<u>Storm Drain Projects – Introductory Comments</u>

The City maintains a storm drainage pipe system and certain channel improvements. Upon improvement of channels and arroyos to Zone 7 standards, Zone 7 assumes ownership of those facilities. Zone 7 and the City currently share joint ownership of portions of the Arroyo Las Positas. Unimproved arroyos are privately owned and maintained.

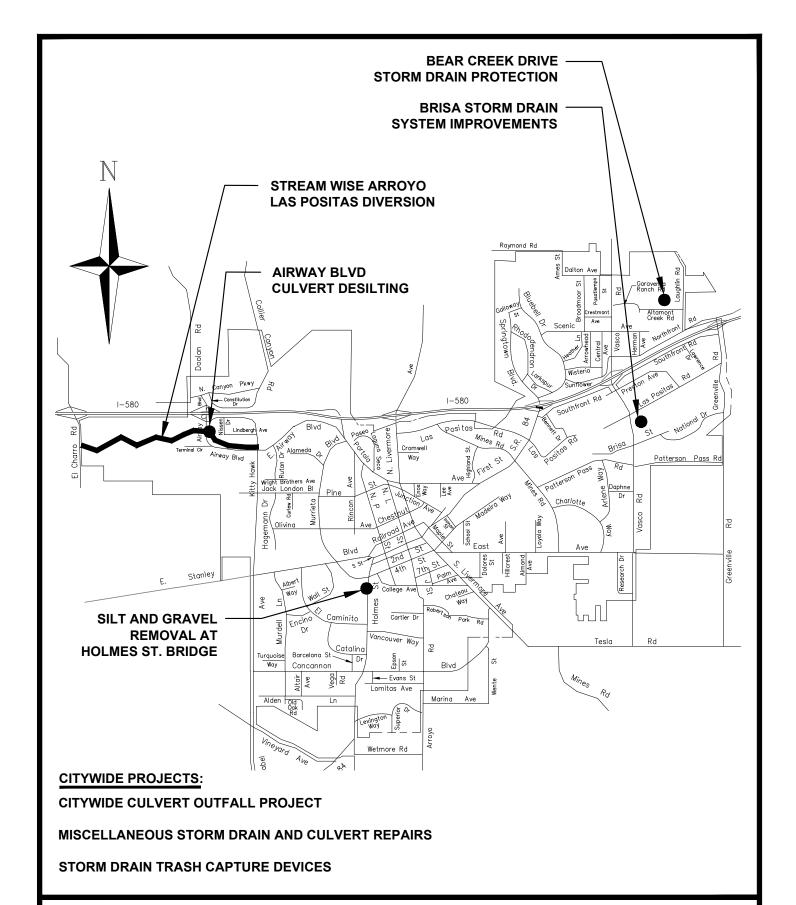
City Storm Drain projects in the Fiscal Year 2012-2013 and Fiscal Year 2013-2014 Capital Improvement Program Budget include a variety of projects to address existing drainage problems, maintenance work along the arroyos, and pay for the oversizing of storm drain transmission facilities needed by new development. The 20-year Capital Improvement Program also plans for projects needed to complete major storm drain trunkline upgrades, and maintenance work or improvement work on City owned arroyos and channels so that Zone 7 can take over these facilities for maintenance. Commitments in future years will be needed to maintain and improve the Arroyo Las Positas and the Arroyo Mocho.

Proposed Improvements are consistent with the City's 2004 Storm Drain Master Plan Update and with the City's General Plan and Downtown Specific Plan. Funding for much of the capacity enhancing projects is provided by the City storm drain development impact fee. Channel maintenance projects and improvement projects are proposed to be funded over time by the General Fund, or by other funding sources such as Federal/State grants and Zone 7 contributions.

