



Lake Rialto Water Subcommittee Update

October 27, 2021

Lake Rialto – Revised Grading Consideration

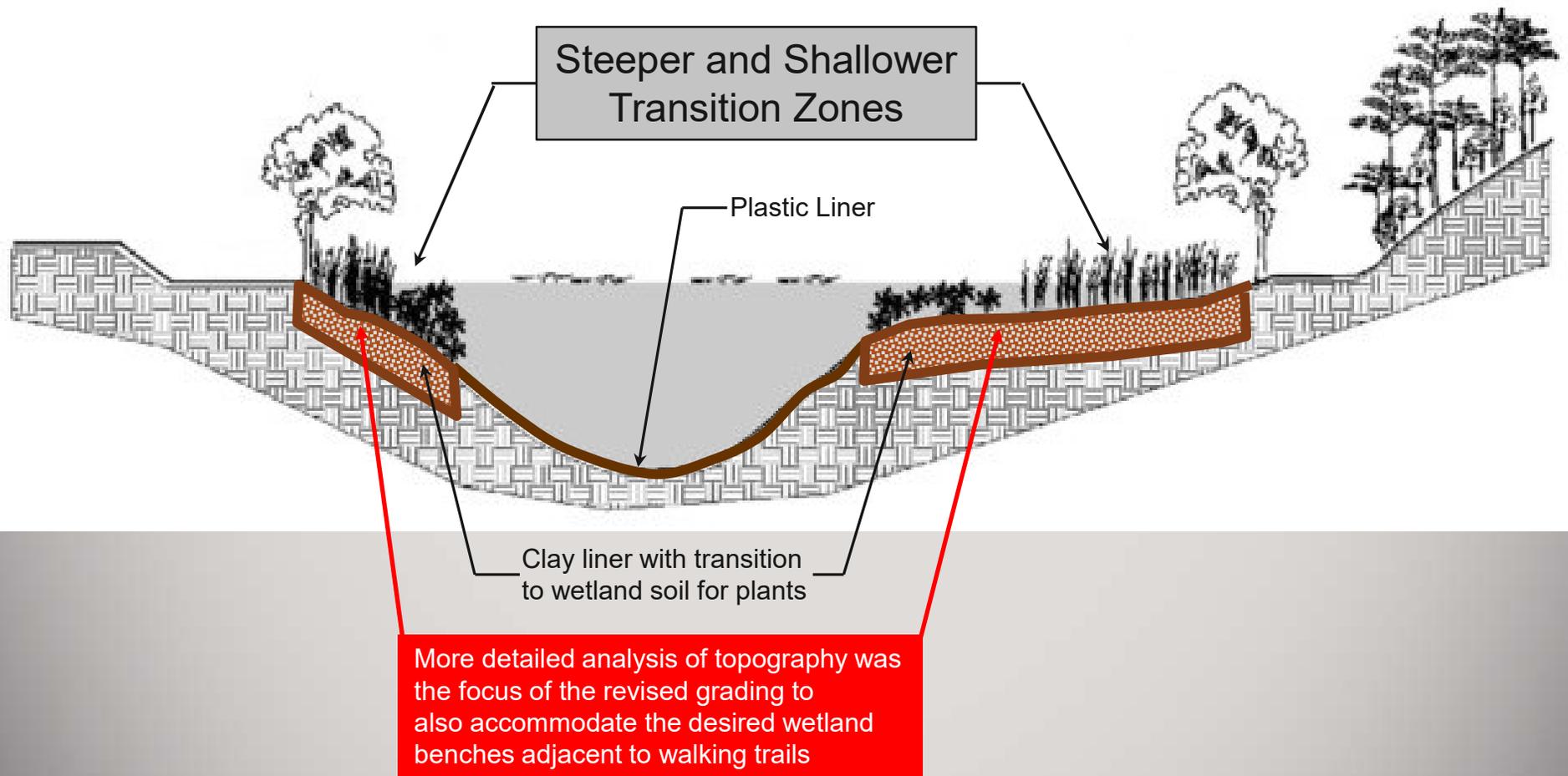
905' vs 912' Water Surface Elevation



More detailed analysis of topography was the focus of the revised grading to accommodate water elevation and perimeter walking trail within the existing property line

