

**Final Environmental Impact Report  
for the Machado Estates Project:  
Responses to Comments**

**State Clearinghouse #2007052003**

*Prepared for:*

City of Manteca  
Community Development Department  
1001 West Center Street  
Manteca, CA 95337  
Contact: Mark Meissner  
209/239-8424

*Prepared by:*

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916/737-3000

October 2008

ICF Jones & Stokes. 2008. *Final Environmental Impact Report for the Machado Estates Project: Responses to Comments*. August. (ICF J&S 61192.06.) Sacramento, CA. Prepared for the City of Manteca Community Development Department, Manteca, CA.

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# Acronyms and Abbreviations

Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
City	City of Manteca
CWA	Clean Water Act
EIR	environmental impact report
IS	initial study
LOS	level of service
MMRP	mitigation monitoring and reporting program
proposed project	Machado Estates Project
SJCOG	San Joaquin Council of Governments
SJMSCP	San Joaquin County Multi-Species Habitat Conservation and Open Space Plan
SR	State Route
USACE	U.S. Army Corps of Engineers

## **Purpose of This Document**

This document, together with the draft environmental impact report (EIR) for the Machado Estates Project (proposed project) that was circulated in December 2007, constitutes the final EIR for the proposed project. The information presented in this document has been provided in accordance with the requirements of the California Environmental Quality Act (CEQA) Guidelines and includes the chapters listed below.

- Chapter 1, “Introduction,” discusses the purpose of this document, the public review process, requirements under CEQA, and the uses of this document.
- Chapter 2, “Text Changes to Draft EIR,” contains changes to the text of the draft EIR made in response to comments received during the public review period for the draft EIR.
- Chapter 3, “Comments on Draft EIR and Responses to Comments,” contains comments received during the public review period for the draft EIR and the responses by the City of Manteca (City) to those comments.
- Chapter 4, “Mitigation Monitoring and Reporting Program,” contains the mitigation monitoring and reporting program (MMRP) for the proposed project.

## **Public Review Process**

The draft EIR was distributed to various public agencies, citizen groups, and interested individuals for a 45-day public review period, from December 7, 2007, through January 22, 2008. The draft EIR was circulated to state agencies for review through the State Clearinghouse of the Governor’s Office of Planning and Research. Copies of the draft EIR were available for public review during normal business hours at Manteca City Hall. During the review period, written comments were received from members of the public and agencies.

## CEQA Requirements

As the lead agency under CEQA, the City must provide each public agency that commented on the draft EIR with a copy of its responses to comments at least 10 days before certifying the final EIR.

## Use of This Document

A final EIR allows the public and public agencies to review revisions to the draft EIR; comments on the draft EIR; responses to comments; and other components of the EIR, such as the MMRP, before approval of the project. This final EIR, including the draft EIR incorporated by reference, will serve as the environmental document used by the City when considering approval of the project.

After completing the final EIR and before approving the project, the lead agency must make the following three certifications (CEQA Guidelines Section 15090).

- The final EIR has been completed in compliance with CEQA.
- The final EIR was presented to the decision-making body of the lead agency, and the decision-making body reviewed and considered the information in the final EIR before approving the project.
- The final EIR reflects the lead agency's independent judgment and analysis.

In addition, if an EIR that has been certified for a project identifies one or more significant environmental impacts, the lead agency must adopt findings of fact (CEQA Guidelines Section 15091[a]) in connection with approval of the project. For each significant impact, the lead agency must make one of the following findings.

- Changes or alterations that avoid or substantially lessen the significant environmental effect as identified in the EIR have been required in or incorporated into the project.
- Such changes or alterations are the responsibility and within the jurisdiction of another public agency, not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

Each finding must be accompanied by a brief explanation of the rationale for the finding. In addition, the lead agency must adopt, in conjunction with the findings, a program for reporting or monitoring the changes that it has either

required in the project or made a condition of approval to avoid or substantially lessen impacts (CEQA Guidelines Section 15091[d]). These measures must be fully enforceable through permit conditions, agreements, or other measures. This is the program referred to above as the MMRP.

In addition, when a lead agency approves a project that would result in significant and unavoidable impacts that are disclosed in the final EIR, the agency must state in writing its reasons for supporting the approved action (CEQA Guidelines Section 15093[b]). This statement of overriding considerations must be supported by substantial information in the record, including the final EIR. Because the proposed project would result in significant and unavoidable impacts, the City is required to adopt a statement of overriding considerations if it approves the project. The statement of overriding considerations is not a substitute for the findings of fact described above.

The certifications, findings of fact, and statement of overriding considerations are included in a separate findings document that will accompany the City's staff report if and when the City approves the proposed project. The draft EIR (incorporated by reference), final EIR, findings of fact, and statement of overriding considerations are submitted to the City for consideration of the proposed project.



## Chapter 2

# Text Changes to Draft EIR

This chapter contains revisions to the text of the draft EIR. Text changes are intended to clarify or correct information in the draft EIR in response to comments received on the document. Revisions are shown with strikethrough text for deletions (~~strikethrough~~) and underlined text for additions (underline). No text changes were identified for those sections or chapters not listed below.

## Chapter 4, “Air Quality”

The following change for clarification is made to Mitigation Measure AIR-3b on page 4-27 of the draft EIR.

### **Mitigation Measure AIR-3b: Implement Measures to Comply with SJVAPCD Rule 9510, Indirect Source Review**

The City project sponsor will conduct an air impact assessment, as required by SJVAPCD Rule 9510. Required emissions-control measures and offsite emission reduction fees (if necessary) will be calculated, as dictated by Rule 9510, to reduce 33.3% of the project’s operational baseline NO<sub>x</sub> and 50% of the project’s operational baseline PM10 emissions over a period of 10 years. The control measures indicated in Mitigation Measure AIR-3a may be implemented to help achieve the emissions reductions required by Rule 9510.

## Chapter 5, “Biological Resources”

The following change is made to the “San Joaquin Multi-Species Habitat and Open Space Conservation Plan” section on page 5-9 of the draft EIR.

The mitigation ratios and fees are determined on the basis of the type of lands that are being converted. Different fees are charged for according to four land cover types: multipurpose open space lands, agricultural land, vernal pools per acre of upland habitat, and vernal pools per acre for wetted habitat. Fees will be paid according to the current fees in place at the time of issuance of the building permits.

- ~~multipurpose open space lands (\$6,511 per acre),~~
- ~~agricultural land (\$13,022 per acre),~~

- ~~natural lands (\$13,022), and~~
- ~~vernal pools (\$34,958 per acre for upland habitat and \$69,858 per acre for wetted habitat).~~

The proposed project site is located within the Central Zone off the SJMSCP coverage area.

Should project applicants choose not to participate in the SJMSCP, they will be required to provide alternative mitigation in an amount and kind equal to that provided in the SJMSCP.

The following change for clarification is made to Mitigation Measure BIO-1a on pages 5-18 – 5-19 of the draft EIR.

#### **Mitigation Measure BIO-1a: Conduct a Noxious Weed Survey and Document Noxious Weed Infestation**

Prior to construction of program elements on undisturbed lands or adjacent to agricultural areas, the City project sponsor will address noxious weed impacts. The City project sponsor will hire a qualified botanist to determine whether noxious weeds are an issue for the program and whether they could displace native plants and natural habitats, affect the quality of forage on rangelands, or affect cropland productivity. Alternatively, the City project sponsor may use certified environmental documentation to determine noxious weed impacts on well sites within proposed development areas.

If noxious weeds are an issue, the City project sponsor will review the County Agricultural Commission's noxious weed list; California Department of Food and Agriculture's A, B, and C lists of noxious weeds; and California Exotic Pest Plant Council's list of pest plants of ecological concern. These lists will be used to identify weeds that will be targeted during field surveys by the botanist. Surveys will focus on target weed species that are considered locally important for documentation and control purposes.

If noxious weed infestations are located during the field surveys, they will be mapped and documented. The City will implement Mitigation Measure BIO-1b to avoid the dispersal of noxious weeds into uninfested areas.

The following change is made to the last sentence of the second complete paragraph on page 5-21 of the draft EIR.

#### **Mitigation Measure BIO-4a: Compensate for Loss of Swainson's Hawk Foraging Habitat as Outlined in the SJMSCP**

The City project sponsor/developer will provide compensation for the conversion of approximately 157 acres of agricultural habitat lands (i.e., fund acquisition of preserve lands) at a ratio of 1:1 (acres acquired to acres lost), as outlined in the SJMSCP (Section 4.1.2[A]). ~~For 2007, the cost to provide 1 acre of compensation for agricultural habitat lands is \$13,022.~~ The final cost to fulfill project compensation requirements will be determined during coordination with SJCOG. Compensation fees must be paid before any ground-disturbing activities commence, including grading no more than 30 days prior to receipt of an approved building permit (SJMSCP Section 5.3.2.3[A]).

## Chapter 9, “Hydrology and Water Quality”

The following change is made to the “Flooding” section on page 9-10 of the draft EIR.

Approximately 1.95 acres of the southern portion of the proposed project site are located within the 100-year flood zone, on the edge of the proposed site. A levee that runs from Williamson Road east to Airport Way provides flood protection for the land north and east of Walthall Slough, including the proposed project area, which is approximately 1.2 miles from the slough. During the 100-year flood event, this levee would overtop and flood the surrounding area, including the southern portion of the proposed project site. This levee is maintained and under the jurisdiction of Reclamation District 17. Currently, RD 17 is in the process of upgrading its levees to improve protection of lives, property, schools, and businesses in the event of large storm events. There are no plans for improvements to the levee associated with the Machado Estates project area at present. However, RD-17 considers it likely that they will be making improvements to this levee in the next 10-20 years (Neudeck, pers. comm.).

In addition, the southeastern portion of Manteca, including the entire project site, is mapped as being within the 500-year floodplain. As a result, most of the project is outside of the 100-year floodplain with exception of the southwest corner of the site.

## Chapter 10, “Noise”

Table 10-8, “Traffic Noise Modeling Results, Existing and Cumulative Conditions,” has been updated to include additional information and follows this page.

The following change is made to the “Impacts and Mitigation Measures: section on page 10-14 of the draft EIR.

### **Impact NOI-3: Exposure of Future Noise-Sensitive Land Uses within the Machado Estates Project to Traffic Noise (Less than Significant with Mitigation)**

The following roadways are adjacent to noise sensitive land uses proposed as part of the proposed project:

- Woodward Avenue between McKinley Avenue and Airport Way; and
- Airport Way between Woodward Avenue and Peach Avenue; and
- The future alignment of McKinley Road west of Airport Way, south of Machado Estates.

Table 10-8 summarizes predicted traffic noise levels along these roadways under existing, cumulative no-project, and cumulative plus-project conditions. These

results indicate that proposed noise-sensitive land uses in the Machado Estates subdivision along Woodward Avenue and ~~Avenue Road~~ Airport Way would be exposed to traffic noise equaling or exceeding the county threshold of 60 dBA  $L_{dn}$ . Noise levels are predicted to be below the county threshold of 60 dBA  $L_{dn}$  along the future alignment of McKinley Road.

New construction designed to meet current thermal insulation standards would typically provide at least 20 dB of exterior-to-interior noise reduction. Accordingly, interior noise levels are predicted to be below the City's interior noise standard of 45 dBA  $L_{dn}$ .

Because predicted noise levels at proposed noise-sensitive land uses exceed the County performance standard of 60 dBA  $L_{dn}$  for new residential land use for Woodward Avenue between McKinley Avenue and Airport Way and Airport Way between Woodward Avenue and Peach Avenue, this impact is considered significant for those roadways and implementation of the following mitigation measure would reduce this impact to a less-than-significant level.

Because noise levels are predicted to be below the county threshold of 60 dBA  $L_{dn}$  along the future alignment of McKinley Road, this is considered to be a less than significant impact for this future roadway and no mitigation is required.

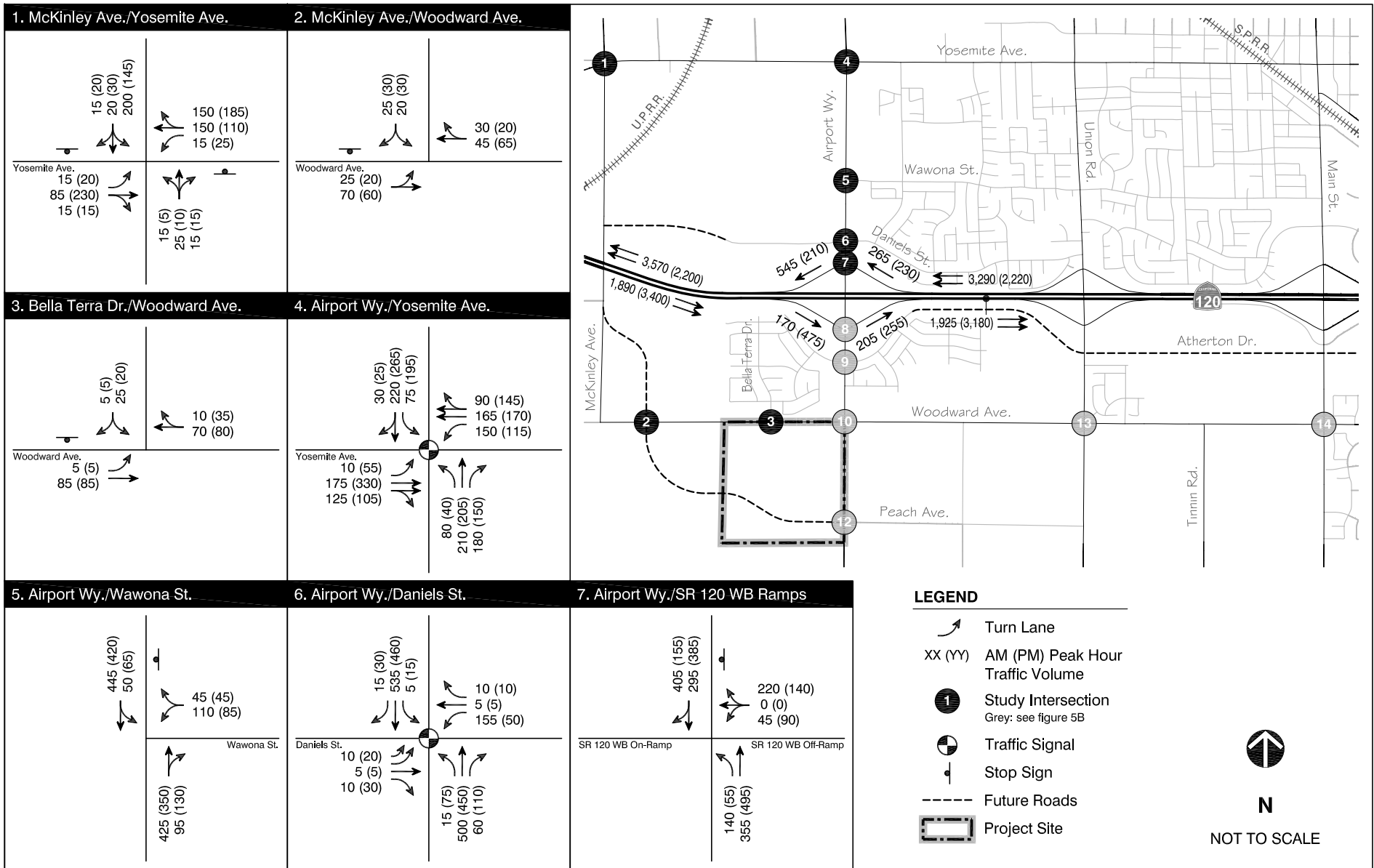
## Chapter 12, “Transportation and Traffic”

Figure 12-5A, “Machado Estates—Peak hour Traffic Volumes and Lane Configurations: Existing Conditions,” immediately following page 12-10 of the draft EIR, has been corrected and replaced. The revised figure follows Table 10-8.

