Sources: Town of Fairfax 2010-30 General Plan; Fairfax General Plan Update Environmental Noise Assessment, November 16, 2011, Illingworth & Rodkin,

XII. POPULATION AND HOUSING – Would the project:	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

C. Environmental Setting

Fairfax is situated in a highly desirable setting, largely related to the forested hillsides that surround the community. Despite its natural beauty, however, the Town is in fact, very densely developed. With over 3,500 residents per square mile, and with most of the existing residences built on very small lots, there are few opportunities to provide additional housing through infill development within the Town's residential areas except through the use of "informal" second units that have traditionally provided very low income housing – though not officially recognized as such.

Fairfax is surrounded on three sides by vast areas of spectacular open space, providing the community with scenic vistas, as well as a rural ambience, despite the Town's location in one of the nation's largest metropolitan areas. However, this protected open space amenity contributes to the Town's housing problem, as it acts as a constraint that limits the community's ability to expand, or significantly increase, the area that could be developed for housing through the traditional annexation process.

There are a limited number of potential housing sites in Fairfax that can accommodate the Town's identified need for low-income or affordable housing units. The Town of Fairfax has identified several sites that could be realistically targeted as potential sites for such housing.

The Fairfax General Plan identifies housing opportunity sites including the key parcels and/or sites that potential for low-income or affordable housing in-fill development. In considering these available sites, the Town determined the size, location, and current status of each site. The ideal sites should have good access and infrastructure availability, be centrally located or along transit routes and promote the principals of Transit Oriented Development (TOD) or Traditional Neighborhood Design (TND) as outlined in the 2010 Land Use Element.

The potential sites are currently zoned Commercial Highway (CH), Limited Commercial (CL), or UR-

7 residential. The 2010 Housing Element recommends the rezoning of three to Planned District Development (PDD), that promotes a mix of uses including housing; and rezoning all CH to CC. Please note: Residential uses are permitted on the second floor in the CC zone "by-right", whereas they are only allowed by Conditional Use Permit in the CH and CL zones. This 2010 Housing Element and Land Use Element are recommending that:

- Christ Lutheran Church be rezoned from UR-7 to PDD.
- 10 Olema-Mandarin Gardens site be rezoned from CL to PDD to provide greater site planning flexibility.
- School Street Plaza to be rezoned from CL to PDD, which promotes a mix of uses including housing; and leaves open the possibility of a new school on the site as well.
- Rezoning the Fairfax Market sites and the open parcel next to it including the strip shopping center to the west, and Good Earth market site from CH to CC.
- Rezoning the Fair-Anselm shopping complex, and the Center Oaks apartment building site from CH to CC to allow residential units on the second floor by right.
- Rezoning the east side commercial area on Sir Francis Drake Boulevard from CH to CC to allow residential units on the second floor by right.

Based upon the proposed zoning above, and through the relaxation of requirements in the Second Unit Amnesty Ordinance, at least 172 affordable dwelling units have the realistic potential to be built over the next five years. Most other major sites in the community that are undeveloped or under-developed are steeply sloped and environmentally sensitive. These sites not only contribute to the rural nature of Fairfax but will also be extremely difficult to develop due to their site characteristics.

The Marin Municipal Water District (MMWD) provides water to the Town. Sanitary District #1 is the service provider for wastewater. Both agencies have adequate capacity to serve the sites identified in this section of the 2010 Housing Element. With the adoption of a "green building ordinances" – as called for in the 2010 Conservation Element (that promotes gray-water and water-efficient technologies) – the need for such energy intensive facilities will be reduced and/or eliminated.

This 2010 Housing Element also recommends the incorporation of green building technologies; reduced minimum unit size requirements (that allow for efficiency-sized apartments, and the reuse of small parcels); and urban "location-efficiency" placement through the use of historic TOD and TND – principals of sustainable urban design patterns as described in the 2010 Land Use Element.

Importantly, the Housing Opportunity Sites in the General Plan have been identified as having a high potential to accommodate at least 172 new affordable housing units, especially for very low income households.

D. Discussion

a). ***Less Than Significant Impact.*** The intent and purpose of the Town of Fairfax General Plan is to set overarching goals and direction for the community in the coming decade. While some of these goals promote new development on opportunity sites, there are very few properties that can be developed that will contribute to significant population growth, therefore the impact is considered **less than significant.**

b). ***No Impact.*** The General Plan includes a Land Use, Housing and Town Center Element. The primary goal of the Housing Element is to capitalize on under-utilized sites to create housing. Therefore, **there is no impact.**

c). ***No Impact.*** The Town of Fairfax General Plan will not displace people in need of replacement housing. Therefore, there is **no impact.**

Sources: The Town of Fairfax 2010-30 General Plan

XIII. PUBLIC SERVICES	**Potentially significant impact**	**Less than significant with mitigation incorporation**	**Less than significant impact**	**No impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

A. Environmental Setting

Fairfax is situated in a highly desirable setting, largely related to the forested hillsides that surround the community. Despite its natural beauty, however, the Town is in fact, very densely developed. With over 3,500 residents per square mile, and with most of the existing residences built on very small lots, there are few opportunities to provide additional housing through infill development within the Town's residential areas except through the use of "informal" second units that have traditionally provided very low income housing – though not officially recognized as such.

Fairfax is surrounded on three sides by vast areas of spectacular open space, providing the community with scenic vistas, as well as a rural ambience, despite the Town's location in one of the nation's largest metropolitan areas. This protected open space amenity contributes to the Town's limited housing opportunities, as it acts as a constraint that limits the community's ability to expand, or significantly increase, the area that could be developed for housing through the traditional annexation process.

Within the existing town boundaries, Fairfax is very limited in terms of developable land. The Town is nearly built-out with all remaining undeveloped land, being either very steeply sloped or constrained from development for other reasons. Of the ten relatively large undeveloped sites located within the

Town's SOI, most are on steep hillsides or exhibit environmental constraints. Five of the parcels have a zoning of Upland Residential (UR). Parcels in the UR zone are allowed a maximum one unit per seven to 10 acres; however, these parcels remain vacant because of the steep site conditions.

B. Discussion

a-b) ***Less Than Significant Impact.*** The Ross Valley Fire Department and the Town of Fairfax Police Department currently provide fire protection services and policing services for the Town. The Town of Fairfax is mostly built out, with few opportunities for significant growth. The build out remaining opportunity sites identified in the General Plan would not result in significant population growth requiring an expansion of existing fire and police services. Furthermore, implementation of the General Plan will not result in adverse physical impacts or cause significant environmental impacts preventing these services from continuing, therefore there will be a **less than significant impact.**

c-e). ***Less Than Significant Impact.*** The intent and purpose of the General Plan is to promote the well-being of Fairfax residents and visitors alike. The Housing Element identifies several opportunity sites that could accommodate additional housing units. However, this increase in potential residential units will not contribute to a significant need for additional schools, parks or other public facilities. There will be **no impacts** associated with school facilities, parks and recreational facilities, or public facilities.

Sources: The Town of Fairfax 2010-30 General Plan

XIV. RECREATION	Potentially significant impact	Less than significant with mitigation incorporation	Less than significant impact	No impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be facilitated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

A. Environmental Setting

Fairfax is a town defined by open space. Open space not only exists within the town, it abuts most town boundaries and defines the views from Town Center, from most neighborhoods, and throughout the Fairfax Planning Area. The location of Fairfax within the Ross Valley, surrounded by undeveloped hillsides and ridges, gives the Town a very distinctive look and feel.

B. Discussion

a-b) ***No Impact.*** The intent and purpose of the General Plan is to promote the well-being of

Fairfax residents and visitors alike. There are few opportunities for development in the Plan Area, and opportunity sites that could be utilized for housing purposes will not represent a significant increase in environmental impacts to warrant mitigation, therefore the project will not result in the physical deterioration of neighborhood or recreation facilities. The General Plan will not result in a substantial increase of residents or visitors to the Plan Area and no additional demand for recreational facilities; therefore there will be **no impact.**

Sources: The Town of Fairfax 2010-30 General Plan

XV. TRANSPORATION/TRAFFIC – Would the project:	**Potentially significant impact**	**Less than significant with mitigation incorporation**	**Less than significant impact**	**No impact**
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase either in the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?)	☐	☒	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☒	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks)?	☐	☐	☐	☒

A. Environmental Setting

The Town of Fairfax is mostly built out, with few opportunities for significant growth. The primary infrastructure, the elements of the circulation network, including the roads and streets, pedestrian and bicycle ways, and utilities are in place. Therefore, the overarching objective for the Circulation

Element is to recognize and understand the opportunities and constraints presented by the established infrastructure, and how best to use the various elements to provide a safe and efficient environment for the entire community while maintaining the Town's quality of life.

The Fairfax 2010-30 General Plan calls for the limited expansion of the historic mixed-use character of the town center area allowing for more transit oriented development, infill development on two key opportunity sites appropriate for senior and workforce housing, and for the creation and utilization of existing and new second units in the residentially zoned areas – all as a way to accommodate a more equitable and sustainable evolution of the Town.

There are a few opportunities for land use changes and density increases in the Town Center area. Sir Francis Drake Boulevard, Center Boulevard, Broadway and Bolinas Road are the major roads to and through the town. All other streets in Fairfax are local streets. They provide access to residences and neighborhood functions. Most local streets in the Fairfax Planning Area were built before the Second World War and many are in hilly areas. Many do not meet minimum current standards for width, curve radius, sight distance and on-street parking.

The Fairfax Pedestrian and Bicycle Master Plan, bicycling in Fairfax fits into a number of niches: commute, school, and recreation, with of bicycle use more than three times the state average with more potential for increased bicycle use for many types of trips, and a current trend toward increased bicycle use.

In December 2011 and January 2012, Parisi Associates conducted a traffic impact analysis of the 2010 – 30 Fairfax General Plan. The overall purpose of this report is to evaluate the potential traffic impacts that could occur as a result of implementing the Town of Fairfax 2010-30 General Plan over the next twenty years and the potential traffic impacts that could result upon redevelopment of the six "opportunity sites or areas" identified in the Housing Element of the Town of Fairfax General Plan. Each of the sites/areas is proposed to contain affordable housing units, either for seniors or the general workforce, in addition to other land uses. The findings of that report are included in the environmental assessment that follows.

B. Discussion

a-b) ***Less Than Significant with Mitigation Incorporation.*** The Town of Fairfax uses the 2000 Highway Capacity Manual (HCM) operational procedures for evaluating signalized and unsignalized intersection performance. The HCM analysis procedures provide estimates of saturation flow, capacity, delay, level of service, and back of vehicle queue by lane group for each approach.

HCM level of service is measured as a function of vehicle delay, with the corresponding ranges shown in Table 2 from the Parisi report shown below. At signalized intersections and unsignalized intersections with all-way stop control, level of service is a measurement of the average overall delay of the intersection. For unsignalized intersections controlled with two or fewer stops, level of service is reported for the approach with the worst delay.

Table 2. Intersection Level of Service and Delay

Level of Service	Level of Delay	Signalized Delay (seconds)	Unsignalized Delay (seconds)
A	Insignificant	0 to 10	0 to 10
B	Minimal	>10 to 20	>10 to 15

C	Acceptable	>20 to 35	>15 to 25
D	Tolerable	>35 to 55	>25 to 35
E	Significant	>55 to 80	>35 to 50
F	Excessive	>80	>50

Source: Transportation Resource Board, Highway Capacity Manual, 2000
Parisi Associates, Traffic impact analysis report, Opportunity site analysis Fairfax, California, December 2011

The Town considers level of service (LOS) D to be the minimum level of operation at both signalized and unsignalized intersections. Therefore, a signalized intersection that experiences 55 seconds or greater average delays, or an unsignalized intersection that experiences 35 seconds or greater average delays, will be required to mitigate unacceptable traffic impacts to an acceptable level of service. There are occasions, however, when the necessary improvements to mitigate the potential traffic impacts are not feasible to construct, such as an exceedingly high construction cost to improve a short duration impact, or an unduly delay for other traffic approaches.

The level of service for weekday AM and PM peak hours for existing conditions was calculated for the 17 study intersections. The findings are shown in Table 3 of the Parisi report. It was found that most intersections are operating at acceptable levels. Four intersections are operating unacceptably:

- Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way: Left-turn movements from Mitchell Drive operate at LOS E during the AM peak hour (22 vehicles per hour (vph))
- Sir Francis Drake Boulevard/Olema Road: Left-turn movements from Olema Road operate at LOS E during the PM peak hour (2 vph)
- Sir Francis Drake Boulevard/Pacheco Avenue: Left-turn movements from Pacheco
- Avenue operate at LOS E in the AM peak hour (19 vph) and LOS F in the PM peak hour (32 vph)
- Broadway /Center Boulevard/Pacheco Avenue: Average vehicle delays for all movements are at LOS E during the PM peak hour

The vehicle trips estimated to be associated with the opportunity sites were distributed to the street network based on existing travel patterns. Traffic volumes for existing plus opportunity sites condition are shown in Figure 3 of the Parisi report. The level of service for weekday AM and PM peak hours for the existing plus opportunity sites condition was calculated for the 17 study intersections. The results are shown in Table 3 of the Parisi report.

The resulting traffic operations for the existing plus opportunity sites scenario will be similar to those under existing conditions for most of the study intersections. Each of the four intersections that currently operate at LOS E or F will continue to operate unacceptably. However, left-turning movements from Mitchell Drive onto Sir Francis Drake Boulevard will degrade from LOS E to LOS F conditions during the AM peak hour. The left-turning volume will increase from 22 vehicles per hour to about 61 vehicles per hour. At Sir Francis Drake Boulevard and Olema Road, the PM peak hour left-turning movements will degrade from LOS D to LOS E conditions. The number of left-turns will increase from two to four vehicles per hour

Redevelopment of the opportunity sites will not result in any of the 17 study intersections degrading from LOS D or better conditions to LOS E or LOS F conditions based on current traffic levels or those expected in year 2030. Four intersections will be expected to continue operating at LOS E or LOS F conditions with or without the redevelopment of the opportunity sites. A fifth intersection, Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way, will have its stop sign-controlled left-turn degrade from LOS E to LOS F conditions during a peak period.

