

2.7 Mitigation Monitoring Program

INTRODUCTION

State and local agencies are required by *Section 21081.6* of the *California Public Resources Code* to establish a monitoring and reporting program for all projects which are approved and which require CEQA processing.

Local agencies are given broad latitude in developing programs to meet the requirements of *Public Resources Code Section 21081.6*. The mitigation monitoring program outlined in this document is based upon guidance issued by the Governor's Office of Planning and Research.

The mitigation monitoring and reporting program for the proposed Project corresponds to mitigation measures outlined in the DEIR. The Program summarizes the environmental issues identified in the EIR, the mitigation measures required to reduce each potentially significant impact to less than significant, the person or agency responsible for implementing the measures, and the agency or agencies responsible for monitoring and reporting on the implementation of the mitigation measures.

THE PROGRAM

The County will adopt this mitigation and monitoring program at the time of adoption of the Specific Plan and Community Plan broad planning-level actions. Moreover, the Specific Plan and Community Plan documents will incorporate a requirement to comply with this mitigation and monitoring program. Such compliance will be enforced through subsequent conditions of approval for future discretionary actions related to these broad entitlements, such as a conditional use permit for the wastewater treatment plant and tentative maps for the proposed subdivision of the Specific Plan Area. As such, mitigation measures contained herein shall be included as conditions of approval for the Project, to the extent permitted by law. Fresno County shall ensure that all construction plans and project operations conform to the conditions of the mitigated project. Table 2-3 shall be attached to future discretionary approvals, such as a conditional use permit or tentative map, as a condition of approval. As explained in Mitigation Measure S-1, as a condition of approval and/or by and through the proposed Development Agreement for the Specific Plan project, the applicant shall enter into an agreement with Fresno County to compensate the County's time for mitigation monitoring and overseeing compliance of mitigation monitoring. Such agreement will provide for ongoing review of the applicant's compliance with the mitigation measures.

Compliance with local land use regulations is enforced by the Fresno County. Upon evidence of, or receipt of complaints of, noncompliance, the Code Compliance Officer and Building Inspector of Fresno County conducts inspections for such noncompliance, the remedies for which are citations, fines, permit modifications, permit revocation, and even criminal charges.

Chapter Three of the DEIR should be consulted for the full text of impacts and mitigation measures.

This Draft EIR has analyzed cumulative impacts and found that there shall be significant cumulative impacts on aesthetics, air quality, and traffic and transportation resources regardless of implementation of feasible mitigation measures.

**Table 2-3
Mitigation Monitoring Program**

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
Impact #S.1 – Mitigation Monitoring Agreement	#S.1: The Applicant shall enter into an agreement with Fresno County to compensate the County’s time for mitigation monitoring and overseeing compliance of mitigation monitoring. At the County’s discretion, the County may hire an independent consultant to conduct on-going mitigation monitoring and compliance on behalf of the County.	Applicant	Fresno County	On going
Impact #3.1.3 – Introduction of New Sources of Light and Glare and Increased Lighting on the Night Sky as a Result of the Project	Mitigation Measure #3.1.3a: Prior to issuance of any discretionary permit necessary for development within the Project Area, a lighting plan shall be prepared and submitted to Fresno County for approval in conjunction with the permit applications related to such development. The County shall ensure that the lighting plan incorporates the requirements set forth in mitigation measures 3.1.3b through 3.1.3f below.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.1.3b: All lighting in the Project Area shall be shielded, directed downward and away from adjoining properties and rights-of-way. Light shields or equivalent shall be installed and maintained consistent with manufacturer’s specifications, and shall reduce the spillage of light onto adjacent properties to less than a one-foot-candle standard, as measured at the adjacent property line.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.1.3c: Development within the Project Area shall incorporate lighting fixtures designed to produce the minimum amount of light necessary for safety purposes. All parking lot pole lights and street lights shall be fully hooded and back shielded to prevent light spillage and glare.	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	Mitigation Measure #3.1.3d: The design of any development proposed within the Project Area shall include the use of glare reducing materials, including non-reflective paints and building materials, to reduce the amount of glare created by the structures.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.1.3e: Landscaping within the Project Area shall include vegetation designed to shield adjacent properties from Project-generated light and glare.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.1.3f: Night lighting within the Project Area shall be limited to that necessary for security, safety, and identification. Night lighting shall also be screened from adjacent residential areas and not be directed in an upward manner or beyond the boundaries of the parcel on which the buildings are located.	Applicant	Fresno County	Prior to construction
Impact #3.1.4 – Degradation of the Existing Visual Character or Quality of the Project Area and its Surroundings Resulting from Utilities and Roadway Construction	Mitigation Measure #3.1.4a: Those portions of the Project Area containing natural vegetation or landscape material that are disturbed during utility line and or roadway construction shall be revegetated upon completion of work utilizing plant materials similar to those disturbed. Revegetated areas within the Friant Ranch Specific Plan Area shall be actively maintained by the developer until fully established, in accordance with the landscape design guidelines contained in the Friant Ranch Specific Plan.	Applicant	Fresno County	Upon completion of construction
	Mitigation Measure #3.1.4b: All permanent utility buildings within the Friant Ranch Specific Plan Area extending above ground shall be screened where feasible using a combination of berms, mounds, landscape material, decorative fencing/walls, or other screening feature approved in the Friant Ranch Specific Plan. In addition, any proposed roadway and utility pump station lighting within the Project Area shall be directed	Applicant	Fresno County	Upon completion of construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	downward using cut-off fixtures to minimize lighting effects on adjacent areas and the night sky.			
Impact #3.3.1 – Construction Impacts for the development of the Friant Ranch Specific Plan (5 phases) and Community Plan Update Carbon Monoxide (CO), Reactive Organic Gases (ROG), Nitrogen Oxide (NOx), Particulate Matter (PM₁₀), & Fine Particulate Matter (PM_{2.5})	<p>Mitigation Measures #3.3.1a: To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 1:</p> <ol style="list-style-type: none"> 1. The use of aqueous diesel fuel for the construction vehicles. 2. Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.) 3. Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules. 4. All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB. 5. Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use. 6. Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards. 7. Use of alternative fueled or catalyst equipped diesel construction equipment. 8. Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the 	Applicant	Fresno County/SJVAPCD	During all phases of construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>minimum number of hours practicable each day.</p> <p>9. To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).</p> <p>10. Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.</p> <p>11. Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).</p> <p>12. During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p>13. During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>14. During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.</p> <p>15. During construction activity, wind breaks shall be installed at windward side(s) of construction areas.</p> <p>16. During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.</p> <p>17. During construction activity, areas subject to excavation, grading, and other construction activity</p>			

