



Capital Improvement Program Prioritization Procedure

For Fiscal Year 2021

Administrative edits to this document may be authorized by the Director or Chief Engineer and General Manager of the Flood Control District of Maricopa County under the authority granted by Resolution FCD 2015R005.

Capital Improvement Program Prioritization Procedure

Purpose of the Procedure

In accordance with Flood Control District of Maricopa County (District) Resolutions 2010R008 and 2015R005, 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 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 six steps:

- Project submittal by requesting agencies;
- Submittal review and evaluation for recommendation by the District’s Prioritization Evaluation Committee (PEC), which is comprised of: PPM Division Manager, Project Management Branch Manager, O&M Division Manager, Floodplain Permitting Division Manager, Policy, Planning and Coordination Branch Manager, Civil/Structures Branch Manager, Senior Engineering Advisor, and LA&WC Branch Manager;
- Recommendation by the District’s Director or 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 who enter into IGA’s and have project funding.

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, for the applicable FY (this document).

Submittals must 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 potential 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, 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 second Friday in July.

Maintenance and Safety Improvements to Existing District Structures Not Previously Prioritized

Necessary improvements to existing District structures occasionally take the form of capital projects. Preserving the integrity of structures operated and maintained by the District is the District's responsibility and its highest priority; so evaluation of these projects by the PEC is typically unnecessary. As such, the District's Director or Chief Engineer and General Manager may, at their discretion, independently recommend these projects for inclusion in the Capital Improvement Program. Projects recommended by this method will be documented as "recommended" under the annual Capital Improvement Program Prioritization Procedure and, through the Resolution review process, will ultimately be submitted to the FCAB for endorsement and to the District's Board of Directors for approval.

Recommendation Reversals

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.

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 Director or 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 projects 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.

Prioritization 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 FCD or Agency's 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?
- "Grant Funding" (e.g., Two additional points may be earned from the above three sub-criteria if funding in whole or in part for the project will be through a third party "Grant Funding" source.)

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. 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.

3. Flooding Threat (15 Points)

Existing threats to property (excluding roadways) that will be mitigated by the proposed project. Fewer points will be awarded to those projects that are intended to resolve flooding threat issues caused by inadequate regulation by the requesting agency. The submittal should answer some or all of these questions:

- 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 current 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:

- Water conservation/recharge opportunities (e.g., Three additional points may be earned by other identified ancillary benefits, if one of the following is applicable: Will promote the efficient reuse of storm water? Work to sustain or increase ground water levels? Improve aquifer quality?;

- Low Impact Development (LID) (e.g., Two additional points may be earned by other identified ancillary benefits, if the project will include alternative stormwater management techniques green stormwater infrastructure, low impact development methods or features.)
- Community Economic Impacts (e.g., Two additional points 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?);
- 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?; Does the design intent include disturbance mitigation elements and landscape restoration techniques that are regional in nature and compatible with existing native Sonoran Desert biomes?);
- 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, infiltration or direct recharge), support for alternative forms of transportation such as multi-use trails and bike paths, support for both passive and active recreation opportunities, restoration of riparian and native desert 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, improved shade and tree canopy/reductions in impervious surfaces, and opportunities for conservation education within the community;

7. 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. Preference is given to projects with maximum external agency participation. 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).

8. 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 7-9 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: Kim Belt, CPM, 602-506-3639

Prioritization Evaluation Committee Chairman: Patrick Schafer, P.E., 602-506-2206

For questions concerning flood control studies, planning or floodplain delineation requests:

