COOLEY DR
P O BOX 51168
26005 S LA CITE DR
450 S ORANGE AVE 12TH FL
652 W SCOTT AVE
BASKO JAMES L CONTO
746 N EL DORADO DR
1254 N ITHICA ST
1535 W HARVARD AVE STE 101
1873 W SAN ANGELO ST
3750 E HUBER ST
354 E IRONWOOD DR
745 W SANFORD AVE
14 S 29TH PL
1827 W SAN ANGELO ST
4501 N BEACH ST
1031 S MAVERICK ST
2616 E PEGASUS ST
630 E DETROIT ST
2110 N COUNTRY CLUB DR
770 N EL DORADO DR
1449 E ARABIAN CT
1370 W LOS LAGOS VISTA AVE
460 E BART DR
2330 S HIGHLAND DR NO 220
C/O JOMAR ASSOCIATION SERVICES

PO BOX 1466
1251 N FRESNO ST
431 E CANYON WY

743 N GOLDEN KEY ST

1514 W TODD DR STE B103

CHANDLER	AZ	852253731
GILBERT	AZ	852332925
CHANDLER	AZ	852485536
CHANDLER	AZ	852255541
CHANDLER	AZ	852253982
GILBERT	AZ	852335510
CHANDLER	AZ	852251182
CHANDLER	AZ	852253984
CHANDLER	AZ	852255063
O FALLON	MO	633042239
CHANDLER	AZ	852444008
MESA	AZ	852111466
CHANDLER	AZ	852251199
GILBERT	AZ	852984609
CHANDLER	AZ	852493095
WEST JORDAN	UT	840886422
GILBERT	AZ	852334506
GILBERT	AZ	852332518
MESA	AZ	852080059
SUN LAKES	AZ	852486725
ORLANDO	FL	328013352
GILBERT	AZ	852333228
GILBERT	AZ	852333805
GILBERT	AZ	852333514
GILBERT	AZ	852331732
GILBERT	AZ	852333054
GILBERT	AZ	852332924
MESA	AZ	852053901
CHANDLER	AZ	852251293
GILBERT	AZ	85233
GILBERT	AZ	852961200
GILBERT	AZ	852332923
FORT WORTH	TX	761373218
CHANDLER	AZ	852861482
GILBERT	AZ	852343918
CHANDLER	AZ	85225
MESA	AZ	852011207
GILBERT	AZ	852333514
GILBERT	AZ	852963122
MESA	AZ	852026643
CHANDLER	AZ	852253702
LAS VEGAS	NV	891024809
TEMPE	AZ	852834846

1890 W ASPEN AVE
448 E SAN TAN ST
612 E TOLEDO ST
451 E CANYON WAY
2155 N SAN VINCENTE DR
412 E MONTEREY ST
383 E MONTEREY ST
532 E HARRISON ST
18756 E SWAN DR
449 E TULSA ST
967 W JUANITA AVE
753 W SAN ANGELO ST
626 N EL DORADO DR
549 E ORCHID LN
C/O SANJAY DHOLE
1009 W JUANITA AVE
1750 S MESA DR
COX KENNY/DONNA L TR
430 N HAMILTON ST
448 E HORSESHOE DR
PO BOX 8
1107 N ELISABETH
2701 E CAMELBACK RD STE 180
2232 N ITHICA CT
PO BOX 3908
C/O MIKE WOOD
1410 W HOUSTON AVE
1410 W HOUSTON AVE
1177 S FARGO CT
824 W COOLEY DR
8686 N CENTRAL AVE STE 206
452 E LAREDO ST
551 N FRESNO ST
485 E TULSA ST
521 N FRESNO
11609 E RIGGS RD
1315 N MONDEL DR
261 S COMANCHE DR
1231 N KINGSTON ST
611 N GOLDEN KEY ST
557 E JUANITA STE 3 4
780 N EXETER ST
12008 S WAR PAINT DR

114 W EL FREDA RD

1043 W STANFORD AVE

4677 S LAKESHORE DR

GILBERT	AZ	852333528
CHANDLER	AZ	852254631
CHANDLER	AZ	852254718
CHANDLER	AZ	852493095
CHANDLER	AZ	852251354
CHANDLER	AZ	852253745
CHANDLER	AZ	852253744
CHANDLER	AZ	852253733
QUEEN CREEK	AZ	852427990
CHANDLER	AZ	852254634
GILBERT	AZ	852332548
GILBERT	AZ	852332642
GILBERT	AZ	852333506
CHANDLER	AZ	852251196
TEMPE	AZ	852842288
GILBERT	AZ	852332556
MESA	AZ	852106211
GILBERT	AZ	852332516
CHANDLER	AZ	852254741
CHANDLER	AZ	852495324
PHOENIX	AZ	850010008
GILBERT	AZ	85233
PHOENIX	AZ	850104332
CHANDLER	AZ	852250937
INCLINE VILLAGE	NV	89450
TEMPE	AZ	852827162
GILBERT	AZ	852331800
GILBERT	AZ	852331800
CHANDLER	AZ	852491044
GILBERT	AZ	852332518
PHOENIX	AZ	850203155
CHANDLER	AZ	852253738
CHANDLER	AZ	852254672
CHANDLER	AZ	852254634
CHANDLER	AZ	852244672
CHANDLER	AZ	852493604
GILBERT	AZ	852331213
CHANDLER	AZ	852245243
GILBERT	AZ	852331723
GILBERT	AZ	852333801
MESA	AZ	852046537
CHANDLER	AZ	852253719
PHOENIX	AZ	850443408

1440 VANDERBILT DR
LAM DON HUNG/ANGIE KIM TR
1884 W ASPEN AVE
PO BOX 2929
1252 E FLAMINGO DR
15723 E PALOMINO BLVD
2537 E EDGEWOOD AVE
DAVIES FAMILY TRUST
913 W COOLEY DR
800 W ENCINAS ST
416 E TONTO PL
713 W SCOTT AVE
C/O COMMERCIAL PROPERTIES INC
481 N KINGSTON ST
11525 E GERMANN RD
407 S HIDALGO RD
408 E HORSESHOE DR
692 W SCOTT AVE
1866 W ASPEN AVE
2531 W GARY DR
462 E LAREDO ST
1168 S FARGO CT
2242 N ITHICA CT
531 E REFLECTION PL
824 N YALE DR
1138 S FARGO CT
11006 E VECINO ST
7377 E DOUBLETREE RANCH RD STE 100
C/O MICHAEL WALKER
PO BOX 11000
2380 PERFORMANCE DR RGV D7 450
1804 W SAN ANGELO ST
1762 W REDFIELD RD
PO BOX 690110
522 W PAMPA AVE
1226 N FARRELL ST
421 N FRESNO ST
876 W HARVARD AVE
50 W PAGE AVE
4501 N BEACH ST
430 E CRESCENT PL
2150 E HIGHLAND AVE STE 207
1726 W PECOS AVE

468 E HORSESHOE PL

407 E EVERGREEN ST

2323 W UNIVERSITY DR

8300B CORONA LOOP NE

EL PASO	TX	799354813
CHANDLER	AZ	852493096
GILBERT	AZ	852333528
GILBERT	AZ	852992929
GILBERT	AZ	852970813
FOUNTAIN HILLS	AZ	85268
MESA	AZ	852044603
PAYSON	AZ	855414010
GILBERT	AZ	852332529
GILBERT	AZ	852332502
CHANDLER	AZ	852495307
GILBERT	AZ	852333236
TEMPE	AZ	852817223
GILBERT	AZ	852334010
CHANDLER	AZ	852491306
CHANDLER	AZ	852256324
CHANDLER	AZ	852495324
GILBERT	AZ	852333233
GILBERT	AZ	852333535
CHANDLER	AZ	852243968
CHANDLER	AZ	852253738
CHANDLER	AZ	852491041
CHANDLER	AZ	852250937
CHANDLER	AZ	852494287
GILBERT	AZ	852343303
CHANDLER	AZ	852861041
CHANDLER	AZ	852487807
SCOTTSDALE	AZ	852582148
ALBUQUERQUE	NM	871131665
SANTA ANA	CA	927111000
IRVINE	CA	750824333
GILBERT	AZ	852332922
GILBERT	AZ	852333517
SAN ANTONIO	TX	782690110
MESA	AZ	852108353
GILBERT	AZ	852331907
CHANDLER	AZ	852254660
GILBERT	AZ	852333104
GILBERT	AZ	852334901
FORT WORTH	TX	761373218
CHANDLER	AZ	852495326
PHOENIX	AZ	850164721
MESA	AZ	852028019

16331 E CHANDLER HEIGHTS RD
4270 S FRESNO ST
8744 E MONTEBELLO AVE
902 N LAYMAN ST
530 E KENT AVE
4950 W CRAIG RD 3263
557 W PRINCETON AVE
351 N FRESNO ST
453 E HARRISON ST
922 N LAYMAN ST
1027 W JUANITA AVE
101 E COMSTOCK DR
PO BOX 4607
3430 W TULSA ST
1006 W LEAH LN
1224 N ITHICA ST
1833 W ENCINAS ST
498 N JACKSON ST
643 E EL PRADO RD
362 E HARRISON ST
944 W COOLEY DR
1107 N ELDON CT
6938 E HAWTHORNE ST
828 N GOLDEN KEY ST
1200-410 22ND ST EAST
1301 E TREASURE COVE DR
24922 N 80TH LANE
459 N GILBERT RD STE C120
9239 S STANLEY PL
PO BOX 603
1608 E DIAMOND DR
1509 W HARVARD AVE
1032 W COOLEY DR
6423 S ASH AVE
10901 W PALM LN
5780 SOESTERN CT
2105 N NEVADA ST
ATTN: D TROGAN
1125 S FRESNO CT
1470 E LYNX WY
469 E HORSESHOE PL
680 N EXETER ST
115 S WILLIAM DILLARD DR

SASKATOON SK S7K 5T6 CANADA

25657 BIRCHLEAF COURT

GILBERT	AZ	85297
CHANDLER	AZ	852493085
SCOTTSDALE	AZ	852506311
GILBERT	AZ	852332918
CHANDLER	AZ	852251285
LAS VEGAS	NV	891302739
GILBERT	AZ	852333280
CHANDLER	AZ	852255017
CHANDLER	AZ	852253731
GILBERT	AZ	852332918
GILBERT	AZ	852332556
CHANDLER	AZ	852251210
ORANGE	CA	928634607
CHANDLER	AZ	85226
GILBERT	AZ	852331909
GILBERT	AZ	852331732
GILBERT	AZ	852332317
GILBERT	AZ	852334016
CHANDLER	AZ	852251338
CHANDLER	AZ	852253727
GILBERT	AZ	852332532
GILBERT	AZ	852332534
TUCSON	AZ	857101231
GILBERT	AZ	852333284
GILBERT	AZ	852342672
PEORIA	AZ	853831021
GILBERT	AZ	852344756
TEMPE	AZ	852843352
TEMPE	AZ	852800603
TEMPE	AZ	852834153
GILBERT	AZ	852333054
GILBERT	AZ	852332541
MESA	AZ	852104014
AVONDALE	AZ	853235446
CHINO	CA	917107020
CHANDLER	AZ	852250924
VALENCIA	CA	913810601
CHANDLER	AZ	852861082
CHANDLER	AZ	852493178
CHANDLER	AZ	852493096
CHANDLER	AZ	852253717
GILBERT	AZ	852335525

383 E LAREDO ST
2180 N ITHICA ST
15740 E JACKRABBIT LN
219 S WILLIAM DILLARD DR STE 121
PO BOX 2110
625 E EL PRADO RD
PO BOX 24542
662 W PRINCETON AVE
1230 N FARRELL ST
ERNESTO L LOPEZ TR
439 E ORCHID LN
265 N EXETER ST
5802 W SHANGRI LA RD

915 WILSHIRE AVE STE 2100
853 W STANFORD
391 E BART DR
485 E SAN TAN ST
654 E MARIPOSA PL
1047 W JUANITA AVE
1853 W ENCINAS ST
805 N MCQUEEN RD
940 W ENCINAS ST
101 E COMSTOCK DR
390 E DEL RIO ST
413 E LAREDO ST
601 FIFTH AVE
932 W COOLEY DR
448 E OAKLAND ST
1015 W JUANITA AVE
C/O AAM LLC
558 N JACKSON ST
10920 WINNETKA AVE
500 STEVENS AVE STE 200
1042 N HUDSON PL
25208 S 187TH PL
LASALLE BANK NATIONAL ASSOC TRUSTEE
7550 S WILLOW DR
353 E JASPER DR
634 N EL DORADO DR
1125 W ENCINAS ST
1936 W RAWHIDE AVE
1009 W LEAH LN

401 E SAN TAN ST

817 E CADY ST

7740 N 16TH ST STE 300

150 ALLEGHENY CENTER IDC 24-050

CHANDLER	AZ	852253736
CHANDLER	AZ	852250942
FOUNTAIN HILLS	AZ	85268
GILBERT	AZ	852335528
CHANDLER	AZ	852242110
CHANDLER	AZ	852251338
TEMPE	AZ	852854542
GILBERT	AZ	852333230
GILBERT	AZ	852331907
CHANDLER	AZ	852254630
CHANDLER	AZ	852251195
CHANDLER	AZ	852254656
GLENDALE	AZ	853043818
WATERTOWN	WI	53094
LOS ANGELES	CA	900173450
GILBERT	AZ	852332512
CHANDLER	AZ	852253701
CHANDLER	AZ	852254630
CHANDLER	AZ	852251346
GILBERT	AZ	852332559
GILBERT	AZ	852332314
GILBERT	AZ	852332278
GILBERT	AZ	852332504
CHANDLER	AZ	852251210
CHANDLER	AZ	852253708
CHANDLER	AZ	852253739
SCOTTSDLUFF	NE	693613581
GILBERT	AZ	852332532
CHANDLER	AZ	852254665
GILBERT	AZ	852332556
PHOENIX	AZ	850204473
GILBERT	AZ	852334020
CHATSWORTH	CA	913111847
SOLANA BEACH	CA	920752055
CHANDLER	AZ	852251576
QUEEN CREEK	AZ	852427911
PITTSBURGH	PA	15212
TEMPE	AZ	852835004
CHANDLER	AZ	852251288
GILBERT	AZ	852333506
GILBERT	AZ	852332509
GILBERT	AZ	852335522
GILBERT	AZ	852331908

325 N NEVADA ST
5821 E CACTUS RD
173 W MORELOS ST
3550 N CENTRAL AVE STE 600
1255 W BASELINE RD STE 292
511 N KINGSTON ST
461 E DEL RIO ST
938 W COOLEY DR
WILLIAM CARTER
831 N QUAIL LN
26548 GLENWOOD DR
1025 W LEAH LN
PO BOX 2734
PO BOX 2734
837 E JASMINE ST
610 N EXETER ST
16235 E OCOTILLO
650 E FLINT ST
1020 W ENCINAS ST
11418 N MILLER RD
559 W SCOTT AVE
3120 W LAREDO ST
329 W MORGAN WAY
329 W MORGAN WAY
23706 MOONGLOW CT
648 N EL DORADO DR
1311 N KINGSTON ST
240 N CENTER ST
845 W ENCINAS AVE
2095 N SAN VICENTE DR
3026 W DANCER LN
435 E COCONINO PL
1457 W BAHIA CT
1001 W LEAH LN
453 E LAREDO ST
1850 S AIRPORT RD
634 E EL MONTE PL
628 E DETROIT ST
320 N FRESNO ST
1776 W REDFIELD RD
497 E TONTO DR
645 E FLINT ST
420 E CRESCENT PL

