



Engineering, Operations, & Technology Committee

Garvey Reservoir Rehabilitation

Item 7-5

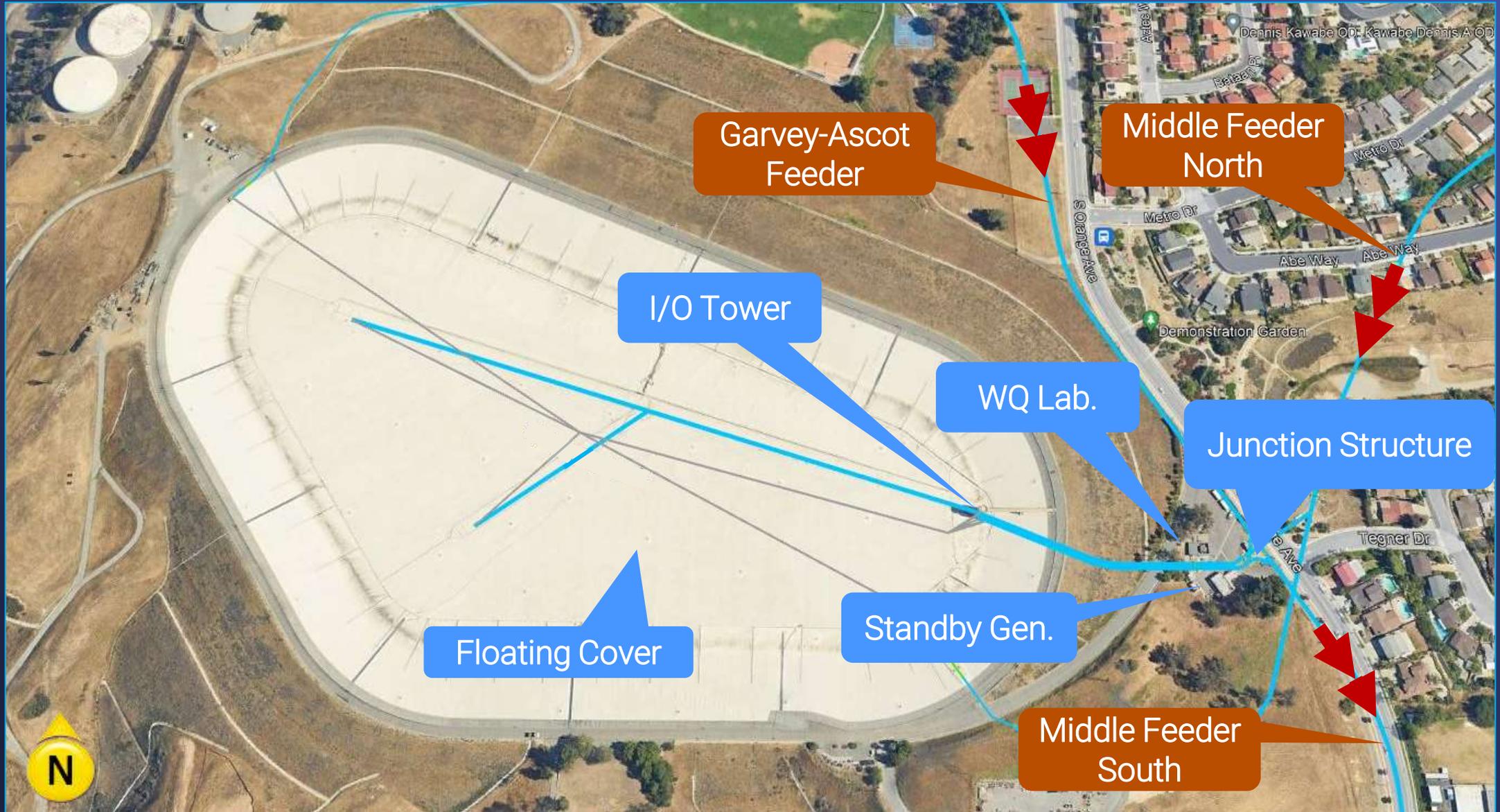
April 10, 2023

Garvey Reservoir Rehabilitation

Current Action

- Authorize an increase of \$5.4 million to an existing agreement with Arcadis U.S., Inc., for a new not-to-exceed total amount of \$6.35 million, for engineering design services to rehabilitate Garvey Reservoir facilities

Garvey Reservoir – Vicinity Map



Garvey Reservoir Rehabilitation

Background

- Reservoir constructed in 1954
- Cover and liner installed in 1999
 - At end of service life
- Need for structural strengthening of outlet tower and water quality building identified
- Stand-by generator and junction structure valves at end of service life



Cover Leakage



Standby Generator

Garvey Reservoir Rehabilitation

Project Scope

- Reservoir rehabilitation
 - Replace floating cover and liner
 - Strengthen outlet tower
 - Modify inlet pipe to improve mixing
- Water quality lab rehabilitation
- Replace standby generator, junction structure valves, and perimeter fence



