5.1 ANALYSIS REQUIREMENT

CEQA GUIDELINES

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with the proposed project. According to CEQA Guidelines Section 15130(a), "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in relation with the effects of past projects, the effects of other current projects and the effects of probable future projects. As defined in CEQA Guidelines Section 15355, cumulative impacts refer to two or more individual effects which, when considered together, are substantial or which compound or increase other environmental impacts. A cumulative impact occurs from:

> *…the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

In addition, Section 15130(b) identifies that the following three elements are necessary for an adequate cumulative analysis:

(1) Either:

(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or

(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency;

(2) A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available, and

(3) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but

shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. CEQA Guidelines Section 15130(a) also states the following with regard to cumulative impacts that are not significant:

- As defined in Section 15355, a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts which do not result in part from the project evaluated in the EIR (Section 15130 (a)(1)).

- When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant (Section 15130(a)(2)).

- An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of mitigation measure or measures designed to alleviate the cumulative impact. A lead agency shall identify facts and analysis supporting the lead agency's conclusion that the cumulative impact is less than significant (Section 15130(a)(3)).

CEQA Guidelines (Section 15130(b)(1)) requires the use of one method of cumulative analysis from two choices offered: a list of known past, present and probable future projects in the area or a summary of projections contained in adopted municipal plans and planning documents. For the purposes of cumulative impact analysis for this EIR, the list method is used. Relative to this method, CEQA Guidelines state the following:

1) When utilizing a list…factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

2) "Probable future projects" may be limited to those projects requiring an agency approval for an application which has been received at the time the notice of preparation is released, unless abandoned by the applicant; projects included in an adopted capital improvements program, general plan, regional transportation plan, or other similar plan; projects included in a summary of projections of projects (or development areas designated) in a general plan or a similar plan; projects anticipated as later phase of a previously approved project (e.g. subdivision); or those public agency projects for which money has been budgeted.

3) Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used (§15130(b)(1)(A)1, 2, 3).

5.2 CUMULATIVE IMPACT ANALYSIS AND ASSUMPTIONS

Based on project conditions, assessment of the project's contribution to cumulative impacts was discussed for each of the topic areas addressed in **Section 3.0, Environmental Setting, Impacts and Mitigation Measures**. Using the 'list' method identified above, the impacts associated with that growth were projected. Cumulative area projects evaluated, in addition to the proposed project are listed in **Table 5-1**.

TABLE 5-1
CUMULATIVE PROJECTS

Development	Status	Land Uses	Units
Approved Projects			
City of Marina			
Marina Heights Subdivision	Approved	Residential	1050 DU
CSUMB North Campus Housing	Approved	Housing	492 DU
CSUMB Master Plan	Approved	Education	1,994 Students
Reservation Road Condominiums	Approved	Residential	14 DU
Paddon Place Subdivision	Approved	Residential	15 DU
249 Carmel	Approved	Residential	10 DU
Crescent/Carmel Subdivision	Approved	Residential	14 DU
Hotel-323 Reservation Road	Approved	Hotel	39 DU
The Dunes –Phase I (formerly known as University Villages)	Approved	Residential, Retail Multiple Use Office Research Parks/Open Space	Single Family Detached Housing 221 DU Town Homes / Condominiums 195 DU Apartments 108 DU Retail 672,000 Sq. Ft. Restaurants 67,500 Sq. Ft. Office 10,000 Sq. Ft. Government Office 81,300 Sq. Ft. Church 55,300 Sq. Ft.
UCMBEST Master Plan	Approved	Hotel, Retail	Hotel 150 Rooms Retail 287,235 Sq. Ft.
Marina Landing Redevelopment	Approved	Commercial	300,000 Sq. Ft.
3200 Seaside	Approved	Residential	29 DU

Development	Status	Land Uses	Units
3110 Seacrest	Approved	Residential	7 DU
MPC Satellite Campus	Approved	Education	700 Students
FORA Business Park	Approved	Business Park	43,381 Sq. Ft
MST Transit Station	Approved	Residential , Retail, Transit Station	Apartments 30 DU Retail 25, 000 Sq. Ft. Bus Frequency 10 busses / hr
Cypress Knolls	Approved	Residential, Park, and Facilities	Senior Adult Housing 596 DUs Assisted Living 60 DU Club Facility 20,000 Sq. Ft. Apartments 116 DU City Park 17.60 Acres Senior Center 6,000 Sq. Ft.
City of Seaside			
Seaside Resort	Approved	Hotel, Timeshares, and Residential Units	330-room hotel 170 timeshare units 125 Clubhouse units affordable / work force 100 units
City Center (Fremont/Broadway)	Approved	Commercial Retail	Sit Down Restaurants 24,674 Sq. Ft. Bank 4,000 Square Feet and Commercial/Retail Space 15,326 Sq. Ft.
MPC Satellite Campus	Approved	Education	400 Students
The Pointe	Approved	Residential and Commercial / Retail	Condominiums 6 Units Commercial / Retail 3,000 Sq. Ft.
Lexus Service Center	Approved	Commercial	5,123 Sq. Ft.
Georis Building (Commercial)	Approved	Commercial	3,978 Sq. Ft.
Dentistry for Children	Approved	Office	4,835 Sq. Ft.
First National Bank	Approved	Office	4,939 Sq. Ft.
Ord Military Housing RCI Development Area	Approved	Residential, Retail, Recreation	769 DU Recreation Center 23,000 Sq. Ft. Retail 99,400 Sq. Ft.
City of Sand City			
Costco Expansion	Approved	Commercial / Retail	16,795 Sq. Ft.
Design Center	Approved	Residential and Commercial /Retail	Apartments 30 Units Commercial / Retail 20,000 Sq. Ft. Office 20,000 Sq. Ft.

