Capital Improvement Program Prioritization Procedure

For Fiscal Year 2017

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

Capital Improvement Program Prioritization Procedure

Purpose of the Procedure

In accordance with Flood Control District of Maricopa County (District) Resolution 2010R008, the District evaluates and prioritizes potential Capital Improvement Program (CIP) projects through its annual CIP Prioritization Procedure.

As its name implies, this procedure applies only to the allocation of CIP resources: funding for final design, right-of-way acquisition and construction of flood control capital projects. The District continues to seek input from the municipalities of Maricopa County regarding planning study priorities; however, requests for District planning or floodplain delineation funding support should be communicated by correspondence independent of this CIP Prioritization Procedure, preferably in sequence with the CIP Prioritization Procedure schedule. District staff listed under the "Points of Contact" section of this document will coordinate these requests.

Additionally, the recommendation of a potential CIP project through the CIP Prioritization Procedure does not guarantee District funding; funding follows the approval of pertinent resolutions and inter-agency agreements and is at the discretion of the District's Board of Directors. District staff proposes its Five-Year CIP to its Flood Control Advisory Board (FCAB) in February of each year, incorporating projects recommended through this prioritization process where feasible. The District's Planning Branch coordinates MOUs and agreements with cooperating agencies for completing pre-design studies and serves as point of contact for project status prior to inclusion in the CIP.

Procedural Summary

The CIP Prioritization Procedure involves seven steps:

- Project submittal by requesting agencies;
- Submittal review and evaluation for recommendation by the District's Prioritization Evaluation Committee (PEC);
- Recommendation by the District's Chief Engineer and General Manager;
- Recommendation by the FCAB Program and Budget Committee;
- Recommendation approval by the FCAB; and,
- Annual budgeting by the District, advancing projects based on project merit, with District funding prioritized for partner agencies providing the highest cost share.

The recommendation of a project through the CIP Prioritization Procedure precedes final project approval by the District's Board of Directors (in the form of a Resolution); however, this final approval is not inevitable. Moreover, a recommendation under this procedure does not, at any level, constitute agreement to cost share in a proposed project. Once a recommended project is fundamentally ready to move forward, intergovernmental agreements are still subject to approval by the District's Board of Directors and project partners' governing boards.

Project Submittal Process

The District sends requests for project submittals to appropriate agencies on the second Friday of each May and concurrently publishes the applicable CIP Prioritization Procedure (this document).

Submittals may be made electronically by means of email or CD, including a signed letter of intent (LOI) (per the template contained within this instruction). Project submittals should clearly address the project evaluation criteria listed herein and re-established annually under this procedure. Maps and similar graphic aids demonstrating prospective project elements are recommended. Additionally, where local (non-District) master plans are referenced, copies of those master plans should be included for reference by District staff. Where discrepancies exist between a LOI and the supporting submittal, the information contained within the LOI is considered overriding. The LOI is not a legally binding document, but it assists in establishing a common starting point for negotiating future project MOUs and IGAs.

In addition to new projects, the District requests agencies resubmit projects that were previously reviewed but have experienced notable changes since their initial submittal. This may include, for example, significant cost changes, changes in project substance following a CAR, changes in project priority to the submitting agency or changes in area benefited due to development.

Previously submitted projects that have *not* experienced a material change should not be resubmitted.

Project submittals must be received no later than the third Friday in July.

Recommendation Reversals

Previously-recommended projects that are not maturing into completed capital projects in a timely manner may revert to a "not recommended" status. In conjunction with the District's annual May notice of intent mailing, the Chief Engineer and General Manager will formally notify sponsor agencies of previously-recommended projects being considered for this action. This notification is intended to initiate a dialog between the District's and partner agencies' staffs to ensure viable projects do not revert in status. After gathering agencies' input, District staff will present recommendations to the FCAB each October for informational purposes, and each December for approval.

Sponsor agencies are encouraged to resubmit such projects after addressing the District's identified concerns. Resubmitted project are re-scored under the most recently revised scoring criteria.

Prioritization Criteria

Established prioritization criteria allow District staff to uniformly evaluate District-generated and agency-requested CIP projects.

Project submittals that do not incorporate LOIs per the District's template are disqualified from consideration. Each request that meets the District's minimum administrative standards will be evaluated by District staff and scored. Through the weighted criteria listed below, a maximum total of 100 points per project is possible. If insufficient data is provided for a particular criterion, no points will be awarded in that category. No set point threshold exists for determining the PEC's recommendation decisions; the threshold is established following evaluation of a given year's submittals.

Evaluation criteria, maximum point value and associated submittal requirements are listed below:

0. Project Description (0 Points)

A summary of the proposed project, including a location map and information concerning project goals, problems to be addressed, anticipated project features, and relationships to any other planned, ongoing or completed infrastructure projects.

1. Funding Commitment and Agency Priority (12 Points)

Rank in priority (from first to last) among the agency's current fiscal year submittals. A number of integrated projects required to improve a particular watershed may be consolidated and classified as a single, phased project.

Demonstration of financial commitment and timing to the project. The submittal should answer some or all of these questions:

- Is the agency ready to fund and implement the project and enter into an Intergovernmental Agreement?

- Is the project a part of or consistent with an articulated, short or long-range CIP program or departmental strategic plan? If so, the component of the plan indicating the project should be included in the submittal.

- Does the project have a current schedule of funding, implementation, including anticipated milestones and deliverables?

Project partners are encouraged to re-confirm their standing interest in projects that have been previously recommended by the prioritization process but have not yet entered formal MOU or IGA processes. This correspondence is most appropriately submitted, in letter form, in conjunction with the agency's new-year prioritization process submittal.

2. Flood Control / Drainage Master Plan Element (8 Points)

Relationship to existing or ongoing flood control, storm-water management or drainage master plans. Points will be awarded on the basis of the project's relative significance or priority within the overall plan. If the associated master plan was formally adopted (e.g., through council action) by the submitting agency, this should be indicated on the LOI for the project submittal. <u>If the associated master plan was completed by an agency other than the District, then a copy of the plan, or an executive summary, must be provided with the project submittal to receive points in this category</u>.

3. Flooding Threat (15 Points)

Existing threats to property (excluding roadways) that will be mitigated by the proposed project. The submittal should answer some or all of these questions:

- Fewer points will be awarded to those projects that are intended to resolve flooding threat issues caused by inadequate regulation by the requesting agency.
- Is the project intended to address an existing flooding hazard?
- Has documented flooding of structures occurred that would be prevented or lessened in the future by the project? If so, on how many occasions has documented flooding occurred? What was the extent of the damage caused? If citizen flooding complaints are available, copies should be included with the project submittal.
- Will the project mitigate flooding hazards in a delineated floodway/floodplain? If so, was the floodway/floodplain delineated before or after development in the affected area?
- What are the peak discharges and frequency of flooding events?
- What are the depth, velocity and duration of storm-water flow?
- What are the characteristics of the contributing watershed (size, slope, land use, etc.)?
- Does an outfall exist? If so, is it undersized, at full capacity, or capable of handling additional flows?

4. Level of Protection (10 Points)

Flood return frequency protection in comparison to protection under existing conditions. Preference is given to projects offering higher flood return frequency (10-year to 100-year) protection. When applicable, information regarding both the anticipated design level of protection and the effective level

of protection, such as that provided by storm drains combined with curb and gutter roadways, should be provided.

5. Area Protected (25 Points)

Characteristics of the geographic area protected by the proposed project. The submittal should answer these questions:

- What are the numbers and estimated values of benefitted residential, commercial and industrial buildings that are located in delineated floodways or 100-year floodplains?
- What are the numbers and estimated values of benefitted residential, commercial and industrial buildings that are not located in delineated floodplains?
- What is the number of benefitted public buildings (schools, libraries, churches, etc.)?
- What amount of infrastructure (roads, drainage/flood control or wastewater facilities, etc.) would benefit or be enhanced (e.g., storm drain capacity increase from 2-10 years.)?
- What is the amount of benefitted cultivated acreage?
- What is the acreage of developed, agricultural and undeveloped land to be removed from the 100-year floodplain?
- What population would directly and indirectly benefit from the project?
- What is the age of area development, and how long has the flooding problem existed?
- Would a floodway/floodplain be reduced and/or the community's floodplain rating be improved through project completion?

6. Ancillary Benefits (12 Points)

Non-flood control benefits of the submitted project. Benefits may include:

- Community Economic Impacts (Earn 2 additional points to the points that may be earned by other identified ancillary benefits as described below, if one of the following is applicable; Does the project provide a benefit needed for economic development? Will the project enhance economic diversification, business expansion and economic growth? Is the project consistent with the agency's development general plan?);

- Water quality implications (e.g., will storm-water be managed through basins or wetlands prior to its discharge to the receiving waters?);

- Water conservation/recharge opportunities (e.g., will the project work to sustain or increase ground water levels and improve aquifer quality? Will the project promote the efficient reuse of storm water?);

- Vegetation and wildlife habitat implications (e.g., will an existing wildlife corridor be maintained/enhanced, or will new habitat areas be created through the provision of dedicated drainage/open space areas?);

- Environmentally sensitive areas (e.g., designated wildlife areas or riparian corridors) to be protected;

- Multiple-use features, benefits and contributions such as ground water enhancement (either through groundwater percolation or direct recharge), support for alternative forms of transportation such as trails and bike paths, support for recreation opportunities, restoration of riparian and other habitats, and other open space uses and activities;

- Contributions to the visual quality of the environment through preservation or enhancement of the natural character of the landscapes of Maricopa County and/or enhancement of local community character;

- Improvement of quality of life indicators such as preservation or enhancement of cultural and historic resources, and opportunities for conservation education within the community;

- Low impact development (LID) (e.g., will the project include low impact development methods or structures?

- Qualification for grant funding such as transportation enhancement funding, water protection funding or wildlife habitat improvement funding.

8. Level of Partner Participation (12 Points)

Proposed cost-share contribution by the submitting agency or other non-District agencies. The District typically requires a fifty-percent cost share contribution from its partners. <u>Preference is given to projects with maximum external agency participation.</u> If the project has an economic development component, the agency and the development beneficiary is expected to contribute a higher level of cost share participation, with the District contributing the least cost share among the project partners and/or beneficiaries. If a future bond election is identified as a source of funding, this should be reported in the submittal. Forms of cost-share participation may include:

- Direct agency funding (e.g., bonds, or property/sales tax revenues);

- Ad-valorem tax contributions to the District;
- Non-cash contributions (e.g., rights of way);
- Previously-acquired land required for the project (not to exceed 30% of an agency's cost share credit); and
- Third-party funding sources (e.g., federal funds or private contributions).

9. Operations and Maintenance Costs to the District (6 Points)

Total operations and maintenance costs *to be borne by the District*. Maximum ratings are assigned to requests with minimal operations and maintenance costs to be borne by the District.

Note: The information provided in criteria above will be used to evaluate and rank the requested projects and will be considered for negotiation of project partnering agreements. However, specific partner responsibilities and cost-sharing amounts will be determined during the IGA negotiation process with District staff on a project-by-project basis.

