



Engineering, Operations, & Technology Committee

Garvey Reservoir Rehabilitation

Item 8-1

December 8, 2025

Presented by: Tae Yun and Sam Mouawad

Item 8-1

Garvey Reservoir Rehabilitation

Subject

Adopt CEQA determination that the proposed action was previously addressed in the certified 2024 Garvey Reservoir Rehabilitation Project Environmental Impact Report; and award a \$115,611,000 construction contract to J.F. Shea Construction Inc. for rehabilitation of Garvey Reservoir facilities; and authorize an increase of \$3.2 million to an existing agreement with Arcadis U.S. Inc. for a new not-to-exceed total amount of \$9.55 million for technical support during construction

Purpose

Maintain water delivery reliability by replacing the cover, liner, and structural strengthening of the outlet tower at Garvey Reservoir

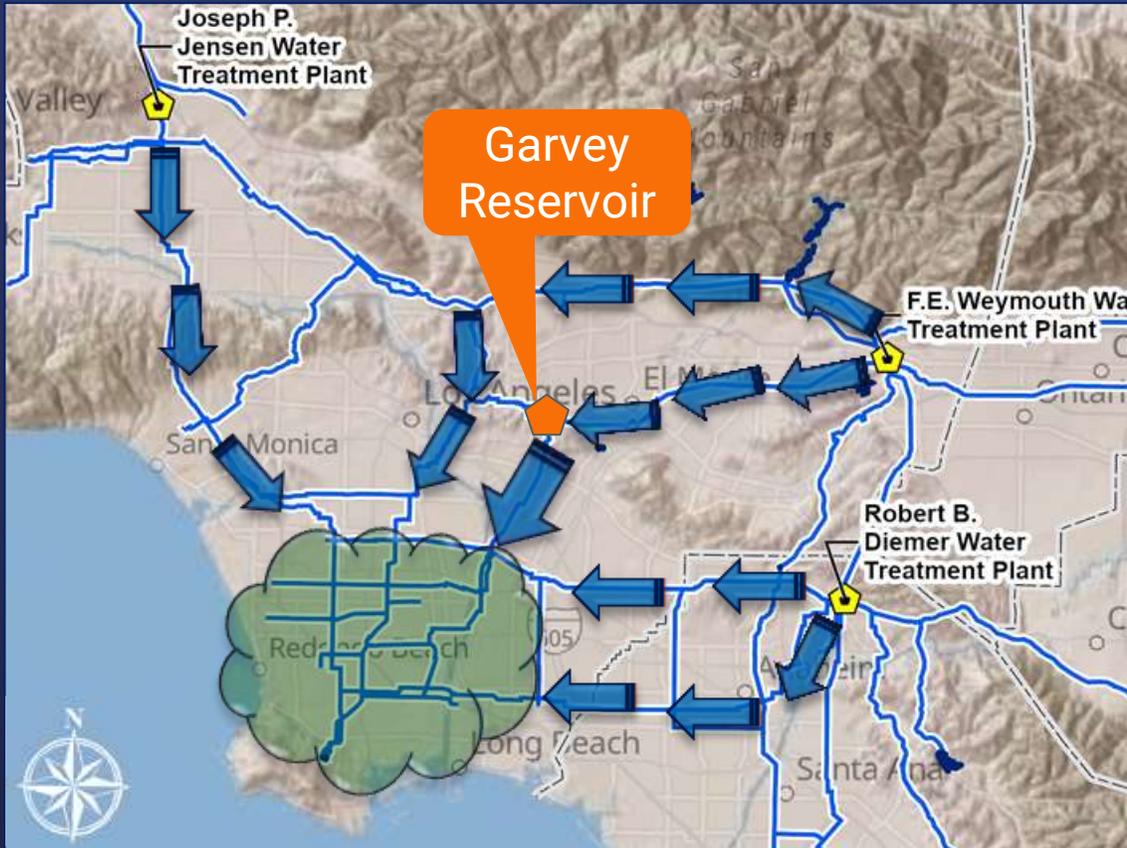
Recommendation and Fiscal Impact

Award a construction contract to replace the reservoir cover and liner at Garvey, and authorize an increase to an existing agreement for technical support during construction

