



WILLIAM T FUJIOKA
Chief Executive Officer

County of Los Angeles
CHIEF EXECUTIVE OFFICE

Kenneth Hahn Hall of Administration
500 West Temple Street, Room 713, Los Angeles, California 90012
(213) 974-1101
<http://ceo.lacounty.gov>

"To Enrich Lives Through Effective And Caring Service"

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April 16, 2013

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012

Dear Supervisors:

ADOPTED

BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

25 April 16, 2013

Sachi A. Hamai
SACHI A. HAMAI
EXECUTIVE OFFICER

**DEPARTMENT OF PUBLIC WORKS:
MARINA DEL REY SEAWALL REFURBISHMENT PROGRAM PROJECT
APPROVE CAPITAL PROJECT
APPROVE TOTAL PROJECT BUDGET
CAPITAL PROJECT NO. 88742
(FOURTH DISTRICT)
(3 VOTES)**

SUBJECT

Approval of the recommended actions will approve a capital project for the Marina del Rey Seawall Refurbishment Program Project, find the proposed Project exempt from the California Environmental Quality Act, and authorize the Director of Public Works, or her designee, to deliver the proposed Project using Board-approved Job Order Contracts.

IT IS RECOMMENDED THAT THE BOARD:

1. Find the proposed Marina del Rey Seawall Refurbishment Program Project categorically exempt under the California Environmental Quality Act per Section 15301(d) of the State California Environmental Quality Act Guidelines; and under Class 1(c) of the County's Environmental Document Reporting Procedures and Guidelines adopted by the Board on November 17, 1987, as the proposed Project provides for repair of the existing Marina seawall structure with no expansion of use.
2. Approve the Marina del Rey Seawall Refurbishment Program Project, Capital Project No. 88742; and authorize the Director of Public Works, or her designee, to deliver the proposed Project with a

total Project budget of \$7,546,578 using Board-approved Job Order Contracts.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

Approval of the recommended actions will find the Marina del Rey Seawall Refurbishment Program Project (Project) exempt from the California Environmental Quality Act (CEQA), approve the proposed Project and current budget, and authorize the Director of Public Works, or her designee, to deliver the proposed Project in phases using Board-approved Job Order Contracts (JOCs).

Background

The Marina del Rey Seawall is a key public infrastructure component that supports the Marina del Rey small craft harbor. It consists of approximately 7 1/2 miles of reinforced concrete panels that form the harbor with eight individual marina basins accessed by a central main channel.

The original seawall construction was completed in 1965 using a standard cantilevered retaining wall design consisting of a series of concrete panels approximately 60 feet long and 10 to 12 feet high, supported on a concrete footing. In 1986, one of the panels in Basin C collapsed, and the cause of the failure was attributed to corrosion of the reinforcing steel at the base of the panel. In response to the isolated wall panel failure, the entire seawall was inspected and tested to identify wall panels damaged by corrosion, and a retrofit design was developed and implemented to restore the structural capacity of the seawall. The structural repair consisted of reinforcing each panel with tie-rods extending from the outside face of the wall (sea side) to reinforced concrete caissons placed behind the wall (land side), and installing a cathodic protection system to protect and prevent further corrosion to the reinforcing steel in the seawall. The retrofit work was completed in phases during the late 1990s.

Since completion of the retrofit work, voids have been detected below the concrete footing slab of the seawall at various locations throughout the harbor, which have the potential to compromise the structural stability of the seawall. The voids are believed to have resulted from erosion of the underlying soils caused by the daily tidal changes. An investigation of the condition of the entire seawall was performed in 2003 and identified voids of various sizes affecting approximately 17,600 lineal feet or approximately 45 percent of the length of the seawall.

A void repair schedule was developed where work was prioritized in four phases starting in areas with the largest voids then addressing areas of progressively smaller voids. Repair of the largest most critical voids (1,600 lineal feet) was completed in 2007.

Since 2007, the Department of Public Works (Public Works), with support from engineering consultants, has conducted an ongoing inspection and maintenance program, based on the limited funding available, to assess and monitor the condition of the seawall and its critical components, and to prioritize and implement as-needed repairs to maintain the structural integrity and extend the service life of the seawall. Unlike conventional retaining walls, the corrosive marine environment and loads induced by tidal action can be very destructive to the seawall. Therefore, in this dynamic environment, it is essential that the seawall panels be properly maintained to prevent deterioration and to avoid the high cost of replacement and the related operational impacts on the surrounding Marina area.

Recommended Project

Based on inspections and testing conducted by Public Works and engineering consultants, deficiencies have been identified in critical components of the seawall, which without mitigation have the potential to compromise the long-term structural integrity and service life of the seawall. Therefore, the proposed Project includes the following repairs to the seawall, in priority order, and will be implemented in phases to minimize construction impacts in the Marina.