Outlet Tower



Water Quality Lab

Garvey Reservoir Rehabilitation

Alternatives Considered

- Metropolitan staff to complete all design activities
 - Resource needs exceed staff availability
- Selected alternative
 - Staff and consultant work as a team
 - Maximize use of in-house staff to develop and reinforce areas of core competencies
 - Use consultant for specialized technical design or as-needed for discrete project elements

Garvey Reservoir Rehabilitation

Arcadis U.S., Inc. – Agreement

- Competitively selected under RFP 1255
- Scope of work for final design of floating cover, liner, outlet tower, standby generator, and water quality lab includes:
 - Preparation of drawings and technical specifications
 - Construction cost estimates
 - Value engineering
- Not to exceed amount: \$6.35 M
- Small Business Enterprise (SBE) participation level: 25%

Garvey Reservoir Rehabilitation

Metropolitan Scope of Work

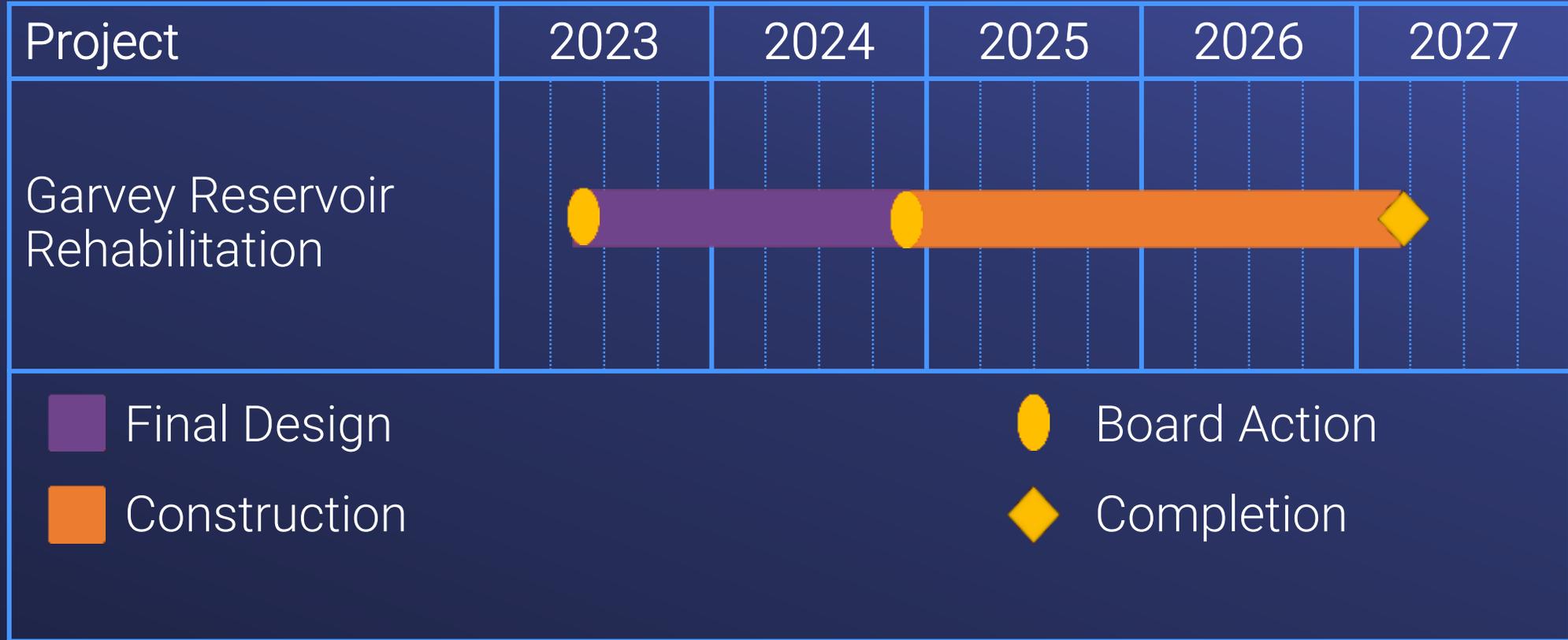
- Prepare final design for
 - Procurement of valves
 - Perimeter fence
- Review consultant work
- Support environmental consultant
- Plan necessary shutdowns
- Conduct value engineering and public outreach
- Obtain necessary permits
- Perform project management

Allocation of Funds

Garvey Reservoir Rehabilitation

| | |
|---|--------------------|
| Metropolitan Labor | |
| Final Design | \$ 1,900,000 |
| Owners Costs (Proj. Mgmt., Contract Admin., Envir. Support) | 834,000 |
| Professional/Technical Services | |
| Arcadis U.S., Inc. | 5,400,000 |
| Other Costs (Value Eng., Geotech. Inv., Pub. outreach, Envir. Doc.) | 440,000 |
| Remaining Budget | 326,000 |
| | <hr/> |
| | Total \$ 8,900,000 |

Project Schedule



Board Options

- Option #1
 - Authorize an increase of \$5.4 million to an existing agreement with Arcadis U.S., Inc., for a new not-to exceed total amount of \$6.35 million, for engineering design services to rehabilitate Garvey Reservoir.
- Option #2
 - Do not proceed with the agreement increase at this time.

Staff Recommendation

- Option #1

