



Engineering, Operations, & Technology Committee

Diemer Chemical Feed Facility Improvements

Item 7-9

October 13, 2025

Item 7-9

Diemer Chemical Feed Facility Improvements

Subject

Award a \$6,412,126 contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. to rehabilitate and improve a chemical feed facility at the Robert B. Diemer Water Treatment Plant

Purpose

Rehabilitation and improvement of a chemical feed facility at the Diemer plant to enhance reliability and worker safety

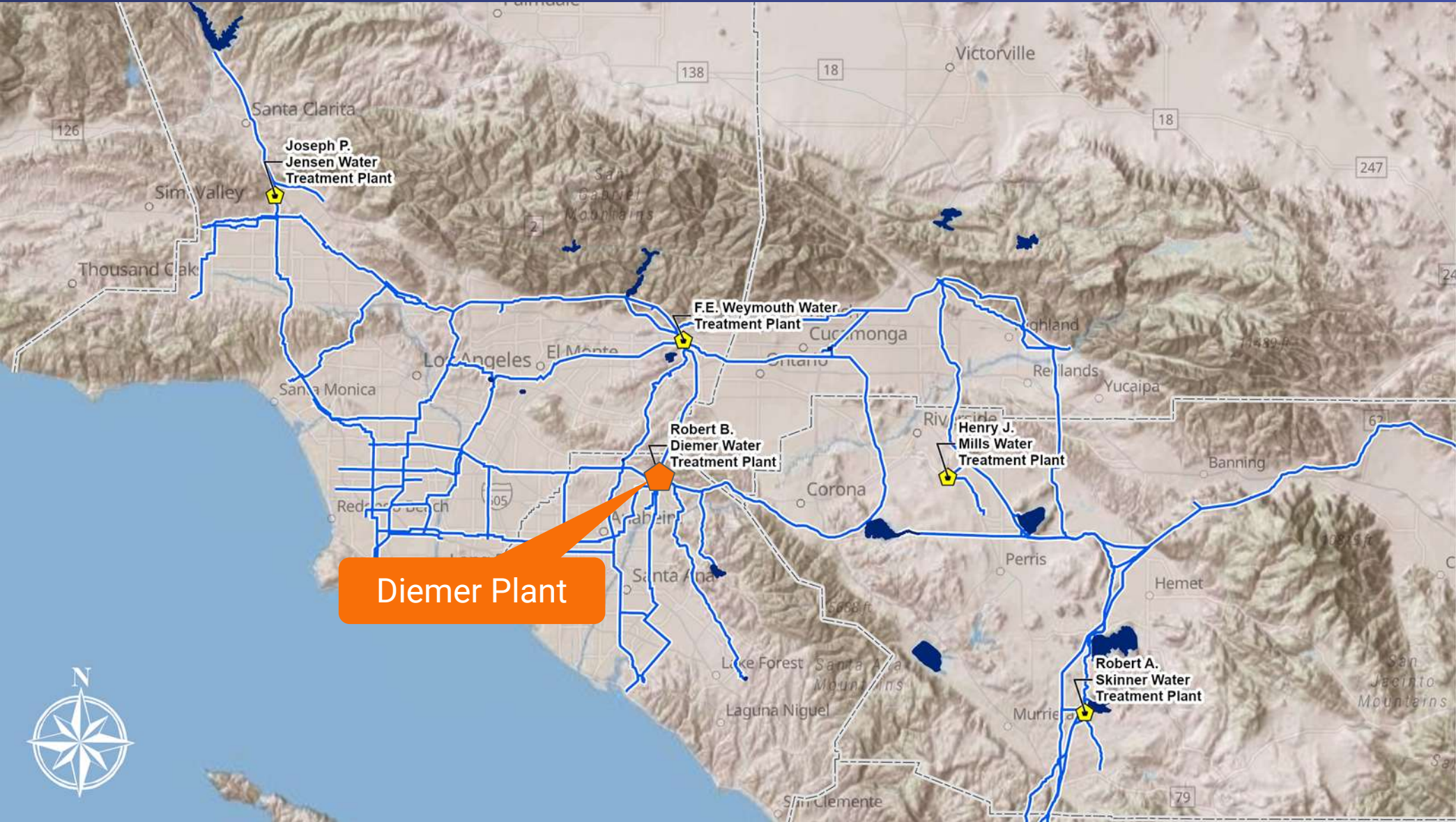
Recommendation and Fiscal Impact

Award a construction contract to rehabilitate and improve a chemical feed facility at the Diemer plant

Fiscal Impact – \$9.6 M

Budgeted

Location Map



Background

- Chemicals are utilized in the water treatment processes
- Due to the corrosive nature of the process, periodic replacement of chemical feed systems is required
- Upgrades to the coagulant, liquid polymer, dry polymer, ammonia, fluorosilicic acid (FSA) are planned
 - Beginning with the FSA feed facility & multipurpose chemical feed facility