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	shall be limited at any one time.			
	<p>Mitigation Measures #3.3.1b: To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 2:</p> <ol style="list-style-type: none"> 1. The use of aqueous diesel fuel for the construction vehicles. 2. Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.) 3. Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules. 4. All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB. 5. Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use. 6. Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards. 7. Use of alternative fueled or catalyst equipped diesel construction equipment. 8. Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day. 	Applicant	Fresno County/SJVAPCD	During all phases of construction

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	<p>9. To the extent practicable fossil-fueled construction equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).</p> <p>10. Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.</p> <p>11. Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).</p> <p>12. During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p>13. During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>14. During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.</p> <p>15. During construction activity, wind breaks shall be installed at windward side(s) of construction areas.</p> <p>16. During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.</p> <p>17. During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.</p>			

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	<p>Mitigation Measures #3.3.1c: To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 3.</p> <ol style="list-style-type: none"> 1. The use of aqueous diesel fuel for the construction vehicles. 2. Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.) 3. Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules. 4. All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB. 5. Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use. 6. Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards. 7. Use of alternative fueled or catalyst equipped diesel construction equipment. 8. Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day. 9. To the extent practicable fossil-fueled construction 	Applicant	Fresno County/SJVAPCD	During all phases of construction

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	<p>equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).</p> <p>10. Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.</p> <p>11. Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).</p> <p>12. During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p>13. During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>14. During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.</p> <p>15. During construction activity, wind breaks shall be installed at windward side(s) of construction areas.</p> <p>16. During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.</p> <p>17. During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.</p>			

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	<p>Mitigation Measure #3.3.1d: To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 4.</p> <ol style="list-style-type: none"> 1. The use of aqueous diesel fuel for the construction vehicles. 2. Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.) 3. Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules. 4. All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB. 5. Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use. 6. Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards. 7. Use of alternative fueled or catalyst equipped diesel construction equipment. 8. Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day. 9. To the extent practicable fossil-fueled construction 	Applicant	Fresno County/SJVAPCD	During all phases of construction

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	<p>equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).</p> <p>10. Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.</p> <p>11. Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).</p> <p>12. During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p>13. During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>14. During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.</p> <p>15. During construction activity, wind breaks shall be installed at windward side(s) of construction areas.</p> <p>16. During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.</p> <p>17. During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.</p>			

