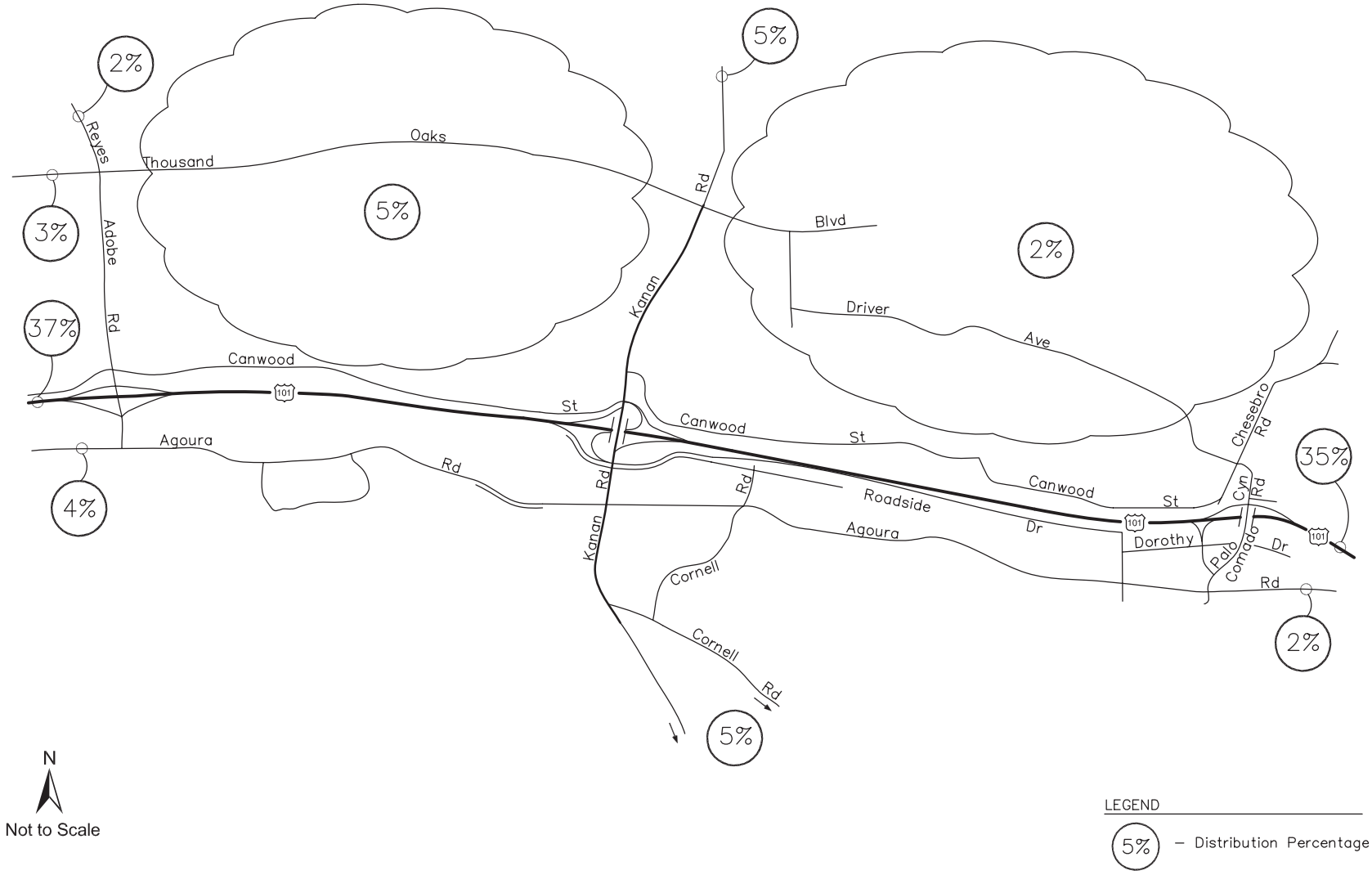
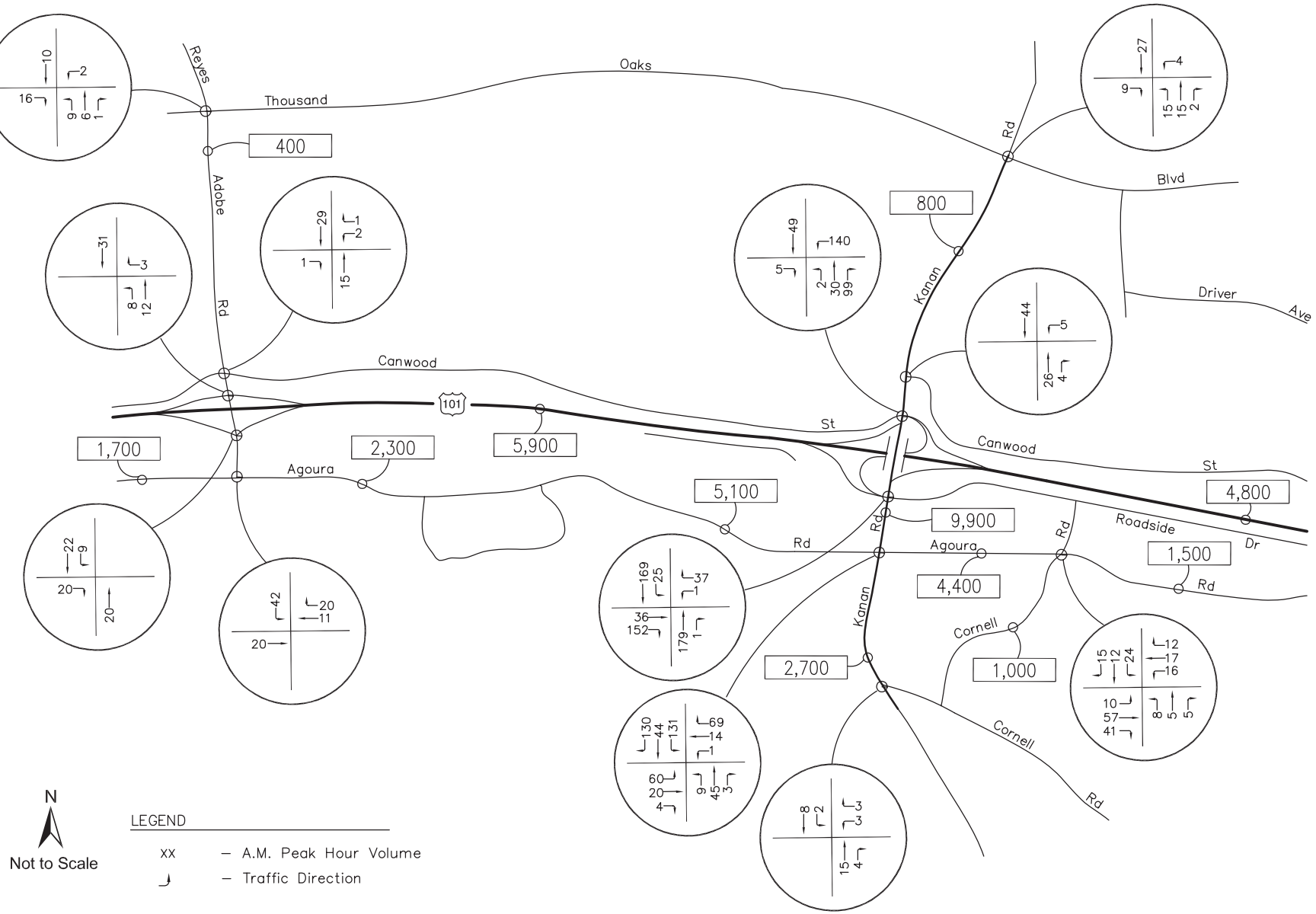


Source: Associated Transportation Engineers, October 2005

Project Trip Distribution Percentages

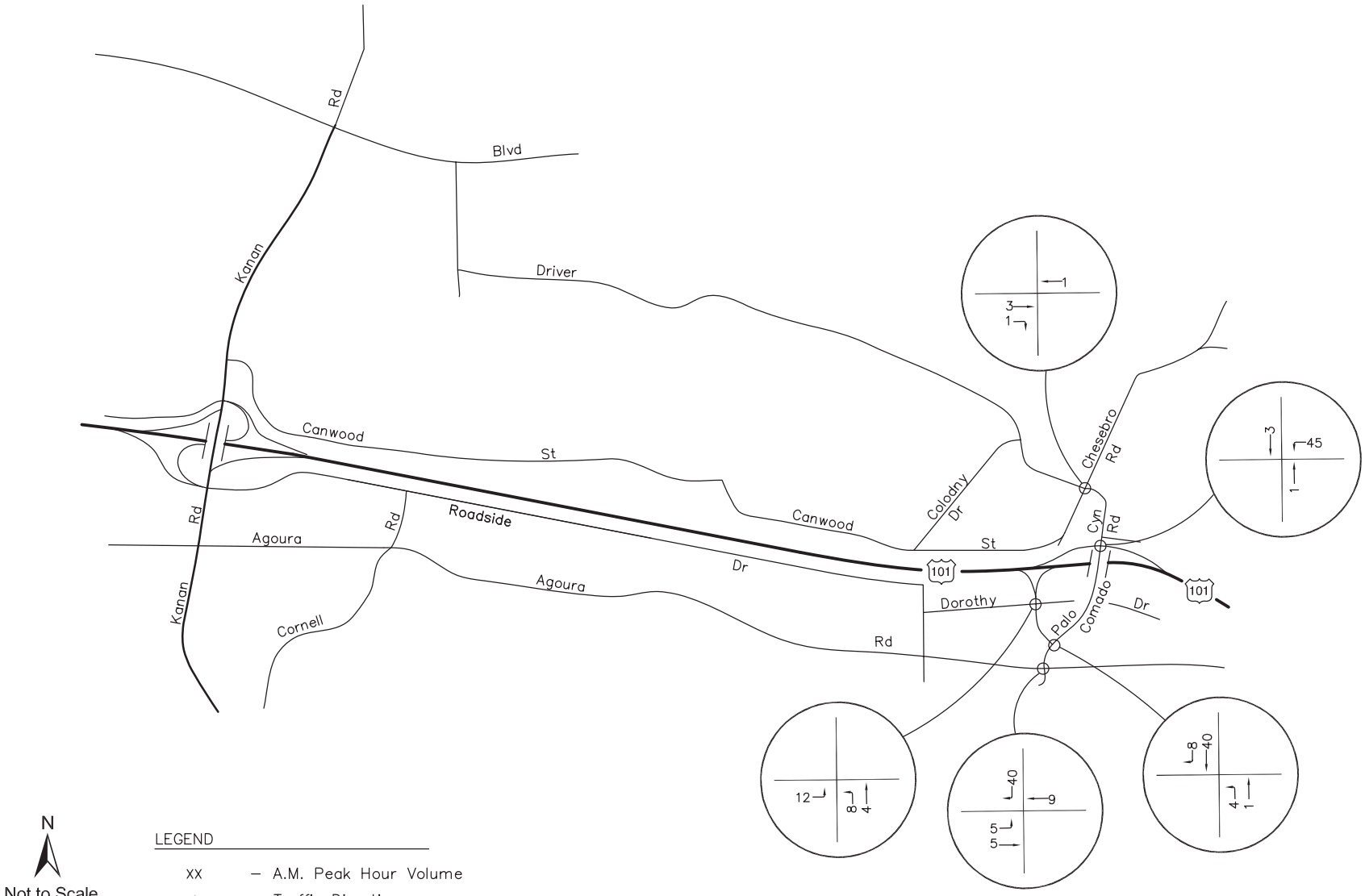
Figure 4.11-2



Project - Added Average Daily Traffic and
A.M. Peak Hour Traffic Volumes

Figure 4.11-3a

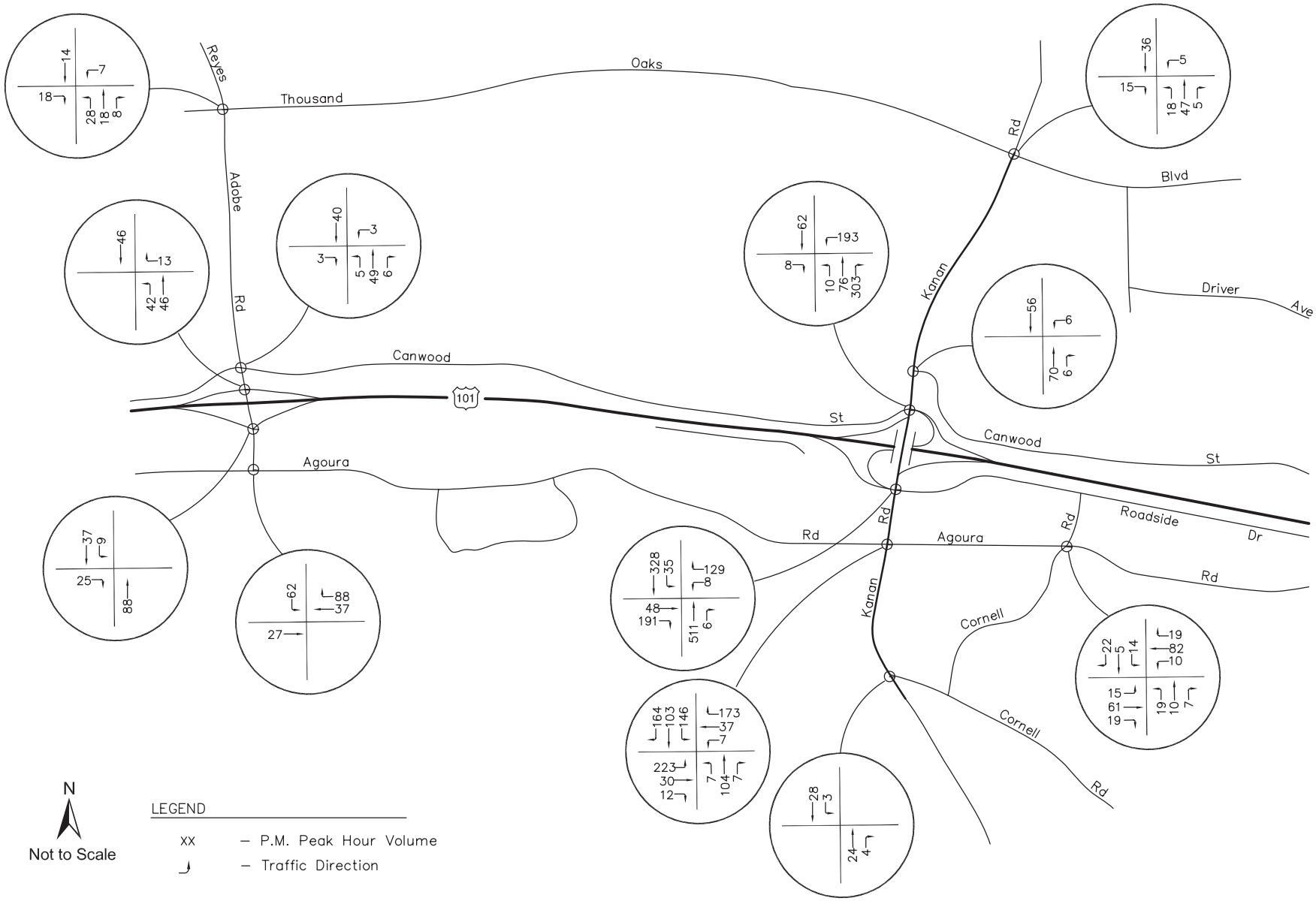
Source: Associated Transportation Engineers, October 2005



Project - Added Average Daily Traffic and
A.M. Peak Hour Traffic Volumes - Continued

Figure 4.11-3b

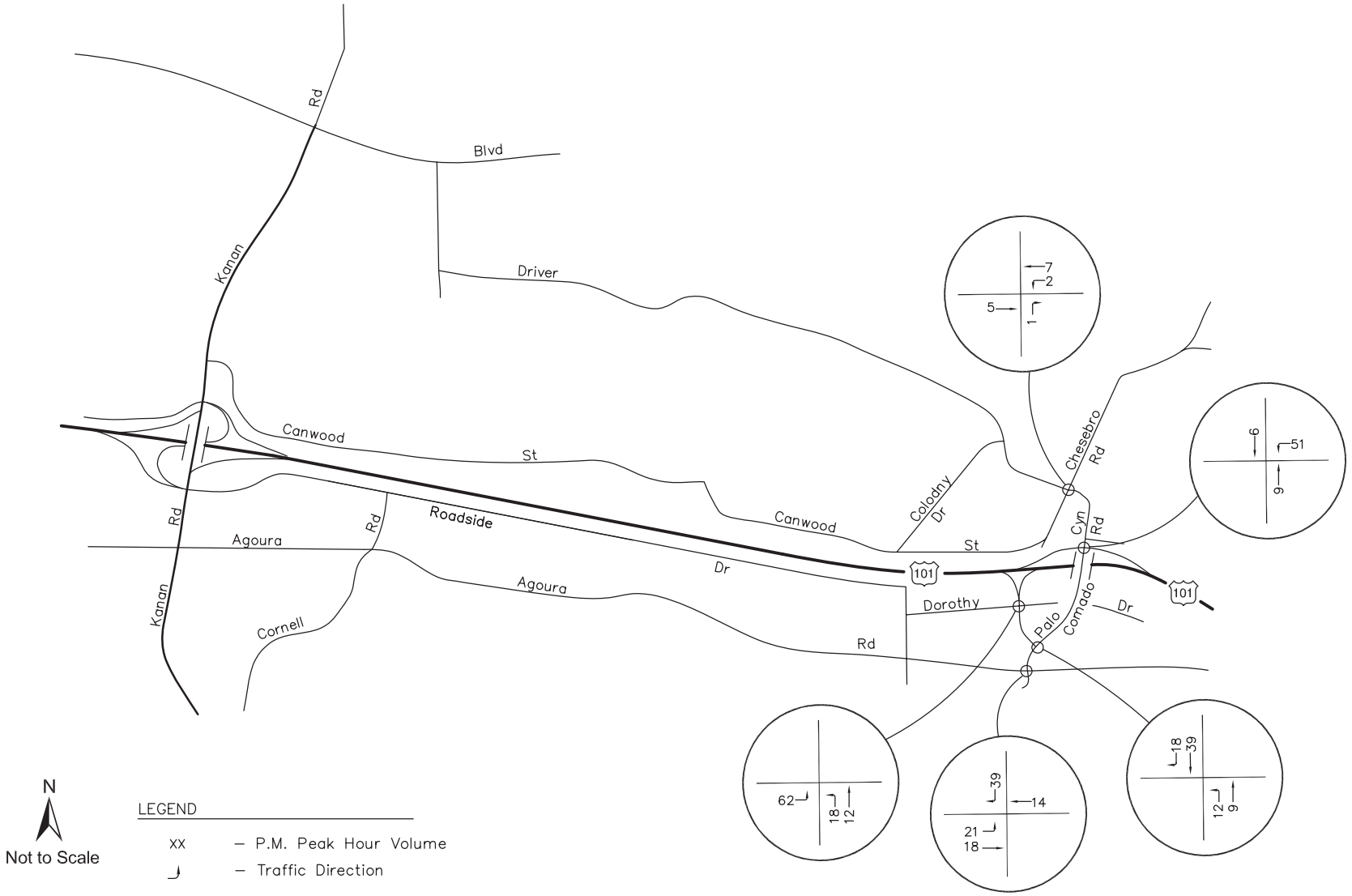
Source: Associated Transportation Engineers, October 2005



Source: Associated Transportation Engineers, October 2005

Project - Added P.M. Peak Hour Traffic Volumes

Figure 4.11-4a



Project - Added P.M. Peak Hour Traffic Volumes - Continued

Source: Associated Transportation Engineers, October 2005

Figure 4.11-4b

coded to reflect the improvements that would be completed under cumulative conditions. The analysis also assumes a two-lane roundabout at the Kanan Road/Agoura Road intersection, which is proposed as part of the Agoura Village Specific Plan. A graphic developed by Ourston Roundabout Engineering that illustrates the roundabout lane geometry is included in Appendix F.

b. Project Impacts and Mitigation Measures.

Impact T-1 **Full buildout of the Specific Plan will result in the addition of 17,593 new average daily trips onto the local circulation network. This would cause one street segment to operate below the City's LOS C standard. Impacts to street segments are considered a Class I, *significant unavoidable* impact.**

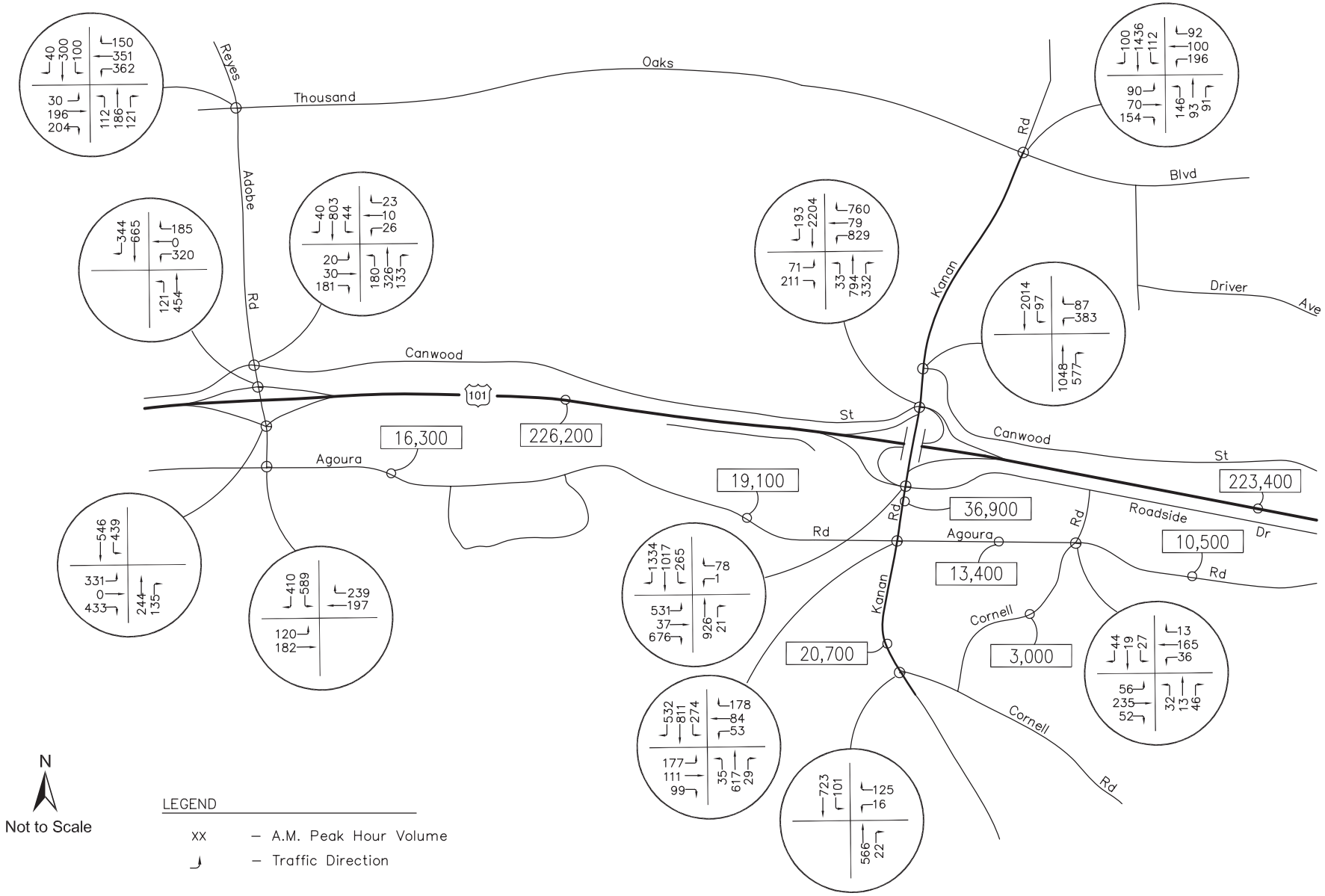
Operational conditions for road segments after full buildout are summarized in Table 4.11-6. Full buildout of the Specific Plan would increase traffic levels by more than 2% on the segment of Agoura Road east of Kanan Road, which is forecast to operate at LOS D. In order to create a village atmosphere, traffic calming measures are included in the Agoura Village Specific Plan. These measures include reducing the number of lanes of that segment of Agoura Road between Kanan Road and Cornell Road from four lanes to two lanes along with proposed angled parking and design elements. It is important to note that a City Council Resolution designated this section of road as two lanes, not four. Therefore, the project would facilitate this City Council Resolution. This effectively reduces the capacity of that segment of roadway and results in a LOS that is less than that normally acceptable based on City Standards.

Table 4.11-6 Cumulative and Cumulative + Proposed Agoura Village Specific Plan Roadway Volumes and Levels of Service

Roadway Segment	No. of Lanes	Cumulative ADT	Cum+AVSP ADT	Cum+AVSP LOS	V/C Increase	Impact?
U.S. Highway 101 west of Kanan Rd[a]	10	220,300	226,200	LOS E	N.A.	No
U.S. Highway 101 east of Kanan Rd[a]	10	218,600	223,400	LOS E	N.A.	No
Kanan Rd north of Cornell Way	2[b]	18,000	20,700	LOS C	N.A.	No
Kanan Rd north of Agoura Rd	6	27,000	36,900	LOS C	N.A.	No
Agoura Rd east of Reyes Adobe Rd	4	14,000	16,300	LOS A	No	No
Agoura Rd east of Kanan Rd	2	9,000	**13,400**	**LOS D**	**>2%**	**Yes**
Agoura Rd east of Cornell Rd	2	9,000	10,500	LOS B	N.A.	No
Cornell Rd south of Agoura Rd	2	2,000	3,000	LOS A	N.A.	No
Roadside Dr east of Kanan Rd	2	7,000	9,000	LOS A	N.A.	No

[a] *Level of service based on L.A. County CMP peak hour demand-to-capacity calculation method.*

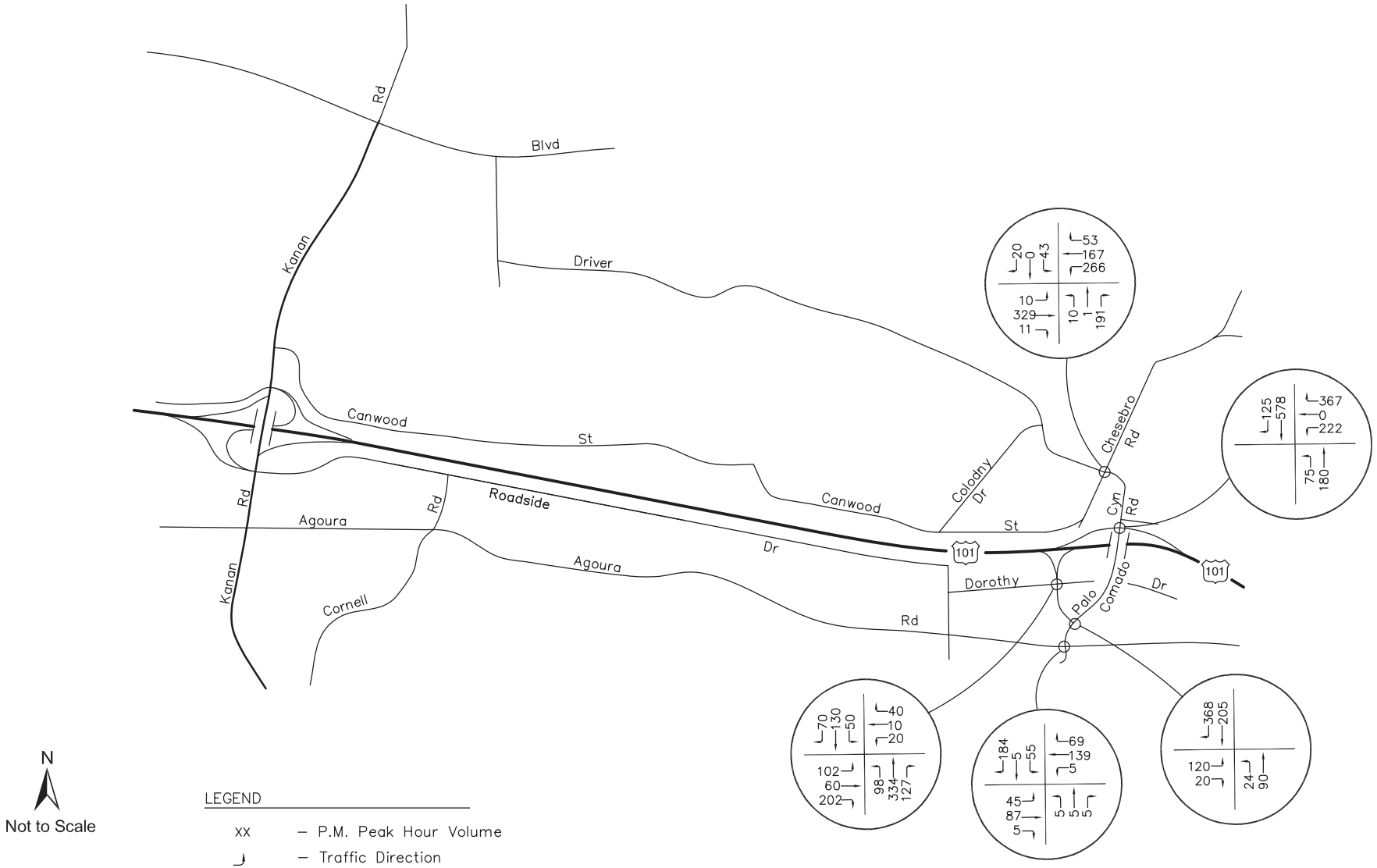
[b] *Capacity adjusted; Roadway segment would contain two travel lanes and two-way left-turn lane .*



Cumulative + Project Average Daily Traffic and A.M. Peak Hour Volumes

Source: Associated Transportation Engineers, October 2005

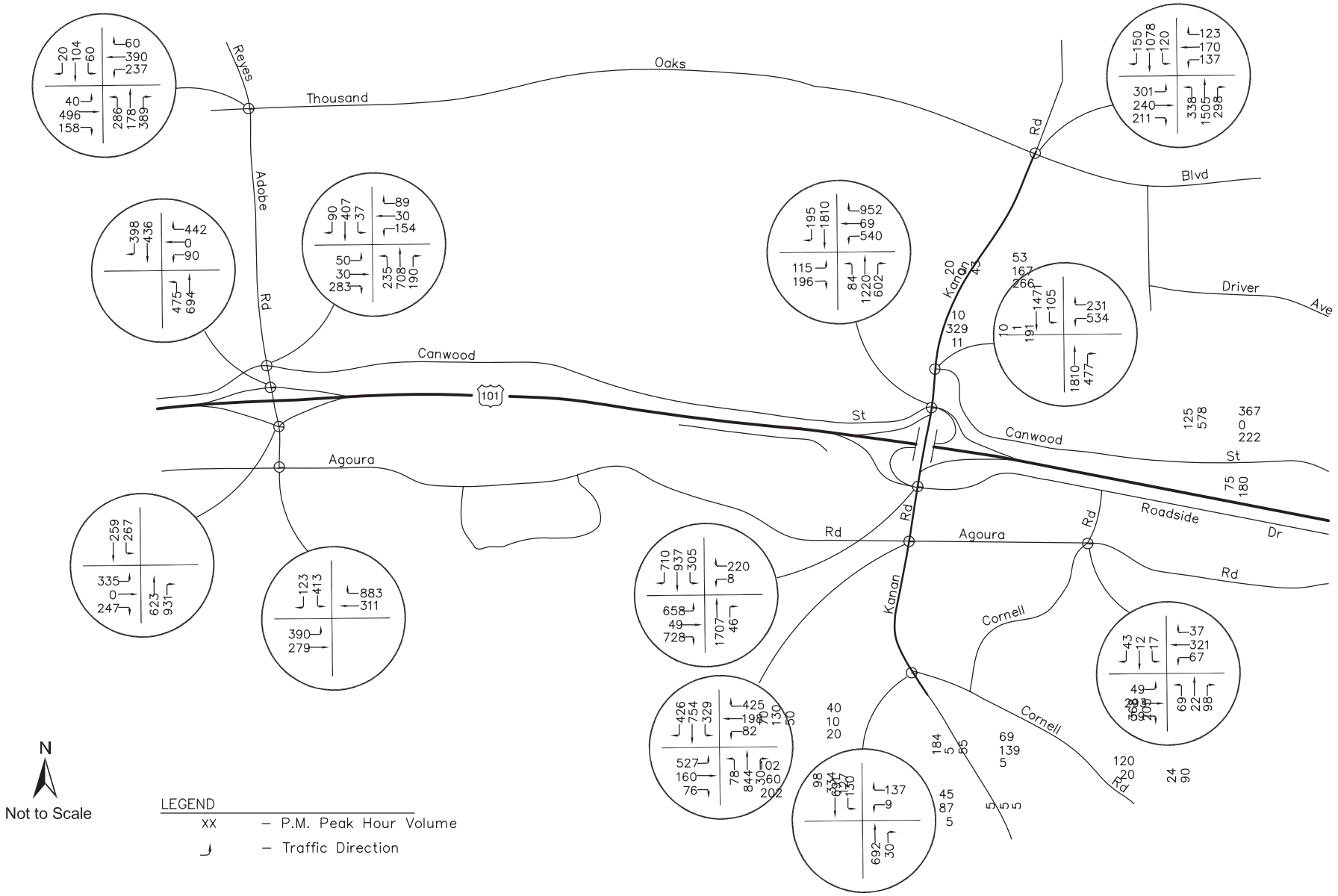
Figure 4.11-5a



Cumulative + Project Average Daily Traffic and
A.M. Peak Hour Volumes - Continued

Source: Associated Transportation Engineers, October 2005

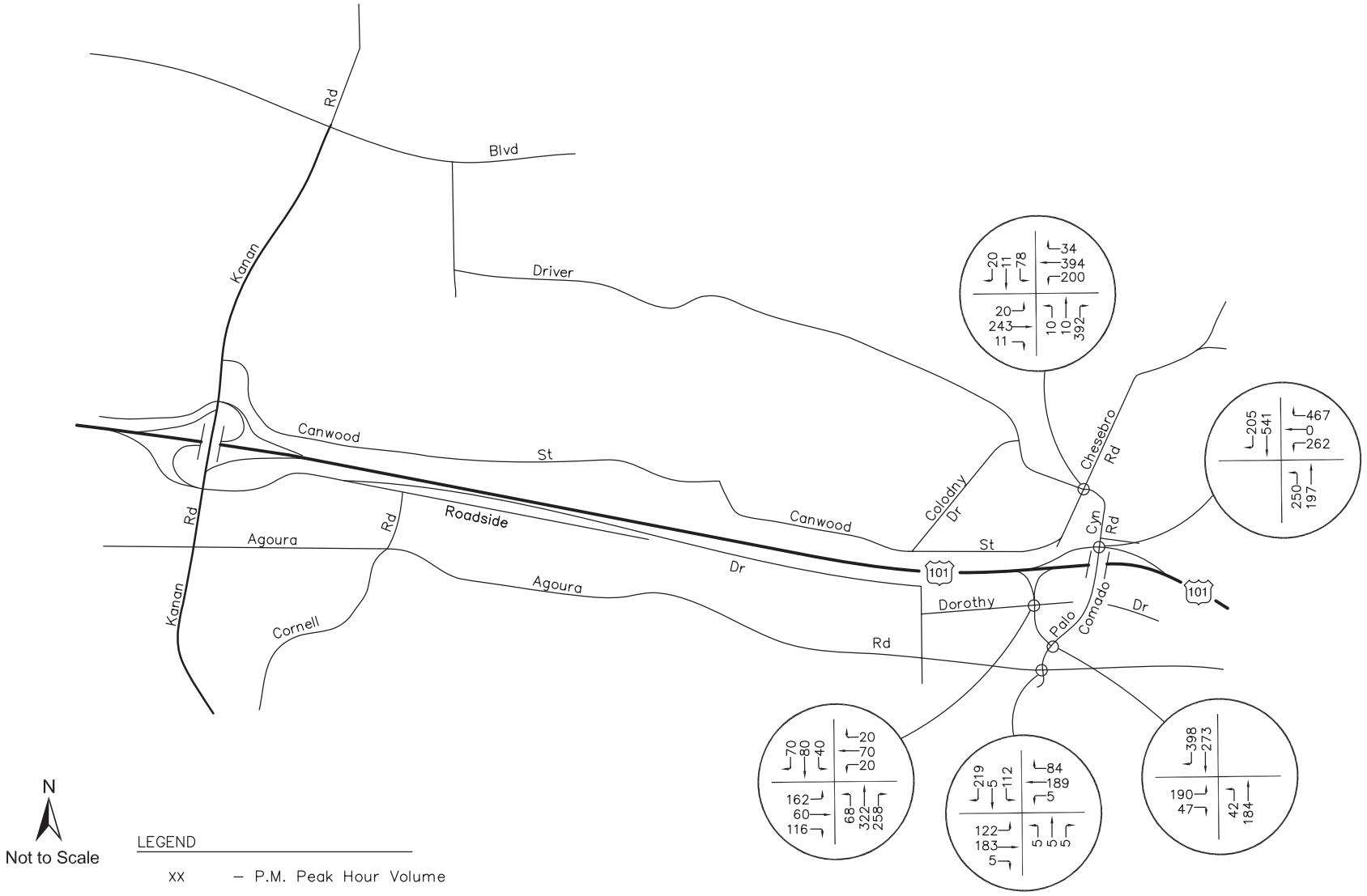
Figure 4.11-5b



Cumulative + Project P.M. Peak Hour Volumes

Source: Associated Transportation Engineers, October 2005

Figure 4.11-6a



Cumulative + Project P.M. Peak Hour Volumes - Continued

Source: Associated Transportation Engineers, October 2005

Figure 4.11-6b

Mitigation Measures. Successful accomplishment of the objectives of the project requires that a pedestrian oriented atmosphere be created to the extent possible within the project area. This includes traffic calming as proposed in the Specific Plan. Therefore, while traditional road widening approaches could be implemented to avoid or mitigate this project impact, these measures are considered infeasible in the context of the overall project objectives. Given the unavailability of road widening as a mitigation option, this is considered a significant and unavoidable impact of the proposed project.

Significance After Mitigation. As discussed above, in order to accomplish the project objectives, there are no feasible mitigation measures available to mitigate the project's effects on the Agoura Road street segment. This is considered a significant and unavoidable impact of the proposed project and would require adoption of a statement of overriding consideration.

Impact T-2 **Full buildout of the Specific Plan will result in the addition of 804 A.M. peak hour trips and 1,633 P.M. peak hour trips to the study-area intersections. This would generate adverse impacts at two intersections during the A.M. peak hour and at eight intersections during the P.M. peak hour. This is considered a Class II, *significant but mitigable* impact.**

As shown in Table 4.11-7, three intersections would operate at LOS D or worse during the A.M. peak hour under cumulative + project conditions. The project would exceed the City's V/C 0.02 or 2% volume increase threshold at two locations, thereby resulting in a significant impact based on the City's threshold criteria. Table 4.11-8 indicates that nine intersections would operate at LOS D or worse during the P.M. peak hour under cumulative + project conditions. The project would exceed the City's V/C 0.02 or 2% volume increase threshold at eight of these locations, thus generating a significant impact based on the City's threshold criteria.

Table 4.11-7 Cumulative and Cumulative + Proposed Agoura Village Specific Plan A.M. Peak Hour Intersection Levels of Service

Intersection	Cumulative A.M. Peak Hour	Cum+AVSP A.M. Peak Hour	V/C or Volume Increase	Impact?
Reyes Adobe Rd/Thousand Oak Blvd	0.50/LOS A	0.52/LOS A	N.A.	No
Reyes Adobe Rd/Canwood St	0.48/LOS A	0.49/LOS A	N.A.	No
Reyes Adobe Rd/U.S. 101 NB Ramps	0.72/LOS C	0.75/LOS C	N.A.	No
Reyes Adobe Rd/U.S. 101 SB Ramps	0.67/LOS B	0.68/LOS B	N.A.	No
Reyes Adobe Rd/Agoura Rd	0.59/LOS A	0.62/LOS B	N.A.	No
Kanan Rd/Thousand Oak Blvd	0.74/LOS C	0.76/LOS C	N.A.	No
Kanan Rd/Canwood St (E)	0.58/LOS A	0.59/LOS A	N.A.	No
Kanan Rd/Canwood St - U.S. 101 NB	**0.87/LOS D**	**0.92/LOS E**	**0.05**	**Yes**
Kanan Rd/Roadside Dr - U.S. 101 SB	0.61/LOS B	0.72/LOS B	N.A.	No

Intersection	Cumulative A.M. Peak Hour	Cum+AVSP A.M. Peak Hour	V/C or Volume Increase	Impact?
Kanan Rd/Agoura Rd	0.70/LOS B	4.7 sec/LOS A[a]	N.A.	No
Kanan Rd/Cornell Way	12.9 sec/LOS B	13.7 sec/LOS B	N.A.	No
Cornell Rd/Agoura Rd	8.8 sec/LOS A	10.4 sec/LOS B	N.A.	No
Chesebro Rd/Driver Ave	14.3 sec/LOS B	14.4 sec/LOS B	N.A.	No
Palo Comado Cyn Rd/U.S. 101 NB	22.3 sec/LOS C	**>38.5 sec/LOS E**	**3%**	**Yes**
Dorothy Dr/U.S. 101 SB Ramps	30.9 sec/LOS D	37.3 sec/LOS E	<2%	No
Palo Comado Cyn Rd/Chesebro Rd	11.1 sec/LOS B	11.5 sec/LOS B	N.A.	No
Chesebro Rd/Agoura Rd	8.9 sec/LOS A	9.2 sec/LOS A	N.A.	No

[a] *Roundabout; level of service expressed in seconds of average vehicle delay.*

Bolded values exceed City LOS C standard.

Table 4.11-8 Cumulative + Proposed Agoura Village Specific Plan P.M. Peak Hour Intersection Levels of Service

Intersection	Cumulative P.M. Peak Hour	Cum+AVSP P.M. Peak Hour	V/C or Volume Increase	Impact?
Reyes Adobe Rd/Thousand Oak Blvd	0.56/LOS A	0.58/LOS A	N.A.	No
Reyes Adobe Rd/Canwood St	**0.82/LOS D**	**0.85/LOS D**	**0.03**	**Yes**
Reyes Adobe Rd/U.S. 101 NB Ramps	0.72/LOS C	0.79/LOS C	N.A.	No
Reyes Adobe Rd/U.S. 101 SB Ramps	0.80/LOS C	**0.82/LOS D**	**0.02**	**Yes**
Reyes Adobe Rd/Agoura Rd	0.79/LOS C	**0.89/LOS D**	**0.10**	**Yes**
Kanan Rd/Thousand Oak Blvd	0.78/LOS C	0.80/LOS C	N.A.	No
Kanan Rd/Canwood St (E)	**0.83/LOS D**	**0.86/LOS D**	**0.03**	**Yes**
Kanan Rd/Canwood St - U.S. 101 NB	**0.83/LOS D**	**0.85/LOS D**	**0.02**	**Yes**
Kanan Rd/Roadside Dr - U.S. 101 SB	**0.82/LOS D**	**1.02/LOS F**	**0.20**	**Yes**
Kanan Rd/Agoura Rd	0.79/LOS C	7.9 sec/LOS A[a]	N.A.	No
Kanan Rd/Cornell Way	14.1 sec/LOS B	14.6 sec/LOS C	N.A.	No
Cornell Rd/Agoura Rd	10.9 sec/LOS B	16.0 sec/LOS C	N.A.	**Yes**
Chesebro Rd/Driver Ave	**29.2 sec/LOS D**	**31.1 sec/LOS D**	<2%	No
Palo Comado Cyn Rd/U.S. 101 NB	**>50.0 sec/LOS F**	**>50.0 sec/LOS F**	**3%**	**Yes**
Dorothy Dr/U.S. 101 SB Ramps	**42.9 sec/LOS E**	**>50.0 sec/LOS F**	**8%**	**Yes**

Intersection	Cumulative P.M. Peak Hour	Cum+AVSP P.M. Peak Hour	V/C or Volume Increase	Impact?
Palo Comado Cyn Rd/Chesebro Rd	15.0 sec/LOS B	16.7 sec/LOS C	N.A.	No
Chesebro Rd/Agoura Rd	11.2 sec/LOS B	12.3 sec/LOS B	N.A.	No

[a] *Roundabout; level of service expressed in seconds of average vehicle delay.*

Bolded values exceed City LOS C standard.

