

Engineers & Planners
Traffic
Transportation
Parking

Linscott, Law &
Greenspan, Engineers
1580 Corporate Drive
Suite 122
Costa Mesa, CA 92626
714.641.1587 T
714.641.0139 F
www.llgengineers.com

Pasadena
Costa Mesa
San Diego
Las Vegas

August 29, 2008

Mr. David Armstrong
ARMSTRONG REAL ESTATE ADVISORS, LLC
1790 East Main Street
Ventura, CA 93001

LLG Reference: 2.07.2916.1

**Subject: Parking Field Study Results and Analysis
Dockweiler Drive and Valle Del Oro On-Street
Vista Condominiums and Terrace Apartments Off-Street
Santa Clarita, California**

Dear Mr. Armstrong:

In response to your direction, and as a follow up to questions raised in the Planning Commission Hearing of July 29, 2008, Linscott, Law & Greenspan, Engineers (LLG) has performed a focused field study of the actual parking demands, both on-street and off-street, related to the Vista Condominiums and Terra Apartments located in the City of Santa Clarita. These residential communities are located along Dockweiler Drive and/or Valle Del Oro near their mutual intersection. Both communities have off-street parking, but also use the adjoining curbs of Dockweiler Drive and/or Valle Del Oro for resident and guest parking support.

Conclusion

In brief, our field study and analysis have concluded that the peak curb parking demand on Dockweiler Drive totals on the order of 113 spaces. Unused supply (empty spaces at the peak demand time) to offset a displacement of this demand (because of future re-striping of the street to four travels lanes with parking prohibitions) totals 96 spaces. This includes 58 spaces in nearby surface lots, and space for 38 vehicles in the unused curb areas within the upper reaches of Valle Del Oro.

This suggests a shortfall of displaced demand of 17 spaces. Redirection of the demand for these 17 spaces to Deputy Jake Drive would occur only as a last resort, because the nearest parking on that roadway is 1100' from the Dockweiler Drive/Valle Del Oro intersection. Because the nearest home on that street is 1700' from the same intersection, to the extent that displaced vehicles might use Deputy Jake Drive, such parking is not likely to occur adjoining a single family residence.

Philip M. Linscott, PE (1924-2000)
Jack M. Greenspan, PE (Ret.)
William A. Law, PE (Ret.)
Paul W. Wilkinson, PE
John P. Keating, PE
David S. Shender, PE
John A. Boorman, PE
Clare M. Look-Jaeger, PE
Richard E. Barretto, PE
Keil D. Maberry, PE

Background

As you know, this residential parking question arose in conjunction with the review of The Master's College Master Plan. More specifically, and to be consistent with the City's General Plan, that Master's College plan provides for the extension of Dockweiler Drive from its current terminus at the eastern edge of the site, through the college property, to its western boundary. This extension would provide for an eventual 4-lane cross-section per the requirements of the General Plan, but the Master's College extension would not make a connection to Railroad Avenue on the west, and the timing of such a connection is unknown.

The existing segment of Dockweiler Drive in the vicinity of the Vista Condominiums and Terrace Apartments is a divided roadway. While its cross-section would allow (in the absence of on-street parking) the striping of two travel lanes in each direction, its current configuration provides a single travel lane plus outside curb parking lane in each direction.

The project traffic study reports an existing traffic volume on Dockweiler Drive (near Sierra Highway) of 5,000 vehicles per day (Figure 5.10-2 of the project EIR). These volumes are consistent with the existing two-lane striping of the roadway near Valle Del Oro. Future volumes on that roadway, with Master's College project traffic but without a Dockweiler connection to Railroad Avenue on the west, are forecast at 7,000 vehicles per day (Figure 5.10-11 of the project EIR). These volumes are also consistent with the existing two-lane striping of the roadway near Valle Del Oro. As explained by City Staff at the Planning Commission meeting, the construction of the Master's College segment of Dockweiler Drive alone, with the addition of all Master's College Master Plan traffic, *would not cause the roadway to be restriped to four lanes (two in each direction) with the concurrent loss of on-street parking that the Vista Condominiums and Terrace Apartments now enjoy.*

Thus, while the discussion on the status of Dockweiler Drive on-street parking has surfaced during the Master's College review process, any potential loss of those spaces would not be caused by full implementation of the Master's College Master Plan. Additionally, a future loss of on-street parking is not automatically assured, but rather related to the long term issue of the City's General Plan representation of Dockweiler Drive as a continuous roadway between Railroad Avenue and Sierra Highway.