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	<p>Mitigation Measures #3.3.1e: To reduce emissions and thus reduce air quality impacts, the following Option 2 (enhanced mitigation) measures shall be implemented for Phase 5:</p> <ol style="list-style-type: none"> 1. The use of aqueous diesel fuel for the construction vehicles. 2. Use of diesel oxidation catalysts capable of a 40% reduction in NOx emissions on all diesel equipment with the exception of cranes and forklifts which will require a 15% reduction in accordance with URBEMIS 9.2.4 (see Appendix C.) 3. Use of low-volatile organic compound paints capable of reducing ROG emissions by 45% compared to existing architectural coating rules. 4. All heavy-duty diesel trucks shall comply with EPA on-road PM emissions standards and be equipped with Best Available Control Technology (BACT) devices certified by CARB. 5. Idling restrictions (maximum 5 minutes) shall apply to construction equipment, when not in use. 6. Construction equipment shall incorporate, where feasible, emissions-savings technology such as hybrid drives and specific fuel economy standards. 7. Use of alternative fueled or catalyst equipped diesel construction equipment. 8. Operation of heavy duty equipment and/or the amount of equipment in use shall be limited to the minimum number of hours practicable each day. 9. To the extent practicable fossil-fueled construction 	Applicant	Fresno County/SJVAPCD	During all phases of construction

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	<p>equipment shall be replaced with electrically driven equivalents (provided they are not run via a portable generator set).</p> <p>10. Construction activities shall be curtailed during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak-hour of vehicular traffic on adjacent roadways.</p> <p>11. Construction activity management shall be implemented as practicable (e.g., rescheduling activities to reduce short-term impacts).</p> <p>12. During construction activity, traffic speeds on unpaved roads shall be limited to 15 mph.</p> <p>13. During construction activity, sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.</p> <p>14. During construction activity, wheel washers shall be installed for all exiting trucks, or wash off all trucks and equipment leaving the site.</p> <p>15. During construction activity, wind breaks shall be installed at windward side(s) of construction areas.</p> <p>16. During construction activity, excavation and grading activity shall be suspended when winds exceed 20 mph.</p> <p>17. During construction activity, areas subject to excavation, grading, and other construction activity shall be limited at any one time.</p>			

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<p>Impact #3.3.2 – Violation of Air Quality Standards by Area and Operational Emissions</p>	<p>Mitigation Measure #3.3.2: Implementation of the following mitigation measures shall substantially reduce air quality impacts related to human activity within the entire Project area, but not to a level that is less than significant:</p> <p>The following guidelines shall be used by the County during review of future project- specific submittals for non-residential development within the Specific Plan area and within the Community Plan boundary in order to reduce generation of air pollutants with intent that specified measures be required where feasible and appropriate:</p> <ul style="list-style-type: none"> ▪ <i>Trees shall be carefully selected and located to protect building(s) from energy consuming environmental conditions, and to shade paved areas. Trees selected to shade paved areas should be varieties that shall shade 25% of the paved area within 20 years.</i> ▪ <i>Equip HVAC units with a PremAir or similar catalyst system, if reasonably available and economically feasible at the time building permits are issued. Catalyst systems are considered feasible if the additional cost is less than 10% of the base HVAC unit cost;</i> ▪ <i>Install two 110/208 volt power outlets for every two loading docks.</i> <p>Implement the following, or equivalent measures, as determined by the County in consultation with the APCD:</p> <p>The following measures shall be used singularly or in combination to accomplish an overall reduction of 10 to 20% in residential energy consumption relative to the</p>	<p>Applicant</p>	<p>Fresno County/SJVAPCD</p>	<p>Ongoing</p>

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	<p>requirements of the 2008 State of California Title 24:</p> <ul style="list-style-type: none"> ▪ <i>Use of air conditioning systems that that are more efficient than the 2008 Title 24 requirements;</i> ▪ <i>Use of high-efficiency heating and other appliances, such as water heaters, cooking equipment, refrigerators, and furnaces;</i> ▪ <i>Establishment of tree-planting guidelines that require residents to plant trees to shade buildings primarily on the west and south sides of the buildings. Use of deciduous trees (to allow solar gain during the winter) and direct shading of air conditioning systems shall be included in the guidelines; and</i> ▪ <i>Establish paving guidelines that encourage businesses, if feasible, to pave all privately owned parking areas with a substance with reflective attributes (albedo = 0.30 or better) similar to Portland cement concrete. The use of a paving substance with reflective attributes similar to Portland cement concrete is considered feasible under this measure if the additional cost is less than 10% of the cost of applying a standard asphalt product.</i> <p>Bicycle usage shall be promoted by requiring the following:</p> <ul style="list-style-type: none"> ▪ <i>All non-residential projects shall provide bicycle lockers and/or racks; and</i> ▪ <i>All apartment complexes or condominiums without garages shall provide at least two Class I bicycle storage spaces per unit.</i> 			

