

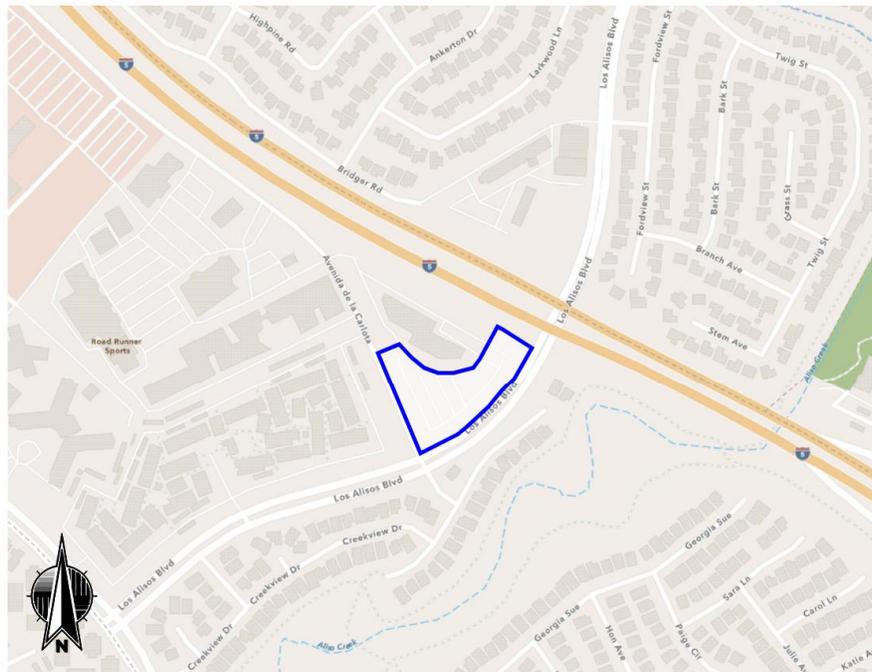
TECHNICAL MEMORANDUM

Oakbrook Plaza Estimated Sewer Capacity

PREPARED FOR: City of Laguna Hills Community Development Department
PREPARED BY: Fuscoe Engineering, Inc.
DATE: February 12, 2025

Project Description

The Oakbrook Plaza Project ("Project") is situated in the City of Laguna Hills ("City") in an existing 8.42-acre office plaza (zoned as Village Commercial) at the intersection of Avenida De La Carlota and Los Alisos Boulevard. The proposed project will subdivide the existing office plaza into two parcels (4.18 acres and 4.24 acres), developing 2.66 acres (of the proposed 4.18-acre parcel) of the existing southerly surface parking lot into a 4-story apartment building with a subterranean parking garage with 2 floors. The proposed apartment building will consist of 250 dwelling units (du) including studio, 1-bedroom, and 2-bedroom units. To ensure regional wastewater treatment capacity is available to handle sewer changes from the proposed Project, existing and proposed sewer calculations were performed to quantify a net change in sewer flows to compare with the regional wastewater system capacities. These calculations and associated analyses are provided below.



VICINITY MAP
NOT TO SCALE

Sewer System Findings

Per the El Toro Water District Water and Sewer Master Plan (2004), El Toro Water District (“The District”) provides wastewater collection services through its eleven lift stations and network of gravity pipelines and force mains to approximately 50,000 customers across five cities in South Orange County (Aliso Viejo, Mission Viejo, Laguna Hills, Laguna Woods, and Lake Forest). As of 2004, the District was processing approximately 5.0 million gallons per day (MGD). During wet-weather events, this number increased to approximately 6.0 MGD; the maximum monthly capacity is 6.0 MGD. The anticipate future redevelopments will result in an increase to the average daily flow by 380 gpm providing a total influent flow of 5.56 MGD, representing an 11% increase. The anticipated peak flow was found to be 854gpm.

The ETWD Sewer and Water Master Plan depicted anticipated future redevelopments within the District’s jurisdiction to evaluate the future impacts. Within the City of Laguna Hills, the Urban Village redevelopment project near the Laguna Hills Mall was anticipated to construct additional residential and mixed-use facilities. Our Project site is within the footprint of this redevelopment area. See Attachment A. The ETWD Sewer and Water Master Plan projected 112 gpm of additional sewer demand required by the proposed Urban Village project in the City of Laguna Hills.