The impacts associated with the development of the opportunity sites in Fairfax can be mitigated to a **less than significant level with mitigation incorporation** for the following five intersections:

Mitigation Measure TRAF-1:

- Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way: Stop sign-controlled left turns from Mitchell Drive currently operate at LOS E conditions during the AM peak hour. LOS E is expected to continue to result in the year 2030 without redevelopment. Redevelopment of the Christ Lutheran Church Site will degrade the left-turns to LOS F conditions and result in significant left-turn delays of two to three minutes. Traffic signalization of this intersection should be considered.

- Sir Francis Drake Boulevard/Olema Road: LOS E or F conditions will continue for left-turns turning from Olema Road with or without redevelopment of the opportunity sites. Fewer than five vehicles per peak hour are expected to continue turning left, experiencing delays of 60 seconds or less. This small volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions.

- Sir Francis Drake Boulevard/Pacheco Avenue: LOS E or F conditions will continue for left-turns turning from Pacheco Avenue with or without redevelopment of the opportunity sites. Fewer than 35 vehicles per peak hour are expected to continue turning left, experiencing delays of 80 seconds or less. This volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions.

- Broadway /Center Boulevard/Pacheco Avenue: The average delay for all movements at this all-way stop sign-controlled intersection is expected to equate to LOS E conditions during the PM peak period considering existing and year 2030 traffic volumes, with or without redevelopment of the opportunity sites. Installing a modern roundabout could be considered, if feasible, to mitigate these conditions. Provision of a traffic signal could exacerbate vehicle queuing through Pacheco Avenue's intersection with Sir Francis Drake Boulevard.

- Center Boulevard/Pastori Avenue: By the year 2030, with or without redevelopment of the opportunity sites, this intersection is expected to operate at LOS E during the PM peak hour. Installation of a modern roundabout could be considered in the future.

c.) ***No Impact.*** Current air traffic patterns will be maintained. The proposed project does not include improvements that will impact air traffic patterns; therefore there will be **no impact**.

d.) ***No Impact.*** The Circulation Element of the Fairfax General Plan does not involve design features that will increase hazards and will not introduce incompatible uses; therefore there will be **no impact**.

e.) ***Less Than Significant Impact.*** The Circulation Element of the Fairfax General Plan does not propose alteration of any roadways that will affect emergency access. The intent and purposes of Goal C-4: Ensure access by emergency service vehicles and public evacuation, is to enhance the emergency access network for the Town of Fairfax. As discussed above, many streets in Fairfax do not meet minimum current standards for width, curve radius, sight distance and on-street parking. Although there are no specific projects in the General Plan that will improve emergency access, there are also no proposed projects that will impede or alter access and circulation. Future development in Town will

be subject to design review and approval and all construction activity that will take place on potential project sites will be subject to review by staff for compliance with the General Plan and Zoning Code. Furthermore, projects that include alterations to infrastructure within the public street right of way, or impact access, circulation or sight distance will be subject to review and approval from various agencies including the local fire and emergency response departments responsible. Therefore, the impact is considered **less than significant** and no further mitigation is required.

f.) ***No Impact.*** Public parking in the Town of Fairfax is accommodated in several parking lots as well as on-street in the Town Center and on-street in residential areas. Although there has been no formal survey, parking is observed to be available in the downtown during most hours of the day and evening on weekdays and weekends. Merchants in the Town Center report that, in general, parking is available most of the time within a reasonable walking distance. Exceptions can occur during a Farmer's Market or special events in progress. Merchants generally support the concept of maintaining the existing parking supply rather than lose spaces to projects such as landscaping portions of the Parkade. The General Plan will not result in projects that reduce the public parking capacity; therefore, there is **no impact.**

g.) ***No Impact.*** The Circulation Element of the Fairfax General Plan includes goals and policies promoting the use of alternative modes of transportation, including bicycle and pedestrian trails and pathways. The intent and purpose of Goal C-5: Consider pedestrian and bicycle facilities as an integral part of a complete circulation network that provide affordable, healthful and ecological means of transportation, is to ensure the viability of alternative modes of transportation in Fairfax. Goal C-5 and related policies, as well as policy C-6.4, are designed to not conflict with adopted policies, plans, or programs supporting alternative transportation; therefore there is **no impact.**

Sources: Town of Fairfax 2010-30 General Plan; Parisi Associates, Traffic impact analysis report, Opportunity site analysis Fairfax, California, January 2012

XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:	**Potentially significant impact**	**Less than significant with mitigation incorporation**	**Less than significant impact**	**No impact**
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to	☐	☐	☒	☐

serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state and local statutes and regulations related to solid waste?	☐	☐	☐	☒

A. Environmental Setting

Fairfax is situated in a highly desirable setting, largely related to the forested hillsides that surround the community. Despite its natural beauty, however, the Town is in fact, very densely developed. The Town density is characterized by 3,500 residents per square mile, and most of the existing residences are built on very small lots. Fairfax is surrounded on three sides by vast areas of open space, providing the community with scenic vistas, as well as a rural ambience, despite the Town's location in one of the nation's largest metropolitan areas. This protected open space amenity contributes to the Town's limited housing opportunities, as it acts as a constraint that limits the community's ability to expand, or significantly increase, the area that could be developed for housing through the traditional annexation process.

Within the existing town boundaries, Fairfax is very limited in terms of developable land. The Town is nearly built-out with all remaining undeveloped land, being either very steeply sloped or constrained from development for other reasons. Of the ten relatively large undeveloped sites located within the Town's SOI, most are on steep hillsides or exhibit environmental constraints. Five of the parcels have a zoning of Upland Residential (UR). Parcels in the UR zone are allowed a maximum one unit per seven to 10 acres; however, these parcels remain vacant because of the steep site conditions.

The Marin Municipal Water District (MMWD) provides water to the Town of Fairfax. Ross Valley Sanitary District #1 is the service provider for wastewater. Both agencies have adequate capacity to serve the Town and opportunity sites identified in the 2010 Housing Element. With the adoption of a "green building ordinances" – as called for in the 2010 Conservation Element (that promotes gray-water and water-efficient technologies) – the need for such energy intensive facilities will be reduced and/or eliminated.

This 2010 Housing Element also recommends the incorporation of green building technologies; reduced minimum unit size requirements (that allow for efficiency-sized apartments, and the reuse of small parcels); and urban "location-efficiency" placement through the use of historic TOD and TND – principals of sustainable urban design patterns as described in the 2010 Land Use Element.

B. Discussion

a-b) ***Less Than Significant Impact.*** The Fairfax General Plan will not result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The Town is relatively built out and there are few opportunities for development. The impact to wastewater treatment facilities is considered **less than significant**, therefore no mitigation is required.

c) ***Less Than Significant Impact.*** The Town of Fairfax General Plan includes Policy CON-4.2.2 that aims to improve the standard practices contained in a Storm Drain Master Plan. The General Plan does not propose specific storm drain improvement projects but is designed to improve local water quality by establishing the Storm Drain Master Plan. This Master Plan will be evaluated for environmental impacts upon completion. The Discussion for Hydrology and Water Quality issues c-f above contains adequate environmental controls with regards to existing storm water management, therefore the impact is considered **less than significant**.

d) ***Less Than Significant Impact.*** The Town of Fairfax will continue to be served by the Marin Municipal Water District. There is adequate supply to meet the demands of the current Fairfax population, which is not anticipated to see significant population growth in the next ten years, and therefore will not generate the need to expand entitlements. The intent and purpose of Objective CON-4.1 is a 20% reduction of the Town's potable water consumption by 2015, therefore the impact is considered **less than significant**.

e) ***Less Than Significant Impact.*** The Town of Fairfax will continue to be served by the Ross Valley Sanitation District. There is adequate supply to meet the demands of the current Fairfax population, which is not anticipated to see significant population growth in the next ten years,. Furthermore, opportunity sites identified in the Housing Element can be served by the existing facilities, therefore the impact is considered **less than significant**.

f) ***Less Than Significant Impact.*** The intent and purpose of the Town of Fairfax General Plan Conservation Element is to protect the natural resources and character of the Town. The General Plan does not directly involve the removal of materials with specific need of landfill disposal. However, Goal CON-7: Waste Management is designed to reduce waste generated by Fairfax residents, businesses and government. Future development in Town will be influenced by the policies and programs contained in Goal CON-7 and will therefore limit the amount of waste sent to the local landfills in Marin County, therefore the impact is considered **less than significant**.

g) ***No Impact.*** The Town of Fairfax General Plan is consistent with all federal, state and local statutes and regulations related to solid waste.

Sources: Town of Fairfax 2010-30 General Plan

XVII. MANDATORY FINDINGS OF SIGNIFICANCE-	**Potentially significant impact**	**Less than significant with mitigation incorporation**	**Less than significant impact**	**No impact**
a) Does the project have the potential to degrade the quality of the environment,	☐	☐	☒	☐

substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

a) ***Less than Significant Impact.*** The Town of Fairfax 2010-30 General Plan is a guide for future development while preserving unique and important habitats within Fairfax. The intent and purpose of the document is to promote sustainability including goals and policies that will reduce or prevent impacts to the environment. Although there are sensitive habitats and species identified throughout the General Plan area, there is no known habitat for fish or wildlife species or rare endangered plant or animal or important examples of the major periods of California history or prehistory on the opportunity sites or areas identified for development. Future projects will be subject to the design and construction guidelines of the Fairfax Planning Department and Building Services as well as potential regulatory agencies that have jurisdiction. All proposals would be subject to the applicable environmental evaluation prior to any plan review and approval. The General Plan, as designed, will not have the potential to degrade the quality of the environment, substantially reduce or cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community. Therefore the **impact is considered Less than Significant.**

b) ***Less than Significant Impact with Mitigation Incorporation.*** The intent and purpose of the Town of Fairfax 2010-30 General Plan is to is to create a set of overarching goals and a statement of direction for the Fairfax community in the coming decade. The goals, policies and programs contained within are designed to help focus the Town's energies and efforts in a common direction. The General Plan has been drafted to establish a vision for the future of the Town, establishing key initiatives to guide development, reduce waste and emissions, preserve open space and engage the public to help enact this vision. With the exception of the findings from the Parisi traffic analysis, no impacts will result in cumulatively considerable issues that cannot be mitigated to less than significant levels on a project by project basis. Furthermore, pursuant to the findings in the Parisi traffic analysis of the six opportunity sites/areas, the recommended mitigations for five intersections in Fairfax will reduce the cumulative impact to a **less than significant with mitigation incorporation level** (see Transportation/Traffic, a & b discussion above).

c) ***Less than Significant Impact.*** The Town of Fairfax General Plan is a guide for long-term development and sustainability and includes goals and policies that will reduce or prevent impacts to the environment. However, there may be impacts as a result of changes to the circulation system with regards to the full build-out of the opportunity sites/areas discussed above. The mitigation incorporation for those impacts should reduce them to **less than significant** levels and thus will not cause substantial adverse effects on human beings.

AIR-1: Mixed-use buildings that includes both residences and restaurants could result in incidents of objectionable odors from restaurants.	New restaurants located in mixed-use developments, or adjacent to residential developments, shall install kitchen exhaust vents with filtration systems, re-route vents away from residential development, or use other accepted methods of odor control, in accordance with local building and fire codes. New residences proposed in buildings or immediately adjacent to buildings that include restaurant or other odor producing uses shall be designed to reduce exposures to odors. This could be conducted through proper design of ventilations systems either at the residence or the source.	Project Sponsor(s) will submit detailed plans addressing exhaust, filtration and ventilation systems to address potential impacts from odors.	Prior to application submittal to the Town of Fairfax Planning and Building Services.	
GEO-1: The potential for strong seismic shaking, liquefaction and landslides in high in Fairfax	Project level geotechnical engineering analysis, by a qualified California geotechnical engineer, of all potential hazards on new development sites shall be required prior to planning approval.	Project sponsor(s) will retain a qualified structural geotechnical engineer	Prior to application submittal to the Town of Fairfax Planning and Building Services.	
Noise-1: The General Plan could result in potential impacts related to exposing persons to or generation of excessive groundborne vibration or groundborne noise levels for new construction or substantial improvements.	a) Avoid impact pile driving where possible. Drilled piles cause lower vibration levels where geological conditions permit their use. b) Avoid using vibratory rollers and tampers near sensitive areas. c) In areas where project construction is anticipated to include vibration-generating activities, such as pile driving, in close proximity to existing structures, site-specific vibration studies shall be conducted to determine the area of impact and to present	Project sponsor(s) will submit detailed site plan and construction plan detail	Prior to application submittal to the Town of Fairfax Planning and Building Services.	

	• Sir Francis Drake Boulevard/Pacheco Avenue: LOS E or F conditions will continue for left-turns turning from Pacheco Avenue with or without redevelopment of the opportunity sites. Fewer than 35 vehicles per peak hour are expected to continue turning left, experiencing delays of 80 seconds or less. This volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions. • Broadway /Center Boulevard/Pacheco Avenue: The average delay for all movements at this all-way stop sign-controlled intersection is expected to equate to LOS E conditions during the PM peak period considering existing and year 2030 traffic volumes, with or without redevelopment of the opportunity sites. Installing a modern roundabout could be considered, if feasible, to mitigate these conditions. Provision of a traffic signal could exacerbate vehicle queuing through Pacheco Avenue's intersection with Sir Francis Drake Boulevard. • Center Boulevard/Pastori Avenue: By the year 2030, with or without redevelopment of the opportunity sites, this intersection is expected to operate at LOS E during the PM peak hour. Installation of a modern roundabout could be considered in the future.			

	h. Designate a noise disturbance coordinator who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaints (e.g., starting too early, bad muffler) and institute reasonable measures warranted to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site.			
TRAF-1: The development of opportunity sites in Fairfax will contribute to long-term traffic congestion in the Town of Fairfax	• Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way: Stop sign-controlled left turns from Mitchell Drive currently operate at LOS E conditions during the AM peak hour. LOS E is expected to continue to result in the year 2030 without redevelopment. Redevelopment of the Christ Lutheran Church Site will degrade the left-turns to LOS F conditions and result in significant left-turn delays of two to three minutes. Traffic signalization of this intersection should be considered. • Sir Francis Drake Boulevard/Olema Road: LOS E or F conditions will continue for left-turns turning from Olema Road with or without redevelopment of the opportunity sites. Fewer than five vehicles per peak hour are expected to continue turning left, experiencing delays of 60 seconds or less. This small volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions.	The project sponsor(s) shall contribute to a fair-share the fund prior to issuance of building permits	TBA	

	5. Conduct post-survey on structures where either monitoring has indicated high levels or complaints of damage has been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.			
Noise-2: Construction operations may cause noise impacts during regular construction hours	a. Limit construction to the hours of 8:00 a.m. to 5:00 p.m. on weekdays, and 9:00 a.m. to 5:00 p.m. on Saturdays, with no noise-generating construction on Sundays or holidays. b. Control noise from construction workers' radios to the point where they are not audible at existing residences that border the Project site. c. Equip all internal combustion engine-driven equipment with mufflers, which are in good condition and appropriate for the equipment. d. Utilize quiet models of air compressors and other stationary noise sources where technology exists. e. Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area. f. Prohibit unnecessary idling of internal combustion engines. g. Notify residents adjacent to the Project site of the construction schedule in writing.	Project sponsor(s) to submit construction schedule including list of equipment	Prior to beginning of construction	

	appropriate mitigation measures that may include the following: 1. Identification of sites that will include vibration compaction activities such as pile driving and have the potential to generate groundborne vibration, and the sensitivity of nearby structures to groundborne vibration. Vibration limits should be applied to all vibration-sensitive structures located within 200 feet of the project. This task should be conducted by a qualified structural engineer. 2. Development of a vibration monitoring and construction contingency plan to identify structures where monitoring will be conducted, set up a vibration monitoring schedule, define structure-specific vibration limits, and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies will be identified for when vibration levels approached the limits. 3. At a minimum, vibration monitoring should be conducted during initial demolition activities and during pile driving activities. Monitoring results may indicate the need for more or less intensive measurements. 4. When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.			