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	<p>Transportation related mitigation measures (Extended Conditions of approval):</p> <ul style="list-style-type: none"> ▪ <i>Commute options: to inform Specific Plan area occupants of the alternative travel amenities provided, including ridesharing and public transit availability/schedules;</i> ▪ <i>Maps showing the Community Plan’s pedestrian, bicycle, and equestrian paths to community centers, shopping areas, employment areas, schools, parks, and recreation areas; and</i> ▪ <i>Information regarding SJVAPCD programs to reduce county-wide emissions.</i> <p>The County and SJVAPCD may substitute different air pollution control measures for individual projects, that are equally effective or superior to those proposed herein, as new technology and/or other feasible measures become available in the course of build-out within the Friant Community Plan boundary.</p>			
<p>Impact #3.4.1 - Impacts to candidate, sensitive, or special status species within the Friant Ranch Specific Plan Area</p>				
<p>Impact #3.4.1a – Impacts to succulent owls clover:</p>	<p>Mitigation Measure #3.4.1a: To ensure that indirect impacts to succulent owls clover will be less than significant; the following mitigation measures will be implemented:</p> <ol style="list-style-type: none"> 1. The wetlands on the Friant Ranch Specific Plan Site that contain succulent owls clover shall be maintained as undisturbed open space, as required in mitigation measure 3.4.1c(4). 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>2. Prior to issuance of a grading permit that would result in activities affecting the succulent owls clover, a Land Management Plan shall be prepared for the open space that exists on the Specific Plan Site. That Land Management Plan shall include continued management by cattle grazing and shall:</p> <ul style="list-style-type: none"> ▪ be developed in cooperation with the California Department of Fish and Game and the United States Fish and Wildlife Service, ▪ describe management goals and objectives, ▪ include provisions for monitoring existing populations of protected biological resources (including succulent owls clover), ▪ include the use of adaptive management to ensure that results of the monitoring efforts are incorporated into management actions, and follow the management goals and objectives, and ▪ identify remedial actions and alternatives for protection (which may include off-site compensation) if management fails to protect on-site resources to the level established for each resource. 			
	<p>Mitigation Measure # 3.4.1a(1): The Specific Plan applicant will pay the market rate for 0.5 acres of succulent owl's clover creation/restoration credits from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Area.</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.4.1b – Impacts to Hartweg’s golden sunburst</p>	<p>Mitigation Measure #3.4.1b: The following measures shall be implemented to reduce the level of impacts to Hartweg’s golden sunburst to a level that is less than significant.</p> <ol style="list-style-type: none"> 1. Prior to the issuance of a grading permit that would result in activities affecting the Hartweg’s golden sunburst populations, the on-site open space which contains the species will be protected in perpetuity through a conservation easement to be held by a non-profit land trust. 2. The designated open space will be managed to preserve in perpetuity the populations of Hartweg’s golden sunburst. Prior to issuance of a grading permit that would result in activities affecting the Hartweg’s golden sunburst, a Land Management Plan will be prepared (see mitigation measure #3.4-1a2) that will include the protection of the golden sunburst population from human foot traffic and off road vehicles by restricting access to open space through fencing and signage. 3. Prior to issuance of an occupancy permit, an informational brochure will be prepared that educates Friant Ranch Community members about the sensitivity of this species to human trampling, discouraging trespass into conserved open space. 4. Where avoidance is not possible, the project applicant will have a qualified biologist develop a Restoration Plan to salvage populations of Hartweg’s golden sunburst located in proposed development areas that would be destroyed during construction activities. A draft of this plan will be submitted to the California Department of Fish and Game and the U.S. Fish and Wildlife Service for review, comment, and approval. The plan will be 	Applicant	Fresno County	Prior to construction

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	<p>finalized and implemented by the project applicant prior to issuance of a grading permit for the areas inhabited by Hartweg’s golden sunburst. Elements of the Restoration Plan shall include the collection of mature seed prior to natural dispersal (late April or early May), the storage of the seed in a cool dry location until the fall, and the dispersal of the seed onto proposed open space areas of the Site where suitable Rocklin soils are known to be present. The selected planting areas would be mapped using GIS, fenced to reduce grazing pressure, and monitored after planting for a minimum of four years during a 7 year monitoring period. An annual monitoring report will be prepared and submitted to CDFG and the USFWS. The salvage and relocation of this species will be considered successful when a self-sustaining population of Hartweg’s golden sunburst has been established on approximately 0.06 acres of the designated open space (representing a 3:1 ratio).</p> <p>5. The Restoration Plan described in number 5 above shall include alternatives or contingencies for ensuring that appropriate compensation for the loss of Hartweg’s golden sunburst is met (at a ratio of 3:1) should the initial relocation of the Hartweg’s golden sunburst populations not meet established success criteria. These alternatives shall be approved by the CDFG and USFWS.</p>			
<p>Impact #3.4.1c – Impacts to vernal pool fairy shrimp</p>	<p>Mitigation Measure #3.4.1c: The following measures shall be implemented to ensure that impacts to vernal pool fairy shrimp are less than significant.</p> <p>1. The Project shall avoid vernal pool fairy shrimp to the maximum extent feasible. The Friant Ranch Specific Plan has been designed to avoid the majority of vernal pools on the site. Of the 14.38 acres of vernal pool habitat identified on the project</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

