



Flood Control District of Maricopa County

Flood Control Advisory Board

Meeting Minutes for January 22, 2014

Board Members Present: Hemant Patel, Chairman; Scott Ward, Secretary; DeWayne Justice, Ray Dovalina, Ex Officio; Bob Larchick, Ex Officio

Board Members Absent: Dallas Tanner, Vice Chairman; Melvin Martin

Staff Members Present: Tim Phillips; Wayne Peck, General Counsel; Amir Motamedi, Christopher Fazio; Scott Vogel; Kelli Sertich, Patrick Schafer; Linda Reinbold, Anna Medina; and Ed Raleigh.

Guests Present: Randy Harrell, Fountain Hills; Nathan Ford, RBF; Jeff Minch, Wood/Patel; Raj Shah, Ritoch Powell; Justine Buler, Dibble Engineering; Laura Marquis, Hoskin Rayan; Hasan Mushtaq, City of Phoenix; Brian Schalk, Atkins; Stuart Kimball, G&K; Laurie Marin, Kimley-Horn; Huri Raghavan

1) CALL TO ORDER

Chairman Patel called the meeting of the Flood Control Advisory Board (FCAB) to order at 2:00 p.m. on Wednesday, January 22, 2014.

2) PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was recited.

3) EMPLOYEE OF THE QUARTER

Steve Ruben from the O&M Division was present to introduce the employee of the quarter. Mr. Ruben introduced Joshua Barnes as the employee of the quarter. As the employee of the quarter, he is being recognized for his continued demonstration of motivation and a can-do attitude as a positive force for the O&M division.

4) APPROVE THE MINUTES OF OCTOBER 23, 2013

ACTION: It was moved by Mr. Justice and seconded by Mr. Larchick to approve the minutes as submitted. The motion carried unanimously.

5) ASHBROOK WASH CHANNELIZATION PROJECT DESIGN IGA W/FOUNTAIN HILLS

Presented by: Scott Vogel, P.E, Project Manager

STAFF RECOMMENDS THE FOLLOWING ACTION: Endorse and recommend that the Board of Directors of the Flood Control District of Maricopa County approve IGA FCD 2013A009 for the Ashbrook Wash Improvements Project.

Mr. Vogel reviewed that the resolution for the project was endorsed by the Board in October of 2013. Before the Board today is the design IGA. Upon approval, design will commence. Staff will return to the Board for approval of a potential construction IGA with the Town of Fountain Hills. Randy Harrel, Town Engineer for Fountain Hills, was present to answer questions.

The project is located in the Town of Fountain Hills. The project site is north of Fountain Park. Ashbrook Wash extends across the town from the west to the east, into the Fort McDowell Yavapai Indian Community and towards the Verde River.

The Fountain Hills Area Drainage Master Study identified flooding problems and solutions. At the request of the Town, District staff prepared a technical memorandum that studied the area and verified the flooding problems along Ashbrook Wash. Subsequently, the Town submitted the project through the District's prioritization process and it was approved through that procedure. The resolution for the project is in place.

Mr. Vogel identified the project area on the area map. Ashbrook Wash runs across the project area. On the left is Bayfield Drive and on the right is Del Cambre Avenue. He identified the floodplain on the map, as delineated by FEMA. In addition to the FEMA floodplain, the technical memorandum identified that the structures identified with red Xs are subject to flooding during a one hundred-year storm event. In general, flow down Ashbrook Wash is constricted by the culvert restrictions at Bayfield Drive and Saguaro Boulevard. Flow comes out of the banks of Ashbrook Wash, causing the flooding. Further downstream, the flow is restricted by heavy vegetation and the channel cross section itself, further pushing flows out of the wash at the cul-de-sac of Aloe Drive. In summary, approximately 13 homes would be subject to flooding during a one hundred-year storm event. The culverts at Saguaro and Bayfield require replacement to pass the one hundred-year storm event. Downstream of these culverts, vegetation thinning and channelization is required. He presented photos of the area.

Mr. Vogel discussed that the IGA identifies that the District would be the lead for the design of the project. Design costs estimated at \$150,000 would be cost shared equally by the District and the Town. The schedule provides a design completion date of October of 2014. The project would then move to construction likely in fiscal year 2016. Construction cost is estimated at \$1.5 million.

