

5.1 Domestic and Recycled Water Storage and Distribution

5.1.1 Domestic Water

1. Existing Conditions

The Site is included in the City of Newport Beach's service area. Seventy-five percent of the City's water supply is from well water with the remaining supply derived from the Municipal Water District of Orange County. Newport Beach distribution facilities are adjacent to the Site in West Coast Highway, 16th Street, and Ticonderoga Street. A transmission main exists at the north edge of the Site, which transports well water to the treatment facility and reservoir on 16th Street, which the City operates. Mesa Consolidated Water District also has facilities adjacent to the Project Site in 19th Street and in the surrounding residential, commercial, and industrial areas of Costa Mesa. Its facilities are located primarily along the portion of the Project proposed for open space and are therefore not proposed for development use.

2. Proposed System

Domestic water needs for the Project will include dust control during construction, landscaping and irrigation needs, fire-flow requirements, and all associated residential, commercial, and visitor-serving consumption required from normal operation and occupancy of the Site.

The proposed domestic water system will connect to the existing City of Newport Beach infrastructure at 16th Street, Ticonderoga, and West Coast Highway. Within the Site, a network of 8- to 12-inch water mains is proposed to facilitate service to the various uses.

Exhibit II.5-1, Master Water Plan, depicts the existing and proposed backbone water facilities.

A "Water Supply Assessment" will be provided to the City of Newport Beach as part of the CEQA/EIR process to further evaluate service. It is anticipated, that, because the Project is consistent with the recently approved 2006 General Plan, adequate capacity is available.