Mitigation Measures. The following text identifies improvements that would reduce the intersection impacts to a less than significant level, except at the Kanan Road/U.S. 101 Southbound intersection, where the level of service after mitigation would exceed the City's LOS C standard. Implementation of these measures may occur incrementally over the build out of the AVSP, with the timing of the particular measure to be determined as specific development projects are proposed that would trigger the need for the particular mitigation measure. All mitigation measures that are deemed to be necessary for a specific project shall be completed prior to issuance of a Certificate of Occupancy.

T-2(a) **Kanan Road/Canwood Street - U.S. 101 Northbound Ramps intersection (A.M. and P.M. peak hour):** Additional capacity will need to be provided at this intersection to obtain acceptable operations. As part of the Kanan Interchange Projects, the future geometry for the southbound approach of the intersection includes three southbound through lanes and a separate right-turn lane. One southbound through lane is a trap lane onto the Northbound On-Ramp, and two through lanes would continue onto the overpass.

Future cumulative peak hour volumes on the southbound through approach would exceed 2,000 vehicles per hour (vhp) during the A.M. peak hour and would exceed 1,700 vph during the P.M. peak hour. These volumes indicate the need for additional southbound capacity.

Additional measures that would be necessary include restriping of the southbound approach to three through lanes and a shared through/right – turn lane would improve the intersection operations to LOS C during the A.M. peak hour and LOS C during the P.M. peak hour. This mitigation would require that the Northbound on-ramp approach be moved 16 feet (4.9 m) to the west and the overpass be restriped from two southbound lanes to three southbound lanes. The southbound direction on the overpass contains 43.5 feet (13.3 m), which is sufficient to accommodate three 11.8 feet (3.6 m) wide lanes and a 4 feet (1.2 m) wide bike lane.

Additional widening on the eastbound approach (Canwood Street) is required to provide LOS C during the A.M. peak hour. The eastbound approach would need to be widened from one left-turn lane and one right-turn lane to one left-turn lane, a shared left/right-turn lane, and a right-turn lane. The mitigated geometry is shown below and the mitigated levels of service are shown below in Tables 4.11-9 and 4.11-10.

Scenario	Northbound	Southbound	Eastbound	Westbound
Future Geometry	L TT R	TTT R	L R	L LT RR
Mitigated Geometry	L TT R	TTT TR	L LR R	L LT RR

L =left-turn lane , LT = left-turn/through lane, LTR = left-turn/through/right turn lane two right-turn lane, T = through lane, R = right turn lane, RT = right turn/through lane

T-2(b) **Palo Comado Canyon Road/U.S. 101 Northbound Ramps intersection (A.M. and P.M. peak hour):** This intersection is currently controlled by a stop sign on the U.S. 101 Northbound Off-Ramp approach. Signalizing this intersection would result in LOS C in the A.M., therefore mitigating the project's impact to a level of insignificance. For the P.M. peak hour to achieve an LOS C and thereby reduce the project's impacts to a level of insignificance, the westbound approach (Northbound Off-Ramp) would need to be widened to provide dual left-turn lanes and a right turn lane, in addition to the signal. Any future improvements for this intersection would likely need to be processed through Caltrans and require Caltrans permitting.

City staff have indicated that several improvement options for the intersection are being evaluated as part of the traffic study underway for a school site proposed east of Palo Camado Canyon Road within County limits. Improvement options include installation of a signal, widening of the overpass and/or approaches, or construction of a roundabout at this location.

T-2(c) **Reyes Adobe Road/Canwood Street intersection (P.M. peak hour):** The City has programmed the widening of the northbound approach as part of the U.S. 101/Reyes Adobe interchange improvement project. After implementation of the proposed improvements, the intersection would operate at LOS A during the P.M. peak hour, thereby reducing the project's impact to a level of insignificance. It is noted that no implementation schedule has been developed for this project at this time. The mitigated level of service is shown below in Table 4.11-10.

T-2(d) **Reyes Adobe Road/U.S. 101 Southbound Ramps intersection (P.M. peak hour):** The City has programmed the widening of this intersection as part of the U.S. 101/Reyes Adobe interchange improvement project. After construction, the intersection would operate at LOS C during the P.M. peak hour, thereby reducing the project's effect to less than significant. It is noted that no implementation schedule has been developed for this project at this time. The mitigated level of service is shown below in Table 4.11-10.

T-2(e) **Reyes Adobe Road/Agoura Road intersection (P.M. peak hour):** Restriping the southbound approach to provide dual left-turn lanes and a right-turn lane, and providing additional capacity on the westbound approach would result in LOS C during the P.M. peak hour, thereby reducing the project's impact to less than significant. There are two receiving lanes on all three legs of this intersection. The southbound approach contains one left-turn lane

and the right-turn lane which are separated by a wide striped channelization island. There is sufficient pavement width between the raised median and the western curb (43 ft) to restripe the approach to two left-turn lanes and a right-turn lane. In addition, the westbound approach should be restriped to a shared through/right-turn lane and a dedicated right-turn lane, or be widened to include an additional lane (through, through-right, and right-turn lane) to provide LOS C during the P.M. peak hour. The mitigated level of service is shown below in Table 4.11-10.

T-2(f) **Kanan Road/Canwood Street (E) intersection (P.M. peak hour)**: This intersection was recently reconstructed as part of the Kanan Road/U.S. 101 interchange improvement project. Kanan Road contains two northbound through lanes and a right-turn lane; the southbound approach contains a left-turn lane and three through lanes. A third northbound through lane (two through lanes and a through-right-turn lane) is required to provide LOS C during the P.M. peak hour. This mitigation measure would require some widening of the north side of the intersection for 200 ft or more to provide three receiving lanes. The mitigated level of service is shown below in Table 4.11-10.

T-2(g) **Kanan Road/Roadside Drive - U.S. 101 Southbound Ramps intersection (P.M. peak hour):** Additional capacity on the northbound and southbound approaches will need to be provided at this intersection to provide LOS C operations. The required improvements are outlined below:

There are three northbound receiving lanes provided on the north side of the intersection. Under the proposed intersection design, two lanes continue onto the overpass and one lane traps into the U.S. 101 Southbound On-Ramp. The northbound approach would contain one through lane and one shared through/right-turn lane. This approach should be widened to provide two through lanes and one shared through/right-turn lane.

Under the proposed intersection design, the southbound approach would contain one left-turn lane, two through lanes and one right-turn lane. To provide LOS C during the P.M. peak hour, a second southbound left-turn lane is needed. There is sufficient roadway width provided on the north leg of the intersection and the overpass to provide dual left-turn lanes, two through lanes and a right-turn lane on the southbound approach, and retain the three northbound receiving lanes provided on the north side of the intersection. The bike lane on the southbound approach shown on the proposed intersection design may need to be eliminated. It is noted that the lane widths on the north leg (11-foot left-turn lanes, 11-foot through lanes and 12 to 13-foot right-turn lanes) would be less than the lane widths specified by Caltrans (12-foot left-turn lanes, 12-foot through lanes and 16-foot right-turn lanes), and would require approval of a design exception.

Additionally, the east leg of the intersection (Roadside Drive) would need to be widened to the south to provide two receiving lanes.

Implementation of the above improvements would result in LOS C (V/C 0.78). The mitigated geometry is shown below followed by the mitigated level of service as shown in Table 4.11-10.

Kanan Road-Roadside Drive/U.S. 101 Southbound Ramps
Mitigated Intersection Geometry

Scenario	Northbound	Southbound	Eastbound	Westbound
Future Geometry	T TR	L TT R	L LTR R	L R
Mitigated Geometry	***TT TR***	LL TT R	L LTR R	L R

L =left-turn lane , LT = left-turn/through lane, LTR = left-turn/through/right turn lane two right-turn lane, T = through lane, R = right turn lane, RT = right turn/through lane

T-2(h) **Dorothy Drive/U.S. 101 Southbound Ramps intersection (P.M. peak hour):** This intersection is currently controlled by stop signs on all approaches. Signalizing this intersection would result in LOS C during the P.M. peak hour, therefore mitigating the project's impact to a level of insignificance. The mitigated levels of service are shown below in Table 4.11-10.

Scenario	Northbound	Southbound	Eastbound	Westbound
Future Geometry	T TR	L TT R	L LTR R	L R
Mitigated Geometry	TT TR	L TT R	L LTR R	L R

L =left-turn lane , LT = left-turn/through lane, LTR = left-turn/through/right turn lane two right-turn lane, T = through lane, R = right turn lane, RT = right turn/through lane

Table 4.11-9 Cumulative + Proposed Agoura Village Specific Plan Mitigated A.M. Peak Hour Intersection Levels of Service

Intersection	Cum+AVSP A.M. Peak Hour	Mitigated A.M. Peak Hour
Kanan Rd/Canwood St - U.S. 101 NB	**0.92/LOS E**	0.78/LOS C
Palo Comado Cyn Rd/U.S. 101 NB	**>50.0 sec/LOS F**	0.64/LOS B

Bolded values exceed City LOS C standard.

Table 4.11-10 Cumulative + Proposed Agoura Village Specific Plan Mitigated P.M. Peak Hour Intersection Levels of Service

Intersection	Cum+AVSP P.M. Peak Hour	Mitigated P.M. Peak Hour
Reyes Adobe Rd/Canwood St	**0.85/LOS D**	0.57/LOS A
Reyes Adobe Rd/U.S. 101 SB Ramps	**0.82/LOS D**	0.72/LOS C
Reyes Adobe Rd/Agoura Rd	**0.89/LOS D**	0.75/LOS C
Kanan Rd/Canwood St (E)	**0.86/LOS D**	0.77/LOS C

Kanan Rd/Canwood St - U.S. 101 NB	**0.85/LOS D**	0.78/LOS C
Kanan Rd/Roadside Dr - U.S. 101 SB	**1.02/LOS F**	0.78/LOS C
Palo Comado Cyn Rd/U.S. 101 NB	**>50.0 sec/LOS F**	0.76/LOS C
Dorothy Dr/U.S. 101 SB Ramps	**>50.0 sec/LOS F**	0.71/LOS C

Bolded values exceed City LOS C standard.

Significance After Mitigation. As shown in Tables 4.11-9 and 4.11-10, completion of the additional improvements described above would mitigate future traffic impacts at all intersections affected by the project to a less than significant level. However, the residual impact at the Kanan Road/U.S.101 Northbound Ramps would be significant and unavoidable. This impact would require a statement of overriding consideration.

Impact T-3 **Project development would require access, circulation and parking improvements that may adversely affect pedestrian and bicycle movements and safety. In addition, the proposed Specific Plan would provide for exceptions to the City's current parking requirements, potentially resulting in the overall reduction of parking required for future development within the Specific Plan area. Individual projects within the Specific Plan area have the potential to result in short term construction impacts to adjoining land uses and roadways. These impacts are considered Class II, *significant but mitigable*.**

Kanan Road/Agoura Road Roundabout. The Specific Plan includes a roundabout at the intersection of Kanan Road and Agoura Road, both of which are arterial roadways. The preliminary layout of the two-lane roundabout, which was developed by Ourston Roundabout Engineering, is included in Appendix F. Levels of service were calculated for the roundabout using RODEL, a model developed for evaluating roundabout operations. As shown in Tables 4.11-7 and 4.11-8, the two-lane roundabout is forecast to operate at LOS A assuming the cumulative + Specific Plan peak hour volumes.

Roundabouts have many advantages over conventional intersections, including: less accidents due to the reduction of conflicting points compared to non-circular intersections; less serious vehicular crashes (head-on and "T-bone" collisions are eliminated and slower speeds reduce the severity of other accidents); they can increase traffic flow and increase capacity; they are more environmentally friendly since there is a continuous flow of vehicles consuming less fuel and emitting fewer pollutants than stop-and-go operations at signalized intersections; they are less costly to operate; and they can be more aesthetically pleasing instead of just concrete, the roundabout centers can feature landscaping, flowering plants, sculpture, etc.

City of Agoura Hills Public Works Department staff reviewed the roundabout concept plan and noted that it will be an improvement over the conventional signalized intersection and can provide for a unique entry into the City with enhanced landscaping and signage.

The concept diagram (Figure 3-1) for the roundabout included in the Agoura Hills Specific Plan document (RRM Design Group, July 15, 2005) indicates that pedestrian crosswalks are proposed

on all approaches. These crosswalks should be designed to conform to standards provided in the FHWA *Roundabouts: an informational guide*[6]. Design elements would include provision of ramps on each end of the crosswalk, a pedestrian refuge in the splitter island and a minimum distance of 25 feet between the crosswalk and the yield line to provide for vehicle storage between the circulatory roadway and the crosswalk.

Research of accident rates at existing roundabouts in Europe has shown that roundabouts are safer for pedestrians and bicyclists compared to signalized intersections. The required inclusion of splitter islands provides pedestrian refuge and a shorter one-directional crossing, and low speed conditions typically improve bicycle and pedestrian safety. Crosswalks and bicycle facilities are typically provided within the right-of-way of urban roundabouts.

The central location of the Kanan Road/Agoura Road intersection within the Specific Plan indicates that this location would likely experience a significant number of pedestrian movements. Significant pedestrian volumes can reduce the capacity of the roundabout, as one crossing pedestrian can restrict entering and existing movements on an approach. Given the expected low delays during the peak hours, the capacity of the roundabout would not be reduced to an unacceptable level as a result of conflicting pedestrian movements. It is noted that during periods with high entering volumes, the effects of pedestrian movements on capacity decrease, as entering vehicles would have to yield to circulating vehicles regardless of the presence of conflicting pedestrian movements.

The FHWA *Roundabouts: an informational guide (Chapter 2.2.5)* states that the passage of emergency vehicles through a roundabout is the same as for other large vehicles. Just as they are required to do at conventional intersections, drivers should be educated not to enter a roundabout when an emergency vehicle is approaching on another leg. In addition, the guide states that roundabouts provide for safer negotiation due to lower speeds and the absence of through vehicles unexpectedly running the intersection.

Additionally, as mentioned in Section 4.10, *Public Services*, the proposed roundabout at the intersection of Kanan and Agoura Road has the potential to restrict access to safety personnel and emergency vehicles. Public education should include information on driver behavior in the event of an emergency vehicle, which is similar to the driver behavior required at conventional intersections. All approaches to the roundabout would contain two lanes. Vehicles in queue in front of an emergency vehicle would either move to another lane or move through the roundabout to facilitate passage of the emergency vehicle. The design of the roundabout includes a mountable apron on the island and mountable splitter islands. In the event of blockage of the circulatory roadway, these elements would provide for sufficient width within the roundabout for passage of emergency vehicles.

The lay-out developed by Ourston Roundabout Engineering for the roundabout is preliminary in nature. It is noted that the capacity and safety of the roundabout are determined by the geometric design elements. Further detailed engineering designs are necessary in order to provide sufficient capacity and safety conditions for pedestrians at the roundabout.

[6] Roundabouts: An Informational Guide, U.S. Department of Transportation, Federal Highway Administration, June 2000.

Agoura Road/Zone A Traffic Circle. The Agoura Road/Zone A intersection (between Kanan and Cornell Road) is proposed to be converted to contain a circular geometry with a center island feature and stop signs on the north and south legs. Although similar in appearance, the intersection shown is not technically a traffic circle or roundabout. Due to the high traffic volume along Agoura Road and the anticipated pedestrian movement through this crossing area, this geometry is not considered optimal for vehicle or pedestrian movement. This is considered a significant, but mitigable impact.

Agoura Road Angled Parking. The cross section diagram for Agoura Road west of Kanan Road that is included in the Specific Plan indicates that the roadway could contain two 12-foot wide travel lanes divided by a landscaped median, 6 to 8 foot buffer/Class III bike lanes in both directions and 16-18 feet for angled parking on both sides of the road. In addition, both sides would contain 9 feet of landscaped buffer and a 7 foot sidewalk. It should be noted that the ability to construct diagonal parking on both sides of the roadway would be determined by the width available along a given segment.

Agoura Road is an arterial roadway and is forecasted to carry about 13,400 ADT under the cumulative + Specific Plan scenario, with about 1,250 vehicles during the P.M. peak hour period. While there is sufficient space for parked vehicles to back up from the angled parking space due to the 8 feet wide buffer/bike lane, queuing and congestion could occur when vehicles on the roadway that want to park stop on the roadway to wait for a vehicle leaving a space. Queues could extend into the roundabout proposed at the Kanan Road/Agoura Road intersection. This has the potential to "lock up" the roundabout, where vehicles would not be allowed to enter or exit the intersection, including through movements on Kanan Road. Impacts to motorist and pedestrian movement are considered potentially significant, but mitigable.

Agoura Road Median. The cross section diagram for Agoura Road west of Kanan Road that is included in the Specific Plan (see Appendix F for cross section diagram) shows a 10 foot median on the roadway. The median would facilitate flows within the village area by allowing left-turning vehicle to store in turn pockets instead of waiting in the through travel lane. Although use of this median is not anticipated to generate impacts to motorists or pedestrians, it could be improved to provide a refuge area for pedestrians using the proposed crossings on Agoura Road.

Pedestrian Access and Mid-Block Crosswalks. Sidewalks are currently provided along the segments of Kanan Road and Cornell Road north of Agoura Road, and partly along the north side of Agoura Road. The pedestrian circulation plan developed for the project includes construction of sidewalks on both sides of Kanan Road, Agoura Road, Roadside Drive and Cornell Road within the Specific Plan boundaries. Pedestrian crossings will be provided at all intersections and at key midblock locations for convenience and ease of travel, and to encourage a pedestrian-oriented environment.

The Specific Plan shows several mid-block pedestrian crossings on Agoura Road, one on Kanan Road, and one on Cornell Road. Many jurisdictions are not in favor of mid-block crosswalks because they often provide a false sense of security to pedestrians and could lead to pedestrian/vehicle collisions. However, the City's Public Works Department has indicated that it may allow the crossings, depending on individual site conditions and circulation

configurations. The use of mid-block crosswalks that may create safety issues for pedestrians and motorists is considered a potentially significant, but mitigable impact.

Parking Requirements. Parking requirement calculations previously completed for the project were based on the City Zoning Ordinance and indicated that applying the City's parking supply requirements for the respective land uses would result in almost 1,800 parking spaces. Providing the number of parking spaces to each of the properties within the Specific Plan would result in an overabundance of parking. The concept of shared parking recognizes that a single space may serve several different uses at different times during the day. Efficient sharing of spaces can allow parking requirements to be reduced significantly. Parking can be shared among different buildings and facilities in an area to take advantage of different peak periods. For example, an office complex can efficiently share parking facilities with a restaurant or theater, since offices require maximum parking during weekdays, while restaurants and theaters require maximum parking during evenings and weekends. As a result, the total amount of parking can be reduced significantly compared with standard off-street parking requirements for each destination. Table 4.11-11 illustrates the peaking characteristics of various land uses, many of which may be developed within the Specific Plan area.

Table 4.11-11 Peak Parking Demand Times

Weekday Peaks	Evening Peaks	Weekend Peaks
Banks, Offices, Professional Services, Medical Clinics, Schools, Distribution Facilities, Factories.	Restaurants, Theaters, Bars, Dance Halls, Meeting Halls, Auditoriums, Residential Units.	Shops and Malls, Religious Institutions, Parks, Residential Units.

Shared parking is somewhat limited by the proximity of destinations that share a parking facility. Exactly how close they must be depends on the type of land use and the type of user. Table 4.11-12 summarizes acceptable walking distance for various types of activities. Acceptable walking distance is also affected by the quality of the pedestrian environment, climate, line of site (longer distances are acceptable if people can see their destination), and "friction" (barriers along the way, such as crossing busy traffic).

Table 4.11-12 Acceptable Walking Distances for Shared Parking Facilities

Adjacent	Short	Medium	Long
(less than 100ft)	**(less than 800 ft)**	**(less than 1,200ft)**	**(less than 1,600ft)**
People with disabilities, deliveries/loading, emergency services, convenience store	Grocery stores, professional services, medical clinics, residential	General retail, restaurants, entertainment centers, religious institutions	Airport parking, major sport or cultural event, overflow parking

This table indicates maximum acceptable walking distance from parking to destinations for various activities and users. It assumes good pedestrian conditions (sidewalks, or crosswalks, level terrain) that are outdoors and uncovered with a mild climate.

The concepts of shared parking are well defined in the Urban Land Institute (ULI) Shared Parking Manual. The ULI Shared Parking Manual discusses the concepts, and provides guidelines for computing the parking space needs for mixed-use sites. The report presents

hourly parking accumulation percentages for each land use type, which are utilized in conjunction with peak parking demand forecasts to determine the total parking requirements for the mixed-use project.

Parking Strategies. The Agoura Village Specific Plan provides the following directions to ensure that adequate parking is available within the Specific Plan:

- On-street diagonal parking may be placed along Agoura Road east of Kanan (16 ft. diagonal parking on either side of the street)
- Parallel parking may be placed on the west side of Cornell and along the south side of Roadside Drive
- Plan for new off-street public parking areas to allow for longer term parking for visitors, residents, and people who work in the area
- Create a parking district with the development of shared parking facilities, on-street parking, and opportunities to reduce parking that can support multiple businesses

Parking design standards will be consistent with the City's Zoning Ordinance. It is also indicated that if a project contains a mix of retail and office uses, the non-residential portion of the mixed-use building may be eligible to receive a reduction in the parking requirements of up to 25 percent. When two or more uses on the same site have distinctively different hours of operation, such uses may develop shared parking agreements to satisfy the parking requirements in accordance with the following:

- Only 50 percent of the required parking may qualify for shared parking arrangement;
- A minimum of 50 percent of the required parking must be met on-site;
- Required parking must be calculated based on the land use that demands the greatest amount of parking;
- The shared parking facility must be within a 700-foot radius of the site.

Vehicular Access. Vehicular access to the respective development clusters proposed in the Agoura Village Specific Plan is provided via driveways on Kanan Road, Agoura Road, Roadside Drive and Cornell Road. Most of the driveways that provide access to the existing commercial land uses located on Kanan Road between Roadside Drive and Agoura Road will be maintained and enhanced in consistency with the project's *Urban Design Plan*. The Specific Plan also shows provisions for two new internal roadway connections to Kanan Road and Agoura Road that would enhance the internal circulation. The Specific Plan area south of Agoura Road is largely undeveloped. Development of this area will result in construction of driveways on the south side of Agoura Road and on Kanan Road south of Agoura Road. Individual traffic driveways may shift traffic volumes to and from each individual site and, thus, opposing traffic volumes on the adjacent roadway system. The design and control of each individual access driveway will need to be determined as individual projects are analyzed.

Mitigation Measures. Implementation of the following improvements would reduce impacts to access, pedestrian circulation, and parking to a less than significant level.

T-3(a) **Roundabout Engineering.** Refer to Mitigation Measure PS-3(c) in Section 4.10, *Public Services.*

T-3(b) **Agoura Road/Zone A Pedestrian Crossing.** It is recommended that the final design of the intersection at the mid-block of Agoura Road (between Kanan and Cornell Road) be configured as a roundabout or a conventional intersection. It should be designed to accommodate pedestrians, bicyclists, and should contain a traversable island allowing larger vehicles such as trucks, buses and emergency vehicles to pass through the intersection.

T-3(c) **Pedestrian Friendly Median.** As the use of mid-block crosswalks may create safety issues for pedestrians, the median proposed along Agoura Road should also be designed to provide a refuge area for pedestrians using the proposed crossings on Agoura Road. Consideration should be given to making the area more pedestrian friendly.

T-3(d) **Pedestrian Cross Walks.** Pedestrian cross-walks should utilize textured and colored surface treatments to clearly distinguish these areas for pedestrian movement. Final design must be approved by the City's Public Works Director.

T-3(e) **Individual Access.** The design and control of individual access driveways will need to be determined as individual projects are analyzed. Analysis of these individual access driveways should give consideration to traffic volumes to and from each individual site within the Specific Plan and opposing traffic volumes on the adjacent roadway system.

T-3(f) **Construction Impacts.** Prior to individual project approval, short-term construction impacts shall be examined. Where necessary, a construction vehicle management plan shall be developed and implemented. This plan shall include measures to avoid conflicts with nearby businesses and other land uses (such as construction activity notification and timing so as to minimize conflicts) and to minimize the effects on the local street network.

Significance After Mitigation. Implementation of the above measures would mitigate future access and safety impacts to a less than significant level.

c. Cumulative Impact Analysis. The analysis of project impacts under Impact T-1 and T-2 consider cumulative traffic increases based on the City's list of planned and pending development in the City. With the exception of the unavoidable significant impact along that segment of Agoura Road, east of Kanan, planned road improvements as outlined in Mitigation Measures T-2(a) through T-2(h) would mitigate future impacts to roadways to a less than significant level.

5.0 GROWTH INDUCING IMPACTS

This section discusses the project's potential to induce growth.

5.1 GROWTH INDUCING EFFECTS

Section 15126.2(d) of the *CEQA Guidelines* requires that EIRs discuss the potential for projects to induce population or economic growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth, as well as ways in which a project may set a precedent for future growth.

5.1.1 Population and Job Growth

The proposed Specific Plan would allow for development of up to 293 multi-family residences and up to 575,958 sf of new commercial, retail, office, restaurant, community center and hotel area, and redevelopment of 372,042 sf of existing commercial and retail uses with an increased density within the same footprint. This development would directly generate a population estimated at 879[1] and would provide an estimated 1,896 jobs onsite, including 744 existing jobs and 1,153 new jobs.[2] Short-term employment opportunities would also be created during project construction.

The jobs that the project would generate may be filled from the existing labor force in the area or from new residents attracted to the increased employment opportunities in the area. Assuming that at least some of the estimated 1,153 new jobs would be filled by people from outside of the region, the project would be expected to indirectly generate some increase in population in the area with an associated increase in demand for housing. However, as the project has a residential component, the increase in demand for housing would be largely offset by the 293 multifamily units proposed within the project area.

5.1.2 Comparison to Subregional Projections

The Southern California Association of Governments (SCAG) makes projections of housing and employment growth in each of several subregions within Southern California. Agoura Hills is located within the Las Virgenes, Malibu, Conejo Council of Governments (COG) subregion. SCAG growth projections for this subregion are shown in Table 5-1. As indicated, 118 new housing units are expected to be added in the subregion by 2010 and 282 new units will be added by 2020. About 1,883 jobs are projected to be added in the subregion by 2010 and 2,799 jobs are expected to be added by 2020. A balanced community would have a match between employment and housing opportunities so that most of the residents could also work in the community. However, Agoura Hills is a predominately residential community and has significantly more housing than it does jobs (Housing Element, 2001). Therefore, the large introduction of jobs as part of the Specific Plan would be beneficial in helping to balance the existing difference between housing and work levels.

[1] Based on an average of 3 persons per household, the average for the City of Agoura Hills according to the 2000 U.S. Census.
[2] Based on an estimate of one employee per 500 square feet of building area for both offices and restaurants. The actual number of employees may be somewhat higher or lower, depending upon the specific businesses that occupy the buildings.

Table 5-1 Employment and Housing Projections for the Las Virgenes, Malibu, Conejo COG

	Year		
	2005	**2010**	**2020**
Jobs	11,032	12,915	13,831
Housing	7,127	7,245	7,409
Population	21,998	21,998	22,000

Source: Southern California Association of Governments, 2004 RTP Growth Forecasting, April 2004

The 293 new residential units that would be allowed under the Specific Plan represent about 2.5 times the overall housing growth projected within the subregion between 2005 and 2010, and 1.04 times the overall growth expected between 2005 and 2020. The estimated 1,153 jobs that would be added by the proposed project would account for about 61% of SCAG's near-term (2010) employment projections for the Las Virgenes, Malibu, Conejo COG and about 41% of the employment growth expected through 2020. The increased employment growth associated with build out of the Specific Plan would be within the 2020 projections for the Las Virgenes, Malibu, Conejo COG.

According to population estimates by the California Department of Finance Demographic Research Unit (CDFDRU) (2004) the City of Agoura Hills population for January of 2004 was 22,134 and grew to 23,330 by January of 2005, a 5.4% increase. These numbers suggest that the City of Agoura Hills exceeded the SCAG population projection for 2020 in January of 2004. Thus, the additional residential population that would be allowed under the Specific Plan would further exacerbate the City's existing exceedance of SCAG's population forecast. Therefore, using the most recent housing and population data that is available, the project would cause an exceedance of SCAG projections for both population and housing. This exceedance is not a physical impact of the project and is largely because the SCAG forecasts have not been updated to reflect current City conditions and planning policies. The project's contribution to local jobs, housing and population, along with other growth in the City, will be reflected in the City's revised growth estimates and provided to SCAG for future growth projections.

Construction associated with build out within the Specific Plan area would directly generate temporary employment opportunities. Proposed new commercial uses would be expected to create some long-term job opportunities. The new jobs provided within the project area would not be expected to induce people to relocate to the area to fill new job opportunities, as the majority of the jobs would be in the retail sectors. Such jobs are typically filled by the local labor force. Thus, the indirect population growth associated with new job opportunities presented by build out of the project area is expected to be minimal.

5.2 REMOVAL OF OBSTACLES TO GROWTH

Build out of the Specific Plan area would involve the introduction of residential and commercial uses within the 132-acre project area. This area is partially developed with commercial/retail uses; thus, the site is already served by water and sewer infrastructure and would only require minor extensions of such infrastructure to serve new development. Existing roads in the project area would serve the anticipated development, although new roads within the Specific Plan area would be required to provide access to the interior of individual sites within the area. These relatively minor utility and roadway infrastructure extensions are generally considered as infill development, rather than as an extension of new services into an area that is presently underserved by such improvements. Given that the areas adjoining the Specific Plan area either physically hindered by steep hillsides, are areas unsuitable to development, or are already developed, the infrastructure extensions that would be required for new development are not expected to cause significant inducement to new growth beyond that within the Specific Plan boundary. Additionally, the requirement for Open Space conservation easements along the southern boundary of the Specific Plan area would further serve to hinder expansion of development to the south.

The project would follow a major improvement to the Kanan Road/Highway 101 interchange, which would substantially increase the capacity of the interchange. This upgrade was needed to relieve existing poor levels of service and a projected worsening of service levels as a result of regional growth. The proposed project is independent of the interchange improvement and would not be expected to facilitate or induce additional unplanned development or growth. It is expected that increased usage of the newly designed interchange would occur with or without the build out of the Specific Plan.

From a policy perspective, the Specific Plan sets the planning framework for the project area. It includes development standards and design guidelines that are intended to revitalize the area, guide future development of undeveloped property within the Plan area, and to create a visually and environmentally appealing pedestrian oriented village setting for the area. These development standards and design guidelines essentially replace the City's Zoning Ordinance requirements for the project area. In order to accomplish the project objectives, the development standards contained within the Specific Plan include deviations from the City's current Zoning Ordinance. This includes deviations from the City's parking requirements and very minor exceptions to the City's Hillside and Significant Ecological Areas (Division 2) Sections 9652.13 A and B of the Zoning Ordinance which addresses density and allowed development within hillside areas. Given that these current requirements would be replaced by refined requirements with similar objectives to ensure the protection of public and environmental health and safety, these policy changes are not expected to result in significant growth inducement or precedent setting actions that would cause a significant environmental impact. Further, since the proposed Specific Plan requirements would only apply to future development within the Specific Plan area, they would not be expected to result in any significant growth or precedent setting actions that could cause significant environmental effects outside of the area. If the proposed Specific Plan were to encourage similar development in another part of the City, any subsequent modification to the City's General Plan and/or Zoning Ordinance would be required to be processed through the City's development/permit review process and would undergo independent environmental analysis prior to approval.

6.0 ALTERNATIVES

Section 15126.6 of the *State CEQA Guidelines*, requires that an EIR examines a reasonable range of alternatives to the proposed project that could feasibly achieve the project's basic objectives and that would potentially reduce or avoid significant impacts of the project. In addition, the *State CEQA Guidelines* require that an EIR examine the "No Project" Alternative. The alternatives addressed below include the following:

- Alternative 1: No Project
- Alternative 2: Reduced Specific Plan Area
- Alternative 3: Reduced Buildout Density
- Alternative 4: Alternate Location
- Alternative 5: Reduced Buildout Density (Without Residential Development)

Table 6-1 provides a summary comparison of the proposed project and the four alternatives. Each alternative is described in greater detail and compared to the proposed project below.

Table 6-1 Comparison of Project Alternatives

Project Characteristics	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced SP Area	Alternative 3: Reduced Buildout Density	Alternative 4: Alternate Location	Alternative 5: Reduced Project Size
Existing Commercial/ Retail/Office	372,042	372,042	335,142	372,042	372,042	372,042
Proposed Commercial/ Retail/Office	576,458	580,928	342,108	467,458	576,458	326,158
Proposed Residential	293	0	181	235	293	0
Roundabout		No	No	Yes	No	No
Total Commercial/ Retail/Office	**948,500**	**952,970**	**677,250**	**839,500**	**948,500**	**698,200**
Total Residential	**293**	**0**	**181**	**235**	**293**	**0**

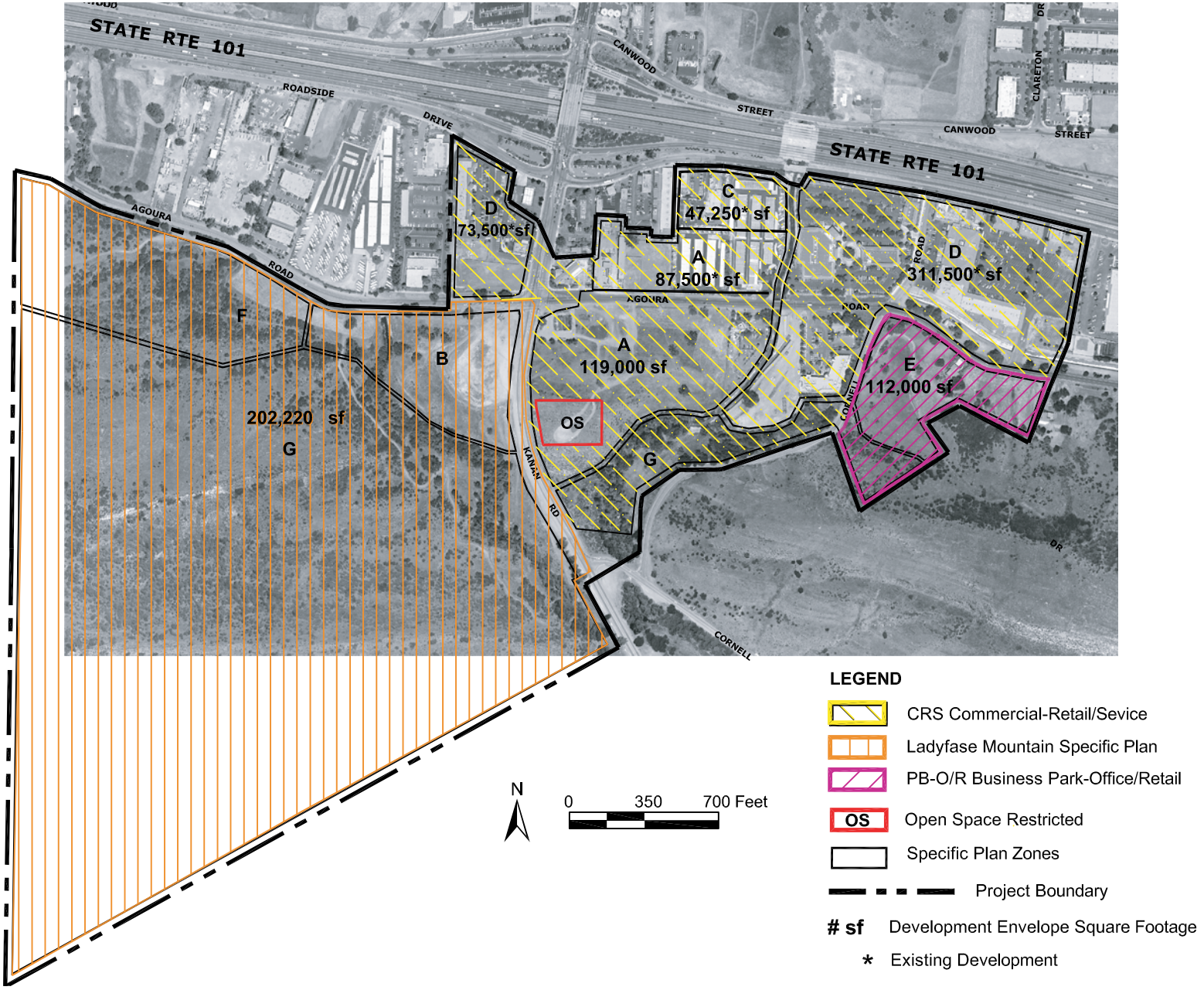
6.1 ALTERNATIVE 1: NO PROJECT

This alternative assumes that the Specific Plan is not implemented and that the project area would develop under the existing land use planning framework that is currently in place for the project area. More specifically, this alternative assumes that the project area would be developed in accordance with the existing General Plan land use and zoning designations that would allow a majority of the area to be developed with retail service commercial uses (CRS-FC-AV, CRS-D-AV, and CRS-FC-OA-AV). The remainder of the project area is designated as the Ladyface Mountain Specific Plan and for business park, office retail and open space uses (SP-AV, OS-AV, or BP-OR-AV). The current land use designations would allow commercial development with a potential buildout of up to 580,928 square feet (sf) of new development in the undeveloped portions of the project area in addition to the existing commercial development of 372,042 sf, mostly located north of Agoura Road. In total, full buildout of the study area under the existing General Plan would result in about 952,970[1] sf of general commercial/retail/office development within the project area. This is approximately 4,470 sf, or less than 1%, more commercial/retail/office square footage than would be allowed under the proposed Specific Plan. The current General Plan land use designations do not allow residential development within the project area, so no residential development would be developed under this scenario.

This alternative would not accomplish the project objectives of achieving a mixed use "Village" type of development, encouraging the shared use of parking, and the establishment of a consistent design theme for the site development and streetscape. This alternative would increase commercial development intensity within the project area and has the potential to increase impacts associated with certain visual impacts and biological resources. However, this alternative would be anticipated to reduce overall impacts associated with land use, public services, and traffic. This alternative would be expected to require about the same amount of grading, soil export, and construction related noise and air emissions compared to the proposed Specific Plan. Therefore, impacts related to air quality, geology and seismic activity, hazards, historic resources, hydrology, water quality, and noise, would be anticipated to be about the same as impacts under the Specific Plan.

This alternative would retain the Open Space designation on the knoll located northeast of Kanan Road and Cornell Road and would reduce the development potential for the portion of the Specific Plan area that is currently within the Ladyface Mountain Specific Plan area. Additionally, this alternative would avoid the introduction of residential use within the Specific Plan area and would eliminate the traffic calming measures identified in the Specific Plan along Agoura Road. This would avoid one Class I, unavoidable and significant impact related to traffic. The development potential for this alternative is shown in Table 6-2 and the site plan is shown on Figure 6-1.

[1]Based on estimates provided by the City of Agoura Hills, 2005.



Aerial: City of Agoura Hills, 2002
Source: RRM Design Group, March 2008.

Alternative 1: No Project

Figure 6-1

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Table 6-2 Alternative 1: No Project (Agoura Hills General Plan Buildout)

		Existing		Proposed		Total Allowable	
Project Zone	Total Zone Area (s.f.)	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office
		DU	s.f.	DU	s.f.	DU	s.f.
A South	600,000	-	-	-	119,000	-	119,000
A North	250,000	-	58,192	-	29,308	-	87,500
B	700,000	-	-	-	202,220	-	202,220
C	135,000	-	43,750	-	3,500	-	47,250
D West	210,000	-	36,900	-	36,600	-	73,500
D East	1,200,000	-	233,200	-	78,300	-	311,500
E	320,000	-	-	-	112,000	-	112,000
F	315,000	-	-	-	(included in Area B)-	-	-
Total	**3,621,040**	**-**	**372,042**	**-**	**580,928**	**-**	**952,970**

6.1.1 Aesthetics

As with the proposed project, this alternative would involve full buildout of the project area with a planned urban use. Similar to the project, this alternative would alter viewsheds, introduce new sources of light and glare, accommodate structural development, and modify the aesthetic character of the project area. This would be most noticeable on the southern portion of the project area that would transform from its generally natural state to an urban condition.

This alternative would provide for a slightly larger commercial/retail development than that proposed under the Specific Plan but would not involve the uniform development standards and design guidelines for the project area. The resultant appearance of this alternative has the potential to be markedly different from that envisioned in the Specific Plan and would be expected to be typical of other segments of the Agoura Road corridor, which lack a unified theme.

The current zoning identifies an approximate 1.5-acre area at the top of the knoll northeast of Kanan and Cornell Roads as Open Space. The Specific Plan would not restrict potential grading of this knoll, although the area would be reserved as open space. The modification of this natural landform is considered a potentially significant impact under the Specific Plan. The No Project alternative would offer the same potential impacts associated with the modification or loss of the knoll through grading.

U.S. Highway 101, Kanan Road, Agoura Road, and Roadside Drive each have scenic corridor/roadway designations. The project alternative would be visible from each of these roadways, but would result in a less cohesive and unified aesthetic. Only the knoll located north of the intersection of Kanan and Cornell Road would be preserved, as opposed to the 32 acres of open space designated under the Specific Plan. Thus the alternative would not protect as large of an area of open space within the project area. Additionally, this alternative would not provide for redevelopment of the area between U.S. 101 and Agoura Road, and thus would not have a beneficial impact with respect to improving the visual character of that area.

Further, this alternative would not likely achieve the visual continuity that would be associated with the proposed land use and development standards and design guidelines that are currently proposed as part of the Specific Plan.

Impacts to the undeveloped rural character of the area south of Agoura Road would be similar to, but less desirable than, those proposed under the Specific Plan. The alternative would not be guided by the design principles and development standards included under the Specific Plan. Therefore, impacts from the transformation of the area's rural character to that of a more urban environment, although significant but mitigable, would be considered more significant than those resulting from the Specific Plan. Similar to the Specific Plan, this alternative would alter scenic resources onsite, such as riparian corridors and oak trees. As mentioned above, buildout under this alternative would not be guided by the design principles and development standards included under the Specific Plan. Thus, treatment of the riparian corridors and oak trees onsite would not be as aesthetically sensitive as required under the Specific Plan. The alternative would avoid the major knoll onsite, which would remain a visual focal point. However, surrounding development is not likely to be as visually integrated and sensitive to the natural contours and landscapes, as that proposed under the Specific Plan. The alternative would have a similar impact with respect to lighting and glare as the proposed project.

Although the comparative analysis of visual resources is highly subjective, it is the intent of the Specific Plan to develop a uniform and integrated urban form for the project area that goes beyond that which would be accomplished with the current land use designations alone (this alternative). Buildout under this alternative is not expected to result in substantially reduced visual resource impacts for the area. Therefore, visual impacts associated with this alternative's buildout would be considered similar to, but less desirable than that of the Specific Plan. Overall, this alternative is considered to be less desirable with regards to aesthetic impacts. All mitigation measures recommended for the project would apply.

6.1.2 Air Quality

This alternative would involve about 4,470 more commercial/retail/office square footage and 293 fewer residences than the proposed Specific Plan. It is anticipated that grading for this alternative would be about the same as that required under the Specific Plan. This alternative would generate about the same air pollutant emissions. Depending upon the ultimate grading volumes, construction related air emissions would be about the same as the proposed project. Mitigation measures recommended for the proposed project would apply.

In the long term, this alternative would generate about the same level of traffic as that projected under the Specific Plan. Consequently, operation of this alternative would generate about the same level of air pollutant emissions as those under the project. Therefore, long term CO, ROG, NO_x, and PM_{10} emissions would still be anticipated to exceed SCAQMD thresholds, and are considered unavoidably significant. This alternative would not include a provision for an equestrian center; therefore, related impacts would be less than significant. Overall, air quality impacts related to this alternative are anticipated to be about the same as those under the Specific Plan, and mitigation measures recommended for the proposed project's long-term impacts would apply.