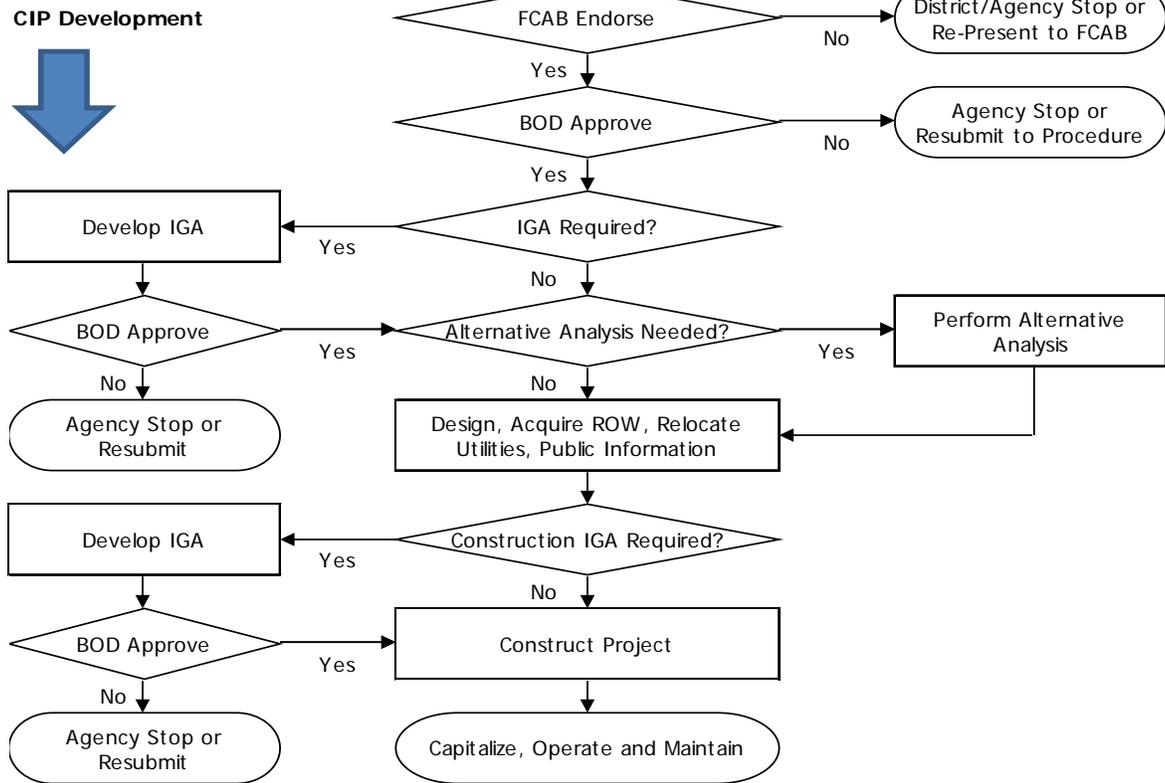
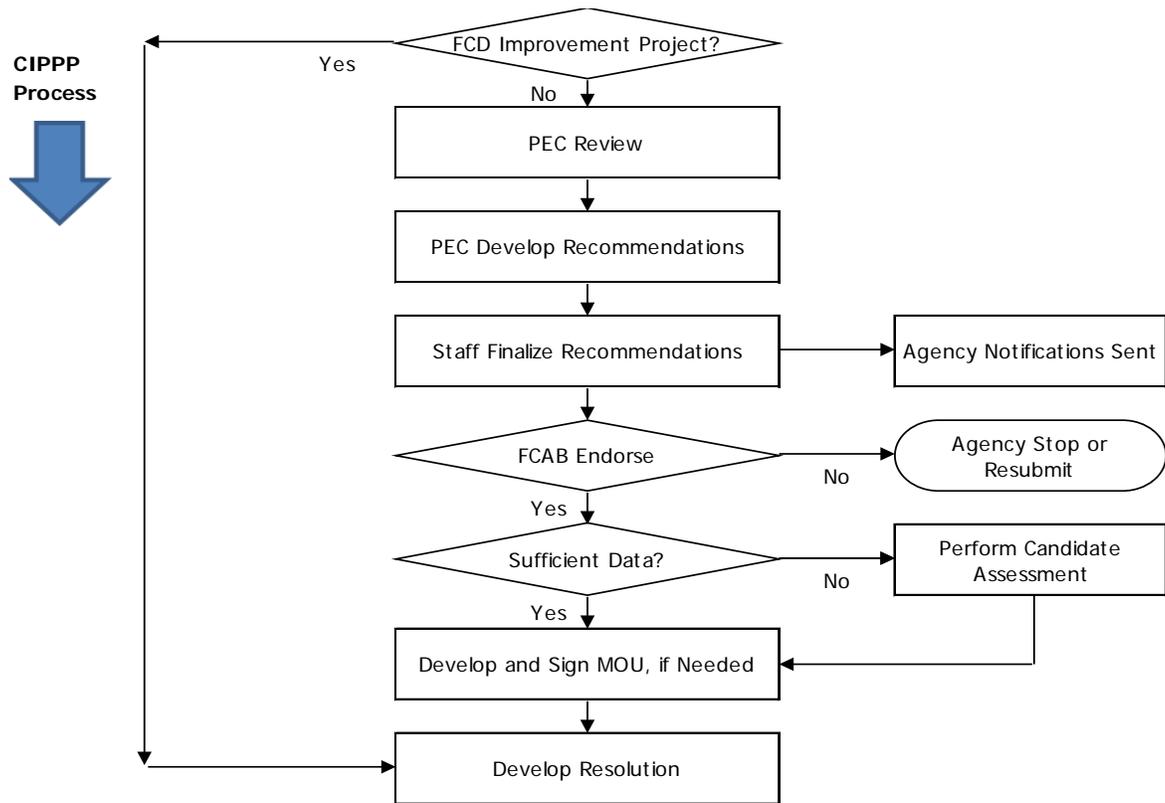
Planning Branch Manager: Hasan Mushtaq, P.E., 602-506-2929

Floodplain Permitting Division Manager: Catherine Regester, P.E., 602-506-4001

Fiscal Year 2021 Prioritization Procedure Schedule

May 10, 2019	Agency Notices Mailed
July 12, 2019	Agency Proposals Submittal Deadline
August, 2019	Evaluation Committee Review and Evaluation
August, 2019	Evaluation Committee Recommendations to Director
September, 2019	FCAB Program and Budget Committee Review
September, 2019	District Recommendations Forwarded to Agencies
October 23, 2019	District Recommendations Presented to the FCAB for Action
December, 2019	Prioritization Procedure Results Published
February, 2020	Proposed FY 2021 - 2025 CIP Presented to FCAB for Endorsement
March, 2020	Proposed FY 2021 - 2025 CIP Forwarded to County Management & Budget