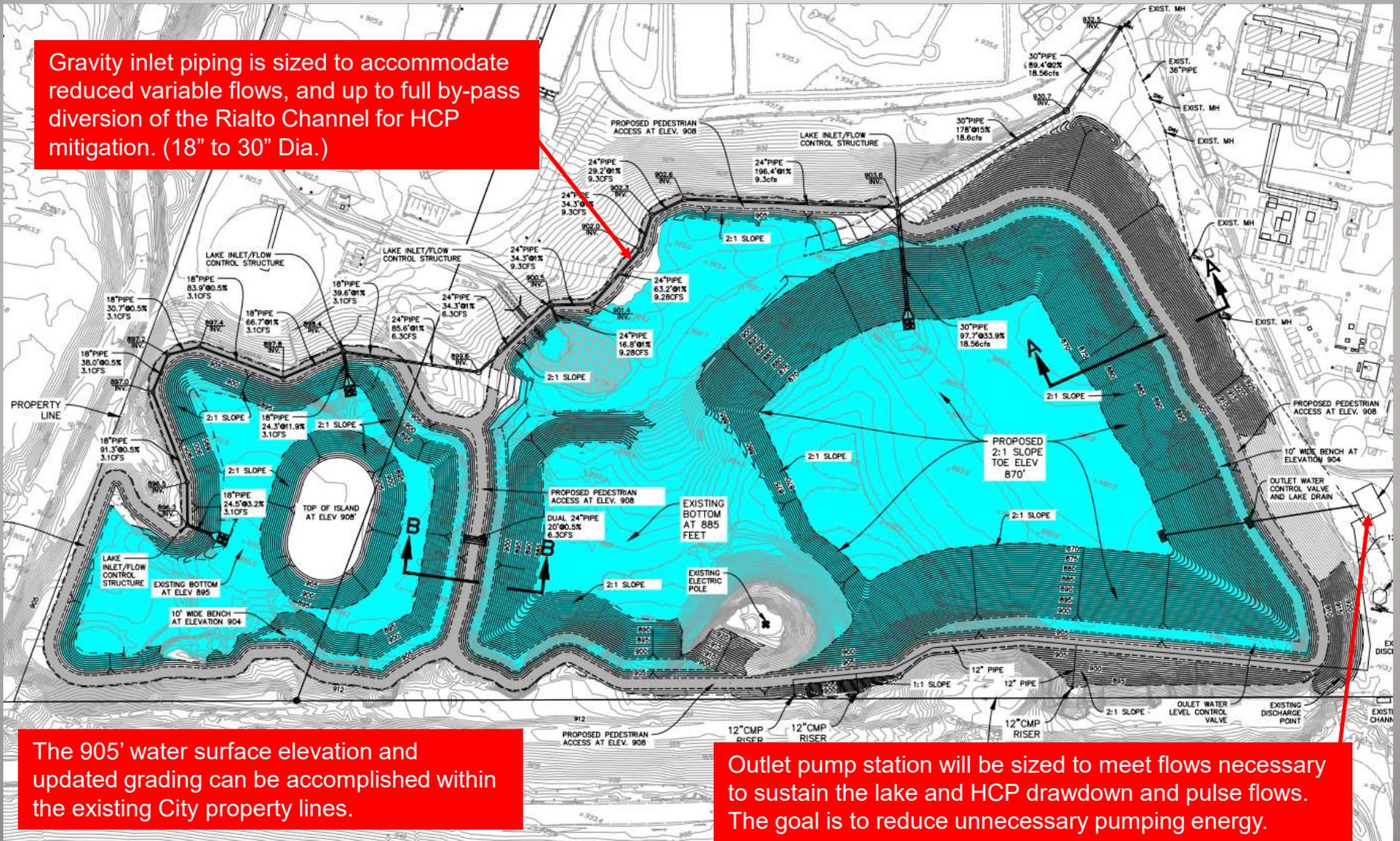
Lake Rialto

Consideration of Wetland/Upland Interface Cross Section Using a Hybrid of Clay/Soil and Plastic Liner