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	<p>site, 12.09 acres of vernal pools shall be protected within approximately 233 acres of designated undisturbed open space that shall be placed under a conservation easement. The area of vernal pool fairy shrimp habitat to be protected within designated on-site open space shall be at a ratio of 5 acres of protected vernal pool habitat for each acre of such habitat directly or permanently disturbed by grading and construction associated with the development of the project.</p> <p>2. Prior to the issuance of a grading permit the project applicant shall compensate for the loss of vernal pool habitat through the creation/restoration of additional vernal pool habitat at a ratio of one acre of creation/restoration for each acre of such habitat directly and permanently disturbed by grading and construction associated with the project development. Creation/restoration of vernal pool habitat shall be accomplished by one or a combination of the following three mitigation alternatives:</p> <p>a. Off-Site Creation/Restoration. The project applicant shall conserve through acquisition or conservation easement off-site lands suitable for vernal pool creation/restoration in Fresno, Madera, or Merced County. Such lands shall consist of the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands shall have been previously disturbed by farming, or some other intensive use); vernal pools once occurred on these lands naturally; the underlying hardpan layer is still intact; and the natural topography has not been eliminated through land leveling. Topographic</p>			

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	<p>depressions shall be created/restored on these lands according to a “mitigation and monitoring plan” prepared by a qualified biologist. The depressions shall hold water for approximately three months of every year. When full, the depth of the filled pools shall vary from 6 to 18 inches. The depressions shall be revegetated with vernal pool species native to the area; soil collected from existing pools in the region shall be distributed on the bottoms of the constructed pools in order to enhance the prospects for establishing vernal pool fairy shrimp populations. Efforts to establish fairy shrimp populations in the constructed pools shall only occur after receiving formal authorization to do so from the USFWS, as required by law. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.</p> <p>b. Purchase of Vernal Pool Creation/Restoration Credits from a Conservation Bank. The project applicant shall pay the market rate for Vernal Pool Creation/Restoration Credits at the stipulated 1:1 ratio from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Area.</p> <p>c. Payment into the Vernal Pool Fund. Should a conservation bank having vernal pool creation credits for sale not exist in Fresno, Madera or Merced Counties, the project applicant shall pay the going rate per acre into the Vernal Pool Fund managed by the Center for Natural Lands Management. These funds may only be used for the purchase of vernal pool creation credits in a local conservation bank.</p>			