CIPPP Process Flowchart



Prioritization Procedure Distribution List

Name	Position	Agency
Mr. Neil Wentz	Deputy Base Civil Engineer, Luke AFB	Department of the Air Force
Mr. Randy Everett	Central District Senior Division Administrator	Arizona Department of Transportation
Mr. David Janover	City Engineer	City of Avondale
Mr. Scott Zipprich	City Engineer	City of Buckeye
Mr. W. T. Gladden	President	Buckeye Water Cons. and Drainage District
Mr. Gary Neiss	Town Administrator	Town of Carefree
Mr. Hal Marron	Town Engineer	Town of Cave Creek
Mr. John Knudson	Public Works Director	City of Chandler
Mr. Jorge Gastelum	City Engineer	City of El Mirage
Ms. Bernadine Burnette	President	Fort McDowell Indian Community
Mr. Randy Harrel	Town Engineer	Town of Fountain Hills
Ms. Kathy Valenzuela	Interim Town Manager	Town of Gila Bend
Mr. Errol Blackwater	Director- Department Land & Water	Gila River Indian Community
Mr. Tom Condit	Town Engineer	Town of Gilbert
Mr. David Beard	Engineering Director	City of Glendale
Ms. Rebecca Zook	Director of Engineering	City of Goodyear
Mr. Jeff Kulaga	Town Manager	Town of Guadalupe
Mr. Bill Stephens	City Manager	City of Litchfield Park
Mr. Jennifer Toth	Director	Maricopa County Department of Transportation
Mr. Chuck Williams	Capital Improvement Program Manager	Maricopa County Department of Transportation
Mr. Lance Webb	Supervising Engineer	City of Mesa
Mr. Paul Mood	Town Engineer	Town of Paradise Valley
Ms. Adina Lund	Engineering Director	City of Peoria
Mr. Kevin Burke	Public Works-Utilities Director	City of Peoria
Mr. Ray Dovalina, Jr.	Assistant Public Works Director/Flood Plain Admin.	City of Phoenix
Mr. Troy White	Public Works Director	Town of Queen Creek
Mr. Shane Leonard	General Manager	Roosevelt Water Conservation District
Mr. Kyle Tilghman	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 Gent	Public Works Director	City of Surprise
Ms. Marilyn DeRosa	Deputy Public Works Director/City Engineer	City of Tempe
Mr. Reyes Medrano Jr.	City Manager	City of Tolleson
Mr. Vincent Lorefice	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 2020/2021 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	Narramore Road at Waterman Wash	MCDOT (1)	Narramore Road Crossing Waterman Wash between Dean Road and Airport Road east of Buckeye.	Narramore Road is the only access to a community of 130 developed properties west of Waterman Wash. The community gets cut off frequently during winter and monsoon storms with no alternative access. The project will provide for a 2-lane bridge accommodating the 100-year storm event.	\$1,750,000	\$ -	\$1,750,000	\$3,500,000	Deferred for further analysis and resubmittal.
2	Sun City West Canal Crossings	MCDOT (2)	Seven Canal Crossings locations. Conquistador Dr and Allegro Dr (E); Conquistador Dr and Allegro Dr (W); Spanish Garden Dr and 132nd Ave; Beardsley Rd and 125th Ave; Wildwood Dr and 126th Ave; Conquistador Dr and Regal Dr; Buntline Dr and Desert Glen Dr	(Sun City West Canal Crossings) project evaluated 36 FCDMC crossings within Sun City West to determine the appropriate treatment needed to meet current design standards. The seven locations identified include box culvert extensions. Requesting participation for design and construction.	\$400,000		\$400,000	\$800,000	Not Recommended.
3	Glenn Dr. Storm Drain Improvements: N. 59th Ave. to N. 52nd Ave.	Glendale	Within the public right-of-way on Glenn Dr. from N 59th Ave. to N 52nd Ave.	Preliminary Drainage Report, Drainage Design and Construction of storm sewer infrastructure to take excess storm flows from Properties along Glenn Dr. to N 59th Ave. into an existing regional 78-inch storm sewer.	\$3,150,000		\$2,100,000	\$5,250,000	Recommended.
4	Golden Eagle Park Dam Area: Drainage Improvement Project	Fountain Hills	Golden Eagle Park Dam and adjoining areas.	Upgrade perimeter channels and structures to protect recreational facilities and garage/storage basement from 10-year storm, within and adjacent to an existing dam.	\$410,000	\$ -	\$410,000	\$820,000	Deferred for further analysis and resubmittal.
					\$ 5,710,000	\$ -	\$ 4,660,000	\$ 10,370,000	

Table Two: FY 2020/2021 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
3	Glenn Dr. Storm Drain: N. 59th Ave to N. 52nd Ave.	Glendale (1)	75	\$ 2,100,000	\$ 5,250,000	Recommended.

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
2	Sun City West Canal Crossings	MCDOT (2)	31	\$ 400,000	\$ 800,000	Not Recommended.

Table 2C: Projects Deferred for Further Analysis

No.	Project Name	Sponsor (Priority)	PEC Ave. Score	District Cost	Est. Total Cost	PEC Recommendation
1	Narramore Road at Waterman Wash	MCDOT (1)	59.75	\$ 1,750,000	\$ 3,500,000	Deferred for further analysis and resubmittal.
4	Golden Eagle Park Dam Area: Drainage Improvement Project	Fountain Hills	59	\$ 410,000	\$ 820,000	Deferred for further analysis and resubmittal.

