# Mitigation Monitoring and Reporting Program for the

# Environmental Impact Report The Trails of Manteca Project City of Manteca, San Joaquin County, California

State Clearinghouse No. 2010072042

#### Prepared for:



#### **City of Manteca**

Community Development Department 1001 West Center Street Manteca, CA 95337 209.456.8522

Contact: Erika Durrer, Senior Planner

#### Prepared by:

#### **Michael Brandman Associates**

Bishop Ranch 3 2633 Camino Ramon, Suite 460 San Ramon, CA 94583 925.830.2733

Contact: Jason Brandman, Project Director



January 4, 2011

**Table 1: The Trails of Manteca Project Mitigation Monitoring and Reporting Program** 

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
maganor measures	metriod of Verification	Verification	Verification	Date	Initial
1. Aesthetics, Light, and Glare					
MM AES-2a: Prior to issuance of the first building permit, the applicant shall prepare and submit Design Guidelines that establish Building Design Standards to the City of Manteca for review and approval. The Building Design Standards shall at a minimum address the following as described in the applicable General Plan policies: minimal visual prominence of garages, incorporation of entry gateways, signage, and well-designed boundary walls; natural/neutral exterior color scheme; climate responsive and pedestrian-friendly architectural features such as canopies, overhangs, and awnings; building design that uses natural ventilation and is oriented to minimize solar gain and maximize daylight; visually unobtrusive installation of solar collectors, etc.; and/or additional standards as determined the Community Development Director. The approved Building Design Standards shall be incorporated into the proposed project.	Approval of Design Guidelines	Prior to issuance of the first building permit	City of Manteca Community Development Department		
MM AES-2b: Prior to issuance of the first building permit, the applicant shall prepare and submit Design Guidelines that establish Landscape Design Standards to the City of Manteca for review and approval. The Landscape Design Standards shall at a minimum address the following as described in the applicable General Plan policies: a common landscape theme that includes primary street trees along major arterial streets; a street tree program; use of non-fruiting species such as flowering pear and plum as secondary accent trees in landscape corridors along major streets; parking lot trees, or additional standards as determined the Community Development Director. The approved Landscaping Design Standards shall be incorporated into the proposed project.	Approval of Design Guidelines	Prior to issuance of the first building permit	City of Manteca Community Development Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification o	f Completion
miligation measures	Method of Vernication	Verification	Verification	Date	Initial
MM AES-2c: Prior to issuance of the first building permit, the applicant shall prepare and submit Design Guidelines that establish Street Design Standards to the City of Manteca for review and approval. The Street Design Standards shall at a minimum address the following as described in the applicable General Plan policies: interconnection between the pedestrian and bikeway system and its linkage to the Citywide Pedestrian and Bikeway Trail System; street lighting; common landscape theme along major arterial streets, or additional standards as determined the Community Development Director. The approved Street Design Standards shall be incorporated into the proposed project.	Approval of Design Guidelines	Prior to issuance of the first building permit	City of Manteca Community Development Department		
MM AES-3: Prior to issuance of the first building permit, the applicant shall prepare and submit an outdoor lighting plan (which includes a photometric analysis) to the City of Manteca that includes a footcandle map illustrating the amount of light from the project site at adjacent light sensitive receptors. The lighting map shall comply with the following General Plan policies and shall include minimal levels of street; parking, building, site, and public area lighting to meet safety standards and provide direction; directional shielding for all exterior lighting; and automatic shutoff or motion sensors and/or additional standards as determined by the Community Development Director.	Approval of plan	Prior to issuance of the first building permit	City of Manteca Community Development Department		
2. Agricultural Resources					
<b>MM AG-1:</b> At the time building permits are sought for the proposed project, the project applicant shall pay the required City of Manteca agricultural mitigation fee to help offset the conversion of Important Farmland pursuant to Manteca Municipal Code Chapter 13.42.	Receipt of fees	At the time building permits are sought	City of Manteca Community Development Department		