Priority 1 - Seawall Crack Repairs

Cracks of various sizes have been identified on the face of the seawall, which have the potential to expose the reinforcement steel in the seawall to corrosion. Cracks smaller than 1/16-inch are not considered a problem. The small cracks (between 1/16 and 1/8-inch) will be sealed by injecting grouting. The larger cracks (greater than 1/8-inch) will be repaired by removing the cracked concrete, replacing the damaged reinforcing steel, and applying a new concrete section. The crack repairs will be completed using a Public Works' Board-approved JOC, and are scheduled to begin in June 2013 and be completed in November 2013.

Priority 2 - Tie Rod End Cap Repairs

The tie rods installed, as part of the seawall retrofit work in the 1990s, are a component in maintaining the structural capacity of the seawall by connecting the existing wall to a cast-in-place concrete caisson on the land side for support. Based on observed deterioration of the tie rod end cap assemblies from exposure to the salt air environment, a comprehensive inspection study was completed to document the condition and needed repairs for the tie rods (7,449 total). Approximately 4,800 tie rods need to be repaired by replacing the plastic end caps and reapplying epoxy coating to the exposed metal components to prevent further corrosion. These repairs will be completed using a Public Works' JOC and are scheduled to start concurrently with the seawall crack repairs in June 2013 and will be completed in May 2014.

Priority 3 - Cathodic Protection System Repairs

The cathodic protection system was installed as a critical component of the seawall retrofit work to prevent any further corrosion of the reinforcing steel in the seawall. The cathodic protection system includes a total of 25 rectifiers installed in underground vaults that are used to provide a regulated direct electrical current flow to the seawall for optimal corrosion control.

In 2009, a comprehensive inspection of the cathodic protection system and its various components was completed to assess its condition and performance. It was determined that many of the rectifier components were damaged from exposure to moisture and standing water in the underground vaults. The repairs will include replacing the vault lid seals to prevent water intrusion into the underground vaults, repairing and/or replacing the inoperable rectifier components and the pumps that remove standing water from the vaults, and recommissioning the repaired rectifiers. The cathodic protection system repairs will be completed using a Public Works' JOC and are anticipated to begin in April 2013 and be completed in May 2014.

Priority 4 - Void Repairs

In accordance with the void repair schedule, the first phase void repairs were completed in 2007. The second phase void repair (6,600 lineal feet) will consist of filling voids with grout and installing rock slope protection at the base of the seawall to prevent future migration of the underlying soils. The second phase void repairs will be completed with a Public Works' JOC once the full funding is

identified and the special condition of soft bottom/wetland habitat restoration from the Coastal Development Permit is fulfilled. It is anticipated that the second phase void repairs will take approximately 18 months to complete. Public Works continues to monitor the second phase void repair areas, and no significant change in the void sizes has been observed that could compromise the integrity of the seawall.

The remaining voids (9,400 lineal feet) are progressively smaller and isolated and do not pose a threat to the overall structural stability of the seawall. These voids will continue to be monitored as part of the ongoing inspection and maintenance program, and no repair work is presently proposed. The final phase of void repairs would include sections exhibiting no voids, but where rock slope protection would be added to prevent possible future erosion.

Implementation of Strategic Plan Goals

The Countywide Strategic Plan directs the provision of Operational Effectiveness (Goal 1) and Integrated Services Delivery (Goal 3) by investing in public infrastructure that will extend the service life of the Marina del Rey harbor seawall.

FISCAL IMPACT/FINANCING

The total cost for the proposed Project's top three priority repairs, including plans and specifications, plan check, construction, consultant services, miscellaneous expenditures, and County services, is currently estimated at \$7,546,578. The proposed top three priority repairs will be implemented using Public Works' Board-approved JOCs with estimated construction costs of \$420,000, \$1,890,000, and \$2,570,000, respectively. The proposed Project Schedule and Budget Summary for the top three priority repairs are detailed in the Attachment.

Sufficient appropriation is available in the Fiscal Year 2012-13 Capital Projects/Refurbishment Budget-Marina del Rey Seawall Refurbishment Program Project (Capital Project No. 88742) to fully fund the seawall crack repairs, tie rod end cap repairs, and the cathodic protection system repairs. The Project's top three priority repairs are currently funded by \$292,000 of net County cost, \$383,000 of Vehicle License Gap Loan Funds, and \$6,726,600 of Marina cumulative Capital Outlay (Marina ACO) Funds. The pre-design services cost of \$144,978 was covered under Department of Beaches and Harbors' operating budget.

The total cost for the void repairs are currently estimated at \$6,840,000. The Department of Beaches and Harbors (Beaches and Harbors) will identify and periodically transfer Marina ACO Funds into the Marina del Rey Seawall Refurbishment Program Project (Capital Project No. 88742) for void repairs. Once the full funding for void repairs is secured and the required permit conditions are met, Public Works will implement Priority 4 of the Project using Board-approved JOCs.

Following completion of the improvements, Beaches and Harbors anticipates annual operating costs of \$270,000 for the County's ongoing maintenance and inspection for the seawall, including visual inspection of the entire seawall to monitor for cracks on the exposed seawall face and to look for signs of subsidence and wall displacement, and evaluation of the condition of the tie rods; routine inspection, maintenance, and testing of the cathodic protection system to ensure optimal corrosion control for the seawall; and periodic nondestructive field testing of the seawall to determine the condition of the reinforcing steel in the seawall.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

Pursuant to the Board's Civic Art Policy adopted on December 7, 2004, as amended, the Project is exempt from the Civic Art Policy funding allocation requirement because the Project involves public infrastructure repairs.