## Chapter 16, “References Cited”

The following reference is added to “Personal Communications” on page 16-10 of the draft EIR.

Neudeck, Chris. Engineer. KSN, Inc., Stockton, CA. October 20, 2008 – telephone conversation with Wendy Johnson of ICF Jones & Stokes.





**Table 10-8.** Traffic Noise Modeling Results, Existing and Cumulative Conditions

Roadway	Segment	Existing Land Use Description	Existing L <sub>dn</sub>	Cumulative No Project dBA L <sub>dn</sub>	Cumulative With Project dBA L <sub>dn</sub>	Cumulative With Project minus Existing dB	Cumulative With Project minus Cumulative No Project dB
McKinley Avenue	Yosemite Avenue to Woodward Avenue	Residential/Open Space	52	64	64	+12	0
<u>McKinley Avenue (future alignment)</u>	<u>West of Airport Way</u>	<u>Residential</u>	<u>n/a</u>	<u>49</u>	<u>54<sup>b</sup></u>	<u>n/a</u>	<u>+5</u>
Airport Way	Yosemite Avenue to Wawona Street	Residential	60	63	63	+3	0
Airport Way	Wawona Street to Daniels Street	Residential	60	63	63	+3	0
Airport Way	Atherton Road to Woodward Avenue	Residential	57	62	63	+6	+1
Airport Way	Woodward Avenue to Site Access (Plus Project)	Residential	59	63	64 <sup>b</sup>	+6	+1
Airport Way	Site Access (Plus Project) to Peach Avenue	Residential	59	63	64 <sup>b</sup>	+5	+1
Airport Way	South of Peach Avenue	Residential	59	63	63	+4	0
<u>Machado Estates Access</u>	<u>West of Airport Way</u>	<u>Vacant (future Residential)</u>	<u>n/a</u>	<u>n/a</u>	<u>51<sup>b</sup></u>	<u>n/a</u>	<u>n/a</u>
Yosemite Avenue	McKinley Avenue to Airport Way	Residential	60	63	63	+3	0
Yosemite Avenue	Airport Way to Union Road	Commercial/Residential	62	63	63	+1	0
Woodward Avenue	McKinley Avenue to Bella Terra Drive	Residential	52	61	61 <sup>b</sup>	+9	0
Woodward Avenue	Bella Terra Drive to Airport Way	Residential	52	61	61 <sup>b</sup>	+9	0
Woodward Avenue	Airport Way to Union Road	Residential	54	60	60	+6	0
Woodward Avenue	Union Road to Main Street	Residential	57	60	60	+3	0
Peach Avenue	East of Airport Way	Residential	44	53	53	+9	0
SR 120		Residential	59 <sup>a</sup>	61 <sup>a</sup>	61 <sup>a</sup>	+2	0

<sup>a</sup> A nominal 5 dB of noise reduction was applied to noise levels to account for acoustical shielding provided by the existing subdivision wall.

<sup>b</sup> Predicted traffic noise levels at Machado Estates receiver locations.



## Chapter 3

# Comments on Draft EIR and Responses to Comments

As described in Chapter 1, the draft EIR was circulated for review and comment by the public and other interested parties, by agencies that commented on the initial study (IS) and notice of preparation of the EIR and by surrounding jurisdictions. Comment letters on the draft EIR were received from individuals and agencies. The letters received are listed in Table 3-1, and copies of the letters, with all individual comments indicated, are provided in this chapter.

As stated in CEQA Guidelines Sections 15088(a) and 15088(b), comments that raise environmental issues must be provided with responses. This chapter contains the City's responses to comments received on the draft EIR. Reasoned, factual responses have been provided for all comments received, focusing specifically on the environmental issues raised. In general, the responses provide explanation or amplification of information contained in the draft EIR. Comments that are outside the scope of CEQA review will be forwarded to the decision-makers for consideration as part of the project's approval process. Those comments are answered with a general response.

The comment letters and comments within each letter are numbered consecutively. For example, Letter 1 is the first letter, and Comment 1-1 is the first comment in Letter 1. Revisions made to the draft EIR in response to comments are identified as text to be deleted (~~striketrough~~) and text to be added (underline). All text changes are indicated in Chapter 2 also.

**Table 3-1.** Comments Received on Draft EIR

Letter	Date	Commenter	Address
1	December 28, 2007	San Joaquin Council of Governments	555 East Weber Avenue Stockton, CA 95202
2	January 24, 2008	California Governor's Office of Planning and Research, State Clearinghouse and Planning Unit	1400 10th Street Sacramento, CA 95812
3	December 27, 2007	Department of California Highway Patrol	3330 Ad Art Road Stockton, CA 95208
4	January 16, 2008	California Department of Transportation	P.O. Box 2048 Stockton, CA 95201
5	January 31, 2008	Department of the Army, U.S. Army Engineer District, Sacramento	1325 J Street Sacramento, CA 95814
6	January 14, 2008	San Joaquin County Environmental Health Department	600 East Main Street Stockton, CA 95202-3029
7	January 17, 2008	California Public Utilities Commission	505 Van Ness Avenue San Francisco, CA 94102-3298

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:12 #007 P.002/009

Letter 1

RECEIVED



S J C O G, Inc.

JAN 02 2008

555 East Weber Avenue • Stockton, CA 95202 • (209) 468-5913 • FAX (209) 468-1084

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP)

SJMSCP RESPONSE TO LEAD AGENCY ADVISORY AGENCY NOTICE TO SJCOG, Inc.

To: David Hanham, City of Manteca Community Development Department
From: Anne-Marie Poggio-Castillou, SJCOG, Inc.
Date: December 28, 2007
Re: Lead Agency Project Title: Draft Environmental Impact Report: Machado Estates
Lead Agency Project Number: Draft EIR: Machado Estates
Assessor Parcel Number(s): 241-320-18

Total Acres to be converted from Open Space Use: 158.8 acres

Habitat Types to be Disturbed: Agriculture (C34 Row and Field Crop)

Species Impact Findings: Findings to be determined by SJMSCP biologist.

Dear Mr. Hanham:

SJCOG, Inc. has reviewed application DEIR: Machado Estates. This project consists of approximately 158.8 acres located directly south of the Manteca city limits. The project site is located at the southwest corner of the Airport Way/Woodward Avenue intersection. The project proposes the subdivision of the approximately 156.8-acre site into 575 single-family residential lots

1-1

The City of Manteca is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts, and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). Although participation in the SJMSCP is voluntary, lead agents should be aware that if project applicants choose against participating in the SJMSCP, they will be required to provide alternative mitigation in an amount and kind equal to that provided in the SJMSCP.

The SJMSCP is requesting a change to the DEIR. In section 5-21 (Mitigation Measure BIO-4a). This section states:

Compensation fees must be paid before any ground-disturbing activities commence, including grading.

1-2

The SJMSCP requires that biological assessment be taken prior to ground-disturbance; however, fees are to be paid no greater than 30-days prior to pulling the building permit.

It should be noted that two important federal agencies (U.S. Army Corps of Engineers and the California Regional Water Quality Control Board) have not issued permits to the SJCOG and so payment of the fee to use the SJMSCP will not modify requirements that could be imposed by these two agencies. Potential waters of the United States [pursuant to Section 404 Clean Water Act] are believed to occur on the project site. It may be prudent to obtain a preliminary wetlands map from a qualified consultant. If waters of the United States are confirmed on the project site, the Corps and the Regional Water Quality Control Board (RWQCB)

1-3

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:12 #007 P.003/009

would have regulatory authority over those mapped areas [pursuant to Section 404 and 401 of the Clean Water Act respectively] and permits would be required from each of these resource agencies prior to grading the project site.

1-3  
Cont

**This Project is subject to the SJMSCP. Per requirements of the SJMSCP, this project must seek coverage due to required Army Corp permitting, and is subject to a case-by-case review.** This can be a 90 day process and it is recommended that the project applicant contact SJMSCP staff as early as possible.

**After this project is approved by the Habitat Technical Advisory Committee and the SJCOG Inc. Board,** the following process must occur to participate in the SJMSCP:

- Schedule a SJMSCP Biologist to perform a pre-construction survey **prior to any ground disturbance**
- Sign and Return Incidental Take Minimization Measures to SJMSCP staff (given to project applicant after pre-construction survey is completed)
- Pay appropriate fee to the City of Stockton based on SJMSCP findings
- Receive your Certificate of Payment and release the required permit

1-4

If you have any questions, please call (209) 468-3913.

# Responses to Comment Letter 1—San Joaquin Council of Governments, December 28, 2007

## Response to Comment 1-1

The commenter states that project applicants should know that if they choose not to participate in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), they will be required to provide alternative mitigation in an amount and kind that is the same as those measures outlined in the SJMSCP.

This change was made in the text, as shown in Chapter 2 of this final EIR.

## Response to Comment 1-2

The commenter requests that language in Section 5-21 of the DEIR be changed to reflect specific requirements concerning timely payment of compensation fees.

The change was reflected in the text, as shown in Chapter 2 of this final EIR.

## Response to Comment 1-3

The commenter notes that the U.S. Army Corps of Engineers and the California Regional Water Quality Control Board have not issued permits to the San Joaquin Council of Governments (SJCOG), and therefore project participation in the SJMSCP will not modify the requirements that these agencies may impose upon the project. The commenter also states that a wetland delineation map will need to be prepared for the project and that permits will need to be obtained pursuant to Sections 401 and 404 of the Clean Water Act (CWA), if necessary.

Mitigation Measure BIO-2a: Identify and Delineate Waters of the United States and Obtain and Comply with State, Federal, and Local Permits, found on page 5-20 of the draft EIR, requires that a wetlands delineation be prepared and verified prior to construction of the project and requires that if the U.S. Army Corps of Engineers determines that the ditch is waters of the United States, the City will require that the applicant obtain a Section 404 permit from the U.S. Army Corps of Engineers for placement of fill within waters of the United States and a Section 401 certification from the Regional Water Quality Control Board. The mitigation measure further requires that the extent of the ditch that is within the jurisdiction of the California Department of Fish and Game be identified for the purpose of obtaining a California Fish and Game Code Section 1602 streambed alteration agreement and that all conditions that are attached to the state and federal permits be implemented as part of the project, be clearly identified in the

construction plans and specifications, and be monitored during and after construction to ensure compliance.

## Response to Comment 1-4

The commenter states that this project is subject to the SJMSCP and outlines the process by which a project must comply with the plan. This information is hereby incorporated into the EIR. The draft EIR includes Mitigation Measure BIO-4a, as modified in Response to Comment 1-2 and shown below, requires that the project compensate for a loss of Swainson's hawk foraging habitat as outlined in the SJMSCP.

### **Mitigation Measure BIO-4a: Compensate for Loss of Swainson's Hawk Foraging Habitat as Outlined in the SJMSCP**

The City will provide compensation for the conversion of approximately 157 acres of agricultural habitat lands (i.e., fund acquisition of preserve lands) at a ratio of 1:1 (acres acquired to acres lost), as outlined in the SJMSCP (Section 4.1.2[A]). For 2007, the cost to provide 1 acre of compensation for agricultural habitat lands is \$13,022. The final cost to fulfill project compensation requirements will be determined during coordination with SJCOG. Compensation fees must be paid ~~before any ground-disturbing activities commence, including grading~~ no more than 30 days prior to receipt of an approved building permit (SJMSCP Section 5.3.2.3[A]).

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:12 #007 P.004/009

Letter 2



ARNOLD SCHWARZENEGGER  
GOVERNOR

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT  
DIRECTOR

January 24, 2008

RECEIVED

JAN 25 2008

COMMUNITY DEVELOPMENT  
DEPARTMENT

David Hanham  
City of Manteca  
1001 W. Center Street  
Manteca, CA 95366

Subject: Machado Estates  
SCH#: 2007052023

Dear David Hanham:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 22, 2008, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

2-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

2-2

Sincerely,  
*Terry Roberts*

Terry Roberts  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044  
(916) 445-0613 FAX (916) 323-3018 www.npr.ca.gov

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:13 #007 P.005/009

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2007052023  
**Project Title** Machado Estates  
**Lead Agency** Manteca, City of

**Type** EIR Draft EIR

**Description** The proposed project includes the Annexation, Prezoning, Development Agreement, Tentative Map, a planned unit development, and construction of the Machado Estates Subdivision. The project would subdivide approximately 158 acres into 575 single family lots. The project would include the removal of a single family home from the site.

**Lead Agency Contact**

**Name** David Hanham  
**Agency** City of Manteca  
**Phone** 209-825-2346 **Fax**  
**email**  
**Address** 1001 W. Center Street  
**City** Manteca **State** CA **Zip** 95366

**Project Location**

**County** San Joaquin  
**City** Manteca  
**Region**  
**Cross Streets** South Airport Way and Woodward Avenue  
**Parcel No.** 241-320-018  
**Township**

	<b>Range</b>	<b>Section</b>	<b>Base</b>

**Proximity to:**

**Highways** SR 120  
**Airports**  
**Railways** Union Pacific Railroad  
**Waterways**  
**Schools** Sierra High School, Veritas Elementary  
**Land Use** AU-40, general Agriculture on 40-acre parcel minimum, San Joaquin County Zoning Code, LDR, Low Density Residential (City of Manteca General Plan Designation)

**Project Issues** Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Noise; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Growth Inducing; Landuse; Cumulative Effects

**Reviewing Agencies** Resources Agency; Department of Conservation; Department of Fish and Game, Region 2; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 10; Air Resources Board, Transportation Projects; Integrated Waste Management Board; State Water Resources Control Board, Clean Water Program; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; Department of Housing and Community Development

**Date Received** 12/07/2007 **Start of Review** 12/07/2007 **End of Review** 01/22/2008

## **Responses to Comment Letter 2—California Governor’s Office of Planning and Research, State Clearinghouse and Planning Unit, January 24, 2008**

### **Response to Comment 2-1**

The commenter notes that the reviewing period has closed, and the letter outlines project information and reviewing agencies for which the State Clearinghouse forwarded the document for review. No response is required in this EIR.

### **Response to Comment 2-2**

The commenter notes that the City has complied with the draft environmental document reviewing process under CEQA for this project.