Mitigation Measures	Mothod of Varification	nod of Verification  Timing of Verification  Responsible for Verification	Responsible for	Verification of	of Completion
Miligation Measures	Method of Vernication		Verification	Date	Initial
MM AG-2: Prior to recordation of the final map for the proposed project, the project applicant shall pay the Williamson Act Contract cancellation fee as determined by the San Joaquin County Assessor's Office.	Receipt of fees	Prior to recordation of the final map	City of Manteca Community Development Department; San Joaquin County Assessor's Office		
3. Air Quality/Greenhouse Gas Emissions					
<ul> <li>MM AIR-1a: During construction activities, the construction contractor shall implement the following air emissions reduction measures:</li> <li>Construction equipment shall be properly maintained at an offsite location; maintenance shall include proper tuning and timing of engines. Equipment maintenance records and data sheets of equipment design specifications shall be kept onsite during construction.</li> </ul>	Notes on construction plans; Site inspection	During construction activities	City of Manteca Community Development Department		
<ul> <li>Onsite construction equipment shall not idle for more than 5 minutes in any one hour or be shut down when not in use.</li> <li>During the building phase, onsite electrical hook ups shall be provided for electric construction tools including saws, drills and compressors, to eliminate the need for diesel powered electric generators.</li> <li>Construction workers shall be encouraged to carpool to and</li> </ul>					
from the construction site. Workers shall be advised at a preconstruction meeting about carpooling opportunities.  MM AIR-1b: During the architectural coating phase, paints with a volatile organic compound content less than 10 grams per	Notes on construction plans; Site inspection	During the	City of Manteca Community		
liter shall be used.	plans, site inspection	coating phase	Development Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification o	of Completion
miligation measures	Welliou of Verification	Verification	Verification	Date	Initial
MM AIR-1c: Prior to issuance of building permits, the project applicant shall demonstrate compliance with all applicable requirements of San Joaquin Valley Air Pollution Control District, Rule 9510 via the submittal of a Rule 9510 Implementation Plan to the City of Manteca for review and approval. The implementation plan shall achieve a 33-percent reduction in NO <sub>x</sub> and a 50-percent reduction in PM <sub>10</sub> over the first 10 years of operations through the use of onsite emissions reduction measures or through the payment of offsite mitigation fees to the SJVAPCD for purchase of emission reductions. The requirements of the approved implementation plan shall be incorporated into the proposed project.	Approval of Rule 9510 Implementation Plan	Prior to issuance of building permits	City of Manteca Community Development Department		
MM AIR-1d: Prior to approval of the final map, the City of Manteca shall verify that the project complies San Joaquin Valley Air Pollution Control District Rule 4901, which limits emissions from wood burning heaters, fireplaces, and outdoor wood burning devices. Compliance shall be verified by confirming that project's wood stoves or fireplaces do not exceed one of the following combinations of units:  100 wood stoves and 500 fireplaces; or Zero (0) wood stoves and 600 fireplaces; or 280 wood stoves and zero (0) fireplaces; or	Approval of final map	Prior to approval of the final map	City of Manteca Community Development Department		
MM AIR-1e: Prior to issuance of building permits for each dwelling unit, the project applicant shall demonstrate that each habitable structure can exceed the latest edition of the Title 24 energy efficiency standards by a minimum of 10 percent.	Approval of building plans	Prior to issuance of building permits for each dwelling unit	City of Manteca Community Development Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification o	on of Completion	
wittigation weasures	Method of Vernication	Verification	Verification	Date	Initial	
4. Biological Resources						
$\mathcal{E}$	Submittal of documentation; Site inspection	During ground clearing or vegetation removal activities that occur between February 15 and August 31	City of Manteca Community Development Department			
	Site inspection; Submittal of documentation	No more than 30 day prior to the beginning of ground disturbance	City of Manteca Community Development Department			

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for Verification	Verification of	of Completion
Witigation Measures	Method or verification	Verification		Date	Initial
MM BIO-2: Prior to issuance of grading permits within any impacted resource area, the project applicant shall obtain all required authorization from agencies with jurisdiction over the irrigation ditches within the project area. Such agencies may include but are not limited to the United States Army Corps of Engineers, the California Department of Fish and Game, and the Central Valley Regional Water Quality Control Board. Impacted resources shall be offset through onsite restoration, offsite restoration, or purchase of credits at an agency-approved mitigation bank in the region at no less than a 1:1 ratio.	Submittal of documentation	Prior to issuance of grading permits within any impacted resource area	City of Manteca Community Development Department		
MM BIO-5: Prior to issuance of grading permits for any activities that would remove one or more trees subject to City of Manteca Ordinance 17.19.060, the applicant shall prepare and submit a tree removal and replacement plan to the City of Manteca for review and approval. The plan shall identify all trees proposed for removal and proposed replacement tree species and locations. Replacement shall occur at no less than a 1:1 ratio. All replacement trees shall be no less than a 24-inch-box-size species.	Approval of plan	Prior to issuance of grading permits for any activities that would remove one or more trees subject to City of Manteca Ordinance 17.19.060	City of Manteca Community Development Department		
MM BIO-6: Prior to issuance of grading permits for the proposed project, the applicant shall pay all fees in accordance with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan.	Receipt of fees	Prior to issuance of grading permits	City of Manteca Community Development Department		
5. Cultural Resources					
MM CUL-1: If potentially significant historic resources are encountered during subsurface excavation activities for the project area, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to	Site inspection; Submittal of documentation	During subsurface excavation activities	City of Manteca Community Development Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
willigation weasures	Method of Verification	Verification	Verification	Date	Initial
inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate California Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.					
MM CUL-2: If potentially significant archaeological resources are encountered during subsurface excavation activities, all construction activities within a 100-foot radius of the resource shall cease until a qualified archaeologist determines whether the resource requires further study. The City shall require that the applicant include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. Any previously undiscovered resources found during construction shall be recorded on appropriate Department of Parks and Recreation forms and evaluated for significance in terms of California Environmental Quality Act criteria by a qualified archaeologist. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths,	Site inspection; Submittal of documentation	During subsurface excavation activities	City of Manteca Community Development Department		