Table Three: Previously-Recommended Projects yet to be Implemented

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	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 Drainage Improvements - 89th Avenue to Agua Fria River	Peoria	Awaiting IGA and partner funding	71	\$ 7,000,000	\$ 14,000,000
2008	Pecos North and South Detention Basins	Mesa	ADMP Update in progress.	64	\$ 11,625,000	\$ 15,500,000
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	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
2015	Loma Vista Corridor Drainage Improvements	Tempe	LID Study is in progress	75	\$ 2,002,500	\$ 2,670,000
2019	Cheney Improvement Area	Paradise Valley	Awaiting IGA and partner funding	63	\$ 3,715,000	\$ 7,430,000

*Costs are estimates from original submittals.

\$ 117,385,140 \$ 295,025,384

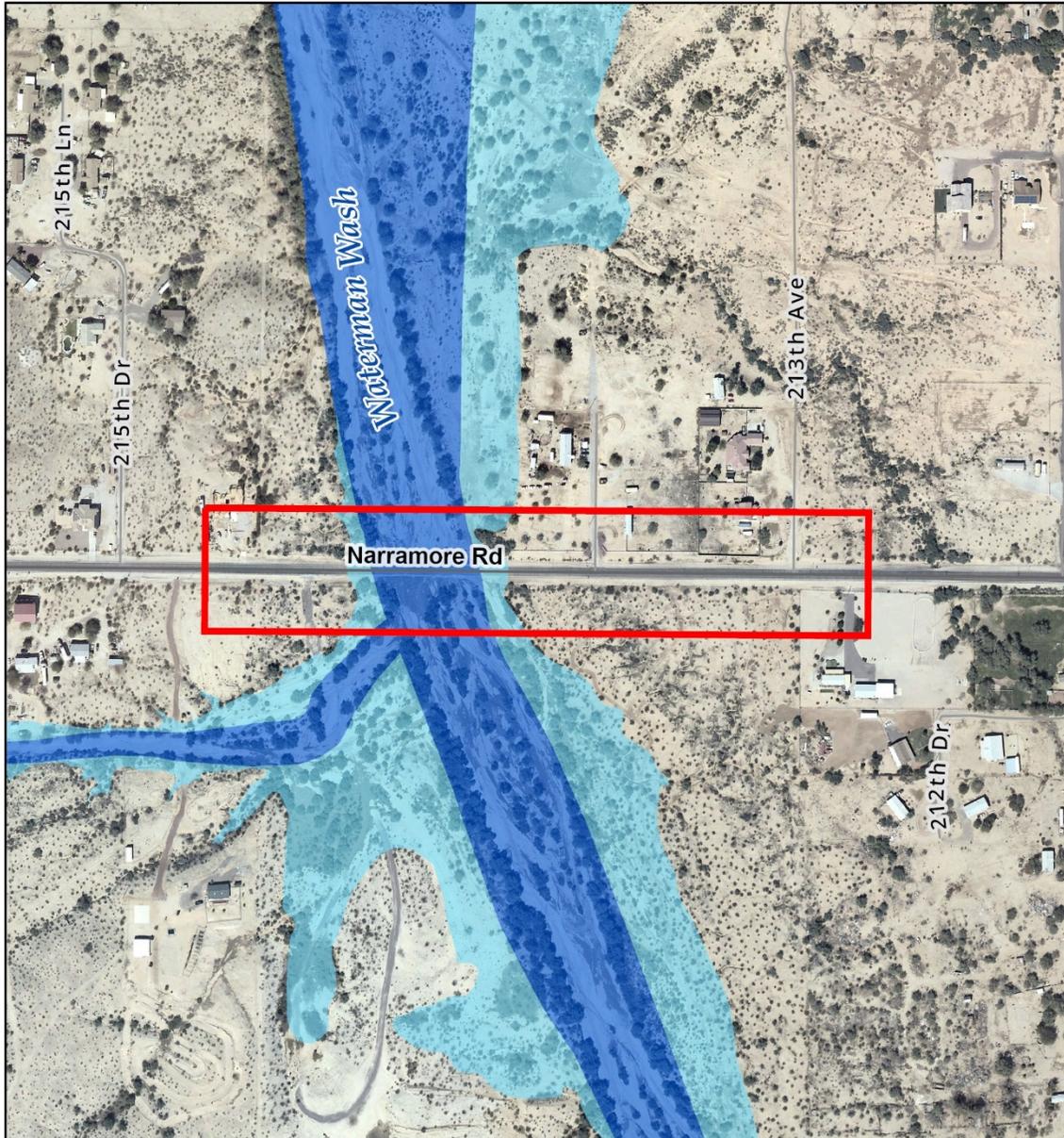
Table Four: Maintenance and Safety-Related Modifications to District Structures Recommended by the Chief Engineer and General Manager of the District

Year	Project Name	Summary	Resolution
2019	Sun City Drains	2019 field inspections identified deficiencies with the channel lining, the ramps, and access for maintenance.	N/A