Board Member Ward referred to the aerial photograph and asked whether residences located in the areas described are currently in a dangerous situation, due to potential flooding. Mr. Vogel confirmed that the houses identified would be subject to flooding during a one hundred-year storm event. Board Member Ward asked about effects to the adjacent street. Mr. Vogel confirmed that Bayfield Drive and Saguaro Boulevard would overtop in the event of a one hundred-year storm event.

Board Member Ward asked whether planning included bridging the road. Mr. Vogel explained that the plan includes replacement of both culvert sections, removing the existing CMPs and replacing them with reinforced concrete box culverts.

Board Member Justice asked about the current capacity. Mr. Vogel indicated that at Bayfield, the current capacity is approximately 500 cubic feet per second, with the required capacity being approximately 2,000 cubic feet per second. Board Member Justice asked about the proposed revised capacity. Mr. Vogel explained that at Bayfield, the anticipated revision will include six cells, each ten feet wide and five feet high. This will accommodate the required capacity of 2,000 cubic feet per second. Board Member Justice asked if the revisions would be the same for the other crossing. Mr. Vogel confirmed that at Saguaro, there will be six cells, ten feet side and six feet high. There will be a slightly larger capacity, due to another wash entering the area.

Board Member Ward asked Mr. Vogel to identify the Saguaro crossing on the aerial photograph.

Chairman Patel asked about the channel cross section, which is also restricting flows. Mr. Vogel replied that it will not be a concrete section. The existing right-of-way will be used. The first step will be to investigate the removal of vegetation in the area. Undesirable vegetation will be removed first. It is anticipated that the cross section will be excavated to a slightly larger cross section. Chairman Patel asked for confirmation that this area included existing Flood Control district right of way. Mr. Vogel replied that the Town of Fountain Hills owns the right of way, so they do not anticipate right of way acquisition for the project.

Board Member Dovalina asked about velocities. Given that the project will now provide 2,000 CFS, he asked whether armoring some of the slope slides might be necessary. Mr. Vogel confirmed that this will be looked at, however it is not anticipated that any slopes will need to be armored. The flow rate is in the order of five feet per second. One goal is to minimize the amount of cross section widening that would potentially increase the velocity and add the potential for erosion.

Board Member Larchick asked about the effects downstream and whether the water is retained downstream. Mr. Vogel explained that the next street crossing is Del Cambre Avenue. The crossing is adequate and the present time and will remain so. From that point to about a quarter of a mile downstream, the Ashbrook Wash goes into the Fort McDowell Yavapai Indian Community, and there is no detention of flows down to the Verde River.

ACTION: It was moved by Mr. Dovalina and seconded by Mr. Ward to approve the item as submitted. The motion carried unanimously.

6) FISCAL YEAR 15 CIP PRIORITIZATION PROCEDURE

Presented by Amir Motamedi, P.E., Hydrology/Hydraulics Branch Manager

STAFF RECOMMENDS THE FOLLOWING ACTION: Endorse and recommend that the Board of Directors of the Flood Control District of Maricopa County approve District staff's recommendations associated with the FY 2014/2015 CIP Prioritization Procedure.

Mr. Motamedi was present to review the results of the FY 2014/2015 CIP Prioritization Procedure. A draft of the FY 2014/2015 CIP recommendation was presented to the Programs and Budget Committee on October 2nd, 2013. The Committee endorsed the draft results. The same recommendations were presented to the FCAB as an information item on October 23rd. This is the first step in the project development process. Should the Board approve the

recommendations, there will be no dollars yet committed to the project. Resolution development and IGA development will follow before any funds are committed.

A total of nine submittals were received by different agencies, for a total estimated cost of all potential projects of \$89 million. The District's proposed share of costs is \$42.2 million, with the requesting agencies to pay \$46 million. The submitting agencies included Glendale, Peoria, Phoenix and Tempe. Out of the nine projects proposed, staff is recommending that three move forward.

The first two projects were submitted by the City of Phoenix. Mr. Motamedi reviewed that in the mid 2000s, the Maricopa County Department of Transportation and the Flood Control District designed and constructed the Baseline Road storm drains, which start at 7th Avenue, flowing west to 43rd Avenue and then north into Salt River. This is a one hundred-year project. The original design called for two offline basins to take some of the flows from these pipes. One was located at 27th Avenue and South Mountain and the other at Baseline Road and 43rd Avenue. The 43rd Avenue and Baseline basin has undergone substantial construction. The 27th Avenue and South Mountain portion is fully designed and will be constructed shortly.