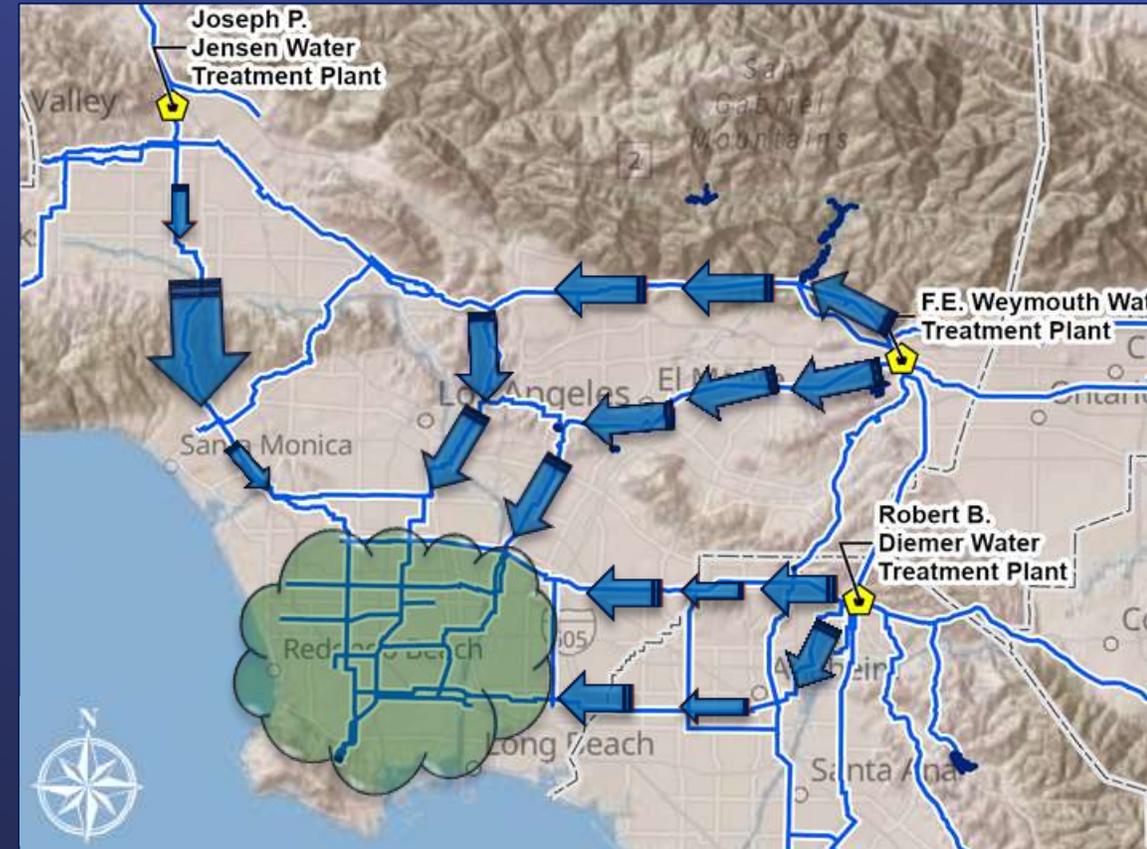
Fiscal Impact – \$145 M

Budgeted

Distribution System



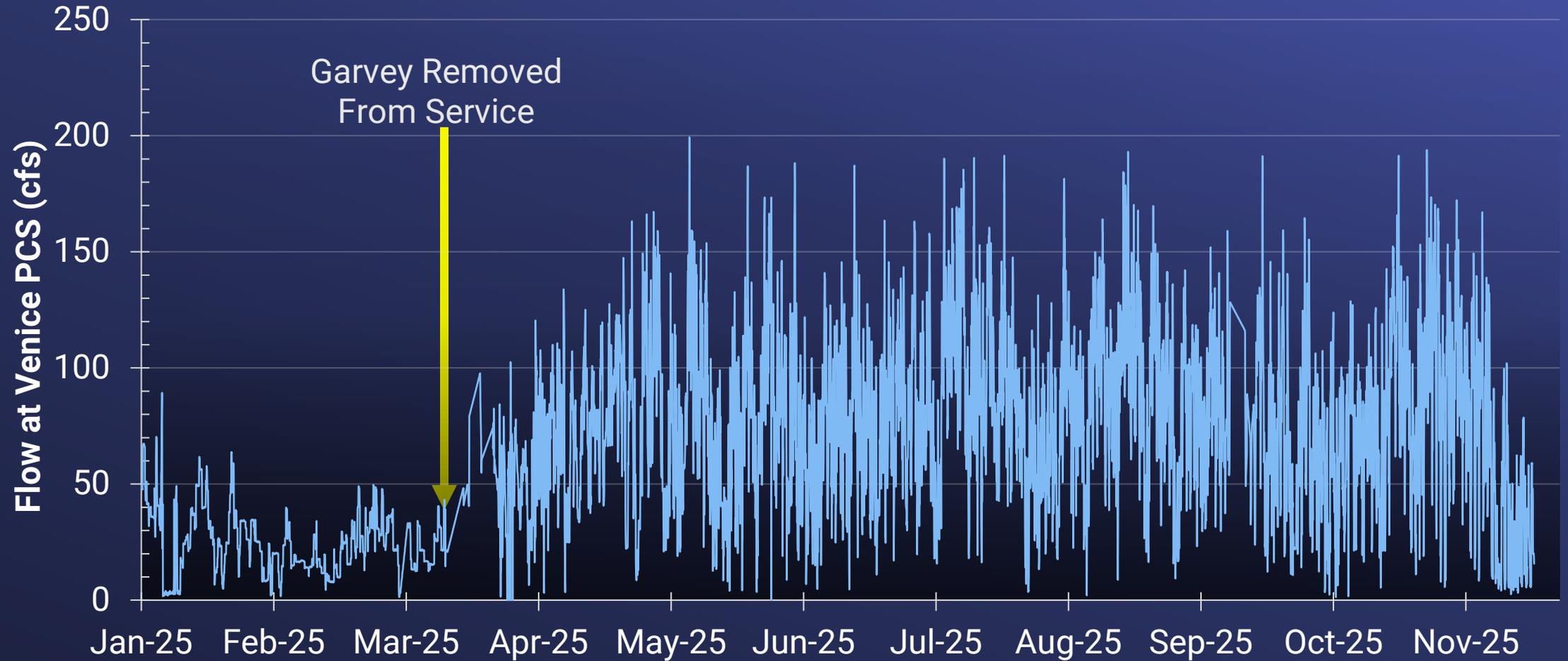
Garvey In Service



Garvey Out of Service

 Central Pool Area
 Direction of Water Flow

Higher Flow Fluctuation on Distribution System



Garvey Reservoir Rehabilitation

Minimize SWP into Common Pool

- During drought, reduce SWP flow into Common Pool to 30 cfs
- Without Garvey, operations will rely more on Jensen Plant reservoir with higher flows into Common Pool