6.1.3 Biological Resources

The proposed Specific Plan would increase the acreage designated for Open Space to about 138 acres. In addition, the Specific Plan calls for habitat preservation and restoration efforts that go beyond the current General Plan and Ladyface Mountain Specific Plan requirements. Although the Specific Plan would involve an increase in overall development and development intensity (commercial/retail/office plus residential), its more focused approach may result in reduced overall impacts to nesting birds, sensitive communities and natural habitat onsite.

Areas with known populations of Agoura Hills dudleya (Zone G, south of Zone A and E) east and along Cornell Road would remain designated as Commercial-Retail/Service (CRS) and Business Park-Office/Retail (PB-O/R) and so be subject to potential loss. While this plant is listed as threatened under the federal ESA, this protection extends only to those areas in federal jurisdiction, or where listed plants are removed in knowing violation of state law. Further, this alternative would allow greater encroachment into willow scrub and chaparral east of Kanan Road. With respect to the populations of Lyon's pentachaeta and Agoura Hills dudleya west of Kanan Road, the current General Plan (Ladyface Mountain Specific Plan) would allow up to 202,220 sf of commercial retail and office within this area (Zones B and F) as compared to the 197, 750 sf of commercial retail/office and 112 dwelling units proposed under the proposed Specific Plan. Because the protection policies of the two Specific Plans with respect to biological resources are similar, there is no substantial difference between the proposed project and the "no project" alternative in this location.

The "no project" alternative would require the widening of Agoura Road through the Specific Plan Area to four lanes, which would likely result in greater encroachment upon oak trees and other biological resources within the road corridor. Under the proposed Specific Plan project, the cumulatively significant traffic impact associated with maintaining a two-lane roadway would require over-riding considerations, but would potentially reduce the number of oak trees removed. Overall, biological resource impacts would be somewhat greater under this alternative than for the proposed Specific Plan. All mitigation measures recommended for the proposed project would apply to this alternative and would reduce impacts to a level considered less than significant.

6.1.4 Geology

Similar to the proposed Specific Plan, buildout under this alternative would result in urban development of the project area. This alternative would involve similar geological impacts to that of the proposed Specific Plan. It is anticipated that grading for this alternative would be about the same as that required under the Specific Plan. Thus, development under the current General Plan with proposed commercial/retail/office land use would involve many of the same geological impacts as those proposed under the Specific Plan. Groundshaking, slope instability, expansive soils, and settlement related impacts associated with this alternative would be considered significant, but mitigable and would be subject to many of the same mitigation measures outlined in the EIR.

6.1.5 Hazards

As with the Specific Plan buildout, this alternative would potentially expose persons to health and safety hazards associated with development within a wildfire hazard zone, and the presence and potential release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development. The overall potential for exposure to hazards would be about the same under this alternative and the Specific Plan. As with the Specific Plan buildout, impacts associated with wildfire hazards and transport of hazardous materials would be considered less than significant. Impacts related to the potential for the presence of hazardous materials onsite would be considered potentially significant, but mitigable. The mitigation measure recommended for the Specific Plan would apply and would reduce this alternative's health and safety impacts to a level considered less than significant. Overall, impacts associated with hazards to human health and safety are considered about the same for the alternative and the Specific Plan.

6.1.6 Historic and Archaeological Resources

Four known cultural resource sites exist within the Specific Plan area, and three are considered significant under CEQA and would be disturbed under Specific Plan buildout. This alternative would likely result in a similar amount of ground disturbance in those areas identified as sensitive cultural resources sites. Therefore, the cultural resource impacts are considered essentially the same as for the proposed project. All mitigation measures recommended for the Specific Plan would apply to this alternative and would reduce impacts to a level considered less than significant. Overall, impacts associated with historic and archaeological resources would be considered about the same for the alternative and the Specific Plan.

6.1.7 Hydrology and Water Quality

As with the Specific Plan, this alternative would likely involve relatively substantial grading and associated temporary impacts to surface water quality. As this alternative involves about the same grading as the Specific Plan, the magnitude of construction-related water quality impacts would be similar to those under the Specific Plan. Preparation of a SWPPP would minimize impacts and no further mitigation would be necessary for construction related water quality impacts.

Similar to the Specific Plan, this alternative would involve an increase in impervious surface area. Long-term hydrological, downstream flooding, groundwater, and water quality impacts would be about the same under this alternative as those under the Specific Plan. All mitigation measures recommended for the Specific Plan would apply to this alternative and would reduce impacts to a level considered less than significant. Overall, alternative impacts related to water quality and hydrology would be considered about the same as those under the Specific Plan.

6.1.8 Land Use

The No Project alternative does not involve any new residential development. As such, it would not introduce residential uses to an existing commercial area and, thus, would avoid land use conflicts between planned new commercial and residential land uses and between proposed equestrian uses and residential uses. The No Project alternative's land use impacts

would be lower than those of the proposed project and are considered Class III, less than significant.

6.1.9 Noise

Traffic volumes under this alternative would be about the same (less than 1% greater) as those under the Specific Plan. Therefore, this alternative's impact to roadway noise would be about the same as that of the Specific Plan. However, this alternative would avoid the introduction of new residential uses within a commercial area and would reduce noise conflicts that may be associated with a residential/commercial interface. Overall, long-term impacts would be about the same as those of the proposed project.

Short-term construction noise would be similar to that associated with the proposed project. This alternative involves roughly the same square footage of construction and thus would require about the same level of grading for the area. Therefore, construction impacts are anticipated to be about the same as those of the Specific Plan and are considered significant but mitigable. Restrictions on operating hours for construction equipment would apply. All mitigation measures recommended for the proposed project would apply and no unavoidably significant impacts are anticipated.

6.1.10 Public Services

Impacts related to wastewater, water, solid waste generation, and recreation are considered less than significant under the proposed project, and would be about the same under this alternative.

Because this alternative would not include the proposed residential component, it would have no impact upon area schools and the increase in demand for fire or police protection (generated due to commercial uses) would be about the same as that for the project. Additionally, this alternative would further avoid impacts to emergency services and emergency access as it would not involve development of the roundabout at the intersection of Kanan and Agoura Road. This would allow traditional emergency access through a signalized intersection. Overall, the proposed alternative would have a lower level impact with respect to emergency services than that of the proposed project.

As discussed above, this alternative does not include a residential component. Consequently, future demands on recreation would be less under this alternative. Employees would still generate demand for recreational opportunities, but impacts to existing facilities would not be significant. Overall, impacts from this alternative are considered slightly lower than that of the Specific Plan. Mitigation measures, with the exception of mitigation associated with the roundabout on Kanan Road, which would be eliminated, that are recommended for the Specific Plan and would apply to this alternative to reduce impacts to a level considered less than significant.

6.1.11 Transportation and Circulation

This alternative would generate a total of 22,125 ADT with 721 trips in the A.M. peak hour and 1,976 trips in the P.M. peak hour. Of these trips, 17,114 ADT, 596 A.M. peak hour trips (PHT) and 1,542 P.M. PHT would be primary trips. This is 479 primary ADT, and 208 A.M. and 91 P.M. peak hour primary trips less than the primary trips generated by the proposed Agoura Village Specific Plan (AVSP).

Trip generation estimates for the project were developed based on rates presented in ITE's Trip Generation Handbook for the respective new land uses included in the Specific Plan. For the retail uses within the Specific Plan, a 25% pass-by rate was applied. This rate was developed based on pass-by rates contained in ITE's Trips Generation Handbook and the forecast traffic volumes on Kanan Road and Agoura Road adjacent to the project site. In addition, a 10% mixed-use rate was applied to the trip estimates to account for interactions between the office, restaurant and commercial uses within the project area. The trip generation estimates for this alternative are listed in Table 6-3, and are summarized according to the analysis zones developed for the Agoura Village Specific Plan.

Potential Roadway Impacts. Buildout under this alternative would generate 479 primary ADT less than the primary trips generated by the proposed AVSP. A review of the trip generation per project zone indicates that this alternative would result in an additional 500 ADT on the segment of Agoura Road west of Kanan Road and 1,000 ADT less on the segment of Agoura Road east of Kanan, as compared to the proposed AVSP. The four-lane segment of Agoura Road west of Kanan Road would carry 19,600 ADT (LOS B) and the proposed two-lane segment of Agoura Road east of Kanan would carry 12,400 ADT (LOS C). Therefore, buildout under this alternative is not expected to generate any significant roadway impacts. Therefore, impacts under the proposed alternative would be lower than those associated with the Specific Plan.

Potential Intersection Impacts. Buildout under the no project alternative would generate 208 A.M. and 91 P.M. peak hour primary trips less than the primary trips generated by the proposed AVSP. This would generate adverse impacts at two intersections during the A.M. peak hour and at eight intersections (see Table 4.11-8) during the P.M. peak hour. This is considered a Class II, significant but mitigable impact, except for the Kanan Road/U.S. 101 Southbound Ramp. The improvement measures developed in the AVSP analysis for the impacted locations during the peak hours would also mitigate the impacts generated under this alternative to a level of insignificance.

Overall, this alternative would result in an increase in traffic of 1% (197 additional total daily trips) over that of the Specific Plan. Although, this alternative would increase the total level of traffic, the distribution of trips, relative to differing land uses, differs substantially from that under the Specific Plan, and therefore, would reduce traffic related impacts. Thus, this alternative would have a lower level of traffic related impacts.

Table 6-3: No Project Alternative Traffic Generation

Land Use	Size	Mixed-Use Factor	ADT		A.M. Peak Hour		P.M. Peak Hour	
			Rate	Trips	Rate	Trips	Rate	Trips
Zone A North Specialty Retail Primary Trips Pass-By Trips	29,308 S.F	0.9	44.06	1,162 (871) (291)	1.32	35 (26) (9)	3.13	83 (62) (21)
Zone A South Specialty Retail Primary Trips Pass-By Trips Hotel **Subtotal**	49,000 S.F 120 Rms.	0.9 0.9	43.55 8.17	1,921 (1,441) (480) 882 **2,803**	1.31 0.56	58 (43) (15) 60 **118**	2.84 0.59	125 (94) (31) 64 **189**
Zone B Shopping Center Primary Trips Pass-By Trips	202,220 S.F	0.9	53.08	9,660 (7,245) (2,415)	1.18	215 (161) (54)	4.93	896 (672) (224)
Zone C Specialty Retail Primary Trips Pass-By Trips	3,500 S.F	0.9	46.55	147 (110) (37)	1.40	4 (3) (1)	4.55	14 (11) (3)
Zone D West Specialty Retail Primary Trips Pass-By Trips	36,600 S.F	0.9	43.81	1,443 (1,082) (361)	1.31	43 (32) (11)	2.99	98 (73) (25)
Zone D East Shopping Center Primary Trips Pass-By Trips	78,300 S.F	0.9	73.98	5,213 (3,910) (1,303)	1.73	122 (91) (31)	6.80	479 (360) (119)
Zone E Specialty Retail Primary Trips Pass-By Trips General Office **Subtotal**	12,000 S.F 100,000 S.F.	0.9 0.9	45.92 13.34	496 (372) (124) 1,201 **1,697**	1.38 1.88	15 (11) (4) 169 **184**	4.19 1.91	45 (34) (12) 172 **217**
Zone F No Development								
TOTAL Primary Trips Pass-By Trips				**22,125** (17,114) (5,011)		**721** (596) (125)		**1,976** (1,542) (434)

6.2 ALTERNATIVE 2: REDUCED SPECIFIC PLAN AREA

This alternative would be identical to the proposed project except that it would exclude all Zones west of Kanan Road (Zones B, D west, F and G). Removal of the area west of the intersection of Agoura and Kanan Roads would reduce the overall Specific Plan area by roughly 25 acres[2] of developable area. Although this alternative would not include development of the area south and west of the intersection of Kanan and Agoura Roads, this area could be developed in the future, in accordance with the Ladyface Mountain Specific Plan. Development of this area according to the Ladyface Mountain Specific Plan is examined under the No Project Alternative. This analysis does not evaluate the potential development of this area as a component of this alternative.

Overall, this alternative would accommodate 181 residences, or 112 fewer than are proposed under the Specific Plan, and approximately 677,250 sf of commercial/retail/office space, or approximately 271,250 sf less than are proposed under the Specific Plan. This alternative does not fulfill the project objectives as it lacks the roundabout, which is considered a key element of the Specific Plan, and due to its significant reduction in residential and commercial use. This substantial reduction in development potential would likely reduce the economic viability of development projects (making it more difficult to encourage private sector investment and revitalization) leading to the possible infeasibility of creating a vibrant village that is successful and self-sustaining.

This alternative would not avoid any Class I impacts or reduce Class II impacts to Class III. However, this would be expected to reduce the amount of grading activity onsite, soil export, impacts to biological resources, public service demand, and pedestrian and traffic safety issues. The development potential for this alternative is summarized in the table below and the site plan is shown on Figure 6-2.

Table 6-4 Alternative 2: Reduced Specific Plan Area

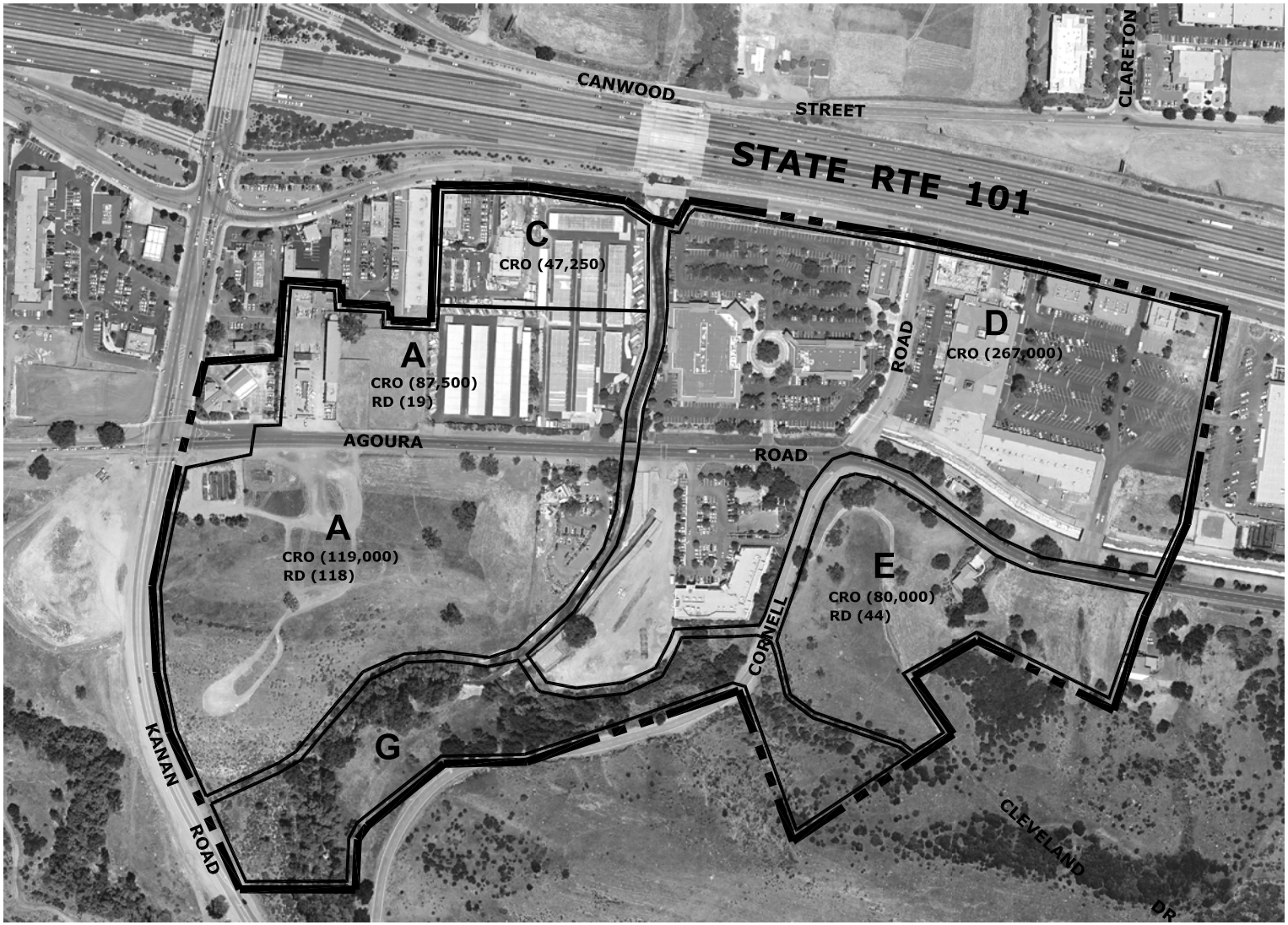
		Existing		Proposed		Total Allowable	
Project Zone	**Total Zone Area (s.f.)**	**Residential**	**Commercial/ Retail/Office**	**Residential**	**Commercial/ Retail/Office**	**Residential**	**Commercial/ Retail/Office**
		DU	**s.f.**	**DU**	**s.f.**	**DU**	**s.f.**
A South	600,000	-	-	118	119,000	118	119,000
A North	250,000	-	58,192	19	29,308	19	87,500
C	135,000	-	43,750	-	3,500	-	47,250
D East	1,200,000	-	233,200	-	78,300	-	311,500
E	311,040	-	-	44	112,000	44	112,000
Total	**2,496,040**	**-**	**335,142**	**-**	**342,108**	**181**	**677,250**

[2] It is important to note that although the project would not incorporate the area south and west of the intersection of Kanan and Agoura Roads, this area could still be developed under the Ladyface Mountain Specific Plan. As analyzed under Alternative 1, future development of this area would likely total 113,100 sf of commercial/office/retail. This area is not analyzed under this impact, as it is analyzed under Alternative 1.

6.2.1 Aesthetics

This alternative's impact on public viewsheds, introduction of new sources of light and glare, and modification of the aesthetic character of the project area would be similar to, but slightly less than, that of the proposed Specific Plan. Removal of Zones B, D west, F and G would reduce the overall aesthetic impact in the project area. Thus, as compared with the Specific Plan, this alternative would reduce visual impacts for travelers along Kanan and Agoura Roads. U.S. Highway 101, Kanan Road, Agoura Road, and Roadside Drive each of which have scenic corridor/roadway designations. However, this alternative would be visible from each of these roadways, and would generate a similar aesthetic impact as the proposed Specific Plan.

Similar to the proposed project, this alternative would provide for redevelopment of the area between U.S. 101 and Agoura Road, and thus would have a beneficial impact on those lands adjacent to a designated scenic corridor. Like the proposed project, this alternative would result in the transformation of the rural visual character of this area to a more urban, contemporary low-scale built environment. In summary, although the alternative's impacts would be similar to that of the Specific Plan, the overall impact of the alternative is somewhat lower than that of the proposed project. However, mitigation measures recommended for the project would apply.



LEGEND

CRO - Commercial/Retail/Office (square footage)

RD - Residential Dwellings (dwelling units)

Specific Plan Zones

Project Boundary

N

0 200 400 Feet

Aerial: City of Agoura Hills, 2002
Source: RRM Design Group, March 2004.

Alternative 2: Reduced Specific Plan Area Site Plan

Figure 6-2

6.2.2 Air Quality

This alternative would involve 112 fewer residences than the proposed project and approximately 271,250 sf less commercial/retail/office development. This alternative is estimated to reduce grading and soil exporting requirements from the project site by approximately 100,000 cubic yards, a 14% reduction in overall soil export. As such, the alternative would generate fewer air pollutant emissions and less fugitive dust during construction. However, construction related impacts from the project would still be considered significant and unavoidable. All mitigation measures recommended for the proposed project would apply.

In the long term, this alternative would generate about 28% fewer daily vehicle trips associated with commercial/retail/office uses and 38% fewer daily vehicle trips associated with residential uses within the Specific Plan. Consequently, operation of this alternative would generate proportionally fewer air pollutant emissions than operation of the project. However, long term CO, ROG, NO_x, and PM_{10} emissions would still be expected to exceed SCAQMD thresholds. Although long-term impacts would be less than those of the proposed project, these would still be considered unavoidably significant. This alternative would also include provisions for a new equestrian trail within the project area. Odors associated with the equestrian use would be similar to those under the Specific Plan. All mitigation measures recommended for the proposed project's long-term impacts would apply.

6.2.3 Biological Resources

This alternative would reduce biological impacts as compared with those of the proposed project. Eliminating proposed development under the Agoura Village Specific Plan within Zones B and F would reduce the overall impacts to native communities and natural habitat associated with that Plan. Most notably, avoidance of these areas would reduce impacts to special status communities, as the alternative would avoid areas of Southern Willow Scrub/Southern Arroyo Willow Riparian Forest and Valley Needlegrass Grasslands, which are located within Zones G and B. Additionally, the alternative would avoid known areas of Lyon's pentachaeta and Agoura Hills dudleya. This alternative would reduce the overall impact to sensitive species associated with the Specific Plan.

Compared to the project, the Reduced Specific Plan alternative would reduce encroachment upon oak trees, riparian woodlands, aquatic habitats, mixed chaparral and coastal sage scrub located within Zones B and F. This alternative would avoid the project related impacts related to Lindero Canyon Creek, including impacts to riparian and wetland habitat, which provide a perennial source of water for wildlife around Ladyface Mountain. Note however, while this alternative would eliminate these impacts from the proposed project, future development within Zones B and F would not be precluded and thus could result in similar impacts to the proposed project in these area. To the extent that the proposed Specific Plan would be more likely to induce land use development in Zones B and F than the current General Plan, biological resource impacts would therefore be lower under this alternative than under the Specific Plan, though the potential long term effect on the area west of Kanan Road is anticipated to be similar. In particular, if the Specific Plan is successful within the reduced footprint area, then it is likely that Zones B and F would be developed under the Ladyface

Specific Plan in approximately the same timeframe. All mitigation measures recommended for the proposed project would apply to this alternative and would reduce impacts to a level considered less than significant.

6.2.4 Geology

Development of the Reduced Specific Plan alternative would involve a smaller area and reduced retail/commercial and residential square footage than the proposed Specific Plan. This alternative would not include development of the Ladyface Mountain Specific Plan area, located south and west of the intersection of Kanan and Agoura Road, although this alternative would not preclude future development of this area outside of the parameters of this Specific Plan. This alternative would not require export of the stockpiled soils located within Zone B and would avoid slope instability, expansive soil, and settlement related impacts associated with development within Zone B. Development of the alternative would involve other similar geological impacts as those proposed under the Specific Plan. Groundshaking, slope instability, possible blasting, expansive soils, and settlement related impacts in other portions of the project site would still be considered significant, but mitigable, and would be subject to many of the same mitigation measures outlined in the EIR.

6.2.5 Hazards

As with the Specific Plan buildout, this alternative would potentially expose persons to health and safety hazards associated with development within a wildfire hazard zone, and the presence and potential release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development. As with the Specific Plan buildout, impacts associated with wildfire hazards and transport of hazardous materials would be considered less than significant. Impacts related to the potential for the presence of hazardous materials onsite would be considered potentially significant, but mitigable. The mitigation measure recommended for the proposed project would apply and would reduce this alternative's health and safety impacts to a level considered less than significant. The overall potential for exposure to hazards would be similar to, but less than that of, the proposed project due to the smaller number of residential units.

6.2.6 Historic and Archaeological Resources

Grading and development associated with this alternative would be less than that provided for in the Specific Plan by eliminating Zones B and F from the Plan. This would reduce grading that will be required and will reduce the level of ground disturbance that could impact cultural resources. This Reduced Specific Plan alternative would reduce the overall potential to impact identified cultural resources located in the project area by avoiding archaeological sites CA-LAN-467 and CA-LAN-1436, located in Zones B and F. Therefore, the cultural resource impacts would be lower than the proposed project under this alternative. Note however, while this alternative would eliminate these impacts from the proposed project, future development within Zones B and F would not be precluded and thus could result in similar impacts to the proposed project in these area. Therefore, this alternative would still result in potentially significant but mitigable impacts to other archaeological sites, not in Zones B and F. All mitigation measures recommended for the Specific Plan would apply to this alternative and would reduce impacts to a level considered less than significant.

6.2.7 Hydrology and Water Quality

The Reduced Specific Plan Area alternative would involve grading and associated temporary impacts to surface water quality similar to that of the proposed Specific Plan. Additionally, this alternative would involve an increase in impervious surface area, long-term changes to the existing drainage pattern onsite, downstream flooding and water quality impacts similar to that of the proposed Specific Plan. However, the overall construction-related and long term water quality impacts would be less under this alternative than under the Specific Plan. The reduction in overall impacts is due to the avoidance of Zones B, F and the areas surrounding Lindero Canyon Creek and its associated riparian habitats, as well as the overall reduction in project size. Mitigation measures recommended for the project would apply and would reduce impacts to a less than significant level. The overall hydrology and water quality impacts of this alternative would be similar to, but less than, that of the proposed project.

6.2.8 Land Use

The introduction of residential uses to an area that is commercial in nature, and the potential for internal compatibility conflicts between commercial/office/restaurant uses and residential uses, would be similar to that of the proposed project. Although the alternative's impact would be slightly less since 112 fewer residences would be built, as with the proposed project, compatibility impacts are considered potentially significant, but mitigable. The potential for conflicts with General Plan policies relating to land use compatibility would be the same as that of the proposed project.
Although this alternative would have slightly less impact with respect to land use compatibility and conflicts, overall this alternative would have very similar impacts as those of the proposed project. All mitigation measures recommended for the project would apply.

6.2.9 Noise

Short-term construction noise would be similar to, but slightly less than, that associated with the proposed project. As with the proposed project, construction impacts, including potential blasting and grading noise and vibration, would be significant but mitigable. Restrictions on operating hours for construction equipment would apply.

Due to the smaller size of the project, less commercial and residential development, traffic volumes would be about 28%-38% lower under this alternative than would occur with the proposed project. This decrease in traffic would result in a decrease in the change in noise levels along project roadways. Under the proposed project, the following roadways would experience an exceedance of the noise significance threshold of 1.5 dBA: 1) Kanan Road North of Agoura Road; 2) Agoura Road West of Kanan Road; 3) Agoura Road between Kanan Road and Cornell Road; and 4) Agoura Road East of Cornell Road. Under the alternative, Kanan Road North of Agoura Road, Agoura Road between Kanan Road and Cornell Road, and Agoura Road East of Cornell Road would be anticipated to exceed the noise significance threshold. Therefore, the alternative would be expected to have a similar and significant effect on noise levels on the local roadway system.

Impacts relating to onsite activity, with the exception of Zones B and F, would be about the same as for the proposed project. The mixed-use village concept that encourages adjacency of

residences, entertainment, and office space will expose residences to operational noise from non-residential sources. Long-term impacts from traffic related noise from U.S. 101 and surrounding roadways would be similar to those of the proposed project. All mitigation measures recommended for the proposed project would apply.

6.2.10 Public Services

This alternative would generate about 93,000 gallons of wastewater per day and would demand about 103,000 gallons of water per day. This is about 62%-64% lower than the wastewater generation and water demand for the proposed Specific Plan. Impacts to water and wastewater conveyance and treatment systems would be less than those of the project. Although significant water and wastewater impacts would not be anticipated, water conservation measures recommended for the proposed project would apply.

Impacts to fire and police services would be similar to, but slightly less than, those of the proposed project since 112 residential units would be eliminated. Impacts to safety access routes would be eliminated as the roundabout at Kanan Road would be eliminated. Mitigation measures recommended for landscaping, fuel modification, and design approval would apply.

Impacts to schools would be slightly lower under this alternative, as the elimination of 112 residences would reduce student generation by an estimated 56 students from 181 to 125 students. Nevertheless, impacts to schools would be potentially significant. Mitigation recommended for the project, including payment of fees, would apply to this alternative.

This alternative would generate about 1.4 tons per day, or 510 tons per year. This is approximately 48% less solid waste than the proposed project. As such, its impact to landfill capacity would be lower. Although impacts would not be significant, measures recommended for the project would apply to ensure compliance with local and state waste diversion requirements.

Additionally, the City currently has a shortage of parks and recreational facilities. Although the Reduced Specific Plan would introduce fewer residential dwellings, and would have reduced impact on parks and recreational uses compared to the Specific Plan, the increased demand on recreational facilities would require dedication of open space lands or payment of in lieu fees as with the Specific Plan. This alternative would provide more open space than what is required and the necessary park and recreation lands, or in-lieu fees, would be collected. Therefore, impacts to recreational lands and facilities would be less than significant. Overall, impacts to public services are similar to, but proportionally less than, those of the proposed project.

6.2.11 Transportation and Circulation

Due to the smaller size of the project, less commercial and residential development, this alternative would decrease commercial use in the project area by approximately 28% and residential uses by 38%. This reduction in total size is roughly equivalent to 32%[3] reduction in overall project size. Thus, the alternative is anticipated to have a reduction in overall daily trips and A.M. and P.M. peak hour trips as compared with the proposed project. Consequently, the

[3] Assuming 1,500 sf per residential dwelling in the Specific Plan.

impact to the local circulation system would be less than that of the proposed project. Nevertheless, this alternative would be expected to have significant impacts at nearby intersections and roadway street segments.

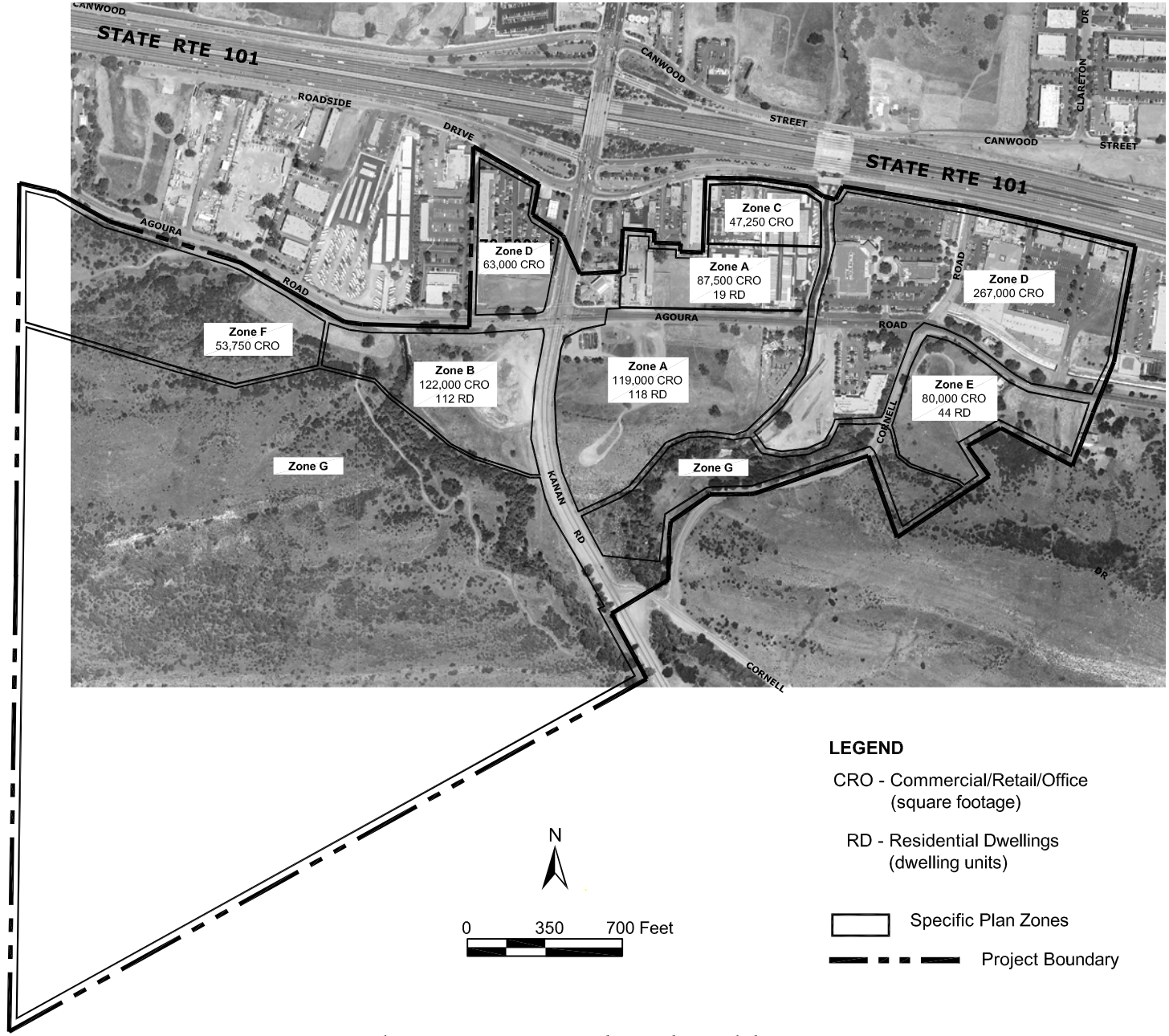
Mitigation measures recommended for the Specific Plan, with the exception of those pertaining to the roundabout, would be applicable for this alternative. Overall, traffic impacts of the Reduced Project alternative are considered similar to, but proportionally lower than, that of the proposed project. However, this will largely depend upon the nature and intensity of uses that could be developed within that area (25 acres) that has been deleted from the proposed Specific Plan. Based on preliminary analysis, it is anticipated that impacts would be similar to those under the Specific Plan.

6.3 ALTERNATIVE 3: REDUCED BUILDOUT DENSITY

This alternative would be similar to the Specific Plan except that the project area would be developed with a lower density. Development at a lower density would reduce the overall building square footage for the proposed development by roughly 109,000 square feet. Specifically, commercial/retail/office development within Zones D west, D east, E, and F would be developed at a lower FAR. This alternative calculates buildout potential based on a higher buildout density for those areas within the village core (Zones A south, A north, and B). These zones were calculated at a density of 0.35 FAR. Buildout density for zones on the periphery of the village core (Zones E and F) were calculated with a 0.25 FAR. Buildout density for zones outside of the village core (Zones D west and D east) were calculated with a 0.30 FAR. This is a reduction in buildout density as compared with the Specific Plan, which allowed for all zones to be developed at an FAR of 0.35. This alternative would generally have the same level of impact with respect to aesthetics, air quality, geologic hazards, hazardous materials, historic and cultural resources, hydrology, water quality, land use, noise, public services, and transportation, as the Specific Plan. However, this alternative would likely free up more open space, would reduce demand on local infrastructure, and would lessen encroachment on biological resources, such as oak trees, onsite. Overall, this alternative is considered very similar to the Specific Plan. The development potential for this alternative is shown on Table 6-4 and the site plan is shown on Figure 6-3.

Table 6-5 Alternative 3: Reduced Buildout Density

		Existing		Proposed		Total Allowable	
Project Zone	Total Zone Area (s.f.)	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office
		DU	s.f.	DU	s.f.	DU	s.f.
A South	600,000	-	-	118	119,000	118	119,000
A North	250,000	-	58,192	19	29,308	19	87,500
B	700,000	-	-	112	122,000	112	122,000
C	135,000	-	43,750	-	3,500	-	47,250
D West	210,000	-	36,900	-	26,100	-	63,000
D East	1,200,000	-	233,200	-	33,800	-	267,000
E	311,040	-	-	44	80,000	44	80,000
F	215,000	-	-	-	53,750	-	53,750
Total	**3,621,040**	**-**	**372,042**	**293**	**467,458**	**293**	**839,500**



Aerial Source: City of Agoura Hills, 2002

Alternative 3: Reduced Buildout Density

Figure 6-3

6.3.1 Aesthetics

This alternative's impact to public views from scenic corridors would generally be similar to that of the proposed project. The reduction in development density would incrementally reduce the change in views from nearby scenic corridors but the overall grading required is expected to be similar to the proposed project. Overall, this alternative's impact would be about the same as that of the proposed project. Impacts to the undeveloped rural character of the area south of Agoura Road, including the riparian corridor along Medea Creek and the oak trees located east of Kanan Road, would be similar to those under the proposed project. All mitigation measures recommended for the project would apply.

6.3.2 Air Quality

This alternative is similar in size and scale to the Specific Plan; however, it involves a reduction of 109,000 square feet of commercial/retail/office development. This is an approximately 12% reduction in buildout. As such, air pollutant emissions would be relatively similar to the Specific Plan during construction, and emissions would be expected to remain above SCAQMD significance thresholds. Impacts related to particulate matter from diesel-fueled vehicles would be similar to those under the proposed project. Therefore, construction related impacts would be considered significant and unavoidable. Impacts related to grading would be considered significant but mitigable. All mitigation measures recommended for the proposed project would apply.

Operational emissions under this alternative would generate slightly fewer daily vehicle trips than the proposed project, and would generate proportionally fewer air pollutant emissions. Long-term impacts would therefore be slightly less than those of the proposed project. Nevertheless, the air quality impact would be anticipated to remain unavoidably significant based on SCAQMD significance thresholds. This alternative would also include provisions for a new equestrian trail within the project area. Odors associated with the equestrian use would be similar to those under the Specific Plan. All mitigation measures recommended for the proposed project's long-term impacts would apply.

6.3.3 Biological Resources

This alternative would generally have biological impacts similar to those of the proposed project. However, the reduction in overall building density would allow for greater design flexibility to retain more open space and may better preserve oak trees and sensitive resources onsite. Construction of 53,750 sf commercial retail/office in Zone F under this alternative (21,500 sf less than the proposed project) is more likely to be achievable without encroaching upon the scrub oak chaparral where Lyon's pentachaeta is known to occur. This alternative would also allow greater flexibility and avoidance of riparian habitats and the native grassland at the southeast portion of Zone B. Overall, biological resource impacts would be about the same as the proposed Specific Plan. All mitigation measures recommended for the proposed project would apply to this alternative and would reduce impacts to a level considered less than significant.

6.3.4 Geology

Development under this alternative would generally be in the same locations as the proposed project; therefore, exposure to seismic hazards would be similar and potentially significant. Potential hazards would involve many of the same geological impacts as those proposed under the Specific Plan. Groundshaking, slope instability, possible blasting, expansive soils, and settlement related impacts associated with this alternative would be considered significant, but mitigable and would be subject to many of the same mitigation measures outlined in the EIR. Overall the impacts are considered to be the about the same as the proposed project. All mitigation measures recommended for the proposed project would also apply to this alternative.

6.3.5 Hazards

As with the Specific Plan buildout, this alternative would potentially expose persons to health and safety hazards associated with development within a wildfire hazard zone, and the presence and potential release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development. As with the Specific Plan buildout, impacts associated with wildfire hazards and transport of hazardous materials would be considered less than significant. Impacts related to the potential for the presence of hazardous materials onsite would be considered potentially significant, but mitigable. The mitigation measure recommended for the proposed project would apply and would reduce this alternative's health and safety impacts to a level considered less than significant. Overall, impacts related to safety hazards associated with the alternative are considered to be about the same as the proposed project.

6.3.6 Historic and Archaeological Resources

Grading and development associated with this alternative would entail roughly the same area as that of the Specific Plan. This alternative would be developed within the same area as the proposed Specific Plan and would have the same potential to impact significant cultural resources. Therefore, the cultural resource impacts under this alternative would be about the same as those under the proposed Specific Plan. All mitigation measures recommended for the Specific Plan would apply to this alternative and would reduce impacts to a level considered less than significant.

6.3.7 Hydrology and Water Quality

This alternative would involve a reduction of roughly 12% commercial/retail/office development as compared with the proposed project. It would therefore generate somewhat less stormwater runoff during peak storm events and would add less dry weather flow to Medea and Lindero Canyon Creeks. The approach to stormwater management is presumed to be the same as for the proposed project. Therefore, construction impacts would be less than significant. Impacts to the areas drainage pattern and flood related impacts would be the same as for the project and would be considered significant but mitigable.

The reduction in development density would incrementally reduce potential impacts to surface water quality by reducing overall construction and long-term activity onsite and the associated

generation of surface water pollutants. However, impacts would be less than significant with compliance with existing regulations. Overall, development of the alternative scenario would have generally the same level of impacts, with respect to hydrology and water quality, as that of the proposed project.

6.3.8 Land Use

The introduction of residential uses to an area that is commercial in nature, and the potential for internal compatibility conflicts between commercial/office/restaurant uses and residential uses, would be similar to that of the proposed project. The alternative's compatibility impacts are considered potentially significant, but mitigable. The potential for conflicts with General Plan policies relating to land use compatibility would be the same as that of the proposed project. As this alternative would introduce additional residential uses in the Specific Plan area, this would contribute to the City's existing exceedance of SCAG population forecasts. Overall this alternative would have very similar impacts as those of the proposed project. All mitigation measures recommended for the project would apply.

6.3.9 Noise

Short-term construction noise would be similar to that associated with the proposed project. This would include blasting and grading-related noise and vibration. As with the proposed project, construction impacts would be significant but mitigable. Restrictions on operating hours for construction equipment would apply.

Traffic volumes would be slightly lower under this alternative than under the proposed project. Therefore, this alternative's impact to roadway noise would be slightly less than that of the proposed Specific Plan. However, the incremental increase in noise levels on roads in the project vicinity would still be expected to exceed the noise significance threshold. Therefore, impacts relating to traffic noise generation would be similar to that of the project and are considered significant but mitigable.

Impacts relating to onsite activity would generally be similar to the proposed project, even though the alternative is smaller in size. The mixed-use village concept that encourages adjacency of residences, entertainment, and office space will expose residences to operational noise from non-residential sources. Long-term impacts from traffic related noise from U.S. 101 and surrounding roadways would be similar to those of the proposed project. All mitigation measures recommended for the proposed project would apply.

6.3.10 Public Services

This alternative would incrementally reduce wastewater, water demand, and solid waste generation. Impacts to water and wastewater conveyance and treatment systems would therefore be similar to, but slightly less than, those of the project. Impacts to landfill capacity would be less than significant. Although significant water and wastewater impacts would not be anticipated, water conservation measures recommended for the proposed project would apply.

Impacts to fire and police services would be similar to those of the proposed project. Overall, impacts would be relatively the same as those of the proposed project. Mitigation measures recommended for the proposed project would apply.

Impacts to schools would be similar to, but slightly less than, those under the Specific Plan. Nevertheless, impacts to schools would be potentially significant. Mitigation recommended for the project, including payment of fees, would apply to this alternative.

Additionally, the City currently has a shortage of parks and recreational facilities. As this alternative would introduce residential uses within the area, this would further exacerbate the City's shortfall of recreational facilities. However, this alternative, like the proposed Specific Plan, would provide more open space than is required under the current City policy and the appropriate in-lieu fees and/or land would be obtained. Thus, impacts on parks and recreational uses are similar to the Specific Plan, and would be subject to the same mitigation.

6.3.11 Transportation/Circulation

This alternative would decrease commercial use onsite by approximately 12%. In reference to traffic impacts, this is an unsubstantial change and impacts would be anticipated to be the same as those under the Specific Plan. This alternative would be expected to have significant, but mitigable, impacts at nearby intersections and roadway street segments. Mitigation measures recommended for the Specific Plan are recommended to reduce impacts to a less than significant level.

6.4 ALTERNATIVE 4: ALTERNATE LOCATION

This alternative redefines the Specific Plan boundaries and shifts development west of Kanan Road. The concept for this alternative would be to create the same Agoura Village atmosphere with development on both sides of Agoura Road. Redevelopment would be focused west of Kanan Road and to the north of Agoura Road, an area currently zoned as Business Park-Manufacturing (BP-M). This area would be redeveloped in a manner consistent with the AVSP at a density of 0.35 FAR over the entire area. New development would also be focused to the west of Kanan Road, but would be predominantly on the southern side of Agoura Road, an area currently designated as Ladyface Specific Plan (SP).

The 342,108 sf of commercial/retail/office space proposed for new- and re-development in Zones A south, A north, C, D east, and E would be shifted to the west of Kanan Road and would be developed consistent with the proposed Specific Plan. Redevelopment would consist of approximately 100,000 -200,000 sf commercial/retail/office in that area previously proposed for redevelopment as part of the Ladyface Village Project. New development would consist of approximately 230,000 sf commercial/retail/office and 181 residential units to be located south of Agoura Road. Zones B, D west and F would be developed as currently planned for in the Agoura Village Specific Plan and would form the eastern boundary of the Specific Plan. Given the topography along the south side of Agoura Road and the presence of numerous important oak trees and special-status plants within the area the alternative would have a greater significant impact with respect to biological resources, geologic conditions, and public services. Overall this alternative increases potential impacts and would be considered less desirable than

the proposed Specific Plan. The development potential for this alternative is shown on Table 6-5 and the site plan is shown on Figure 6-4.