TRAFFIC IMPACT ANALYSIS REPORT

2010-2030 GENERAL PLAN

FAIRFAX, CALIFORNIA

PREPARED FOR:

TOWN OF FAIRFAX

PREPARED BY:

Parisi ASSOCIATES
transportation consulting

JANUARY 2012

EXHIBIT # D

TABLE OF CONTENTS

PURPOSE

The overall purpose of this report is to evaluate the potential traffic impacts that could occur as a result of implementing the Town of Fairfax 2010-30 General Plan over the next twenty years.

Though the Town of Fairfax is in large part built-out, the 2010-30 General Plan calls for the limited expansion of the historic mixed-use character of the town center area allowing for more transit-oriented development, infill development on two key opportunity sites for senior and workforce housing, and for the creation and use of existing and new second units in the residentially zoned areas – all as a way to accommodate a more equitable and sustainable evolution of the Town.

Specifically, the Town of Fairfax 2010-2030 General Plan calls for the redevelopment of six opportunity sites and/or areas for housing units affordable to a range of household types and incomes, including seniors and/or the general workforce, in addition to other community oriented land uses. These opportunity "sites" and/or "areas" are articulated in detail in the Land Use Element and the Housing Element sections of the 2010-30 General Plan and compose the basis of this analysis.

It is anticipated that this transportation impact study, as part the State required California Environmental Quality Act (CEQA) review of the 2010-30 General Plan, will provide the necessary regulatory review of specific projects as build-out occurs over the next twenty years provided that those projects are within the scope and intent of the 2010-30 General Plan. However, projects outside the scope of the 2010-30 General Plan – or formulated after final adoption of the 2010-30 General Plan, like the development of a "Town Center Plan" called for in the Town Center Element, will be subject to further CEQA review including further traffic impact studies.

Methodology

This traffic analysis assesses potential weekday AM and PM peak hour traffic impacts at 17 intersections in Fairfax for the following four conditions:

- Existing
- Existing plus Opportunity Sites
- Year 2030
- Year 2030 plus Opportunity Sites

Further, this analysis compares the travel characteristics for proposed redeveloped sites (or "areas") with the current land uses, including estimated vehicle trip generation, distribution and assignment. The net increase or decrease in trips for the proposed redeveloped sites are overlaid on the street network for existing and 2030 traffic volumes to assess traffic operational impacts at the study intersections.

The locations of the opportunity sites and/or areas and study intersections are shown in Figure 1.

EXISTING CONDITIONS

Street Network

Sir Francis Drake Boulevard, Broadway, Center Boulevard and Bolinas Road are classified as Arterial Roadways in the Town of Fairfax General Plan. All other streets are classified as Local Roadways.

Sir Francis Drake Boulevard is an important east-west route serving Marin County that traverses through the Town limits. Within the Town, Sir Francis Drake is a two-lane street with left-turn lanes and right-turn lanes at most major intersections. The street serves housing and commercial land uses. All of the opportunity sites are located adjacent to Sir Francis Drake Boulevard.

Broadway /Center Boulevard together is a continuous roadway that parallels most of Sir Francis Drake Boulevard one block to the south. The street has two lanes with auxiliary turn lanes at major intersections. The street primarily serves commercial uses in the downtown and San Anselm areas. Two opportunity sites are located adjacent to the street.

Bolinas Road is a north-south, two-lane street that terminates at Broadway. Bolinas Road primarily serves residential areas and a couple of commercial blocks in the downtown area. One opportunity site is located adjacent to the street.

Traffic Volumes

Seventeen intersections along the study area roadways were evaluated in this report, including three signalized intersections, three all-way stop sign-controlled intersections, and 11 intersections with one-way or two-way stop sign-control. Table 1 shows the type of traffic control at each intersection.

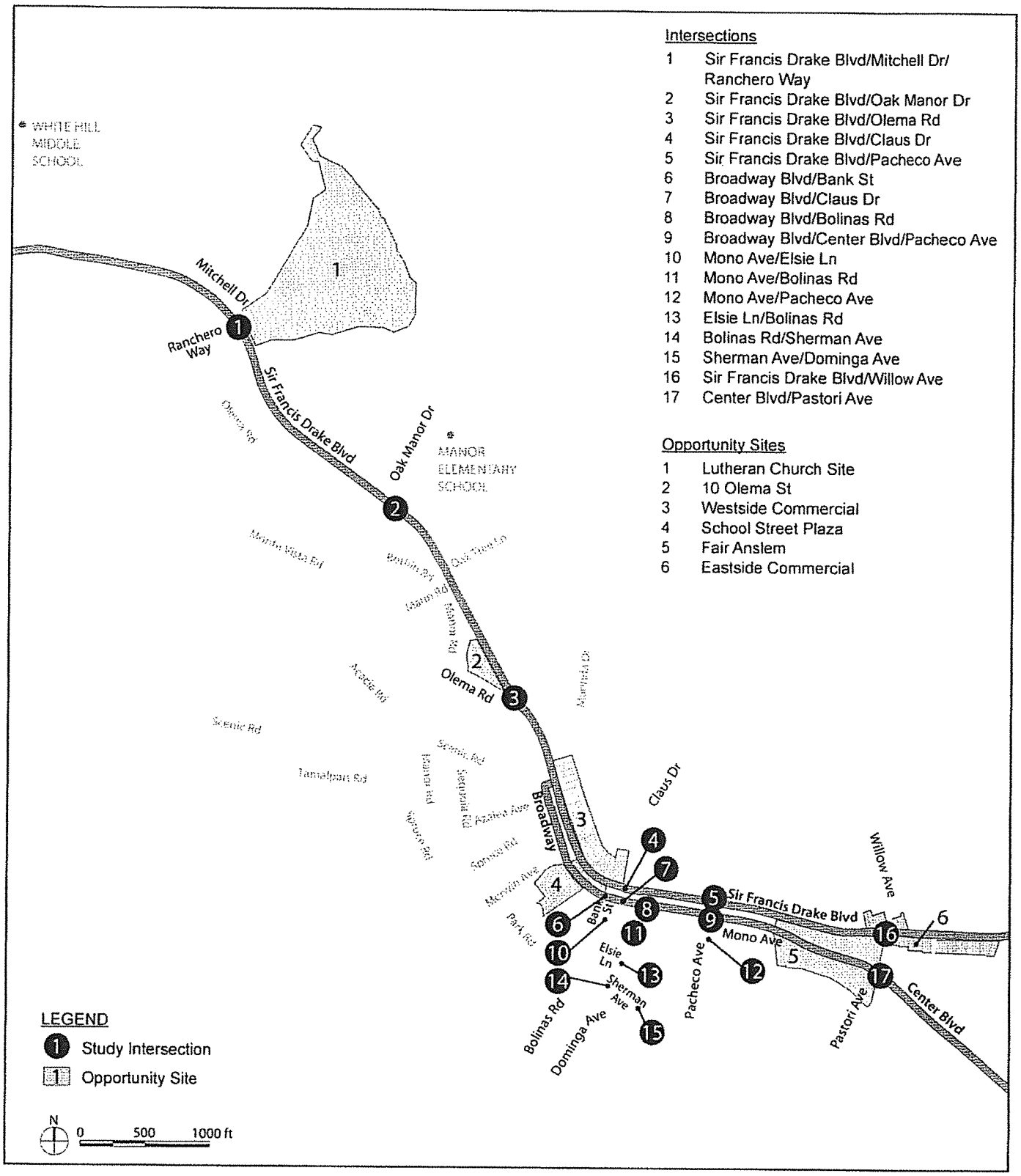


FIGURE 1
Study Intersections

Parisi ASSOCIATES transportation consulting

24 January 2012

Table 1. Study Intersections and Traffic Control

No.	Intersection	Control
1	Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way	Two-Way Stop
2	Sir Francis Drake Boulevard/Oak Manor Drive	Signal
3	Sir Francis Drake Boulevard/Olema Road	One-Way Stop
4	Sir Francis Drake Boulevard/Claus Drive	Signal
5	Sir Francis Drake Boulevard/Pacheco Avenue	One-Way Stop
6	Broadway /Bank Street	Two-Way Stop
7	Broadway B/Claus Drive	Two-Way Stop
8	Broadway /Bolinas Avenue	All-Way Stop
9	Broadway /Center Boulevard/Pacheco Avenue	All-Way Stop
10	Elsie Street/Mono Avenue	One-Way Stop
11	Bolinas Avenue/Mono Avenue	No Stop
12	Pacheco Avenue/Mono Avenue	Two-Way Stop
13	Bolinas Avenue/Elsie Lane	One-Way Stop
14	Bolinas Road/Sherman Avenue	One-Way Stop
15	Sherman Avenue/Dominga Avenue	All-Way Stop
16	Sir Francis Drake Boulevard/Pastori Avenue	Signal
17	Center Boulevard/Pastori Avenue	All-Way Stop

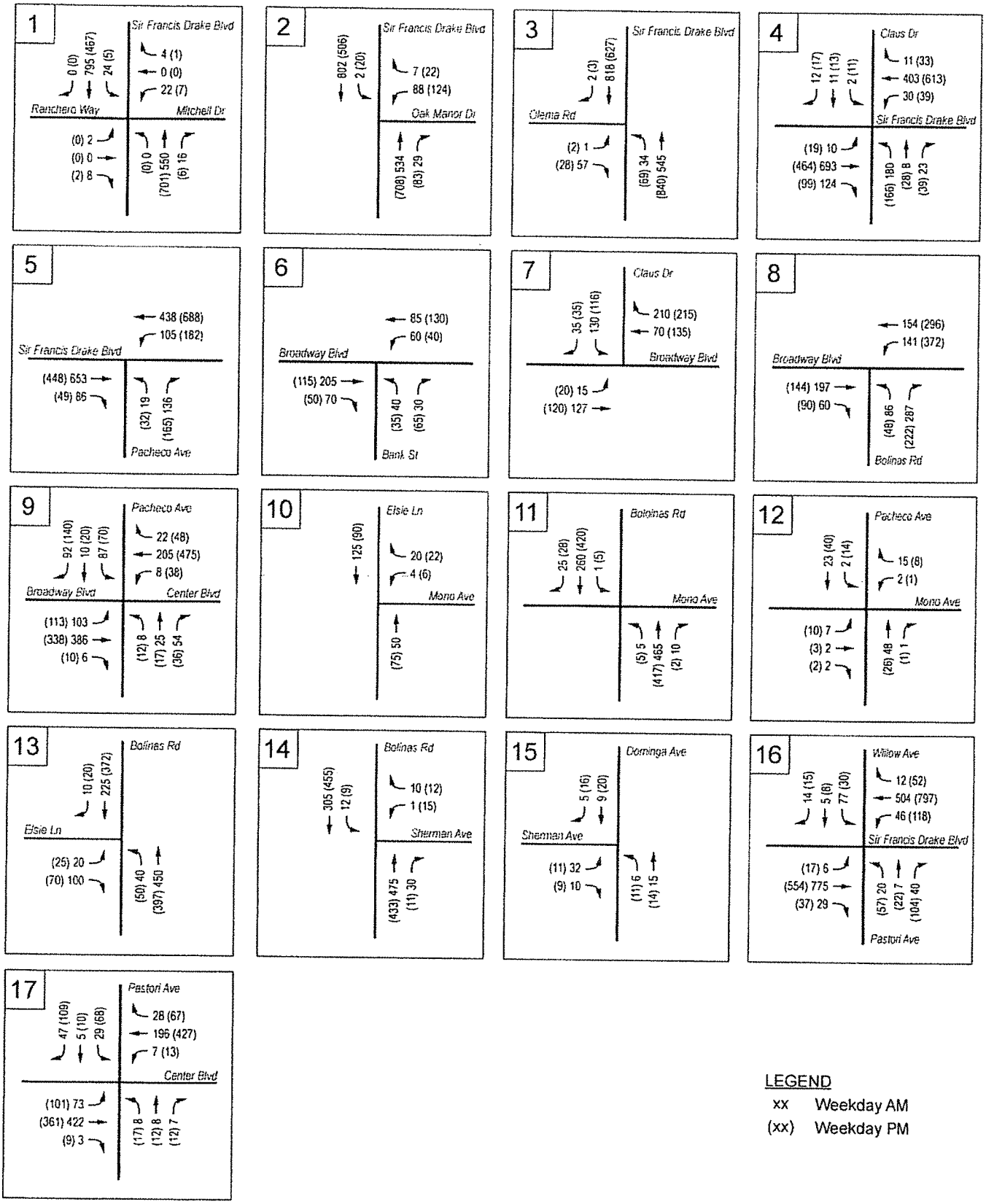
Intersection turning movements for the weekday AM and PM peak hours for the 17 intersections were obtained from three sources.