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	<p>3. The designated open space proposed for the project site shall provide buffers of 75 feet or greater between developed areas of the project site and vernal pools, to reduce encroachment into pools by foot and off-road vehicle traffic.</p> <p>4. Prior to issuance of a grading permit for the project site, a Drainage Plan shall be prepared for the undisturbed open space of the site. Elements of this plan shall include:</p> <ul style="list-style-type: none"> a. Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent feasible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved vernal pools shall be roughly equivalent to pre-project conditions, b. All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions, c. Irrigation runoff from landscaped areas shall be routed away from vernal pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions, d. A grazing management plan shall be developed and implemented to control the proliferation of non-native annuals in grassland and vernal pool habitats of the on-site open space areas, and to control the build-up of flammable thatch, 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>e. Access to the open space areas shall be controlled in order to minimize impact to vernal pools and other habitats, and to ensure that cattle are confined to the open space areas when grazing is permitted. This plan shall be submitted to the USFWS for review and approval.</p>			
<p>Impact #3.4.1d – Impacts to the California tiger salamander</p>	<p>Mitigation Measure #3.4.1d: The following measures shall be implemented to ensure that impacts to the California tiger salamander are at levels that are <i>less than significant</i>.</p> <p>1. The Project shall be designed to avoid elimination of breeding and aestivation habitat to the maximum extent possible. The project applicant has designed the project to avoid a substantial amount of on-site habitats suitable for CTS. Of the 14.38 acres of on-site vernal pool habitat potentially used as breeding habitat by the CTS, 12.09 acres of vernal pools shall be protected in designated undisturbed open space (Table 3.4-2). The area of California tiger salamander breeding habitat to be protected within designated open space shall be at a ratio of 5 acres of protected vernal pool habitat for each acre of such habitat directly and permanently disturbed by grading and construction associated with project development. Of the 927.82 acres of potential aestivation habitat now present in the Specific Plan Area, approximately 233 acres of undisturbed aestivation habitat shall be preserved within the proposed open space. An additional 30 acres of the site that are contiguous with undisturbed open space and that are to be temporarily disturbed by site grading shall be restored to native vegetation and managed as part of the proposed open space area. Open space areas with vernal pool complexes of the completed project, totaling 275.4 acres, shall be</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>linked to one another to facilitate the movements of CTS from one preserved habitat area to another, and linked to significant breeding and aestivation habitats on lands to the south of the Site.</p> <p>2. Management of the undisturbed open space, as required in mitigation for vernal pool fairy shrimp set forth in mitigation measure 3.4.1c, shall ensure that vernal pools protected in open space areas of the Site shall continue to provide breeding habitat for CTS and that grasslands shall continue to provide habitat for burrowing rodents, which create aestivation habitat for CTS.</p> <p>3. Prior to issuance of a grading permit for all or any portion of the project site, the project applicant shall preserve grassland habitats suitable for CTS aestivation under conservation easement at a minimum ratio of two acres of habitat preservation for every acre of such habitat directly or permanently disturbed by project grading and construction. Such preservation shall include on-site (i.e., open space areas) and off-site habitat in Fresno, Madera and/or Merced Counties . Should the project be constructed in phases, preservation can be phased concurrent with development phases as long as the 2:1 ratio is met for the acreage subject to the grading permit.</p> <p>At full buildout the project shall eliminate approximately 694.5 acres of suitable on-site aestivation habitat. Under this mitigation measure, the applicant shall preserve two times that amount of known and created CTS aestivation habitat on-site and off-site in suitable habitat located on other parcels within Fresno, Madera and Merced Counties.. Parcels that could meet the requirements of this mitigation measure and are available for</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>mitigation purposes have been identified in Tables 3.4-2 and 3.4-3 and are further illustrated in Figure 3.4-7. These representative parcels provide up to 31.21 acres of breeding habitat in the form of vernal pools and 1,282.19 acres of aestivation habitat in the form of grasslands and other habitats supporting populations of burrowing animals such as California ground squirrels and pocket gophers. To meet the 2:1 preservation requirement set forth in the above mitigation measure the project applicant may identify additional or alternative parcels similar to those identified in Tables 3.4-2 and 3.4-3.</p>			
<p>Impact #3.4.1e – Impacts to the Western Spadefoot</p>	<p>Mitigation Measure #3.4.1e: To reduce impacts to western spadefoots to a level that is <i>less than significant</i>, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. The western spadefoot utilizes the same habitats as the California tiger salamander for breeding and aestivation (i.e., the western spadefoot breeds in vernal pools and aestivates in rodent burrows of surrounding grasslands). Therefore, implementation of mitigation measures for the California tiger salamander (Mitigation Measures 3.4.1d) would reduce the impact to the western spadefoot to a <i>less than significant level</i>. 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>