Points of Contact

Planning and Project Management Division Manager: Don Rerick, P.E., 602-506-4878

For questions concerning the Prioritization Procedure and capital project submittals:
Capital Improvement Program Supervisor: Patrick Schafer, P.E., 602-506-2206
Planning and Project Management Division Manager: Don Rerick, P.E., 602-506-4878

For questions concerning flood control studies, planning or floodplain delineation requests:
Planning Branch Manager: Doug Williams, P.E., 602-506-8743
Floodplain Delineations Branch Manager: Catherine Regester, P.E., 602-506-4001

Fiscal Year 2017 Prioritization Procedure Schedule

May 8, 2015	Agency Notices Mailed
July 17, 2015	Agency Proposals Submittal Deadline
August, 2015	Evaluation Committee Review and Evaluation
August, 2015	Evaluation Committee Recommendations to PPM Division Manager and Chief Engineer
September, 2015	Staff Recommendations Forwarded to Agencies
September, 2015	FCAB Program Budget Committee Review
October 28, 2015	Staff Recommendations Presented to the FCAB for Information
December 2, 2015	Final Staff Recommendations Presented to the FCAB for Action
December, 2015	Prioritization Procedure Results Published
February, 2016	Proposed FY 2017 - 2021 CIP Presented to FCAB for Endorsement
March, 2016	Proposed FY 2017 - 2021 CIP Forwarded to County Management & Budget

Prioritization Procedure Process Flowchart

Prioritization Procedure Distribution List

Name	Position	Agency
Mr. Alan Thomas	Environmental Program Mgr, Luke AFB	Department of the Air Force
Ms. Chaun Hill	Asst. State Engineer, Urban Project Mgt.	Arizona Department of Transportation
Mr. David Janover	City Engineer	City of Avondale
Mr. Scott Zipprich	City Engineer	City of Buckeye
Mr. Steve Bales	President	Buckeye Water Cons. and Drainage District
Mr. Gary Neiss	Town Administrator	Town of Carefree
Mr. Wayne Anderson	Town Engineer	Town of Cave Creek
Mr. R.J. Zeder	Transportation & Development Director	City of Chandler
Mr. Jorge Gastelum	City Engineer	City of El Mirage
Dr. Clinton Mattea	President	Fort McDowell Indian Community
Mr. Randy Harrel	Town Engineer	Town of Fountain Hills
Mr. William Menard	Public Works Director	Town of Gila Bend
Mr. Errol Blackwater	Director of Land and Water Resources	Gila River Indian Community
Mr. Mike Gillespie	Town Engineer	Town of Gilbert
Mr. David Beard	Engineering Director	City of Glendale
Mr. David Ramirez	Engineer	City of Goodyear
Mr. Jim Ricker	Public Works Director	Town of Guadalupe
Mr. Darryl Crossman	City Manager	City of Litchfield Park
Ms. Jennifer Toth	Director	Maricopa County Department of Transportation
Mr. Chuck Williams	Capital Improvement Program Manager	Maricopa County Department of Transportation
Mr. Fred Rustam	Deputy Engineer-Design	City of Mesa
Mr. James Shano	Town Engineer	Town of Paradise Valley
Mr. Andrew Granger	Engineering Director	City of Peoria
Mr. Bill Mattingly	Public Works Director	City of Peoria
Mr. Hasan Mushtaq	Floodplain Manager	City of Phoenix
Mr. Troy White	CIP/Environmental Division Manager	Town of Queen Creek
Mr. Michael Leonard	General Manager	Roosevelt Water Conservation District
Mr. Bob Larchick	Manager, Water Engineering	Salt River Project
Mr. Brian Meyers	Community Manager	Salt River Pima-Maricopa Indian Community
Mr. Ashley Couch	Stormwater Management Director	City of Scottsdale
Mr. Mike Mecham	Engineering Supervisor	City of Surprise
Mr. Andy Goh	City Engineer	City of Tempe
Mr. Reyes Medrano Jr.	City Manager	City of Tolleson
Mr. Joshua H. Wright	Town Manager	Town of Wickenburg
Mr. Douglas Nelson	Attorney	Woolsey Flood Protection District
Mr. Marty Mosbrucker	Public Works Manager	Town of Youngtown

Table One: FY 2016/2017 Capital Improvement Program Prioritization Procedure Capital Project Requests

No.	Project Name	Sponsor (Priority)	Location	Agency Funding	Other Funding	District Cost	Est. Total Cost	Summary Recommendation
1	Lower El Mirage Wash Tributary Improvements	El Mirage (1)	Lower El Mirage Wash Tributary between Dysart Road and the BNSF Spur.	$925,000	$ -	$150,000	$1,075,000	Not Recommended
2	Bethany Home Road Storm Drain - 58th Avenue to 67th Avenue	Glendale (1)	Area between Glendale Ave and Bethany Home Rd, between 67th Ave and 58th Ave, and drain along Grande Ave and 51st Ave.	$5,280,000	$ -	$3,520,000	$8,800,000	Recommended
3	Bethany Home Road Storm Drain- 67th Avenue to 79th Avenue	Glendale (2)	Area between Glendale Ave and Bethany Home Rd, between 79th Ave east to 67th Ave.	$6,000,000	$ -	$4,000,000	$10,000,000	Recommended
4	51st Avenue Storm Drain betwen Northern Avenue and Olive Avenue	Glendale (3)	Approximately 0.8 square miles between 55th Ave and 47th Ave and Northern and Olive Ave.	$1,066,500	$ -	$1,066,500	$2,133,000	Not Recommended
5	67th Avenue/Arrowhead Hospital Drainage Improvements	Glendale (4)	Intersection of 67th Ave and Sack Drive in front of Arrowhead Hospital.	$288,360	$ -	$245,640	$534,000	Not Recommended
6	ACDC Access at 59th Avenue South of Thunderbird Road	Glendale (5)	Area from the ACDC on the west and south to 55th Ave on the east and Bell Road to the north.	$783,640	$ -	$723,360	$1,507,000	Deferred
7	New River Channel, Bank, Fill & Erosion Control Improvements	Peoria (1)	New River Channel approximately 1/2 mile south of Deer Valley Road.	$2,000,000	$ -	$1,000,000	$3,000,000	Not Recommended
8	Van Buren Street Storm Drain Project	Phoenix (1)	Van Buren Street between 40th Street and Interstate 10 (I-10).	$9,700,000	$ -	$9,700,000	$19,400,000	Not Recommended
9	Thomas Road Storm Drain Project	Phoenix (2)	Thomas Road between 60th Street and Old Cross Cut Canal (OCCC).	$5,350,000	$ -	$5,350,000	$10,700,000	Not Recommended
10	Central Avenue Storm Drain Project	Phoenix (3)	Central Avenue between Bethany Home Road and Griswold Road, north of Northern Avenue.	$4,100,000	$ -	$4,100,000	$8,200,000	Not Recommended
11	Pecos Basin Outfall Project	Phoenix (4)	Intersection of State Route 202 (SR202) and 48th Street.	$1,000,000	$ -	$1,000,000	$2,000,000	Not Recommended
				$ 36,493,500	$ -	$ 30,855,500	$ 67,349,000	

*Detailed recommendation provided in Table Two.

Table Two: FY 2016/2017 Capital Improvement Program Prioritization Procedure Results

Table 2A: Projects Recommended for Inclusion in the District's Capital Improvement Program

No.	Project Name	Sponsor (Priority)	PEC Ave. Score	District Cost	Est. Total Cost	PEC Recommendation
2	Bethany Home Road Storm Drain - 58th Avenue to 67th Avenue	Glendale (1)	75	$ 3,520,000	$ 8,800,000	Recommended
3	Bethany Home Road Storm Drain- 67th Avenue to 79th Avenue	Glendale (2)	73	$ 4,000,000	$ 10,000,000	Recommended
				$ 7,520,000	$ 18,800,000	

Table 2B: Projects Not Recommended for Inclusion in the District's Capital Improvement Program

No.	Project Name	Sponsor (Priority)	PEC Ave. Score	District Cost	Est. Total Cost	PEC Recommendation
1	Lower El Mirage Wash Tributary Improvements	El Mirage (1)	53	$ 150,000	$ 1,075,000	Not Recommended
4	51st Avenue Storm Drain betwen Northern Avenue and Olive Avenue	Glendale (3)	51	$ 1,066,500	$ 2,133,000	Not Recommended
5	67th Avenue/Arrowhead Hospital Drainage Improvements	Glendale (4)	51	$ 245,640	$ 534,000	Not Recommended
7	New River Channel, Bank, Fill & Erosion Control Improvements	Peoria (1)	57	$ 1,000,000	$ 3,000,000	Not Recommended
8	Van Buren Street Storm Drain Project	Phoenix (1)	59	$ 9,700,000	$ 19,400,000	Not Recommended
9	Thomas Road Storm Drain Project	Phoenix (2)	53	$ 5,350,000	$ 10,700,000	Not Recommended
10	Central Avenue Storm Drain Project	Phoenix (3)	48	$ 4,100,000	$ 8,200,000	Not Recommended
11	Pecos Basin Outfall Project	Phoenix (4)	41	$ 1,000,000	$ 2,000,000	Not Recommended
				$ 22,612,140	$ 47,042,000	

Table 2C: Projects Deferred for Further Analysis

No.	Project Name	Sponsor (Priority)	PEC Ave. Score	District Cost	Est. Total Cost	PEC Recommendation
6	ACDC Access at 59th Avenue South of Thunderbird Road	Glendale (5)	61	$ 723,360	$ 1,507,000	Deferred for further analysis and re-submittal
				$ 723,360	$ 1,507,000	

Table Three: Previously-Recommended Projects Beyond the District's 5-Year Capital Improvement Program

