



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** David Sykes

**SUBJECT:** THOMPSON CREEK & GUADALUPE RIVER BANK EROSION & OUTFALL REPAIR PROJECTS  
**DATE:** 05-23-11

Approved

Date

5/31/11

**COUNCIL DISTRICTS:** 6, 8 and 9

## **RECOMMENDATION**

Adoption of a resolution authorizing the City Manager to negotiate and execute a cost-sharing agreement with the Santa Clara Valley Water District to compensate the District for design and construction associated with the repair of a City outfall and an eroded bank along Thompson Creek, and sediment removal and repair of an eroded bank along Guadalupe River in a total amount not to exceed \$553,000.

## **OUTCOME**

Approval of this cost-sharing agreement between the City of San José and Santa Clara Valley Water District (SCVWD) will allow the City to compensate the District for services related to the design and construction associated with the repair of a City outfall and an eroded bank along Thompson Creek, and sediment removal and repair of an eroded bank along Guadalupe River under the SCVWD Stream Maintenance Program.

## **BACKGROUND**

Thompson Creek is a major tributary to Coyote Creek and drains a portion of the southeast side of the City of San José. Over the past two decades, the watershed to Thompson Creek has experienced rapid urban development. As a result, Thompson Creek has an increase in water flow that has resulted in a rapidly changing and moving streambed. At Thompson Creek and Cadwallader Bridge, the City's outfall structure is located upstream, southeast of the pedestrian bridge. Approximately 35 feet of the existing outfall structure has deteriorated between the outfall and the nearest manhole and requires replacement. In addition, the alignment of the outfall with respect to the creek has caused bank erosion and scouring on the downstream (northwest) side of the bridge structure and threatens the stability of the bridge abutment. The bridge is the north/south pedestrian access for residents to the San Felipe Road and Aborn Road commercial establishments. The integrity of an existing City of San José Municipal Water 18-inch Ductile Iron Pipe that currently traverses the bridge is also threatened by the erosion.

For the past few years, Guadalupe River has experienced flooding and the river channel has widened as a result of sediment transport, bottom scouring, bank failure, and tree loss. At Capitol Expressway Auto Mall, storm water discharge from the City's 48-inch pipe outfall structure located immediately upstream on the southeast side of the bridge is a significant contributor to sedimentation in the river channel and, as a result, the outfall is buried. This sedimentation on the east bank and under the bridge causes water to flow on the west side of the river bed, eroding a portion of the west bank under the bridge, and exposing four corrugated metal steel tube bridge pile encasements, located downstream of the outfall. According to bridge reports prepared by Caltrans in 2007 and 2009, bank erosion at this location has accelerated in recent years. At this time, there is no sign of structural distress, and therefore no need for structural repair.

### **ANALYSIS**

In January 2011, the City of San José and the SCVWD began coordination efforts for storm drain outfall and bank erosion repair along Thompson Creek at Cadwallader Bridge and sediment removal and bank erosion repair along Guadalupe River at Capitol Expressway Auto Mall. Both of these locations are located within the City's right-of-way and portions of SCVWD's right-of-way and easement. This cost sharing agreement enables the City of San José to compensate the District for work done within the City's right of way.

During coordination efforts with the SCVWD, it became clear that obtaining the environmental clearances and regulatory permits for the two projects would be extremely lengthy and costly for the City of San José, while SCVWD's expertise in engineering and stream stewardship, obtaining regulatory permits, and equipment necessary to make such repairs would be much more effective and expeditious. As a result, SCVWD agreed to include the projects in its ongoing Stream Maintenance Program (SMP) permit, which includes authorization from all the relevant regulatory agencies.

Approval of the cooperative agreement between the City of San José and the SCVWD will enable SCVWD to provide design and construction services associated with repair of a City of San José outfall and eroded bank along Thompson Creek at Cadwallader Bridge and repair of sediment removal and repair of the eroded bank along Guadalupe River at Capitol Expressway Auto Mall, as needed to protect existing City of San José facilities. The SCVWD will submit a Post Construction Report to regulatory agencies by January 2012. The City and SCVWD staff will continue to monitor bank erosion at the locations noted above and will continue a cooperative effort to establish long-term solutions to the issue of bank erosion at both locations along Thompson Creek and Guadalupe River.