<p>Impact #3.4.1g –Impacts to Burrowing Owls</p>	<p>Mitigation Measure #3.4.1g: The following measures shall be implemented to ensure that impacts to the burrowing owl are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. A pre-construction survey shall be conducted on the Specific Plan Site and on the Depot Parcel for ground nesting raptors, including burrowing owls, within 14 to 30 days prior to initiation of site grading activities. If the grading activities are 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>implemented in phases, then so shall the surveys be conducted in phases. If more than 30 days lapse between the time of the preconstruction survey (s) and the start of ground-disturbing activities, another preconstruction survey must be completed. This process should be repeated until the habitat is converted (e.g., graded and developed). The survey shall be completed in accordance with the survey requirements detailed in the CDFG's October 17, 1995 <i>Staff Report on Burrowing Owl Mitigation</i>.</p> <p>2. If burrowing owls are identified onsite or within the area of influence of the project site (within 250 feet of the project site), during surveys required in mitigation measure 3.4.1g (1) above, an upland mitigation area for burrowing owls shall be established either on or offsite. The mitigation site must be determined to be suitable by a qualified biologist. The size of the required mitigation site shall be based on the number of burrowing owls observed on the project site with a minimum of 6.5 acres preserved per pair of owls or single owl observed using the site. The number of owls for which mitigation is required shall be based on the combined results of the protocol-level survey and the preconstruction surveys (i.e., if two pairs of owls are observed on the project site during the protocol-level survey, the mitigation requirement shall be $2 \times 6.5 = 13$ acres provided that no more than two pairs of owls are observed during the preconstruction survey; if three pairs of owls are observed during the preconstruction survey, then the mitigation requirement shall be $3 \times 6.5 = 19.5$ acres). Two natural or artificial nest burrows shall be provided on the mitigation site for each burrow in the project area that shall be rendered biologically unstable.</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>3. If burrowing owls are present on the site and require relocation, an upland mitigation site for burrowing owls shall be designated as provided for in item 2 above. This site may be located within the on-site open space area or it may be located off site. The mitigation site must consist of grassland habitat, contain small mammals (or other prey), and ground squirrel burrows. Habitat protected for the CTS (see mitigation measure #3.4.1e) may be sufficiently suitable. The mitigation site must be approved by the California Department of Fish and Game. The area shall be preserved in perpetuity as wildlife habitat through a conservation easement that designates the California Department of Fish and Game, or any other qualified conservation organization as the Grantee of the easement. The mitigation area need not be identified prior to finding burrowing owls on the Site, however advance planning would reduce the potential for construction delays.</p> <p>4. If a Conservation Easement is established for burrowing owl mitigation onsite, the project applicant shall provide the Grantee of the easement with an endowment to cover the management of the Conservation Easement within six months of breaking ground on the project site. The endowment amount necessary for the conservation easement shall be established after negotiations between the applicant, easement holder/land trust, and the regulatory agencies. The management fund shall be provided by the project applicant to the Grantee of the Conservation Easement within six months of breaking ground on the project site.</p> <p>5. If burrowing owls are present on the project site during the breeding season (peak of the breeding season is April 15 through July 15), and appear to</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>be engaged in nesting behavior, a fenced 250 foot buffer would be required between the nest site(s) (i.e., the active burrow(s)) and any earth-moving activity or other disturbance on the project site. This 250 foot buffer could be removed once it is determined by a qualified biologist that the young have fledged. Typically, the young fledge by August 31st. This date may be earlier than August 31st, or later, and would have to be determined by a qualified biologist. If burrowing owls are present in the non-breeding season a 160 foot buffer area will be established. If construction activities require the removal of an active den, the occupying burrowing owls must be passively relocated from the project site, as approved by the California Department of Fish and Game, passive relocation shall not commence until October 1st and must be completed by February 1st. After passive relocation, the project site and vicinity shall be monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document where the relocated owls move and to ensure that the owls are not reoccupying the project site. A report detailing the results of the relocation and subsequent monitoring shall be submitted to CDFG and the County within two months of the relocation. That report can be incorporated into the monthly monitoring reports as required in item 6 below.</p> <p>6. Monitoring of the project site shall occur on a weekly basis to identify any burrowing owls that may move into the construction area. Monitoring shall be conducted by a qualified biologist provided by the project applicant. Monitoring may be suspended or discontinued if, in the opinion of the qualified biologist, it is determined that suitable habitat for the burrowing owl is absent from the site following mass grading. Monthly reports of</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>monitoring activities shall be submitted by the biologist to the project applicant, the County of Fresno, and the California Department of Fish and Game. A final report of all monitoring application shall be prepared by the biologist and submitted to the project applicant, the County of Fresno, and the California Department of Fish and Game within 90 days of project completion.</p>			
<p>Impact #3.4.1h – Impacts to the American Badger</p>	<p>Mitigation Measure #3.4.1h: The following measures shall be implemented to ensure that impacts to American badgers are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Pre-construction surveys shall be conducted in development zones no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, or any project activity likely to impact the American badger. If construction activities (including ground disturbing activities) are phased, then so shall the pre-construction surveys be phased. 2. If dens are found within the construction area and require removal, they shall be monitored for badger presence using a tracking medium or a video probe. Tracking medium must be monitored for 3 consecutive days to provide evidence of vacancy. All dens and burrows within the construction area and which contain badger sign must be hand excavated by a trained wildlife biologist. If a den is found to be occupied by a badger, the den shall not be excavated until the badger is allowed to passively vacate the den. 3. If dens are located within 100 feet of construction areas, but not within construction areas, they shall not be removed. Instead, exclusion fencing shall be constructed around the den (s). The exclusion 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>fencing shall consist of plastic construction fencing held in place by t-posts every 25 feet, or by a rope and flagging fence. The purpose of the fencing is to exclude construction activities occurring near the den (s).