490 E FRYE RD

CHANDLER	AZ	852254671
SCOTTSDALE	AZ	852544341
CHANDLER	AZ	852256241
PHOENIX	AZ	850122108
MESA	AZ	852025822
GILBERT	AZ	852334011
CHANDLER	AZ	852253712
GILBERT	AZ	852332532
CHANDLER	AZ	852256350
GILBERT	AZ	85233
NOVI	MI	483742141
GILBERT	AZ	852331908
DANVILLE	CA	945267734
DANVILLE	CA	945267734
MESA	AZ	852032613
CHANDLER	AZ	852253716
GILBERT	AZ	852978700
CHANDLER	AZ	852254729
GILBERT	AZ	852332506
SCOTTSDALE	AZ	852605425
GILBERT	AZ	852333265
CHANDLER	AZ	852262323
QUEEN CREEK	AZ	852436109
QUEEN CREEK	AZ	852436109
RAMONA	CA	920654518
GILBERT	AZ	852333506
GILBERT	AZ	852331716
MESA	AZ	852016629
GILBERT	AZ	852332503
CHANDLER	AZ	852251350
QUEEN CREEK	AZ	852423009
CHANDLER	AZ	852495315
GILBERT	AZ	852335601
GILBERT	AZ	852331908
CHANDLER	AZ	852253739
BUCKEYE	AZ	853269240
CHANDLER	AZ	852251334
CHANDLER	AZ	852254703
CHANDLER	AZ	850225017
GILBERT	AZ	852333517
CHANDLER	AZ	852495306
CHANDLER	AZ	852254728
CHANDLER	AZ	852495326

1105 S FRESNO CT
40916 N JACKRABBIT RD
544 W NIDO AVE
612 E EL PRADO RD
1992 TREASURE DR
1483 W HARVARD AVE
C/O EPROPERTYTAX- DEPT 207
2636 SALEROSO DR
1132 S BOGLE CT
1101 N LELAND CT
2339 E VIRGO PL
1845 E GRANDVIEW ST
1440 N FIESTA BLVD
1108 N MELBA CT
655 E FLINT ST
PO BOX 195
PO BOX 195
1842 W MERRILL LN
1530 N HOBSON ST
1980 W COMMERCE AVE
440 E DEL RIO ST
4275 S EXETER ST
1025 S GILBERT RD
11333 N SCOTTSDALE RD STE 180
1450 W GUADALUPE RD STE 113
1520 N HOBSON ST
1025 N GILBERT RD
140 N GILBERT RD
1013 W LEAH LN
1187 S FARGO CT
2741 E YELLOWSTONE PL
830 W COOLEY DR
245 N FRESNO ST
1100 VIRGINIA DR
654 W PRINCETON AVE
600 E TOLEDO ST
1830 W ASPEN AVE
1715 W SUNRISE BLVD STE A
153 GRANVILLE AVE
521 E REFLECTION PL
484 E OAKLAND ST
463 E LAREDO ST
130 N EXETER ST

PO BOX 4900

CHANDLER	AZ	852491082
QUEEN CREEK	AZ	852429698
MESA	AZ	852107572
CHANDLER	AZ	852251337
EDWARDSVILLE	IL	620255254
GILBERT	AZ	852333052
SCOTTSDALE	AZ	852614900
ROWLAND HEIGHTS	CA	91748
CHANDLER	AZ	852491313
GILBERT	AZ	852332539
CHANDLER	AZ	852495236
MESA	AZ	852034526
GILBERT	AZ	852331000
GILBERT	AZ	852332543
CHANDLER	AZ	852254728
QUEEN CREEK	AZ	85242
QUEEN CREEK	AZ	852420195
GILBERT	AZ	852331738
GILBERT	AZ	852331220
GILBERT	AZ	852334000
CHANDLER	AZ	852253710
CHANDLER	AZ	852495316
GILBERT	AZ	852963463
SCOTTSDALE	AZ	852545187
GILBERT	AZ	852333055
GILBERT	AZ	85233
GILBERT	AZ	85234
GILBERT	AZ	852345762
GILBERT	AZ	852331908
CHANDLER	AZ	852491044
CHANDLER	AZ	852492616
GILBERT	AZ	852332523
CHANDLER	AZ	852254658
FORT WASHINGTON	PA	19034
GILBERT	AZ	852333226
CHANDLER	AZ	852254718
GILBERT	AZ	852333535
GILBERT	AZ	852335032
LOS ANGELES	CA	900494224
CHANDLER	AZ	852494287
CHANDLER	AZ	852254665
CHANDLER	AZ	852253740
CHANDLER	AZ	852255541

449 E OAKLAND ST
628 E EL MONTE PL
219 N EXETER ST
1331 N KINGSTON ST
219 W EXETER ST
854 W COOLEY DR
432 E HARRISON ST
C/O WALGREENS #3725
2743 S SAILORS WY
434 E LYNX WAY
403 E MONTEREY ST
4173 E WALNUT RD
352 W JAMISON PL UNIT 73
16617 S 164TH ST
21535 N 74TH WAY
1761 W COMMERCE AVE
1236 N ITHICA ST
1108 S FARGO CT
447 E TONTO PL
2717 NIAGARA LN N
955 W JUANITA AVE
1044 W COOLEY DR
1341 N KINGSTON ST
488 N JACKSON ST
541 N KINGSTON ST
348 N NEVADA
1854 W MERRILL LN
380 E DEL RIO ST
1618 E GATE WAY
1437 E INDIGO CIR
4032 EL BOSQUE DR
C/O FARNSWORTH REALTY
753 W SCOTT AVENUE
2345 S ALMA SCHOOL RD STE 210
1858 W MERRILL LN
25139 JESSICA CT
668 W SCOTT AVE
1123 S MAVERICK CT
4505 S VIRGINIA WAY
754 W SCOTT AVE
674 N EL DORADO DR
1108 N LELAND CT
840 W ENCINAS ST

104 WILMOT RD MS #1435

460 S GREENFIELD RD STE 5

CHANDLER	AZ	852254664
CHANDLER	AZ	852251334
CHANDLER	AZ	852254656
GILBERT	AZ	852331716
CHANDLER	AZ	852254656
GILBERT	AZ	852332527
CHANDLER	AZ	852253729
DEERFIELD	IL	600155121
GILBERT	AZ	852957119
CHANDLER	AZ	852495328
CHANDLER	AZ	852253747
GILBERT	AZ	852988616
LITTLETON	CO	801205216
GILBERT	AZ	852972004
SCOTTSDALE	AZ	852554727
GILBERT	AZ	852334015
GILBERT	AZ	852331732
CHANDLER	AZ	852491041
CHANDLER	AZ	852495307
MINNEAPOLIS	MN	554474844
GILBERT	AZ	852332548
GILBERT	AZ	852332545
GILBERT	AZ	852331716
GILBERT	AZ	852334016
MESA	AZ	85202
CHANDLER	AZ	852244663
GILBERT	AZ	852331738
CHANDLER	AZ	852253708
PLEASANTON	CA	945663542
MESA	AZ	852033364
PEBBLE BEACH	CA	939533011
MESA	AZ	852062062
GILBERT	AZ	852333237
MESA	AZ	852104014
GILBERT	AZ	852331738
LAKE VILLA	IL	600465118
GILBERT	AZ	852333233
CHANDLER	AZ	852481453
CHANDLER	AZ	852495321
GILBERT	AZ	852333238
GILBERT	AZ	852333509
GILBERT	AZ	852332539
GILBERT	AZ	852332502

461 E BART DR
370 ELAN VILLAGE LN UNIT 225
907 W JUANITA AVE
866 N ABILENE DR
1067 W COOLEY DR
953 N LAYMAN ST
1106 S FRESNO CT
1843 W ENCINAS ST
1100 N HAMILTON ST
DBA T W STEEL CORP
1431 W HARVARD AVE
5112 N 40TH ST STE 105
4530 S FRESNO ST
6039 T HIGHWAY
C/O SHELLEY PAIALII
1111 S SIRRINE
2121 E HUBER
1021 W JUANITA AVE
1225 E WARNER RD 9
2323 W UNIVERSITY DR
752 W DOUGLAS AVE
3401 E SOUTHERN AVE
410 E DEL RIO ST
1316 S SAN VICENTE CT
1074 W COOLEY DR
1091 S MAVERICK ST
912 N LAYMAN ST
391 E DEL RIO ST
639 E IVANHOE ST
572 E HARRISON ST
1040 W JUANITA AVE
943 W JUANITA AVE
282 N FRESNO ST
ATT: MARIA HERNANDEZ
1244 N ITHICA ST
390 N NEVADA ST
563 W THOMPSON PL
2162 E HAWKEN WAY
587 E DETROIT ST
254 N EXETER ST
496 E OAKLAND ST
139 N SACRAMENTO ST
225 BRAE BLVD

1100 N HAMILTON ST

12121 WILSHIRE BLVD STE 1221

52197 W MAYER BLVD

CHANDLER	AZ	852253705
SAN JOSE	CA	951342532
GILBERT	AZ	852332551
GILBERT	AZ	852333232
GILBERT	AZ	852332546
GILBERT	AZ	852332919
CHANDLER	AZ	852491080
GILBERT	AZ	852332314
CHANDLER	AZ	852253302
CHANDLER	AZ	852253302
GILBERT	AZ	853823052
PHOENIX	AZ	850189182
CHANDLER	AZ	852493083
BRANSON	MO	656169339
LOS ANGELES	CA	900251164
MESA	AZ	852108718
MESA	AZ	852131467
GILBERT	AZ	852332556
TEMPE	AZ	852843244
TEMPE	AZ	852817223
GILBERT	AZ	852333243
PHOENIX	AZ	850403846
CHANDLER	AZ	852253710
CHANDLER	AZ	852494266
GILBERT	AZ	852332545
CHANDLER	AZ	852491482
GILBERT	AZ	852332918
CHANDLER	AZ	852253709
CHANDLER	AZ	852253985
CHANDLER	AZ	852253733
GILBERT	AZ	852332558
GILBERT	AZ	852332551
CHANDLER	AZ	852254659
MARICOPA	AZ	852394553
GILBERT	AZ	852331732
CHANDLER	AZ	852254663
CHANDLER	AZ	852487049
CHANDLER	AZ	852491249
CHANDLER	AZ	852254928
CHANDLER	AZ	852254657
CHANDLER	AZ	852254665
CHANDLER	AZ	852255546
PARK RIDGE	NJ	076561870

1664 W MERRILL LN
2816 E TAURUS PL
C/O HELMHOLDT REAL ESTATE
11372 E LA JUNTA AVE
1806 W REDFIELD RD
422 E HARRISON ST
445 HIDALGO ST
445 S HIDALGO RD
1873 W ENCINAS ST
342 E VERDE LANE
1008 W COOLEY DR
1455 E UNIVERSITY DR
PO BOX 3439
522 E HARRISON ST
479 S HIDALGO RD
646 E HOUSTON
1221 N MONDEL DR
9651 CAMASSIA WAY
2033 E KEMPTON RD
5238 E CATALINA AVE
470 N HAMILTON ST
PO BOX 972
760 N EXETER ST
1907 W REDFIELD RD
961 W JUANITA AVE
812 W COOLEY DR
1404 W SAN PEDRO ST
802 N BOGLE AVE
401 E CRESCENT PL
FRANCES HOPKINS
331 N FRESNO ST
652 E EL MONTE PL
4949 SW MEADOWS RD STE 400
4222 E BROWN RD NO 2
7805 N MOHAVE RD
1877 W SAN ANGELO ST
1108 N VELMA CT
3476 STATEVIEW BLVD
1694 W MERRILL LN
432 E LAREDO ST
460 E CANYON WAY
1081 S MAVERICK ST
350 E KENT AVE

7404 LAS BRISAS LN

1012 S ROBIN LN

GILBERT	AZ	852331719
CHANDLER	AZ	852493785
PARADISE VALLEY	AZ	85253
SCOTTSDALE	AZ	852555791
GILBERT	AZ	852333518
CHANDLER	AZ	852253729
CHANDLER	AZ	85224
CHANDLER	AZ	852256324
GILBERT	AZ	852332314
PHOENIX	AZ	850123010
GILBERT	AZ	852332538
MESA	AZ	852038130
GILBERT	AZ	852993439
CHANDLER	AZ	852253733
CHANDLER	AZ	852256355
GILBERT	AZ	85234
GILBERT	AZ	852331808
SAN RAMON	CA	945825263
CHANDLER	AZ	852252346
MESA	AZ	852062200
CHANDLER	AZ	852254741
DOUGLAS	AZ	856080972
CHANDLER	AZ	852253719
GILBERT	AZ	852333523
GILBERT	AZ	852332548
GILBERT	AZ	852332518
GILBERT	AZ	852332413
CHANDLER	AZ	852253987
CHANDLER	AZ	852495327
MESA	AZ	852045504
CHANDLER	AZ	852255017
CHANDLER	AZ	852251334
LAKE OSWEGO	OR	970353164
MESA	AZ	852054055
SCOTTSDALE	AZ	852533041
GILBERT	AZ	852332924
GILBERT	AZ	852332547
FORT MILL	SC	297157203
GILBERT	AZ	852331719
CHANDLER	AZ	852253737
CHANDLER	AZ	852493092
CHANDLER	AZ	852491482
CHANDLER	AZ	852251218

502 E HARRISON ST
1838 W ASPEN AVE
1038 W COOLEY DR
605 E EL MONTE PL
1351 N FRESNO ST
1784 W SAN ANGELO ST
7301 N 16TH ST STE 103
1120 W SARAGOSA ST
1370 W PARK AVE
175 S HAMILTON PL BLDG 3 STE 104
LEE KHANTHAPHIXAY
175 S HAMILTON PL BLDG 1 STE 101
515 E JUANITA AVE
691 W PRINCETON AVE
700 N ITHICA ST
1920 E THIRD ST
ALFRED R CLARK AND MARIA T CLARK
4723 E INGRAM ST STE 201
1028 W JUANITA AVE
1399 S BOGLE CT
431 E DEL RIO ST
1767 W REDFIELD RD
25 HARROWGATE DR
1049 W COOLEY DR
PO BOX 199000
578 N JACKSON ST
4400 LINDELL BLVD APT 18G
470 E DEL RIO ST
1221 N KINGSTON ST
C/O RAYMOND M SOLOMON
930 E MELODY DR
1389 S BOGLE CT
2143 W MONROE ST
4755 S VIRGINIA WAY
4428 W 15TH PL
7810 N SENDERO DE JUANA
842 N ABILENE DR
860 N BOGLE CT
PO BOX 7755
4888 S FRESNO ST
355 E IRONWOOD DR
632 E MEGAN ST
2418 E SOLANO DR