Lake Rialto – Recommended Concept At 905' Water Surface Elevation

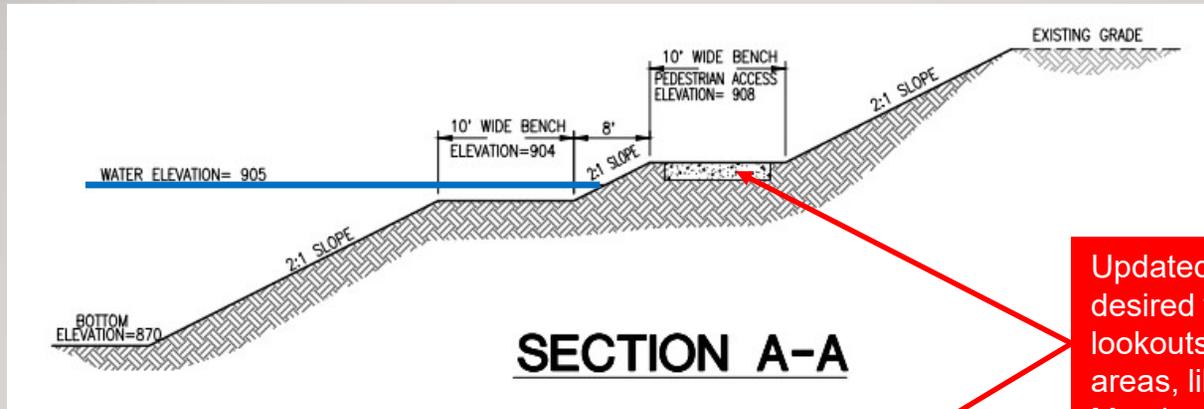
Gravity inlet piping is sized to accommodate reduced variable flows, and up to full by-pass diversion of the Rialto Channel for HCP mitigation. (18" to 30" Dia.)



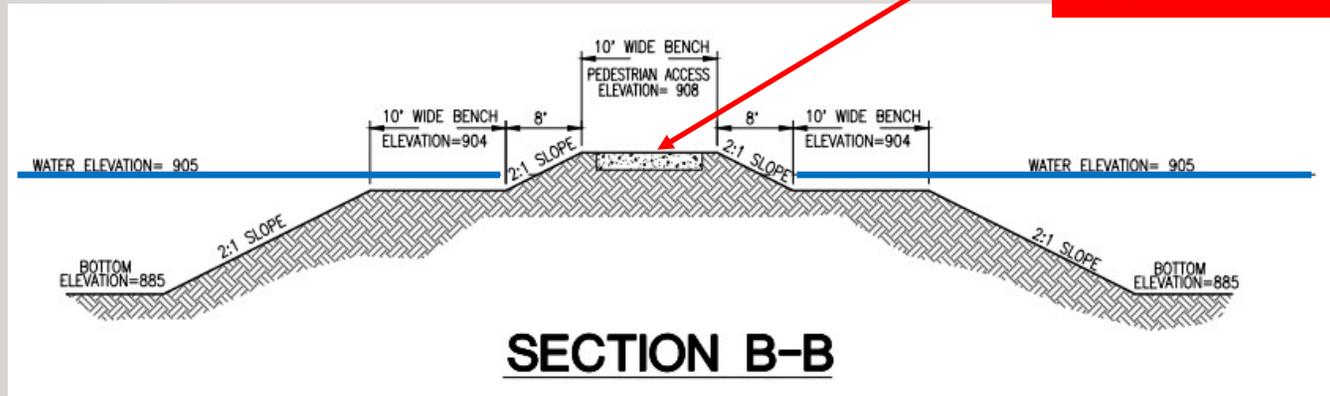
The 905' water surface elevation and updated grading can be accomplished within the existing City property lines.

Outlet pump station will be sized to meet flows necessary to sustain the lake and HCP drawdown and pulse flows. The goal is to reduce unnecessary pumping energy.