Development	Status	Land Uses	Units
City of Monterey			
Ryan Ranch Business Park (Buildout)	Approved	Office	CHOMP Medical Offices (remainder) 138,380 Sq Ft. 6 & 8 Lower Ragsdale Dr. (Office) 63,985 Sq Ft.
Del Monte Beach Tract 2	Approved	Residential	17 Units
St. John the Baptist Greek Orth. Church	Approved	Church	8,300 Sq. Ft.
Calvalry Chappel Expansion	Approved	Church	25,932 Sq. Ft.
City of Del Rey Oaks			
Safeway Supermarket (Former Ralph's)	Approved	Commercial / Retail	54,000 Sq. Ft.
City of Salinas			
Tynan Village Mixed Use Development	Approved and Under Construction	Housing Commercial/Retail	171 Apartment units 13,250 Sq. Ft. Commercial / Retail space
Hartnell College Expansion	Approved	Education	3,000 Students
Monte Bella Subdivision	Approved	Residential	550 Units
Unincorporated Monterey County			
Monterra Ranch	Approved	Residential	151 Units
Pasadera	Approved	Residential	43 Units
Harper - Existing Lots of Record	Existing Lots of Record	Residential	14 Units
Oaks Subdivision	Approved	Residential	11 Units
Laguna Seca Office Park - Jessen Office Building	Approved	Office	16,388 Sq. Ft.
Laguna Seca Office Park - York Road Office Building	Approved	Office	20,000 Sq. Ft.
Tanimura Family Residential	Approved	Residential	73 Units
CSUMB East Campus Housing	Approved	Residential	125 Units
East Garrison	Approved	Residential Commercial Institutional Artist Studios Parks & Open Space	1,470 Units 75,000 Sq. Ft. 11,000 Sq. Ft. 100,000 Sq. Ft. 50,000 Sq. Ft.
Laguna Seca Villas	Pending	Residential	104 Units

Development	Status	Land Uses	Units
Projects under Review			
City of Marina			
K-8 Schools	Pending	Education	850 Students
UCMBEST	Pending	Office Park, Light Industrial	Office 675,673 Sq. Ft. Light Industrial 326,116 Sq. Ft.
CSUMB Students	Pending	Education	6,389 Students
The Dunes – Phase 2 & 3 (formerly University Villages)	Pending	Residential, Retail Multiple Use Office Research Parks/Open Space	Single Family Detached Housing 393 DU Town Homes / Condominiums 320 DU Retail 353,830 Sq. Ft. Restaurants 15,000 Sq. Ft. Offices 1,289,721 Sq. Ft. City Park 7.8 Acres Soccer Complex 4 fields Community Buildings 80,000 Sq. Ft.
Marina Station	Pending	Residential, Retail, Office, Light Industrial	Apartment 473 DU Single Family Units 887 DU Retail 39,900 Sq. Ft. Restaurant 20,100 Sq. Ft. Office 143,808 Sq. Ft. Light Industrial 651,624 Sq. Ft.
City of Seaside			
Ord Military Housing Seaside Development Area	Pending	Residential and Commercial / Retail	Drumstick Parcel 56,400 Sq. Ft. Light Fighter Parcel 40,000 Sq. Ft. (Shopping center) 130 Units (townhomes)
Main Gate Shopping Center	Pending	Commercial/Retail/Hotel	Retail 650,000 Sq. Ft. Hotel 250 rooms
East of Gen. Jim Moore Bl. Housing	Pending	Housing	1,800 Units

Development	Status	Land Uses	Units
Former First Tee Site (Golf Course)	Pending	Recreation	Golf course 80.09 Acres Driving Range 33 Tees Operations building 5,900 Sp. Ft. Foundation Offices 8 employees
Del Monte Hotel	Pending	Hotel	98 Rooms
Seaside Auto Center Redevelopment	Pending	Commercial	Beautification Project No additional dwelling units or Sq. Ft.
Plaza de Espirtu	Pending	Commercial/Retail	4,709 Sq. Ft.
Laguna Grande Plaza	Pending	Commercial/Retail	6,491 Sq. Ft.
Diaz Restaurants	Pending	Restaurant	2,000 Sq. Ft.
Ahmed All Retail Store	Pending	Commercial / Retail	6,464 Sq. Ft.
City of Sand City			
Monterey Bay Shores Hotel	Pending	Hotel	100 Rooms
Collections Monterey Bay	Pending	Hotel	100 Rooms
South of Tioga (The Orosco Grp)	Pending	Residential, Commercial / Retail, and office	Apartments 30 Units Commercial / Retail 20,000 Sq. Ft. Office 20,000 Sq. Ft.
City of Del Rey Oaks			
Del Rey Oaks Resort	Pending	Golf, Clubhouse & Driving Range Hotels Timeshares Residential Commercial/Retail Office	152.8 Acres 22.4 Acres 7.3 Acres 31.8 Acres 2.2 Acres 16.8 Acres
City of Monterey			
Ryan Ranch Business Park	Pending	Medical Offices Office / Industrial Research	101 Wilson Rd. 26, 453 Sq. Ft. 1 Swain Court 127, 412 Sq. ft.
2711 Garden Road	Pending	Office	23,080 Sq. Ft.
Unincorporated Monterey County			
Monterey Airport Expansion	Pending	Project 2	355,000 Sq. Ft.

