

3.3-1 TRAFFIC IMPACT ANALYSIS



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**OAK CREEK (TENTATIVE TRACT MAP NO. 36388)
(PA 11-0261)
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF WILDOMAR, CALIFORNIA**

May 21, 2012 (Revised)
April 17, 2012 (Revised)
March 22, 2012 (Revised)
January 25, 2012

JN:08055-07 Report
AE:CH:rd

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OAK CREEK (TENTATIVE TRACT MAP No. 36388) (PA 11-0261)
TRAFFIC IMPACT ANALYSIS
CITY OF WILDOMAR, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Oak Creek (Tentative Tract Map No. 36388) development (Project), which is generally located between the Farm Road and Sunset Avenue and on either side of Bundy Canyon Road in the City of Wildomar as shown on Exhibit 1-1.

The purpose of this traffic impact analysis is to evaluate the potential impacts to traffic and circulation associated with the development of the proposed Project, and recommend improvements to mitigate impacts considered significant in comparison to established regulatory thresholds. This TIA has been prepared in accordance with the approved Project Traffic Study Scoping agreement and consultation with City of Wildomar Engineering staff. The approved Project Traffic Study Scoping agreement is provided in Appendix “1.1” of this TIA.

1.1 PROJECT OVERVIEW

The City of Wildomar planning case PA 11-0261 for TTM No. 36388 proposes to amend Specific Plan No. 116 (Amendment 4) to allow 275 single family detached dwelling units and a 3.5 acre neighborhood commercial center (14,469 square foot pharmacy with drive-thru window, 2,550 square feet of specialty retail uses and an 8 vehicle fueling position gas station with convenience market and car wash) on 151.23 acres. Zoning for the property is proposed to change from Single Family Residential (R-1 – 7,200 square foot minimum) to Planned Residential Development (R-4). All Project access points along Bundy Canyon Road have been assumed to allow full access, with the exception of the following:

- “I” Street on Bundy Canyon Road – Right-In/Right-Out/Left-In Access Only (No Left Turns Out)
- Commercial Access on Bundy Canyon Road – Right-In/Right-Out Access Only (No Left Turns In/Out)

Due to the proposed intersection spacing between The Farm Road to Harvest Way-West on Bundy Canyon Road, an alternative analysis has been conducted which assumes access restrictions on the intersection of Harvest Way-West at Bundy Canyon Road. In the event that a traffic signal is not installed at the intersection of Harvest Way-West at Bundy Canyon Road and full access could not be accommodated, the intersection of Harvest Way-West at Bundy Canyon Road has also been analyzed assuming access would be restricted to right-in/right-out/left-in access only (no left turns out). This access alternative would affect Project travel patterns at The Farm Road and at Harvest Way-West on

EXHIBIT 1-1 SITE PLAN



LEGEND:

- FULL** = FULL ACCESS
- RIRO-LI** = RIGHT-IN/RIGHT-OUT/LEFT-IN ACCESS
- RIRO** = RIGHT-IN/RIGHT-OUT ACCESS



Bundy Canyon Road.

It should also be noted that a specific development proposal for the retail component is not proposed as part of this Project. The aforementioned uses (14,469 square foot pharmacy with drive-thru window, 2,550 square feet of specialty retail uses and an 8 vehicle fueling position gas station with convenience market and car wash) represent a likely scenario that could be developed in light of the site's location and physical constraints. The trip generation associated with a specific commercial design with detailed land use assumptions was deemed more conservative from a trip generation perspective as compared to the Institute of Transportation of Engineers (ITE) general commercial (ITE 820) land use category. As such, the uses defined as part of the proposed Project would overstate as opposed to understate the traffic generated by any future development that could potentially occur.

For the purposes of this traffic impact analysis, it is assumed that the Project will be constructed and at full occupancy by 2015.

Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 8th Edition, 2008. The Project is estimated to generate a net total of approximately 3,933 net trip-ends per day on a typical weekday with approximately 284 net AM peak hour trips and 410 net PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this report.

1.2 ANALYSIS SCENARIOS

For the purpose of this traffic study, potential impacts to traffic and circulation will be assessed for each of the following conditions:

- Existing (2011) Conditions (1 scenario)
- Existing plus Project Conditions (1 scenario)
- Opening Year (2015), without and with Project (2 scenarios) – ambient growth and cumulative development projects
- Horizon Year (2035), without and with Project (2 scenarios)

1.2.1 EXISTING (2011)

Information for existing year (2011) is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.2.2 EXISTING PLUS PROJECT

The existing year (2011) plus Project (E+P) analysis determines direct project-related traffic impacts that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon existing conditions. Based on discussions with City staff, project impacts have been determined through a comparison of the existing (2011) versus E+P traffic conditions, Opening Year (2015) without versus with Project conditions and Horizon Year (2035) without versus with Project conditions. As such, the E+P scenario has been provided to assess direct Project impacts and to identify the associated Project mitigation measures.

1.2.3 OPENING YEAR (2015) WITHOUT AND WITH PROJECT CONDITIONS

The Opening Year (2015) without and with Project conditions analyses will be utilized to determine both direct project-related and cumulative traffic impacts. To account for background traffic, forty-three (43) other known cumulative development projects in the study area were included in addition to 8.24% of ambient growth. This comprehensive list was compiled from information provided by the City of Wildomar and City of Menifee in December 2011 in an effort to identify pending development projects and development applications on file with adjacent jurisdictions.

1.2.4 HORIZON YEAR (2035) WITHOUT AND WITH PROJECT CONDITIONS

Traffic projections for Horizon Year (2035) with Project conditions were derived from the Riverside County Transportation Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing conditions and Horizon Year (2035) conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with Opening Year (2015) with Project peak hour turning movement volumes. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2035) peak hour forecasts. Lastly, Horizon Year (2035) turning volumes were compared to Opening Year (2015) with Project volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between Opening Year (2015) with Project and Horizon Year (2035) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between existing and Opening Year (2015) with Project traffic conditions.

The initial estimate of the future Horizon Year (2035) with Project peak hour turning movements was then reviewed by Urban Crossroads for reasonableness at intersections where model results showed unreasonable turning movements. The initial raw model estimates were adjusted to achieve flow

conservation, reasonable growth, and reasonable diversion between parallel routes.

Post-processing worksheets and final turning volumes for Horizon Year (2035) without and with Project traffic conditions are provided in Appendix “1.2”.

1.3 STUDY AREA

To ensure that this TIA satisfies the needs of the City of Wildomar and complies with the County’s TIA preparation guidelines, Urban Crossroads, Inc. prepared a Project Traffic Study Scoping Agreement for review by City staff prior to the preparation of this TIA. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The Agreement approved by the City of Wildomar is included in Appendix “1.1”.

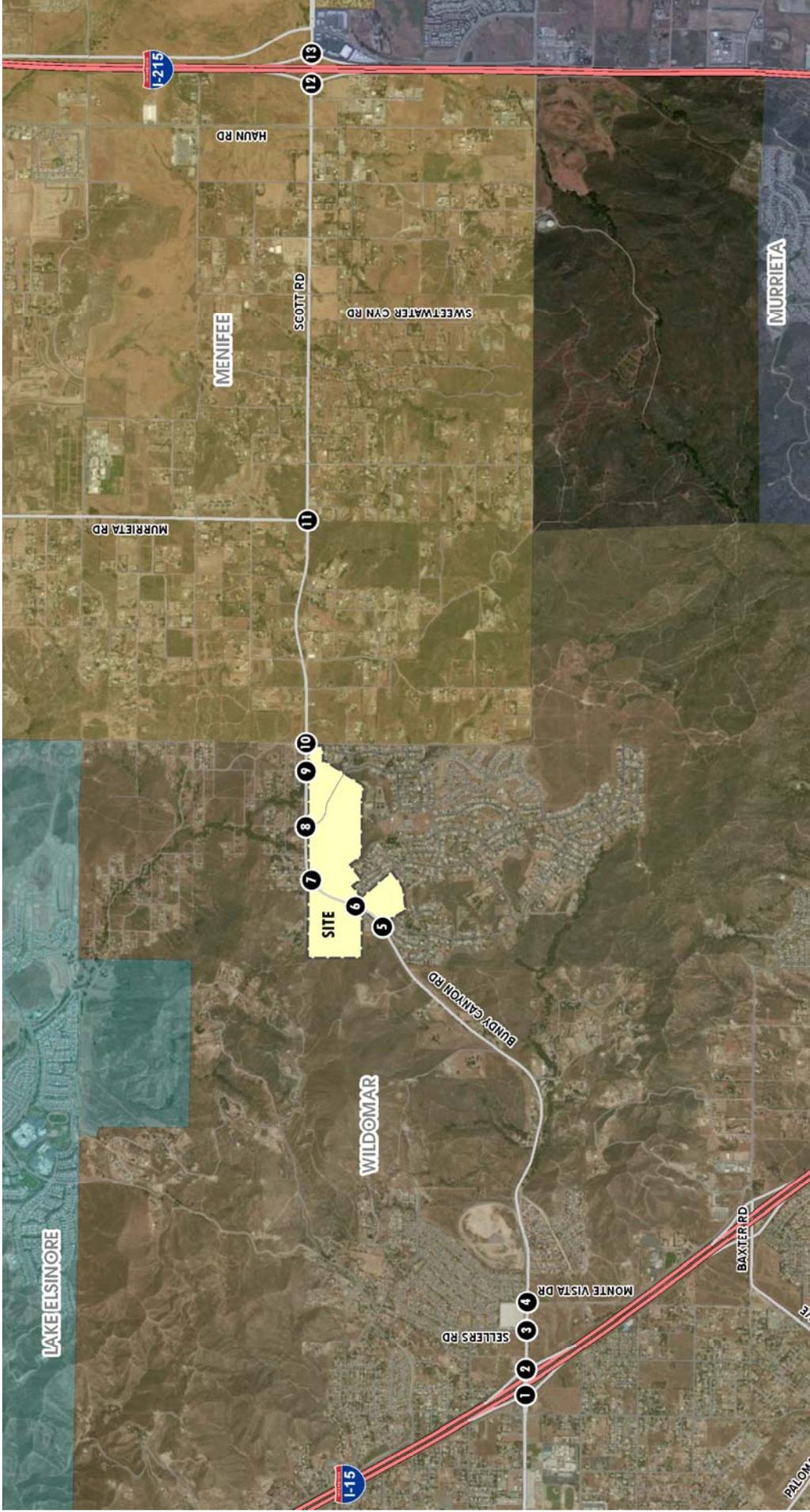
The following thirteen (13) study area intersection locations shown on Exhibit 1-2 and listed on Table 1-1 were selected for this TIA based on the following: (1) County TIA guidelines that requires analysis of intersection locations in which a proposed project is anticipated to contribute 50 or more peak-hour trips and (2) input from the City of Wildomar.

Table 1-1 Intersection Analysis Locations

ID	Intersection Location	Location
1	I-15 Southbound Ramps / Bundy Canyon Road	Caltrans
2	I-15 Northbound Ramps / Bundy Canyon Road	Caltrans
3	Sellers Road / Bundy Canyon Road	Wildomar
4	Monte Vista Drive / Bundy Canyon Road	Wildomar
5	The Farm Road / Bundy Canyon Road	Wildomar
6	Harvest Way-West / Bundy Canyon Road	Wildomar
7	<i>“I” Street / Bundy Canyon Road – Future Intersection</i>	<i>Wildomar</i>
8	Harvest Way-East / Bundy Canyon Road	Wildomar
9	<i>Commercial Access / Bundy Canyon Road – Future Intersection</i>	<i>Wildomar</i>
10	Sunset Avenue / Bundy Canyon Road	Wildomar/Menifee
11	Murrieta Road / Scott Road	Menifee
12	I-215 Southbound Ramps / Scott Road	Caltrans
13	I-215 Northbound Ramps / Scott Road	Caltrans

It should be pointed out that the “50 peak hour trip” criterion utilized by the City of Wildomar and the County of Riverside is consistent with the methodology employed by other jurisdictions throughout Southern California, and generally represents a threshold of trips at which an intersection would have the potential to be impacted. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a valid and proven way to establish a study area.

EXHIBIT 1-2
LOCATION MAP



1.4 SUMMARY OF IMPACTS

The following intersections were found to be impacted due to the addition of Project traffic for all scenarios:

ID	Intersection Location	Location
3	Sellers Road / Bundy Canyon Road	Wildomar
4	Monte Vista Drive / Bundy Canyon Road	Wildomar
6	Harvest Way-West / Bundy Canyon Road	Wildomar
8	Harvest Way-East / Bundy Canyon Road	Wildomar
10	Sunset Avenue / Bundy Canyon Road	Wildomar/Menifee

Whereas, the following intersections were found to be cumulatively impacted:

ID	Intersection Location	Location
11	Murrieta Road / Scott Road	Menifee
12	I-215 Southbound Ramps / Scott Road	Caltrans
13	I-215 Northbound Ramps / Scott Road	Caltrans

Recommended improvements to reduce cumulative impacts to less-than-significant are discussed subsequently in Section 1.6 *Summary of Cumulative Impacts and Recommended Improvements* and in further detail in Section 6.0 *Opening Year (2015) Traffic Analysis* and Section 7.0 *Horizon Year (2035) Traffic Analysis* of this report.

1.5 SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

This section provides a summary of direct project impacts and associated mitigation measures. Section 2.0 *Methodologies* provides information on the methodologies used in the analysis and Section 5.0 *Existing Plus Project Traffic Analysis* includes the detailed analysis. The recommended mitigation measures necessary to reduce direct project-related impacts under E+P traffic conditions to “less-than-significant” are discussed below.

Impact 1.1 – Sellers Road / Bundy Canyon Road (#3) – The addition of Project traffic would result in an unacceptable level of service (LOS) during one or both peak hours. The impact is considered “**significant**”.

Mitigation Measure 1.1 – The following improvement is necessary to reduce the Project’s direct impact to “**less-than-significant**”:

- Install a traffic signal.

Impact 2.1 – Monte Vista Drive / Bundy Canyon Road (#4) – The addition of Project traffic would result in an unacceptable LOS during one or both peak hours. The impact is considered “**significant**”.

Mitigation Measure 2.1 – The following improvement is necessary to reduce the Project’s direct impact to “**less-than-significant**”:

- Install a traffic signal.

Impact 3.1 – Harvest Way-West / Bundy Canyon Road (#6) – The addition of Project traffic would result in an unacceptable LOS during one or both peak hours. The impact is considered “**significant**”.

Mitigation Measure 3.1 – The following improvements are necessary to reduce the Project’s direct impact to “**less-than-significant**”:

- Install a traffic signal.
- Northbound: Stripe the defacto right turn lane as a shared through-right turn lane.
- Southbound: Construct a left turn lane and a shared through-right turn lane.
- Eastbound: Construct a left turn lane and two additional through lanes.
- Westbound: Construct two additional through lanes.

Impact 4.1 – Harvest Way-East / Bundy Canyon Road (#8) – The addition of Project traffic would result in an unacceptable LOS during one or both peak hours. The impact is considered “**significant**”.

Mitigation Measure 4.1 – The following improvements are necessary to reduce the Project’s direct impact to “**less-than-significant**”:

- Install a traffic signal.
- Eastbound: Construct a left turn lane and two additional through lanes.
- Westbound: Construct a left turn lane.

Impact 5.1 – Sunset Avenue / Bundy Canyon Road (#10) – The addition of Project traffic would result in an unacceptable LOS during one or both peak hours. The impact is considered “**significant**”.

Mitigation Measure 5.1 – The following improvements are necessary to reduce the Project’s direct impact to “**less-than-significant**”:

- Install a traffic signal.
- Eastbound: Construct a left turn lane and two additional through lanes.
- Westbound: Construct a left turn lane.

Impact 6.1 – “I” Street / Bundy Canyon Road (#7) – The addition of Project traffic would result in an unacceptable LOS during one or both peak hours. The impact is considered **“significant”**.

Mitigation Measure 6.1 – The following improvements are necessary to reduce the Project’s direct impact to **“less-than-significant”**:

- Install a traffic signal.
- Northbound: Construct a shared left-through-right turn lane.
- Southbound: Construct a shared left-through-right turn lane.
- Eastbound: Construct a left turn lane and two through lanes.
- Westbound: Construct a left turn lane and two through lanes.

The recommended mitigation measures to reduce all of the Project’s direct impacts to **“less-than-significant”** are illustrated on Exhibit 1-3 in addition to the site-adjacent project design features shown on the Project’s Parcel map that contribute to reducing impacts. The recommended improvements are shown in bold and are recommended in addition to the existing lanes shown subsequently on Exhibit 3-1.

1.6 SUMMARY OF CUMULATIVE IMPACTS AND RECOMMENDED IMPROVEMENTS

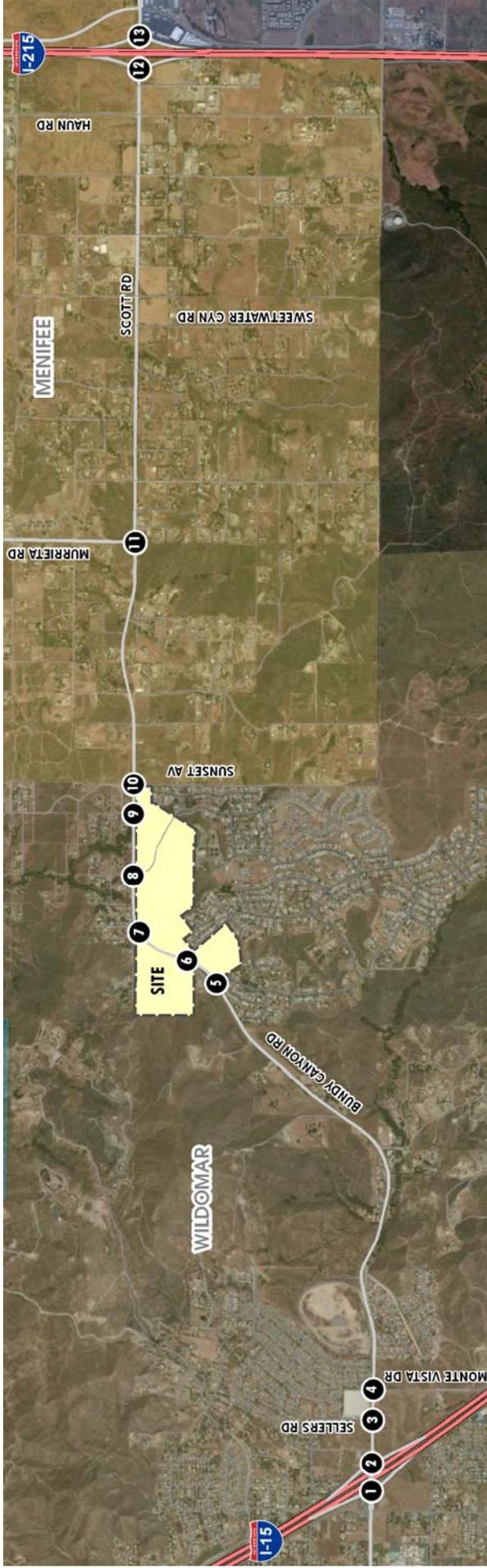
A detailed discussion of the cumulatively impacted study area intersections and recommended improvements to reduce cumulative impacts to less-than-significant are described in detail within Section 6.0 *Opening Year (2015) Traffic Analysis* of this report. Cumulative impacts are deficiencies in the transportation network’s LOS that would not be directly caused by the Project. The Project would, however, contribute traffic to these deficient facilities along with traffic associated with local and regional growth, resulting in a cumulative impact. A summary of the recommended mitigation measures necessary to reduce cumulative impacts to “less-than-significant” are discussed below.

Murrieta Road / Scott Road (#11) – It is anticipated that this intersection would operate at unacceptable LOS without and with the Project. As such, this cumulative impact is considered **“significant”**. The following improvements are necessary to maintain acceptable peak hour operations, thus reducing the cumulative impact to **“less-than-significant”**:

- Install a traffic signal.
- Southbound: Re-stripe the shared left-right turn lane as a right turn lane and construct two left turn lanes.
- Eastbound: Construct a left turn lane and an additional through lane.
- Westbound: Construct an additional through lane and a dedicated right turn lane.

RECOMMENDED PROJECT MITIGATION MEASURES

EXHIBIT 1-3



1	I-15 SB Ramps & Bundy Canyon Rd.	No Improvements							
2	I-15 NB Ramps & Bundy Canyon Rd.	No Improvements							
3	Sellers Rd. & Bundy Canyon Rd.								
4	Monte Vista Dr. & Bundy Canyon Rd.								
5	The Farm Rd. & Bundy Canyon Rd.	No Improvements							
6	Harvest Way West & Bundy Canyon Rd.								
7	"I" St. & Bundy Canyon Rd.								
8	Harvest Way East & Bundy Canyon Rd.								
9	Commercial Access & Bundy Canyon Rd.								
10	Sunset Av. & Bundy Canyon Rd.								
11	Murreleta Rd. & Scott Rd.	No Improvements							
12	I-215 SB Ramps & Scott Rd.	No Improvements							
13	I-215 NB Ramps & Scott Rd.	No Improvements							

LEGEND:

- = TRAFFIC SIGNAL
- = ALL WAY STOP
- = STOP SIGN
- = EXISTING LANE
- = CURRENT PHASE IMPROVEMENT



I-215 Southbound Ramps / Scott Road (#12) – It is anticipated that this intersection would operate at unacceptable LOS without and with the Project. As such, this cumulative impact is considered ***“significant”***. The following improvements are necessary to maintain acceptable peak hour operations, thus reducing the cumulative impact to ***“less-than-significant”***:

- Southbound: Re-stripe the shared left-through lane as a left turn lane and construct a second left turn lane and second right turn lane.
- Eastbound: Construct three additional through lanes.
- Westbound: Eliminate the left turn lane and construct two additional through lanes and a right turn lane.
- It should be noted that these improvements are consistent with the planned I-215 Freeway at Scott Road interchange improvements.