18540 NOTTINGHAM LN

459 E ORCHID LN

9234 N KOBER RD

CHANDLER	AZ	852253733
GILBERT	AZ	852333535
GILBERT	AZ	852332541
CHANDLER	AZ	852251335
CHANDLER	AZ	852251301
GILBERT	AZ	852332920
PHOENIX	AZ	850205266
CHANDLER	AZ	852247200
GILBERT	AZ	852335136
GILBERT	AZ	852335508
ROWLAND HEIGHTS	CA	91748
GILBERT	AZ	852335508
MESA	AZ	852046542
GILBERT	AZ	852333231
GILBERT	AZ	852334002
TEMPE	AZ	852812973
CHANDLER	AZ	852251195
MESA	AZ	852053233
GILBERT	AZ	852332558
CHANDLER	AZ	852864285
CHANDLER	AZ	852253712
GILBERT	AZ	852333516
CHERRY HILL	NJ	080031912
GILBERT	AZ	852332544
DALLAS	TX	752199000
GILBERT	AZ	852334020
SAINT LOUIS	MO	63108
CHANDLER	AZ	852253711
GILBERT	AZ	852331723
PARADISE VALLEY	AZ	85253
GILBERT	AZ	852342506
CHANDLER	AZ	852494285
CHANDLER	AZ	852248394
CHANDLER	AZ	852495322
YUMA	AZ	853648603
TUCSON	AZ	857187518
GILBERT	AZ	852333232
CHANDLER	AZ	852253981
CHANDLER	AZ	852467755
CHANDLER	AZ	852493077
CHANDLER	AZ	852251294
CHANDLER	AZ	852253929
PHOENIX	AZ	850162817

1040 N NEVADA ST
484 E COCONINO DR
1440 W SAN PEDRO ST
1783 W SAN ANGELO ST
1360 S BOGLE CT
342 W CITATION LN
1481 W SCOTT AVE
2150 W CHEYENNE DR
55 W HOOVER AVE STE 12
PO BOX 9081
C/O CDC POOL
8185 E ALAMEDA RD
5691 S MESQUITE GROVE WAY
5691 S MESQUITE GROVE WY
C/O MIKE WOOD
C/O MIKE WOOD
25558 MANDARIAN CT
44152 W NEELY DR
590 N METRO BLVD
PO BOX 292
1649 W COMMERCE AVE
PO BOX 26221
714 N ELDORADO DR
11832 S WARPAINT DR
1747 W REDFIELD RD
671 E COLT CT
2190 N ITHICA ST
PO BOX 7180
848 W COOLEY DR
433 E LAREDO ST
1061 W COOLEY DR
1002 W COOLEY DR
436 E TONTO PL
1245 N HOBSON ST
1245 N HOBSON ST
5833 E INDIAN SCHOOL RD
5833 E INDIAN SCHOOL RD
435 S HAMILTON CT
C/O ATAS INTERNATIONAL INC
1054 STANFORD AVE
476 E SAN CARLOS WAY
906 W COOLEY DR
443 E MONTEREY ST

4677 S LAKESHORE DR
4677 S LAKESHORE DR

6612 SNOWDRIFT RD

GILBERT	AZ	85233
CHANDLER	AZ	852495300
GILBERT	AZ	852332413
GILBERT	AZ	852332921
CHANDLER	AZ	852494284
TEMPE	AZ	853841358
GILBERT	AZ	852333046
CHANDLER	AZ	852241708
MESA	AZ	852105267
MESA	AZ	852149081
MESA	AZ	852149081
SCOTTSDALE	AZ	852552819
CHANDLER	AZ	852499669
CHANDLER	AZ	852339669
TEMPE	AZ	852827162
TEMPE	AZ	852827162
LOMA LINDA	CA	923543713
MARICOPA	AZ	852399423
CHANDLER	AZ	85226
CHANDLER	AZ	852440292
GILBERT	AZ	852334008
TEMPE	AZ	852856221
GILBERT	AZ	852333512
PHOENIX	AZ	850443463
GILBERT	AZ	852333516
CHANDLER	AZ	852251333
CHANDLER	AZ	852250942
CHANDLER	AZ	852467180
GILBERT	AZ	852332523
CHANDLER	AZ	852253739
GILBERT	AZ	85233
GILBERT	AZ	852332538
CHANDLER	AZ	852495307
GILBERT	AZ	852331215
GILBERT	AZ	852331215
PHOENIX	AZ	850186104
PHOENIX	AZ	850186104
GILBERT	AZ	852335521
ALLENTOWN	PA	181069352
MADERA	CA	936376228
CHANDLER	AZ	852495332
GILBERT	AZ	85233
CHANDLER	AZ	852253747

ARIZONA REFLECTIONS
3999 CELIA CT
4709 E COVINA ST
1034 W JUANITA AVE
410 N FRESNO ST
412 E OAKLAND ST
842 W COOLEY DR
885 SHEILA CT
662 E COLT CT
2211 S 5TH AVE
1883 W SAN ANGELO ST
876 N ABALEONE DR
1101 N ARIEL CIR
450 N PLEASANT DR
3401 W STEINBECK DR
525 BELLA CALAIS WAY
1430 N HOBSON ST
874 N EL DORADO DR
1369 S BOGLE CT
616 E HARRISON ST
1834 W SAN ANGELO ST
1281 N FRESNO ST
619 E SHANNON ST
1188 S FARGO CT
859 W COOLEY DR
1893 W ENCINAS ST
40 W STARSHINE LN
1240 N ITHICA ST
987 W LEAH LN
628 N EL DORADO DR
444 E LYNX WY
1275 W HOUSTON AVE
1863 W SAN ANGELO ST
733 W SAN ANGELO ST
5625 N 12TH AVE
1201 N CHARLES ST
591 N KINGSTON ST
13619 N 17TH PL
170 S WILLAM DILLARD DR
768 W DOUGLAS AVE
1439 W SAN ANGELO ST
698 E TOLEDO ST
664 E TOLEDO ST

8715 W UNION HILLS #106

STE 1-101

PEORIA	AZ	853823031
SIMI VALLEY	CA	930632828
MESA	AZ	852057126
GILBERT	AZ	852332558
CHANDLER	AZ	852254661
CHANDLER	AZ	852254665
GILBERT	AZ	852332523
CAMPBELL	CA	950086420
CHANDLER	AZ	852251330
ARCADIA	CA	910065312
GILBERT	AZ	852332924
GILBERT	AZ	852332415
GILBERT	AZ	852332530
PHOENIX	AZ	85024
PHOENIX	AZ	850862510
SAN JOSE	CA	951381329
GILBERT	AZ	852331202
GILBERT	AZ	852332900
CHANDLER	AZ	852494285
CHANDLER	AZ	852253907
GILBERT	AZ	852332922
CHANDLER	AZ	852251199
CHANDLER	AZ	852253911
CHANDLER	AZ	852491041
GILBERT	AZ	852332526
GILBERT	AZ	852332314
SEDONA	AZ	863517594
GILBERT	AZ	852331732
GLENDALE	AZ	852331915
GILBERT	AZ	852333506
CHANDLER	AZ	852495328
GILBERT	AZ	852331810
GILBERT	AZ	852332924
GILBERT	AZ	852332642
PHOENIX	AZ	850131753
GILBERT	AZ	852331916
GILBERT	AZ	852334004
PHOENIX	AZ	850225058
GILBERT	AZ	85233
GILBERT	AZ	852333243
GILBERT	AZ	852332408
CHANDLER	AZ	852254718
CHANDLER	AZ	852254718

548 N JACKSON ST
690 N EL DORADO DR
3218 W APOLLO RD
441 E DEL RIO ST
401 E DEL RIO ST
1831 W SAN ANGELO ST
1786 W REDFIELD RD
649 E EL PRADO RD
836 W COOLEY DR
655 W SCOTT AVE
2145 N SAN VINCENTE DR
1026 WEST NEWPORT BEACH DR
1026 WEST NEWPORT BEACH DR
1026 WEST NEWPORT BEACH DR
7430 COPLEY PARK PL
648 E IVANHOE ST
563 E JUANITA AVE
412 E LAREDO ST
1000 W ENCINAS ST
1108 N ARIEL CT
431 E SPRINGFIELD PL
1350 W SANDPIPER DR
607 E COLT AVE
702 W SCOTT AVE
985 W JUANITA AVE
521 N KINGSTON ST
431 S HIDALGO RD
329 W GALVESTON ST
453 E MONTEREY ST
730 N EL DORADO DR
900 E ENCINAS AVE
2253 N ITHICA CT
140 W FLAGSTONE PL
90 SOUTH ROOSEVELT AVE #109
742 E BEECHNUT DR
1291 N KINGSTON ST
433 E MONTEREY ST
449 E ORCHID LN
370 E KENT AVE
468 N JACKSON ST
1356 N PIONEER ST
431 N FRESNO ST
598 E DETROIT ST

GILBERT	AZ	852334020
GILBERT	AZ	852333509
PHOENIX	AZ	850416337
CHANDLER	AZ	852253712
CHANDLER	AZ	852253712
GILBERT	AZ	852332923
GILBERT	AZ	852333517
CHANDLER	AZ	852251339
GILBERT	AZ	852332523
GILBERT	AZ	852333229
CHANDLER	AZ	852491354
GILBERT	AZ	852346739
GILBERT	AZ	852346739
GILBERT	AZ	852346739
SAN DIEGO	CA	921111122
CHANDLER	AZ	852253984
MESA	AZ	852046523
CHANDLER	AZ	852253737
GILBERT	AZ	852332506
GILBERT	AZ	852332530
CHANDLER	AZ	852491019
GILBERT	AZ	852335624
CHANDLER	AZ	852251331
GILBERT	AZ	852333235
GILBERT	AZ	852332550
GILBERT	AZ	852334011
CHANDLER	AZ	852256324
CHANDLER	AZ	852256701
CHANDLER	AZ	852253747
GILBERT	AZ	852333512
GILBERT	AZ	85234
CHANDLER	AZ	852250938
CASA GRANDE	AZ	852226200
PASADENA	CA	911074174
CHANDLER	AZ	852493300
GILBERT	AZ	852331723
CHANDLER	AZ	852253747
CHANDLER	AZ	852251195
CHANDLER	AZ	852241218
GILBERT	AZ	852334016
GILBERT	AZ	852331805
CHANDLER	AZ	852254660
CHANDLER	AZ	852254628

614 E COLT CT
1 COPPERSTONE LN
1370 S BOGLE CT
414 E LYNX WAY
2783 E NOLAN PL
1462 62ND ST
413 E MEAD DR
5833 E INDIAN SCHOOL RD
962 W COOLEY DR
311 N FRESNO ST
613 E MESQUITE ST
3825 W CADBURY CIR
460 E DEL RIO ST
497 E MEAD PL
411 E BART DR
829 W COOLEY DR
600 E FLINT ST
PO BOX 1285
1922 N OLEANDER ST
557 E OAKLAND ST
3303 THE LEE GARDENS 33 HYSAN AVE
4102 25TH ST
1126 S FRESNO CT
1068 W COOLEY DR
1755 W ASPEN AVE
401 E SPRINGFIELD PL
738 N EL DORADO DR
1341 N FRESNO ST
6527 E ASPEN AVE
1021 W LEAH LN
498 E MEAD PL
1102 N ELDON CIR
5758 ATHENOUR CT
1887 W REDFIELD RD
1380 S BOGLE CT
617 E CHANDLER BLVD
1747 W COMMERCE AVE
1807 W REDFIELD RD
675 W PRINCETON AVE
1341 N PIONEER
500 N HAMILTON ST
647 E EL MONTE PL
1361 N PIONEER

CAUSEWAY BAY

HONG KONG CHINA

CHANDLER	AZ	852251329
MISSION VIEJO	CA	926925933
CHANDLER	AZ	852494284
CHANDLER	AZ	852495328
CHANDLER	AZ	852495500
BROOKLYN	NY	112195413
CHANDLER	AZ	852495331
PHOENIX	AZ	850186104
GILBERT	AZ	852332536
CHANLDER	AZ	852255017
GILBERT	AZ	852961719
SYRACUSE	UT	840756853
CHANDLER	AZ	852253710
CHANDLER	AZ	852493090
CHANDLER	AZ	852253704
GILBERT	AZ	852332522
CHANDLER	AZ	852254729
CHANDLER	AZ	852441285
TEMPE	AZ	852811674
CHANDLER	AZ	852254666
SAN FRANCISCO	CA	941143705
CHANDLER	AZ	852491080
GILBERT	AZ	852332545
GILBERT	AZ	852333502
CHANDLER	AZ	852491019
GILBERT	AZ	852333512
CHANDLER	AZ	852251301
MESA	AZ	852061717
GILBERT	AZ	852331908
CHANDLER	AZ	852493088
GILBERT	AZ	852332534
PLEASANTON	CA	945889678
GILBERT	AZ	852333521
CHANDLER	AZ	852494284
CHANDLER	AZ	852255635
GILBERT	AZ	852334015
GILBERT	AZ	852333519
GILBERT	AZ	852333231
GILBERT	AZ	852341806
CHANDLER	AZ	852254742
CHANDLER	AZ	852251336
GILBERT	AZ	852341806

119 N HAMILTON ST
150 N HAMILTON PL
101 N HAMILTON ST
452 E HARRISON ST
2144 N SAN VICENTE DR
450 E CRESCENT PL
221 N THORNBURG ST
1361 N PIONEER
10115 E BELL RD STE 107-410
1450 W GUADALUPE RD
961 E WILDHORSE DR
418 E HORSESHOE DR
1070 S BOGLE CT
1420 N HOBSON ST
771 N GOLDEN KEY ST
1917 W REDFIELD RD
1893 W SAN ANGELO ST
411 E CRESCENT PL
JVK INVESTMENTS LLC
901 W JUANITA AVE
240 N PASADENA ST
C/O COMMERCIAL PROPERTIES INC
415 E LYNX WAY
1355 N MONDEL DR
760 E GERMANN RD
1022 W JUANITA AVE
620 N EXETER ST
1350 E IBIS ST
426 E TONTO PL
420 E BART DR
562 E HARRISON ST
706 N EL DORADO DR
2128 E CAROLINE LN
4499 CRESTWOOD CIR
380 E BUFFALO ST
1158 S FARGO CT
MANNEM FAMILY TRUST
1248 MONTCOURSE LN
421 E CANYON WY
380 E BUFFALO ST
916 ADDISON DR NE
1621 N 40TH ST
538 N JACKSON ST

1625 S SIERRA VISTA AVE

2323 W UNIVERSITY DR

1620 MISSION SPRINGS CIR

CHANDLER	AZ	852255616
CHANDLER	AZ	85225
CHANDLER	AZ	852255616
CHANDLER	AZ	852253729
CHANDLER	AZ	852251352
CHANDLER	AZ	852495326
SANTA MARIA	CA	934584350
GILBERT	AZ	852341806
SCOTTSDALE	AZ	852602189
GILBERT	AZ	852333042
CHANDLER	AZ	852491025
CHANDLER	AZ	852495324
CHANDLER	AZ	852491310
GILBERT	AZ	852331202
GILBERT	AZ	852333812
GILBERT	AZ	852333523
GILBERT	AZ	852332924
CHANDLER	AZ	852495327
ALHAMBRA	CA	918015533
GILBERT	AZ	852332551
GILBERT	AZ	852334506
TEMPE	AZ	852817223
CHANDLER	AZ	852495329
GILBERT	AZ	852331213
CHANDLER	AZ	852491318
GILBERT	AZ	852332558
CHANDLER	AZ	852253716
GILBERT	AZ	852970816
CHANDLER	AZ	852495307
CHANDLER	AZ	852253702
CHANDLER	AZ	852253733
GILBERT	AZ	852333511
TEMPE	AZ	852843532
CONCORD	CA	945211246
CHANDLER	AZ	852255539
CHANDLER	AZ	852491041
SAN JOSE	CA	951313032
SAN JOSE	CA	951312407
CHANDLER	AZ	852493095
CHANDLER	AZ	852255539
ST PETERSBURG	FL	337163444
PHOENIX	AZ	850084004
GILBERT	AZ	852334020