Parking Field Study

Notwithstanding the above summary of the roadway extension versus on-street parking issues, the Planning Commission seeks information with respect to the current parking characteristics along Dockweiler Drive. In preparing that information, parking characteristic along Valle Del Oro also become of interest, as do off-street spaces in the "influence area" of this on-street parking. That influence area is estimated based on proximity to Dockweiler, and considers perceived convenience between the roadway

and nearby residences as influenced by pedestrian linkages and topography. In essence, these off street parking areas will be the likely focus of on-street parkers should they be displaced by the elimination of Dockweiler Drive curb parking.

Our parking field study approach is outlined below:

1. The study area was broken into off-street parking zones for parking space inventory and demand observations. Figure 1 presents those zones.
2. Similarly, curb parking areas along both Dockweiler Drive and the upper reaches of Valle Del Oro were also defined. Figure 2 identifies those curb parking zones.
3. The number of marked parking spaces within each zone was inventoried from field study. Similarly, the length of each curb segment was inventoried, and its parking space capabilities estimated at 1space/22 feet of curb. This is necessary since the on-street spaces are not actually marked. Actual conditions may translate to a shorter equivalent space length, but we've found this to be a good estimating factor.
4. Counts of actual parking demand were made on Saturday, August 16, 2008, from 11 AM though 10 PM. While only a one-day count, we've found that the late evening demand on a Saturday night is likely to capture peak or near peak conditions. Starting the count at 11 AM, and making a count of actual demand every hour on the hour, illustrates the relative parking profile of residential demand throughout the day.
5. The attached Table 1 summarizes the off-street parking results. The demand within each zone is shown for each survey period. The inventoried supply in each zone is at the top of the column, just below the Zone location. As shown, demand typically grows throughout the day and peaks in the mid to late evening hours. The Vista Condominium project provides 149 spaces in the off-street parking zones, and the demand peaked at 127 spaces, for a surplus of 22 spaces. At the Terrace Apartments, 239 off-street spaces were inventoried in study zones, where the peak demand was counted at 203 spaces.
6. From Table 1, and for all off-street zones combined, the demand peaked at 330 spaces against a supply of 388 spaces. This yielded a surplus of 58 spaces at the 10 PM peak. So, while the one might speculate that the Dockweiler Drive on-street parking occurs because the off-street parking lots are "full", the field data shows 58 empty spaces at the observed peak.

7. Table 2 presents parking demand data for curb spaces along Dockweiler Drive. Like Table 1, Table 2 identifies the estimated supply in each zone, below which the time-of-day profile demand for each is shown. From Table 2, the Dockweiler Drive demand peaks with 113 vehicles at 10 PM, but does not vary from that value by much more than 10% throughout the day. Within these zones, we've estimated the supply to be 139 spaces, and when compared to the peak, a surplus of 26 spaces is indicated at the peak.
8. Table 3 presents a similar summary for Valle Del Oro. As indicated, the aggregate demand for the 8 curb zones along the upper reaches of that street totaled 61 spaces, while the inventory of curb lengths converts to a functional supply of 61 spaces. On that basis, we conclude that this segment of Valle Del Oro, which is the most proximate on-street parking other than Dockweiler Drive for those residents and guests who now prefer to park along Dockweiler Drive, could accommodate 38 more vehicles than our field study counted.

Parking Analysis and Summary

As a practical matter, the parking issue here boils down to this: If the city eventually causes Dockweiler Drive to become a continuous roadway from Sierra Highway to Railroad Avenue, and if the resulting traffic volume increase because of that continuity causes the existing parking use of Dockweiler in the subject study area to be prohibited, where is that parking refocused?

From the attached materials and the above discussion, the field studied parking aspects of the issue are as follows:

Peak Dockweiler parking demand to be displaced:	-113 spaces (Table 2)
Unused off-street spaces	+58 spaces (Table 1)
Unused Valle Del Oro curb spaces (upper reach):	<u>+38 spaces</u> (Table 3)
Unused subtotal	+96 spaces
Total Surplus(+)/Shortfall(-)	-17 spaces

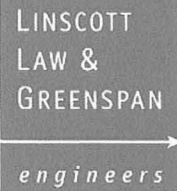
From the above summary, other currently vacant spaces in the study area have the capability, based on our field study, to absorb all but 17 spaces of absorbed demand following a potential total prohibition of curb parking along Dockweiler Drive.