I-215 Northbound Ramps / Scott Road (#13) – It is anticipated that this intersection would operate at unacceptable LOS without and with the Project. As such, this cumulative impact is considered ***“significant”***. The following improvements are necessary to maintain acceptable peak hour operations, thus reducing the cumulative impact to ***“less-than-significant”***:

- Northbound: Construct a second right turn lane and re-stripe the shared left-through lane as a through lane.
- Southbound: Construct two right turn lanes.
- Eastbound: Construct a second left turn lane and two additional through lanes.
- Westbound: Construct two additional through lanes and a shared through-right turn lane.
- It should be noted that these improvements are consistent with the planned I-215 Freeway at Scott Road interchange improvements.

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2.0 METHODOLOGIES

This section documents the methodologies and assumptions used to perform this TIA.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM) (Transportation Research Board 2000) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in December 2010. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

Traffic counts were originally conducted in December 2010. In an effort to more accurately reflect December 2011 conditions, the count data has been adjusted with a background growth of one (1) percent. The volume development worksheets have been provided in Appendix "3.1" of this report.

2.2.1 SIGNALIZED INTERSECTIONS

Consistent with Riverside County traffic analysis guidelines, signalized intersection operations analysis based on the methodology described in Chapter 16 of the (HCM). Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in

Table 2-1. All signalized study area intersections within the study area have been analyzed using the software package Traffix (Version 8.0 R1, 2008).

Table 2-1 Signalized Intersection LOS Thresholds

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
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.	35.01 to 55.00
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.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Source: HCM 2000, Chapter 16

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15 minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. $PHF = \frac{[Hourly Volume]}{[4 \times Peak\ 15\text{-minute\ Flow\ Rate}]}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for existing (2011) and E+P traffic conditions. A PHF of 0.95 (or higher depending on the existing PHF) has been utilized for Opening Year (2015) without and with Project traffic conditions. Lastly, a PHF of 1.00 has been used for all intersections for Horizon Year (2035) without and with Project traffic conditions.

2.2.2 UNSIGNALIZED INTERSECTIONS

The operations of unsignalized intersections have been evaluated using the methodology described in Chapter 17 of the HCM (also consistent with Riverside County traffic study guidelines). The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

Table 2-2 Unsignalized Intersection LOS Thresholds

Level of Service	Description	Average Control Per Vehicle (Seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

Source: HCM 2000, Chapter 17

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole. All unsignalized study area intersections have utilized the Traffix software (Version 8.0 R1, 2008).

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*, as amended by the *MUTCD 2010 California Supplement*, for all study area intersections.

The signal warrant criteria for existing (2011) conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Both the FHWA's *MUTCD* and the *MUTCD 2010 California Supplement* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Warrant 3 criteria are basically identical for both the FHWA's *MUTCD* and the *MUTCD 2010 California Supplement*. Warrant 3 is appropriate to use for this TIA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating at or above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Future unsignalized intersections have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-

based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for all of the study area intersections, with the exception of the following locations which are either currently signalized or is proposed to have restricted access:

ID	Intersection Location	Location
1	I-15 Southbound Ramps / Bundy Canyon Road	Caltrans
2	I-15 Northbound Ramps / Bundy Canyon Road	Caltrans
5	The Farm Road / Bundy Canyon Road	Wildomar
7	"I" Street / Bundy Canyon Road – Proposed RIRO-LI	Wildomar
9	Commercial Access / Bundy Canyon Road – Proposed RIRO	Wildomar
12	I-215 Southbound Ramps / Scott Road	Caltrans
13	I-215 Northbound Ramps / Scott Road	Caltrans

The existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3.0 *Area Conditions* of this report. The traffic signal warrant analysis for future conditions is presented in Section 5.0 *Existing plus Project Traffic Analysis*, Section 6.0 *Opening Year (2015) Traffic Analysis* and Section 7.0 *Horizon Year (2035) Traffic Analysis* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above LOS "C" or operate below LOS "C" and not meet a signal warrant.

2.4 LOS CRITERIA

As the City of Wildomar does not currently have an adopted General Plan, the definition of an intersection deficiency within the City of Wildomar is based on the County of Riverside General Plan Circulation Element. Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target level of service (LOS): LOS "C" on all County-maintained roads and conventional State Highways. As an exception, LOS "D" may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS "E" may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. As such, LOS "D" has been considered acceptable at any intersection within the County of Riverside.

The City of Menifee has established a LOS standard of “D”. Therefore, LOS “D” is acceptable at any intersection wholly or partially within the City of Menifee.

Regarding Caltrans’ ramp to arterial intersections and other Caltrans maintained facilities, the published Caltrans traffic study guidelines (December 2002) states the following:

“Caltrans endeavors to maintain a target LOS at the transition between LOS “C” and LOS “D” on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS.”

As such, LOS “D” is considered to be the limit of acceptable traffic operations during the peak hour at intersections maintained by Caltrans.

2.5 THRESHOLDS OF SIGNIFICANCE

This section outlines the significance criteria used in this analysis relating to roadway system impacts. The Criteria are based on California Environmental Quality Act (CEQA).

According to CEQA guidelines, a project is considered to cause a significant impact to the transportation system if it:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roadway or highways.
- Conflicts with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Based on Riverside County traffic study guidelines, a “significant” impact occurs when the addition of project traffic as defined by any “with Project” scenario causes an intersection that operates at an acceptable level of service under the “without Project” traffic condition (i.e., LOS “D” or better) to fall to an unacceptable level of service (i.e., LOS “E” or “F”). Therefore, the following criteria have been utilized to identify significant project-related traffic impacts:

- If an intersection is projected to operate at an acceptable level of service (i.e., LOS “D” or better) without the Project and the addition of Project traffic, as measured by 50 or more peak hour trips, is expected to cause the intersection to operate at an unacceptable level of service (i.e., LOS “E” or “F”), the impact is considered significant.

In addition, for intersections that reside within the jurisdictional authority of the City of Wildomar, the City requires that an additional test be performed for intersection locations found to operate at a deficient LOS (i.e., LOS “E” or “F”) under pre-project conditions:

- If an intersection is projected to operate at an unacceptable level of service (i.e., LOS “E” or “F”) without the project, and the addition of project traffic (as measured by 50 peak hour trips or more) results in an increase of more than five (5.0) seconds to the peak hour delay, the impact is considered significant. Mitigation is then required to bring the “with Project” scenario delay to within five (5.0) seconds of the pre-Project condition. It should be noted that this criteria applies only to those intersections within the City of Wildomar.

The City of Wildomar, City of Menifee nor Caltrans identifies specialized significance criteria within their traffic study guidelines.

A significant cumulative impact has been identified when an intersection is projected to operate below the requisite level of service standard under pre-project conditions AND the Project’s measurable increase in traffic, as defined by 50 or more peak hour trips, contributes to the deficiency. Cumulative traffic impacts are created as a result of a combination of the proposed Project together with other future developments contributing to the overall traffic impacts requiring additional improvements to maintain acceptable level of service operations with or without the Project. For the purposes of this analysis, mitigation measures have been recommended for cumulatively impacted intersections to bring the “with Project” delay and associated level of service back to acceptable peak hour operations at intersections located within the City of Menifee.

A Project’s contribution to a cumulatively significant impact can be reduced to less-than-significant if the Project is required to implement or fund its fair share of improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

3.0 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Wildomar General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrants.

The AM peak hour traffic volumes were determined by counting traffic volumes in the two hour period between 7:00 and 9:00 AM in December 2010. Similarly, the PM peak hour traffic volumes were identified by counting traffic volumes in the two hour period from 4:00 to 6:00 PM in December 2010. These counts are representative of typical weekday peak hour traffic conditions within the study area. The December 2010 count data have been adjusted with a background growth of one (1) percent to represent December 2011 conditions. The volume development worksheets have been provided in Appendix “3.1” of this report.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the Traffic Study Scoping Agreement (Appendix “1.1”) and discussion with the City of Wildomar staff, the study area includes a total of 13 existing and future intersections as shown on Exhibit 1-2. Of these 13 intersections, the existing study area circulation network includes eleven (11) intersections analysis locations shown on Table 1-1. The other two (2) intersections in the study area are future planned intersections that do not currently exist.

Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF WILDOMAR GENERAL PLAN CIRCULATION ELEMENT

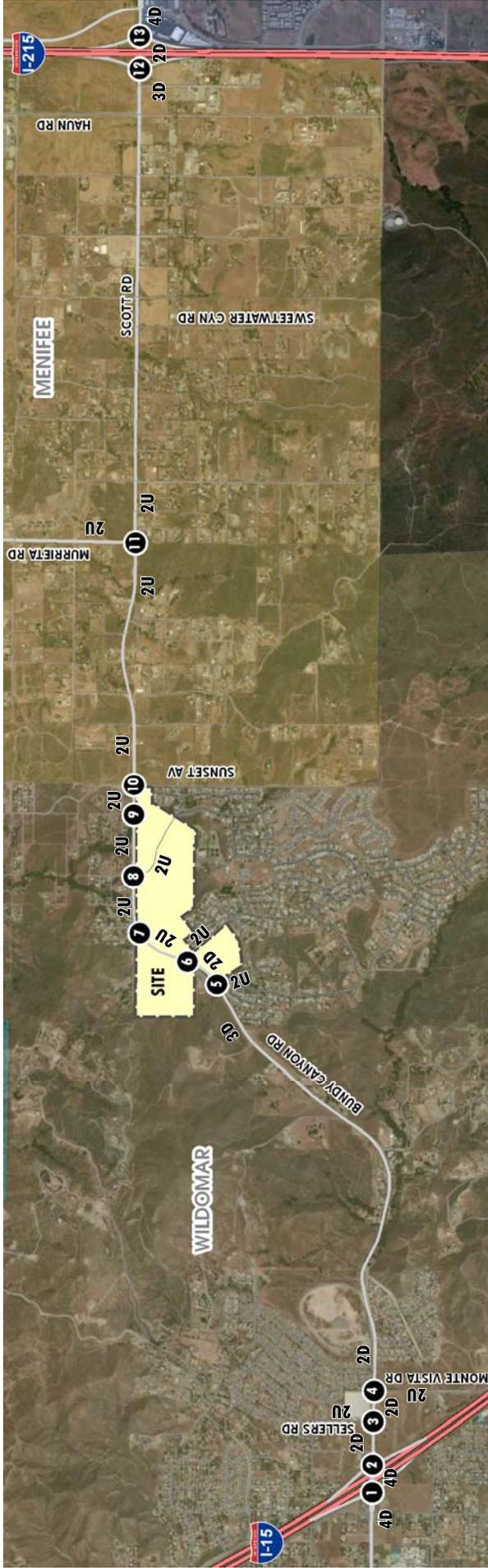
Exhibit 3-2 shows the City of Wildomar General Plan Circulation Element, and Exhibit 3-3 illustrates the City of Wildomar General Plan roadway cross-sections. It is our understanding that the City of Wildomar has adopted the County of Riverside General Plan roadway cross-sections.

3.3 TRANSIT SERVICE

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region near the City of Wildomar, with bus service along Mission Trail immediately west of the I-15 Freeway and along Scott Road immediately east of the I-215 Freeway through various routes (Routes 7, 8 and 61). The existing bus routes provided in the area by RTA are shown on Exhibit 3-4. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

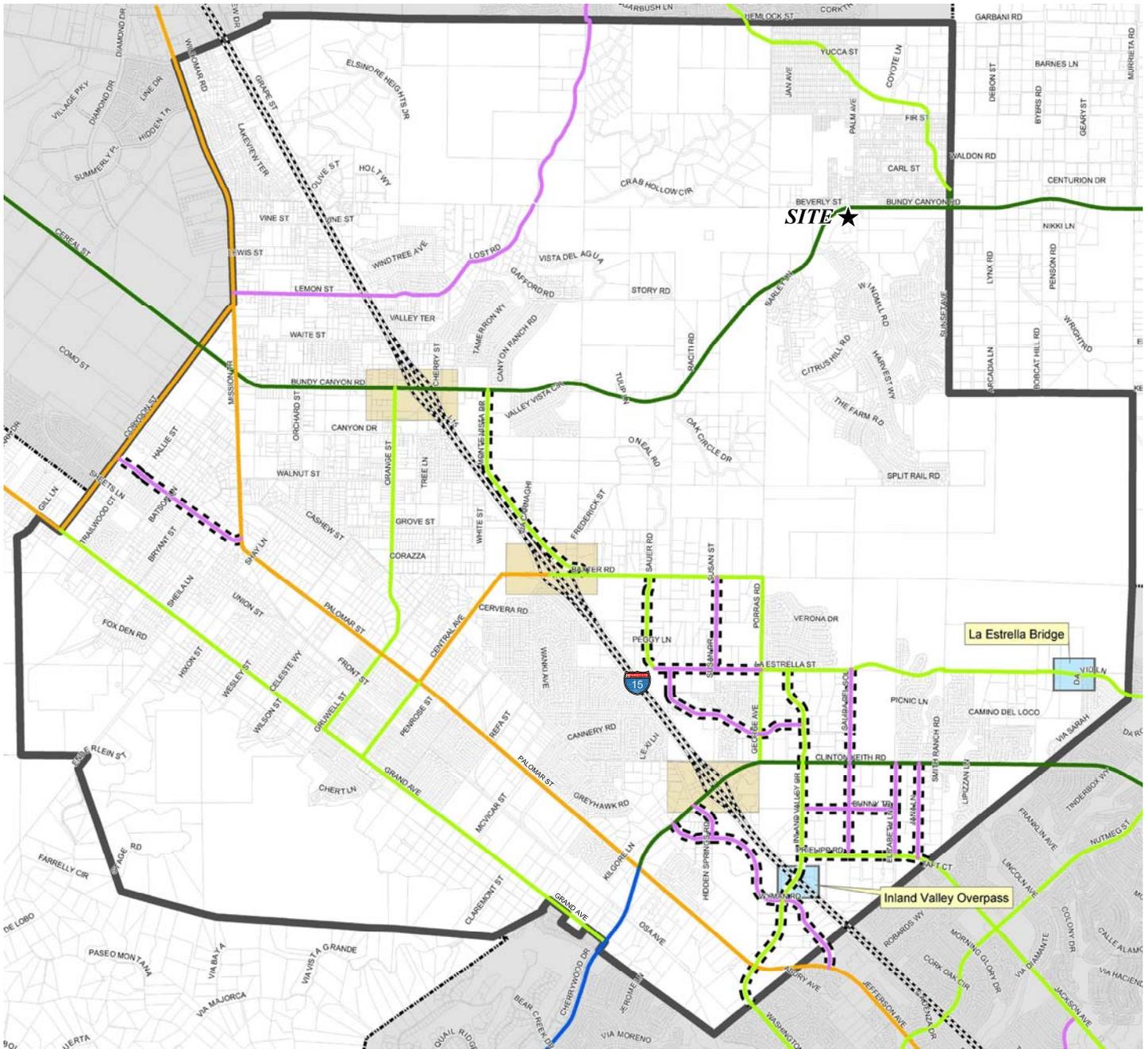
EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

EXHIBIT 3-1



1 I-15 SB Ramps & Bundy Canyon Rd.		2 I-15 NB Ramps & Bundy Canyon Rd.		3 Sellers Rd. & Bundy Canyon Rd.		4 Monte Vista Dr. & Bundy Canyon Rd.		5 The Farm Rd. & Bundy Canyon Rd.		6 Harvest Way West & Bundy Canyon Rd.		7 "I" St. & Bundy Canyon Rd.		8 Harvest Way East & Bundy Canyon Rd.	
9 Commercial Access & Bundy Canyon Rd.		10 Sunset Av. & Bundy Canyon Rd.		11 Murrrieta Rd. & Scott Rd.		12 I-215 SB Ramps & Scott Rd.		13 I-215 NB Ramps & Scott Rd.		<p>LEGEND:</p> <ul style="list-style-type: none"> = TRAFFIC SIGNAL = ALL WAY STOP = STOP SIGN 4 = NUMBER OF LANES D = DIVIDED U = UNDIVIDED DEF = DEFACTO RIGHT TURN LANE 					
<p>Future Intersection</p>															

EXHIBIT 3-2 CITY OF WILDOMAR GENERAL PLAN CIRCULATION ELEMENT



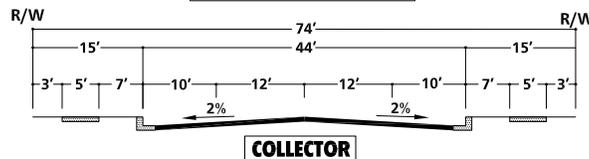
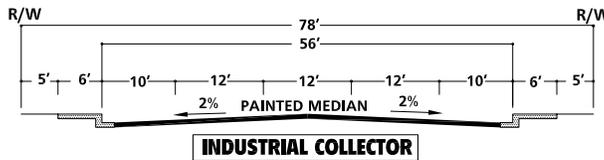
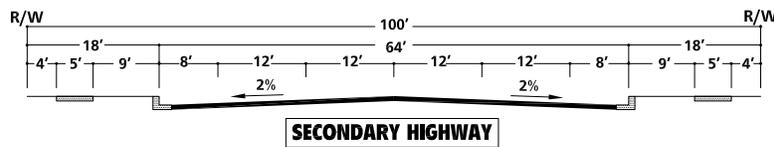
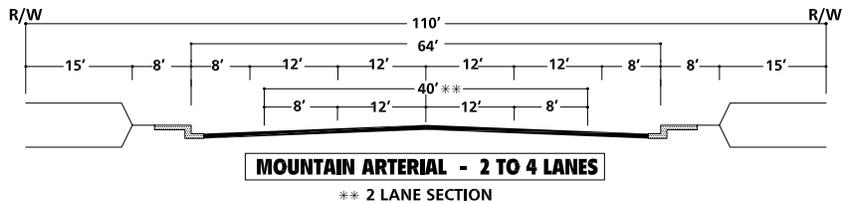
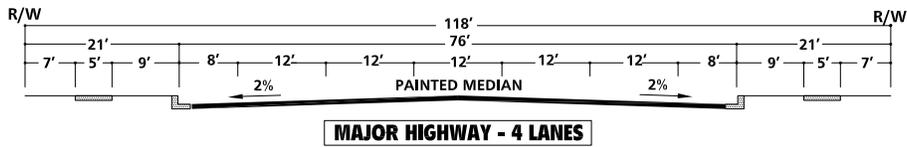
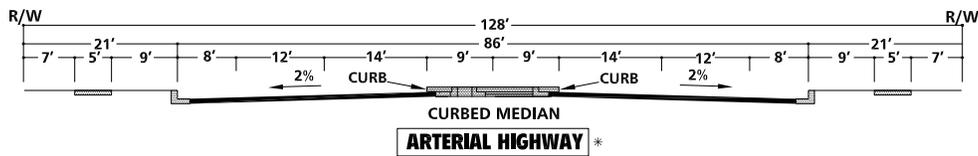
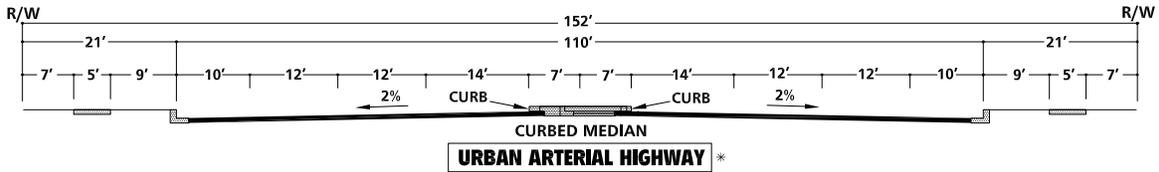
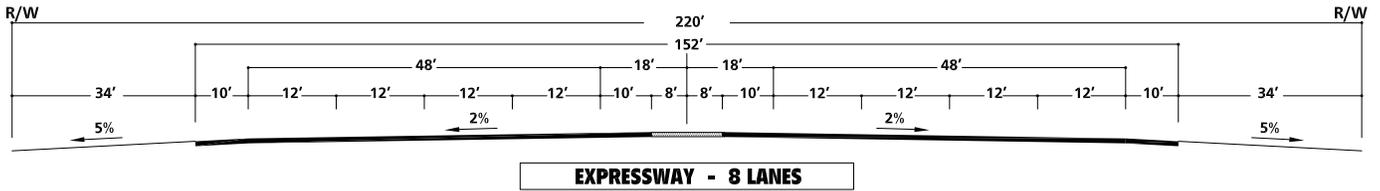
LEGEND:

- | | | | |
|---|---------------------------------------|---|---------------------------------|
|  | Proposed Wildomar Circulation Changes |  | Highways |
|  | URBAN ARTERIAL |  | Parcels |
|  | ARTERIAL |  | Proposed Wildomar Incorporation |
|  | MAJOR |  | Cities |
|  | SECONDARY |  | Existing Interchanges |
|  | COLLECTOR | | |

NOTE: THE CITY OF WILDOMAR HAS ADOPTED THE COUNTY'S GENERAL PLAN AND STANDARDS

EXHIBIT 3-3

CITY OF WILDOMAR GENERAL PLAN ROADWAY CROSS-SECTIONS



* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS. SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

NOT TO SCALE

NOTE: THE CITY OF WILDOMAR HAS ADOPTED THE COUNTY OF RIVERSIDE'S GENERAL PLAN AND STANDARDS

EXISTING TRANSIT SERVICES RIVERSIDE TRANSIT AUTHORITY - ROUTE 7

7

Lake Elsinore Outlet Center to Inland Valley Medical Center

Information Center
(951) 565-5002
Web site
www.RiversideTransit.com

Routing and timetables subject to change.