REAL ESTATE SERVICES
2294 E DESERT BLOOM PL
963 N LAYMAN ST
301 N 56TH ST
437 E TULSA ST
PO BOX 1808
1114 N LELAND CT
477 E MEAD PL
236 N EXETER ST
624 W SCOTT AVE
919 W COOLEY DR
825 E ENINAS ST
762 N EL DORADO DR
413 E TULSA ST
1271 N FRESNO ST
565 W PRINCETON AVE
602 E COLT CT
1282 N ITHICA ST
120 N HAMILTON PL
680 E FLINT ST
672 E DETROIT ST
550 E KENT AVE
400 E OAKLAND ST
437 E OAKLAND ST
642 N EL DORADO DR
208 N EXETER ST
1277 N LAYMAN ST
1855 W SAN ANGELO ST
300 S HAMILTON PL
1108 N WHIPPLE CT
FISCH MATT TR
1425 N MONDEL DR
4123 E CASSIA WY
680 W PRINCETON AVE
552 E HARRISON ST
1040 W ENCINAS ST
492 E HARRISON ST
1101 N MELBA CT
2105 N SAN VINCENTE DR
634 W SCOTT AVE
751 TRESTLE GLEN RD
850 N BOGLE CT
1627 S SIERRA VISTA AVE

301 W JEFFERSON STE 960

426 E SAN CARLOS WY

PHOENIX	AZ	850032111
CHANDLER	AZ	852862330
GILBERT	AZ	852332919
CHANDLER	AZ	852262502
CHANDLER	AZ	852254634
CHANDLER	AZ	852441808
GILBERT	AZ	852332539
CHANDLER	AZ	852493090
CHANDLER	AZ	852254657
GILBERT	AZ	852333228
GILBERT	AZ	852332531
GILBERT	AZ	852332503
GILBERT	AZ	852333514
CHANDLER	AZ	852254634
CHANDLER	AZ	852251199
GILBERT	AZ	852333283
CHANDLER	AZ	852251329
GILBERT	AZ	852331739
CHANDLER	AZ	852255624
CHANDLER	AZ	852254729
CHANDLER	AZ	852254703
CHANDLER	AZ	852251285
CHANDLER	AZ	852254665
CHANDLER	AZ	852254664
GILBERT	AZ	852333506
CHANDLER	AZ	85225
GILBERT	AZ	852331744
GILBERT	AZ	852332924
GILBERT	AZ	852335505
GILBERT	AZ	852332525
CHANDLER	AZ	854295332
GILBERT	AZ	852331209
PHOENIX	AZ	850444650
GILBERT	AZ	852333230
CHANDLER	AZ	852253733
GILBERT	AZ	852332506
CHANDLER	AZ	852253730
GILBERT	AZ	852332543
CHANDLER	AZ	852251353
GILBERT	AZ	852333228
OAKLAND	CA	946102329
CHANDLER	AZ	852253981
ALHAMBRA	CA	918015533

1627 S SIERRA VISTA AVE STE A
855 N QUAIL LN
639 W PRINCETON AVE
482 E HARRISON ST
42442 W SUNLAND DR
1826 PEARY WY
8111 E INDIAN BEND RD
601 W SHERRI DR
949 W COOLEY DR
1036 W HUDSON WAY
4407 CITY TERRACE DR
1757 W REDFIELD RD
1836 W ASPEN AVE
1796 W REDFIELD RD
ARTHUR J HATCH
236 N FRESNO ST
218 N FRESNO ST
363 E LAREDO ST
413 E MONTEREY ST
1589 W MELODY DR
471 N FRESNO ST
1740 S MESA DR
611 E EL MONTE PL
648 E EL PRADO RD
PO BOX 1466
436 E SAN CARLOS WAY
1062 W COOLEY DR
820 W ENCINAS ST
3362 MONROE ST
943 W COOLEY DR
1366 E 1120 S
8646 E NANCE ST
549 W PRINCETON AVE
581 N KINGSTON ST
1752 W REDFIELD RD
606 E EL PRADO RD
601 E COLT CT
902 W COOLEY DR
4575 S EXETER ST
421 E BART DR
1425 W ELLIOT RD STE 105
642 W SCOTT AVE
2223 N ITHICA CT

2625 N 24TH ST UNIT 33

ALHAMBRA	CA	918015533
GILBERT	AZ	852333227
GILBERT	AZ	852333225
CHANDLER	AZ	852253730
MARICOPA	AZ	852391625
LIVERMORE	CA	945505615
SCOTTSDALE	AZ	852504813
GILBERT	AZ	852338044
GILBERT	AZ	852332535
GILBERT	AZ	852331905
LOS ANGELES	CA	900631008
GILBERT	AZ	852333516
GILBERT	AZ	852333535
GILBERT	AZ	852333517
MESA	AZ	852131467
CHANDLER	AZ	852254659
CHANDLER	AZ	852254659
CHANDLER	AZ	852253736
CHANDLER	AZ	852253747
GILBERT	AZ	852331205
CHANDLER	AZ	852254660
MESA	AZ	852106213
CHANDLER	AZ	852251335
CHANDLER	AZ	852251337
MESA	AZ	852111466
CHANDLER	AZ	852495332
GILBERT	AZ	852332545
GILBERT	AZ	852332502
CARLSBAD	CA	920082045
GILBERT	AZ	852332533
PROVO	UT	846066379
MESA	AZ	852071414
GILBERT	AZ	852333280
GILBERT	AZ	852334004
GILBERT	AZ	852333517
CHANDLER	AZ	852251337
CHANDLER	AZ	852251331
GILBERT	AZ	852332528
CHANDLER	AZ	852495317
CHANDLER	AZ	852253704
GILBERT	AZ	852335141
GILBERT	AZ	852333228
CHANDLER	AZ	852250938

1007 W COOLEY DR
C/O MG PETERSON CONSULTING PLC
4445 S VIRGINIA WAY
5709 NE 3RD PL
623 E MARIPOSA PL
1704 W MERRILL LN
381 S HIDALGO RD
714 N MONTEREY ST
708 E TREMAINE
1877 W REDFIELD RD
175 S HAMILTON PL BLDG 4 STE 109
12118 E BLUEBIRD DR
SIERRA REVOCABLE TRUST
463 E KAIBAB PL
6 N SAHUARO DR
654 E EL PRADO RD
3515 SUNRISE ST
461 N FRESNO ST
1674 W MERRILL LN
424 E TULSA ST
1110 W MCDOWELL RD APT 1
720 N EXETER ST
393 E MONTEREY ST
1883 W ENCINAS ST
PO BOX 41941
3817 E DOWNING CIR
3938 E BECKER LN
409 E HORSESHOE DR
8108 W 4TH ST
460 E SAN TAN ST
1851 E LINDA LN
763 E ELMONTE PL
PO BOX 69
MARK A GORDON SR AND TANYA Y GORDON TRUS
1225 N ACACIA DR
1291 N FRESNO ST
952 N LAYMAN ST
6428 S MAGIC CT
2090 E UNIVERSITY DR STE 104
390 E BART DR
1102 N LELAND CT
1101 N ELDON CT
435 E LYNX WAY

PO BOX 27328

49 E 5TH AVE

479 E HORSESHOE PL

GILBERT	AZ	852332537
TEMPE	AZ	852857328
CHANDLER	AZ	852495319
RENTON	WA	980594888
CHANDLER	AZ	852251347
GILBERT	AZ	852331721
CHANDLER	AZ	852256323
GILBERT	AZ	852333832
GILBERT	AZ	852344667
GILBERT	AZ	852333533
PHOENIX	AZ	852335508
CHANDLER	AZ	852491910
MESA	AZ	852108501
CHANDLER	AZ	852495309
GILBERT	AZ	852335434
CHANDLER	AZ	852251337
WINSLOW	AZ	860476991
CHANDLER	AZ	852254660
GILBERT	AZ	852331719
CHANDLER	AZ	852254635
PHOENIX	AZ	850071774
CHANDLER	AZ	852253718
CHANDLER	AZ	852253744
GILBERT	AZ	852332314
MESA	AZ	852741941
MESA	AZ	852056119
PHOENIX	AZ	850283426
CHANDLER	AZ	852495325
LOS ANGELES	CA	900484416
CHANDLER	AZ	852254630
GILBERT	AZ	852346119
CHANDLER	AZ	852250936
CHANDLER	AZ	852240069
CHANDLER	AZ	852493096
GILBERT	AZ	852331820
CHANDLER	AZ	852251199
GILBERT	AZ	852332918
GILBERT	AZ	852974895
TEMPE	AZ	852814684
CHANDLER	AZ	852253700
GILBERT	AZ	852332539
GILBERT	AZ	852332534
CHANDLER	AZ	852495329

9125 H 6 N APT 1125
1107 N FREEMAN CT
956 W HUDSON WAY
138 N HAMILTON PL
1705 W COMMERCE AVE
CHERYL L GARNER
1355 N MCQUEEN RD
937 W JUANITA AVE
C/O COMMERCIAL PROPERTIES INC
700 ELM ST
681 E FLIND ST
8015 S MILL AVE
119 N REDROCK ST
155 N SACRAMENTO ST
1827 W REDFIELD RD
462 E MONTEREY ST
14484 CHESTER AVE
4532 S FOUR PEAKS WY
664 N EL DORADO DR
PO BOX 40091
1837 W REDFIELD RD
379 E ORCHID LN
1113 DEER HAVEN DR
94-807 MEAHALE ST
972 N LAYMAN ST
KARL OEHRMAN
1175 S FRESNO CT
7619 E KRALL ST
ASSET MANAGEMENT
1335 N MONDEL DR
710 N EXETER ST
1287 N NEBRASKA
1102 N ARIEL CT
1292 W HARWELL RD
1654 E HERMOSA VISTA DR
1117 S FARGO CT
1019 W COOLEY DR
3260 DOLONITA AVE
1128 S FARGO CT
1061 S MAVERICK ST
JERRY F/CHERYL A ODEN
454 E LYNX WAY
1320 W BOXWOOD AVE

175 S HAMILTON PL STE 106 BLDG 4

2323 W UNIVERSITY DR

460 GUNNING ROAD

450 S ORANGE AVE NO 900

2924 E LIBRA ST

HOUSTON	TX	77095
GILBERT	AZ	852332521
GILBERT	AZ	852331919
CHANDLER	AZ	852255624
GILBERT	AZ	852334015
GILBERT	AZ	852335507
GILBERT	AZ	852331704
GILBERT	AZ	852332551
TEMPE	AZ	852817223
EDMONDS	WA	980206618
CHANDLER	AZ	852254728
TEMPE	AZ	852841327
GILBERT	AZ	852341042
CHANDLER	AZ	852255546
GILBERT	AZ	852333533
CHANDLER	AZ	852253745
SARATOGA	CA	950705627
CHANDLER	AZ	852495972
GILBERT	AZ	852333509
PHOENIX	AZ	850670091
GILBERT	AZ	852333533
CHANDLER	AZ	852251182
FRANKFORT	KY	406015205
WAIPAHU	HI	967974026
GILBERT	AZ	852332918
TRYON	NC	28782
CHANDLER	AZ	852491099
SCOTTSDALE	AZ	852504658
ORLANDO	FL	328013339
GILBERT	AZ	852331213
CHANDLER	AZ	852253718
CHANDLER	AZ	852256648
GILBERT	AZ	852332530
GILBERT	AZ	852331833
MESA	AZ	852032118
CHANDLER	AZ	852491042
GILBERT	AZ	852332540
HACIENDA HEIGHTS	CA	91745
CHANDLER	AZ	852491041
CHANDLER	AZ	85286
GILBERT	AZ	852344014
CHANDLER	AZ	852495328
GILBERT	AZ	852331813

1002 15TH ST SW STE 110
3240 BETTY DR
613 S MARINA DR
1261 N KINGSTON ST
786 N EL DORADO DR
1400 S BOGLE CT
2554 E CHESTER DR
229 N FRESNO ST
34656 N CAMINO LARGO
1230 W SHANNON ST
629 E FLINT ST
619 E FLINT
610 E FLINT ST
443 S HIDALGO RD
604 E HARRISON ST
1114 N ELDON CT
1361 N FRESNO ST
751 N FRESNO ST
2204 S ILLINOIS ST
78 N EXETER ST
1361 N PIONEER ST
461 E TULSA ST
400 E BART DR
1167 S FARGO CT
858 N ABILENE DR
8 WASHBURN PL
644 E DETROIT ST
1777 W REDFIELD RD
551 E REFLECTION PL
3222 W WHITE CANYON
841 W COOLEY DR
538 E HORSEHOE PL
1202 N CHARLES ST
4877 S EXETER ST
701 S 7TH ST
484 E TULSA ST
720 E COLT RD
487 E TONTO DR
PO BOX 37167
1335 E HORSESHOE AVE
1823 W ENCINAS ST
PO BOX 2057
818 E 6TH ST

AUBURN	WA	980016502
LOS ANGELES	CA	900322006
GILBERT	AZ	85233
GILBERT	AZ	852331723
GILBERT	AZ	852333539
CHANDLER	AZ	852494286
CHANDLER	AZ	852491360
CHANDLER	AZ	852254658
QUEEN CREEK	AZ	852428885
CHANDLER	AZ	852243577
CHANDLER	AZ	852254728
CHANDLER	AZ	85225
CHANDLER	AZ	852254729
CHANDLER	AZ	852256324
CHANDLER	AZ	852253907
GILBERT	AZ	852332534
CHANDLER	AZ	852251301
CHANDLER	AZ	852253725
CHANDLER	AZ	852488503
CHANDLER	AZ	852255570
GILBERT	AZ	852331806
CHANDLER	AZ	852254634
CHANDLER	AZ	852253702
CHANDLER	AZ	852491044
GILBERT	AZ	852333232
SOUTH DENNIS	MA	026602349
CHANDLER	AZ	852254703
GILBERT	AZ	852333516
CHANDLER	AZ	852494287
QUEEN CREEK	AZ	852423060
GILBERT	AZ	852332524
CHANDLER	AZ	852493097
GILBERT	AZ	85233
CHANDLER	AZ	852495318
PHOENIX	AZ	850343202
CHANDLER	AZ	852254635
CHANDLER	AZ	852250932
CHANDLER	AZ	852495306
PHOENIX	AZ	850697167
GILBERT	AZ	852961935
GILBERT	AZ	852332317
GILBERT	AZ	852992057
MESA	AZ	852037213