Development	Status	Land Uses	Units
Monterey Horse Park	Pending	Recreation	16 units 37 employees 20 Trainers 80 Daily Visitors 1Event (3-Day Event)
Monterey Regional Waste Management District	Pending	Waste Management	No additional units or Sq. Ft.
Corral de Tierra Mixed-Use	Pending	Office and Commercial / Retail	12,338 Sq. Ft. 114,185 Sq. Ft.
Wang Subdivision	Pending	Rural Residential	Single Family Homes 23 Units Inclusionary Housing 6 Units
Ferrini Ranch	Pending	Residential and Ag Industrial	Single Family Homes 212 Units Wine Tasting 15,000 Sq. Ft.
Carmel Valley			
Miller Property – Light Industrial	Pending	Light Industrial	32,500 Sq. Ft.
Rancho Canada	Pending	Residential	281 Units
September Ranch	Pending	Residential	110 Units

Source: Higgins Associates 2008

For each section, the discussion of cumulative impacts of these projects follows direct project impacts and mitigation measures. Throughout the cumulative analysis presented in this EIR, the appropriate cumulative context is described and considered in light of the types of impacts created by the project. The cumulative impacts summarized below are also presented in each of the Environmental Analysis subsections of the EIR (see **Sections 3.1 through 3.11**). Each cumulative impact is determined to have one of the following levels of significance: **less than significant**, **potentially significant**, or **significant and unavoidable**, thus requiring a Statement of Overriding Considerations.

5.3 Discussion of Cumulative Impacts

AESTHETICS AND VISUAL SENSITIVITY

Cumulative Degradation of Visual Character

Impact 3.1.5 The proposed project in combination with cumulative development would add to the urbanization of the project site, resulting in a visual change within a rural setting. However, policies in the *Monterey County General Plan* and *Toro Area Plan* would address cumulative visual effects and subsequent design review of proposed development on the project site would ensure a limited impact on the visual character of the area. Therefore, the cumulative visual impacts would be considered a **less than significant cumulative impact.**

The proposed project in combination with cumulative development would continue to urbanize the area around Corral de Tierra/San Benancio Road. The *Monterey County General Plan* anticipates the minimal development in Corral de Tierra/San Benancio Road area. The overall change in the visual character of the project area from primarily undeveloped grazing land to approximately 17 residential units on 164 acres would result in a permanent change. Although the proposed subdivision will increase the residential development in a rural community, the project is consistent with the rural density residential zoning requirement of a minimum of 5.1 acres, with an average density of 9.64 acres per residential unit. The project site is adjacent to Toro Regional Park, which will remain permanently undeveloped. The project applicant has committed to donating approximately 154-acres of the 180-acre remainder parcel by deeding it to the Monterey County Parks Department as an extension of the adjacent Toro Park. Policies in the *Monterey County General Plan* and *Toro Area Plan* that emphasize preservation of the rural environment, implemented over time, would address cumulative visual effects. In addition, the entire project site is subject to additional design review in order to ensure limited impact of visual character. Therefore, the proposed project's contribution to the cumulative degradation of visual character in the region would be considered **less than significant.** No mitigation measures are necessary.

AIR QUALITY

Cumulative Air Quality Emissions

Impact 3.2-5 Development of the proposed project combined with other reasonably foreseeable projects in the project vicinity, would contribute to increased air quality emissions in the air basin. This is considered a **less than significant impact**.

Cumulative air quality impacts are evaluated based on a quantification of the project related air quality impacts and consistency of the proposed project with regional air quality plans (i.e. the *MBUACPD Air Quality Management Plan*). The proposed project would

result in a significant cumulative impact on ozone if the proposed project is inconsistent with the MBUAPCD *Air Quality Management Plan* (AQMP) and/or if localized pollutant concentrations under cumulative project conditions exceed CAAQS.

Conformity of population-related projects with the *MBUACPD Air Quality Management Plan* is based on the proposed project's number of residential units. The number of residential units is assessed by comparing the projected population growth associated with the proposed project to population forecasts adopted by the Association of Monterey Bay Area Governments (AMBAG).

The proposed project consists of a total of 17 new residential units. The *2004 Population, Housing Unit, and Employment Forecast* estimates there will be 151,844 housing units in Monterey County by the year 2010. Currently there are 147,776 existing, approved, and/or permitted residential units in Monterey County (AMBAG 2005). The combination of the proposed project's residential units, plus the existing and approved residential units in Monterey County, is less than the regional forecasts for Monterey County of approximately 151,844 residential units. Therefore, the proposed project is consistent with the 2004 regional forecasts and the MBUAPCD Air Quality Management Plan (AMBAG 2005) and the cumulative emissions impact is considered **less than significant.**

BIOLOGICAL RESOURCES

Cumulative Effect on Special Status Species and Sensitive Habitats

Impact 3.3-7 Buildout of the proposed project combined with buildout of reasonably foreseeable development within the vicinity of the project site would result in disturbance to special status species and sensitive habitats throughout the region. However, implementation of mitigation measures presented within this section, **MM 3.3-1** through **MM 3.3-6**, would reduce the overall contribution to cumulative biological resource impacts resulting from buildout of the proposed project. Therefore, this would be considered a **less than significant cumulative impact**.