ENVIRONMENTAL DOCUMENTATION

The proposed Project is categorically exempt from CEQA. The proposed Project, to repair the cracks on the face of the seawall, the tie rod end caps, the cathodic protection system components of the seawall, and voids at the base of the seawall, is within certain classes of projects that have been determined not to have a significant effect on the environment in that it meets criteria set forth in Sections 15301(d) of the State CEQA Guidelines, and Class 1(c) of the County's Environmental Document Reporting Procedures and Guidelines, Appendix G. The proposed Project provides for repair of the existing Marina seawall structure with no expansion of use. There are no cumulative impacts, unusual circumstances or other limiting factors that would make the exemption inapplicable based on the proposed Project records.

Upon the Board's approval of the proposed Project, Public Works will file a Notice of Exemption with the Registrar-Recorder/County Clerk in accordance with Section 15062 of the State CEQA Guidelines.

CONTRACTING PROCESS

The proposed repairs to the seawall will be completed by Public Works using Board-approved JOCs.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The seawall refurbishment repairs will take place at various locations in the Marina. The Marina waterways will remain open during construction, but access to certain dock areas may be restricted when work is being executed at the specific sites. The contractor will be required to coordinate its construction schedule with the daily functions and activities of the various affected Marina del Rey lessees to minimize disruption of services and access to the dock areas.

CONCLUSION

Please return one adopted copy of this Board letter to the Chief Executive Office, Capital Projects Division; the Department of Beaches and Harbors; and the Department of Public Works, Project Management Division I.

The Honorable Board of Supervisors

4/16/2013

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Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. T. Fujioka', with a long horizontal line extending to the right.

WILLIAM T FUJIOKA

Chief Executive Officer

WTF:RLR:DJT

DKM:AC:zu

Enclosures

c: Executive Office, Board of Supervisors
County Counsel
Arts Commission
Beaches and Harbors
Public Works

April 9, 2013

ATTACHMENT A

**DEPARTMENT OF PUBLIC WORKS:
MARINA DEL REY SEAWALL REFURBISHMENT PROGRAM PROJECT
APPROVE CAPITAL PROJECT
APPROVE TOTAL PROJECT BUDGET
CAPITAL PROJECT NO. 88742**

I. PROJECT SCHEDULE

Project Activity	Scheduled Completion Date
Priority 1. Seawall Crack Repairs	
Construction Award (JOC)	05/16/13
Construction Start	06/03/13
Substantial Completion	11/22/13
Project Acceptance	01/30/14
Priority 2.-Tie Rod End Cap Repairs	
Construction Award (JOC)	05/16/13
Construction Start	06/03/13
Substantial Completion	05/30/14
Project Acceptance	07/31/14
Priority 3.-Cathodic Protection System Repairs	
Construction Award (JOC)	04/11/13
Construction Start	04/29/13
Substantial Completion	05/30/14
Project Acceptance	07/31/14
Priority 4. – Void Repairs	TBD

II. PROJECT BUDGET SUMMARY

Project Activity	Proposed Budget
Land Acquisition	\$ 0
Construction	
Priority 1. - Seawall Crack Repairs	\$ 420,000
Priority 2. - Tie Rod End Cap Repairs	1,890,000
Priority 3. - Cathodic Protection System Repairs	2,570,000
Change Orders	976,000
Departmental Crafts	0
Youth Employment	0
Construction Consultants	0
Misc. Expense (Gordian Fees)	100,000
Telecomm Equip – Affixed to Building	0
Civic Arts	0
Subtotal	<u>\$5,956,000</u>
Programming/Development	\$ 0
Plans and Specifications	\$ 42,600
Consultant Services	
Site Planning	\$ 0
Hazardous Materials	0
Geotech/Soils Report and Soils Testing	0
Material Testing	50,000
Cost Estimating	0
Topographic Surveys	0
Construction Management	0
Construction Administration (Halcrow)	200,000
Environmental	0
Legal	0
Construction/Change Order	0
Other: Inspection and Investigative Studies (Halcrow)	145,000
Other:	0
Subtotal	<u>\$ 395,000</u>
Miscellaneous Expenditures	\$ 1,400
Jurisdictional Review/Plan Check/Permit	\$ 8,600
County Services	
Code Compliance and Quality Control Inspection	\$ 300,000
Design Review	5,000
Design Services	5,000
Contract Administration	88,000
Project Management	452,000
Project Management Support Services	0
ISD Job Order Contract Management	0
DPW Job Order Contract Management	0
ISD ITS Communications	0
Pre-design Services*	144,978
Project Technical Support	45,000
Office of Affirmative Action	30,000
Other: ISD Procurement Services	0
Other: DPW Design Division Support Services	73,000
Subtotal	<u>\$ 1,142,978</u>
TOTAL	\$7,546,578

*Paid directly from Department of Beaches and Harbors Operating Budget.