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:13 #007 P.006/009

**Letter 3**

State of California—Business, Transportation and Housing Agency    **ARNOLD SCHWARZENEGGER, Governor**

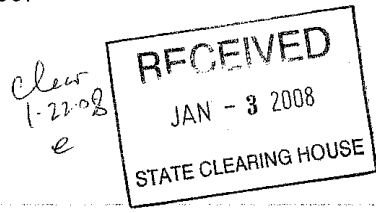
**DEPARTMENT OF CALIFORNIA HIGHWAY PATROL**  
3330 Ad Art Road  
Stockton, CA 95208  
(209) 943-8666  
(800) 735-2929 (TT/TDD)  
(800) 735-2922 (Voice)



December 27, 2007

File No.: 265.11045.11012.MachadoEstatesdec/2007

Ms. Peggy Mello  
State Clearing House  
1400 Tenth Street, Room 121  
Sacramento, CA 95814



Dear Ms. Mello:

Thank you for the opportunity to review the Notice of Completion and Environmental Impact Report (EIR) for the Machado Estates project located at the southwest corner of the intersection of Airport Way and Woodward Avenue. (SCH# 2007052023). This project is located in the southern portion of San Joaquin County and south of the jurisdictional boundaries for the City of Manteca. This project will involve the development of approximately 156.8 acres and approximately 575 single-family residential lots.

3-1

As indicted in the EIR, this project will have significant impacts on surrounding roadways. Airport Way is commonly used by commuters to access State Route 120 and ultimately Interstate 5 and State Route 99. These roadways will see a measurable increase in the average daily traffic volumes as a result of this project, especially during peak hours.

Although the EIR indicates several plans to mitigate the expected increased traffic volumes throughout this project, on adjacent roadways, and on State Route 120, it stops short of solving several potential issues. Several of the attempts at mitigation involve funding for future improvements and yet to be identified projects. Although future planning is admirable, the EIR lists several traffic related issues under the category of "Significant and Unavoidable Impacts." Therefore, I would like to recommend the City of Manteca work closely with the San Joaquin County Department of Public Works, the California Department of Transportation, and the California Highway Patrol (CHP) in developing long range and short term plans that are beneficial to all the citizens utilizing the highway system.

3-2

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:13 #007 P.007/009

Ms. Marie Mello  
Page 2  
December 27, 2007

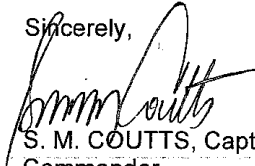
The impacts on local traffic created by this project will be significant and felt by local commuters. As you know, the CHP has the primary responsibility for traffic enforcement on county roads as well as State Route 120. This project will require the CHP to redirect staffing to effectively manage traffic absent an increase in resources.

3-3

The impacts of this project should be further addressed in the project's EIR. Should you have any questions, please feel free to call me or Lieutenant Scott Lynch of my staff at (209) 943-8666.

3-4

Sincerely,



S. M. COUTTS, Captain  
Commander  
Stockton Area

# Responses to Comment Letter 3—Department of California Highway Patrol, December 27, 2007

## Response to Comment 3-1

The commenter notes that there are “significant and unavoidable” impacts on traffic associated with the project.

The draft EIR discloses several transportation-related impacts as significant and unavoidable. These are listed on pages 14-23 and 14-24 of the draft EIR. These impacts are considered to be significant and unavoidable because it would be financially infeasible for the proposed project alone to fund improvements to fully mitigate the deficiencies (e.g., freeway widening, roadway widening, and interchange reconstruction). Mitigation measures identified in the draft EIR require that the project will pay fair-share contributions toward future improvements that will reduce the significance of the transportation impacts.

## Response to Comment 3-2

The commenter requests that the City work closely with the San Joaquin County Department of Public Works, the California Department of Transportation (Caltrans), and the California Highway Patrol (CHP) if traffic-related problems arise as a result of the proposed project.

If problems related to the completion of the proposed project occur, the City agrees that it should work with Caltrans and the CHP to develop plans to address the problems.

## Response to Comment 3-3

The commenter states that the traffic impacts of the project will be significant and will be felt by local commuters and possibly may require the CHP to redirect staff to manage traffic.

The project area will be incorporated into Manteca by the time the proposed project would be built out. Because traffic enforcement within the city is handled by the Manteca Police Department, the CHP will have a slightly smaller range to patrol. As for the significant impacts on traffic on the state highway system, the project would pay its fair share toward improvements that would reduce the significance of the impacts. However, as stated before, it would be financially infeasible for the project to fully fund all the improvements outlined in the draft EIR.

## Response to Comment 3-4

The commenter states that the traffic impacts of the project should be discussed further in the EIR, although the commenter does not identify specific issues to be further discussed.

The City has met with and corresponded with Caltrans during the preparation of the traffic study for this EIR. The City believes that the EIR has adequately disclosed the transportation impacts associated with the proposed project and that no additional analysis is required.

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:13 #007 P.008/009

Jan. 16. 2008 9:52AM

No. 0069 P. 2/3

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION

P.O. BOX 2048 STOCKTON, CA 95201  
(1976 E. CHARTER WAY/1976 E. DR. MARTIN  
LUTHER KING JR. BLVD. 95205)  
TTY: California Relay Service (800) 735-2929  
PHONE (209) 941-1921  
FAX (209) 948-7194



Flex your power!  
Be energy efficient!

Letter 4



January 16, 2008

10-SJ-120-PM3,3  
SCH 2007052023  
Machado Estates)

David Hanham  
City of Manteca  
Community Development Department  
1001 West Center Street  
Manteca, CA 95337

Clear  
1-22-08  
e

Dear Mr. Hanham:

The California Department of Transportation (Department) appreciates the opportunity to have reviewed the Draft Environmental Impact Report (DEIR) for the proposed Machado Estates Project. This project proposes the subdivision of an approximately 156.8-acre site into 575 single-family residential lots. One existing single-family home on the site will be removed. The proposed project includes the City's approval of annexation of the project site to Manteca, zoning, a development agreement, and a tentative map for residential development. The project also involves the annexation of 15 parcels north of the project area for inclusion in Manteca to maintain adequate provision of services in an area that is experiencing growth and development. This project is located at the southwest corner of the Airport Way/Woodward Avenue Intersection, in the City of Manteca. The Department has the following comment(s):

- The development's Draft Environmental Impact Report (DEIR) depends primarily on fair share contributions to the future SJ-120/Airport Interchange project to mitigate its cumulative traffic impacts. The DEIR assumes that the SJ-120/Airport Interchange project will be designing the facilities to accommodate the development's traffic generation. The SJ-120/Airport Interchange project currently does not have an approved traffic forecast. Therefore, the above assumption needs to be verified since previous projects in San Joaquin County have used a constrained SJCOG model, which has resulted in designing facilities based on significantly lower traffic estimates. This is due to the SJCOG model not accounting for the increased level of development in a city general plan, and additionally the SJCOG model not being updated to account for some existing levels of development. If the SJCOG model traffic forecast for the SJ-120/Airport Interchange does not account for the City's increased level of build-out, then the assumption that the future interchange project will provide the mitigation for the development's traffic will not be valid.

4-1

"Caltrans improves mobility across California"

From:COMMUNITY DEVELOPMENT

209 825 2349

03/05/2008 08:13 #007 P.009/009

Jan. 16. 2008 9:52AM

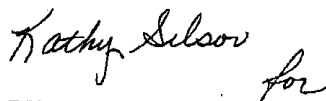
No. 0069 P. 3/3

Mr. Hanham  
January 16, 2007  
Page 2

- The Existing condition (Figure 12-5A) at the Airport Way /SR 120 westbound on ramp shows the AM peak hour to be 490; however, the sum of the left turn (LT) Airport Way and right turn (RT) Airport Way to SR 120 WB on ramp is 545. Please clarify. 4-2
- The lane configuration shown in Figure 12-15A Cumulative condition at the Airport Way/SR 120 WB ramps is incorrect according to page 12-41 Mitigation Measure TRA-10a. The Airport Way/SR 120 WB ramp terminal intersection would be designed with the following characteristics: two left-turn lanes and a shared through/right-turn lane, and a right-turn lane on the WB approach. 4-3
- On page 12-19 under the Freeway Mainline, off-ramp and on-ramp Segment, it states that the "County's Congestion Management Plan (CMP) defines LOS F as the standard on SR 120, all segments are judged to be operating at or better then LOS standard." However, Caltrans Standard LOS is D or better. 4-4
- An Encroachment Permit will be required for work (if any) done within the Department's right of way. This work is subject to the California Environmental Quality Act. Therefore, environmental studies may be required as part of the encroachment permits application. A qualified professional must conduct any such studies undertaken to satisfy the Department's environmental review responsibilities. Ground disturbing activities to the site prior to completion and/or approval required environmental documents may affect the Department's ability to issue a permit for the project. Furthermore, if engineering plans or drawings will be part of your permit application, they should be prepared in standard units. 4-5

If you have any questions or would like to discuss our comments in more detail, please contact Kathy Selsor at (209) 948-7190 (e-mail: [kathy\\_selsor@dot.ca.gov](mailto:kathy_selsor@dot.ca.gov)) or me at (209) 941-1921.

Sincerely,



TOM DUMAS, CHIEF  
OFFICE OF METROPOLITAN PLANNING

c: SMorgan State Clearinghouse

*"Caltrans improves mobility across California"*

# Responses to Comment Letter 4—California Department of Transportation, January 16, 2008

## Response to Comment 4-1

The commenter states that traffic assumptions related to State Route (SR) 120/Airport Way for fair-share contributions to mitigate cumulative traffic impacts are based on SJCOG modeling that is out of date.

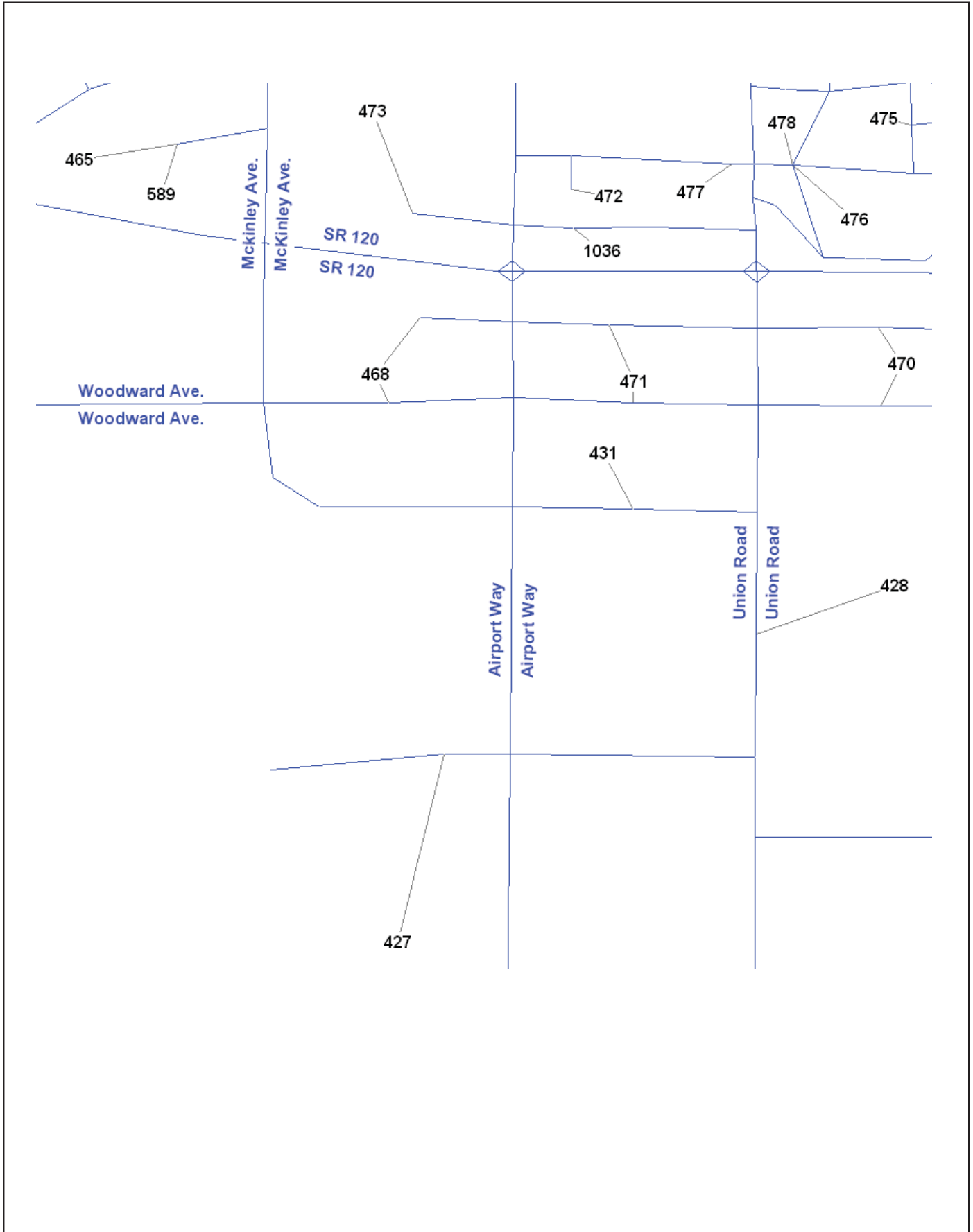
The version of the SJCOG model used to study the proposed project was modified specifically to generate more realistic traffic forecasts within the study area. The land uses in the original SJCOG model were replaced with updated land uses created in collaboration with City planning staff. Table 3-2 below presents a comparison of the original SJCOG land use forecasts and the modified SJCOG land use forecasts. Figure 3-1 shows where the traffic analysis zones are located.

**Table 3-2.** Comparison of Original and Modified SJCOG Land Use Forecasts

SJCOG Model Land Use Comparison				
Traffic Analysis Zone	Original 2015 SJCOG Model		Modified 2015 SJCOG Model	
	Households	Employees	Households	Employees
427	1,538	389	2,081	389
428	741	459	986	349
431	51	53	73	134
468	161	0	1,288	117
471	85	0	1,164	891
472	33	348	550	348
473	1,572	13	445	1,865
477	843	65	791	65
1036	1,263	174	0	738
<b>Total</b>	<b>6,332</b>	<b>1,501</b>	<b>7,558</b>	<b>4,896</b>

Source: Fehr & Peers 2008.

As shown in the table, the modified SJCOG model has significantly more households and employees when compared with the original SJCOG model. Traffic analysis zone 427 represents the zone containing the proposed project. The updated model has more than 500 additional dwelling units when compared with the original SJCOG model. In the cases where there is less development in the modified model, the reduction was caused by a manual shift in development from one zone to another to ensure more accurate loading of trips to the street





network. For example, traffic analysis zone 1036 was used to represent the Stadium Center III and adjacent Manteca Retail Center projects. Because there are no homes in these retail projects, the number of households was set to zero, and the surrounding residential zones were checked to ensure that they had an adequate amount of growth in residential dwelling units.

## Response to Comment 4-2

The commenter states that Figure 12-5A shows a.m. peak hours at SR 120/Airport Way westbound on-ramp to be 490 while the sum of left-turn Airport Way and right-turn Airport Way to westbound SR 120 is 545, and that clarification is needed.

There was an error in Figure 12-5A, and it has been updated to reflect the change (see the revised figure in Chapter 2 of this final EIR). However, the volumes in the technical calculations are correct.

## Response to Comment 4-3

The commenter notes that the lane configuration in Figure 12-5A is incorrect and should be corrected.

Please see Response to Comment 4-2.