The total cost for both projects is \$943,500. The SCVWD will be funding 41 percent of the cost, including design of the repairs, and bank erosion repair within their lands, easements and/or right of way at both project locations. The City of San José will be funding 59 percent of the cost for construction within the City of San José lands and/or right-of-way and includes replacement of the storm sewer pipe and outfall structure, bank erosion repair, tree removal, and installation and

monitoring of mitigation plantings along Thompson Creek. Along Guadalupe River the work includes sediment removal in the immediate vicinity of the outfall structure and underneath a portion of the bridge structure, bank erosion repair, and erosion repair around the exposed bridge pile encasements.

### **EVALUATION AND FOLLOW-UP**

No additional follow-up actions with the Council are expected at this time.

### **POLICY ALTERNATIVES**

**Alternative #:** *1 City staff to design, bid and award, and manage construction of both projects.*

**Pros:** The City would be able to have all responsibility for projects related to its own infrastructure.

**Cons:** City staff would have to obtain extremely costly environmental clearances and regulatory permits for both projects. Obtaining the clearances and permits would create a minimum one year delay, and as a result of the added expense, the City would only be able to construct one of the two projects.

**Reason for not recommending:** In addition to significantly increased project costs, delaying these projects increases the risk of structural damage to the bridge structures at both locations.

### **PUBLIC OUTREACH/INTEREST**

- Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- Criterion 2:** Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. **(Required: E-mail and Website Posting)**
- Criterion 3:** Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. **(Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers)**

This recommendation is for delegation of approval of a cooperative agreement between the Santa Clara Valley Water District and the City of San José to the City Manager. The item does not meet any of the criteria listed above. This memorandum will be posted on the City's website for the June 14, 2011 Council Agenda.

### **COORDINATION**

This project and memorandum have been coordinated with the Department of Planning, Building and Code Enforcement, Finance, Transportation, the City Attorney's Office, and the City Manager's Budget Office.

**FISCAL/POLICY ALIGNMENT**

This project is consistent with the Council-approved Budget Strategy Economic Recovery section in that it will spur construction spending in our local economy.

**COST SUMMARY/IMPLICATIONS**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT:
 

Project Delivery	\$12,000
Agreement Cost	553,000
<b>TOTAL PROJECT COSTS</b>	<b>\$565,000</b>
  
2. COST ELEMENTS OF AGREEMENT/CONTRACT:
 

Thompson Creek	\$343,000
Guadalupe River	210,000
<b>TOTAL AGREEMENT/CONTRACT AMOUNT</b>	<b>\$553,000</b>
  
3. SOURCE OF FUNDING: 469 – Storm Sewer Capital Fund
  
4. OPERATING COSTS: The proposed operating and maintenance costs of this project have been reviewed and will have no significant impact on the General Fund operating budget.

**BUDGET REFERENCE**

The table below identifies the fund and appropriations proposed to fund the contract(s) recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn. Name	RC #	Total Appn	Amt. for Contract	2010-2011 Adopted Budget (Page)	Last Budget Action (Date, Ord. No.)
<b>Current Funding Available</b>							
469	4245	Outfall Rehabilitation - Capital	167553	\$409,000	\$253,000	Capital V-125	6/29/10, Ord. No. 28765
469	6474	Creek Channel Stabilization	167563	\$580,000	\$300,000	Capital V-118	10/19/10, Ord. No. 28829
<b>Total Current Funding Available</b>				<b>\$989,000</b>	<b>\$553,000</b>		

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**CEQA**

CEQA: "Final Environmental Impact Report for the Multi-Year Stream Maintenance Program" dated August 2001. Resolution No. 2001-56 adopted August 21, 2001 by the Santa Clara Valley Water District Board of Directors.