To determine if the Oakbrook Plaza Project fits within the existing District’s wastewater system and treatment capacity, a comparison of existing and proposed wastewater flows has been conducted. The sewage generation was calculated using the City of Los Angeles/Los Angeles County Sanitation District’s characteristic sewage generation factors, as provided by the District.

Table 1 Existing and Proposed Sewer Flows

Existing Sewer Flows				
Land Use	Sewer Demand	Sewer Generation Factor ¹	Sewer Flow	
			(gpm)	(gpd)
VC (Village Commercial) ³	0	0	0	0
Total Existing			0	0
Proposed Sewer Flows				
Land Use	Sewer Demand	Sewer Generation Factor	Sewer Flow	
			(gpm)	(gpd)
Residential Apartment Units	29,875 ⁽¹⁾⁽²⁾ gpd	0.44 ⁽¹⁾	10	13,145
Total Proposed			10	13,145
Existing Versus Proposed Sewer Flows Summary				
Total Proposed			10	13,145
Total Existing			0	0
Net Change			+10	+13,145
Notes				
¹ Based on City of Los Angeles characteristic sewage generation factors as directed by ETWD. 0.44 factor is to reduce by 44%, since no food is being produced.				
² Based on a count of 27 studios, 140 (1) bedroom, 83 (2) bedroom apartment units.				
³ Project limit consists of the existing surface parking lot of the office plaza only.				

As shown above, total sewer flows associated with the proposed Project are 10 gpm. This increase in demand represents 2.6% of the projected increase of 380gpm within the District and 8.9% of the anticipated 112 gpm increase within the Urban Village Project as noted in the 2004 Sewer and Water Master Plan. Additionally, this project does not fall within any areas of deficiency, as identified in the El Toro Water District Water and Sewer Master Plan (2004). Therefore, impacts related to regional wastewater treatment capacity are insignificant.