## Response to Comment 4-4

The commenter states that page 12-19 of the draft EIR mistakenly states that the level of service (LOS) standard on SR 120 under San Joaquin County's congestion management plan is LOS F, but that the Caltrans standard is LOS D or better.

Although the congestion management plan LOS standard differs from the Caltrans LOS standard, the findings of the draft EIR are still valid because SR 120 freeway mainline impacts were identified in Impact TRA-21. Using the Caltrans LOS D standard would not have changed the findings of the draft EIR since an impact would have also been identified under these conditions.

## Response to Comment 4-5

The commenter states that the project would require an encroachment permit from Caltrans for work within Caltrans' right-of-way. The commenter also notes that the project is subject to CEQA and that further studies may be required as part of the encroachment permit process.

Based on the findings of the draft EIR, the proposed project would not directly construct any improvements within Caltrans' right-of-way. For improvements to which the proposed project is contributing funding, the City will work with Caltrans on any environmental studies necessary to grant the appropriate permits.

REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO CA 95814-2922

**Letter 5**  
**RECEIVED**

FEB 04 2008

COMMUNITY DEVELOPMENT  
DEPARTMENT

January 31, 2008

Regulatory Division (SPK-2007-02294)

David Hanham  
Senior Planner  
City of Manteca  
Community Development Department  
1001 W. Center Street  
Manteca, California 95337

Dear David Hanham:

We are responding to your request for comments on the Draft Environmental Impact Report for Machado Estates (SCH#200702023), received in this office on December 13, 2007. This project is located within Section 12, Township 2 South, Range 7 East, in the City of Manteca, in San Joaquin County, California. Your identification number is SPK-2007-02294.

The Corps of Engineers' jurisdiction within the study area is under the authority of Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. Waters of the United States include, but are not limited to, rivers, perennial or intermittent streams, lakes, ponds, wetlands, vernal pools, marshes, wet meadows, and seeps. Project features that result in the discharge of dredged or fill material into waters of the United States will require Department of the Army authorization prior to starting work.

To ascertain the extent of waters on the project site, the applicant should prepare a wetland delineation, in accordance with the "Minimum Standards for Acceptance of Preliminary Wetland Delineations", under "Jurisdiction" on our website at the address below, and submit it to this office for verification. A list of consultants that prepare wetland delineations and permit application documents is also available on our website at the same location.

Any activity which is likely to jeopardize the continued existence of a threatened or endangered species or species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which designation, as identified under the critical habitat of such species may require consultation with the United States Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS). Any activity which may affect historic properties listed or eligible for listing, in the National Register of Historic Places must satisfy the requirements of the National Historic Preservation Act.

-2-

The range of alternatives considered for this project should include alternatives that avoid impacts to wetlands or other waters of the United States. Every effort should be made to avoid project features which require the discharge of dredged or fill material into waters of the United States. In the event it can be clearly demonstrated there are no practicable alternatives to filling waters of the United States, mitigation plans should be developed to compensate for the unavoidable losses resulting from project implementation.

5-1

Please refer to identification number SPK-2007-02294 in any correspondence concerning this project. If you have any questions, please contact Peck Ha at our California South Branch, 1325 J Street, Room 1480, email [peck.ha@usace.army.mil](mailto:peck.ha@usace.army.mil), or telephone 916-557-6617. You may also use our website: [www.spk.usace.army.mil/regulatory.html](http://www.spk.usace.army.mil/regulatory.html).

Sincerely,



Kathleen Dadey, Ph.D.  
Chief, California South Branch

## Copy furnished:

Sandy Morey, California Department of Fish and Game, 1701 Nimbus Road, Rancho Cordova,  
California 95670-4503

U.S. Fish and Wildlife Service, Endangered Species Division, 2800 Cottage Way, Suite W2605,  
Sacramento, California 95825-3901

Patrick Gillum, Central Valley Regional Water Quality Control Board, 11020 Sun Center Drive  
#200, Rancho Cordova, California 9670-6114

Wendy Johnson, Jones and Stokes, 2600 V Street, Sacramento, California 95818

Joe and Lillian Machado, 24916 Manteca Road, Manteca, California 95336

# Responses to Comment Letter 5— Department of the Army, U.S. Army Engineer District, Sacramento, January 31, 2008

## Response to Comment 5-1

The commenter states that the U.S. Army Corps of Engineers (USACE) would like the project to include alternatives that avoid impacts on wetlands and waters of the United States.

Pursuant to CEQA, a reasonable range of alternatives to the project was considered in the draft EIR. As noted in the draft EIR's Chapter 5, "Biological Resources," development of the project would place fill within an agricultural ditch located in the center of the eastern portion of the project area. This agricultural ditch could support seasonal wetland habitat and be considered a water of the United States. However, impacts on wetlands and waters of the United States are anticipated to be less than significant with mitigation incorporated.

Letter 6



**San Joaquin County  
Environmental Health Department  
600 East Main Street  
Stockton, California 95202-3029**

**Website: [www.sjgov.org/ehd](http://www.sjgov.org/ehd)  
Phone: (209) 468-3420  
Fax: (209) 464-0138**

**DIRECTOR**

Donna Heran, REHS

**ASSISTANT DIRECTOR**

Laurie Cotulla, REHS

**PROGRAM COORDINATORS**

Carl Borgman, REHS

Mike Huggins, REHS, RDI

Margaret Lagorio, REHS

Robert McClellon, REHS

Jeff Carruesco, REHS, RDI

Kasey Foley, REHS

January 14, 2008

David Hanham  
Senior Planner  
City of Manteca Community Development Department  
1001 West Center Street  
Manteca, California 95337

**RECEIVED**

Jan 18 2008

COMMUNITY DEVELOPMENT  
DEPARTMENT

**RE: DRAFT EIR, MACHADO ESTATES**

The San Joaquin County Environmental Health Department has the following comments regarding the preparation of a draft environmental impact report for the above project:

The existing homes are being served by onsite sewage disposal systems and individual wells for domestic and irrigation purposes. The Environmental Health Department recommends that as a part of developing these properties, the existing wells and septic systems shall be destroyed under permit and inspection with the Environmental Health Department. Existing residences that will remain shall be connected to public sewer and public water.

6-1

Should you have any questions or need further assistance please call Rod Estrada, Lead Senior R.E.H.S., at (209) 468-0331.

Donna Heran, R.E.H.S., Director

Mike Huggins, Program Coordinator, R.E.H.S., R.D.I.  
Environmental Health Department

MH:tl

# Responses to Comment Letter 6—San Joaquin County Environmental Health Department, January 14, 2008

## Response to Comment 6-1

The commenter recommends that existing wells and septic systems within the project area be destroyed under permit and inspection with the San Joaquin County Environmental Health Department while existing houses and residences that remain be connected to public water and sewer.

As stated on page 13-13 in Chapter 13, “Utilities and Service Systems,” in the draft EIR, the existing home on the project site is currently served by a septic system. Mitigation Measure HAZ-2f will require that this septic system be properly abandoned upon project implementation. The project site would be served by City wastewater facilities upon project development.

Letter 7

STATE OF CALIFORNIA

Arnold Schwarzenegger, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



January 17, 2008

RECEIVED

JAN 22 2008

COMMUNITY DEVELOPMENT  
DEPARTMENT

David Hanham  
City of Manteca  
1001 W. Center Street  
Manteca, CA 95366

RE: Machado Estates, SCH# 2007052023

Dear Mr. Hanham:

As the state agency responsible for rail safety within California, we recommend that any development projects planned near the rail corridor in the City be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings.

7-1

Of specific concern is the cumulative impact from increased traffic created by this and the numerous other projects in the vicinity on the existing at-grade highway-rail crossings in the City.

If you have any questions in this matter, please call me at (415) 703-2795.

Very truly yours,

Kevin Boles  
Environmental Specialist  
Rail Crossings Engineering Section  
Consumer Protection and Safety Division

cc: Terrel Anderson, Union Pacific Railroad

# Responses to Comment Letter 7—Public Utilities Commission, January 17, 2008

## Response to Comment 7-1

The commenter recommends that new projects consider the safety of rail corridors close to the project area because new development could increase traffic at at-grade rail crossings. The commenter expresses specific concerns related to cumulative impacts created by the proposed project and other projects in the vicinity.

Although there are no at-grade rail crossings in the immediate vicinity of the proposed project, the project would add traffic to roadways that have at-grade crossings. SJCOG has been aggressively addressing rail-crossing conflicts through grade separation projects throughout San Joaquin County. Specifically, the 2007 SJCOG regional transportation plan lists a grade separation project on Airport Way at the Union Pacific Railroad tracks north of the proposed project site. SJCOG and the City will continue to work together to identify future grade separation projects near the proposed project site to further reduce potential conflicts. The proposed project would help fund these improvements through the payment of a regional transportation impact fee to SJCOG and through the generation of sales tax from Machado Estates residents.



## Chapter 4

# Mitigation Monitoring and Reporting Program

## Purpose of and Need for Monitoring

In compliance with CEQA, an EIR has been prepared for the proposed project. The EIR identified potentially significant impacts in the resource areas listed below, along with mitigation measures to reduce those impacts.

Mitigation measures are identified in the EIR to address significant impacts pertaining to the following resource areas:

- agricultural resources;
- air quality;
- biological resources;
- climate change;
- cultural resources;
- energy;
- geology, soils, and paleontology;
- hazards and hazardous materials;
- hydrology and water quality;
- noise;
- traffic; and
- utilities and service systems.

CEQA requires that a lead agency adopt an MMRP for the measures the agency has proposed to avoid or mitigate significant environmental effects (CEQA Guidelines Section 15097). The purpose of the MMRP is to ensure that the mitigation measures identified in the EIR are implemented and to identify who is responsible for their implementation.

Table 4-1, below, identifies the mitigation measures for the proposed project, the parties responsible for implementing and monitoring the measures, the timing of each measure, and a summary of the actions necessary to implement and monitor each measure.

## Mitigation Monitoring and Reporting Program

The MMRP has been prepared for the proposed project in accordance with Public Resources Code Section 21081.6, which specifies that when a public agency makes findings required by paragraph (1) of subdivision (a) of Section 21081, it “shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” Public Resources Code Section 21081.6 further specifies that the MMRP “ensure compliance during project implementation.”

This MMRP is intended to ensure the effective implementation of mitigation measures that are within the City’s authority to implement, including monitoring where identified, throughout all phases of development and operation of the proposed project.

