



Syphon Reservoir Improvement Project

Meeting our community's water needs

Business Outreach – April 1, 2021

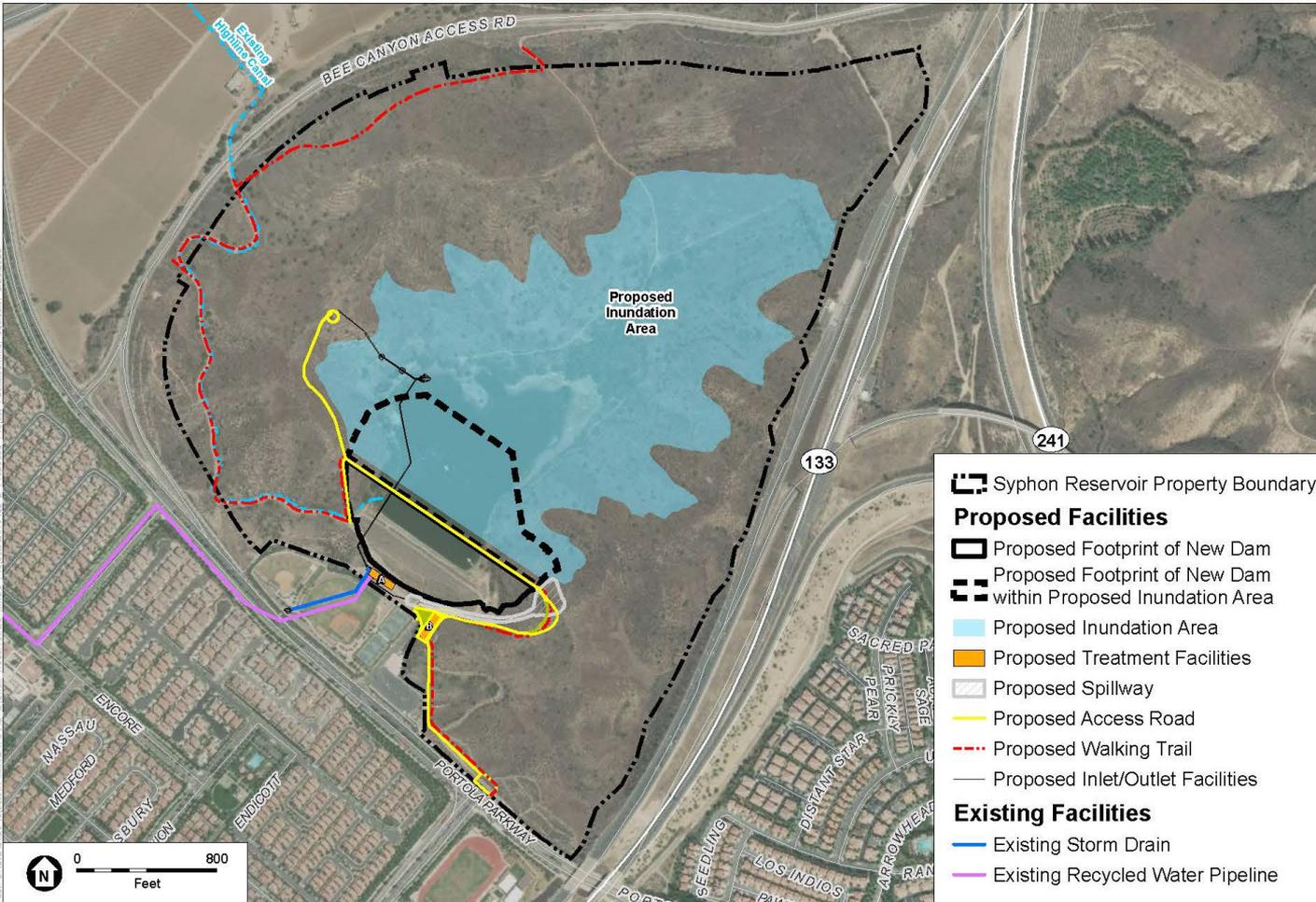
Presenter: Scott Toland, P.E., Senior Engineer – IRWD Capital Projects

Syphon Reservoir Background

- Built by The Irvine Company in 1949
- Purchased by IRWD in 2010
- 59 feet tall
- 535-acre-foot (AF) capacity
- Surrounded by sensitive upland and wetland vegetation – protected under state & federal environmental and regulatory requirements
- Improvements needed for adequate seasonal storage of recycled water



