



Colorado River Aqueduct Mile 12 Flow Monitoring Station Upgrades

Engineering & Operations Committee

Item 7-5

May 10, 2021

Current Action

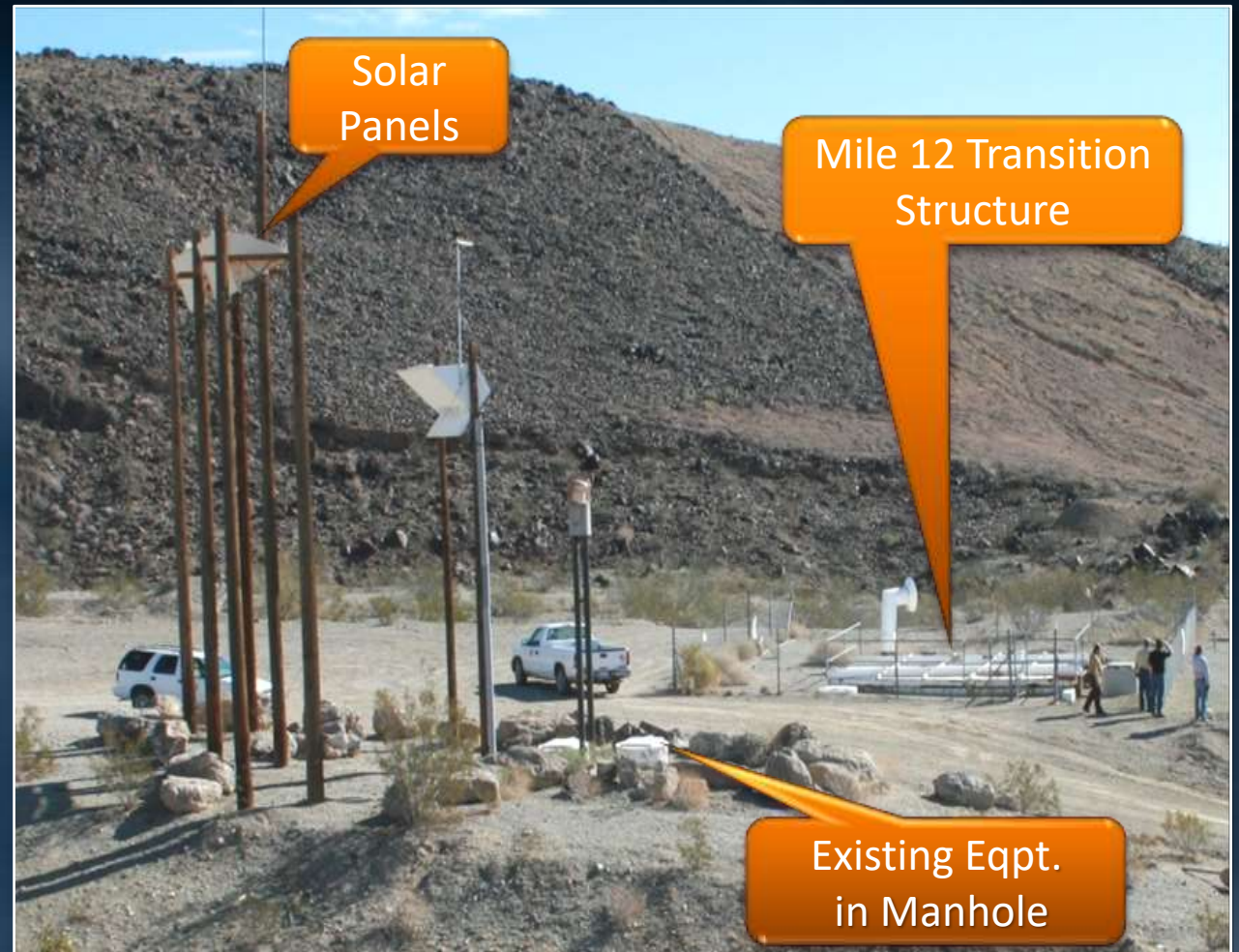
- Award \$2,022,000 contract to R2BUILD to upgrade the flow monitoring station at Mile 12 of the Colorado River Aqueduct