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<b>Agricultural Resources</b>				
<p><b>Mitigation Measure AG-1a: Agricultural Mitigation Fee</b></p> <p>The applicant shall pay the agricultural mitigation fee as required by Manteca Municipal Code Chapter 13.42.</p>	<p>Prior to issuance of building permit</p>	<p>Project sponsor</p>	<p>City of Manteca Building and Planning Divisions of the Community Development Department (Building) (Planning)</p>	<p>Verify before issuance of building permit</p>
<b>Air Quality</b>				
<p><b>Mitigation Measure AIR-1a: Prepare and Implement a Dust Control Plan</b></p> <p>To control the generation of construction-related PM10 emissions, the City will require construction contractors to prepare a dust control plan and submit it to the SJVAPCD at least 48 hours before any earthmoving or construction activities. As previously indicated, implementation of a dust control plan would satisfy the requirements of Regulation VIII (Cadrett pers. comm.). The requirements of the dust control plan are described in Appendix E of this EIR.</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>City of Manteca Engineering Division of the Public Works Department (Engineering)</p>	<p>Require prior to issuing grading and building permits</p> <p>Verify implementation of dust control plan periodically during construction</p>
<p><b>Mitigation Measure AIR-1b: Implement Measures to Reduce Construction Emissions</b></p> <p>The City will require construction contractors to implement the following measures to reduce construction-related emissions.</p> <ul style="list-style-type: none"> <li>■ Limit the area subject to excavation, grading, and other construction activity to one activity or phase at a time.</li> <li>■ Limit the hours of operation of heavy-duty equipment to a maximum of 8 hours per day, 5 days per week, or limit the amount of equipment operated concurrently.</li> <li>■ Replace fossil-fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).</li> <li>■ Require that all diesel engines be shut off when not in use to reduce emissions from idling.</li> </ul>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>(Engineering)</p>	<p>Verify implementation of measures to reduce construction emissions periodically during construction activities</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>■ Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing construction activity during the peak hour of vehicular traffic on adjacent roadways and “Spare the Air Days” declared by the SJVAPCD.</li> <li>■ Implement activity management (e.g., rescheduling activities to reduce short-term impacts) to minimize concurrent operation of construction equipment and concurrent construction of project phases.</li> <li>■ During the smog season (May through October), lengthen the construction period to minimize the number of vehicles and equipment operating at the same time.</li> <li>■ Off-road trucks should be equipped with on-road engines when possible.</li> <li>■ Minimize the obstruction of traffic on adjacent roadways.</li> <li>■ Power construction equipment with diesel engines fueled by alternative diesel fuel blends or ultra-low sulfur diesel (ULSD). Only fuels that have been certified by the ARB should be used. The ARB has verified specific alternative diesel fuel blends for NO<sub>x</sub> and PM emission reduction. The applicant also should use ARB-certified alternative fueled (compressed natural gas [CNG], liquid propane gas [LPG], electric motors, or other ARB-certified off-road technologies) engines in construction equipment where practicable.</li> <li>■ Use construction equipment that meets the current off-road engine emission standard (as certified by the ARB) or that is re-powered with an engine that meets this standard. Tier I, Tier II, and Tier III engines have significantly less NO<sub>x</sub> and PM emissions compared with uncontrolled engines.</li> </ul>	<p>As required by San Joaquin Valley Air Pollution Control District Rule 9510</p>	<p>Project sponsor</p>	<p>Planning</p>	<p>Verify prior to issuing grading and building permits</p>
<p><b>Mitigation Measure AIR-1c: Implement Measures to Comply with SJVAPCD Rule 9510, Indirect Source Review</b></p> <p>The project applicant will enter into a developer agreement with the SJVAPCD and conduct an air impact assessment, as required by SJVAPCD Rule 9510. Required emissions control measures and offsite emission reduction fees (if necessary) will be calculated by the project applicant through the permitting process, as dictated by Rule 9510, to reduce construction-related NO<sub>x</sub> emissions by 20% and PM10 emissions by 45%, compared with the statewide fleet average.</p>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure AIR-1d: Enter into a Development Mitigation Contract</b></p> <p>The project applicant will enter into a development mitigation contract with the SJVAPCD to mitigate or reduce project emissions beyond the requirements of Rule 9510 through the payment of fees (on a per-ton basis) to the SJVAPCD. The payment of fees will be made to the SJVAPCD based on the fee schedule in the development mitigation contract and the amount of reductions necessary to offset project NO<sub>x</sub> and ROG emissions below the SJVAPCD thresholds.</p>	<p>As required by the San Joaquin Valley Air Pollution Control District</p>	<p>Project sponsor</p>	<p>Planning</p>	<p>Verify prior to issuing grading and building permits</p>
<p><b>Mitigation Measure AIR-3a: Incorporate Additional Innovative Measures to Reduce Air Quality Impacts</b></p> <p>The SJVAPCD encourages innovation in measures to reduce air quality impacts. Several measures will be incorporated into the design and operation of the proposed project to provide additional reductions in the overall level of emissions, where feasible. These measures include the following.</p> <ul style="list-style-type: none"> <li>■ Energy-efficient design will be provided for homes and buildings, including automated control systems for heating and air conditioning and energy efficiency beyond California Code of Regulations (CCR) Title 24 (California Building Standards Code) requirements, lighting controls and energy-efficient lighting in buildings, increased insulation beyond Title 24 requirements, and light-colored roof materials to reflect heat.</li> <li>■ Large canopy trees will be carefully selected and located to protect buildings from energy-consuming environmental conditions and shade paved areas. Trees will be selected to shade 50% of paved areas within 15 years.</li> <li>■ Plant deciduous trees on the south- and west-facing sides of buildings.</li> <li>■ Plant trees adjacent to all sidewalks 30 foot on center and at a ratio of one tree for each parking space. Structural soil will be used under paved areas to improve tree growth in locations where street trees are located or planned.</li> <li>■ The City will implement measures to reduce the amount of vehicle traffic to and from the project area to further reduce air pollution in the valley. This could include provisions such as encouraging employees to rideshare or carpool to the project site, or incentives for employees to use alternative transportation.</li> </ul>	<p>During project design and construction</p>	<p>Project sponsor</p>	<p>Planning and Engineering</p>	<p>Review measures during final map improvement plan check and during individual home plan check</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>■ If transit service is available to the project site, improvements will be made to encourage its use. If transit service is not currently available but is planned for the area in the future, easements will be reserved to provide for future improvements. These include bus turnouts, loading areas, route signs, and shade structures. Pedestrian access will be directed to the main entrance of the project from existing or potential public transit stops, and appropriately designed sidewalks will be provided. Such access will consist of paved walkways or ramps and will be separated physically from parking areas and vehicle access routes. Appropriations made to facilitate public or mass transit will help mitigate trips generated by the project.</li> <li>■ Sidewalks and bicycle paths will be provided throughout as much of the project as possible and connect to any nearby open space areas, parks, schools, and commercial areas to encourage walking and bicycling. Connections to nearby public uses and commercial areas will be made as direct as possible to promote walking for some trips. Sidewalks and bikeways will be designed to separate pedestrian and bicycle pathways from vehicle paths. Sidewalks and bikeways will be designed to be accommodating and appropriately sized for anticipated future pedestrian and bicycle use. Such pathways will be easy to navigate and designed to facilitate pedestrian movement through the project and create a safe environment for all potential users (pedestrian, bicycle, and disabled) from obstacles and automobiles. Pedestrian walkways will be created to connect all buildings throughout the project. The walkways will create a safe and inviting walking environment for people wishing to walk from one building to another. Walkways will be installed to direct pedestrians from the street sidewalk to the buildings. Safe and convenient pathways will be provided for pedestrian movement in large parking lots. Mid-block paths will be installed to facilitate pedestrian movement through long blocks (more than 500 feet in length) and cul-de-sacs. Sidewalks will be designed for high visibility (e.g., brightly painted or a different color of concrete) when crossing parking lots, streets, and similar vehicle paths. Pathways through the project will be built in anticipation of future growth/development.</li> <li>■ Exits to adjoining streets will be designed to reduce time to re-enter traffic from the project site.</li> <li>■ Efficient interior circulation and pedestrian access within the project area and logical connection points for future development on the surrounding</li> </ul>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>properties will be provided.</p> <ul style="list-style-type: none"> <li>■ Measures will be implemented to reduce the amount of vehicle traffic to and from the residential area(s) that further reduce air pollution in the SJVAB. This could include providing an information center for residents to coordinate carpooling.</li> <li>■ As many energy-conserving features as possible will be incorporated into the design and operation of the proposed project. These include:               <ul style="list-style-type: none"> <li>□ increased energy efficiency;</li> <li>□ increased wall and ceiling insulation (beyond building code requirements);</li> <li>□ energy-efficient windows (double-paned or Low-E);</li> <li>□ high-albedo (reflecting) roofing materials;</li> <li>□ cool paving;</li> <li>□ radiant heat barriers;</li> <li>□ energy-efficient lighting, appliances, and heating and cooling systems;</li> <li>□ installation of solar water-heating systems;</li> <li>□ provision of low NO<sub>x</sub>-emitting or high-efficiency, energy-efficient water heaters;</li> <li>□ installation of clean-energy features that promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems and small wind turbines);</li> <li>□ installation of geothermal heat pump systems;</li> <li>□ installation of programmable thermostats for all heating and cooling systems;</li> <li>□ awnings or other shading mechanisms for windows;</li> <li>□ porch, patio, and walkway overhangs;</li> <li>□ ceiling fans or whole-house fans;</li> <li>□ passive solar cooling and heating designs (e.g., natural convection and thermal flywheels);</li> </ul> </li> </ul>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>❑ daylighting (natural lighting) systems such as skylights, light shelves, and interior transom windows;</li> <li>❑ electrical outlets around the exterior of units to encourage the use of electric landscape maintenance equipment;</li> <li>❑ bicycle parking facilities for patrons and employees in covered secure areas (conveniently located at each destination point);</li> <li>❑ use of low and no-VOC coatings and paints;</li> <li>❑ natural gas fireplaces (instead of wood burning fireplaces or heaters) and natural gas lines (if available to the project area) in backyard or patio areas to encourage the use of gas barbecues;</li> <li>❑ onsite employee cafeterias or eating areas;</li> <li>❑ pre-wired units with high-speed modem connections/DSL and extra phone lines;</li> <li>❑ employee shower and locker areas for bicycle and pedestrian commuters; and</li> <li>❑ use of low or nonpolluting landscape maintenance equipment (e.g., electric lawn mowers, reel mowers, leaf vacuums, and electric trimmers and edgers).</li> </ul>	As required by SJVAPCD Rule 9510	Project sponsor	Planning	Verify prior to issuing grading permits
<p><b>Mitigation Measure AIR-3b: Implement Measures to Comply with SJVAPCD Rule 9510, Indirect Source Review</b></p> <p>The project sponsor will conduct an air impact assessment, as required by SJVAPCD Rule 9510. Required emissions-control measures and offsite emission reduction fees (if necessary) will be calculated, as dictated by Rule 9510, to reduce 33.3% of the project’s operational baseline NO<sub>x</sub> and 50% of the project’s operational baseline PM<sub>10</sub> emissions over a period of 10 years. The control measures indicated in Mitigation Measure AIR-3a may be implemented to help achieve the emissions reductions required by Rule 9510.</p>				
<p><b>Biological Resources</b></p>				
<p><b>Mitigation Measure BIO-1a: Conduct a Noxious Weed Survey and Document Noxious Weed Infestation</b></p> <p>Prior to construction of program elements on undisturbed lands or adjacent to</p>	Prior to project construction	Project sponsor	Planning and Engineering	Verify prior to issuing building permits

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>agricultural areas, the project sponsor will address noxious weed impacts. The project sponsor will hire a qualified botanist to determine whether noxious weeds are an issue for the program and whether they could displace native plants and natural habitats, affect the quality of forage on rangelands, or affect cropland productivity. Alternatively, the project sponsor may use certified environmental documentation to determine noxious weed impacts on well sites within proposed development areas.</p> <p>If noxious weeds are an issue, the project sponsor will review the County Agricultural Commission’s noxious weed list; California Department of Food and Agriculture’s A, B, and C lists of noxious weeds; and California Exotic Pest Plant Council’s list of pest plants of ecological concern. These lists will be used to identify weeds that will be targeted during field surveys by the botanist. Surveys will focus on target weed species that are considered locally important for documentation and control purposes.</p> <p>If noxious weed infestations are located during the field surveys, they will be mapped and documented. The City will implement Mitigation Measure BIO-1b to avoid the dispersal of noxious weeds into uninfested areas.</p>	<p>Prior to and during project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing building permits</p>
<p><b>Mitigation Measure BIO-1b: Avoid the Dispersal of Noxious Weeds into Uninfested Areas</b></p> <p>To avoid the introduction or spread of noxious weeds into uninfested areas, the City will incorporate the following measures into construction project plans and specifications:</p> <ul style="list-style-type: none"> <li>■ use certified, weed-free, imported erosion-control materials (or rice straw in upland areas);</li> <li>■ coordinate with the County Agricultural Commissioner and land management agencies to ensure that the appropriate BMPs are implemented;</li> <li>■ educate construction supervisors and managers about weed identification and the importance of controlling and preventing the spread of noxious weeds;</li> <li>■ clean equipment at designated wash stations after leaving noxious weed infestation areas; and</li> <li>■ include the noxious weed avoidance measures in contract documents and ensure that they are implemented by the program contractor.</li> </ul>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure BIO-2a: Identify and Delineate Waters of the United States and Obtain and Comply with State, Federal, and Local Permits</b></p> <p>Before construction begins, the City will require that a delineation of waters of the United States within the project area be conducted and a report and map of the results be submitted to the USACE for verification. If the USACE determines that the ditch is not waters of the United States, the applicant will not need to obtain a CWA Section 404 permit. If the USACE decides that the ditch is waters of the United States and therefore is under its jurisdiction, the City will require that the applicant obtain a Section 404 permit from the USACE for placement of fill within waters of the United States and a Section 401 certification from the RWQCB.</p> <p>In addition, the extent of the ditch that is within jurisdiction of DFG will be identified for the purpose of obtaining a CFGC Section 1602 streambed alteration agreement. All conditions that are attached to the state and federal permits would be implemented as part of the project. The conditions would be clearly identified in the construction plans and specifications and monitored during and after construction to ensure compliance.</p>	<p>As required by state, federal, and local permits</p>	<p>Project sponsor</p>	<p>Planning</p>	<p>Verify prior to issuing grading permits</p>
<p><b>Mitigation Measure BIO-3a: Conduct Tree Removal Activities during Nonbreeding Season for Swainson’s Hawk and Non-Special-Status Migratory Birds and Raptors or Conduct Nesting Bird Survey Prior to Tree Removal Activities</b></p> <p>To avoid removing any active Swainson’s hawk or non-special-status migratory bird and raptor nests protected under the MBTA and the CFGC, tree removal activities will be conducted during the nonbreeding season for these species (generally August 16 through February 28) or after a qualified biologist determines that fledglings have left the nest, as described in the SJMSCP (Sections 5.2.3.1[G], 5.2.4.11, 5.2.4.18, and 5.2.4.19). If tree removal activities will be conducted before August 16 or after February 28, a qualified biologist will be retained to survey for nesting birds in all trees that will be removed and any tree located within 500 feet (or 0.25 mile for Swainson’s hawk) of construction activities, including grading. The nesting bird survey will be conducted no more than 48 hours before tree removal activities. If the biologist determines that the area surveyed does not contain any active nests, tree removal activities can commence without any further mitigation. If active nests are found, construction will not occur until nesting activities have ceased (after a qualified biologist determines that fledglings</p>	<p>Prior to project construction, outside of Swainson’s hawk and raptor breeding season</p>	<p>Project sponsor</p>	<p>Planning</p>	<p>Verify prior to construction or tree removal</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
have left the nest).				
<p><b>Mitigation Measure BIO-4a: Compensate for Loss of Swainson’s Hawk Foraging Habitat as Outlined in the SJMSCP</b></p> <p>The project sponsor/developer will provide compensation for the conversion of approximately 157 acres of agricultural habitat lands (i.e., fund acquisition of preserve lands) at a ratio of 1:1 (acres acquired to acres lost), as outlined in the SJMSCP (Section 4.1.2[A]). For 2007, the cost to provide 1 acre of compensation for agricultural habitat lands is \$13,022. The final cost to fulfill project compensation requirements will be determined during coordination with SJCOG no more than 30-days prior to receipt of an approved building permit.</p>	As required by the San Joaquin Council of Governments	Project sponsor	Planning and Engineering	Verify prior to issuing grading and building permits
<p><b>Mitigation Measure BIO-6a: Conduct Preconstruction Survey and Adhere to DFG Guidelines</b></p> <p>DFG (1995) recommends that preconstruction surveys be conducted to locate active burrowing owl burrows in the construction work area and within a 250-foot-wide buffer zone around the construction area. The project proponent or its contractor will retain a qualified biologist to conduct preconstruction surveys for active burrows according to DFG’s Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995). The preconstruction surveys will include a breeding season survey and wintering season survey. If no burrowing owls are detected, no further mitigation is required.</p>	During burrowing owl breeding and wintering season as required by the California Department of Fish and Game	Project sponsor	City of Manteca	Verify prior to issuing grading and building permits
<p><b>Mitigation Measure BIO-6b: Avoid and Minimize Impacts on Nesting Burrowing Owl</b></p> <p>If active burrowing owls are detected, the project proponent will implement the following measures.</p> <ul style="list-style-type: none"> <li>■ Occupied burrows will not be disturbed during the breeding season (February 1–August 31).</li> <li>■ If owls must be moved away from the project site during the nonbreeding season, passive relocation techniques (e.g., installing one-way doors at burrow entrances) will be used instead of trapping, as described in DFG guidelines. At least 1 week will be necessary to complete passive relocation and allow owls to acclimate to alternate burrows.</li> </ul>	Prior to project construction and during burrowing owl nonbreeding season	Project sponsor	City of Manteca	Verify prior to issuing grading and building permits
<p><b>Mitigation Measure BIO-6c: Compensate for Loss of Burrowing Owl</b></p>	As required by the	Project sponsor	City of Manteca	Verify prior to issuing