Also serving: DPSS, Downtown Lake Elsinore, Senior Center. **No service on:** New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.



EXISTING TRANSIT SERVICES RIVERSIDE TRANSIT AUTHORITY - ROUTE 8

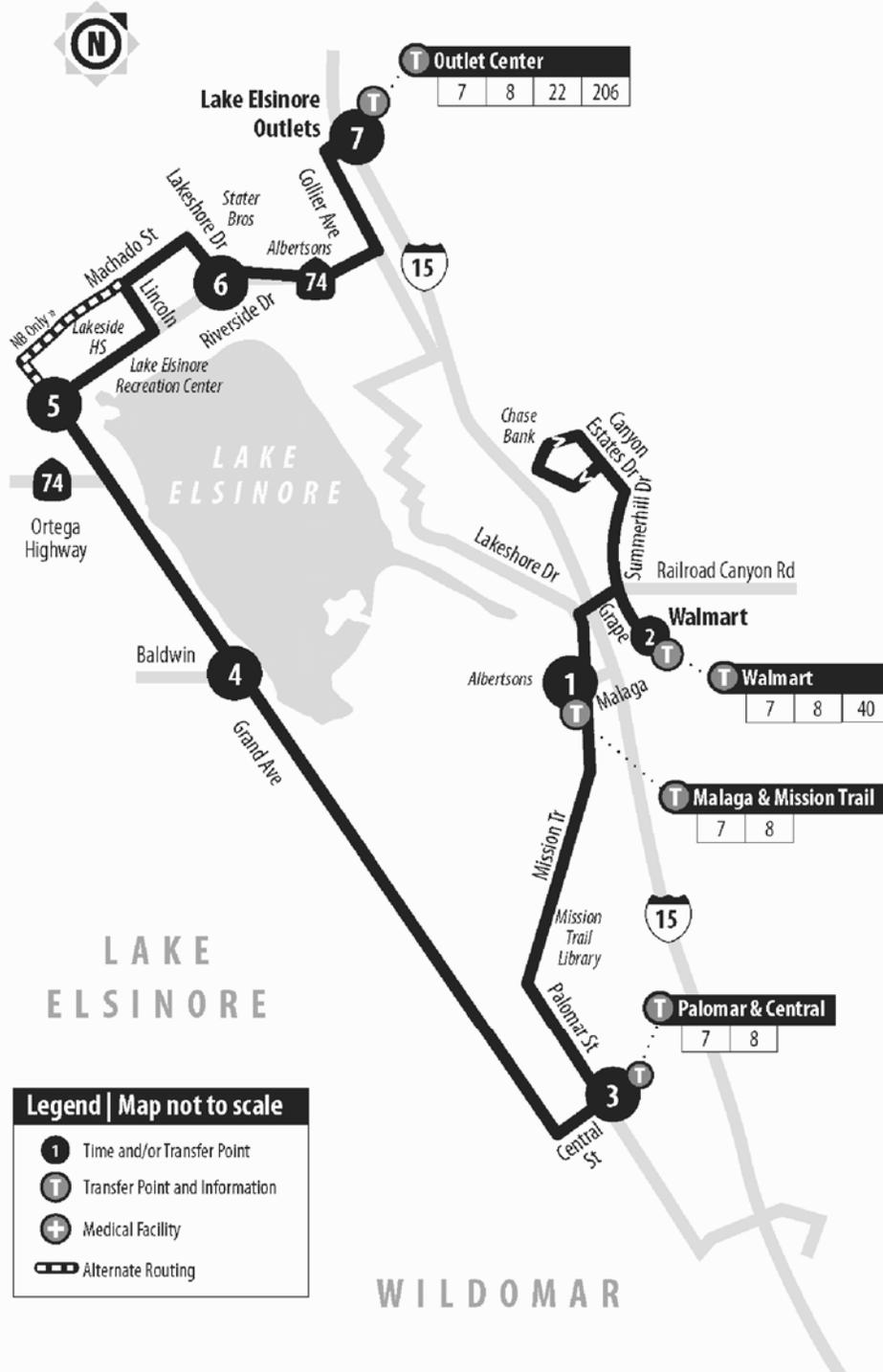
8

Lake Elsinore Walmart to Lake Elsinore Outlet Center

Information Center
(951) 565-5002
Web site
www.RiversideTransit.com

Routing and timetables subject to change.

Also serving: Stater Bros, Albertsons, Lake Elsinore Recreation Center. **No service on:** New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.



EXISTING TRANSIT SERVICES RIVERSIDE TRANSIT AUTHORITY - ROUTE 61

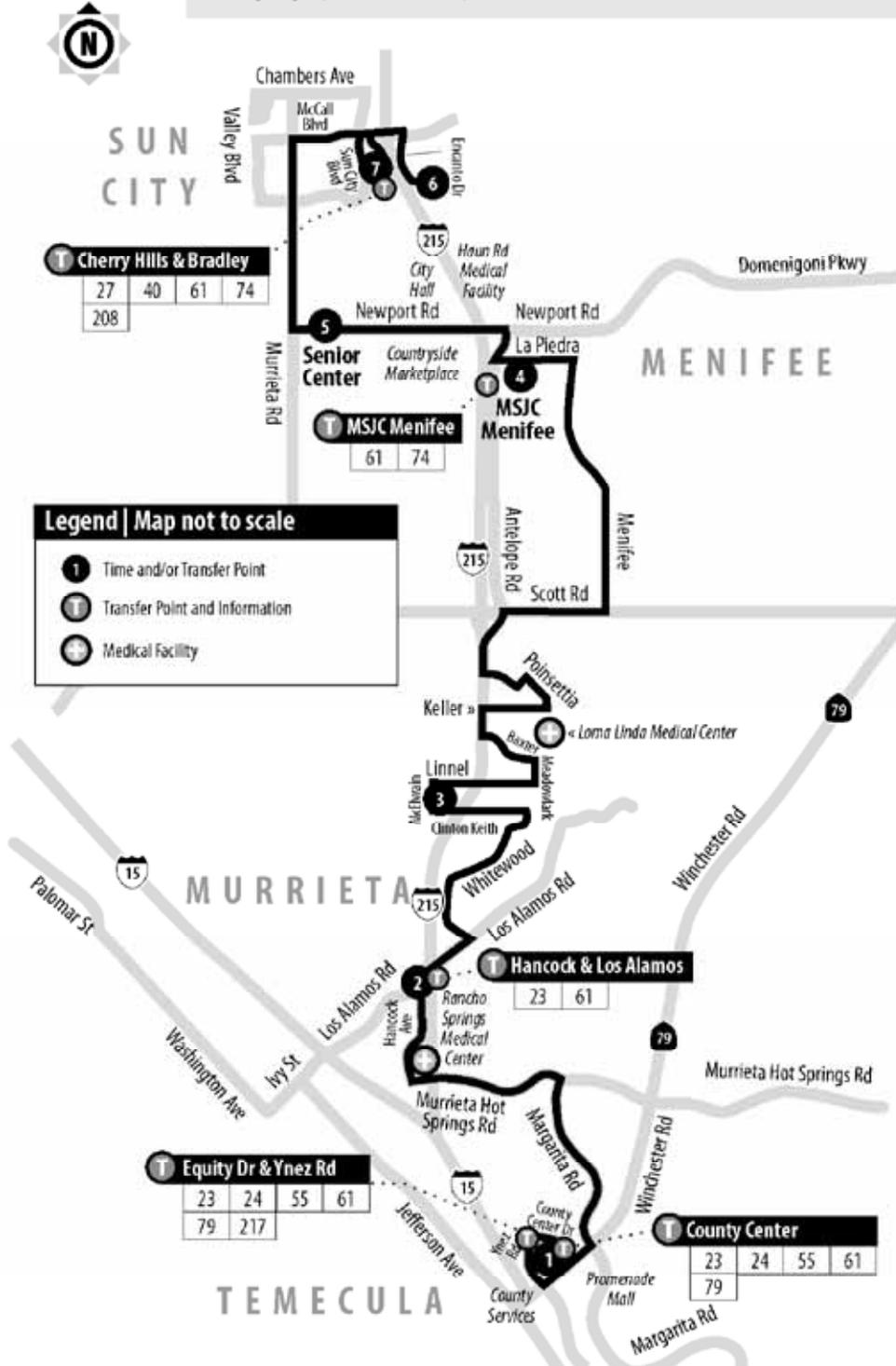
61

Sun City - Menifee - Murrieta - Temecula

Information Center
(951) 565-5002
Web site
www.RiversideTransit.com

Routing and timetables
subject to change.

Also serving: Sun City Center, Loma Linda Medical Building. **No service on weekends or on the following holidays:** New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.



Based on the routes provided on Exhibit 3-4, RTA should consider expanding bus service along Bundy Canyon Road/Scott Road between the I-15 and I-215 Freeways to potentially serve the Project in the future.

3.4 EXISTING TRAFFIC COUNTS

Manual AM and PM peak hour turning movement counts were conducted in December 2010. The December 2010 count data have been adjusted with a background growth of one (1) percent to represent December 2011 conditions. The volume development worksheets have been provided in Appendix “3.1” of this report.

Existing (2011) average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-5. Existing (2011) ADT volumes are based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg, except for those roadway segments which have 24-hour tube count data available (see Appendix “3.1”):

$$\text{PM Peak Hour (Approach Volume + Exit Volume)} \times 12 = \text{Leg Volume}$$

Existing (2011) AM and PM peak hour intersection volumes are shown on Exhibits 3-6 and 3-7, respectively.

3.5 EXISTING CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing (2011) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that all of the eleven (11) existing study area intersections are currently operating at acceptable LOS during the peak hours, with the exception of the intersections of Monte Vista Drive at Bundy Canyon Road and Murrieta Road at Scott Road.

The intersection operations analysis worksheets are included in Appendix “3.2” of this TIA.

EXHIBIT 3-5
**EXISTING (2011)
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 3-6
**EXISTING (2011)
 AM PEAK HOUR INTERSECTION VOLUMES**



1 I-15 SB Ramps & Bundy Canyon Rd.		2 I-15 NB Ramps & Bundy Canyon Rd.	3 Sellers Rd. & Bundy Canyon Rd.	4 Monte Vista Dr. & Bundy Canyon Rd.	5 The Farm Rd. & Bundy Canyon Rd.	6 Harvest Way West & Bundy Canyon Rd.	8 Harvest Way East & Bundy Canyon Rd.	
9 Commercial Access & Bundy Canyon Rd. Future Intersection	10 Sunset Av. & Bundy Canyon Rd.	11 Murreleta Rd. & Scott Rd.	12 I-215 SB Ramps & Scott Rd.	13 I-215 NB Ramps & Scott Rd.	7 Bundy Canyon Rd. Future Intersection			8 Harvest Way East & Bundy Canyon Rd.

EXHIBIT 3-7
**EXISTING (2011)
 PM PEAK HOUR INTERSECTION VOLUMES**



1	I-15 SB Ramps & Bundy Canyon Rd.		9	Commercial Access & Bundy Canyon Rd.		Future Intersection
2	I-15 NB Ramps & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		Future Intersection
3	Sellers Rd. & Bundy Canyon Rd.		11	Murrieta Rd. & Scott Rd.		
4	Monte Vista Dr. & Bundy Canyon Rd.		12	I-215 SB Ramps & Scott Rd.		
5	The Farm Rd. & Bundy Canyon Rd.		13	I-215 NB Ramps & Scott Rd.		
6	Harvest Way West & Bundy Canyon Rd.					
7	'I' St. & Bundy Canyon Rd.	Future Intersection				
8	Harvest Way East & Bundy Canyon Rd.					



Table 3-1

Intersection Analysis for Existing (2011) Conditions

#	Intersection	Jurisdiction	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
				Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
				L	T	R	L	T	R	L	T	R	L	T	R				
1	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans	TS	0	0	0	1	1	0	0	2	0	1	2	0	23.0	18.9	C	B
2	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans	TS	1	1	0	0	0	0	1	2	0	0	2	0	18.9	19.3	B	B
3	Sellers Rd. / Bundy Canyon Rd.	Wildomar	CSS	0	0	0	0	1	0	1	1	0	0	1	1	24.2	31.1	C	D
4	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	CSS	0	1	0	0	0	0	0	1	0	1	1	0	21.4	62.2	C	F
5	The Farm Rd. / Bundy Canyon Rd.	Wildomar	TS	1	0	1	0	0	0	0	1	1	1	1	0	9.3	11.1	A	B
6	Harvest Wy.-West / Bundy Canyon Rd.	Wildomar	CSS	1	0	d	0	1	0	0	1	1	1	1	0	27.5	30.6	D	D
7	"I" Street / Bundy Canyon Rd.	Wildomar		Future Intersection															
8	Harvest Wy.-East / Bundy Canyon Rd.	Wildomar	CSS	0	1	0	0	1	0	0	1	0	0	1	0	26.6	24.5	D	C
9	Commercial Access / Bundy Canyon Rd.	Wildomar		Future Intersection															
10	Sunset Av. / Bundy Canyon Rd.	Wildomar/ Menifee	CSS	0	1	0	0	1	0	0	1	0	0	1	0	21.3	23.3	C	C
11	Murrieta Rd. / Scott Rd.	Menifee	AWS	0	0	0	0	1	0	0	1	0	0	1	0	18.7	39.4	C	F ⁴
12	I-215 SB Ramps / Scott Rd.	Caltrans	TS	0	0	0	0	1	1	0	1	1	1	1	0	24.6	30.8	C	C
13	I-215 NB Ramps / Scott Rd.	Caltrans	TS	0	1	1	0	0	0	1	1	0	0	1	1	26.6	32.3	C	C

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

3.6 EXISTING CONDITIONS TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for existing traffic conditions are based on existing peak hour intersection volumes. For existing conditions, the following study area intersections currently appear to warrant a traffic signal (See Appendix “3.3”):

ID	Intersection Location	Location
3	Sellers Road / Bundy Canyon Road	Wildomar
4	Monte Vista Drive / Bundy Canyon Road	Wildomar
6	Harvest Way-West / Bundy Canyon Road	Wildomar
11	Murrieta Road / Scott Road	Meniffee

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4.0 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project is located between The Farm Road and Sunset Avenue and on either side of Bundy Canyon Road in the City of Wildomar. The City of Wildomar planning case PA 11-0261 for TTM No. 36388 proposes to amend Specific Plan No. 116 (Amendment 4) to allow 275 single family detached dwelling units and a 3.5 acre neighborhood commercial center (14,469 square foot pharmacy with drive-thru window, 2,550 square feet of specialty retail uses and an 8 vehicle fueling position gas station with convenience market and car wash) on 151.23 acres. Zoning for the property is proposed to change from Single Family Residential (R-1 – 7,200 square foot minimum) to Planned Residential Development (R-4).

It should also be noted that a specific development proposal for the retail component is not proposed as part of this Project. The aforementioned uses (14,469 square foot pharmacy with drive-thru window, 2,550 square feet of specialty retail uses and an 8 vehicle fueling position gas station with convenience market and car wash) represent a likely scenario that could be developed in light of the Project's location and the site's physical constraints. The trip generation associated with a specific commercial design with detailed land use assumptions was deemed more conservative from a trip generation perspective as compared to the Institute of Transportation of Engineers (ITE) general commercial (ITE 820) land use category. As such, the uses defined as part of the proposed Project would overstate as opposed to understate the traffic generated by any future development that could potentially occur.

For the purposes of this traffic impact analysis, it is assumed that the Project will be constructed and at full occupancy by 2015. All Project access points along Bundy Canyon Road have been assumed to allow full access, with the exception of the following:

- "I" Street on Bundy Canyon Road – Right-In/Right-Out/Left-In Access Only (No Left Turns Out)
- Commercial Access on Bundy Canyon Road – Right-In/Right-Out Access Only (No Left Turns In/Out)

Due to the proposed intersection spacing between The Farm Road to Harvest Way-West on Bundy Canyon Road, an alternative analysis has been conducted which assumes access restrictions on the intersection of Harvest Way-West at Bundy Canyon Road. In the event that a traffic signal is not installed at the intersection of Harvest Way-West at Bundy Canyon Road and full access could not be accommodated, the intersection of Harvest Way-West at Bundy Canyon Road has also been analyzed assuming access would be restricted to right-in/right-out/left-in access only (no left turns out). This access alternative would affect Project travel patterns at The Farm Road and at Harvest Way-West on Bundy Canyon Road.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 4-1 and a summary of the Project's trip generation is shown in Table 4-2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 8th Edition, 2008.

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These types of trips are many times associated with retail uses such as gas stations, convenience stores, and pharmacies just to name a few. As the Project is proposed to include some of these specific uses, pass-by reductions have been taken for the applicable project uses. The ITE *Trip Generation Handbook* (2nd Edition, 2004) indicates that pass-by trip reductions can vary between 49% and 62% for these uses. Specifically, the ITE *Trip Generation Handbook* includes multiple sources for each land use with the following average pass-by trip percentages:

- 49% for the pharmacy with drive-thru window land use (ITE LU 881) during the weekday PM peak period;
- 62% for the gas station with convenience market and car wash land use (ITE LU 946) during the weekday AM peak period;
- 56% for the gas station with convenience market and car wash land use (ITE LU 946) during the PM peak period;

The PM peak period pass-by trip reductions have been applied to the daily trip generation. The use of the pass-by trip reductions as shown in Table 4-2 have been reviewed and approved by City staff.

The proposed development is projected to generate a total of approximately 3,933 net trip-ends per day on a typical weekday. The Project is anticipated to generate a total of approximately 284 net weekday AM peak hour trips and 410 net weekday PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project

**Table 4-1
Project Trip Generation Rates**

Land Use ¹	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Single Family Detached	DU	210	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Pharmacy with Drive-thru	TSF	881	1.52	1.14	2.66	5.18	5.18	10.36	88.16
Gas Station w/ market & car wash	VFP	946	6.08	5.85	11.93	7.11	6.83	13.94	152.84
Specialty Retail ³	TSF	820/814	0.61	0.39	1.00	1.19	1.52	2.71	44.32

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eighth Edition (2008).

² DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Position

³ AM peak hour rates are unavailable for ITE Land Use 814. As such, the weekday AM peak hour rates for ITE Land Use 820 have been utilized.

Table 4-2

Project Trip Generation Summary

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Single Family Detached Residential	275	DU	52	154	206	176	102	278	2,632
Pharmacy with drive-thru	14.469	TSF	22	16	38	75	75	150	1,276
<i>Pass-by Reduction (49%-PM & Daily)²</i>			0	0	0	-37	-37	-73	-625
Gas Station with market and car wash	8	VFP	49	47	95	57	55	112	1,223
<i>Pass-by Reduction (62%-AM; 56%-PM & Daily)³</i>			-30	-29	-59	-32	-31	-62	-685
Specialty Retail	2.550	TSF	2	1	3	3	4	7	113
TOTAL			94	189	284	242	168	410	3,933

¹ DU = Dwelling Units; TSF = Thousand Square Feet

² Pass-by reduction percentages are from the ITE Trip Generation Handbook (2nd Edition, 2004): Table 5.18.

³ Pass-by reduction percentages are from the ITE Trip Generation Handbook (2nd Edition, 2004): Tables 5.29 and 5.30.

trip distributions were developed based on anticipated travel patterns to and from the Project site for the traffic associated with both the residential and commercial uses.

The total volume on each roadway was divided by the total site traffic generation to indicate the percentage of Project traffic that would use each component of the regional roadway system in each relevant direction. The Project trip distribution pattern associated with the residential use is graphically depicted on Exhibit 4-1. The Project trip distribution pattern associated with the commercial uses is graphically depicted on Exhibit 4-2.

It should be noted that the trip distribution patterns for both the proposed residential and commercial uses reflect full-access at all Project access points along Bundy Canyon Road, with the exception of the following:

- "I" Street on Bundy Canyon Road – Right-In/Right-Out/Left-In Access Only (No Left Turns Out)
- Commercial Access on Bundy Canyon Road – Right-In/Right-Out Access Only (No Left Turns In/Out)

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes.