Mitigation Measures	Method of Verification	Timing of	Method of Verification		Verification o	f Completion
Willigation Weasures	Wethod of Vermication	Verification	Verification	Date	Initial	
structural remains, or historic dumpsites. If the resource is determined to be significant under CEQA, the City and a qualified archaeologist shall determine whether preservation in place is feasible. Such preservation in place is the preferred mitigation. If such preservation is infeasible, the qualified archaeologist shall prepare and implement a research design and archaeological data recovery plan for the resource. The archaeologist shall also conduct appropriate technical analyses, prepare a comprehensive written report and file it with the appropriate information center (California Historical Resources Information System), and provide for the permanent curation of the recovered materials.						
MM CUL-3: In the event that plant or animal fossils are discovered during subsurface excavation activities for the proposed project, all excavation within 50 feet of the fossil shall cease until a qualified paleontologist has determined the significance of the find and provides recommendations in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall notify the City of Manteca to determine procedures to be followed before construction is allowed to resume at the location of the find. If the find is determined to be significant and the City determines that avoidance is not feasible, the paleontologist shall design and implement a data recovery plan consistent with the Society of Vertebrate Paleontology standards. The plan shall be submitted to the City for review and approval. Upon approval, the plan shall be incorporated into the project.	Site inspection; Submittal of documentation	During subsurface excavation activities	City of Manteca Community Development Department			

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
witigation weasures	Wethou of Vernication	Verification	Verification	Date	Initial
MM CUL-4: If previously unknown human remains are encountered during construction activities, Section 7050.5 of the California Health and Safety Code applies, and the following procedures shall be followed:  In the event of an accidental discovery or recognition of any human remains, Public Resource Code Section 5097.98 must be followed. Once project-related ground disturbance begins and if there is accidental discovery of human remains, the following steps shall be taken:	Site inspection; Submittal of documentation	During construction activities	City of Manteca Community Development Department; San Joaquin County Coroner's Office		
• There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the San Joaquin County Coroner's Office is contacted to determine if the remains are Native American and if an investigation into cause of death is required. If the coroner determines the remains are Native American, the coroner shall contact the NAHC within 24 hours, and the NAHC shall identify the person or persons it believes to be the most likely descendant (MDL) of the deceased Native American. The MDL may make recommendations 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 Public Resources Code Section 5097.98.					
6. Geology, Soils, and Seismicity					
MM GEO-1: Prior to issuance of building permits, the project applicant shall submit a design-level geotechnical study and building plans to the City of Manteca for review and approval. The building plans shall demonstrate that they incorporate all applicable recommendations of the design-level geotechnical study and comply with all applicable requirements of the most recent version of the California Building Standards Code.	Approval of plans	Prior to issuance of building permits	City of Manteca Community Development Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification o	f Completion
Willigation Weasures	metriod of Verification	Verification	Verification	Date	Initial
A licensed professional engineer shall prepare the plans, including those that pertain to soil engineering, structural foundations, pipeline excavation, and installation. The approved plans shall be incorporated into the proposed project. All onsite soil engineering activities shall be conducted under the supervision of a licensed Geotechnical Engineer or Certified Engineering Geologist.					
7. Hazards and Hazardous Materials					
MM HAZ-1a: Prior to recordation of the final map, the applicant shall retain a qualified consultant to perform groundwater sampling in the vicinity of the former aboveground storage tank. If the sampling determines that concentrations of hydrocarbons exceed acceptable levels, the applicant shall consult with the Central Valley Regional Water Quality Control Board regarding ongoing monitoring and remediation activities. If necessary, the final map shall include provisions to allow groundwater monitoring and remediation to occur during project construction and operations.	Submittal of documentation	Prior to recordation of the final map	City of Manteca Community Development Department; Central Valley Regional Water Quality Control Board		
MM HAZ-1b: Prior to issuance of grading permits, the project applicant shall retain a qualified consultant to perform testing of soils in the vicinity of the residence for the presence of residual concentrations of agricultural chemicals. Soils shall be laboratory tested for organochlorine pesticides in accordance with California Department of Toxic Substances Control (DTSC) guidelines. If the testing yields concentrations in excess of acceptable limits for commercial development, the project applicant shall retain a qualified contractor to perform soil remediation in accordance with DTSC guidelines. The soil remediation activities shall be completed prior to grading activities. The applicant shall submit documentation to the City of Manteca demonstrating that soil testing was performed and any necessary remediation was completed as part of the grading permit application.	Submittal of documentation	Prior to issuance of grading permits	City of Manteca Community Development Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
Miligation Measures	Method of Vernication	Verification	Verification	Date	Initial
MM HAZ-1c: Prior to demolition activities of any structures located on the project site, the project applicant shall retain a certified hazardous waste contractor to determine the presence or absence of building materials or equipment that contains hazardous waste, including asbestos, lead-based paint, mercury, and PCBs. If such substances are found to be present, the contractor shall properly remove and dispose of these hazardous materials in accordance with federal and state law. All removal activities shall be completed prior to commencement of demolition activities. Following completion of removal activities, the applicant shall submit documentation to the City of Manteca verifying that all hazardous materials were properly removed and disposed.	Submittal of documentation	Prior to demolition activities of any structures	City of Manteca Community Development Department		
<b>MM HAZ-1d:</b> Prior to grading activities, any onsite wells or septic systems shall be destroyed under permit and inspection with San Joaquin County Environmental Health Department.	Submittal of documentation	Prior to grading activities	City of Manteca Community Development Department; San Joaquin County Environmental Health Department		
8. Hydrology and Water Quality	,				
MM HYD-1: Prior to the issuance of grading permits, the project applicant shall prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) to the RWQCB electronically and a copy to the City of Manteca that identifies specific actions and Best Management Practices (BMPs) to prevent stormwater pollution during construction activities. The SWPPP shall identify a practical sequence for BMP implementation, monitoring, and maintenance; site restoration; contingency measures; responsible parties; and agency contacts. The SWPPP shall include but will not be limited to the following elements:	Approval of plan	Prior to the issuance of grading permits	City of Manteca Community Development Department; City of Manteca Public Works Department		

