



Engineering, Operations, & Technology Committee

Colorado River Aqueduct Pumping Plants Storage Buildings

Item 8-2

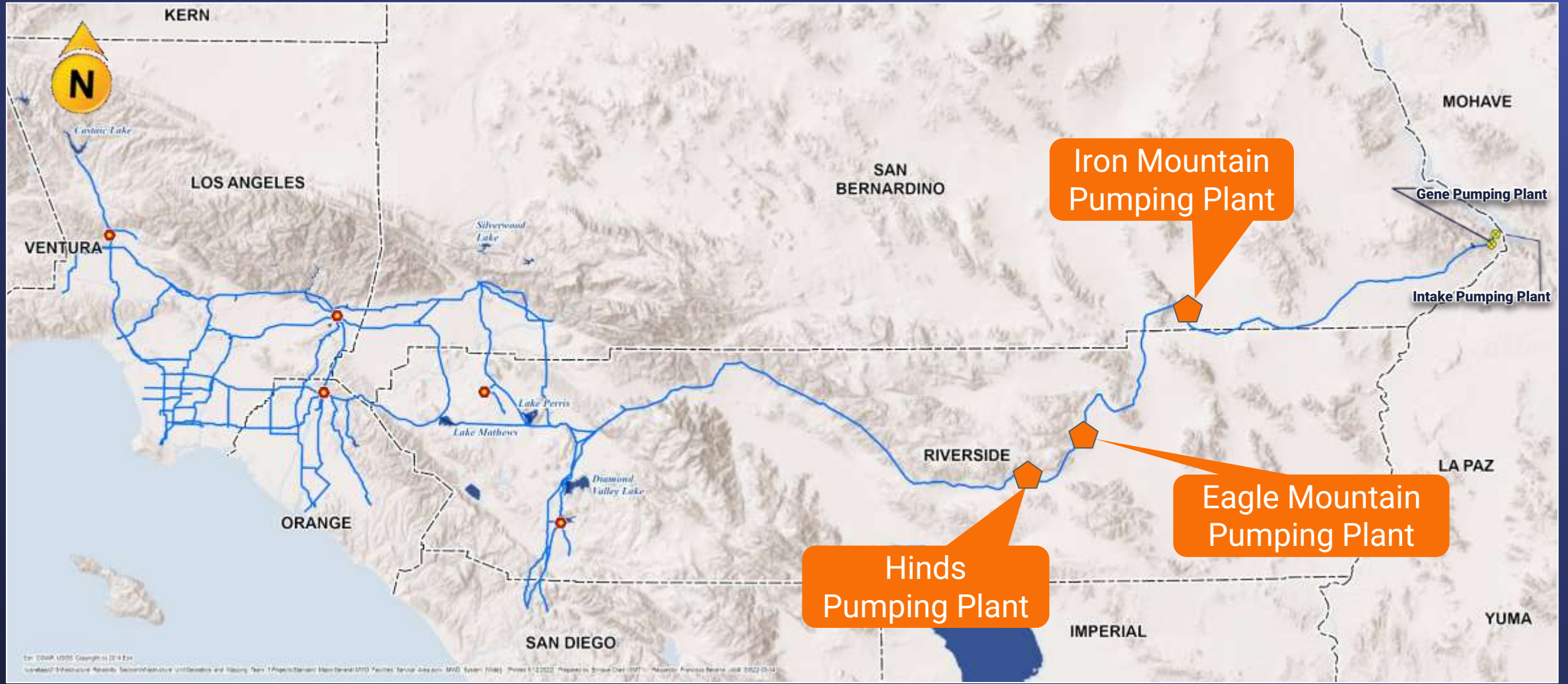
June 12, 2023

Colorado River
Aqueduct
Equipment
Storage
Buildings

Current Action

- Award a \$16,490,000 contract to J. F. Shea Construction Inc. to replace storage buildings at Hinds, Eagle Mountain, & Iron Mountain pumping plants