Table 6-6 Alternative 4: Alternate Location

		Existing		Proposed		Total Allowable	
Project Zone	Total Zone Area (s.f.)	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office
		DU	s.f.	DU	s.f.	DU	s.f.
A South	600,000	-	-	118	119,000	118	119,000
A North	250,000	-	58,192	19	29,308	19	87,500
B	700,000	-	-	112	122,500	112	122,500
C	135,000	-	43,750	-	3,500	-	47,250
D West	210,000	-	36,900	-	36,600	-	73,500
D East	1,200,000	-	233,200	-	78,300	-	311,500
E	311,040	-	-	44	112,000	44	112,000
F	215,000	-	-	-	75,250	-	75,250
Total		**-**	**372,042**	**-**	**575,958**	**293**	**948,500**

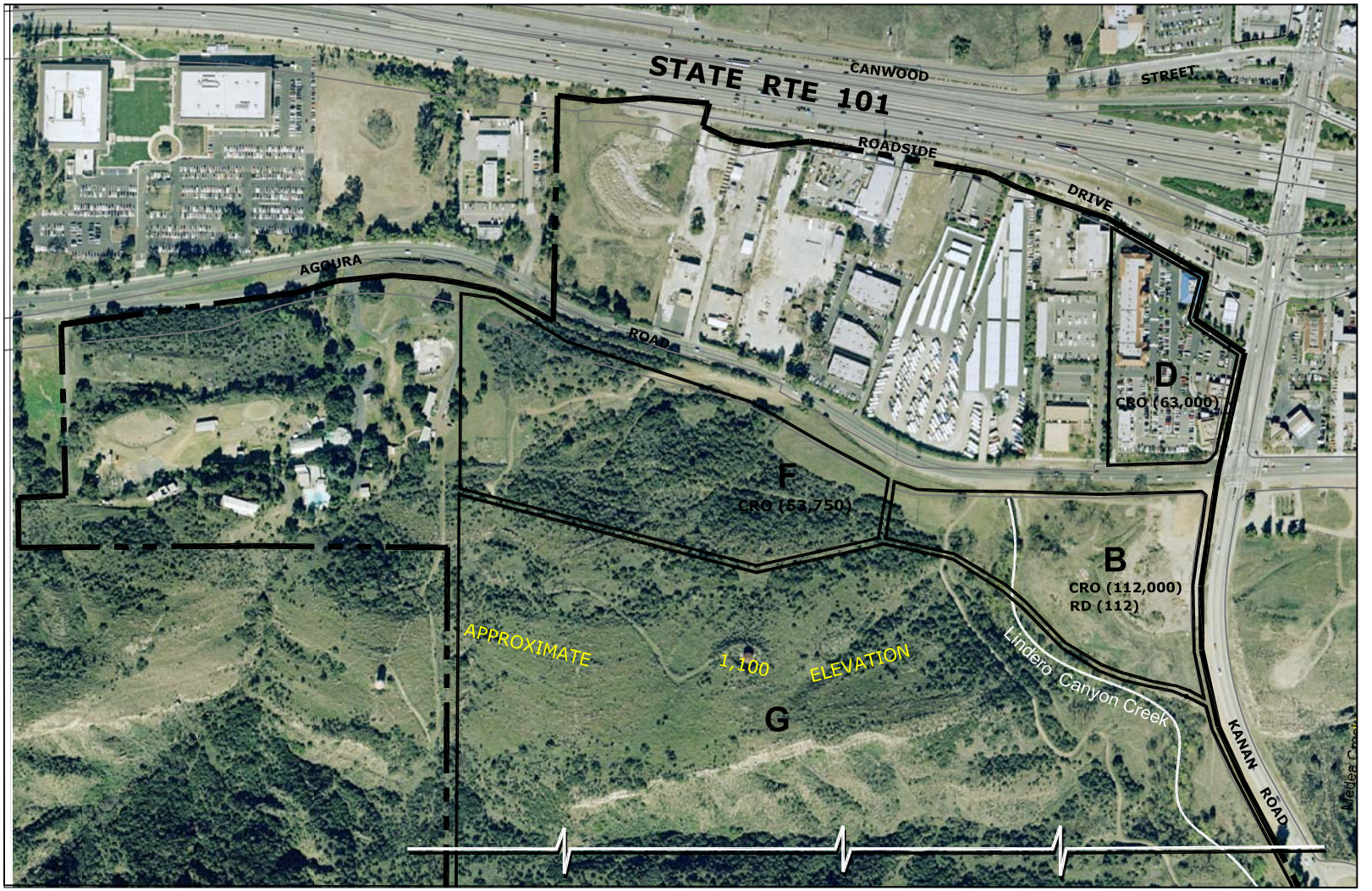
6.4.1 Aesthetics

This alternative's impact to public views from Highway 101 would be reduced from that of the proposed Specific Plan. Due to the topography surrounding the alternative site, sight distances to nearby uses would be about the same as under the Specific Plan. Existing development between Highway 101 would generally block views of the alternative site from travelers along the highway. Additionally, Ladyface Mountain and surrounding hillsides would generally block the project site from nearby scenic corridors. This alternative would avoid the notable impacts to scenic resources, modification of two knolls located in the proposed Specific Plan area. However, this alternative may require modifications to other natural landforms within this new location. This alternative may be perceived as similar visually, as seen from nearby scenic resources. Overall, this alternative's impact would be about the same as that of the proposed project. All mitigation measures recommended for the project would apply.

6.4.2 Air Quality

This alternative would involve the same level of buildout as that proposed under the Specific Plan. This alternative would generate about the same level of, or slightly less, air pollutant emissions and fugitive dust during construction as that anticipated under the proposed project. The largest difference between the alternative and the proposed project would be additional dust and temporary emissions associated with the possible future grading of the knoll area within Zone A south of the Specific Plan. This alternative is not anticipated to require the same level of grading; however, soil conditions at the alternative site have not been evaluated and could potentially involve similar construction and grading efforts. Grading related impacts and diesel-fueled emissions related impacts are considered significant but mitigable. All mitigation measures recommended for the proposed project would apply.

In the long term, this alternative would generate roughly the same number of daily vehicle



Aerial Sourc: Air PhotoU.S.A. 2006.
Base MapSource: RRM Design Group, March 2004.

Alternative 4: Alternate Location

Figure 6-4

trips. Consequently, operation of this alternative would generate about the same level of air pollutant emissions as that anticipated under the Specific Plan. Long-term impacts would therefore be about the same as the proposed project. Nevertheless, the air quality impact would remain unavoidably significant based on SCAQMD significance thresholds. All mitigation measures recommended for the proposed project's long-term impacts would apply.

6.4.3 Biological Resources

This alternative would increase impacts to biological resources, as the project would encroach more heavily into the Ladyface Mountain Specific Plan area. The alternative would focus development in an area with known sensitive plant species and communities of special concern. Development within, or near, Lyon's pentacheata, stands of native oak trees, grasslands, and wetlands could be mitigated and would be considered similar to those of the Specific Plan. Although the project area is not located within an identified wildlife corridor, this alternative would move development into a more contiguous wildlife area, as compared with the proposed project's location. Thus, this alternative would be expected to have a greater impact on local wildlife movement in the area. However, the alternative location is not recognized as a regional or local wildlife corridor; therefore, impacts would remain less than significant. Overall, biological resource impacts would be expected to be higher under this alternative. Mitigation measures recommended for the proposed project would apply to this alternative and would reduce impacts to a level considered less than significant.

6.4.4 Geology

Development under this alternative would include a portion of the proposed Specific Plan area, and adjacent lands located to the west. The alternative would involve many of the same geological impacts as those proposed under the Specific Plan. Groundshaking, slope instability, possible blasting, expansive soils, and settlement related impacts associated with this alternative would be considered significant but mitigable and would be subject to many of the same mitigation measures outlined in the EIR. Due to the slope and geologic conditions and soil types located west of Zone G and F, this alternative would be expected to be less desirable than that of the proposed project.

This alternative would avoid possible future grading of the large knoll located within the Specific Plan Zone A south and, thus, could reduce the soil disturbance activities associated with project construction. However, the western areas of the alternative include, and are adjacent to, areas with greater than 25% slopes and high soil shrink/swell potential. This area also consists of highly indurated volcanic rock which is difficult to cut and could require blasting, as well as major areas of fill. This alternative would be subject to all mitigation measures outlined in the EIR. Overall, this alternative is considered less desirable due to its geologic constraints.

6.4.5 Hazards

As with the Specific Plan buildout, this alternative would potentially expose persons to health and safety hazards associated with development within a wildfire hazard zone, and the presence and potential release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development. The overall potential for exposure to hazards would be about the same under this alternative as that under

the Specific Plan. As with the Specific Plan buildout, impacts associated with wildfire hazards and transport of hazardous materials would be considered less than significant. Impacts related to the potential for the presence of hazardous materials onsite would be considered potentially significant, but mitigable. The mitigation measure recommended for the proposed project would apply and would reduce this alternative's health and safety impacts to a level considered less than significant.

6.4.6 Historic and Archaeological Resources

Grading and development associated with this alternative would entail roughly the same area as that of the Specific Plan. This alternative would encompass development Zones B and F of the proposed Specific Plan and would have the same potential to impact significant cultural resources. Two known cultural resource sites within the alternative area are site CA-LAN-467 and site CA-LAN-1436. This alternative would avoid known cultural resource sites CA-LAN-1352 and CA-LAN-41, and would have a slightly reduced impact with respect to cultural resources than that of the proposed Specific Plan. Additional studies would be required to investigate the presence of any cultural resources to the west of Zones F and G. All mitigation measures recommended for the Specific Plan would also apply to this alternative and would reduce impacts to a level considered less than significant.

6.4.7 Hydrology and Water Quality

This alternative would involve the same level of development as the proposed project. However, this alternative would be expected to reduce the cut material exported from the project area, as it would avoid the knoll located south and east of the intersection of Kanan and Agoura Road. Thus, the alternative would be similar in size to that of the proposed Specific Plan, but is anticipated to reduce construction activities and associated construction water quality impacts. Although construction related impacts of the alternative would be potentially significant but mitigable, they are anticipated to be less intensive than those of the proposed project. However, the full extent of grading and construction needs for this area is unknown; therefore, grading has the potential to be as significant as the proposed plan. Additionally, avoidance of the knoll in Zone A of the Specific Plan would prevent significant alteration of the existing drainage as shown in the City's Master Plan of Drainage (1992). However, the urbanization of the area west of Kanan Road would alter the existing drainage pattern of that area. The alternative would generate roughly the same stormwater runoff during peak storm events; however this drainage would all be collected by Lindero Canyon Creek. Therefore, the alternative's impact on the existing drainage would be considered potentially significant. Mitigation measures provided in the Specific Plan would be required to reduce impacts to a less than significant level.

The alternative could place structures within a floodplain, and thus would have the same impacts related to flooding. The approach to stormwater management is presumed to be the same as for the proposed project and, as with the proposed project, implementation of the mitigation measures recommended for the project would reduce hydrological impacts to a less than significant level. Development density and land uses would be about the same as the proposed Specific Plan. Thus, potential impacts to surface water quality and the associated generation of surface water pollutants would be about the same. Impacts to groundwater would be about the same as those of the proposed project. Impacts would remain less than

significant. Overall, impacts related to water quality are about the same for the alternative as those of the proposed project.

6.4.8 Land Use

The potential for internal compatibility conflicts between office/restaurant uses and adjacent residential buildings would be similar to that of the proposed project. As with the proposed project, the alternative would generate compatibility impacts such as bar/tavern, performing arts center, farmers market, and possibly other uses that have the potential to result in increased traffic, including pedestrian traffic and possibly noise sources, such as amplified music, that may cause nuisance effects with adjoining or nearby residential uses. Compatibility impacts would be considered potentially significant but mitigable.

The potential for conflicts with General Plan policies relating to zoning designations would be the about the same as that of the proposed project. Mitigation measures outlined in the EIR would likely be required to reduce impacts to a less than significant level. Overall, this alternative would have about the same impact with respect to land use compatibility and conflicts with applicable General Plan policies. All mitigation measures recommended for the project would apply.

6.4.9 Noise

Short-term construction noise would be similar to, but slightly less than, that associated with the proposed project, as construction activity would be somewhat less due to avoidance of the knoll in the proposed Specific Plan construction. As with the proposed project, construction impacts would be significant but mitigable. Restrictions on operating hours for construction equipment would apply.

Because the alternative buildout would be the same as the proposed Specific Plan, traffic volumes would be about the same as well. Therefore, this alternative's increase in traffic would result in roughly the same level of increase in noise. However, traffic would disperse in a different manner than under the proposed project. Thus, increases in noise would follow the dispersion of traffic, and would likely generate exceedances of the noise significance threshold on nearby roadway segments. Thus, it is anticipated that the alternative would generate a noise level increase that would be similar to the proposed project, albeit on differing roadway segments. Impacts relating to onsite activity and long-term impacts would be about the same as for the proposed project. The entire project site would be exposed to freeway and arterial roadway noises, and residential dwellings would also be exposed to commercial use related noises which are generally higher than those allowed for residential uses. If blasting would be necessary under this alternative, the appropriate mitigation would apply. Mitigation measures recommended for the proposed project would apply and no unavoidably significant impacts are anticipated. Overall, the alternative's impacts from noise are considered to be about the same as those of the proposed project.

6.4.10 Public Services

This alternative would generate roughly the same level of wastewater and solid waste, and would demand roughly the same level of water as the Specific Plan. However, this area does not have the existing infrastructure which is present in the proposed project area. Additional water and wastewater conveyance systems would be necessary in order to implement the project alternative. Impacts to water and wastewater conveyance and treatment systems would therefore be greater than those of the project. Although significant water and wastewater impacts would not be anticipated, water conservation measures recommended for the proposed project would apply and additional mitigation would be required to provide for infrastructure improvements.

Impacts to fire and police services would be similar to those of the proposed project. This alternative, however, does not include a provision for a roundabout at Kanan Road and thus would not interfere with emergency access through the intersection. Given the location of the alternative, limited ingress and egress would be considered a potentially significant impact, as it would limit the ability of safety personnel to access the site. Additional mitigation measures, in addition to those listed in the EIR, would be necessary to reduce safety and emergency access impacts to a less than significant level.

Impacts to schools would be about the same under this alternative as those under the proposed Specific Plan. Nevertheless, impacts to schools would be potentially significant. Mitigation recommended for the project, including payment of fees, would apply to this alternative. This alternative would generate about the same solid waste as the proposed project. As such, its impact to landfill capacity would be about the same. Although impacts would not be significant, measures recommended for the project would apply to ensure compliance with local and state waste diversion requirements.

Additionally, the City currently has a shortage of parks and recreational facilities. The alternative would introduce residential uses within the area, and would further exacerbate the City's shortfall of recreational facilities. The increased demand on recreational facilities would require dedication of open space lands or payment of in lieu fees. No further mitigation would be necessary.

6.4.7 Transportation/Circulation

This alternative would generate the same level of traffic as the proposed project. Consequently, the impact to the local circulation system would be generally the same as that of the proposed project. This alternative would shift a large portion of project related traffic from Kanan Road to Reyes Adobe Road. The alternative would not include a roundabout at the intersection of Kanan and Agoura Road, and thus would avoid emergency access related impacts associated with the roundabout.

Based on preliminary calculations, the project related trip generation would need to be reduced by a minimum of 42% in order to maintain a LOS C along Agoura Road in a two lane configuration between Kanan and Cornell Roads. Assuming that this is roughly the same for the segment of Agoura Road west of Kanan, this alternative would not be able to avoid a Class I, significant and unavoidable impact of the proposed project. Additionally, the project would

also be anticipated to increase vehicle trips through the Kanan and Agoura Road intersection, such that impacts would be significant and unavoidable.

As discussed under 6.4.6 Public Services, the alternative location has limited ingress and egress access due to its location at the base of Ladyface Mountain. Therefore, the alternative would require additional mitigations to ensure adequate emergency access. This project would also have similar pedestrian related impacts as that of the proposed project. Mitigation measures relevant to pedestrian crossings and circulation improvements which are recommended for the proposed project would apply to this alternative; however additional mitigation would be necessary to ensure the safety of pedestrians, ease of access, and adequate LOS at nearby roadways and intersections. Overall, transportation and circulation related impacts of this alternative are considered to be less desirable than those of the proposed project.

6.5 ALTERNATIVE 5: REDUCED BUILDOUT DENSITY (WITHOUT RESIDENTIAL DEVELOPMENT)

This alternative is a reduced version of the Specific Plan and would be developed with a lower density and without a residential component. Development at a lower density would reduce the overall building square footage for the proposed development by about 250,300 square feet. Specifically, new commercial/retail/office development within each zone would be developed at a lower FAR (0.25) as compared with the Specific Plan new development FAR (0.35). This alternative does not have a residential component and allows for minimal redevelopment. Thus, this alternative would not accomplish the project objectives of achieving a mixed use "Village" type of development. The primary component in achieving a successful "Village" is to establish sufficient retail and other commercial square footage development in a concentrated area with a complementary residential component to support the commercial uses. The substantially lower commercial square footage (inhibiting revitalization of the area and the promotion of private sector involvement that would foster commercial sales activity), combined with the elimination of residences, would severely challenge the ability to achieve a successful "Village." This alternative would substantially reduce traffic related impacts and would decrease air quality and noise related impacts. The alternative would also likely free up more open space, reduce demand on local infrastructure, impact fewer biological resources, such as oak trees, onsite, and eliminate two unavoidable and significant impacts related to land use. Although this project would have an overall lower level of environmental impact, as compared with the proposed Specific Plan, this alternative would not meet the basic objectives of the project as described above. The development potential for this alternative is shown on Table 6-6 and the site plan is shown on Figure 6-5.

Table 6-7 Alternative 5: Reduced Buildout Density (Without Residential Development)

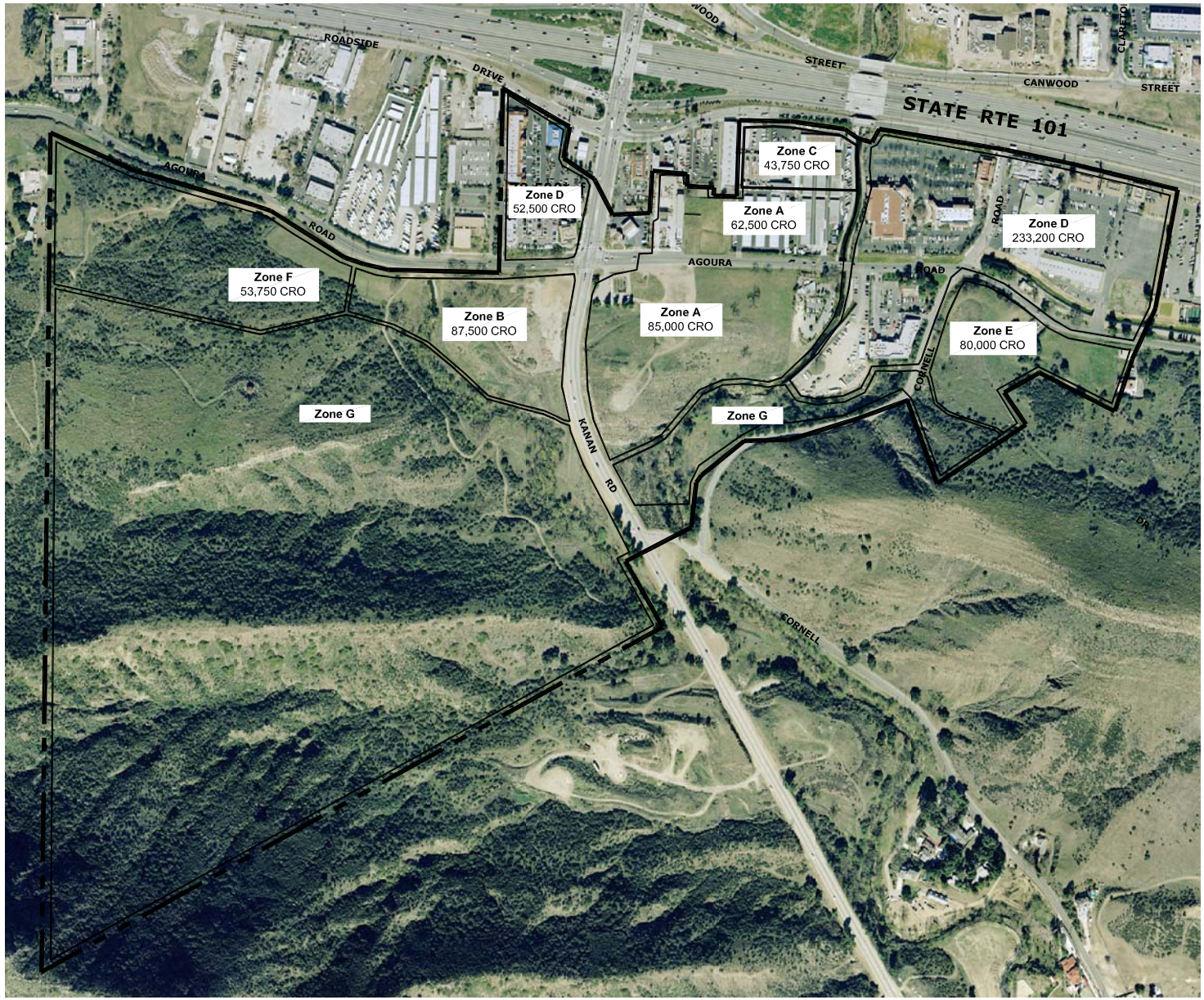
		Existing		Proposed		Total Allowable	
Project Zone	Total Zone Area (s.f.)	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office	Residential	Commercial/ Retail/Office
		DU	s.f.	DU	s.f.	DU	s.f.
A South	600,000	-	-	-	85,000	-	85,000
A North	250,000	-	58,192	-	4,308	-	4,308
B	700,000	-	-	-	87,500	-	87,500
C	135,000	-	43,750	-	-	-	-
D West	210,000	-	36,900	-	15,600	-	15,600
D East	1,200,000	-	233,200	-	-	-	-
E	311,040	-	-	-	80,000	-	80,000
F	215,000	-	-	-	53,750	-	53,750
Total	**3,621,040**	**-**	**372,042**	**-**	**326,158**	**-**	**698,200**

6.5.1 Aesthetics

This alternative's impact to public views from scenic corridors would generally be similar to that of the proposed project. The reduction in development density would incrementally reduce the change in views from nearby scenic corridors but the overall grading required is expected to be similar to, but somewhat less than, the proposed project. Redevelopment under this alternative would also be less than what is provided for under the Specific Plan. Additionally, impacts to the undeveloped rural character of the area south of Agoura Road, including the riparian corridor along Medea Creek and the oak trees located east of Kanan Road, would be similar to those under the proposed project and would be considered significant, but mitigable. Overall, this alternative's impact would be similar to that of the proposed project. All mitigation measures recommended for the project would apply.

6.5.2 Air Quality

This alternative reduces the full buildout under the Specific Plan by approximately 26%; and involves a reduction of nearly 56%of new development. New development would include only 326,158 square feet of commercial/retail/office development, as compared with 576,458 sf under the Specific Plan. Construction related air quality emissions are anticipated to be similar to those under the Specific Plan, and emissions would be expected to remain above SCAQMD significance thresholds. Impacts related to particulate matter from diesel-fueled vehicles would also be similar to those under the proposed project. Mitigation measures recommended for the proposed project would apply. This alternative would generate fewer daily vehicle trips than the proposed project, and would generate proportionally fewer air pollutant emissions. Long-term impacts would therefore be slightly less than those of the proposed project. Nevertheless, the air quality impact would remain unavoidably significant based on SCAQMD significance thresholds. This alternative would also include provisions for a new equestrian trail within the project area. Odors associated with the equestrian use would be similar to those under the Specific Plan. All mitigation measures recommended for the proposed project's long-term impacts would apply.



Alternative 5: Reduced Buildout Density
(Without Residential Development)

Aerial Source: Air Photo U.S.A. 2006,
Map Source:City of Agoura Hills, 2002

Figure 6-5

6.5.3 Biological Resources

This alternative would generally have biological impacts similar to those of the proposed project. Construction of 53,750 sf commercial retail/office in Zone F under this alternative (21,500 sf less than the proposed project) is more likely to be achievable without encroaching upon the scrub oak chaparral where Lyon's pentachaeta is known to occur. This alternative would also allow greater flexibility and avoidance of riparian habitats and the native grassland at the southeast portion of Zone B. Overall, biological resource impacts would be similar to, but slightly less than, those under the proposed Specific Plan. Mitigation measures recommended for the proposed project would apply to this alternative and would reduce impacts to a level considered less than significant.

6.5.4 Geology

Development under this alternative would generally be in the same locations as the proposed project; therefore, exposure to seismic hazards would be similar and potentially significant. Potential hazards would involve many of the same geological impacts as those proposed under the Specific Plan. Groundshaking, slope instability, possible blasting, expansive soils, and settlement related impacts associated with this alternative would be considered significant, but mitigable and would be subject to many of the same mitigation measures outlined in the EIR. Overall the impacts are considered to be the about the same as the proposed project. All mitigation measures recommended for the proposed project would also apply to this alternative.

6.5.5 Hazards

As with the Specific Plan buildout, this alternative would potentially expose persons to health and safety hazards associated with development within a wildfire hazard zone, and the presence and potential release of hazardous materials associated with the use, storage, and transport of hazardous materials related to existing and new development. As with the Specific Plan buildout, impacts associated with wildfire hazards and transport of hazardous materials would be considered less than significant. Impacts related to the potential for the presence of hazardous materials onsite would be considered potentially significant, but mitigable. The mitigation measure recommended for the proposed project would apply and would reduce this alternative's health and safety impacts to a level considered less than significant. Overall, impacts related to safety hazards associated with the alternative are considered to be about the same as the proposed project.

6.5.6 Historic and Archaeological Resources

Grading and development associated with this alternative would entail roughly the same area as that of the Specific Plan. Although at a lower density, this alternative would be developed within the same area as the proposed Specific Plan and would have the same potential to impact significant cultural resources. Therefore, the cultural resource impacts under this alternative would be about the same as those under the proposed Specific Plan. All mitigation measures recommended for the Specific Plan would apply to this alternative and would reduce impacts to a level considered less than significant.

6.5.7 Hydrology and Water Quality

This alternative reduces the full buildout under the Specific Plan by approximately 26%; and involves a reduction of nearly 56%of new development. The alternative would require less impermeable surfaces and would, therefore, generate less stormwater runoff during peak storm events and would also add less dry weather flow to Medea and Lindero Canyon Creeks. With the exception of residential use, the approach to stormwater management is presumed to be the same as for the proposed project and, implementation of the mitigation measures recommended for the project would reduce hydrological impacts to a level of insignificance.

The reduction in development density would reduce potential impacts to surface water quality by reducing overall construction and long-term activity onsite and the associated generation of surface water pollutants. Impacts would remain less than significant. Construction procedures would be subject to compliance with the Clean Water Act and would be required to develop a SWPPP. Long term operations would be subject to the Los Angeles County Municipal Storm Water NPDES Permit and would be required to develop a SUSMP. Implementation of these plans would reduce water quality impacts to a less than significant level. Overall, hydrology and water quality related impacts would be similar to, but slightly less than, those of the proposed project.

6.5.8 Land Use

This alternative does not involve residential development. As such, it would not introduce residential uses to an existing commercial area and, thus, would avoid land use conflicts between planned new commercial and residential land uses and between proposed equestrian uses and residential uses. Thus, the alternative would avoid potential land use compatibility impacts associated with noise, aesthetics (light and glare), public services, and traffic and circulation. Although the proposed project's impact with respect to land use compatibility can be mitigated, this alternative's impact would be lower than that of the proposed project. This alternative's land use impacts would be lower than those of the proposed project and are considered Class III, less than significant.

6.5.9 Noise

Short-term construction noise would be similar to that associated with the proposed project. This may include potential blasting and grading-related noise and vibration. As with the proposed project, construction impacts would be significant but mitigable. Restrictions on operating hours for construction equipment would apply.
Traffic volumes would be lower under this alternative than under the proposed project. Therefore, this alternative's impact to roadway noise would be less than that of the proposed Specific Plan. Impacts relating to traffic noise generation would be similar to, but less than, those of the project and are considered significant but mitigable.

As the alternative is smaller in size and would avoid introduction of residential uses adjacent of to commercial/retail uses, impacts under this alternative would be less than those under the proposed Specific Plan. Long-term impacts from traffic related noise from U.S. 101 and

surrounding roadways would be less than those under the proposed project. All mitigation measures recommended for the proposed project would apply.

6.5.10 Public Services

This alternative would reduce wastewater generation, water demand, and solid waste generation as compared with the proposed Specific Plan. Impacts associated with these public services are considered less than significant under the proposed Specific Plan buildout. Therefore, a reduction in the demand for these services under this alternative would further reduce these impacts. Impacts to water and wastewater conveyance and treatment systems, and solid waste generation, would be less than those under the proposed project. Although significant water and wastewater impacts would not be anticipated, water conservation measures recommended for the proposed project would apply.

Because this alternative would not include the proposed residential component, it would have no impact upon area schools and would generate a smaller increase in demand for fire or police protection (generated due to commercial uses). This alternative would have similar impacts to emergency services and emergency access concerning the roundabout at the intersection of Kanan and Agoura Road. Overall, the proposed alternative would have a similar level impact with respect to emergency services as that of the proposed project.

As discussed above, this alternative does not include a residential component. Consequently, future demands on recreation would be less under this alternative. Employees would still generate demand for recreational opportunities, but impacts to existing facilities would not be significant. Overall, impacts from this alternative are considered slightly lower than that of the Specific Plan. Mitigation measures that are recommended for the Specific Plan and would apply to this alternative to reduce impacts to a level considered less than significant.

6.5.11 Transportation/Circulation

This alternative would reduce the project by approximately 26%. This alternative would generate 14,050 ADT with 524 trips in the A.M. peak hour and 1,403 trips in the P.M. peak hour. Of these trips, 10,964 ADT, 450 A.M. PHT and 1,119 P.M. PHT would be primary trips. This is 6,629 primary ADT, and 354 A.M. and 514 P.M. peak hour primary trips less than the primary trips generated by the proposed Agoura Village Specific Plan.

Potential Roadway Impacts. This alternative is not expected to generate any roadway impacts. All the study-area roadways are expected to operate at LOS C under cumulative + Project Alternative 5 conditions, which is acceptable based on the City's standards.

Potential Intersection Impacts. This alternative is expected to generate a Class II impact at the Kanan Road/Canwood Street-U.S. 101 Northbound Ramps intersection during the A.M. peak hour. The mitigation provided in the analysis for the preferred project would mitigate this impact to a level of insignificance. No other intersection impacts would be generated during the A.M. peak hour.

This alternative is expected to generate Class II impacts at five intersections during the P.M. peak hour. The impacted intersections are listed below:

- Reyes Adobe Road/Canwood Street
- Reyes Adobe Road/Agoura Road
- Kanan Road/Canwood Street (E)
- Kanan Road/Roadside Drive – U.S. 101 Southbound Ramps
- Dorothy Drive/U.S. 101 Southbound Ramps

Mitigations that were provided for four of the impacted intersections in the analysis for the preferred project would reduce the project alternative's impacts to a level of insignificance. The mitigation developed for the Kanan Road/Roadside Drive – U.S. 101 Southbound Ramps intersections is to provide one additional through lane at the northbound approach, resulting in two northbound through lanes and a shared northbound through/right-turn lane. This mitigation would reduce the project alternative's impact to a level of insignificance.

Overall, this alternative would drastically reduce impacts to nearby intersections and roadway street segments.

6.6 ALTERNATIVES CONSIDERED BUT REJECTED

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.

One additional alternative was considered for inclusion in the EIR. This alternative was proposed by the Santa Monica Mountains Conservancy, and entailed a substantially reduced project footprint. This alternative would maintain a more natural wildland interface in the area around Lindero Canyon Creek, and is intended to cluster development on those ruderal and grassland areas that have been heavily disturbed. This alternative would restrict development west of Kanan Road by explicitly limiting development of Zone F to within the extent of existing disturbance. This would avoid encroachment into onsite scrub oak chaparral and would eliminate potential direct effects on the Lyon's pentachaeta population located within Zone F. Development east of Kanan Road would be restricted from those unimproved (natural) areas of Medea Creek and would be eliminated on the knoll located in Zone A south. In addition, the alternative would reduce development of the easternmost portion of the project area.

Table 6-8 and Figure 6-6 illustrate the buildout potential under the proposed SMMC reduced footprint alternative in comparison with that of the proposed Specific Plan. New commercial development potential within Zone F would be substantially reduced, by approximately 89%. Commercial and residential development potential within Zone B would also be substantially reduced, approximately 47%. This totals to a reduction of 63% commercial and 47% residential of the potential development west of Kanan Road, and a 13% reduction in the total new development potential allowed under the Specific Plan.
Commercial and residential development within Zone E would be reduced by 44% to 63,000 square feet of commercial and 29 dwelling units of residential. The reduction of allowed commercial development proposed by SMMC in the periphery zones, E, F and B totals 135,925 sf, or 24% of the total new development proposed under the Specific Plan.

Including Zone A South, the total reduction in commercial and residential development potential proposed under the SMMC reduced footprint equals 32% and 26%, respectively. Because the majority of the proposed reduction is within Zones F, E, and B on the periphery of the Specific Plan, this alternative focuses and centralizes development within Zone A south, creating a greater contrast between the density in the center of the Specific Plan along Agoura Road as compared to the outer west and east ends of Agoura Road. In addition, it also increases the density of development within Zone A by removing from the development footprint from the top of the knoll, an area that has a barren dirt turning area and adjacent ruderal and annual grassland habitats.

Although the alternative proposed by SMMC would result in similar reductions in overall development potential as those examined under the Specific Plan EIR, specifically Alternative 3, the concentration of development into much reduced portions of Zones A and B under this scenario would detract from the City and community's vision for the project area, to transition from the area's current state toward a pedestrian-oriented "Village." Substantially restricting development in these zones would likely reduce the economic viability of potential development projects (making it more difficult to encourage private sector investment and revitalization) leading to the possible infeasibility of creating a vibrant village that is successful and self-sustaining. To accomplish a true village environment a critical amount of retail and other commercial and residential development must be achieved.

Aside from the restaurants and the movie theater, there is presently little reason to walk within the Village area to get from one place to another. A shift in some of the existing uses, development of new commercial/ retail projects as well as residential, and the implementation of sidewalks, street trees and furniture are anticipated to be important catalysts in the creation of a "village" environment that extends along Agoura Road throughout the width of the Specific Plan area. Thus, as stated in the Specific Plan objectives, it is essential to the pedestrian village concept that the Specific Plan steer revitalization of the area and promote continuing private sector investment to prevent the loss of, and to facilitate, commercial sales activity. Recruitment of desirable commercial and retail applicants is necessary to provide adequate infrastructure and public improvements outlined in the Specific Plan. By substantially reducing the developable area within the periphery zones, the ability to balance office, commercial and residential development in sufficient quantity as to foster a village theme and connection decreases markedly.

As noted in the Opportunities and Constraints analysis within the Agoura Village Specific Plan, a limited population base is present directly around the Agoura Village area. Most of the residential population of Agoura Hills is north of the freeway, creating a psychological barrier that must be overcome if shoppers are to be attracted to the area south of the freeway. Therefore, it is vital to the village concept that an appropriate balance of residential development be incorporated within the Specific Plan area and that a sufficient scale of commercial use is attracted in order to generate the revenue base necessary to provide adequate infrastructure and other public improvements. The loss of 77 potential dwelling units (26% of proposed total) may limit the viability of the area.

Table 6-8 Buildout Potential of SMMC Reduced Footprint Alternative vs. AVSP

			Developable Envelope (sf)		New Development Potential Within Project Area (sf)		Full Residential Buildout Potential of Project Area (DU)	
Project Zone	**Land Uses per Zone**	**Total Area of Zone (sf)**	**AVSP Scenario**	**SMMC Reduced Footprint**	**AVSP Scenario**	**SMMC Reduced Footprint**	**AVSP Scenario**	**SMMC Reduced Footprint**
A South	Retail / Office / Restaurant / Community Center/ Hotel	600,000	340,000	312,000	119,000[1]	109,200[1]	118	108
A North	Retail / Office / Restaurant	250,000	250,000	250,000	29,308	29,308	19	19
B	Retail / Office / Restaurant/Hotel	700,000	350,000	185,500	122,500[1]	64,925[1]	112	59
C	Service Commercial / Office	135,000	135,000	135,000	3,500	3,500		
D West	Retail / Office / Restaurant	210,000	210,000	210,000	36,600	36,600		
D East	Retail / Office / Restaurant	1,100,000	890,000	890,000	78,300	78,300		
E	Office / Restaurant	320,000	320,000	210,000	112,000[2]	63,000[2]	44	29
F	Office	315,000	215,000	40,000	75,250[3]	8,000[3]		
TOTAL		**3,630,000**	**2,710,000**	**2,232,500**	**576,458**	**392,833**	**293**	**216**

[1] Based on a 0.35 FAR ; [2] Based on a 0.30 FAR; [3] Based on a 0.20 FAR
No change

The substantial decrease in square footage in Zone F primarily affects the provision of professional office/service use within the Specific Plan, an important component in creating daytime activity that supports the commercial retail use in other zones and supports the residential component by providing employment opportunities within walking distance. While such use is accommodated in the other zones, it is intended to be a secondary use to the retail component (for instance, office use is only allowed above ground level in Zones A, B and E). Both vertical and horizontal mixing of uses is considered desirable to achieve the vision of the Specific Plan (page 1-10 of the Agoura Village Specific Plan) and the loss of potential stand alone office use would have a substantial detrimental effect on achieving the goals of the Specific Plan.

This alternative was eliminated from further consideration because it would significantly reduce the buildable area within the periphery zones of the Specific Plan, lending to a more reduced and less connected development. Based on the locations of the percentage reductions in development potential, this scenario would not support those basic objectives of the project to encourage a pedestrian-oriented, successful mixed-use "Village" development; foster the

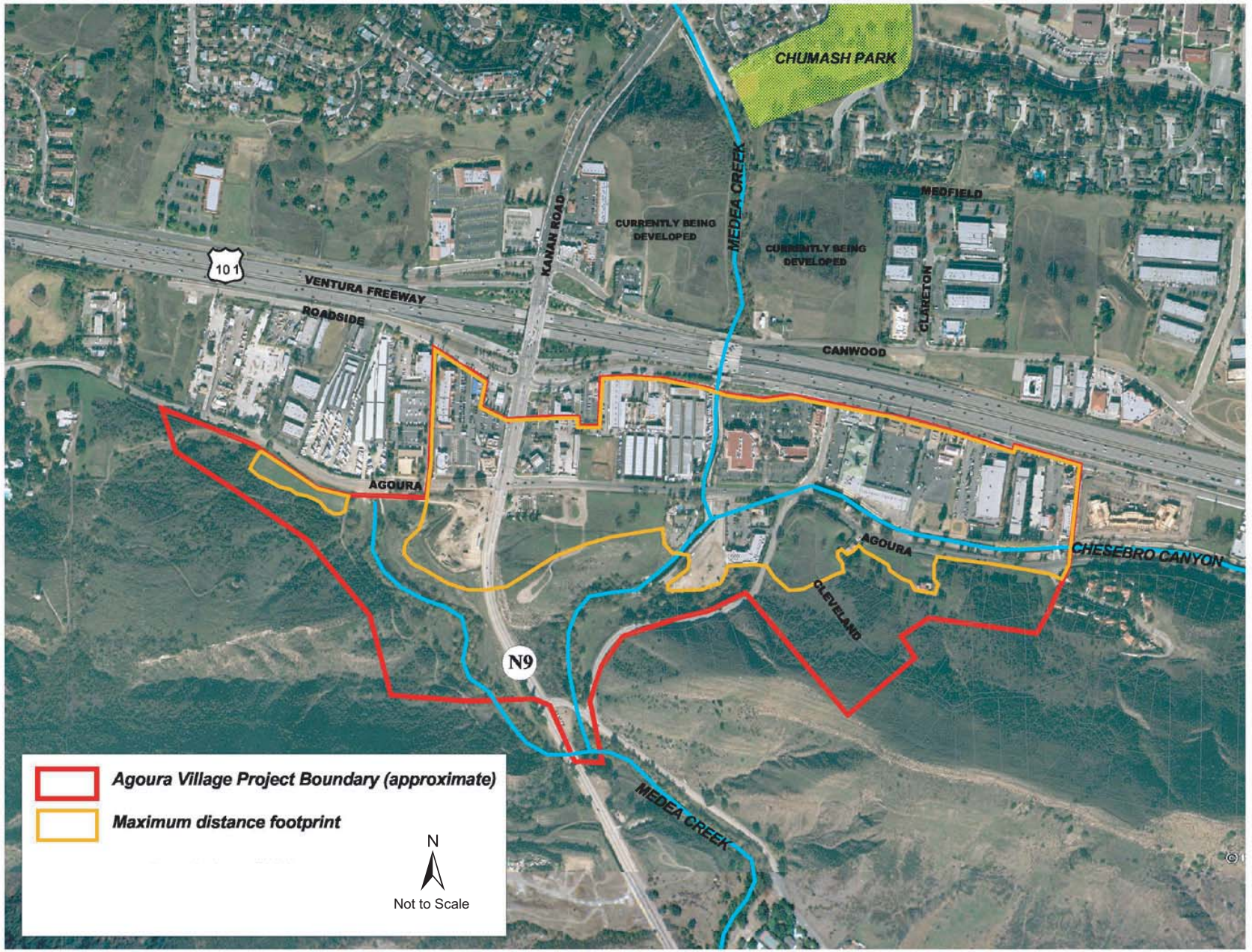
appropriate balance of development within the area needed to achieve an economically successful "Village" environment; steer revitalization of the area and promote continuing private sector investment to prevent the loss of, and to facilitate, commercial sales activity; and provide adequate infrastructure and other public improvements.

6.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

This section compares the impacts of the five alternatives that were considered herein to those of the proposed project. Table 6-6 provides a summary comparison of the impacts associated with the project and various alternatives. A discussion of the environmentally superior alternative follows.

The Reduced Buildout Density (Without Residential Development) alternative would be considered environmentally superior overall. This scenario has less impact than the proposed project for a number of reasons. This alternative would avoid the introduction of residential uses and so would reduce the amount of traffic moving through the Specific Plan area. This would eliminate one Class I impact associated with roadway traffic. The reduction in traffic would further reduce air quality and noise related impacts within the area. Additionally, this alternative would incrementally reduce impacts relating to biological resources and public services. Although this alternative would substantially reduce project related impacts, as compared with the proposed Specific Plan, the elimination of residential uses would fail to meet the basic objectives of the "Mixed-use Village," to transition from the area's current state toward a "Mixed-use" pedestrian-oriented center with residential uses and retail shops, restaurants, offices, and entertainment uses that serve the City and the larger Conejo Valley region. The primary component in achieving a successful "Village" is to establish sufficient retail and other commercial square footage development in a concentrated area with a complementary residential component to support the commercial uses. The substantially lower commercial square footage (Inhibiting revitalization of the area and the promotion of private sector involvement that would foster commercial sales activity) combined with the elimination of residences, would severely challenge the ability to achieve a successful "Village."

Of the remaining alternatives, the No Project alternative is considered environmentally superior, as it would eliminate one Class I impact associated with roadway traffic. This alternative would also reduce the overall impact of several other impacts found to be significant but mitigable under the proposed project. However, this alternative also would not fulfill the basic objective of the project. As this alternative lacks a residential component, as well as the development guidelines and standards provided in the Specific Plan, this alternative would not provide for a "mixed-use" pedestrian-oriented center with residential uses and retail shops, restaurants, offices, and entertainment uses that serve the City and the larger Conejo Valley region.



