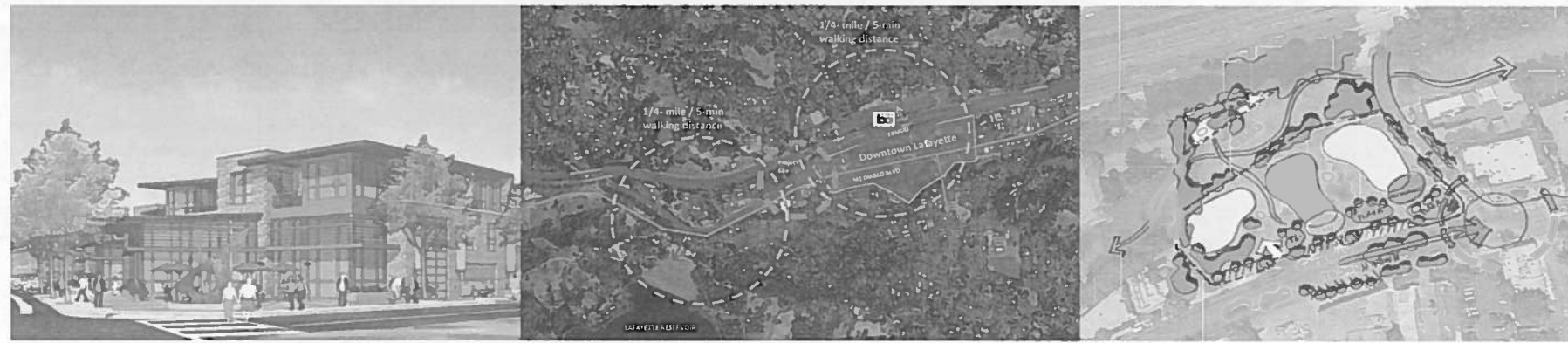


**Attachment 1**  
**Preliminary Design Drawings (Excerpt)**



**3666, 3672, & 3682 Mt. Diablo Boulevard, Lafayette, CA**  
Planning Re-Submittal, October 24, 2014

**LENNAR®**



**CINITY MAP**



**PROJECT TEAM**

**DEVELOPER:**  
**LENNAR**  
 111 Bolinger Canyon Road, Suite 550  
 San Ramon, CA 94583  
 Contact: CHAD KILTZ  
 Phone: 925.327.8301

**CIVIL ENGINEER:**  
**CARLSON, BARBEE & GIBSON, INC.**  
 2633 Camino Ramon, Suite 350  
 San Ramon, CA 94583  
 Contact: GREGORY D. MILLER  
 Phone: 925.866.0322 ext. 223

**ARBORIST:**  
**ARBORWELL**  
 2337 American Ave  
 Hayward, CA 94545  
 Contact: SAMUEL OAKLEY  
 Phone: 888.969.8733

**ARCHITECT/ PLANNER:**  
**STUDIO T-SQ, INC.**  
 34 12th Street, Suite 2A  
 Oakland, CA 94607  
 Contact: CHEK TANG  
 Phone: 510.451.2850

**LANDSCAPE ARCHITECT:**  
**THOMAS BAAK & ASSOCIATES, LLP**  
 1620 North Main Street, Suite 4  
 Walnut Creek, CA 94596  
 Contact: ANDREA SWANSON  
 Phone: 925.933.2583

**BUILDING PROGRAM**

UNITS	Quan.	G.S.F. unit area incl unit wall	Unit Mix	Rentable S.F.		
1A 1BR/1BA	6	958	9.1%	5,748		
1C 1BR/1BA	1	1058	1.5%	1,058		
2A 2BR/2BA + den	37	1477	56.1%	54,649		
2B 2BR/2BA	10	1231	15.2%	12,310		
2C 2BR/2BA (2A minus den)	3	1305	4.5%	3,915		
3A 3BR/2.5BA +den @ end	6	1771	9.1%	10,626		
3B 3BR/2.5BA +den inline	3	1816	4.5%	5,448		
<b>Units Total</b>	<b>66</b>	<b>1421</b>	<b>100.0%</b>	<b>93,754</b>		

RESTAURANT / RETAIL		Parking Req'd	Parking Provided
Restaurant seating, indoor and outdoor (1/45sf req'd)	2200	1/45 sf	49
Restaurant other, incl employees / kitchen (1/500sf req'd)	1800	1/500 sf	4
Retail / Flex	1400	4/1000sf	6
<b>Restaurant / Retail Total</b>	<b>5400</b>		<b>58</b>

PARKING	REQUIRED PER CODE	H/C Pkg* Provided	PROVIDED
Assigned Residential Parking in garage (req'd per code: 1.0/1BR, 1.25/2BR, 1.5/3BR)	83	4 in garage	106
Guest parking in garage (req'd per code: 1 car per 5 units)	13	2 in garage	13
<b>Resident &amp; Guest Parking- Total</b>	<b>96</b>		<b>119</b>
Restaurant Parking (req'd per City: 1.0/45sf seating area; 1/500sf other)	53	1 in garage 2 on-street	44 9
Flex Retail Parking (req'd per code: 1 car / 250 sf)	6	in-garage	6
<b>Retail / Restaurant Parking total</b>	<b>58</b>		<b>59</b>
<b>Parking- Total</b>	<b>155</b>	<b>9</b>	<b>178</b>

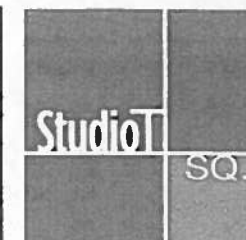
\* included in overall provided pkg stalls

OPEN AREA, AND BUILDING COVERAGE DATA			
Open Area	% of net lot area	S.F.	
Main site (Total net lot area, building coverage - driveways/paving - setback)	28.7%	25,600	
Triangular site		6,800	
Usable Open Space	S.F. Per Unit	% of net lot area	S.F.
Usable Common Open Space Provided incl triangle (excluding 10' setback)	491	36.3%	32,400
Usable Private Open Space Provided (balconies: 70 S.F. min.)	100	7.4%	6,600
Usable Open Space Provided - Total	591	43.7%	39,000
Building Coverage (main site only)	% of net lot area	S.F.	
	50.1%	44,700	

FLOOR AREA CALCULATIONS			*Gross building S.F.
Level B1 Subterranean Garage (excluded from FAR)	70,540 SF		N/A
Level 1 Street Level			44,700
Level 2			44,700
Level 3			41,000

**SHEET INDEX**

- G0.0 Project Summary / Sheet Index
- G1.0 Photo and Visual Analysis
  
- SP1.0 Context / Neighborhood Plan
- SP2.0 Illustrative Site Plan
- SP3.0 Existing Site Circulation Diagram
- SP3.1 Proposed Site Circulation Diagram
- SP3.2 Proposed Site Access Diagram
- SP4.0 Site Sections
  
- TM.1 Vesting Tentative Suidivision Map
- TM.2 Boundary & Existing Conditions
- TM.3 Preliminary Site Plan
- TM.4 Preliminary Grading & Drainage
- TM.5 Preliminary Utility & Stormwater
  
- A0.0 Plan Overlay Proposed-Existing
- A1.0 Basement Level Garage Plan
- A1.1 Street Level Plan
- A1.2 Second Level Plan
- A1.3 Third Level Plan
- A1.4 Roof Plan
  
- A2.1 Building Sections
- A2.2 Building Sections
- A2.3 Building Elevations
  
- A3.0 Building Perspectives
- A3.1 Building Perspectives
- A3.2 Building Perspectives
- A3.3 Building Perspectives
- A3.4 Building Perspectives
- A3.5 Building Perspectives
  
- A4.0 Colors & Material Board (8.5x11)
- A4.1 Colors, Materials, Details
  
- L0.0 Illustrative Landscape Plan
- L1.0 Site Amenities Plan
- L2.0 Site Amenities Images
- L3.0 Lighting Plan
- L4.0 Preliminary Planting Plan
- L5.0 Enlarged Plan: Courtyard and Corner
- L6.0 Enlarged Plan: Center Courtyard



: Architecture  
 : Planning  
 : Urban Design

: 304 12th Street, Suite 2A  
 : Oakland, California 94607  
 : (510) 451 - 2850

3666, 3672 & 3682 Mt. Diablo Boulevard  
 Lafayette, California

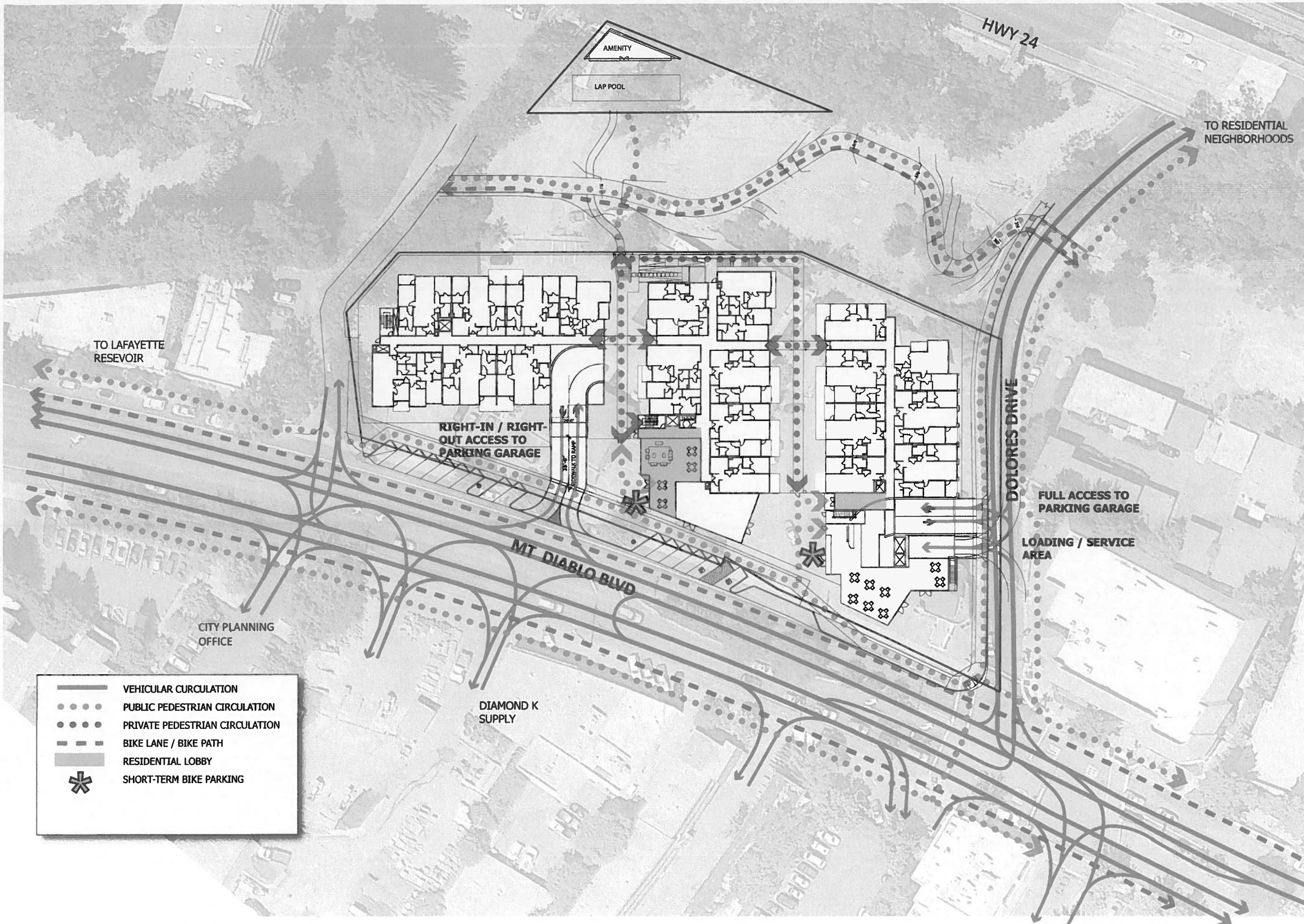
Lennar

Sheet Title:

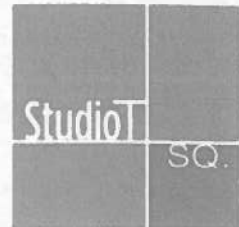
**PROJECT SUMMARY**

Job No. 13003  
 Date: 10/20/2014  
 Scale:  
 Drawn By:

Sheet No:



	VEHICULAR CURCULATION
	PUBLIC PEDESTRIAN CIRCULATION
	PRIVATE PEDESTRIAN CIRCULATION
	BIKE LANE / BIKE PATH
	RESIDENTIAL LOBBY
	SHORT-TERM BIKE PARKING



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 : Planning  
 : Urban Design  
  
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 : Oakland, California 94607  
 : (510) 451 - 2850

**3666, 3672 & 3682 Mt. Diablo Boulevard**  
 Lafayette, California  
  
**Lennar**

Sheet Title:  
**PROPOSED SITE CIRCULATION DIAGRAM**

Job No. 13003  
 Date: 10/20/2014  
 Scale: 1" = 30'-0"  
 Drawn By:

Sheet No:  
**SP3.1**

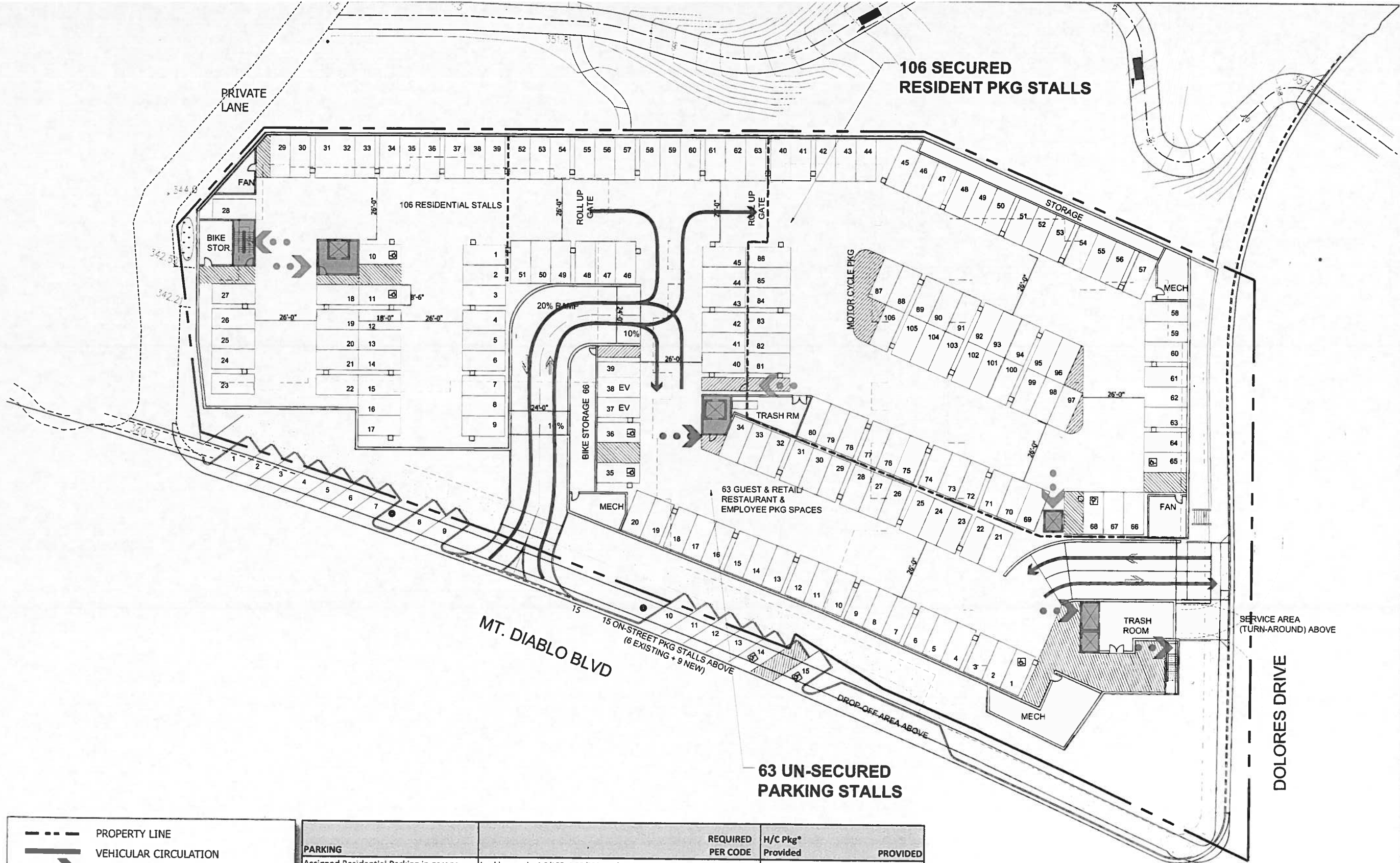
Sheet Title:

**SITE ACCESS DIAGRAM**

Job No. 13003  
 Date: 10/20/2014  
 Scale: 1" = 30'-0"  
 Drawn By:

Sheet No:

**SP3.2**



- PROPERTY LINE
- VEHICULAR CIRCULATION
- GUEST & RESTAURANT/RETAIL PATRONS
- RESIDENT / SECURED ACCESS
- ELEVATORS AND STAIRS
- FENCE SEPARATING UN-SECURED FROM SECURED PARKING STALLS

PARKING	REQUIRED PER CODE	H/C Pkg* Provided	PROVIDED
Assigned Residential Parking in garage (req'd per code: 1.0/1BR, 1.25/2BR, 1.5/3BR)	83	4 in garage	106
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\* included in overall provided pkg stalls



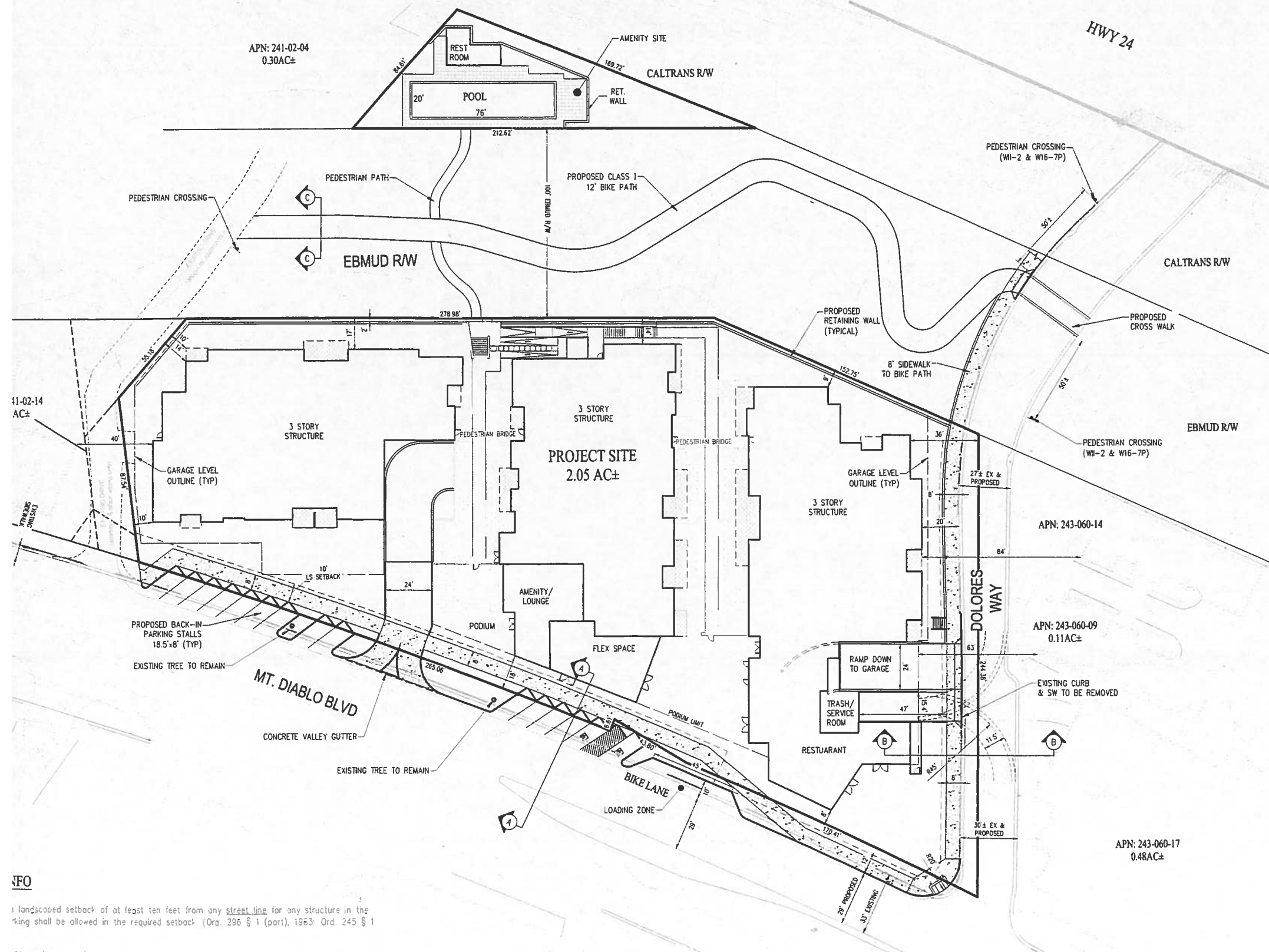
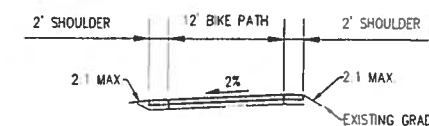
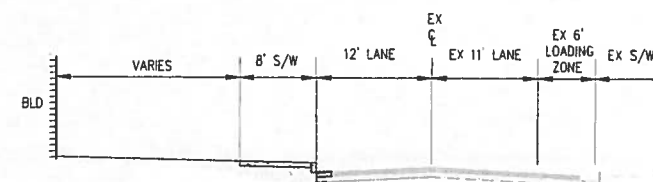
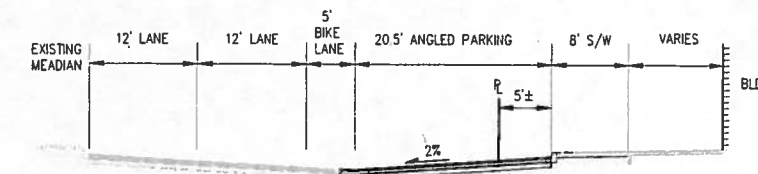
**LEGEND AND ABBREVIATION**

EXISTING	PROPOSED	DESCRIPTION
---	---	PROPERTY BOUNDARY
---	---	CENTERLINE
---	---	EASEMENT LINE
	[Pattern]	CONCRETE SIDEWALK
	[Pattern]	LANDSCAPING
	LS	LANDSCAPE
	SW	SIDEWALK
	R/W	RIGHT-OF-WAY
	TC	TOP OF CURB
	EX	EXISTING

PARKING SUMMARY	
DESCRIPTION	PARKING PROVIDED
MT. DIABLO BLVD	15
MT. DIABLO BLVD	1 LOADING
UNDERGROUND	166

**NOTES**

- SEE LANDSCAPING PLANS FOR LANDSCAPING DETAILS
- SEE SHEET TM2 FOR EXISTING STRUCTURES
- SEE ARCHITECTURAL PLANS FOR COVERED PARKING DETAILS AND UNDERGROUND CIRCULATION
- SEE SHEET TM2 FOR PROPERTY LINE BEARINGS AND DISTANCES.