/s/

DAVID SYKES

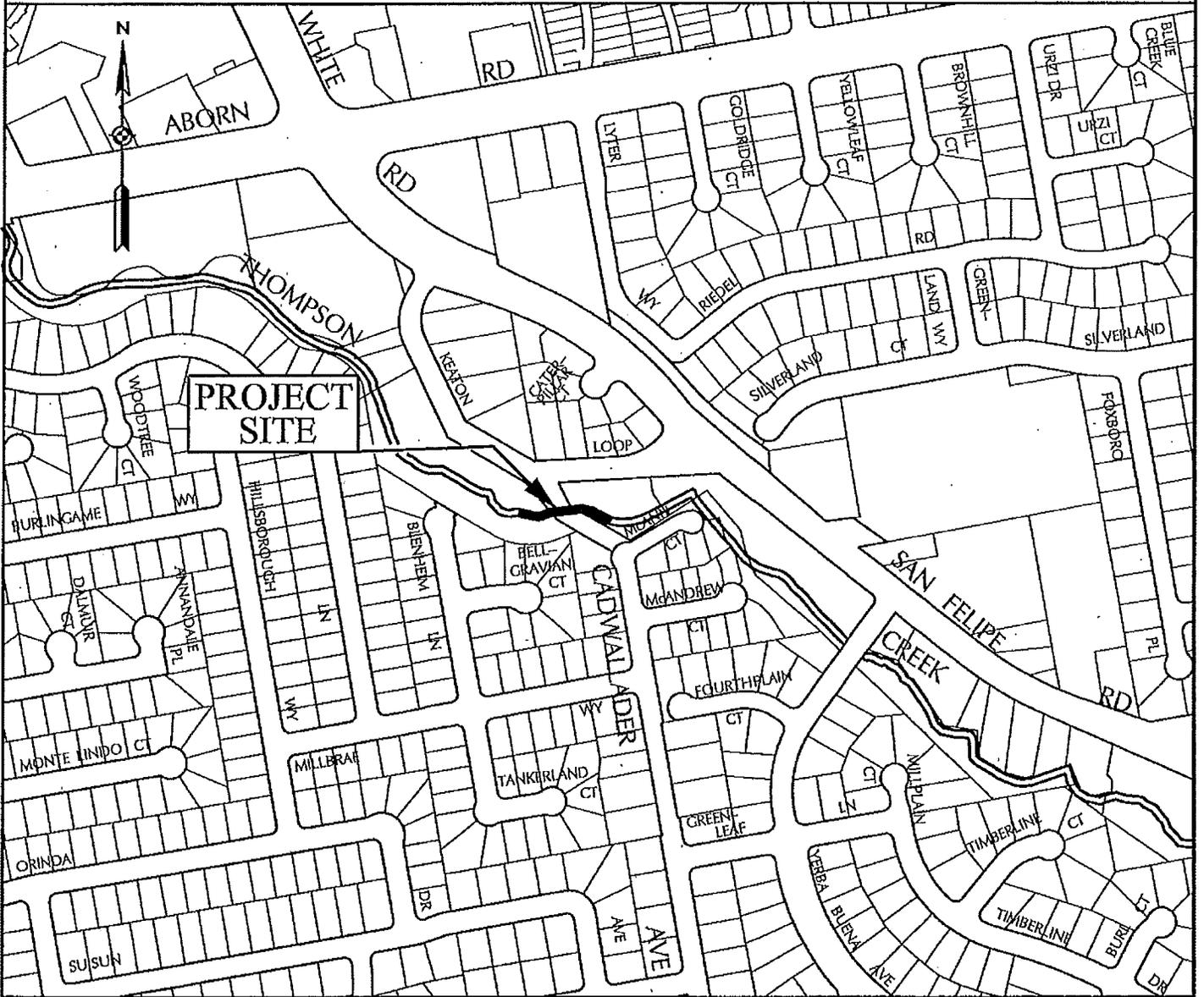
Acting Director of Public Works

For questions please contact MICHAEL O'CONNELL, ACTING DEPUTY DIRECTOR, at 408-535-8300.

MO:JC:ma:bs:li

# PROJECT LOCATION #1

## THOMPSON CREEK AT CADWALLADER AVE



COST-SHARING AGREEMENT BETWEEN THE CITY OF  
SAN JOSE AND THE SANTA CLARA VALLEY WATER  
DISTRICT FOR THE REPAIR OF A CITY OUTFALL AND  
AN ERODED BANK ALONG THOMPSON CREEK.

LOCATION MAP

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# PROJECT LOCATION #2

## GUADALUPE RIVER AT CAPITOL EXPRESSWAY AUTO MALL



COST-SHARING AGREEMENT BETWEEN THE CITY OF SAN JOSE AND THE SANTA CLARA VALLEY WATER DISTRICT FOR SEDIMENT REMOVAL AND REPAIR OF AN ERODED BANK ALONG GUADALUPE RIVER.

### LOCATION MAP

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