SMMC Footprint

Figure 6-6

Source: Santa Monica Mountains Conservancy

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The Reduced Specific Plan Area alternative would reduce the amount of potential grading activity onsite, soil export, impacts to biological resources, hydrological conditions and pedestrian and traffic safety issues related to building a roundabout at the corner of Kanan and Agoura Roads and pedestrian traffic moving across Kanan Road. However, this alternative would not include the proposed roundabout, which is considered a key element of the Specific Plan. This alternative would also not fully achieve a pedestrian oriented village environment, as envisioned in the Specific Plan, since a major component of the area (Kanan intersection) of the village would be removed. The Kanan/Agoura Roads intersection is a major gateway into Agoura Hills. As part of the AVSP it would have a special traffic design (a roundabout) and monument signage entries, signifying a key entry into the City and Agoura Village, creating a special sense of place to attract people to the village. Further, the reduction in commercial square footage may inhibit achieving an economically viable "Village" and revitalization of the area, as private sector investment is dependent upon an appropriate balance of residential/commercial buildout.

This alternative would not result in a substantial improvement in the environmental impacts of the proposed project. This alternative has the potential to avoid the Class I impact on Agoura Road and accomplish the project objectives of traffic calming needed to create the Village setting. However, the ability to avoid this impact will largely depend upon the nature and intensity of uses that could be developed within that area (25 acres) that has been deleted from the proposed Specific Plan. It is important to note that development in Zones B and F would likely occur even without the Specific Plan. Thus, with implementation of the Specific Plan, these areas would be planned and integrated together.

The Reduced Buildout Density alternative would generally have the same level of impact with respect to aesthetics, air quality, geologic hazards, hazardous materials, historic and cultural resources, hydrology, water quality, land use, noise, public services, and transportation, as the Specific Plan. However, this alternative would likely free up more open space, would reduce demand on local infrastructure, and would lessen encroachment on biological resources, such as oak trees, onsite. Overall, this alternative is considered very similar to the Specific Plan. However, this alternative would result in the same unavoidable and significant impact as under the proposed project. This alternative would not have a substantial improvement in environmental impacts over those of the proposed project.

The Alternate Location alternative would increase environmental impacts, as compared with the Specific Plan. Given the topography along the south side of Agoura Road and the presence of numerous important oak trees within the area the alternative would have a greater significant impact with respect to biological resources, geologic conditions, and public services. Overall this alternative increases potential impacts and would be considered less desirable than the proposed Specific Plan.

Table 6-8 Comparison of Environmental Effects

Issue	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced SP Area	Alternative 3: Reduced Buildout Density	Alternative 4: Alternate Location	Alternative 5: Reduced Buildout Density (W/O Residential)
Aesthetics						
AES-1	Class II	Class II/-	Class II/+	Class II/=	Class II/+	Class II/=
AES-2	Class IV	Class III/-	Class IV/=	Class IV/=	Class IV/=	Class III/=
AES-3	Class III & Class II	Class III/=	Class III/= & ClassII/=	Class III/= & ClassII/=	Class III/= & ClassII/=	Class III/= & ClassII/=
AES-4	Class III & Class II	Class III/= & Class II/=	Class III/= & Class II/=	Class III/= & Class II/=	Class III/= & Class II/=	Class III/= & Class II/=
AES-5	Class II	Class II/-	Class II/+	Class II/=	Class II/-	Class II/=
Air Quality						
AQ-1	Class I	Class I/=	Class I/=	Class I/=	Class I/=	Class I/=
AQ-2	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
AQ-3	Class I	Class I/=	Class I/+	Class I/=	Class I/=	Class I/+
AQ-4	Class II	Class III/+	Class II/=	Class II/=	Class III/=	Class II/+
Biology						
BIO-1	Class II	Class II/-	Class II/+	Class II/=	Class II/-	Class II/=
BIO-2	Class II	Class II/-	Class II/+	Class II/=	Class II/-	Class II/=
BIO-3	Class II	Class II/-	Class II/+	Class II/+	Class II/-	Class II/=
BIO-4	Class II	Class II/-	Class II/+	Class II/=	Class II/=	Class II/=
BIO-5	Class III	Class III/=	Class III/+	Class III/=	Class III/-	Class III/=
BIO-6	Class II	Class II/-	Class II/+	Class II/=	Class II/-	Class II/=
Geology						
GEO-1	Class II	Class II/=	Class II/=	Class II/=	Class II/-	Class II/=
GEO-2	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
GEO-3	Class II	Class II/=	Class II/=	Class II/=	Class II/-	Class II/=
GEO-4	Class II	Class II/=	Class II/=	Class II/=	Class II/-	Class II/=
GEO-5	Class II	Class II/=	Class II/=	Class II/=	Class II/-	Class II/=
GEO-6	Class II	Class II/=	Class II/=	Class II/=	Class II/-	Class II/=
Haz. Mat.						
HAZ-1	Class III	Class III/=	Class III/=	Class III/=	Class III/=	Class III/=
HAZ-2	Class III	Class III/=	Class III/=	Class III/=	Class III/=	Class III/=
HAZ-3	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
Historic & Archl.						
HA-1	Class II	Class II/=	Class II/+	Class II/=	Class II/=	Class II/=

Table 6-8 Comparison of Environmental Effects

Issue	Proposed Project	Alternative 1: No Project	Alternative 2: Reduced SP Area	Alternative 3: Reduced Buildout Density	Alternative 4: Alternate Location	Alternative 5: Reduced Buildout Density (W/O Residential)
Hydrology & Water Quality						
HYD-1	Class III	Class III/=	Class III/+	Class III/=	Class III/=	Class III/=
HYD-2	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
HYD-3	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
HYD-4	Class III	Class II/=	Class II/+	Class III/=	Class III/=	Class III/=
HYD-5	Class III	Class III/=	Class III/+	Class III/=	Class III/=	Class III/=
Land Use						
LU-1	Class III	Class III/+	Class III/=	Class III/=	Class III/=	Class III/+
LU-2	Class II	Class III/=	Class II/=	Class II/=	Class II//=	Class III/+
LU-3	Class III	Class III /+	Class III /=	Class III /=	Class III /=	Class III /+
LU-4	Class II	Class II/+	Class II/=	Class II/=	Class II/=	Class II/+
Noise						
N-1	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
N-2	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/+
N-3	Class II	Class III/+	Class II/=	Class II/=	Class II/=	Class II/+
VIB-1	Class II	Class II/=	Class II/=	Class II/=	Class II/=	Class II/=
Public Service						
PS-1	Class III	Class III/=	Class III/+	Class III/=	Class III/-	Class III/+
PS-2	Class III	Class III/=	Class III/+	Class III/=	Class III/-	Class III/+
PS-3	Class II	Class II/+	Class II/=	Class II/-	Class II/-	Class II/=
PS-4	Class II	Class II/+	Class II/=	Class II/-	Class II/-	Class II/=
PS-5	Class II	Class III/+	Class II/+	Class II/=	Class II/=	Class III/+
PS-6	Class III	Class III/=	Class III/+	Class III/=	Class III/=	Class III/+
PS-7	Class III	Class III/=	Class III/=	Class III/=	Class III/=	Class III/=
Transp. & Circulation						
T-1	Class I	Class III/+	Class I/+	Class I/=	Class I/=	Class III/+
T-2	Class II	Class II/+	Class II/+	Class II/=	Class II/= & Class I/=	Class II/+
T-3	Class II	Class II/-	Class II/=	Class II/=	Class II/-	Class II/=

Class I = Unavoidably Significant Impact
Class II = Significant but Mitigable Impact
Class III = Less than Significant Impact
Class IV = Beneficial Impact
+ Superior to the proposed project
- Inferior to the proposed project
= About the same as the proposed project

7.0 REFERENCES AND PREPARERS

7.1 REFERENCES

7.1.1 Bibliography

Agoura Hills, City of. (2005). *Official Website*. Available at http://www.ci.agoura-hills.ca.us/.

Agoura Hills, City of. (1992). *City of Agoura Hills General Plan*. Update adopted May 12, 1993. Prepared by Cotton/Beland/Associates for the City of Agoura Hills.

Agoura Hills, City of. (1992). *City of Agoura Hills General Plan Update Environmental Impact Report*. Update adopted March 24, 1992. Prepared by Cotton/Beland/Associates for the City of Agoura Hills.

Agoura Hills, City of. (1992b). *Architectural Design Standards & Guidelines.*

Agoura Hills, City of. (1992c). *Master Plan of Drainage.*

Agoura Hills, City of. (2001). 2000-2005 *Housing Element.*

Agoura Hills/Calabasas Community Center website. (2005). Available at http://www.ahc3.org/default.htm

Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, 1971.

California Air Resources Board, www.arb.ca.gov/aqs/aaqs2.pdf, May 6, 2005.

California Air Resources Board, 2002, 2003, & 2004 Annual Air Quality Data Summaries for Thousand Oaks, Reseda and Burbank monitoring stations available at http://www.arb.ca.gov.

California Department of Conservation, Division of Mines and Geology. (1982). Fault Map of California.

California Department of Conservation, Division of Mines and Geology. (1994). Fault-Rupture Hazard Zones in California, Special Publication 42.

California, Department of Finance, E-1 City/County Population Estimates, with Annual Percent Change, January 1, 2004 and 2005. Sacramento, California, May 2005.

California Department of Fish and Game. (July 2005). *State and Federally Listed Endangered Threatened, and Rare Plants of California*. Habitat Conservation Division, Natural Diversity Data Base.

California Department of Fish and Game. (July 2005). *State and Federally Listed Endangered and Threatened Animals of California*. Habitat Conservation Division, Natural Diversity Data Base.

California Department of General Services. (January 2004). *Index Adjustment on the Assessment for Development.* Available at http://www.documents.dgs.ca.gov/OPSC/WhatsNew/IndexAdjust.pdf.

California Department of Transportation. (2000). *Draft Project Report On Route 101 in Los Angeles County at Kanan Road Intersection.*

California Native Plant Society. (July 2005). *Online Inventory of Rare and Endangered Plants.* Available at http://www.cal.net/~levinel/cgi-bin/cnps/sensinv.cgi.

California Native Plant Society. (July 2005). A *Manual of California Vegetation.* Available at http://davisherb.ucdavis.edu/cnpsActiveServer/index.html.

California Geological Survey. (2003). The Revised 2002 California Probabilistic Seismic Hazard Maps.

California Integrated Waste Management Board. (2004). Estimated Solid Waste Generation Rates for Residential Developments.

California Integrated Waste Management Board. (2004). Estimated Solid Waste Generation Rates for Commercial Developments.

California Wilderness Coalition; The Nature Conservancy; the Biological Resources Division of the United States Geological Survey; the Center for Reproduction of Endangered Species; and California State Parks (2001). Proceedings of *Missing Linkages Conference: Restoring Connectivity to the California Landscape*.

California Wilderness Coalition (2001). *Missing Linkages: Restoring Connectivity to the California Landscape*. Retrieved March 25, 2005, from http://www.calwild.org/resources/pubs/linkages/.

Caltrans, 2004. *2003-Annual Average Daily Truck Traffic on the California State Highway System*

C.M. Harris. 1979. Handbook of Noise Control.

Dibblee, T. W., (1993). Geologic Map of the Thousand Oaks Quadrangle, Ventura and Los Angeles Counties, California, Dibblee Geological Foundation.

Dolan J. F., Sieh, K., et al, 1995, Prospects for larger or more frequent earthquakes in the Los Angeles Metropolitan region; Science, V. 267, p. 199-205.

Edelman, P. 1990. Critical Wildlife Corridor/Habitat Linkage Areas between the Santa Susana Mountains, the Simi Hills and the Santa Monica Mountains. Prepared for The Nature Conservancy.

Federal Emergency Management Agency (FEMA). (December 1986). *Flood Insurance Rate Map*. FIRM Panel Nos. 0650720001A and 0650430757B.

Federal Emergency Management Agency (FEMA). (August 1998). *Flood Insurance Rate Map*. FIRM Panel No. 0650720001B.

Federal Highway Administration's Traffic Noise Model®, TNM.

FUGRO WEST, INC. (July 1996). *Phase II archaeological investigation at CA-LAN-467 and an extended Phase I archaeological investigation at site CA-LAN-1436.* Report prepared for City of Agoura Hills Planning Department, Agoura Hills, CA.

Harris, Cyril M. (1979). *Handbook of Noise Control*.

Holland, Robert F. (October 1986). *Preliminary Descriptions of the Terrestrial Natural Communities of California*. California Department of Fish and Game, Nongame Heritage Program. 156 pgs.

Holland, V.L. and D.J. Keil. (1990). *California Vegetation.* Biological Sciences Department, California Polytechnic State University, San Luis Obispo, CA.

J.H. Snyder Mixed Use Development EIR, Section 4.9, City of Agoura Hills, 2001.

Jones & Stokes Associates, Oakmont View Phase V Revised Draft EIR, prepared for City of Glendale, July 2001. Estimates of airblast and ground vibration are from data developed as part of a blasting assessment for a northern California mining project. Estimates are based on a 293-pound charge under average normal confinement.

Lieberstein, T. 1987. Wildlife Corridor Design: A Case Study for Los Angeles and Ventura Counties. Part III in a Series-Biogeography and the Zoo.

Los Angeles County Department of Public Works. (July 1999). *1998-1999 Monitoring Report.* Available at http://ladpw.org/WMD/npdes/report_directory.cfm.

Los Angeles County Department of Public Works. (July 2000). *1994-2000 Integrated Receiving Water Impacts Report.* Available at http://ladpw.org/WMD/npdes/report_directory.cfm.

Los Angeles County Department of Public Works. (2002). *North Santa Monica Bay Watersheds White Paper*. Available at http://ladpw.org/WMD/nsmb/Page_01.cfm.

Los Angeles County Department of Public Works. (April 2003). *2001-2002 Hydrologic Report.*. Available at http://ladpw.org/wrd/report/0102/runoff/discharge.cfm.

Los Angeles County Department of Public Works. (August 2003). *2002-2003 Stormwater Monitoring Report.* Available at http://ladpw.org/WMD/npdes/report_directory.cfm.

Los Angeles County Department of Public Works. (January 2005). *Interim Peak Flow Runoff Criteria for New Development.* Available at http://ladpw.org/wmd/NPDES/letters/InterimPeakFlow.pdf

Los Angeles County Department of Public Works, Watershed Management. (2005). *North Santa Monica Bay Watersheds Home.* Available at http://ladpw.org/wmd/nsmb/.

Los Angeles Regional Water Quality Control Board. (1998). *1998 California 303(d) List and TDML Priority Schedule*. Approved by US EPA, May 12, 1999. Available at http://www.swrcb.ca.gov/tmdl/303d_lists.html.

Los Angeles Regional Water Quality Control Board. (June 29, 2001a). *Fact Sheet/Staff Report for the County of Los Angeles Municipal Storm Water NPDES Permit (CAS-004001).* Second Draft.

Los Angeles Regional Water Quality Control Board. (October, 2004a). *Santa Monica Bay Watershed Management Area Summary.* Available at http://www.waterboards.ca.gov/losangeles/html/programs/regional_program/ws_santamonica.html

Los Angeles Regional Water Quality Control Board. (2004b). *Santa Monica Bay Water Management Area.* Available at http://www.swrcb.ca.gov/rwqcb4/html/programs/regional_program/ws_santamonica.html

Los Angeles Regional Water Quality Control Board. (December, 2004c). *Total Maximum Daily Loads for Bacteria Malibu Creek Watershed.*

Michael Brandman Associates. 1989. *Biological Resource Assessmenbt, Agoura Canyon Ranch, Los Angeles County, California.* Prepared for Significant Ecological Area Technical Advisory Committee, Los Angeles County Department of Regional Planning. Irvine, CA.

Merrill, Michael. (April, 2002). *A Spatial Analysis of Mapped Surface Artifacts in Several Early Period Sites in Los Angeles and Ventura Counties.*

Ng, Sandra J., Jim W. Dole, Raymond M. Sauvajot, Seth P.D. Riley, and Thomas J. Valone. (March 2003). *Use of Highway Undercrossings by Wildlife in Southern California.* Biological Conservation.

Pacific Coast Civil, Inc. (September 2004). *Drainage Concept for Cornerstone at Agoura Village, City of Agoura Hills, Los Angeles County, California*.

Parsons, Jeff A. (December, 2003). *Mapping of Subsurface Trench Exposures at LAN-41, Kanan and Agoura Roads, Agoura Hills*. Report prepared for Clay S. Singer, C.A. Singer & Associates, Inc., Cambria, CA.

Rincon Consultants, Inc. (2003). Biological Assessment by biologist Ed Miller, at the E.F. Moore & Company Project site.

Rincon Consultants, Inc. (2002). *J.H. Snyder Mixed Use Development Final Environmental Impact Report.* Prepared for the City of Agoura Hills.

Sawyer, J.O. and T. Keeler-Wolf (1995). *A Manual of California Vegetation*. California Native Plant Society.

Singer, Clay A. (October, 2000). *Subject: Cultural resources survey and impact assessment for an 18+/- acre property at the junction of Kanan Road and Agoura Road in the City of Agoura Hills, Los Angeles County California: a status report on archaeological site CA-LAN-41.* Report prepared for Ted Moore, E.F. Moore & Co., Ojai.

Singer, Clay A. (January, 2004a). *Subject: Forensic archaeology.* Report prepared for CraigSkinner and Jennifer Thatcher, Northwest Research Obsidian Studies Laboratory, Corvallis, OR.

Singer, Clay A. (July, 2004b). *Phase II Archaeological Investigations at CA-LAN-41, a Prehistoric Deposit in the City of Agoura Hills, Los Angeles County, California.* Report prepared for Steven Craig, The Planning Corp., Santa Barbara.

Singer, Clay A. (September, 2004c). *Cultural resources survey reevaluation of archaeological site CA-LAN-1352, and impact assessment for the Cornerstone @ Agoura Village Project in the City of Agoura Hills, Los Angeles, County, California.* Report prepared for Steven Craig, The Planning Corp., Santa Barbara.

South Coast Air Quality Management District (SCAQMD). (1993). *CEQA Air Quality Handbook*. As updated at http://www.aqmd.gov/ceqa/hdbk.html.

SCAQMD. (May 6, 2005) *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning.*

SCAQMD. *Localized Significance Thresholds* & Appendix C – *Mass Rate LST Look Up Tables. http://www.aqmd.gov/ceqa/handbook/LST/LST.html#Appendix%20C;*

TREES, etc. (2004). *Preliminary Oak Tree Report, Cornerstone @ Agoura Village.*

United States Census Bureau. (Census 2000). *2003 Population Estimates.*

United States Environmental Protection Agency. (1971). *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances.*

Unites States Geological Survey (USGS) and California Geological Survey (CGS). (2002). Probabilistic Seismic Hazards Assessment (PSHA) Model, 2002 (revised April 2003).

Unites States Geological Survey (USGS). (1981). Topographic map of the Thousand Oaks Quadrangle (1951; photorevised 1981)

7.1.2 Persons Contacted

Ken Berkman, City Engineer, City of Agoura Hills
Ed Cline, City Traffic Engineer, City of Agoura Hills
Tony Fina, Captain, Los Angeles County Fire Department, Station #65
Gene Talmudge, Las Virgenes Municipal Water District
Don Wippert, Site Superintendent, Calabasas Landfill
Donald Zimring, Superintendent, Las Virgenes Unified School District

7.2 EIR PREPARERS

This EIR was prepared by Rincon Consultants, Inc., under contract to the City of Agoura Hills. Consultant staff involved in the preparation of the EIR are listed below.

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City of Agoura Hills

Agoura Village Specific Plan

Updated Final Revised and Recirculated Environmental Impact Report

Volume II: Appendices

August 2008

AGOURA VILLAGE SPECIFIC PLAN

Updated Final Revised and Recirculated Environmental Impact Report

Volume II: Appendices

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August 2008

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Appendix A

Air Quality
Emissions Calculations

URBEMIS 2002 For Windows 8.7.0

Project Name: AVSP 2
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

*** 2006 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	35.08	368.33	247.63	2.62	1,192.87	11.86	1,181.01
TOTALS (lbs/day, mitigated)	35.08	342.12	247.63	2.62	300.89	6.57	294.32

*** 2007 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	9.97	63.36	82.31	0.00	3.12	2.80	0.32
TOTALS (lbs/day, mitigated)	9.97	54.64	82.31	0.00	1.37	1.05	0.32

*** 2008 ***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
TOTALS (lbs/day,unmitigated)	157.80	25.77	54.88	0.00	1.11	0.78	0.33
TOTALS (lbs/day, mitigated)	36.41	22.30	54.88	0.00	0.63	0.30	0.33

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	28.10	8.12	9.35	0.00	0.02

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	115.31	140.20	1,315.85	0.91	158.11
TOTALS (lbs/day, mitigated)	108.33	130.81	1,227.74	0.85	147.52

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	143.41	148.32	1,325.2	0.91	158.13

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

DETAIL REPORT
(Pounds/Day - Summer)

Construction Start Month and Year: June, 2006
Construction Duration: 29
Total Land Use Area to be Developed: 28 acres
Maximum Acreage Disturbed Per Day: 3 acres
Single Family Units: 0 Multi-Family Units: 293
Retail/Office/Institutional/Industrial Square Footage: 565960

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source *** 2006***	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	1,180.33	-	1,180.33
Off-Road Diesel	26.81	187.22	212.98	-	8.39	8.39	0.00
On-Road Diesel	8.07	180.85	30.06	2.62	4.13	3.46	0.67
Worker Trips	0.20	0.26	4.59	0.00	0.02	0.01	0.01
Maximum lbs/day	35.08	368.33	247.63	2.62	1,192.87	11.86	1,181.01
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	35.08	368.33	247.63	2.62	1,192.87	11.86	1,181.01

*** 2007***

Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.17	62.33	60.45	-	2.78	2.78	0.00
Bldg Const Worker Trips	1.80	1.03	21.86	0.00	0.34	0.02	0.32
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	9.97	63.36	82.31	0.00	3.12	2.80	0.32
Max lbs/day all phases	9.97	63.36	82.31	0.00	3.12	2.80	0.32

*** 2008***

Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	151.73	-	-	-	-	-	-
Arch Coatings Worker Trips	1.66	0.96	20.38	0.00	0.34	0.02	0.32
Asphalt Off-Gas	0.33	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.00	23.58	33.99	-	0.73	0.73	0.00
Asphalt On-Road Diesel	0.06	1.21	0.24	0.00	0.03	0.03	0.00
Asphalt Worker Trips	0.02	0.01	0.27	0.00	0.00	0.00	0.00
Maximum lbs/day	157.80	25.77	54.88	0.00	1.11	0.78	0.33
Max lbs/day all phases	157.80	25.77	54.88	0.00	1.11	0.78	0.33

Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06

Phase 2 Duration: 6 months
On-Road Truck Travel (VMT): 6317.5
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
1	Other Equipment	190	0.620	8.0
6	Scrapers	313	0.660	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Dec '06
Phase 3 Duration: 23 months
Start Month/Year for SubPhase Building: Jan '07
SubPhase Building Duration: 12 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
3	Other Equipment	190	0.620	8.0
3	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Jan '08
SubPhase Architectural Coatings Duration: 10 months
Start Month/Year for SubPhase Asphalt: Apr '08
SubPhase Asphalt Duration: 3 months
Acres to be Paved: 8.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

CONSTRUCTION EMISSION ESTIMATES MITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2006***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	293.64	-	293.64
Off-Road Diesel	26.81	161.01	212.98	-	3.10	3.10	0.00
On-Road Diesel	8.07	180.85	30.06	2.62	4.13	3.46	0.67
Worker Trips	0.20	0.26	4.59	0.00	0.02	0.01	0.01
Maximum lbs/day	35.08	342.12	247.63	2.62	300.89	6.57	294.32
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Max lbs/day all phases	35.08	342.12	247.63	2.62	300.89	6.57	294.32
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	8.17	53.60	60.45	-	1.03	1.03	0.00
Bldg Const Worker Trips	1.80	1.03	21.86	0.00	0.34	0.02	0.32
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	9.97	54.64	82.31	0.00	1.37	1.05	0.32
Max lbs/day all phases	9.97	54.64	82.31	0.00	1.37	1.05	0.32
*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Bldg Const Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	30.35	-	-	-	-	-	-
Arch Coatings Worker Trips	1.66	0.96	20.38	0.00	0.34	0.02	0.32
Asphalt Off-Gas	0.33	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.00	20.28	33.99	-	0.27	0.27	0.00
Asphalt On-Road Diesel	0.06	1.04	0.24	0.00	0.01	0.01	0.00
Asphalt Worker Trips	0.02	0.01	0.27	0.00	0.00	0.00	0.00
Maximum lbs/day	36.41	22.30	54.88	0.00	0.63	0.30	0.33
Max lbs/day all phases	36.41	22.30	54.88	0.00	0.63	0.30	0.33

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: Apply soil stabilizers to inactive areas
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 2: Soil Disturbance: Replace ground cover in disturbed areas quickly
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 15.0%)
Phase 2: Soil Disturbance: Water exposed surfaces - 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 34.0%)
Phase 2: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 2: Stockpiles: Cover all stock piles with tarps
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 9.5%)
Phase 2: Unpaved Roads: Water all haul roads 2x daily
Percent Reduction(ROG 0.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 30.0%)
Phase 3: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: Off-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: On-Road Diesel Exhaust: Use aqueous diesel fuel
Percent Reduction(ROG 0.0% NOx 14.0% CO 0.0% SO2 0.0% PM10 63.0%)
Phase 3: Offgassing: Rule 1113
Percent Reduction(ROG 80.0% NOx 0.0% CO 0.0% SO2 0.0% PM10 0.0%)
Phase 1 - Demolition Assumptions: Phase Turned OFF

Phase 2 - Site Grading Assumptions
Start Month/Year for Phase 2: Jun '06
Phase 2 Duration: 6 months
On-Road Truck Travel (VMT): 6317.5

Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
2	Crawler Tractors	143	0.575	8.0
1	Other Equipment	190	0.620	8.0
6	Scrapers	313	0.660	8.0

Phase 3 - Building Construction Assumptions
Start Month/Year for Phase 3: Dec '06
Phase 3 Duration: 23 months
Start Month/Year for SubPhase Building: Jan '07
SubPhase Building Duration: 12 months
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
3	Other Equipment	190	0.620	8.0
3	Tractor/Loaders/Backhoes	79	0.465	8.0

Start Month/Year for SubPhase Architectural Coatings: Jan '08
SubPhase Architectural Coatings Duration: 10 months
Start Month/Year for SubPhase Asphalt: Apr '08
SubPhase Asphalt Duration: 3 months
Acres to be Paved: 8.3
Off-Road Equipment

No.	Type	Horsepower	Load Factor	Hours/Day
1	Graders	174	0.575	8.0
1	Pavers	132	0.590	8.0
1	Rollers	114	0.430	8.0

AREA SOURCE EMISSION ESTIMATES (Summer Pounds per Day, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.60	8.10	5.89	0	0.01
Hearth - No summer emissions					
Landscaping	0.52	0.02	3.45	0.00	0.01
Consumer Prdcts	14.33	-	-	-	-
Architectural Coatings	12.64	-	-	-	-
TOTALS(lbs/day,unmitigated)	28.10	8.12	9.35	0.00	0.02

URBEMIS 2002 For Windows 8.7.0

Project Name: AVSP Operational Revised 10.21.05
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	115.31	140.20	1,315.85	0.91	158.11
TOTALS (lbs/day, mitigated)	108.33	130.81	1,227.74	0.85	147.52

URBEMIS 2002 For Windows 8.7.0

File Name: P:\ESP Projects\Los Angeles County\Agoura Hills, City of [various]\04-57370 Agoura Village Specific Plan\Document\ADEIR\appendices\Revised Operational AQ 10.21.05.urb
Project Name: AVSP Operational Revised 10.21.05
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	2.50	2.13	21.13	0.01	2.51
Condo/townhouse general	4.68	3.59	35.63	0.02	4.24
Retirement community	0.62	0.36	3.61	0.00	0.43
Hotel	4.92	4.62	43.36	0.03	5.10
Regnl shop. center	22.28	28.73	267.44	0.19	32.16
Strip mall	35.91	45.07	419.57	0.29	50.45
Shopping Center	29.91	38.32	356.70	0.25	42.89
General office building	14.48	17.37	168.42	0.12	20.34
TOTAL EMISSIONS (lbs/day)	115.31	140.20	1,315.85	0.91	158.11

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 49.98 % reduction. Nonresidential trips: 3.42 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES
Analysis Year: 2010 Temperature (F): 85 Season: Summer
EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments low rise	5.13	3.45 trips/dwelling unit	82.00	282.99
Condo/townhouse general	11.25	2.65 trips/dwelling unit	180.00	477.15
Retirement community	6.20	1.56 trips/dwelling unit	31.00	48.38
Hotel		7.10 trips/rooms	120.00	851.87
Regnl shop. center		64.32 trips/1000 sq. ft.	78.30	5,036.62
Strip mall		37.86 trips/1000 sq. ft.	208.70	7,901.53
Shopping Center		55.06 trips/1000 sq. ft.	122.00	6,717.59
General office building		13.32 trips/1000 sq. ft.	175.25	2,334.13
		Sum of Total Trips		23,650.26
		Total Vehicle Miles Traveled		104,285.81

Vehicle Assumptions:
Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
Shopping Center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

MITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Apartments low rise	2.40	1.99	19.71	0.01	2.35
Condo/townhouse general	4.50	3.35	33.24	0.02	3.95
Retirement community	0.60	0.34	3.37	0.00	0.40
Hotel	4.68	4.31	40.45	0.03	4.76
Regnl shop. center	20.85	26.80	249.53	0.17	30.00
Strip mall	33.66	42.05	391.47	0.27	47.07
Shopping Center	28.00	35.75	332.81	0.23	40.02
General office building	13.64	16.21	157.14	0.11	18.98
TOTAL EMISSIONS (lbs/day)	108.33	130.81	1,227.74	0.85	147.52
PERCENTAGE REDUCTION %	6	7	7	7	7

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:

Residential trips: 49.98 % reduction. Nonresidential trips: 3.42 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES
Analysis Year: 2010 Temperature (F): 85 Season: Summer
EMFAC Version: EMFAC2002 (9/2002)
Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Apartments low rise	5.13	3.22 trips/dwelling unit	82.00	264.04
Condo/townhouse general	11.25	2.47 trips/dwelling unit	180.00	445.20
Retirement community	6.20	1.46 trips/dwelling unit	31.00	45.14
Hotel		6.62 trips/rooms	120.00	794.82
Regnl shop. center		60.02 trips/1000 sq. ft.	78.30	4,699.33
Strip mall		35.33 trips/1000 sq. ft.	208.70	7,372.39
Shopping Center		51.37 trips/1000 sq. ft.	122.00	6,267.74
General office building		12.43 trips/1000 sq. ft.	175.25	2,177.82
		Sum of Total Trips		22,066.48
		Total Vehicle Miles Traveled		97,302.14

Vehicle Assumptions:
Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.70	1.10	98.70	0.20
Light Truck < 3,750 lbs	15.20	2.00	96.00	2.00
Light Truck 3,751- 5,750	16.20	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	68.80	31.20	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Regnl shop. center				2.0	1.0	97.0
Strip mall				2.0	1.0	97.0
Shopping Center				2.0	1.0	97.0
General office building				35.0	17.5	47.5

MITIGATION OPTIONS SELECTED

Residential Mitigation Measures
==========

Residential Mix of Uses Mitigation

Percent Reduction in Trips is 0% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate to get Mitigated Trips
Inputs Selected:
The number of housing units within a 1/2 mile radius of the project, plus the number of residential units included in the project are .
The employment for the study area (within a 1/2 mile radius of the project) is .

Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate to get Mitigated Trips

Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Residential Transit Service Mitigation

Percent Reduction in Trips is 0.15% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate
to get Mitigated Trips
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 12
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 4.55% (calculated as a % of 9.57 trips/day)
Note that the above percent is applied to the 'double counting adjusted' trip rate
to get Mitigated Trips
Inputs Selected:
The Number of Intersections per Square Mile is 20
The Percent of Streets with Sidewalks on One Side is 0%
The Percent of Streets with Sidewalks on Both Sides is 100%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 50%

Non-Residential Mitigation Measures
==========

Non-Residential Mix of Uses Mitigation

Percent Reduction in Trips is 0%
Inputs Selected:
The number of housing units within a 1/2 mile radius of the project, plus the
number of residential units included in the project are .
The employment for the study area (within a 1/2 mile radius of the project) is .

Non-Residential Local-Serving Retail Mitigation

Percent Reduction in Trips is 2%
Inputs Selected:
The Presence of Local-Serving Retail checkbox was selected.

Non-Residential Transit Service Mitigation

Percent Reduction in Trips is 0.15%
Inputs Selected:
The Number of Daily Weekday Buses Stopping Within 1/4 Mile of Site is 12
The Number of Daily Rail or Bus Rapid Transit Stops Within 1/2 Mile of Site is 0
The Number of Dedicated Daily Shuttle Trips is 0

Non-Residential Pedestrian/Bicycle Friendliness Mitigation

Percent Reduction in Trips is 4.55%
Inputs Selected:
The Number of Intersections per Square Mile is 20
The Percent of Streets with Sidewalks on One Side is 0%
The Percent of Streets with Sidewalks on Both Sides is 100%
The Percent of Arterials/Collectors with Bike Lanes or where Suitable,
Direct Parallel Routes Exist is 50%

Changes made to the default values for Land Use Trip Percentages
The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/11.25 to 5.3/11.25
The Trip Rate and/or Acreage values for Retirement community
have changed from the defaults 3.71/6.2 to 3.12/6.2
The Primary Trip % for Regnl shopping cntr changed from 55 to 75
The Diverted Trip % for Regnl shopping cntr changed from 35 to 0
The Pass-By Trip % for Regnl shopping cntr changed from 10 to 25
The Primary Trip % for Strip mall changed from 45 to 75
The Diverted Trip % for Strip mall changed from 40 to 0
The Pass-By Trip % for Strip mall changed from 15 to 25
The Primary Trip % for Supermarket changed from 45 to 75
The Diverted Trip % for Supermarket changed from 40 to 0
The Pass-By Trip % for Supermarket changed from 15 to 25

Changes made to the default values for Operations
The pass by trips option switch changed from off to on.
The double counting option switch changed from off to on.
The mitigation option switch changed from off to on.
The operational emission year changed from 2005 to 2010.
The operational winter selection item changed from 3 to 2.
The operational summer temperature changed from 90 to 85.
The operational summer selection item changed from 8 to 6.
The Res and Non-Res Mix of Uses Mitigation changed from off to on.
The Res and Non-Res Local-Serving Retail Mitigation changed from off to on.
The Res and Non-Res Transit Service Mitigation changed from off to on.
The Res and Non-Res Ped/Bike Mitigation changed from off to on.

Notes: The operational air quality analysis was revised to reflect reduced ADT associated with project buildout as per revisions in the Traffic Analysis that was produced and revised for this project 10.20.05). The Traffic consultant applied a 10% mixed use factor to all retail components of the project. The associated trip reduction is reflected in this analysis as a decrease in the value of the trip rates that were applied to each use. Additionally, double counting and mixed use mitigation was used to obtain overall project ADT of 22,066, which is still greater than the ADT projected in the traffic analysis (21,928 ADT). However, this difference is only 0.6% of the total ADT.

Appendix B

Biological Resource Studies

BIOLOGICAL ASSESSMENT
Agoura Hills Project
July 2003

1.0 INTRODUCTION

This report contains the findings of a biological resource assessment for potential construction areas on a planned commercial project in the City of Agoura Hills. The proposed commercial/residential development is located on approximately 8 acres of a 10 acre parcel located on the southeast corner of Kanan Road and Agoura Road within the City of Agoura Hills, Los Angeles County. The property is currently vacant and slopes upward from north to south to a small knoll located at the southwest corner. The elevation of the site ranges from 840 feet above sea level to approximately 920 on top of the knoll. A remnant foundation and parking lot from previous commercial development are located at the northwest corner. Additionally, some un-vegetated dirt parking areas are located on the north side of the property adjacent to Agoura Road. A dirt road connects these dirt parking areas to the top of the knoll. Current land use around the site consist of commercial development to the north and east, a dirt parking area to the west (across Kanan Road) and the Medea Creek riparian area to the south.

2.0 PROJECT DESCRIPTION

The proposed project consists of the development of most of the property, 8 of 10 acres, for commercial and residential development, per preliminary construction plans provided by E.F. Moore & Company. Areas to be developed on the site will be graded completely with all vegetation removed. Portions of the site that will be left in existing condition include the southwest corner of the project site and the southern edge of the property adjoining the Medea Creek riparian area.

3.0 METHODS

Site assessment included a search and review of the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDB) prior to a field visit to determine if any special-status vegetation or wildlife have been recorded in the area (CNDDB Map, Figure 1). A search range of 10-mile radius around the site was used to identify potential special-status species issues because it encompasses a sufficient distance to accommodate for regional habitat diversity and to reduce the limitations of the CNDDB. The CNDDB is based on recorded occurrences that have been provided to the Department of Fish and Game and does not constitute an exhaustive inventory of every resource. It is noted that these standard data sources relied upon during the completion of this report may also vary with regard to accuracy and completeness for this location. While we believe the data sources to be reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources used.

The field reconnaissance included a 100% walkover of the site by Rincon biologist Ed Miller. The project area was surveyed on June 20 and June 25, 2003, for identification of onsite habitats, special-status biological resources, natural communities of special concern, drainages, wildlife corridors and other potential biological resources onsite. If seen, such resources are described in detail below; otherwise the identification of potential special-status species habitat below has been based on a suitability analysis level only and did not include definitive surveys for the presence or absence of the species that may be present. Definitive surveys for special-status wildlife and plant species generally require specific survey protocols requiring extensive field

survey time to be conducted only at certain times of the year. The findings and opinions conveyed in this report are based on this methodology.

4.0 REGULATORY SETTING

Regulatory authority over biological resources is shared by Federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Agoura Hills). The CDFG is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the Fish and Game Code of California. Under the State and Federal Endangered Species Acts, the CDFG and the U.S. Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as Threatened or Endangered. The U.S. Department of Army Corps of Engineers (Corps) has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. Statutes within the Clean Water Act, California Fish and Game Code, and Regional Water Quality Control Board regulations protect wetlands and riparian habitat.

In response to legislative mandates, regulatory authorities have defined sensitive biological resources as those specific organisms that have regionally declining populations such that they may become extinct if declining population trends continue. Habitats are also considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance.

Sensitive species are classified in a variety of ways, both formally (e.g. State or Federally Threatened and Endangered Species) and informally ("Special Animals"). Species may be formally listed and protected as Threatened or Endangered by the CDFG or USFWS or as California Fully Protected (CFP). Informal listings by agencies include California Species of Special Concern (CSC) (a broad database category applied to species, roost sites, or nests); or as USFWS Candidate taxa. CDFG and local governmental agencies may also recognize special listings developed by focal groups (i.e. Audubon Society Blue List; California Native Plant Society (CNPS) Rare and Endangered Plants; U.S. Forest Service regional lists). Section 3503.5 of the Fish and Game Code of California protects birds of prey, and their nests and eggs against take, possession, or destruction.

Vegetation in California is accorded sensitivity ranking by the CNPS and CDFG within the community classification of Holland (1986, 1990), modified as appropriate to conform to more recently accepted series concepts of Sawyer and Keeler-Wolf (1995). The City of Agoura Hills Municipal Code contains conditions intended to preserve and protect mature native oak trees and mature native trees.

5.0 FINDINGS

The project site is generally disturbed with non-native grassland areas comprising a majority of the site. Property areas adjacent to Agoura Road are either paved, bare ground, or disced. Coastal sage scrub habitat is located on the southwest corner of the site on the south side of the knoll. Some portions within this coastal sage habitat area are steep with exposed rock outcrops. Additionally, eighteen valley oaks (*Quercus lobata*) are located throughout the site, seven of

which are greater than 20 inches in diameter at breast height (DBH). These locations and the habitat types within the project site are shown on Figure 2.

No special-status plant or animal species were observed at the project site during the June 20 and 25, 2003 site visit.

5.1 Habitat Types. Classification of habitat types or vegetation communities is based generally on the California Wildlife Habitat Relationship System (WHR), Holland (1986), and Sawyer and Keeler-Wolf (1995) with modifications to better represent existing field conditions. The WHR defines habitats based on the composition and structure of the dominant vegetation of any given area and provides generalized information pertaining to wildlife value and use of these habitat types. A plant list including all plant species observed during the site visits is included as Appendix A.

a. Non-Native Annual Grassland. Non-Native Annual Grassland is the dominant habitat type on the project site and predominantly occurs in the northern and middle portions of the site. The area adjacent to Agoura Road on the northwest corner of the site contains dirt and paved parking areas and is heavily disturbed. Additionally, areas with vegetation adjacent to Agoura Road and the eastern side of the project site are regularly disced for fire control.

Vegetation in the non-native annual grassland is composed primarily of introduced annual grasses. Dominant species include wild oat (*Avena fatua*), brome grasses (*Bromus* sp.), and slender tarweed (*Hemizonia fasciculata*). Other common species throughout this habitat type included common fiddleneck (*Amsinckia menziesii*), yellow star-thistle (*Centaurea solstitialis*), woolly aster (*Lessingia filaginifolia*) and vinegar weed (*Trichostema lanceolatum*). Several large valley oaks (*Quercus lobata*) are scattered around the project site (locations shown on Figure 2). Of eighteen valley oaks noted on the site, seven were of large size, greater than 20 inches diameter at breast height (DBH), and were numbered with metal tags. The large trees are identified by numbers 1, 2, 3, 4, 5, 7, and 8 on Figure 2. Tree number six was approximately 8 inches DBH. The additional valley oak trees that were noted were all of small size, generally less than 3 inches DBH. The majority of these small trees were within 50 feet of tree number 1. No raptor nests were noted on these, or any other trees, on the project site.

Wildlife species or sign observed on the site include California ground squirrel, coyote, rabbit, crow, and dog.

b. Coastal Sage Scrub. Coastal Sage Scrub habitat is located in the southern portion of the site, primarily on the south side of the knoll in the southwest corner. The area is also steep, containing numerous rock outcroppings. The dominant species is California buckwheat (*Eriogonum fasciculatum*). Other species include coyote brush (*Baccharis pilularis*), deerweed (*Lotus scoparius*), brome grasses (*Bromus* sp.), mustard (*Brassica* sp.), and slender tarweed (*Hemizonia fasciculata*). Clumps of prickly pear (*Opuntia littoralis*) were present. In addition, the rockier portions of the slope contained Turkish rugging (*Chorizanthe staticoides*) and chalk live-forever (*Dudleya pulverulenta*). As with the grassland area, there were numerous signs of small mammal activity such as scat and burrows.

c. Riparian. Medea Creek is located adjacent and south of the project site. While the drainage and riparian area are generally not on the project site, a portion of the riparian area

overlaps the southeast corner of the property. The riparian corridor contains willow species (*Salix nigra, S. lasiolepus, S. laevigata*), oaks (*Quercus lobata, Q. agrifolia*), and black locust (*Robinia pseudoacacia*). The understory is dominated by woodbine (*Parthenocissus vitacea*). The portion of the riparian area that overlaps the project site consists primarily of red willow.

d. Wetland. No natural wetland areas were found on the project site. However, a low wet area exists inside the residual foundation located at the northwest corner of the property. The ground surface inside the foundation frame is several feet below surrounding ground level and appears to collect water. Species located within this area included curly dock (*Rumex crispus*), mustard (*Brassica* sp.), and a small arroyo willow.

5.2 Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those considered "species of concern" by the USFWS; those listed or proposed for listing as rare, threatened, or endangered by the CDFG under the California Endangered Species Act (CESA); animals designated as "Species of Special Concern" by the CDFG; and plants listed on the CDFG published special plants list (January 2003). A number of special-status wildlife species are also considered to be of "local concern." Animals in this category are of concern because they have limited distributions, are experiencing local or regional population declines, are vulnerable to current or future threats to their preferred habitat, and/or are of unusual scientific, recreational, or educational value.

