

CITY OF LAGUNA BEACH ECA APPLICATION
PROJECT TITLE: NCI Interconnect to Lift Station 2 Force Main

Project Location

South Coast Highway at Country Club Drive adjacent to the Aliso Creek in Laguna Beach, Orange County, California. The proposed project (as will be described in more detail below) is approximately 0.25 miles from the Pacific Ocean at Aliso Creek County Beach. The proposed project has a nexus to the November 2019 sanitary sewer overflow (SSO) in both nature and location because it is designed to minimize the risk of a similar SSO occurring in the same location (i.e. Pollution Prevention). See Figure 1 for map of Project location and Figure 1A Plan View of Lift Station No. 2 and the intertie bypass (the proposed project).

Project Description

The proposed project is an interconnection or “intertie” of the North Coast Interceptor (NCI) sewage transmission pipeline to the South Coast Water District’s (SCWD) Lift Station No. 2 force main which will provide the ability to bypass either the NCI, or Lift Station No. 2 force main, along Aliso Creek (the Project or Intertie Project). Currently, the NCI is in and along Aliso Creek and conveys up to 2.5 Million Gallons per Day (MGD) of untreated sewage to the South Orange County Wastewater Authority (SOCWA) Coastal Treatment Plant. Neither SCWD nor the City of Laguna Beach (City) possess a secondary conveyance facility to the Coastal Treatment Plant that could be used in the event of a line break or blockage. For this reason, sewage from the November 2019 SSO could not have been bypassed to the treatment facility while crews were implementing necessary repairs. Implementation of this Project would allow either the City or SCWD to utilize the other's pipeline in an emergency, while repairs are being completed to the primary facilities. The Project will minimize the likelihood and risk of sewage entering receiving waters from a future SSO in this area. Adding the intertie system serves to protect the aquatic ecosystems and ensure water quality for recreation in Aliso Creek, Aliso Creek County Beach, and the Marine Protected Area along the Pacific Ocean coastline.

The Project will leverage existing timing and funding opportunities by adding onto the SCWD’s Lift Station No. 2 reconstruction project, which is described on:

https://www.scwd.org/depts/engineering/projects/wastewater_projects/lift_station_no2_replacement_project.htm

The Project will include a bypass that will function as an environmental benefit by immediately protecting the biota in both the canyon and along the coastline from possible future spills caused by a failure of the NCI or of the SCWD’s force main. Although the City and SCWD are implementing this Project jointly, for the purposes of deferred liability, the City of Laguna Beach will assume responsibility for timely Project completion of the Intertie Project and its anticipated

portion of project funding. The City Council has approved support for the Project. Funding will be approved pending final cost estimates prepared concurrent with the completion of the design.

Work Plan

The Project is integrated as a part of the SCWD's Lift Station No. 2 Reconstruction; for the purposes of Project tracking, the City will be responsible for reporting on the following tasks, deadlines, and deliverables related to the Project:

1. Project Design – Complete by 4/2/21

Task objective is to prepare the detailed design sheets for the construction of the intertie portion of the Lift Station Reconstruction plans. Deliverables consist of plans, specifications, and estimates for all elements of the Reconstruction Project.

2. Entitlements phase – Complete by 8/25/21

Task objective is to complete the CEQA process and obtain all necessary permits and permissions. Deliverables will consist of copies of each of these final documents. All permits below will be pursued concurrently to the largest extent possible:

- a. City of Laguna Beach – Coastal Development Permit (Landside Improvements)
- b. County of Orange – Parks and Flood Control Departments
- c. California Coastal Commission – Coastal Development Permit (Storm Water Outfall into Aliso Creek)
- d. U.S. Army Corps of Engineers – Section 404 Permit (Fill within Waters of the U.S.)
- e. California Department of Fish and Wildlife - Section 1600 Agreement (Streambed Alteration)
- f. Regional Water Quality Control Board (Section 401 Water Quality Certification) (Dewatering Permit)

3. Bid Award by South Coast Water District – Complete by 6/24/21

Task objective is to select the construction team assigned to the project and award the contract. As a deliverable, the City will provide a copy of the minutes recording the authorization of the award of contract as well as the actual contract.

4. Project Construction – Complete by 4/1/24

Task objective is to complete construction of the Lift Station No. 2 Emergency Intertie. Deliverables will consist of photo documentation of construction activities.

5. Final Reports- Complete by 5/1/24

Task objective is to provide final reports demonstrating completion of ECA in accordance with the Stipulated Order. Deliverables will include intertie bypass testing results and final as-builts.

Total Project Cost

The Project is estimated to cost \$1.4 million including a 20% contingency. The City's portion of the Project cost is estimated to be approximately \$950,000. The City is prepared to spend more than the maximum deferred liability for this Enhanced Compliance Action (\$748,277.50) to ensure successful project completion.