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Habitat</b></p> <ul style="list-style-type: none"> <li>■ When destruction of occupied burrows is unavoidable during the nonbreeding season (September 1–January 31) the following actions must be taken.</li> <li>■ Unsuitable burrows will be enhanced (enlarged or cleared of debris) or new burrows created (by installing artificial burrows) at a ratio of 2:1 on protected lands approved by DFG. Newly created burrows will follow guidelines established by DFG.</li> <li>■ Loss of foraging and burrowing habitat on the project site will be offset by acquiring and permanently protecting a minimum of 6.5 acres of foraging habitat per occupied burrow identified on the project site. The protected lands should be located adjacent to the occupied burrowing owl habitat on the project site or in other occupied habitat near the project site. The location of the protected lands will be determined in coordination with DFG.</li> </ul>	<p>California Department of Fish and Game and prior to project construction</p>			<p>grading and building permits</p>
<p><b>Cultural Resources</b></p>				
<p><b>Mitigation Measure CR-1a: Stop Work in Case of Accidental Discovery of Buried Archaeological Resources</b></p> <p>If buried cultural resources, such as chipped or ground stone, historic debris, building foundations, or human bone, are inadvertently discovered during ground-disturbing activities, work will stop in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the City and other appropriate agencies. (See also implementation measure RC-I-46 of the City General Plan [City of Manteca 2003a]).</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure CR-2a: Stop Work in Case of Accidental Discovery of Buried Human Remains</b></p> <p>If human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC 5097). If any human remains are discovered or recognized in any location other than a dedicated cemetery, there will be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>■ the county coroner has been informed and has determined that no investigation of the cause of death is required; and</li> <li>■ if the remains are of Native American origin,                             <ul style="list-style-type: none"> <li>□ the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98; or</li> <li>□ the NAHC was unable to identify a descendant, or the descendant failed to make a recommendation within 24 hours after being notified by the commission.</li> </ul> </li> </ul>				
<p>According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must contact the NAHC.</p>				
<p><b>Geology and Soils</b></p>				
<p><b>Mitigation Measure GEO-5a: Stockpile Excavated Topsoil for Onsite Reuse</b></p> <p>The project proponent will require the contractor(s) retained for project construction and landscaping to stockpile excavated topsoil so it can be reused for revegetation and landscaping on the project site. Topsoil will be stockpiled separately from other excavated materials.</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Require in project plans Verify periodically during construction</p>
<p><b>Mitigation Measure GEO-8a: Conduct Preconstruction Survey, Salvage, and Protection</b></p> <p>Before site preparation (including vegetation clearing) and project earthwork begin, the project proponent will retain a qualified professional paleontologist as defined by the SVP Conformable Impact Mitigation Guidelines Committee (1995) to conduct a pedestrian surface survey and, if necessary, a paleontological salvage operation. The goal of the salvage operation, if needed, will be to ensure that any paleontological materials exposed at the surface are recovered and properly prepared and curated, or</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Engineering and Planning</p>	<p>Require in grading and building permits Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>protected from damage using exclusion fencing or other appropriate means. The completed survey will be submitted to the City. Protection will be designed and installed in consultation with the City and the project engineering consultant to ensure that it is appropriate and effective but does not unduly impede construction activities.</p>				
<p><b>Mitigation Measure GEO-8b: Retain a Qualified Professional Paleontologist to Monitor during Ground-Disturbing Activities</b></p> <p>The project proponent will retain a qualified professional paleontologist as defined by the SVP Conformable Impact Mitigation Guidelines Committee (1995) to monitor during any activities with the potential to disturb the Modesto Formation or any other substrate units of Pleistocene age.</p>	During project construction	Project sponsor	Engineering	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure GEO-8c: Provide Worker Sensitivity Training for Paleontological Resources</b></p> <p>The project proponent will ensure that all construction personnel receive training provided by a qualified professional paleontologist, experienced in teaching nonspecialists, to ensure that they can recognize fossil materials in the event any are discovered during construction.</p>	Prior to project construction	Project sponsor	Engineering	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure GEO-8d: Stop Work and Implement Evaluation and Treatment Measures if Macrofossil Remains are Encountered during Construction</b></p> <p>If paleontological materials are discovered during any site preparation, excavation, or project-related activities, work will stop in the area of the find, and the contractor will notify the City’s project manager and the qualified paleontologist retained to perform project monitoring. The paleontologist will assess the nature and importance of the find and recommend appropriate treatment, consistent with the SVP’s 1995 guidelines and all other applicable standards of care. If the paleontologist identifies a need, a state-licensed professional geologist (California PG) will also be retained to assist with evaluating the potential for project work to further disturb the geologic units in which the find was made. Work will not resume in the area of the find until the find has been assessed by the paleontologist and any treatment identified as necessary has been implemented. However, with the paleontologist’s approval, work may resume on other portions of the site during evaluation and treatment of the find. Depending on the nature of the find, site-specific geologic conditions, and the project activities planned for the site, treatment may include paleontological monitoring, preparation, and</p>	During project construction	Project sponsor	Engineering and Planning	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>recovery of fossil materials so that they can be housed in an appropriate museum or university collection, preparation of a report for publication describing the finds, or other approaches developed for the site. The project proponent will be responsible for ensuring that the paleontologist’s recommendations regarding treatment and reporting are implemented.</p>				
<b>Hazardous Materials</b>				
<p><b>Mitigation Measure HAZ-2a: Screen Surface Soils in Project Area for Residuals from Agricultural Chemicals and Other Hazardous Materials</b></p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Engineering and Planning</p>	<p>Verify prior to issuing grading and building permits</p>
<p>As described under “Environmental Setting” above, potentially contaminated soils located in the proposed project area could create a hazard by exposing the public to hazardous materials such as pesticides and other chemicals. To reduce the potential for human exposure to potentially harmful pesticide, fertilizer, and other chemical residues during construction in areas with potential for harmful pesticide and fertilizer residues, surface soils in the area will be sampled or field screened by a qualified hazardous materials consultant for residuals from agricultural chemicals during construction. The structure dripline soils around the existing buildings and any remaining foundations of former buildings will be tested for lead, asbestos, and pesticides prior to development.</p> <p>The San Joaquin County Environmental Health Department (SJCEHD) will review the results of soils sampling or screening and, in the event that soil sampling or field screening indicates the presence of hazardous concentrations of agricultural chemicals and other hazards, the soils will be excavated and properly disposed of before development begins.</p>				
<p><b>Mitigation Measure HAZ-2b: Proper Removal of Hazardous Materials and Hazardous Material Containers from the Site</b></p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Planning and Engineering</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p>The project applicant will require the removal of drums and containers of known hazardous substances from the site. If an underground storage tank is found during development of the site, the project applicant will obtain a permit from the SJCEHD for proper removal. The 55-gallon drums and the 5-gallon bucket of used oil will be removed and recycled in accordance with federal, state, and local regulations. In addition, debris piles and tires will be properly disposed of prior to grading. If any hazardous materials are discovered, a qualified environmental health and safety specialist will be contacted to assess the situation and determine proper removal and disposal procedures.</p>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure HAZ-2c: Proper Disposal of Asbestos by Certified Asbestos Abatement Contractor</b></p> <p>Any asbestos containing materials (from the structures or any underground pipes) will be removed and disposed of by a licensed and certified asbestos abatement contractor prior to grading, excavation, construction, or any other activities that would disturb the material.</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Planning and Engineering</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure HAZ-2d: Notification of Contractors of Presence of Asbestos and Lead Paint</b></p> <p>Contractors that will be working on the site will be notified of the presence of asbestos and lead paint prior to work. The contractors will be provided with a copy of the Asbestos and Lead Paint Survey Reports and a list of asbestos removed by the asbestos abatement contractor during abatement activities. The contractors will be instructed not to disturb asbestos during their work. Contractors will be responsible for informing the landfill of the contractor’s intent to dispose of lead paint and asbestos waste and segregating and characterizing waste streams prior to disposal.</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Planning and Engineering</p>	<p>Verify prior to issuing grading and building permits</p>
<p><b>Mitigation Measure HAZ-2e: Prepare Site Construction Plan for Work in Vicinity of Oil/Gas Well/Drilling Mud Pit</b></p> <p>Contractor(s) working to prepare the site for development will be notified of the presence of the abandoned oil/gas well, and the potential to uncover a buried drilling mud disposal pit in the area of the abandoned well. The contractor(s) will be provided with a copy of the Phase I Environmental Site Assessment Report for the Proposed Machado Estates. In accordance with the Department of Conservation, Oil and Gas, &amp; Geothermal Resources Division (Division), the contractor(s) will be responsible for preparing and submitting to the Division a Construction Site Plan, County Assessor’s Parcel map, with parcel numbers, and a completed Construction Site Plan Review Application, prior to any clearing and grading activities. A Division representative will review the application and conduct a site inspection to check the integrity of the abandoned well and check for gas leaks. Following the site inspection, the Division may make recommendations regarding well protection and/or further testing. Site clearing activities will not commence until the Division approves the Construction Site Plan Application. Although no records could be found regarding the chemical composition of the drilling mud used to install the oil/gas well, it is assumed that the mud was not an oil-based compound and therefore would not be classified as a</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>Planning and Engineering</p>	<p>Require in grading and building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>special hazardous waste. The contractor(s) will, however, notify the Department of Conservation, District 6, Oil and Gas Division should the mud pit be discovered, and the soil is discolored and smells of hydrocarbons or other potentially hazardous substances.</p>				
<p><b>Mitigation Measure HAZ-2f: Proper Abandonment of Septic Systems</b></p> <p>Septic systems are also present on the project site, and the project applicant must abandon the systems by following the proper procedures. The project applicant will obtain a permit from the SJCEHD, and licensed sewage haulers will pump and remove the sewage. The project applicant will be responsible for collapsing and removing the top of the septic systems and will then backfill the empty septic tanks with clean fill material (soil, sand, or pea gravel) to the upper edge of the tank. The SJCEHD will inspect the site to ensure that the septic systems have been properly abandoned.</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>SJCEHD</p>	<p>Require in grading and building permits</p>
<p><b>Mitigation Measure HAZ-3a: Develop and Implement Plans to Reduce Exposure to Hazardous Conditions</b></p> <p>A site-specific safety plan and operations and maintenance plan will be prepared by the project applicant for review and approval by the Manteca Fire Department (MFD). A fire safety plan will also be prepared by the project applicant for review and approval by the MFD. The applicant will also develop and implement a hazardous materials management plan that addresses public health and safety issues by providing safety measures, including release-prevention measures; employee training, notification, and evacuation procedures; and adequate emergency response protocols and cleanup procedures. This plan will be submitted prior to the approval of grading permits for review and approval by the MFD.</p>	<p>Prior to project construction</p>	<p>Project sponsor</p>	<p>MFD</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure HAZ-3b: Follow Manteca Fire Department and Other Guidelines for Storage and Handling of Hazardous Materials</b></p> <p>The project applicant will require that contractors transport, store, and handle hazardous materials required for construction in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the MFD.</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>MFD</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure HAZ-3c: Immediately Contain Spills, Excavate Spill-Contaminated Soil, and Dispose of It at Approved Facility</b></p> <p>In the event of a spill of hazardous materials in an amount reportable to the MFD (as established by Fire Department guidelines), the project applicant</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>MFD</p>	<p>Require in grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>will immediately control the source of the leak and contain the spill. If required by the MFD or other regulatory agencies, contaminated soils will be excavated and disposed of at an offsite facility approved to accept such soils.</p>				
<b>Hydrology and Water Quality</b>				
<p><b>Mitigation Measure HYD-1a: Comply with NPDES Requirements</b></p> <p>To reduce or eliminate construction-related turbidity or sediment water quality effects, the City will require the project contractors to comply with the requirements of the City’s <i>Storm Water Management Program</i> (Stantec 2003). In addition, the City will require the project contractors to obtain coverage under the General Construction Permit before the onset of any construction activities, where the disturbed area is 1 acre or greater in size. A SWPPP will be developed by a qualified engineer or erosion control specialist in accordance with the Central Valley RWQCB requirements for NPDES compliance and implemented prior to the issuance of any grading permit before construction. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.</p> <p>Compliance and coverage with the <i>Storm Water Management Program</i> and General Construction Permit will require controls of pollutant discharges that use BMPs and technology to reduce erosion and sediments to meet water quality standards. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point-source runoff. Measures range from source control, such as reduced surface disturbance, to the treatment of polluted runoff, such as detention basins.</p> <p>BMPs to be implemented as part of the <i>Storm Water Management Program</i> and General Construction Permit (and SWPPP) may include the following practices.</p> <ul style="list-style-type: none"> <li>■ Temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) will be employed to control erosion from disturbed areas.</li> <li>■ Use a dry detention basin (which is typically dry except after a major rainstorm, when it will temporarily fill with stormwater), designed to decrease runoff during storm events, prevent flooding, and allow for off-peak discharge. Basin features will include maintenance schedules for the</li> </ul>	<p>As required by the Central Valley Regional Water Quality Control Board</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>periodic removal of sediments, excessive vegetation, and debris that may clog basin inlets and outlets.</p> <ul style="list-style-type: none"> <li>■ Cover, or apply nontoxic soil stabilizers to, inactive construction areas (previously graded areas inactive for 10 days or more) that could contribute sediment to waterways.</li> <li>■ Enclose and cover exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.</li> <li>■ Ensure that no earth or organic material will be deposited or placed where it may be directly carried into a stream, marsh, slough, lagoon, or body of standing water.</li> <li>■ Prohibit the following types of materials from being rinsed or washed into the streets, shoulder areas, or gutters: concrete, solvents and adhesives, thinners, paints, fuels, sawdust, dirt, gasoline, asphalt and concrete saw slurry, and heavily chlorinated water.</li> <li>■ Ensure that grass or other vegetative cover will be established on the construction site as soon as possible after disturbance.</li> </ul>				
<p>The City, its contractors, or applicants for specific development projects within the Machado Estates project will select a combination of BMPs that is expected to minimize runoff flows and remove contaminants from stormwater discharges. The final selection of BMPs will be subject to approval by the RWQCB. The City will verify that an NOI has been filed with the SWRCB and that a SWPPP has been developed before allowing construction to begin. The City will perform inspections of the construction area, to verify that the BMPs specified in the SWPPP are properly implemented and maintained. The City will notify contractors immediately if there is a noncompliance issue and will require compliance. If necessary, the City will require that additional BMPs be designed and implemented if those originally constructed do not achieve the identified performance standard.</p>				
<p><b>Mitigation Measure HYD-1b: Clean Paved Areas with Street Sweeping Equipment</b></p> <p>To minimize the amount of pollutants entering the storm drain system during construction, project roadways and other paved areas will be cleaned regularly using street-sweeping equipment. Additionally, litter and debris that may accumulate on the streets of the project site will be collected</p>	<p>Prior to and during project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify periodically during construction</p>

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Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
regularly and disposed of properly. These activities will be the responsibility of the developer or its contractors, subject to review by the City.				