Year	Project Name	Sponsor	Status	PEC Ave. Score	District Cost*	Est. Total Cost*
2000	Meridian North and South Channels	Mesa	ADMP Update in progress	60	$ 1,800,000	$ 2,400,000
2001	Waddell Rd. Drainage Improvements	Surprise	Awaiting IGA and partner funding	78	$ 255,600	$ 771,984
2002	Bethany Home Rd. Storm Drain (59th-51st Ave.)	Glendale	Awaiting IGA and partner funding	67	$ 1,575,000	$ 3,150,000
2002	Sand Tank Wash Flood Control Improvements	Gila Bend	Awaiting IGA and partner funding	66	$ 10,534,000	$ 11,707,000
2002	South Gila Bend Drainage Improvements	Gila Bend	Awaiting IGA and partner funding	60	$ 283,000	$ 283,000
2007	Skunk Creek Levees at CAP	District	Awaiting IGA and partner funding	75	$ 2,670,000	$ 8,900,000
2007	Skunk Creek Channel at Pinnacle Peak Rd. and 35th Ave.	Phoenix	Awaiting Phoenix bond election.	70	$ 4,250,000	$ 8,500,000
2007	Pinnacle Peak Road and 67th Avenue Drainage Improvements	Peoria	Awaiting IGA and partner funding	68	$ 3,250,000	$ 6,500,000
2007	Pinnacle Peak Road Drainage Improvements - 89th Avenue to Agua Fria River	Peoria	Awaiting IGA and partner funding	71	$ 7,000,000	$ 14,000,000
2008	Agua Fria Boulevard Scour Protection Grade Control Structure	MCDOT	Awaiting IGA and partner funding	75	$ 1,000,000	$ 2,000,000
2008	AT&SF Channel	MCDOT	CAR completed 2009.	66	$ 3,189,000	$ 6,377,000
2008	Pecos North and South Detention Basins	Mesa	ADMP Update in progress.	64	$ 11,625,000	$ 15,500,000
2008	Pecos Rd. Channel	Mesa	ADMP Update in progress.	58	$ 10,500,000	$ 14,000,000
2009	20th Ave. and Turney Ave. Detention Basin	Phoenix	Awaiting Phoenix bond election.	58	$ 6,500,000	$ 13,000,000
2010	Jefferson St. and I-17 Storm Drain	Phoenix	Awaiting IGA and partner funding	70	$ 1,550,000	$ 3,100,000
2010	Happy Valley Channel	Surprise	Awaiting IGA and partner funding	69	$ 1,130,000	$ 2,260,000
2011	SR-85/Oglesby Outfall Channel	ADOT/FCD	Awaiting IGA and partner funding	74	$ 7,000,000	$ 14,000,000
2012	Skyline Fan Basin & Outlet	Buckeye	Awaiting IGA and partner funding	71	$ 3,600,000	$ 7,200,000
2012	Highline Western Canal Storm Drain	Tempe	Awaiting DMP	76	$ 1,990,000	$ 3,980,000
2012	Rooks Drainage System	Buckeye	Awaiting IGA and partner funding	72	$ 12,740,000	$ 45,500,000
2012	Oglesby Drainage System	Buckeye	Awaiting IGA and partner funding	72	$ 10,472,000	$ 37,400,000
2012	Palo Verde Drainage System	Buckeye	Awaiting IGA and partner funding	72	$ 26,236,000	$ 93,700,000
2013	McCormick Stillman Railroad Park/Lincoln Drive Drainage Improvements	Scottsdale	ADMP Update in progress.	73	$ 4,022,040	$ 6,703,400
2014	Circle K Park Detention Basin and Storm Drain	Phoenix	Awaiting IGA and partner funding	77	$ 8,400,000	$ 16,800,000
2015	Loma Vista Corridor Drainage Improvements	Tempe	LID Study is in progress	75	$ 2,002,500	$ 2,670,000
2015	27th Avenue and Dobbins Road Detention Basin	Phoenix	Awaiting IGA and partner funding	81	$ 3,350,000	$ 6,700,000
2015	South Phoenix/Laveen Drainage Improvements	Phoenix	Awaiting IGA and partner funding	79	$ 5,650,000	$ 11,300,000
					$ 152,574,140	$ 358,402,384

*Costs are estimates from original submittals.

Table Four: Maintenance and Safety-Related Modifications to District Structures Recommended by the Chief Engineer and General Manager of the District

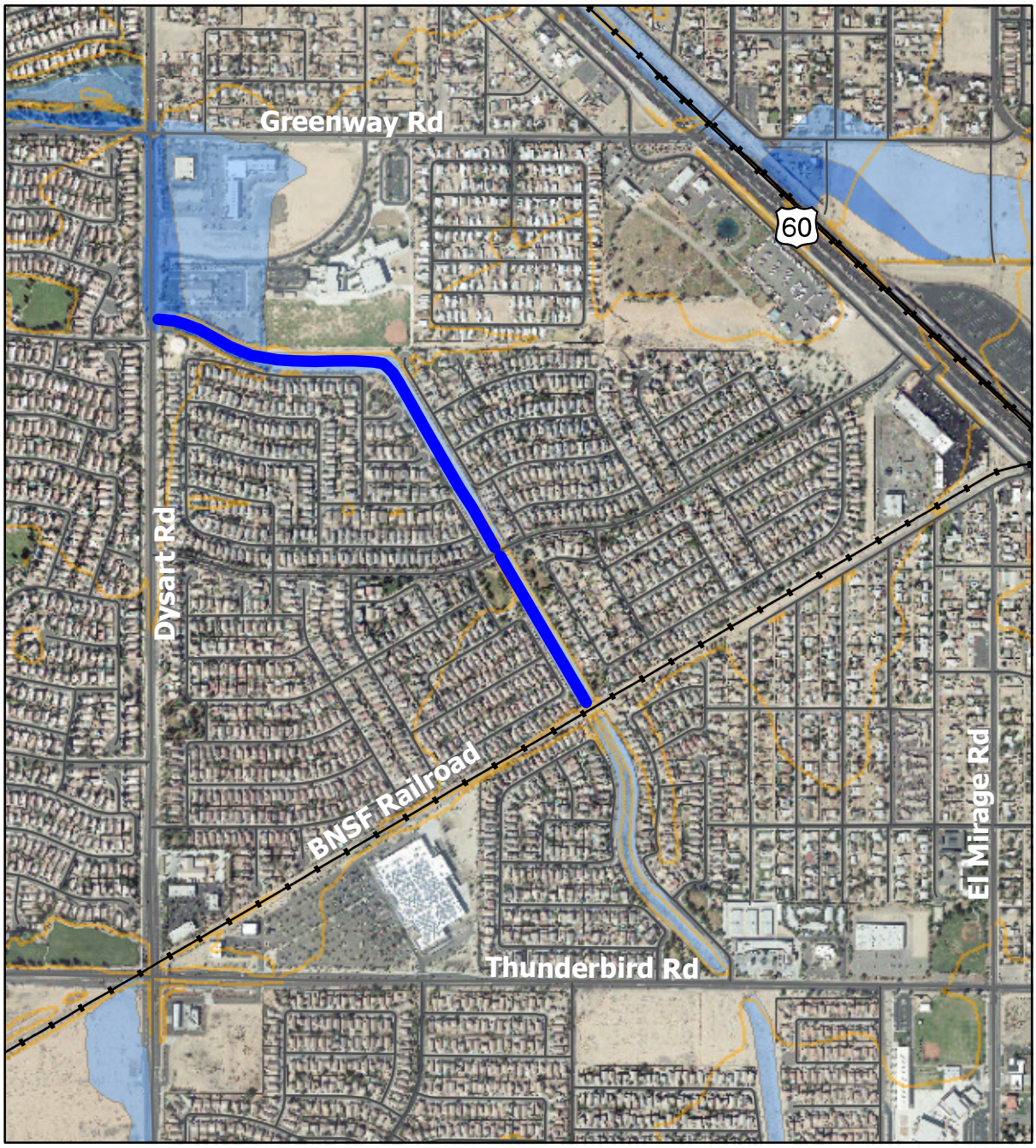
Year	Project Name	Summary	Resolution
2017	None for this FY	N/A	N/A

Project No.1 Name:	Lower El Mirage Wash Tributary Improvements
Requested By:	City of El Mirage
Project Description:	Acquire a portion of the Lower El Mirage Wash Tributary and incorporate it into the City's maintenance network and construct multi-use paths, install solar lighting, and other amenities.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** 0	**Med.** 1-4	**High** 5-12	5
This project ranks 1 out of 1 for the City of El Mirage. The total project cost is estimated to be $1,075,000 and funding is currently not identified in the City's 5-year plan but will be incorporated in the future.				
Flood Control/Drainage Master Plan Element	**Low** 0-4	**Med.** 5-6	**High** 7-8	6
The project is located within an existing drainage channel as part of the Lower El Mirage Wash Tributary. The watershed that contributes to the channel was studied as part of the "Loop 303/White Tanks Area Drainage Master Plan Update Area Hydrologic Analysis" (ADMPUAHA) prepared in 2009 by HDR.				
Flooding Threat	**Low** 0-5	**Med.** 6-12	**High** 13-15	6
Rainfall events (based on two and five-year average) disrupt use in the channel area. The City currently only does general maintenance in the area but cannot make significant improvements as the land is private property. The targeted project area poses a flood risk for commercial and the adjacent residential properties. The watershed generally slopes to the south-southeast towards the Agua Fria River at relatively flat gradients, varying between 0.10% and 0.50%.				
Level of Protection	**<10 yr** 0	**10-50 yr** 3-7	**>50 yr** 8-10	8
The project already provides for a 100-year level of protection. This level would be maintained.				
Area Protected	**Low** 0-8	**Med.** 9-16	**High** 17-25	5
The attached Firmette indicates the floodplain includes residential and commercial properties within the project limits. All other properties adjacent to the project are currently protected and the proposed project will not change the level of protection. The 100-year floodplain will not change with this project.				
Ancillary Benefits	**Low** 0-4	**Med.** 5-8	**High** 9-12	8
There are several additional benefits to this proposed project including: The City can perform necessary improvements to the channel to protect adjacent properties. Multiuse pathways provide safe and stable areas for use by pedestrians and bicyclists. Solar lighting will increase security and reduce potential vandalism.				
Level of Partner(s) Participation	**<50%** 0-4	**50%** 8	**>50%** 12	9
The total project cost is estimated to be $1,075,000. The City is proposing a 86/14 cost share (86% City and 14% FCD). FCD's total estimated cost share would be $150,000.				
O&M Costs to the District	**High** 0	**Low** 1-5	**None** 6	6
Any costs associated with the operations and maintenance of the proposed improvements will be provided by the City of El Mirage. The District will not be responsible for any O&M costs.				
Not Recommended			**Total**	**53**

