



# Sodium Hypochlorite Feed System Upgrades at Garvey Reservoir

Engineering & Operations Committee

Item 7-1

February 8, 2021

# Current Action

- Award \$2,418,149 contract to Metro Builders & Engineers Group, Ltd. for sodium hypochlorite feed system upgrades at Garvey Reservoir

# Distribution System



# Project Location – Garvey Reservoir



**Sodium  
Hypochlorite  
Feed System**

# Background

- Sodium Hypochlorite Feed System
  - Constructed in 1995
  - Maintains required chlorine residual levels
  - Reached end of service life



Feed Pumps and Storage Tanks



Piping

# Alternatives Considered

- Rehabilitate in-place components
  - Produces a less reliable system
  - Leads to increased maintenance costs
- Add a second redundant feed system
  - Expands facility overall footprint in restricted site
  - Higher cost compared to recommended alternative
- Replace the existing system - selected option
  - Increases system reliability
  - Enhances operational safety and access
  - Maintains water quality within the distribution system

# Contractor Scope

- Replace sodium hypochlorite feed system
  - Temporary feed system
  - Pumps, valves, piping, & related appurtenances
  - Storage tank instruments
  - Chemical containment sensors & alarm system
- Install new grating
  - Improves staff access
  - Enhances site safety

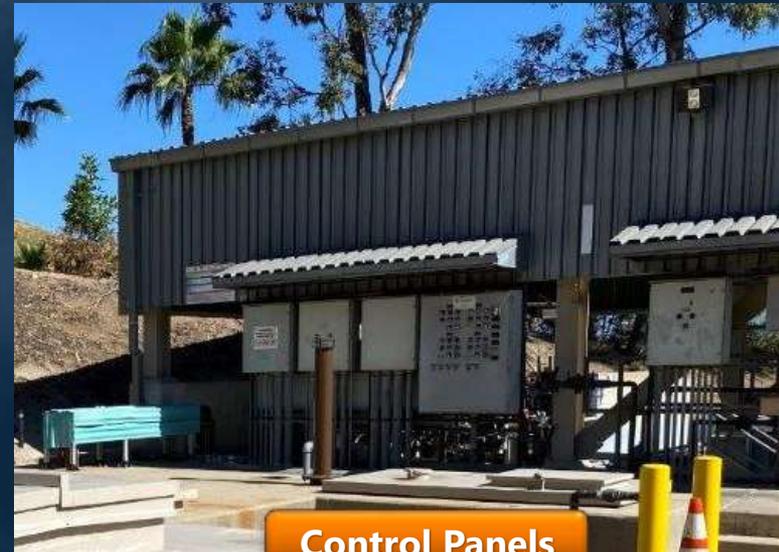


# Metropolitan Scope

- Conduct two shutdowns
- Commission feed system
- Provide technical support
- Provide project management & environmental support
- Perform construction inspection



Loading Pad



Control Panels

# Bid Results

## Specifications No. 1804

<b>Bids Received:</b>	December 10, 2020
<b>No. of Bidders:</b>	4
<b>Low Bidder*:</b>	Metro Builders & Engineers Group, Ltd.
<b>Low Bid*:</b>	\$2,418,149
<b>Range of Higher Bids:</b>	\$2,821,000 to \$2,966,500
<b>Engineer's Estimate:</b>	\$2,100,000
<b>SBE Participation**:</b>	100%

\*Original low bid withdrawn

\*\*SBE (Small Business Enterprise) participation level set at 25%

# Allocation of Funds

## Contract

Metro Builders & Engineers Group, Ltd. \$2,418,149

## Metropolitan Labor

Construction inspection 390,000

Force construction 186,000

Submittal review, technical support,  
record dwgs. 374,000

Contract admin., envir. support, & proj.  
management 201,000

Materials & Supplies 30,000

Remaining Budget 300,851

---

**Total: \$3,900,000**

***Total Construction Cost: \$2,634,149***

# Schedule

Activity	2021				2022			
Sodium hypochlorite feed system upgrades at Garvey Reservoir								



Board Action



Construction



Completion

# Board Options

- Option #1
  - Award \$2,418,149 contract to Metro Builders & Engineers Group, Ltd. for sodium hypochlorite feed system upgrades at Garvey Reservoir.
- Option #2
  - Do not proceed with the project at this time.

# Staff Recommendations

- Option #1