Stepping back from these actual values we offer the following observations and conclusions from both this field study as well as an overall body of parking experience:

- Residential parking is largely a function of convenience and habit. While spaces may be available in an off-street lot, residents and guests will often choose to park on the street, unless prohibited from doing so.

- The presence of parking on Dockweiler Drive, and the fact that the amount of parking demand on that street exceeds the number of empty spaces in the most proximate off-street parking areas does not necessarily mean that those communities have not provided enough off-street parking. It is common for some parking spaces within individual garages to be used for purposes other than parking. Such a characteristic is often discouraged/prohibited in condominium or apartment community regulations, but enforcement of those regulations varies. This observation is not to suggest a solution of tightened parking regulations or enforcement in these communities, but rather to bring visibility as to how conditions like those observed in the field arise.
- A prohibition of parking such as that which may eventually occur on Dockweiler Drive will cause the affected parkers to make adjustments in their parking patterns. A shift to otherwise empty off-street spaces can be expected, as can use of otherwise empty curb spaces along Valle Del Oro. Residents may also increase the use of their own garage spaces which may now not be used for parking. A shift of parking demand towards the Deputy Jake Drive area might also occur. To the extent that it did, such a shift can be expected to peak at about 17 spaces. In equivalent terms this represents about 375' of curb length (about 200' along both sides of a street). It is worth noting that the entrance driveway for McGrath School (approximate location of the nearest Deputy Jake Drive curb parking) is roughly 1100' from the Dockweiler Drive/Valle Del Oro intersection, and nearest home adjoining Deputy Jake Drive is 1700' from the same intersection. (See Figure 3 for an illustration of these estimated distance values.) These would constitute very long walking distances for displaced parkers, suggest that Deputy Jake Drive would offer parking only of last resort, and further suggest that if displaced parkers redirected to Deputy Jake Drive, such parking would not occur in front of homes adjoining Deputy Jake Drive.
- A parking restriction program and signage could provide further protection against parking intrusion within the Deputy Jake residential area. Such a program could also consider the traffic, parking, arrival period, and departure period characteristics of McGrath Elementary School.
- A future striped four lane cross-section on Dockweiler Drive does not automatically assure that all on-street parking will be lost. An initial review of the existing curb to curb width of Dockweiler Drive suggests that four travel lanes plus a parking lane on only one side of the street could be provided through median reconfiguration to retain the full-width median where left turn channelization is needed, but reduce the median width at mid-block locations to retain an eight-foot parking lane. This configuration is identified as an opportunity for more study as the conversion to four travel lanes is pursued for implementation.

Mr. David Armstrong
August 29, 2008
Page 6



We appreciate the opportunity to provide this investigation and analysis. Please call us if you have any questions.

Sincerely,

Linscott, Law & Greenspan, Engineers

A handwritten signature in black ink, appearing to read "Paul W. Wilkinson", is positioned above the typed name.

Paul W. Wilkinson, P.E.
Principal

Attachments

cc: File

Table 1
Vista Condo & Terrace Apartments Off-Street Parking
8/16/08, Santa Clarita

TIME	Vista Condo							Terrace Apartments							TOTAL 388 sp	Surplus (+) Shortfall (-)
	Zone A	Zone B	Zone C	Zone D	Subtotal	Surplus (+) Shortfall (-)	Zone E	Zone F	Zone G	Zone H	Zone I	Subtotal	Surplus (+) Deficiency (-)			
	13 sp	67 sp	29 sp	40 sp	149 sp		56 sp	99 sp	29 sp	36 sp	19 sp	239 sp				
11:00 AM	7	44	19	30	100	49	26	42	19	26	0	113	126			
12:00 PM	7	44	19	33	103	46	28	45	21	21	0	115	124			
1:00 PM	6	41	17	33	97	52	31	51	20	23	0	125	114			
2:00 PM	6	39	17	31	93	56	28	55	20	24	0	127	112			
3:00 PM	7	35	17	31	90	59	31	54	18	26	0	129	110			
4:00 PM	6	38	19	32	95	54	32	55	21	29	0	137	102			
5:00 PM	7	53	19	32	111	38	34	72	21	35	0	162	77			
6:00 PM	6	54	26	32	118	31	38	75	21	35	0	169	70			
7:00 PM	7	56	27	33	123	26	43	88	21	36	0	188	51			
8:00 PM	9	57	27	34	127	22	47	91	22	36	0	196	43			
9:00 PM	8	57	28	34	127	22	52	90	22	36	0	200	39			
10:00 PM	9	56	28	34	127	22	52	93	22	36	0	203	36			