C/O LISA M PENA
620 E FLINT ST
660 N EXETER ST
PO BOX 2057
162 N EXETER ST
437 E SAN TAN ST
451 N FRESNO ST
436 E OAKLAND ST
472 E ERIE NO 114
25 N COTTONWOOD ST
653 E EL MONTE PL
C/O TOM BISHOP
BETTY F/EDWARD A MARSHALL III TRUSTEES
860 W ENCINAS ST
11428 E APPLEBY RD
901 W HARVARD
853 W COOLEY DR
670 E ENCINAS AVE
670 E ENCINAS AVE
670 E ENCINAS AVE
670 E ENCINAS AVE
BETHANY HOLDINGS GROUP LLC
ATTN GENERAL ACCOUNTING FN74
348 E BUFFALO ST
348 E BUFFALO ST
87 N SACRAMENTO ST
1322 N JACKSON ST
1874 W SAN ANGELO ST
C/O ASSOCIATED ASSET MANAGEMENT INC
2345 S ALMA SCHOOL RD STE 210
1725 W ASPEN AVE
380 E BART DR
4800 N SCOTTSDALE RD NO 1400
1215 N ACACIA DR
660 E FLINT ST
673 E FLINT ST
631 E IVANHOE ST
555 E RAY RD APT 232
770 N EXETER ST
647 W PRINCETON AVE
PO BOX 2120
PO BOX 9
1504 W SAN PEDRO ST

818 E 6TH ST

UNIT 72

685 S PORTER ST
5134 N CENTRAL AVE STE 200

1920 MAIN ST STE 770
200 E VAN BUREN ST

7740 NORTH 16TH STREET SUITE 300

MESA	AZ	852037213
CHANDLER	AZ	852254729
CHANDLER	AZ	852253717
GILBERT	AZ	852992057
CHANDLER	AZ	852255541
CHANDLER	AZ	852254630
CHANDLER	AZ	852254660
CHANDLER	AZ	852254665
CHANDLER	AZ	852258816
CHANDLER	AZ	85225
CHANDLER	AZ	852251336
GILBERT	AZ	852963038
PHOENIX	AZ	850121477
GILBERT	AZ	852332502
CHANDLER	AZ	852492101
GILBERT	AZ	852343106
GILBERT	AZ	852332526
GILBERT	AZ	852343461
IRVINE	CA	926147262
PHOENIX	AZ	850042238
CHANDLER	AZ	852255539
CHANDLER	AZ	852255539
CHANDLER	AZ	852255562
GILBERT	AZ	852331715
GILBERT	AZ	852332925
PHOENIX	AZ	850204473
MESA	AZ	852104014
GILBERT	AZ	852333502
CHANDLER	AZ	852253700
SCOTTSDALE	AZ	852517632
GILBERT	AZ	852331820
CHANDLER	AZ	852254729
CHANDLER	AZ	852254728
CHANDLER	AZ	852253985
CHANDLER	AZ	852253318
CHANDLER	AZ	852253719
GILBERT	AZ	852333225
GILBERT	AZ	852992120
CHANDLER	AZ	852440009
GILBERT	AZ	852332412

PO BOX 19000
4868 S FESNO ST
1114 N WHIPPLE CIR
925 W COOLEY DR
1102 N MELBA CT
4443 N 47TH PL
4735 S VIRGINIA WAY
AFFILIATED PROPERTY MANAGEMENT
3140 N ARIZONA AVE STE 101
PO BOX 511196
4795 S VIRGINIA WAY
909 W HARVARD AVE
460 E AUTO CENTER DR
460 E AUTO CENTER DR
PO BOX 4008
2225 N MOSLEY DR
C/O CHEVRON CORP PROPERTY TAX DEPT
568 N JACKSON ST
BANK ONE TRUST COMPANY N A TR
1121 SW SALMON ST 5TH FLR
5833 E INDIAN SCHOOL RD
401 E OAKLAND ST
PO BOX 3475
410 E KENT AVE
KRISTIN T THOMAS
424 E OAKLAND ST
361 E KENT AVE
299 N EXETER ST
PO BOX 4740
700 N MONTEREY ST
531 E VERMONT DR
TEAM ARIZONA
PO BOX 1117
1310 N ACACIA DR STE 120
2529 E CHERRYWOOD PL
491 N KINGSTON ST
501 E FRYE RD
501 E FRYE RD
1450 W GUADALUPE RD STE 120
636 E CARLA VISTA DR
1836 W MERRILL LN
C/O LLOYD MILLER MEMBER
444 E COCONINO PL

3140 N ARIZONA AVE STE 101

PO BOX 1392

PO BOX 71

231 MANGELS AVE

36 N WILLIAM DILLARD DR

1756 E BOSTON CIR

DALLAS	TX	75219
CHANDLER	AZ	852493077
GILBERT	AZ	852332525
GILBERT	AZ	852332531
GILBERT	AZ	852332543
PHOENIX	AZ	850182905
CHANDLER	AZ	852495322
CHANDLER	AZ	852257166
CHANDLER	AZ	852257166
SALT LAKE CITY	UT	841511196
CHANDLER	AZ	852495323
GILBERT	AZ	852333106
MESA	AZ	852046500
MESA	AZ	852046500
MESA	AZ	852114008
CHANDLER	AZ	852251356
BAKERSFIELD	CA	933021392
GILBERT	AZ	852334020
PHOENIX	AZ	850010071
PORTLAND	OR	97205
PHOENIX	AZ	850186104
CHANDLER	AZ	852254664
TULSA	OK	741013475
CHANDLER	AZ	852251233
SAN FRANCISCO	CA	941312817
CHANDLER	AZ	852254665
CHANDLER	AZ	852251227
CHANDLER	AZ	852254656
MESA	AZ	852114740
GILBERT	AZ	85233
GILBERT	AZ	852965945
GILBERT	AZ	852334508
GILBERT	AZ	852991117
PHOENIX	AZ	852331832
CHANDLER	AZ	852493522
GILBERT	AZ	852334010
CHANDLER	AZ	852256384
CHANDLER	AZ	852256384
CHANDLER	AZ	852252311
CHANDLER	AZ	852254720
GILBERT	AZ	852331742
CHANDLER	AZ	85225
CHANDLER	AZ	852495315

517 E MEAD PL
1916 W ASPEN AVE
48 N MACDONALD
573 W PRINCETON AVE
1450 W GUADALUPE RD STE 109
1927 W REDFIELD RD
760 S STAPLEY DR STE 3
PM DEPARTMENT #2247
825 E OAKLAND ST
1943 W GOLDFINCH WY
1985 W TREMAIN ST
722 N EL DORADO DR
625 E COLT CT
637 W SCOTT AVE
1020 W COOLEY DR
848 N GOLDEN KEY ST
995 S CHANTILLY ST
729 W SCOTT AVE
4331 E BASELINE #B105
C/O SHEILA SCOTT
628 E HARRISON ST
22810 QUICKSILVER DR
725 E BASELINE RD
672 W PRINCETON AVE
2256 E TAHITIAN WY
657 W PRINCETON AVE
450 E DEL RIO ST
TOP 10 PROPERTIES
PO BOX 708490
423 E MONTEREY ST
746 W SCOTT AVE
1415 N ACACIA DR
919 W JUANITA AVE
1225 N MONDEL DR
1178 S FARGO CT
SCOTT CROSSEN
372 E CHANDLER BLVD
5833 E INDIAN SCHOOL RD
733 E EL MONTE PL
2724 E COUNTRY CT
443 E HARRISON ST
754 N EL DORADO DR
1101 N VELMA CT

PO BOX 460069

16225 PARK TEN PL STE 200

10920 WINNETKA AVE

701 N GOLDEN KEY ST

CHANDLER	AZ	852493090
GILBERT	AZ	852343531
MESA	AZ	852017329
GILBERT	AZ	852333283
GILBERT	AZ	852333055
GILBERT	AZ	852333523
MESA	AZ	852043400
ESCONDIDO	CA	920460069
CHANDLER	AZ	852254749
CHANDLER	AZ	852867927
GILBERT	AZ	852333406
GILBERT	AZ	852333512
CHANDLER	AZ	852251332
GILBERT	AZ	852333229
GILBERT	AZ	852332541
GILBERT	AZ	852333284
ANAHEIM	CA	928065025
GILBERT	AZ	852333237
GILBERT	AZ	85234
HOUSTON	TX	770845141
CHANDLER	AZ	852253907
DULLES	VA	201662007
GILBERT	AZ	852331203
GILBERT	AZ	852333230
GILBERT	AZ	852342852
GILBERT	AZ	852333225
CHANDLER	AZ	852253710
CHATSWORTH	CA	913111847
SANDY	UT	840708490
CHANDLER	AZ	852253747
GILBERT	AZ	852333238
GILBERT	AZ	852331826
GILBERT	AZ	852332551
GILBERT	AZ	852331808
CHANDLER	AZ	852491041
GILBERT	AZ	852333857
CHANDLER	AZ	852255585
PHOENIX	AZ	850186104
CHANDLER	AZ	852250935
GILBERT	AZ	85297
CHANDLER	AZ	852253731
GILBERT	AZ	852333514
GILBERT	AZ	852332547

5408 E GLENCOVE ST
1309 E SALADO CIR
1005 W LEAH LN
245 N EXETER ST
431 E BART DR
244 N EXETER ST
283 N EXETER ST
55 N SACRAMENTO ST
446 E TONTO PL
1860 W ASPEN AVE
4327 E EDGEWOOD AVE
382 E HARRISON ST
425 E OAKLAND ST
400 E SAN TAN ST
2250 N JACKSON PL
448 E TULSA ST
515 W TOLEDO ST
400 E DEL RIO ST
542 E HARRISON ST
PO BOX 68
425 E LYNX WAY
2164 N SAN VINCENTE DR
20840 S GREENFIELD RD
302 E PALO VERDE ST
1515 W SAN ANGELO ST STE A
38 PELICAN CREST DR
558 E HORSESHOE PL
750 N EXETER ST
PO BOX 199000
1691 W COMMERCE AVE
1031 W COOLEY DR
609 E FLINT ST
PO BOX 2122
1220 N FARRELL ST
770 N ITHICA ST
PO BOX 920
478 E SAN TAN ST
450 N HAMILTON ST
5337 E CALLE REDONDA
738 W SCOTT AVE
949 W JUANITA AVE
PO BOX 1064
1428 W SAN PEDRO ST

MESA	AZ	852054315
MESA	AZ	852032057
GILBERT	AZ	852331908
CHANDLER	AZ	852254656
CHANDLER	AZ	852253704
CHANDLER	AZ	852254657
CHANDLER	AZ	852254656
CHANDLER	AZ	852255562
CHANDLER	AZ	852495307
GILBERT	AZ	852333535
MESA	AZ	852062647
CHANDLER	AZ	852253727
CHANDLER	AZ	852254664
CHANDLER	AZ	852254631
CHANDLER	AZ	852250944
CHANDLER	AZ	852254635
CHANDLER	AZ	852254511
CHANDLER	AZ	852253710
CHANDLER	AZ	852253733
CHANDLER	AZ	852440068
CHANDLER	AZ	852495329
CHANDLER	AZ	852251352
GILBERT	AZ	852989365
GILBERT	AZ	852961032
GILBERT	AZ	852332411
NEWPORT COAST	CA	926571805
CHANDLER	AZ	852493097
CHANDLER	AZ	852253718
DALLAS	TX	752199000
GILBERT	AZ	852334008
GILBERT	AZ	852332542
CHANDLER	AZ	852254728
ARIZONA CITY	AZ	852232122
GILBERT	AZ	852331906
GILBERT	AZ	852334003
TOLLESON	AZ	853530920
CHANDLER	AZ	852254631
CHANDLER	AZ	852254741
PHOENIX	AZ	850184437
GILBERT	AZ	852333238
GILBERT	AZ	852332554
CHANDLER	AZ	852441064
GILBERT	AZ	852332413

1017 N 3RD ST STE 25
PO BOX 1980
PO BOX 52025
1428 W SAN PEDRO ST
1 PLASTICS ARME
4898 S FRESNO ST
61 S WILLIAM DILLARD DR
479 S HIDALGO RD
571 N KINGSTON ST
617 E EL MONTE PLACE
2166 E CAROLINE LN
424 E LYNX WAY
LAND DEPT ATTN:JUNE ROBINSON
PO BOX 52025
1251 N KINGSTON ST
PO BOX 8672
2020 N ARIZONA AVE STE G62
419 E HORSESHOE DR
640 E FLINT ST
420 N HAMILTON ST
700 N EXETER ST
1803 W ENCINAS ST
429 E ORCHID LN
2342 S MCCLINTOCK DR
558 W PRINCETON AVE
801 W COOLEY DR
330 N FRESNO ST
510 DOHENY RD
C/O EKMARK & EKMARK
C/O EKMARK & EKMARK
542 E ERIE ST
432 N FRESNO ST
654 S VELERO ST
403 E LAREDO ST
631 E EL PRADO RD
4250 S FRESNO ST
1371 N FRESNO ST
619 E COLT CT
123 W PAGE AVE
4739 S FRESNO ST
446 E SAN CARLOS WAY
722 W SCOTT AVE
4555 S EXETER ST

6720 N SCOTTSDALE RD STE 261
4645 E COTTON GIN LOOP

PHOENIX	AZ	85004
PHOENIX	AZ	850011980
PHOENIX	AZ	850722025
GILBERT	AZ	852332413
PITTSFIELD	MA	012013662
CHANDLER	AZ	852493077
GILBERT	AZ	852335501
CHANDLER	AZ	852256355
GILBERT	AZ	852334004
CHANDLER	AZ	852251335
TEMPE	AZ	852843532
CHANDLER	AZ	852495328
PHOENIX	AZ	850722025
PHOENIX	AZ	850722025
GILBERT	AZ	852331723
NEWPORT BEACH	CA	926588672
CHANDLER	AZ	852253496
CHANDLER	AZ	852495325
CHANDLER	AZ	852254729
CHANDLER	AZ	852254741
CHANDLER	AZ	852253718
GILBERT	AZ	852332317
CHANDLER	AZ	852251195
TEMPE	AZ	852822674
GILBERT	AZ	85233
GILBERT	AZ	852332517
CHANDLER	AZ	852255017
BEVERLY HILLS	CA	902102922
SCOTTSDALE	AZ	852534468
PHOENIX	AZ	850408885
CHANDLER	AZ	852254655
CHANDLER	AZ	852254661
CHANDLER	AZ	852252239
CHANDLER	AZ	852253739
CHANDLER	AZ	852251338
CHANDLER	AZ	852493085
CHANDLER	AZ	852251369
CHANDLER	AZ	852251331
GILBERT	AZ	85234
CHANDLER	AZ	852493081
CHANDLER	AZ	852495332
GILBERT	AZ	852333238
CHANDLER	AZ	852495317

5611 E CALLE CAMELIA
834 W GOLDFINCH CT
5611 E CALLE CAMELIA
1206 N CHARLES ST
7001 N SCOTTSDALE RD STE 2050
5123 E CALLE DEL NORTE
847 W HARVARD AVE
1021 W HUDSON WAY
4858 S FRESNO ST
381 E BART DR
C/O BARR PATRICIA
880 NBOGLE CRT
449 E SAN TAN ST
401 E TULSA ST
250 N PASADENA ST
1114 N ARIEL CT
620 E COLT CT
70 N EXETER ST
461 E OAKLAND ST
275 N EXETER ST
1355 N ACACIA DR
135 E CHILTON DR
1050 S BOGLE CT
3587 LANGDON CMN
488 E HORSESHOE PL
5619 GOLD CREEK DR
753 E EL MONTE PL
668 E COLT CT
428 E HORSESHOE DR
690 N EXETER ST
402 E MEAS DR
1824 W SAN ANGELO ST
422 N FRESNO ST
1051 S MAVERICK ST
2177 E PICKETT CT
422 E KAIBAB PL
2245 N MOSLEY DR
MR DANA DUNCAN
335 E BASELINE RD
441 N FRESNO ST
2647 E SOUTHERN AVE
11022 S 51ST ST STE 201
11975 EL CAMINO REAL STE 203