LOWER EL MIRAGE WASH TRIBUTARY IMPROVEMENTS

Project 1



General Proposed Improvements

10-ft Topo. Contour

Floodplains

Floodways

Railroad

N

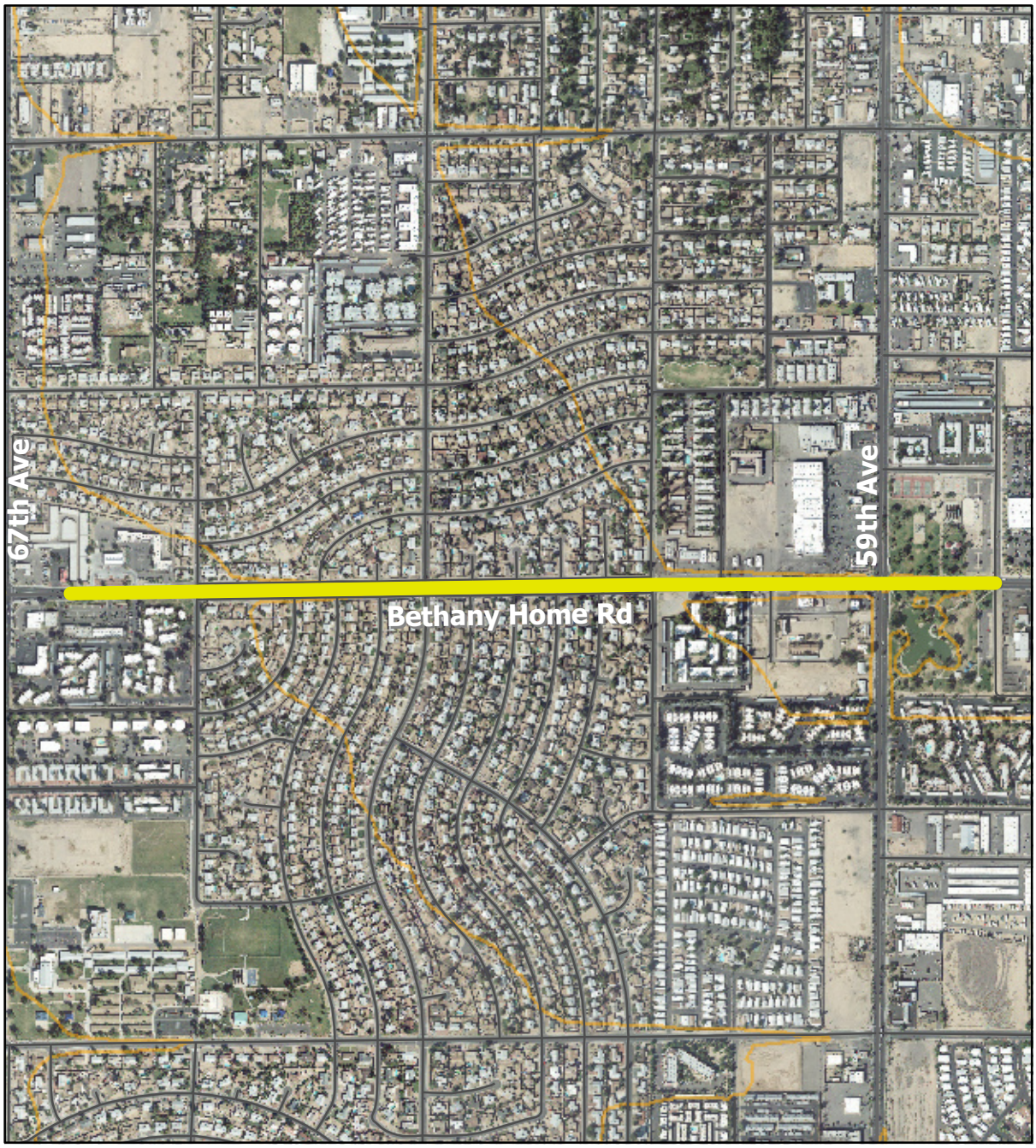
0 1,200 Feet

Project No.2 Name:	Bethany Home Road Storm Drain - 58th Avenue to 67th Avenue
Requested By:	City of Glendale
Project Description:	Construct storm drain along Bethany Home Rd from 67th Ave east to 58th Ave. Construction includes installation of catch basins, manholes, junction boxes and associated appurtenances.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** 0	**Med.** 1-4	**High** 5-12	10
This project ranks 1 out of 5 for the City of Glendale. This project was prevously submitted and approved through the FY2002 FCD prioritization procedure. Project components and cost have been updated and is being resubmitted. The estimated projected cost for this segment of the Bethany Home Road Storm Drain is $8,800,000. City indicated that funding will span three fiscal years from 2017 to 2019 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** 0-4	**Med.** 5-6	**High** 7-8	8
Project was identified in the completed Maryvale Area Drainage Master Plan which has been officially opted by the City Council.				
Flooding Threat	**Low** 0-5	**Med.** 6-12	**High** 13-15	10
The intersection of Grand Avenue and 51st Avenue is a flood prone area. Installation of storm drain will improve the drainage in the area between Glendale Ave and Bethany Home Rd, between 67th Ave and 58th Ave. and drain identified ponding areas.				
Level of Protection	**<10 yr** 0	**10-50 yr** 3-7	**>50 yr** 8-10	4
This storm drain system will be designed to address the 10 year, 6 hour event. Catch basins will be placed into existing curb and gutter (in curb inlets).				
Area Protected	**Low** 0-8	**Med.** 9-16	**High** 17-25	17
80% of this area is developed, the remainder is undeveloped zoned for commercial, light industrial or residential development. The area includes approximately 1800 residences, nine apartment complexes, two elementary schools, five commercial developments, two nurseries, two city parks and one public housing area. The area represents approximately 2% of the total area of the City of Glendale with a population of approximately 7000.				
Ancillary Benefits	**Low** 0-4	**Med.** 5-8	**High** 9-12	8
Environmental Quality - A portion of the stormwater runoff generated in this area will be from retention basins. Area Wide Benefits - Construction of this portion of this storm drain will enhance the appearance of the area, improve the condition and safety of the streets in the area, and address public safety concerns (ponding of stormwater in the streets).				
Level of Partner(s) Participation	**<50%** 0-4	**50%** 8	**>50%** 12	12
The projected cost for this segment of the Bethany Home Road Storm Drain is $8,800,000. The City is proposing a 60/40 cost share where the City will provide 60% of the funding. The City will also purchase any required right of way, easements and temporary construction easements needed for construction.				
O&M Costs to the District	**High** 0	**Low** 1-5	**None** 6	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Glendale will operate and maintain this segment of the storm drain system.				
Recommended			**Total**	**75**

BETHANY HOME ROAD STORM DRAIN FROM 58TH AVE TO 67TH AVE

Project 2



Proposed Storm Drain

10-ft Topo. Contour

N

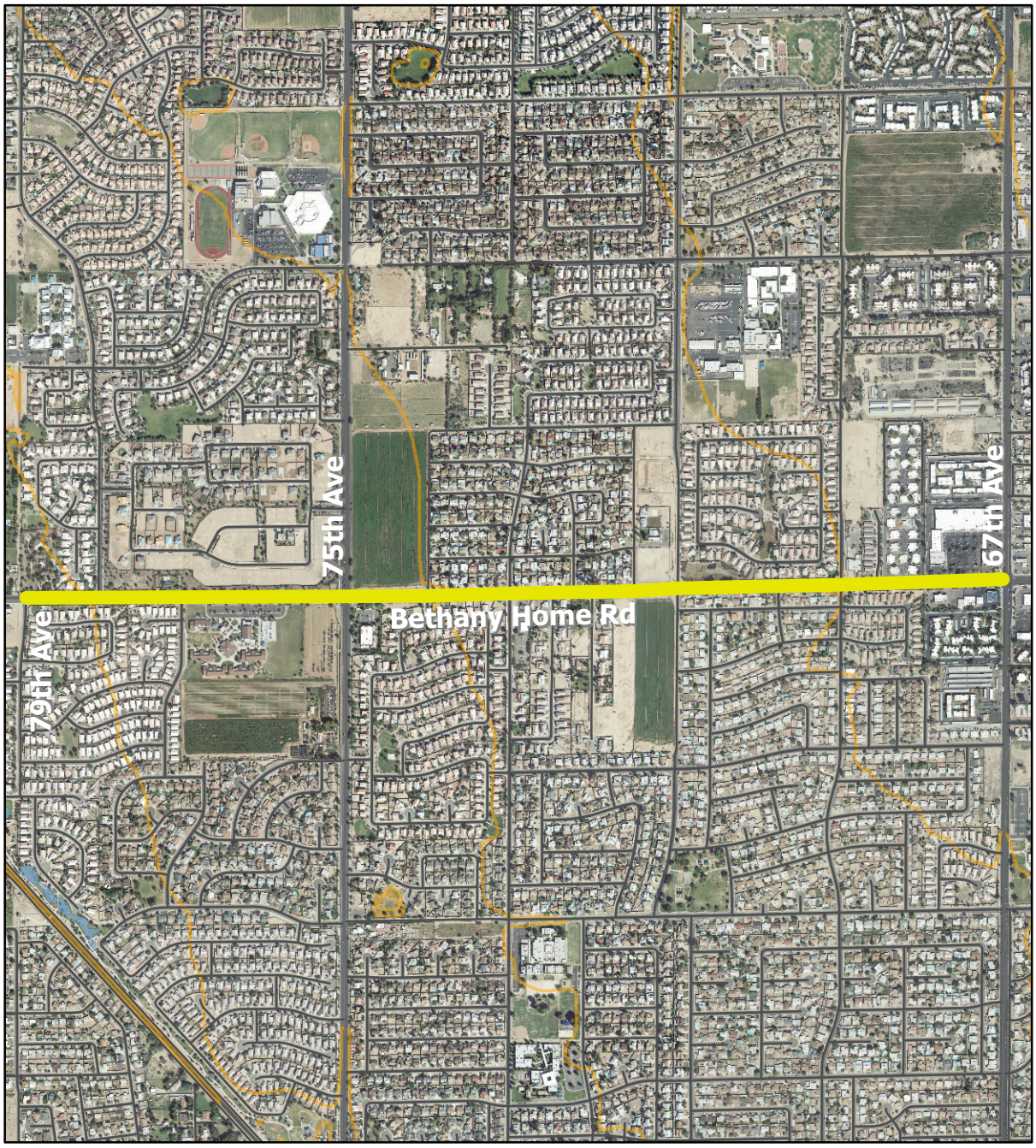
0 1,100 Feet

Project No.3 Name:	Bethany Home Road Storm Drain- 67th Avenue to 79th Avenue
Requested By:	City of Glendale
Project Description:	Construct storm drain along Bethany Home Rd from 67th Ave east to 79th Ave. Construction includes installation of catch basins, manholes, junction boxes and associated appurtenances.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** 0	**Med.** 1-4	**High** 5-12	9
This project ranks 2 out of 5 for the City of Glendale. This project was prevously submitted and approved through the FY2002 FCD prioritization procedure. Project components and cost has been updated and is being resubmitted. The estimated projected cost for this segment of the Bethany Home Road Storm Drain is $10,000,000. City indicated that funding will span three fiscal years from 2017 to 2019 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** 0-4	**Med.** 5-6	**High** 7-8	8
Project was identified in the completed Maryvale Area Drainage Master Plan which has been officially opted by the City Council.				
Flooding Threat	**Low** 0-5	**Med.** 6-12	**High** 13-15	10
The intersection of Grand Avenue and 51st Avenue is a flood prone area. Installation of storm drain will improve the drainage in the area between Glendale Ave and Bethany Home Rd, between 67th Ave and 79th Ave. and drain identified ponding areas.				
Level of Protection	**<10 yr** 0	**10-50 yr** 3-7	**>50 yr** 8-10	4
This storm drain system will be designed to address the 10 year, 6 hour event. Catch basins will be placed into existing curb and gutter (in curb inlets).				
Area Protected	**Low** 0-8	**Med.** 9-16	**High** 17-25	15
60% of this area is developed, the remainder is agricultural land. The area includes developments, one nursery, two services stations, several farms and one fire station. The area represents approximately 2% of the total area of the City of Glendale with a population of approximately 4,000.				
Ancillary Benefits	**Low** 0-4	**Med.** 5-8	**High** 9-12	9
Environmental Quality - A portion of the stormwater runoff generated in this area will be from retention basins. Area Wide Benefits - Construction of this portion of this storm drain will enhance the appearance of the area, improve the condition and safety of the streets in the area, and address public safety concerns (ponding of stormwater in the streets).				
Level of Partner(s) Participation	**<50%** 0-4	**50%** 8	**>50%** 12	12
The projected cost for this segment of the Bethany Home Road Storm Drain is $10,000,000. The City is proposing a 60/40 cost share where the City will provide 60% of the funding. The City will also purchase any required right of way, easements and temporary construction easements needed for construction.				
O&M Costs to the District	**High** 0	**Low** 1-5	**None** 6	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Glendale will operate and maintain this segment of the storm drain system.				
Recommended			**Total**	**73**