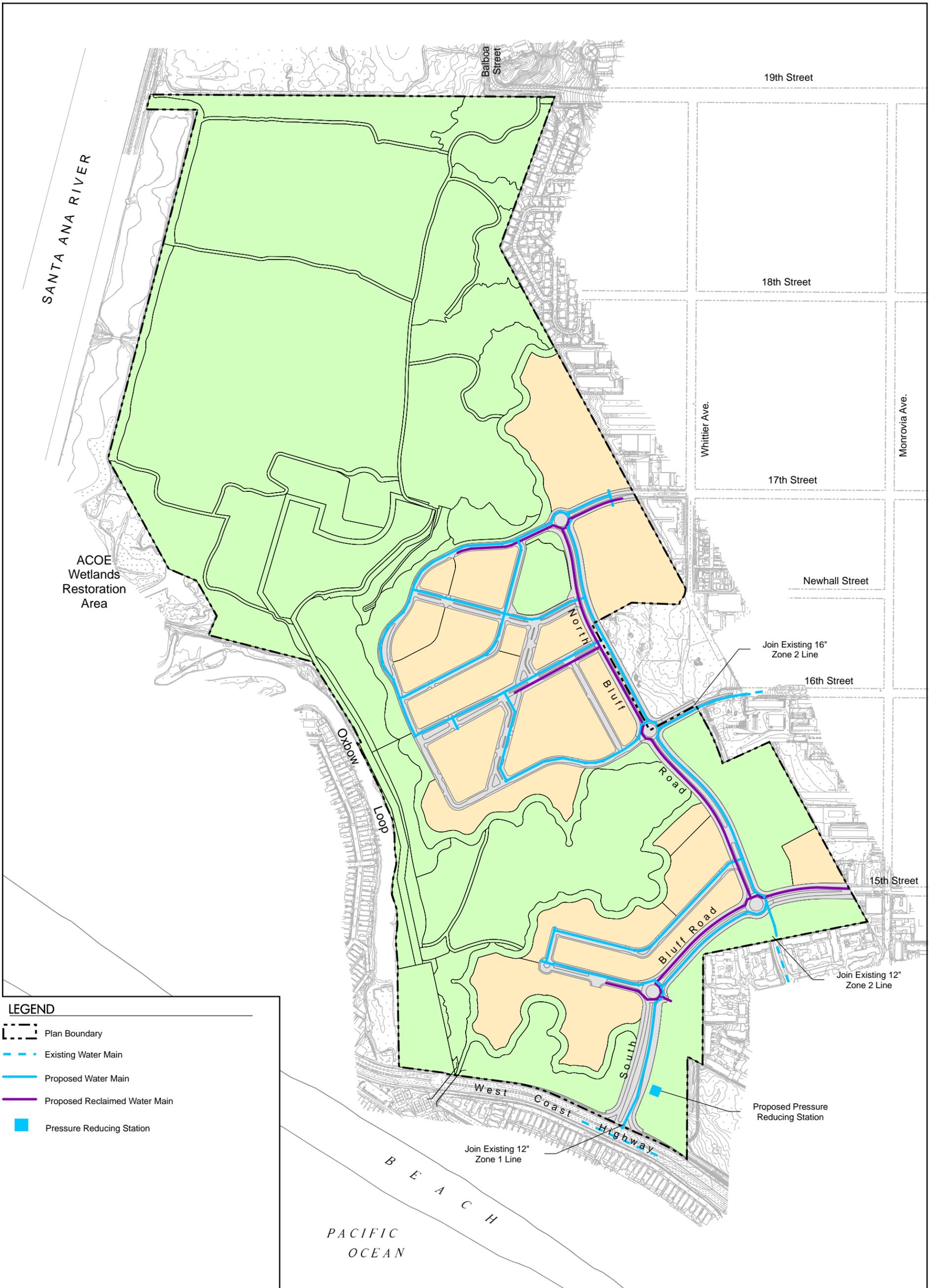
5.1.2 Recycled Water

1. Existing Conditions

Neither the City of Newport Beach nor Mesa Consolidated Water District has reclaimed water facilities in the Project vicinity. The Orange County Sanitation District operates a reclaimed water line west of the Santa Ana River (on the opposite side from the Project) between their two treatment facilities.

2. Proposed System

At this time, neither the City of Newport Beach nor the Mesa Consolidated Water District plans to extend reclaimed water to the Site vicinity. In recognition of the following: 1) That the use of reclaimed water is highly desirable; 2) retrofitting a domestic water system is cost prohibitive; and 3) reclaimed water may become available at a future time, the Project is proposing to build a separate on-site water system to irrigate the parks, open space and common areas. The separate system will be built to reclaimed water standards but will initially be connected to the City of Newport Beach's domestic system. At a time when reclaimed water is available, the system can be disconnected from the domestic system and connected to the reclaimed water line. The proposed alignment is shown on Exhibit II.5-1, Master Water Plan.



- LEGEND**
- Plan Boundary
 - Existing Water Main
 - Proposed Water Main
 - Proposed Reclaimed Water Main
 - Pressure Reducing Station

5.2 Wastewater Collection and Disposal

5.2.1 Existing Conditions

The City of Newport Beach has facilities adjacent to the Project on West Coast Highway, along 19th Street, and on Ticonderoga Street.

Discharge from the Ticonderoga and West Coast Highway sewer systems connect to the County Sanitation District of Orange County's (CSDOC's) Bitter Point Pump Station near the southwest corner of the Site adjoining West Coast Highway. Discharge from the sewer in 19th Street flows northerly to a City-operated pump station at the end of Walkabout Circle, from which the discharge is directed to connect with CSDOC's Wastewater Treatment Plant.

The City of Costa Mesa has facilities along the eastern edge of the Site. Discharge from these systems connects into interceptor sewer lines maintained by CSDOC. The system of lift stations, interceptor sewers or trunk lines carries wastewater along Newport Boulevard and West Coast Highway to Wastewater Treatment Plant 2 via the Bitter Point Pump Station. A portion of the Costa Mesa area flows northerly to Wastewater Treatment Plant 1.

The CSDOC operates facilities in West Coast Highway as well as the Bitter Point Pump Station and three force mains located within the Project existing Site. The trunk system in West Coast Highway is part of the Newport Beach Trunk Sewer System which serves the southeastern portion of the CSDOC's Districts No. 5 and No. 6. From the Bitter Point Pump Station the effluent is pumped through the force mains on-

site and then flows via a siphon under the Santa Ana River to Wastewater Treatment Plant 2.

The CSDOC is nearing construction to improve the Bitter Point Pump Station and force mains. The proposed improvements will increase flow through capacity and reliability.