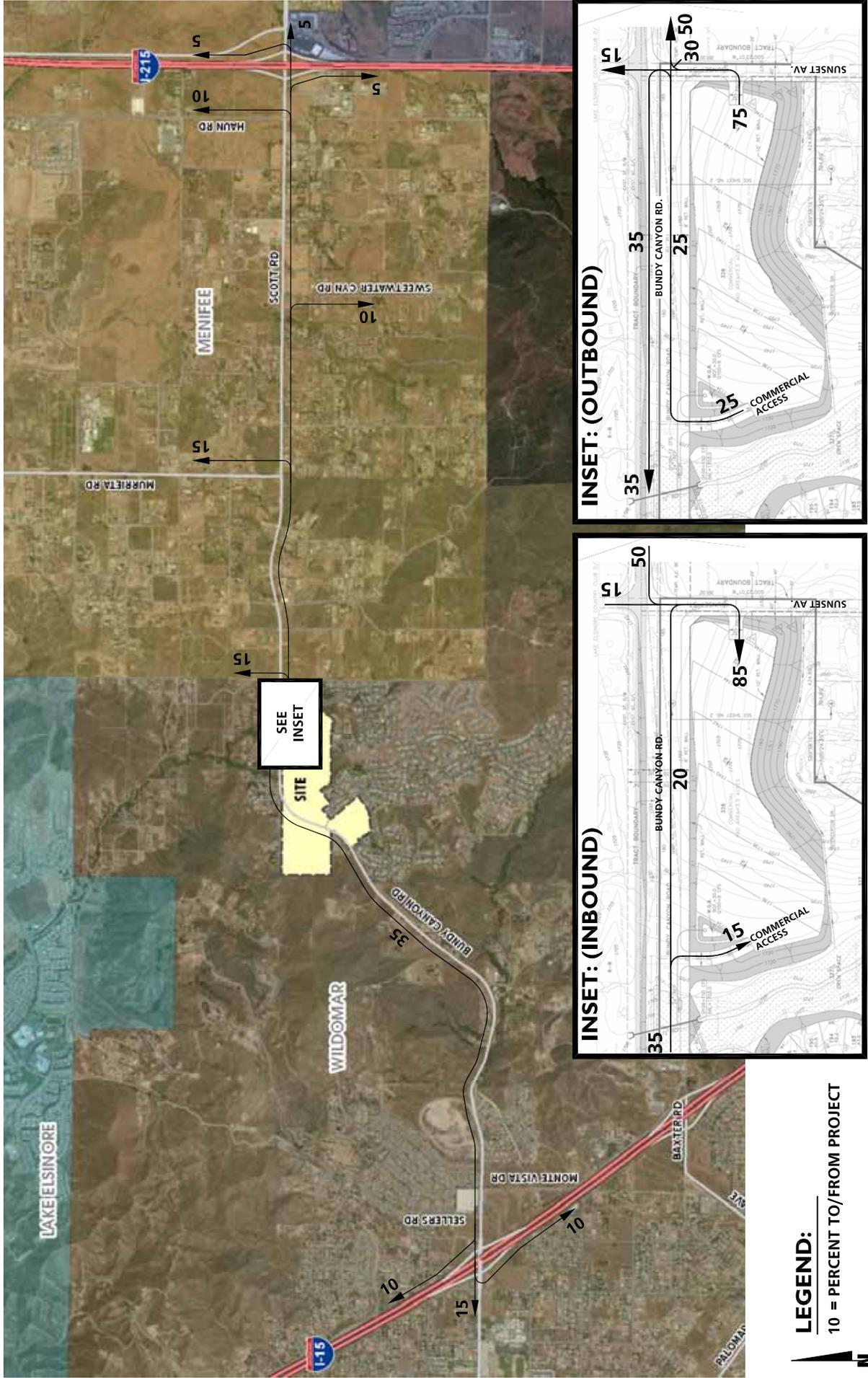
4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-3. Project AM and PM peak hour volumes are shown on Exhibits 4-4 and 4-5.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon four (4) years of background (ambient) growth at 2% per year for 2015 traffic conditions. The total ambient growth is 8.24% for 2015 traffic conditions (compounded growth of two percent per year over four years or 1.02^4 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

EXHIBIT 4-2 PROJECT (COMMERCIAL) TRIP DISTRIBUTION



LEGEND:
10 = PERCENT TO/FROM PROJECT



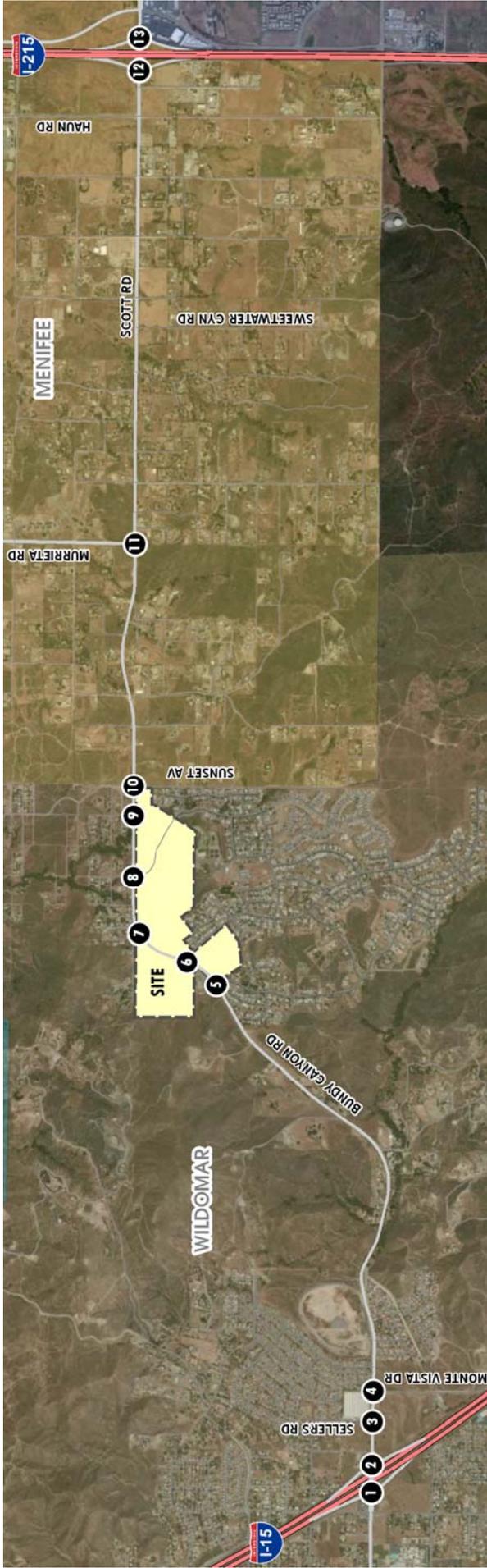
EXHIBIT 4-3
PROJECT ONLY
AVERAGE DAILY TRAFFIC (ADT)



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



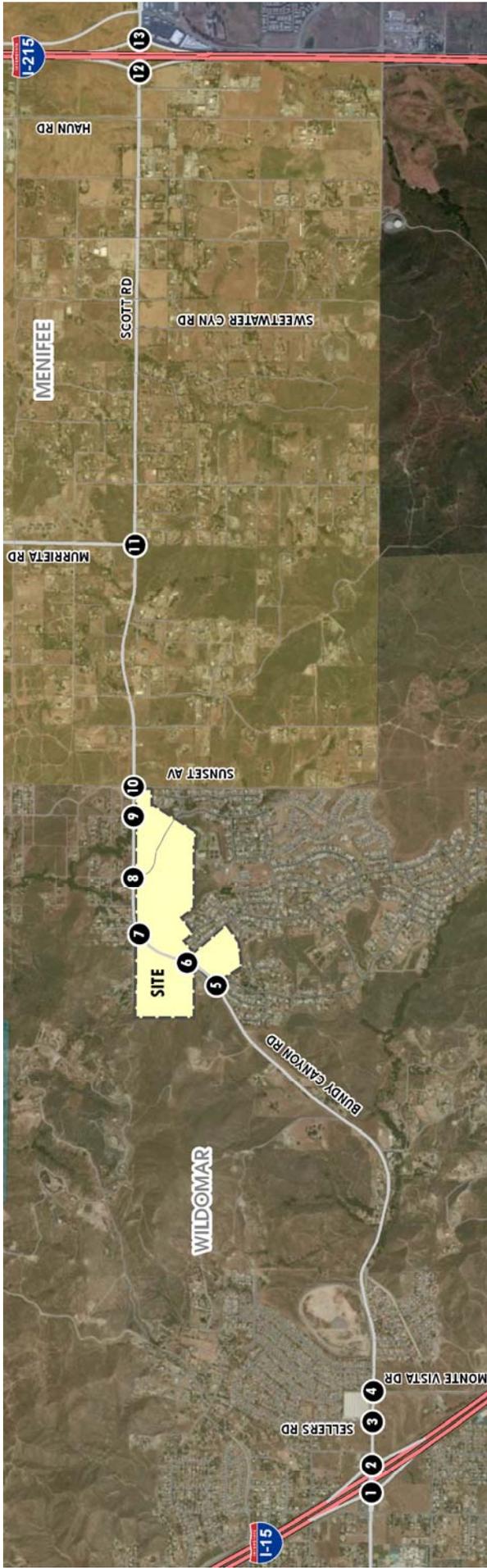
EXHIBIT 4-4
PROJECT ONLY
AM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murreleta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd.
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EXHIBIT 4-5
PROJECT ONLY
PM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murreleta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd.
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4.6 CUMULATIVE DEVELOPMENT TRAFFIC

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with the City of Wildomar and the City of Menifee. Exhibit 4-6 illustrates the cumulative development location map.

4.6.1 CUMULATIVE DEVELOPMENT TRIP GENERATION

Cumulative development trip generation rates and associated trip generation are shown on Tables 4-3 and 4-4. The cumulative development projects assumed in this traffic analysis are estimated to generate 168,987 net trip-ends per day during a typical weekday with approximately 10,911 net vehicle trips during the AM peak hour and 16,113 net vehicle trips during the PM peak hour.

4.6.2 CUMULATIVE DEVELOPMENT TRIP ASSIGNMENT

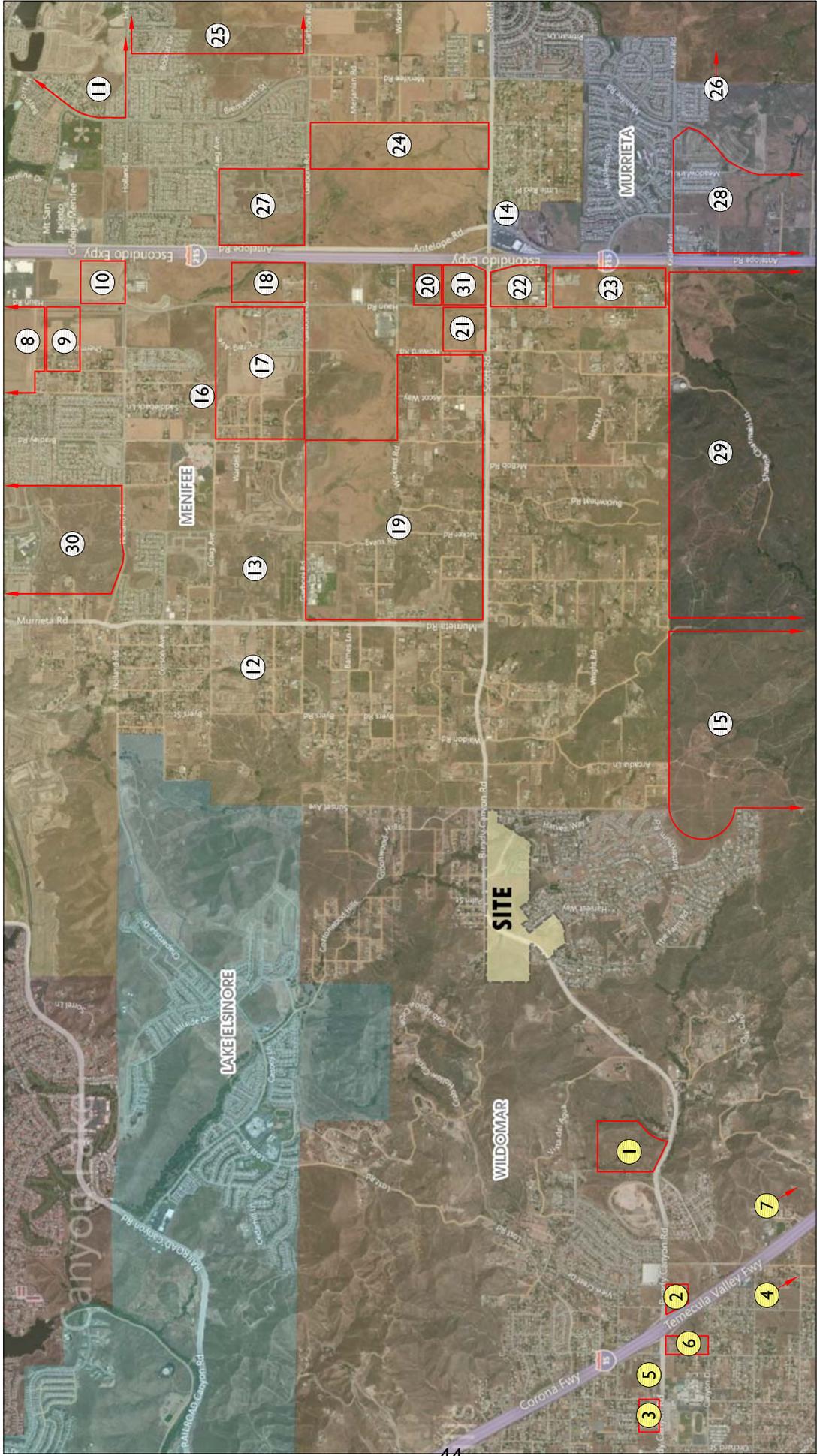
Based on the identified trip distribution patterns for the cumulative development projects on arterial highways throughout the study area for future conditions, cumulative development ADT volumes, AM peak hour and PM peak hour intersection turning movement volumes are shown on Exhibits 4-7, 4-8 and 4-9, respectively.

4.7 TRAFFIC FORECASTS

An existing plus project (E+P) analysis scenario has been included to address a recent CEQA case ruling, which asserts that impacts of a proposed project must be measured against the current existing physical conditions. The E+P analysis scenario has been utilized to identify significant project-related impacts and mitigation measures necessary to bring those impacts to “less-than-significant”.

To provide a comprehensive assessment of the potential project-related and cumulative traffic impacts, two types of analyses, “buildup” and “buildout”, were performed in support of this work effort. The buildup method was used to approximate the Opening Year (2015) traffic conditions, and is also intended to identify the direct project-related impacts on both the existing and planned near-term circulation system in conjunction with identifying cumulative impacts. The Opening Year (2015) without Project traffic condition includes background traffic and traffic generated by other cumulative development projects within the study area. The buildup method was also utilized to approximate the Opening Year (2015) with Project traffic condition, and includes background traffic, traffic generated by other cumulative development projects within the study area and the traffic generated by the proposed Project. The buildout approach is used to forecast the Horizon Year (2035) without and with Project conditions of the study area.

EXHIBIT 4-6
CUMULATIVE DEVELOPMENT PROJECTS LOCATION MAP



LEGEND:

- ① = CITY OF WILDOMAR CUMULATIVE DEVELOPMENT PROJECT
- ⑧ = CITY OF MENIFEE CUMULATIVE DEVELOPMENT PROJECT



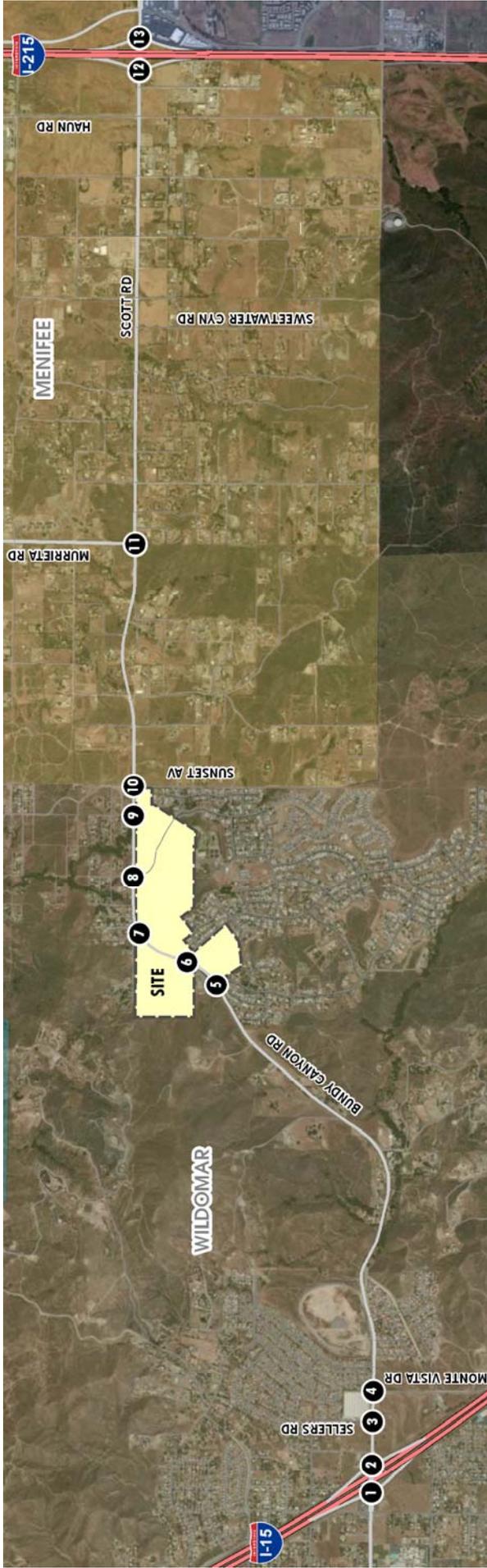
EXHIBIT 4-7
**CUMULATIVE DEVELOPMENT PROJECTS
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 4-8 CUMULATIVE DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES

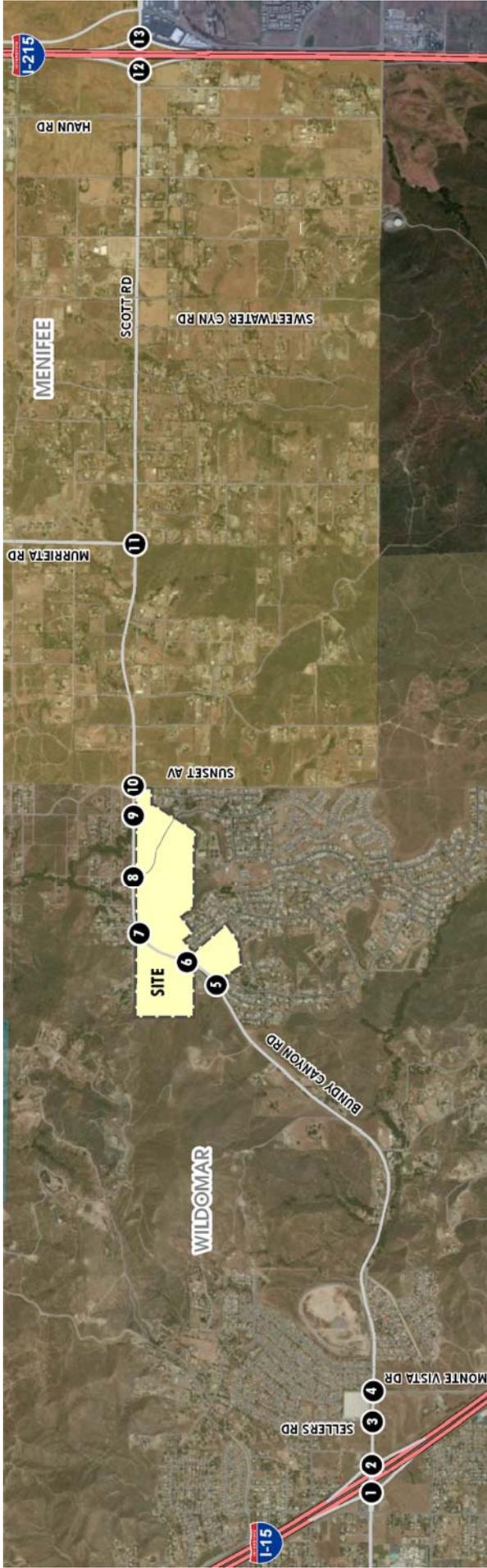


1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murreleta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd.
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Oak Creek (TTM No. 36388) Traffic Impact Analysis
City of Wildomar, CA (JN - 08055:204.dwg)



EXHIBIT 4-9
**CUMULATIVE DEVELOPMENT
 PM PEAK HOUR INTERSECTION VOLUMES**



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	
9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murreleta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd. 				



Table 4-3

Cumulative Development Trip Generation Rates¹

Land Use	ITE Code	Units ²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
General Light Industrial	110	TSF	0.81	0.11	0.92	0.12	0.85	0.97	6.97
Warehousing	150	TSF	0.24	0.06	0.30	0.08	0.24	0.32	3.56
Mini-Warehouse (Storage)	151	Units	0.01	0.01	0.02	0.01	0.01	0.02	0.25
Mini-Warehouse	151	TSF	0.09	0.06	0.15	0.13	0.13	0.26	2.50
SFDR	210	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Apartments	220	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.65
Condo/Townhomes	230	DU	0.07	0.37	0.44	0.35	0.17	0.52	5.81
Senior Adult Housing-Detached	221	DU	0.08	0.14	0.22	0.16	0.11	0.27	3.71
Hotel	310	Room	0.34	0.22	0.56	0.31	0.28	0.59	8.17
Private School (K-12)	536	STU	0.49	0.32	0.81	0.07	0.10	0.17	2.48
Office	710	TSF	1.36	0.19	1.55	0.25	1.24	1.49	11.01
Free-Standing Discount Superstore	813	TSF	0.94	0.73	1.67	2.26	2.35	4.61	53.13
Specialty Retail ³	814	TSF	0.61	0.39	1.00	1.19	1.52	2.71	44.32
Wholesale Nursery	818	TSF	1.20	1.20	2.40	2.59	2.58	5.17	39.00
Commercial Retail	820	TSF	0.61	0.39	1.00	1.83	1.90	3.73	42.94
Discount Club	857	TSF	0.40	0.16	0.56	2.12	2.12	4.24	41.80
Home Improvement Store	862	TSF	0.72	0.54	1.26	1.14	1.23	2.37	29.80
Pharmacy w/ Drive Thru	881	TSF	1.52	1.14	2.66	5.18	5.18	10.36	88.16
Sit-Down Restaurant	932	TSF	5.99	5.53	11.52	6.58	4.57	11.15	127.15
Fast Food w/ Drive Thru	934	TSF	25.17	24.18	49.35	17.60	16.24	33.84	496.12
Auto Care Center ⁴	942	TSF	1.91	1.03	2.94	1.69	1.69	3.38	20.00
Gas Station w/ Market	945	VFP	5.08	5.08	10.16	6.69	6.69	13.38	162.78
Gas Station w/ Market & Car Wash	946	VFP	6.08	5.85	11.93	7.11	6.83	13.94	152.84

¹ Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 8th Edition, 2008.

² DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions; STU = Students

³ AM peak hour rates are not available in the ITE Trip Generation Manual. As such, the AM peak hour average rates for ITE LU 820 have been utilized.

⁴ Daily Trip Generation Rate Source: SANDAG Land Development Code Trip Generation Manual, May 2003. ITE does not provide a weekday rate for Land Use 942.

Table 4-4
(Page 1 of 4)

Cumulative Development Trip Generation Summary

TAZ	Project Name	Land Use ¹	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily	
					In	Out	Total	In	Out	Total		
CITY OF WILDOMAR												
1	Tulip Lane (08-0147)	SFDR	60	DU	11	34	45	38	22	61	574	
2	Canyon Plaza/JR Oil (08-179)	Retail	33.800	TSF	51	33	84	147	160	307	3,394	
		Pass-by Reduction (40%)				-20	-13	-34	-59	-64	-123	-1,358
		Fast Food w/Drive Thru	6.200	TSF	173	167	340	149	138	287	3,076	
		Pass-by Reduction (45%)				-78	-75	-153	-67	-62	-129	-1,384
		Gas Station w/ Market	12	VFP	63	64	127	82	81	163	1,953	
		Pass-by Reduction (60%)				-38	-38	-76	-49	-49	-98	-1,172
Subtotal TAZ 2³					151	137	288	203	204	407	4,509	
3	DL Almond (09-0265)	Wholesale Nursery	5.040	TSF	6	6	12	13	13	26	197	
4	Baxter Crossing (10-0064)	Condo/Townhomes	265	DU	19	98	117	93	45	138	1,540	
		Apartments	110	DU	11	45	56	44	24	68	732	
		Retail	130.600	TSF	110	71	181	372	388	760	8,078	
		Internal Trips (10% Residential)				-3	-14	-17	-14	-7	-21	-227
		Internal Trips (Retail)				-14	-3	-17	-7	-14	-21	-227
		Pass-by Reduction (25%-Retail Only)				0	0	0	-91	-94	-185	-1,963
Subtotal TAZ 4⁴					123	197	320	397	342	739	7,932	
5	Subway (10-0222)	Specialty Retail	10.500	TSF	6	4	11	12	16	28	465	
6	Tentative Map No. 30522 (10/0301)	Retail	79.497	TSF	48	31	79	145	151	297	3,414	
		Fast Food w/Drive Thru	1.500	TSF	38	36	74	26	24	51	744	
		Pass-by Reduction (25%-Retail Only)										
		Gas Station w/ Market	6	VFP	30	30	61	40	40	80	977	
		Pass-by Reduction (62%-AM; 56%-PM & Daily)				-19	-19	-38	-22	-22	-45	-547
Subtotal TAZ 6					98	79	177	190	193	383	4,588	
7	Richland Planned Community (11-0137)	SFDR	105	DU	20	59	79	67	39	106	1,005	
CITY OF WILDOMAR TOTAL					415	516	931	920	830	1,750	19,270	
CITY OF MENIFEE												
8	Menifee Town Center Specific Plan	Retail ⁵	150.000	TSF	92	59	150	275	285	560	6,441	
		Retail	359.370	TSF	219	140	359	658	683	1,340	15,431	
		Hotel	200	Room	68	44	112	62	56	118	1,634	
		Office	65.340	TSF	89	12	101	16	81	97	719	
		SFDR	577	DU	110	323	433	369	213	583	5,522	
		Condo/Townhomes	475	DU	33	176	209	166	81	247	2,760	
		Internal Capture				-8	-8	-16	-28	-28	-56	-524
		Pass-by Reduction (25% Retail Only)				0	0	0	-230	-238	-468	-5,403
		Subtotal TAZ 8					602	746	1,348	1,288	1,133	2,421

Table 4-4
(Page 2 of 4)

Cumulative Development Trip Generation Summary

TAZ	Project Name	Land Use ¹	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
CITY OF MENIFEE											
9	Santa Rosa Charter School ⁶	Elementary School	363	STU	178	116	294	25	36	62	900
		Middle School	338	STU	166	108	274	24	34	57	166
		High School	400	STU	196	128	324	28	40	68	196
		Internal Capture			0	0	0	0	0	0	0
Subtotal TAZ 9					539	352	892	77	110	187	1,262
10	PP 2010-123	Retail	263.160	TSF	161	103	263	482	500	982	11,300
		Pass-by Reduction (25% Retail Only)			0	0	0	-120	-125	-245	-2,825
		Subtotal TAZ 10					161	103	263	361	375
11	The Lakes TR 30422 (SP 247 Amendment 1)	SFDR	992	DU	188	556	744	635	367	1,002	9,493
12	TR 29636	SFDR	75	DU	14	42	56	48	28	76	718
13	TR 30142	SFDR	537	DU	102	301	403	344	199	542	5,139
14	Antelope Square	Retail	93.250	TSF	57	36	93	171	177	348	4,004
		Fast Food w/Drive Thru	2.000	TSF	50	48	99	35	32	68	992
		Pharmacy w/Drive Thru	14.000	TSF	21	16	37	73	73	145	1,234
		Gas Station w/ Market	16	VFP	81	81	163	107	107	214	2,604
		Self Storage	250	Units	3	3	5	3	3	5	63
		Pass-by Reduction (25% Retail Only)			0	0	0	-97	-98	-195	-2,224
Subtotal TAZ 14					212	184	397	291	294	585	6,673
15	TR 31217	SFDR	1,200	DU	228	672	900	768	444	1,212	11,484
16	TR 30465	SFDR	8	DU	2	4	6	5	3	8	77
17	TR 31724	SFDR	15	DU	3	8	11	10	6	15	144
	TR 33883	SFDR	51	DU	10	29	38	33	19	52	488
	TR 31831	SFDR	110	DU	21	62	83	70	41	111	1,053
	Subtotal TAZ 17					33	99	132	113	65	178
18	PP 18014	Mini-Warehouse	191.263	TSF	17	11	29	25	25	50	478
19	TR 31194	SFDR	483	DU	92	270	362	309	179	488	4,622
	TR 33511	SFDR	71	DU	13	40	53	45	26	72	679
	Subtotal TAZ 19					105	310	416	355	205	560
20	TR 33371	Condo/Townhomes	229	DU	16	85	101	80	39	119	1,330
21	PP 22279	Discount Club	148.663	TSF	59	24	83	315	315	630	6,214
		Home Improvement	140.760	TSF	101	76	177	160	173	334	4,195
		Retail	237.377	TSF	145	93	237	434	451	885	10,193
		Pass-by Reduction (25%)			0	0	0	-228	-235	-462	-5,150
Subtotal TAZ 21					306	192	498	683	704	1,387	15,451

Table 4-4
(Page 3 of 4)

Cumulative Development Trip Generation Summary

TAZ	Project Name	Land Use ¹	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
22	Shops at Scott	Retail	82.000	TSF	50	32	82	150	156	306	3,521
		Fast Food w/Drive Thru	9.000	TSF	227	218	444	158	146	305	4,465
		Pass-by Reduction (25%)			0	0	0	-77	-75	-153	-1,997
	Subtotal TAZ 22					227	218	444	81	71	152
23	PP 21452 & PP 22280	General Light Industrial	872.347	TSF	707	96	803	105	741	846	6,080
	PP 18570	Warehousing	109.935	TSF	26	7	33	9	26	35	391
	PP 20021	Warehousing	4.500	TSF	1	0	1	0	1	1	16
	Subtotal TAZ 23					734	103	837	114	769	883
24	Cantalena	SFDR	353	DU	67	198	265	226	131	357	3,378
		Apartments	851	DU	85	349	434	340	187	528	5,659
	Subtotal TAZ 24					152	547	699	566	318	884
25	TR 31229	SFDR	242	DU	46	136	182	155	90	244	2,316
	TR 32277	SFDR	411	DU	78	230	308	263	152	415	3,933
	Subtotal TAZ 25					124	366	490	418	242	660
26	TR 30433	SFDR	498	DU	95	279	374	319	184	503	4,766
27	TR 32628	SFDR	364	DU	69	204	273	233	135	368	3,483
	TR 28206	SFDR	148	DU	28	83	111	95	55	149	1,416
	Subtotal TAZ 27					97	287	384	328	189	517
28	Murrieta Fields II	SFDR	10	DU	2	6	8	6	4	10	96
	Sepulveda Bldg.	General Light Industrial	2.500	TSF	2	0	2	0	2	2	17
	Golden City SP	SFDR	502	DU	95	281	377	321	186	507	4,804
		Retail	23.340	TSF	14	9	23	43	44	87	1,002
		Pass-by Reduction (25%)			0	0	0	-11	-11	-22	-251
	Keller Commercial	Retail	5.875	TSF	4	2	6	11	11	22	252
		Pass-by Reduction (25%)			0	0	0	-3	-3	-5	-63
Subtotal TAZ 28					117	298	416	368	233	601	5,858
29	Murrieta Hills	Senior Adult Housing	1,012	DU	81	142	223	162	111	273	3,755
30	TR 28788	SFDR	119	DU	23	67	89	76	44	120	1,139
	TR 28790	SFDR	110	DU	21	62	83	70	41	111	1,053
	Subtotal TAZ 30					44	128	172	147	85	231

Table 4-4
(Page 4 of 4)

Cumulative Development Trip Generation Summary

TAZ	Project Name	Land Use ¹	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily		
					In	Out	Total	In	Out	Total			
31	Menifee Walmart Shopping Center (PP 22674) ⁷	Discount Superstore	205.000	TSF	193	150	342	463	482	945	10,892		
		Auto Care Center	6.680	TSF	13	7	20	11	11	23	134		
		Specialty Retail	13.800	TSF	8	5	14	16	21	37	612		
		Sit-Down Restaurant	6.500	TSF	39	36	75	43	30	72	826		
		Fast Food w/Drive Thru	6.200	TSF	156	150	306	109	101	210	3,076		
		Gas Station w/ Market & Car Wash	16	VFP	97	94	191	114	109	223	2,445		
		Internal Capture (10%)					-45	-45	-90	-78	-78	-156	-1,883
		Pass-by Reduction (25%)					0	0	0	-51	-48	-99	-1,242
Subtotal TAZ 31					461	396	858	628	628	1,255	14,860		
CITY OF MENIFEE TOTAL					4,658	6,420	11,079	8,202	6,821	15,022	154,720		
GRAND TOTAL					5,073	6,936	12,009	9,122	7,650	16,772	173,990		

¹ SFDR = Single Family Detached Residential

² DU = Dwelling Units; TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

³ Project trip generation is consistent with the Canyon Plaza Traffic Study (Darnell & Associates, Inc. - November 10, 2003).

⁴ Project trip generation is consistent with the Baxter Crossing Traffic Impact Analysis (Urban Crossroads, Inc. - June 17, 2010).

⁵ Menifee Village Shopping Center (2011-130).

⁶ School site located within Menifee Town Center Specific Plan. Internal interaction with proposed residential within SP.

⁷ Project trip generation is consistent with the Menifee Shopping Center Traffic Impact Analysis (Urban Crossroads, Inc. - May 10, 2010).

4.8 OPENING YEAR (2015) CONDITIONS

The buildup approach combines existing traffic counts with a background ambient growth factor to forecast the Opening Year (2015) traffic conditions. An ambient growth factor of 8.24% accounts for background (area-wide) traffic increases that occur over time up to the year 2015 from the year 2011 (compounded two percent per year growth over a four year period). In addition, the traffic generated by other cumulative development projects within the study area has also been included. Traffic volumes generated by the Project are then added to assess the Opening Year (2015) with Project traffic conditions. The 2015 roadway network is similar to the existing conditions roadway network with the exception of future roadways proposed to be developed by the Project.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year (2015) Without Project
 - Existing 2011 counts
 - Ambient growth traffic (8.24%)
 - Cumulative Development Project traffic

- Opening Year (2015) With Project
 - Existing 2011 counts
 - Ambient growth traffic (8.24%)
 - Cumulative Development Project traffic
 - Oak Creek (TTM No. 36388) traffic

4.9 HORIZON YEAR (2035) CONDITIONS

The Horizon Year (2035) with Project traffic volumes have been derived from the Riverside County Transportation and Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing (2011) conditions and Horizon Year (2035) conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with Opening Year (2015) with Project peak hour traffic volumes. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2035) peak hour forecasts. Lastly, Horizon Year (2035) turning volumes were compared to Opening Year (2015) with Project volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between Opening Year (2015) with Project and Horizon Year (2035) traffic conditions that is not accounted for by the traffic

generated by cumulative development projects and the ambient growth between existing and Opening Year (2015) with Project conditions.

Flow conservation checks and forecast adjustments were performed as necessary to ensure that all future Opening Year (2015) with Project and Horizon Year (2035) traffic volume forecasts are reasonable. Flow conservation checks have been performed in an effort to ensure the flow of traffic volumes between closely spaced intersections is maintained. In other words, traffic flow between two closely spaced intersections, such as two freeway ramp locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there are no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis.

Post-processing volume worksheets for Horizon Year (2035) with Project conditions and final volume calculations for Horizon Year (2035) without and with Project conditions are provided in Appendix "1.2".

The RivTAM (2035) traffic forecasts assume buildout of the City of Wildomar General Plan circulation network as previously shown on Exhibit 3-2. As such, the lane configurations and traffic controls assumed to be in place for Horizon Year (2035) without and with Project conditions are consistent with those planned according to the City of Wildomar General Plan roadway classifications in conjunction with the Project driveways and those facilities assumed to be constructed by the Project or cumulative development projects to provide site access.

5.0 EXISTING PLUS PROJECT TRAFFIC ANALYSIS

In an effort to satisfy the CEQA Guideline section 15125(a), an analysis of existing traffic volumes plus traffic generated by the proposed Project (E+P) has been included in this analysis. This section discusses the traffic forecasts for existing plus project (E+P) conditions and the resulting intersection operations and traffic signal warrants. Direct project-related impacts have been evaluated and identified through the analysis of E+P traffic conditions.

5.1 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes existing (2011) traffic volumes plus Project traffic. Exhibit 5-1 shows the ADT volumes which can be expected for E+P traffic conditions. E+P AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-2 and 5-3, respectively.

5.2 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.0 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1, which indicates that the following study area intersections are anticipated to operate at unacceptable levels of service:

ID	Intersection Location	Location
3	Sellers Road / Bundy Canyon Road	Wildomar
6	Harvest Way-West / Bundy Canyon Road	Wildomar
8	Harvest Way-East / Bundy Canyon Road	Wildomar
10	Sunset Avenue / Bundy Canyon Road	Wildomar/Meniffee
11	Murrieta Road / Scott Road	Meniffee

As shown in Table 5-1, the intersection of Harvest Way-West at Bundy Canyon Road is anticipated to operate at acceptable peak hour levels of service with the access alternative assumptions. If access is restricted at this intersection, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS “D” or better). The intersection operations analysis worksheets are included in Appendix “5.1” of this TIA.

5.3 PROJECT IMPACTS AND MITIGATION MEASURES

This section provides a summary of direct project impacts and associated mitigation measures. Based on the City of Wildomar specialized significance criteria discussed in Section 2.5 *Thresholds of Significance*, the following intersections were found to be impacted by the Project. Mitigation measures necessary to reduce direct project-related impacts to “less-than-significant” are also discussed below.

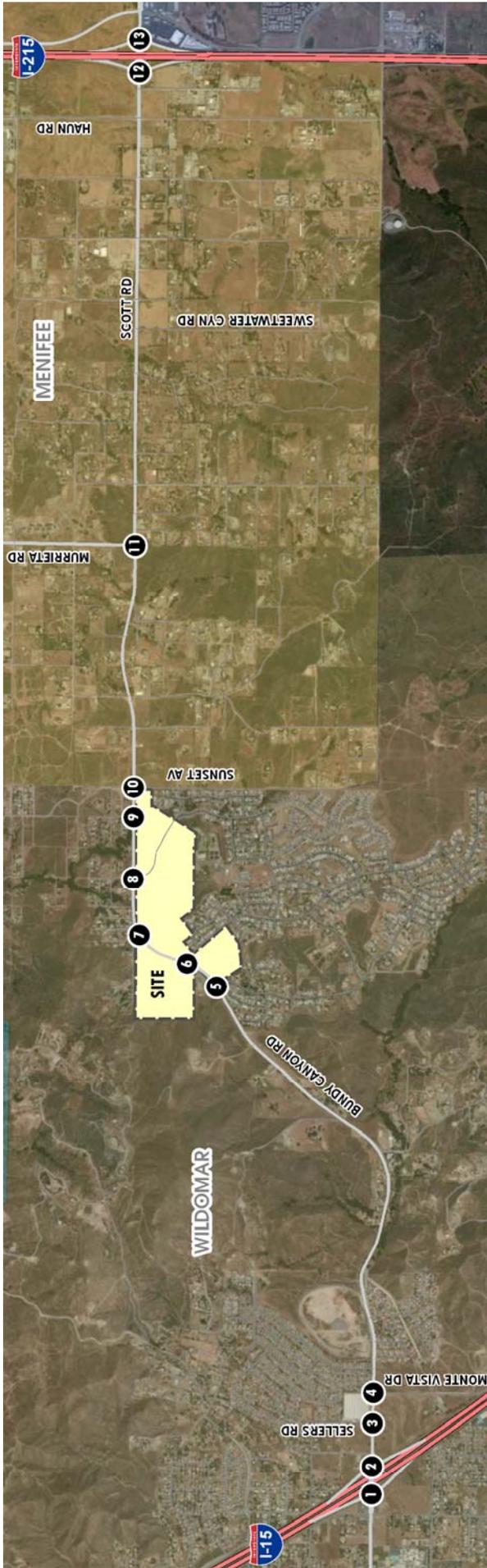
EXHIBIT 5-1
**EXISTING PLUS PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



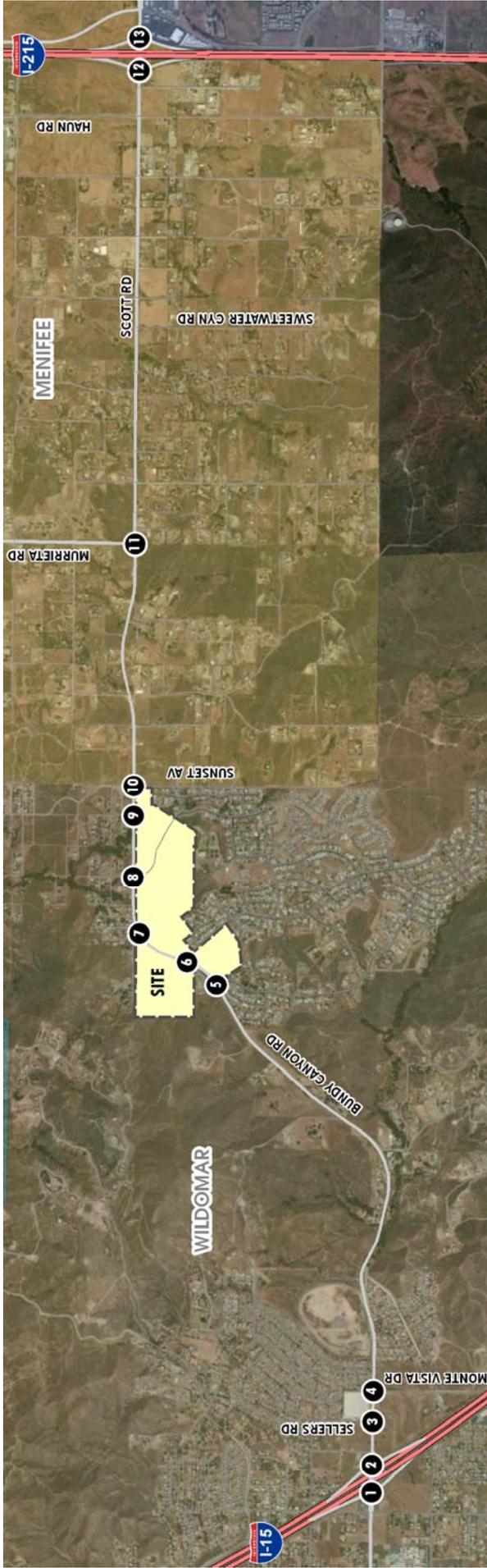
EXHIBIT 5-2 EXISTING PLUS PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd.		2 I-15 NB Ramps & Bundy Canyon Rd.		3 Sellers Rd. & Bundy Canyon Rd.		4 Monte Vista Dr. & Bundy Canyon Rd.		5 The Farm Rd. & Bundy Canyon Rd.		6 Harvest Way West & Bundy Canyon Rd.		7 11th St. & Bundy Canyon Rd.		8 Harvest Way East & Bundy Canyon Rd.	
9 Commercial Access & Bundy Canyon Rd.		10 Sunset Av. & Bundy Canyon Rd.		11 Murieta Rd. & Scott Rd.		12 I-215 SB Ramps & Scott Rd.		13 I-215 NB Ramps & Scott Rd.							