BETHANY HOME ROAD STORM DRAIN FROM 67TH AVE TO 79TH AVE

Project 3



Proposed Storm Drain

Floodplains

10-ft Topo. Contour

N

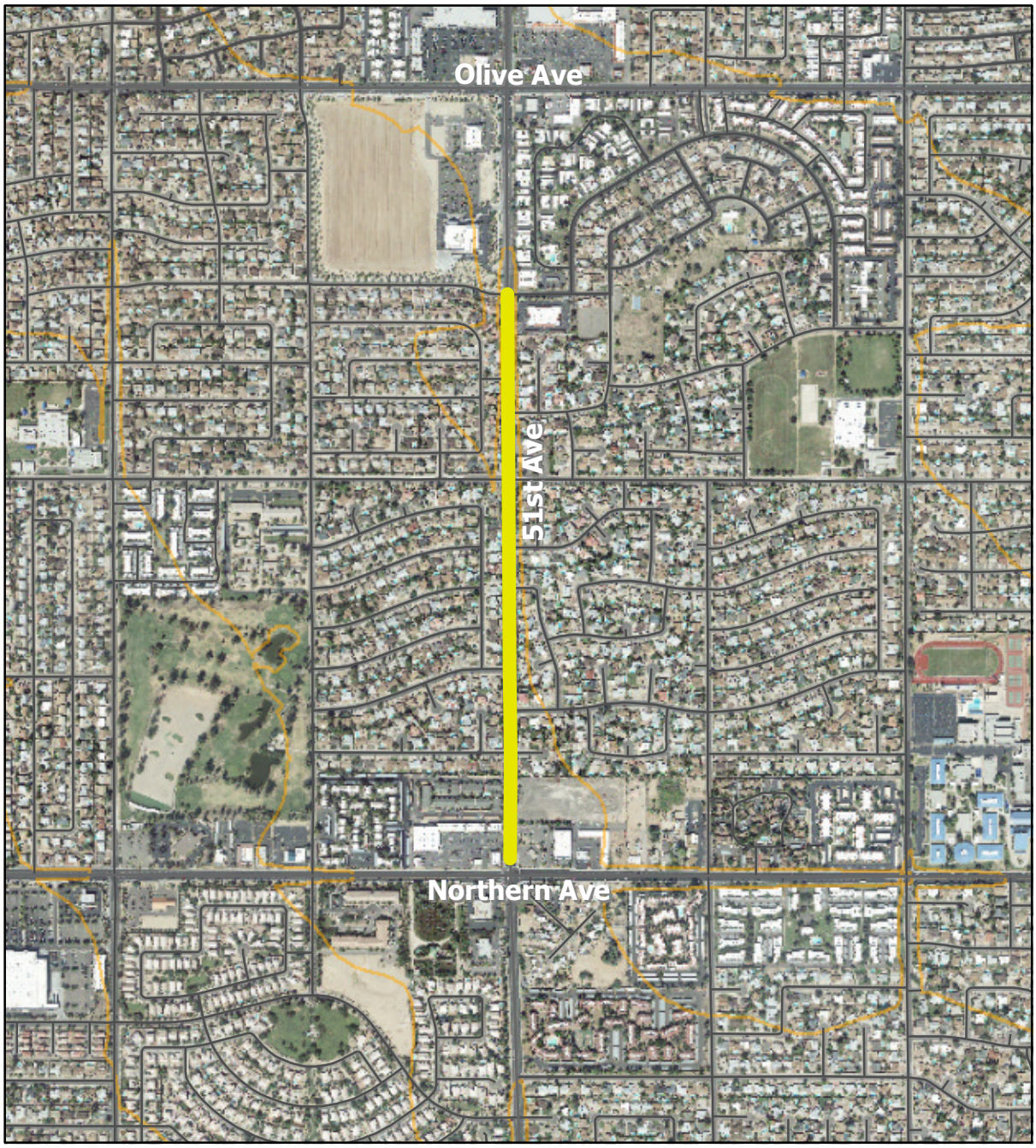
0 1,500 Feet

Project No.4 Name:	51st Avenue Storm Drain betwen Northern Avenue and Olive Avenue
Requested By:	City of Glendale
Project Description:	Construct 42-inch storm drain along 51st Avenue from Northern Avenue to Olive Avenue. Construction includes installation of catch basins, manholes, junction boxes and associated appurtenances.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** 0	**Med.** 1-4	**High** 5-12	6
This project ranks 3 out of 5 for the City of Glendale. The estimated projected cost for this segment of the 51st Avenue Storm Drain is $2,133,000. City indicated that funding will span two fiscal years from 2018 to 2019 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** 0-4	**Med.** 5-6	**High** 7-8	7
This project has been identified in the Glendale Area Stormwater Management Plan. This segment of storm drain is a recommended extension of the Northern Avenue storm drain completed in 2011.				
Flooding Threat	**Low** 0-5	**Med.** 6-12	**High** 13-15	8
The area north of 51st Avenue between Olive and Northern Avenues is a major arterial that experiences flooding during moderate storm events. Housing developments to the east discharge stormwater into the streets without any retention or detention causing flooding. Ponding and flooding has occurred within the square mile spanning Northern Avenue to Olive Avenue. There is repeated flooding at the intersection of 51st Avenue and Olive Avenue. There are no storm drains or detention/retention basins in or along 51st Avenue between Northern and Olive Avenues. The results of the hydrology study indicated the peak discharge rate from the 10-year turn frequency storm event is approximately 148 cfs and produces a total runoff volume of approximately 32 acre-feet.				
Level of Protection	**<10 yr** 0	**10-50 yr** 3-7	**>50 yr** 8-10	1
The full flow capacity of a 42-inch storm drain is approximately 55 cfs. This capacity is approximately 40% of the 10-year storm event.				
Area Protected	**Low** 0-8	**Med.** 9-16	**High** 17-25	9
The project would protect about 0.8 square mile between 55th Avenue and 47th Avenue and between Northern Avenue and Olive Avenue. Half of that area will be protected from a storm event up to the design discharge rate. The other half of the area is benefited by a positive drainage outfall.				
Ancillary Benefits	**Low** 0-4	**Med.** 5-8	**High** 9-12	6
This project improves life safety, has a higher community acceptance and improves impacts on traffic and from flooding up to the peak design discharge for the storm drain system. Emergency responders will also have fewer traffic delays caused by flooding event.				
Level of Partner(s) Participation	**<50%** 0-4	**50%** 8	**>50%** 12	8
The projected cost for this segment of the 51st Avenue Storm Drain is $2,133,000. The City is proposing a 50/50 cost share.				
O&M Costs to the District	**High** 0	**Low** 1-5	**None** 6	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Glendale will operate and maintain this segment of the storm drain system.				
Not Recommended			**Total**	**51**

51ST AVENUE STORM DRAIN FROM NORTHERN AVENUE TO OLIVE AVENUE

Project 4



Proposed Storm Drain

10-ft Topo. Contour

N

0 1,300 Feet

Project No.5 Name:	67th Avenue/Arrowhead Hospital Drainage Improvements
Requested By:	City of Glendale
Project Description:	The project will construct over 1,300LF of 24-inch diameter storm drain extending north from the Intersection of Union Hills Drive and 67th Avenue. Catch basins will also be installed.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** **0**	**Med.** **1-4**	**High** **5-12**	5
This project ranks 4 out of 5 for the City of Glendale. The estimated projected cost for this segment of Storm Drain is $534,000. City indicated that funding will span two fiscal years from 2017 to 2018 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** **0-4**	**Med.** **5-6**	**High** **7-8**	6
This project has been identified in the Glendale Area Stormwater Management Plan.				
Flooding Threat	**Low** **0-5**	**Med.** **6-12**	**High** **13-15**	7
Ponding accumulates at the intersection of 67th Avenue and Sack Drive during relatively small rainfall events. Flooding also occurs in the existing citrus field northeast of the Sack Drive and 67th Avenue intersection. This creates difficult access into the Arrowhead Hospital during flooding events. Water ponds and spills into the street causing pavement degradation and access problems into other medical facilities adjacent to the hospital.				
Level of Protection	**<10 yr** **0**	**10-50 yr** **3-7**	**>50 yr** **8-10**	1
The full flow capacity of a 24-inch storm drain is approximately 12 cfs. This capacity is just under 50% of the 10-year storm event.				
Area Protected	**Low** **0-8**	**Med.** **9-16**	**High** **17-25**	7
This project directly protects a very small area near the intersection of 67th Avenue and Sack Drive. The overarching benefit of the project is to provide better access to and from the Thunderbird Hospital during rainfall and runoff events.				
Ancillary Benefits	**Low** **0-4**	**Med.** **5-8**	**High** **9-12**	7
This project will not only improve the drainage for the nearby intersections but will improve the traffic safety in a busy commercial area and allow rapid access of emergency vehicles to the Arrowhead Hospital.				
Level of Partner(s) Participation	**<50%** **0-4**	**50%** **8**	**>50%** **12**	12
The projected cost for this segment of storm drain is $534,000. The City is proposing a 54/46 cost share (City being 54%).				
O&M Costs to the District	**High** **0**	**Low** **1-5**	**None** **6**	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Glendale will operate and maintain this segment of the storm drain system.				
Not Recommended			**Total**	**51**

