



Emergency Radio System Construction & Deployment

Engineering & Operations Committee

Item 8-4

May 12, 2015

Current Action

- Appropriate \$2,740,000
- Award \$1,120,810 contract to CSI Electrical, Inc. to install components of the emergency radio system
- Authorize increase of \$134,000 to an agreement with Advanced Electronics, Inc., for new not-to-exceed total of \$6,720,000

Need for Two-Way Radio System

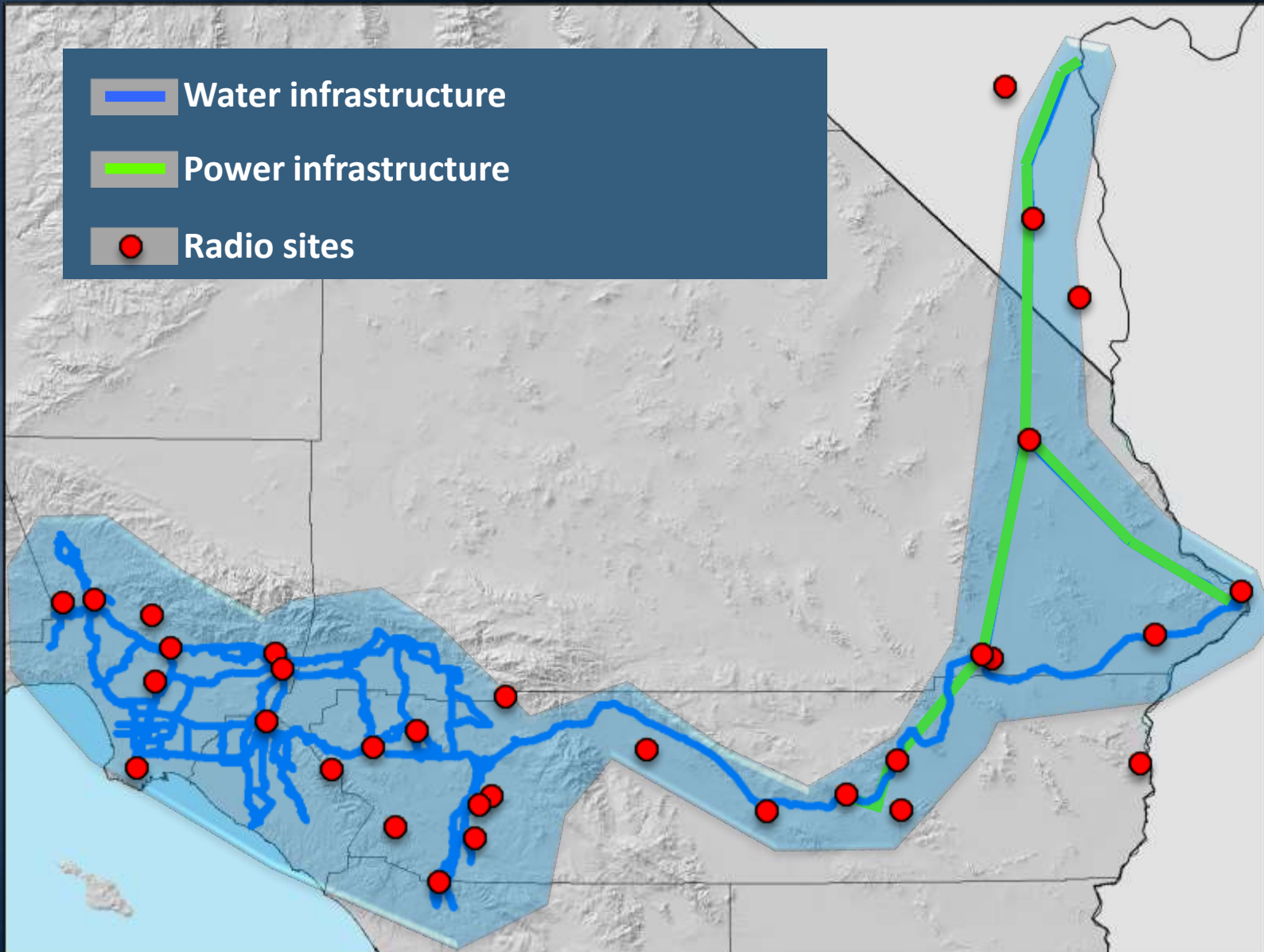
- Provides critical backbone for emergency response
 - Used by life/safety agencies and utilities for internal communication
 - Allows manual facility operations if SCADA communications fail
 - Remains in service if cell or land-line phones fail
- Serves as primary operational tool
 - Maintenance staff
 - Shutdowns
 - Patrolling