Project No.1 Name:	Narramore Road at Waterman Wash			
Requested By:	MCDOT			
Project Description:	Narramore Road is the only access to a community of 130 developed properties west of Waterman Wash. The community gets cut off frequently during winter and monsoon storms with no alternative access. The project will provide for a 2-lane bridge accommodating the 100-year storm event.			
Factor	Range			PEC Points
Funding Commitment and Agency Priority	<u>Low</u> 0	<u>Med.</u> 1-4	<u>High</u> 5-12	8.625
This project ranks 1 out of 1 for MCDOT. The total project cost is estimated to be \$3,500,000. MCDOT proposes to be responsible for 50% of project costs. Project is proposed/funded in MCDOT's TIP.				
Flood Control/Drainage Master Plan Element	<u>Low</u> 0-4	<u>Med.</u> 5-6	<u>High</u> 7-8	4.875
The Narramore Road at Waterman Wash project is a recommended regional capital improvement project identified in the Rainbow Valley Area Drainage Master Plan, 2010.				
Flooding Threat	<u>Low</u> 0-5	<u>Med.</u> 6-12	<u>High</u> 13-15	6.75
The objectives of the project include providing access to a community of 130 developed properties west of Waterman Wash. The community gets cut off frequently during winter and monsoon storms.				
Level of Protection	<u><10 yr</u> 0	<u>10-50 yr</u> 3-7	<u>>50 yr</u> 8-10	6.625
The project will provide for a 100-year level of protection.				
Area Protected	<u>Low</u> 0-8	<u>Med.</u> 9-16	<u>High</u> 17-25	9.875
The objectives of the project include providing access to a community of 130 developed properties west of Waterman Wash. The community gets cut off frequently during winter and monsoon storms. The crossing serves approximately 250 parcels with 130 parcels developed.				
Ancillary Benefits	<u>Low</u> 0-4	<u>Med.</u> 5-8	<u>High</u> 9-12	9
By providing safe access to a community of 130 developed properties to include ingress and egress of emergency personnel/vehicles.				
Level of Partner(s) Participation	<u><50%</u> 0-4	<u>50%</u> 8	<u>>50%</u> 12	8
The total project cost is estimated to be \$3,500,000. MCDOT is proposing a 50/50 cost share (50% MCDOT and 50% FCD). FCD's total estimated cost share would be \$1,750,000.				
O&M Costs to the District	<u>High</u> 0	<u>Low</u> 1-5	<u>None</u> 6	6
Any costs associated with the operation and maintenance of the proposed improvements will be provided by MCDOT. Maintenance costs for MCDOT will significantly decrease with implementation of this project.				
Committee Recommendation: Deferred			Total	59.75