Lake Rialto – Cross Sections

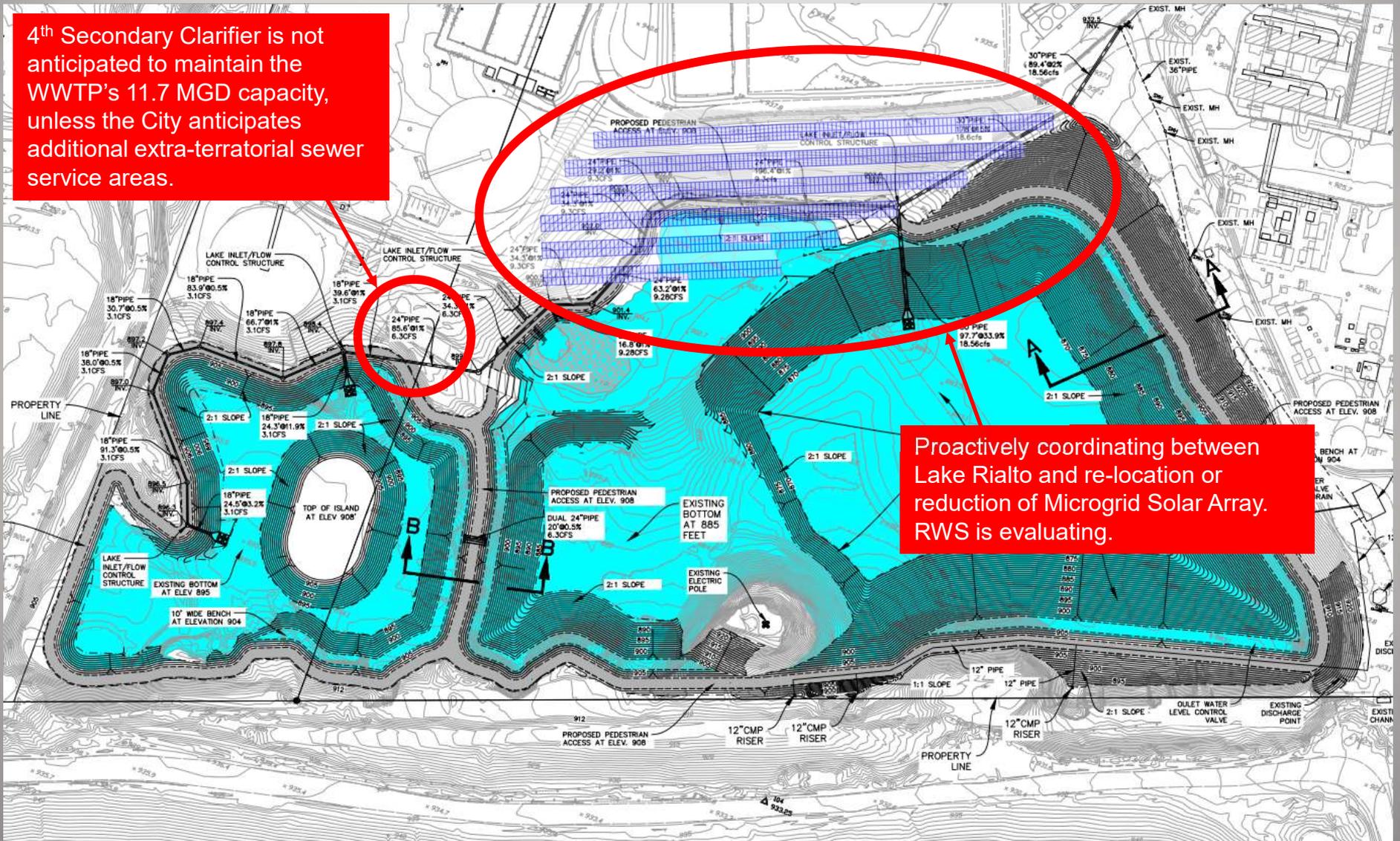


Updated grading achieves desired walking paths, view lookouts and adjacent marsh areas, like the San Joaquin Marsh.



Lake Rialto – WWTP & Microgrid Coordination

4th Secondary Clarifier is not anticipated to maintain the WWTP's 11.7 MGD capacity, unless the City anticipates additional extra-territorial sewer service areas.



Proactively coordinating between Lake Rialto and re-location or reduction of Microgrid Solar Array. RWS is evaluating.