EXHIBIT 5-3
**EXISTING PLUS PROJECT
 PM PEAK HOUR INTERSECTION VOLUMES**



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murreleta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd.
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Table 5-1

Intersection Analysis for Existing Plus Project Conditions

#	Intersection	Jurisdiction	Traffic Control ²	Existing				Existing + Project			
				Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
				AM	PM	AM	PM	AM	PM	AM	PM
1	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans	TS	23.0	18.9	C	B	25.5	21.8	C	C
2	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans	TS	18.9	19.3	B	B	19.8	20.8	B	C
3	Sellers Rd. / Bundy Canyon Rd.	Wildomar	CSS	24.2	31.1	C	D	30.3	46.1	D	E
4	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	CSS	21.4	62.2	C	F	26.0	>80.0	D	F
5	The Farm Rd. / Bundy Canyon Rd.										
	- Preferred Access	Wildomar	TS	9.3	11.1	A	B	9.8	11.9	A	B
	- Access Alternative	Wildomar	TS	9.3	11.1	A	B	13.2	15.2	B	B
6	Harvest Wy.-West / Bundy Canyon Rd.										
	- Preferred Access	Wildomar	CSS	27.5	30.6	D	D	26.9	55.5	D	F
	- Access Alternative	Wildomar	CSS	27.5	30.6	D	D	9.7	10.5	A	B
7	"I" Street / Bundy Canyon Rd.	Wildomar	CSS	Not Applicable				9.6	10.0	A	B
8	Harvest Wy.-East / Bundy Canyon Rd.	Wildomar	CSS	26.6	24.5	D	C	56.2	44.9	F	E
9	Commercial Access / Bundy Canyon Rd.	Wildomar	CSS	Not Applicable				9.5	10.2	A	B
10	Sunset Av. / Bundy Canyon Rd.	Wildomar/ Menifee	CSS	21.3	23.3	C	C	33.8	>80.0	D	F
11	Murrieta Rd. / Scott Rd.	Menifee	AWS	18.7	39.4	C	F ³	29.5	71.0	D	F
12	I-215 SB Ramps / Scott Rd.	Caltrans	TS	24.6	30.8	C	C	26.6	32.7	C	C
13	I-215 NB Ramps / Scott Rd.	Caltrans	TS	26.6	32.3	C	C	29.3	33.9	C	C

¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

³ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

Sellers Road / Bundy Canyon Road (#3) – This intersection is anticipated to operate at an acceptable LOS (LOS “D” or better) during the AM and PM peak hours under existing (2011) traffic conditions. The addition of Project traffic is anticipated to cause the intersection to operate at unacceptable LOS (LOS “E”) during the PM peak hour only. As such, the impact is considered **significant (Impact 1.1)**.

Mitigation Measure 1.1 – Sellers Road / Bundy Canyon Road (#3) – The following improvement is necessary to reduce the Project’s impact to **“less-than-significant”**:

- Install a traffic signal.

Monte Vista Drive / Bundy Canyon Road (#4) – Although this intersection was found to operate at an unacceptable LOS (LOS “F”) during the weekday PM peak hour under existing (2011) conditions, the City of Wildomar’s specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impacts is considered significant. The project-related delay increase is greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 2.1)**.

Mitigation Measure 2.1 – Monte Vista Drive / Bundy Canyon Road (#4) – The following improvement is necessary to reduce the Project’s impact to **“less-than-significant”**:

- Install a traffic signal.

Harvest Way-West / Bundy Canyon Road (#6) – This intersection is anticipated to operate at an acceptable LOS (LOS “D”) during the AM and PM peak hours under existing (2011) traffic conditions. The addition of Project traffic is anticipated to cause the intersection to operate at unacceptable LOS (LOS “F”) during the PM peak hour. As such, the impact is considered **significant (Impact 3.1)**.

Mitigation Measure 3.1 – Harvest Way-West / Bundy Canyon Road (#6) – The following improvements are necessary to reduce the Project’s impact to **“less-than-significant”**:

- Install a traffic signal.
- Stripe a shared northbound through-right turn lane in place of the existing defacto right turn lane.
- Construct a southbound left turn lane and shared through-right turn lane.
- Construct an eastbound left turn lane and two additional through lanes.
- Construct two additional westbound through lanes.

Harvest Way-East / Bundy Canyon Road (#8) – This intersection is anticipated to operate at an acceptable LOS (LOS “D” or better) during the AM and PM peak hours under existing (2011) traffic conditions. The addition of Project traffic is anticipated to cause the intersection to operate at

unacceptable LOS (LOS “E”) during the AM and PM peak hours. As such, the impact is considered **significant (Impact 4.1)**.

Mitigation Measure 4.1 – Harvest Way-East / Bundy Canyon Road (#8) – The following improvements are necessary to reduce the Project’s impact to **“less-than-significant”**:

- Install a traffic signal.
- Construct an eastbound left turn lane and two additional through lanes.
- Construct a westbound left turn lane.

Sunset Avenue / Bundy Canyon Road (#10) – This intersection is anticipated to operate at an acceptable LOS (LOS “C”) during the AM and PM peak hours under existing (2011) traffic conditions. The addition of Project traffic is anticipated to cause the intersection to operate at unacceptable LOS (LOS “F”) during the PM peak hour only. As such, the impact is considered **significant (Impact 5.1)**.

Mitigation Measure 5.1 – Sunset Avenue / Bundy Canyon Road (#10) – The following improvements are necessary to reduce the Project’s impact to **“less-than-significant”**:

- Install a traffic signal.
- Construct an eastbound left turn lane and two additional through lanes.
- Construct a westbound left turn lane.

Mitigation strategies have been recommended to address study area intersections found to be significantly impacted by the Project. The effectiveness of the proposed mitigation measures are presented in Table 5-2.

With the implementation of the intersection mitigation measures discussed above, there are no project-related impacts anticipated to the study area intersections. E+P intersection operations analysis worksheets with mitigation measures are provided in Appendix “5.3”.

5.4 CUMULATIVE IMPACTS AND MITIGATION MEASURES

A significant cumulative impact has been identified when an intersection is projected to operate below the requisite level of service standard under pre-project conditions AND the Project’s measurable increase in traffic, as defined by 50 or more peak hour trips, contributes to the deficiency. Mitigation measures necessary to reduce cumulative impacts to “less-than-significant” are also discussed below.

Murrieta Road / Scott Road (#11) – This intersection has been found to operate at an unacceptable LOS (LOS “F”) during the weekday PM peak hour under existing (2011) conditions and is anticipated to continue to operate at LOS “F” during the PM peak hour with the addition of Project traffic (as

Table 5-2

Intersection Analysis for Existing Plus Project Conditions with Project Mitigation Measures

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R	L	T	R	
3	Sellers Rd. / Bundy Canyon Rd.																	
	- Existing (2011)	CSS	0	0	0	0	1	0	1	1	0	0	1	1	24.2	31.1	C	D
	- E+P w/o Mitigation ⁴	CSS	0	0	0	0	1	0	1	1	0	0	1	1	30.3	46.1	D	E
	- With Project Mitigation 1.1	TS	0	0	0	0	1	0	1	1	0	0	1	1	14.8	37.6	B	D
4	Monte Vista Dr. / Bundy Canyon Rd.																	
	- Existing (2011)	CSS	0	1	0	0	0	0	0	1	0	1	1	0	21.4	62.2	C	F
	- E+P w/o Mitigation ⁴	CSS	0	1	0	0	0	0	0	1	0	1	1	0	26.0	>80.0	D	F
	- With Project Mitigation 2.1	TS	0	1	0	0	0	0	0	1	0	1	1	0	29.4	24.0	C	C
6	Harvest Wy.-West / Bundy Canyon Rd.																	
	- Existing (2011)	CSS	1	0	d	0	0	0	0	1	1	1	1	0	27.5	30.6	D	D
	- E+P w/o Mitigation ⁴	CSS	1	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	0	<u>1</u>	<u>3</u>	<u>0</u>	1	<u>3</u>	0	26.9	55.5	D	F
	- With Project Mitigation 3.1	TS	1	<u>1</u>	<u>0</u>	<u>1</u>	<u>1</u>	0	<u>1</u>	<u>3</u>	<u>0</u>	1	<u>3</u>	0	28.8	27.1	C	C
8	Harvest Wy.-East / Bundy Canyon Rd.																	
	- Existing (2011)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	26.6	24.5	D	C
	- E+P w/o Mitigation ⁴	CSS	0	1	0	0	1	0	<u>1</u>	<u>3</u>	0	<u>1</u>	1	0	56.2	44.9	F	E
	- With Project Mitigation 4.1	TS	0	1	0	0	1	0	<u>1</u>	<u>3</u>	0	<u>1</u>	1	0	19.2	19.0	B	B
10	Sunset Av. / Bundy Canyon Rd.																	
	- Existing (2011)	CSS	0	1	0	0	1	0	0	1	0	0	1	0	21.3	23.3	C	C
	- E+P w/o Mitigation ⁴	CSS	0	1	0	0	1	0	<u>1</u>	<u>3</u>	0	<u>1</u>	1	0	33.8	>80.0	D	F
	- With Project Mitigation 5.1	TS	0	1	0	0	1	0	<u>1</u>	<u>3</u>	0	<u>1</u>	1	0	19.0	19.9	B	B

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

⁴ "E+P w/o mitigation" assumes lanes that would be constructed by the Project as part of their site adjacent roadway improvements or to provide

measured by 50 or more peak hour trips). As such, this impact is considered **cumulatively significant**. The following improvements are necessary to reduce the cumulative impact to **“less-than-significant”**:

- Install a traffic signal.
- Construct an eastbound left turn lane.

The effectiveness of the recommended improvements discussed above to address E+P cumulative traffic impacts are presented in Table 5-3. E+P intersection operations analysis worksheets with cumulative mitigation measures are provided in Appendix “5.4”.

5.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for E+P traffic conditions are based on E+P peak hour volumes. For E+P conditions, traffic signals appear to be warranted at the following intersections (See Appendix “5.2”).

ID	Intersection Location	Location
8	Harvest Way-East / Bundy Canyon Road	Wildomar
10	Sunset Avenue / Bundy Canyon Road	Wildomar/Meniffee

It should be noted that if access is ultimately restricted at the intersection of Harvest Way-West and Bundy Canyon Road, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS “D” or better).

Table 5-3

Intersection Analysis for Existing Plus Project Conditions with Cumulative Mitigation Measures

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
11	Murrieta Rd. / Scott Rd.																	
	- Pre-Project Conditions	AWS	0	0	0	0	1	0	0	1	0	0	1	0	18.7	39.4	C	F ⁴
	- With Cumulative Mitigation	TS	0	0	0	0	1	0	1	1	0	0	1	0	18.3	18.5	B	B

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

6.0 OPENING YEAR (2015) TRAFFIC ANALYSIS

This section discusses the methods used to develop Opening Year (2015) without and with Project traffic forecasts, and the resulting intersection operations and traffic signal warrants.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year (2015) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of project driveways and those facilities assumed to be constructed by the Project to provide site access which are assumed to be in place for Opening Year (2015) with Project conditions only.

Although the I-215 Freeway at Scott Road interchange improvement project is planned, it is unclear at this time when the re-designed interchange would be in place. As such, the planned improvements at the I-215 Freeway at Scott Road interchange have not been assumed for the purposes of the Opening Year (2015) conditions analyses.

6.2 OPENING YEAR (2015) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes existing (2011) traffic volumes plus an ambient growth factor of 8.24% plus traffic from pending and approved but not yet constructed known development projects (as previously listed on Table 4-4) in the area. The weekday ADT volumes which can be expected for Opening Year (2015) without Project traffic conditions are shown on Exhibit 6-1. Exhibits 6-2 and 6-3 show the AM and PM peak hour intersection turning movement volumes for Opening Year (2015) without Project traffic conditions.

6.3 OPENING YEAR (2015) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes existing (2011) traffic volumes, an ambient growth factor of 8.24%, traffic from pending and approved but not yet constructed known development projects in the area and the addition of Project traffic. The weekday ADT volumes which can be expected for Opening Year (2015) with Project traffic conditions are shown on Exhibit 6-4. Exhibits 6-5 and 6-6 show the AM and PM peak hour intersection turning movement volumes for Opening Year (2015) with Project traffic conditions.

6.4 INTERSECTION OPERATIONS ANALYSIS

Level of service calculations were conducted for the study intersections to evaluate their operations under Opening Year (2015) conditions with existing roadway and intersection geometrics consistent with Exhibit 3-1. As shown in Table 6-1, the following intersections were found to operate at an unacceptable LOS under Opening Year (2015) with Project traffic conditions.

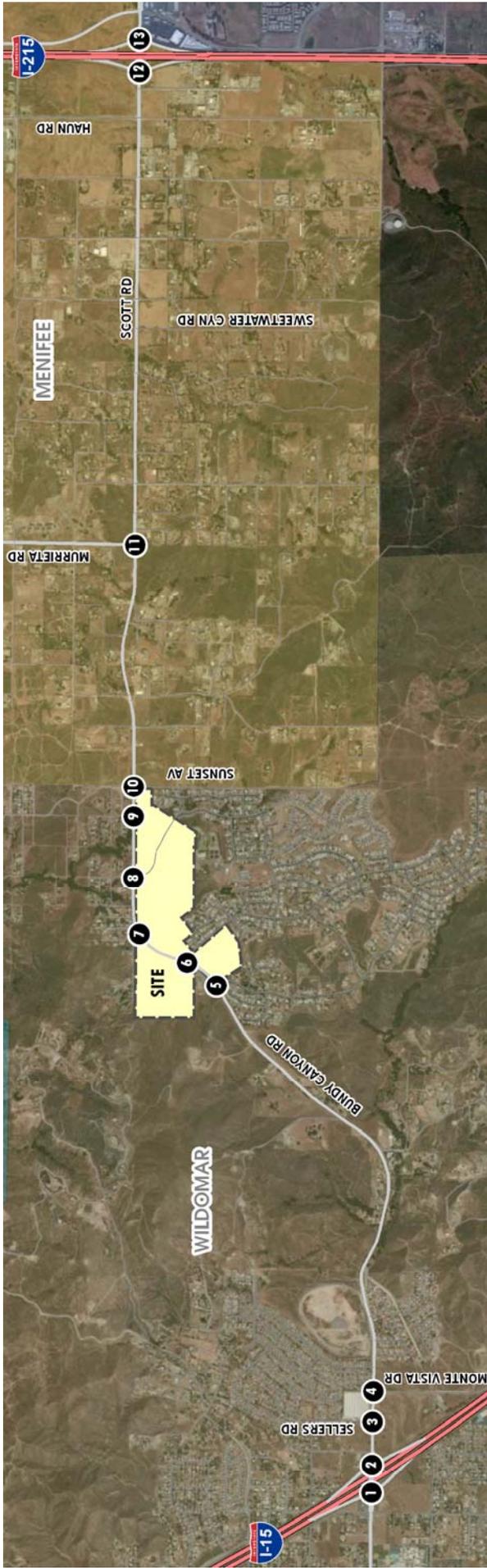
EXHIBIT 6-1 OPENING YEAR (2015) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)



LEGEND:
10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 6-2 OPENING YEAR (2015) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES

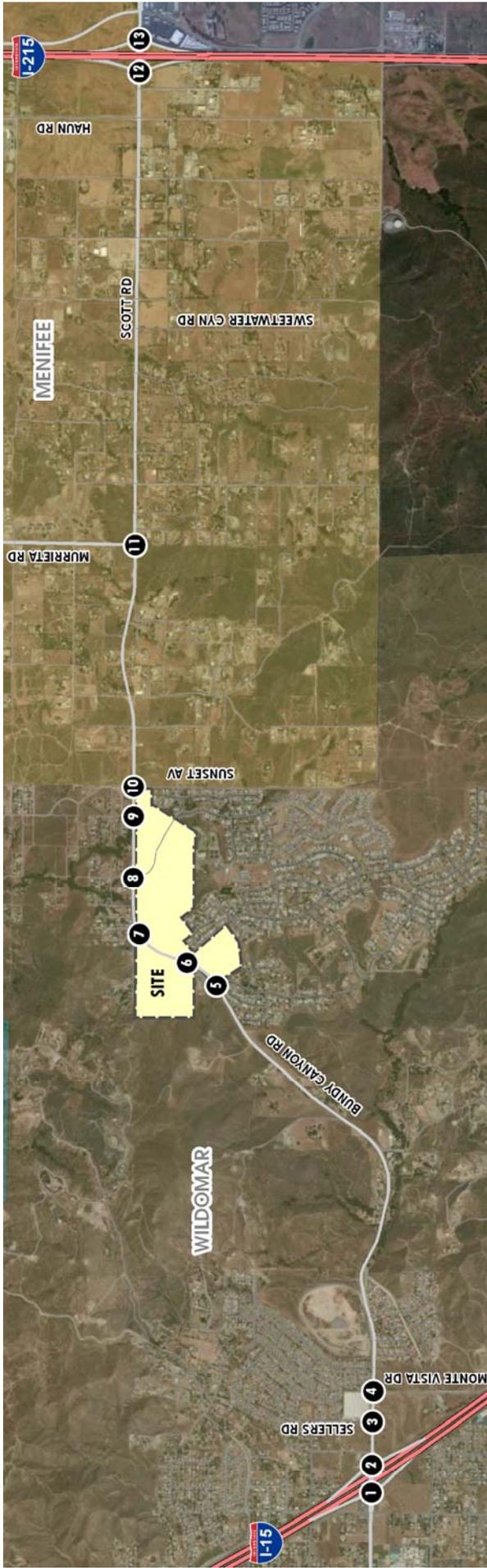


1 I-15 SB Ramps & Bundy Canyon Rd.		2 I-15 NB Ramps & Bundy Canyon Rd.		3 Sellers Rd. & Bundy Canyon Rd.		4 Monte Vista Dr. & Bundy Canyon Rd.		5 The Farm Rd. & Bundy Canyon Rd.		6 Harvest Way West & Bundy Canyon Rd.		7 1st St. & Bundy Canyon Rd.		8 Harvest Way East & Bundy Canyon Rd.	
9 Commercial Access & Bundy Canyon Rd.		10 Sunset Av. & Bundy Canyon Rd.		11 Murreta Rd. & Scott Rd.		12 I-215 SB Ramps & Scott Rd.		13 I-215 NB Ramps & Scott Rd.							

Oak Creek (TTM No. 36388) Traffic Impact Analysis
City of Wildomar, CA (JN - 08055:208.dwg)



EXHIBIT 6-3 OPENING YEAR (2015) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1	I-15 SB Ramps & Bundy Canyon Rd.		2	I-15 NB Ramps & Bundy Canyon Rd.		3	Sellers Rd. & Bundy Canyon Rd.		4	Monte Vista Dr. & Bundy Canyon Rd.		5	The Farm Rd. & Bundy Canyon Rd.		6	Harvest Way West & Bundy Canyon Rd.		7	11th St. & Bundy Canyon Rd.		8	Harvest Way East & Bundy Canyon Rd.		9	Commercial Access & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		11	Murreleta Rd. & Scott Rd.		12	I-215 SB Ramps & Scott Rd.		13	I-215 NB Ramps & Scott Rd.	
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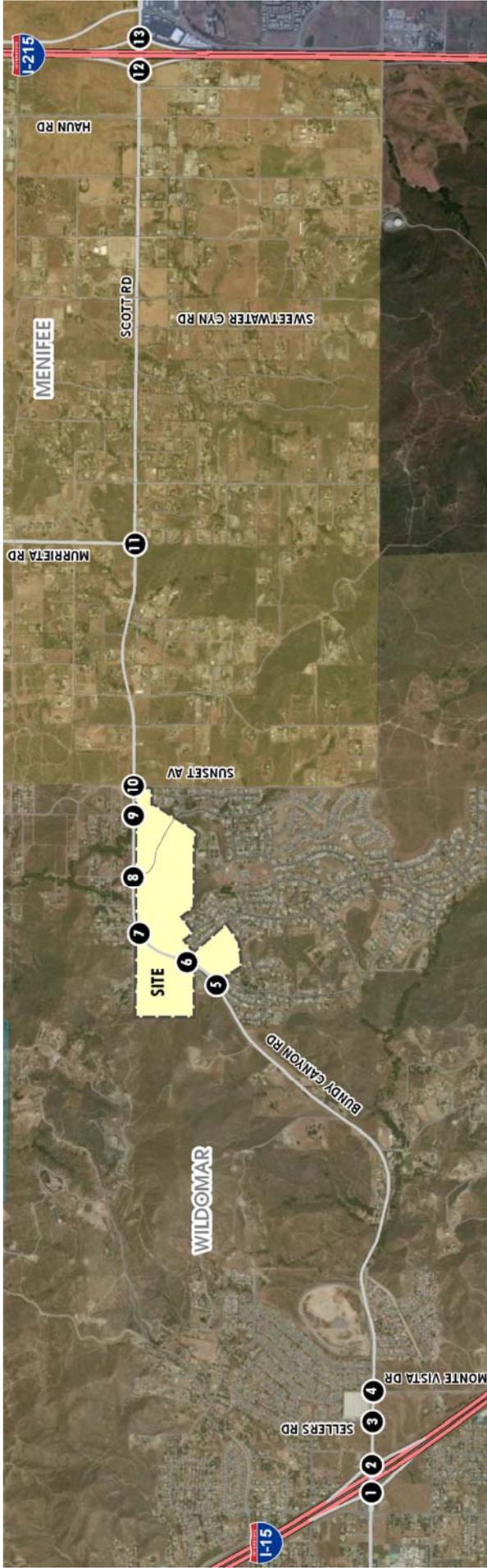


EXHIBIT 6-5 OPENING YEAR (2015) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	
9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murrieta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd. 				