City of Livermore, CA Capital Improvement Projects

Fiscal Year End 2013 -2014 Category Fund Summary Storm Drain

Project		_	Fiscal Year			
Number	Project Name	Project Status	2012 - 2013	2013 - 2014		
200066	Airway Blvd. Culvert Desilting	In Progress	\$60,000	\$0		
200648	Bear Creek Drive Storm Drain Protection	In Progress	\$60,000	\$0		
200723	Brisa Storm Drain System Improvements	Preliminary Desi	\$0	\$2,000,000		
201323	Citywide Culvert Outfall Project	Not Started	\$250,000	\$250,000		
201325	Miscellaneous Storm Drain and Culvert Repairs	Not Started	\$50,000	\$50,000		
199758	Silt and Gravel Removal at Holmes St. Bridge	Preliminary Desi	\$100,000	\$0		
201030	Storm Drain Trash Capture Devices	In Progress	\$80,200	\$0		
201217	Stream WISE Arroyo Las Positas Diversion	Not Started	\$150,000	\$250,000		
	,	Гotal: Storm Drain	\$750,200	\$2,550,000		



CITY OF LIVERMORE

ALAMEDA COUNTY STATE OF CALIFORNIA

20 YEAR CIP PROGRAM

STORM DRAIN PROJECTS

Capital Project Worksheet

CIP Project Number 200066 CIP Project Name Airway Blvd. Culvert Desilting

Dept/ProgramStorm DrainGASB34Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status In Progress

Project Location Airway Blvd. To Cayetano Creek Blvd.

Project Description Desilt the Arroyo Las Positas culverts under Airway Boulevard. Remove silt down to the

existing flow line of the Arroyo Las Positas. The project involves preparing an environmental document for the silt removal, obtaining required permits, and de-silting the culverts. Project 2012-16 involves removing additional silt in the Arroyo Las Positas down to the original design cross sections of the creek and other more permanent improvements to the creek

that will reduce silt accumulation in the future.

Capital Cost:

				Fiscal	Year End			-
	•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$159,140	\$70,170	\$60,000	\$0	\$0	\$0	\$0	\$289,310

Project Funding:

		Fiscal Year End								
		2011 - 2012 2012 - 2013 2013 - 2014 2014 - 2015 2015 - 2016 2016 - 2032								
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
001	\$159,140	\$70,170	\$60,000	\$0	\$0	\$0	\$0	\$289,310		
Total Funding	\$159,140	\$70,170	\$60,000	\$0	\$0	\$0	\$0	\$289,310		

Project Justification:

Silt accumulation in the Arroyo Las Positas culverts under Airway Boulevard is forming a restriction during large storm events. Recent high water flows have been observed near the top of the culverts. If additional silt accumulates at this location high water flows may overtop the road. Removal of accumulated silt above the existing flow line of the creek will reduce the chance of flooding at this location. Funds requested in FY 2012-13 are to bid out desilting work instead of utilizing City maintenance resources as originally planned.

Capital Project Worksheet

CIP Project Number 200056 CIP Project Name Annual Misc Storm Drain Reimbursements

Dept/Program Storm Drain GASB34 Capital Asset

Project Mgr/Lead Community Development

Project Status In Progress

Project Location Various City Locations

Project Description Various developer reimbursements for oversizing credits for impacts caused by new

development as identified in the 2004 Storm Drain Master Plan.

Capital Cost:

				Fiscal	Year End			
	•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$95,110	\$0	\$0	\$0	\$0	\$0	\$20,000	\$115,110

Project Funding:

				FISCAL Y	ear End			-		
	•	2011 - 2012 2012 - 2013 2013 - 2014 2014 - 2015 2015 - 2016 2016 - 2032								
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
308	\$95,110	\$0	\$0	\$0	\$0	\$0	\$20,000	\$115,110		
Total Funding	\$95,110	\$0	\$0	\$0	\$0	\$0	\$20,000	\$115,110		

Project Justification:

This project sets aside funds for reimbursements to developers for oversizing storm drain lines as required in the City's 2004 Storm Drain Master Plan.

Capital Project Worksheet

CIP Project Number 200078 CIP Project Name Arroyo Mocho Bank Stabilization

Dept/Program Storm Drain GASB34 Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status Completed

Project Location Arroyo Mocho Bank at the Maintenance Service Center

Project Description Bank stabilization/protection of 300 feet of eroded bank on the Arroyo Mocho, adjacent to

the City/LARPD Maintenance Service Center facility has been completed. Fund 323 refers to the LARPD's contribution for 38% of project cost. Mitigation work in Sycamore Grove Park was completed in FY 06/07 to satisfy Fish and Game permit conditions. On going expenses are for biological monitoring of the mitigation work for the bank repair.