Project Location



Background

- Metal storage buildings built in 1950s
 - Decayed wooden frames
 - Metal walls & roof panels deteriorated
 - Limited storage capacity
- Gene Pumping Plant storage buildings were replaced in 2015
- Final design complete for replacement of storage buildings at Hinds, Eagle & Iron Mtn. pumping plants
 - Value engineering conducted to identify & implement cost saving measures for project



Iron Mtn. Storage Building (Existing)



Gene Storage Building (New)

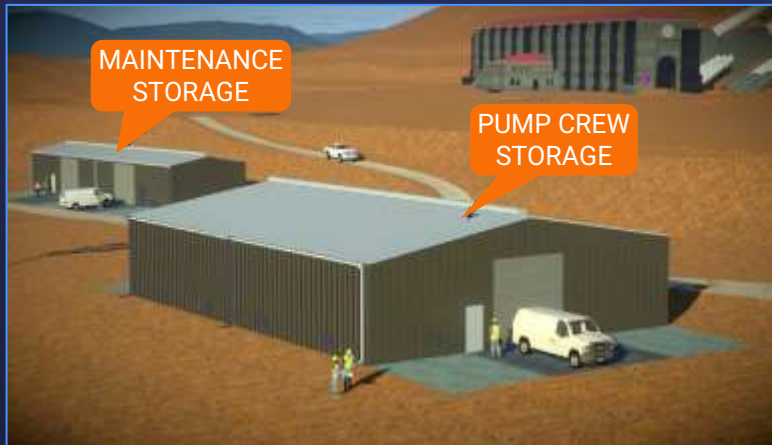
Colorado River Aqueduct Equipment Storage Buildings

Alternatives Considered

- Provide one large building instead of two
 - Limited space near pumping plants
 - Would increase retrieval time for parts
- Building types (tilt-up, masonry & steel)
 - Longer construction period
 - Costly materials
- Selected Alternative – Replace single building with two pre-engineered buildings
 - Easier to site
 - Faster installation

Contractor – Scope of Work

- Demolish existing storage buildings
- Procure & install six pre-engineered metal storage buildings
- Grading for access & drainage improvements
- Construct concrete foundation pads, asphalt paving & fencing
- Install fire protection system – new firewater lines & hydrants



Hinds Storage Buildings



Eagle Mtn. Storage Buildings



Iron Mtn. Storage Buildings

Bid Results

Specifications No. 2000A*

Bids Received	April 20, 2023
No. of Bidders	2
Lowest Responsible Bidder	J. F. Shea Construction Inc.
Low Bid	\$16,490,000
Other Bid	\$19,668,656
Engineer's Estimate	\$17,460,000
SBE Participation**	33%

* This contract will be conducted under the terms of Metropolitan's project labor agreement

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

Comparison of Recent Storage Building Projects

Cost Analysis Findings - CRA Storage Buildings

- 6 buildings across 3 separate facilities
- Extensive site work required for CRA buildings
 - Extensive site grading & erosion control
 - Electrical & water source farther from new buildings
 - Fire protection systems & hydrants needed for 3 separate buildings
 - Environmental fencing
- Demolition of existing buildings
- Remote Desert locations

Contract Cost Comparison	CRA Storage Buildings (2023)	Lake Mathews Storage Building (2021)
Contract cost	\$16,490,000	\$4,759,000
Sitework & demo. cost	\$8,436,000	\$2,075,000
Building cost	\$8,054,000	\$2,684,000
Total building area, sq. ft.	27,660	18,200
\$ per sq. ft.	\$291	\$147

Colorado River
Aqueduct
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Metropolitan - Scope of Work

- Integration of fire alarm system with SCADA
- Installation of ventilation exhaust fans
- Construction management & inspection
- Submittals review & preparation of record drawings
- Environmental monitoring
- Project management, project labor agreement administration & project controls

Allocation of Funds

CRA Storage Buildings at Hinds, Eagle Mtn. & Iron Mtn.