**INFO**

landscaped setback of at least ten feet from any street line for any structure in the city shall be allowed in the required setback. (Ord. 296 § 1 (part), 1953; Ord. 245 § 1 (part), 1980)

side and rear yards. If a three-story building is adjacent to residentially zoned property, or to a single parcel not zoned residentially, containing four or more dwelling units, there shall be a 10-foot landscaped setback along the side and rear property line. Side yard setbacks for three-story buildings shall be regulated by Section 5-929 of the City Code. (Ord. 245 § 1 (part), 1980)

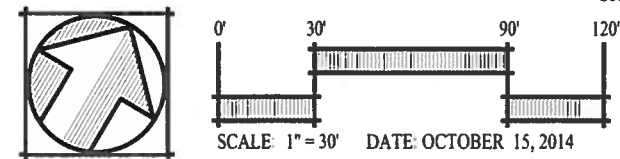
setback for three-story buildings. A three-story building in the C district shall be set back from the side property line a minimum of ten feet. This setback may be reduced through the site plan and building elevation review process, provided that the following criteria are met: 1. The building mass and height is visually attenuated by a deep, recessed entrance; 2. The building mass and height is visually attenuated by a deep, recessed entrance; 3. The building mass and height is visually attenuated by a deep, recessed entrance; 4. The building mass and height is visually attenuated by a deep, recessed entrance; 5. The building mass and height is visually attenuated by a deep, recessed entrance.

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**PRELIMINARY SITE PLAN**  
**3666,3672,&3682 MT.DIABLO BLVD**

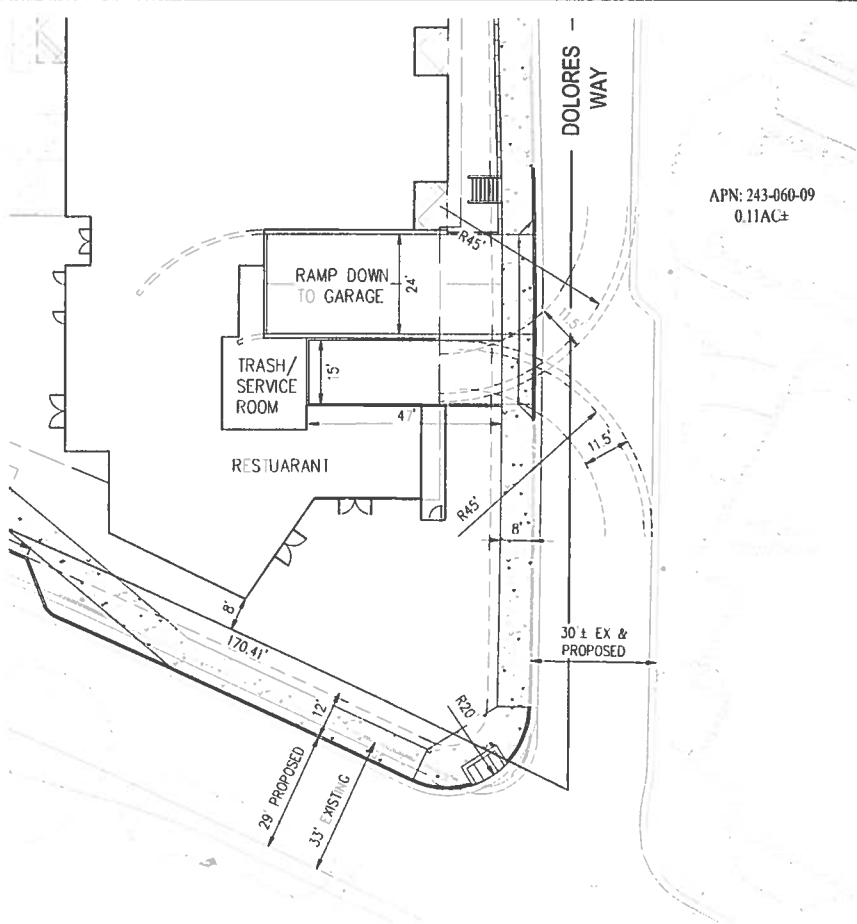
CITY OF LAFAYETTE CONTRA COSTA COUNTY CALIFORNIA



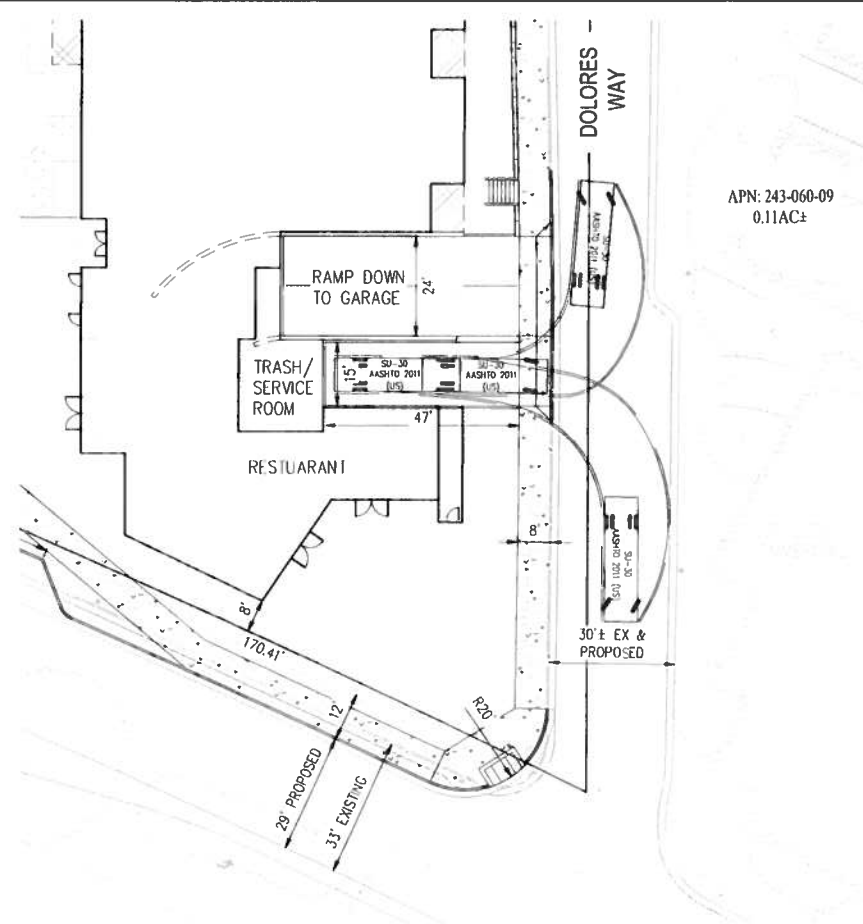
**ebg** Carlson, Barbee & Gibson, Inc. CIVIL ENGINEERS • SURVEYORS • PLANNERS

2633 CAMINO RAMON, SUITE 350 SAN RAMON, CALIFORNIA 94583 (925) 866-0322 FAX (925) 866-8575

SHEET NO. **TM 3** OF 5 SHEETS



**FRONT LOADED TRASH TRUCK TURNING RADIUS**



**SU-30 TURNING RADIUS**

**TURNING RADIUS EXHIBIT**  
**LAFAYETTE CONDOMINIUMS**

CITY OF LAFAYETTE CONTRA COSTA COUNTY CALIFORNIA

DATE: 11/12/2014 SCALE: 1" = 30'



	<b>Carlson, Barbee &amp; Gibeon, Inc.</b> CIVIL ENGINEERS • SURVEYORS • PLANNERS
	<small>3833 CAMINO RAMON, SUITE 300          SAN RAMON, CALIFORNIA 94583</small>
<small>(925) 469-9377          FAX (925) 588-9476</small>	<small>(925) 469-9377          FAX (925) 588-9476</small>

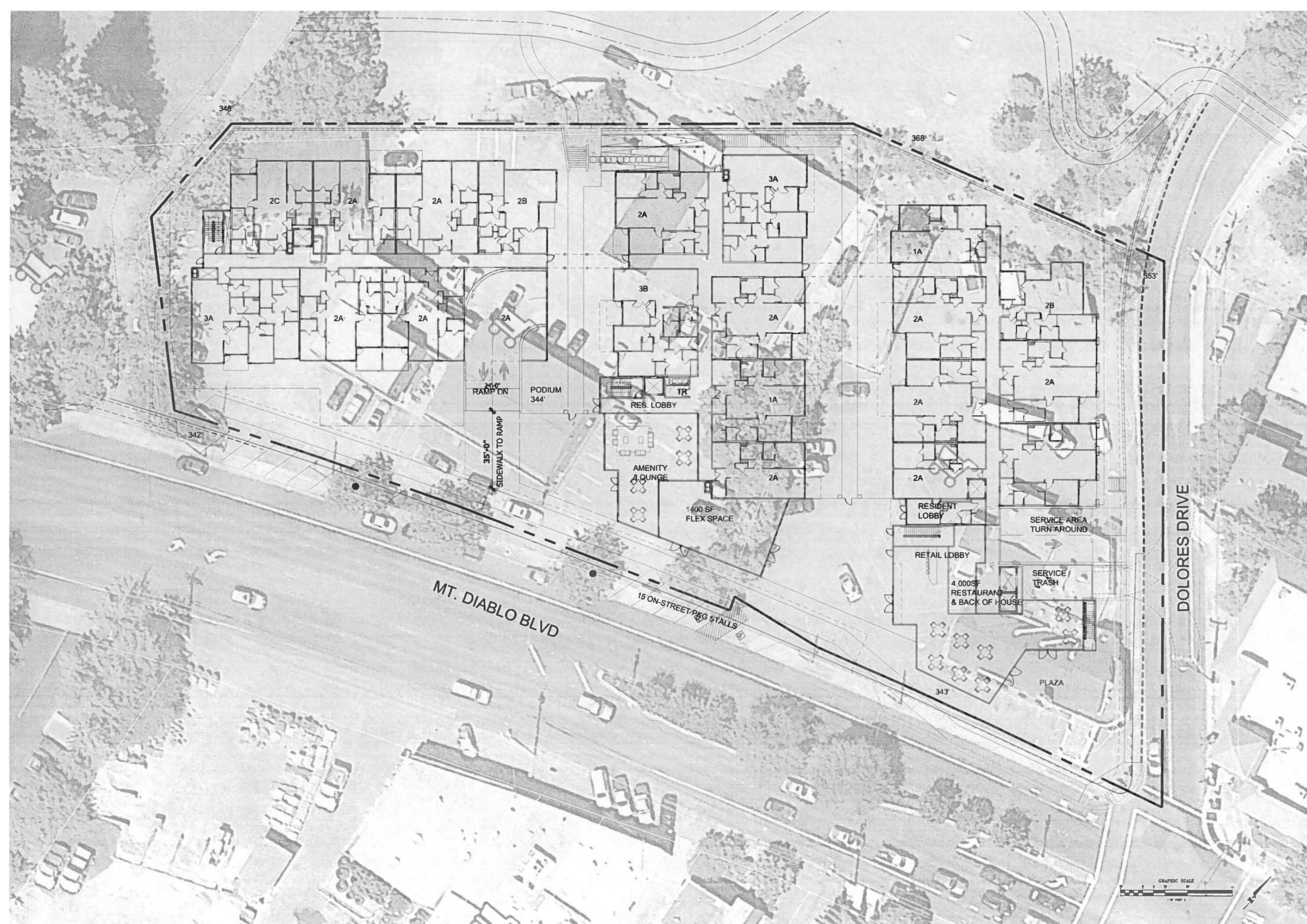
Sheet Title:

**OVERLAY OF PROPOSED PLAN AND EXISTING SITE**

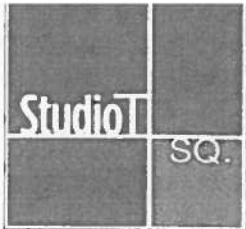
Job No: 13003  
 Date: 10/20/2014  
 Scale: 1"=20'-0"  
 Drawn By:

Sheet No:

A0.0







: Architecture  
: Planning  
: Urban Design

: 304 12th Street, Suite 2A  
: Oakland, California 94607  
: (510) 451 - 2850

3666, 3672 & 3682 Mt. Diablo Boulevard  
Lafayette, California

Lennar

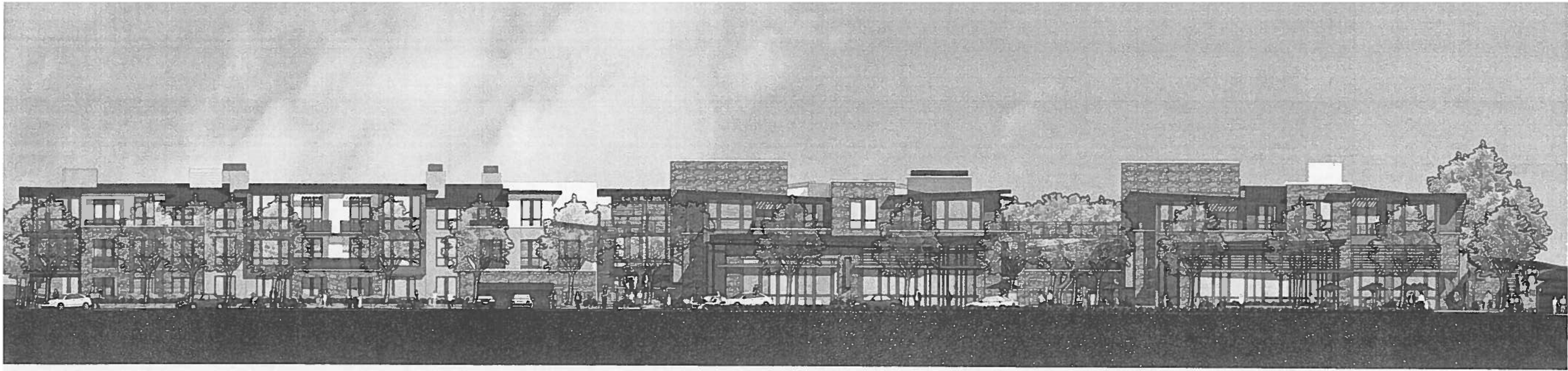
Sheet Title:

**PERSPECTIVE  
VIEWS**

Job No. 13003  
Date: 10/20/2014  
Scale: NTS  
Drawn By:

Sheet No:

**A3.0**



**MT. DIABLO BLVD. ELEVATION**

1/16"=1'-0"

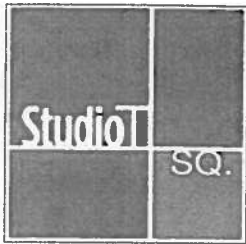
2



**MT. DIABLO BLVD. AERIAL VIEW**

N.T.S.

1



: Architecture  
 : Planning  
 : Urban Design

: 304 12th Street, Suite 2A  
 : Oakland, California 94607  
 : (510) 451 - 2850



**DOLORES DRIVE ELEVATION**

1/16"=1'-0"

2



**DOLORES DRIVE STREET VIEW FROM SOUTH**

N.T.S.

1

3666, 3672 & 3682 Mt. Diablo Boulevard  
 Lafayette, California

Lennar

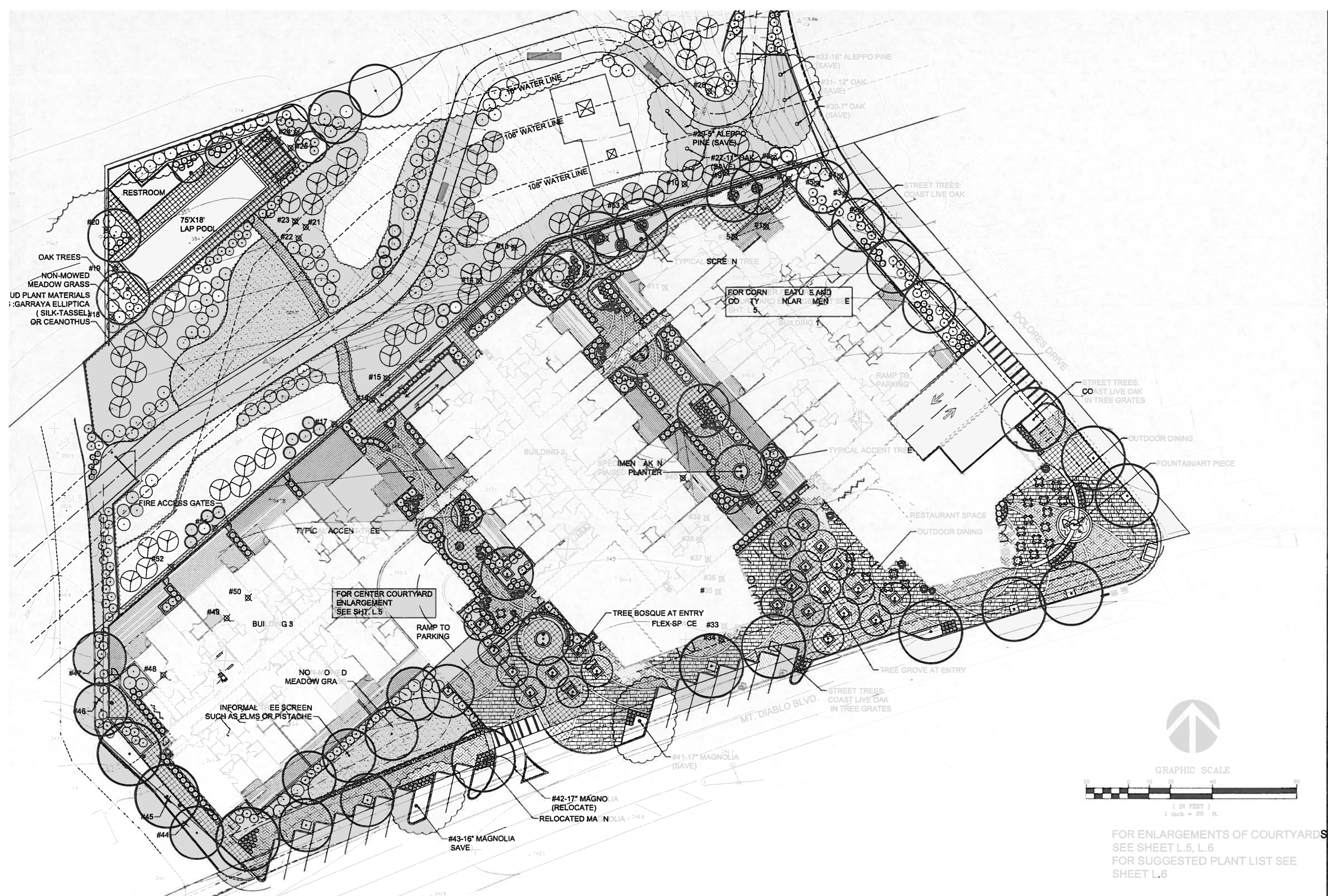
Sheet Title:

**PERSPECTIVE  
 VIEWS**

Job No. 13003  
 Date: 10/20/2014  
 Scale: NTS  
 Drawn By:

Sheet No:

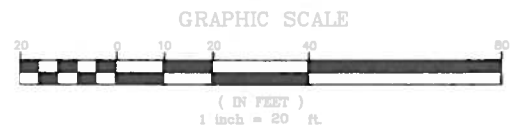
**A3.1**



OAK TREES  
 NON-MOWED  
 MEADOW GRASS  
 PLANT MATERIALS  
 GARRAYA ELLIPTICA  
 (SILK-TASSEL)  
 OR CEANOTHUS

FOR CENTER COURTYARD  
 ENLARGEMENT  
 SEE SHT. L.5

FOR CORNER ENTRY AND  
 COURTYARD ENLARGEMENT  
 SEE SHT. L.5



FOR ENLARGEMENTS OF COURTYARDS  
 SEE SHEET L.5, L.6  
 FOR SUGGESTED PLANT LIST SEE  
 SHEET L.6

Thomas Bank & Associates, L.L.P.  
 Landscape Architects  
 1000 North Main Street, Suite 4  
 Walnut Creek, CA 94598  
 Ph: 925/937-3881



3666,3672 MT. DIABLO BLVD  
 LAFAYETTE, CALIFORNIA

PRELIMINARY  
 PLANTING  
 PLAN

DESIGNED:	DRWNL
CHECKED:	JOB NO.
DATE:	07-24-14
SCALE:	

SHEET  
**L.4**  
 OF SHEETS

**Attachment 2**  
**Transportation Impact Study (Excerpt)**



## MEMORANDUM

Date: September 23, 2014  
To: Chad Kiltz, Lennar Corporation  
From: Dan Hennessey and Ellen Poling, Fehr & Peers  
Subject: **Lafayette Residential Development Transportation Impact Study**

*WC14-3117*

---

This memorandum summarizes the transportation impact study for the proposed 66-unit residential development, flex space, and restaurant project (Project) in the City of Lafayette. The proposed Project is located at the northwest corner of the Mount Diablo Boulevard intersection with Dolores Drive. The study identifies Project impacts to the surrounding transportation system and recommends measures to mitigate significant impacts. The study also assesses the operations and design parameters of key intersections that will provide primary access to the site, as well as a detailed site plan review from a circulation perspective.

### PROJECT DESCRIPTION

The Project consists of 66 residential units, a 4,500-square foot restaurant, and 1,400 square feet of flex space. The parcel is currently occupied by Celia's Mexican Restaurant and three office buildings. Several access options have been evaluated for the site, two of which are assessed in the site access and circulation section of this memorandum. Previous versions of this memorandum other site plan alternatives in more detail:

- April 28, 2014 memo detailed three access alternatives
  - Dolores Drive Only (full access)
  - Dolores Drive (full access) and Mount Diablo Boulevard mid-site (full access)
  - Dolores Drive (full access) and Mount Diablo Boulevard west-end (full access)



- July 28, 2014 memo detailed two additional access alternatives
  - Mount Diablo Boulevard Only mid-site (full access)
  - Mount Diablo Boulevard mid-site (full access) and Dolores Drive (full access)

The proposed Project now has a full access driveway on Dolores Drive and a right-in, right-out only driveway on Mount Diablo Boulevard, and the Project alternative has the same full access driveway on Dolores Drive only. For the purposes of the off-site traffic impact analysis, only the analysis of the primary proposed Project is shown. Changes with the proposed Project alternative (single access Dolores Drive driveway) are discussed qualitatively and have been analyzed in previous iterations of this analysis. **Figure 1** shows the Project location (all figures are attached at the end of this memo).