Notes:
= Peak Hour
sp = Parking Spaces

Table 2
Dockweiler Drive On-Street Parking
8/16/2008, Santa Clarita

TIME	Dockweiler Drive On-Street Parking										TOTAL 139 sp	Surplus (+) Shortfall (-)
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10		
	14 sp	11 sp	8 sp	6 sp	27 sp	15 sp	10 sp	24 sp	15 sp	9 sp		
11:00 AM	11	13	11	8	14	10	7	16	9	4	103	36
12:00 PM	11	13	9	8	20	11	7	15	14	4	112	27
1:00 PM	12	12	9	8	19	9	6	18	13	4	110	29
2:00 PM	11	11	9	7	18	9	6	19	12	4	106	33
3:00 PM	11	11	9	7	16	10	4	21	10	4	103	36
4:00 PM	12	11	10	8	16	9	5	20	10	2	103	36
5:00 PM	12	12	10	8	16	9	7	19	11	2	106	33
6:00 PM	12	10	10	7	18	9	8	20	11	2	107	32
7:00 PM	12	10	11	7	17	8	8	18	11	1	103	36
8:00 PM	12	8	11	6	17	7	8	17	12	1	99	40
9:00 PM	12	8	11	8	20	8	9	19	13	3	111	28
10:00 PM	12	8	11	8	20	8	9	19	14	4	113	26

Notes:

☐ = Peak Hour

Parking spaces are estimated at 22 feet per space

sp = Parking Spaces

Table 3
Valle del Oro On-Street Parking
8/16/08, Santa Clarita

TIME	Valle del Oro On-Street Parking										TOTAL 99 sp	Surplus (+) Shortfall (-)
	Zone 11	Zone 12	Zone 13	Zone 14	Zone 15	Zone 16	Zone 17	Zone 18				
	0 sp	17 sp	5 sp	30 sp	0 sp	0 sp	23 sp	24 sp				
11:00 AM	0	8	2	20	0	0	12	16			58	41
12:00 PM	0	7	2	16	0	0	12	16			53	46
1:00 PM	0	7	2	14	0	0	12	17			52	47
2:00 PM	0	6	2	15	0	0	12	16			51	48
3:00 PM	0	6	3	15	0	0	12	16			52	47
4:00 PM	0	6	4	16	0	0	13	14			53	46
5:00 PM	0	6	4	16	0	0	14	13			53	46
6:00 PM	0	9	4	18	0	0	16	13			60	39
7:00 PM	0	8	2	19	0	0	14	14			57	42
8:00 PM	0	8	2	19	0	0	13	16			58	41
9:00 PM	0	8	3	20	0	0	13	16			60	39
10:00 PM	0	8	3	20	0	0	13	17			61	38

Notes:

Peak Hour

Parking spaces are estimated at 22 feet per space

sp = Parking Spaces



n:\2900\2072916\dwg\8-25-08\2916f-1.dwg LDP 10:18:37 08-29-2008 egulior

LINSCOTT
LAW &
GREENSPAN
engineers



NO SCALE

KEY

— = OFF-STREET PARKING ZONES

FIGURE 1

VISTA CONDO AND TERRACE APARTMENT
OFF-STREET ZONE STRUCTURE
MASTER'S COLLEGE MASTER PLAN, SANTA CLARITA



n:\2900\2072916\dwg\8-25-08\2916f-2.dwg LDP 10:28:22 08-29-2008 aguilair

KEY

- = DOCKWEILER DRIVE ON-STREET PARKING ZONES
- = VALLE DEL ORO ON-STREET PARKING ZONES

FIGURE 2

VISTA CONDO AND TERRACE APARTMENT
ON-STREET ZONE STRUCTURE
MASTER'S COLLEGE MASTER PLAN, SANTA CLARITA

LINSCOTT
LAW &
GREENSPAN
engineers



NO SCALE



n:\2900\2072916\dwg\8-25-08\2916f-3.dwg LDP 13:34:08 08-29-2008 green

LINSCOTT
LAW &
GREENSPAN
engineers



FIGURE 3

**DEPUTY JAKE DRIVE ILLUSTRATION
MASTER'S COLLEGE MASTER PLAN, SANTA CLARITA**