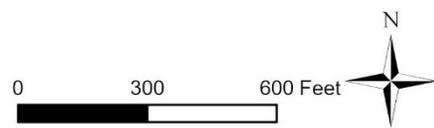
NARRAMORE ROAD AT WATERMAN WASH

Project 1



-  Narramore Road at Waterman Wash
-  Floodway
-  Floodplain

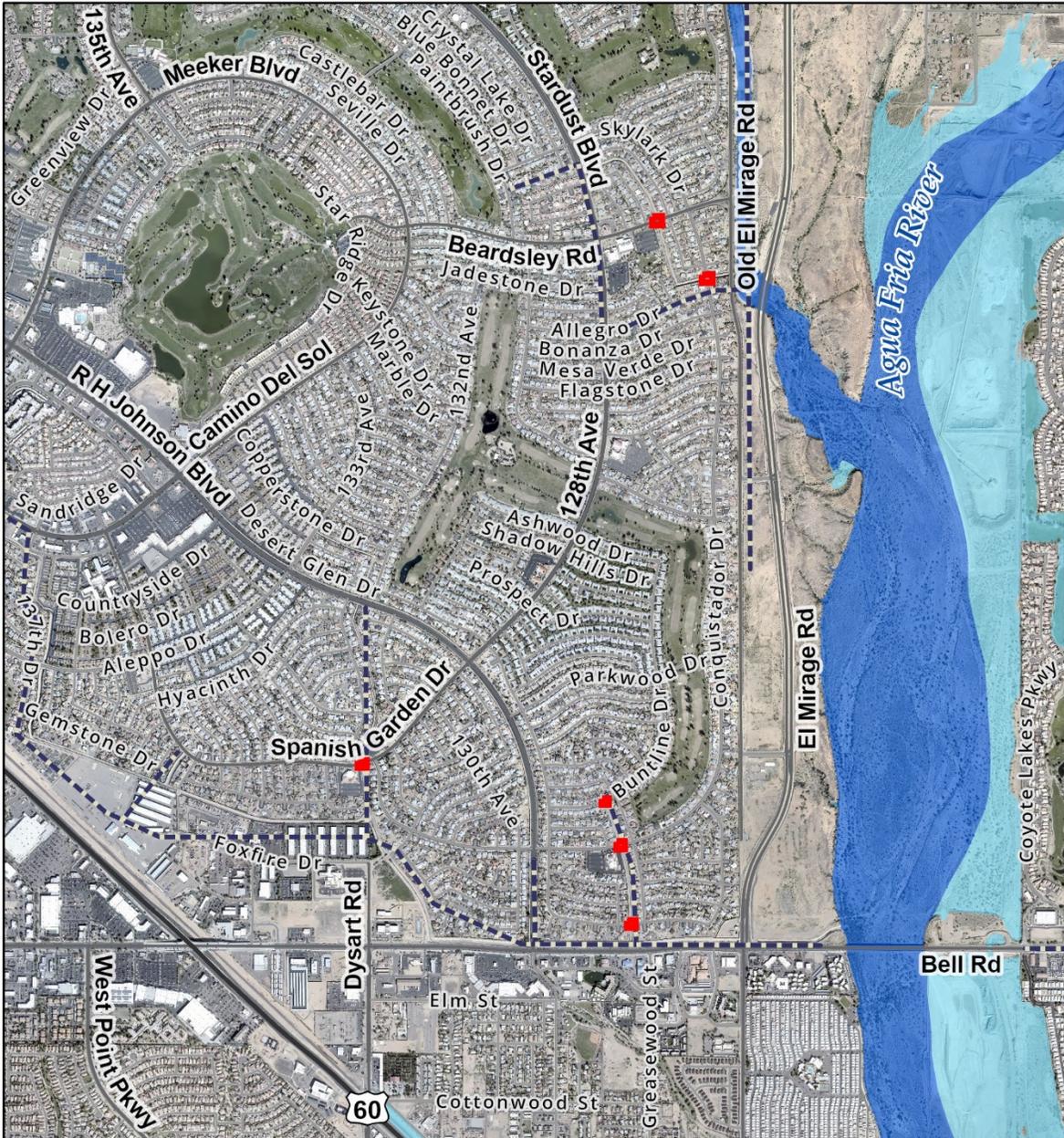
Aerial Photography - Fall 2018



Project No.2 Name:	Sun City West Canal Crossings			
Requested By:	MCDOT			
Project Description:	The Sun City West Canal Crossings project evaluated 36 FCDMC crossings within Sun City West to determine the appropriate treatment needed to meet current design standards. The seven locations identified include box culvert extensions. Requesting participation for design and construction.			
Factor	Range			PEC Points
Funding Commitment and Agency Priority	<u>Low</u> 0	<u>Med.</u> 1-4	<u>High</u> 5-12	5.625
This project ranks 2 out of 2 for MCDOT. The total project cost is estimated to be \$800,000 and funding is currently identified in MCDOT's TIP.				
Flood Control/Drainage Master Plan Element	<u>Low</u> 0-4	<u>Med.</u> 5-6	<u>High</u> 7-8	1.125
N/A.				
Flooding Threat	<u>Low</u> 0-5	<u>Med.</u> 6-12	<u>High</u> 13-15	1.25
None. MCDOT has conducted an assessment of the Sun City West area to identify locations where Flood Control District channels cross MCDOT Roadways and clear zone protection is in place, missing, or nonstandard. Ultimately 7 locations were identified, a majority of which were in residential area with older and retired members.				
Level of Protection	<u><10 yr</u> 0	<u>10-50 yr</u> 3-7	<u>>50 yr</u> 8-10	0
N/A.				
Area Protected	<u>Low</u> 0-8	<u>Med.</u> 9-16	<u>High</u> 17-25	3.25
Sun City.				
Ancillary Benefits	<u>Low</u> 0-4	<u>Med.</u> 5-8	<u>High</u> 9-12	7.125
Provide protection for older and retired residents driving over MCDOT/FCD structures.				
Level of Partner(s) Participation	<u><50%</u> 0-4	<u>50%</u> 8	<u>>50%</u> 12	8.5
The projected cost for this project is \$800,000. MCDOT is proposing a 50/50 cost share where MCDOT will provide 50% of the funding.				
O&M Costs to the District	<u>High</u> 0	<u>Low</u> 1-5	<u>None</u> 6	4.25
The Flood Control District will be responsible for the costs of operation or maintenance of FCD structures not MCDOT structures.				
Committee Recommendation: Not Recommended			Total	31

SUN CITY WEST CANAL CROSSINGS

Project 2



-  Sun City West Canal Crossings
-  Existing Infrastructure
-  Floodway
-  Floodplain

Aerial Photography - Fall 2018

0 1,500 3,000 Feet



Project No.3 Name: Glenn Dr. Storm Drain: N. 59th Ave to N. 52nd Ave.
Requested By: City of Glendale
Project Description: Preliminary Drainage Report, Drainage Design and Construction of storm sewer infrastructure to take excess storm flows from Properties along Glenn Ave. to N 59th Ave. into an existing regional 78-inch storm sewer.

Factor	Range			PEC Points
Funding Commitment and Agency Priority	<u>Low</u> 0	<u>Med.</u> 1-4	<u>High</u> 5-12	11

This project ranks 1 out of 1 for Glendale. Funding is available in the City's proposed CIP. The estimated projected cost for this project is \$5,250,000.

Flood Control/Drainage Master Plan Element	<u>Low</u> 0-4	<u>Med.</u> 5-6	<u>High</u> 7-8	7.625
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Glenn Dr. Storm Drain project is specified in the "Glendale Area Stormwater Management Plan –Recommended Stormwater Master Plan" (Master Plan), prepared by Kimley-Horn and Associates, Inc., July 2011.