## ANALYSIS LOCATIONS AND METHODS

Three intersections in the immediate vicinity of the site are evaluated for the weekday morning (7-9 AM) and evening (4-6 PM) peak periods, plus the Project driveway in the Plus Project scenarios:

- Mount Diablo Boulevard / Risa Road / Village Center
- Mount Diablo Boulevard / Dolores Drive / Mountain View Drive
- Mount Diablo Boulevard / Happy Valley Road
- Mount Diablo Boulevard / Project Driveway (Plus Project scenarios only)
- Dolores Drive / Project Driveway (Plus Project scenarios only)

**Figure 2** shows the study intersection locations in relationship to the site.

## ANALYSIS METHODS

The operational performance of a roadway network is commonly described with the term level of service (LOS). LOS is a qualitative description of operating conditions, ranging from LOS A (free-flow traffic conditions with little or no delay) to LOS F (oversaturated conditions where traffic flows exceed design capacity, resulting in long queues and delays.) LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

From the Downtown Lafayette Specific Plan: Environmental Impact Report (EIR), the City of Lafayette strives to maintain a "Good" LOS D (35 to 45 seconds of average control delay per vehicle). "Poor" LOS D is defined as 45 to 55 seconds of average control delay per vehicle. All



three study intersections have been designated as “downtown” intersections; as such, they have a different level of service threshold, per General Plan definitions. A project is considered to have a significant impact when it causes a “downtown” intersection operation to deteriorate to LOS E or F. These standards apply to both signalized and unsignalized intersections. Therefore, “Poor” LOS D is acceptable at the study intersections. The LOS analysis methods used in this study are consistent with the 2000 Highway Capacity Manual (HCM) published by the Transportation Research Board. The HCM methods for calculating LOS for signalized intersections and unsignalized intersections are described below.

### Signalized Intersections

Traffic operations at signalized intersections are evaluated using the LOS method described in Chapter 16 of the HCM. A signalized intersection’s LOS is based on the weighted average control delay measured in seconds per vehicle and includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration. **Table 1** summarizes the relationship between the control delay and LOS for signalized intersections.

**TABLE 1: SIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Delay (seconds per vehicle)
A	Operations with very low delay occurring with favorable traffic signal progression and/or short cycle lengths.	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Highway Capacity Manual, Transportation Research Board, 2000.*



### Unsignalized Intersections

Traffic conditions at unsignalized intersections are evaluated using the method from Chapter 17 of the HCM. With this method, operations are defined by the average control delay per vehicle (measured in seconds) for each movement that must yield the right-of-way. For all-way stop-controlled intersections, the average control delay is calculated for the intersection as a whole. At two-way or side street-controlled intersections, the control delay (and LOS) is calculated for each controlled movement, the left turn movement from the major street, and the entire intersection. **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections.

**TABLE 2: UNSIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Delay (seconds per vehicle)
A	Little or no delays	< 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

Source: *Highway Capacity Manual, Transportation Research Board, 2000.*

## TRAFFIC IMPACT ANALYSIS

### Data Collection

Figure 2 shows the location of the proposed Project and the study intersections. These intersections have been identified as those most likely to be affected by the proposed Project.

Existing peak hour vehicle turning movement, bicycle, and pedestrian volume counts were collected from 7:00 to 9:00 AM and from 4:00 to 6:00 PM on Wednesday, March 12, 2014. 24-hour tube counts on Mount Diablo Boulevard (just west of the existing Celia's driveways) and





Dolores Drive (just north of the existing Celia's driveways) were collected on the same date<sup>1</sup>. Additional data collection was also completed, including observations of the lane configurations, signal timings, intersection operations and vehicle queuing on three occasions. A second set of peak hour vehicle turning movement counts were done on Thursday, May 22, 2014. The AM peak period and peak hour show an increase of seven percent from the original counts, and the PM peak period shows a decrease of four percent and the PM peak hour shows a decrease of one percent. These differences are well within the typical day-to-day variation of intersection volumes and would have little effect on the intersection analysis.

These daily vehicle counts suggest that the peak periods for both streets are captured by the peak period turning movement counts; the peak 15-minute periods for both streets started at 8:30 AM and 5:30 PM. The daily traffic on Mount Diablo Boulevard is 15,800 vehicles per day, and the daily traffic on Dolores Drive is 1,800 vehicles per day. The resulting peak hour vehicle volumes (8:00 to 9:00 AM and 4:45 to 5:45 PM), lane geometries, and traffic control can be seen in Figure 2. Traffic count data are available in **Attachment A**.

### **Existing Traffic Conditions**

Traffic operations throughout the study area are analyzed using the Synchro 8.0 software program. Synchro calculations are based on the procedures outlined in the HCM. **Table 3** shows the LOS results for the existing weekday AM and PM peak hours. These results are mostly consistent with the Downtown Lafayette Specific Plan EIR. The LOS difference at the intersection of Mount Diablo Boulevard / Dolores Drive / Mountain View Drive is due to new vehicle counts (and peak hour factors), as well as other minor inputs.

Existing vehicle queues were also observed at the study intersections to ensure that the Synchro models were properly calibrated. Most queues were observed to be contained within their allotted storage lengths, though the eastbound left-turn queue at the Mount Diablo Boulevard / Happy Valley Road intersection extends one or two cars beyond the pocket in the AM peak hour and out of its pocket past the western Trader Joe's driveway and near Mountain View Drive in the PM peak hour. The queue lengths reported by the Synchro software were consistent with the observations. The 95<sup>th</sup> percentile queue length for the southbound approach on Dolores Drive is approximately 110 to 120 feet in both peak hours.

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<sup>1</sup> The purpose of the ADT counts is to provide basic existing roadway volume information rather than to capture trip generation information for the existing site. Hoses are placed away from the intersection to avoid queued vehicles at the signal sitting on the hoses, which can lead to inaccurate counts. The peak period study intersection and existing driveway counts adequately capture the traffic at the driveways generated by other nearby land uses.



**TABLE 3: EXISTING CONDITIONS INTERSECTION OPERATIONS SUMMARY**

Intersection	Control <sup>1</sup>	Peak Hour	Existing Conditions		Existing Conditions from Specific Plan EIR	
			Delay <sup>2</sup>	LOS <sup>2</sup>	Delay <sup>2</sup>	LOS <sup>2</sup>
Mount Diablo Boulevard / Risa Road / Village Center	Signal	AM	8.8	A	11.9	B
		PM	10.5	B	9.8	A
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	Signal	AM	21.2	C	11.3	B
		PM	26.4	C	17.1	B
Mount Diablo Boulevard / Happy Valley Road	Signal	AM	16.9	B	17.5	B
		PM	25.7	C	32.5	C

Notes:

1. Signal = signalized intersection; SSSC = side-street stop controlled intersection.
2. Traffic operations results include LOS (level of service) and delay (seconds per vehicle). LOS is based on delay thresholds published in the Highway Capacity Manual (Transportation Research Board, 2000).

Source: *Fehr & Peers, September 2014.*

## PROJECT VEHICLE TRIP GENERATION

Vehicle trip generation estimates for the proposed Project during both AM and PM peak hours have been developed using the trip generation equations and rates presented in Institute of Transportation Engineers' (ITE) Trip Generation, 9th Edition. No reductions are made to account for internal trips, pass-by trips, or transit use, and no reductions are made for the elimination of current land uses, even though the existing trips to and from the site will in fact be eliminated by the proposed Project.

**Table 4** shows the vehicle trip generation estimates. Vehicle trip generation for the 66 residential units is estimated using rates and equations for the Apartment Category (Land Use 220) in ITE Trip Generation, 9th Edition. Vehicle trip generation for the 4,500 square feet of restaurant space is estimated using rates and equations for the Quality Restaurant Category (Land Use 931). Vehicle trip generation for the 1,400 square feet of flex space is estimated using rates and equations for the Variety Store Category (Land Use 814), which has the highest trip generation rates of the possible uses for this space. The proposed development would generate approximately 934 daily trips, 43 AM peak hour trips and 85 PM peak hour trips. For comparison purposes only, the existing restaurant and office uses are estimated to generate approximately 470 daily trips, 19 AM peak hour trips, and 45 PM peak hour trips, using ITE Trip Generation, 9th Edition rates.



**TABLE 4: PROJECT TRIP GENERATION**

Land Use	ITE Code	Units	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Apartment	220 <sup>1</sup>	66 dwelling units	439	7	27	34	27	14	41
Restaurant	931 <sup>2</sup>	4,500 square feet	405	3	1	4	23	11	34
Flex	814 <sup>3</sup>	1,400 square feet	90	3	2	5	5	5	10
<b>Total</b>			<b>934</b>	<b>13</b>	<b>30</b>	<b>43</b>	<b>55</b>	<b>30</b>	<b>85</b>

Notes:

- ITE trip generation average rates used (ITE Code 220 – Apartment):  
 Daily:  $T = 6.65 * X$       AM:  $T = 0.51 * X$ ; Enter = 20%, Exit = 80%      PM:  $T = 0.62 * X$ ; Enter = 65%, Exit = 35%  
 Where X = total dwelling units, T = number of vehicle trips
- ITE trip generation average rates used (ITE Code 931 – Quality Restaurant):  
 Daily:  $T = 89.95 * X$       AM:  $T = 0.81 * X$ ; Enter = 82%, Exit = 18%      PM:  $T = 7.49 * X$ ; Enter = 67%, Exit = 33%  
 Where X = total square footage, T = number of vehicle trips
- ITE trip generation average rates used (ITE Code 814 – Variety Store):  
 Daily:  $T = 64.03 * X$       AM:  $T = 3.81 * X$ ; Enter = 62%, Exit = 38%      PM:  $T = 6.82 * X$ ; Enter = 48%, Exit = 52%  
 Where X = total square footage, T = number of vehicle trips

Source: *Trip Generation Manual (9<sup>th</sup> Edition), ITE, 2012.*

**TRIP DISTRIBUTION AND ASSIGNMENT**

Trip distribution is defined as the directions of approach and departure that vehicles would use to arrive at and depart from the site. This traffic analysis assumes that all new Project trips would be distributed proportionately based on an assessment of the current movements at the existing driveways on Dolores Drive and Mount Diablo Boulevard and at the intersection of Mount Diablo Boulevard and Dolores Drive. The movements to/from Dolores Drive from/to Mount Diablo Boulevard serve to inform the potential trip distribution for the Project because Dolores Drive primarily provides access between Mount Diablo Boulevard and a residential neighborhood. Because the external traffic impact analysis is performed for the alternative with driveways on both Dolores Drive and Mount Diablo Boulevard, all Project trips are shown entering or exiting the site at one of the two driveways.

**Figure 3** shows the Project vehicle trips assigned to the intersection turning movements; **Figure 4** shows the Project trips combined with the existing traffic volumes shown on Figure 2.



## EXISTING PLUS PROJECT TRAFFIC OPERATIONS

Traffic operations throughout the study area are analyzed using the Synchro models used in the evaluation of the existing peak hours. **Table 5** shows the LOS results for both scenarios; as shown, the additional traffic due to the Project is not projected to impact the study intersections. **Table 6** shows the 50<sup>th</sup> and 95<sup>th</sup> percentile queue results for both scenarios. The queue lengths reported are estimated from equations that approximate the length of the 50<sup>th</sup> and 95<sup>th</sup> longest queues from a sample of 100 observed maximum queues.

The analysis shows that the southbound approach on Dolores Drive at Mount Diablo Boulevard can accommodate the additional traffic generated by the Project with the current lane configuration. The southbound 95<sup>th</sup> percentile queue on Dolores Drive at Mount Diablo Boulevard would grow approximately 30 to 40 feet, reaching the proposed access driveway. Queues during most of the peak hour would be shorter than this maximum queue. A "keep clear" zone in front of the driveway could be considered to aid drivers entering and exiting the project driveway. The average cycle length at the intersection would increase approximately four seconds during each peak hour.

Additionally, vehicles turning left into the project site from Dolores Drive experience minimal delay yielding to vehicles coming southbound on Dolores Drive toward Mount Diablo Boulevard. The queue that results from the northbound left turn movement into the project site should not affect operations on Dolores Drive, at the project driveway, or at the private driveway across the street for 3658 Mount Diablo Boulevard.

The results of the April 28, 2014 memo that analyzed the Dolores Drive only scenario as the proposed project closely match the results presented here. The additional right-in, right-out driveway at Mount Diablo Boulevard removes some vehicles from Dolores Drive both entering and exiting, though the LOS and queue results are very similar.

**Figure 5** shows the maximum peak hour queue for each intersection approach during either peak hour, both with and without the Project.



**TABLE 5: EXISTING PLUS PROJECT CONDITIONS INTERSECTION OPERATIONS**

Intersection	Control <sup>1</sup>	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
			Delay <sup>2</sup>	LOS <sup>2</sup>	Delay <sup>2</sup>	LOS <sup>2</sup>
Mount Diablo Boulevard / Risa Road / Village Center	Signal	AM	8.8	A	8.8	A
		PM	10.5	B	10.7	B
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	Signal	AM	21.2	C	23.1	C
		PM	26.4	C	30.3	C
Mount Diablo Boulevard / Happy Valley Road	Signal	AM	16.9	B	17.2	B
		PM	25.7	C	26.1	C
Mount Diablo Boulevard / Proposed Access Driveway	SSSC	AM	n/a	n/a	0.0 (9.0)	A (A)
		PM	n/a	n/a	0.0 (8.9)	A (A)
Dolores Drive / Proposed Access Driveway	SSSC	AM	n/a	n/a	1.6 (8.9)	A (A)
		PM	n/a	n/a	2.5 (8.9)	A (A)

Notes:

1. Signal = signalized intersection; SSSC = side-street stop controlled intersection.
2. Traffic operations results include LOS (level of service) and delay (seconds per vehicle). LOS is based on delay thresholds published in the Highway Capacity Manual (Transportation Research Board, 2000).
3. Delay is reported as: Average delay for intersection (Average delay for Project driveway).

Source: *Fehr & Peers, September 2014.*



**TABLE 6: EXISTING AND EXISTING PLUS PROJECT CONDITIONS QUEUE LENGTHS**

Intersection	Move-ment	Storage Length	Existing Conditions <sup>1</sup>		Existing Plus Project Conditions <sup>1</sup>		Change <sup>1</sup>	
			50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue	50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue	50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue
Mount Diablo Boulevard / Risa Road / Village Center	EBL	125	10 (10)	30 (30)	10 (10)	30 (30)	-	-
	EBT-R	-	30 (60)	60 (120)	30 (60)	70 (130)	-	10 (10)
	WBL	100	10 (20)	40 (50)	10 (20)	40 (50)	-	-
	WBT-R	-	20 (30)	80 (100)	20 (30)	80 (110)	-	0 (10)
	NB	-	10 (10)	40 (40)	10 (10)	40 (40)	-	-
	SB	-	10 (30)	40 (90)	10 (30)	40 (90)	-	-
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	EBL	75	10 (20)	50 (50)	20 (30)	60 (90)	10 (10)	10 (40)
	EBT-R	-	90 (270)	180 (470)	100 (290)	190 (510)	10 (20)	10 (40)
	WBL	100	20 (60)	60 ( <b>130</b> )	20 (60)	70 ( <b>130</b> )	-	10 (0)
	WBT-R	500	150 (130)	280 (230)	170 (150)	310 (270)	20 (20)	30 (40)
	NB	-	50 (120)	120 (230)	50 (130)	140 (250)	0 (10)	20 (20)
	SB	-	40 (50)	120 (110)	60 (70)	150 (150)	20 (20)	30 (40)
Mount Diablo Boulevard / Happy Valley Road	EBL	100	70 ( <b>230</b> )	<b>180 (490)</b>	80 ( <b>240</b> )	<b>190 (510)</b>	10 (10)	10 (20)
	EBT-R	500	20 (110)	50 (190)	20 (110)	60 (190)	-	10 (0)
	WBL	75	20 (60)	60 ( <b>120</b> )	20 (60)	60 ( <b>120</b> )	-	-
	WBT-R	-	50 (110)	110 (180)	50 (120)	110 (190)	0 (10)	0 (10)
	NB	-	20 (70)	70 (140)	20 (70)	70 (140)	-	-
	SBL-T	-	40 (110)	110 (210)	40 (120)	110 (210)	0 (10)	-
	SBR	125	10 (10)	80 (70)	10 (10)	80 (70)	-	-
Mount Diablo Boulevard / Proposed Access Driveway	SBR	-	n/a	n/a	10 (10)	10 (10)	-	-
Dolores Drive / Proposed Access Driveway	EBL-R	-	n/a	n/a	10 (10)	10 (10)	-	-
	NBL-T	-	n/a	n/a	10 (10)	10 (10)	-	-

Notes:

1. Reported queues are AM peak hour (PM peak hour).
2. All distances are measured in feet.
3. Bold indicates queue length exceeds storage length.

Source: *Fehr & Peers, September 2014.*

## CUMULATIVE TRAFFIC CONDITIONS

Traffic forecasts are from the *Downtown Lafayette Specific Plan EIR*. The "Cumulative with Specific Plan Project" scenario from the EIR represents the "Cumulative No Project" scenario for this traffic analysis. The forecasts from the EIR are adjusted to reflect the updated (2014) traffic data and to account for new developments expected to be built and occupied in the Project vicinity in the



near-term. Generally, these adjustments increased the previous forecasts and, as a result, increase the average vehicle delay and decrease the intersection LOS. **Figure 6** shows the resulting traffic forecasts at the study intersections and **Table 7** shows the Cumulative Conditions LOS results. Also shown are the results from the Specific Plan EIR, which are generally consistent with the findings of this analysis. The difference at the intersection of Mount Diablo Boulevard / Dolores Drive / Mountain View Drive is due to new vehicle forecasts, influenced by the recently obtained vehicle counts, as well as other minor inputs.

**TABLE 7: CUMULATIVE CONDITIONS INTERSECTION OPERATIONS**

Intersection	Control <sup>1</sup>	Peak Hour	Cumulative Conditions No Project		Cumulative Conditions with Specific Plan Project from Specific Plan EIR	
			Delay <sup>2</sup>	LOS <sup>2</sup>	Delay <sup>2</sup>	LOS <sup>2</sup>
Mount Diablo Boulevard / Risa Road / Village Center	Signal	AM	11.2	B	10.0	A
		PM	13.2	B	11.2	B
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	Signal	AM	25.8	C	12.1	B
		PM	42.1	D	18.0	B
Mount Diablo Boulevard / Happy Valley Road	Signal	AM	27.3	C	27.2	C
		PM	49.5	D	45.4	D

Notes:

1. Signal = signalized intersection; SSSC = side-street stop controlled intersection.
  2. Traffic operations results include LOS (level of service) and delay (seconds per vehicle). LOS is based on delay thresholds published in the Highway Capacity Manual (Transportation Research Board, 2000).
- Source: *Fehr & Peers, September 2014.*

**CUMULATIVE PLUS PROJECT TRAFFIC OPERATIONS**

The Project vehicle trip turning movements at the study intersections (Figure 3) are added to the Cumulative No Project traffic volumes (Figure 6) to obtain the Cumulative Plus Project traffic volumes shown on **Figure 7**. The Synchro models are used to evaluate the cumulative traffic forecasts (without and with Project) and the resulting LOS is shown in **Table 8**. As shown, the additional traffic due to the Project is not projected to impact the study intersections. **Table 9** shows the 50<sup>th</sup> and 95<sup>th</sup> percentile queue results for both scenarios. The queue lengths reported are estimated from equations that approximate the length of the 50<sup>th</sup> and 95<sup>th</sup> longest queues from a sample of 100 observed maximum queues. The analysis shows minimal impacts to the existing queues on Mount Diablo Boulevard and the local streets it intersects.



The analysis shows that the southbound approach on Dolores Drive at Mount Diablo Boulevard can accommodate the additional traffic generated by the Project with the current lane configuration. The southbound 95<sup>th</sup> percentile queue on Dolores Drive at Mount Diablo Boulevard would grow approximately 30 to 40 feet during both peak hours relative to Cumulative No Project Conditions; queues in both scenarios would reach the project driveway. A "keep clear" zone in front of the driveway could be considered to aid drivers entering and exiting the project driveway.

Again, vehicles turning left into the project site from Dolores Drive experience minimal delay yielding to vehicles coming southbound on Dolores Drive toward Mount Diablo Boulevard. The queue that results from the northbound left turn movement into the project site should not affect operations on Dolores Drive, at the project driveway, or at the private driveway across the street for 3658 Mount Diablo Boulevard.

Vehicles attempting to access 3658 Mount Diablo Boulevard via its Dolores Drive driveway will experience a minimal increase in delay on average (less than one second per vehicle) due to vehicles attempting to turn into the Project on Dolores Drive. Vehicles attempting to exit 3658 Mount Diablo Boulevard via the Dolores Drive driveway will experience a similar increase in delay on average (one to two seconds per vehicle) due to vehicles attempting to turn into the Project on Dolores Drive or the vehicles exiting the Project via Dolores Drive. During the AM and PM peak hours, the estimated traffic generated by the Project would add less than one vehicle per cycle to the southbound approach of Dolores Drive at the Mount Diablo Boulevard intersection.

The results of the April 28, 2014 memo that analyzed the Dolores Drive only scenario as the proposed project closely match the results presented here. The additional right-in, right-out driveway at Mount Diablo Boulevard removes some vehicles from Dolores Drive both entering and exiting, though the LOS and queue results are very similar.

Without the Mount Diablo Boulevard driveway, queues for vehicles exiting the driveway would rarely be more than one vehicle long, and the signal at Dolores Drive would effectively meter northbound traffic to increase the number of gaps available for vehicles to turn out of the driveway. The traffic operations analysis also shows that the impacts to the driveway from the Dolores Drive / Mount Diablo Boulevard signalized intersection will be occasional and restricted to the peak hours only. Southbound Dolores Drive vehicles will experience minor increases in delay from the additional southbound queue, but will still be able to pass through the intersection during each signal cycle. Northbound vehicles will also be delayed occasionally when a vehicle is





turning left into the driveway and must wait for a gap in southbound traffic, though this delay is expected to be minimal.

**Figure 8** shows the maximum peak hour queue for each intersection approach during either peak hour, both with and without the Project.

**TABLE 8: CUMULATIVE PLUS PROJECT INTERSECTION OPERATIONS**

Intersection	Control <sup>1</sup>	Peak Hour	Cumulative No Project		Cumulative Plus Project	
			Delay <sup>2</sup>	LOS <sup>2</sup>	Delay <sup>2</sup>	LOS <sup>2</sup>
Mount Diablo Boulevard / Risa Road / Village Center	Signal	AM	11.2	B	12.0	B
		PM	13.2	B	13.5	B
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	Signal	AM	25.8	C	28.2	C
		PM	42.1	D	48.3	D
Mount Diablo Boulevard / Happy Valley Road	Signal	AM	27.3	C	27.5	C
		PM	49.5	D	51.7	D
Mount Diablo Boulevard / Proposed Access Driveway	SSSC	AM	n/a	n/a	0.0 (9.2)	A (A)
		PM	n/a	n/a	0.0 (9.7)	A (A)
Dolores Drive / Proposed Access Driveway	SSSC	AM	n/a	n/a	1.2 (9.0)	A (A)
		PM	n/a	n/a	1.6 (9.4)	A (A)

Notes:

1. Signal = signalized intersection; SSSC = side-street stop controlled intersection.
2. Traffic operations results include LOS (level of service) and delay (seconds per vehicle). LOS is based on delay thresholds published in the Highway Capacity Manual (Transportation Research Board, 2000).
3. Delay is reported as: Average delay for intersection (Average delay for Project driveway).