Missassian Magauras	Method of Verification	Timing of	Responsible for	Verification of	of Completion
Mitigation Measures	Method of Vernication	Verification	Verification	Date	Initial
Temporary erosion control measures shall be employed for disturbed areas.					
Specific measures shall be identified to protect the onsite open drainages during construction of the proposed project.					
No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months.					
• Sediment shall be retained onsite by a system of sediment basins, traps, or other appropriate measures.					
The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.					
BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.					
In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance, as an interim erosion control measure throughout the wet season.					
MM HYD-2: Prior to the issuance of building permits, the project applicant shall submit a stormwater quality control plan to the City of Manteca for review and approval. The plan shall include a detailed drainage plan and identify expected, site-specific pollutants and required measures to treat those pollutants before they reach the regional detention basins and, ultimately, the San Joaquin River. The approved measures shall be incorporated into the proposed project. The plan will	Approval of plan	Prior to the issuance of building permits	City of Manteca Community Development Department; City of Manteca Public Works Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	f Completion
wittigation Measures	wethod of verification	Verification	Verification	Date	Initial
describe monitoring and performance measures and standards required in order to ensure water quality is adequately protected during operation of the project area. Examples of stormwater pollution prevention measures and practices to be incorporated into the plan include but are not limited to:					
Strategically placed bioswales and landscaped areas that promote percolation of runoff					
Pervious pavement					
Roof drains that discharge to landscaped areas					
Trash enclosures with screen walls and roofs					
Stenciling on storm drains					
• Curb cuts in parking areas to allow runoff to enter landscaped areas					
Rock-lined areas along landscaped areas in parking lots					
• Catch basins					
Oil/water separators					
Regular sweeping of parking areas and cleaning of storm drainage facilities					
MM HYD-4: Prior to the issuance of building or grading permits for the proposed project, the project applicant shall submit a drainage plan for the project as a whole to the City of Manteca for review and approval. The plan shall include a detailed drainage plan that demonstrates attainment of preproject runoff requirements prior to release at Walthall Slough and describes the volume reduction measures and treatment controls used to reach attainment. The drainage plan shall identify all expected flows from the project area and the location, size, and type of facilities used to retain and treat the runoff volumes and peak flows to meet pre-project conditions. The Drainage Plan shall also include the geotechnical report	Approval of plan	Prior to the issuance of building or grading permits	City of Manteca Community Development Department; City of Manteca Public Works Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification (	of Completion
Willigation Measures	Method of Vernication	Verification	Verification	Date	Initial
verifying groundwater elevation for the regional basins. In addition, the plan shall address the need for subsurface drainage system located between the levee and the subdivision to control this water during a high water stage event. The approved drainage plan shall be incorporated into the proposed project.					
MM HYD-5a: Prior to the issuance of grading permits, the project applicant must revisit the status of the provisionally accredited levees providing 100-year level of flood protection to the project area to determine it is still the case and the project site remains outside of the 100-year flood hazard. If development is proposed within a 100-year floodplain, the applicant shall revise project plans to raise all structures a minimum of 1 foot above the flood elevation.	Submittal of documentation	Prior to the issuance of grading permits	City of Manteca Community Development Department; City of Manteca Public Works Department		
MM HYD-5b: Prior to the issuance of grading permits, the project applicant shall either demonstrate that the developed portions of the project site are outside of the anticipated 200-year flood hazard area or incorporate measures into the proposed project to achieve a 200-year level of flood protection for any site installations.	Submittal of documentation	Prior to the issuance of grading permits	City of Manteca Community Development Department; City of Manteca Public Works Department		
10. Noise					1
<ul> <li>MM NOI-1: During construction activities for the proposed project, the applicant shall require its construction contractors to adhere to the following noise attenuation requirements:</li> <li>Construction activities shall be limited to the hours between 7 a.m. to 8 p.m. daily. The City of Manteca Director of Public Works shall have the discretion to permit construction activities to occur outside of allowable hours if compelling circumstances warrant such an exception (e.g., weather conditions necessary to pour concrete).</li> </ul>	Notes on construction plans; Site inspection	During construction activities	City of Manteca Community Development Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion	
mitigation measures	Method of Verification	Verification	Verification	Date	Initial	
• All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. If no noise-reduction features were installed by the manufacturer, then the contractor shall require that at least a muffler be installed on the equipment.						
• Construction staging and heavy equipment maintenance activities shall be performed a minimum distance of 300 feet from the nearest residence, unless safety or technical factors take precedence (e.g., an equipment breakdown).						
• A 10-foot-high construction noise barrier shall be installed along the edge of the project site within 300 feet of any offsite residence prior to start of grading activities. The noise barrier shall either be constructed of a minimum 0.5-inch plywood or utilize acoustical blankets with a minimum Sound Transmission Class of 12. The barrier shall remain in place until noise intensive aspects of construction are completed.						
MM NOI-4: Prior to issuance of building permits for any residential units that adjoin Woodward Avenue, the project applicant shall prepare and submit plans to the City of Manteca that identify the following noise attenuation features:	Approval of plans	Prior to issuance of building permits for any residential units that adjoin	City of Manteca Community Development Department			
Single Family Dwelling Units: A minimum 7-foot high masonry wall shall be provided between Woodward Avenue and any proposed single-family residential units. The wall shall be of high quality design.		Woodward Avenue				
Multi-Family Dwelling Units: One or more of the following measures shall be implemented:						
<ul> <li>A 4-foot high landscaped berm along Woodward Avenue</li> <li>Locate the dwelling units a minimum of 140 feet away from the Woodward Avenue centerline</li> </ul>						
- Orient any private outdoor living spaces (e.g., patios, balconies, decks, etc.) away from Woodward Avenue.						

