

# Appendix L

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Water Demand Study



February 21, 2020

City of Camarillo Water Division  
601 Carmen Drive  
Camarillo, CA 93010

**RE: 2800 Barry Street- Affordable Housing Development  
Water Demand Study**

This letter is intended to assess the water demand for the proposed development located at 2800 Barry Street. The project site is located within Camarillo City limits and receives water service from the City of Camarillo.

The site is currently a vacant paved lot but was previously used as a lumber storage yard. The proposed project is a 100% affordable multi-family housing development consisting of a total of 68 units, including 60 rental apartments, and 8 for-sale condominiums. At the time of the preparation of this analysis the project is at the concept level of design. The analysis includes domestic flows and does not take into account spontaneous fire flows. The analysis of actual peak demand, including fire flows, will be completed during final design for purposes of sizing meters/service lines.

**METHOD OF ANALYSIS**

The following table provides a summary of water use factors provided by the City of Camarillo:

Unit Category	Water Use Factor (gal/capita* day)	Population Factor (people/unit)
Apartments	70	1.9
Condo/Duplex	70	2.5

**CALCULATED PROJECT WATER DEMAND**

Using the applicable water demand factors, the total project water demand has been calculated as follows:

Apartment Water Demand

$$\frac{70 \text{ gal}}{\text{capita} * \text{day}} \times 1.9 \frac{\text{people}}{\text{unit}} \times 60 \text{ units} = 7,980 \frac{\text{gal}}{\text{day}} = 8.9 \text{ AFY}$$



Condominium Water Demand

$$\frac{70 \text{ gal}}{\text{capita} * \text{day}} \times 2.5 \frac{\text{people}}{\text{unit}} \times 8 \text{ units} = 1,400 \frac{\text{gal}}{\text{day}} = 1.6 \text{ AFY}$$

Unit Category	Water Use Factor (gal/day)	Population Factor (people/unit)	Unit QTY	Anticipated Daily Water Demand (gal/day)	Anticipated Annual Water Demand (AFY)
Apartments	70	1.9	60	7,980	8.9
Condo/Duplex	70	2.5	8	1,400	1.6
<b>Project Total</b>					<b>10.5</b>

Based on the conceptual site plan, the proposed development has an anticipated water demand of 10.5 acre-feet per year. The historic water allocation for the site was determined to be 0.55 acre-feet per year, the excess demand of 9.95 acre-feet per year will be offset by reducing the water demand for an off-site property.

The water use factors provided by the City of Camarillo are assumed to be conservative factors. By implementing drought tolerant landscaping and water efficient fixtures in the design, the total water demand for the project is predicted to decrease. A more detailed analysis will be completed at the time of final design that will provide a more accurate estimate of the project's anticipated water demand.

Sincerely,

**RRM DESIGN GROUP**

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