The next project is the 27th Avenue and Dobbins Road Retention Basin. This project will construct a regional detention basin at 27th Avenue and Dobbins along with a storm drain. The two areas that will primarily benefit are the Citrus Mountain and the Southern Highland subdivisions. This was the number one priority out of the seven project proposals submitted by the City of Phoenix. This will be a ten-year storm drain to capture flows and a one hundred-year detention basin. Once the flow is captured, the storm drain will be used to bleed off the detention basin into the Baseline storm drain. The total project cost is approximately \$6.7 million. The City proposes to pay half of the cost with the District paying the remainder. O&M would be the responsibility of the City.

Board Member Ward asked about the proposed pipe size to be utilized. Mr. Motamedi conceded that he was unable to answer the question at this time. Board Member Ward inquired as to the existence of a canal. Mr. Motamedi confirmed that the Western Canal extension is present and is the cause of some ponding. Board Member Ward asked whether the road washes out at 27th Avenue during a significant event. Mr. Motamedi replied that there is significant flooding along the road, the majority of which occurs at the Western Canal extension. Board Member Ward asked whether this constitutes a hazardous condition. Mr. Motamedi stated that based upon information provided from the City of Phoenix, driving would be hazardous.

Board Member Ward asked whether staff has considered performing a master plan for the area. Board Member Dovalina replied that a study was performed looking at the whole area, which identified potential projects, including this one. Mr. Motamedi agreed, stating that the area was looked at as part of the Laveen South Mountain work a few years prior. During the design of this project, staff, along with the City of Phoenix, looked particularly at the needs for the watershed. These recommendations are a result of that project.

The next project is also a request by the City of Phoenix, the South Phoenix Laveen Drainage Improvement Project. The project is located at Baseline Road, 7th Avenue and 19th Avenue. The project consists of a series of multiple regional detention basins and storm drains that will collect the flows coming off the South Mountain and ponding along the Western Canal. There is potential for significant damage to homes as well as cutting off access to emergency services.

The project will provide a one hundred-year level of protection. It will detain and convey flows either along 7th Avenue to Baseline Road or along South Mountain to the proposed basins along 27th Avenue. This is priority number two for the City of Phoenix. The total cost of the project is estimated at \$11.3 million. The City of Phoenix is proposing to split the cost evenly with the District. O&M would be the responsibility of the City.

The Loma Visa Corridor Drainage Improvement project was submitted by the City of Tempe. The location is Southern Avenue, Broadway Road and McClintock. There are 21 homes in the area which are subject to flooding during a one hundred-year flood. There is no delineated floodplain in the area. The project will construct a storm drain along Loma Vista, Alameda and Los Feliz Drive and carry it to an outfall at an expanded detention basin with McClintock High school, providing a one hundred-year level of protection. The total cost of the project is estimated at \$2.67 million. Of this, 25 percent would be paid by the City and 75 percent by the District. O&M would be the responsibility of the City.

Staff conditionally recommends the project. The conditional recommendation is partially due to a conflict with an existing sewer system. The basin will be rather deep with no positive outfall. Staff is concerned about potential maintenance issues in the future. Approval is recommended subject to a final solution, including a positive outfall for the system.

Board Member Ward asked whether the area had settled over the years to become a low ponding area. Mr. Motamedi agreed that the area sits lower than the adjacent areas. The flow is generally coming from east or northeast. Board Member Ward inquired whether the possibility of adding dry wells had been considered. Mr. Motamedi explained that the system and the storm drain will be sitting rather low. The current submittal includes the addition of at least two dry wells. Board Member Ward added that this is likely an area where children are walking or cycling to school.

Board Member Justice asked about the size of the collection basin. Staff member Lokey replied that it would be approximately three acres.

Board Member Justice asked about the depth measurement. Burke Lokey, Project Manager explained that staff worked with the Tempe Union High School District to ensure that the School District found the plans acceptable. The plan includes utilization of an axillary soccer practice field and baseball practice field. Both fields would be lowered to 13 feet below grade. The baseball field would be terraced above the soccer field.

Board Member Justice asked how well the ground percolates. Burke Lokey said that most of Tempe is similar in nature and that the area does not percolate quickly.

Mr. Motamedi added that there were six submittals that staff did not recommend. Historically, staff has discussed with the requesting cities to work with them to see if the requests can either be repackaged to include more flood control components for viability, or that the cities provide more information that results in a higher score for the project.