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	f Completion
Mitigation Measures	wiethod or verification	Verification	Verification	Date	Initial
<b>MM NOI-5:</b> During project operations, the project applicant shall limit outdoor activities at the clubhouse to the hours of 7 a.m. to 10 p.m. Indoor activities are permitted between 10 p.m. and 7 a.m. Signage shall be posted at the clubhouse advising users of this restriction.	Site inspection	During project operations	City of Manteca Community Development Department		
12. Public Services and Utilities					
<b>MM PSU-1:</b> Prior to issuance of building permits, the project applicant shall provide the City of Manteca will all applicable fire protection development fees in accordance with the latest adopted fee schedule.	Receipt of fees	Prior to issuance of building permits	City of Manteca Community Development Department		
MM PSU-3: Prior to issuance of building permits, the project applicant shall provide the Manteca Unified School District with all applicable school development fees in accordance with the latest adopted fee schedule. The applicant shall submit a receipt to the City of Manteca prior to issuance of building permits verifying that all fees have been paid.	Receipt of fees; Submittal of receipt	Prior to issuance of building permits	City of Manteca Community Development Department; Manteca Unified School District		
MM PSU-4: Prior to issuance of building permits, the project applicant shall provide the City of Manteca with all the applicable park development fees in accordance with the latest adopted fee schedule. The City shall have the discretion to provide the project applicant with fee credits for the provision of onsite park and recreational facilities, if deemed appropriate.	Receipt of fees	Prior to issuance of building permits	City of Manteca Community Development Department		
<b>MM PSU-5:</b> Prior to issuance of building permits, the project applicant shall provide the City of Manteca with all the applicable library development fees in accordance with the latest adopted fee schedule.	Receipt of fees	Prior to issuance of building permits	City of Manteca Community Development Department		

Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification  Timing of Responsible for	Responsible for	Verification o	f Completion	
witigation weasures	Method of Vernication	Verification	Verification	Date	Initial
MM PSU-6a: Prior to approval of the final map, the applicant shall identify the location of a new well with a minimum capacity of 1,287 gallons per minute. If located onsite, the final map shall depict the location of the well and necessary infrastructure. If located offsite, the applicant shall provide the City with fees equivalent to the full cost of site acquisition. The applicant shall either (1) construct the well in accordance with City standards or (2) provide the City with the fees equivalent to the full cost of construction of the well. The well and associated infrastructure shall be operational prior to issuance of the first certificate of occupancy for any dwelling unit. Final flow estimates and needed water system improvements shall be determined by the City of Manteca based on detailed construction plans, and water system modeling.	Approval of map; Acceptance or work or receipt of fees	Prior to approval of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department		
MM PSU-6b: Prior to issuance of building permits, the applicant shall prepare and submit documentation to the City of Manteca for review and approval identifying a non-potable irrigation system that is separate from the potable water systems. The non-potable irrigation system shall use non-potable well water until recycled water is available, at which point it shall be converted to use recycled water.	Submittal of documentation	Prior to issuance of building permits	City of Manteca Community Development Department; City of Manteca Public Works Department		
MM PSU-6c: Prior to issuance of building permits, the applicant shall prepare and submit documentation to the City of Manteca for review and approval identifying that all appropriate and feasible water conservation measures are incorporated into the proposed use(s). The approved measures shall be incorporated into the final development plans. Examples of water conservation measures include but are not limited to:  • Drought-tolerant landscaping or xeriscaping	Submittal of documentation	Prior to issuance of building permits	City of Manteca Community Development Department; City of Manteca Public Works Department		
Water efficient irrigation systems (drip irrigation, bubbler/soaker systems, hydrozones, evapotranspiration controllers, etc.)					

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
miligation measures	Method of Vernication	Verification	Verification	Date	Initial
MM PSU-7: Prior to approval of the final map, the applicant shall identify the location and characteristics of a new sewer pump station and the alignment and characteristics of a new force main to an existing pump station necessary to serve the proposed project. The City shall review and approve the location, alignment, and characteristics of the pump station and force main. The applicant shall either (1) construct the pump station and force main or (2) provide the City with fees equivalent to the full cost of the improvements. The pump station and force main shall be operational prior to issuance of the first certificate of occupancy for any of the dwelling units.	Approval of map; Acceptance or work or receipt of fees	Prior to approval of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department		
MM PSU-9a: Prior to issuance of building permits, the project applicant shall retain a qualified contractor to perform construction and demolition debris recycling. Following the completion of construction activities, the project applicant shall provide documentation to the satisfaction of the City of Manteca demonstrating that construction and demolition debris was recycled.	Submittal of documentation	Prior to issuance of building permits	City of Manteca Community Development Department		
MM PSU-9b: Prior to issuance of final certificate of occupancy for each multi-family residential building, the project applicant shall install onsite recycling collection facilities. Such facilities shall be provided in centralized locations within enclosed facilities. Signage shall clearly identify accepted materials, and recycling collection vessels (i.e., dumpsters, receptacles, bins, toters, etc.) shall be distinctly different in appearance from solid waste collection vessels.	Site inspection	Prior to issuance of final certificate of occupancy for each multi-family residential building	City of Manteca Community Development Department; City of Manteca Public Works Department		