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Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure HYD-1c: Employ Other Provisions for Work in Surface Waters</b></p> <p>If construction occurs when flows are present in onsite drainages, the contractor will implement measures to protect surface water quality, such as flow diversions, impoundments (e.g., coffer dams), or other methods to avoid the direct exposure of surface water to sediment created as part of construction activity. As a performance standard, the measures will maintain basin plan standards for turbidity, as follows.</p> <ul style="list-style-type: none"> <li>■ Where natural turbidity is between 0 and 5 Nephelometric Turbidity Units (NTUs), increases will not exceed 1 NTU.</li> <li>■ Where natural turbidity is between 5 and 50 NTUs, increases will not exceed 20%.</li> <li>■ Where natural turbidity is between 50 and 100 NTUs, increases will not exceed 10 NTUs.</li> <li>■ Where natural turbidity is greater than 100 NTUs, increases will not exceed 10%.</li> </ul> <p>Where the project has potential to result in elevated turbidity, monitoring will be performed at least twice daily at upstream and downstream locations to determine whether the standards outlined above have been met. In the event that they are not being met, the turbidity-generating activities will cease until turbidity is within the identified limits, and construction methods or turbidity control measures will be modified to ensure that turbidity limits continue to be met.</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p> <p>Verify periodically during construction</p>
<p><b>Mitigation Measure HYD-2a: Implement a Spill Prevention and Control Program</b></p> <p>As part of requiring compliance with the NPDES General Construction Permit, the City will require that project contractors develop and implement a spill prevention and control program to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities. The NPDES General Construction Permit requires the spill prevention and control program. The program will be completed before any construction activities begin.</p> <p>The City will review and approve the spill prevention and control program before the onset of construction activities. The City will inspect the construction area routinely to verify that the measures specified in the spill</p>	<p>Prior to and during project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>prevention and control program are properly implemented and maintained. The City will notify contractors immediately if there is a noncompliance issue and will require compliance.</p> <p>The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that:</p> <ul style="list-style-type: none"> <li>■ violates applicable water quality standards,</li> <li>■ causes a film or sheen upon or discoloration of the water surface or adjoining shoreline, or</li> <li>■ causes a sludge or emulsion to be deposited beneath the surface of the water or adjoining shorelines.</li> </ul> <p>If a spill is reportable, the contractor will notify the City’s fire department and the State Department of Toxic Substances Control (DTSC), which have spill response and cleanup ordinances to govern emergency spill response. A written description of reportable releases must be submitted to the Central Valley RWQCB and the DTSC. This submittal must include a description of the release, including the type of material and an estimate of the amount spilled, the date of the release, an explanation of why the spill occurred, and a description of the steps taken to prevent and control future releases. The releases would be documented on a spill report form.</p>				
<p><b>Mitigation Measure HYD-3a: Implement Provisions for Dewatering</b></p> <p>Dewatering effluent will be discharged to the SSJID drainage system and is subject to the SSJID-City storm drainage agreement (Environmental Science Associates 1999). Before discharging any substance that could reach surface waters, the applicant’s contractors will obtain an NPDES permit and WDRs from the Central Valley RWQCB. Depending on the volume and characteristics of the discharge, coverage under the RWQCB’s General Construction Permit or General Dewatering Permit is possible. As part of the permit, the contractors will design and implement measures as necessary so that the discharge limits identified in the relevant permit are met. As a performance standard, these measures will be selected to achieve the maximum sediment removal and represent the best available technology (BAT) that is economically achievable. Implemented measures may include the retention of dewatering effluent until particulate matter has settled before it is discharged, the use of infiltration areas, and other BMPs. The final selection of water quality control measures will be subject to review</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>by the City.</p> <p>The City will verify that coverage under the appropriate NPDES permit has been obtained before allowing dewatering activities to begin. The City or its agent will perform routine inspections of the construction area to verify that the water quality control measures are properly implemented and maintained. The City will notify the contractors immediately if there is a noncompliance issue and will require compliance.</p>				
<p><b>Mitigation Measure HYD-4a: Develop and Implement a Master Drainage Plan</b></p> <p>Prior to the commencement of construction, the applicant will develop and implement a master drainage plan, subject to prior review and approval by the City. This plan will address the following requirements:</p> <ul style="list-style-type: none"> <li>■ refined calculations of predevelopment runoff conditions and post-development runoff scenarios, using appropriate engineering methods, to evaluate potential changes to runoff through specific design criteria and account for increased surface runoff;</li> <li>■ a refined assessment of existing drainage facilities within the project area and an inventory of necessary upgrades, replacements, redesigns, and rehabilitation;</li> <li>■ a proposed maintenance program for the onsite drainage system; and</li> <li>■ phasing standards for drainage systems to be installed on a project-/parcel-specific basis.</li> </ul> <p>Drainage systems, including any possible detention basin(s), will be designed in accordance with the City’s and other applicable flood control design criteria. As a performance standard, measures to be implemented from the master drainage plan will provide for no net increase in peak stormwater discharge relative to current conditions, ensure that 100-year flooding and its potential impacts are maintained at or below current levels, and ensure that people and structures are not exposed to additional flood risk.</p> <p>Prior to issuing a grading permit, the City will require the project applicant to demonstrate that the portion of the project subject to the grading permit is consistent with the recommendations and conclusions of the master drainage plan and will implement the measures identified in the plan. If the plan does not adequately address the drainage impacts of the specific development, the City will require the applicant to prepare additional analysis and incorporate</p>	<p>Prior to and during project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>measures consistent with the scope and performance standards associated with the plan to ensure that drainage and flooding impacts are avoided.</p>				
<p><b>Mitigation Measure HYD-5a: Implement Best Management Practices to Maximize Stormwater Quality</b></p> <p>To reduce or eliminate water quality effects from polluted runoff from the project, the developer or applicant will implement multiple BMPs in areas with a potential to drain into storm drainage systems or surface waters. The BMPs may include a combination of source control, structural elements, and treatment systems. BMPs may include the practices below.</p> <ul style="list-style-type: none"> <li>■ The streets and sidewalks create new impervious surfaces. To help minimize the amount of pollutants entering the storm drain system, paved project roadways and parking areas will be cleaned regularly using street sweeping equipment. Additionally, litter and debris that may accumulate on the project site will be regularly collected and properly disposed of. These measures will be carried out at least monthly if construction occurs during the rainy season (October–April).</li> <li>■ Dry detention basins—which are typically dry except after a major rainstorm, when they temporarily fill with stormwater—will be created and designed to decrease runoff during storm events, prevent flooding, and allow for off-peak discharge. Basin features will include maintenance schedules for the periodic removal of sedimentation, excessive vegetation, and debris that may clog basin inlets and outlets.</li> <li>■ Grass buffer strips, high infiltration substrates, and grassy swales will be used where feasible throughout the project site to reduce runoff, serve as biofilters, and provide initial stormwater treatment. This type of treatment will apply particularly to parking lots.</li> <li>■ Physical devices will be placed at outlets of pipes and channels to reduce the velocity or the energy of exiting water. Outlet protection helps to prevent scour and minimize the potential for downstream erosion by reducing the velocity or energy of concentrated stormwater flows.</li> </ul> <p>The City, contractors, or the applicant will select a combination of BMPs that is expected to remove contaminants from stormwater discharges. The final selection and design of BMPs will provide maximum contaminant removal, represent the BAT that is economically achievable, and explicitly identify the expected level of effectiveness at contaminant removal.</p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering</p>	<p>Verify prior to issuing grading and building permits</p> <p>Verify periodically during construction</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>The City will conduct inspections following the construction to ensure that all identified BMPs have been properly installed. The project will adopt a regular maintenance and monitoring schedule to ensure that these BMPs function properly during project operations. If necessary, the City will require that additional BMPs be designed and implemented if those originally constructed do not achieve the identified performance standard.</p>				
<b>Noise</b>				
<p><b>Mitigation Measure NOI-1a: Employ Noise-Reducing Construction Practices</b></p>	<p>During project construction</p>	<p>Project sponsor</p>	<p>Engineering and Building</p>	<p>Verify prior to issuing grading and building permits  Verify periodically during construction</p>
<p>The project applicant will employ noise-reducing construction practices so that construction noise does not exceed 50 dBA Leq between the hours of 7:00 p.m. and 10:00 p.m., or 45 dBA Leq between the hours of 10:00 p.m. and 7:00 a.m.</p> <p>Measures that can be used to limit noise include but are not limited to:</p> <ul style="list-style-type: none"> <li>■ prohibiting noise-generating construction activity between the hours of 7:00 p.m. and 7:00 a.m.;</li> <li>■ locating equipment as far as practical from noise sensitive uses;</li> <li>■ requiring that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation;</li> <li>■ prohibiting gasoline or diesel engines from having unmuffled exhaust;</li> <li>■ selecting haul routes that affect the fewest number of people;</li> <li>■ using noise-reducing enclosures around noise-generating equipment; and</li> <li>■ constructing barriers between noise sources and noise sensitive land uses or taking advantage of existing barrier features (terrain, structures) to block sound transmission.</li> </ul>				
<p><b>Mitigation Measure NOI-1b: Disseminate Essential Information to Residences and Implement a Complaint/Response Tracking Program</b></p>	<p>Prior to and during project construction</p>	<p>Project sponsor</p>	<p>Engineering and Building</p>	<p>Verify prior to issuing grading and building permits  Verify periodically during construction</p>
<p>Before construction begins, the construction contractor will notify residences within 500 feet of the construction areas of the construction schedule in writing. The construction contractor will designate a noise disturbance</p>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>coordinator who will be responsible for responding to complaints regarding construction noise during the full term of construction. The coordinator will determine the cause of the complaint and will ensure that reasonable measures are implemented to correct the problem. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the written notification of the construction schedule sent to nearby residents. The noise disturbance coordinator will submit to the City of Manteca a weekly summary of any noise complaints that have been received. The summary will include, but is not limited to, the name of the complainant and their location, the nature of their complaint, and the action being taken to address the complaint.</p>				
<p><b>Mitigation Measure NOI-3a: Construct Noise Barriers along Woodward Avenue and Airport Way so that Traffic Noise Does Not Exceed 60 dBA L<sub>dn</sub> in Outdoor Use Areas</b></p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Require in project plans</p>
<p>The project applicant will construct noise barriers along Woodward Avenue and Airport Way so that traffic noise in primary outdoor use areas at residences does not exceed 60 dBA L<sub>dn</sub>. A preliminary analysis indicates that barriers 6 to 8 feet high will reduce traffic noise to 60 dBA L<sub>dn</sub> or less. Once the tentative map and roadway alignments are finalized, the project applicant will prepare a report identifying final wall heights and materials necessary to reduce noise at outdoor residential use areas to 60 dBA L<sub>dn</sub> or less.</p>				
<p><b>Transportation/Traffic</b></p>				
<p><b>Mitigation Measure TRA-1a: Pay PFIP Fee for the Installation of a Traffic Signal at the Airport Way/Westbound State Route 120 On- and Off-Ramp Intersection</b></p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p>As shown in Table 12-22, with the installation of traffic signals, intersection operations would improve to acceptable LOS C or better during both AM and PM peak hour conditions. Therefore, this impact is considered less than significant with mitigation. As noted earlier, this traffic signal is already funded and is expected to be operational in February 2008. Since the City's PFIP is the funding source for this traffic signal, the project applicant's standard PFIP fee will cover the cost of the traffic signal. It should be noted that any new traffic signals installed along Airport Way, between Daniels Street and Atherton Road, should be coordinated due to the close intersection spacing in the area.</p>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-2a: Pay PFIP Fee for the Installation of a Traffic Signal at the Airport Way/Eastbound State Route 120 On- and Off-Ramp Intersection</b></p> <p>As shown in Table 12-22, with the installation of traffic signals, intersection operations would improve to acceptable LOS C during both AM and PM peak hour conditions. Therefore, this impact is considered less than significant with mitigation. As noted earlier, this traffic signal is already funded and is expected to be operational in February 2008. Since the City’s PFIP is the funding source for this traffic signal, the project applicant’s standard PFIP fee will cover the cost of the traffic signal. It should be noted that any new traffic signals installed along Airport Way, between Daniels Street and Atherton Road, should be coordinated due to the close intersection spacing in the area.</p>	Prior to building permit	Project sponsor	City of Manteca	Verify prior to issuance of building permits
<p><b>Mitigation Measure TRA-3a: Reconfigure Site Plan to Provide Better Access and Circulation</b></p> <p>As shown on Figure 12-14, the following improvements would improve site access and circulation.</p> <ul style="list-style-type: none"> <li>■ Provide a full access intersection at Airport Way for the site access located between Woodward Avenue and McKinley-Peach Avenue.</li> <li>■ Accommodate left- and U-turns along the east-west site access road at the second intersection west of Airport Way. Left- and U-turns can be accommodated with a roundabout or an appropriately sized traditional four-way intersection.</li> <li>■ Allow bike and pedestrian access through the ends of cul-de-sacs to encourage bicycling and walking.</li> </ul>	Prior to building permit	Project sponsor	City of Manteca	Verify prior to issuance of building permits
<p><b>Mitigation Measure TRA-4a: Pay Fair-Share of Intersection Improvements at Yosemite Avenue/McKinley Avenue</b></p> <p>The City General Plan shows Yosemite Avenue as a six-lane facility and McKinley Avenue as a four-lane facility in the future. As part of the widening projects, this intersection would be improved and signalized. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. Acceptable operations can be provided at this intersection with the construction of the improvements listed below.</p>	Prior to building permit	Project sponsor	City of Manteca	Verify prior to issuance of building permits

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>■ Signalize the intersection.</li> <li>■ Construct second eastbound and westbound through lanes at the intersection. The additional through lanes must be carried a sufficient distance up and downstream to ensure adequate lane utilization.</li> <li>■ Configure the northbound and southbound approaches as follows: single left-turn lane, shared through/left-turn lane, and single right-turn lane.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS D during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>				
<p><b>Mitigation Measure TRA-5a: Pay Fair-Share of Intersection Improvements at Woodward Avenue/McKinley Avenue</b></p> <p>The General Plan shows Woodward Avenue and McKinley Avenue as four-lane facilities in the future. As part of the widening projects, this intersection would be improved. Moreover, as described later in this section, the segment of Woodward Avenue between McKinley and Bella Terra Drive must be widened to four lanes to accommodate project traffic. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified, as the current PFIP covers only a portion of the cost. Acceptable operations can be provided at this intersection with the construction of the improvements listed below.</p> <ul style="list-style-type: none"> <li>■ Construct second eastbound and westbound through lanes at the intersection. The additional through lanes must be carried a sufficient distance up and downstream to ensure adequate lane utilization.</li> <li>■ Configure the northbound and southbound approaches as follows: single</li> </ul>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>left-turn lane, single through lane, and a single right-turn lane.</p> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS D or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>				
<p><b>Mitigation Measure TRA-6a: Pay Fair-Share to Signalize Woodward Avenue/Bella Terra Drive Intersection</b></p> <p>To accommodate project traffic at this intersection (which provides access to the site), a traffic signal is required under Cumulative Conditions. Since a subsequent mitigation measure identifies the widening of Woodward Avenue to four lanes, this mitigation measure assumes the widening is in place.</p> <p>A LOS analysis indicates that if the intersection is signalized, it will operate at LOS B during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-7a: Pay Fair-Share of Intersection Improvements at Yosemite Avenue/Airport Way</b></p> <p>The City General Plan shows Yosemite Avenue and Airport Way as six-lane facilities in the future. As part of the widening projects, this intersection would be improved. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified, as the current PFIP covers only a portion of the cost. Acceptable operations can be provided at this intersection with the construction of the following improvements:</p> <ul style="list-style-type: none"> <li>■ provide a single left-turn lane, a through lane, and a shared through/right-turn lane on all approaches.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS D or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p> <p>Note that a subsequent mitigation measure requires that Airport Way be widened to four lanes between Yosemite Avenue and Daniels Street to accommodate project trips at an acceptable LOS. The mitigation measure at this intersection was designed to accommodate the roadway widening to four lanes. By providing the additional through lanes, this intersection will operate at an acceptable LOS. The roadway widening therefore has a secondary benefit that provides acceptable operations at this intersection.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-8a: Pay Fair-Share of Intersection Improvements at Wawona Street/Airport Way</b></p> <p>The General Plan shows Airport Way as six-lane facility in the future. As part of the Airport Way widening project, this intersection would be improved. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified, as the current PFIP covers only a portion of the cost. To meet the City’s LOS standards, the intersection must be configured as follows:</p> <ul style="list-style-type: none"> <li>■ provide a single left-turn lane and two through lanes on the southbound approach, and</li> <li>■ provide a through lane and a shared through/right-turn lane.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS B during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p> <p>Note that a subsequent mitigation measure requires that Airport Way be widened to four lanes between Yosemite Avenue and Daniels Street to accommodate project trips at an acceptable LOS. The mitigation measure at this intersection was designed to accommodate the roadway widening to four lanes. By providing the additional through lanes, this intersection will operate at an acceptable LOS. The roadway widening therefore has a secondary benefit that provides acceptable operations at this intersection.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-9a: Pay Fair-Share of Intersection Improvements at Daniels Street/Airport Way</b></p> <p>The City General Plan shows Airport Way as a six-lane facility in the future. As part of the Airport Way widening project, this intersection would be improved. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified, as the current PFIP covers only a portion of the cost. To meet the City’s LOS standards, the intersection must be configured as follows:</p> <ul style="list-style-type: none"> <li>■ provide a single left-turn lane, two through lanes, and a right-turn lane on the southbound approach;</li> <li>■ provide two left-turn lanes, two through lanes, and a right-turn lane on the northbound approach; and</li> <li>■ provide two left-turn lanes, one through lane, and a right-turn lane on the eastbound and westbound approach.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS B during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-10a: Pay Fair-Share for Interchange Improvements at Airport Way and SR 120</b></p> <p>As described previously, the City, in cooperation with Caltrans District 10 and SJCOG, has initiated a PSR for the SR 120/Airport Way interchange. The interchange project will determine the required interchange design to serve full buildout of the City General Plan (six lanes on Airport Way) and the planned widening of SR 120 from four to six lanes. The Westbound SR</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>120/Airport Way ramp terminal intersection would be designed with the following characteristics:</p> <ul style="list-style-type: none"> <li>■ three through lanes and a right-turn lane on the southbound approach,</li> <li>■ two left-turn lanes and three through lanes on the northbound approach, and</li> <li>■ two left-turn lanes, a shared through/right-turn lane, and a right-turn lane on the westbound approach.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS C during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>While the improvements described above would provide acceptable operations at this intersection, the impact is still considered significant and unavoidable for the following reasons:</p> <ul style="list-style-type: none"> <li>■ full funding for the project has not been identified;</li> <li>■ the timeline for completion of the interchange improvements is unknown; and</li> <li>■ this project is outside the control of the City or the project applicant and its implementation cannot be guaranteed.</li> </ul> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-11a: Pay Fair-Share for Interchange Improvements at Airport Way and SR 120</b></p> <p>As described previously, the City, in cooperation with Caltrans District 10, and SJCOG has initiated a PSR for the SR 120/Airport Way interchange. The interchange project will determine the required interchange design to serve full buildout of the City General Plan (six lanes on Airport Way) and the planned widening of SR 120 from four to six lanes. The Eastbound SR 120/Airport Way ramp terminal intersection would be designed with the following characteristics:</p> <ul style="list-style-type: none"> <li>■ one left-turn lane and three through lanes on the southbound approach,</li> </ul>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<ul style="list-style-type: none"> <li>■ three through lanes and a right-turn lane on the northbound approach, and</li> <li>■ one left-turn lane, a shared through/left-turn lane, and two right-turn lanes on the eastbound approach.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS C or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>While the improvements described above would provide acceptable operations at this intersection, the impact is still considered significant and unavoidable for the following reasons:</p> <ul style="list-style-type: none"> <li>■ full funding for the project has not been identified;</li> <li>■ the timeline for completion of the interchange improvements is unknown; and</li> <li>■ this project is outside the control of the City or the project applicant and its implementation cannot be guaranteed.</li> </ul> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-12a: Pay Fair-Share of Intersection Improvements at Atherton Road/Airport Way Intersection</b></p> <p>The City General Plan shows Airport Way as a six-lane facility and Atherton Road as a four-lane facility in the future. As part of the widening projects, this intersection would be improved and signalized. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified, as the current PFIP covers only a portion of the cost. To meet the City’s LOS standard, the following intersection improvements are necessary:</p> <ul style="list-style-type: none"> <li>■ signalize the intersection;</li> <li>■ construct two left-turn lanes, three through lanes, and a right-turn lane on the southbound approach;</li> <li>■ construct one left-turn lane, two through lanes, and a shared through/right-</li> </ul>				