As presented in the impact discussions above (see Impacts 3.3-1 through 3.3-6), implementation of the proposed project would result in a disturbance to special status species and sensitive habitats. When these impacts are combined with biological resources impacts associated with reasonably foreseeable development within the vicinity of the project site, the disturbance to special status species and sensitive habitats is likely to be compounded and considered a cumulative impact. However, implementation of mitigation measures presented within this section, **MM 3.3-1** through **MM 3.3-6**, would reduce the overall contribution to cumulative biological resource impacts resulting from buildout of the proposed project. Therefore, the proposed project's contributions to the cumulative loss and/or restriction of biological resources in the region are considered **less than significant**.

CULTURAL RESOURCES

Cumulative Impact to Undiscovered Cultural Resources

Impact 3.4-2 Implementation of the proposed project, in combination with cumulative development activity in the area, would increase the potential to disturb or contribute to the loss of known and undiscovered cultural resources in the area. This would be considered a **potentially significant cumulative impact.**

Implementation of mitigation measure **MM 3.4-1** would ensure the project's contribution to this cumulative impact remains at a **less than significant** level by addressing impacts on a case-by-case basis, thus avoiding compounding the impact of cumulative development on cultural resources.

GEOLOGY AND SOILS

The proposed project will not combine with any other factors or projects and, thus, is not significant due to the localized, site-specific nature of geotechnical and seismic impacts. Therefore, no significant cumulative impacts are anticipated relative to geology or geologic hazards.

GROUNDWATER RESOURCES AND HYDROGEOLOGY

Cumulative Adversely Affect on the Surrounding Subareas

Impact 3.6-4 Implementation of the proposed project without septic tank systems and minimal landscaping would reduce the amount of return flow to the El Toro Groundwater Basin by approximately 5.88 AFY, which may exceed the water surplus for individual subareas within the El Toro Creek subarea. However, the four individual subareas are considered interconnected and combined would have net surplus of approximately 314.82 AFY. Therefore, the loss of 5.88 AFY would be considered minimal and according to Monterey County Health Department, Environmental Health Division, the proposed project would have negligible effects on the aquifer in this region. This would be considered a **less than significant cumulative impact.**

The proposed project will include minimal landscaping and will dispose of wastewater at a wastewater treatment plant and will not include septic tanks at the project site. This is not consistent with the assumptions made for the predicted water demand upon buildout of the El Toro Groundwater Basin. The water demand upon buildout of the El Toro Groundwater Basin assumed that approximately 57.6 percent of the total residential demand would be for interior water uses and 42.4 percent for exterior water use. Approximately 80 percent of the interior water demand was assumed to return to the groundwater basin through septic tank systems and 20 percent of the exterior water demand was assumed to be return

to the groundwater basin through percolation. Since wastewater disposal for the proposed project will be conveyed to a wastewater treatment plant and the proposed project would have minimal landscaping, the loss of return flow to the El Toro Groundwater Basin is estimated to be approximately 5.88 AFY (12.75 AFY total water demand x 57.60 percent interior usage x 80 percent interior usage return via septic system). This reduction in water, which would recharge the groundwater basin, may affect cumulative development within some of the four interconnected subareas located north of the Chupines fault within the El Toro Groundwater Basin

As shown in **Table 3.6-4, El Toro Groundwater Basin Water Surplus Upon Buildout Minus Loss of Return Flow,** the loss 5.88 AFY of return flow lost due to the proposed project is greater than the 4.7 AFY water surplus for the El Toro Creek subarea. According to the *Project Specific Hydrogeology Report – Harper Canyon Realty LLC Subdivision* the water balance for the El Toro Creek subarea should be recalculated if future developments are proposed within that subarea. Upon buildout of the El Toro Groundwater Basin, the Corral de Tierra subarea would not meet the estimated water demands by approximately 174.4 AFY, with or without the proposed project. According to the *Project Specific Hydrogeology Report – Harper Canyon Realty LLC Subdivision* development should be extremely rationed in the Corral de Tierra subarea.

TABLE 3.6-4
EL TORO GROUNDWATER BASIN
WATER SURPLUS UPON BUILDOUT MINUS LOSS OF RETURN FLOW

Subarea	Buildout Surplus (AFY)	Loss of Return Flow (AFY)	Remaining Surplus (AFY)
San Benancio Gulch	29.9	-5.88	**24.02**
El Toro Creek	4.7	-5.88	**-1.18**
Corral de Tierra	-174.4	-5.88	**-180.26**
Watson Creek	460.5	-5.88	**454.62**

NOTES: AFY = Acre Feet per Year
1995 Demand and Buildout based on projections from Additional Hydrogeologic Update, El Toro Area (Fugro, 1996).
Recharge is based on 2.18 inches per year using soil-moisture methodology (Fugro, 1996).

Source: Todd Engineers 2003

Although the loss of return flow associated with the proposed project may have an adverse impact on some of the individual subareas, the four subareas are considered to be interconnected and will maintain an overall water surplus of approximately 314.82 AFY. Since four interconnected areas would have net surplus of approximately 314.82 AFY, the loss of 5.88 AFY would be considered minimal. According to Monterey County Health

Department, Environmental Health Division, the proposed project would have negligible effects on the aquifer in this region (MCDH 2002a). Therefore, this would be considered a **less than significant cumulative impact.**

SURFACE WATER HYDROLOGY AND WATER QUALITY

Cumulative Long-Term Surface Water Runoff and Water Quality

Impact 3.7-4 Implementation of the proposed project combined with reasonably foreseeable development would result in a cumulative increase in impervious surface that may have an adverse impact on surface water runoff and water quality. However, the proposed project provides for detainment of excess storm water and cumulative development would be required to do the same. Therefore, would be considered a **less than significant cumulative impact**.