19

# Table 1 (cont.): The Trails of Manteca Project Mitigation Monitoring and Reporting Program

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
willigation weasures	wethou of verification	Verification	Verification	Date	Initial
13. Transportation					
MM TRANS-1a: Prior to issuance of building permits for each dwelling unit, the applicant shall pay all transportation-related fees in accordance with the latest adopted fee schedule at the time permits are sought. Such fees shall include but would not be limited to the City of Manteca Public Facilities Implementation Plan fee and the San Joaquin County Regional Transportation Impact Fee.	Receipt of fees	Prior to issuance of building permits for each dwelling unit	City of Manteca Community Development Department		
<ul> <li>MM TRANS-1b: The project applicant shall construct one or more of the following improvements when determined to be necessary by the City of Manteca. The applicant shall be credited for the cost of the improvements(s) against its Public Facilities Implementation Plan fee amount.</li> <li>Woodward Avenue/McKinley Avenue: Implement one of the following improvement options:         <ul> <li>Widen intersection to include a two-way left-turn lane on Woodward Avenue to accommodate eastbound and southbound left-turn movements. Construct channelized southbound right-turn lane with 250-foot receiving lane on westbound Woodward Avenue. With these improvements in place, operations would be restored to LOS C during the AM and PM peak hours; or</li> <li>Construct Atherton Drive extension to Woodward Avenue prior to operations at the Woodward Avenue/McKinley Avenue intersection degrading to an unacceptable level. Operations are projected to degrade to unacceptable at approximately 70 percent of project buildout This new road construction would divert all trips away from the Woodward Avenue/McKinley Avenue intersection, thereby no longer requiring the need for any improvements. If the City decides this improvement will be warranted because of uncertainties regarding the timing</li> </ul> </li> </ul>	Acceptance of improvements	When determined to be necessary by the City of Manteca	City of Manteca Community Development Department; City of Manteca Public Works Department		

Midigation Magazza	Method of Verification	Timing of	Responsible for	Verification of	of Completion	
Mitigation Measures	method or verification	Verification	Verification	Date	Initial	
of the Atherton Drive extension, it would become the applicant's responsibility.						
• Atherton Drive/Airport Way: Install traffic signal and restripe northbound approach to include one left-turn lane, one through lane, and one shared through/right lane. Restripe northbound Airport Way north of Atherton Drive to include a second travel lane to the SR-120 eastbound ramps intersection. With this improvement in place, operations would be restored to LOS A during the AM peak hour and LOS B during the PM peak hour.						
Woodward Avenue/Airport Way: Install traffic signal and widen intersection to include exclusive left-turn lane and shared through/right lane on eastbound, westbound, and northbound approaches. Widen southbound approach to include exclusive left, through, and right-turn lanes and operate right-turn lane with overlap arrow. With this improvement in place, operations would be restored to LOS B during the AM peak hour and LOS C during the PM peak hour.						
MM TRANS-2: Prior to issuance of the first building permit, the project applicant shall provide the City of Manteca with proportionate-share fees for the following improvements to the SR-120/Airport Way and SR-120/Yosemite Avenue interchanges if there is an agreement in place between the City and Caltrans for improvements to these facilities. The City of Manteca shall transfer the collected fees to Caltrans in accordance with the agreement.	Receipt of fees	Prior to issuance of the first building permit	City of Manteca Community Development Department			
• SR-120/Airport Way Interchange (Applicant's proportionate share: 7.1 percent)						
<ul> <li>Construct loop on-ramps.</li> <li>Widen overcrossing to include two northbound and three southbound lanes</li> </ul>						

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	of Completion
mitigation measures	Method or verification	Verification	Verification	Date	Initial
<ul> <li>Widen SR-120 EB and WB off-ramps to include two left-turn lanes and two right-turn lanes.</li> <li>Restripe the SB approach at the Airport Way/Daniels Street intersection to add a third through lane and restripe the NB approach to add an exclusive right-turn lane.</li> <li>Restripe the EB Daniels Street approach to include left, shared left/through, and two right-turn lanes with right-turn overlap phasing.</li> </ul>					
• SR-120/Yosemite Avenue Interchange (Applicant's proportionate share: 2.8 percent)					
<ul> <li>Install all-way stop at SR-120 EB Ramps/Yosemite Avenue intersection.</li> <li>Widen westbound off-ramp to include channelized "free" right-turn lane.</li> <li>Widen southbound Yosemite Avenue approach to include exclusive right-turn lane.</li> </ul>					
<b>MM TRANS-3a:</b> Prior to recordation of the final map, the project applicant shall redesign the horizontal curve on Woodward Avenue in the northwest quadrant of the project to have a radius of at least 180 feet, which would increase its design speed from 15 mph to 25 mph.	Approval of map	Prior to recordation of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department		
<ul> <li>MM TRANS-3b: Prior to recordation of the final map, the project applicant shall make the following changes, which shall be reflected on the map and the conditions of approval. The applicant is responsible for the full cost of the changes outlined below.</li> <li>Relot Unit 6C so that residential lots do not front onto Trails Loop Road directly west of Tara Park Avenue, which is projected to carry approximately 4,000 average daily trips and may experience moderate queues as vehicles wait to turn onto Tara Park Avenue.</li> </ul>	Approval of map	Prior to recordation of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification of	f Completion
Milligation Measures	Method of Verification	Verification	Verification	Date	Initial
A traffic signal shall be installed at the Woodward Avenue/Atherton Drive Extension/Tara Park Avenue intersection prior to opening day.					
<ul> <li>Stop-control with full access shall be installed at Trails Loop Road and E Street approaches to Tara Park Avenue prior to opening day.</li> </ul>					
• To accommodate future development of Tara Park, the segment of Tara Park Avenue between Woodward Avenue and Trails Loop Road shall be a minimum of two travel lanes in each direction. Exclusive southbound left-turn lanes shall be installed to provide ingress to Tara Park.					
<ul> <li>Install traffic circles, speed tables, speed legends, chicanes, and/or other approved traffic calming devices along the easterly 0.6-mile segment of Trails Loop Road prior to opening day.</li> </ul>					
• The dimensions and configurations of the onsite traffic circles shall be verified with the City staff to determine that they can accommodate trucks and school buses. In addition, the adequacy of sight distance on residential streets that intersect Trails Loop Road shall be confirmed. Necessary revisions shall be reflected on the map.					
MM TRANS-3c: After issuance of the first certificate of occupancy for the first dwelling unit, the City of Manteca, in conjunction with the County of San Joaquin and the California Public Utilities Commission, shall monitor operations and safety at the McKinley Avenue grade crossing with the Union Pacific Oakland Subdivision to determine whether additional safety improvements are warranted. Such safety improvements would consist of the installation of a raised roadway median on both approaches to discourage wrong-way travel when the gates have been activated. The project applicant shall front the full cost of this improvement in advance of the issuance of the first	Monitoring of grade crossing; Installation of improvements	After issuance of the first certificate of occupancy for the first dwelling unit	City of Manteca Community Development Department; City of Manteca Public Works Department		