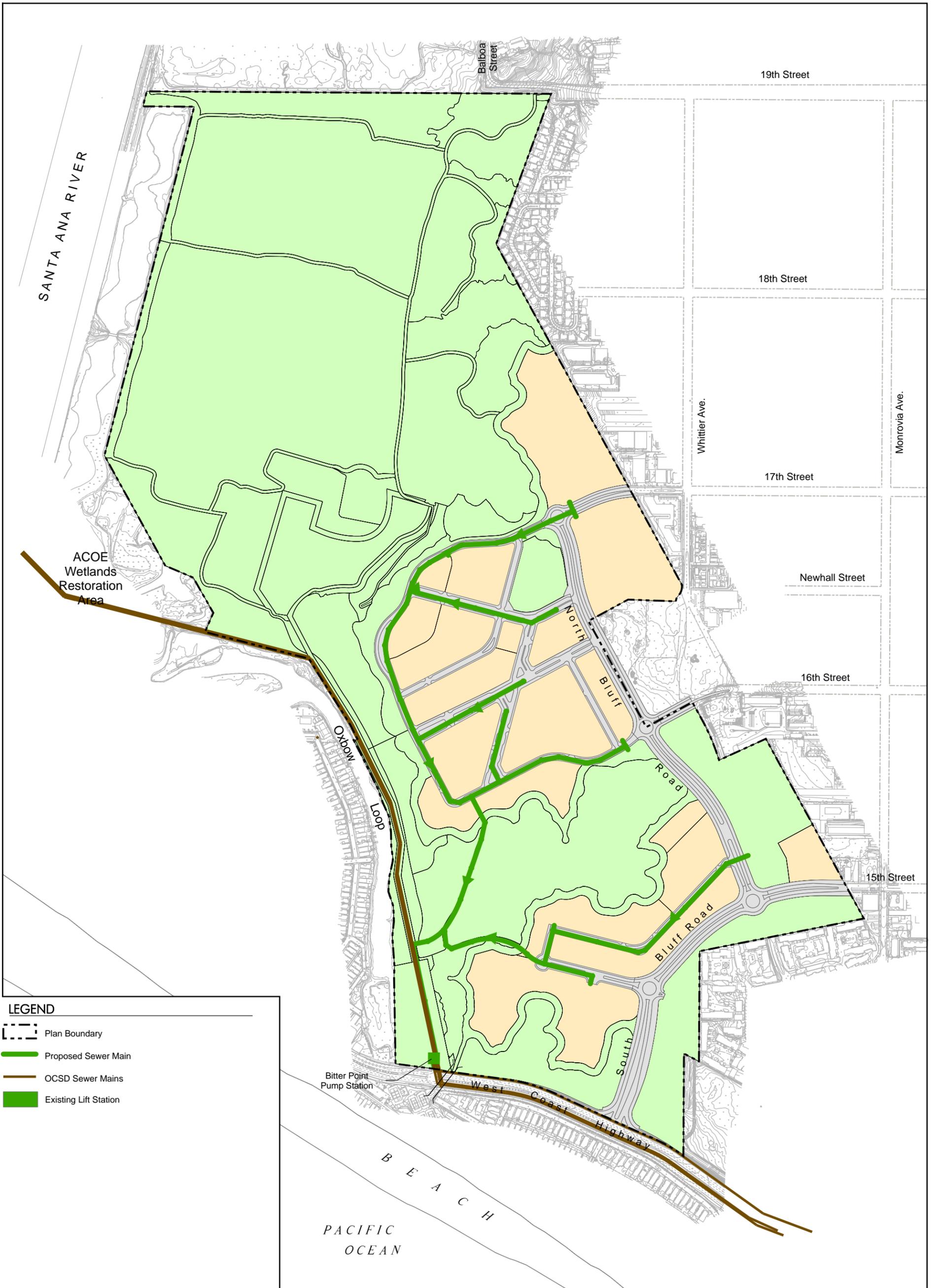
The Site is now and has historically been used for oil operations. An operations building exists near the 17th Street entrance to the Site. Discharge from this building and the other outbuildings go to a septic system.

The oil extraction operation produces water which is cleaned and then directed to a 12-inch pipe that joins the County Sanitation District Facility upstream of the siphon at the Santa Ana River. As part of the CSDOC upgrades, arrangements will be made for the oil operation effluent to be pumped by the oil operator to a point upstream of the pump station.

5.2.2 Proposed System

The development will require a sanitary sewer network to serve the proposed uses. It is proposed that the effluent from the development areas be collected and directed to the CSDOC trunk sewer upstream of the Bitter Point Pump Station. It is expected that the on-site sewer system will be public and will be owned and maintained by the city of Newport Beach.

Exhibit II.5-2, Master Wastewater Plan, depicts the existing and proposed backbone wastewater facilities. Exhibit II.5-2, Master Wastewater Plan.



LEGEND

- Plan Boundary
- Proposed Sewer Main
- OCSD Sewer Mains
- Existing Lift Station

5.3 Dry Utilities and Services

Public infrastructure and utility buildings, structures, and facilities including, but not limited to, electrical, gas, water, sewage, drainage, telephone, and cable television, and their storage, distribution, treatment, and/or production that are required to carry out development are permitted in all Land Use Districts of the Planned Community.

Public infrastructure and utilities also must conform to the following regulations set forth in Chapter 7, Community Regulations, of the PC Development Plan:

1. Consistent with sound civil engineering practices, utilities shall be principally located in road rights-of-way, alleyways, or, where necessary and feasible, in recreation and open space areas not primarily required for habitat restoration and/or preservation
2. Any new public utilities located within open space areas except for the Oil Facilities District shall be placed below grade if and where feasible from an economic and environmental perspective.

The Dry Utility Purveyors for the area are as follows:

- Electrical – Southern California Edison Company
- Gas – The Gas Company
- Telephone – Pacific Bell
- Cable – Time Warner