Diemer Plant

Background – Existing Facilities

- Central Chemical Feed Facility
 - 1963: Originally constructed as a chlorine unloading facility
 - 2003: Converted to a temporary sulfuric acid facility
 - 2008: Converted to an FSA storage facility
 - Inadequate roof clearances prevent inspection & proper maintenance
- Dry Polymer Feed Facility
 - 1991: Facility constructed adjacent to Central Chemical Feed Facility
- Both facilities - Tanks & equipment have exceeded life expectancy & require replacement



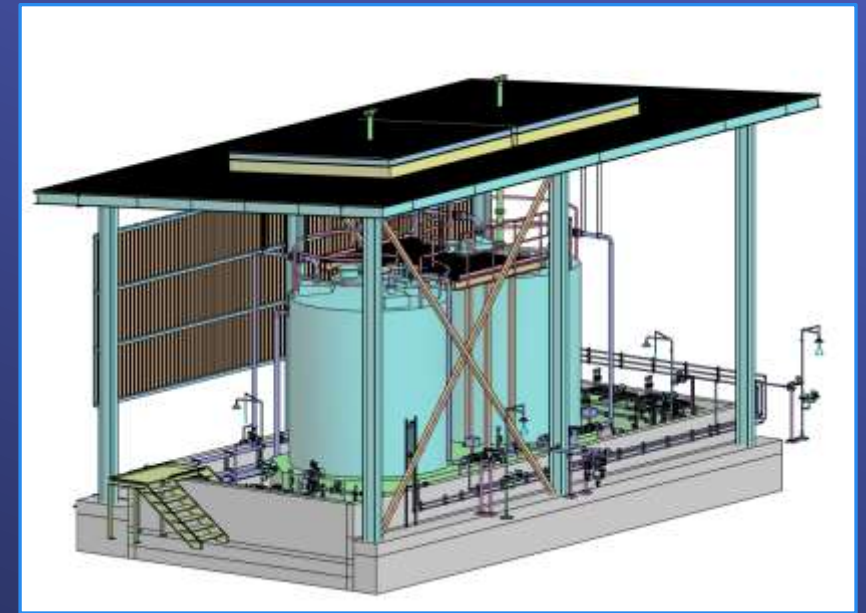
Existing Facility



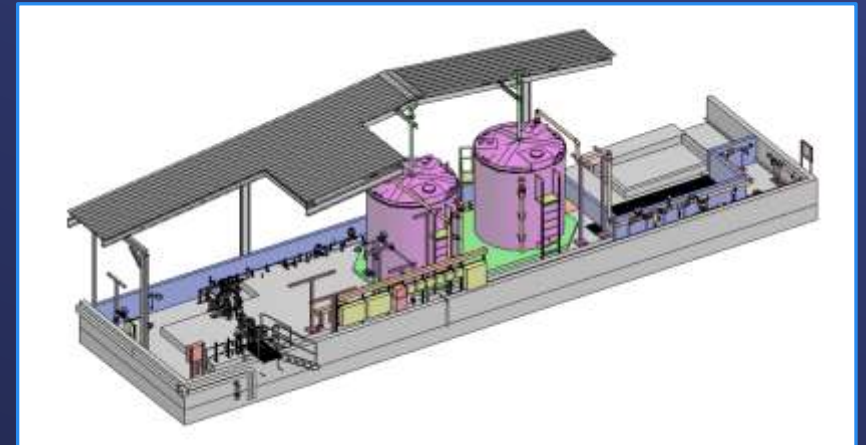
Tank Farm Roof Clearance

New Chemical Feed Facilities

- Improved reliability of the chemical feed facilities with new feed system & storage tanks
- Multipurpose feed facility minimizes service interruption during construction & future planned upgrades
- Improved operational flexibility
 - New roof with access hatches
 - Enhanced chemical dosing accuracy
- Added enhanced safety features
 - Control panels relocated
 - Safety platform & fall protection for elevated work
 - Safety eyewash & shower



Future Central Chemical Feed Facility



Future Multipurpose Feed Facility

Diemer Chemical Feed Facility Improvements

Alternatives Considered

- Considered Alternative – Install a liner for the storage tanks
 - Significant structural & tank modifications required
- Considered Alternative – Staging with tank replacements first, defer safety/maintenance improvements to later
 - Significant feed equipment and roof removal required due to limited accessibility
- Selected Alternative – Complete replacement of the storage tanks, roof and feed system
 - Maintains plant reliability
 - Enhances worker safety, meets latest chemical safety standards

Diemer Chemical Feed Facility Improvements

Scope of Work

- Contractor
 - Replace chemical storage tanks
 - Replace chemical feed equipment & piping
 - Relocation of controls & instrumentation
 - Replace roof structure
 - Conversion of dry polymer tank farm into a multipurpose feed facility
 - Addition of safety features
 - Hazardous material removal & abatement
- Metropolitan
 - Multiple shutdown coordination
 - SCADA integration
 - Equipment testing
 - Project management
 - Inspection

Bid Results

Specifications No. 2083

Bids Received

July 9, 2025

No. of Bidders

3

Lowest Responsible Bidder

Houalla Enterprises Ltd. DBA
Metro Builders & Engineers
Group Ltd.