Impacts to Drought Actions Without Garvey Reservoir

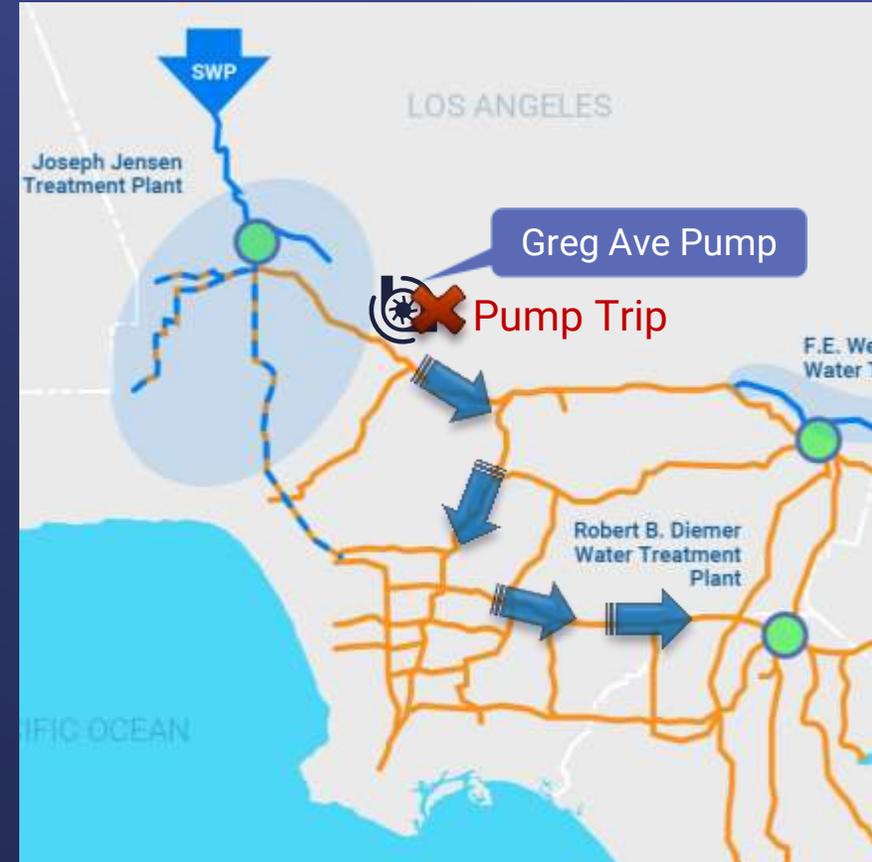


Garvey Reservoir Rehabilitation

Greg Ave Pumping

- Pump ~55 cfs of Colorado River Water (CRW) into Jensen Service Area
- Garvey provides buffer during pump trips
- Without Garvey, pump trips could cause water to backup at Diemer reservoir
- Without Garvey, Greg Ave pumping could see more down time during pump trips

Impacts to Drought Actions Without Garvey Reservoir



Garvey Reservoir Rehabilitation



Garvey Reservoir Rehabilitation

Background

- Constructed in 1954
- Max. storage 1,600 acre-feet
- Provides hydraulic flexibility
- Current cover installed in 1999
- Cover repaired multiple times
- Cover and liner at end of service life
- Outlet tower requires structural strengthening
- March 2025 reservoir taken out of service due to cover failure



Inlet/Outlet Tower & Cover



Cover Failure March 2025

Alternatives Considered

- Considered Alternative – One construction package to address all needed rehabilitation at Garvey site
 - Extends final design package schedule
 - March 2025 – cover failure puts Garvey reservoir out of service
- Selected Alternative – Prioritize key components of Garvey facilities
 - Floating cover and liner replacement
 - Structural strengthening of the outlet tower
 - Allowed staff to expedite the return to service of Garvey reservoir
- Future Actions – Future rehabilitation work will focus on improving reservoir supporting facilities



Water Quality Lab.



Junction Structure Valve

Garvey Reservoir Rehabilitation

Contractor Scope of Work

- Demolish the existing cover and liner
- Furnish and install a new floating cover and liner
- Structural strengthening of the outlet tower
- Modify the inlet pipe for better water mixing
- Upgrade rainwater collection system, pumping and subdrain systems
- Install a new electrical duct bank
- Testing and commissioning

Garvey Reservoir Rehabilitation

Metropolitan Scope of Work

- Project management and contract administration
- Inspection and construction management
- Submittal review and record drawings
- Environmental support and monitoring
- Metropolitan force activities:
 - Reservoir refilling, dewatering, and disinfection
 - Construction support and start-up activities
 - Water quality sampling and testing
 - Return reservoir back to service

Bid Results

Specifications No. 2110

Bids Received	October 28, 2025
No. of Bidders	7
Lowest Responsible Bidder	J.F. Shea Construction Inc.
Low Bid	\$115,611,000
Range of Other Bids	\$119,364,500 to \$142,406,379
Engineer's Estimate	\$139,500,000
SBE Participation Level	7%

Garvey
Reservoir
Rehabilitation

Arcadis U.S. Inc. – Agreement Amendment

- Engineer of Record
- Scope of Work
 - Construction technical support
 - Submittal reviews
 - Prepare record drawings
- Amendment amount: \$3,200,000
- NTE amount: \$9,550,000
- SBE participation level: 25%