Rincon Consultants biologists developed a target list of special-status plant and animal species that could potentially occur on-site based on review of the CNDDB and general knowledge of the area. Table 1 lists those sensitive plant species and Table 2 lists those sensitive animal species known to occur in the project region.

a. Special-Status Plants. A search and review of the CNDDB identified 18 plants of special concern within a 10-mile radius of the project site. Figure 1, the CNDDB map, illustrates the known location of these species. Table 1 identifies these sensitive plant species, their listing status, preferred habitat and the potential for those species to occur on the project site. Those special-status plant species with the potential to occur on the project site include: Plummer's mariposa lily (*Calochortus plummerae*); Santa Susana tarplant (*Deinandra minthornii*); round-leaved filaree (*Erodium macrophyllum*); Parry's spineflower (*Chorizanthe parryi var Parryi*), Santa Monica Mountains dudleya (*Dudleya cymosa agourensis*), marcescent dudleya (*Dudleya cymosa marcescens*), many-stemmed dudleya (*Dudleya multicaulis*), Conejo dudleya (*Dudleya parva*), Conejo buckwheat (*Eriogonum crocatum*), and Lyon's pentachaeta (*Pentachaeta lyonii*).

Plummer's mariposa lily (CNPS List 1B) is a bulbiferous perennial in the lily family (Liliaceae) that blooms May through July. This species is typically found in coastal scrub, chaparral, and valley and foothill grasslands. Plummer's mariposa lily is known to occur approximately three miles north of the project site (CNDDB, 2002). No Plummer's mariposa lilies were found during site visits.

Santa Susana tarplant (State rare and CNPS List 1B) is a deciduous shrub in the sunflower family (Asteraceae) that blooms from July to November. This species is typically found in

chaparral and coastal sage scrub usually on sandstone outcrops and crevices. Suitable habitat is present among the rocky outcrops on the southern portions of the site. This species would have been identifiable during the site visits, but was not found.

Round-leaved filaree (CNPS List 1B) is an annual herb that blooms between March and May. This species is typically occurs in cismontane woodland, valley and foothill grassland in clay soils. The nearest CNDDB record of this species is located approximately four miles southeast of the project site. This species is not likely to occur on the project site due to the disturbed nature of the site and the predominance of rocky soils.

Parry's spineflower (CNPS List 3) is annual herb that blooms from April to June. The species is found in coastal scrub and chaparral on dry slopes and flats. The species was not found during site surveys.

Dudlya's are perennial herbs that bloom during the springtime, but are recognizable year-round. They inhabit areas with rocky outcrops and volcanic soils. No special-status dudleyas were found during the site surveys.

Conejo buckwheat (State rare and CNPS List 1B) is a perennial herb that blooms from April to July. It is found in chaparral, coastal scrub, valley grassland and foothill grassland within Conejo volcanic outcrops. This species would have been identifiable during site surveys but was not found.

Lyon's pentachaeta (Federal and State endangered, CNPS List 1B) is an annual herb that blooms from March to August. The species is found in chaparral, valley grassland and foothill grassland. Immediately prior to the June 25 site visit, a reference site on Cornell Road (approximately 1 mile south of the project site) known for this species was checked, and the species was found to be in bloom. Subsequently, the species was not found after a second, 100% coverage survey of all potential habitat areas on the project site.

Table 1 Special-Status Plant Species in the Project Vicinity

Scientific Name	Common Name	Status Federal/State/CNPS	Habitat Requirements	Project Site Suitability
Astragalus brauntonii	Braunton's milk- vetch	FE/None/1B	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas. Stiff gravelly clay soils overlying granite or limestone. Blooms February – July. Perennial herb. 10 –2100 feet.	Suitable habitat not present on-site. Suitable soils absent.
Atriplex Coulteri	Coulter's saltbush	None/None/1B	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Found on ocean bluffs, ridgetops as well as alkaline low places. 32 – 1408 feet.	Suitable habitat not present on site.
Baccharis malibuensis	Malibu baccharis	None/None/1B	Coastal scrub, chaparral, cismontane woodland. In conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 485 – 832 feet.	Project site above the elevation range for the species.
Calochortus plummerae	Plummer's mariposa lily	None/None/1B	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granite or alluvial material. Fire follower. Blooms May – July. Bulbiferous perennial herb. 300 – 5280 feet.	Suitable habitat on-site. None found during site visits.
Chorizanthe parryi fernandina	San Fernando valley spineflower	FC/SE/1B	Coastal scrub. Dry, gravelly or sandy soils. Blooms April – June. 10 – 3396 feet.	Suitable habitat not present on-site. Suitable soils absent.
Deinandra minthornii	Santa Susana tarplant	None/SR/1B	Chaparral, coastal sage scrub. Usually on sandstone outcrops and crevices, in shrubland. Blooms July – November. Shrub. 920 – 2500 feet.	Habitat present, but species not found during site visits.
Chorizanthe parryi var parryi	Parry's spineflower	None/None/3	Coastal scrub and chaparral. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland; dry sandy soils. An annual herb that blooms from April to June. 128 – 5456 feet.	Suitable habitat present on site. None found during site visits.
Delphinium parryi blochmaniae	Dune larkspur	None/None/1B	Chaparral, coastal maritime dunes. Rocky areas and dunes. Blooms April – May. Perennial herb. 0 – 700 feet.	Suitable habitat not present on-site. Out of elevational range.

Table 1 Special-Status Plant Species in the Project Vicinity

Scientific Name	Common Name	Status Federal/State/CNPS	Habitat Requirements	Project Site Suitability
Dudleya blochmaniae blochmaniae	Blochman's dudleya	None/None/1B	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Open rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. Blooms April – June. Perennial herb. 20 – 1500 feet.	Suitable habitat present on-site. Not found during site visits.
Dudleya cymosa agourensis (=D. c. ovatifolia)	Santa Monica Mountains dudleya	FT/None/1B	Chaparral, cismontane woodland. Rocky, volcanic substrates. Blooms May – June. Perennial herb. 700 – 2000 feet.	Suitable habitat present on-site. Not found during site visits.
Dudleya cymosa marcescens	Marcescent dudleya	FT/SR/1B	Chaparral. Sheer volcanic rock surfaces, canyon walls. Blooms April – June. Perennial herb. 490 – 1700 feet.	Suitable habitat present on-site. Not found during site visits.
Dudleya multicaulis	Many-stemmed dudleya	None/None/1B	Chaparral, coastal scrub, valley and foothill grassland. Heavy, often clayey soils or grassy slopes. Blooms April – July. Perennial herb. 0 – 2600 feet.	Suitable habitat present on-site. Not found during site visits.
Dudleya parva	Conejo dudleya	FT/None/1B	Coastal scrub, valley and foothill grassland. Clayey or volcanic soils on rocky slopes and grassy hillsides. Blooms May – June. Perennial herb. 200 – 1500 feet.	Suitable habitat present on-site. Not found during site visits.
Eriogonum crocatum	Conejo buckwheat	None/SR/1B	Chaparral, coastal scrub, valley foothill grassland. Conejo volcanic outcrops; rocky sites. Blooms April – July. Perennial herb. 200 – 1900 feet.	Suitable habitat present on-site. Not found during site visits.
Erodium macrophyllum	Round-leaved filaree	None/None/1B	Cismontane woodland, valley and foothill grassland. Clay soils. Blooms March – May. Annual herb. 49 – 3900 feet.	Suitable habitat may be present on site. Not found during site visits.
Orcuttia californica	California orcutt grass	FE/SE/1B	Vernal pools. Blooms April – August. Annual herb. 49 – 2200 feet.	Suitable habitat not present on-site. No vernal pools present in the project site.
Pentachaeta lyonii	Lyon's pentachaeta	FE/SE/1B	Chaparral, valley and foothill grassland. Edges of clearings in chaparral. Clay soils, exposed soils. Blooms March – August. Annual herb. 100 – 2100 feet.	Suitable habitat present on site. Not found during site visits.

Table 1 Special-Status Plant Species in the Project Vicinity

Scientific Name	Common Name	Status Federal/State/CNPS	Habitat Requirements	Project Site Suitability
Senecio aphanactis	Rayless ragwort	None/None/2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats, alkaline soils on alkaline substrates. Blooms January – April. Annual herb. 49 – 3000 feet.	Suitable habitat not present on site.

Source: California Department of Fish and Game, *Special Plants*, January 2003; CNDDB Rarefind 10-mile search radius, January 2003; California Native Plant Society (CNPS) *6th Inventory of Rare Plants - Online Edition*, November 2002.

CSC = California Species of Special Concern
FSC = Federal Species of Special Concern
SE = State Endangered
FE = Federally Endangered
ST = State Threatened
FT = Federally Threatened
FP = Fully Protected
SR = State Rare
FC = Federal Candidate
CNPS List 1B = rare or endangered in California and elsewhere
CNPS List 2 = rare or endangered in California
None = no status

Table 2 Special-Status Wildlife Species in the Project Vicinity

Scientific Name	Common Name	Status Federal/State	Habitat Requirements	Project Site Suitability
Aquila chrysaetos	Golden eagle	None/CSC (Nesting and Wintering)/CFP	Rolling foothills, mountain areas, sage-juniper flats, desert. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable foraging habitat on-site. Potential to forage in non-native annual grassland.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/CSC	Coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat present on-site.
Gila orcutti	Arroyo chub	None/CSC	Slow water stream sections with mud or sand bottoms. Slow moving streams with typical water depth of 40 cm (15.75 inches of water). Feeds on aquatic vegetation.	Suitable aquatic habitat not present on-site.
Bufo californicus (= Bufo microscaphus californicus)	Arroyo toad	FE/CSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert wash, desert riparian. Rivers with sandy banks, willows, cottonwoods, and sycamores. Loose gravelly areas of streams in drier parts of range.	Suitable aquatic habitat not present on-site.
Clemmys marmorata pallida	Southwestern pond turtle	FSC/CSC	Requires permanent or nearly permanent bodies of water. Aquatic habitats including ponds, streams, and irrigation ditches. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks. Below 6000 feet.	Suitable aquatic habitat not present on-site.
Cnemidophorus tigris multiscutatus	Coastal western whiptail	None/CSC	Deserts and semiarid areas with sparse vegetation and open areas, woodlands and riparian areas. Firm soil; sandy or rocky.	Suitable habitat on-site.
Danaus plexippus	Monarch butterfly	None/None	Winter roost sites located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	No suitable roosting habitat on site.
Diadophis punctatus modestus	San Bernardino ringneck snake	FSS/None	Rocky areas, often in moist microhabitats near intermittent streams.	Suitable habitat present on-site.
Eucyclogobius newberryi	Tidewater goby	FE/CSC	Brackish water habitats along the coast. Shallow lagoons and lower stream reaches.	Suitable aquatic habitat not present on-site.
Lampropeltis zonata pulchra	San Diego mountain kingsnake	None/CSC	San Gabriel and San Jacinto Mountains in valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows.	Project site outside of known areas of occurrence.

Table 2 Special-Status Wildlife Species in the Project Vicinity

Scientific Name	Common Name	Status Federal/State	Habitat Requirements	Project Site Suitability
Neotoma lepida intermedia	San Diego desert woodrat	None/CSC	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops and rocky cliffs and slopes.	Suitable habitat present on-site. No woodrat nests observed on the project site during site visits.
Oncorhynchus mykiss irideus	Southern Steelhead-Southern California ESU	FE/CSC	Rivers and creeks from Santa Maria south to San Mateo Creek.	Suitable aquatic habitat not present on-site.
Phrynosoma coronatum blainvillei	San Diego horned lizard	None/CSC	Coastal sage scrub and chaparral in arid and semi-arid climate. Prefers friable, rocky or shallow sandy soils.	Suitable habitat present on-site.
Polioptila californica	California gnatcatcher	FT/CSC	Obligate, permanent resident of coastal sage scrub. Low coastal sage scrub in arid washes, on mesas and slopes. Below 2500 feet in southern California.	Species may occur on site, however project site outside of known range. Per USFWS (2002) no CA gnatcatchers have been found in the Santa Monica Mts.
Riparia riparia	Bank swallow	FSC (nesting)/ FT (nesting)	Colonial nester. Nests primarily in riparian and other lowland habitats. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Suitable nesting habitat not present on-site.
Scaphiopus hammondii	Western spadefoot	FSC/CSC	Primarily in grassland habitats. Can be found in valley-foothill hardwood woodlands. Vernal pools are essential for reproduction.	Suitable habitat not present on-site. No vernal pools.
Thamnophis hammondii	Two-striped garter snake	None/CSC	Aquatic. Found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Suitable aquatic habitat not present on-site, but is present in Medea Creek.

Source: California Department of Fish and Game, *Special Animals*, January 2003; CNDDB Rarefind 10-mile search radius, October 2002.

CSC = California Species of Special Concern
FSC = Federal Species of Special Concern
SE = State Endangered
FE = Federally Endangered
ST = State Threatened
FT = Federally Threatened
FP = Fully Protected
SR = State Rare
CFP = California Department of Fish and Game Fully Protected
FSS = USDA Forest Service sensitive species
None = no status

c. Special-Status Wildlife. A sensitive wildlife resource refers to any rare, threatened, or endangered animal species. This section addresses special-status animal species that occur in the region and are either known to occur or may occur on the project site. The CNDDB indicated 17 special-status animal species as potentially occurring in the vicinity of the project site. Table 2 identifies these sensitive wildlife species, their listing status, preferred habitat and the potential for those species to occur on the project site. Potential occurrence of these species is based on the availability and quality of suitable habitat. Those special-status wildlife with the potential to occur on the project site include: San Diego horned lizard (*Phrynosoma coronatum blainvillei*); coastal western whiptail (*Cnemidophorus tigris multiscutatus*); golden eagle (*Aquila chrysaetos*); Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*); California gnatcatcher (*Polioptila californica*); and San Bernardino Ringneck snake (*Diadophis punctatus modestus*). These species are described in more detail below.

San Diego horned lizard (FSC) California Species of Special Concern, CSC) is associated with open, sandy areas of coastal sage scrub and chaparral habitats. CNDDB records for the species are located to the south and east of the project site, with the nearest record approximately five miles away. Potential habitat occurs for this species on portions of the project site; however, no individuals were observed during field surveys.

Coastal western whiptail (CSC) inhabits a variety of habitats including sage scrub, grasslands, washes, and oak woodlands. CNDDB records show occurrences throughout the Santa Monica Mountains, south of the 101, with the nearest occurrence approximately two miles southwest of the project site. Habitat is present on-site to support this species; however, no individuals were observed during field surveys.

San Bernardino Ringneck Snake (FSS) is found in open relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats. CNDDB records show an occurrence for the species approximately seven miles southeast of the project site. Habitat for this species is present on site; however, no individuals were observed during field surveys.

Golden eagle (CSC; CFP) requires open savannahs, rolling foothills, and early successional shrub habitats for foraging. The species generally nests on cliffs and in large trees located in open areas. Suitable foraging habitat is present on-site for the golden eagle; however, no individuals were observed during site visits.

Southern California rufous-crowned sparrow (CSC) frequents steep rocky hillsides with patches of grass and forbs. It will also occur on rocky hillsides with coastal sage scrub or chaparral habitats. Individuals generally seek cover in grass, shrubs, or rocks and will nest at the base of shrubs. There is one record of the species occurring within 10 miles of the project site, approximately seven miles to the northeast. No individuals of the species were observed during site visits.

Coastal California gnatcatcher (FT; CSC) occurs in coastal scrub sage and inland sage scrub habitats at elevations below 900 feet in San Diego, Orange, and Los Angeles County, and below 1,600 feet in Riverside County. Suitable coastal sage scrub habitat required to support the species was present on-site, however, this species has not been documented as occurring as a breeding population within the Santa Monica Mountains

(personal communication, Rick Ferris, USFWS 2002), and none were seen during site visits.

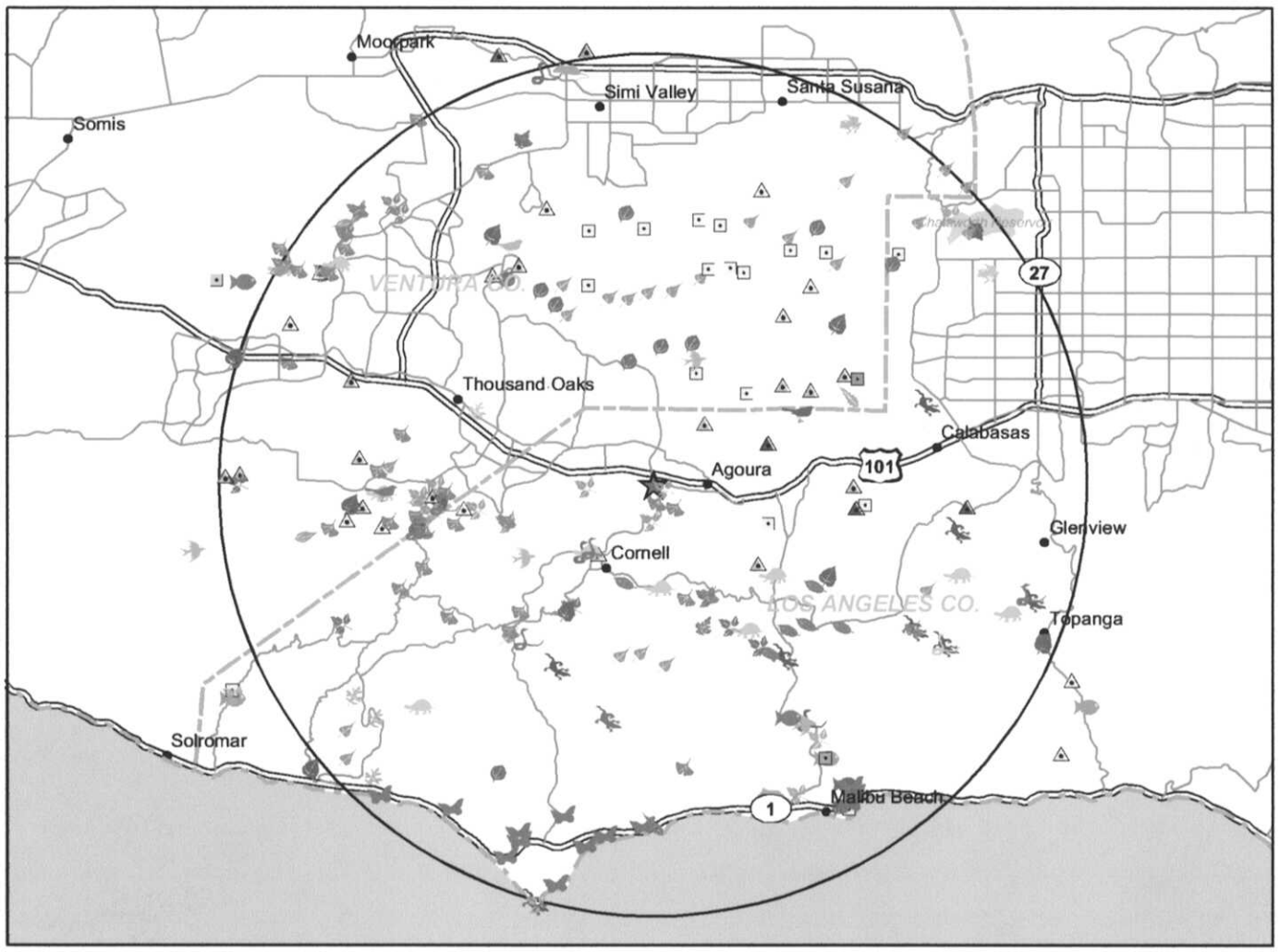
5.3 Wildlife Corridors

The project site occurs at the boundary between open space and developed commercial/residential areas. The area to the north and east is developed, while the east side of the site is bordered by Kanan Road. Medea Creek may act as a wildlife corridor for north-south movement, but the vertical channel walls north of the site and the culvert under the freeway substantially limits the use of this corridor. As such, the site does not function as a wildlife corridor and the temporary and permanent impacts from development would not significantly affect wildlife movement.

6.0 POTENTIAL IMPACTS

No significant impacts would occur to jurisdictional waters, special-status species or their habitats, or migration corridors during development of this site. Although there is the potential for the San Diego horned lizard, western whiptail, San Bernardino ringneck snake, golden eagle, and rufous-crowned sparrow to occur onsite, none of these species are listed as endangered, threatened, or rare. The loss of less than 10 acres of habitat would not significantly impact these species, namely, it would not substantially reduce population size due to loss of individuals or limit the known range of these species.

Valley Oak trees do occur on the site, within the development footprint and would require removal. The necessary permitting and subsequent mitigation (replacement) would be required to mitigate this impact. In addition, most nesting birds are protected from harm by the California Fish and Game Code and the Migratory Bird Treaty Act during the breeding period (generally March through August). Future development that disturbs native habitats should preferably be scheduled to avoid this time period.



Source: California Natural Diversity Database, January 2003.

Project Location
10 Mile Buffer
AAABB01111,ARROYO TOAD
AAABF01030,WESTERN SPADEFOOT
ABNKC22010,GOLDEN EAGLE
ABPAU08010,BANK SWALLOW
ABPBJ08080, COASTAL CALIFORNIA GNATCATCHER
ABPBX91091,SOUTHERN CALIFORNIA RUFOUS-CROWNED SPARROW
AFCHA0206J,SOUTHERN STEELHEAD - SOUTHERN CALIFORNIA ESU
AFCJB13120,ARROYO CHUB
AFCQN04010,TIDEWATER GOBY
AMAFF06041,SAN DIEGO DESERT WOODRAT
ARAAD02032,SOUTHWESTERN POND TURTLE
ARACF12021,SAN DIEGO HORNED LIZARD
ARACF12022,CALIFORNIA HORNED LIZARD
ARACJ02140,COASTAL WESTERN WHIPTAIL
ARADB10015,SAN BERNARDINO RINGNECK SNAKE
ARADB19063,SAN DIEGO MOUNTAIN KINGSNAKE
ARADB36160,TWO-STRIPED GARTER SNAKE
CALE1220CA,SOUTHERN CALIFORNIA COASTAL LAGOON
CARE2310CA,SOUTHERN CALIFORNIA STEELHEAD STREAM
CTT42110CA,VALLEY NEEDLEGRASS GRASSLAND
CTT52120CA,SOUTHERN COASTAL SALT MARSH
CTT61300CA,SOUTHERN RIPARIAN FOREST
CTT61310CA,SOUTHERN COAST LIVE OAK RIPARIAN FOREST
CTT62400CA,SOUTHERN SYCAMORE ALDER RIPARIAN WOODLAND
CTT63300CA,SOUTHERN RIPARIAN SCRUB
CTT63320CA,SOUTHERN WILLOW SCRUB
CTT71130CA,VALLEY OAK WOODLAND
CTT71210CA,CALIFORNIA WALNUT WOODLAND
ILEPP2010,MONARCH BUTTERFLY
PDAST0W0W0,MALIBU BACCHARIS
PDAST4R0J0,SANTA SUSANA TARPLANT
PDAST5X060,LYON'S PENTACHAETA
PDASTIH060,RAYLESS RAGWORT
PDCHE040E0,COULTER'S SALTBUSH
PDCRA04016,CONEJO DUDLEYA
PDCRA04051,BLOCHMAN'S DUDLEYA
PDCRA040A3,MARCESCENT DUDLEYA
PDCRA040A5,SANTA MONICA MOUNTAINS DUDLEYA
PDCRA040A7,SANTA MONICA MTNS. DUDLEYA
PDCRA040H0,MANY-STEMMED DUDLEYA
PDFAB0F1G0,BRAUNTON'S MILK-VETCH
PDGER01070,ROUND-LEAVED FILAREE
PDPGN040J1,SAN FERNANDO VALLEY SPINEFLOWER
PDPGN040J2,PARRY'S SPINEFLOWER
PDPGN081G0,CONEJO BUCKWHEAT
PDRAN0B1B1,DUNE LARKSPUR
PMLIL0D150,PLUMMER'S MARIPOSA LILY
PMPOA4G010,CALIFORNIA ORCUTT GRASS
PPTHE05192,SONORAN MAIDEN FERN

Sensitive Elements Reported by the California Natural Diversity Database

Figure 1

E.F. Moore & Company

Habitat Map

Figure 2

Aerial Source: City of Agoura Hills

TREES, etc.

PRELIMINARY
OAK TREE REPORT

Cornerstone @ Agoura Village
Agoura & Cornell Roads
Agoura Hills, Ca

for
Agoura Cornell Roads, LP
22048 Sherman Way, Suite 217
Canoga Park, Ca 91303

by
TREES, etc.
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P.O. Box 4583
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E-Mail: treesetc.richard@verizon.net
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Project No. 525-1-04
September 21, 2004

Preliminary OAK TREE REPORT

Cornerstone @ Agoura Village, Agoura Hills

Project No. 525-1-04

The following are our field observations (of June 6, 2004) & recommendations pertinent to the 61 "tagged" Coast Live Oaks & Valley Oaks; and about 350 "un-tagged" Scrub Oaks at (on-property) & adjacent (off-property) to the above-mentioned site. This proposed project is bordered on the north by Agoura Rd., and on the west by Cornell Rd. in the city of Agoura Hills, Ca ["The Thomas Guide 2004 – Los Angeles & Ventura Counties Street Guide" page 558 // section B-6].

Included within this report are the following: the **TREE PHOTOGRAPHS** (21 pages), the **TREE EVALUATIONS** sheets (7 pages), the **TREE CANOPY MEASUREMENTS** sheets (7 pages), and one **TREE LOCATION MAP** (derived from the '40 scale' "Conceptual Grading Plan", as produced by Pacific Coast Civil, dated January 20, 2004).

PLAN REVIEW

1. This project's 61 "inventoried & tagged" Oak trees are: 24 [numbered 3-5, 9-11, 14, 17, 21-26, 31, 48, 51, 53, 54 & 57-61] Coast Live Oak (*Quercus agrifolia*), 2 [numbered 42 & 49] Scrub Oaks (*Quercus dumosa*), and 35 [numbered 1, 2, 6-8, 12, 13, 15, 16, 18-20, 27-30, 32-41, 43-47, 52, 55, 56 & 58] Valley Oak (*Quercus lobata*). (Coast Live Oak 61 was not tagged.) We also found about 350 "non-inventoried or tagged" Scrub Oaks on this site.

2. Pursuant to the enclosed **TREE LOCATION MAP**, the following is proposed:

Tree No(s).	Disposition//Requested Encroachment
1	SAVE = the existing Agoura Rd., is 15' from the trunk of this off-property Valley Oak (within its dripline), shall be moved to no closer than 20' from the trunk (still within its dripline). Pruning may be required for roadway clearance.
2	SAVE = the existing Agoura Rd., 24' from the trunk of this off-property Valley Oak (within its Protected Zone), shall be moved to no closer than 35' from the trunk (outside of its Protected Zone). Pruning is not required for roadway clearance.
3	SAVE = the existing Agoura Rd., 18' from the trunk of this off-property Coast Live Oak (within its dripline), shall be moved to no closer than 30' from the trunk (outside of its Protected Zone). Adjacent roadside "diagonal" parking shall be installed no closer than 1' from its dripline (within its Protected Zone). Pruning is not required for roadway clearance.
4	SAVE = this Coast Live Oak shouldn't be encroached upon by project construction.
5	SAVE = the existing Agoura Rd., 30' from the trunk of this off-property Coast Live Oak (outside of its dripline), shall be moved to no closer than 17' from the trunk (within its dripline). Pruning may be required for roadway clearance.
6 to 9	Removals = these 4 off-site Oaks (6 to 8 are Valley Oaks, while 9 is a Coast Live Oak) shall be removed to the widening of Agoura Rd.
10 to 16	Removals = these 7 Oaks (10, 11 & 14 are Coast Live Oaks, while the remaining are Valley Oaks) shall be removed for project construction.
17	SAVE = a proposed 6' high retaining wall shall encroach into this Coast Live Oak's Protected Zone, no closer than 4' from its dripline. Pruning shouldn't be required for this encroachment.
18 & 19	SAVES = these 2 Valley Oaks shouldn't be encroached upon by project construction.
20	SAVE = a proposed 6' high retaining wall shall encroach into this Valley Oak's Protected Zone, no closer than 2' from its dripline. Pruning shouldn't be required for this encroachment.

Tree No(s).	Disposition//Requested Encroachment
21 to 23	SAVES = these 3 off-site Coast Live Oaks shall not be encroached upon by project construction.
24	SAVE = the widening of Cornell Rd. shall encroach into this Coast Live Oak's Protected Zone, no closer than 3' from its dripline. Pruning is not required for this encroachment.
25 & 26	SAVES = these 2 off-site Oaks (25 is a Coast Live Oak, while 26 is a Valley Oak) shall not be impacted (or encroached upon) by project construction.
27	Remove = this off-site Valley Oak shall be removed to the widening of Cornell Rd.
28 & 29	Removals = these 2 Valley Oaks shall be removed for project construction.
30	SAVE = the existing Cornell Rd., is 18' from the trunk of this off-property Valley Oak (within its dripline), shall be moved to no closer than 10' from the trunk (still within its dripline). Pruning may be required for roadway clearance.
31 & 32	Removals = these 2 Oaks (31 is a Coast Live Oak, while 32 is a Valley Oak) shall be removed for project construction.
33	SAVE = this Valley Oak shouldn't be encroached upon by project construction.
34	SAVE = a planter wall shall encroach into this Valley Oak's dripline, no closer than 20' from its trunk. Clearance pruning may be required for this encroachment
35	SAVE = this Valley Oak should not be encroached upon by project construction.
36	SAVE = a planter wall shall encroach into its Protected Zone, no closer than 3' from this Valley Oak's dripline. Pruning is not required for this encroachment
37	SAVE = project construction shall encroach into this Valley Oak's Protected Zone, no closer than 8' from its dripline. Pruning will be required for this encroachment.
38	Remove = this Valley Oak shall be removed for project construction.
39	SAVE = this Valley Oak shouldn't be impacted encroached upon by project construction.
40	Remove = this Valley Oak shall be removed for project construction.
41 & 42	SAVES = these 2 Oaks (41 is a Valley Oak, while 42 is a Scrub Oak) shouldn't be encroached upon by project construction.
43 to 48	Removals = these 6 Oaks (43 to 47 are Valley Oaks, while 48 is a Coast Live Oak) shall be removed for project construction.
49 to 60	SAVES = these 12 off-site Oaks (49 is a Scrub Oak; 50, 51, 53, 54, 57, 59 & 60 are Coast Live Oaks; while the remaining are Valley Oaks) shall not be encroached upon by project construction.
61	Remove – this Coast Live Oak shall be removed for project construction.
About 20	Removals = these Scrub Oaks (located northeast of tree 42) shall be removed for project construction.

3. In summary, the following is proposed:

Total quantity of Oak trees that were inventoried = **61**
SAVES (with no "new" encroachments) = **26** [2, 4, 18, 19, 21-23, 25, 26, 33, 35, 39, 41, 42 & 49-60]
SAVES (with "new" dripline encroachments) = **4** [1, 5, 30 & 34]
SAVES (with "new" Protected Zone encroachments) = **6** [3, 17, 20, 24, 36 & 37]
Removals = **25** [6-16, 27-29, 31, 32, 38, 40, 43-48 & 61]
Total (estimated) quantity of Scrub Oaks that were reviewed = **350**
Removals = **20** [these are located northeast of tree 42]

FIELD OBSERVATIONS

1. The trees were inventoried as to their specie, health & aesthetic considerations. This inventory included the measuring of trunk diameters of 2" & larger at 3½' above existing grade. It should be noted that these dimensions may change in the next growing season(s) following our initial field measurements.

2. The inventoried trees had their driplines (canopy spreads) measured. These measurements were taken at a minimum of eight compass directions. We also measured the minimum clearances from the existing field grades to the bottoms of the canopy at each compass point. It should be noted that these dimensions may change in the next growing season(s) following our initial field measurements.

3. This project's Oak trees were tagged with rectangular (¾"x3") metal tags with numbers written in black on them.

4. Many of this project's native Oak trees are relatively healthy (see the **TREE EVALUATION** sheets).

TREE REPLACEMENT PROGRAM

1. This project shall plant four (4) 24" box specimen trees as mitigation "replacements" for each approved removal. Therefore, this project shall plant a minimum of one-hundred (100) 24" box, specimen Oak trees as mitigation "replacements" for the 25 removals.

   The "about 20" Scrub Oaks, located northeast of tree 42, shall be mitigated as required by the City of Agoura Hills.

2. The above noted trees shall be planted in the "landscape" areas of this project. See the project's Landscape Architectural plans for the approximate locations of these mitigation trees.

SPECIFIC RECOMMENDATIONS

1. The 'saved' native Oak trees within 100' from proposed construction shall be fenced with a temporary chainlink (or similar) protective fence at their driplines or Protected Zones (or at the location of approved encroachment) prior to the start of any on-site grading. This fencing shall remain intact until the City of Agoura Hills' Planning & Community Development Department (CAHP&CDD) allows it to be removed or relocated.

2. All footing excavations within the driplines and/or Protected Zones shall be dug by hand work only, to a maximum depth of 5' (or to a depth that CAL-OSHA, OSHA or local codes allow). If any roots are encountered, they shall be cleanly excised (and not sealed) assuming that the CAHP&CDD allows their removal. Any excavation below the "approved" depth may be done with acceptable machinery. It is recommended that all footings within the Protected Zones be of "post type" rather than of "continuous type" to lessen potential root damage.

3. It is anticipated that no other on-site native Oak trees shall be encroached upon within their driplines and/or Protected Zones, other than what is being requested.

4. No 'over-excavation' outside of any cut and/or fill slopes ("tops" or "toes") for the proposed construction shall occur within the dripline and/or Protected Zone of any on-site native Oak trees, unless required by the project's structural engineer.

5. No landscape, irrigation lines, utility lines and/or grade changes shall be designed and/or installed within the dripline and/or Protected Zones of any on-site native Oak trees, unless approved by the CAHP&CDD.

6. The "bare" areas within the driplines and/or Protected Zones of this site's saved native Oak trees, those trees within 50' of approved grading, should be covered with an insect & disease free organic mulch (minimum depth of 2" thick and no closer than 6" from the trunk).

OVERALL RECOMMENDATIONS

1. All work, to this project's native Oak trees, shall be in accordance with city of Agoura Hills '**Oak Tree Ordinance**' and tree policies.

2. Some of this project's saved native Oak trees are in need of minor dead wood removal. No major structural pruning shall be allowed. A qualified arborist under the review of ***TREES, etc.*** shall complete all dead wood removal and/or pruning.

3. Prior to the completion of this project, ***TREES, etc.*** shall certify in a 'letter of compliance', that the '**Oak Tree Ordinance**' and all concerned tree policies have been adhered to.

4. Copies of this report and the '**Oak Tree Ordinance**' shall be maintained on site during all project construction.

NOTICE of DISCLAIMER = Opinions given in this report are those of *TREES, etc.*, and are derived from current professional standards based on visual recordings at the time of inspection. This visual record does not include aerial or subterranean inspections, and therefore may not reveal existing hidden hazards. Records may not remain accurate after inspection due to changeable deterioration of the inventoried plant material. *TREES, etc.* provides no warranty regarding errors of omission resulting from the lack of communication of facts available only to the requester of this report which are expressed or implied as to the fitness of the urban forests for safe uses. This report is offered for your consideration.

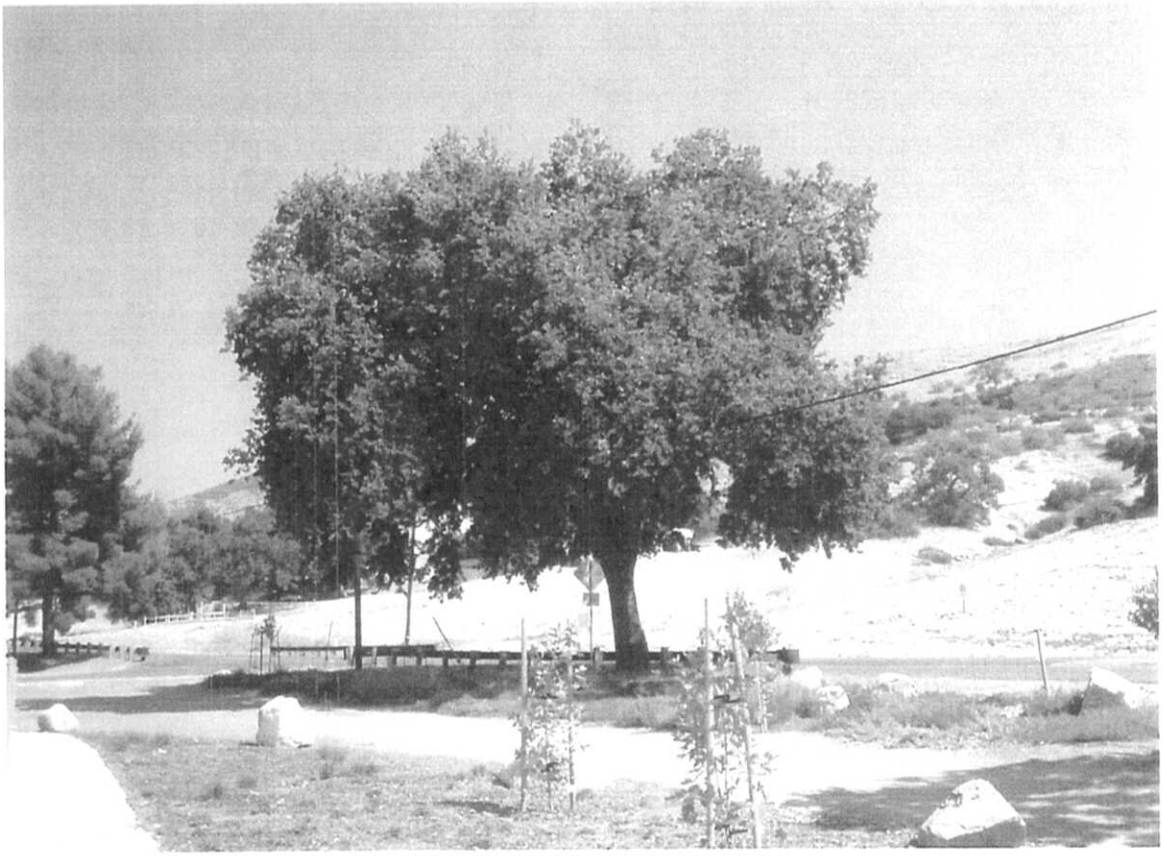
If you have any further questions, please do not hesitate to call ***TREES, etc.***

Sincerely,
RDI & Associates, Inc.
dba ***TREES, etc.***

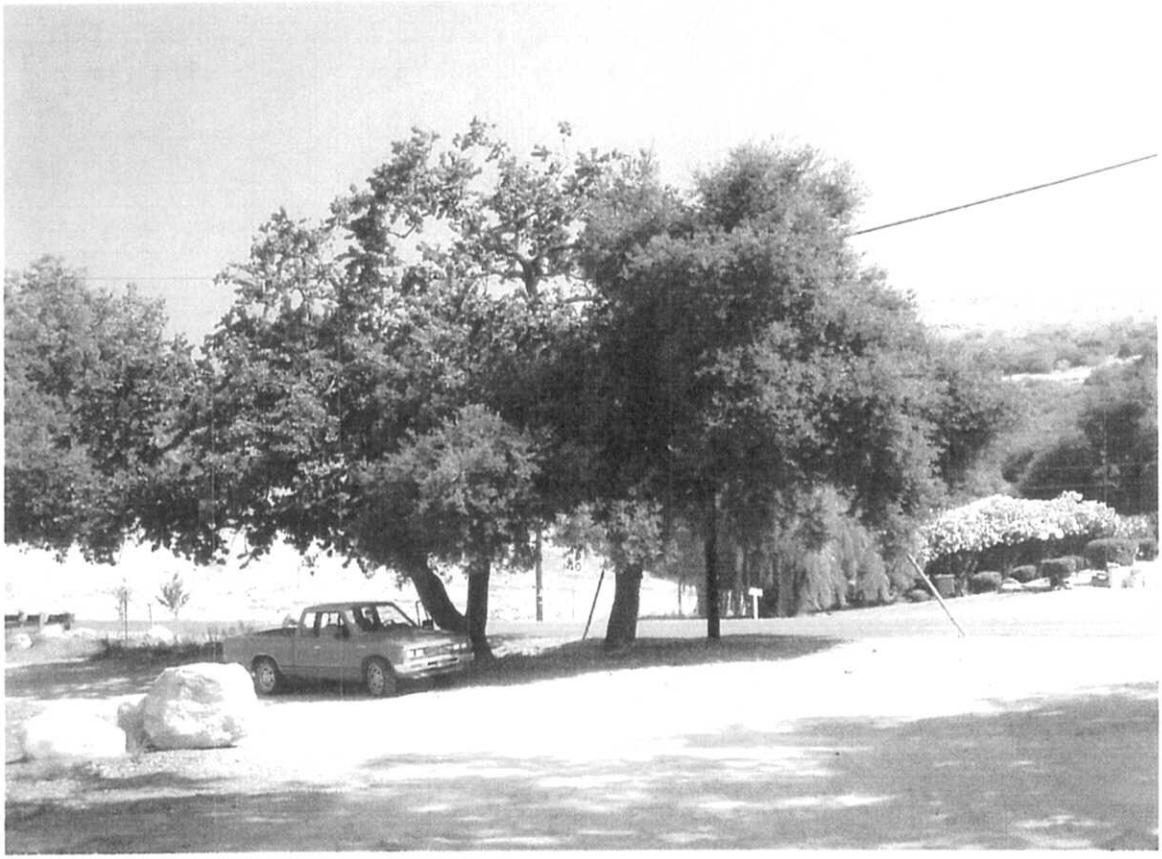
Richard Ibarra, President
CONSULTING ARBORIST
(OAK TREE CONSULTANT)

525otr-1[a]