EXHIBIT 6-6 OPENING YEAR (2015) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd.																																			
2 I-15 NB Ramps & Bundy Canyon Rd.				3 Sellers Rd. & Bundy Canyon Rd.			4 Monte Vista Dr. & Bundy Canyon Rd.			5 The Farm Rd. & Bundy Canyon Rd.			6 Harvest Way West & Bundy Canyon Rd.			7 Harvest Way East & Bundy Canyon Rd.			8 Harvest Way East & Bundy Canyon Rd.			9 Commercial Access & Bundy Canyon Rd.		10 Sunset Av. & Bundy Canyon Rd.			11 Murreleta Rd. & Scott Rd.			12 I-215 SB Ramps & Scott Rd.			13 I-215 NB Ramps & Scott Rd.		



Table 6-1

Intersection Analysis for Opening Year (2015) Conditions

#	Intersection	Jurisdiction	Traffic Control ²	2015 Without Project				2015 With Project			
				Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
				AM	PM	AM	PM	AM	PM	AM	PM
1	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans	TS	26.9	33.1	C	C	30.6	42.5	C	D
2	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans	TS	24.9	26.9	C	C	27.4	31.4	C	C
3	Sellers Rd. / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
4	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
5	The Farm Rd. / Bundy Canyon Rd.										
	- Preferred Access	Wildomar	TS	24.2	24.1	C	C	35.5	35.8	D	D
	- Access Alternative	Wildomar	TS	24.2	24.1	C	C	21.0	37.1	C	D
6	Harvest Wy.-West / Bundy Canyon Rd.										
	- Preferred Access	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
	- Access Alternative	Wildomar	CSS	>80.0	>80.0	F	F	11.1	14.5	B	B
7	"I" Street / Bundy Canyon Rd.	Wildomar	CSS	Not Applicable				11.1	13.2	B	B
8	Harvest Wy.-East / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
9	Commercial Access / Bundy Canyon Rd.	Wildomar	CSS	Not Applicable				10.4	12.5	B	B
10	Sunset Av. / Bundy Canyon Rd.	Wildomar/ Menifee	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
11	Murrieta Rd. / Scott Rd.	Menifee	AWS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
12	I-215 SB Ramps / Scott Rd.	Caltrans	TS	>80.0	>80.0	F	F	>80.0	>80.0	F	F
13	I-215 NB Ramps / Scott Rd.	Caltrans	TS	>80.0	>80.0	F	F	>80.0	>80.0	F	F

¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

ID	Intersection Location	Location
3	Sellers Road / Bundy Canyon Road	Wildomar
4	Monte Vista Drive / Bundy Canyon Road	Wildomar
6	Harvest Way-West / Bundy Canyon Road	Wildomar
8	Harvest Way-East / Bundy Canyon Road	Wildomar
10	Sunset Avenue / Bundy Canyon Road	Wildomar/Meniffee
11	Murrieta Road / Scott Road	Meniffee
12	I-215 Southbound Ramps / Scott Road	Caltrans
13	I-215 Northbound Ramps / Scott Road	Caltrans

As shown in Table 6-1, the intersection of Harvest Way-West at Bundy Canyon Road is anticipated to operate at acceptable peak hour levels of service with the access alternative assumptions. If access is restricted at this intersection, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS “D” or better). The intersection operations analysis worksheets for Opening Year (2015) without Project traffic conditions are included in Appendix “6.1” of this TIA. The intersection operations analysis worksheets for Opening Year (2015) with Project traffic conditions are included in Appendix “6.2” of this TIA.

6.5 PROJECT IMPACTS AND MITIGATION MEASURES

This section provides a summary of direct project impacts and associated mitigation measures. Based on the City of Wildomar specialized significance criteria discussed in Section 2.5 *Thresholds of Significance*, the following intersections were found to be impacted by the Project. Mitigation measures necessary to reduce direct project-related impacts to “less-than-significant” are also discussed below.

Sellers Road / Bundy Canyon Road (#3) – Although this intersection was found to operate at an unacceptable LOS (LOS “F”) during the AM and PM peak hours under Opening Year (2015) without Project traffic conditions, the City of Wildomar’s specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 or more peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impact is considered significant. As indicated on Table 6-2, the project-related delay increase if greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 1.1)**.

Mitigation Measure 1.1 – Sellers Road / Bundy Canyon Road (#3) – The following improvement is necessary to reduce the Project’s impact to “**less-than-significant**”:

- Mitigation Measure 1.1 from Section 5.3 *Project Impacts and Mitigation Measures* shall apply.

Monte Vista Drive / Bundy Canyon Road (#4) – Although this intersection was found to operate at an unacceptable LOS (LOS “F”) during the AM and PM peak hours under Opening Year (2015) without

Table 6-2

City of Wildomar Significant Impact Criteria Test for Opening Year (2015) Conditions

#	Intersection	Jurisdiction	Traffic Control ³	2015 Without Project				2015 With Project				Significant Project Impact? ¹			
				Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service		AM Peak Hour		PM Peak Hour	
				AM	PM	AM	PM	AM	PM	AM	PM	Change in Delay	Significant?	Change in Delay	Significant?
3	Sellers Rd. / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F	>5.0	Yes	>5.0	Yes
4	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F	>5.0	Yes	>5.0	Yes
6	Harvest Wy.-West / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F	>5.0	Yes	>5.0	Yes
8	Harvest Wy.-East / Bundy Canyon Rd.	Wildomar	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F	>5.0	Yes	>5.0	Yes
10	Sunset Av. / Bundy Canyon Rd.	Wildomar/ Meniffee	CSS	>80.0	>80.0	F	F	>80.0	>80.0	F	F	>5.0	Yes	>5.0	Yes

¹ City of Wildomar threshold of significance has been applied to those intersections within the City. Other jurisdictions do not have a threshold of significance.

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

Project traffic conditions, the City of Wildomar's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 or more peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impact is considered significant. As indicated on Table 6-2, the project-related delay increase if greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 2.1)**.

Mitigation Measure 2.1 – Monte Vista Drive / Bundy Canyon Road (#4) – The following improvement is necessary to reduce the Project's impact to **"less-than-significant"**:

- Mitigation Measure 2.1 from Section 5.3 *Project Impacts and Mitigation Measures* shall apply.

Harvest Way-West / Bundy Canyon Road (#6) – Although this intersection was found to operate at an unacceptable LOS (LOS "F") during the AM and PM peak hours under Opening Year (2015) without Project traffic conditions, the City of Wildomar's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 or more peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impact is considered significant. As indicated on Table 6-2, the project-related delay increase if greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 3.1)**.

Mitigation Measure 3.1 – Harvest Way-West / Bundy Canyon Road (#6) – The following improvement is necessary to reduce the Project's impact to **"less-than-significant"**:

- Mitigation Measure 3.1 from Section 5.3 *Project Impacts and Mitigation Measures* shall apply.

Harvest Way-East / Bundy Canyon Road (#8) – Although this intersection was found to operate at an unacceptable LOS (LOS "F") during the AM and PM peak hours under Opening Year (2015) without Project traffic conditions, the City of Wildomar's specialized significance criteria dictates that if the addition of Project traffic (as measured by 50 or more peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impact is considered significant. As indicated on Table 6-2, the project-related delay increase if greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 4.1)**.

Mitigation Measure 4.1 – Harvest Way-East / Bundy Canyon Road (#8) – The following improvement is necessary to reduce the Project's impact to **"less-than-significant"**:

- Mitigation Measure 4.1 from Section 5.3 *Project Impacts and Mitigation Measures* shall apply.

Sunset Avenue / Bundy Canyon Road (#10) – Although this intersection was found to operate at an unacceptable LOS (LOS "F") during the AM and PM peak hours under Opening Year (2015) without Project traffic conditions, the City of Wildomar's specialized significance criteria dictates that if the

addition of Project traffic (as measured by 50 or more peak hour trips) results in an increase in delay by more than five (5.0) seconds, the impact is considered significant. As indicated on Table 6-2, the project-related delay increase if greater than five (5.0) seconds, therefore, the impact is considered **significant (Impact 5.1)**.

Mitigation Measure 5.1 – Sunset Avenue / Bundy Canyon Road (#10) – The following improvement is necessary to reduce the Project’s impact to **“less-than-significant”**:

- Mitigation Measure 5.1 from Section 5.3 *Project Impacts and Mitigation Measures* shall apply.

Mitigation strategies have been recommended to address study area intersections found to be significantly impacted by the Project. The effectiveness of the proposed mitigation measures are presented in Table 6-3.

With the implementation of the intersection mitigation measures discussed above, there are no project-related impacts anticipated to the study area intersections. Opening Year (2015) with Project intersection operations analysis worksheets with Project mitigation measures are provided in Appendix “6.4”.

6.6 CUMULATIVE IMPACTS AND MITIGATION MEASURES

A significant cumulative impact has been identified when an intersection is projected to operate below the requisite level of service standard under pre-project conditions AND the Project’s measurable increase in traffic, as defined by 50 or more peak hour trips, contributes to the deficiency. Mitigation measures necessary to reduce cumulative impacts to “less-than-significant” are also discussed below.

Murrieta Road / Scott Road (#11) – This intersection is anticipated to operate at an unacceptable LOS (LOS “F”) during the AM and PM peak hours under Opening Year (2015) without Project condition and is anticipated to continue to operate at LOS “F” during the peak hours with the addition of Project traffic (as measured by 50 or more peak hour trips). As such, this impact is considered **cumulatively significant**. The following improvements are necessary to reduce the cumulative impact to **“less-than-significant”**:

- Cumulative mitigation from Section 5.4 *Cumulative Impacts and Mitigation Measures* shall apply and:
- Re-stripe the southbound shared left-right turn lane as a right turn lane and construct two left turn lanes.
- Construct an additional eastbound through lane.
- Construct an additional westbound through lane and a dedicated right turn lane.

Table 6-3

Intersection Analysis for Opening Year (2015) Conditions With Project Mitigation Measures

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												2015 With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay ² (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
3	Sellers Rd. / Bundy Canyon Rd.																	
	- Pre-Project Conditions	CSS	0	0	0	0	1	0	1	1	0	0	1	1	>300.0	>300.0	F	F
	- With Project Mitigation 1.1	TS	0	1	0	0	1	0	1	1	0	1	1	1	60.3	113.5	E	F
4	Monte Vista Dr. / Bundy Canyon Rd.																	
	- Pre-Project Conditions	CSS	0	1	0	0	0	0	0	1	0	1	1	0	269.3	>300.0	F	F
	- With Project Mitigation 2.1	TS	0	1	0	0	0	0	0	1	0	1	1	0	113.5	132.5	F	F
6	Harvest Wy.-West / Bundy Canyon Rd.																	
	- Pre-Project Conditions	CSS	1	0	d	0	0	0	0	1	1	1	1	0	>80.0	>80.0	F	F
	- With Project Mitigation 3.1	TS	1	1	0	1	1	0	1	3	0	1	3	0	30.6	27.9	C	C
8	Harvest Wy.-East / Bundy Canyon Rd.																	
	- Pre-Project Conditions	CSS	0	1	0	0	1	0	0	1	0	0	1	0	>80.0	>80.0	F	F
	- With Project Mitigation 4.1	TS	0	1	0	0	1	0	1	3	0	1	1	0	25.4	21.8	C	C
10	Sunset Av. / Bundy Canyon Rd.																	
	- Pre-Project Conditions	CSS	0	1	0	0	1	0	0	1	0	0	1	0	>80.0	>80.0	F	F
	- With Project Mitigation 5.1	TS	0	1	0	0	1	0	1	3	0	1	1	0	57.5	47.0	D	D

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

I-215 Southbound Ramps / Scott Road (#12) – This intersection is anticipated to operate at an unacceptable LOS (LOS “F”) during the AM and PM peak hours under Opening Year (2015) without Project condition and is anticipated to continue to operate at LOS “F” during the peak hours with the addition of Project traffic (as measured by 50 or more peak hour trips). As such, this impact is considered **cumulatively significant**. The following improvements are necessary to reduce the cumulative impact to **“less-than-significant”**:

- Re-stripe the southbound shared left-through lane as a left turn lane and construct a second left turn lane and second right turn lane.
- Construct three additional eastbound through lanes.
- Eliminate the westbound left turn lane and construct two additional through lanes and a right turn lane.
- It should be noted that these improvements are consistent with the planned I-215 Freeway at Scott Road interchange improvements.

I-215 Northbound Ramps / Scott Road (#13) – This intersection is anticipated to operate at an unacceptable LOS (LOS “F”) during the AM and PM peak hours under Opening Year (2015) without Project condition and is anticipated to continue to operate at LOS “F” during the peak hours with the addition of Project traffic (as measured by 50 or more peak hour trips). As such, this impact is considered **cumulatively significant**. The following improvements are necessary to reduce the cumulative impact to **“less-than-significant”**:

- Construct a second northbound right turn lane and re-stripe the shared left-through lane as a through lane.
- Construct two southbound right turn lanes.
- Construct a second eastbound left turn lane and two additional through lanes.
- Construct two additional westbound through lanes and a shared through-right turn lane.
- It should be noted that these improvements are consistent with the planned I-215 Freeway at Scott Road interchange improvements.

The effectiveness of the recommended improvements discussed above to address Opening Year (2015) with Project cumulative traffic impacts are presented in Table 6-4. Opening Year (2015) with Project intersection operations analysis worksheets with cumulative mitigation measures are provided in Appendix “6.5”.

6.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Opening Year (2015) without and with Project traffic conditions are based on Opening Year (2015) without and with Project ADT volumes. For Opening Year (2015) without Project traffic conditions, there are no intersections anticipated to warrant a traffic signal as compared to those

Table 6-4

Intersection Analysis for Opening Year (2015) Conditions With Cumulative Mitigation Measures

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												2015 With Project			
			Northbound			Southbound			Eastbound			Westbound			Delay ² (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
11	Murrieta Rd. / Scott Rd.																	
	- Pre-Project Conditions	AWS	0	0	0	0	1	0	0	1	0	0	1	0	>300.0	>300.0	F	F
	- With Cumulative Mitigation	TS	0	0	0	<u>2</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>2</u>	0	0	<u>2</u>	<u>1</u>	18.0	24.9	B	C
12	I-215 SB Ramps / Scott Rd.																	
	- Pre-Project Conditions	TS	0	0	0	0	1	1	0	1	1	1	1	0	284.4	>300.0	F	F
	- With Cumulative Mitigation	TS	0	0	0	<u>2</u>	<u>0</u>	<u>2</u>	0	<u>4</u>	1	<u>0</u>	<u>3</u>	<u>1</u>	10.7	16.9	B	B
13	I-215 NB Ramps / Scott Rd.																	
	- Pre-Project Conditions	TS	0	1	1	0	0	0	1	1	0	0	1	1	>300.0	>300.0	F	F
	- With Cumulative Mitigation	TS	0	1	<u>2</u>	0	0	<u>2</u>	<u>2</u>	<u>3</u>	0	0	<u>4</u>	1	24.3	41.4	C	D

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-street Stop; AWS = All Way Stop; TS = Traffic Signal

previously identified under existing (2011) traffic conditions. Similarly, there are no additional traffic signals that appear to be warranted under Opening Year (2015) with Project traffic conditions in addition to those warranted under Opening Year (2015) without Project traffic conditions.

It should be noted that if access is ultimately restricted at the intersection of Harvest Way-West and Bundy Canyon Road, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS "D" or better).

7.0 HORIZON YEAR (2035) TRAFFIC ANALYSIS

This section discusses the methods used to develop Horizon Year (2035) without and with Project traffic forecasts and the resulting intersection operations and traffic signal warrants.

7.1 ROADWAY IMPROVEMENTS

The RivTAM (2035) traffic forecasts assume buildout of the City of Wildomar General Plan circulation network as previously shown on Exhibit 3-2. As such, the lane configurations and traffic controls assumed to be in place for Horizon Year (2035) without and with Project conditions are consistent with those planned according to the City of Wildomar General Plan roadway classifications in conjunction with the Project driveways and those facilities assumed to be constructed by the Project or cumulative development projects to provide site access. Exhibit 7-1 shows the future lane geometrics assumed for each analysis location under Horizon Year (2035) without Project traffic conditions.

As discussed previously in Section 6.1 *Roadway Improvements*, there are currently Caltrans improvements planned at the I-215 Freeway at Scott Road interchange; however, it is not known when these improvements would be in place. For the purposes of this analysis, it has been assumed that the I-215 Freeway at Scott Road interchange improvements would be in place under Horizon Year (2035) traffic conditions. Exhibit 7-3 shows the planned I-215 Freeway at Scott Road interchange improvements.

The City of Wildomar General Plan Circulation Element is based on the circulation needs as defined by buildout of the Land Use Element. As such, it is assumed that the circulation network would be built out as the Land Use Element is built out and the funds for these improvements are made available for construction.

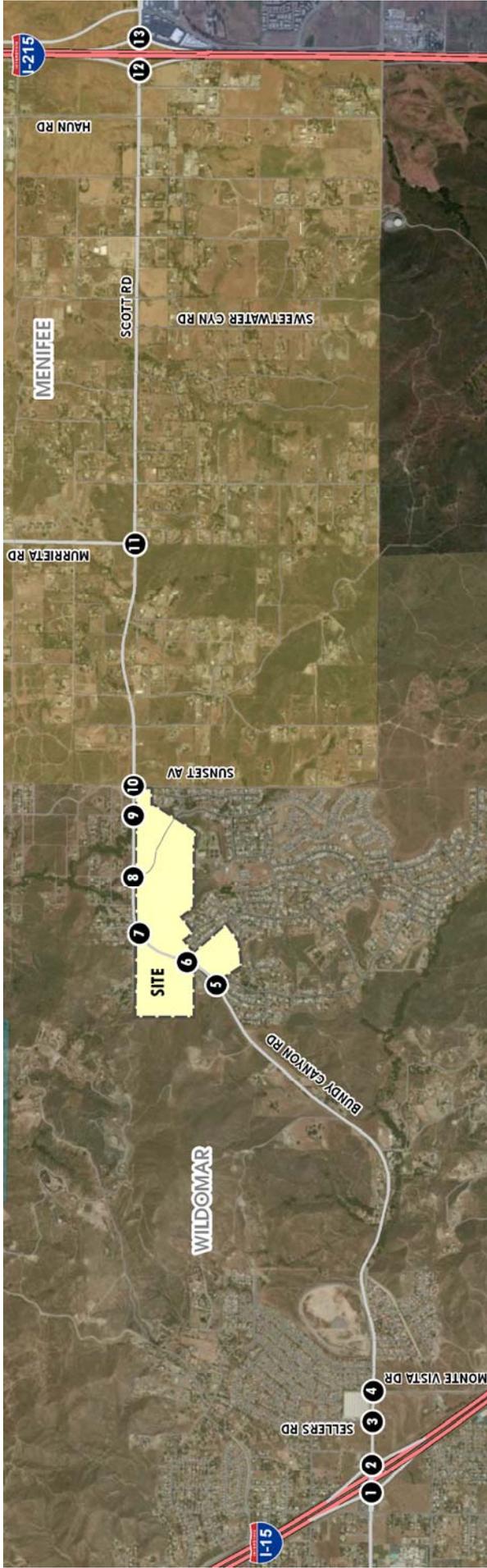
Exhibit 7-2 shows the future lane geometrics assumed under Horizon Year (2035) with Project traffic conditions. The lane geometrics shown in Exhibit 7-2 are consistent with those previously shown on Exhibit 7-1, with the exception of the following intersections:

ID	Intersection Location	Location
6	Harvest Way-West / Bundy Canyon Road	Wildomar
7	"I" Street / Bundy Canyon Road	Wildomar
9	Commercial Access / Bundy Canyon Road	Wildomar

7.2 HORIZON YEAR (2035) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes obtained from the Riverside County Transportation and Analysis Model (RivTAM) less the traffic generated by the proposed Project (see

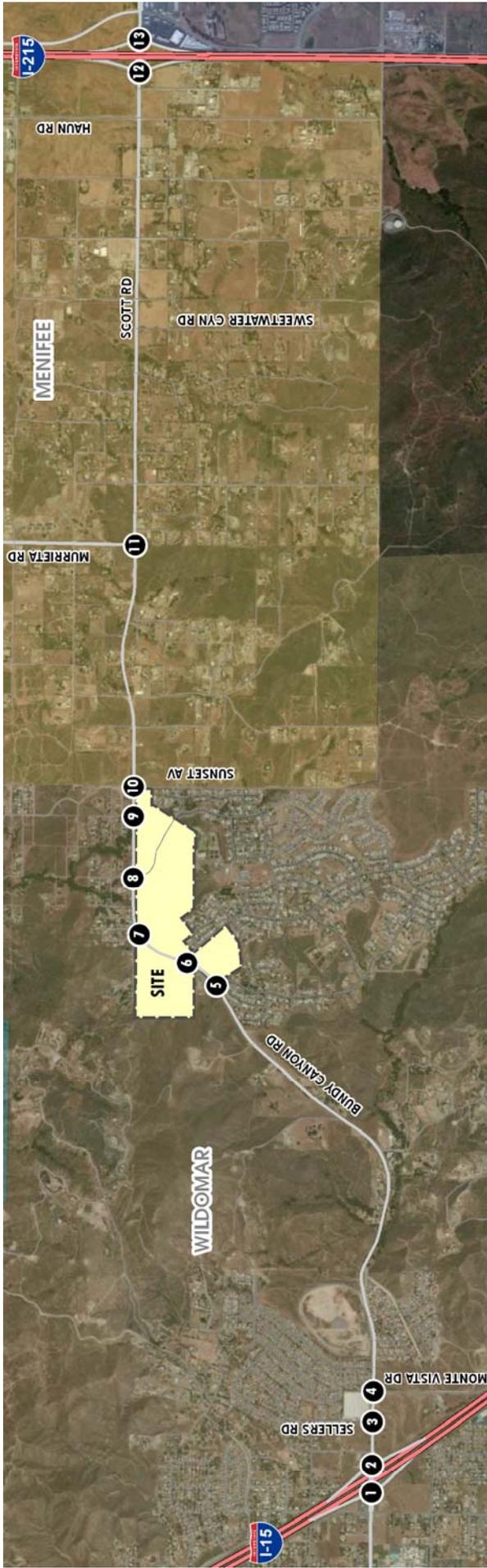
EXHIBIT 7-1 HORIZON YEAR (2035) WITHOUT PROJECT LANE CONFIGURATION AND INTERSECTION CONTROLS