Refer to LARPD Project No. 02-03.

Capital Cost:

		-			Fiscal	Year End			•
		•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
		Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Ī	Capital Costs	\$245,690	\$10,000	\$0	\$0	\$0	\$0	\$0	\$255,690

Project Funding:

				Fiscal Y	ear End			_
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
001	\$169,270	\$6,200	\$0	\$0	\$0	\$0	\$0	\$175,470
308	\$21,430	\$0	\$0	\$0	\$0	\$0	\$0	\$21,430
323	\$54,990	\$3,800	\$0	\$0	\$0	\$0	\$0	\$58,790
Total Funding	\$245,690	\$10,000	\$0	\$0	\$0	\$0	\$0	\$255,690

Project Justification:

The southern bank of the Arroyo Mocho near the City/LARPD Maintenance Service Center needs to be repaired to head off further erosion and preserve the existing maintenance road and perimeter wall around the maintenance center.

Capital Project Worksheet

CIP Project Number 200648 CIP Project Name Bear Creek Drive Storm Drain Protection

Dept/Program Storm Drain **GASB34** Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status In Progress

Project Location Bear Creek Drive and Knoll Way

Project Description This project involves sealing the storm drain system in the vicinity of Bear Creek Road and

Knoll Way that discharges to Altamont Creek. Expenditures through FY 2011-2012 were for sliplining 1,100 feet of the lower portion of the storm drain system and coating six storm drain structures; completing a report that evaluated the effectiveness of the initial work and determined what additional measures are needed to protect the storm drain system; and installing an oil separator at the outfall of the northern segment of the storm drain system

(Edgewater Lane and Knoll Way).

FY 2012/13 expenditures are for making modifications to the discharge vault structure at the outfall of the entire storm drain system. Modifications include converting the structure into an oil separator and installing a spring loaded lid.

Maintenance and operation cost assume oil separator cleaned twice per year and includes oil disposed for an estimated amount of \$7,000/year. Maintenance costs are covered under the construction agreement until 2017.

Capital Cost:

				Fiscal	Year End			•
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$411,880	\$35,000	\$60,000	\$0	\$0	\$0	\$0	\$506,880

Project Funding:

	,			Fiscal Y	ear End			•
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
001	\$395,460	\$0	\$0	\$0	\$0	\$0	\$0	\$395,460
240	\$16,420	\$35,000	\$60,000	\$0	\$0	\$0	\$0	\$111,420
Total Funding	\$411,880	\$35,000	\$60,000	\$0	\$0	\$0	\$0	\$506,880
M&O C	Costs 200648	\$7,000	\$7,000	\$7,000	\$7,000	\$7,000	\$112,000	\$147,000

Project Justification:

Natural deposits of perched oil are seeping into the storm drain system in the area and potentially threaten habitat in Altamont Creek. The oil separator at Edgewater Lane and Knoll Way collects oil from the northern segment of the storm drain system; modifications to the downstream outfall vault will help collect oil from the other segments of the storm drain system.

Capital Project Worksheet

CIP Project Number 200723 CIP Project Name Brisa Storm Drain System Improvements

Dept/Program Storm Drain GASB34 Capital Asset

Project Mgr/Lead Community Development

Project Status Preliminary Design

Project Location Brisa neighborhood

Project Description Construct storm drain system improvements to correct the Brisa area deficiencies identified

in the 2004 Storm Drain Master Plan. The project is a box culvert north of Brisa Street and

east of Vasco Road and some nearby pipe improvements. Prior year Fund 308

expenditures are reimbursements to the Butler and Dunn-Rite developments for oversizing storm drains in the Brisa Area as per the 2004 Storm Drain Master Plan. Fund 308 expenditures in prior years were for preliminary design. Fund D is anticipated developer contributions from the Brisa Neighborhood project developer. Developer will be reimbursed

for Fund D contributions over an agreed upon time line.