Source: *Fehr & Peers, September 2014.*



**TABLE 9: CUMULATIVE AND CUMULATIVE PLUS PROJECT CONDITIONS QUEUE LENGTHS**

Intersection	Movement	Storage Length	Cumulative Conditions <sup>1</sup>		Cumulative Plus Project Conditions <sup>1</sup>		Change <sup>1</sup>	
			50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue	50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue	50 <sup>th</sup> Percentile Queue	95 <sup>th</sup> Percentile Queue
Mount Diablo Boulevard / Risa Road / Village Center	EBL	125	10 (10)	50 (50)	10 (10)	50 (50)	-	-
	EBT-R	-	50 (90)	100 (190)	50 (100)	100 (200)	0 (10)	0 (10)
	WBL	100	20 (30)	60 (80)	20 (30)	70 (90)	-	10 (10)
	WBT-R	-	70 (80)	150 (160)	70 (80)	150 (170)	-	0 (10)
	NB	-	20 (10)	70 (50)	20 (10)	70 (50)	-	-
	SB	-	30 (50)	90 (130)	30 (50)	100 (140)	-	10 (10)
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	EBL	75	20 (40)	60 ( <b>90</b> )	20 (60)	70 ( <b>120</b> )	0 (20)	10 (30)
	EBT-R	-	160 (440)	310 (760)	180 (480)	330 (810)	20 (40)	20 (50)
	WBL	100	30 (80)	90 ( <b>170</b> )	30 (90)	90 ( <b>170</b> )	0 (10)	-
	WBT-R	500	210 (420)	390 ( <b>680</b> )	230 (490)	430 ( <b>720</b> )	20 (70)	40 (40)
	NB	-	70 (180)	170 (310)	70 (190)	180 (330)	0 (10)	10 (20)
	SB	-	70 (140)	160 (250)	90 (170)	200 (280)	20 (30)	40 (30)
Mount Diablo Boulevard / Happy Valley Road	EBL	100	<b>160 (380)</b>	<b>310 (720)</b>	<b>170 (390)</b>	<b>310 (730)</b>	10 (10)	0 (10)
	EBT-R	500	90 (230)	140 (340)	90 (240)	140 (340)	0 (10)	-
	WBL	75	50 ( <b>150</b> )	<b>120 (250)</b>	50 ( <b>150</b> )	<b>120 (250)</b>	-	-
	WBT-R	-	190 (230)	290 (290)	190 (230)	290 (300)	-	0 (10)
	NB	-	50 (110)	120 (290)	50 (120)	120 (290)	0 (10)	-
	SBL-T	-	130 (260)	320 (540)	140 (270)	320 (540)	10 (10)	-
	SBR	125	40 (80)	<b>210 (210)</b>	50 (80)	<b>220 (220)</b>	10 (0)	10 (10)
Mount Diablo Boulevard / Proposed Access Driveway	SBR	-	n/a	n/a	10 (10)	10 (10)	-	-
Dolores Drive / Proposed Access Driveway	EBL-R	-	n/a	n/a	10 (10)	10 (10)	-	-
	NBL-T	-	n/a	n/a	10 (10)	10 (10)	-	-

Notes:

1. Reported queues are AM peak hour (PM peak hour).
2. All distances are measured in feet.
3. Bold indicates queue length exceeds storage length.

Source: *Fehr & Peers, September 2014.*

## TRAFFIC IMPACT SIGNIFICANCE DETERMINATION

As stated earlier, the City of Lafayette's standard for the study intersections is LOS D (less than 55 seconds of average control delay per vehicle). As shown in the previous tables, all intersections are projected to meet this standard under the evaluated scenarios; therefore, the Project does not



have a significant impact on the study intersections, and intersection mitigation is not needed. The Synchro worksheets used to complete this analysis are provided in **Attachment B**.

## SITE PLAN REVIEW

The Project site plan has been reviewed with consideration for safe and efficient circulation of motor vehicles, bicyclists, and pedestrians through the Project site and on the roadways adjacent to the Project site. **Figure 9** shows the site plan that was reviewed for this study, which is current as of September 22, 2014. The review focuses on:

- Existing pedestrian, bicycle, and transit facilities
- Vehicle access and circulation, including parking layout within the site
- Emergency vehicle access to the site
- Pedestrian access and circulation within and adjacent to the site
- Viability of a roundabout along Mount Diablo Boulevard

## EXISTING PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

In the vicinity of the Project area, there is a sidewalk on the north side of Mount Diablo Boulevard, which extends from Risa Road in the west to Pleasant Hill Road in the east, which is typically six feet wide. A continuous sidewalk exists from the same extents on the south side of Mount Diablo Boulevard, except for a 300-foot segment west of Mountain View Drive in front of Diamond K Supply. In this location there is a wide, undefined driveway for supply trucks accessing materials at the Diamond K Supply storage yard, as well as parking in front of the Lescure Company building. Just west of Mountain View Drive, the sidewalk is approximately nine feet wide.

On the west side of Dolores Drive, there is a 100-foot segment of four- to five-foot wide sidewalk between Mount Diablo Boulevard and the existing Celia's driveway; the west side sidewalk begins again at the SR 24 overpass. On the east side of Dolores Drive, there is sidewalk from Mount Diablo Boulevard to the connection with Via Roble in the north that varies in width from five to ten feet. There are also crosswalks across all four approaches of the Mount Diablo Boulevard / Dolores Drive / Mountain View Drive intersection. The next crosswalk across Mount Diablo Boulevard west of the Dolores Drive intersection is approximately 2,000 feet to the west at Risa Road / Village Center. The next crosswalk across Mount Diablo Boulevard east of the Dolores Drive intersection is approximately 500 feet to the east at Happy Valley Road.



A Class II Bikeway (Bicycle Lane) provides a restricted right-of-way and is designated for the use of bicycles with a striped lane on a street or highway. Bicycle lanes are generally four to six feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted. A Class III Bikeway (Bicycle Route) provides for a right-of-way designated by signs or pavement markings (sharrows) for shared use with pedestrians or motor vehicles. Sharrows are a type of pavement marking (bike and arrow stencil) placed to guide bicyclists to the best place to ride on the road, avoid car doors, and remind drivers to share the road with cyclists.

Currently, there are Class II bicycle lanes in both directions on Mount Diablo Boulevard from Acalanes Road in the west to Dolores Drive in the east. East of Dolores Drive, there are Class III bicycle routes designated to First Street, where the Class II bicycle lanes pick up again and continue to Pleasant Hill Road. Typically, the Class II bicycle lanes are placed between a vehicle travel lane and vehicle parking. There is currently parking on both sides of Mount Diablo Boulevard in the vicinity of the Project.

The Project site is approximately one-half mile from the Lafayette Bay Area Rapid Transit (BART) Station. BART provides regional commuter rail service between San Francisco and the East Bay (Pittsburg/Bay Point, Richmond, Dublin/Pleasanton and Fremont), as well as between San Francisco and San Mateo County (SFO Airport and Millbrae). Weekday hours of operation are between 4 AM and midnight. During the weekday AM and PM peak periods, headways are five to 15 minutes along each line. Within Lafayette, BART operates above grade in the median of SR 24 and the Lafayette BART Station is located off Deer Hill Road between Oak Hill Road and Happy Valley Road.

Currently, two County Connection transit routes serve Lafayette in the vicinity of the Project site. Route 6 runs between the Orinda BART Station and the Lafayette BART Station, serving Moraga and St. Mary's College via Moraga Way and Moraga Road. Route 6 runs from 6:00 AM to 9:00 PM on weekdays and 9:30 AM to 6:00 PM on weekends, and headways for Route 6 are 30 minutes during the weekday peak periods, 90 minutes during the weekday off peak periods, and 80 minutes during the weekend. The closest bus stop for Route 6 is at the Lafayette BART Station.

Route 25 runs between the Lafayette BART Station and the Walnut Creek BART Station along Mount Diablo Boulevard. Route 25 runs from 7:30 AM to 6:30 PM on weekdays only, and headways for Route 25 are 60 minutes. The closest bus stop for Route 25 is at Happy Valley Road.



## CITY-PLANNED PEDESTRIAN, BICYCLE, AND TRANSIT IMPROVEMENTS

In 2012, the City published a document entitled *"Feasibility & Options Study for a Pedestrian & Bicycle Pathway Along the EBMUD Aqueduct ROW"* that would potentially create a new pedestrian and bicycle path along East Bay Municipal Utility District (EBMUD) right-of-way on the south side of SR 24 from Risa Road to Brown Avenue. The preferred option includes a crossing at Dolores Drive; the study says that the only design option for this location is an uncontrolled, at-grade crossing. Recommendations for the Dolores Drive crossing include:

- Installing a necked-down high-visibility ladder crosswalk with pedestrian-scale lighting;
- Installing in-pavement flashers, signage, and advance yield markings along Dolores Drive;
- Installing passive video detection;
- Curving the pathway and installing bollards and stop signs;
- Completing the sidewalk along the west side of Dolores Drive between the pathway and Mount Diablo Boulevard.

There are no other pedestrian or bicycle improvements in the vicinity of the proposed project area planned at this time.

The City of Lafayette is currently participating in the Lamorinda Shuttle Study to evaluate the feasibility of operating a shuttle service within and between the area's three PDAs and two BART stations. The City's Downtown Specific Plan calls for shuttle service to reduce downtown congestion, though no transit improvements are planned at this time.

## VEHICULAR ACCESS AND CIRCULATION

As previously noted, there are two access alternatives for the Project. The alternative that has been studied in the traffic impact analysis portion of this memorandum has a full access unsignalized driveway on Dolores Drive, approximately 130 feet north of Mount Diablo Boulevard, and a secondary right-in, right-out access driveway on Mount Diablo Boulevard across from Diamond K Supply, approximately 275 feet west of Dolores Drive. A second alternative proposes a full unsignalized access driveway on Dolores Drive only, with no access on Mount Diablo Boulevard. The following sections detail the evaluations and recommendations for each of the driveway locations.



### **Dolores Drive**

Dolores Drive is signed with a 25 mile per hour speed limit, though observations and resident comments suggested that the prevailing speed southbound on Dolores Drive is higher. A 100-vehicle speed survey of southbound vehicles on Dolores Drive just north of the existing site showed that the 85<sup>th</sup> percentile speed is 33 miles per hour. Though somewhat winding, Dolores Drive has a downhill grade toward Mount Diablo Boulevard, likely a contributing factor to the higher speeds. Northbound vehicle speeds were not measured, as slower speeds near the proposed Project driveway were expected given the vicinity of the signalized intersection and the uphill grade.

Section 205.3 of the Caltrans Highway Design Manual describes the requirements for urban driveways. It references sections 405.1 and 201.3, which provide the requirements for sight distance from a driveway. Corner sight distance is not required from an urban driveway, leaving stopping sight distance as the minimum standard. The required stopping sight distance from the driveway for a 25 mile per hour road would be 150 feet, while the required sight distance from the driveway for a 33 mile per hour road would be 230 feet.

Section 201.3 also warns that "the stopping sight distances in Table 201.1 should be increased by 20 percent on sustained downgrades steeper than 3 percent and longer than one mile." Though not longer than one mile, the required stopping sight distance when the downgrade is accounted for is 276 feet. Based on field measurements, there is approximately 290 feet of stopping sight distance from the proposed Dolores Drive driveway. The signal at Dolores Drive will occasionally meter vehicles able to arrive at the driveway, providing additional gaps for vehicles exiting the driveway and vehicles entering the driveway from the west. The same effect will also decrease vehicle speeds at this location.

Due to the curvature of the road, vehicles turning left into the Project driveway would have approximately 200 feet of sight distance to see southbound vehicles on Dolores Drive. **Figure 10** shows the sight distances at each driveway. As shown, the proposed driveway layout provides adequate sight distance in each direction. Additionally, the proposed loading driveway adjacent to the south edge of the proposed access driveway will have approximately the same sight distance to the north. The service area appears long enough that trucks in the loading dock should not obscure the view of drivers attempting to exit the driveway and turn north onto Dolores Drive. Trucks should be able to efficiently maneuver into the loading space, though use of the loading dock should be limited to outside the morning and afternoon peak periods given its proximity to Mount Diablo Boulevard.



The ramp into the garage should be carefully designed to maximize sight distance from the driveway. Vehicles should be close to level with Dolores Drive as they stop to look for a gap between vehicle, bicycle, and pedestrian traffic to enter Dolores Drive. Drivers will also need to be able to see pedestrians on the sidewalk waiting to cross the driveway.

*Consultant Recommendation 1:* Ensure adequate sight distance is maintained at the Dolores Drive driveway after the installation of the garage ramp and that vehicles will be able to see pedestrians on the sidewalk waiting to cross the driveway. The grade of the sidewalk should remain constant across the driveway. Exiting vehicles should be level with Dolores Drive before reaching sidewalk. Retaining walls should be designed to ensure that vehicles have appropriate sight distance at the intersection with Dolores Drive. Prohibit on-street parking on the west side of Dolores Drive between the proposed driveway and the SR 24 overpass or the proposed trail crossing. Ensure that any vegetation adjacent to the proposed driveway does not obstruct sight distance. Ensure that the service area for the loading dock does not interfere with driver sight distance looking south from the access driveway.

The traffic operations analysis also shows that the driveway impacts on Dolores Drive will be occasional and restricted to the peak hours only. Southbound Dolores Drive vehicles will experience minor increases in delay from the additional southbound queue, but will still be able to pass through the intersection during each signal cycle. Northbound vehicles will be delayed occasionally when a vehicle is turning left into the driveway and must wait for a gap in southbound traffic, though this delay is expected to be minimal. Additionally, five to six vehicles could queue without reaching Mount Diablo Boulevard while waiting for a vehicle to turn into the project. A "keep clear" zone could be implemented in the southbound lane with pavement markings.

The proposed driveway appears to have larger-than-necessary curb radii given the low speed desired for vehicles entering and exiting the Project. A standard driveway apron should also be considered, instead of an intersection design with raised curbs, as the apron design would create lower vehicle speeds entering and exiting the driveway and a more pleasant pedestrian experience by preserving the sidewalk grade across the driveway.

*Consultant Recommendation 2:* Decrease the curb radii or include a standard driveway apron at the driveway to slow vehicles entering and exiting the Project site.



Additionally, the *Feasibility & Options Study* for the EBMUD pathway states that “[t]he geometric design of Dolores Drive poses sight distance (especially for the northbound approach) and speed control issues for both motorists and pathway users.” With respect to the Project, drivers leaving the proposed driveway on Dolores Drive will have better sight distance than most northbound vehicles, given the geometry of the roadway. These vehicles will also be moving slower as they approach the pathway crossing, due to the decreased acceleration distance. The proposed development does not conflict with the proposed pathway or its proposed crossing treatment in any other manner; in fact, the proposed crossing design should slow down vehicles as they approach the proposed driveway, and pathway users, as they cross Dolores Drive, could create additional gaps for vehicles leaving the proposed driveway and for vehicles leaving the driveway at 3658 Mount Diablo Boulevard. Sight distance for pedestrians on the west side of Dolores Drive at the crossing looking south will be greater than for drivers at the same point due to the curvature of the road. The recommended bulbout on the east side of the crossing would help increase sight distance looking south and decrease the distance of crossing the northbound lane.

#### **Mount Diablo Boulevard**

The Project proposes angled on-street parking on Mount Diablo Boulevard to supplement the parking provided on-site. These parking stalls have been designed to allow back-in angled parking, which is appropriate with the Class II bicycle lane on westbound Mount Diablo Boulevard. Back-in angled parking has been shown to reduce the number of conflicts and collisions between bicyclists and vehicles on roadway segments, when compared to the traditional forward-in angled parking.<sup>2</sup> Back-in angled parking has not conclusively been proven to affect vehicle speeds, though studies have shown that back-in angled parking does not induce U-turns or other movements that would create additional conflicts between vehicles and cyclists.<sup>3</sup>

With the proposed on-street angled parking (whether the proposed back-in, or forward-in), there will be an increase in the number of potential vehicle-vehicle and vehicle-bicycle conflicts on westbound Mount Diablo Boulevard as compared to the existing condition. The decision to design this parking area as back-in angle parking will allow both drivers of parked vehicles to have a better awareness for the conditions on Mount Diablo Boulevard before exiting a parking space, and drivers of vehicles entering a space to have to look over their shoulder through the bicycle lane before entering a parking space.

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<sup>2</sup> “Back-in/Head-out Angle Parking,” Nelson\Nygaard Consulting Associates, January 2005.

<sup>3</sup> “High Street Back in Angle Parking Evaluation,” URS Corporation.





With the proposed on-street angled parking, the project's driveway will be between two on-street parking zones. This will also be a potentially busy pedestrian area, increasing the importance of appropriate sight distance at this location. The proposed plan will allow drivers exiting the Project to first cross the sidewalk before entering the storage space between the Mount Diablo Boulevard travel lane and the sidewalk. This space can be utilized to determine if there is an acceptable gap for vehicles to enter Mount Diablo Boulevard. Sidewalk extensions or "bulb-outs" could also be considered at the driveway to increase vehicle sight distance near the parking areas, though it appears the on-street parking to the east is far enough to not obstruct sight distance from the driveway. The proposed design provides adequate sight distance in each direction, as shown on **Figure 10**.

*Consultant Recommendation 3:* Ensure adequate sight distance is maintained at the Mount Diablo Boulevard driveway after the installation of the garage ramp and that vehicles will be able to see pedestrians on the sidewalk as they cross the driveways. The grade of the sidewalk should remain constant across the driveways. Exiting vehicles should be level with Mount Diablo Boulevard before reaching the sidewalk. The parking ramp should incorporate visual cues and design details to alert drivers to the potential for pedestrians and there should be design details to alert pedestrians to possible vehicles crossing.

Additionally, there are currently six driveways on what would be the Project's Mount Diablo Boulevard frontage. Consolidating them to a single main driveway and eliminating left turns into and out of that driveway would remove many of the conflicts associated with vehicles entering and exiting several closely spaced driveways and the driveways on the south side of Mount Diablo Boulevard. The proposed development would generate approximately double the number of trips that the existing land uses generate, though most of these trips will move to Dolores Drive. Focusing the remaining trips at one point (instead of six) decreases the number of conflict points of which drivers exiting the driveway, drivers on Mount Diablo Boulevard, pedestrians, and bicyclists need to be aware. This effect counter-balances the addition of angled parking along the frontage.

Limiting this driveway to right-in, right-out turns only will decrease the number of vehicle conflicts between entering and exiting vehicles and westbound vehicles on Mount Diablo Boulevard with other vehicles. The channeling island's concrete face along Mount Diablo Boulevard appears long enough to discourage the left-turn movement into the driveway and make that movement difficult, though it is still feasible for drivers to turn left into the driveway from Mount Diablo Boulevard.



Other potential treatments to control access points, such as median barriers along this stretch of Mount Diablo Boulevard, could significantly alter the circulation in the 500-foot stretch between Dolores Drive and the Desco Plaza for the land uses on the south side of Mount Diablo Boulevard, necessitating the coordination of several land owners and a thorough traffic operations analysis once a detailed plan was developed.

Each driveway has space inside the garage for two vehicles to wait for the gate to open to access the secure parking and still allow vehicles to pass to access the guest spaces, which is unlikely to cause queuing on the ramp.

#### EMERGENCY VEHICLE ACCESS

Factors such as number of access points, roadway width, and proximity to fire stations determine whether a project provides sufficient emergency access. The proposed Project provides a point of entry on Dolores Drive under both the proposed plan and the project alternative. The proposed plan has a second entry on Mount Diablo Boulevard. Section 6-623 of the *Lafayette, California Municipal Code* states that access drives must be at least 20 feet wide; the driveways proposed in the plan shown on Figure 9 appears to meet this requirement, though the driveway widths should be checked to ensure the proposed driveways are adequate for emergency vehicle access. The area adjacent to the channelizing island for the right-in, right-out driveway on Mount Diablo Boulevard will be less than 20 feet wide and could restrict emergency vehicle access at this location.

The fire station most likely to serve the site is located on Mount Diablo Boulevard, just over one mile to the east. Emergency vehicles would travel west directly down Mount Diablo Boulevard to access the site and would not have to complete any U-turns to gain entry. Given these considerations, the Project provides sufficient emergency access.

#### PEDESTRIAN ACCESS AND CIRCULATION

There are sidewalks proposed fronting the Project site on both Dolores Drive and Mount Diablo Boulevard. The existing sidewalks, which are approximately five feet wide with numerous curb cuts, would be replaced. This is compliant with *Americans with Disabilities Act Standards for Accessible Design*, which requires four feet of clear distance, but eight-foot sidewalks on Mount Diablo Boulevard fronting the Project and a reduction in the number of curb cuts will make the sidewalks more comfortable for users. Additionally, the Dolores Drive sidewalk will provide access to/from the future EBMUD pathway and should be wider than the minimum required.



The overall plan provides good connectivity throughout the site and to the surrounding sidewalks, particularly with the plaza at the southeast corner of the Project. Internal pedestrian paths should be at least six feet wide to ensure a comfortable passage for pedestrians walking next to each other. All building frontages are set back an appropriate distance from Mount Diablo Boulevard and Dolores Drive. Section 6-990 of the *Lafayette, California Municipal Code* requires at least ten feet of setback from any street line to any structure. There are no minimum standards for setback in the M-R-T district (Section 6-887 of the *Lafayette, California Municipal Code*). The building faces along Dolores Drive are the closest to a street curb, and they are all more than ten feet from the curb. ADA-compliant curb ramps should be built at the corner of the Mount Diablo Boulevard / Dolores Drive intersection when the sidewalks are rebuilt. This corner provides the access to downtown and to transit connections (both BART and County Connection), as well as the future EBMUD pathway.

*Consultant Recommendation 4:* Ensure that all internal pedestrian paths are at least six feet wide and sidewalks on Mount Diablo Boulevard and Dolores Drive fronting the Project are at least eight feet wide.

As stated earlier, consolidation to one driveway along the Project's Mount Diablo Boulevard frontage, or elimination of the driveways in this area, would improve safety for pedestrians along the north side of Mount Diablo Boulevard. The right-in, right-out channelizing island at the driveway is close enough to Mount Diablo Boulevard such that it is not an obstacle for pedestrians, and it does not interfere with the path of pedestrian travel. The channelizing island should also help to slow vehicles entering and exiting the garage, and as previously mentioned, the concrete face along Mount Diablo Boulevard is long enough to discourage the left-turn movement into the driveway.

## ROUNDBABOUT EVALUATION

City staff has asked the applicant to determine if a roundabout is feasible at the Mount Diablo Boulevard / Dolores Drive intersection or at the Mount Diablo Boulevard intersection with the a potential project driveway. The roundabout options were analyzed using the HCM 2010 methodology for roundabout capacity analysis, which does not account for pedestrian or bicycle activity at the roundabout. AM and PM peak hour Cumulative Plus Project volumes were used for the analysis.