OAK TREE PHOTOGRAPHS



Looking West Tree 1



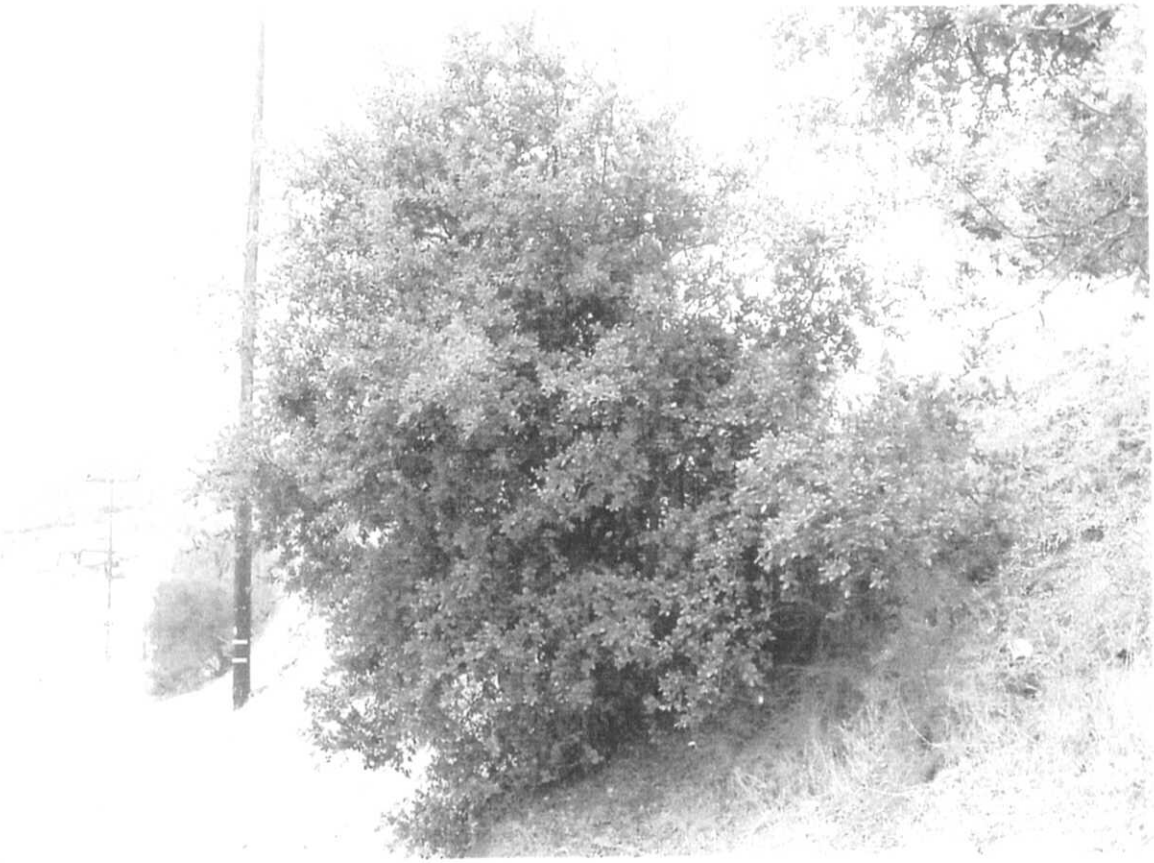
Looking Southwest Trees 2 and 3

Looking South Tree 4

Looking Southwest Tree 5

Looking South Trees 7 and 6

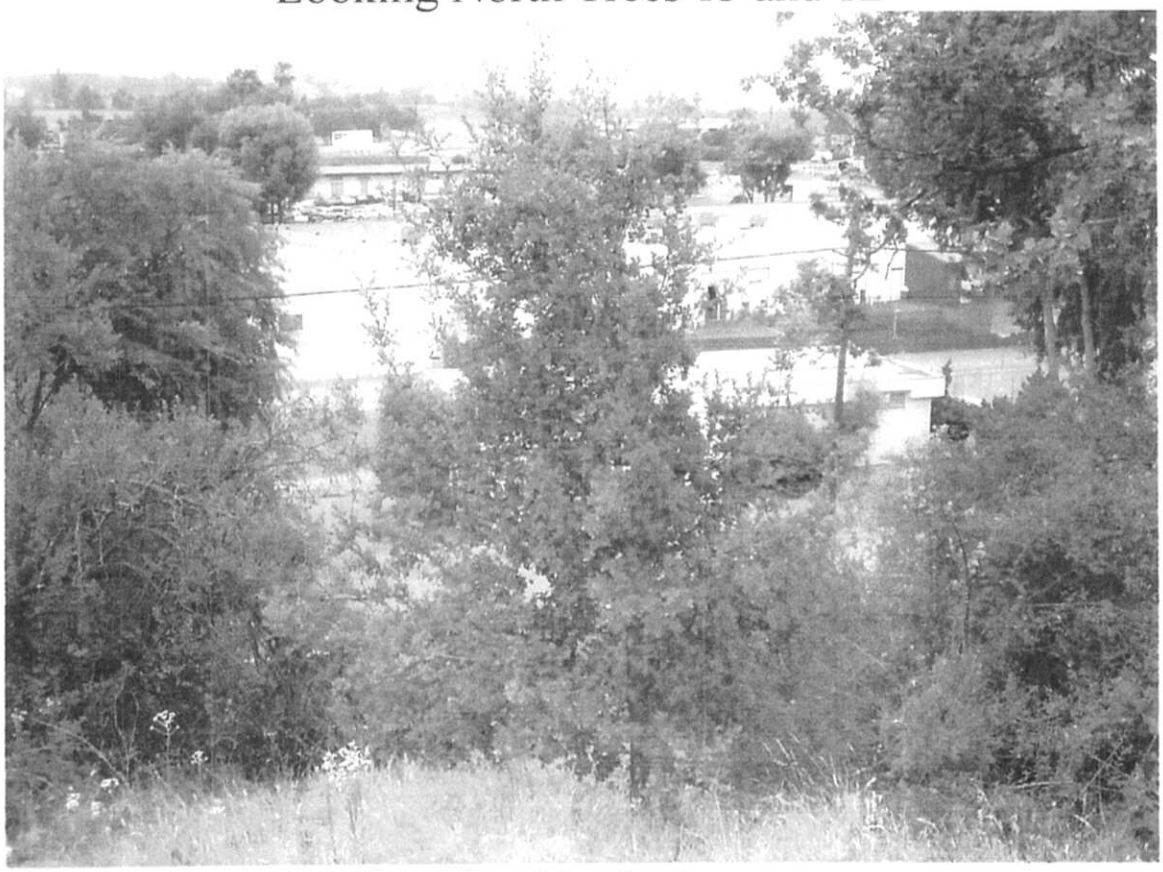
Looking South Tree 8



Looking East Tree 9

Looking South Trees 10 and 11

Looking North Trees 13 and 12



Looking North Tree 14

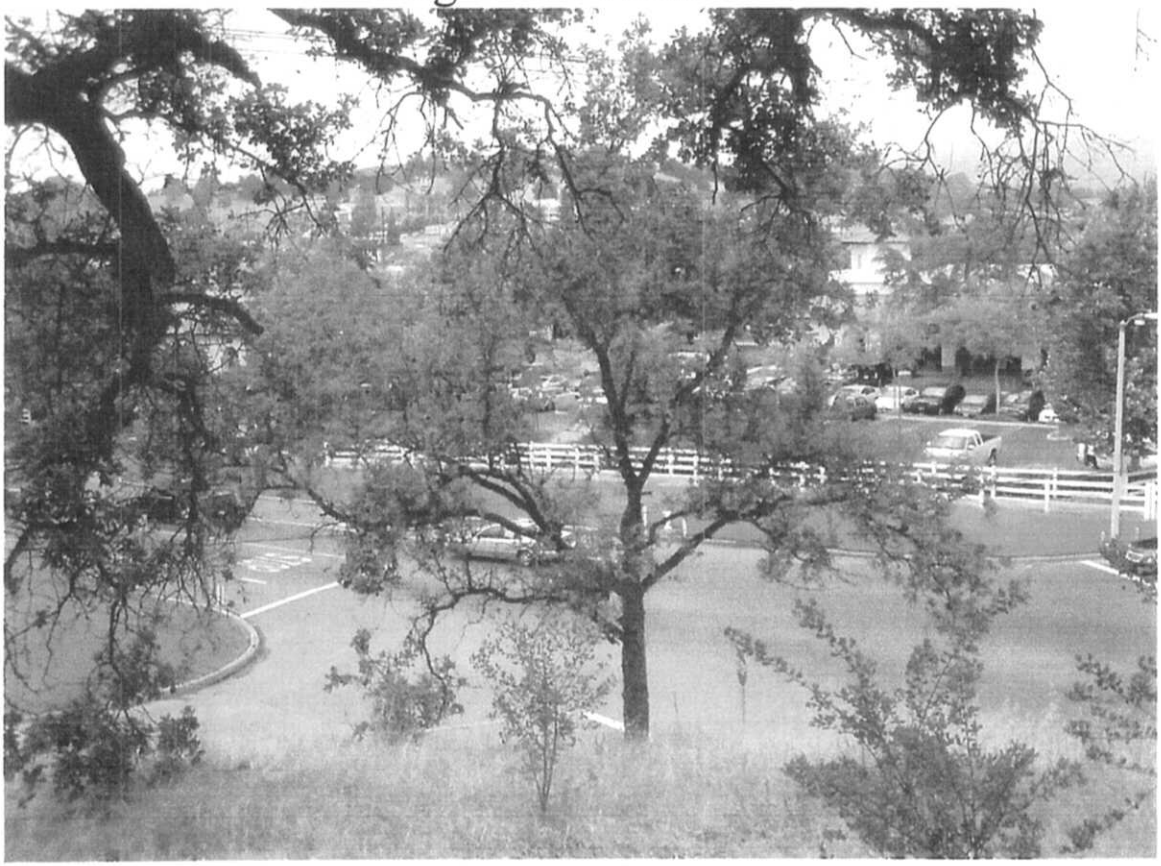
Looking North Tree 15

Looking North Tree 16

Looking North Tree 17

Looking North Tree 18

Looking North Trees 19 & 61



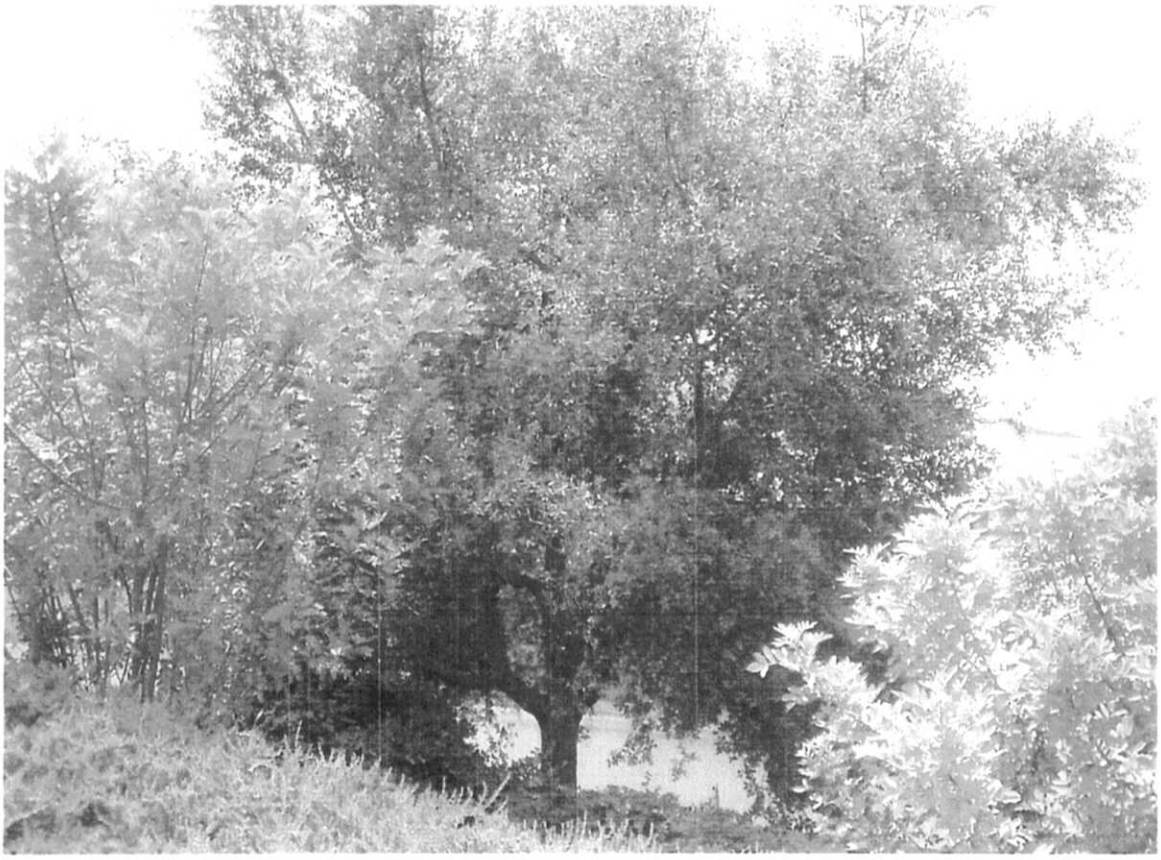
Looking North Tree 20

Looking South Tree 21

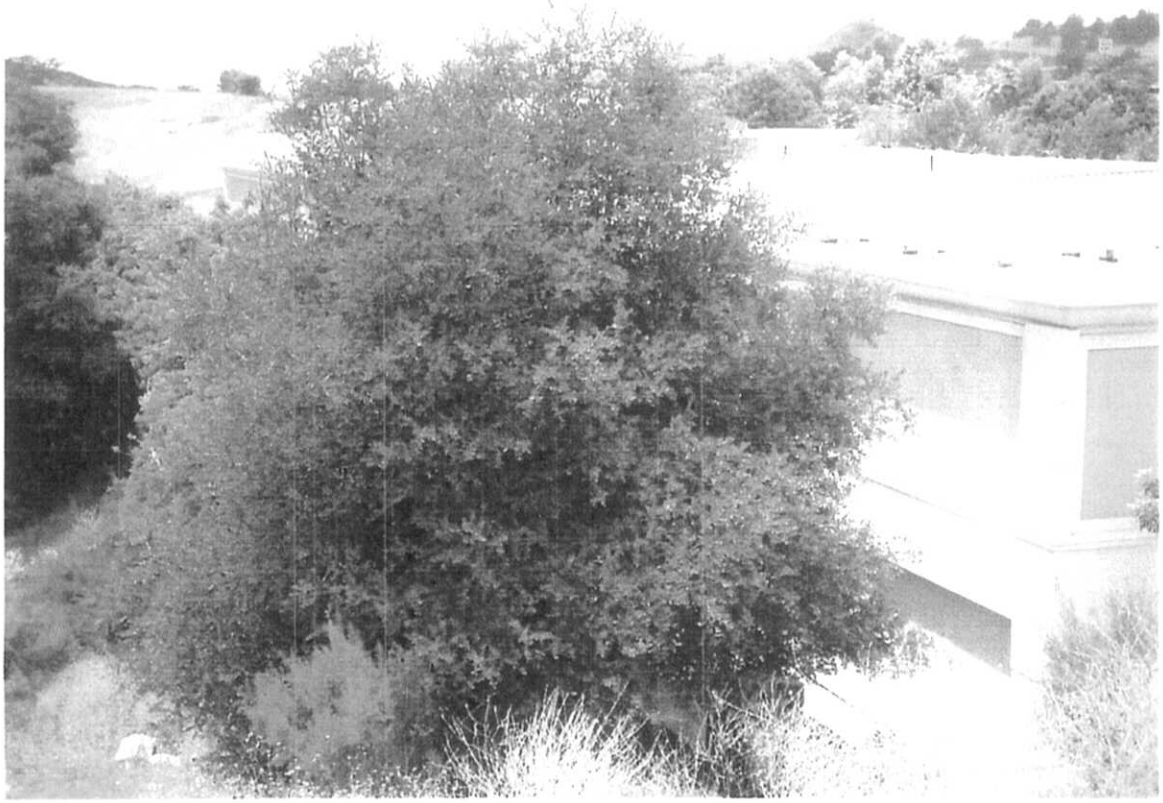
Looking West Tree 22

Looking West Tree 23

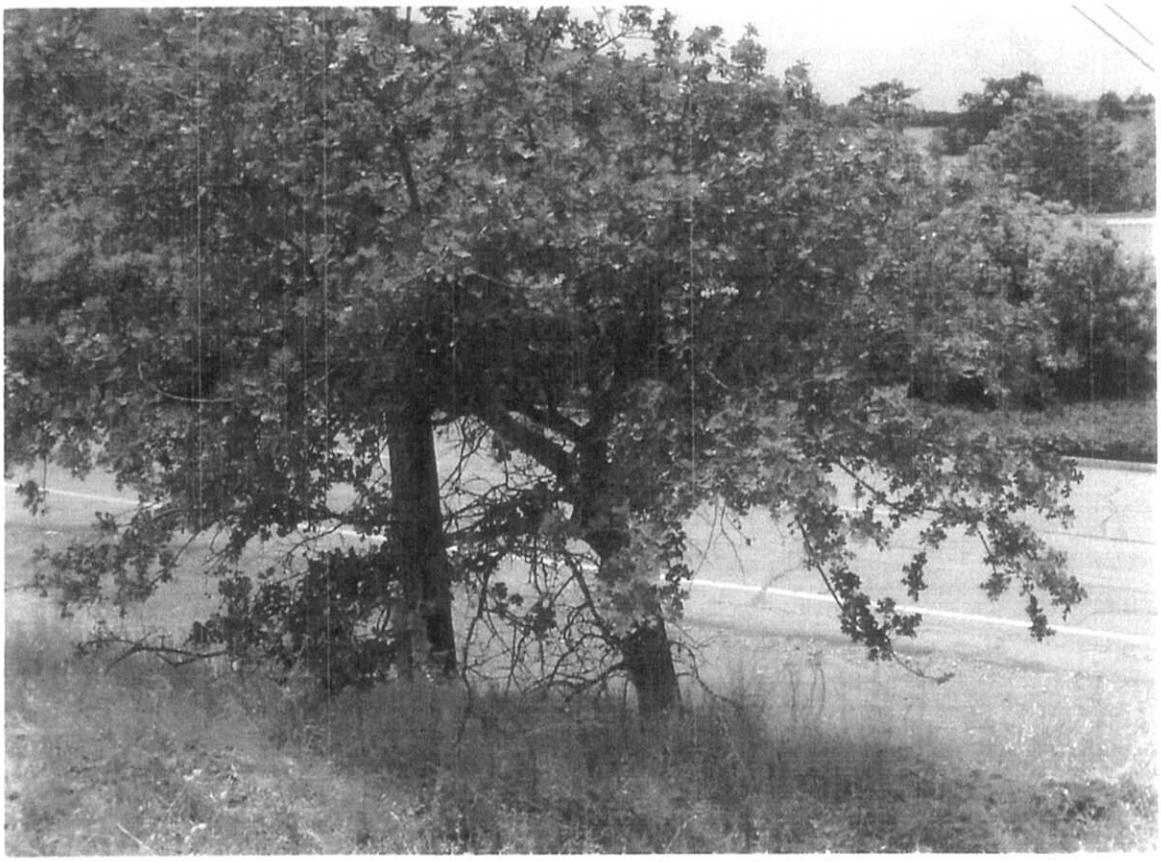
Looking West Tree 24



Looking West Tree 25



Looking West Tree 26

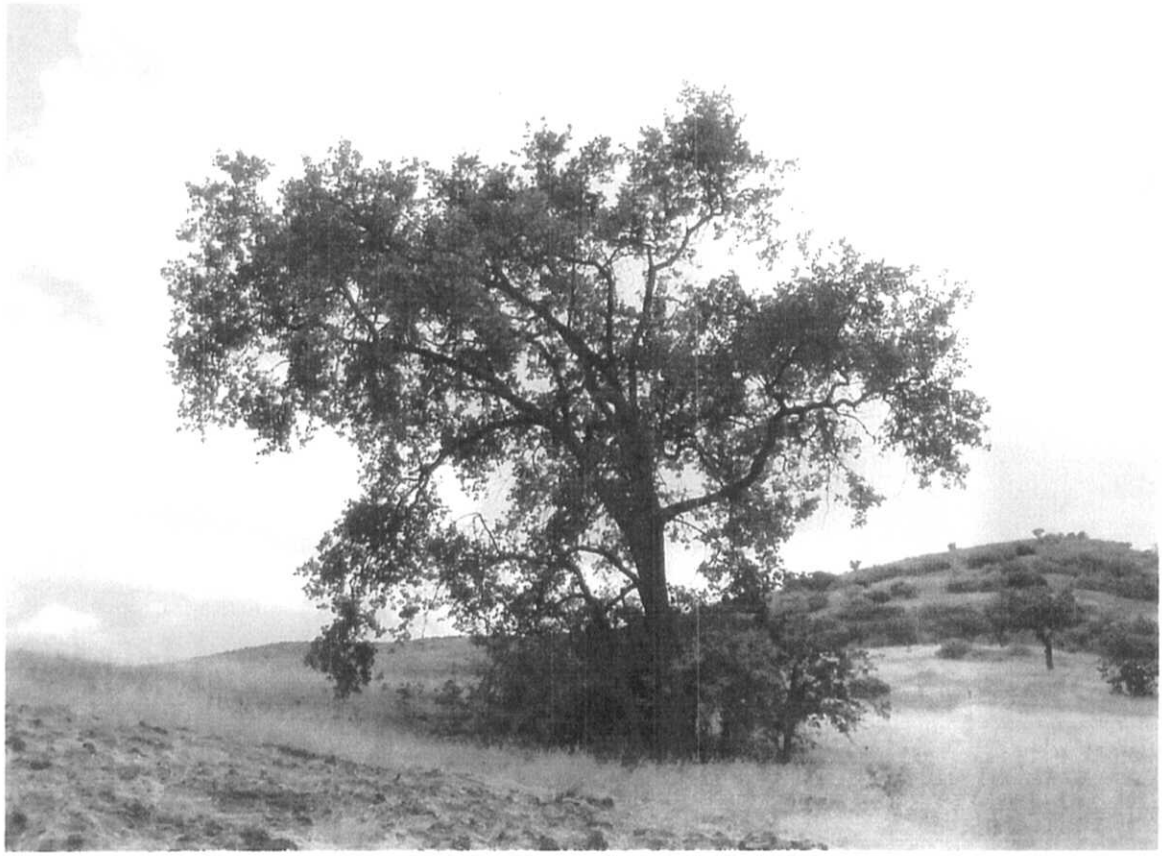


Looking West Tree 27

Looking Southwest Trees 31, 28 and 29

Looking West Tree 30

Looking South Tree 32



Looking South Trees 33-36

Looking South Tree 37

Looking East Tree 38

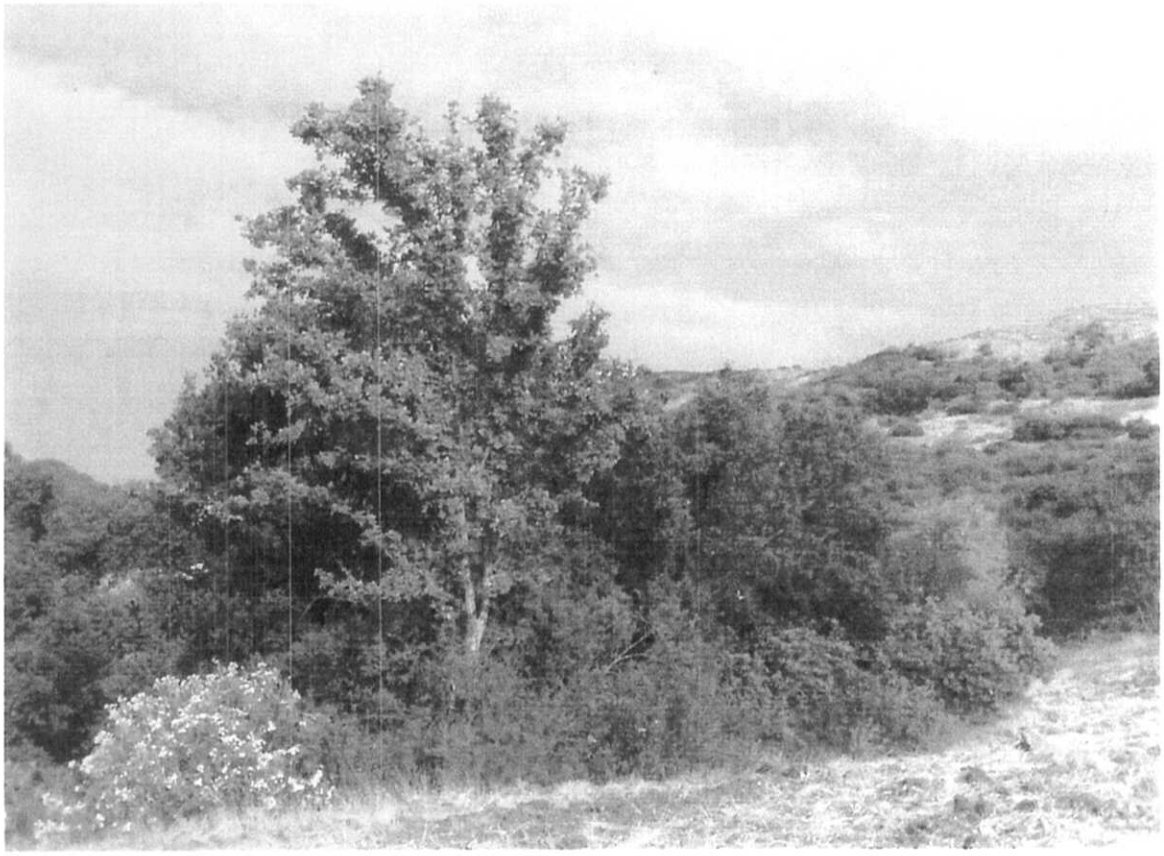
Looking Southeast Tree 39

Looking North Tree 40

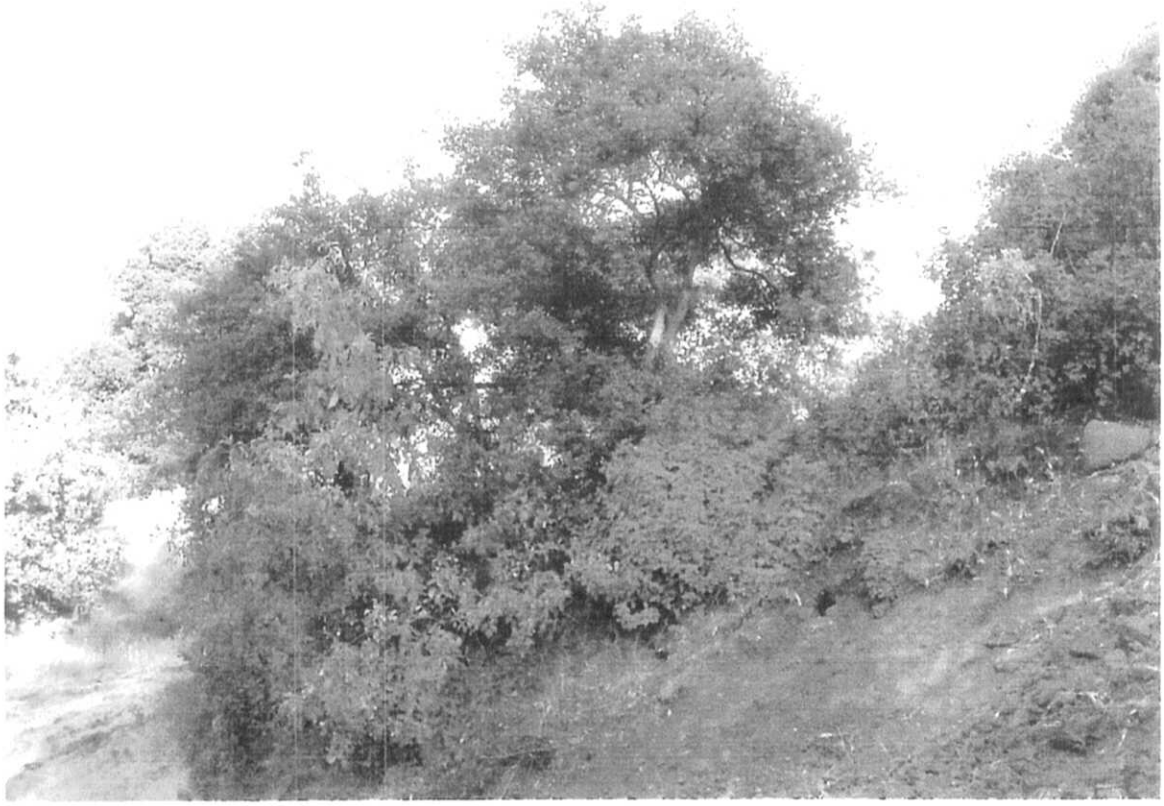
Looking East Tree 41

Looking East Tree Mass 42

Looking Southeast Trees 43-46

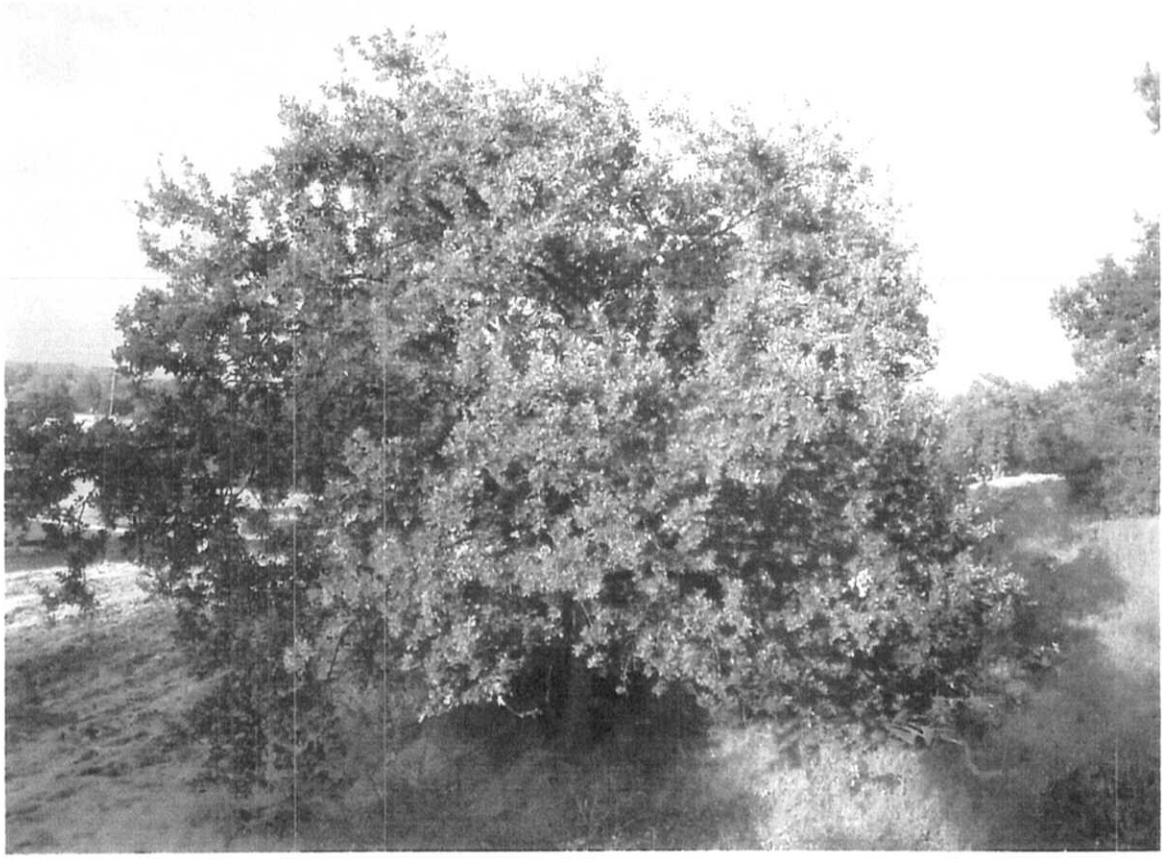


Looking East Trees 47 and 48

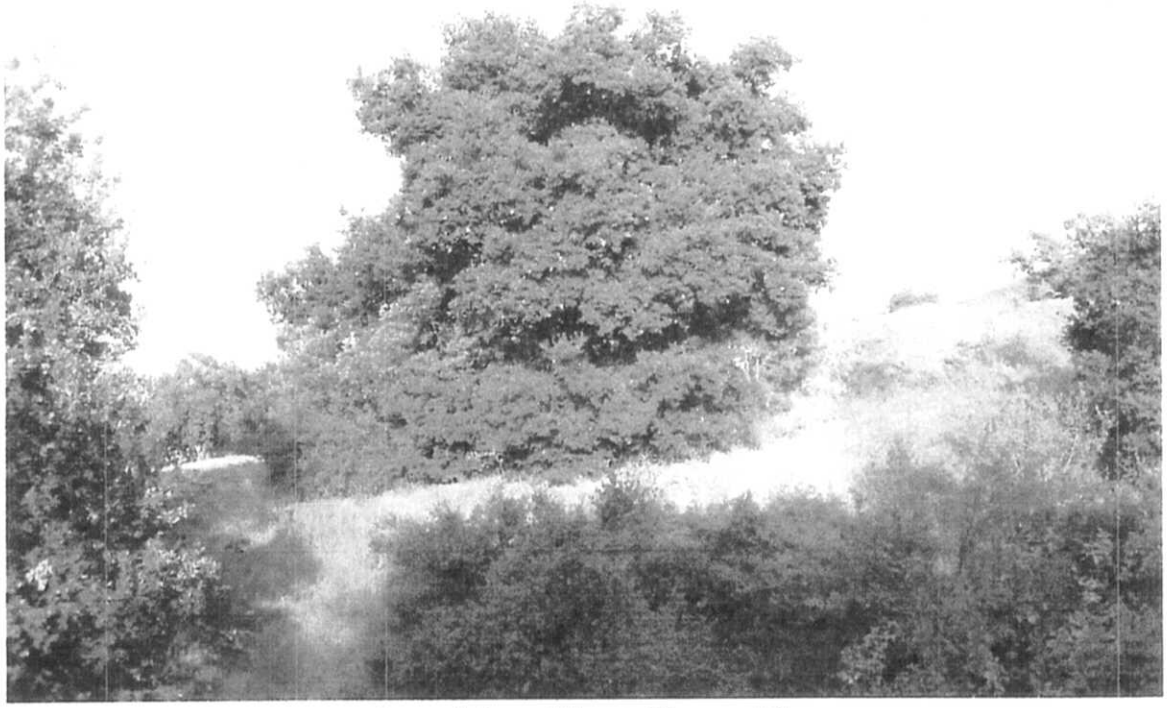


Looking East Tree 49

Looking Northwest Trees 50 and 51



Looking East Tree 52



Looking East Tree 53

Looking Southwest Tree 54

Looking Southwest Trees 55-59

Looking East Tree 60

TREE EVALUATIONS
(OAK TREES)

The inventory **Health** & **Aesthetic** Ratings of the trees are explained in the following:

The **Health** of the trees was visually determined from the following macroscopic inspection of signs and symptoms of disease.

A. **Excellent (31 to 35 points)** - This tree is a healthy & vigorous tree characteristic of its species and free of any visible signs of disease or pest infestation.
B. **Good (26 to 30 points)** - This tree is a healthy & vigorous tree. However, there are minor visible signs of disease and pest infestation.
C. **Fair (16 to 25 points)** - This tree is healthy in overall appearance, but there is a normal amount of disease and/or pest infestation.
D. **Poor* (11 to 15 points)** - This tree is characterized by exhibiting a greater degree of disease and/or pest infestation or structural instability than normal and appears to be in a state of decline.
E. **Very Poor* (6 to 10 points)** - This tree exhibits extensive signs of dieback.
F. **Dead* (0 points)** - This tree exhibits no signs of life at the time of field evaluation.

* A tree rating of "D" and lower is in low vigor and naturally a meaningful level of recovery is doubtful. Removal should be considered if it is within the proposed development.

The **Aesthetic** quality of the trees was visually determined from the following overall inspection of appearance.

A. **Excellent** - This tree is visually symmetrical, having the ideal form and appearance for the species.
B. **Good to Fair** - This tree, though non-symmetrical, has an appealing form for the species with very little dieback of foliage or twigs/branches.
C. **Poor** - This tree is non-symmetrical for the species with an unappealing form and/or has much dieback of foliage and twigs/branches.
D. **Very Poor** - This tree has few, if any, positive characteristics and may detract from the beauty of the landscape.

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	TREE NUMBER 1	2	3	4	5	6	7	8	9	10
CROWN DEVELOPMENT											
Well Balanced	5 points	X				X	X	X		X	
Lacking Natural Symmetry	3 points		X	X	X				X		X
Lacking a Full Crown	1 point										
TRUNK CONDITION											
Sound & Solid	5 points	X	X	X	X	X	X	X	X	X	X
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points										
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X	X	X	X	X	X	X	X	
Many Structurally Dead or Broken Branches	1 point										X
TWIG GROWTH											
Typical for Species & Age	5 points	X	X	X	X	X	X	X	X	X	
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point										X
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X	X	X	X	X	X	X	X	
Major Deficiency Symptoms	1 point										X
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X	X	X	X	X	X	X	X	X
Severe Infestation	1 point										
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X	X	X	X	X	X	X	X	X
Severe Root Problems	1 point										
	TOTAL POINTS	27	25	25	25	27	27	27	25	27	15
	Aesthetic Grade	A	C	C	C	B	B	B	C	B	D

ADDITIONAL COMMENTS P.O. = Poison Oak w/in root zone area

1	2	3	4	5	6	7	8	9	10
QL 36"x45'	QL 23", 18½", G3'	QA 27"x25'	QA 16", 9½"x25', T, Bo, G	QA 32"x25'	QL 9", 2"x15', G	QL 8"x12'	QL 3"x10'	QA 5", 2"x3"x10', TG, P.O.	QA 11", 10½", 6"x20', Bo, *, E, P.O.

QL = Quercus lobata
G = Galls
QA = Quercus agrifolia
T = Termites
Bo = Borers
TG = Twig girdlers
* = 13" branch fallen
E = Exfoliations

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	11	12	13	14	15	16	17	18	19	20
CROWN DEVELOPMENT											
Well Balanced	5 points			X	X	X	X	X	X	X	X
Lacking Natural Symmetry	3 points	X	X								
Lacking a Full Crown	1 point										
TRUNK CONDITION											
Sound & Solid	5 points	X	X	X	X	X	X	X		X	X
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points								X		
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X	X	X	X	X	X	X	X	X
Many Structurally Dead or Broken Branches	1 point										
TWIG GROWTH											
Typical for Species & Age	5 points	X	X	X	X	X	X	X	X	X	X
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point										
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X	X	X	X	X	X	X	X	X
Major Deficiency Symptoms	1 point										
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X	X	X	X	X	X	X	X	X
Severe Infestation	1 point										
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X	X	X	X	X	X	X	X	X
Severe Root Problems	1 point										
	TOTAL POINTS	25	25	27	27	27	27	27	22	27	27
	Aesthetic Grade	C	C	B	B	B	B	B	A	B	B

ADDITIONAL COMMENTS PD. = Poison Oak w/in root zone area

QA = Quercus agrifolia
TG = Twig girdler
QL = Quercus lobata
G = Galls
TC = Trunk Cavity
BC = Branch Cavities
* = Old tag # 30

11	12	13	14	15	16	17	18	19	20
PD, 6½", G, 2x5"x12', TG, QA	QL, 10", 8½", 5"x12'	QL, 11½", 11"x18'	QA, 2½"x9'	QL, 4"x12", G	QL, 10½"x20'	QA, 13½", 7"x15', TG,	QL, 22"x25', TC, BC	QL, 27"x25', G, BC, *	QL, 7½", 3"x18', G

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	TREE NUMBER 21	22	23	24	25	26	27	28	29	30
CROWN DEVELOPMENT											
Well Balanced	5 points	X	X	X	X	X	X				X
Lacking Natural Symmetry	3 points							X	X	X	
Lacking a Full Crown	1 point										
TRUNK CONDITION											
Sound & Solid	5 points	X	X	X	X	X	X	X	X	X	
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points										X
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X	X	X	X	X	X	X	X	X
Many Structurally Dead or Broken Branches	1 point										
TWIG GROWTH											
Typical for Species & Age	5 points	X	X	X	X	X	X	X	X	X	X
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point										
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X	X	X	X	X	X	X	X	X
Major Deficiency Symptoms	1 point										
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X	X	X	X	X	X	X	X	X
Severe Infestation	1 point										
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X	X	X	X	X	X	X	X	X
Severe Root Problems	1 point										
TOTAL POINTS		27	27	27	27	27	27	25	25	25	22
Aesthetic Grade		A	B	B	B	B	B	C	C	C	B
		QA 27"x 45', TG	QA 7"x 16'	QA 6"x 15'	QA 9"x 18'	QA 13"x 20'	QA 10½", 4", 2"x 20'	QL 7"x 12', G	QL 11"x 20'	QL 3½", 2"x 10', G	QL 37"x 30', TC

ADDITIONAL COMMENTS

QA = Quercus agrifolia
QL = Quercus lobata
G = Galls
TC = Trunk Cavity
TG = Twig girdler

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	31	32	33	34	35	36	37	38	39	40
CROWN DEVELOPMENT											
Well Balanced	5 points	X	X		X						
Lacking Natural Symmetry	3 points					X	X	X	X	X	X
Lacking a Full Crown	1 point			X							
TRUNK CONDITION											
Sound & Solid	5 points	X	X		X	X	X	X		X	X
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points			X					X		
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X		X	X	X	X	X	X	X
Many Structurally Dead or Broken Branches	1 point			X							
TWIG GROWTH											
Typical for Species & Age	5 points	X	X		X	X	X	X	X	X	X
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point			X							
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X		X	X	X	X	X	X	X
Major Deficiency Symptoms	1 point			X							
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X		X	X	X	X	X	X	X
Severe Infestation	1 point			X							
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X		X	X	X	X	X	X	X
Severe Root Problems	1 point			X							
	TOTAL POINTS	27	27	6	27	25	25	25	20	25	25
	Aesthetic Grade	B	B	D	B	C	C	C	C	C	C
		QA 4"+3"+2"x12'	QL 6"+5½"x15', G,	QL 4½"x10'	QL 15"x25'	QL 2"x9'	QL 3½"x7'	QL 2x2½"x10', G	QL 22"x18', L, TC, BC,	QL 18"x20', *	QL 5½"+3½"x10'

ADDITIONAL COMMENTS

QA = Quercus agrifolia
QL = Quercus lobata
G = Gall
L = Leaning
TC = Trunk Cavity
BC = Branch Cavities
* = Old tag #22

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	TREE NUMBER 41	42	43	44	45	46	47	48	49	50
CROWN DEVELOPMENT											
Well Balanced	5 points								X	X	X
Lacking Natural Symmetry	3 points	X	X	X	X	X	X	X			
Lacking a Full Crown	1 point										
TRUNK CONDITION											
Sound & Solid	5 points		X	X	X	X	X	X	X	X	X
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points	X									
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X	X	X	X	X	X	X	X	X
Many Structurally Dead or Broken Branches	1 point										
TWIG GROWTH											
Typical for Species & Age	5 points	X	X	X	X	X	X	X	X	X	X
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point										
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X	X	X	X	X	X	X	X	X
Major Deficiency Symptoms	1 point										
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X	X	X	X	X	X	X	X	X
Severe Infestation	1 point										
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X	X	X	X	X	X	X	X	X
Severe Root Problems	1 point										
TOTAL POINTS		20	25	25	25	25	25	25	27	27	27
Aesthetic Grade		C	C	C	C	C	C	C	B	B	B

ADDITIONAL COMMENTS P.O. = Poison Oak w/in canopy (root zone)

QL = Quercus lobata

QD = Quercus dumosa

TC = Trunk Cavity

BC = Branch Cavities

QA = Quercus agrifolia

41	42	43	44	45	46	47	48	49	50
QL	QD	QL	QL	QL	QL	QL	QA	QD	QA
Old tags # 20 19"x20' TC, BC,	92x22= Mass 30 Plants	7½", 7"x18'	8½"x20'	4½", 3"x16'	7"x20'	7"x20'	P.O. 10", 22½", 11½"x20'	2", 5"x2"=7'	24"x25'

TREE EVALUATIONS

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

FACTORS	POINTS	51	52	53	54	55	56	57	58	59	60
CROWN DEVELOPMENT											
Well Balanced	5 points	X	X	X							X
Lacking Natural Symmetry	3 points				X	X	X	X	X	X	
Lacking a Full Crown	1 point										
TRUNK CONDITION											
Sound & Solid	5 points	X	X	X	X	X	X	X	X	X	X
Section of Bark Missing:											
Less Than ¼ Around	4 points										
¼ to ½ Around	3 points										
½ Or More Around	2 points										
Stump with New Basal Growth	1 point										
Extensive Decay or Hollow Trunk	0 points										
BRANCH STRUCTURE											
No Defects	5 points										
Dieback (Limited)	4 points										
Few Structurally Dead or Broken Branches	3 points	X	X	X	X	X	X	X	X	X	X
Many Structurally Dead or Broken Branches	1 point										
TWIG GROWTH											
Typical for Species & Age	5 points	X	X	X	X	X	X	X	X	X	X
Less Than ½ Normal	3 points										
Growth Greatly Reduced	1 point										
FOLIAGE											
Normal Size & Color	5 points										
Minor Deficiency Symptoms	3 points	X	X	X	X	X	X	X	X	X	X
Major Deficiency Symptoms	1 point										
INSECTS & DISEASES											
No Insects or Diseases Apparent	5 points										
Few Controllable Insects/Diseases Apparent	3 points	X	X	X	X	X	X	X	X	X	X
Severe Infestation	1 point										
ROOTS											
No Root Problems Apparent	5 points										
Minor Root Problems	3 points	X	X	X	X	X	X	X	X	X	X
Severe Root Problems	1 point										
	TOTAL POINTS	27	27	27	25	25	25	25	25	25	27
	Aesthetic Grade	B	B	B	C	C	C	C	C	C	B
		QA 14" 3x7"x18'	QL 12" 10"x20'	QA 19"x20'	QA 8" 7" 6" 5"x12'	QL 3x15' G	QL 4"x15'	QA 4"x10'	QL 3½"x15'	QA 4½"x6'	QA 25½"x25' Bo

ADDITIONAL COMMENTS

QA = Quercus agrifolia
QL = Quercus lobata
G = Galls
Bo = Borers

TREE EVALUATIONS

7/7

Date of Inspection 6-6-04

TOTAL POINTS	CLASS	GRADE
31 to 35	Excellent	A
26 to 30	Good	B
16 to 25	Fair	C
11 to 15	Poor	D
6 to 10	Very Poor	E
0	Dead	F