Capital Cost:

				Fiscal	Year End			-
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	<u>-</u> '
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$513,650	\$0	\$0	\$2,000,000	\$0	\$0	\$0	\$2,513,65

Project Funding:

	·			Fiscal Y	ear End			_
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
302	\$144,070	\$0	\$0	\$0	\$0	\$0	\$0	\$144,070
308	\$369,570	\$0	\$0	\$0	\$0	\$0	\$0	\$369,570
D	\$0	\$0	\$0	\$2,000,000	\$0	\$0	\$0	\$2,000,000
Total Funding	\$513,640	\$0	\$0	\$2,000,000	\$0	\$0	\$0	\$2,513,640
M&O C	Costs 200723	\$0	\$0	\$3,500	\$3,500	\$3,500	\$56,000	\$66,500

Project Justification:

These improvements are needed to resolve the Brisa area storm drain deficiencies identified in the 2004 Storm Drain Master Plan. Development in the area will increase the chance of flooding unless these improvements are constructed.

Annual Maintenance & Operation cost assumptions

Box Culvert 1,400 I.f. @ \$2 per I.f. = \$2,800 Storm Drains 1,400 I.f. @ \$0.5 per I.f. = \$700

Capital Project Worksheet

CIP Project Number 200917 CIP Project Name Central Avenue Culvert Replacement

Dept/Program Storm Drain GASB34 Capital Asset

Project Mgr/Lead Public Works

Project Status Not Started

Project Location Arroyo Las Positas at Central Avenue

Project Description Remove undersized 8 foot high by 16 foot wide arch culvert and replace with a new 8 foot

high by 16 foot wide reinforced concrete box culvert. After culvert is replaced, widen creek to increase conveyance capacity between Vasco Road and Central Avenue. Fund D in the out years refers to money from Zone 7 to fund the design, mitigation, construction and

maintenance of the creek widening portion of the project.

Capital Cost:

				Fiscal	Year End			-
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$1,400,000

Project Funding:

		Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
308	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	
D	\$0	\$0	\$0	\$0	\$0	\$0	\$900,000	\$900,000	
Total Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$1,400,000	
M&O C	Costs 200917	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Project Justification:

The creek widening was identified by Zone 7 as part of their StreamWISE implementation program in 2007 as necessary to convey the existing and future flows in the Arroyo Las Positas. Roadway culverts throughout the City are the responsibility of the City to replace and maintain. This culvert replacement is necessary to open up an existing flow constriction and to complete the proposed upstream improvements. Until the culvert is replaced and upstream improvements are complete no additional flood flows from upstream development will be allowed. As a result development upstream will be required to detain flood flows on-site so that the existing conditions downstream are not worsened.

Capital Project Worksheet

CIP Project Number 201323 CIP Project Name Citywide Culvert Outfall Project

Dept/Program Storm Drain **GASB34** Study - not related to a project

Project Mgr/Lead Community Development

Project Status Not Started

Project Location Citywide

Project Description Permit preparation and CEQA documentation needed to obtain an annual maintenance

permit to clean out critical storm drain outfalls by the end of FY 13/14 to alleviate flooding. Estimated \$100,000 required to clear critical outfalls. Maintenance permit will allow for

annual maintenance.

Capital Cost:

	,	Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
Capital Costs	\$0	\$50,000	\$250,000	\$250,000	\$125,000	\$125,000	\$0	\$800,000	

Project Funding:

			Fiscal Year End								
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-			
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total			
001	\$0	\$50,000	\$250,000	\$250,000	\$125,000	\$125,000	\$0	\$800,000			
Total Funding	\$0	\$50,000	\$250,000	\$250,000	\$125,000	\$125,000	\$0	\$800,000			

Project Justification:

Creek maintenance has not been done for several years resulting in sediment-logged outfalls that need cleaning to function prorperly and alleviate flooding. Annual creek maintenance permit is required to clean outfalls annually.

Capital Project Worksheet

CIP Project Number 201413 CIP Project Name Culvert Improvements

Dept/Program Storm Drain GASB34 Capital Asset

Project Mgr/Lead Public Works

Project Status Not Started

Project Location Various Locations

Project Description Construct the culvert improvements identified in the 2009 Storm Drain Master Plan

Addendum with the exception of the Jack London Boulevard, Central Avenue, and Arroyo Las Positas Golf Course Bridge culvert improvements which are included in Capital Improvement Program as separate projects. This project includes culvert improvements along the Arroyo Las Positas at Airway, Vasco, Heather, and Arrowhead; along the Altamont Creek at Broadmoor, Pasatiempo, and Vasco; along the Arroyo Seco at Lucille; and under I-

580 near Las Positas Road. No projects anticipated FY 11/12 or FY 12/13.