Low Bid

\$6,412,126

Range of Other Bids

\$6,466,000 to \$7,798,555

Engineer's Estimate

\$6,200,000

SBE Participation*

100%

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

Allocation of Funds

Diemer Chemical Feed Facility Improvements

Metropolitan Labor

Owner Costs (Proj. Mgmt., Contract Admin., Envir. Support)	\$	628,000
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Construction Inspection & Support		820,000
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Force Construction		700,000
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Submittals Review, Tech. Support, Record Dwgs.		676,000
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Professional/Technical Services

PLA Administration		32,000
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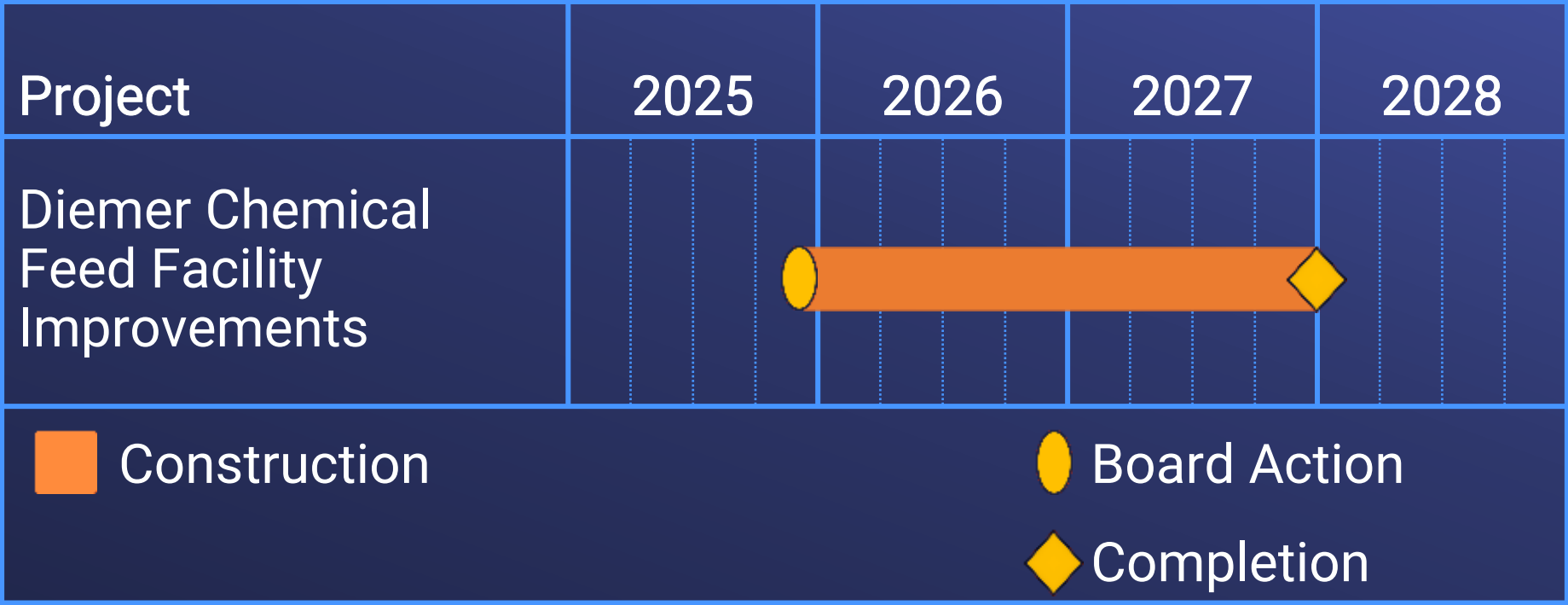
Contracts

Houalla Enterprises Ltd.		6,412,126
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Remaining Budget		331,874
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Total	\$	9,600,000
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Project Schedule



Board Options

- Option #1
Award a \$6,412,126 construction contract to Houalla Enterprises Ltd. DBA Metro Builders & Engineers Group Ltd. to rehabilitate and improve a chemical feed facility at the Robert B. Diemer Water Treatment Plant.
- Option #2
Do not proceed with this project at this time.

Staff Recommendation

- Option #1