Traffic volumes for eight locations were taken from Figures C-2 and C-3 in the Circulation Element for the Town's 2010 General Plan Update. The counts were conducted by the Crane Transportation Group in January and February 2007.

The Good Earth Market traffic study, prepared by KD Anderson & Associates, Inc., was the source of traffic counts for six intersections. The counts were taken by the consultant in January 2011. The project would relocate the Good Earth Market located near the Sir Francis Drake Boulevard/Claus Drive intersection to a larger site near the Sir Francis Drake Boulevard/Pastori Avenue intersection. This report assumes the project was completed for existing conditions purposes.

Traffic counts for the remaining three intersections were conducted by Parisi Associates in October 2011 for this report.

Figure 2 shows the existing weekday AM and PM peak hour traffic volumes.



LEGEND

xx Weekday AM

(xx) Weekday PM

FIGURE 2

Existing Peak Hour Traffic Volumes

Parisi ASSOCIATES transportation consulting

24 January 2012

Intersection Service Levels

The Town of Fairfax uses the 2000 Highway Capacity Manual (HCM) operational procedures for evaluating signalized and unsignalized intersection performance. The HCM analysis procedures provide estimates of saturation flow, capacity, delay, level of service, and back of vehicle queue by lane group for each approach.

HCM level of service is measured as a function of vehicle delay, with the corresponding ranges shown in Table 2. At signalized intersections and unsignalized intersections with all-way stop control, level of service is a measurement of the average overall delay of the intersection. For unsignalized intersections controlled with two or fewer stops, level of service is reported for the approach with the worst delay.

Table 2. Intersection Level of Service and Delay

Level of Service	Level of Delay	Signalized Delay (seconds)	Unsignalized Delay (seconds)
A	Insignificant	0 to 10	0 to 10
B	Minimal	>10 to 20	>10 to 15
C	Acceptable	>20 to 35	>15 to 25
D	Tolerable	>35 to 55	>25 to 35
E	Significant	>55 to 80	>35 to 50
F	Excessive	>80	>50

Source: Transportation Resource Board, Highway Capacity Manual, 2000

The Town considers level of service (LOS) D to be the minimum level of operation at both signalized and unsignalized intersections. Therefore, a signalized intersection that experiences 55 seconds or greater average delays, or an unsignalized intersection that experiences 35 seconds or greater average delays, would be required to mitigate unacceptable traffic impacts to an acceptable level of service. There are occasions, however, when the necessary improvements to mitigate the potential traffic impacts are not feasible to construct, such as an exceedingly high construction cost to improve a short duration impact, or an unduly delay for other traffic approaches.

The level of service for weekday AM and PM peak hours for existing conditions was calculated for the 17 study intersections. The findings are shown in Table 3. It was found that most intersections are operating at acceptable levels. Four intersections are operating unacceptably:

- Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way: Left-turn movements from Mitchell Drive operate at LOS E during the AM peak hour (22 vehicles per hour (vph))
- Sir Francis Drake Boulevard/Olema Road: Left-turn movements from Olema Road operate at LOS E during the PM peak hour (2 vph)
- Sir Francis Drake Boulevard/Pacheco Avenue: Left-turn movements from Pacheco Avenue operate at LOS E in the AM peak hour (19 vph) and LOS F in the PM peak hour (32 vph)

- Broadway /Center Boulevard/Pacheco Avenue: Average vehicle delays for all movements are at LOS E during the PM peak hour

Table 3. Intersection Level of Service and Delay for Existing and Existing + Opportunity Sites Conditions

No.	Street Name	Traffic Control	Time	Existing		Existing + Project	
				Delay	LOS	Delay	LOS
1	Sir Francis Drake Boulevard	Two-Way Stop	AM	**46.1**	**E**	**117.2**	**F**
	Mitchell Drive/Banchero Way		PM	28.2	D	28.9	D
2	Sir Francis Drake Boulevard	Signal	AM	6.5	A	6.9	A
	Oak Manor Drive		PM	9.2	A	9.2	A
3	Sir Francis Drake Boulevard	One-Way Stop	AM	33.6	D	**40.1**	**E**
	Olema Road		PM	**44.0**	**E**	**47.1**	**E**
4	Sir Francis Drake Boulevard	Signal	AM	19.9	B	23.0	C
	Claus Drive		PM	20.3	C	20.5	C
5	Sir Francis Drake Boulevard	One-Way Stop	AM	**37.7**	**E**	**47.4**	**E**
	Pacheco Avenue		PM	**68.0**	**F**	**75.5**	**F**
6	Broadway	Two-Way Stop	AM	11.9	B	12.4	B
	Bank Street		PM	10.5	B	10.3	B
7	Broadway	Two-Way Stop	AM	14.4	B	18.9	C
	Claus Drive		PM	14.3	B	14.4	B
8	Broadway	All-Way Stop	AM	12.2	B	13.5	B
	Bolinas Road		PM	15.4	C	15.6	C
9	Broadway	All-Way Stop	AM	14.4	B	16.1	C
	Center Boulevard/Pacheco Avenue		PM	**35.3**	**E**	**35.8**	**E**
10	Mono Avenue	One-Way Stop	AM	8.8	A	8.9	A
	Elsie Lane		PM	9.0	A	8.9	A
11	Mono Avenue	No Stop	AM	0.1	A	0.1	A
	Bolinas Road		PM	0.2	A	0.2	A
12	Mono Avenue	Two-Way Stop	AM	9.1	A	9.2	A
	Pacheco Avenue		PM	9.3	A	9.3	A
13	Elsie Lane	One-Way Stop	AM	12.1	B	12.4	B
	Bolinas Road		PM	14.8	B	14.7	B
14	Bolinas Road	One-Way Stop	AM	12.2	B	12.4	B
	Sherman Avenue		PM	16.0	C	16.0	C
15	Sherman Avenue	All-Way Stop	AM	7.2	A	7.2	A
	Dominga Avenue		PM	7.0	A	7.0	A
16	Sir Francis Drake Boulevard	Signal	AM	23.4	C	31.7	C
	Pastori Avenue		PM	24.1	C	27.8	C
17	Center Boulevard	All-Way Stop	AM	14.3	B	16.3	C
	Pastori Avenue		PM	29.1	D	31.2	D

OPPORTUNITY SITES CONDITIONS

Opportunity Sites

The Town of Fairfax has identified six potential sites that could accommodate the Town's identified need for low-income or affordable housing units. In considering these sites, the Town determined the size, location, and current status of each site. The Town concluded that the ideal sites should have good access and infrastructure availability, be centrally located or along transit routes and promote the principals of transit-oriented development or traditional neighborhood design. In the evaluation of these sites, the Town determined that it would be necessary to rezone some sites in order to meet to meet its objectives.

The proposed six opportunity sites and/or areas, with locations shown in Figure 1, are described as follows:

- Site #1: Christ Lutheran Church Site: The Christ Lutheran Church and the Cascade Canyon School, a private school, currently occupy this large wooded lot. The proposed uses would retain the church, expand the school from 50 to 150 students, and construct 40 senior housing units.
- Site #2: 10 Olema Street: A former restaurant is being used as an artist's studio. A Victorian home, one of the oldest buildings in Fairfax, is also on the site and is currently divided into two units (one occupied). The site is proposed to have up to 22 workforce housing units and 1,650 square feet of commercial space.
- Site #3: Westside Commercial (13 total parcels): This area is small, with specialty retail centers that include office and commercial uses, a grocery store and a couple of residential units behind or over storefronts. The various parcels are proposed to redevelop with similar uses and 17 new second floor "efficiency" residential units; and/or ground floor two-story live/work units.
- Site #4: School Street Plaza: A former school site is being used by a variety of commercial uses within the old school buildings. A new private or public school for 300 students is proposed on the site along with nine new residential units. The current 18,196 square feet of commercial use would be removed (or relocated) if and when new school buildings and/or residential units are built. For conservative purposes, a new private school was assumed since private schools generate more traffic than public schools on a per student basis.
- Site #5: Fair-Anselm Shopping Center (eight total parcels): This area is a small, specialty retail center that includes office and commercial uses and a grocery store. Fifteen new residential units and an additional 4,000 square feet of commercial space are proposed for this site.
- Site #6: Eastside Commercial (21 total parcels): An eclectic mix of old homes, apartments, commercial and office uses. It exhibits the definition of a small, specialty retail center. The various parcels are proposed to redevelop with an additional 5,500 square feet of commercial space and 11 new residential units.

A total of 114 new residential units are proposed to be constructed in the six opportunity sites or areas, and 58 new (i.e., either newly constructed or "formalized") second units in the residential

zoned areas of Town. This addresses the 2005 (of 64 units) and 2010 (108) Regional Housing Needs Assessment (RHNA) allotment provided by ABAG and required in order to qualify for State certification of the 2010 Housing Element.

Vehicle Trip Generation

This report evaluates the potential traffic impacts associated with the new land uses at the six opportunity sites. Vehicle trip generation rates from the Institute of Transportation Engineers' Trip Generation (8th Edition) were used to quantify the number of weekday AM and PM peak hour trips for each use. A summary of the trip rates used in this report is shown in Table 4.

Table 4: ITE Trip Generation Rate Summary

Land Use	ITE		AM Peak Hour			PM Peak Hour		
Description	Code	Units	Rate	% In	% Out	Rate	% In	% Out
Single Family	210	DU	0.75	0.25	0.75	1.01	0.63	0.37
Apartments	220	DU	0.51	0.20	0.80	0.62	0.65	0.35
Condominiums	231	DU	0.67	0.25	0.75	0.78	0.58	0.42
Senior Housing	251	DU	0.22	0.35	0.65	0.27	0.61	0.39
Private School (K-8)	534	Students	0.90	0.55	0.45	0.09	0.47	0.53
Church	560	SF	0.56	0.62	0.38	0.55	0.48	0.52
Specialty Retail Center	814	SF	6.84	0.48	0.52	5.02	0.56	0.44
Supermarket	850	SF	3.59	0.61	0.39	10.50	0.51	0.49

AM and PM trip generation was estimated for the six opportunity sites using existing and project conditions. A summary and comparison of the estimated trips for the AM peak period is shown in Table 5 and for the PM peak period in Table 6.

Table 5: Summary of Estimated AM Trips for Existing and Opportunity Site Conditions

		Existing Trips			Opp Sites Trips			Opp Sites Minus Existing		
Site	Opportunity Site	In	Out	Total	In	Out	Total	In	Out	Total
1	Christ Lutheran Church	25	20	45	79	68	147	54	48	102
2	10 Olema Street	1	2	3	8	17	25	7	15	22
3	Westside Commercial	86	83	169	89	92	181	3	9	12
4	School Street Plaza	40	43	83	150	127	277	110	84	194
5	Fair Anselm Shopping Center	135	133	268	146	149	295	11	16	27
6	Eastside Commercial	54	63	117	67	80	147	13	17	30
	Totals	341	344	685	539	533	1,072	198	189	387

Table 6: Summary of Estimated PM Trips for Existing and Opportunity Site Conditions

Site	Opportunity Site	Existing Trips			Opp Sites Trips			Opp Sites - Existing		
		In	Out	Total	In	Out	Total	In	Out	Total
1	Christ Lutheran Church	3	4	7	14	13	27	11	9	20
2	10 Olema Street	2	1	3	15	11	26	13	10	22
3	Westside Commercial	114	100	214	121	105	226	7	5	12
4	School Street Plaza	34	27	61	17	18	35	-17	-9	-26
5	Fair Anselm Shopping Center	165	142	307	179	153	332	14	11	25
6	Eastside Commercial	51	39	90	66	49	115	15	10	25
	Totals	**369**	**313**	**682**	**412**	**349**	**761**	**43**	**36**	**79**

During the AM peak hour, the six opportunity sites would account for a net increase of about 387 vehicle trips. About 76 percent of those trips would be attributed to the sites with the two proposed private schools. The School Street Plaza site would generate about 194 new trips and the Christ Lutheran Church site would generate about 102 new trips. The remaining 82 trips would be distributed among retail, office and residential uses at the other four opportunity sites.

A net increase of 79 vehicle trips is estimated during the PM peak hour. There would be considerable fewer net trips during this period because schools have a low PM peak hour trip rate. The redeveloped School Street Plaza site is estimated to have 26 fewer trips than the existing conditions because the proposed private school on the site would have a lower vehicle trip generation rate than the existing commercial uses it would replace.