Capital Cost:

				Fiscal	Year End			_
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$8,883,000	\$8,883,000

Project Funding:

		Fiscal Year End								
		2011 - 2012 2012 - 2013 2013 - 2014 2014 - 2015 2015 - 2016 2016 - 2032								
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
001	\$0	\$0	\$0	\$0	\$0	\$0	\$5,202,000	\$5,202,000		
308	\$0	\$0	\$0	\$0	\$0	\$0	\$3,681,000	\$3,681,000		
Total Funding	\$0	\$0	\$0	\$0	\$0	\$0	\$8,883,000	\$8,883,000		

Project Justification:

Future development identified in the General Plan will increase peak storm flows. The 2009 Storm Drain Master Plan Addendum determined that these culverts will not be able to handle ultimate peak storm flows. Upsizing the culverts is the responsibility of the City because they are located under City roadways and trails. The 2009 Storm Drain Master Addendum calculated the portion of each improvement needed to accommodate existing flows and the additional upsizing needed for ultimate flows. Costs associated with upsizing for existing flows are funded with General Funds (Fund 001) and costs associated with upsizing for ultimate flows are funded with Storm Drain Funds (Fund 308).

Capital Project Worksheet

CIP Project Number 200520 CIP Project Name Major Storm Drain Trunkline Upgrades

Dept/Program Storm Drain **GASB34** Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status Not Started

Project Location Various City Locations

Project Description This project includes storm drain trunkline upgrade projects outside the Brisa Area that are

required to keep pace with development and alleviate system capacity inadequacies and bottlenecks in accordance with the recommendations of the 2009 Storm Drain Master Plan Addendum by Schaaf and Wheeler. This project includes improvements to the Second Street, Village, and Southfront storm drain systems. Required improvements due to new development in the Brisa area are being constructed as part of Brisa Area Storm Drain Improvements Project 2007-23. FY 2015-2016 expenditures of \$2,100,000 are for the

Second Street Storm Drain Improvements in the Downtown area.

See "Infrastructure Rehabilitation" section for projected unmet needs.

Capital Cost:

					Fiscal	Year End			•
		•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	•
		Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
ı	Capital Costs	\$0	\$0	\$0	\$0	\$0	\$2,100,000	\$1,506,000	\$3,606,000

Project Funding:

			Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_		
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
308	\$0	\$0	\$0	\$0	\$0	\$2,100,000	\$1,506,000	\$3,606,000		
Total Funding	\$0	\$0	\$0	\$0	\$0	\$2,100,000	\$1,506,000	\$3,606,000		

Project Justification:

This project will implement required storm drainage system improvements shown in the 2009 Storm Drain Master Plan Addendum to mitigate anticipated drainage problems associated with new developments.

Capital Project Worksheet

CIP Project Number 201325 CIP Project Name Miscellaneous Storm Drain and Culvert

Repairs

Dept/Program Storm Drain GASB34 Repairs / Maintenance

Project Mgr/Lead Public Works

Project Status Not Started

Project Location Various Locations

Project Description Repair existing deficiencies in storm drains and culverts under city roadways including

repairing pipes in place, replacing pipes, or desilting pipes.

Capital Cost:

				Fiscal	Year End			•
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$800,000	\$1,000,000

Project Funding:

				Fiscal Yo	ear End			-
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
681	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$800,000	\$1,000,000
Total Funding	\$0	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$800,000	\$1,000,000

Project Justification:

Repairing storm drains and culverts under roadways will reduce the potential of flooding and sink holes on City roadways.

Capital Project Worksheet

CIP Project Number 199758 CIP Project Name Silt and Gravel Removal at Holmes St. Bridge

Dept/Program Storm Drain **GASB34** Repairs / Maintenance

Project Mgr/Lead Public Works

Project Status Preliminary Design

Project Location Arroyo Mocho Stream (Wente St. to Stanley Blvd.)