Background

- Existing Radio Network
 - 3 different systems, expanded over 30 years
 - Lacks adequate coverage, capacity, & reliability
- Planned System
 - Single, unified system using modern technology
 - Improved coverage, capacity, & ease of use
 - Radio frequencies procured
 - Pilot tests completed successfully
 - Final design completed

Location Map



Construction & Deployment

- Installation Contractor Scope
 - Install radio equipment, antennas, and cables
 - 15 of 19 high-elevation repeater towers
 - 13 low-elevation facilities
 - Tunnels at water treatment plants
- Metropolitan Scope
 - Install electrical/ethernet circuits at all sites
 - Radio installation at 4 sites
 - Inspection & submittals review
 - Record drawings
- Future Completion Contract
 - Minor architectural & electrical repairs
 - Removal of obsolete equipment

Bid Results – Installation Contract

Specifications No. 1790A

Bids received	April 15, 2015
No. of bidders	2
Low bidder	CSI Electrical, Inc.
Low bid	\$1,120,810
Other bid	\$1,230,000
Engineer's estimate	\$920,000

Advanced Electronics, Inc. – Agreement Amendment

- Scope of Work
 - Additional equipment identified for fully reliable system
 - Site-specific equipment for antenna spacing, cabling, & dispatching system at EOC
- Competitively selected (RFP 1046)
- Estimated cost \$134,000 for a new amount NTE \$6,720,000
- SBE participation level 100%

Requested Funds

Contracts

CSI Electrical, Inc.	\$	1,120,810
Advanced Electronics, Inc.		134,000
Future completion contract		240,000

Labor

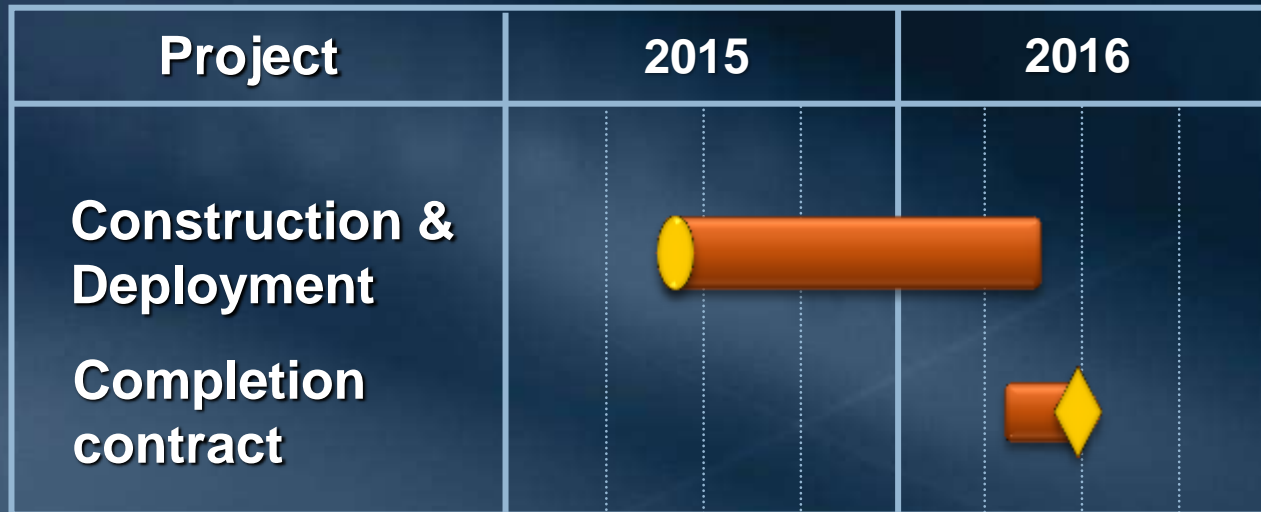
Metropolitan force construction		539,000
PM, technical review		82,000
Submittals review & record drawings		67,000
Construction inspection & support		195,000

Remaining Budget		362,190
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Total	\$	2,740,000
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Total construction cost (w/equipment): \$5.64 million

Project Schedule



Construction/Deployment



Board Action



Completion

Board Options

- Option #1
 - Adopt CEQA determination that the proposed action is categorically exempt
 - Appropriate \$2,740,000
 - Award \$1,120,810 contract to CSI Electrical, Inc. for radio system installation
 - Authorize increase of \$134,000 to agreement with Advanced Electronics, Inc., for new not-to-exceed total of \$6,720,000
- Option #2
 - Do not proceed with the project at this time

Staff Recommendation

- Option #1