Although the buildout of the proposed project combined with reasonably foreseeable development will increase the impervious surface within the vicinity of the project site, most development will be required to detain excess storm water flow onsite. The proposed project provides for detainment of excess storm water generated by the proposed project in addition to storm water generated by potential development on adjacent properties within the same watersheds. Therefore, the proposed project will not contribute to cumulative runoff. New development will be required to limit peak storm runoff to pre-project or pre-soil disturbance levels through construction of detention ponds or other approved measures. Therefore, each project would detain surface water runoff and the impact would be **less than significant**.

LAND USE, POPULATION AND HOUSING

Cumulative Land Use Impacts

Impact 3.8-3 Development of the proposed project, combined with other foreseeable projects in the Toro planning area may result in cumulative land use impacts to the project area. However, the proposed project would be consistent with the *Monterey County General Plan* and zoning provisions applicable to the project site. Cumulative development would also be subject to the County's development review process through which any potentially significant land use impacts would be analyzed. As the proposed project is consistent with County policy and programs and no significant land use impacts were identified, the project will not "combine" with other similar projects to create or exacerbate a significant impact. Therefore, this would be considered a **less than significant cumulative impact**.

The proposed project meets the *Monterey County General Plan* goals and policies, which seek to develop rural residential land uses within the project site. The proposed project

would be subject to design review, which will ensure that the proposed project meets the goals and policies in the *Monterey County General Plan* for rural residential development within a Design Control District. The proposed project would be consistent with the *Monterey County General Plan* and zoning provisions applicable to the project site and therefore would result in a less than significant land use impact. Cumulative development would also be subject to the County's development review process through which any potentially significant land use impacts would be analyzed. As the proposed project is consistent with County policy and programs and no significant land use impacts were identified, the project will not "combine" with other similar projects to create or exacerbate a significant impact. Therefore, the cumulative land use impact would be considered **less than significant**. No mitigation measures are necessary.

Cumulative Population Growth

Impact 3.8-4 The proposed project, combined with other foreseeable projects in Monterey County would result in cumulative population growth impacts. However, the estimated population increase at buildout of the proposed plan is well within the forecast established for Monterey County and the anticipated growth in the unincorporated area of Monterey County. This would be considered a **less than significant cumulative impact**.

The proposed project, combined with other foreseeable projects in Monterey County would result in cumulative population growth impacts. However, the estimated population increase at build out of the proposed plan is well within the forecast established for Monterey County and the anticipated growth in the unincorporated area of Monterey County. This would be considered a **less than significant cumulative impact**.

PUBLIC SERVICES AND UTILITIES

Cumulative Impacts to Public Services and Utilities

Impact 3.9-9 Implementation of the proposed project in combination with reasonably foreseeable development would result in a cumulative increase in demand on public services, which could result in the need for increased public facilities for the provision of fire and police protection services, educational services, parks and recreation facilities, and utilities. However, no significant increases in demand on public services and utilities have been identified for the proposed project and the increased demand would be accommodated by increased property tax revenue and development impact fees assessed. Therefore, this would be considered a **less than significant cumulative impact**.

No significant increases in demand on public services and utilities have been identified for the proposed project. Implementation of mitigation measures **MM 3.7-2, MM 3.6-2a** and **MM 3.6-2b,** and **MM 3.9-4** would ensure that storm water drainage facilities, potable water

distribution and treatment facilities, and wastewater collection and treatment facilities are adequate to accommodate the increased demand associated with the proposed project. Since the proposed project will not generate a significant increase in demand for public services and utilities it will have minimal affect on the cumulative increase in demand for public services and utilities. The increased demand for public services associated with the proposed project and other future development would be accommodated by increased property tax revenue and development impact fees assessed for new construction in the planning area. As a result, impacts associated with providing public service facilities and utilities for cumulative development would be considered to be **less than significant**. No mitigation measures are necessary.

TRANSPORTATION AND CIRCULATION

Cumulative Adverse Impact on Level of Service

Impact 3.10-7 Implementation of the proposed project would contribute to a cumulative increase in traffic volumes that would result in or exacerbate unacceptable levels of service on the local roadway network. This is considered a **significant cumulative impact**.

A number of other projects have been proposed within the study area that have not yet been approved or even formally submitted for evaluation. The list of cumulative projects relevant to this traffic study was developed in consultation with the County of Monterey Planning and Public Works staff and is included in **Appendix I**. The proposed project, combined with the cumulative relevant projects, would generate an estimated 27,071 daily trips, with 2,138 trips (1,241 in, 897 out) during the AM peak hour and 2,707 trips (1,187 in, 1,520 out) during the PM peak hour.

Intersections

Intersection levels of service for cumulative traffic conditions are summarized in **Table 3.10-10, Intersection Level of Service for Cumulative Project Conditions**.