See Attachment 1: "AKM Intertie Project Cost Estimate Apportioned to CLB and SCWD" for a more detailed breakdown of project costs.

Project Readiness

Once the design is complete, a mitigated negative declaration is anticipated to be prepared by the South Coast Water District, as the lead agency. SCWD has hired ESA, an environmental consulting firm, to prepare the mitigated negative declaration. ESA is also preparing a detailed jurisdictional delineation analysis to assist in expediting necessary permits.

Project construction is generally in the roadway and in the private property owned by the South Coast Water District, therefore no landowner permissions are needed.

The neighboring property owner, The Ranch Resort, is fully supportive of the project as it will enhance the aesthetics of the resort entry along Country Club Drive. and provide a more reliable system passing through the Ranch and the first mile of the lower canyon.

It is important to note that the system is not being upsized, rather, it is being replaced and improved, and therefore should fall under a California Environmental Quality Act (CEQA) exemption.

Expected Benefits

The Intertie Project will benefit both the City of Laguna Beach and the South Coast Water District. The Project's success will be measured by the ability to bypass either the North Coast Interceptor or the Lift Station No.2 force main along Aliso Creek. Adding the bypass capability serves to safeguard Aliso Creek, the habitat along the Creek, the resort property, the Aliso Beach Park, the recreating public, the Marine Protected Area, and the Pacific Ocean. The bypass will also improve maintenance opportunities by allowing for the lowest points along the Creek to be accessed and drained. As such, CCTV robotics is planned to be used to inspect the line along the drained portions.

Confirmation of Bypass Capabilities – The engineering design firm for the Enhanced Compliance Action is AKM Consulting Engineers. They have designed the intertie bypass and integrated it as a permanent component of the new lift station. They have identified the pump capacity of 3000 gpm for Lift Station No. 2. AKM has prepared worst-case capacity estimates and has determine that in normal operating conditions, the total flow from both SCWD and CLB is less than the pumping capacity, rendering unlimited storage time. Therefore, the ECA project will provide both

agencies an ability to bypass the section of force main aligned along Aliso Creek. The City will be able to conduct an inspection of the NCI once the intertie is fully functional.

Environmental Justice/Disadvantaged Community

Aliso Creek and Aliso County Beach serve all of the residents and visitors of Orange County, some of which are disadvantaged and experiencing financial hardships, particularly during the Covid-19 pandemic. To address social distancing during the COVID-19 pandemic, the City has restricted recreation to allow active use along the beach. The bypass works to minimize the sewer spill risk to the environment and the public.

Further Right to Water

While all water transferred by Lift Station No. 2 is recycled at the Coastal Treatment Plant, which reduces demand on potable water supplies and furthers the State Board's core value of the human right to water, this Project will not result in the production of additional reclaimed water.

Additional Information

Climate Change – The Project is designed with flood protection from a 50-year storm event. A storm drain system will be installed to convey flows around the site and attenuating them through an underground retarding basin. More specifically, a 2-foot wide grated channel would intercept up to 100-year storm flows as well as the debris/sediment originating from the upstream canyon and adjacent slopes. Adjacent to the grated-channel's outer wall would be a two foot wide concrete path to enable foot-access to the grates and channel for maintenance. Two concrete weir blocks would be constructed within the grated channel at the east side to allow sediment to deposit before reaching the downstream retarding basin. This would enhance the ability of staff to remove the accumulated sediment after storm events.

Voluntary Improvement - This Project has the unique opportunity to benefit both the City of Laguna Beach and the South Coast Water District. It serves both agencies as an emergency bypass of the wastewater transmission pipelines directing flow to the Coastal Treatment Plant. While the Intertie Project is not required by any regulations or agency, and it is not a prevailing industry practice to have bypass capabilities, it is recognized by both agencies for its compelling benefits.

Recycled Water for Recreational Use - Providing a higher level of reliability ensures that wastewater is delivered to the Coastal Treatment Plant where treated wastewater can be directed to the Advanced Water Treatment Plant, to be further treated and distributed as recycled water by the South Coast Water District. The recycled water benefits park areas in portions of Laguna Beach, Dana Point, and the County's Dana Point Harbor.

Commitment to ECA Project - On July 14, 2020, the City Council approved the 10-year Wastewater System Financing Plan. The plan includes funding identified to pay for the ACL settlement agreement. The source of the funding is from a loan against the City's insurance fund that will be paid back over time. Sewer user charges for the fiscal year 2020-2021 were increased by 5%. Further increases were approved, in concept, annually for the next several years. These

increases and a modified Capital Improvement Program will be developed to accommodate the new ECA project. An updated financing plan will be developed in early Q2 of 2021 to include long term plans for improvements to enhance the reliability of the NCI.