2502 E SOLANO DR

STE101

335 E BASELINE RD

MESA	AZ	850184663
CHANDLER	AZ	852864449
PHOENIX	AZ	850184663
GILBERT	AZ	852331926
SCOTTSDALE	AZ	852533698
PHOENIX	AZ	850184427
GILBERT	AZ	852333103
GILBERT	AZ	852331904
CHANDLER	AZ	852493077
CHANDLER	AZ	852253701
PHOENIX	AZ	850162818
CHANDLER	AZ	852253981
CHANDLER	AZ	852254630
CHANDLER	AZ	852254634
GILBERT	AZ	852334506
GILBERT	AZ	852332530
CHANDLER	AZ	852251329
CHANDLER	AZ	852255570
CHANDLER	AZ	852254664
CHANDLER	AZ	852254656
GILBERT	AZ	852331818
CHANDLER	AZ	85225
CHANDLER	AZ	852491310
FREMONT	CA	945385403
CHANDLER	AZ	852493096
CASTRO VALLEY	CA	945525443
CHANDLER	AZ	852250936
CHANDLER	AZ	852251330
CHANDLER	AZ	852495324
CHANDLER	AZ	852253717
CHANDLER	AZ	85249
GILBERT	AZ	852332922
CHANDLER	AZ	852254661
CHANDLER	AZ	852861482
GILBERT	AZ	852986105
CHANDLER	AZ	852495308
CHANDLER	AZ	852251356
GILBERT	AZ	852331102
GILBERT	AZ	852331102
CHANDLER	AZ	852254660
PHOENIX	AZ	850403619
PHOENIX	AZ	850444307
SAN DIEGO	CA	921302542

1894 W ASPEN AVE
4320 S FRESNO ST
920 W COOLEY DR
1768 W REDFIELD RD
1001 W COOLEY RD
1342 N JACKSON ST
3054 E VALLEJO DR
228 N FRESNO ST
1845 W SAN ANGELO ST
485 E ERIE ST
430 E DEL RIO ST
1735 W ASPEN AVE
400 E CRESCENT PL
1745 W ASPEN AVE
835 W COOLEY DR
973 W JUANITA AVE
883 N QUAIL LN
1113 S 131 ST
510 E KENT AVE
647 E IVANHOE ST
1844 W SAN ANGELO ST
1121 SW SALMON 5TH FL
94-401 KAHULIALII ST
1872 W ASPEN AVE
1107 S FARGO CT
847 W COOLEY DR
3489 E LOWELL AVE
2165 N SAN VINCENTE DR
218 N EXETER
624 E EL PRADO RD
C/O NO. BAY COMMERCIAL
485 E OAKLAND ST
99 W PALOMINO DR APT 116
11415 E CHANDLER HEIGHTS RD
WILSHIRE/FIDELITY
9830 N 32ND ST STE B-106
9830 N 32ND ST STE B-106
1 MARKET PLZ
PO BOX 7091
729 N GOLDEN KEY ST STE 200
518 E HORSEHOE PL
37 S LINDSAY RD
432 E KAIBAB PL

2544 CLEVELAND AVE

1270 NORTHLAND DR STE 200

GILBERT	AZ	852333528
CHANDLER	AZ	852493084
GILBERT	AZ	852332532
GILBERT	AZ	852333517
GILBERT	AZ	852332537
GILBERT	AZ	852331715
GILBERT	AZ	852979058
CHANDLER	AZ	852254659
GILBERT	AZ	852332924
CHANDLER	AZ	852254652
CHANDLER	AZ	852253710
GILBERT	AZ	852333502
CHANDLER	AZ	852495326
GILBERT	AZ	852333502
GILBERT	AZ	852332522
GILBERT	AZ	852332548
GILBERT	AZ	852333223
GILBERT	AZ	852337606
CHANDLER	AZ	852251285
CHANDLER	AZ	852253985
GILBERT	AZ	852332925
PORTLAND	OR	972052000
MILILANI	HI	967892638
GILBERT	AZ	852333535
CHANDLER	AZ	852491042
GILBERT	AZ	852332524
GILBERT	AZ	852971555
CHANDLER	AZ	852251354
CHANDLER	AZ	852254657
CHANDLER	AZ	852251337
SANTA ROSA	CA	954032994
CHANDLER	AZ	852254664
CHANDLER	AZ	85225
CHANDLER	AZ	852480022
MENDOTA HEIGHTS	MN	55120
PHOENIX	AZ	85028
PHOENIX	AZ	85028
SAN FRANCISCO	CA	941051101
CHANDLER	AZ	852467091
GILBERT	AZ	85233
CHANDLER	AZ	852493097
GILBERT	AZ	852961131
CHANDLER	AZ	852495308

C/O BLDG 4/84 LUMBER CO/TX DEPT
2124 N SAN VINCENTE DR
6975 SW SANDBURG RD STE 300
5512 N CAMELBACK CANYON PL
5512 N CAMELBACK CANYON PL
677 E COLT CT
750 ROBINSON FARMS DR
119 S RIVER DR
497 E OAKLAND ST
478 N JACKSON ST
630 N EXETER ST
5340 W LUKE AVE
1847 W REDFIELD RD
PO BOX 1112
266 N HAMILTON
G ALEXANDER AND PAULA A MCCARTY TRUSTEES
942 N LAYMAN ST
462 E HARRISON ST
1133 S MAVERICK CT
1255 N MONDEL DR
2521 N CHERI LYNN DR
561 E REFLECTION PL
456 E TONTO PL
971 E COMMANCHE CIR
2323 W UNIVERSITY DR
2683 E BRIDGEPORT PKWY
999 W LEAH LN
1075 W ENCINAS ST
1013 W HUDSON WAY
807 W COOLEY DR
1054 N OPAL
3476 STATEVIEW BLVD
PO BOX 2140
455 E LYNX WY
383 E HARRISON ST
916 E 8TH AVE
C/O KACHINA MANAGEMENT INC
170 S WILLIAM DILLARD DR STE 106
PO BOX 71037
3450 PENROSE PL STE 150
4150 W TURNEY AVE
1026 W COOLEY DR
372 E HARRISON ST

1019 ROUTE 519

4838 S FRESNO ST

21448 N 75TH AVE STE 6

EIGHTY FOUR	PA	153302813
CHANDLER	AZ	852251351
PORTLAND	OR	972238078
PHOENIX	AZ	850181239
PHOENIX	AZ	850181239
CHANDLER	AZ	852251333
MARIETTA	GA	300683281
TEMPE	AZ	852813010
CHANDLER	AZ	852254664
GILBERT	AZ	852334016
CHANDLER	AZ	852253716
GLENDALE	AZ	853016020
GILBERT	AZ	852333533
PHOENIX	AZ	850011112
CHANDLER	AZ	852254714
CHANDLER	AZ	852493077
GILBERT	AZ	852332918
CHANDLER	AZ	852253729
CHANDLER	AZ	852491453
GILBERT	AZ	852331808
CHANDLER	AZ	852252133
CHANDLER	AZ	852494287
CHANDLER	AZ	852495307
WASHINGTON	UT	847802034
TEMPE	AZ	852817223
GILBERT	AZ	852952360
GILBERT	AZ	852331915
GILBERT	AZ	852332507
GILBERT	AZ	852331904
GILBERT	AZ	852332517
MESA	AZ	852072271
FORT MILL	SC	297157203
HIGLEY	AZ	852362140
CHANDLER	AZ	852495329
CHANDLER	AZ	852253728
MESA	AZ	852043424
GLENDALE	AZ	853085978
GILBERT	AZ	852335510
PHOENIX	AZ	850501001
BOULDER	CO	803011800
PHOENIX	AZ	850193327
GILBERT	AZ	852332541
CHANDLER	AZ	852253727

17258 E MELODY DR
1335 N HOBSON ST
1211 N KINGSTON ST
508 N JACKSON ST
ART SEGAL MANAGER
175 S HAMILTON PL BLDG 2 STE 102
1320 N ACACIA DR
1440 N HOBSON ST
541 E KENT AVE
3746 E OMEGA CIR
611 E SHANNON ST
1127 S FARGO CT
10129 CAMINO VISTA DR
1863 W ENCINAS ST
1327 W SAN PEDRO ST
570 E ERIE ST
421 E DEL RIO ST
1503 W SAN PEDRO ST
933 N LAYMAN ST
1803 W SAN ANGELO ST
756 W STANFORD AVE
1415 N MONDEL DR
1085 W MUSKET WAY
1137 S FARGO CT
932 N LAYMAN ST
PO BOX 7000-294
1101 N WHIPPLE CT
1780 W ASPEN AVE
1027 N COLUMBUS DR
4295 S EXETER ST
1817 W REDFIELD RD
412 E HARRISON ST
571 E REFLECTION PL
665 E COLT CT
2160 N ITHICA ST
CORPORATION OF THE PRESIDING BISHOP
1321 N KINGSTON ST
61 AZUSA AVE
881 W HARVARD AVE
1281 N KINGSTON ST
937 W COOLEY DR
1787 W REDFIELD RD
2449 E DARREL RD

PO BOX 1067

50 E NORTH TEMPLE FL 22

HIGLEY	AZ	852360004
GILBERT	AZ	852331208
GILBERT	AZ	852331723
GILBERT	AZ	852334017
SAN LUIS OBISPO	CA	93406
GILBERT	AZ	852335508
GILBERT	AZ	852331830
GILBERT	AZ	852331202
CHANDLER	AZ	852251286
MESA	AZ	852159728
CHANDLER	AZ	852253911
CHANDLER	AZ	852491042
CUPERTINO	CA	950142607
GILBERT	AZ	85233
GILBERT	AZ	852332403
CHANDLER	AZ	852244655
CHANDLER	AZ	852253712
GILBERT	AZ	852332401
GILBERT	AZ	852332919
GILBERT	AZ	852332930
GILBERT	AZ	852332621
GILBERT	AZ	852331209
CHANDLER	AZ	852486468
CHANDLER	AZ	852491042
GILBERT	AZ	852332918
REDONDO BEACH	CA	90277
GILBERT	AZ	852332525
GILBERT	AZ	852333503
GILBERT	AZ	852348000
CHANDLER	AZ	852495316
GILBERT	AZ	852333533
CHANDLER	AZ	852253729
CHANDLER	AZ	852494287
CHANDLER	AZ	852251333
CHANDLER	AZ	852250942
SALT LAKE CITY	UT	841500002
GILBERT	AZ	852331716
VENTURA	CA	930043801
GILBERT	AZ	852333103
GILBERT	AZ	852331723
GILBERT	AZ	852332533
GILBERT	AZ	852333516
PHOENIX	AZ	850425935

359 E ORCHID LN
432 E ELGIN ST
243 VINTAGE
220 WILLIAM DILLARD DR
305 N MILLER ST
531 N KINGSTON ST
1107 N ARIEL CT
PO BOX 2990
PO BOX 5365
219 S WILLIAM DILLARD DR STE 131
154 N EXETER ST
962 N LAYMAN ST
175 S HAMILTON PL BLDG 3 STE 104
1025 N GILBERT RD
333 S MCPHERRIN AVE
690 E ENCINAS AVE
624 E MARIPOSA PL
PO BOX 21535
760 S STAPLEY DR STE 3
4701 S BANDIT RD
413 E HARRISON ST
719 E BRIDLE WY
914 W COOLEY DR
1857 W REDFIELD RD
1270 N ITHICA ST
4300 S FRESNO ST
478 E MEAD PL
P O BOX 321
PO BOX 13755
423 E KAIBAB PL
1148 S FARGO CT
684 W SCOTT AVE
461 E CRESCENT PL
763 W DOUGLAS AVE
488 E DETROIT ST
1476 W HARVARD AVE
1100 W ENCINAS ST
399 E ORCHID LN
PO BOX 3102
670 N EXETER ST
PROPERTY TAX
335 S HAMILTON CT
301 WEST JEFFERSON ST

1400 DOUGLAS ST STOP 1640

CHANDLER	AZ	852251182
GILBERT	AZ	852962070
IRVINE	CA	926202864
GILBERT	AZ	852334500
ANAHEIM	CA	928015445
GILBERT	AZ	852334004
GILBERT	AZ	852332530
PINETOP	AZ	859352990
MESA	AZ	852115365
GILBERT	AZ	852335527
CHANDLER	AZ	852255541
GILBERT	AZ	852332918
GILBERT	AZ	852335508
GILBERT	AZ	850061003
MONTEREY PARK	CA	917543308
GILBERT	AZ	852343461
CHANDLER	AZ	852251345
MESA	AZ	852771535
MESA	AZ	852043400
GILBERT	AZ	852979628
CHANDLER	AZ	852253731
GILBERT	AZ	852955958
GILBERT	AZ	852332528
GILBERT	AZ	852333533
GILBERT	AZ	852331739
CHANDLER	AZ	852493084
CHANDLER	AZ	852493088
SIERRA MADRE	CA	910250321
TEMPE	AZ	852840063
CHANDLER	AZ	852495308
CHANDLER	AZ	852491041
GILBERT	AZ	852333233
CHANDLER	AZ	852495327
GILBERT	AZ	852333244
CHANDLER	AZ	852254637
GILBERT	AZ	852333051
GILBERT	AZ	852332508
CHANDLER	AZ	852251182
CHANDLER	AZ	852443102
CHANDLER	AZ	852253717
OMAHA	NE	681029937
GILBERT	AZ	852335520
PHOENIX	AZ	85003

1003 W JUANITA AVE
979 W LEAH LN
598 E ERIE ST
14523 S W MILLIKAN WY STE 200
392 E LAREDO ST
731 W KYLE CT
731 W KYLE CT
425 E TULSA ST
650 N EXETER ST
1080 W ENCINAS ST
496 E SAN TAN ST
1121 W WARNER RD STE 109
1005 E GARNET AVE
473 E OAKLAND ST
460 E TULSA ST
442 E MONTEREY ST
654 E DETROIT ST
429 S MAIN ST
511 N FRESNO ST
798 N EXETER ST
451 E DEL RIO ST
1228 N ITHICA ST
400 E KENT AVE
605 E MARIPOSA PL
1275 W HOUSTON AVE
1056 W COOLEY DR
4252 E MARLETTE
110 W VAUGHN AVE
2664 E ORION ST
553 E JASPER DR
659 E EL MONTE PL
2125 N SAN VINCENTE DR
445 E LYNX WAY
1215 N MONDEL DR
1215 N MONDEL DR
412 E SAN TAN ST
5110 N 44TH ST STE 110
100 GRAINGER PKWY B4 V37
1058 N LAYMAN ST
465 E LYNX WAY
403 E MEAD DR
599 E ERIE ST
8412 TIBANA WAY