TABLE 3.10-10
INTERSECTION LEVEL OF SERVICE FOR CUMULATIVE PROJECT CONDITIONS

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
1. State Route 218 at State Route 68	C/D	31.6	C	72.4	E
2. York Road at State Route 68	C/D	124.4	F	106.6	F
3. Pasadera Drive-Boots Road at State Route 68	C/D	123.3	F	106.5	F
4. Laureles Grade at State Route 68	C/D	107.0	F	160.9	F
5. Corral de Tierra Road at State Route 68	C/D	197.5	F	268.9	F

Intersection	LOS Standard	AM Peak Hour		PM Peak Hour	
		Delay (Seconds)	LOS	Delay (Seconds)	LOS
6. San Benancio Road at State Route 68	C/D	159.8	F	237.0	F

Source: Higgins Associates 2008

All six study intersections would operate at unacceptable levels of service under cumulative traffic conditions. Similar to background plus project conditions, five of the six study intersections would be impacted by the project because of LOS F operating conditions. Each signalized intersection operating deficiently under cumulative traffic conditions is described below.

State Route 218/State Route 68, Intersection #1 (Signalized) would operate at LOS C during the weekday AM peak hour and LOS E during the weekday PM peak hour (average delay of 31.6 and 72.4 seconds, respectively). Since this signalized intersection would degrade from LOS C during the PM peak hour under background plus project conditions to LOS E during the PM peak hour under cumulative project conditions, this would be considered a significant impact. Widening and re-striping the northbound approach to include one left-turn lane, one through lane, and one right-turn lane; widening and re-stripe the eastbound approach to include two left-turn lanes, tow through lanes and one right-turn lane; and installing right-turn overlap phasing at this intersection would improve operations to acceptable LOS C during the AM and PM peak hours.

York Drive/State Route 68, Intersection #2 (Signalized) would operate at LOS F during the weekday AM and PM peak hours (average delay of 124.4 and 106.6 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip to this intersection during the AM or PM peak hours would be considered a significant impact. The addition of a second eastbound through lane in conjunction with the addition of a second westbound through lane as recommended under existing conditions would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

Pasadera Drive-Boots Road/State Route 68, Intersection #3 (Signalized) would operate at LOS F during the weekday AM peak hour and LOS E during the weekday PM peak hour (average delay of 123.3 and 106.5 seconds, respectively). During the AM peak hour, this signalized intersection would degrade from LOS E with a volume-to-capacity ratio of 1.10 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.30 under cumulative traffic conditions. During the PM peak hour, this intersection would degrade from LOS D with a volume-to-capacity ratio of 1.00 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.17 under cumulative traffic conditions. Since the AM peak hour level of service would degrade from LOS E to LOS F and the volume-to-capacity ratio would increase by 0.20 and the PM peak hour level of service would degrade from LOS D to LOS F and the volume-to-capacity ratio would increase by 0.17 during the PM peak hour this would be considered a significant

cumulative impact. The addition of a second eastbound through lane in addition to the addition of a second westbound through lane recommended under existing conditions, would improve operations at this intersection to an acceptable LOS B during the AM and PM peak hours.

Laureles Grade/State Route 68, Intersection #4 (Signalized) would operate at LOS F during the weekday AM and PM peak hours (average delay of 107.0 and 160.9 seconds, respectively). During the AM peak hour, this signalized intersection would degrade from LOS E with a volume-to-capacity ratio of 1.11 under background plus project traffic conditions to LOS F with a volume-to-capacity ratio of 1.28 under cumulative traffic conditions. Since the AM peak hour level of service would degrade from LOS E to LOS F and the volume-to-capacity ratio would increase by 0.17 and the PM peak hour level of service is LOS F, the addition of one trip to this intersection during either the AM or PM peak hour would be considered a significant impact. Converting the northbound right-turn to right-turn overlap phasing in conjunction with the addition of a second eastbound through lane and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS B during the AM peak hour and LOS C during the PM peak hour.

Corral de Tierra Road / State Route 68 (Intersection #5) would operate at LOS F during the weekday AM and PM peak hours (average delay of 197.5 and 268.9 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip would be considered a significant impact. Converting the northbound right turn to right-turn overlap phasing in conjunction with the addition of a second eastbound through lane and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

San Benancio Road / State Route 68 (Intersection #6) would operate at LOS F during the weekday AM and PM peak hours (average delay of 159.8 and 237.0 seconds, respectively). Since this signalized intersection operates at LOS F, the addition of one trip would be considered a significant impact. The addition of a second eastbound through lane and a second westbound through lane as recommended under existing conditions, would improve operations at this intersection to an acceptable LOS C during the AM and PM peak hours.

The improvements listed above would improve the operating conditions at the study intersections to acceptable levels of service. However, no funding is available for the implementation these major improvements. Therefore, these improvements are not considered feasible mitigation under CEQA. No other feasible mitigation measures have been identified. Since five of six study intersections would continue to operate at LOS F under cumulative traffic conditions, the addition of any trips would be considered a **significant cumulative impact**.

Roadway Segments

Cumulative traffic conditions for road segment levels of service, as well as AM and PM peak hour volumes on the study road segments, are summarized in **Table 3.10-11, Roadway Segment Level of Service for Cumulative Project Conditions.**