Project Description This project is for annual removal of silt and gravel accumulation at the Holmes Street

Bridge. FY 12/13 expenditures are for removal of silt and gravel at the Holmes Street Bridge which will be permitted through the Citywide Culvert Outfall Project No. 2013-23 Citywide

permit. The last time silt & gravel was removed was in June 2011.

Capital Cost:

	,			Fiscal	Year End			
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$91,400	\$0	\$100,000	\$0	\$0	\$0	\$1,600,000	\$1,791,400

Project Funding:

	ı		Fiscal Year End						
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
001	\$44,800	\$0	\$100,000	\$0	\$0	\$0	\$1,600,000	\$1,744,800	
308	\$46,600	\$0	\$0	\$0	\$0	\$0	\$0	\$46,600	
Total Funding	\$91,400	\$0	\$100,000	\$0	\$0	\$0	\$1,600,000	\$1,791,400	

Project Justification:

This annual maintenance will prevent flooding along the Arroyo Mocho at the Holmes Street Bridge.

Capital Project Worksheet

CIP Project Number 201216 CIP Project Name SMMP Projects-Arroyo Las Positas & Mocho

Dept/Program Storm Drain GASB34 Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status Not Started

Project Location Arroyo Las Positas & Mocho

Project Description The City has partnered with Zone 7 to implement StreamWISE projects within the City of

Livermore. Projects along the Arroyo Las Positas already identified in CIP No. 201217and 201218 and include StreamWISE projects R.1-7, R.5-2 and R.5-3. This project includes the remaining projects R.1-2, R.1-6, R.3-2, R.3-4, R.3-5, R.6-1 and R.6-2 that are not already identified as CIP projects. Analysis and coordination with Zone 7 is needed to determine improvements that can be incorporated into future park, creek and habitat restoration projects. Fund 001 provides for City analysis and coordination with Zone 7. Fund

D refers to the grants, assessments, funds from Zone 7 for Regional Flood Control

Improvements.

Capital Cost:

			Fiscal Year End						
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
Capital Costs	\$0	\$25,000	\$0	\$0	\$0	\$0	\$273,275,000	\$273,300,000	

Project Funding:

		Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
001	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	
D	\$0	\$0	\$0	\$0	\$0	\$0	\$273,275,000	\$273,275,000	
Total Funding	\$0	\$25,000	\$0	\$0	\$0	\$0	\$273,275,000	\$273,300,000	

Project Justification:

Control of sediment along both the Arroyo Mocho and Arroyo Las Positas is necessary to reduce future maintenance costs and flooding. Coordination with Zone 7 allows the City to provide input into the design process so that regional projects can be incorporated best into ongoing development, park, creek restoration and trail projects along the creek corridors. Mitigation opportunities identified through this analysis will benefit other city and Zone 7 projects and reduce the futre maintenance costs or shift the responsibility of maintenance to Zone 7 thus eliminating City creek maintenance for those sections of the Arroyo the City now has the responsibility to maintain.

Capital Project Worksheet

CIP Project Number 201030 CIP Project Name Storm Drain Trash Capture Devices

Dept/Program Storm Drain GASB34 Repairs / Maintenance

Project Mgr/Lead Public Works

Project Status In Progress

Project Location Various

Project Description Install trash capture devices in the storm drain system in at least 127 acres of the City's

wholesale/commercial areas. Fund D refers to funding from the American Recovery and Reinvestment Act (ARRA) awarded to the San Francisco Estuary Partnership to purchase and install trash capture devices in Livermore. The City has entered into an agreement with the Association of Bay Area Governments (ABAG) where ABAG installs the trash capture

devices using the City's pro rata share of ARRA funds for this project.