GILBERT	AZ	852332556
GILBERT	AZ	852331915
CHANDLER	AZ	852254655
BEAVERTON	OR	970052352
CHANDLER	AZ	852253735
GILBERT	AZ	852338042
GILBERT	AZ	852338042
CHANDLER	AZ	852254634
CHANDLER	AZ	852253716
GILBERT	AZ	852332506
CHANDLER	AZ	852254631
TEMPE	AZ	852842819
MESA	AZ	852045810
CHANDLER	AZ	852254664
SCOTTSDALE	AZ	85255
CHANDLER	AZ	852253745
CHANDLER	AZ	852254703
MILPITAS	CA	950355318
CHANDLER	AZ	852254672
CHANDLER	AZ	852253719
CHANDLER	AZ	852253712
GILBERT	AZ	852331732
CHANDLER	AZ	852251233
CHANDLER	AZ	852251347
GILBERT	AZ	852331810
GILBERT	AZ	852332545
PARADISE VALLEY	AZ	85253
GILBERT	AZ	85233
GILBERT	AZ	852343910
CHANDLER	AZ	852251292
CHANDLER	AZ	852251336
CHANDLER	AZ	852251353
CHANDLER	AZ	852495329
GILBERT	AZ	852331808
GILBERT	AZ	852331808
CHANDLER	AZ	852254631
PHOENIX	AZ	850181649
LAKE FOREST	IL	600455203
GILBERT	AZ	852332318
CHANDLER	AZ	852495329
CHANDLER	AZ	852495331
CHANDLER	AZ	852254654
LAS VEGAS	NV	891475242

PO BOX 199000
991 W LEAH LN
920 E ISABELLA AVE
654 N EL DORADO DR
1692 LEDERER CIR
642 E EL PRADO RD
4878 S FRESNO ST
1142 S BOGLE CT
9024 E OLIVE LN N
3185 LONGVIEW DR
1050 W JUANITA AVE
750 N ITHICA ST
409 E ORCHID LN
5425 E WASHINGTON ST
975 W LEAH LN
7317 E MILL ST
6945 E ROLAND ST
LLOYD E/L JOSEPHINE WEBSTER
415 E COCONINO PL
2240 N JACKSON PL
14523 SW MILLIKAN WY STE 200
529 E ORCHID LN
1821 W SAN ANGELO ST
931 W JUANITA AVE
30115 PEBBLE BEACH DR
1102 N VELMA CT
458 N JACKSON ST
1301 N KINGSTON ST
811 W HARVARD AVE
2251 N JACKSON PL
1114 N MELBA CT
1878 W ASPEN AVE
588 N JACKSON ST
1960 LEISURE WORLD
1231 N FRESNO ST
992 WEST JUANITA AVENUE
670 E EL PRADO RD
1016 W JUANITA AVE
683 W PRINCETON AVE
2175 N MOSLEY DR
484 E SAN TAN
1808 W CANARY WAY
10220 N 27TH PL

1470 W HOUSTON AVE

DALLAS	TX	752199000
GILBERT	AZ	852331915
MESA	AZ	852046644
GILBERT	AZ	852333509
SAN JOSE	CA	951312949
CHANDLER	AZ	852251337
CHANDLER	AZ	852493077
CHANDLER	AZ	852491313
SUN LAKES	AZ	852486404
SACRAMENTO	CA	958217214
GILBERT	AZ	852332560
GILBERT	AZ	852334003
CHANDLER	AZ	852251195
PHOENIX	AZ	850342131
GILBERT	AZ	852331913
MESA	AZ	852072043
MESA	AZ	852071567
GILBERT	AZ	852331800
CHANDLER	AZ	852495315
CHANDLER	AZ	852250944
BEAVERTON	OR	970052352
CHANDLER	AZ	852251196
GILBERT	AZ	852332923
GILBERT	AZ	852332551
SUN CITY	CA	925863222
GILBERT	AZ	852332547
GILBERT	AZ	852334016
GILBERT	AZ	852331716
GILBERT	AZ	852333103
CHANDLER	AZ	852250946
GILBERT	AZ	852332543
GILBERT	AZ	852333535
GILBERT	AZ	852334020
MESA	AZ	852065322
CHANDLER	AZ	852251199
GILBERT	AZ	852332549
CHANDLER	AZ	852251337
GILBERT	AZ	852332558
GILBERT	AZ	852333231
CHANDLER	CA	852251355
CHANDLER	AZ	852244631
CHANDLER	AZ	852488033
PHOENIX	AZ	850283735

COREY R & CHRISTINE MEEHAN POORE TRS
1107 N MELBA CIR
463 S LAKESHORE DR UNIT 280
551 N KINGSTON ST
480 E KENT AVE
1004 W JUANITA AVE
681 W SCOTT AVE
419 E ORCHID LN
10349 S ROYAL EAGLE ST
2154 N SAN VICENTE DR
472 E KAIBAB PL
310 N FRESNO ST
4887 S EXETER ST
926 W COOLEY DR
219 S WILLIAM DILLARD DR STE 127
1794 W SAN ANGELO ST
1837 W SAN ANGELO ST
1350 N MONDEL DR
1269 N LAYMAN ST
1906 W ASPEN AVE
5104 WILLOW EST
357 JAYNE AVE
2222 N ITHICA CT
1813 W ENCINAS ST
341 N FRESNO ST
1051 N FIESTA BLVD
1265 N LAYMAN ST
5915 E AIRE LIBRE LN
517 E TONTO DR
440 N HAMILTON ST
1043 W COOLEY DR
527 E TONTO DR
457 E TONTO PL
460 E OAKLAND ST
5650 E PASEO LOMAS
1956 E BRENTTRUP DR
610 21ST AVE
C/O CUTLER COMMERCIAL
2150 E HIGHLAND STE 207
2150 E HIGHLAND AVE STE 207
1107 N VELMA CIR

2691 E HARWELL RD

2150 E HIGHLAND AVE STE 207

GILBERT	AZ	852341479
GILBERT	AZ	852332543
MESA	AZ	85282
GILBERT	AZ	852334004
CHANDLER	AZ	852251242
GILBERT	AZ	852332557
GILBERT	AZ	852333234
CHANDLER	AZ	852251195
HIGHLANDS RANCH	CO	80129
CHANDLER	AZ	852251352
CHANDLER	AZ	852495309
CHANDLER	AZ	852255017
CHANDLER	AZ	852495318
GILBERT	AZ	852332532
GILBERT	AZ	852335527
GILBERT	AZ	852332920
GILBERT	AZ	852332923
GILBERT	AZ	852331212
GILBERT	AZ	852331744
GILBERT	AZ	852333531
SAN JOSE	CA	951351241
OAKLAND	CA	946103345
CHANDLER	AZ	852250937
GILBERT	AZ	852332317
CHANDLER	AZ	852255017
GILBERT	AZ	852332236
GILBERT	AZ	852331744
SCOTTSDALE	AZ	852541238
CHANDLER	AZ	852495304
CHANDLER	AZ	852254741
GILBERT	AZ	852332544
CHANDLER	AZ	852495304
CHANDLER	AZ	852495307
CHANDLER	AZ	852254665
TUCSON	AZ	857501026
TEMPE	AZ	852834927
SAN FRANCISCO	CA	941213808
PHOENIX	AZ	850164721
PHOENIX	AZ	850164721
PHOENIX	AZ	850164721
GILBERT	AZ	852332547

ASU lecturers see contract length reduced

Educators worry about job stability as deals shrink from 3 years to 1

By RYAN GABRIELSON
TRIBUNE

Some of ASU's best teachers see their job security threatened, not by the rounds of layoffs past and future, but by a technical administrative change.

Arizona State University is shortening the length of contracts it awards to lecturers, a class of untenured faculty members who specialize in educating rather than researching.

More experienced lecturers, labeled "senior," have traditionally worked on three-year deals. ASU would automatically renew those contracts for three more years each time senior lecturers passed their performance reviews.

University officials say that process no longer works.

But without stability, several lecturers contend they might have to take their work elsewhere.

Jaquellina Wheeler is a senior lecturer in ASU's English department, where she has taught almost 15 years. She said she is

becoming certified to teach high school, just in case.

"These jobs are at risk now too," Wheeler said. "But I'm not sure I have a future here at ASU. I'm very sad about it."

State lawmakers have cut \$60 million from ASU this year and additional, possibly even deeper, funding reductions are coming. Arizona's tax revenues continue to wither, with home building and other critical industries suffering historic slumps.

With the financial uncertainty, Mark Searle, ASU vice president for academic personnel, said the university needs more freedom to shed costs quickly.

And that means keeping employee contracts as short as possible, Searle said, preferably to one-year contracts.

Despite that, ASU Provost Elizabeth Capaldi said she is telling university deans that the new multiyear contract policy, announced during the past few weeks, is not absolute.

"Some lecturers have been with us for years and years and years and they're key," Capaldi said.

ASU employs about 350 lecturers, of which 250 are "senior" and have multiyear contracts, Searle said. Senior lecturers comprise 14 percent of the university faculty.

"We're real teachers, as opposed to professors who do a lot of research."

PAUL QUINN
LECTURER IN DEAF STUDIES
FOR 13 YEARS AT ARIZONA
STATE UNIVERSITY

Their significance to ASU's educational quality is far larger than their numbers.

Lecturers teach at least twice as many classes a semester as their tenured colleagues. They have a smaller research requirement than professors. Instead, lecturers spend their work hours teaching and sometimes serve as academic administrators.

"We're real teachers, as opposed to professors who do a lot of research," said Paul Quinn, a lecturer in deaf studies the past 13 years and director of ASU's American Sign Language program. Quinn added that tenured professors contribute just as much to the university, only differently.

Wheeler said she worries about more than their contracts' length.

If lecturers must essentially resign for a new contract every year, ASU could decrease the lecturers' pay annually without

negotiation.

The University Senate, a faculty group, passed a resolution last month asking that ASU again grant lecturers multiyear contracts once the budget crisis passes.

Should ASU shed lecturers, the university would have to make a difficult choice. Eliminate courses, or pile far more teaching on tenured faculty and professors working to earn tenure — essentially a lifetime appointment.

"Their main focus is the research, there's no doubt about it. That's what they're judged on," John Schaeffer, an ASU geography senior lecturer, said of tenured faculty.

Lecturers' focus on teaching makes them particularly valuable, Capaldi said, and a limited number of them will continue to receive three-year contracts.

However, several lecturers said their departments' deans and chairmen have unequivocally eliminated contracts of more than a year.

That is the message David Forsyth, a senior lecturer in real estate law, received earlier this month.

Paul Patterson, dean of the Management and Agricultural School at the ASU Polytechnic campus in east Mesa, sent For-

syth a memo earlier this month detailing the end of multiyear contracts. "This decision does not signal any reduction in our deep appreciation for your many and excellent contributions to the university and does not indicate any weakening of our desire to retain you on our faculty," Patterson's memo states.

Forsyth had to sign and return a copy.

After almost 30 years spent practicing law, Forsyth said he tried out teaching a couple of classes for ASU and Chandler-Gilbert Community College part-time. He fell in love with classroom work, took a lecturer position with ASU four years ago and his first multiyear contract began in the fall.

Forsyth is guaranteed his job, or at least his pay, through May 2011.

Estimate could curbing a multiyear deal, and more than a decade from retirement, he said he intended to finish his career teaching ASU students. Now Forsyth worries about what happens when his contract expires, regardless of his dean's statements of support.

"It's a sad comedown," he said, "at least for me."

CONTACT WRITER: (480) 898-5630
or rgabrielson@trib.com

**The Flood Control District of Maricopa County
Chandler-Gilbert Floodplain Delineation Study**

OPEN HOUSE

Wednesday, March 25 • 6:00-7:30 p.m.
Mesquite High School • Library
500 S. McQueen Rd., Gilbert



The Flood Control District of Maricopa County (District), Town of Gilbert (Town), and City of Chandler (City) invite all interested people to attend an open house presenting the results of the updated floodplain/floodway delineation performed along the Union Pacific Railroad and a portion of Arizona Ave. as part of the Chandler-Gilbert Floodplain Delineation Study.

Exhibits of the updated floodplain delineation will be on display and representatives from the District, Town, City, and project team will be available to discuss the study and answer your questions.

The portion of the study re-evaluated the floodplain delineation along the Union Pacific Railroad between US90 and Hunt Highway and Gilbert Road and US60 and a portion of Arizona Ave. The study involved topographic mapping, hydrologic and hydraulic analysis of approximately 18 linear miles along the railroad and one mile along Arizona Ave.

When the study is completed, the results will be sent to the Federal Emergency Management Agency (FEMA) for approval and adoption, which typically takes approximately one year. FEMA uses these studies to update the Flood Insurance Rate Maps for the National Flood Insurance Program. In the interim the District and other jurisdictions will use the data as the "best available information" for floodplain management.



The floodplains for this portion of the study are managed by two jurisdictions. The District manages floodplains located within unincorporated Maricopa County, the City of Chandler and the City of Mesa. The Town of Gilbert manages floodplains within the Town. All jurisdictions were given the opportunity to comment on the District's findings.

For more information regarding the study results, please contact the project manager:

Kathryn Grose, CFM M.A., Project Manager
(602) 508-4837
kag@mail.maricopa.gov

Requests for hearing assistance (sign-language interpreters, hearing device, alternative format materials) require 72-hour notice and can be made by calling Nicole Schelder at (602) 806-6782. Additional reasonable accommodations will be made if possible and if given 72-hour notice.

**Recent Research Reveals Devastating Link
Between Gum Disease & Heart Disease!**

The American Heart Association, the "Journal of the American Medical Association", and the "New England Journal of Medicine" have documented a link between heart disease, stroke and gum infection. **IF YOU OR YOUR CHILD, OR EN have not had your teeth cleaned for six months or longer, you could be at risk of infection from the same BONE and GUM ERODING germs that cause gum disease. WARNING: Gum disease has no symptoms in its early and middle stages. Most people are unaware until it's too late.**

**Dental Cleaning, Teeth Whitening, & Checkup or
\$200 GIFT CERTIFICATE**

Towards Any Treatment - Expires 3/30/09



Dental Exam, Cleaning and X-rays - Reg. \$290
Only \$67
Save \$223!
Satisfaction Guaranteed or YOUR FIRST VISIT IS ABSOLUTELY FREE!

Teeth Whitening
Reg. \$224
Pay Only \$77
Save \$147!
4 Shades Whiter
Guaranteed or YOUR MONEY BACK!
*Professional teeth whitening is the most effective and safest way to whiten your teeth.

100% MONEY BACK GUARANTEE
Most dentists balk at the thought of giving any sort of guarantee let alone "satisfaction or your money back". We not only encourage you to try us and test our service, care and convenience, but **if during your first year as a patient you're not completely satisfied, let us know and we'll gladly make you feel right or refund 100% of your cost up to \$1,000!**

\$200 Toward any Treatment
May not be combinable.

**CALL NOW
OFFERS EXPIRE 3/30/09**

480-295-4154
Southwest Smiles
2487 South Gilbert Road, Suite #105
Gilbert, AZ 85295

The Flood Control District of Maricopa County
Chandler-Gilbert Floodplain Delineation Study

OPEN HOUSE

Wednesday, March 25 • 6:00-7:30 p.m.
Mesquite High School • Library
500 S. McQueen Rd., Gilbert

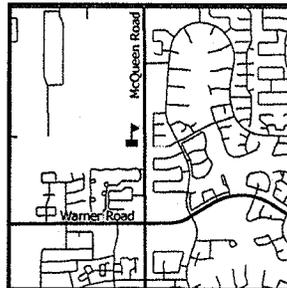


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please contact the project manager:

Kathryn Gross, CFM M.A. • Project Manager
(602)506-4837
kag@mail.maricopa.gov

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B.7 FEMA Correspondence



Flood Control District of Maricopa County

Board of Directors
Fulton Brock, District 1
Don Stapley, District 2
Andrew Kunasek, District 3
Max Wilson, District 4
Mary Rose Wilcox, District 5

www.fcd.maricopa.gov

2801 West Durango Street
Phoenix, Arizona 85009
Phone: 602-506-1501
Fax: 602-506-4601
TT: 602-505-5897

July 29, 2010

Padinare V. Unnikrishna, PhD. P.E. CFM
Michael Baker Jr., Inc.
2929 North Central Avenue
Phoenix, AZ 85012

Subject: Chandler Gilbert FDS Phase 3: Responses to PMR Technical Review of January 2010

Dr. Unnikrishna:

We have received your comments dated January 22, 2010 and are providing the following responses.