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>turn lane on the northbound approach;</p> <ul style="list-style-type: none"> <li>■ construct two left-turn lanes, a through lane, and a right-turn lane on the eastbound approach; and</li> <li>■ maintain the current westbound configuration of one left-turn lane, one through lane, and one right-turn lane.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS D or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>				
<p><b>Mitigation Measure TRA-13a: Pay Fair-Share of Intersection Improvements at Woodward Avenue/Airport Way Intersection</b></p> <p>The City General Plan shows Airport Way as a six-lane facility and Woodward Avenue as a four-lane facility in the future. As part of the widening projects, this intersection would be improved and signalized. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. To meet the City’s LOS standard, the following intersection improvements are necessary:</p> <ul style="list-style-type: none"> <li>■ signalize the intersection;</li> <li>■ construct one left-turn lane, one through lane, and one right-turn lane on the southbound approach;</li> <li>■ construct one left-turn lane, one through lane, and a shared through/right-turn lane on the northbound approach;</li> <li>■ construct one left-turn lane, one shared left/through lane, and one shared</li> </ul>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>through/right-turn lane on the eastbound approach; and</p> <ul style="list-style-type: none"> <li>■ construct one left-turn lane, one through lane, and one shared through/right-turn lane on the eastbound approach.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS D or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>				
<p><b>Mitigation Measure TRA-14a: Pay Fair-Share of Intersection Improvements at Woodward Avenue/Union Road Intersection</b></p> <p>The City General Plan shows Union Road and Woodward Avenue as four-lane facilities in the future. As part of the widening projects, this intersection would be improved and signalized. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. To meet the City’s LOS standard, the following intersection improvements are necessary:</p> <ul style="list-style-type: none"> <li>■ signalize intersection, and</li> <li>■ construct one left-turn lane and one shared through/right-turn lane on all approaches.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS C or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>				
<p><b>Mitigation Measure TRA-15a: Pay Fair-Share of Intersection Improvements at Woodward Avenue/Main Street Intersection</b></p> <p>The City General Plan shows Main Street as a six-lane facility and Woodward Avenue as a four-lane facility in the future. As part of the widening projects, this intersection would be improved and signalized. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. To meet the City’s LOS standard, the following intersection improvements are necessary:</p> <ul style="list-style-type: none"> <li>■ signalize the intersection,</li> <li>■ construct an additional left-turn lane to provide two left-turn lanes and one shared through/right-turn lane on the southbound approach, and</li> <li>■ construct one left-turn lane and one shared through/right-turn lane on the eastbound approach.</li> </ul> <p>A LOS analysis indicates that if the intersection is configured as described above, it will operate at LOS C or better during the AM and PM peak hours. Table 12-23 presents the intersection LOS results under Cumulative Plus Project with Mitigation Measures Incorporated.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-16a: Pay Fair-Share to Widen Airport Way to Four Lanes</b></p> <p>The City General Plan shows Airport Way as a six-lane facility in the future. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. Table 12-24 shows that adequate roadway segment operations can be provided by widening Airport Way to four lanes.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-17a: Pay Fair-Share for Interchange Improvements at Airport Way and SR 120 and Airport Way Widening</b></p> <p>As described previously, the City, in cooperation with Caltrans District 10, and SJCOG has initiated a PSR for the SR 120/Airport Way interchange. The interchange project will widen Airport Way to six lanes between Daniels Street and Atherton Road, which would provide acceptable roadway segment LOS.</p> <p>While the improvements described above would provide acceptable operations at this intersection, the impact is still considered significant and unavoidable for the following reasons:</p> <ul style="list-style-type: none"> <li>■ full funding for the project has not been identified;</li> <li>■ the timeline for completion of the interchange improvements is unknown; and</li> <li>■ this project is outside the control of the City or the project applicant, and its implementation cannot be guaranteed.</li> </ul> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>determined at the time of final map approval.</p> <p><b>Mitigation Measure TRA-18a: Pay Fair-Share to Widen Airport Way to Four Lanes</b></p> <p>The City General Plan shows Airport Way as a six-lane facility in the future. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. Table 12-24 shows that adequate roadway segment operations can be provided by widening Airport Way to four lanes.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-19a: Pay Fair-Share to Widen Airport Way to Four Lanes</b></p> <p>The City General Plan shows Woodward Avenue as a four-lane facility in the future. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. Table 12-24 shows that adequate roadway segment operations can be provided by widening Woodward Avenue to four lanes.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p><b>Mitigation Measure TRA-20a: Pay Fair-Share to Widen McKinley Avenue to Four Lanes</b></p> <p>The General Plan shows McKinley Avenue as a four-lane facility in the future. However, as mentioned previously, full funding for General Plan roadway improvements has not been identified since the current PFIP covers only a portion of the cost. Table 12-24 shows that adequate roadway segment operations can be provided by widening McKinley Avenue to four lanes.</p> <p>To help implement these improvements, the project applicant shall make a fair-share contribution toward the unfunded portion of the costs. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>Even though the improvements described above will provide acceptable operations under Cumulative Plus Project conditions, the impact is still considered significant and unavoidable because full funding for the improvements has not been identified and implementation cannot be guaranteed.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p><b>Mitigation Measure TRA-21a: City Regional Transportation Impact Fee</b></p> <p>The project applicant will pay the City’s regional transportation impact fee when building permits are issued.</p> <p>The widening of SR 120 to six lanes is included in the SJCOG Regional Transportation Plan as a Tier 1 improvement. Funding for this improvement comes from the City’s regional transportation impact fee (currently at \$2,500 per dwelling unit) and the Measure K retail transaction and use tax. The project would contribute its fair-share by paying the City’s regional transportation impact fee and through retail transactions that would be paid by project residents.</p> <p>As shown in Table 12-25, the widening of SR 120 from four to six lanes (three in each direction) would provide LOS C conditions in the off-peak direction. However, even with the additional lanes on SR 120, the peak directions of travel (westbound in the AM peak hour, eastbound in the PM peak hour) will continue to operate at LOS F.</p> <p>Even though SR 120 is still expected to operate at LOS F conditions under cumulative conditions, it still meets the LOS F standard defined in the CMP.</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>The impact caused by the Machado project is considered less than significant with mitigation because the project is paying its fair-share to fund the County’s ultimate transportation improvement for SR 120.</p>				
<p><b>Mitigation Measure TRA-22a: Pay Fair-Share for Interchange Improvements at Airport Way and SR 120</b></p> <p>As mentioned previously, the City, in cooperation with Caltrans District 10 and SJCOG, has initiated a PSR for the SR 120/Airport Way interchange. The interchange project will determine the required design to serve full buildout of the City General Plan and the planned widening of SR 120 from four to six lanes (RTP Tier 1 project). The on-ramp and off-ramp designs will provide the necessary acceleration, deceleration, and storage lengths to serve projected morning and evening peak-hour volumes at acceptable levels of service. To reduce the impact of project trips, the project applicant will pay its fair-share for interchange improvements. The fair-share percentage and the dollar amount of the fee/contribution will be determined at the time of final map approval.</p> <p>As shown in Table 12-26, the LOS results with the interchange improvements in place indicate that the following ramp junctions are expected to operate at an acceptable LOS during the AM and PM peak hours under Cumulative Plus Project Conditions.</p> <ul style="list-style-type: none"> <li>■ Eastbound SR 120 on-ramp to Airport Way</li> <li>■ Westbound SR 120 off-ramp from Airport Way</li> </ul> <p>The LOS analysis indicates that the ramp junctions below will operate at LOS F conditions because of congestion on the freeway mainline. However, due to the LOS F standard for SR 120, with the project’s contribution toward the ultimate interchange and mainline improvements, the project impact would be mitigated.</p> <ul style="list-style-type: none"> <li>■ Eastbound SR 120 off-ramp to Airport Way is expected to operate at LOS F during the PM peak hour.</li> <li>■ Westbound SR 120 on-ramp from Airport Way is expected to operate at LOS F during the AM peak hour.</li> </ul> <p>This impact is still considered significant and unavoidable because the interchange improvements are not under the control of the City or applicant, and because no funding sources have been identified for the</p>	<p>Prior to building permit</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
interchange improvements.				
<p><b>Mitigation Measure TRA-23a: Install Bicycle Facility Improvements in the Vicinity of the Project Site</b></p> <p>The project applicant will coordinate with the City to determine specific bicycle facilities improvements required to mitigate increased demand for bicycle facilities. One possible improvement includes dedicated bicycle lanes, bicycle routes, or other bicycle improvements along the project frontage on McKinley Avenue and Woodward Avenue consistent with the 2003 Bicycle Master Plan (City of Manteca 2003b). Additionally, as shown on Figure 12-14, bicycle access through the ends of cul-de-sacs should be allowed to encourage bicycling. Proposed bicycle access to and from the project site that meets the Bicycle Master Plan and City standards for bicycle facilities will be shown on improvement plans submitted by the applicant to the City before final map approval. The applicant will construct the bicycle access improvements along with the other infrastructure improvements for the project before occupancy.</p>	Prior to building permit	Project sponsor	City of Manteca	Verify prior to issuance of building permits
<p><b>Mitigation Measure TRA-24a: Coordinate with the City of Manteca to Develop Transit Service and Construct Facilities in the Vicinity of the Project Site</b></p> <p>The project applicant will coordinate with the City to determine specific transit improvements required to mitigate increased demand for public transit. An example of a transit improvement would be to pay for the construction of a sheltered transit stop along the project frontage on either Airport Way or Woodward Avenue and help fund expanded transit service to the project site to meet the increased demand on public transportation by project residents.</p>	Prior to project construction	Project sponsor	City of Manteca	Verify prior to issuance of building permits
<p><b>Utilities And Service Systems</b></p>				
<p><b>Mitigation Measure USS-5a: Pay Park Acquisition and Improvement Fee</b></p> <p>The project applicants will comply with policy PF-P-53 of the City General Plan, which requires the payment of a park acquisition and improvement fee to fund systemwide improvements.</p>	Prior to building permit	Project sponsor	City of Manteca	Verify prior to issuance of building permits
<p><b>Mitigation Measure USS-10a: Identify and Relocate Existing Utilities Where Necessary</b></p>	Prior to project construction	Project sponsor	City of Manteca	Verify prior to issuance of building permits

Description of Measure	Timing	Implementing Party	Monitoring Party	Monitoring Actions
<p>Project design and specifications will identify all underground utilities in the areas of proposed excavations. Underground Service Alert will be contacted to identify underground utilities. Where possible, existing utilities will be avoided. In instances in which utilities cannot be avoided, the relocation of existing utilities will be completed either before or during project construction.</p>				
<b>Other CEQA Considerations</b>				
<p><b>Mitigation Measure CE-3a: Implement City of Manteca General Plan Policies for Energy Conservation</b></p>	<p>During project design</p>	<p>Project sponsor</p>	<p>City of Manteca</p>	<p>Verify prior to issuance of building permits</p>
<p>All of these policies work to reduce emissions of GHGs. Implementation of the City General Plan goals and policies to reduce energy-related impacts associated with climate change would work to reduce emissions of GHGs; however, the residual level of cumulative impacts associated with the project would remain significant.</p> <p>The City General Plan does not address climate change at this time. However, impact PFS-7 of the General Plan EIR states that the City General Plan would require expanded energy sources and infrastructure for the urban development anticipated in the General Plan. City General Plan Goal PF-10 and Policies PF-P-28 and PF-I-14 to PF-I-16 would reduce energy provision-related impacts by using conservation measures and expanding services throughout the city. General Plan Goal RC-3 and Policies RC-I-6, RC-I-8, RC-P-8, RC-I-10, and RC-I-11 would reduce impacts related to electricity and infrastructure expansion by using the following types of measures: energy conservation practices, conservation-minded building orientation and design, energy source alternatives (e.g., solar), land use and circulation improvements (e.g., reduction in length of vehicle trips), and interagency and interjurisdictional cooperation.</p>				