Capital Cost:

			Fiscal Year End					
	•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	="
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total
Capital Costs	\$0	\$0	\$80,200	\$0	\$0	\$0	\$0	\$80,200

Project Funding:

	ı	Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032		
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
D	\$0	\$0	\$80,200	\$0	\$0	\$0	\$0	\$80,200	
Total Funding	\$0	\$0	\$80,200	\$0	\$0	\$0	\$0	\$80,200	
M&O C	osts 201030	\$0	\$26,000	\$26,000	\$26,000	\$26,000	\$416,000	\$520,000	

Project Justification:

The recently adopted Regional Water Quality Control Board Regional Stormwater Permit requires that trash capture devices need to be installed in a portion of each city's retail and commercial area storm drain systems. These devices will reduce the amount of trash washed into creeks during storm events. The San Francisco Estuary Partnership has been awarded \$5 million from the American Recovery and Reinvestment Act to purchase trash capture devices and provide them to cities and counties throught the Bay Area according to a formula based on population and permit requirements. The \$80,200 in Fund D refers to Livermore's allottment.

Maintenance costs assume 1 hr/year for 130 devices at \$200/hr = \$26,000/yr

Capital Project Worksheet

CIP Project Number 200445 CIP Project Name Stream Channel Master Plans

Dept/Program Storm Drain **GASB34** Study - not related to a project

Project Mgr/Lead Community Development

Project Status Not Started

Project Location Stream Channels - Citywide

Project Description Compile new and analyze existing creek, flooding, water quality and other necessary data to

develop a comprehensive creek and watershed master plan that will satisfy new water quality permit requirements as well as aid in the management of the floodplains within the jurisdiction of the City. Prior Year expenditures were for the development of a stream channel hydraulic model and companion stream channel master plan report identifying existing and future stream channel hydraulic deficiencies. Out Year expenditures are for the

development of a comprehensive creek and watershed master plan.

Capital Cost:

				Fiscal Year End						
		•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	-	
		Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
Ī	Capital Costs	\$100,730	\$0	\$0	\$0	\$0	\$0	\$200,000	\$300,730	

Project Funding:

			Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	_		
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
001	\$100,730	\$0	\$0	\$0	\$0	\$0	\$200,000	\$300,730		
Total Funding	\$100,730	\$0	\$0	\$0	\$0	\$0	\$200,000	\$300,730		

Project Justification:

The 2004 Storm Drainage Master Plan did not include creeks since the City's storm drain connection fees cannot include channel improvements other than culvert improvements. Currently many of the creeks are owned and maintained by the City and will not be accepted by Zone 7 for maintenance until they meet Zone 7 standards. Now that these standards are better identified in the 2003 Zone 7 Draft Stream Management Master Plan, a City-wide creek and watershed plan can be developed. Creek studies can be compiled along with any new analysis to identify the specific City-wide projects needed to upgrade creeks to meet Zone 7 standards and meet new water quality requirements. Some of these creek upgrade projects, such as the Arroyo Las Positas downstream of Kitty Hawk are also identified in the Zone 7 Stream Management Master Plan. Mapping existing creeks and detention basins along with new features, determining the funding requirements and finding or developing funding sources to build the identified projects will aid in a more efficient allocation of City resources.

Capital Project Worksheet

CIP Project Number 201218 CIP Project Name Stream WISE Airway Improvement Project

Dept/Program Storm Drain **GASB34** Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status Not Started

Project Location Arroyo Las Positas from Airway Blvd. To Cayetano Creek

Project Description The City has partnered with Zone 7 to implement StreamWise projects within the City of

Livermore. This project is identified as R.5-2 in the Zone 7 StreamWise program. This project includes channel and culvert desilting and a comprehensive sediment analysis, a stream corridor restoration plan including fish-friendly grade control structures and creek restoration to original design between Airway Blvd. and Cayetano Creek. This project follows downstream levee construction under Project No. 201217. The City and Zone 7 each own half of the channel between Airway Blvd. and Kitty Hawk Rd. Fund 001 will provide City analysis, review and coordination with Zone 7. Fund D refers to \$120,000 in Federal funding for the Arroyo Las Positas and Arroyo Mocho Channels previously authorized in Federal FY 2003 & 2004 respectively. Out years expenditures to Fund D refers to the grants, assessments, funds from Zone 7 for Regional Flood Control Improvements.