### **Mount Diablo Boulevard / Dolores Drive**

At Mount Diablo Boulevard / Dolores Drive, the HCM analysis indicates that a single-lane roundabout would operate at LOS F during the PM peak hour, creating queues of approximately 1,000 feet in both directions on Mount Diablo Boulevard. A two-lane roundabout would operate at an acceptable level of service for vehicles (LOS A or B during both peak hours). Queue lengths would be shorter than at a signalized intersection; eastbound and westbound queue lengths are estimated to be approximately 125 feet during the PM hour. Side-street vehicles would experience delays of six to twelve seconds on average during the peak hours. Additionally, the roundabout would likely slow eastbound Mount Diablo Boulevard vehicle speeds entering downtown. All roundabout analysis worksheets are included in **Attachment C**.

Two-lane roundabouts present challenges for pedestrians and bicycles. A two-lane roundabout requires a pedestrian to cross two lanes at a time and presents a multiple-threat condition. This occurs when one vehicle yields to a pedestrian in a crosswalk but a vehicle in the adjacent lane does not. Additionally, visually impaired pedestrians have difficulty detecting when it is safe to cross a roundabout as audible queues at typical signal or stop controlled intersections are not present at roundabouts. This is particularly a challenge at two-lane roundabouts. Because of these concerns, the use of a pedestrian hybrid beacon or full traffic signal is recommended at the two-lane entrances and exits of two-lane roundabouts. Similarly, bicycles traversing a two-lane roundabout must be aware of vehicles turning from two lanes and requires them to navigate the roundabout similar to how they would navigate a multi-lane intersection. For these reasons, a two-lane roundabout does not provide the advantages that a single-lane roundabout does for pedestrians and bicycles.

As mentioned, the analysis does not account for pedestrian and bicycle activity at the intersection. The pedestrian activated signals mentioned above would increase delay for vehicles compared to that stated in the analysis.

The geometry of the intersection also makes physical layout of a roundabout difficult. To accommodate the offset of the Dolores Drive and Mountain View Drive approaches to the intersection, substantial realignment of the roadways and/or an oval or elliptical design would be required to sufficiently control vehicle speeds. Both of these options would require substantial right-of-way from adjacent properties.

There is approximately 100 feet between the building at the northeast corner of the intersection (3658 Mount Diablo Boulevard) and the building at the southwest corner of the intersection



(3651, 3653, and 3655 Mount Diablo Boulevard and 965 Mountain View Drive). The construction of a two-lane roundabout at this location would likely necessitate the demolition of the building on the south side of Mount Diablo Boulevard and removal of a portion of the building on the north side. Without this additional space, an elongated roundabout would not deflect Mount Diablo Boulevard vehicles enough to slow them down.

#### **Mount Diablo Boulevard / Project Driveway / Diamond K Supply Driveway**

At a potential Project driveway on Mount Diablo Boulevard, the HCM analysis method indicates that a single-lane roundabout would operate at LOS F during the PM peak hour with queues of approximately 600 feet in the eastbound direction and 800 feet in the westbound direction. Driveway vehicles would experience delays of six to ten seconds on average during the peak hours. A two-lane roundabout would operate at LOS A during both peak hours with queues less than 100 feet in both directions on Mount Diablo Boulevard. A two-lane roundabout would present the same challenges to pedestrians and bicycles as identified in the Mount Diablo Boulevard / Dolores Drive section.

The existing curb-to-curb distance in this area is approximately 70 feet. Modifications would need to be made to the existing Diamond K Supply site, potentially including the building. A complete curb and sidewalk would need to be constructed along the south side of Mount Diablo Boulevard at the Diamond K Supply frontage. The driveway into their site would need to be consolidated to a single location, and the roundabout would need to be designed to accommodate the necessary truck movements into and out of the site. Currently, trucks use the entire frontage to maneuver into and out of the site due to the lack of defined curb and sidewalk. This movement would be eliminated with construction of a roundabout and a new truck access plan would need to be created. The project site would also require modification to accommodate entrance and exit to the roundabout.

## **PARKING SUPPLY AND DEMAND**

The site plan shows 179 parking spaces. There are 164 underground parking spaces and 15 on-street parking spaces for residents, guests of residents and customers of the restaurant and flex space locations. This is sufficient parking to meet code requirements as discussed below.



## CITY CODE REQUIREMENTS

Currently, the parcel is classified as part of the General Commercial District (C-1). The City of Lafayette's off-street parking requirement in the General Commercial District is one parking space per one bedroom dwelling unit, 1.2 parking spaces per two bedroom dwelling unit, and 1.5 parking spaces per three bedroom dwelling unit (Section 6-992 of the *Lafayette, California Municipal Code*) in a multi-family residential district. In addition, for multi-family residential developments, one guest parking space is required for each five dwelling units.

With 66 dwelling units, 122 parking spaces are required if the parcel is zoned as part of the multi-family residential townhouse district (M-R-T district); both spaces for each unit are accessible from the unit per code. In addition, thirteen parking spaces for guests would be required in the garage.

The 4,500 square foot restaurant will require one parking space for every 500 feet of gross kitchen area and an additional space for every 45 square feet of gross dining area (Section 6-641 (r) of the *Lafayette, California Municipal Code*). Based on the floor space estimates from the architect, 52 parking spaces will be required for the restaurant use. The 1,400 square foot flex space will require one parking space for every 250 feet of net floor area (Section 6-641 (v) of the *Lafayette, California Municipal Code*). Based on the floor space estimates from the architect, 6 parking spaces will be required for the flex space use.

On-street parking on Mount Diablo Boulevard could also supplement the parking provided on-site. There are currently five parking spaces on Mount Diablo Boulevard along the Project frontage; these parking spaces will be removed in favor of new on-street parking stalls. As recommended, these parking stalls should be designed to allow back-in angled parking, given the Class II bicycle lane on westbound Mount Diablo Boulevard.

Based on observations, three to four of the existing five parking spaces were occupied during a weekday afternoon. These parking spaces were limited to two hours from Monday to Saturday during the hours of 7:00 AM to 6:00 PM. More on-street parking exists on the north side of Mount Diablo Boulevard to the west of the Project site that could potentially supplement the proposed parking supply.

There are currently no bicycle parking requirements per the *Lafayette, California Municipal Code*. The *Lafayette Bikeways Master Plan*, published in 2006, recommended that the City "[i]ncorporate into the future redevelopment plans for the downtown detailed bicycle parking requirements,



such as secure on-site bicycle parking be included in all new commercial, office and multi-family development projects and new parks and community buildings in the Lafayette. Requirements for quantity and type of parking would vary based on the size and type of the proposed development." Requirements for nearby communities, including Walnut Creek and Pleasant Hill, range from two to ten percent of automobile spaces. There are currently four proposed bicycle parking racks, two of which will be available to the public at ground level. Assuming that each bicycle rack will allow parking for at least six bicycles, there will be at least twelve public bicycle parking spaces as compared to 155 required parking spaces. The twelve bicycle parking spaces represent almost eight percent of the required automobile parking spaces, which is acceptable based on the standards from other communities mentioned above. Additionally, the bicycle racks are likely to fit more than six bicycles per rack.

The site plan shows two proposed parking stalls located west of Dolores Drive along the frontage to be used as a drop-off area. These parallel parking stalls should be used for loading and unloading only. Re-locating this loading area to Mount Diablo Boulevard from Dolores Drive will decrease the number of turning movements to access the area and will be more user-friendly with respect to project access.

Consultant Recommendation 5: Paint the curb white or yellow in the parking area to denote a loading (or commercial loading) zone.

Table 10 displays the parking requirements per code and the supply proposed for the Project.

**TABLE 10: PARKING REQUIREMENTS AND SUPPLY**

Land Use	For Residents			For Guests			Does Parking Supply Meet City Code?
	Required	Supplied	Surplus / Deficit	Required	Supplied	Surplus / Deficit	
Residential	83	105 <sup>1</sup>	+22	13	15 <sup>2</sup>	+2	Yes
Flex	-	-	-	6	59 <sup>1</sup>	-	Yes
Restaurant	-	-	-	53		-	Yes
<b>Total</b>	<b>83</b>	<b>105</b>	<b>+22</b>	<b>72</b>	<b>74</b>	<b>-</b>	<b>Yes</b>

Notes:

1. Basement parking spaces.
2. On-street parking spaces.

Source: Fehr & Peers, September 2014.



In the parking garage, the parking spaces provided are of adequate depth and width and there is adequate space to maneuver in/out of each space. About 50 feet should be provided between the driveway entry and the first parking space. However, given the size of the Project it is expected that internal conflicts will appear infrequently. In addition, recommendations to reduce the curb radii will slow vehicle speeds entering and exiting the site. The dead-end aisles, while typically not recommended, are located in areas with assigned parking spaces only, which will eliminate the need for turnarounds when vehicles searching for a parking space are not able to find one.

Attachments:

- Figure 1 Project Vicinity
  - Figure 2 Existing Traffic Control, Lane Configurations, and Peak Hour Traffic Volumes
  - Figure 3 Project Trip Turning Movements
  - Figure 4 Existing Plus Project Peak Hour Traffic Forecasts
  - Figure 5 Existing and Existing Plus Project 95<sup>th</sup> Percentile Queue Lengths
  - Figure 6 Cumulative Conditions Peak Hour Traffic Forecasts
  - Figure 7 Cumulative Plus Project Peak Hour Traffic Forecasts
  - Figure 8 Cumulative and Cumulative Plus Project 95<sup>th</sup> Percentile Queue Lengths
  - Figure 9 Site Plan Recommendations
  - Figure 10 Driveway Sight Distances
- 
- Attachment A Traffic Counts
  - Attachment B Synchro Worksheets
  - Attachment C Roundabout Analysis Worksheets







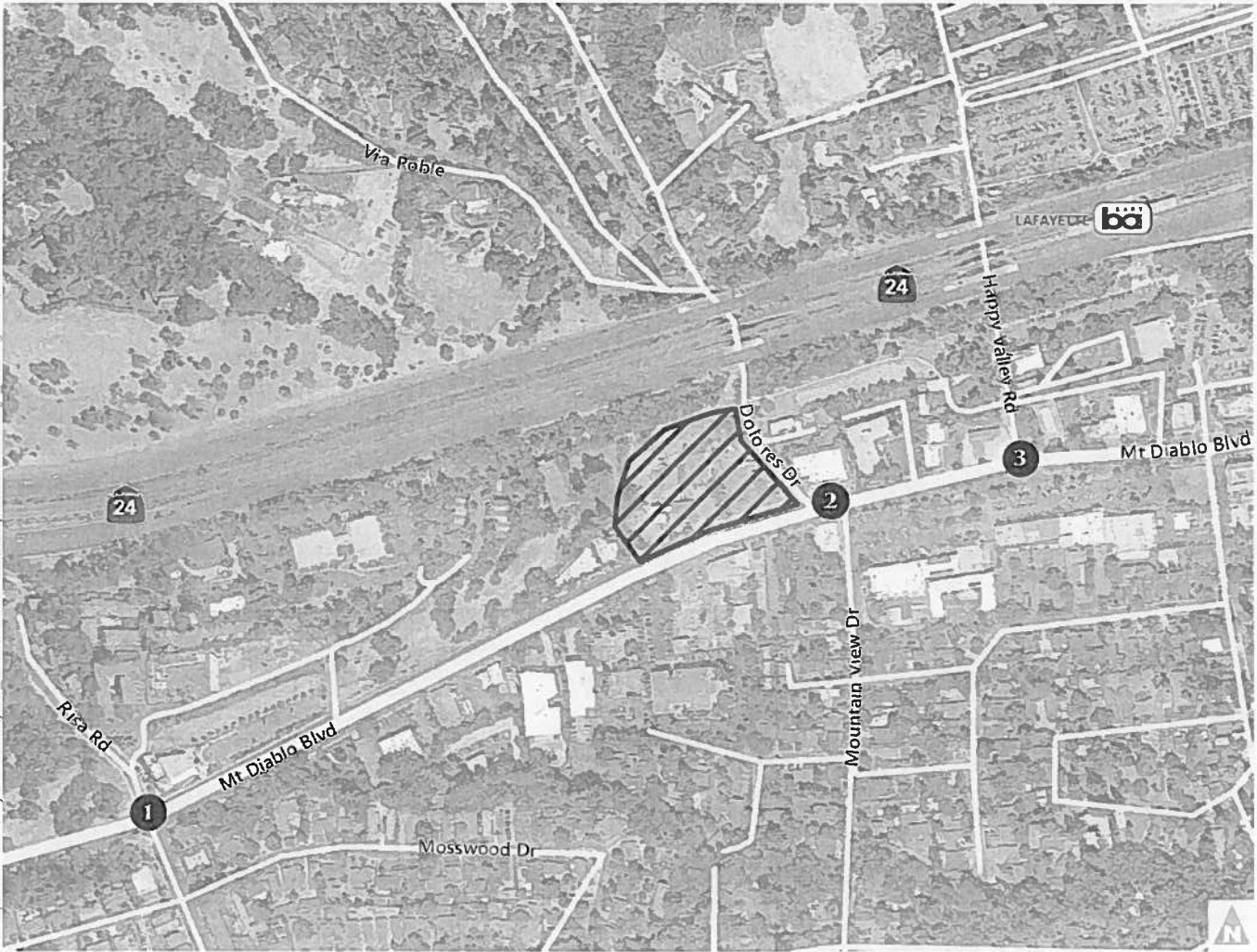
-  Project Site
-  BART Station



Figure 1  
Project Vicinity

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1. Mt Diablo Blvd/Risa Rd	2. Mt Diablo Blvd/Dolores Dr	3. Mt Diablo Blvd/Happy Valley Rd
 Risa Rd 19 (65) 0 (0) 62 (112) 140 (71) 359 (470) 58 (60) 6 (5) Mt Diablo Blvd Village Center 25 (21) 1 (1) 81 (61)	 Dolores Dr 20 (17) 9 (5) 67 (49) 45 (57) 643 (465) 36 (70) 1 (7) Mt Diablo Blvd Mountain View Dr 8 (2) 19 (20) 375 (765) 68 (107) 66 (115) 4 (8) 41 (60)	 Happy Valley Rd 456 (257) 53 (68) 73 (134) 66 (92) 318 (358) 48 (80) 2 (13) Mt Diablo Blvd Retail Driveway 18 (29) 228 (395) 224 (560) 18 (26) 32 (60) 34 (53) 15 (24)

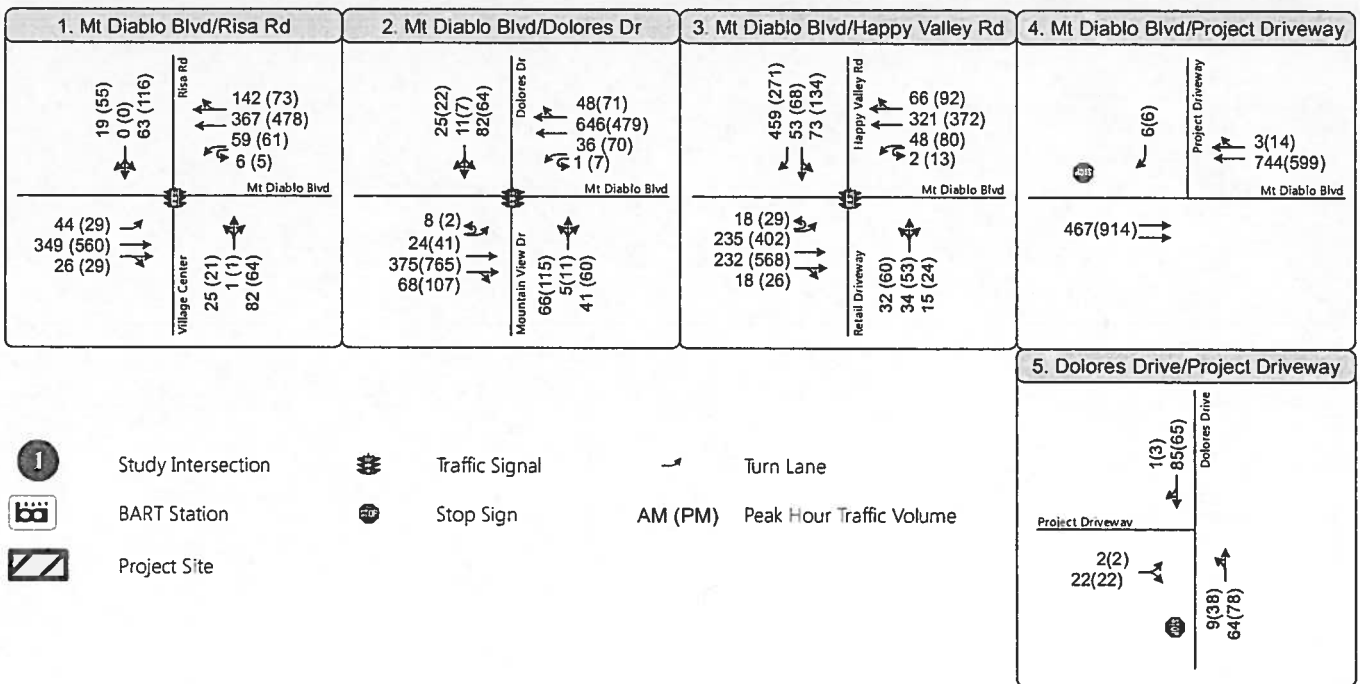
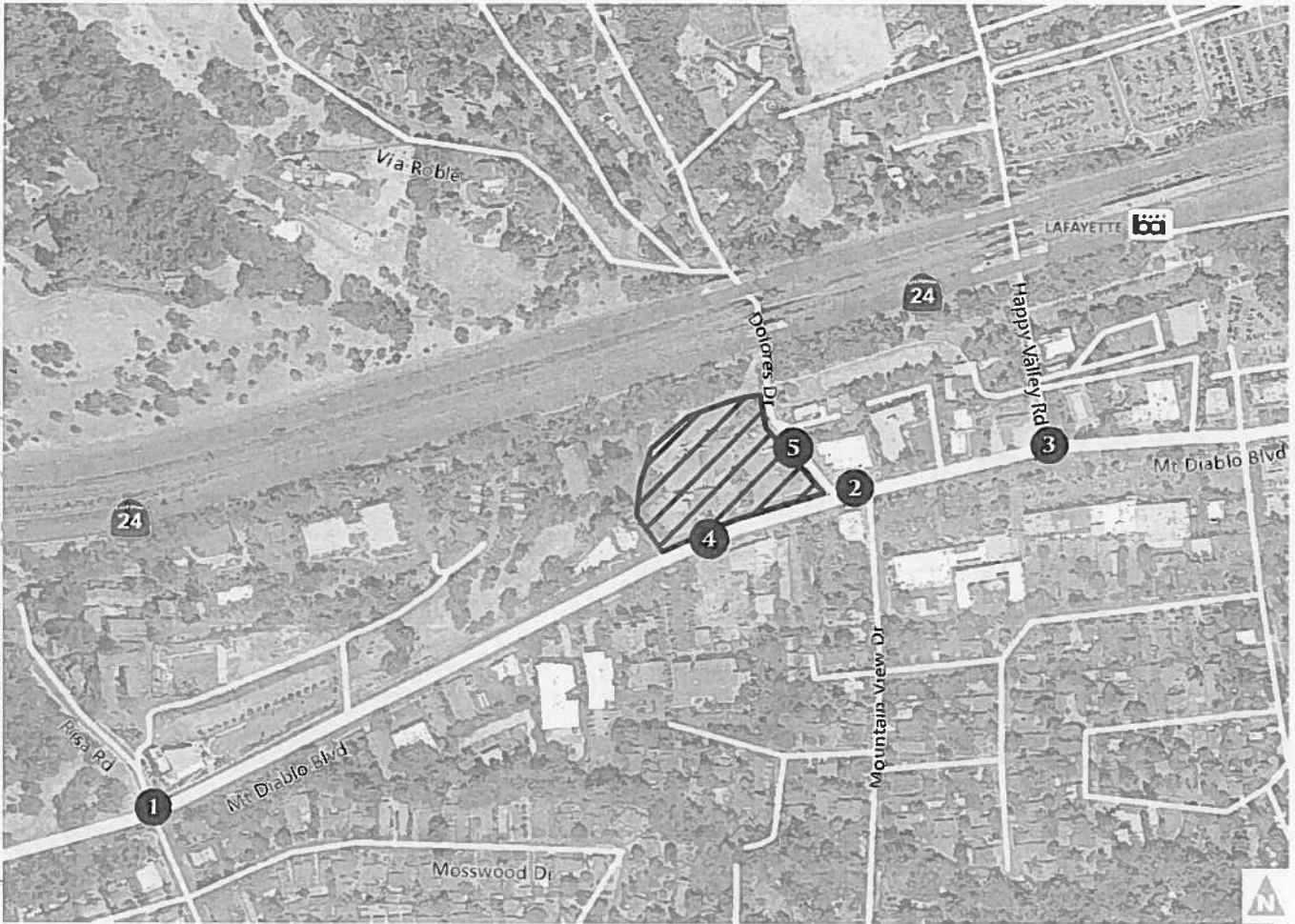
- Study Intersection
- Traffic Signal
- Turn Lane
- BART Station
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Project Site



Figure 2  
Existing Traffic Control, Lane Configurations,  
and Peak Hour Traffic Volumes



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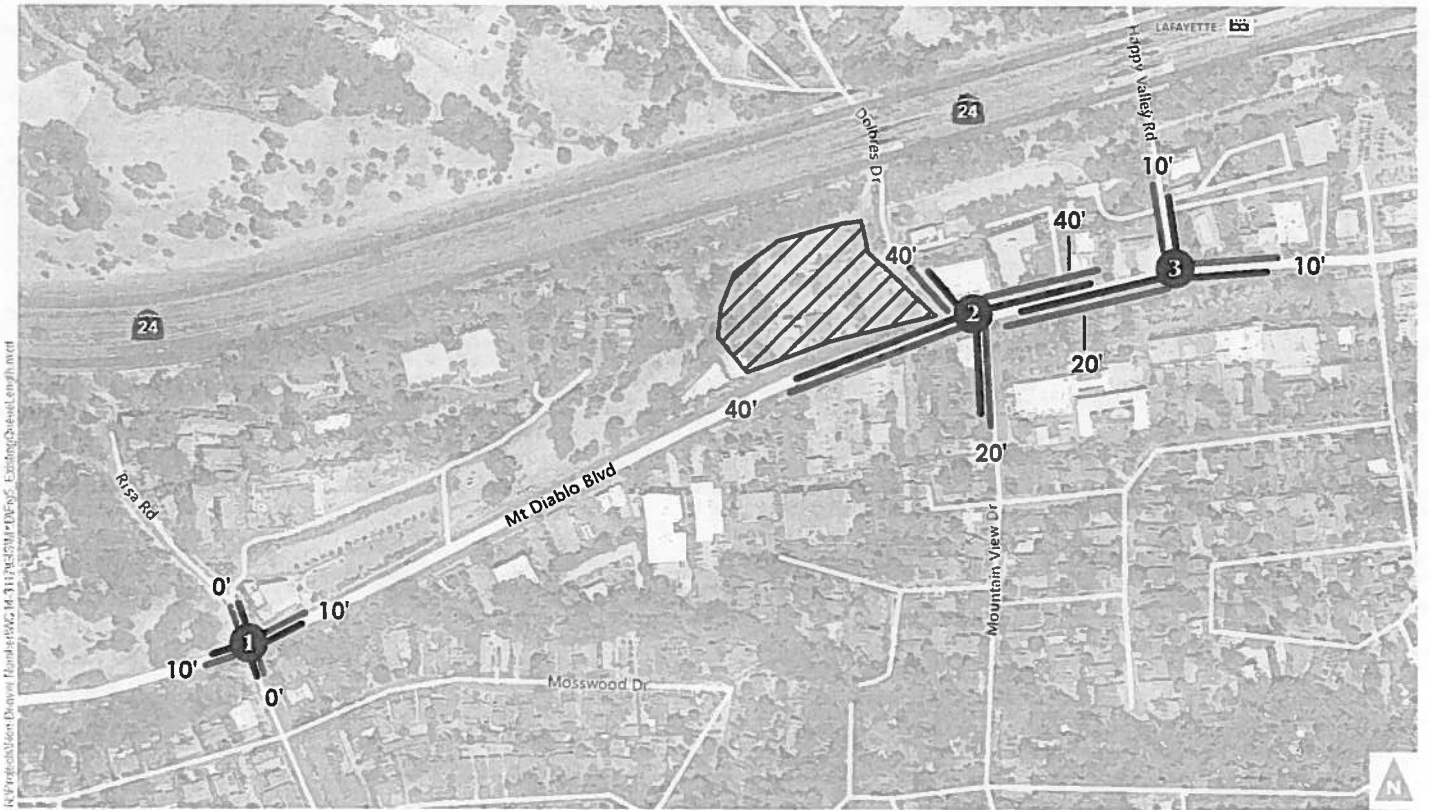