67TH AVENUE/ARROWHEAD HOSPITAL DRAINAGE IMPROVEMENTS

Project 5

Proposed Storm Drain

10-ft Topo. Contour

N

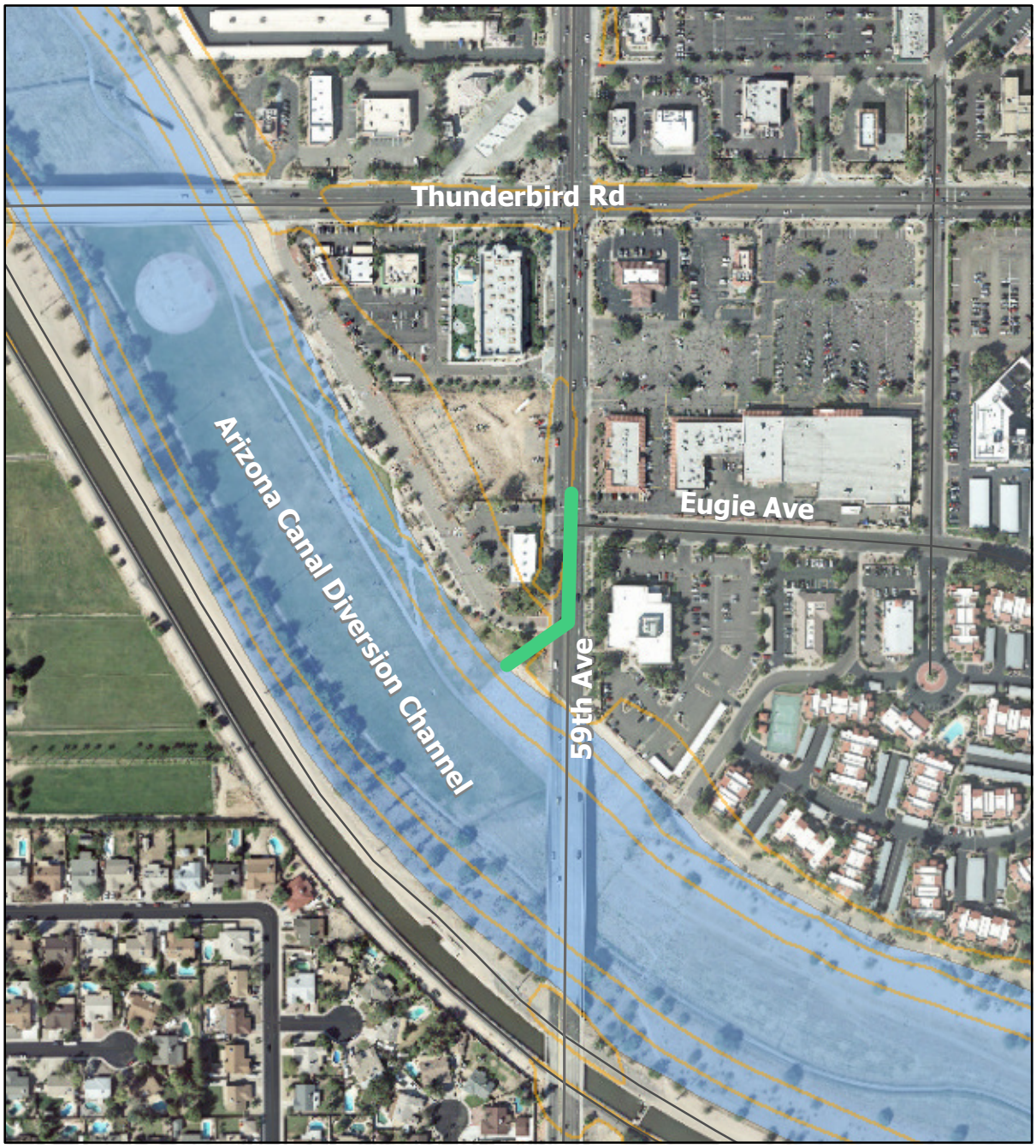
0 540 Feet

Project No.6 Name:	ACDC Access at 59th Avenue South of Thunderbird Road
Requested By:	City of Glendale
Project Description:	This project consists of a large Inlet system to capture storm water at a low point south of Thunderbird Road near Eugie and convey it thru a two-barrel eight foot span by four foot rise box culvert.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** **0**	**Med.** **1-4**	**High** **5-12**	4
This project ranks 5 out of 5 for the City of Glendale. The estimated projected cost for this segment of Storm Drain is $1,507,000. City indicated that funding will span two fiscal years from 2018 to 2019 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** **0-4**	**Med.** **5-6**	**High** **7-8**	6
This project has been identified in the Glendale Area Stormwater Management Plan.				
Flooding Threat	**Low** **0-5**	**Med.** **6-12**	**High** **13-15**	8
The ACDC was designed to be the ultimate outfall for stormwater runoff in this area. Future development of the nursery property could again block the inlet for stormwater into the ACDC. As a result storm water flow in excess of the 10-year event that exceeds the capacity of the Thunderbird Road storm drain will flow south across Thunderbird Road and pond at a low spot near the intersection of Eugie Avenue and 59th Avenue. In addition, there is very little flood protection along 59th Avenue south of Thunderbird Road. An overland inlet was located along the north side of Thunderbird Road west of 59th Avenue. This inlet was blocked when a commercial building was constructed on an elevated pad between the ACDC and 59th Avenue on the north side of the Thunderbird Road.				
Level of Protection	**<10 yr** **0**	**10-50 yr** **3-7**	**>50 yr** **8-10**	8
This project is sized to convey the peak discharge from the 100-year return frequency storm event which is 1,370 cfs.				
Area Protected	**Low** **0-8**	**Med.** **9-16**	**High** **17-25**	10
This project would directly benefit approximately an area of 0.25 square miles near the low point at Eugie Avenue and 59th Avenue which includes the Banner Hospital. This project would indirectly benefit approximately two square miles upstream of the low point at Eugie Avenue and 59th Avenue by providing a dedicated outfall for stormwater flow into the ACDC. The project provides a permanent outfall to the ACDC that cannot be altered by re-development of surrounding properties that are currently used to convey the flow to the ACDC.				
Ancillary Benefits	**Low** **0-4**	**Med.** **5-8**	**High** **9-12**	7
This project will not only improve the drainage for the nearby intersections and an outfall, but will improve the traffic safety in a busy commercial area and allow rapid access of emergency vehicles to the Banner Thunderbird Hospital.				
Level of Partner(s) Participation	**<50%** **0-4**	**50%** **8**	**>50%** **12**	12
The projected cost for this segment of storm drain is $1,507,000. The City is proposing a 52/48 cost share (City being 52%).				
O&M Costs to the District	**High** **0**	**Low** **1-5**	**None** **6**	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Glendale will operate and maintain this segment of the storm drain system.				
Deferred			**Total**	**61**

ACDC ACCESS AT 59TH AVENUE SOUTH OF THUNDERBIRD ROAD

Project 6



Proposed Box Culvert

Floodplains

10-ft Topo. Contour

N

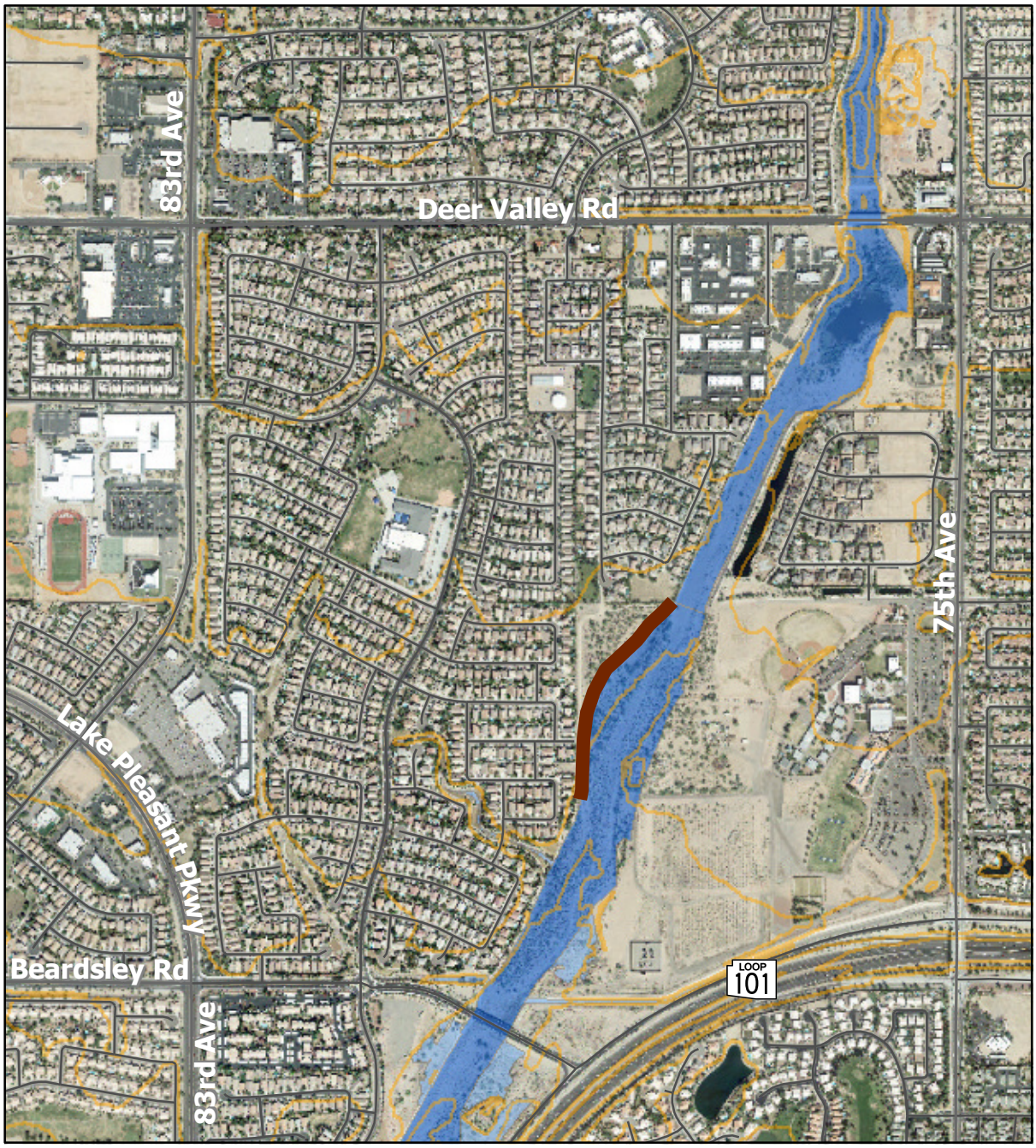
0 430 Feet

Project No.7 Name:	New River Channel, Bank, Fill & Erosion Control Improvements
Requested By:	City of Peoria
Project Description:	West channel, bank, fill, erosion control, maintenance road and landscape improvements to complete the remaining reach of New River halfway between Beardsley Road and Deer Valley Road, approximately 1600 linear feet.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** **0**	**Med.** **1-4**	**High** **5-12**	8
This project ranks 1 out of 1 for the City of Peoria. The estimated projected cost for this segment of Storm Drain is $3,000,000. City indicated that funding will span two fiscal years from 2017 to 2018 but did not identify the project in a program document.				
Flood Control/Drainage Master Plan Element	**Low** **0-4**	**Med.** **5-6**	**High** **7-8**	7
This reach of New River is a segment of channel and structural bank improvements as recommended by the Middle New River Watercourse Master Plan, March 1999 (MNRWCMP)				
Flooding Threat	**Low** **0-5**	**Med.** **6-12**	**High** **13-15**	5
Erosion protection of the west bank will sustain the 100-year flow within the river and eliminate the source of sediment contributed by adjacent floodplain areas not confined by the existing river banks. The proposed bank improvements will be the last remaining segment on Peoria's side.				
Level of Protection	**<10 yr** **0**	**10-50 yr** **3-7**	**>50 yr** **8-10**	9
This project will maintain the 100-year protection plus freeboard.				
Area Protected	**Low** **0-8**	**Med.** **9-16**	**High** **17-25**	4
Project will improve protection to existing adjacent residential and commercial developments by eliminating the potential for bank erosion. Improvements may potentially remove approximately 6-acres of property from the floodplain (5 -acres of which will be utilized for the trail system).				
Ancillary Benefits	**Low** **0-4**	**Med.** **5-8**	**High** **9-12**	6
Peoria's trail system will be extended an additional 1 1/4 mile connecting to the existing 10 mile long trail. Sediment control will be minimized.				
Level of Partner(s) Participation	**<50%** **0-4**	**50%** **8**	**>50%** **12**	12
The projected cost is estimated to be $3,000,000. The City is proposing a 67/33 cost share (City being 67%).				
O&M Costs to the District	**High** **0**	**Low** **1-5**	**None** **6**	6
The Flood Control District will not be responsible for the costs of operation or maintaining this project. The City of Peoria will be responsible for an O&M activities.				
Not Recommended			**Total**	**57**