Capital Cost:

	ı	Fiscal Year End							
		2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032		
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
Capital Costs	\$0	\$0	\$0	\$0	\$145,000	\$0	\$30,400,000	\$30,545,000	

Project Funding:

		Fiscal Year End								
		2011 - 2012	011 - 2012 2012 - 2013 2013 - 2014 2014 - 2015 2015 - 2016 2016 - 2032							
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
001	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000		
D	\$0	\$0	\$0	\$0	\$120,000	\$0	\$30,400,000	\$30,520,000		
Total Funding	\$0	\$0	\$0	\$0	\$145,000	\$0	\$30,400,000	\$30,545,000		

Project Justification:

Channel capacity to contain 100-year old flood has greatly diminished to a 10-year capacity or less so the channel needs to be desilted to contain the 100-year flood. Channel desitlting only is not permittable without a creek restoration plan with mitigation. This project will provide the necessary plan to allow the project to be permitted for capital improvements and on-going maintenance. Maintenance which is now both Zone 7 and the City responsibility (each own one-half of the channel) is expected to transfer to Alameda County Flood Control (Zone 7) after these improvements are completed.

Capital Project Worksheet

CIP Project Number 201217 CIP Project Name Stream WISE Arroyo Las Positas Diversion

Dept/Program Storm Drain **GASB34** Repairs / Maintenance

Project Mgr/Lead Community Development

Project Status Not Started

Project Location El Charro Road to Isabel

Project Description

The StreamWISE Arroyo Las Positas Diversion Project R5.3 is part of Zone 7 's regional multi-phase 100-year flood protection solution. The project components include: Phase 1) Flood control improvements that are part of CIP200720, Phase 2) a berm or wall along the southern side of Arroyo Las Positas from Airway Blvd to Isabel Avenue, Phase 3a) Creek restoration through the golf course to remove non-native vegetation, silt, plant native vegetation and provide for a 15 year frequency flood conveyance. Phase 3b) a flood wall and levee extending from the golf course berm (built with Phase 1) along the Club House parking lot across and along the north side of Club House Drive. This phase includes the installation of 4-15 x7' culverts under Airway Blvd. and certification of levees. Phase 4) 4-8'x10' RCB;s from southern conveyance facility to Cope Lake with a pump station and extension of the concrete lined Arroyo Mocho for drain back flows Phase 5) Construction of additional culverts from the southern conveyance facility, constructed with CIP 200720, to Cope Lake and additional pumps to convey the ultimate 6,000-8,000cfs. Phase 2 and 3 are estimated to cost \$27.7 million. The direct benefit to the Airport for these phases is calculated to be approximately 33% of the project cost and the remaining 67% a regional benefit. Therefore, Fund 210 expenditures represent the share of costs to the Airport. Fund D refers to funding from other agencies to complete Phase 2 & 3 and future funding for Phase 4 & 5.

Capital Cost:

	-		Fiscal Year End						
	•	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016 - 2032	="	
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total	
Capital Costs	\$21,670	\$0	\$150,000	\$250,000	\$500,000	\$8,250,000	\$170,600,000	\$179,771,670	

Project Funding:

			Fiscal Year End							
		2011 - 2012	1 - 2012 2012 - 2013 2013 - 2014 2014 - 2015 2015 - 2016 2016 - 2032							
	Prior Years	Requested	Requested	Requested	Requested	Requested	Out Years	Total		
001	\$21,670	\$0	\$0	\$0	\$0	\$0	\$0	\$21,670		
210	\$0	\$0	\$150,000	\$250,000	\$500,000	\$8,250,000	\$0	\$9,150,000		
D	\$0	\$0	\$0	\$0	\$0	\$0	\$170,600,000	\$170,600,000		
Total Funding	\$21,670	\$0	\$150,000	\$250,000	\$500,000	\$8,250,000	\$170,600,000	\$179,771,670		

Project Justification:

Regional Flood Control Improvements are necessary to eliminate severe streambed erosion and flooding downstream. A diversion system to divert 6,000 to 8,000 cfs to Cope Lake has been determined by Zone 7 in their StreamWISE program to be the best regional solution. Development in the El Charro Specific Plan has necessitated early preliminary analysis to identify Phase 1 and subsequent phasing necessary to convey ultimate flows through the Las Positas Golf Course without damaging the Airport. City analysis and coordination with Zone 7 will continue to allow the City to guide Zone 7 regional projects through private and City owned land to provide long term solutions that are best for the City and Zone 7.