Garvey Reservoir Rehabilitation

Rincon Consultants Inc. – No Action Required

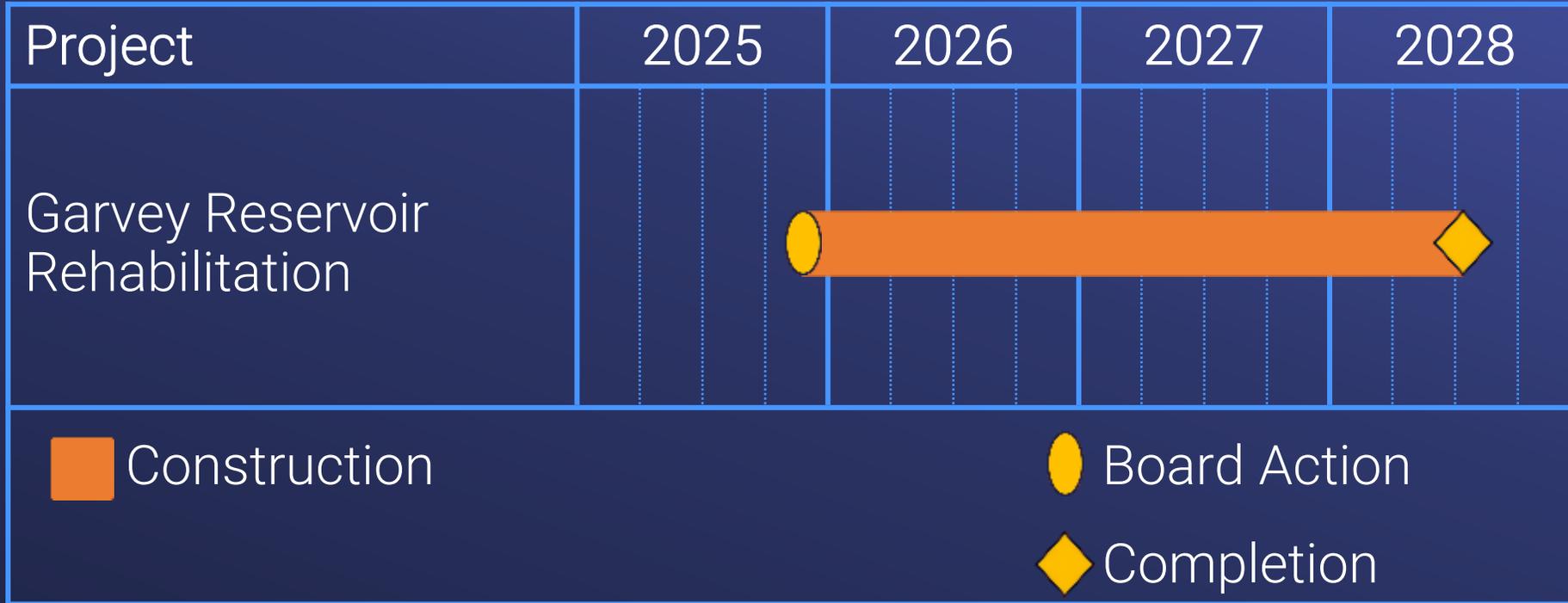
- Originally selected through RFQ 1265
- Environmental support during construction
- Scope of Work
 - Monitor construction
 - Perform nesting bird surveys
 - Prepare document for project mitigation monitoring and reporting program
- NTE amount: \$240,000
- SBE participation level: 25%

Allocation of Funds

Garvey Reservoir Rehabilitation

Metropolitan Labor		
Owner Costs (Proj. Mgmt., Contract Admin., Envir. Support)	\$	5,300,000
Construction Inspection & Support		8,900,000
Force Construction		2,300,000
Submittals Review, Tech. Support, Record Dwgs.		1,500,000
Materials & Supplies		30,000
Professional/Technical Services		
Arcadis U.S. Inc.		3,200,000
Rincon Consultants Inc.		240,000
Contract		
J.F. Shea Construction Inc.		115,611,000
Remaining Budget		7,919,000
	Total \$	145,000,000

Project Schedule



Board Options

- Option #1
 - a. Adopt CEQA determination that the proposed action was previously addressed in the certified 2024 Garvey Reservoir Rehabilitation Project Environmental Impact Report;
 - b. Award a \$115,611,000 construction contract to J.F. Shea Construction Inc. for rehabilitation of Garvey Reservoir facilities; and
 - c. Authorize an increase of \$3.2 million to an existing agreement with Arcadis U.S. Inc., for a new not-to-exceed total amount of \$9.55 million, to provide technical support during construction.
- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1

