



North City Pure Water Pipeline Alignment Analysis October 2017

Background/Purpose

The proposed alignment of the North City Pure Water Pipeline has been developed and refined through the course of the design. Following feedback received from the Scripps Ranch Planning Group on May 4, 2017, again on September 7, 2017, and Murphy Development on October 10, 2017, the City further analyzed an additional suggested alignment for the pipeline.

The suggested alignment would require the City to utilize property south of the Scripps Lake Drive right-of-way from Scripps Ranch Boulevard and have the pipeline travel alongside Scripps Lake Drive (existing San Diego County Water Authority pipelines and other utilities would prevent the pipeline from being constructed under the roadway). Because of operational requirements it would result in the dechlorination facility to be located near Miramar Reservoir. This document is intended to provide an overview of the results of the analysis of this alignment.

Engineering Challenges

The route of the pipeline alignment that Murphy Development has suggested has the following disadvantages:

- Existing utility conflicts in Scripps Lake Drive (Exhibits B and C), including San Diego County Water Authority (SDCWA) pipelines (Exhibit A) and facilities under and along the roadway would require significant minimum separations, thereby requiring new pipelines to be outside of the street right-of-way.
- Constructing outside of the right-of-way would require considerable grading and backfill within the existing slope to support the pipeline. The existing drainage south of Scripps Lake Drive also contains outfall pipelines associated with the Miramar Dam, so approval to backfill over that critical infrastructure would be required from the State Division of Safety of Dams (DSOD).
- Long stretches of tunneling (Exhibit C) would be required due to conflicts with other utilities. This location is within Santiago Peak Volcanic Formation, which is more difficult to bore through. This would result in blasting methods (provided SDCWA would approve as they have large diameter aqueducts located within the roadway), longer construction duration and higher costs.

- Receiving shaft of the tunnel would need to be located in the Scripps Ranch Library parking lot (Exhibit C). Additional staging and work space would be needed for construction activities to ensure safety of the public.
- Tunnel is directly in front of earthen dam supporting Miramar Reservoir. Approval from DSOD would be required and could be rejected due to the other feasible pipeline alignment option.
- Crossing of SDCWA property would require approval, which would be more difficult due to the angle of crossings and the fact that there is another feasible alignment.

Risk of Increased Environmental Impacts

- The suggested pipeline route would require significant fill within the canyon areas to provide lateral stability for the pipeline and limit the risk of a land slide. Re-grading of the slope could impact wetlands in the canyon (Exhibit B).

Land Acquisition

- A similar area of permanent and temporary construction easements to the preferred alignment would be required. This would include a property easement at the Latter Day Saints Property shown in Exhibit B.
- SDCWA has prior property rights to Scripps Lake Drive in front of the Scripps Ranch Library. Existing SDCWA pipelines require 14' setbacks, which would require the new pipeline and a tunnel shaft to be located in the Scripps Ranch Library parking lot.

Exhibit A: San Diego County Water Authority Pipelines and Property Ownership



Exhibit B: Utility/Pipeline Congestion on Scripps Ranch Blvd and Scripps Lake Drive and Suggested Pure Water Pipeline Route (in Red)

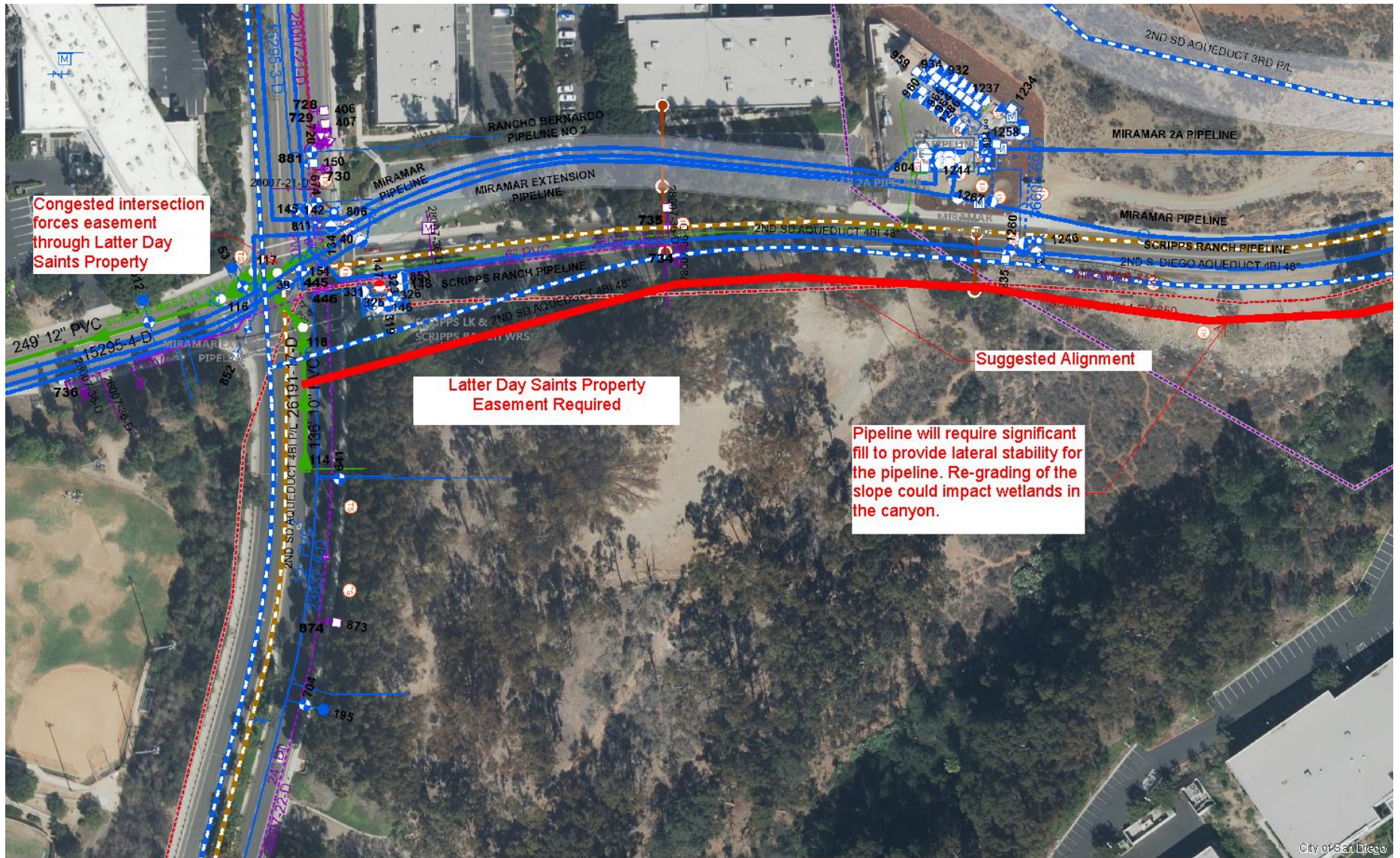


Exhibit C: Pipelines/Utilities on Scripps Lake Drive and Suggested Pure Water Pipeline Route (in Red)