Mitigation Measures	Method of Verification	Timing of	Responsible for	Verification o	f Completion
miligation measures	Wethou of Verification	Verification	Verification	Date	Initial
certificate of the occupancy, which the City of Manteca shall hold in escrow until monitoring determines that the raised median is necessary. The project applicant's financial obligation for the cost of the median may be reduced to the extent other funding sources (e.g., Measure K or Section 130) become available. At the time the safety improvements are determined to be warranted, the City of Manteca shall coordinate with agencies with jurisdiction over the McKinley Avenue grade crossing to install the improvements.					
MM TRANS-4: Prior to approval of the final map, the project applicant shall identify a temporary emergency vehicle access (EVA) to the proposed project. The temporary EVA shall provide access from the east and be maintained until a second permanent roadway connection is established (e.g., Woodward Avenue after the Atherton Drive extension). The temporary EVA alignment shall be suitable for use by large emergency vehicles (e.g., fire engines) and be reviewed and approved by the City of Manteca. The temporary EVA shall be established prior to the issuance of the first certificate of occupancy for any dwelling units.	Approval of map	Prior to approval of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department; City of Manteca Fire Department		
MM TRANS-5a: Prior to approval of the final map, the applicant shall identify suitable locations for bus stops as required by the City of Manteca. Such stops may be located along the project frontage with E. Woodward Avenue or within the project boundaries. All stops shall include, at a minimum, a turn-out, seating, transit information, and connection to a sidewalk or comparable pedestrian facility to nearby uses.	Approval of map	Prior to approval of the final map	City of Manteca Community Development Department; City of Manteca Public Works Department		

Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
				Date	Initial
MM TRANS-5b: Prior to approval of the final improvement plans, the applicant shall depict bicycle facilities along the Woodward Avenue frontage with the proposed project in accordance with planned improvements in the latest version of the City's Bikeway Master Plan.	Approval of map	Prior to approval of the final improvement plans	City of Manteca Community Development Department; City of Manteca Public Works Department		
MM TRANS-5c: Prior to issuance of building permits, the applicant shall demonstrate that each dwelling unit (single-family and multi-family) provides enclosed space suitable for storage of at least two bicycles. Such enclosed space may consist of garages, storage rooms, closets, or other non-living area spaces that allow the occupant(s) to securely store a bicycle and avoid exposure to theft or adverse weather conditions.	Approval of building plans	Prior to issuance of building permits	City of Manteca Community Development Department		
MM TRANS-6: Prior to the commencement of construction activities, the project applicant shall prepare and submit a Construction Traffic Control Plan for review and approval by the City of Manteca. The plan shall identify routing for all delivery and haul trucks and, if necessary, limit deliveries to non-peak times. To the extent feasible, truck routing should avoid or minimize travel through residential areas. The plan shall also identify suitable locations for construction worker parking.	Approval of plan	Prior to the commencement of construction activities	City of Manteca Community Development Department; City of Manteca Public Works Department		