Long Term Improvement Study – The NCI represents approximately 4 miles of the City’s conveyance system for wastewater collected within the City of Laguna Beach north of Nye’s Place to the South Orange County Wastewater Authority (SOCWA) Coastal Treatment Plant (CTP). In 2002, the City commissioned a System Assessment report, which was used for steering various improvements to the transmission and collection system pipelines, and the lift stations, during the past 19 years. At that time, the majority of NCI improvements included addressing condition and reliability issues at the Laguna SOCWA Sewage Lift Station and Bluebird SOCWA Sewage Lift Station. Recent issues along the NCI are prompting the need for refocusing effort on risk and reliability of the NCI.

Earlier this year, the City commissioned another assessment of the NCI. The objective of this study was to provide recommendations to improve the long-term reliability of the NCI system by enabling long term bypass capability for preventative maintenance and isolate potential points failure along the transmission pipeline. The study identified the Aliso Creek Canyon Inverted Siphon reach of the NCI as a vulnerability and presented two alternatives to move the line out of Aliso Creek which will be considered by the City. The cost estimates for the alternatives to improve the NCI system range from \$109-206 million. As such, these are long term projects. In the short term, the Intertie Project, which will be implemented in three years, will provide the bypass capacity for this Aliso Creek portion of the NCI.

The City is currently reviewing the draft report. The City provided the Regional Board a draft copy during confidential negotiations. The City has scheduled a workshop on February 16, 2021 wherein staff will present a comprehensive sewer system capital improvement program including recommendations for the City Council’s consideration. Staff plans to go over the results of the study with the City Council and receive public input. Recommendations for short-term financing to fund priority projects will result in considering sewer user charge increases for one or more years. City Council direction resulting from the workshop, will drive the schedule for comprehensive NCI reliability improvements and long-term financing solutions.

City’s Track Record – The City has presented the Regional Board capital improvement finance records dating back to 2006, as far back as they are physically retrievable. Earlier records are no longer stored. From 2006 to date, the City has a proven track record of identifying and completing projects to maintain the NCI including the following:

- December 2006: Replacement of NCI Surge Tank at both Laguna and Bluebird SOCWA Lift Stations
- 2006: Addition of SuperOxygenation system to minimize corrosion and odors along the NCI between Bluebird SOCWA Lift Station and the Coastal Treatment Plant

- 2006-2007: Replacement of 700 ft of 27-inch pipeline in Coast Highway at Victoria Place overpass.
- May 2007: Replacement of approximate 40-foot section of the NCI along Galen Drive as a result of a small leak of a joint seal.
- 2008: Addition of SuperOxygenation system to minimize corrosion and odors along the NCI between the Laguna SOCWA Lift Station and the Bluebird SOCWA Lift Station
- 2009: Rehab of the Bluebird SOCWA Lift Station and bypass to the NCI
- 2009-2014: Replacement of all Air/Vacuum Release Valves along the 4-mile length of the NCI.
- 2016: Rehab of the Laguna SOCWA Lift Station and bypass to the NCI
- 2016: Addition of Odor and Corrosion Control System at Laguna SOCWA Lift Station
- 2020: Addition of Odor and Corrosion Control System at Bluebird SOCWA Lift Station

While the City is not directly implementing the Intertie Project, it has been, and will continue to be, in weekly communication with SCWD to ensure that the project is completed on schedule.

Figure 1 – SITE LOCATION MAP AND BYPASS INFORMATION GRAPHIC



FIGURE 1A – SCWD LIFT STATION NO. 2 SITE PLAN



AKM
JOB NO.: 781393.00
DATE: SEPTEMBER 2020

**SOUTH COAST WATER DISTRICT
LIFT STATION No. 2**

PROPOSED SITE PLAN

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Attachment 1**AKM Intertie Project Cost Estimate Apportioned to CLB and SCWD**

The following excerpt provides a summary of the apportioned costs to the agencies for the Intertie portion of the Lift Station No. 2 project.

Cost Estimate							
South Coast Water District/ City of Laguna Beach							
Lift Station No. 2/North Coast Interceptor Sewer, Emergency Intertie							
Item	Description	Quantity	Unit	Unit Price	Amount	SCWD Cost	City Cost
				Total	\$1,164,775	\$232,875	\$931,900
				Contingency (20%)	\$232,955	\$46,575	\$186,380
				Estimated Design, Construction, and Inspection Cost	\$1,397,730	\$279,450	\$1,118,280

The detailed cost estimate can be reviewed and downloaded at:

<http://www.lagunabeachcity.net/civica/filebank/blobdload.asp?BlobID=25920>