- Study Intersection
- Traffic Signal
- Turn Lane
- BART Station
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Project Site

Figure 4

## Existing Plus Project Peak Hour Traffic Forecasts



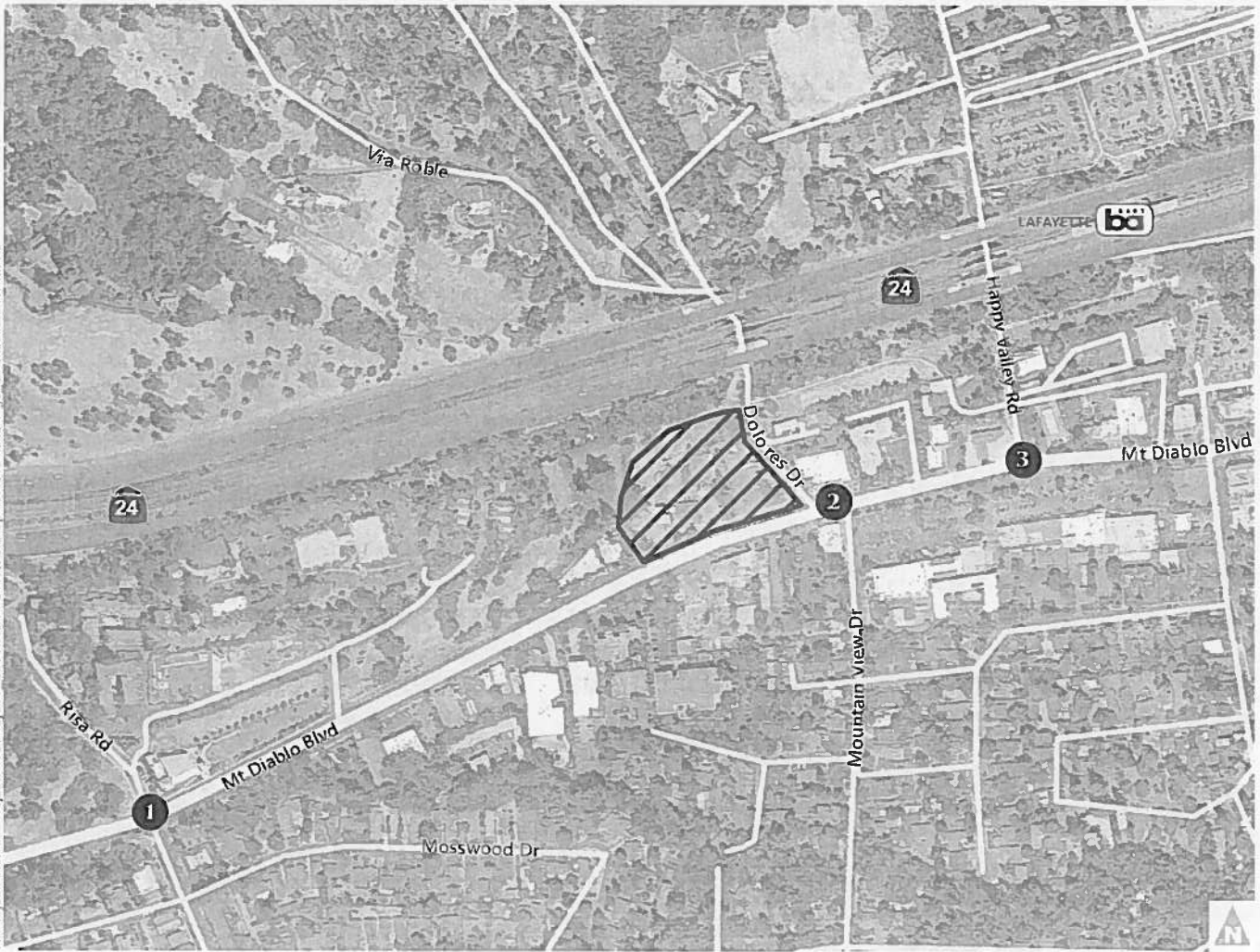


- 1 Study Intersection
- 24 BART Station
- Existing Conditions Queue Length
- Existing Plus Project Queue Length
- Queue Length Growth
- Project Site



Figure 5  
Existing and Existing Plus Project  
95th Percentile Queue Lengths

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1. Mt Diablo Blvd/Risa Rd	2. Mt Diablo Blvd/Dolores Dr	3. Mt Diablo Blvd/Happy Valley Rd
<p>Risa Rd</p> <p>40 (60) 10 (10) 90 (120)</p> <p>150 (80) 520 (600) 60 (80) 10 (10)</p> <p>Mt Diablo Blvd</p> <p>Village Center</p> <p>40 (30) 10 (10) 90 (70)</p> <p>50 (40) 410 (690) 30 (40)</p>	<p>Dolores Dr</p> <p>30 (50) 10 (30) 80 (80)</p> <p>80 (90) 700 (900) 40 (80) 10 (10)</p> <p>Mt Diablo Blvd</p> <p>Mountain View Dr</p> <p>10 (10) 20 (30) 540 (860) 80 (120)</p> <p>70 (120) 10 (10) 50 (80)</p>	<p>Happy Valley Rd</p> <p>500 (310) 60 (110) 170 (200)</p> <p>180 (210) 540 (500) 70 (170) 10 (20)</p> <p>Mt Diablo Blvd</p> <p>Retail Diversity</p> <p>20 (30) 240 (420) 440 (780) 20 (30)</p> <p>40 (70) 40 (60) 20 (30)</p>

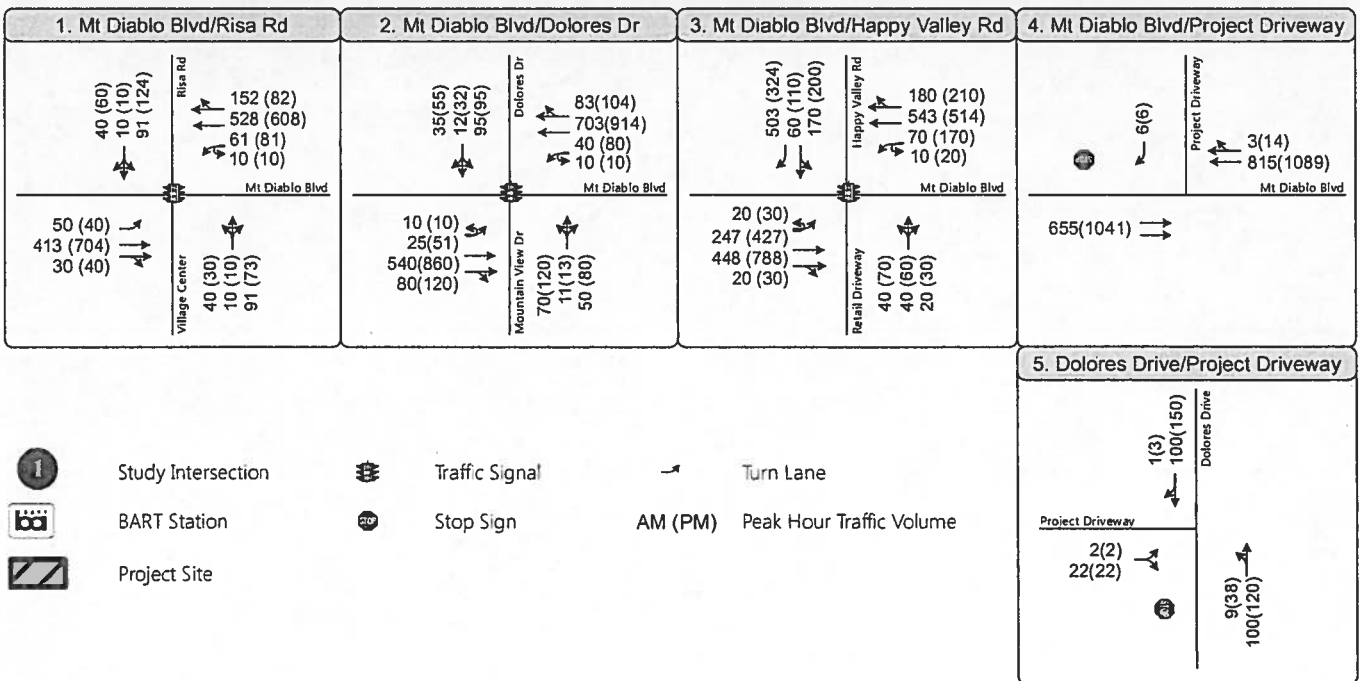
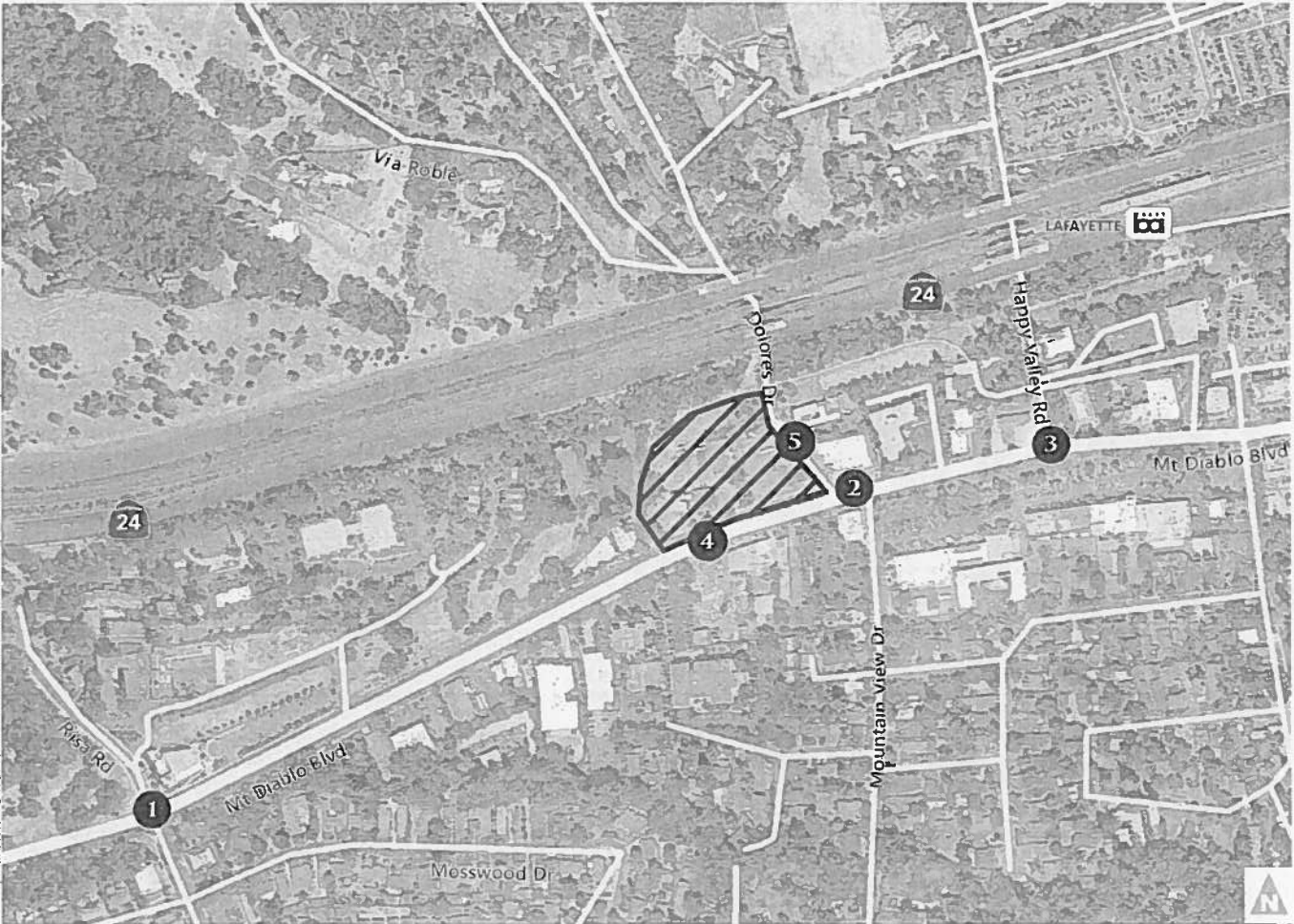
- Study Intersection
- Traffic Signal
- Turn Lane
- BART Station
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Project Site

Figure 6

## Cumulative Conditions Peak Hour Traffic Forecasts



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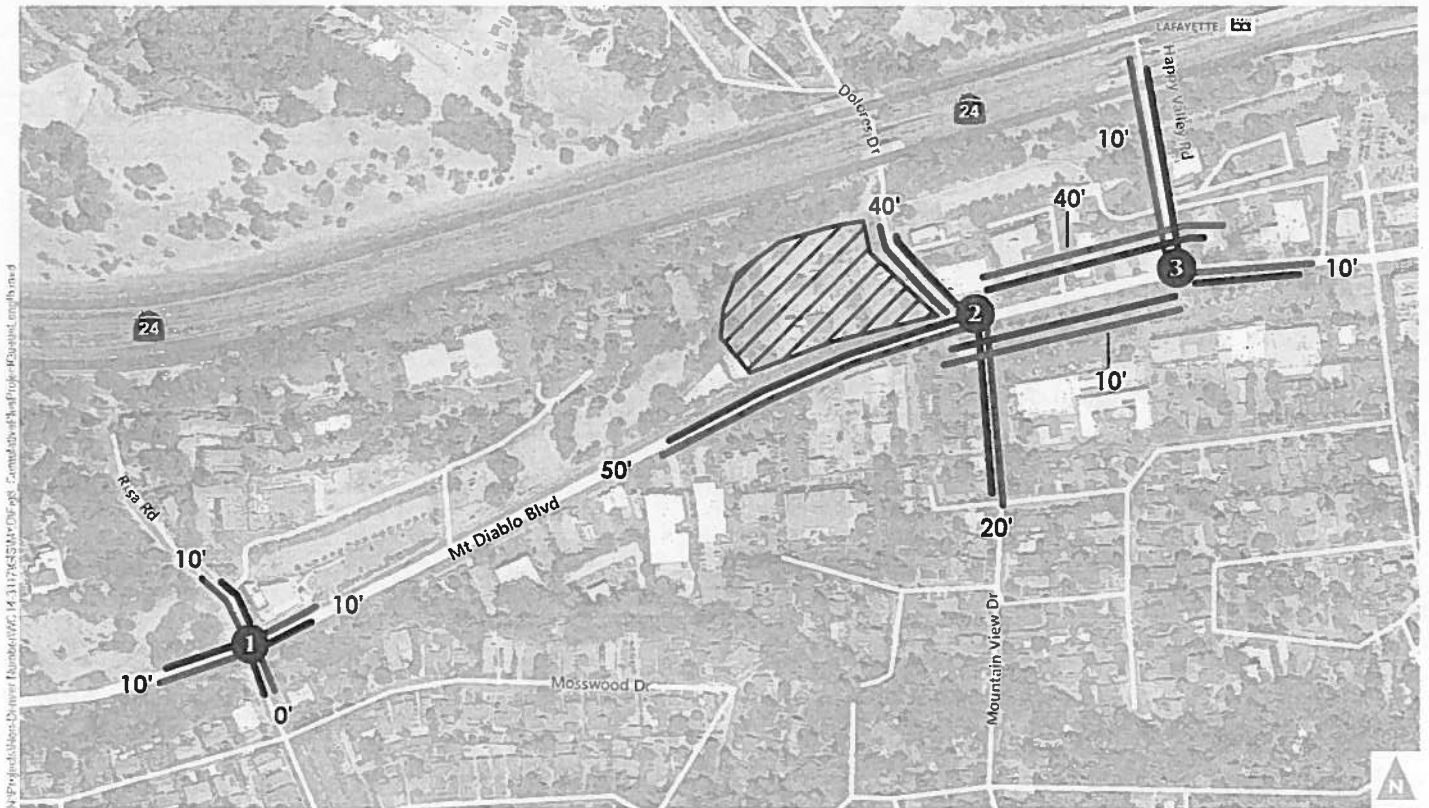


- Study Intersection
- Traffic Signal
- Turn Lane
- BART Station
- Stop Sign
- AM (PM) Peak Hour Traffic Volume
- Project Site

Figure 7

## Cumulative Plus Project Conditions Peak Hour Traffic Forecasts











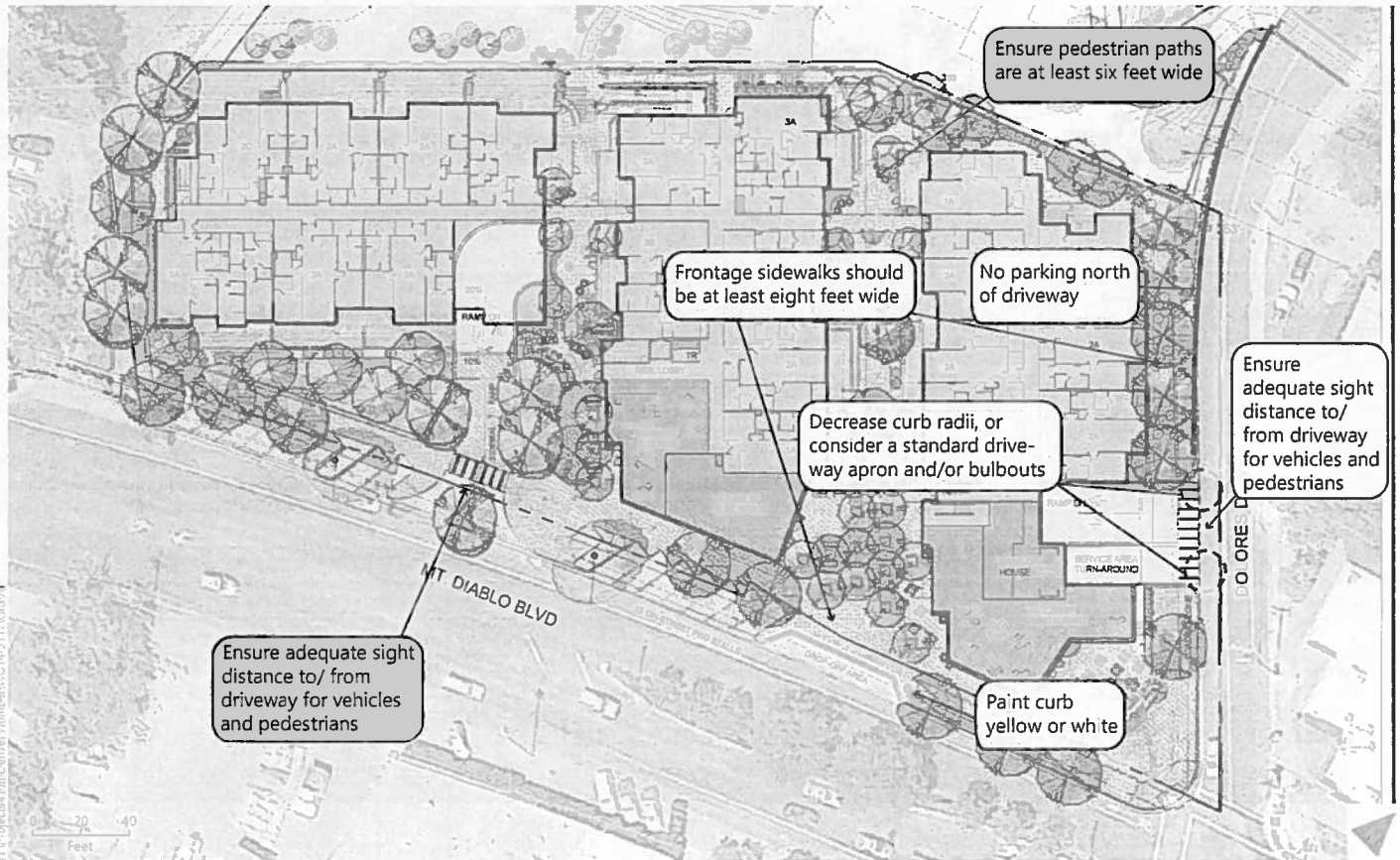
-  Study Intersection
-  BART Station
-  Cumulative Conditions Queue Length
-  Cumulative Plus Project Queue Length
-  Queue Length Growth
-  Project Site

Figure 3  
 Cumulative and Cumulative Plus Project  
 95th Percentile Queue Lengths







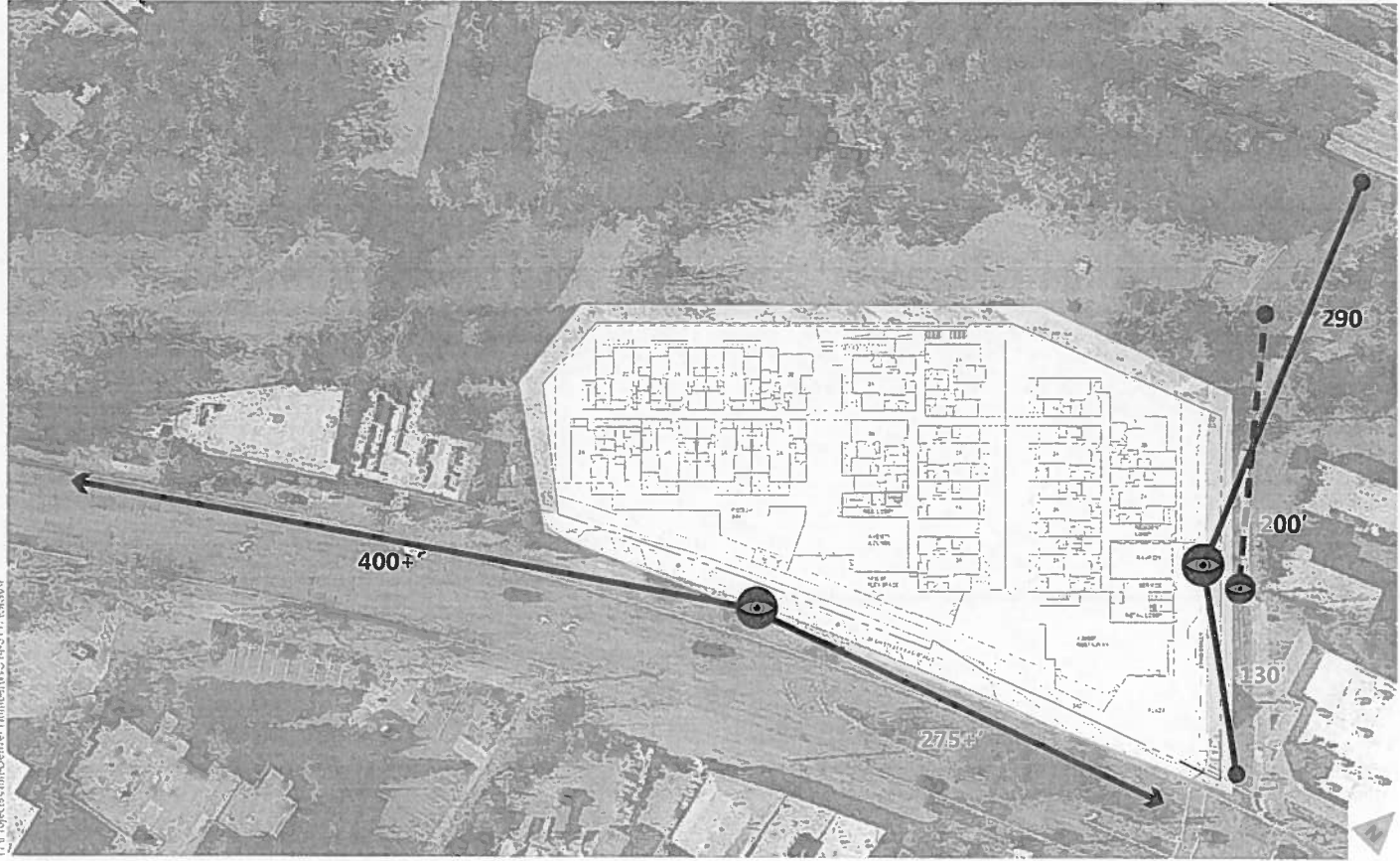
NOTE: Updated proposal has back-in angled parking.