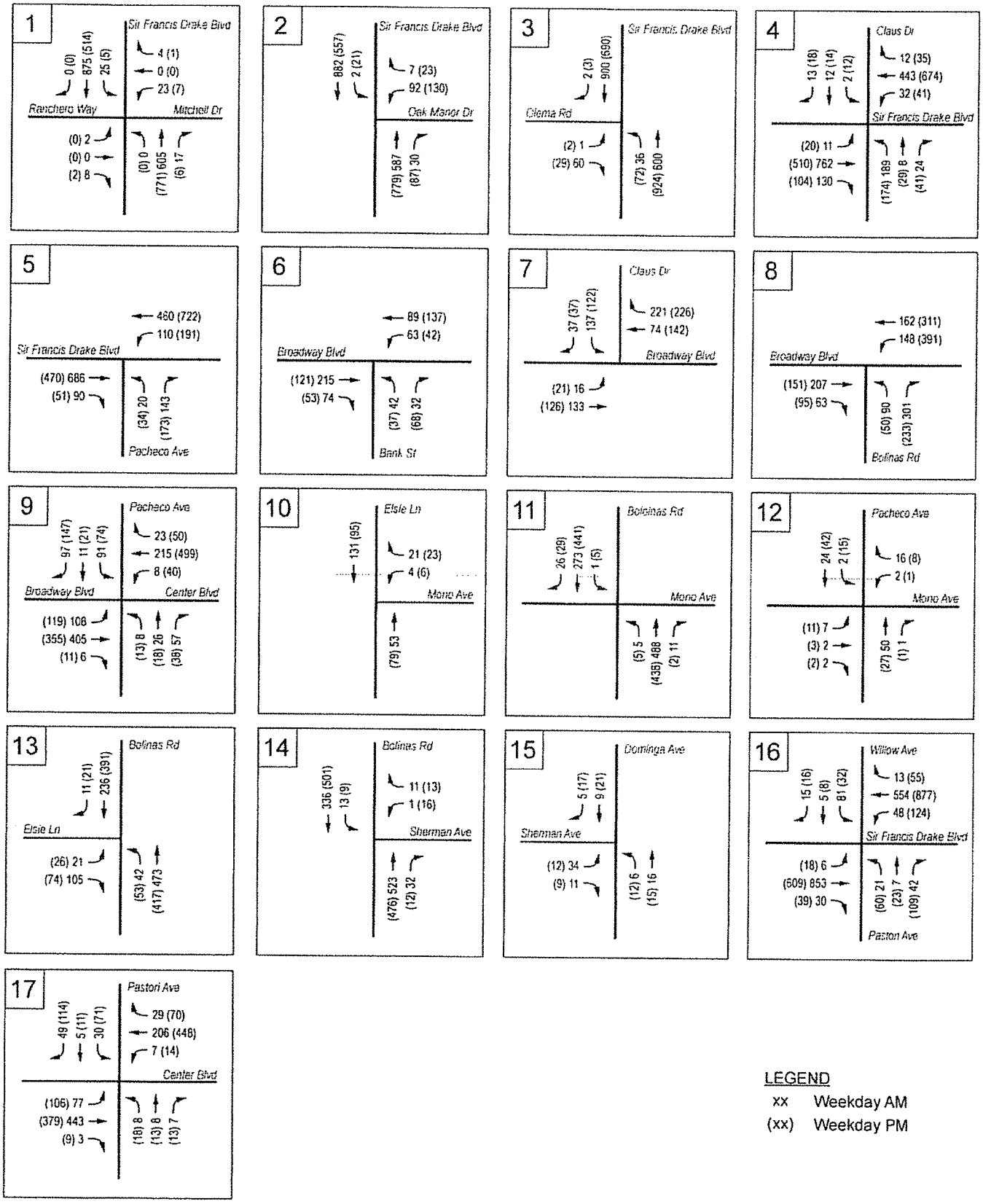
EXISTING PLUS OPPORTUNITY SITES CONDITIONS

Intersection Service Levels

The vehicle trips estimated to be associated with the opportunity sites were distributed to the street network based on existing travel patterns. Traffic volumes for existing plus opportunity sites condition are shown in Figure 3.

The level of service for weekday AM and PM peak hours for the existing plus opportunity sites condition was calculated for the 17 study intersections. The results are shown in Table 3.

The resulting traffic operations for the existing plus opportunity sites scenario would be similar to those under existing conditions for most of the study intersections. Each of the four intersections that currently operate at LOS E or F would continue to operate unacceptably. However, left-turning movements from Mitchell Drive onto Sir Francis Drake Boulevard would degrade from LOS E to LOS F conditions during the AM peak hour. The left-turning volume would increase from 22 vehicles per hour to about 61 vehicles per hour. At Sir Francis Drake Boulevard and Olema Road, the PM peak hour left-turning movements would degrade from LOS D to LOS E conditions. The number of left-turns would increase from two to four vehicles per hour.



LEGEND

xx Weekday AM

(xx) Weekday PM

FIGURE 3

Year 2030 Peak Hour Traffic Volumes

Parisi ASSOCIATES transportation consulting

24 January 2012

YEAR 2030 CONDITIONS

Year 2030 Traffic Volumes

Local and regional growth may result in an increase in traffic volumes at all intersections by the year 2030. For purposes of the report, it was assumed that traffic would increase on Sir Francis Drake Boulevard at a rate of one-half of one-percent per year, or about ten percent by 2030. Traffic levels on all other streets were assumed to increase at a rate of one-quarter of one-percent per year, or about five percent until year 2030.

These increases are lower than increases forecasted by the Marin County of Public Works regional travel demand model of one percent per year on Sir Francis Drake Boulevard. A lower increase in travel volumes was assumed for this report because current traffic volumes have generally decreased, as evidenced in recent studies, due to the regionally economic situation and because the area is generally already built out. As for the other streets in Fairfax, increases in traffic volumes would be expected to be lower because of built-out conditions except for the potential redevelopment of the opportunity sites.

Intersection Service Levels

Projected traffic volumes for year 2030 conditions are shown in Figure 4. Level of service for weekday AM and PM peak hours for year 2030 conditions was calculated for the 17 study intersections. The results are shown in Table 7.

By 2030, the same four intersections that currently operate at LOS E or F conditions are expected to continue operating unacceptably (Sir Francis Drake Boulevard at Mitchell Drive/Banchero Way, at Olema Road, and at Pacheco Boulevard; and Broadway at Center Boulevard/Pacheco Avenue). By 2030, one additional intersection would operate unacceptably. The Center Boulevard/Pastori Avenue intersection would operate at LOS E conditions during the PM peak hour. It currently operates at LOS D during this period.

YEAR 2030 PLUS OPPORTUNITY SITES CONDITIONS

Intersection Service Levels

The vehicle trips estimated to be generated from the opportunity sites were distributed on the street network based on existing travel patterns. Traffic volumes for existing plus opportunity sites conditions are shown in Figure 5.

The level of service for weekday AM and PM peak hour for existing plus opportunity sites conditions was calculated for the 17 study intersections. The results are shown in Table 7.

The resulting traffic operations for the year 2030 plus opportunity site scenario would be similar to those under year 2030 conditions for most of the study intersections. Each of the five intersections that would be expected to operate at LOS or F in 2030 would continue to operate unacceptably with the opportunity sites redeveloped. However, left-turning movements from Mitchell Drive onto Sir Francis Drake Boulevard would degrade from LOS E to LOS F conditions during the AM peak hour. The left-turning volume would increase from 23 vehicles per hour to about 62 vehicles per hour. At Sir Francis Drake Boulevard and Pacheco Avenue,

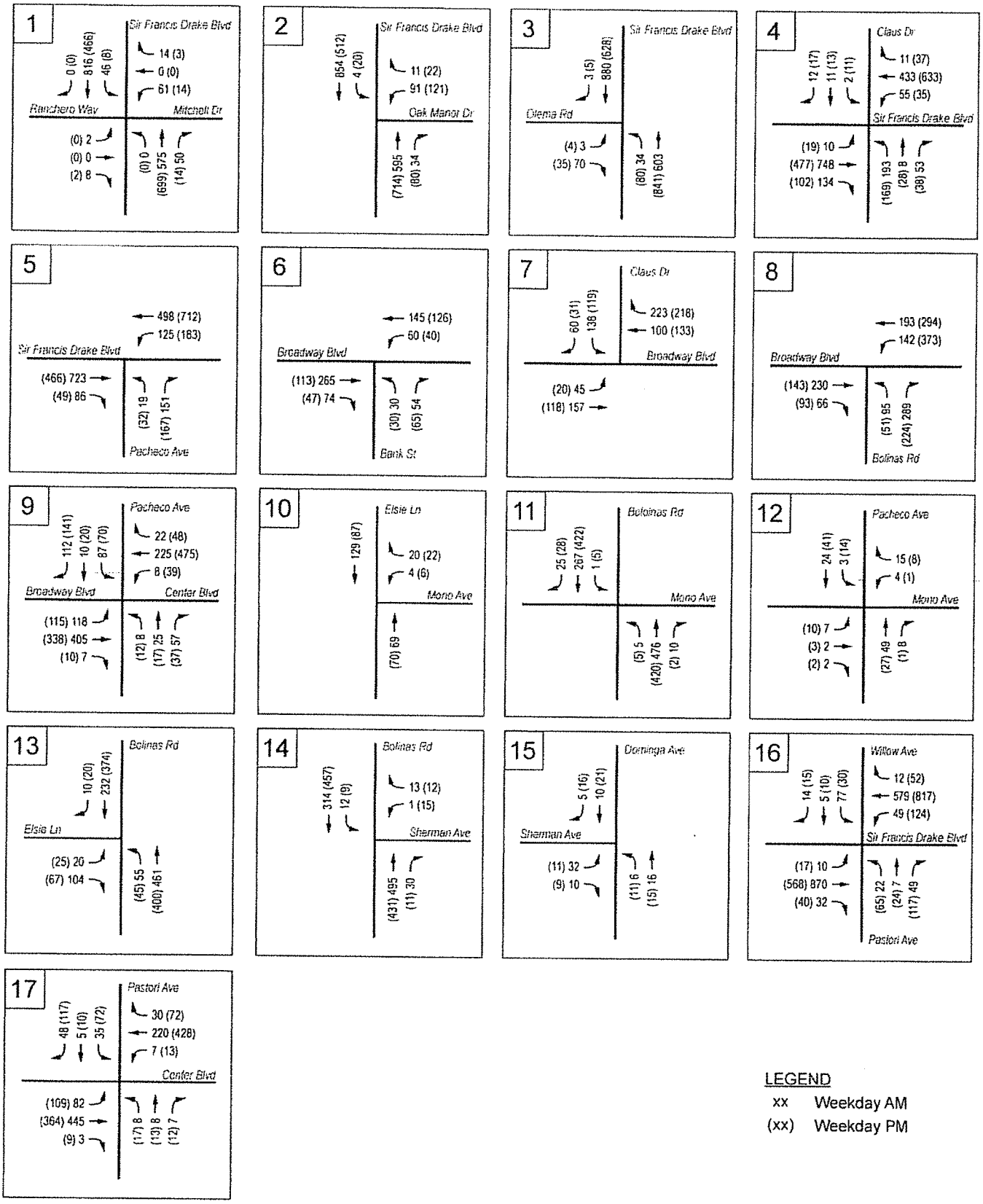


FIGURE 4

Existing + Opportunity Sites Peak Hour Traffic Volumes

Parisi ASSOCIATES transportation consulting

24 January 2012

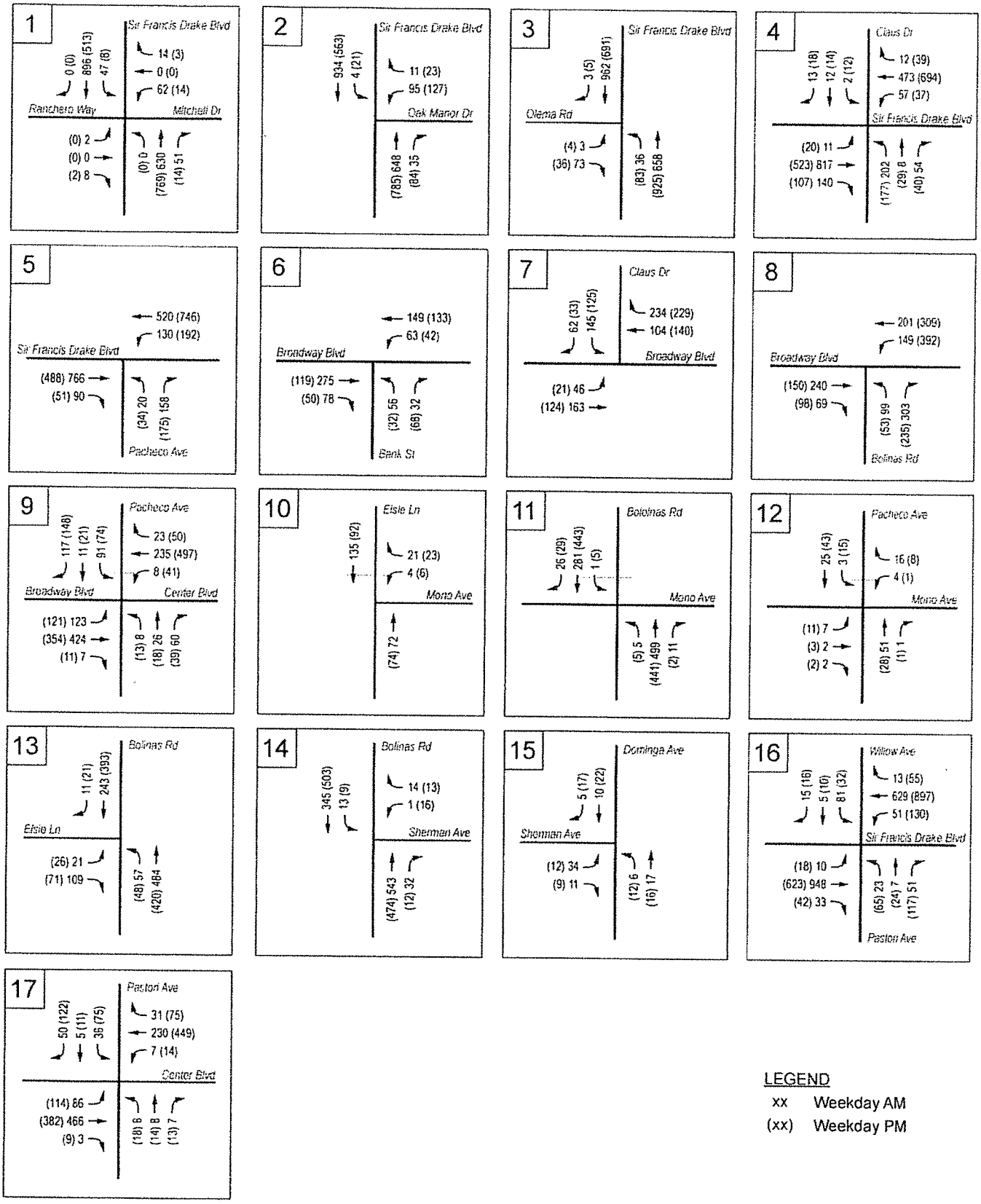


FIGURE 5

Year 2030 + Opportunity Sites Peak Hour Traffic Volumes

Parisi ASSOCIATES transportation consulting

24 January 2012

the AM peak hour left-turning movements from Pacheco Avenue would degrade from LOS E to LOS F conditions.