Technical Data Notebook

1. Comment 1: The NW/SE floodplain linework needs to be smoothed.

District Response: The floodplain limits represent the location of the inundation limits based on our detailed topographic contours and modeling. The floodplains were left in this fashion to accurately depict the relationship of the floodplain limits to the structures immediately adjacent to the floodplain limits. We request that the current floodplain limits not be modified.

2. Comment 2: Provide signed Community Overview and Concurrence forms.

District Response: Signed forms have been included in the updated TDN for all impacted communities: Town of Gilbert, City of Chandler, City of Mesa, and unincorporated Maricopa County.

Hydrologic Analysis

1. Comment 1: Correct the routing reach for 509503.

District Response: The routing has been corrected. This was done for both the 6-hour and 24-hour models. The updated models are provided in hard copy in Volume 2 Sections DS and DN 6 and are also provided digitally on cd in the TDN.

2. Comment 2: Correct the routing reach for 502503.

District Response: The routing has been corrected. This was done for both the 6-hour and 24-hour models. The updated models are provided in hard copy in Volume 2 Sections DS and DN 6 and are also provided digitally on cd in the TDN.

3. Comment 3: Correct the rainfall distribution parameter in Ph 3 South 6-hr hydrology model.

District Response: The rainfall distribution parameter has been corrected. Updated values have been incorporated into the updated TDN and Floodplain Workmaps where necessary. The updated model is provided in hardcopy in Volume 2 Section DS 6 and on cd.

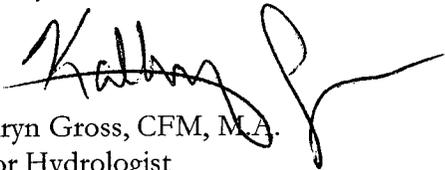
4. Comment 4: Basins 507, 514, and 520 are included in the parameters table but are not depicted on Exhibit B or in the HEC-1 models.

District Response: Originally the three basins were included in the study area. However, that area was represented by another District study and therefore they were removed from the Chandler Gilbert FDS. We did not direct our consultant to modify our preprocessing program that develops our parameter tables; the subbasins were just removed from the Exhibit and the HEC-1 models.

5. The District would also like to request that certain Zone A delineations downstream of the Railroad embankment identified as part of the latest Maricopa County County-wide DFIRM Update be removed from the FIRM panels as part of the Physical Map Revision contract. A separate letter with the technical details regarding which ponds we recommend will follow under separate cover.

If you have any questions, please contact me at (602) 506-4837, or kag@mail.maricopa.gov.

Sincerely,



Kathryn Gross, CFM, M.A.
Senior Hydrologist

Baker

Michael Baker Jr., Inc.

2929 North Central Avenue
Suite 800
Phoenix, AZ 85012

Phone: 602-279-1234
FAX: 602-279-1411

January 22, 2010

Mr. Richard Harris, P.E.
Project Manager
Flood Control District of Maricopa County
2801 West Durango Street
Phoenix, AZ 85009

Dear Mr. Harris,

We have completed a review of the submitted data for Chandler/Gilbert Floodplain Delineation Study, Phase 3, UPRR/Arizona Avenue Watershed Technical Data Notebook (TDN). The TDN was prepared by David Evans and Associates and dated March 2009. The results of our review found several items that should be addressed prior to acceptance of this study. The purpose of this letter is to summarize our review comments.

We performed a review of the following submitted data:

- Chandler/Gilbert Floodplain Delineation Study Technical Data Notebook
- Hydrologic Models (HEC-1)
- Hydraulic Models (HEC-RAS)
- Floodplain Work Maps

Technical Data Notebook

1. The floodplains are smooth along the north south UPRR. The floodplains along the UPRR running southeast from US 60 are jagged and need to be smoothed.
2. Signatures from the City of Chandler, City of Mesa and Town of Gilbert Community Officials need to be included on the Overview & Concurrence Form. Please address the issue.

Hydrologic Analysis

1. The HEC-1 model states that routing reach 509503 has a length of 6500', however, a review of Exhibit B (Drainage Flow Path Map) shows it to be closer to 9300'.
2. The HEC-1 model states that routing reach 502503 has a length of 5500', however, a review of Exhibit B (Drainage Flow Path Map) shows it to be closer to 9000'.
3. According to Fig 2.5 of FCDMC DDM, the Pattern number for the 100-year 6-hr rainfall distribution should lie between 2 and 3 instead of 4 for the drainage area of 8.69 sq miles of South Area Region 1. Reference to the FCDMC DDM was done in the review of Chandler/Gilbert Phase 2 as well. Please address discrepancy.
4. Basins 507, 514 and 520 are shown in the parameters table; however, are not depicted on the Exhibit B Drainage Flow Path Map or included in the HEC-1 models. Please address discrepancy.

Hydraulic Analysis

1. No comments

Baker

Richard Harris
January 22, 2010
Page 2

Floodplain Work Maps

1. No comments

Please respond to the issues detailed above. If you have any questions, please contact me at 602-798-7558.

Sincerely



Padinare V. Unnikrishna, Ph.D., P.E., CFM



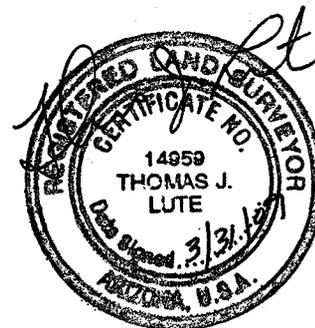
APPENDIX C: SURVEY FIELD NOTES

C.1 Survey field notes for hydrologic and hydraulic calculations

An ASCII file of points collected and copies of the field notes for additional survey of Vagabond Park, Festiva Court Subdivision and Tumbleweed Park retention basin areas are included on CD ROM. City of Chandler benchmarks checks were performed and are included in the following pages.

CHANDLER-GILBERT
 PHASE 3
 NGS (GDACS) CHECKS
 MARI0000-0040

POINT	DATE & TIME	NORTHING	EASTING	MEASURED ELEVATION	CORPSCON NGVD29	PUBLISHED ELEVATION	DIFFERENCE	NOTE 1
4314	12/15/2008 14:12	833830.96	737278.70	1246.21	1244.46	1246.36	-0.15	BS/FS CHK=2CK1
4320	12/16/2008 7:50	833830.99	737278.70	1246.20	1244.45	1246.36	-0.16	BS/FS CHK=2CK1
4321	12/16/2008 8:16	849353.92	723499.35	1209.68	1207.97	1209.81	-0.13	BS/FS CHK=2BJ1
4470	12/19/2008 8:23	849353.89	723499.33	1209.75	1208.04	1209.81	-0.06	BS/FS CHK=2BJ1
4739	12/19/2008 13:32	849353.93	723499.34	1209.65	1207.94	1209.81	-0.16	BS/FS CHK=2BJ1
4740	12/23/2008 8:10	833830.96	737278.70	1246.17	1244.42	1246.36	-0.19	BS/FS CHK=2CK1
5005	12/23/2008 12:07	833830.99	737278.69	1246.23	1244.48	1246.36	-0.13	BS/FS CHK=2CK1
6000	12/19/2008 8:18	849353.94	723499.35	1209.69	1207.98	1209.81	-0.13	BS/FS CHK=2BJ1
6370	12/19/2008 13:27	849353.92	723499.32	1209.68	1207.97	1209.81	-0.13	BS/FS CHK=2BJ1
AVERAGE							-0.14	
STANDARD DEVIATION							0.04	





Chandler- Gilbert Area Flood Delineation Study Survey Report:

At the request of the, Floodplain Delineation Branch Hydrologist Kathryn Gross Flood Control District surveyors were requested to field survey additional topography observations in the South half of section 22 Township 2 South, Range 5 East in Pinelake Estates Subdivision. The work was accomplished on April 8th 2009.

Observations were gathered with RTK GPS procedures utilizing a Trimble 5800 Rover connected to the AZGPS radio system. Reduction and checking was performed by Trimble Geomatics Office Software and results were provided by an excel format spreadsheet. Field accuracy is plus or minus .10ft at the 95% confidence level.

The control used for the work is a portion of the Maricopa County Geodetic Densification and Cadastral Survey System (GDACS) control network. Observations were conducted on the NAVD 88 vertical datum. All coordinate data is displayed in NAD 1983/92 State Plane Coordinates, Arizona Central Zone.

The survey was conducted by me and under my direct supervision and the information herein is true and correct to the best of my knowledge and belief.

John R. Stock, RLS, #25087 CFM#US-04-01065



Expires 6-30-2010

CHANDLER GILBERT FLOOD DELINEATION STUDY ADDITIONAL TOPOGRAPHY

PT#	NORTH	EAST	ELEV	DESCRIPTION
100	812914.1	725315.2	1219.48	EDGE OF SIDEWALK
101	812914.2	725319.4	1219.38	EDGE OF SIDEWALK
102	812914.2	725323.6	1219.36	EDGE OF SIDEWALK
103	812914.5	725327.6	1219.37	EDGE OF SIDEWALK
104	812915.3	725331.8	1219.36	EDGE OF SIDEWALK
105	812915.5	725335.9	1219.24	EDGE OF SIDEWALK
106	812915.5	725340.5	1219.25	EDGE OF SIDEWALK
107	812915.2	725345.4	1219.32	EDGE OF SIDEWALK
108	812914.7	725349.6	1219.26	EDGE OF SIDEWALK
109	812915.4	725352.9	1219.42	EDGE OF SIDEWALK
110	812915.6	725357.1	1219.38	EDGE OF SIDEWALK
111	812915.8	725360.9	1219.32	EDGE OF SIDEWALK
112	812915.6	725365.2	1219.32	EDGE OF SIDEWALK
113	812915.9	725369.4	1219.28	EDGE OF SIDEWALK
114	812915.9	725373.6	1219.25	EDGE OF SIDEWALK
115	812916	725377.6	1219.26	EDGE OF SIDEWALK
116	812916.2	725381.1	1219.18	EDGE OF SIDEWALK
117	812916.4	725384.1	1219.07	EDGE OF SIDEWALK
118	812915.8	725387.6	1219.06	EDGE OF SIDEWALK
119	812916.7	725392.4	1219.05	EDGE OF SIDEWALK
120	812917.9	725397.1	1219.04	EDGE OF SIDEWALK
121	812918	725402.1	1219.1	EDGE OF SIDEWALK
122	812918.1	725406.6	1219.11	EDGE OF SIDEWALK
123	812918.2	725411	1219.1	EDGE OF SIDEWALK
124	812918.3	725414.9	1219.16	EDGE OF SIDEWALK
125	812918.4	725418.9	1219.16	EDGE OF SIDEWALK
126	812918.5	725423.8	1219.12	EDGE OF SIDEWALK
127	812918.6	725426.1	1219.15	EDGE OF SIDEWALK
128	812917.8	725430.7	1219.05	EDGE OF SIDEWALK
129	812917.8	725435.5	1219.02	EDGE OF SIDEWALK
130	812917.2	725439.9	1219.07	EDGE OF SIDEWALK
131	812917.5	725444.6	1219.09	EDGE OF SIDEWALK
132	812918.5	725448.1	1219.1	EDGE OF SIDEWALK
133	812919	725452.9	1219.21	EDGE OF SIDEWALK
134	812919.9	725458.1	1219.12	EDGE OF SIDEWALK
135	812920.9	725463.5	1219.19	EDGE OF SIDEWALK
136	812921.8	725468.6	1219.27	EDGE OF SIDEWALK
137	812922.6	725472.9	1219.31	EDGE OF SIDEWALK
138	812923.4	725477.1	1219.29	EDGE OF SIDEWALK
139	812924.1	725481.8	1219.26	EDGE OF SIDEWALK
140	812924.8	725486.6	1219.32	EDGE OF SIDEWALK
141	812926.2	725491.4	1219.34	EDGE OF SIDEWALK
142	812927.7	725496	1219.37	EDGE OF SIDEWALK
143	812929.1	725500.3	1219.33	EDGE OF SIDEWALK
144	812930.7	725504.3	1219.35	EDGE OF SIDEWALK
145	812953.8	725499.1	1220.91	FENCE CORNER
146	812946	725503.8	1220.53	CONCRETE
147	812943.6	725505.6	1220.11	CONCRETE
148	812887.8	725526.1	1220.14	GROUND

149	812890.6	725535.5	1220.12	GROUND
150	812894.1	725543.4	1220.15	GROUND
151	812895.6	725551.9	1220.14	GROUND
152	812900.3	725559.8	1220.18	GROUND
153	812904.5	725568.3	1220.18	GROUND
154	812912.8	725576.2	1220.12	GROUND
155	812918.3	725582.6	1220.14	GROUND
156	812924	725589.4	1220.13	GROUND
157	812884.1	725518	1220.19	GROUND
158	812881.8	725510.6	1220.07	GROUND
159	812880.4	725501.6	1220.1	GROUND
160	812876.8	725494.2	1220.2	GROUND
161	812873.9	725485.1	1220.09	GROUND
162	812870.9	725476.1	1220.12	GROUND
163	812867.5	725465.9	1220.12	GROUND
164	812865.3	725460.2	1220.01	GROUND
165	812931.9	725251.3	1220.13	CONCRETE CORNER
166	812928.6	725220.4	1220.02	EDGE OF DRIVEWAY
167	812910.3	725135.9	1220.13	EDGE OF DRIVEWAY
168	812906.9	725120.5	1220.06	EDGE OF DRIVEWAY
169	812915.1	725088.5	1220.08	EDGE OF DRIVEWAY
170	812913.4	725072.7	1220.15	EDGE OF DRIVEWAY
171	812912.7	725005.7	1220.15	EDGE OF DRIVEWAY
172	812896.6	724961.1	1220.04	GROUND
173	812887.2	724893.5	1220.08	EDGE OF DRIVEWAY
174	812884.3	724866.3	1219.91	EDGE OF DRIVEWAY
175	812911.9	724665.8	1217.73	VALLEY GUTTER
176	813099.8	724601.1	1220.08	EDGE OF DRIVEWAY
177	813070.5	724610.8	1220.07	EDGE OF DRIVEWAY
178	813025.6	724618.3	1220.16	CONCRETE BRICK
179	812981.3	724635.8	1219.57	EDGE OF DRIVEWAY
180	813676.6	724601.4	1220.08	EDGE OF WALKWAY
181	813670.3	724639.1	1220.16	CENTER OF DRIVEWAY
182	812732.8	724910.5	1219.84	CONCRETE CORNER
183	812600.7	724910.6	1220.19	CONCRETE CORNER
184	812589.3	725040.2	1219.83	GROUND



EXPIRES 6-30-2010