Figure 9  
Site Plan Recommendations



SOURCE: StudioT.SQ., Architecture Planning Urban Design, Lafayette, California

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-  Sight distance to/from driveway
-  Sight distance for turning movement



SOURCE: StudioT SO, Architecture Planning Urban Design, Lafayette, California

Figure 10  
 Driveway Sight Distances

**Attachment 3**  
**Peer Review Letter Report**



Vision That Moves Your Community

Transportation  
Consultants

November 10, 2014

Mr. Steve Noack  
PlaceWorks  
1625 Shattuck Avenue, Suite 300  
Berkeley, CA 94709

**Re: TJKM Peer Review of Lafayette Residential Development  
Transportation Impact Study Dated September 23, 2014**

Dear Mr. Noack:

This letter summarizes TJKM's review of the September 23, 2014 Memorandum from Dan Hennessey and Ellen Poling of Fehr and Peers to Chad Kiltz of the Lennar Corporation regarding a proposed mixed use project to be located at the northwest corner of Mount Diablo Boulevard and Dolores Drive in Lafayette. TJKM also reviewed a set of project documents dated October 10, 2014 and a second set dated October 24, 2014. The project consists of 66 apartment units, a 4,500 square foot restaurant, and 1,400 square feet of retail uses. The current proposal consists of full access on Dolores Street leading to an underground garage and right in/right out access on Mount Diablo Boulevard, also leading to the same underground garage. Earlier proposals of the project evaluated various combinations of access on the two frontages, including separate designs with exclusive unlimited access on each of the two frontage streets.

TJKM's comments on various sections of the report are as follows:

**Data Collection and Existing Conditions**

In earlier versions of the Fehr and Peers report, there was concern raised about the accuracy of the existing conditions intersection counts, in part because the counts may have been made on a day in which schools did not operate with standard hours. Fehr and Peers original counts were made on Wednesday, March 12, 2014; a second set of counts was made on Thursday, May 22, 2014. The second counts showed seven percent higher a.m. peak counts while the p.m. counts were four percent lower. Accordingly, the original counts and calculations were utilized as it was felt that these differences were within typical ranges of count variation.

TJKM was asked to make a third set of counts, which were made on Thursday, June 5 before the school year ended. TJKM evaluated the intersection delay and resulting level of service and compared it with the original counts, which were also utilized in the September 23 report currently being reviewed. The results of this analysis are shown in Table 1:

**Table 1: Comparison of Existing Level of Service Results**

Intersection	Peak Hour	Fehr & Peers TIA		TJKM Analysis	
		Delay (sec)	LOS	Delay (sec)	LOS
Mount Diablo Boulevard / Risa Road / Village Center	AM	8.8	A	10.0	B
	PM	10.5	B	8.8	A
Mount Diablo Boulevard / Dolores Drive / Mountain View Drive	AM	21.2	C	22.5	C
	PM	26.4	C	24.0	C
Mount Diablo Boulevard / Happy Valley Road	AM	16.9	B	31.3	C
	PM	25.7	C	35.2	D

Date of Counts: Fehr and Peers March 12, 2014; TJKM June 5, 2014

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Since the counts were made on different days, it can be expected that the results would differ somewhat. It can be seen that two of the three intersections had very similar results even though made at different times. At Mount Diablo Boulevard and Risa Road/Village Center, TJKM noted slightly increased delay in the morning and slightly reduced delay in the evening. At Mount Diablo Boulevard and Dolores Drive/Mountain View Drive the results were similar – TJKM found slightly higher delay in the morning and slightly lower delay in the evening, with no change in level of service.

At Mount Diablo Boulevard at Happy Valley Road, TJKM's level of service results were noticeably poorer than those included in the Fehr and Peers study, even though the traffic volumes during the two study periods were similar. It appears that the Fehr and Peers calculations did not consider the existing side street split phasing traffic signal operations.

#### Revised Future Traffic Signal Timing

The Metropolitan Transportation Commission retained TJKM to provide improved signal timing along Mt. Diablo Boulevard. TJKM has worked with the City staff and updated traffic signal timing has been recommended for each signalized intersection along Mt. Diablo Boulevard. The new signal timing has been approved by the City and will be installed in the near future. The new signal timing is expected to improve traffic conditions along Mt. Diablo Boulevard but may result in increased delays and queuing along the side streets. At the City's request, TJKM analyzed the level of service and intersection queuing using the new signal timing. The results are shown in Table 2 below.

**Table 2: Intersection Level of Service (LOS) and Delay With Updated Signal Timing**

<i>Intersection</i>	<i>Scenario</i>	<i>Existing</i>	<i>Existing + Project</i>	<i>Cumulative</i>	<i>Cumulative + Project</i>
Mt. Diablo Blvd/Dolores Drive	Delay	19.1(23.6)	21.9(24.5)	21.3(30.3)	22.2(33.0)
	LOS	B(C)	C(C)	C(C)	C(C)
Mt. Diablo Blvd/Happy Valley Road	Delay	30.2(35.7)	30.3(35.9)	38.2(61.4)	38.7(66.2)
	LOS	C(D)	C(D)	D(E)	D(E)

Note: Reported Delay and LOS are AM peak hour (PM peak hour).

As compared with the results shown in the Table 1 above, it can be seen that with the new signal timing in place, the level of service results at the two key intersections will be similar to those resulting from the original assumptions.

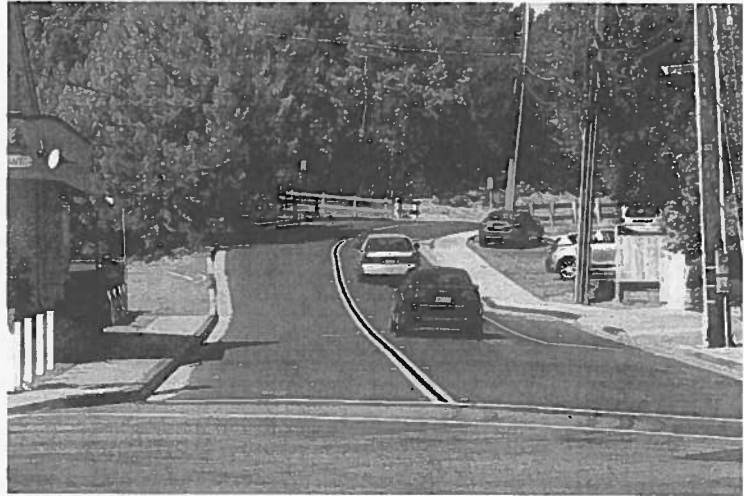
#### Project Trip Generation, Distribution and Assignment

Trip generation is treated conservatively in that several existing businesses are located on the site of the project and currently generate daily and peak hour trips. These trips are not accounted for in the traffic study; in many studies such existing trips are subtracted from the new site trips prior to the assessment of project impacts. Thus, some of the project impacts identified in the study, such as queuing and intersection delay, may be slightly overstated.

TJKM agrees with the trip distribution and assignment shown in the Fehr and Peers report.

### **Site Plan and Circulation**

**Truck Loading Dock** The project proposes to utilize Dolores for maneuvering into and out of the truck dock. More information should be provided. TJKM suggests that Auto Turn or a similar program be utilized to demonstrate how truck maneuvering would take place. Also, the traffic study should indicate the approximate number of trucks per day or week that would be using the dock and the size of the trucks that would be utilized. There is



the potential for a truck to overhang the sidewalk and interfere with visibility and sight distance of and from autos using the garage entrance. The photo illustrates the "tightness" of Dolores in this area.

**Mount Diablo Boulevard Access** This is an important issue of the new project because Mount Diablo Boulevard is a busy arterial and because of the numerous driveways along the roadway near the proposed project. In the current project, the Mount Diablo Boulevard access point is proposed to be restricted to right turns in and right turns out.

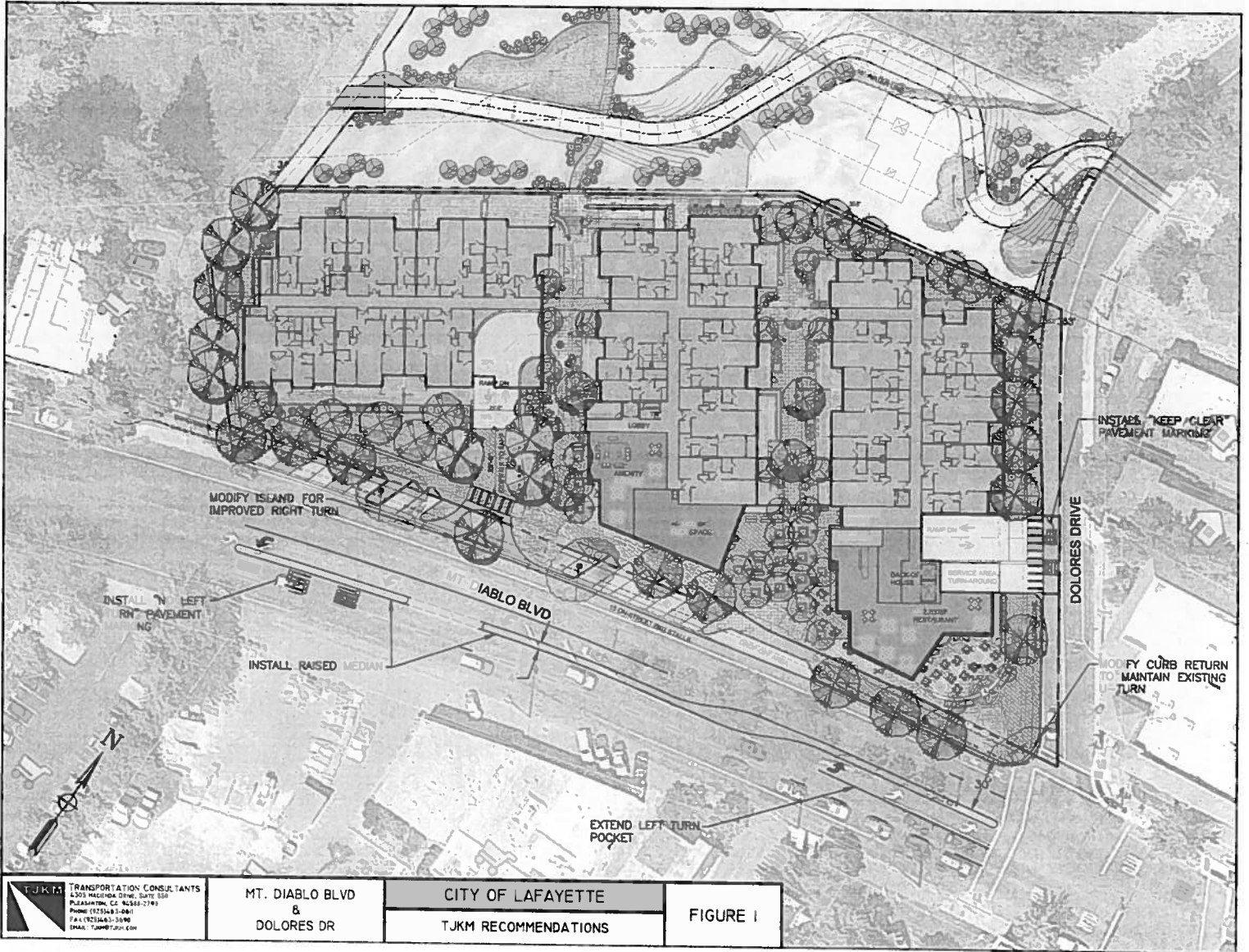


TJKM evaluated an option of also allowing eastbound left turns into the site, but found the disadvantages of such a maneuver (difficulty of regulating left turns in the context of the other traffic movements in the area) outweighed the potential advantages (slightly reduced p.m. traffic on Dolores Drive).

However, it appears the proposed triangular island in the driveway area that is intended to prevent left turn movements into and out of the

development is likely to be ineffective. Mount Diablo Boulevard is very wide at that location and is equipped with a two-way left turn lane, which would facilitate improper left turns into the garage entrance. TJKM suggests that the raised median be extended along a portion of the site frontage to reduce the potential for improper entrances to the garage by eastbound motorists. As shown in the photo, the current striping in the area would not be conducive to restricting improper maneuvers.

If a four-foot raised median were constructed along the south edge of the two-way left-turn lane extending some 80 feet westerly, left turns into the building supply driveway and the office building to the west would still be physically possible, but wrong-way eastbound left turns into the new site would be restricted. The sketch shown in Figure 1 illustrates one possibility. **NO LEFT TURN** signs and markings would be installed facing eastbound traffic. In the sketch, there is a break in the proposed median to continue to allow left turn movements into and out of the Diamond K



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MT. DIABLO BLVD  
 &  
 DOLORES DR

CITY OF LAFAYETTE  
 TJKM RECOMMENDATIONS

FIGURE 1

business. If this opening were not provided, left turns in and out of the new development would be physically impossible. However, the median would also eliminate the possibility of left turns in and out of the main driveway of the Diamond K development on the south side of Mount Diablo Boulevard. All movements into and out of Diamond K would still be possible, but would require U-turns at the ends of the median coupled with the allowed right in – right out movements. The City could consider constructing such a median closure but it would be advisable to investigate the current volume of left turns in and out of Diamond K by customers, employees, and delivery vehicles. A review of the accident history associated with left turners using the driveway should also be made. It is beyond the scope of this peer review to conduct such a study, but the City may wish to undertake such a study as a separate issue.

Without the median closure, the garage exit would need to have conspicuous RIGHT TURN ONLY signs to alert outbound motorists of the restriction.

If the proposed median were constructed (with or without the Diamond K closure), an additional issue would be created. At the west end of the proposed Lennar project there is an existing driveway serving a retail complex fronting on the north side of Mount Diablo Boulevard with a multi-family development in the rear. Currently, access to this driveway is unrestricted; left turns in and out of the driveway are facilitated by the two-way left-turn lane on Mount Diablo Boulevard. (This driveway is directly across the street from the driveway that serves City offices.) The proposed median would not preclude left turns out of the driveway but would eliminate the acceleration area for the left turns. If the median were installed, the City may wish to consider No Left Turn restrictions by motorists accessing eastbound Mount Diablo Boulevard. All other movements into and out of the driveway would not be affected by the proposed median. Also, movements in and out of the City offices on the south side of the street would not be affected.

Eastbound U-Turns at Dolores Drive The proposed site plan provides a widened sidewalk along the Mount Diablo frontage just west of Dolores. This widened sidewalk results in narrowed pavement and a shorter crosswalk at the signalized intersection, which is positive. However, the change results in insufficient space for the eastbound to westbound U-turn movement. TJKM recommends that 30 feet of pavement be provided between the sidewalk and the nearest edge of the median. This would require reducing the sidewalk by about five feet, but would still result in a wider sidewalk area than currently exists.

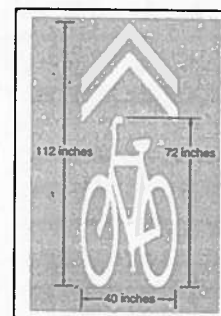
Parking along Mount Diablo Boulevard The proposed project includes angle parking along the frontage of the proposed project. Given the moderate volumes along Mount Diablo Boulevard (about 15,000 two-way vehicles per day) and current “complete street” concepts being instituted by Lafayette, adding angle parking along Mount Diablo Boulevard does not seem inappropriate. Currently, angle parking exists along the south side of eastbound Mount Diablo Boulevard between Dewing Avenue and Lafayette Circle; in addition informal (unmarked) angle parking exists across the street from the proposed project along portions of the Diamond K frontage also along the eastbound lanes.

The angle parking is not needed for the project to meet required City parking requirements, although it would be useful for the project itself for convenient parking. If the angled parking stalls were restricted to two-hour limits between 9 a.m. and 9 p.m., the stalls would be available for customers of this and other nearby retail/restaurant uses during the day, while still being available for overnight residential parking. There would be adequate parking for residents and employees in the garage.



The proposed parking is shown as back-in angle parking. The rationale for back in parking is the bike lane along the site frontage; as described in the Fehr and Peers traffic study it has been demonstrated in other applications that back in parking potentially creates a safer environment when bike lanes are present. This situation occurs because unparking motorists have a better view of any bicyclists in the area. However, it is noted that the painted westbound bike lane begins at Dolores Avenue; east of Dolores a shared bike/auto lane exists. Under these circumstances, it is difficult to justify back in parking solely because of the bike lane. TJKM is of the opinion that in this circumstance, conventional head in parking may be the most appropriate scheme.

The City may wish to consider two options dealing with the combination of parking and bicycle facilities along the site frontage. If conventional angle parking is retained, it may be appropriate to extend the auto/bike shared lane that exists in other portions of the downtown past the site frontage; the separate bike lane would begin west of the project rather than at Dolores as it does now. The purpose of this would be to not give the impression to bicyclists that a separate facility exists with some added protection for bike riders. The installation of Sharrow pavement markings (illustrated) would reinforce the lack of a specific bike lane. In this instance, the City can also explore the possibility of "sliding" the boundary between the existing 25 mph speed limit (east of Dolores) and the 35 mph speed limit (west of Dolores) to a point west of the proposed project at the point where the angle parking would end and the separate bike lane would begin. In this area, a possible pavement striping and marking scheme would be to create one 12-foot wide westbound lane against the median area and a 20-foot wide westbound Sharrow lane that would provide space for through traffic, unparking vehicles, and bicycles.



A second parking option is to retain parallel parking along the site frontage. This would allow retention of a separate bike lane and the existing speed limit boundaries. In this instance, a possible striping and marking scheme would be to provide two 11-foot wide eastbound lanes, a five-foot wide marked bicycle lane, a three-foot buffer and an eight-foot wide recessed parallel parking area.

**Garage parking** The garage parking consists of two sections of secured resident parking areas totaling 106 stalls and 63 unsecured stalls for restaurant and retail customers and employees as well as guests of residents. The layout of the garage appears to work well and allows all categories of parkers to utilize either the Dolores Drive or Mount Diablo Boulevard entrances. TJKM recommends that only one stall be reserved for each of the 66 residential units and the remaining stalls be available to all residents. This approach will minimize the occurrence of a "filled" garage when some of the assigned stalls are unoccupied.

#### **Queuing Near Project**

Table 3 shows the queuing calculations prepared by TJKM utilizing the traffic volumes shown in the Fehr and Peers report but with the proposed new signal timing. The queues calculated by TJKM are similar to those calculated by Fehr & Peers.

**Table 3: 95th Percentile Queue Lengths for Existing and Existing + Project Conditions**

<i>Intersection</i>	<i>Movement</i>	<i>Storage Length</i>	<i>Existing Conditions (ft.)</i>	<i>Existing + Project Conditions (ft.)</i>	<i>Difference (ft.)</i>
Mt. Diablo Blvd. /Dolores Dr.	EBL	60	45(40)	50(62)	5(22)
	WBL	65	47(67)	45(63)	-2(-4)
	NBTL	-	92(160)	93(162)	1(2)
	SBTL	95*	89(67)	101(86)	12(19)
Mt. Diablo Blvd./Happy Valley Rd.	EBL	85	276(481)	288(490)	12(9)
	WBL	60	67(106)	67(106)	0(0)
	SBR	35	125(157)	125(166)	0(9)

Note:

Reported queues are AM peak hour (PM peak hour). \*95 feet = distance from stop bar to garage entrance

The project traffic adds about one car length of queuing or less at all locations shown. The eastbound left turn lane on Mount Diablo Boulevard at Dolores has a maximum queue of 62 feet and a storage length of 60 feet (not 75 feet as shown in the Fehr & Peers report), which is an acceptable condition. However, as shown in Figure 1, TJKM suggests that the eastbound left turn lane be lengthened to accommodate any surges in demand. It appears about 20 feet of additional storage can be obtained without requiring any median tree removal.

On southbound Dolores Drive, the main interest is whether existing plus project conditions might produce queues that would block the proposed garage entrance, thereby blocking the northbound lanes as garage-bound cars await a gap in southbound traffic to enter the garage. The site plan shows about 95 feet of pavement between the stopping point for southbound vehicles and the nearest access point to the garage. The actual inbound entrance lane is located about 105 feet from the stopping point. The calculated existing queues are 89 feet in the morning and 67 feet in the evening. With project traffic added, the calculated queues are 101 feet in the morning and 86 feet in the evening. This shows that the demand and the supply are about equal in the morning with project traffic. In the evening, when most vehicles enter the garage, there is about one car length to spare. The 38 arriving afternoon vehicles amount to about one car per signal cycle on average. In Figure 1, TJKM recommends KEEP CLEAR markings on the southbound lanes near the garage entrance for those instances when the 95<sup>th</sup> percentile queue is exceeded.