Table 7. Intersection Level of Service and Delay for Year 2030 and Year 2030 + Opportunity Site Conditions

No.	Street Name	Traffic Control	Time	2030 Delay	2030 LOS	2030 + Opp Sites Delay	2030 + Opp Sites LOS
1	Sir Francis Drake Boulevard	Two-Way Stop	AM	**62.3**	**E**	**199.1**	**F**
	Mitchell Drive/Banchero Way		PM	33.5	D	34.7	D
2	Sir Francis Drake Boulevard	Signal	AM	6.9	A	7.5	A
	Oak Manor Drive		PM	10.4	B	10.4	B
3	Sir Francis Drake Boulevard	One-Way Stop	AM	**40.6**	**E**	**49.0**	**E**
	Olema Road		PM	**54.8**	**F**	**59.2**	**F**
4	Sir Francis Drake Boulevard	Signal	AM	21.6	C	25.3	C
	Claus Drive		PM	21.6	C	21.8	C
5	Sir Francis Drake Boulevard	One-Way Stop	AM	**39.3**	**E**	**55.5**	**F**
	Pacheco Avenue		PM	**73.4**	**F**	**81.5**	**F**
6	Broadway	Two-Way Stop	AM	12.1	B	14.2	B
	Bank Street		PM	10.7	B	10.5	B
7	Broadway	Two-Way Stop	AM	15.0	C	20.3	C
	Claus Drive		PM	14.9	B	15.0	B
8	Broadway	All-Way Stop	AM	13.0	B	14.4	B
	Bolinas Road		PM	17.0	C	17.2	C
9	Broadway	All-Way Stop	AM	15.7	C	18.0	C
	Center Boulevard/Pachco Avenue		PM	**42.6**	**E**	**43.9**	**E**
10	Mono Avenue	One-Way Stop	AM	8.8	A	8.9	A
	Elsie Lane		PM	9.0	A	9.0	A
11	Mono Avenue	No Stop	AM	0.1	A	0.1	A
	Bolinas Road		PM	0.2	A	0.2	A
12	Mono Avenue	Two-Way Stop	AM	9.2	A	9.2	A
	Pacheco Avenue		PM	9.3	A	9.3	A
13	Elsie Lane	One-Way Stop	AM	12.4	B	12.8	B
	Bolinas Road		PM	15.5	C	15.5	C
14	Bolinas Road	One-Way Stop	AM	12.8	B	13.0	B
	Sherman Avenue		PM	17.6	C	17.6	C
15	Sherman Avenue	All-Way Stop	AM	7.2	A	7.2	A
	Dominga Avenue		PM	7.0	A	7.1	A
16	Sir Francis Drake Boulevard	Signal	AM	29.8	C	45.0	D
	Pastori Avenue		PM	33.2	C	36.0	D
17	Center Boulevard	All-Way Stop	AM	15.6	C	18.1	C
	Pastori Avenue		PM	**35.9**	**E**	**41.1**	**E**

RECOMMENDATIONS

The Town of Fairfax considers LOS D to be the minimum level of operation at both signalized and unsignalized intersections. Redevelopment of the opportunity sites would not result in any of the 17 study intersections degrading from LOS D or better conditions to LOS E or LOS F conditions based on current traffic levels or those expected in year 2030. Four intersections would be expected to continue operating at LOS E or LOS F conditions with or without the redevelopment of the opportunity sites. A fifth intersection, Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way, would have its stop sign-controlled left-turn degrade from LOS E to LOS F conditions during a peak period.

- Sir Francis Drake Boulevard/Mitchell Drive/Banchero Way: Stop sign-controlled left-turns from Mitchell Drive currently operate at LOS E conditions during the AM peak hour. LOS E is expected to continue to result in the year 2030 without redevelopment. Redevelopment of the Christ Lutheran Church site would degrade the left-turns to LOS F conditions and result in significant left-turn delays of two to three minutes. Traffic signalization of this intersection should be considered.
- Sir Francis Drake Boulevard/Olema Road: LOS E or F conditions would continue for left-turns turning from Olema Road with or without redevelopment of the opportunity sites. Fewer than five vehicles per peak hour are expected to continue turning left, experiencing delays of 60 seconds or less. This small volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions.
- Sir Francis Drake Boulevard/Pacheco Avenue: LOS E or F conditions would continue for left-turns turning from Pacheco Avenue with or without redevelopment of the opportunity sites. Fewer than 35 vehicles per peak hour are expected to continue turning left, experiencing delays of 80 seconds or less. This volume, in comparison to the uncontrolled traffic movements at this intersection, plus the availability of alternative means to access northbound Sir Francis Drake Boulevard, do not justify mitigating the LOS E/F conditions.
- Broadway /Center Boulevard/Pacheco Avenue: The average delay for all movements at this all-way stop sign-controlled intersection is expected to equate to LOS E conditions during the PM peak period considering existing and year 2030 traffic volumes, with or without redevelopment of the opportunity sites. Installing a modern roundabout could be considered, if feasible, to mitigate these conditions. Provision of a traffic signal could exacerbate vehicle queuing through Pacheco Avenue's intersection with Sir Francis Drake Boulevard.
- Center Boulevard/Pastori Avenue: By the year 2030, with or without redevelopment of the opportunity sites, this intersection is expected to operate at LOS E during the PM peak hour. Installation of a modern roundabout could be considered in the future.

APPENDIX

This appendix includes:

- Existing AM Peak Hour Trip Generation
- Estimated New AM Peak Hour Trip Generation
- Estimated Resulting AM Peak Hour Traffic Volumes
- Existing PM Peak Hour Trip Generation
- Estimated New PM Peak Hour Trip Generation
- Estimated Resulting PM Peak Hour Traffic Volumes

EXISTING AM PEAK HOUR TRIP GENERATION

Site 1: Christ Lutheran Church

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75		0		0	0	0	0
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45	47	42		0	42	23	19
7	Church	560	SF	0.56	0.62	0.38	5.063	3		0	3	2	1
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52		0	0.34	0	0	0	0
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											45	25	20

Site 2: 10 Olema Street

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	4	3		0	3	1	2
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52		0	0.34	0	0	0	0
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											3	1	2

Site 3: Westside Commercial

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	3	2		0	2	1	1
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	28.075	192	0.34	65	127	61	66
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39	17.6	63	0.36	23	40	25	16
											169	86	83

Site 4: School Street Plaza

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	1	1		0	1	0	1
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	18.196	124	0.34	42	82	39	43
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											83	40	43

Site 5: Fair Anselm

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75		0		0	0	0	0
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	48.047	328	0.34	112	217	104	113
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39	22	79	0.36	28	51	31	20
											267	135	133

Site 6: Eastside Commercial

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75	5	4		0	4	1	3
2	Apartments	220	DU	0.51	0.20	0.80	9	5		0	5	1	4
3	Condominiums	231	DU	0.67	0.25	0.75		0		0	0	0	0
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	24.012	164	0.34	56	108	52	56
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											117	54	63

ESTIMATED NEW AM PEAK HOUR TRIP GENERATION

Site 1: Christ Lutheran Church

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75		0		0	0	0	0
4	Senior Housing	251	DU	0.22	0.35	0.65	40	9		0	9	3	6
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45	150	135		0	135	74	61
7	Church	560	SF	0.56	0.62	0.38	5	3		0	3	2	1
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52		0	0.34	0	0	0	0
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											147	79	68

Site 2: 10 Olema Street

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	26	17		0	17	4	13
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	1.65	11	0.34	4	7	4	4
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											25	8	17

Site 3: Westside Commercial

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	20	13		0	13	3	10
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	28.075	192	0.34	65	127	61	66
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39	17.6	63	0.36	23	40	35	16
											181	89	92

Site 4: School Street Plaza

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	10	7		0	7	2	5
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45	300	270		0	270	149	122
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52		0	0.34	0	0	0	0
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											277	150	127

Site 5: Fair Anselm

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75		0		0	0	0	0
2	Apartments	220	DU	0.51	0.20	0.80		0		0	0	0	0
3	Condominiums	231	DU	0.67	0.25	0.75	15	10		0	10	3	8
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	52.047	356	0.34	121	235	113	122
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39	77	79	0.36	28	51	31	20
											296	146	149

Site 6: Eastside Commercial

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	0.75	0.25	0.75	5	4		0	4	1	3
2	Apartments	220	DU	0.51	0.20	0.80	20	10		0	10	2	8
3	Condominiums	231	DU	0.67	0.25	0.75		0		0	0	0	0
4	Senior Housing	251	DU	0.22	0.35	0.65		0		0	0	0	0
5	Elementary School	520	Students	0.45	0.55	0.45		0		0	0	0	0
6	Private School (K-8)	534	Students	0.90	0.55	0.45		0		0	0	0	0
7	Church	560	SF	0.56	0.62	0.38		0		0	0	0	0
8	Day Care	565	SF	12.26	0.53	0.47		0		0	0	0	0
9	General Office	710	SF	1.55	0.88	0.12		0		0	0	0	0
10	Specialty Retail Center	814	SF	6.84	0.48	0.52	29.512	202	0.34	69	133	64	69
11	Shopping Center	820	SF	1.00	0.61	0.39		0	0.34	0	0	0	0
12	Supermarket	850	SF	3.59	0.61	0.39		0	0.36	0	0	0	0
											147	67	80

ESTIMATED RESULTING AM PEAK HOUR TRAFFIC VOLUMES

1

Sir Francis Drake Boulevard/Claus Drive															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Projects
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	12		12	1.05	13							0	12	13
	T	11		11	1.05	12							0	11	12
	L	2		2	1.05	2							0	2	2
WB	R	11		11	1.05	12							0	11	12
	T	403		403	1.10	443	20	4	4			2	30	433	473
	L	30		30	1.05	32				25			25	55	57
NB	R	23		23	1.05	24				30			30	53	54
	T	8		8	1.05	8							0	8	8
	L	180		180	1.05	189	10	1	2				13	193	202
EB	R	124		124	1.05	130	5	2	3				10	134	140
	T	693		693	1.10	762	32	11	9			3	55	748	817
	L	10		10	1.05	11							0	10	11
							67	18	18	55	0	5			

2

Broadway Boulevard/Claus Drive															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	35		35	1.05	37				25			25	60	62
	T			0	1.05	0							0	0	0
	L	130		130	1.05	137	3	2	3				8	138	145
WB	R	210		210	1.05	221	10	1	2				13	223	234
	T	70		70	1.05	74				30			30	100	104
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T	127		127	1.05	133				30			30	157	163
	L	15		15	1.05	16				30			30	45	46
							13	3	5	115	0	0			

3

Sherman Avenue/Domingo Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	5		5	1.05	5							0	5	5
	T	9		9	1.05	9			1				1	10	10
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	15		15	1.05	16						1	1	16	17
	L	6		6	1.05	6							0	6	6
EB	R	10		10	1.05	11							0	10	11
	T			0	1.05	0							0	0	0
	L	32		32	1.05	34							0	32	34
							0	0	1	0	0	1			

4

Broadway Boulevard/Center Boulevard/Pacheco Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	92		92	1.05	97				20			20	112	117
	T	10		10	1.05	11							0	10	11
	L	87		87	1.05	91							0	87	91
WB	R	22		22	1.05	23							0	22	23
	T	205		205	1.05	215	4			15	1		20	225	235
	L	8		8	1.05	8							0	8	8
NB	R	54		54	1.05	57					2	1	3	57	60
	T	25		25	1.05	26							0	25	26
	L	8		8	1.05	8							0	8	8
EB	R	6		6	1.05	6			1				1	7	7
	T	386		386	1.05	405	2			15	1	1	19	405	424
	L	103		103	1.05	108				15			15	118	123
							6	0	1	65	4	2			

5

Broadway Boulevard/Bank Street															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	85		85	1.05	89				60			60	145	149
	L	60		60	1.05	63							0	60	63
NB	R	30		30	1.05	32							0	30	32
	T			0	1.05	0							0	0	0
	L	40		40	1.05	42				14			14	54	56
EB	R	70		70	1.05	74				4			4	74	78
	T	205		205	1.05	215				60			60	265	275
	L			0	1.05	0							0	0	0
							0	0	0	138	0	0			

6

Broadway Boulevard/Bolinas Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	154		154	1.05	162	4			35			39	193	201
	L	141		141	1.05	148					1		1	142	149
NB	R	287		287	1.05	301					1	1	2	289	303
	T			0	1.05	0							0	0	0
	L	86		86	1.05	90	6	1	2				9	95	99
EB	R	60		60	1.05	63	3	1	2				6	66	69
	T	197		197	1.05	207	2		1	30			33	230	240
	L			0	1.05	0							0	0	0
							15	2	5	65	2	1			

7n

	Bolinas Avenue/Mono Lane (N)															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	260		260	1.05	273	3	3	2		1		7	267	280
	L	1		1	1.05	1							0	1	1
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R	10		10	1.05	11							0	10	11
	T	455		455	1.05	478	6	1	2		1	1	11	466	489
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							9	7	4	0	2	1			

7s

	Bolinas Avenue/Mono Lane (S)														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	25		25	1.05	26							0	25	26
	T	235		235	1.05	247	3	1	2		1		7	242	254
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	465		465	1.05	488	6	1	2		1	1	11	476	499
	L	5		5	1.05	5							0	5	5
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							9	2	4	0	2	1			

8

	Mono Avenue/Pacheco Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	23		23	1.05	24					1		1	24	25
	L	2		2	1.05	2			1				1	3	3
WB	R	15		15	1.05	16							0	15	16
	T			0	1.05	0							0	0	0
	L	2		2	1.05	2					2		2	4	4
NB	R	1		1	1.05	1							0	1	1
	T	48		48	1.05	50						1	1	49	51
	L			0	1.05	0							0	0	0
EB	R	2		2	1.05	2							0	2	2
	T	2		2	1.05	2							0	2	2
	L	7		7	1.05	7							0	7	7
							0	0	1	0	3	1			

9

	Elsie Lane/Bolinas Road														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2035 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	10		10	1.05	11							0	10	11
	T	225		225	1.05	236	3	1	7		1		7	232	243
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	450		450	1.05	473	6	1	2		1	1	11	461	484
	L	40		40	1.05	42				15			15	55	57
EB	R	100		100	1.05	105				4			4	104	109
	T			0	1.05	0							0	0	0
	L	20		20	1.05	21							0	20	21
							9	2	4	19	2	1			

10

	Sir Francis Drake Boulevard/Pacheco Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	438		438	1.05	460	20	4	8	25		3	60	498	520
	L	105		105	1.05	110				20			20	125	130
NB	R	136		136	1.05	143				15			15	151	158
	T			0	1.05	0							0	0	0
	L	19		19	1.05	20							0	19	20
EB	R	86		86	1.05	90							0	86	90
	T	653		653	1.05	686	32	11	4	30		3	80	733	766
	L			0	1.05	0							0	0	0
							57	15	12	90	0	6			