TREE NUMBER	C1									
FACTORS / **POINTS**										
CROWN DEVELOPMENT										
Well Balanced – 5 points Lacking Natural Symmetry – 3 points Lacking a Full Crown – 1 point	5									
TRUNK CONDITION										
Sound & Solid – 5 points Section of Bark Missing: Less than ¼ Around – 4 points ¼ to ½ Around – 3 points ½ or More Around – 2 points Stump with New Basal Growth – 1 point Extensive Decay or Hollow Trunk – 0 points	5									
BRANCH STRUCTURE										
No Defects – 5 points Dieback (Limited) – 4 points Few Structurally Dead or Broken Branches – 3 points Many Structurally Dead or Broken Branches – 1 point	4									
TWIG GROWTH										
Typical for Species & Age – 5 points Less than ½ Normal – 3 points Growth greatly reduced – 1 point	5									
FOLIAGE										
Normal Size & Color – 5 points Minor Deficiency Symptoms – 3 points Major Deficiency Symptoms – 1 point	5									
INSECTS & DISEASES										
No Insects or Diseases Apparent – 5 points Few Controllable Insects/Diseases Apparent – 3 points Severe Infestation – 1 point	3									
ROOTS										
No Root Problems Apparent – 5 points Minor Root Problems – 3 points Severe Root Problems – 1 point	3									
TOTAL POINTS	30									
Aesthetic Grade	A									

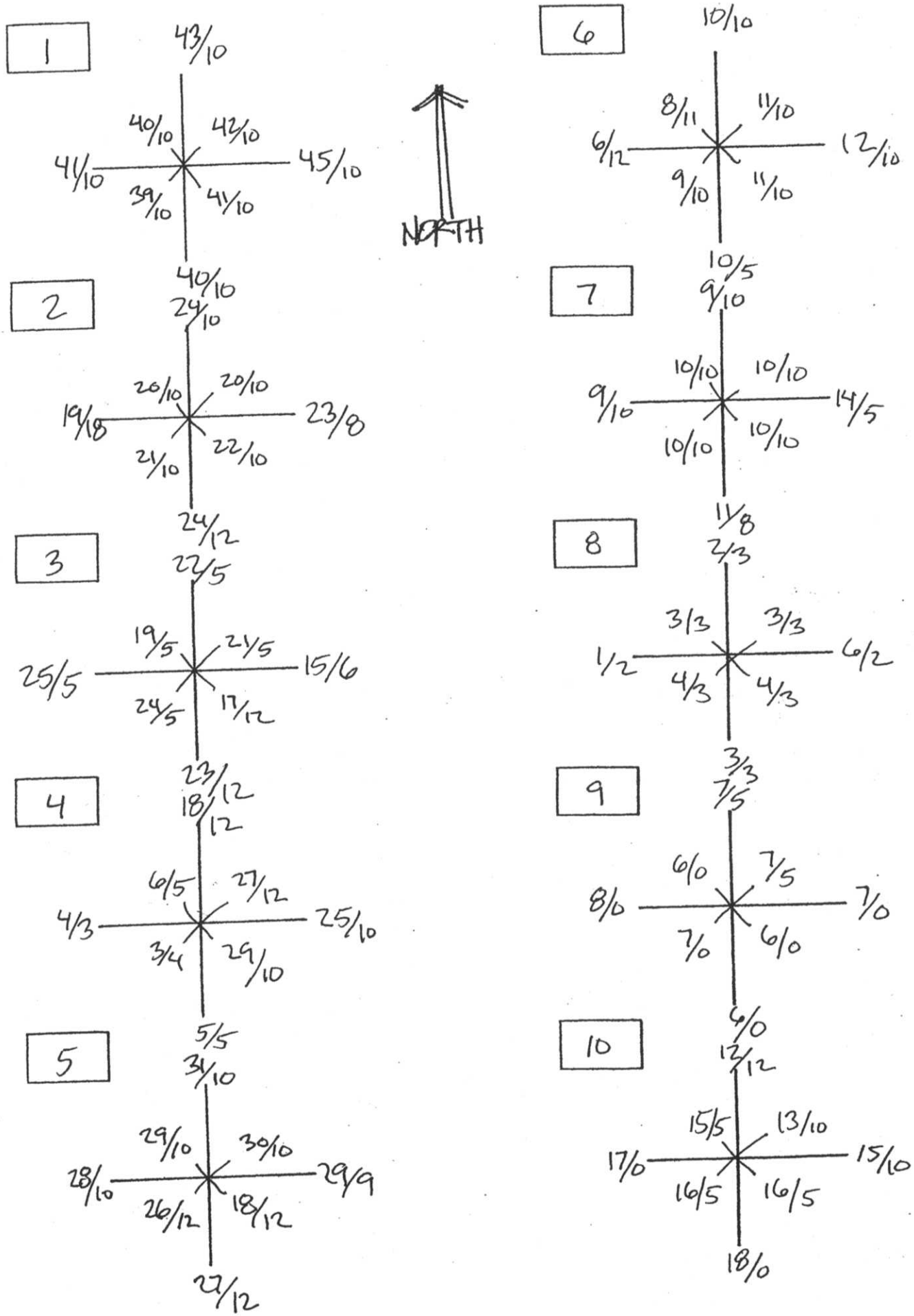
ADDITIONAL COMMENTS

QA = Quercus agrifolia

QA 2" 4", 8' on steep slope										

TREE CANOPY MEASUREMENTS

(OAK TREES)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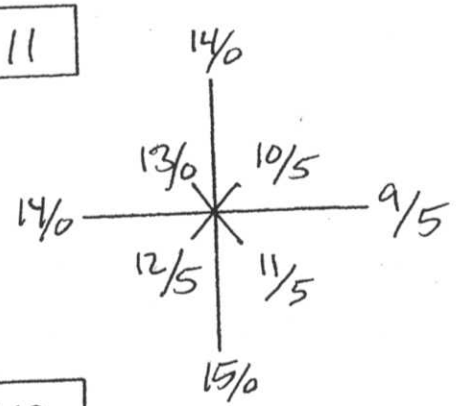

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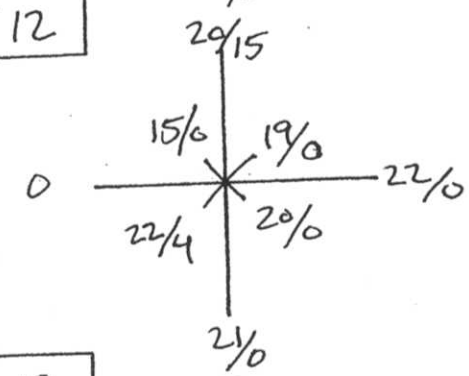

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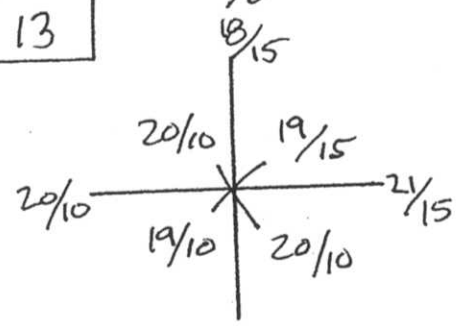

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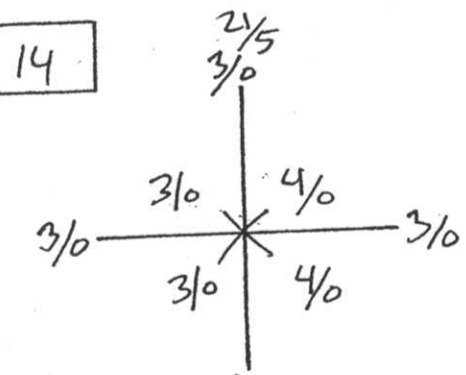

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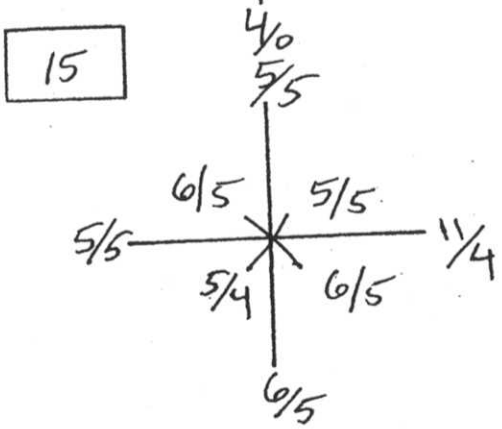

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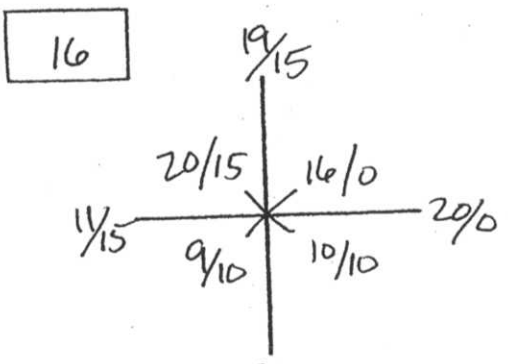

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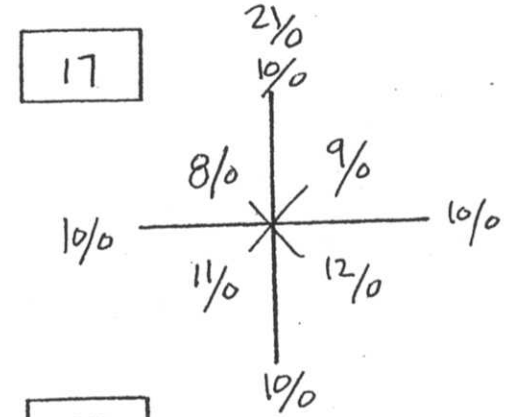

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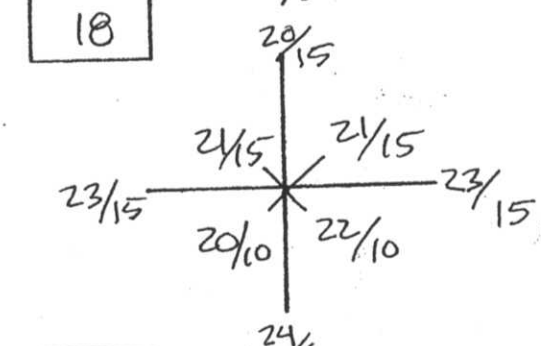

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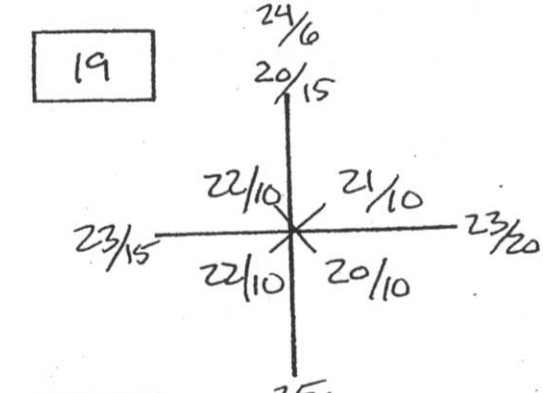

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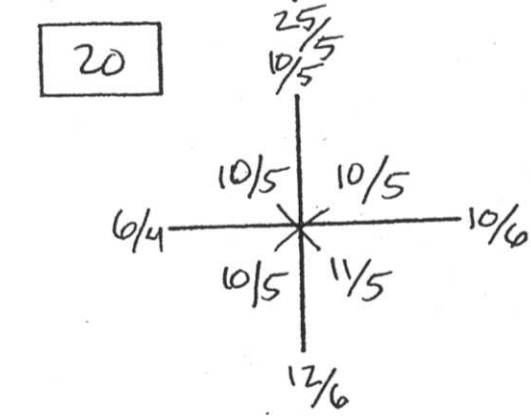

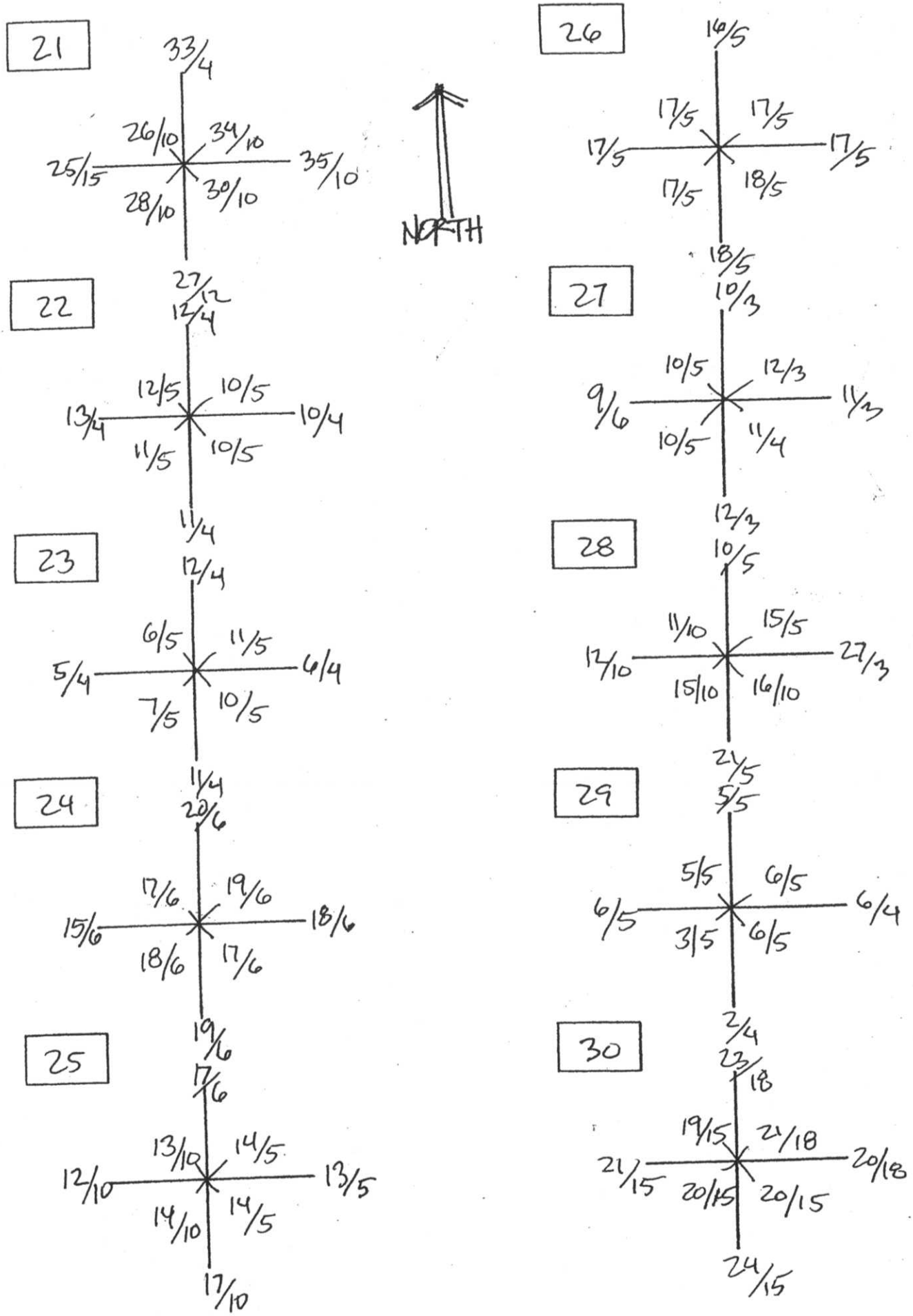
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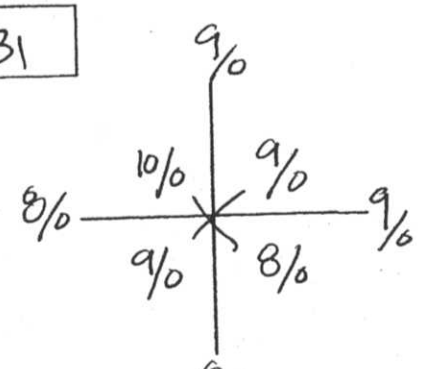

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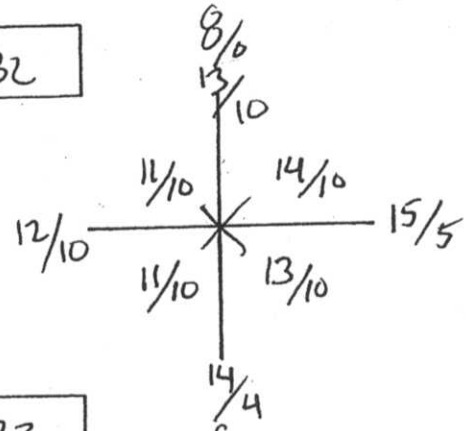

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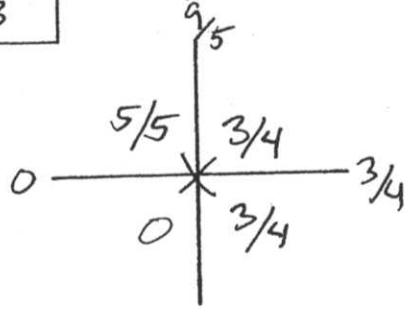

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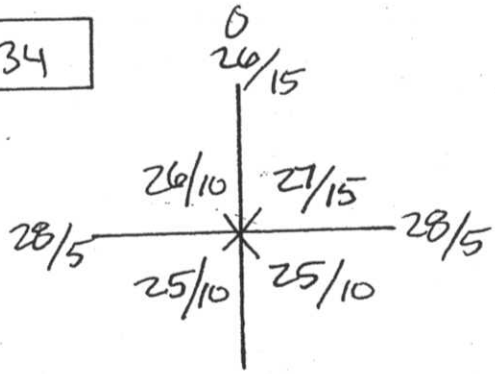

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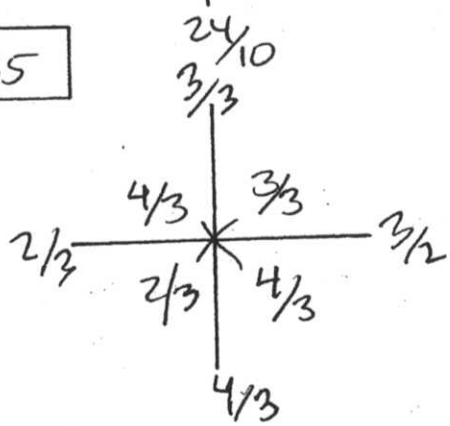

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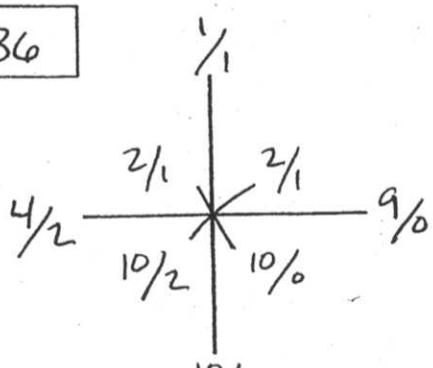

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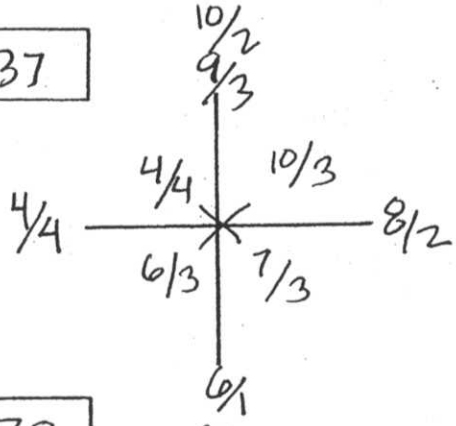

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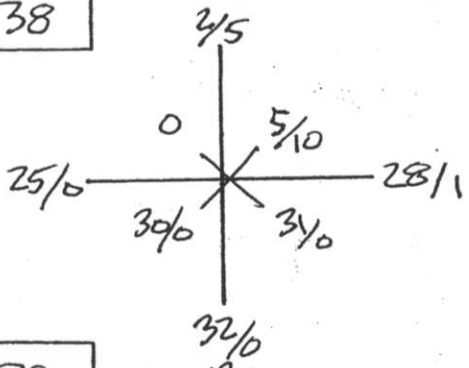

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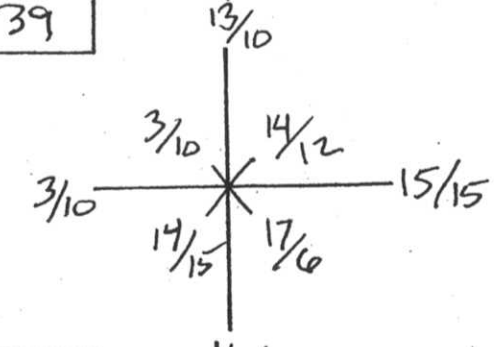

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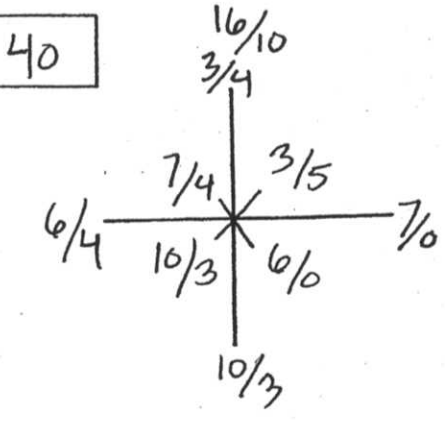

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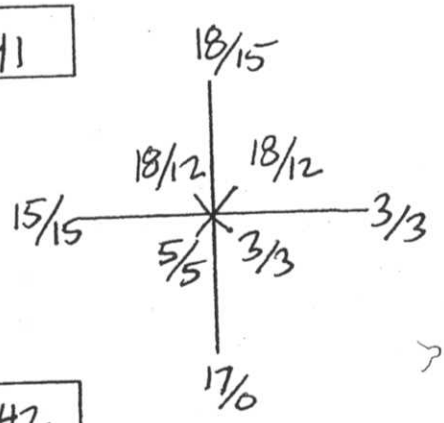

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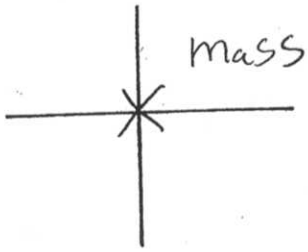

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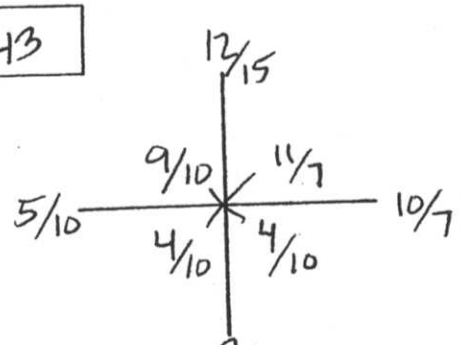

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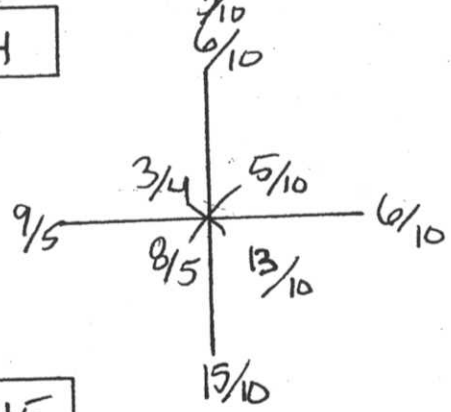

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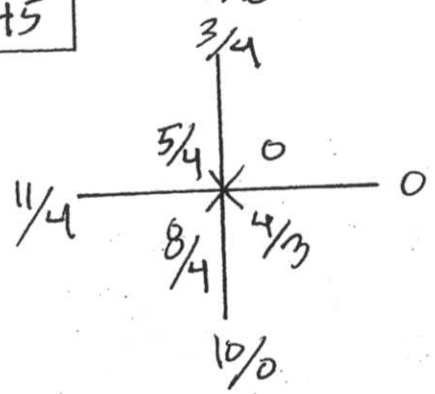

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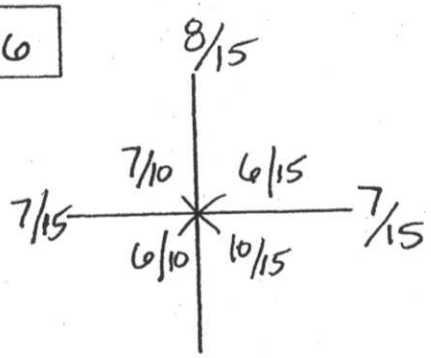

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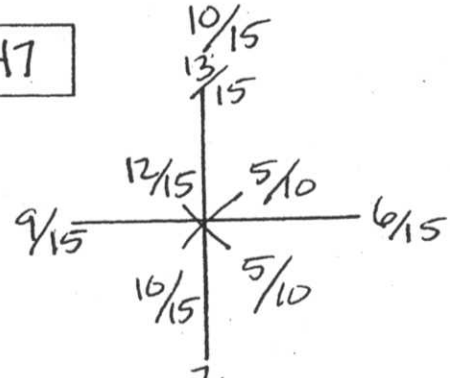

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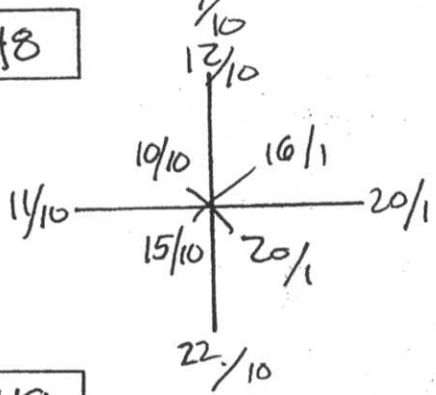

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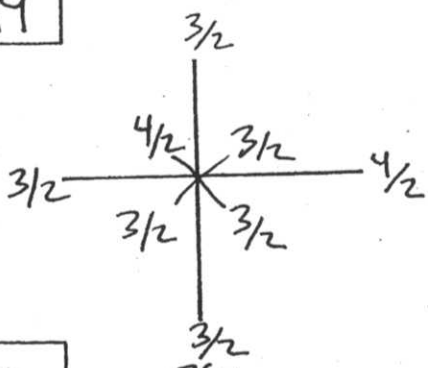

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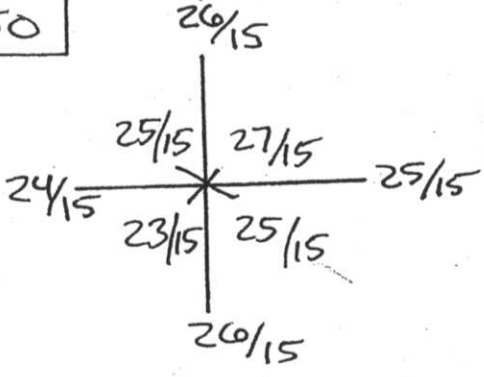

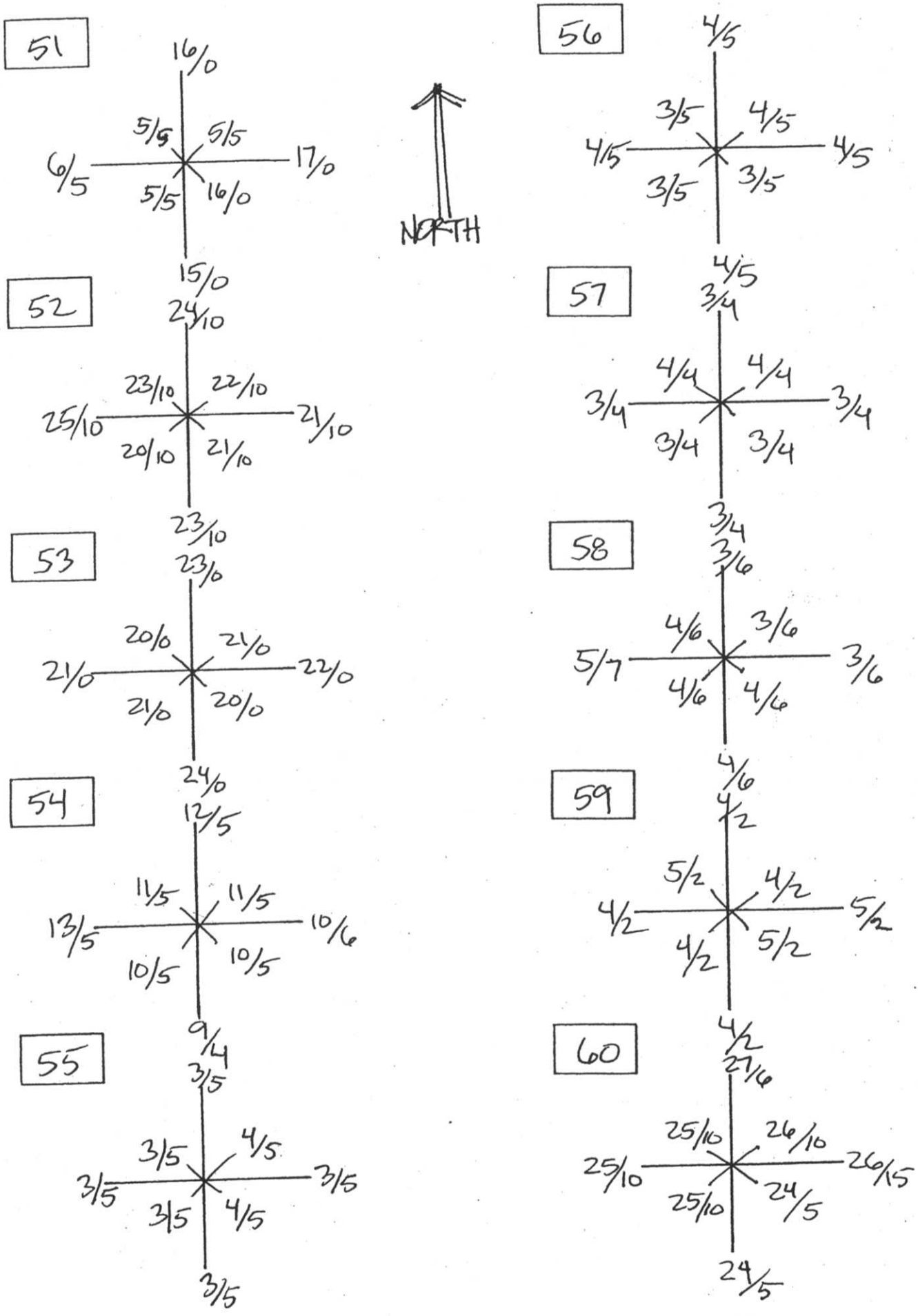
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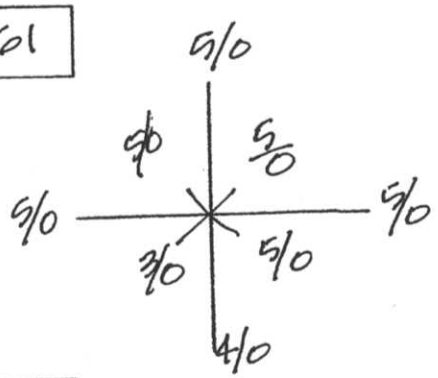

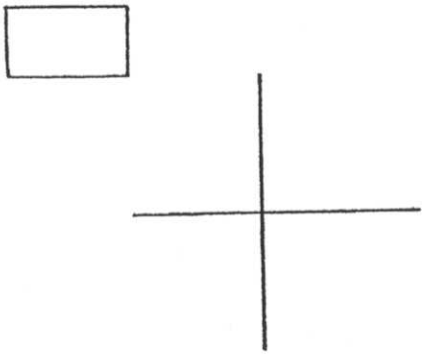

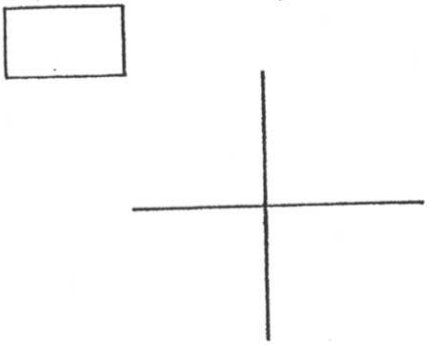

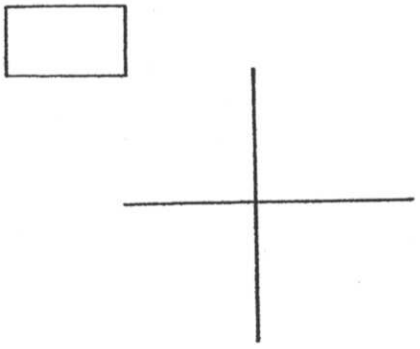

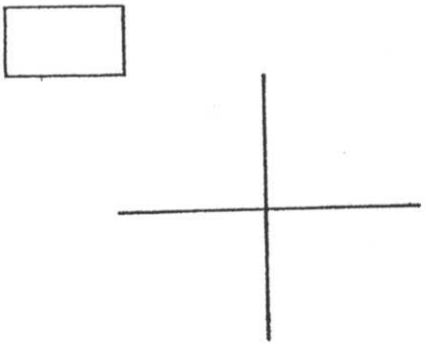

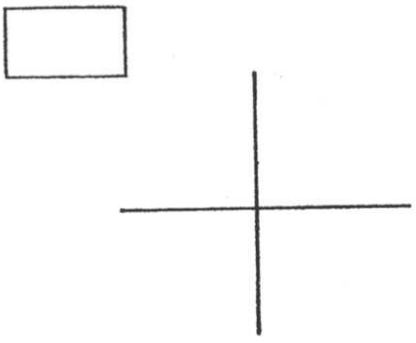

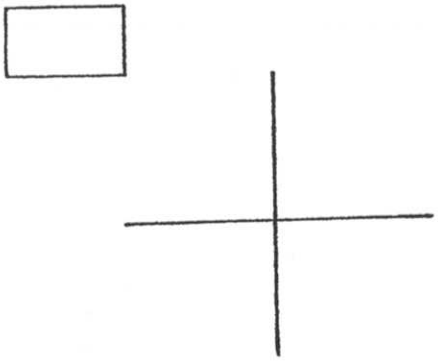

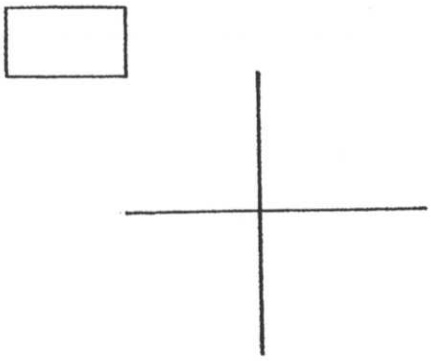

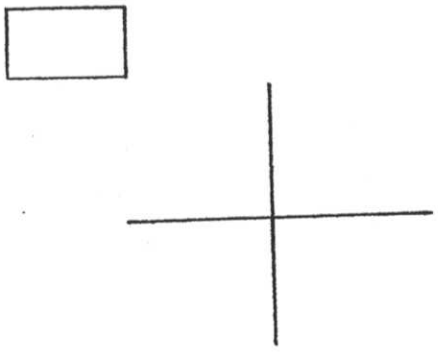

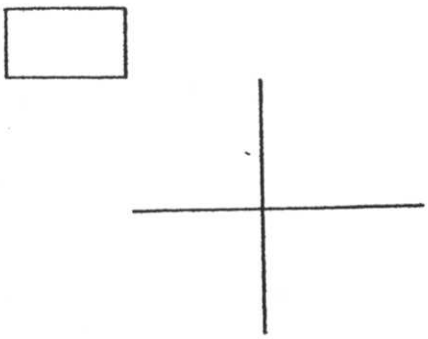

Appendix C

Goetechnical Studies

1. Geologic Study for Proposed Office Building Complex, Cornerstone Project, Southeast Corner of Agoura Road and Cornell Road, City of Agoura Hills, California. Prepared by Terry A. Mayer, August 2004.
2. Soil Engineering Investigation for Proposed Office, Retail, Residential Buildings at Southeast Corner of Agoura Road and Cornell Road, Agoura Hills, CA. Prepared by Heathcote Geotechnical, September 2004.
3. Shallow Seismic Refraction Traverse Surveys for Evaluation of the Rock Hardness, Proposed Multi-use Development, Southeast Corner of Kanan and Agoura Roads, Agoura Hills, California. Prepared by Gorian & Associates, Inc., August 2001.
4. Feasibility Level Geotechnical Site Investigation, Vesting Tentative Parcel Map No. 21730, City of Agoura Hills, California. Prepared by Gorian & Associates, Inc., April 1990.
5. Engineering Geology Review of Grading Plan Review and Responses to Geological and Geotechnical Review Sheets, Creekside Center, City of Agoura Hills. Prepared by Slosson and Associates, November 1996.
6. Engineering Geology Review of Geotechnical Feasibility Review of Creekside Center Preliminary Grading/Drainage Plan Including Responses to City Technical Reviews SW Corner of Kanan Road and Agoura Road. Prepared by Slosson and Associates, August 1996.

TERRY A. MAYER
CONSULTING GEOLOGIST
2902 GROVE STREET
VENTURA, CALIFORNIA 93003

805-653-5670

August 23, 2004

Mr. Fred Heathcote
Heathcote Geotechnical
1884 Eastman Avenue, Suite 105
Ventura, California 93004

Subject: Geologic Study for Proposed Office Building Complex,
Cornerstone Project, Southeast Corner of Agoura Road and Cornell Road,
City of Agoura Hills, California

Project No: 040802

References: see enclosed Plate R

Dear Mr. Heathcote:

In accordance with your request, our firm has undertaken a study of the geologic conditions which occur on and adjacent to the subject site. Our purpose was to evaluate the distribution and characteristics of the earth materials and geologic structure which occur at the site so that we might assess their impact upon the proposed construction of a proposed office building and appurtenances.

The scope of work for this project included 1) review of our files and available references, 2) geologic mapping of the site and immediate vicinity, 3) review and logging of seven (7) exploratory excavations 4) construction of four (4) geologic structure sections and 5) preparation of this report.

This field portion of this study was conducted on June18, 2004. Geologic data obtained during the study is plotted on the attached 1-inch to 40-foot scale Geologic Site Map (Plate 1.1) and on the attached 1-inch to 500-foot Regional Geologic Map (Plate 1.2). Logs of the test pits are included as Plates 2.1 through 2.7. Geologic sections are included as Plates 3.1through 3.2.

Site Development

It is our understanding that office buildings, parking lots, parking structures and appurtenances are proposed to be constructed on the site. Grading is anticipated in order to establish desired grades. Retaining walls are to be utilized to accommodate some of the proposed grade changes.

Project Location and Description

The site is located on the southeast intersection of Agoura Road and Cornell Road in the City of Agoura Hills, California. The site is currently vacant and at the time of our site investigation had been disced for weed abatement. Oak trees are scattered throughout the site. The site is irregular in shape and ascends from both Agoura Road and Cornell Road. Slope gradients range from 2:1(horizontal to vertical) to less than 4:1(horizontal to vertical). Drainage occurs as sheet flow over the site in a general northerly direction via existing natural contours.

FINDINGS

Lithology

As observed on the site and encountered in exploratory excavations and outcrops excavations, earth materials consist of extrusive Conejo Volcanics which are in part overlain by terrace deposits. A thin soil layer mantles the site.

Natural Soil - A veneer of soil covers the project site. The soil ranges in thickness from 1 foot to 3 ½ feet and consists of light brown to chocolate brown clayey silt with abundant volcanic fragments, and minor to moderate quantities of roots. The soil was found to be dry to damp and are generally loose.

Terrace Deposits (Qt) - Terrace deposits cap the lower part of the lower portion of the site. These deposits were found to consist of rounded to sub-angular volcanic boulders and gravel in a clayey silt matrix. The sediments were found to be damp and dense.

Conejo Volcanics (Tcb/Tcab) - Interbedded andesitic-dacite flow breccias and basalts underlie the site and are in part overlain by terrace deposits. The volcanic deposits were found to be light gray to light brown in color, crudely stratified gravel, cobble and boulder-size andesitic fragments. Bedding planes are moderately to poorly defined. These deposits are highly to moderately weathered, locally hard and slightly to moderately fractured. At the explored locations, the excavation of the volcanics ranged from relatively easy to practical refusal (maximum depth explored 9 feet). The rippabiltity of the earth materials between test pits and below the depths explored was not determined by this study.

Geologic Structure

The project site is located on the northern flank of the east-west trending Santa Monica

Mountains. Volcanic flow structures are poorly to moderately well-defined with bedding orientations ranging from approximately N75°W to N87°W with dips ranging from 56°N to 61°N.

Seepage and Groundwater

Neither seepage nor groundwater was encountered in our exploratory excavations and are not anticipated to interfere with construction activities. It should be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, and other factors not evident at the time of our study.

Faulting - Seismicity

The site is situated within an intricately block-faulted area of the Transverse Ranges. As with most of the mountain ranges in Southern California, this area is bordered by faults which are active, potentially active, and inactive. Faults, of most concern from a ground shaking viewpoint are the San Andreas, Malibu Coast, Simi-Santa Rosa, San Cayetano, Big Pine, Red Mountain and Oak Ridge faults. Each is capable of generating large to moderate earthquakes and of causing significant shaking at the site.

However, no significant and/or potentially active or active faults are known to underlie nor trend toward the site. The hazard of site damage as the result of ground rupture, caused by fault offset, is not anticipated.

Notwithstanding, the site, as with all sites in southern California, will experience significantly strong coseismic ground motions caused by activity on regional faults at some

time in the future.

Ground Shaking

Strong to severe ground shaking will be experienced in the project area if a large magnitude earthquake occurs on one of the nearby active or potentially active faults. Moderate to severe ground shaking due to a seismic event on a nearby fault could potentially cause damage to the proposed structure.

Fault Rupture

Surface rupture usually occurs along the traces of known active or potentially active faults, although many historic and recent events occurred on faults not previously known to be active. Inasmuch as no features indicative of on-site faulting were noted, the potential for damage as a result of ground rupture is considered to be low.

Liquefaction

The potential for liquefaction is defined by several factors which include: magnitude and proximity of the earthquake, duration of shaking, soil types, grain size distribution, density, effective overburden, groundwater level, as well as others. In light of the volcanic bedrock which underlies the project site and vicinity, the potential of liquefaction during a strong seismic event is considered to be negligible.

Lateral Spreading

Lateral spreading occurs as a result of liquefaction in which a subsurface layer becomes a liquefied mass, and gravitational and inertial forces cause the mass to move

downslope. In light of the earth materials, the potential of lateral spreading during a strong seismic event is considered to be negligible.

Seismic Settlement

Seismic settlement occurs under a structure when cohesionless soils underlying the structure densify as a result of ground shaking. Although the magnitude of the seismically-induced differential settlement cannot be reliably predicted, it is not anticipated to occur within the Conejo Volcanics. Based upon the dense nature of the subsurface earth materials, the seismic settlement hazard is considered to be insignificant.

Landslides

Geologic maps reviewed as part of this study are indicated on the enclosed reference list. No landslides are indicated on these maps nor were any landslides were encountered in the exploratory test pits or in outcrops located proximal to the building site. No buried soil zones which would indicate a graben nor any indications of a landslide slip surface were noted.

The topography in the area of the building site and near vicinity is not indicative of large-scale landsliding: ie. non-hummocky topography, no offset drainage patterns, no visible landslide scarps, nor oversteepened slopes.

Based upon the above discussion, we conclude that the building site and near-vicinity are not underlain by a landslide.

DISCUSSION AND RECOMMENDATIONS

Data from our field exploration coupled with inferred conditions between exploratory excavations are the basis for the following discussion. Recommendations, based upon the presently available data, are presented below for your consideration.

General

The following recommendations have been prepared assuming that Terry A. Mayer, Consulting Geologist will review the grading and foundation plans prior to construction, and observe all construction activities.

1) The excavation characteristics of the earth materials exposed in the exploratory test pits, ranged from relatively easy to excavate to practical refulsal. The rippability of these materials was not determined by this study and heavy equipment may be required to achieve desired pad/footing grades.

2) Plans and specifications should be provided to this firm prior to grading. Plans should include the grading plans, foundation plans, and foundation details.

3) All prepared bottoms, keyways and benches shall be observed by this firm prior to fill placement.

4) The proposed footings shall bear upon compacted certified fill or in-place competent earth materials, not partially into each. Recommendations for foundations shall be provided by the soils engineer.