Flooding Threat	<u>Low</u> 0-5	<u>Med.</u> 6-12	<u>High</u> 13-15	12.375
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Portions of downtown Glendale have experienced flooding for years as flows from at least one square mile, according to the Master Plan (zoned both residential and business), flow into an existing 24-in storm sewer in Glendale Ave., which is undersized due to a plethora of utilities in the existing right-of-way. Flooding in the project vicinity occurs with a 24-hr event equaling a total of 0.94 in. According to the District records (Attachment 5). Flooding occurs along Glenn Dr., at the Glendale Parking Structure entrance, Murphy Park, and Velma Teague Library. Various businesses along N. 58th Avenue and the alley between N. 58th Ave. and N. 57th Dr.

Level of Protection	<u><10 yr</u> 0	<u>10-50 yr</u> 3-7	<u>>50 yr</u> 8-10	3.875
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The Project is anticipated to provide a 10-year level of protection.

Area Protected	<u>Low</u> 0-8	<u>Med.</u> 9-16	<u>High</u> 17-25	16.5
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The amount of benefitted buildings and public areas that are not located in the delineated floodplain include the various shops located in the Glendale Historic District, Velma Teague Library, Glendale City Hall and Council Chambers, and City parking garage. Murphy Park would benefit the visitors to the park during city events. Murphy Park has several public events throughout the year where it is heavily used by the public. The events includes Glendale Glitters, Glitter and Glow, Glendale Chocolate Affair, Movies by Moonlight, Touch a Truck, Folk & Heritage Festival and the Summer Band Concert Series.

Ancillary Benefits	<u>Low</u> 0-4	<u>Med.</u> 5-8	<u>High</u> 9-12	5.875
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The ancillary benefit includes infiltration of the water via percolation into the soil at the bottom of the basin.

Level of Partner(s) Participation	<u><50%</u> 0-4	<u>50%</u> 8	<u>>50%</u> 12	11.75
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The City of Glendale will provide 60% of the funds with the District providing of the 40% funds. Project costs include preliminary design, design, necessary utility relocations, storm drain construction and construction management. Glendale will work to secure any required easement (TCE's, access agreements, etc.) needed for construction and program funds for the years matched by the District.

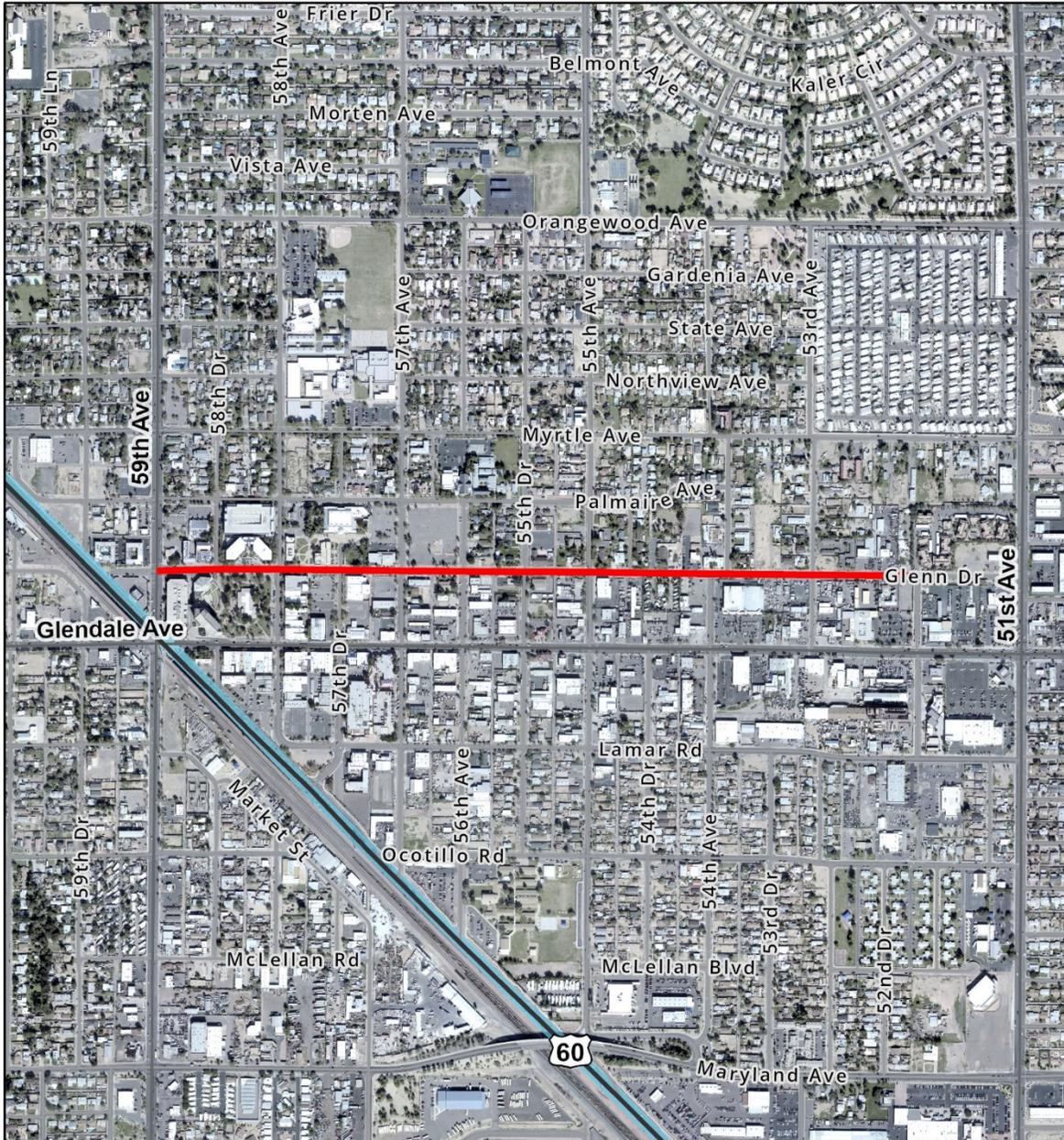
O&M Costs to the District	<u>High</u> 0	<u>Low</u> 1-5	<u>None</u> 6	6
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Upon completion of the project Glendale will take over operation and maintenance of the improvements.