Lake Rialto – Conceptual Parking Alternatives

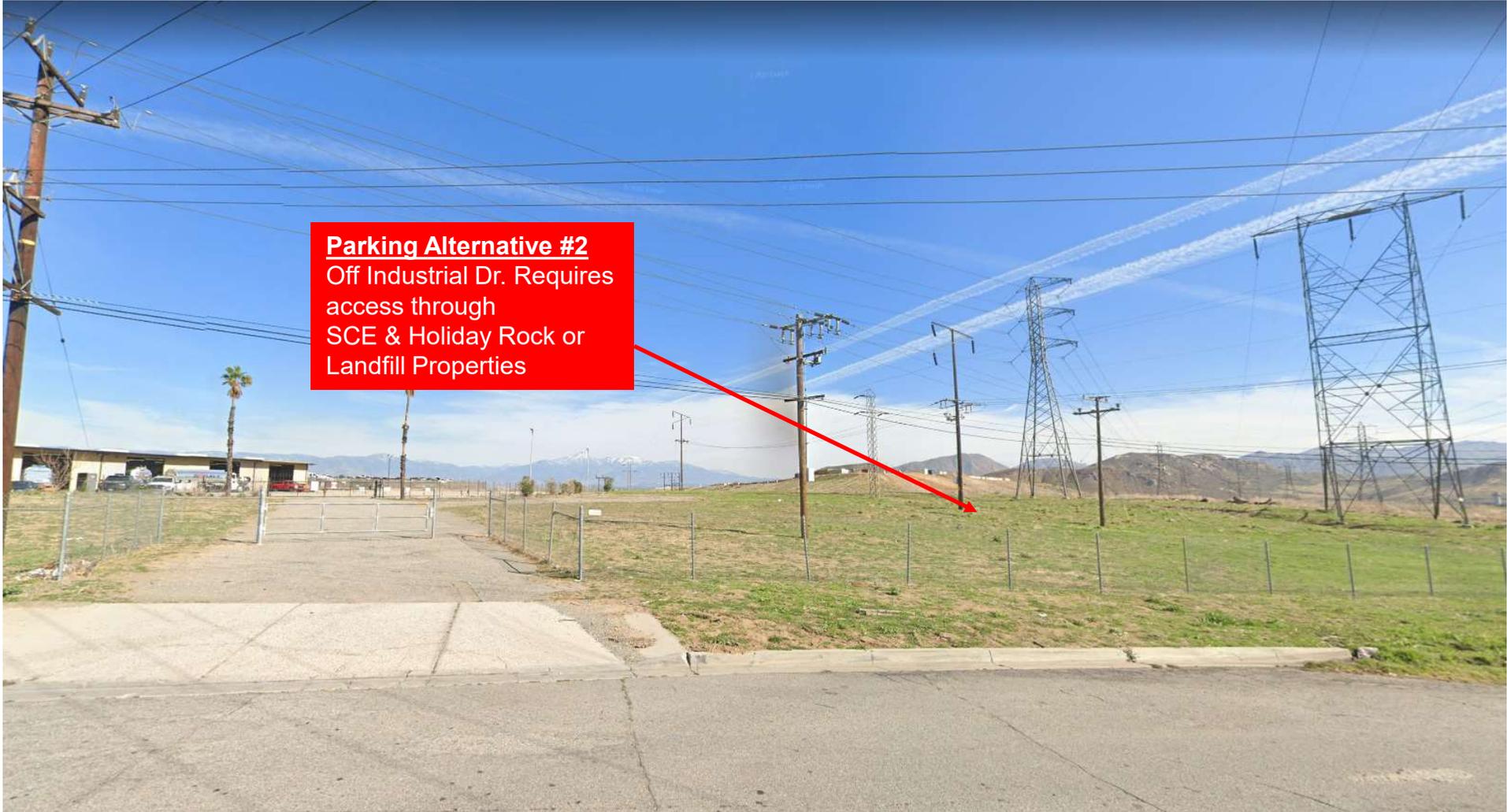


Lake Rialto – Conceptual Parking Alternative 1

Parking Alternative #1
Off E. Santa Ana Ave.



Lake Rialto – Conceptual Parking Alternative 2



Parking Alternative #2
Off Industrial Dr. Requires
access through
SCE & Holiday Rock or
Landfill Properties

Lake Rialto – Conceptual Parking Alternative 3

Recommended Alternative



Parking Alternative #3

On Agua Mansa Rd. via On-Street Parking or in SCE easement. Could require a pedestrian bridge over Rialto Channel if parking is on east side



Could require a pedestrian bridge over Rialto Channel if parking is on east side



Conceptual Connections to the Santa Ana River Trail – Bike Lane Cross Section

- **Connection from the Santa Ana River Trail to Lake Rialto**
Considered the four closest alternatives:
 - Riverside Avenue
 - La Cadena Avenue
 - Mount Vernon Avenue
 - Market Street
- **Existing bridges do not appear to provide sufficient width for new bike lanes or sidewalks. Narrow sidewalks do exist on the southbound sides of La Cadena and Mount Vernon. North and South bound bike and pedestrian access to/from Lake Rialto and the Santa Ana River Trail does not appear feasible using the current configuration of existing bridges.**

Conceptual Connections to the Santa Ana River Trail – Riverside Avenue



Conceptual Connections to the Santa Ana River Trail – La Cadena Drive



Conceptual Connections to the Santa Ana River Trail – Mount Vernon Avenue



Conceptual Connections to the Santa Ana River Trail – Market Street



Completion of Preliminary Design

- **Completed Scope Tasks Include:**
 - Pre-Design Evaluation
 - Site Design Level Survey
 - Base Geotechnical Engineering
 - Preliminary Grading Plan & Infrastructure
 - Preliminary Cost Estimate
 - Funding & Grant Strategy

Considerations for Final Design

- **Final Design Items - Considerations for City to Proceed to Final Design**
 - Grant assistance is on-going
 - Should the project be shovel ready?
 - Time to prepare CEQA/NEPA
 - Bulk plantings will require final design in order to begin contract growing with nurseries.
 - Needed plants not available in bulk
 - Could take 6 to 12 months for contract growing, prior to planting on-site
 - Supply chain and availability challenges for:
 - Pumps
 - Valves
 - Electronics
 - Lake Liner
 - Coordination and cost participation by other agencies
 - HCP
 - SNMP

Questions/Direction?