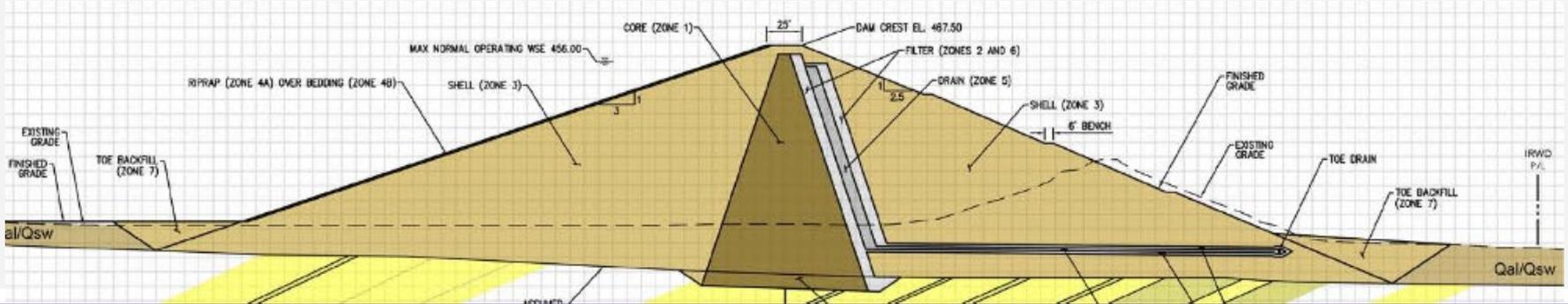
Proposed Project Site



- Syphon Reservoir Property Boundary
- Proposed Facilities**
- Proposed Footprint of New Dam
- Proposed Footprint of New Dam within Proposed Inundation Area
- Proposed Inundation Area
- Proposed Treatment Facilities
- Proposed Spillway
- Proposed Access Road
- Proposed Walking Trail
- Proposed Inlet/Outlet Facilities
- Existing Facilities**
- Existing Storm Drain
- Existing Recycled Water Pipeline

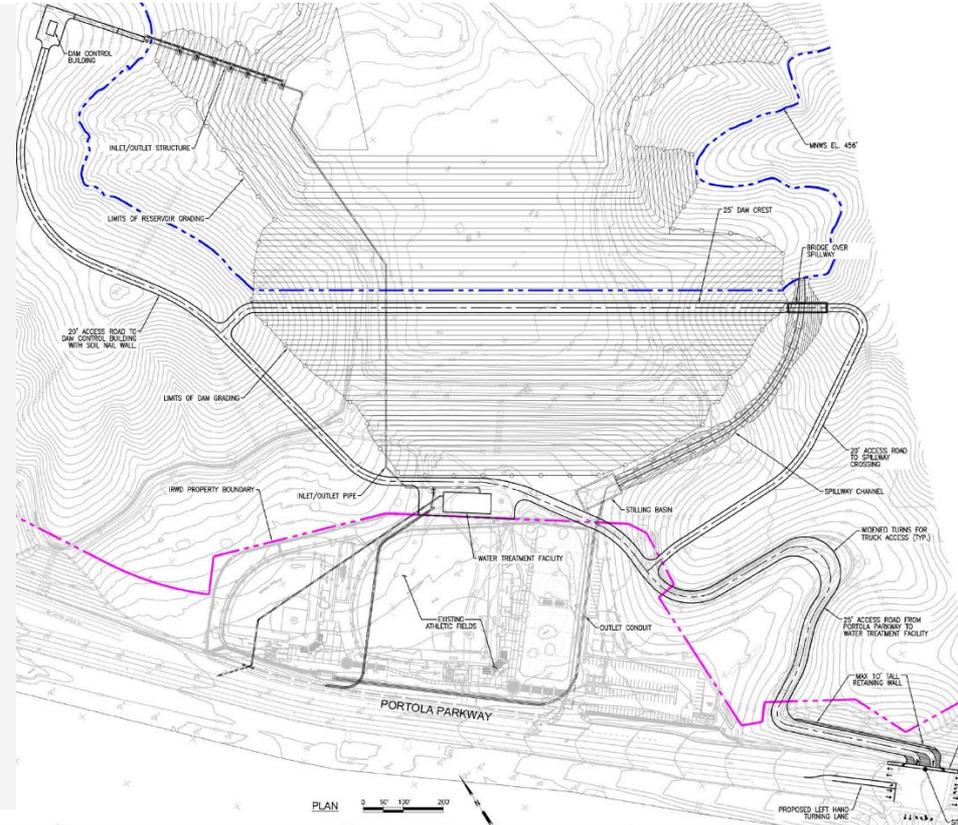
Primary Project Elements

- Remove 59-foot-tall dam and replace with 136-foot engineered embankment dam
- Significant earthwork for excavating, sorting and reusing on-site materials
- Import of specialty materials (gravel, sand, riprap) for internal filter drain and dam face protection