The garage serving 3658 Mount Diablo Boulevard has two driveways on the east side of Dolores Drive across the street from the proposed development. The two driveways are located closer to Mount Diablo Boulevard than the entrance to the proposed garage for the new development. Any queuing on Dolores Drive would have minimal impacts on motorists using the existing entrance driveway, since most 3658 vehicles will arrive from Mount Diablo Boulevard on northbound Dolores Drive, not directly affected by southbound queuing vehicles. Vehicles exiting the existing garage would be affected by the southbound queues on Dolores Drive, which as noted in Table 3, would be about one car longer than existing conditions. Vehicles exiting the garage would queue within the garage and would not block any public streets.

As noted in the Truck Loading Dock section above, the actual truck dock is located closer to the intersection than the main garage entrance. This points out the need to closely monitor the times when this dock is used and to ensure its physical design accommodates the trucks that are likely to use it. Clearly, truck deliveries should not occur during any of the busy periods of the day.

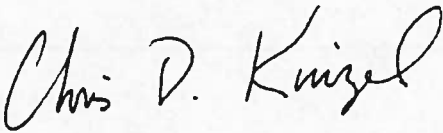
#### Other Issues

- I. TJKM concurs with the analysis that either a single lane or a two-lane roundabout would not be appropriate at or near this project.

2. TJKM concurs that parking should be eliminated and landscaping controlled along the entire west side of Dolores Drive to preserve sight distance.
3. TJKM suggests the City consider rectangular rapid flash beacons instead of the less effective in-pavement flashers at the proposed Dolores Drive crosswalk.

TJKM will be pleased to respond to any comments on this review.

Very truly yours,



Chris D. Kinzel, P.E.  
Vice President

**Attachment 4**  
**Applicant Letter**



WESTGATE VENTURES

November 20, 2014

Chairman Dino Riggio and Members of the Circulation Commission  
City of Lafayette  
3675 Mt. Diablo Boulevard, Suite #210  
Lafayette, CA 94549

RE: Lennar Community  
3666, 3672, and 3682 Mt. Diablo Boulevard

On behalf of Lennar Homes, we would like to thank you for your consideration of our development proposal for 3666 / 3672 / 3682 Mt. Diablo Boulevard. Lennar is excited about the opportunity to create a partnership with the City of Lafayette on a new community that will complement the existing vibrancy of Downtown Lafayette.

The proposal is for a mixed use development of 66 residential units and 5,400 square feet of commercial / restaurant retail space. The current proposal is largely the result of input that Lennar received at two Joint Study Sessions held with the City of Lafayette:

September 2013	City Council, Planning Commission, and Design Review Commission
December 2013	Planning Commission and Design Review Commission

Lennar made substantial changes to its proposal after each of the two Study Sessions in terms of areas such as land use, design, and access, and we are excited to continue our dialogue with the city's advisory bodies and commissions. At our December 2013 Study Session, Lennar was applauded for its willingness to listen to the interests of the various stakeholders.

From a city policy standpoint, it is important to note that Lennar is not seeking any amendments to the General Plan, Downtown Specific Plan, Zoning Code, or Municipal Code. In addition, the proposal complies with city policies in regards to density, building height, parking requirements, and building setbacks.

#### **Evolution of Community Design – Vehicular Access**

Lennar thinks it is important to understand how the overall development has evolved in terms of community access over the past year, in light of the fact that it appears likely to be the main discussion point for the Circulation Commission meeting.

#### **December 2013 Study Session**

After being encouraged by the city representatives at the September 2013 Joint Study Session to pursue a mixed use, podium construction community, Lennar returned to the December 2013 Joint Study Session with a community that contemplated a single point of access off of Dolores Drive.

Lennar proposed that single point of access for two primary reasons. One, the company felt as if the development proposal would not have a significant impact on the Dolores Drive / Mt Diablo Boulevard intersection, and two, it would allow for uninterrupted frontage / landscape design along Mt. Diablo Boulevard. Lennar stated publicly at the December 2013 Study Session that if subsequent traffic studies showed a significant impact on the intersection, then it would revise its ingress / egress accordingly.



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In light of comments made by area residents at this Study Session who were concerned with traffic and associated impacts, some of the Joint Session Commissioners encouraged Lennar to look at its property frontage along Mt Diablo Boulevard as a possible location for primary or secondary access.

April 2014 Initial Project Submittal

While preliminary traffic studies supported a “Dolores Drive Only” access in terms of adequate capacity at nearby intersections, Lennar’s initial submittal of April 2014 showed two points of ingress / egress: a full service access point off of Dolores Drive and an additional full service “Mid Block” access off of Mt. Diablo Boulevard.

This circulation proposal was done strictly in response to the desires of the community members, as Lennar’s traffic study, once again, supported a “Dolores Drive Only” ingress / egress.

April + May 2014 Neighborhood Outreach

Shortly after the submittal, Lennar met with the Happy Valley Highlands Improvement Association (“HVHIA”) leadership group. At that initial meeting, Lennar presented its revised community plans, including the inclusion of the two points of vehicular ingress / egress. In addition, Lennar held a larger community meeting at the city library in May to share its latest plans.

While still concerned with having any access off of Dolores Drive, the neighbors seemingly appreciated Lennar’s efforts to diffuse any impact on Dolores Drive. At these meetings, Lennar reiterated that, although its traffic studies supported a “Dolores Drive Only” access, it wanted to work in a cooperative spirit with the neighbors.

The neighbors also brought up issues with other items, such as:

- The placement of its loading area on Dolores Drive
- Not allowing a service vehicle turnaround, thereby encouraging service vehicles to turn around at Via Robles, an impact to the area residents
- The placement of a vehicular gate at the base of the Dolores Drive access ramp, which was feared to result in vehicles backing up to Dolores Drive. This, in turn, was seen as an impediment to vehicular circulation on Dolores Drive.
- If there was to be a Dolores Drive access point, that Lennar make best efforts to have the retail / restaurant parking access off Dolores and the residential access off of Mt. Diablo.
- Concerns with the sight lines from downhill / southbound traffic coming down Dolores Drive and the want for adequate response for vehicles coming out of a Dolores Drive access point

Lennar has responded to these comments / concerns and has incorporated favorable responses to all of these items in its subsequent development plans.

Additionally, in response to neighbor comments about the day-to-day operations of Dolores Drive and the immediate vicinity, Lennar performed an additional set of traffic data collection to check for consistency with its initial findings. The additional set of data was consistent and of primary note was the finding that the project’s impact on the Dolores Drive / Mt Diablo Boulevard intersection was still considered less than significant.



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July 2014 Project Resubmittal

In a further attempt to try and work in cooperation with the neighboring group, Lennar proposed a Mt. Diablo Boulevard “Mid Block Only” full service access with its project resubmittal. The company spent months doing an additional traffic report, plus site plan and architectural changes, in order to try and make this ingress / egress scenario a part of its development plans.

Unfortunately, in consultation with City Staff, the full service was deemed infeasible from an operations standpoint, due largely to conflicting vehicle movements in the center lane of Mt. Diablo Boulevard.

October 2014 Project Resubmittal

Thus, Lennar reverted back to its plan of having two access points, one from Dolores Drive and one from Mt. Diablo Boulevard in its latest project resubmittal. However, in light of the conflicting movements brought up by Staff, Lennar’s access point at Mt Diablo Boulevard was revised to a “right in, right out” access point., thereby precluding future residents from making left turns in or out of the proposed community.

Maintaining Existing Property Access – Mt. Diablo Boulevard Neighbors

In addition to trying to work in cooperation with the wishes of the HVHIA, Lennar has also remained committed to maintaining existing vehicular patterns to its neighboring property owners to the west and to the south (Diamond K).

At the September 2013 Study Session, the neighboring apartment property owner to the west stated his concern with any driveway sharing that may be contemplated. In addition, a representative from Diamond K stated at the December 2013 Study Session that she wished that none of their existing business operations, including vehicular ingress / egress, be compromised by Lennar’s proposal. Both Lennar and commissioners acknowledged the desires of Diamond K.

Western Property Owner - Shared Access

During the course of its design period, Lennar met with the adjacent property owner to discuss the possibility of a shared access point between the two properties. An agreement proved infeasible to Lennar, as it would have to pay monies to the property owner, over and above its own land and improvement costs, in order to secure access rights with an easement. In essence, under this scenario, Lennar becomes a burden on the neighboring property owner and is being asked to compensate accordingly.

In addition to the payment, Lennar would have to accommodate providing eight dedicated parking spaces, consistent with the property owner’s existing parking allowance. Lastly, Lennar was asked to landscape the neighbor’s frontage to ensure consistent flow between the two properties. The property owner was very professional in the dialogue.

From a planning standpoint, Lennar understands the benefits of a shared access between the two properties. However, in light of the fact that suitable project ingress / egress exists by way of other alternatives, including a “Dolores Only” access point, Lennar does not feel that it should be conditioned to pay monies to secure an offsite access point.

Lastly, if Lennar was proposing to develop just the 1.17 western parcel of its proposed land assemblage (Celia’s remaining in operation), it is Lennar’s belief that it would likely be allowed the right to access



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Mt. Diablo Boulevard on its own frontage and without the need to secure offsite rights. That is, Lennar would not be allowed to be “landlocked” by denying Mt. Diablo Boulevard access.

*The End Result: “A Balanced Approach”*

At this point in time, Lennar feels as if it has exhausted all access options available to it on its property and that it has followed the direction that it was given by the Study Session Commissioners in December 2013. The company has made best efforts.

The company has spent considerable time and effort to work with all of the community stakeholders to come up with a solution to which all parties can agree. Lennar believes that it has been a responsible developer trying to be a good neighbor and a welcome guest.

The traffic studies performed by Fehr and Peers, in addition to the peer review done by TJKM, clearly state that a “Dolores Only” access will not have a significant impact on the community.

That being said, Lennar believes strongly in its current proposal. With its current proposal of having two access points, a full service access off of Dolores Drive and a limited right in, right out access at Mt. Diablo Boulevard, Lennar believes that its proposal:

- Improves an existing condition on its property by greatly consolidating the number of driveways and curb cuts. The current site condition leads to irregular movements in and out of the commercial parking lots.
- Maintains the existing ingress / egress of its neighboring property owners on Mt Diablo Boulevard.
- Reduces the amount of traffic on Dolores Drive relative to the original “Dolores Drive Only” scenario
- Addresses other design concerns brought up by the HVHIA, as previously noted

**Respectfully speaking, Lennar is asking for the ability to proceed under EITHER of the following scenarios:**

- 1) As currently proposed, with full access on Dolores Drive, plus a right in, right out access on Mt. Diablo Boulevard. Lennar does not propose the use of medians, in order not to alter neighbors’ existing access points.**
- 2) With a full service “Dolores only” access, while incorporating the other design changes urged by the HVHIA .**
- 3) With a “Mid Block only” full access on Mt Diablo Boulevard. However, this scenario would likely involve the addition of medians that could preclude service to neighboring property owners, something Lennar has been trying to avoid at all costs**

While Lennar understands some of the technical and design concerns with either of the “Mid Block” scenarios, at the upcoming meeting, the company will present some its thoughts on how these concerns can be met and how a “Mid Block” access can be attractive addition to Downtown Lafayette.

In fact, one of the advantages of the “Mid-Block” is the visibility of the driveway for restaurant and retail users for ease of parking and access. Normally the inconvenience of access and parking is the main reason for the failure of businesses and restaurants. I think all parties can agree that no one benefits from a non-viable retail presence.





WESTGATE VENTURES

Thank you for your time and consideration. We look forward to sharing our vision for the property with you at the upcoming meeting. Should you have any questions regarding our submittal, please do not hesitate to contact me at [atennant@westgateventures.net](mailto:atennant@westgateventures.net) or via my cell phone at (650) 400-5076.

Sincerely,

A handwritten signature in black ink, appearing to read 'Adam Tennant', with a long horizontal flourish extending to the right.

Adam Tennant  
WestGate Ventures

**Attachment 5**  
**Written Public Comments**

**Coe, Tony**

---

**From:** Christine Proctor <christine.proctor@gfong.com>  
**Sent:** Monday, November 17, 2014 4:09 PM  
**To:** Coe, Tony; Planning Commission  
**Cc:** 'WRL@DKSAssociates.com'; Lynn Hiden; 'info@HVHIA.com'  
**Subject:** FW: :Lennar Project - Delores / Mt Diablo Blvd.

Tony,

Please forward the following letter to each circulation Commissioners and the applicant:

---

Dear Members of the Lafayette Circulation Commission and Planning Commission:

I am the Assistant Property Manager of the Loire Court Building, 3658 Mt. Diablo Blvd (across from Dolores Street). Our tenants and I are extremely concerned with the serious traffic and congestion which will be caused by the Lennar Project.

Congestion at the intersection of Mt. Diablo Blvd. and Delores is already a problem with traffic backing up attempting to make a left hand turn from Delores onto Mt. Diablo Blvd. As our building parking lots exits onto Delores Street, we already often experience delays in the morning, around lunch time and in the late afternoon exiting from our building parking onto Delores because of the backup from the traffic signal at the intersection of Mt Diablo and Delores. To compound the traffic from tenants, visitors and customers of the project will result in gridlock.

Cordially,

Christine Proctor  
Assistant Property Manager  
Loire Court Building, Foresight, LLC  
3658 Mt. Diablo Blvd., Suite 200  
Lafayette, CA 94549

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**Coe, Tony**

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**From:** Christine Proctor <christine.proctor@gfong.com> on behalf of Gifford Fong <gifford.fong@gfong.com>  
**Sent:** Wednesday, November 12, 2014 8:33 AM  
**To:** Gifford Fong; Coe, Tony  
**Cc:** Christine Proctor  
**Subject:** :Lennar Project - Delores / Mt Diablo Blvd.

Tony,

Please forward the following letter to each circulation Commissioners and the applicant:

Thank you,

Gifford Fong

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November 11, 2014

Dear Members of the Lafayette Circulation Commission and Planning Commission:

I am the owner of the property across Dolores Street from the project (3658 Mt. Diablo Blvd) since 1996 and a resident of Lafayette since 1981. I am extremely concerned about the serious traffic and congestion which will be caused by this project.

The traffic already backs up for vehicles making a left hand turn from Delores to Mt. Diablo Blvd. During rush hours in the morning around lunch time and in the late afternoon it is already a problem to exit from our building parking onto Delores because of the backup from the signal at the intersection of Mt Diablo and Delores. To compound the traffic from tenants, visitors and customers of the project will result in gridlock and a significant safety hazard.

Further, the allocation of 14-25 parking spaces for the 66 homes, restaurant and employees of the project is unbelievably inadequate.

Delores cannot possible handle the additional traffic and represents not only a serious traffic and congestion problem but also an intolerable safety risk.

Cordially,

Gifford Fong  
Loire Court Building  
Gifford Fong Associates  
3658 Mt. Diablo Blvd, Suite 200  
Lafayette, CA 94549

March 3, 2014

Dear City Circulation Committee members:

We are writing this letter to voice our concerns regarding the current Lennar Homes re-development proposal for the NW corner of Dolores Drive and Mount Diablo Blvd. We are residents of Happy Valley Highlands, situated above the proposed Lennar project.

We realize that this project is still in the preliminary planning stages and that a formal application for design review has not as yet been presented to the City. The proposal, dated 12/2/2013, was presented to the City at a joint study session on 12/16/2013 by the Planning Commission and the Design Review Commission. Unfortunately, we were not directly notified that this meeting was scheduled, so we were unable to attend and offer our comments directly to the study session.

We have not been able to find any minutes for that meeting on the city's web-site, so we don't know what concerns or issues were raised during the session, and whether the Commissions are addressing the concerns which are relevant to us.

At this time, we believe our most pressing concerns are with traffic and safety issues. The current Lennar proposal calls for 70 condominium homes, with parking for approximately 165 cars. They all will enter and exit on Dolores Drive, just a few feet North of what is already a very confusing and dangerous intersection (Dolores/Mt. Diablo Blvd./Mountain View).

Delivery trucks already routinely double park on Dolores (just North of the intersection) causing unsafe driving conditions; any additional residential and commercial deliveries to this area will significantly aggravate this problem.

We also note that the Lennar development offers no safe play areas for young children, and our concern is that they will be tempted to play, unsupervised, in the street. Traffic descending the hill on Via Roble approaches the planned development after a "blind" right curve (under the BART viaduct) so drivers will have insufficient time to detect and avoid children or other hazards.

We believe there are many traffic and safety issues with this project, and since the only entry/exit for Quail Ridge Road residents is Via Roble/Dolores Drive, we ask that you address our issues as part of your overall evaluation of the Lennar proposal. We hope the Commission shares our concern and will work to ensure that none of our residents, their children or their visitors, are placed in jeopardy.

Thank you for your attention to this matter,

Respectfully,

**Ed and Nancy Lee Bradley, 3802 Quail Ridge Road, 925-385-0009**

**Scott and Andrea Christie, 3796 Quail Ridge Road, 925-284-4858**

**Allison Curletto, 3803 Quail Ridge Road, 415-577-3039**

**Eve Goulding, 3811 Quail Ridge Road, 925-283-0782**

**Dick and Albie Kostyrka, 3797 Quail Ridge Road, 925-283-1625**

**Bob and Lois O'Connor, 3791 Quail Ridge Road, 925-284-8665**

**Eve Goulding, 3811 Quail Ridge Road, 925-283-0782**

## Greenblat, Leah

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**From:** Donald Thielke <donthielke@gmail.com>  
**Sent:** Sunday, March 2, 2014 2:45 PM  
**To:** Greenblat, Leah  
**Subject:** Pending Application of LENNAR HOMES at intersection of Mt. Diablo Blvd. and Dolores Drive

Dear Staff, Commissioners and in particular Commissioners Carpenter and Hiden:

My name is Don Thielke, residing at 3870 Quail Ridge Rd., the upper terminus of Via Roble with access from Dolores Drive. I must share with you my personal concern and collective thoughts from a majority of my neighbors with respect to the traffic hazards, flow and control of the multiple vehicular movements that will be generated by this application. Recent study sessions with Lafayette City Council, Planning Commission Design Review Commission and Lennar Homes with public comment included, precipitated a drastic re-work of the original 47 unit proposal with two entry/exits with grade level parking to the new and improved version of 70 units with underground parking, 165 stalls, ALL Entry and Exit on Dolores Drive! The existing intersection already has serious loading at high commute hours with the more impatient drivers making a transition through Celia's parking lot to access Mt. Diablo Blvd. Westbound. The cross traffic does not flow at 90 degrees due to the offset of Dolores with Mt. Diablo and Mtn. View Drive. Dependent upon the traffic signal timing, with 3-4 cars waiting to make a left turn Eastbound, when the signal changes from green to red, I have seen drivers STOP mid-turn and await the next signal change thus blocking flow from Dolores AND Mt. Diablo.

In addition, difficulty already exists in Happy Valley Plaza due to the high volume of traffic at Trader Joe's/Post Office/CVS Drugs and Diablo Foods.

Any development of multiple units at this location is going to negatively impact and adversely affect the Lafayette Business community and the 166 homes to the North using Dolores Drive/Via Roble as their avenue of inlet and egress. Lafayette stresses the attributes of Green Hills, Good Schools and semi-rural advantages and vistas, Do not allow unbridled high density housing with related infrastructure to seriously modify those qualities on the West end of Lafayette.

Donald F. Thielke/Phyllis A. Thielke

## Greenblat, Leah

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**From:** kevinburns3@comcast.net  
**Sent:** Monday, March 3, 2014 6:31 PM  
**To:** Greenblat, Leah  
**Subject:** Against Lennar poor proposal on Mt Diablo

Hi Just so you know Lennar homes need to minimize or downsize drastically so our lifestyles don't get worse. Traffic and safety issues are major concerns. Lennar needs to show Much more empathy for our neighborhood.. Schools are full too. What is this Large corporate company thinking about besides huge profits .  
Get Real LENNAR .. Kevin Burns Homeowner Via Roble



## Greenblat, Leah

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**From:** Samir.Shah@hsd.cccounty.us  
**Sent:** Tuesday, March 4, 2014 4:06 PM  
**To:** Greenblat, Leah  
**Cc:** dandlhidden@comcast.net; rachaelanna85@sbcglobal.net  
**Subject:** Planned Lennar Development at Dolores

Dear Circulation Commission-

I'm sending you this letter/email to share my concern regarding the planned 70 unit development at the corner of Dolores and Mt. Diablo Blvd.

As a resident of the "Happy Valley Highlands" community living on Via Alta I am concerned about the impact of an additional 165 cars using Dolores as entry into the Lennar community since Dolores Avenue is our only entrance/exit from our residential neighborhood. This intersection of Mt. Diablo and Dolores is already heavily used and a tricky spot due to the non-congruous intersection.

My specific concerns are as follows:

1. Having only one entrance to the new development come from Dolores will create traffic jams both on Dolores and Mt. Diablo. Cars entering Dolores from Mt. Diablo could cause a backup on Mt. Diablo since the entry into the subterranean parking structure would slow movement up and down Dolores. Additionally, for residents coming down Dolores there will be a considerable back-up at the signal to allow vehicles exiting the parking structure. This intersection during morning and evening hours will make getting to school, work or home very difficult for everyone in the neighborhood. Additionally, creating a bottleneck at this intersection could be a safety issue for emergency access to the hill neighborhood. I think it is imperative that the new development have an entrance and exit directly into the development on the west side of the lot directly from Mt. Diablo Blvd to isolate the new traffic and limit bottlenecks at the signal intersection. Additionally, I believe jamming 70 units into this small space unnecessarily creates worsening of an already difficult traffic situation by increasing car density substantially.
2. Currently the parking lot on this parcel is used for Delivery vehicles, Trader Joe's employee parking and parking for the Celia's restaurant. Eliminating this parking lot and having only 14 visitor spots (this is what I believe the plan calls for) will mean delivery vehicles will double park either on Dolores or Mt. Diablo and affect flow and safety. Additionally, there are not enough visitor parking spots created in this development to allow for the restaurant space, retail space, visitors, etc. for a development of this size. We already have too few parking spaces in the Trader Joe's lot so this under supply of parking in the Lennar development will increase the traffic of drivers searching for parking spots in the West end area.
3. When the original proposal came to design review it had approximately 40 units and direct access to the development from the west end of the parcel from Mt. Diablo (not only Dolores), why did the second and "final" plan in response to the city's comments increase the number of units and reduce access?

Possible solutions as follows:

1. Create entry for the development directly from Mt. Diablo on the West end of the parcel instead of Dolores Ave.
2. Significantly reduce the number of residential units being built.
3. Widen Dolores Ave. to have 2 lanes in each direction to allow for dedicated turn lanes.

4. Increase visitor and shop parking in the subterranean parking structure.

On a personal level, as a Physician that takes emergency and trauma call for our community I picked this neighborhood to live in because it afforded my family easy access to town, good schools, and most importantly for me easy access to John Muir Hospital and Contra Costa Regional Medical Center from the West end of town when the east end is plugged up with traffic. I am concerned that this ease of access is going to be severely negatively impacted and potentially require my family to move out of this neighborhood. We really don't want to leave so we hope that some compromise to the Dolores Avenue access and number of units/cars planned for this development can be reached.

I appreciate your consideration in this matter. I can be reached at 925-932-1251.

Regards,

Samir B. Shah, M.D., F.A.C.S.  
Head, Department of Surgery  
Contra Costa Health Services

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