1	I-15 SB Ramps & Bundy Canyon Rd.		2	I-15 NB Ramps & Bundy Canyon Rd.		3	Sellers Rd. & Bundy Canyon Rd.		4	Monte Vista Dr. & Bundy Canyon Rd.		5	The Farm Rd. & Bundy Canyon Rd.		6	Harvest Way West & Bundy Canyon Rd.		7	"I" St. & Bundy Canyon Rd.		8	Harvest Way East & Bundy Canyon Rd.	
9	Commercial Access & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		11	Murreta Rd. & Scott Rd.		12	I-215 SB Ramps & Scott Rd.		13	I-215 NB Ramps & Scott Rd.		Future Intersection								
LEGEND:																							
														TRAFFIC SIGNAL									
														DEF = DEFACTO RIGHT TURN LANE									
														FREE RIGHT TURN LANE									
<p>NOTE: LANE GEOMETRICS ARE CONSISTENT WITH THE ULTIMATE GENERAL PLAN ROADWAY DESIGNATIONS. IMPROVEMENTS IDENTIFIED AT THE I-215/SCOTT ROAD INTERCHANGE ARE CONSISTENT WITH FUTURE PLANNED IMPROVEMENTS PER CALTRANS.</p>																							

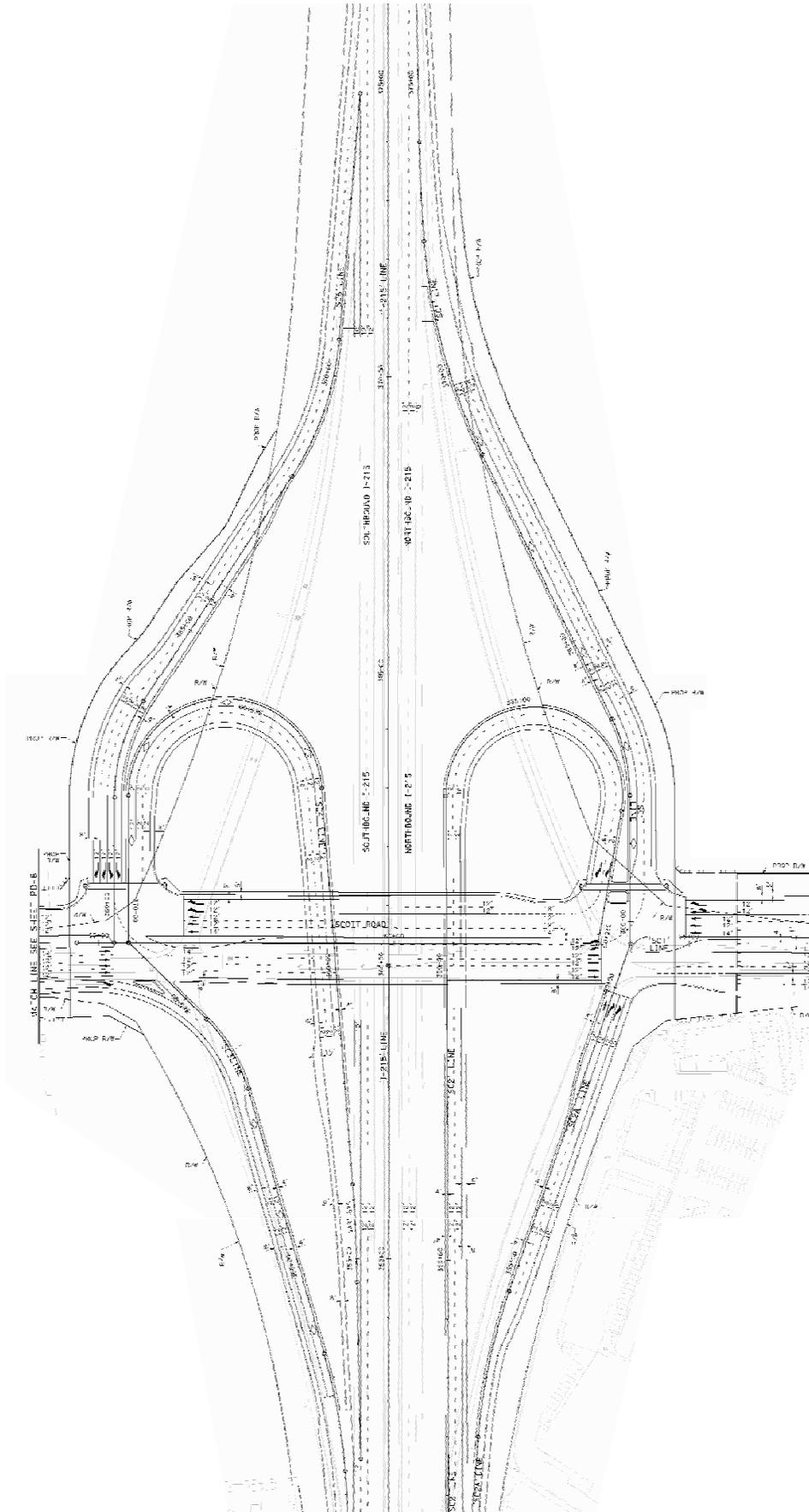


EXHIBIT 7-2 HORIZON YEAR (2035) WITH PROJECT LANE CONFIGURATION AND INTERSECTION CONTROLS



1	I-15 SB Ramps & Bundy Canyon Rd.		2	I-15 NB Ramps & Bundy Canyon Rd.		3	Sellers Rd. & Bundy Canyon Rd.		4	Monte Vista Dr. & Bundy Canyon Rd.		5	The Farm Rd. & Bundy Canyon Rd.		6	Harvest Way West & Bundy Canyon Rd.		7	11th St. & Bundy Canyon Rd.		8	Harvest Way East & Bundy Canyon Rd.		9	Commercial Access & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		11	Murrietta Rd. & Scott Rd.		12	I-215 SB Ramps & Scott Rd.		13	I-215 NB Ramps & Scott Rd.	
LEGEND:													= TRAFFIC SIGNAL = STOP SIGN = FREE RIGHT TURN LANE																									
<p>NOTE: LANE GEOMETRICS ARE CONSISTENT WITH THE ULTIMATE GENERAL PLAN ROADWAY DESIGNATIONS. IMPROVEMENTS IDENTIFIED AT THE I-215/SCOTT ROAD INTERCHANGE ARE CONSISTENT WITH FUTURE PLANNED IMPROVEMENTS PER CALTRANS.</p>																																						

CALTRANS I-215/SCOTT RD. INTERCHANGE IMPROVEMENTS



Section 4.9 *Horizon Year (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology). The weekday ADT volumes which can be expected for Horizon Year (2035) without Project traffic conditions are shown on Exhibit 7-4. Exhibits 7-5 and 7-6 show the AM and PM peak hour intersection turning movement volumes for Horizon Year (2035) without Project traffic conditions.

7.3 HORIZON YEAR (2035) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes obtained from RivTAM (see Section 4.9 *Horizon Year (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology). The weekday ADT volumes which can be expected for Horizon Year (2035) with Project traffic conditions are shown on Exhibit 7-7. Exhibits 7-8 and 7-9 show the AM and PM peak hour intersection turning movement volumes for Horizon Year (2035) with Project traffic conditions.

7.4 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2035) without Project conditions. As shown in Table 7-1, all of the study area intersections are anticipated to operate at an acceptable LOS under Horizon Year (2035) without Project traffic conditions based on the intersection controls and lane geometrics assumed on Exhibit 7-1.

The intersection operations analysis worksheets for Horizon Year (2035) without Project conditions are included in Appendix “7.1” of this TIA.

As shown on Table 7-1, the addition of Project traffic is not anticipated to worsen the peak hour operations at any of the study area intersections, resulting in no significant project-related impacts. As shown in Table 7-1, the intersection of Harvest Way-West at Bundy Canyon Road is anticipated to operate at acceptable peak hour levels of service with the access alternative assumptions. If access is restricted at this intersection, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS “D” or better).

7.5 TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic signal warrants for Horizon Year (2035) without and with Project traffic conditions are based on Horizon Year (2035) without and with Project ADT volumes. For Horizon Year (2035) without Project traffic conditions, there are no intersections anticipated to warrant a traffic signal as compared to those previously identified under Opening Year (2035) without Project traffic conditions. Similarly, there are no additional traffic signals that appear to be warranted under Horizon Year (2035) with Project traffic conditions in addition to those warranted under Horizon Year (2035) without Project traffic conditions.

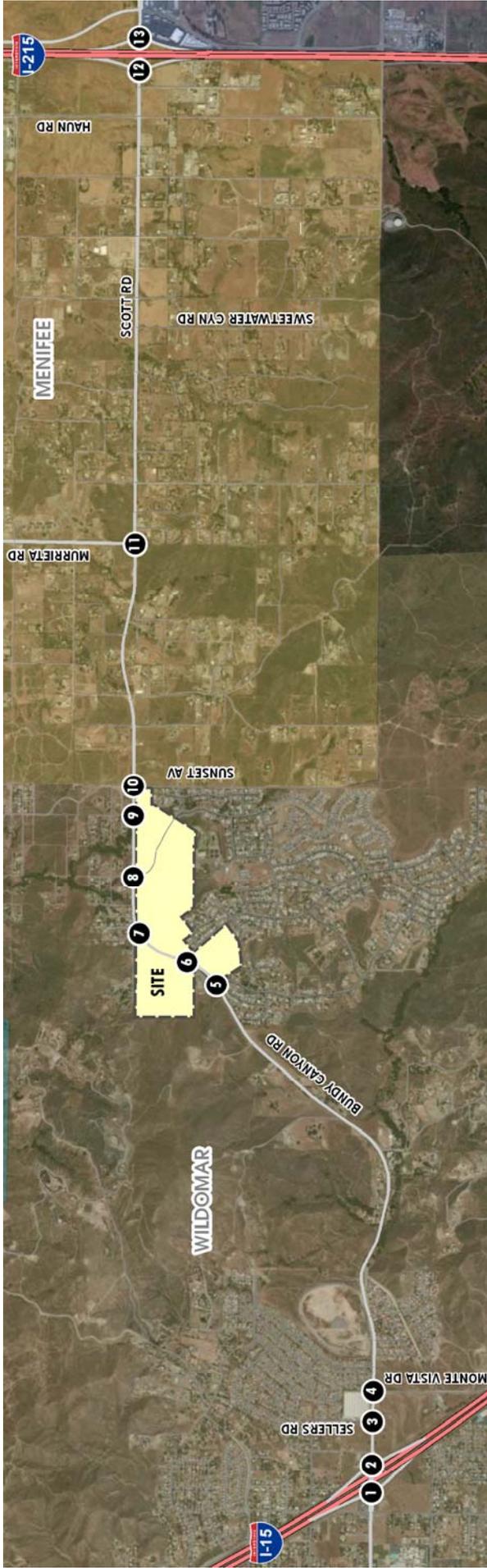
EXHIBIT 7-4
**HORIZON YEAR (2035) WITHOUT PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



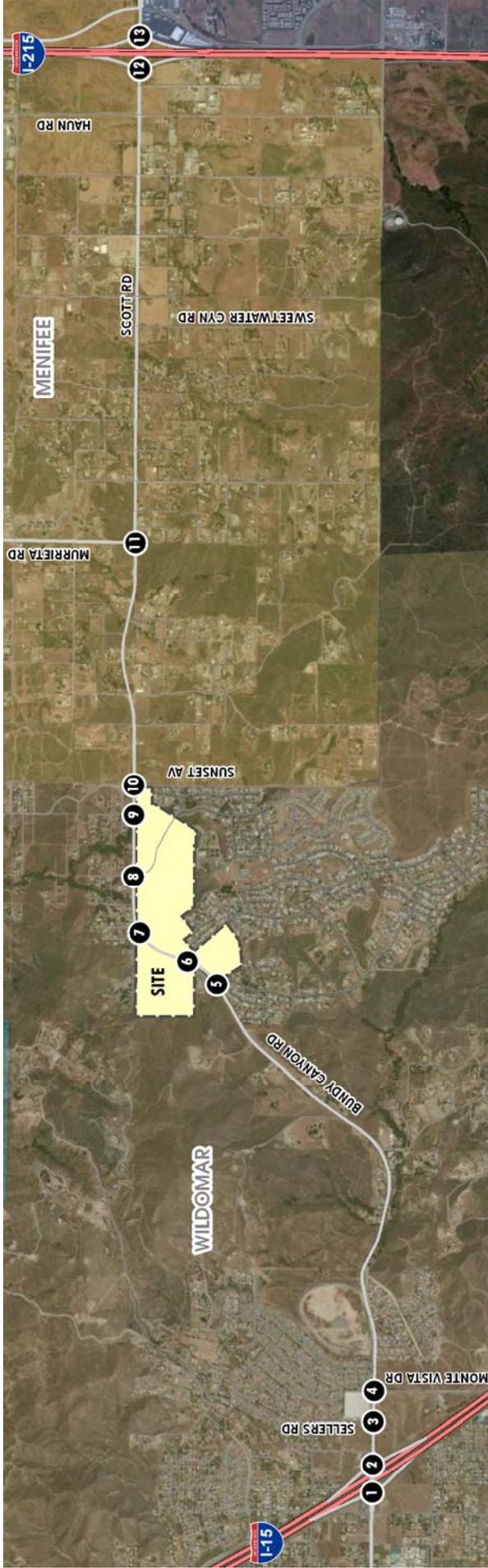
EXHIBIT 7-5 HORIZON YEAR (2035) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1	I-15 SB Ramps & Bundy Canyon Rd.		2	I-15 NB Ramps & Bundy Canyon Rd.		3	Sellers Rd. & Bundy Canyon Rd.		4	Monte Vista Dr. & Bundy Canyon Rd.		5	The Farm Rd. & Bundy Canyon Rd.		6	Harvest Way West & Bundy Canyon Rd.		7	"I" St. & Bundy Canyon Rd.		8	Harvest Way East & Bundy Canyon Rd.	
9	Commercial Access & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		11	Murreleta Rd. & Scott Rd.		12	I-215 SB Ramps & Scott Rd.		13	I-215 NB Ramps & Scott Rd.										

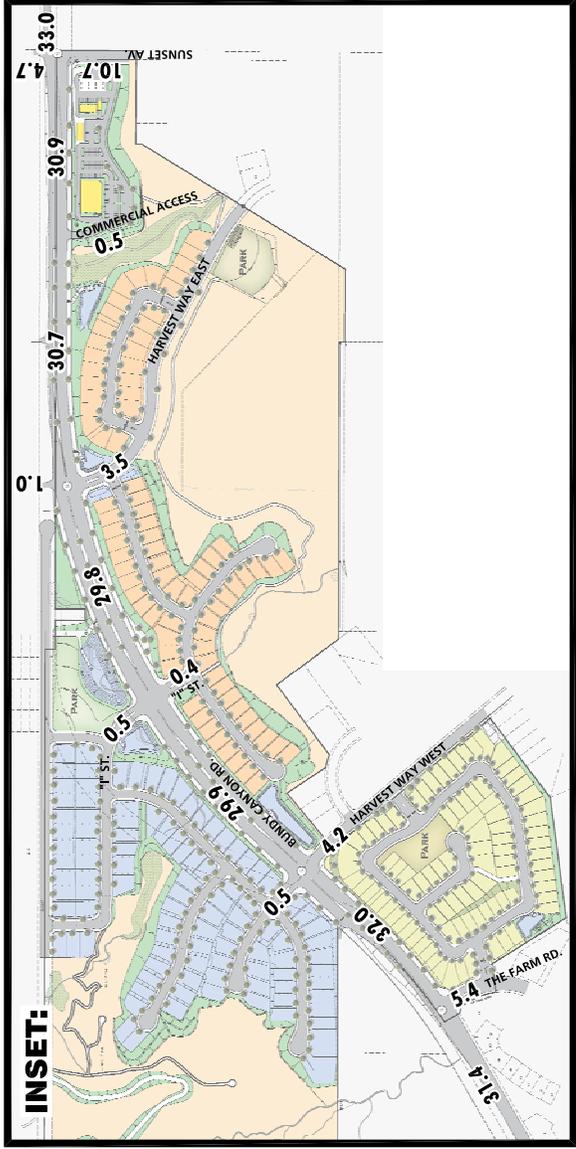


EXHIBIT 7-6 HORIZON YEAR (2035) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1	I-15 SB Ramps & Bundy Canyon Rd.		2	I-15 NB Ramps & Bundy Canyon Rd.		3	Sellers Rd. & Bundy Canyon Rd.		4	Monte Vista Dr. & Bundy Canyon Rd.		5	The Farm Rd. & Bundy Canyon Rd.		6	Harvest Way West & Bundy Canyon Rd.		7	"I" St. & Bundy Canyon Rd.		8	Harvest Way East & Bundy Canyon Rd.		9	Commercial Access & Bundy Canyon Rd.		10	Sunset Av. & Bundy Canyon Rd.		11	Murreleta Rd. & Scott Rd.		12	I-215 SB Ramps & Scott Rd.		13	I-215 NB Ramps & Scott Rd.	
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EXHIBIT 7-7
**HORIZON YEAR (2035) WITH PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:
 10.0 = VEHICLES PER DAY (1000'S)



EXHIBIT 7-8 HORIZON YEAR (2035) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 1st St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	
9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murrieta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd. 				



EXHIBIT 7-9 HORIZON YEAR (2035) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1 I-15 SB Ramps & Bundy Canyon Rd. 	2 I-15 NB Ramps & Bundy Canyon Rd. 	3 Sellers Rd. & Bundy Canyon Rd. 	4 Monte Vista Dr. & Bundy Canyon Rd. 	5 The Farm Rd. & Bundy Canyon Rd. 	6 Harvest Way West & Bundy Canyon Rd. 	7 "I" St. & Bundy Canyon Rd. 	8 Harvest Way East & Bundy Canyon Rd. 	
9 Commercial Access & Bundy Canyon Rd. 	10 Sunset Av. & Bundy Canyon Rd. 	11 Murrietta Rd. & Scott Rd. 	12 I-215 SB Ramps & Scott Rd. 	13 I-215 NB Ramps & Scott Rd. 				



Table 7-1

Intersection Analysis for Horizon Year (2035) Conditions

#	Intersection	Jurisdiction	Traffic Control ²	2035 Without Project				2035 With Project			
				Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
				AM	PM	AM	PM	AM	PM	AM	PM
1	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans	TS	18.1	33.2	B	C	18.8	38.2	B	D
2	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans	TS	17.0	24.3	B	C	17.9	26.6	B	C
3	Sellers Rd. / Bundy Canyon Rd.	Wildomar	TS	22.9	24.4	C	C	22.9	24.7	C	C
4	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	TS	18.8	22.3	B	C	19.6	22.7	B	C
5	The Farm Rd. / Bundy Canyon Rd. - Preferred Access	Wildomar	TS	10.8	11.2	B	B	10.9	11.3	B	B
	- Access Alternative	Wildomar	TS	10.8	11.2	B	B	15.6	15.0	B	B
6	Harvest Wy.-West / Bundy Canyon Rd. - Preferred Access	Wildomar	<u>TS</u>	10.9	9.4	B	A	15.2	13.6	B	B
	- Access Alternative	Wildomar	CSS	10.9	9.4	B	A	11.3	14.9	B	C
7	"I" Street / Bundy Canyon Rd.	Wildomar	<u>CSS</u>	Not Applicable				10.9	12.9	B	B
8	Harvest Wy.-East / Bundy Canyon Rd.	Wildomar	TS	14.1	12.8	B	B	14.9	13.4	B	B
9	Commercial Access / Bundy Canyon Rd.	Wildomar	<u>CSS</u>	Not Applicable				10.3	12.7	B	B
10	Sunset Av. / Bundy Canyon Rd.	Wildomar/ Menifee	TS	16.7	18.1	B	B	17.7	22.6	B	C
11	Murrieta Rd. / Scott Rd.	Menifee	TS	22.3	28.6	C	C	21.8	29.3	C	C
12	I-215 SB Ramps / Scott Rd.	Caltrans	TS	10.3	16.7	B	B	10.5	16.2	B	B
13	I-215 NB Ramps / Scott Rd.	Caltrans	TS	15.4	44.8	B	D	27.6	46.2	C	D

¹ Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

² TS = Traffic Signal; CSS = Cross-street Stop

It should be noted that if access is ultimately restricted at the intersection of Harvest Way-West and Bundy Canyon Road, the installation of a traffic signal is not necessary to achieve acceptable peak hour intersection operations (i.e., LOS “D” or better).

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