11

	Mono Avenue/Elsie Street														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	125		125	1.05	131				4			4	129	135
	L			0	1.05	0							0	0	0
WB	R	20		20	1.05	21							0	20	21
	T			0	1.05	0							0	0	0
	L	4		4	1.05	4							0	4	4
NB	R			0	1.05	0							0	0	0
	T	50		50	1.05	53				19			15	69	72
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							0	0	0	23	0	0			

12

	Bolinas Road/Sherman Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		

SB	R			0	1.05	0							0	0	0
	T	305		305	1.10	336	3	1		4	1		9	314	345
	L	12		12	1.05	13							0	12	13
WB	R	10		10	1.05	11				3			3	13	14
	T			0	1.05	0							0	0	0
	L	1		1	1.05	1							0	1	1
NB	R	30		30	1.05	32							0	30	32
	T	475		475	1.10	523	6	1		12	1		20	495	543
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							9	2	0	19	2	0			

13 Sir Francis Drake Boulevard/Pastori Avenue

Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	14		14	1.05	15							0	14	15
	T	5		5	1.05	5							0	5	5
	L	77		77	1.05	81							0	77	81
WB	R	12		12	1.05	13							0	12	13
	T	504		504	1.10	554	20	4	3	45		3	75	579	629
	L	46		46	1.05	48					3		3	49	51
NB	R	40		40	1.05	42					7	2	9	49	51
	T	7		7	1.05	7							0	7	7
	L	20		20	1.05	21						2	2	22	23
EB	R	29		29	1.05	30	1		2				3	32	33
	T	775		775	1.10	853	32	10	8	43		2	95	870	948
	L	6		6	1.05	6						4	4	10	10
							53	14	13	88	10	13			

14 Carter Boulevard/Pastori Avenue

Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	47		47	1.05	49		1					1	48	50
	T	5		5	1.05	5							0	5	5
	L	29		29	1.05	30			2			4	6	35	36
WB	R	28		28	1.05	29						2	2	30	31
	T	196		196	1.05	206	4			15	5		24	220	230
	L	7		7	1.05	7							0	7	7
NB	R	7		7	1.05	7							0	7	7
	T	8		8	1.05	8							0	8	8
	L	8		8	1.05	8							0	8	8
EB	R	3		3	1.05	3							0	3	3
	T	422		422	1.05	443	2			15	6		23	445	466
	L	73		73	1.05	77					7	2	9	82	86
							6	1	2	30	18	8			

15 Sir Francis Drake Boulevard/Olema Road

Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	2		2	1.05	2		1					1	3	3
	T	818		818	1.10	900	37		4	18		3	62	880	962
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	543		543	1.10	600	30		8	18		2	58	601	658
	L	34		34	1.05	36							0	34	36
EB	R	57		57	1.05	60		13					13	70	73
	T			0	1.05	0							0	0	0
	L	1		1	1.05	1		2					2	3	3
							67	16	12	36	0	5			

16 Sir Francis Drake Boulevard/Oak Manor Drive

Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	802		802	1.10	882	50	2	7	15		3	52	854	934
	L	2		2	1.05	2	2						2	4	4
WB	R	7		7	1.05	7	4						4	11	11
	T			0	1.05	0							0	0	0
	L	88		88	1.05	92				3			3	91	95
NB	R	29		29	1.05	30			2	3			5	34	35
	T	534		534	1.10	587	37	1	6	15		2	61	595	648
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							73	3	10	36	0	5			

17 Sir Francis Drake Boulevard/Mitchel Drive/Bancherro Way

Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	0		0	1.05	0							0	0	0
	T	795		795	1.10	875		1	7	15		3	21	816	896
	L	24		24	1.05	25	22						22	46	47
WB	R	4		4	1.05	4	10						10	14	14
	T	0		0	1.05	0							0	0	0
	L	22		22	1.05	23	39						39	61	62
NB	R	16		16	1.05	17	34						34	50	51
	T	550		550	1.10	605		2	6	15		2	25	575	630
	L	0		0	1.05	0							0	0	0
EB	R	8		8	1.05	8							0	8	8
	T	0		0	1.05	0							0	0	0
	L	2		2	1.05	2							0	2	2
							105	3	8	30	0	5			

EXISTING PM PEAK HOUR TRIP GENERATION

Site 1: Christ Lutheran Church

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42		0		0	0	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53	47	4		0	4	2	2
7	Church	560	SF	0.55	0.48	0.52	5.063	3		0	3	1	1
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44		0	0.34	0	0	0	0
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											7	3	4

Site 2: 10 Olema Street

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	4	3		0	3	2	1
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44		0	0.34	0	0	0	0
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											3	2	1

Site 3: Westside Commercial

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	3	2		0	2	1	1
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	26.075	141	0.34	48	93	52	41
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49	17.6	185	0.36	67	118	60	58
											214	114	100

Site 4: School Street Plaza

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	1	1		0	1	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	18.196	91	0.34	31	60	34	27
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											61	34	27

Site 5: Fair Anselm

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42		0		0	0	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	48.047	241	0.34	82	159	89	70
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49	22	231	0.36	83	148	75	72
											307	165	142

Site 6: Eastside Commercial

		ITE					Existing Site						
Land Use	Description	LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37	5	5		0	5	3	2
2	Apartments	220	DU	0.62	0.65	0.35	9	6		0	6	4	2
3	Condominiums	231	DU	0.78	0.58	0.42		0		0	0	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	24.012	121	0.34	41	80	45	35
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											90	51	39

ESTIMATED NEW PM PEAK HOUR TRIP GENERATION

Site 1: Christ Lutheran Church

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42		0		0	0	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39	40	11		0	11	7	4
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53	150	14		0	14	8	7
7	Church	560	SF	0.55	0.48	0.52	5	3		0	3	1	1
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44		0	0.34	0	0	0	0
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											27	14	13

Site 2: 10 Olema Street

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	26	20		0	20	12	9
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	1.65	8	0.34	3	5	3	2
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											26	15	11

Site 3: Westside Commercial

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	20	16		0	16	9	7
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	28.075	141	0.34	48	93	52	41
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49	17.6	185	0.36	67	118	60	58
											227	121	105

Site 4: School Street Plaza

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	10	8		0	8	5	3
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53	300	27		0	27	13	14
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44		0	0.34	0	0	0	0
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											35	17	18

Site 5: Fair Anselm

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37		0		0	0	0	0
2	Apartments	220	DU	0.62	0.65	0.35		0		0	0	0	0
3	Condominiums	231	DU	0.78	0.58	0.42	15	12		0	12	7	5
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	52.047	261	0.34	89	172	97	76
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49	22	231	0.36	83	148	75	72
											332	179	153

Site 6: Eastside Commercial

Land Use	Description	ITE					Existing Site						
		LU Code	Units	Trip Rate	% In	% Out	Quantity	Trips	Pass-By %	PB Trips	Total Trips	% In	% Out
1	Single Family	210	DU	1.01	0.63	0.37	5	5		0	5	3	2
2	Apartments	220	DU	0.62	0.65	0.35	20	12		0	12	8	4
3	Condominiums	231	DU	0.78	0.58	0.42		0		0	0	0	0
4	Senior Housing	251	DU	0.27	0.61	0.39		0		0	0	0	0
5	Elementary School	520	Students	0.02	0.49	0.51		0		0	0	0	0
6	Private School (K-8)	534	Students	0.09	0.47	0.53		0		0	0	0	0
7	Church	560	SF	0.55	0.48	0.52		0		0	0	0	0
8	Day Care	565	SF	12.46	0.47	0.53		0		0	0	0	0
9	General Office	710	SF	1.49	0.17	0.83		0		0	0	0	0
10	Specialty Retail Center	814	SF	5.02	0.56	0.44	29.512	148	0.34	50	98	55	43
11	Shopping Center	820	SF	3.73	0.49	0.51		0	0.34	0	0	0	0
12	Supermarket	850	SF	10.50	0.51	0.49		0	0.36	0	0	0	0
											115	66	49

ESTIMATED RESULTING PM PEAK HOUR TRAFFIC VOLUMES

1

Sir Francis Drake Boulevard/Claus Drive																
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Projects
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	17		17	1.05	18							0	17	18
	T	13		13	1.05	14							0	13	14
	L	11		11	1.05	12							0	11	12
WB	R	33		33	1.05	35			4				4	37	39
	T	613		613	1.10	674	6	10	3			1	20	633	694
	L	39		39	1.05	41				-4			-4	35	37
NB	R	38		39	1.05	41				-1			-1	38	40
	T	28		28	1.05	29							0	28	29
	L	166		166	1.05	174	2	1					3	169	177
EB	R	99		99	1.05	104	2	1					3	102	107
	T	464		464	1.10	510	5	6				2	13	477	523
	L	19		19	1.05	20							0	19	20
							15	18	7	-5	0	3			

2

Broadway Boulevard/Claus Drive															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	35		35	1.05	37				-4			-4	31	33
	T			0	1.05	0							0	0	0
	L	116		116	1.05	122	2	1					3	119	125
WB	R	215		215	1.05	226	2	1					3	218	229
	T	135		135	1.05	142				-2			-2	133	140
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T	120		120	1.05	126				-2			-2	118	124
	L	20		20	1.05	21							0	20	21
							4	2	0	-8	0	0			

3

Sherman Avenue/Domínga Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	16		16	1.05	17							0	16	17
	T	20		20	1.05	21					1		1	21	22
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	14		14	1.05	15					1		1	15	16
	L	11		11	1.05	12							0	11	12
EB	R	9		9	1.05	9							0	9	9
	T			0	1.05	0							0	0	0
	L	11		11	1.05	12							0	11	12
							0	0	0	0	2	0			

4

Broadway Boulevard/Center Boulevard/Pacheco Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	140		140	1.05	147						1	1	141	148
	T	20		20	1.05	21							0	20	21
	L	70		70	1.05	74							0	70	74
WB	R	48		48	1.05	50							0	48	50
	T	475		475	1.05	499				-2			-2	473	497
	L	38		38	1.05	40					1		1	39	41
NB	R	36		36	1.05	38					1		1	37	39
	T	17		17	1.05	18							0	17	18
	L	12		12	1.05	13							0	12	13
EB	R	10		10	1.05	11							0	10	11
	T	338		338	1.05	355				-1			-1	337	354
	L	113		113	1.05	119						2	2	115	121
							0	0	0	-3	2	3			

5

Broadway Boulevard/Bank Street															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	130		130	1.05	137				-4			-4	126	133
	L	40		40	1.05	42							0	40	42
NB	R	65		65	1.05	68							0	65	68
	T			0	1.05	0							0	0	0
	L	35		35	1.05	37				-5			-5	30	32
EB	R	50		50	1.05	53				-3			-3	47	50
	T	115		115	1.05	121				-2			-2	113	119
	L			0	1.05	0							0	0	0
							0	0	0	-14	0	0			

6

Broadway Boulevard/Bolinas Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	296		296	1.05	311				-2			-2	294	309
	L	372		372	1.05	391						1	1	373	392
NB	R	222		222	1.05	233						2	2	224	235
	T			0	1.05	0							0	0	0
	L	48		48	1.05	50	2	1					3	51	53
EB	R	90		90	1.05	95	2	1					3	93	98
	T	144		144	1.05	151				-1			-1	143	150
	L			0	1.05	0							0	0	0
							4	2	0	-3	0	3			

7h

	Bolinas Avenue/Mono Lane (N)															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	420		420	1.05	441	2	1				1	4	424	445
	L	5		5	1.05	5							0	5	5
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R	2		2	1.05	2							0	2	2
	T	415		415	1.05	436	2	1				2	5	420	441
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							4	2	0	0	0	3			

7i

	Bolinas Avenue/Mono Lane (S)														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	28		28	1.05	29							0	28	29
	T	372		372	1.05	391	2	1				1	4	376	395
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	417		417	1.05	438	2	1				2	5	422	443
	L	5		5	1.05	5							0	5	5
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							4	2	0	0	0	3			

8

	Mono Avenue/Pacheco Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	40		40	1.05	42					1		1	41	43
	L	14		14	1.05	15							0	14	15
WB	R	8		8	1.05	8							0	8	8
	T			0	1.05	0							0	0	0
	L	1		1	1.05	1							0	1	1
NB	R	1		1	1.05	1							0	1	1
	T	26		26	1.05	27					1		1	27	28
	L			0	1.05	0							0	0	0
EB	R	2		2	1.05	2							0	2	2
	T	3		3	1.05	3							0	3	3
	L	10		10	1.05	11							0	10	11
							0	0	0	0	2	0			

9

	Elsie Lane/Bolinas Road														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	20		20	1.05	21							0	20	21
	T	372		372	1.05	391	1	1				1	3	375	394
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	397		397	1.05	417	1	1				2	4	401	421
	L	50		50	1.05	53				-5			-5	45	48
EB	R	70		70	1.05	74				-3			-3	67	71
	T			0	1.05	0							0	0	0
	L	25		25	1.05	26							0	25	26
							2	2	0	-8	0	3			

10

	Sir Francis Drake Boulevard/Pacheco Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T	688		688	1.05	722	6	10	7			1	24	712	746
	L	182		182	1.05	191						1	1	183	192
NB	R	165		165	1.05	173						2	2	167	175
	T			0	1.05	0							0	0	0
	L	32		32	1.05	34							0	32	34
EB	R	49		49	1.05	51							0	49	51
	T	448		448	1.05	470	5	6	5			2	18	466	488
	L			0	1.05	0							0	0	0
							13	16	12	0	0	6			

11

	Mono Avenue/Elsie Street														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	90		90	1.05	95				-3			-3	87	92
	L			0	1.05	0							0	0	0
WB	R	22		22	1.05	23							0	22	23
	T			0	1.05	0							0	0	0
	L	6		6	1.05	6							0	6	6
NB	R			0	1.05	0							0	0	0
	T	75		75	1.05	79				-5			-5	70	74
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							0	0	0	-8	0	0			

12

	Bolinas Road/Sherman Avenue														
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		