Metropolitan Labor

Owners Costs (Proj. Mgmt., Contract Admin., Envir. Support) \$ 680,000

Construction Inspection & Support 1,830,000

Force Construction 128,000

Submittals Review, Tech. Support, Record Dwgs. 617,000

Materials & Incidentals 31,000

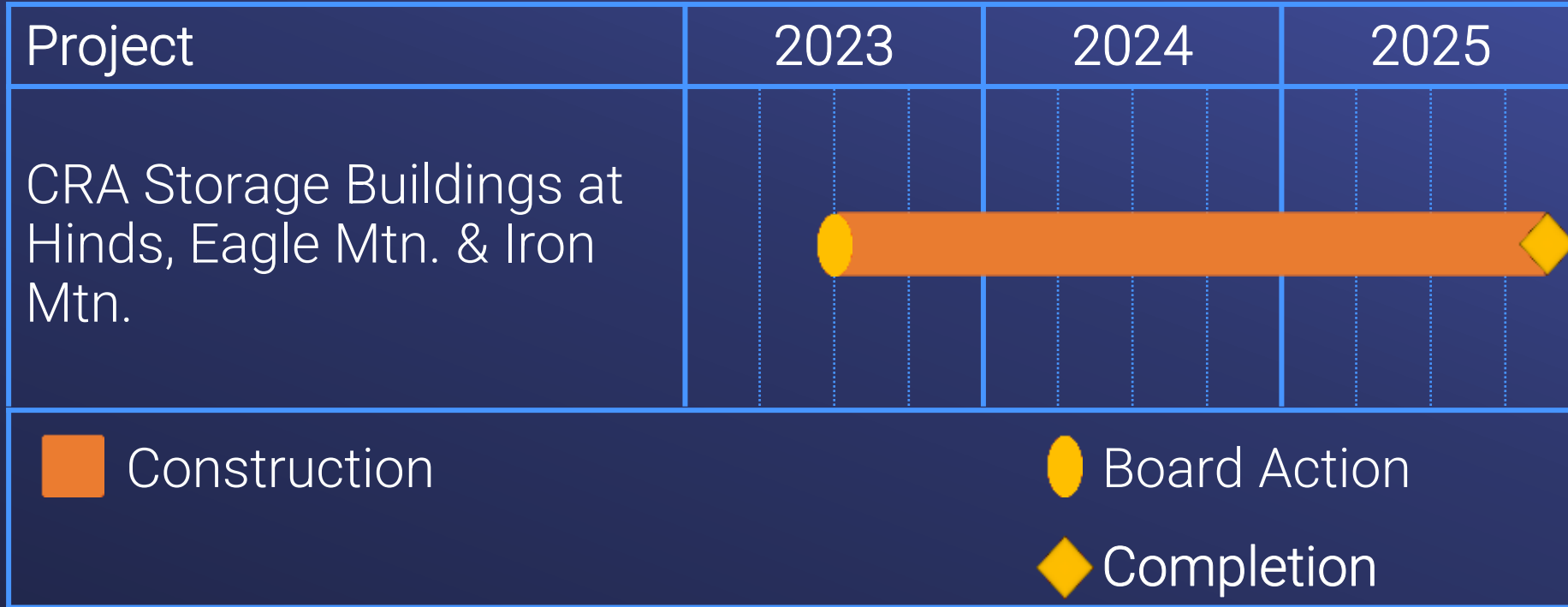
Contracts

J. F. Shea Construction Inc. 16,490,000

Remaining Budget 1,024,000

Total \$ 20,800,000

Project Schedule



Board Options

- Option #1

Award a \$16,490,000 contract to J. F. Shea Construction Inc. for furnishing and installation of pre-engineered storage buildings at the Hinds, Eagle Mountain, and Iron Mountain pumping plants.

- Option #2

Do not proceed with the project at this time.

Staff Recommendation

- Option #1