TABLE 3.10-11
ROADWAY SEGMENT LEVEL OF SERVICE FOR CUMULATIVE PROJECT CONDITIONS

Intersection	Direction	LOS Stan-dard	AM Peak Hour			PM Peak Hour		
			Volume (Veh/hr)	Average Speed[1] (mph)	LOS	Volume (Veh/hr)	Average Speed[1] (mph)	LOS
State Route 68 between:								
1. State Route 218 and	EB	C/D	1,708	36.3	E	1,415	32.4	E
York Road	WB	C/D	1,573	26.6	E	2,057	24.5	F
2. York Road and	EB	C/D	959	39.3	E	1,579	16.8	F
Pasadera Drive/Boots Road	WB	C/D	1,781	28.7	E	1,485	44.8	D
3. Pasadera Drive/Boots	EB	C/D	933	40.8	D	1,516	8.7	F
Road and Laureles Grade	WB	C/D	1,715	18.7	F	1,378	25.3	E
4. Laureles Grade and	EB	C/D	1,062	33.4	E	1,803	12.6	F
Corral de Tierra Road	WB	C/D	1,749	21.8	F	1,347	47.3	C
5. Corral de Tierra Road	EB	C/D	1,252	23.5	E	1,889	13.8	F
and San Benancio Road	WB	C/D	1,700	10.4	F	1,498	9.8	F

Notes: 1 Average travel speed calculated in Synchro software.
EB = Eastbound
WB = Westbound
Veh/hr = vehicles per hour
Mph miles per hour

Source: Higgins Associates 2008

As shown in **Table 3.10-11, Roadway Segment Level of Service for Cumulative Project Conditions** each study roadway segment, eastbound and westbound on State Route 68, would continue to operate below LOS C during both the AM or PM peak periods as they would under existing, background, and background plus project traffic conditions. Similar to background plus project conditions, the addition of one vehicle to the LOS F conditions along four of the five study segments and the degradation of westbound State Route 68 between State Route 218 and York Road will result in the proposed project's contribution to a significant cumulative impact. A brief description of the operations along each roadway segment that would operate with deficiencies under background plus project traffic conditions is provided below.

State Route 68 between State Route 218 and York Road (Roadway Segment #1) would continue to operate at LOS E in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 36.6 and 32.4 mph, respectively); and would continue to operate at LOS E in the eastbound and LOS F in the westbound direction during the weekday PM peak hour (average speeds of 29.6 and 24.5 mph, respectively). The level of service on westbound State Route 68 would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions during the PM peak hour. Therefore, any trips generated by the proposed project on westbound State Route 68 between State Route 218 and York Road during the PM peak hour would be considered a significant cumulative impact.

State Route 68 between York Road and Pasadera Drive/Boots Road (Roadway Segment #2) would operate at LOS E in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 39.3 and 28.7 mph, respectively); and LOS F in the eastbound direction and LOS D in the westbound direction during the weekday PM peak hour (average speeds of 16.8 and 44.8 mph, respectively). During the weekday AM peak hour, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS D under background plus project traffic conditions to LOS E under cumulative traffic conditions. During the weekday PM peak hour, westbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS C under background plus project traffic conditions to LOS D under cumulative traffic conditions. In addition, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS D under background plus project traffic conditions to LOS E under cumulative traffic conditions during the AM peak hour and continue to operate at LOS F during the weekday PM peak hour. Therefore, any trips generated by the proposed project on eastbound State Route 68 between York Road and Pasadera Drive/Boots Road during either the AM or PM peak hours or on westbound State Route 68 between York Road and Pasadera Drive/Boots Road during the PM peak hour would be considered a significant cumulative impact.

State Route 68 between Pasadera Drive/Boots Road and Laureles Grade Road (Roadway Segment #3) would operate at LOS D in the eastbound direction and LOS F in the westbound direction during the weekday AM peak hour (average speeds of 40.8 and 18.7 mph, respectively); and LOS F in the eastbound direction and LOS E in the westbound direction during the weekday PM peak hour (average speeds of 8.7 and 25.3 mph, respectively). During the weekday AM peak hour, westbound State Route 68 between York Road and Pasadera Drive/Boots Road would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. In addition, eastbound State Route 68 between York Road and Pasadera Drive/Boots Road would continue to operate at LOS F during the weekday PM peak hour. Therefore, any trips generated by the proposed project on eastbound State Route 68 between York Road and Pasadera Drive/Boots Road during the weekday PM peak hour or on westbound State Route 68 between York Road and Pasadera Drive/Boots Road during the weekday AM peak hour would be considered a significant cumulative impact.

State Route 68 between Laureles Grade Road and Corral de Tierra (Roadway Segment #4) would continue to operate at LOS E in the eastbound direction and LOS F in the westbound direction during the weekday AM peak hour (average speeds of 33.4 and 21.8 mph, respectively); and LOS F in the eastbound direction and LOS C in the westbound direction during the weekday PM peak hour (average speeds of 12.6 and 47.3 mph, respectively). During the weekday AM peak hour, westbound State Route 68 between Laureles Grade Road and Corral de Tierra would degrade from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. In addition, eastbound State Route 68 between Laureles Grade Road and Corral de Tierra would continue to operate at LOS F during the weekday PM peak hour under cumulative traffic conditions. Therefore, any trips generated by the proposed project on westbound State Route 68 between Laureles Grade Road and Corral de Tierra during the weekday AM peak hour or on eastbound State Route 68 between Laureles Grade Road and Corral de Tierra during the weekday PM peak hour would be considered a significant cumulative impact.

State Route 68 between Corral de Tierra and San Benancio Road (Roadway Segment #5) would operate at LOS F in the eastbound and westbound directions during the weekday AM peak hour (average speeds of 23.5 and 10.4 mph, respectively); and LOS F in the eastbound and westbound directions during the weekday PM peak hour (average speeds of 13.8 and 9.8 mph, respectively). During AM peak hour operations, eastbound State Route 68 between Corral de Tierra and San Benancio Road would be degraded from LOS E under background plus project traffic conditions to LOS F under cumulative traffic conditions. During the weekday PM peak hour, eastbound and westbound State Route 68 between Corral de Tierra and San Benancio Road would continue to operate at LOS F under cumulative traffic conditions. In addition, westbound State Route 68 between Corral de Tierra and San Benancio Road would continue to operate at LOS F during the weekday AM peak hour under cumulative traffic conditions. Therefore, any trips generated by the proposed project on eastbound or westbound State Route 68 between Corral de Tierra and San Benancio Road during the weekday AM or PM peak hours would be considered a significant cumulative impact.