Committee Recommendation: Recommended				Total	75
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GLENN DR. STORM DRAIN IMPROVEMENTS: N. 59TH AVE. TO N. 52ND AVE.

Project 3



— Glenn Dr. Storm Drain Improvements: N. 59th Ave. to N. 52nd Ave.

— Floodplain

Aerial Photography - Fall 2018

0 500 1,000 Feet



Project No.4 Name:	Golden Eagle Park Dam Area Drainage Improvements Project			
Requested By:	Town of Fountain Hills			
Project Description:	Upgrade perimeter channels and structures to protect recreational facilities and garage/storage basement from 10-year storm, within and adjacent to an existing dam.			
Factor	Range			PEC Points
Funding Commitment and Agency Priority	<u>Low</u> 0	<u>Med.</u> 1-4	<u>High</u> 5-12	10.375
This project ranks 1 out of 1 for Town of Fountain Hills. Funding is available in the town's proposed CIP. The estimated projected cost for this project is \$820,000.				
Flood Control/Drainage Master Plan Element	<u>Low</u> 0-4	<u>Med.</u> 5-6	<u>High</u> 7-8	5.625
The proposed project enhances the long-term continued functioning of the Golden Eagle Park Dam (modified by the FCDMC during 2000-2001) by improving sediment conveyance through the flood pool during frequent events, thereby reducing maintenance costs. As noted above, Golden Eagle Park Dam and its impoundment area form an integral part of the Town's flood control system. Re-delineation of Ashbrook Wash/Cloudburst Wash through the Dam (prepared by JE Fuller for FCD and the Town) is currently submitted for FEMA review/approval.				
Flooding Threat	<u>Low</u> 0-5	<u>Med.</u> 6-12	<u>High</u> 13-15	8
This project addresses the known, existing dam impoundment area flooding problems due to relatively frequent storm events, at Golden Eagle Park (which lies within the Dam impoundment area) and nearby channel areas. Photos of the October 2, 2018 inundation at the Park due to Tropical Storm Rosa (a 5-10 year storm event) are attached. Damage to Park facilities is an ongoing maintenance problem for the Town. Preliminary modelling indicates that Park facilities will be damaged at storms that exceed a 2-year event				
Level of Protection	<u><10 yr</u> 0	<u>10-50 yr</u> 3-7	<u>>50 yr</u> 8-10	4.625
The Project is anticipated to provide a 100-year level of protection for habitable buildings. mpoundment area channels, local drainage facilities (catch basins and outlet pipes), streets and parking lot areas will be designed for 10-year storms.				
Area Protected	<u>Low</u> 0-8	<u>Med.</u> 9-16	<u>High</u> 17-25	8.5
This project will protect the Town's substantial recreational investment in the 25 acre Golden Eagle Park from the 10-year design storm. Residents will benefit directly from reduced closings of the Park, and indirectly from its reduced maintenance costs. District's/Town's c.1996 Flood Response Plan showed that nearly 300 residences would be inundated in the ½ PMF flood, plus the High School and the sewage treatment plant. If analyzed today, that number would be substantially reduced due to the year 2000 dam modifications – though likely not totally eliminated.				
Ancillary Benefits	<u>Low</u> 0-4	<u>Med.</u> 5-8	<u>High</u> 9-12	7.875
The proposed project includes minor sedimentation basins that will also allow for increased infiltration of storm water (a water recharge and LID upgrade). The project will increase the multi-use functionality of the Park by reducing storm maintenance closures and downtime.				
Level of Partner(s) Participation	<u><50%</u> 0-4	<u>50%</u> 8	<u>>50%</u> 12	8
The Town proposes to cost-share 50% of the proposed project's design and construction costs with the District.				
O&M Costs to the District	<u>High</u> 0	<u>Low</u> 1-5	<u>None</u> 6	6
The Town will continue to be responsible for all Operation and Maintenance costs associated with this project site, in its Parks and Recreation budget.				
Committee Recommendation: Deferred			Total	59

GOLDEN EAGLE PARK DAM AREA: DRAINAGE IMPROVEMENT PROJECT

Project 4



-  Golden Eagle Park Dam Area: Drainage Improvement Project
-  Existing Infrastructure
-  Floodway
-  Floodplain

Aerial Photography - Fall 2018