NEW RIVER BANK PROTECTION AND EROSION CONTROL

Project 7



Proposed Bank and Erosion Control

10-ft Topo. Contour

Floodplains

Floodways

N

0 1,300 Feet

Project No.8 Name: Van Buren Street Storm Drain Project

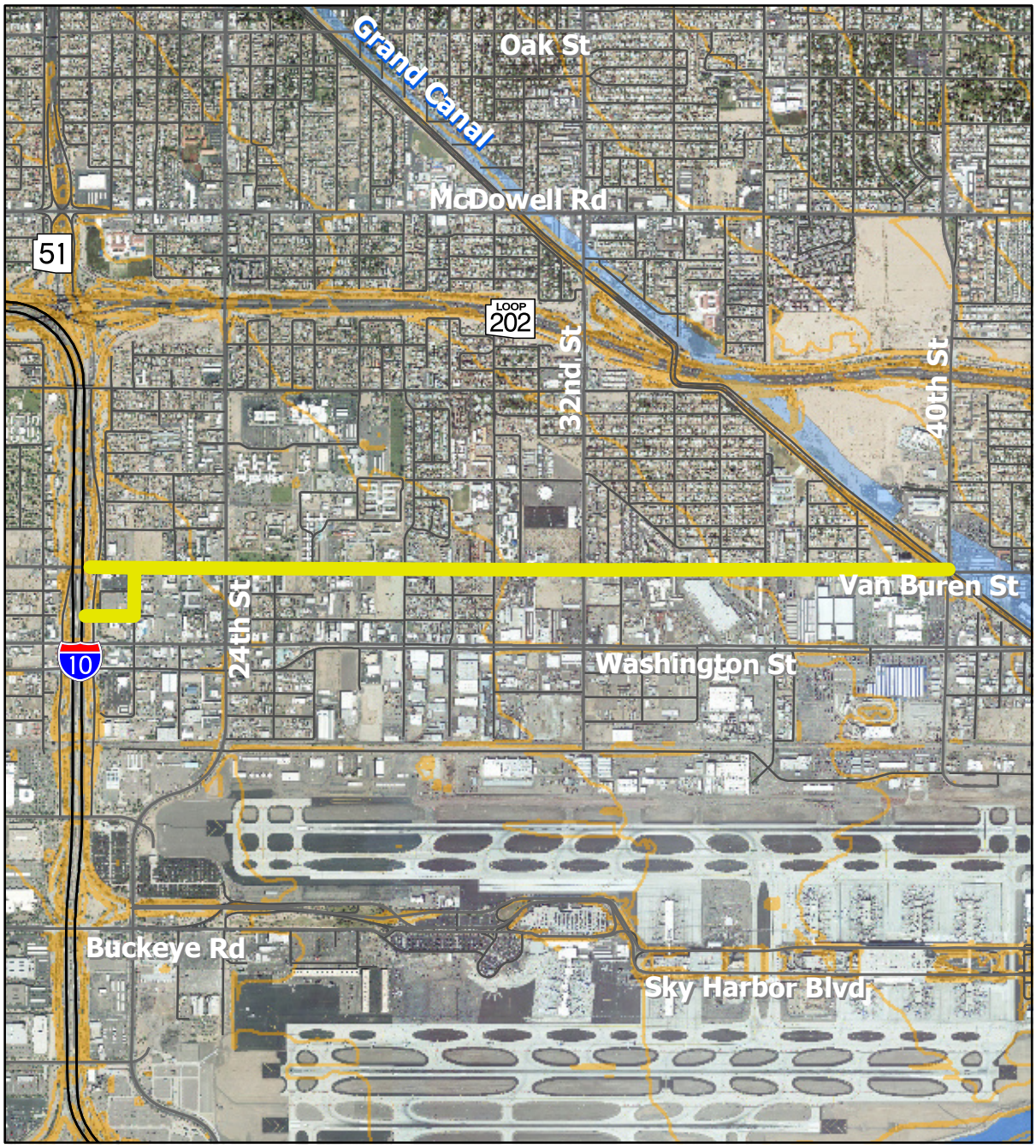
Requested By: City of Phoenix

Project Description: The proposed project will construct a storm drain along Van Buren Street from 40th Street and Interstate 10.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** **0**	**Med.** **1-4**	**High** **5-12**	2
This project ranks 1 out of 4 for the City of Phoenix. The estimated projected cost for this segment of Storm Drain is $19,400,000. City indicated that funding is not programmed or available. Project is out of the 5-year CIP.				
Flood Control/Drainage Master Plan Element	**Low** **0-4**	**Med.** **5-6**	**High** **7-8**	7
Project is identified in the Metro Phoenix Area Drainage Master Plan				
Flooding Threat	**Low** **0-5**	**Med.** **6-12**	**High** **13-15**	11
The general fall of the land is from the northeast to the southwest and includes primarily light residential, commercial and industrial developments. This project will empty the existing storm drains in 24th, 32nd and 40th Streets so that their capacity can be utilized to collect storm water runoff within Sky Harbor Airport.				
Level of Protection	**<10 yr** **0**	**10-50 yr** **3-7**	**>50 yr** **8-10**	4
10-year				
Area Protected	**Low** **0-8**	**Med.** **9-16**	**High** **17-25**	13
The watershed is from 40th Street to Interstate 10 and from Loop 202 to Van Buren Street. The drainage area is approximately 4 square miles.				
Ancillary Benefits	**Low** **0-4**	**Med.** **5-8**	**High** **9-12**	8
The Metro Light Rail near 40th Street & Washington/Jefferson Street will receive flood protection up to a 10-year rain event. Sky Harbor Airport will also benefited from the new storm drain.				
Level of Partner(s) Participation	**<50%** **0-4**	**50%** **8**	**>50%** **12**	8
The projected cost is estimated to be $19,400,000. The City is proposing a 50/50 cost share.				
O&M Costs to the District	**High** **0**	**Low** **1-5**	**None** **6**	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Phoenix will be responsible for an O&M activities.				
Not Recommended			**Total**	**59**

VAN BUREN STREET STORM DRAIN - 40TH STREET TO I-10

Project 8



Proposed Storm Drain

10-ft Topo. Contour

Floodplains

Floodways

N

0 2,800 Feet

Project No.9 Name: Thomas Road Storm Drain Project

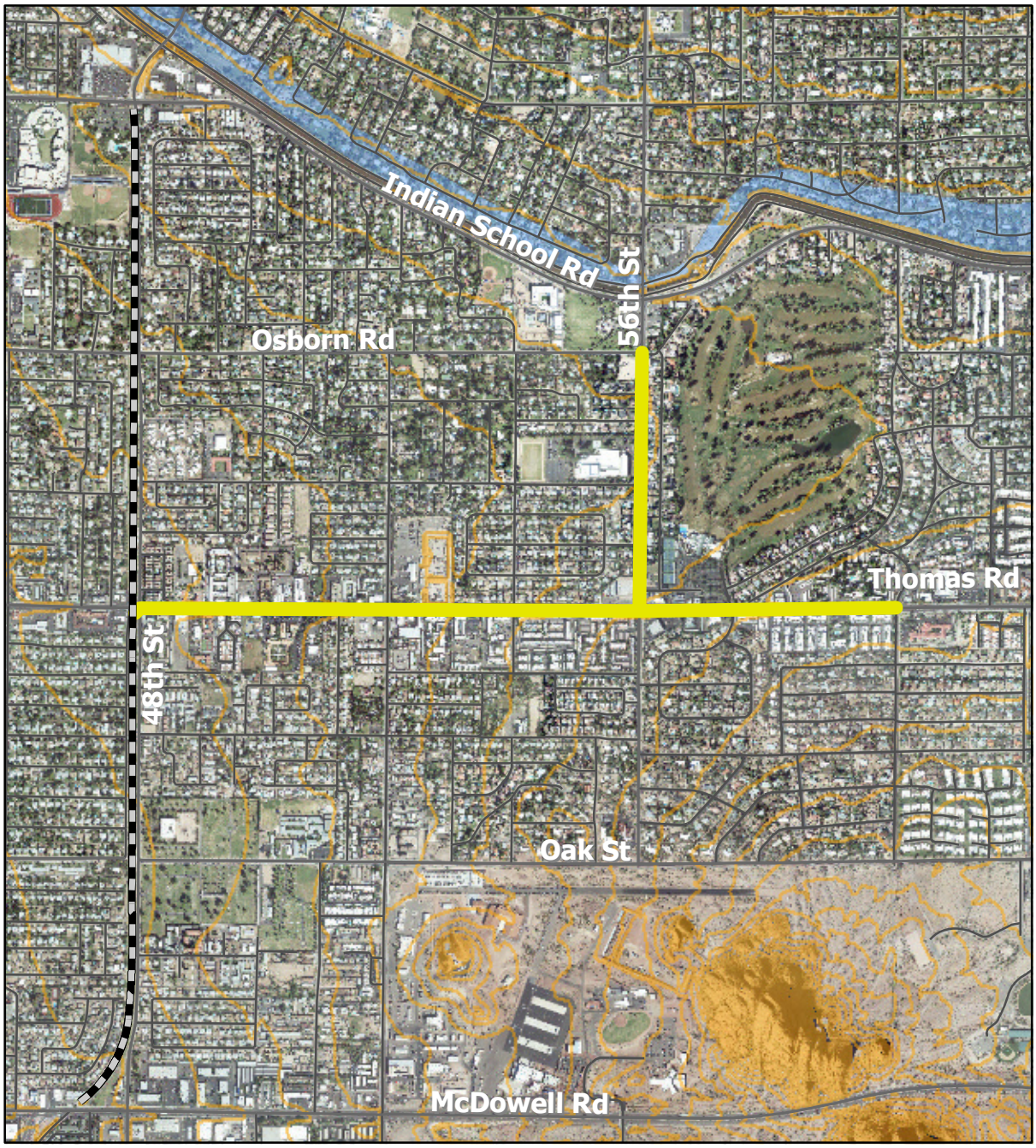
Requested By: City of Phoenix

Project Description: The proposed project will construct a storm drain along Thomas Road between 60th Street and Old Cross Cut Canal (OCCC) and discharge into the OCCC.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** **0**	**Med.** **1-4**	**High** **5-12**	3
This project ranks 2 out of 4 for the City of Phoenix. The estimated projected cost for this segment of Storm Drain is $10,700,000. City indicated that funding is not programmed or available. Project is out of the 5-year CIP.				
Flood Control/Drainage Master Plan Element	**Low** **0-4**	**Med.** **5-6**	**High** **7-8**	7
Project is identified in the Metro Phoenix Area Drainage Master Plan				
Flooding Threat	**Low** **0-5**	**Med.** **6-12**	**High** **13-15**	11
Stormwater flows off the Papago Buttes and flows north through the Arizona Country Club in an existing swale. The contributing watershed is the area north of the Papago Buttes and south of the Arizona Canal at Indian School Road between 48th and 60th Streets. The entire watershed is subject to sheet flows.				
Level of Protection	**<10 yr** **0**	**10-50 yr** **3-7**	**>50 yr** **8-10**	4
10-year				
Area Protected	**Low** **0-8**	**Med.** **9-16**	**High** **17-25**	12
The storm drain will provide protection to residential and commercial properties within the area between Indian School Road to the north, the Papago Buttes on the south and 60th Street to the east. Another storm drain will collect storm water along 56th Street via a lateral on 56th Street to Osborne Road.				
Ancillary Benefits	**Low** **0-4**	**Med.** **5-8**	**High** **9-12**	2
None				
Level of Partner(s) Participation	**<50%** **0-4**	**50%** **8**	**>50%** **12**	8
The project cost is estimated to be $10,700,000. The City is proposing a 50/50 cost share.				
O&M Costs to the District	**High** **0**	**Low** **1-5**	**None** **6**	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Phoenix will be responsible for an O&M activities.				
Not Recommended			**Total**	**53**