Primary Project Elements

- Construct inlet/outlet structure and pipes
- Spillway & hydraulic dissipation structure
- Filtration and chemical facilities
- Associated entrance and access roads



Environmental Restoration (on-site)

- Restoration and maintenance of 6 acres of wetlands
- Restoration and maintenance of 6 acres of riparian habitat



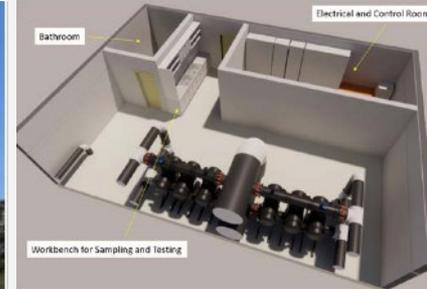
Potential Business Opportunities

Construction management services

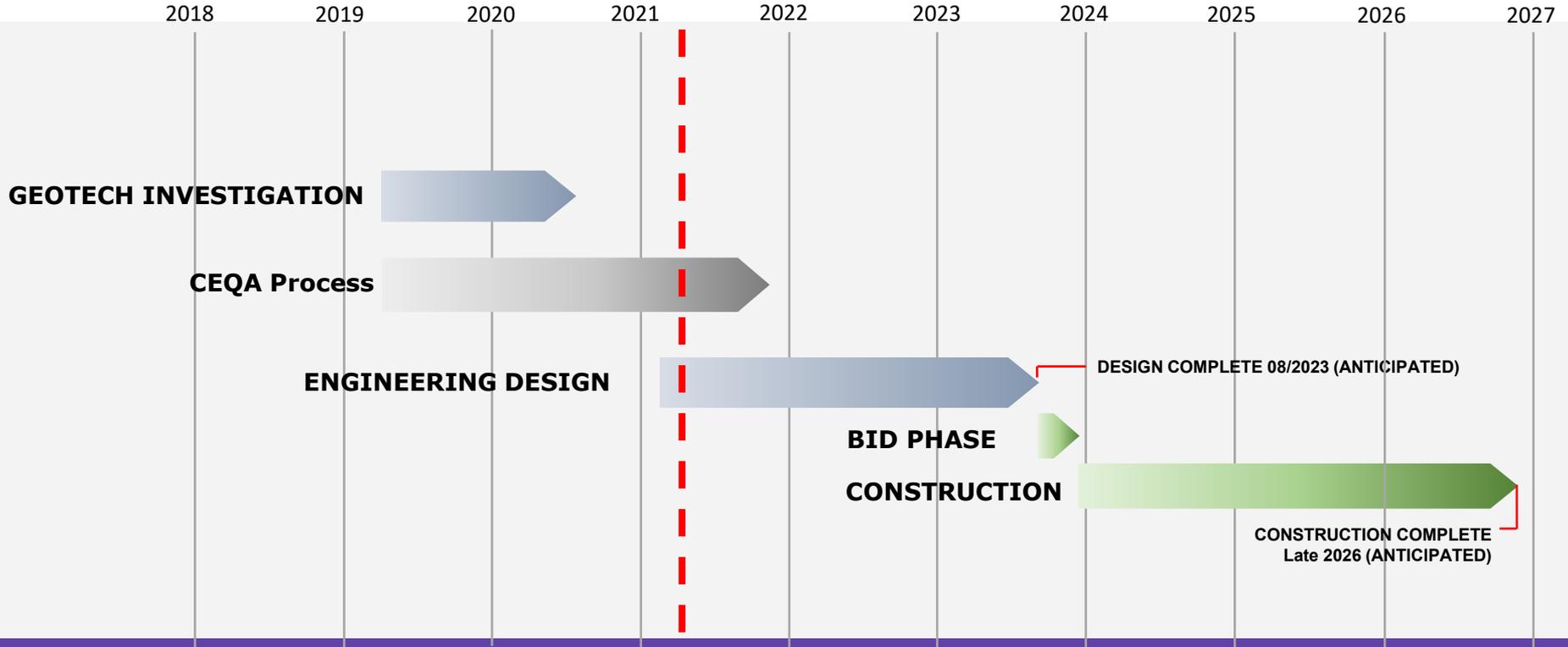
- CM oversight
- Inspection (civil, mechanical, structural, electrical)
- Geotechnical testing & observations

Construction

- Earthworks
- Process mechanical
- Structural
- Electrical and I&C
- Environmental restoration/
maintenance



Project Schedule



Keeping Informed

- Learn more at SyphonReservoirProject.com
- Scott Toland, Project Manager
toland@IRWD.com