Two submittals are recommended for CIP consideration. The total cost is \$18 million with the District to pay \$9 million. One of these was conditionally recommended at a total cost of \$2.7 million. Two million is proposed to be paid by the District. Six submittals were not recommended for further consideration.

Board Member Ward pointed out that in years past, between five and nine projects have been approved and asked whether there is currently a limit on projects due to budget constraints or other factors.

Mr. Phillips replied that over recent years, there has been a significant decrease in the CIP budget, which corresponds to reduction in assessed valuations and revenues. The surrounding cities are facing similar funding constraints.

ACTION: It was moved by Mr. Larchick and seconded by Mr. Ward to approve the item as submitted. The motion carried unanimously.

7) FLOODPLAIN REGULATIONS FOR MARICOPA COUNTY TEXT AMENDMENT FCD 2013-001, APPEAL PROCESS REVISION

Presented by Kelli Sertich, Floodplain Management & Services Division Manager

STAFF RECOMMENDS THE FOLLOWING ACTION: Initiate a change to the Floodplain Regulations for Maricopa County and recommend to the Board of Directors of the Flood Control District of Maricopa County approval of Text Amendment FCD 2013-001

Ms. Sertich reviewed that during 2011, staff completed a revamp of the floodplain regulations, making minor changes as a result of a FEMA community assistance visit. The minor text amendments are located in Article 4 of the regulations, which is an administrative section, Floodplain Use Permit Appeals and Variance. She reviewed the process that staff has taken the proposed changes through, requests for comments from stakeholders, various meetings and a workshop with the stakeholders. No opposition has been suggested. The notice has been reposted on the regulatory outreach webpage. The next stage in the process is to present the proposed change the Flood Control Advisory Board. If approved by the Board, the changes would be provided to the Board of Directors for the public hearing and approval process.

She then reviewed the proposed text revision. Revisions to Section 401, Sand and Gravel Permits, included a clarification in language and an added sentence for clarification of appeals. A revision to Section 404 involved a correction in the cross-referencing of sections. Revisions to the Appeals Section 409 included changes resulting from recent State statute changes for the bill of rights for permitting.

Board Member Ward asked whether a sand and gravel permit allowed the user the unilateral right to mine in those floodways. Ms. Sertich confirmed this to be true but added that it would have to be conducted in accordance with regulations. Board Member Ward asked about the term of the permit. Ms. Sertich replied that they are for up to five years. Board Member Ward asked if a compliant user can then reapply for an extension of the original permit. Mr. Phillips replied that it is not an extension. Mr. Raleigh confirmed this, stating that a new permit would be issued upon reapplication by a compliant applicant. He added that a provision allows a suspension in an active sand and gravel extraction permit, which allows the user to suspend the permit, for example, due to a downturn in the economy which leads to a lull in business or a need to not operate. When the suspension ends, they are not issued a new permit, but a reactivation of their suspended permit.

Ms. Sertich reviewed a further portion of the appeals section, where a clarification in language was needed in regards to the appeal process and the interpretation of the regulations issued. A further change was noted under Section F, where a clarification in language was made from "person" to "appellant." Some sentences containing repetitive language were struck.

Board Member Ward asked about the application process and whether the application is made to staff or to a governing body that reviews and issues the permit. Mr. Phillips responded that staff reviews the application, as the regulating body. Mr. Raleigh clarified that staff is issuing a floodplain use permit only. They do not consider hours of operation, dust control or other related issues. In addition, there is permit paperwork that the applicant must file with the State, that is unrelated to the application process with the District.

Board Member Ward asked for confirmation that the permit does not allow an applicant to receive a prescriptive easement of use of the floodplain in perpetuity. Ms. Sertich confirmed that it does not. General Counsel Mr. Peck added that the permits are for property that the applicant already owns.

Board Member Justice asked for confirmation that the changes have been vetted by all the stakeholders. Mr. Phillips and Ms. Sertich confirmed this.

ACTION: It was moved by Mr. Justice and seconded by Mr. Dovalina to approve the item as submitted. The motion carried unanimously.

8) COMMENTS FROM THE CHIEF ENGINEER AND GENERAL MANAGER

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

PURPOSE: Information and discussion item only. No formal action is required.

9) SUMMARY OF RECENT ACTIONS

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

PURPOSE: Information and discussion item only. No formal action is required.

10) OTHER BUSINESS AND COMMENTS

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

PURPOSE: Information and discussion item only. No formal action is required.

The meeting adjourned at 2:52 p.m.