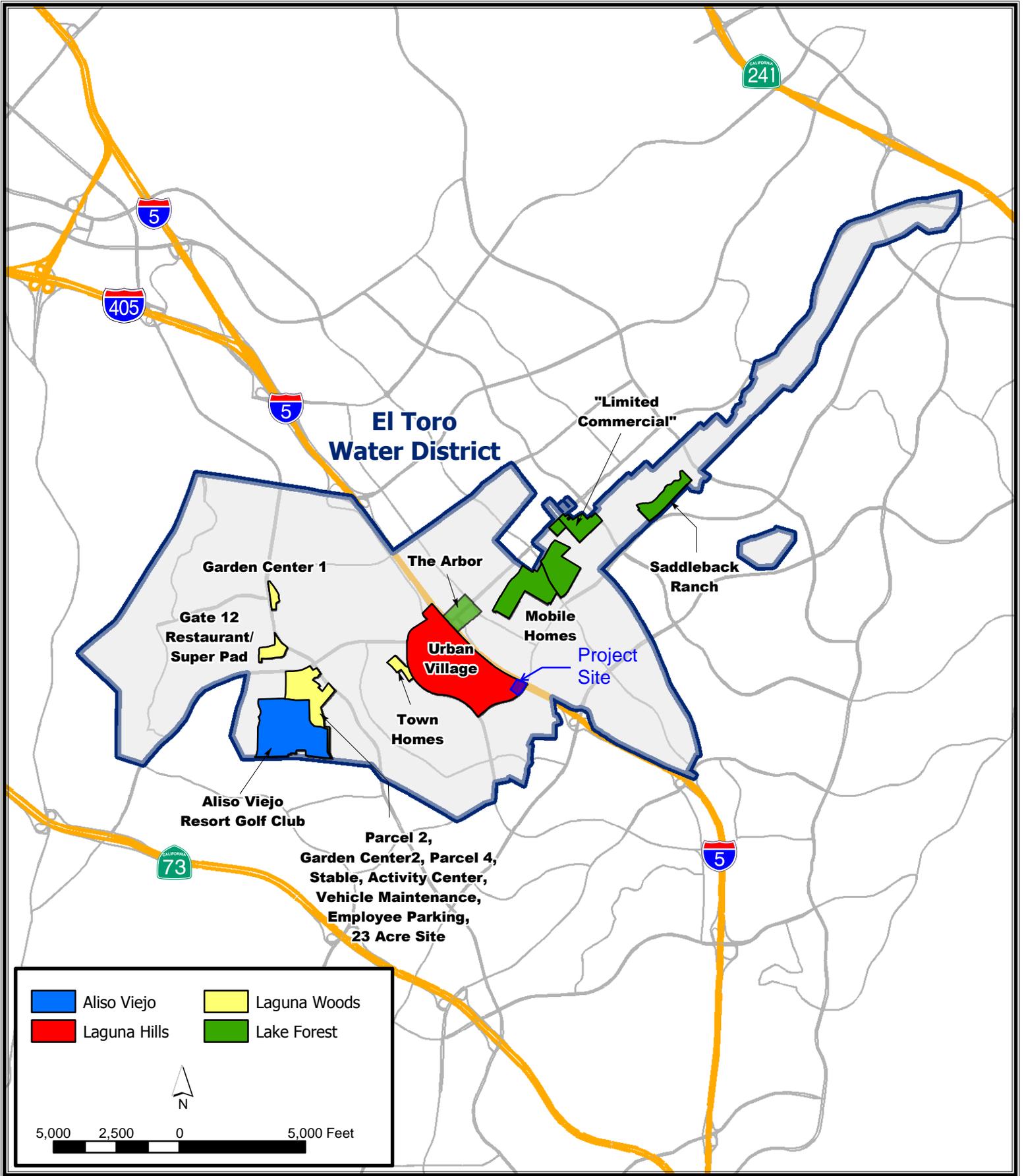
Conclusion

The above findings demonstrate that the proposed increase in sewer flows from redeveloping the Project area will not have a significant impact on regional wastewater treatment capacity. The is sufficient sewer capacity as shown above and as stated in the El Toro Water District Sewer and Water Master Plan to handle proposed increases in sewer demand from the Project. Therefore, no significant regional or local sewer impacts are anticipated.

List of Attachments

Attachment A – El Toro Water District Sewer and Water Master Plan Excerpt
Attachment B – Site Plan