SB	R			0	1.05	0						0	0	0
	T	455		455	1.10	501	1	1				3	458	504
	L	9		9	1.05	9					1	0	9	9
WB	R	12		12	1.05	13						0	12	13
	T			0	1.05	0						0	0	0
	L	15		15	1.05	16						0	15	16
NB	R	11		11	1.05	12						0	11	12
	T	433		433	1.10	476	1	1		-5		-1	432	475
	L			0	1.05	0					7	0	0	0
EB	R			0	1.05	0						0	0	0
	T			0	1.05	0						0	0	0
	L			0	1.05	0						0	0	0
							2	2	0	-5	0	3		

13

Sir Francis Drake Boulevard/Pastori Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	15		15	1.05	16							0	15	16
	T	8		8	1.05	8					2		2	10	10
	L	30		30	1.05	32							0	30	32
WB	R	52		52	1.05	55							0	52	55
	T	797		797	1.10	877	5	8	7	-4		4	20	817	897
	L	118		118	1.05	124					6		6	124	130
NB	R	104		104	1.05	109					5	3	8	112	117
	T	22		22	1.05	23					1		1	23	24
	L	57		57	1.05	60	1	2				2	5	62	65
EB	R	37		37	1.05	39	1	1				1	3	40	42
	T	554		554	1.10	609	4	5	5	-1		1	14	568	623
	L	17		17	1.05	18							0	17	18
							11	16	12	5	14	11			

14

Center Boulevard/Pastori Avenue															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	109		109	1.05	114		1			6	1	8	117	122
	T	10		10	1.05	11							0	10	11
	L	68		68	1.05	71	1					3	4	72	75
WB	R	67		67	1.05	70	1	1				3	5	72	75
	T	427		427	1.05	448				-2	3		1	428	449
	L	13		13	1.05	14							0	13	14
NB	R	12		12	1.05	13							0	12	13
	T	12		12	1.05	13					1		1	13	14
	L	17		17	1.05	18							0	17	18
EB	R	9		9	1.05	9							0	9	9
	T	361		361	1.05	379				-1	-4		3	364	382
	L	101		101	1.05	106		1			5	2	8	109	114
							2	3	0	-3	19	9			

15

Sir Francis Drake Boulevard/Olema Road															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R	3		3	1.05	3		2					2	5	5
	T	627		627	1.10	690	2			-5		2	4	631	694
	L			0	1.05	0							0	0	0
WB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
NB	R			0	1.05	0							0	0	0
	T	840		840	1.10	924	8			-4		1	5	845	929
	L	69		69	1.05	72		11					11	80	83
EB	R	28		28	1.05	29		7					7	35	36
	T			0	1.05	0							0	0	0
	L	2		2	1.05	2		2					2	4	4
							15	22	0	-9	0	3			

16

Sir Francis Drake Boulevard/Oak Manor Drive															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	506		506	1.10	557	7	2		-3		2	6	514	565
	L	20		20	1.05	21							0	20	21
WB	R	22		22	1.05	23							0	22	23
	T			0	1.05	0							0	0	0
	L	124		124	1.05	130				-2			-2	122	128
NB	R	83		83	1.05	87				-2			-2	81	85
	T	708		708	1.10	779	8	2		-9		1	5	717	788
	L			0	1.05	0							0	0	0
EB	R			0	1.05	0							0	0	0
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							15	4	0	-9	0	3			

17

Sir Francis Drake Boulevard/Mitchel Drive/Bancheto Way															
Dir		Existing Traffic	2011 Factor	2011 Traffic	2030 Factor	2030 Traffic	Project Traffic							Existing + Projects	2030 + Project
							Lutheran	Olema	Westside	School	Fair Anselm	Eastside	Total		
SB	R			0	1.05	0							0	0	0
	T	467		467	1.10	514		2		-3		2	1	468	515
	L	5		5	1.05	5	3						3	8	8
WB	R	1		1	1.05	1	2						2	3	3
	T			0	1.05	0							0	0	0
	L	7		7	1.05	7	2						2	16	16
NB	R	6		6	1.05	6	8						8	14	14
	T	701		701	1.10	771		2		-2		1	1	702	772
	L			0	1.05	0							0	0	0
EB	R	2		2	1.05	2							0	2	2
	T			0	1.05	0							0	0	0
	L			0	1.05	0							0	0	0
							20	4	0	-5	0	3			

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
505 Petaluma Boulevard South
Petaluma, California 94952
Tel: 707-766-7700
www.illingworthrodkin.com
Fax: 707-766-7790
illro@illingworthrodkin.com

January 30, 2012

Sean Kennings
Planning Consultant
LAK Associates, LLC
3030 Bridgeway Blvd, Suite 103
Sausalito, CA 94965

VIA E-MAIL: sean@lakassociates.com

SUBJECT: Fairfax General Plan Update Air Quality and Greenhouse Gas CEQA Evaluation

Dear Sean:

The purpose of this letter is to address air quality impacts and greenhouse gas emissions associated with the update to the Town of Fairfax General Plan. The General Plan Update mostly involves updates to policies and implementing measures. Growth from General Plan build out was assumed to occur in areas referred to as "Opportunity Sites." Because in-depth traffic and population analyses of the General Plan Update were not conducted, we analyzed impacts a little differently than recommended in the BAAQMD CEQA Air Quality Guidelines. We tried to quantify impacts following project thresholds since we do not know the rate of traffic increases in the town with respect to population increases. In addition, we could not provide an inventory of greenhouse gas emissions from the Town and update that with respect to the General Plan Update effects. However, we are making the assumption that the Draft Climate Action Plan includes build-out conditions that would occur under the General Plan. That is, growth consistent with ABAG and MTC projections. We are assuming that growth in Fairfax under the General Plan Update would not exceed these projections. Our report is as follows:

Setting

The Town of Fairfax is located in Marin County, CA, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and Federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$). While exceedances of these standards do not occur in Marin County, emissions from the area can contribute to exceedances elsewhere in the Bay Area.

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NOx). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. Highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

EXHIBIT # E

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and Federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the CARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008 CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles[1]. The regulation requires affected vehicles to meet specific performance requirements between 2011 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

The Bay Area Air Quality Management District (BAAQMD) is the regional agency tasked with managing air quality in the region. At the State level, the California Air Resources Board (a part of the California Environmental Protection Agency) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has recently published CEQA Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects[2].

Impact 1: Conflict with or obstruct implementation of the applicable air quality plan? ***No Impact***

The BAAQMD CEQA Air Quality Guidelines provide methods for determining the consistency of General Plan update projects with the Bay Area's latest clean air plan. The most recent clean air plan is the *Bay Area 2010 Clean Air Plan* that was adopted by BAAQMD in September 2010.

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[1] http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm
[2] Bay Area Air Quality Management District. 2010. BAAQMD CEQA Air Quality Guidelines. June.

Emissions of non-attainment air pollutants are addressed under Impacts 2 and 3. Exposure of sensitive receptors (proposed new receptors and existing receptors) is addressed under Impact 4. Impact 6 addresses GHG emissions that could occur from new development occurring under the General Plan.

Clean Air Plan Projections

The consistency of the proposed project with this regional plan is primarily a question of the consistency with the population/employment assumptions utilized in developing the 2010 Clean Air Plan (CAP), which were based on ABAG and MTC Projections. The proposed development occurring under the General Plan Update is anticipated to meet regional housing requirements and not exceed ABAG projections. Traffic generated as part of this development would lead to potential air pollutant emissions. BAAQMD CEQA Air Quality Guidelines recommend that plans evaluate the change in vehicle travel in comparison to population growth. However, the General Plan Update does not include a comprehensive traffic study that evaluates vehicle travel. Development under the General Plan Update is anticipated to concentrate on higher density housing in areas with mixed uses that have access to transit and bicycle and pedestrian amenities. For this reason, growth under the General Plan Update is not anticipated to conflict with Clean Air Plan projections of population and vehicle activity growth.

Since much of the growth would be associated with development of the Opportunity Sites, this analysis computed those emissions and compared them to BAAQMD project emission thresholds. Rather than compare projections of vehicle travel with population growth, this analysis computes the emissions of the growth and compares it to project-level significance thresholds to determine if growth in vehicle travel would cause significant emissions and conflict with the latest CAP. That analysis is contained under Impact 2.

Consistency with Clean Air Plan Control Measures

The 2010 CAP includes about 55 control measures that are intended to reduce air pollutant emissions in the Bay Area either directly or indirectly. The control measures are divided in to five categories that include:

- 18 measures to reduce stationary and area sources;
- 10 mobile source measures;
- 17 transportation control measures;
- 6 land use and local impact measures; and
- 4 energy and climate measures

In developing the control strategy, BAAQMD identified the full range of tools and resources available, both regulatory and non-regulatory, to develop each measure. Implementation of each control measure will rely on some combination of the following:

- Adoption and enforcement of rules to reduce emissions from stationary sources, area sources, and indirect sources;
- Revisions to BAAQMD's permitting requirements for stationary sources;
- Enforcement of CARB rules to reduce emissions from heavy - duty diesel engines;
- Allocation of grants and other funding by the Air District and/or partner agencies;
- Promotion of best policies and practices that can be implemented by local agencies through guidance documents, model ordinances, etc.;
- Partnerships with local governments, other public agencies, the business community, non - profits, etc.;
- Public outreach and education;
- Enhanced air quality monitoring;

- Development of land use guidance and CEQA guidelines, and Air District review and comment on Bay Area projects pursuant to CEQA; and
- Leadership and advocacy.

This approach relies upon lead agencies to assist in implementing some of the control measures. A key tool for local agency implementation is the development of land use policies and implementing measures that address new development or redevelopment in local communities. The consistency of the proposed General Plan update is evaluated with respect to each set of control measures.

Stationary and Area Source Control Measures
The CAP includes Stationary Source Control measures that BAAQMD adopts as rules or regulations through their authority to control emissions from stationary and area sources. The BAAQMD is the implementing agency, since these control measures are applicable to sources of air pollution that must obtain District permits. Any new stationary sources would be required to obtain proper permits through BAAQMD. In addition, the City uses BAAQMD's CEQA Air Quality Guidelines to evaluate air pollutant emissions from new sources.

Mobile Source Measures
The CAP includes Mobile Source Measures that would reduce emissions by accelerating the replacement of older, dirtier vehicles and equipment through programs such as the BAAQMD's Vehicle Buy-Back and Smoking Vehicle Programs, and promoting advanced technology vehicles that reduce emissions. The implementation of these measures rely heavily upon incentive programs, such as the Carl Moyer Program and the Transportation Fund for Clean Air, to achieve voluntary emission reductions in advance of, or in addition to, CARB requirements. CARB has new regulations that require the replacement or retrofit of on-road trucks, construction equipment and other specific equipment that is diesel powered.

Transportation Control Measures
The CAP includes transportation control measures (TCMs) that are strategies meant to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. While most of the TCMs are implemented at the regional level (e.g., by MTC or Caltrans), there are measures that the CAP relies upon local communities to assist with implementation. In addition, the CAP includes land use measures and energy and climate measures where implementation is aided by proper land use planning decisions. The City's latest General Plan includes measures to reduce vehicle travel that are generally consistent with the CAP TCMs. In addition to the proposed programs to encourage development of mixed uses at infill sites, the General Plan Updates includes numerous Circulation programs aimed at reducing motor vehicle travel. Many of these programs focus on developing or expanding the Town's comprehensive pedestrian and bicycling amenities that would include new or improved trails and bike lanes (Programs C-5.1.1 through C-5.1.5, C-5.2 and C-5.2.3, C-5.3.2, C-5.4.2, C-5.5.2, C-5.6.2, C-5.6.3, C-5.7.1, C-5.7.2, C-5.8.1). These programs are further supported by the TC programs (e.g., TC-3.2.1 through TC-3.2.5, and TC-3.2.7)

TAC Exposure
The project site includes sensitive receptors that would be located near sources of TAC emissions. The CAP includes measures to reduce TAC exposure to sensitive receptors. The City uses the BAAQMD CEQA Air Quality Guidelines to identify community risk impacts and develop appropriate mitigation measures. TAC exposure is addressed under Impact 4.

Climate Action Plan
Currently, the Town has developed a draft Climate Action Plan that includes implementing actions to reduce air pollutant and GHG emissions to address climate change through development of a Climate Action Plan. When adopted, these actions or policies would support many of the CAP measures aimed at reducing air pollutant and GHG emissions associated with land use planning. In the meantime, the

General Plan Update incorporates many of the recommendations included in the Climate Action Plan. These are addressed in the Conservation Element as programs contained in CON-1.1, CON-1.2, CON-1.3 and CON-2.1. In addition, CON-7.1 and CON-7.2 address the reduction of solid waste, which indirectly generates GHG emissions.

The proposed General Plan Update would not conflict with the latest Clean Air planning efforts since (1) the project would have emissions well below the BAAQMD thresholds (see Impact 2), (2) the General Plan Update would not interfere with implementation of control measures included in the CAP, and (3) the General Plan Update includes policies and implementing measures that support control measures to reduce air pollutant and GHG emissions, especially those aimed at reducing transportation-related emissions.

Impact 2: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ***Less than significant***

The Bay Area is considered a non-attainment area for ground-level ozone and fine particulate matter ($PM_{2.5}$) under both the Federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for respirable particulates or particulate matter with a diameter of less than 10 micrometers (PM_{10}) under the California Clean Air Act, but not the Federal act. The area has attained both State and Federal ambient air quality standards for carbon monoxide. As part of an effort to attain and maintain ambient air quality standards for ozone and PM_{10}, the BAAQMD has established thresholds of significance for these air pollutants and their precursors. These thresholds are for ozone precursor pollutants (ROG and NOx), PM_{10} and $PM_{2.5}$ and apply to both construction period and operational period impacts.

Opportunity sites where much of the growth under the General Plan Update would occur were considered for new air pollutant emissions. The URBEMIS2007 model was used to predict annual and daily emissions associated with new development or redevelopment of the six opportunity sites. Emissions were modeled with URBEMIS2007 default inputs for the San Francisco Bay Area. This includes default trip rates and travel characteristics for the selected land uses. Because model defaults were used, these predictions likely overestimate the actual emissions that would occur. For example, the model did not incorporate any effects of transit, bicycle or pedestrian travel modes. Emissions of both area and operational (i.e., traffic) were predicted assuming complete build out in 2020. Emissions from the build out of the General Plan Update Opportunity sites would be below thresholds used by BAAQMD to evaluate emissions from projects.