THOMAS ROAD STORM DRAIN PROJECT

Project 9



Proposed Storm Drain

Existing Infrastructure

10-ft Topo. Contour

Floodplains

N

0 2,000 Feet

Project No.10 Name: Central Avenue Storm Drain Project

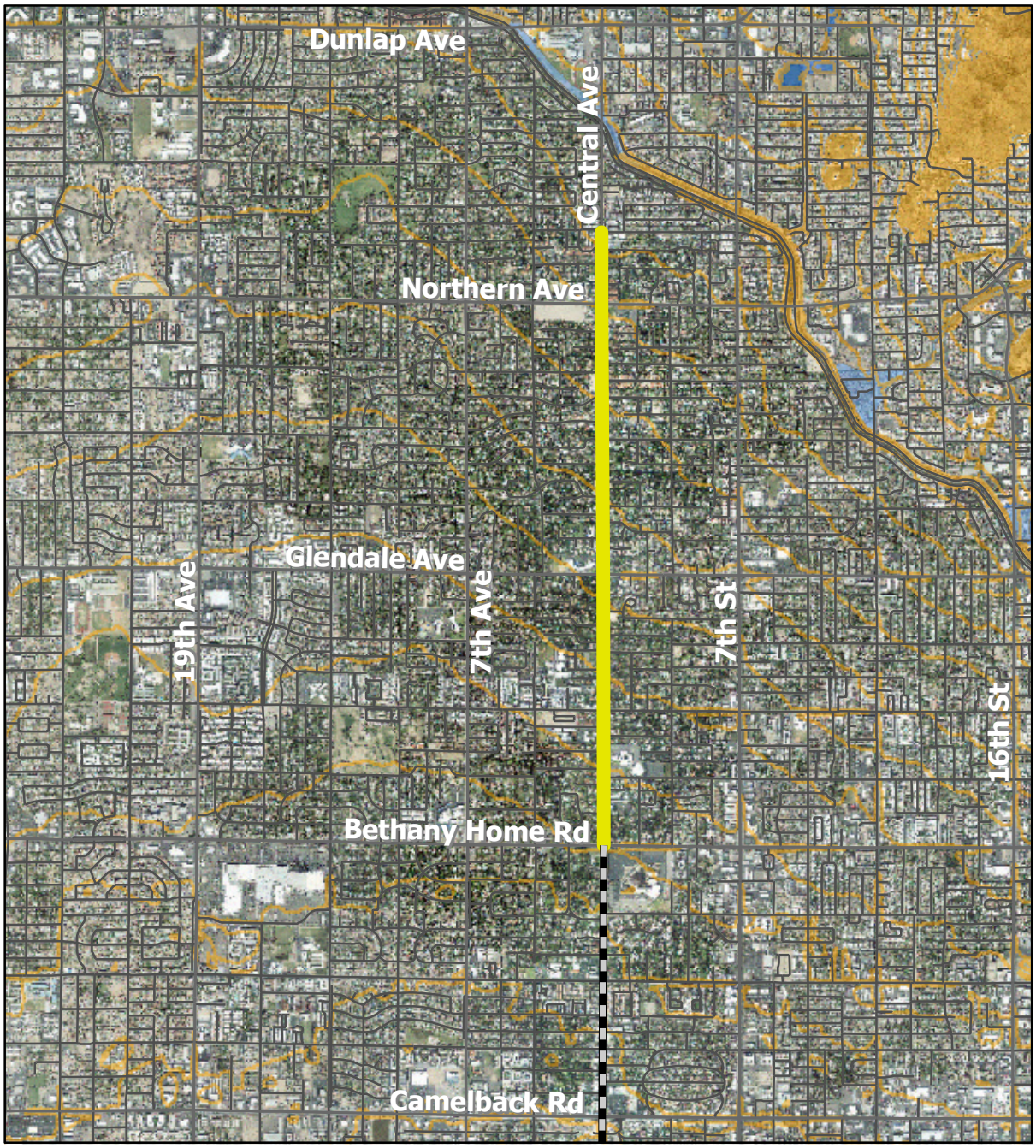
Requested By: City of Phoenix

Project Description: The project will design and construct a storm drain from Bethany Home Road to Griswold Road, extending the existing Central Avenue Storm Drain from Bethany Home Road.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	**Low** 0	**Med.** 1-4	**High** 5-12	2
This project ranks 3 out of 4 for the City of Phoenix. The estimated projected cost for this segment of Storm Drain is $8,200,000. City indicated that funding is not programmed or available. Project is out of the 5-year CIP.				
Flood Control/Drainage Master Plan Element	**Low** 0-4	**Med.** 5-6	**High** 7-8	7
Project is identified in the Metro Phoenix Area Drainage Master Plan				
Flooding Threat	**Low** 0-5	**Med.** 6-12	**High** 13-15	9
The watershed boundary is from 7th Street to Central Avenue from the Arizona Canal to Bethany Home Road and is subject to sheet flows.				
Level of Protection	**<10 yr** 0	**10-50 yr** 3-7	**>50 yr** 8-10	0
2-year				
Area Protected	**Low** 0-8	**Med.** 9-16	**High** 17-25	11
Project is in a residential area and will collect stormwater that flows from the east to the west across Central Avenue from Bethany Home Road north 2 1/2 miles to Griswold Road.				
Ancillary Benefits	**Low** 0-4	**Med.** 5-8	**High** 9-12	5
Preserving the historic character of the Central corridor area and Murphy Bridle path.				
Level of Partner(s) Participation	**<50%** 0-4	**50%** 8	**>50%** 12	8
The project cost is estimated to be $8,200,000. The City is proposing a 50/50 cost share.				
O&M Costs to the District	**High** 0	**Low** 1-5	**None** 6	6
The Flood Control District will not be responsible for the costs of operation or maintaining this segment of this storm drain system. The City of Phoenix will be responsible for an O&M activities.				
Not Recommended			**Total**	**48**

CENTRAL AVENUE STORM DRAIN

Project 10



Proposed Storm Drain

Existing Infrastructure

10-ft Topo. Contour

Floodplains

Floodways

N

0 3,800 Feet

Project No.11 Name: Pecos Basin Outfall Project

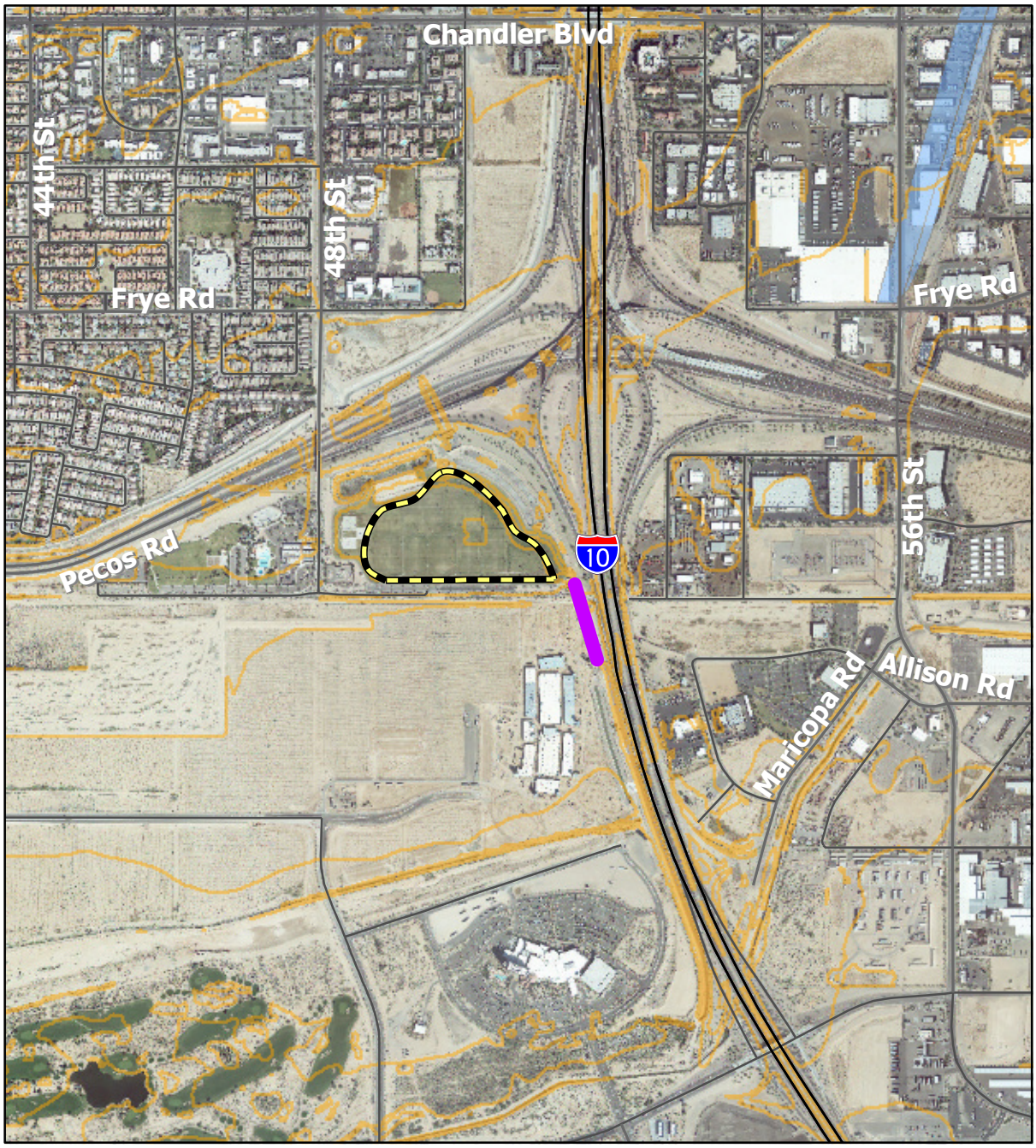
Requested By: City of Phoenix

Project Description: Construction of an outfall for the existing Pecos Basin near the intersection of State Route 202 (SR202) and 48th Street.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	Low 0	Med. 1-4	High 5-12	2
This project ranks 4 out of 4 for the City of Phoenix. The estimated projected cost for this segment of Storm Drain is $2,000,000. City indicated that funding is not available in the current 5-year CIP program.				
Flood Control/Drainage Master Plan Element	Low 0-4	Med. 5-6	High 7-8	5
The Pecos Basin project was completed in 2001 and is within the Foothills ADMP prepared by the City.				
Flooding Threat	Low 0-5	Med. 6-12	High 13-15	7
There is currently no outfall for the existing Pecos Basin. Without an outfall for the basin, the southern edge of the park acts as an overflow weir during a high storm event. The intersection of Chandler Blvd. & 48th Street experiences significant flooding after these storm events. Per the existing IGA, the City is responsible for providing an outfall and coordinating with the GRIC.				
Level of Protection	<10 yr 0	10-50 yr 3-7	>50 yr 8-10	3
None, provides an outfall to an existing basin owned and maintained by the City.				
Area Protected	Low 0-8	Med. 9-16	High 17-25	5
The outfall will provide no area protection. It will just drain the basin. Per the existing IGA, the City is responsible for providing an outfall and coordinating with the GRIC.				
Ancillary Benefits	Low 0-4	Med. 5-8	High 9-12	5
Basin currently acts as a multi-use facility.				
Level of Partner(s) Participation	<50% 0-4	50% 8	>50% 12	8
The project cost is estimated to be $2,000,000. The City is proposing a 50/50 cost share.				
O&M Costs to the District	High 0	Low 1-5	None 6	6
Per the IGA of the project, City is to own and maintain the basin and be responsible for any future improvements.				
Not Recommended			**Total**	**41**

PECOS BASIN OUTFALL

Project 11



Proposed Outlet Pipe

Existing Basin

10-ft Topo. Contour

Floodplains

N

0 1,750 Feet