

Marin County Flood Control and Water Conservation District

FLOOD ZONE 1 ADVISORY BOARD MEETING
NOVEMBER 5, 2012

STAFF REPORT

Item 1. Approval of Meeting Minutes for May 24, 2012

Recommended Action: Approve minutes.

Item 2. Open Time for Items Not on the Agenda

Comments will be heard for items not on the agenda (limited to three minutes per speaker).

Item 3. Project Updates

a. Novato Creek Sediment Removal

This summer the Novato Creek sediment removal project was completed. This work is done approximately once every four years and includes removal of accumulated sediment from sections of Novato Creek, Warner Creek and Arroyo Avichi.

The project was advertised for bids in May 2012 and was awarded to the low bidder, Team Ghilotti, on June, 2012. The low bid was for \$1,032,482. In order to adhere to environmental permit requirements, fish relocation operations were completed prior to start of sediment removal operations in the creek that began on July 5, 2012. The completion of construction in the creek was confirmed from as-built survey data that showed a final quantity of sediment removal of about 40,000 cubic yards. The cofferdams were removed on October 9 resuming normal creek flow prior to the October 15 permit deadline. The only remaining project task consists of the disposal of the creek vegetation from the temporary site at Marsh Drive to an upland site which is anticipated to be completed by November 2, 2012. There were several significant changes to the project compared to previous years and these include: revised fish removal and de-watering regulations, discovering invasive species in creek vegetation and changes to erosion control requirements.

b. Novato Flood Protection and Watershed Program

DPW staff and its consultant are currently working on developing a watershed hydrology model and a hydraulic flow model for Novato Creek from San Pablo Bay to Stafford Lake. Staff has developed a draft hydrology model using the new and improved LiDAR data to better define sub-basins or catchments in the project area and is working with the consultant to calibrate the model. An urban Storm Water Management Model (SWMM) model for the storm drain system in Nave Gardens is also under development. A preliminary "existing conditions" hydraulics model should be up and running by early 2013. This model will be used to analyze and evaluate project alternatives.

The U.S. Army Corps of Engineers (USACOE) through a contract with the State Coastal Conservancy (CCC) will fund \$250,000 in studies to support the Watershed Program. The USACOE study will focus on lower Novato Creek. The funding will support restoration

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design planning downstream of Highway 101. Ultimately, this work by the USACOE and CCC will allow the preferred restoration alternatives to be eligible for federal funding through a future Water Resources Development Act (WRDA).

The EPA has awarded a \$1.5M Flood Control 2.0 Grant to several institutions in the Bay Area including the MCFC & WCD to redesign flood control channels to restore wetlands, improve water quality and shoreline resiliency. We will leverage \$400,000 in committed funds through the watershed program as the Marin County match. The grant will fund \$250,000 towards the preparation of a final creek and marsh restoration along lower Novato Creek and provide \$20,000 to cover staff time in support of the grant. In addition, the SF Estuary Institute will perform a historical ecology analysis for the Novato Creek watershed (\pm \$150,000 value).

c. Vineyard Creek Revegetation

The fourth annual revegetation report is due on December 31, 2012. In the 2011 report, plant survival was 93% in Phase 1 and 90% in Phase 2. This result exceeds the 85%-90% survival rate required by the permitting agencies.

The FC District has employed the services of Conservation Corps North Bay to continue the weeding and replanting needed to enhance plant survival. Single trunk trees (alders) will be planted in the existing Sonotubes where previous plants did not survive. Residents in affected areas were notified of this replanting effort.

Item 4. Novato Creek Sonoma Marin Area Rail Transit (SMART) Railroad Bridge

The District has continued discussions with SMART and City of Novato to select a Novato Creek bridge configuration and identify funding sources. Since the last Advisory Board meeting SMART has indicated that due to time constraints and funding limitations they are only willing to consider constructing one of the Novato Creek bridge crossing options that is included in their current design build contract and listed here:

- Option 1 "Base bid" – 14' pier spacing (\$2.1 M)
- Option 2 - 28' pier spacing (\$3.74M)

For more details on options please refer to the attached SMART Memo (RE: Novato Creek Option 2A). Flood Control staff recommends that development of Option 2 be pursued. It represents the best alternative from a debris passing perspective and is a great improvement from existing conditions.

To date the following funding commitments have been secured:

- SMART \$2,100,000
- City of Novato - \$160,000

This leaves a funding shortfall of \$1,480,000. Based on an evaluation of the Zone's cash flow and an ability to secure a short term loan from the County, staff recommends Zone 1 commit to providing \$500,000 to funding Option 2. With Zone 1's contribution there will still be a funding short fall of \$980,000. The remainder will have to be obtained from other sources.

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Recommended Action: Recommend that Flood Zone 1 commit to providing \$500,000 in Zone 1 funding towards construction of SMART Novato Creek Bridge - Option 2 pending securing a loan from the County of Marin to ensure a positive cash flow and continue to work with our local partners to secure funds required to construction Option 2.

Item 5. Schedule Next Meeting

Schedule the next meeting of the Zone 1 Advisory Board.



MEMORANDUM

DATE: 4/23/12

TO: Bill Gamlen

FROM: Gregg Jennings, Sr. Rail Engineer

CC:

RE: Novato Creek Option 2A

Bill,

Attached is a technical drawing of Novato Creek option 2A. A brief summary of this bridge is as follows:

- It is a 240' concrete ballasted deck on steel plates
- Bents will consist of 4 20"-24" steel piles with a concrete cap
- It raises top of rail between 4 and 5 feet (soffit of bridge will be above 100-yr flood elevation by inches)
- It will likely close the northern at-grade crossing
- Grading impacts of raising top of rail could go up to 1,000' north and south of the bridge and impact XX acres of wetlands.
- Cost of wetlands impacts and consultant permitting efforts are not included in the costs proposed by Stacy Witback/Herzog JV.

Pricing Summary Table

Option	Option Description	Price	Delta Price
1	Raise existing structure 4'. 14' spacing between bents	\$2.1M	N/A
2	New concrete ballasted deck. Raise top of rail 4-5'. 28' spacing between bents.	\$3.74M*	\$1.64M
2A	New concrete ballasted deck with steel plate. Raise top of rail 5' +. 40' spacing between bents.	\$4.2 - \$4.5M (rough order of magnitude)**	\$2.1 to \$2.3M

* Engineering design included

**Engineering design for option 2A - ~\$135K not included.

Note 1: Options 2 and 2A shift track approximately 15' west. Wetland impacts still being evaluated and not included in pricing.

Note 2: 50' bent spacing option not studied.

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