Location Map

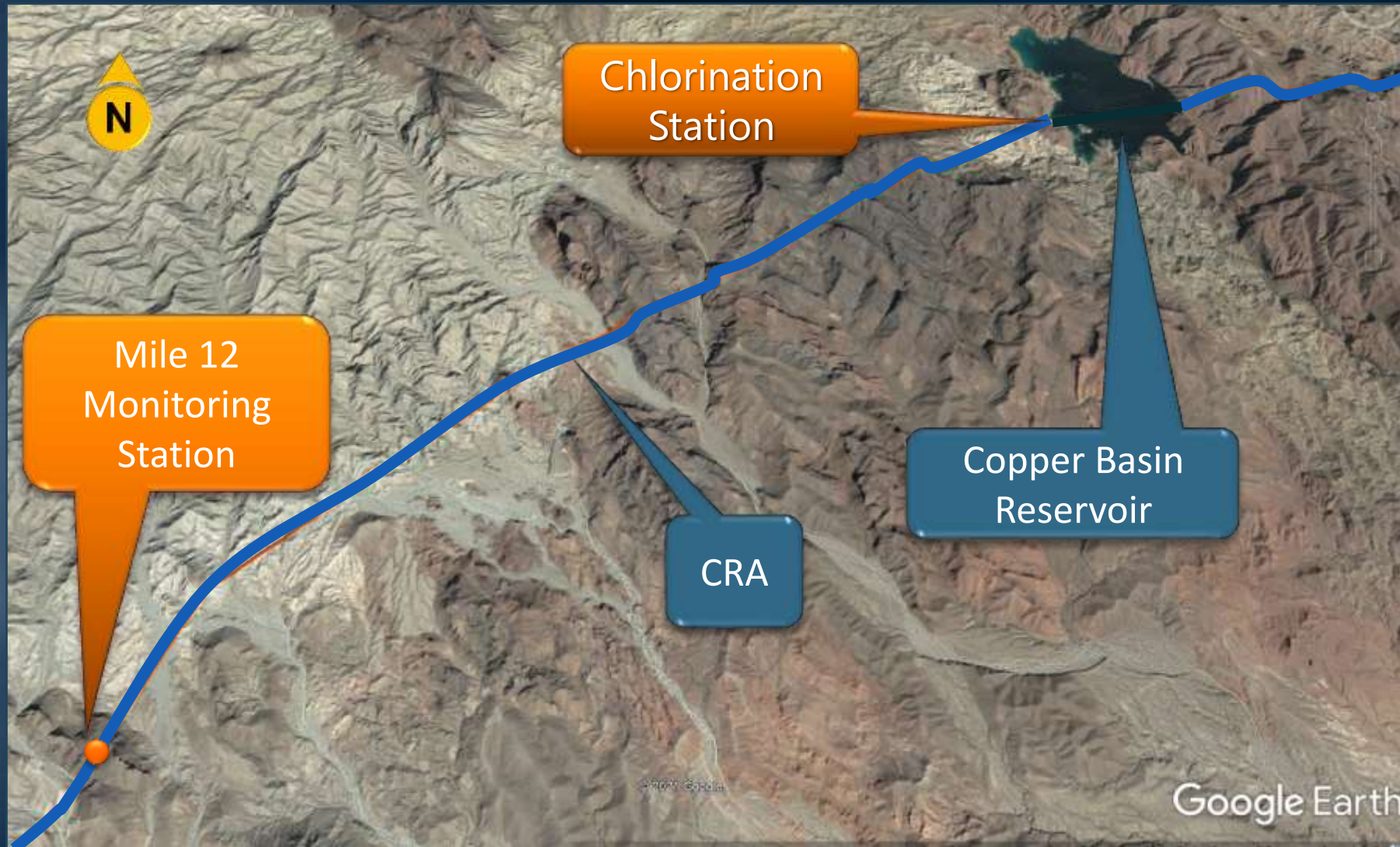


Background – Monitoring Station

- Installed in early 1990s
- Station monitors flow & adjusts chlorine injection rates
- Existing equipment located in manhole structure
- Powered by solar generating system



Quagga Mussel Control Program



Background - Project

- Corrosive environment in structure
- Equipment has deteriorated & needs replacement
- Final design complete, new building installed



Alternatives Considered

- Replace equipment within new/existing below-ground structure
 - Continued presence of residual chlorine vapors
 - Air testing required prior to entry
 - Accelerated corrosion of equipment
- Install permanent power line
 - 5-mile-long power line to connect existing grid
 - Less cost-effective & more obtrusive
- Install equipment in above-ground building with solar power
 - Selected option
 - Enhances safety and provides cost-effective approach

Contractor Scope

- Replace flow monitoring equipment, associated cabling & mechanical piping
- Upgrade solar power system
- Install propane generator system
- Install a 40-foot-high antenna mast
- Abate & dispose of hazardous materials
- Install security cameras & motion sensor lighting



Metropolitan Scope

- Performing full CRA system shutdown
- Procuring and installing telecommunication equipment
- Interfacing new instruments to existing SCADA system
- Support Activities
 - Construction & fabrication inspection
 - Contract administration & PM
 - Submittals review & record drawings

Bid Results

Specifications No. 1760A

Bids Received	April 6, 2021
No. of Bidders	3
Low Bidder	R2BUILD
Low Bid	\$2,022,000
Range of Higher Bids	\$2,412,417 to \$2,783,298
Engineer's estimate	\$2,300,000
SBE Participation*	100%

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

Allocation of Budgeted Funds

Contract

R2BUILD \$2,022,000

Metropolitan Labor

Force construction 617,000

Construction inspection 440,000

Submittals review & record drawings 342,000

Contract administration & PM 271,000

Remaining Budget 208,000

Total: \$3,900,000

Total construction cost: \$2,639,000

Project Schedule



 Construction

 Shutdown

 Board Action

 Completion

Board Options

- Option #1
 - Award \$2,022,000 contract to R2BUILD to upgrade the flow monitoring equipment at Mile 12 along the Colorado River Aqueduct.
- Option #2
 - Do not proceed with the project at this time.

Staff Recommendation

- Option #1