The cumulative trips associated with the proposed project and other development would degrade the level of service or would exacerbate an unacceptable LOS F operating condition at four of five study segments. This would be considered a **significant cumulative impact**.

The following mitigation measure would require that the project applicant contribute their fair share towards the regional traffic impact fee (also referred to as the Transportation Agency of Monterey County (TAMC) impact fee) to help fund regional improvements in the County and reduce the project's cumulative impact to affected intersections and roadway segments.

Mitigation Measure

MM 3.10-7 The Monterey County Resource Management Agency shall require the project applicant to pay any traffic impact fees in effect at the time of building permits application. Such fees include the TAMC Regional Impact Fee, which will mitigate for cumulative impacts to roadway segments and intersections along State Route 68. If the proposed project contributes monetarily toward the extension of the State Route 68 (see mitigation measure MM 3.10-2) in an amount greater than their calculated TAMC Impact Fee responsibility, the proposed project shall be credited for the TAMC fee and the fee considered satisfied, as they will be contributing their fair share toward cumulative impacts and regional improvements identified within the TAMC nexus study.

The traffic analysis for this project identified the need for additional intersection improvements along the Highway 68 corridor under the cumulative scenario. These projected improvements include:

- Widen and restripe the northbound approach of the SR 218/SR 68 intersection to include one left-turn lane, one through lane, and one right-turn lane. Widen and restripe the eastbound approach to include two left-turn lanes, two through lanes and one right-turn lane. Install right turn overlap phasing at this location.

- At the Laureles Grade/SR 68 intersection, convert the northbound right-turn to right-turn overlap phasing.

- At the Corral de Tierra Road/SR 68 intersection, convert the northbound right-turn to right-turn overlap phasing.

The project's contribution to these cumulative mitigation improvements would be satisfied by the project's payment of the TAMC Regional Development Impact Fee, or by the project's mitigation requirements under mitigation measure 3.10-2. This is consistent with the County and TAMC's methodology for addressing cumulative traffic impacts.

The TAMC Regional Development Impact Fee Program is one element of TAMC's proposed *14-Year Improvement Plan*. However, the Regional Development Impact Fee Program has not been adopted. The County of Monterey has voluntarily been collecting regional traffic impact fees consistent with the *Draft Nexus Study* (TAMC 2004) to contribute towards funding improvements on the regional roadways. The County Public Works Department has deemed payment of a regional traffic impact fee as appropriate mitigation for regional impacts. The defeat of Measure A means that TAMC will not be receiving additional revenue through a half-cent tax increase, which is one of the funding sources identified for construction of needed improvements. Therefore, it may take longer

for TAMC to implement regional roadway improvements, but does not preclude voluntarily moving forward with the improvements.

Although TAMC does not have the mechanism in place to implement specific projects (such as State Route 68 freeway extension), the County of Monterey has been collecting TAMC fees for other projects throughout the County. It is thus recommended that the applicant pay the County of Monterey their fair share to the TAMC fee program. Through the payment of the regional traffic impact fees, the proposed project would directly contribute to future improvements, which would help off-set any cumulative traffic impacts on regional roadways caused by increased trip volume associated with the proposed project.

Payment of regional impact fees (as identified in MM 3.10-7) will mitigate the project's cumulative impacts to the extent feasible; however, as the timing and extent of physical improvements along the State Route 68 corridor are not known at this time, the cumulative impact to intersections and roadway segments will remain **significant and unavoidable** until such time that the physical improvements are constructed.

NOISE

Cumulative Increase in Traffic Noise Levels

Impact 3.11-4 Build out of the proposed project combined with reasonably foreseeable development would cumulatively increase traffic volumes on the local roadways resulting in a cumulative increase in traffic noise levels. The cumulative increase in traffic would increase the traffic noise levels along State Route 68. However, trips generated by the proposed project, combined with the trips generated by cumulative development in the project vicinity, are not expected to double the existing trip rates on State Route 68. Therefore, the average traffic noise level is not expected to increase by more than 3 dB. This would be considered a **less than significant cumulative impact.**

The increase in traffic associated with the proposed project combined with cumulative project traffic would increase traffic on State Route 68 by approximately 2,707 daily trips, which would result in an increase in traffic noise along the highway. An increase in traffic noise levels of 5 dB or more would be significant where the ambient level is less than 60 dB, an increase of 3 dB or more would be significant where the ambient level is between 60 and 65 dB, and 1.5 dB or more would be a significant increase where the ambient noise level exceeds 65 dB L_{dn}. As discussed in **Impact 3.11-1**, doubling of the existing traffic volumes can cause a 3 dB increase in average traffic noise. Topography and the distance between the noise source and the sensitive receptors attenuate the increase in traffic noise. Trips generated by the proposed project, combined with the trips generated by cumulative development in the project vicinity, are not expected to double the existing trip rates on

State Route 68. Therefore, the cumulative increase in traffic noise levels would be considered **less than significant**. No mitigation measures are necessary.

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