Attachment A – El Toro Water District Sewer and Water Master Plan Excerpt



	Aliso Viejo		Laguna Woods
	Laguna Hills		Lake Forest

N

5,000 2,500 0 5,000 Feet



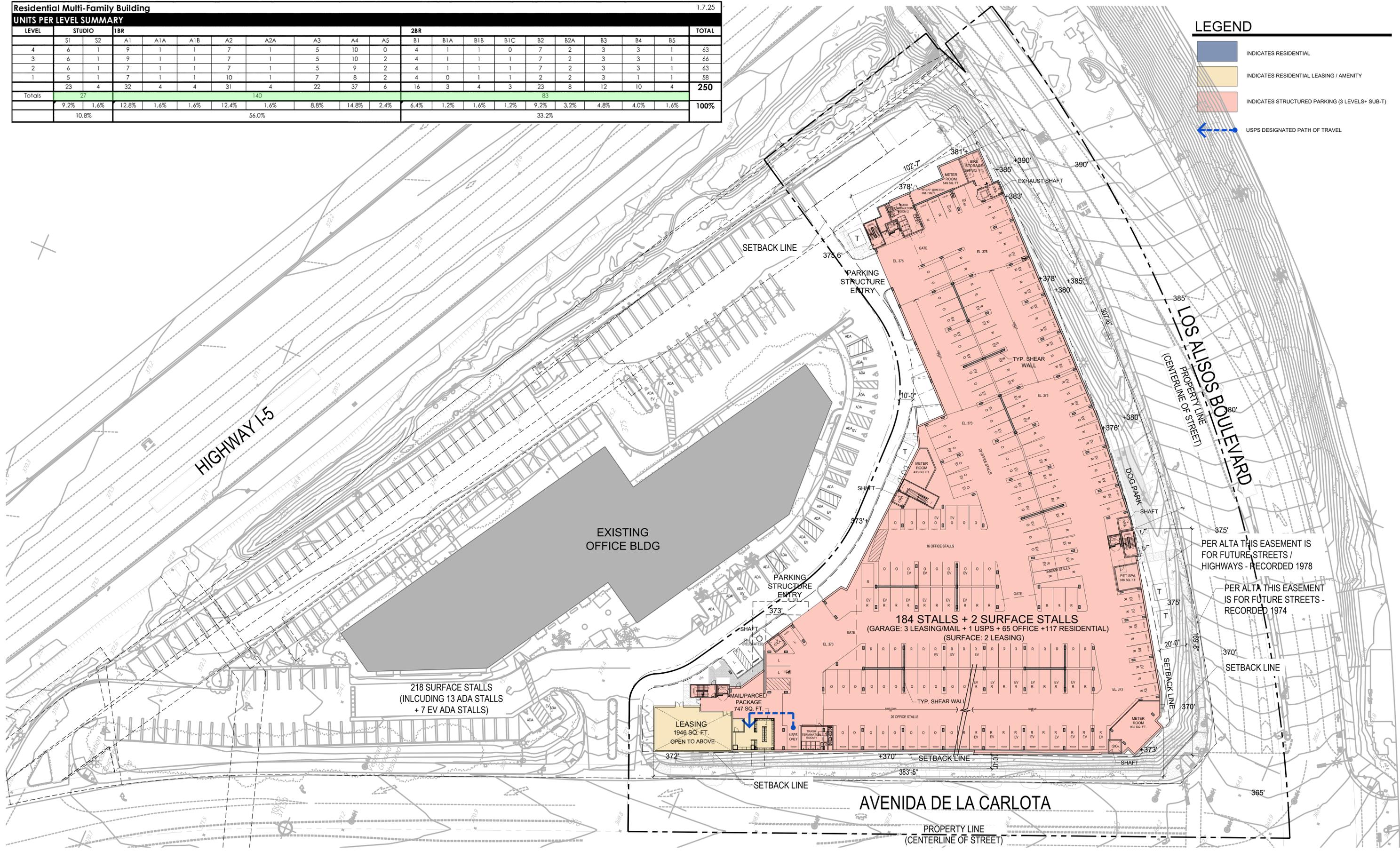
**El Toro Water District
Redevelopment Areas**

Attachment B – Site Plan

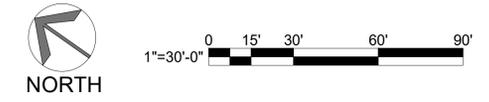
Residential Multi-Family Building																				1.7.25																			
UNITS PER LEVEL SUMMARY																																							
LEVEL	STUDIO		1BR		2BR					3BR					4BR					TOTAL																			
	S1	S2	A1	A1A	A1B	A2	A2A	A3	A4	A5	B1	B1A	B1B	B1C	B2	B2A	B3	B4	B5																				
4	6	1	9	1	1	7	1	5	10	0	4	1	1	0	7	2	3	3	1	63																			
3	6	1	9	1	1	7	1	5	10	2	4	1	1	1	7	2	3	3	1	66																			
2	6	1	7	1	1	7	1	5	9	2	4	1	1	1	7	2	3	3	1	63																			
1	5	1	7	1	1	10	1	7	8	2	4	0	1	1	2	2	3	1	58																				
Totals	23	4	32	4	4	31	4	22	37	6	16	3	4	3	23	8	12	10	4	250																			
	9.2%		1.6%		12.8%		1.6%		1.6%		12.4%		1.6%		8.8%		14.8%		2.4%		6.4%		1.2%		1.6%		1.2%		9.2%		3.2%		4.8%		4.0%		1.6%		100%
	10.8%										56.0%										33.2%																		

LEGEND

- INDICATES RESIDENTIAL
- INDICATES RESIDENTIAL LEASING / AMENITY
- INDICATES STRUCTURED PARKING (3 LEVELS+ SUB-T)
- USPS DESIGNATED PATH OF TRAVEL



24422 AVENIDA DE LA CARLOTA
 LAGUNA HILLS, CA
 BUCHANAN STREET PARTNERS



RESIDENTIAL BUILDING
 Site Plan - Parking Level



A1.0
 Scale
 Job No. 2022-834
 Date 12-17-2024