</p> <p>4. Project-related vehicles shall observe a 20-mph speed limit while on the project site, except on County roads and State and Federal highways. This is particularly important at night (between sunset and sunrise) when American badgers are most active. Construction activities at night (sunset to sunrise) should be prohibited.</p> <p>5. Off-road construction traffic outside of designated construction areas shall be prohibited.</p> <p>6. To prevent inadvertent entrapment of American badgers or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist or trained monitor.</p> <p>7. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. If an entrapped animal is incapable of escaping or is otherwise trapped for an excess of 12 hours, the California Department of Fish and Game should be contacted for advice.</p> <p>8. American badgers are attracted to den-like structures such as pipes and may enter stored pipe, becoming</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored in an unfenced storage yard (see item 4a and b above for appropriate fencing and clearance conditions) for one or more overnight periods should be thoroughly inspected for American badgers before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. Inspections may be conducted by a qualified biologist or trained monitor. If necessary, and under the direct supervision of a biologist, a pipe inhabited by a badger may be moved once to remove it from the path of construction activity, until the animal has escaped.</p> <p>9. During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be dispose of in closed containers and removed at least once a week from the construction site.</p> <p>10. No firearms shall be allowed on the project site during construction activities.</p>			
<p>Impact #3.4.1i –Impacts to nesting raptors</p>	<p>Mitigation Measure #3.4.1i: To protect breeding raptors, the following measures shall be implemented:</p> <p>1. The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys shall be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 300 foot area of influence surrounding the Site. Suitable nesting sites in the Specific Plan area are extremely limited; surveys need only be performed in areas containing suitable nesting habitat as determined by a qualified</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>biologist. If construction begins between September 2 to February 28, nest surveys shall not be required since this is outside the typical breeding period for raptors.</p> <p>2. If nesting raptors are identified during the surveys on the project site or within the 300 foot areas of influence, a 300-foot radius buffer around the nest tree or shrub must be fenced with orange construction fencing or rope and flagging. If a nest site is on an adjacent property, the portion of the buffer that occurs on the Site shall be fenced with orange construction fencing. The 300-foot buffer may be reduced in size if a qualified biologist determines through monitoring that the nesting raptors are acclimated to people and disturbance, and otherwise would not be adversely affected by construction activities. The buffer areas shall not be reduced in size to less than a radius of 200 feet. When construction buffers are reduced in size, the biologist shall monitor distress levels of the nesting birds while the birds nest and construction persists. If at any time the nesting raptors show levels of distress that could cause nest failure or abandonment, the qualified biologist shall re-implement the full 300-foot buffer.</p> <p>3. No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers shall no longer be needed and can be removed, and</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	monitoring can be terminated.			
Impact #3.4.1j – Impacts to common and special status nesting birds	<p>Mitigation Measure #3.4.1j: To protect common and special status nesting birds, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. A nesting bird survey shall be conducted prior to commencing with construction work (including site grading and vegetation removal) if that work would commence between March 15th and August 31st. The nesting bird survey shall be conducted no greater than 30 days prior to commencement of work, nor sooner than 14 days prior to commencement of work. If the construction activities are conducted in phases, then so shall the survey be conducted in phases. 2. If special status birds are identified nesting on the construction area or within a 250 foot area of influence, a 150-foot non-disturbance radius around the nest must be fenced using orange plastic construction fencing or rope and stake fencing as previously described (this fencing requirement shall not replace or be constructed in lieu of fencing discussed above for impacts to nesting raptors). No construction or earth-moving activity shall occur within the 150-foot buffer until it is determined by a qualified biologist that the nest is no longer occupied and young have fledged (that is, left the nest and attained sufficient flight skills to avoid project construction activities). This typically occurs by July 1st, but the date may vary, and would need to be confirmed by a qualified biologist. Similarly, the qualified biologist could modify the size of the buffer based upon site conditions and the bird’s apparent acclimation to human activities. 3. If non-special status birds are identified nesting in 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>any tree or shrub proposed for removal, tree removal would have to be postponed until it is determined by a qualified biologist that the young have fledged and have attained sufficient flight skills to leave the project site. Typically, most passerine birds can be expected to complete nesting by July 1st, with young attaining sufficient flight skills by this date that are sufficient for young to avoid project construction zones. Unless otherwise prescribed for special status bird species, upon completion of nesting no further protection or mitigation measures would be warranted for nesting birds. The mitigation measure shall be implemented by the project applicant and the construction contractor.</p> <p>4. Results of the surveys and monitoring shall be provided in monthly monitoring reports submitted to the project applicant, County of Fresno, and the California Department of Fish and Game.</p>			
<p>Impact #3.4.2 – Impact of Friant Ranch Specific Plan development (including wastewater treatment plant and disposal) to riparian habitat or other sensitive natural communities</p>	<p>Mitigation Measure #3.4-2: The following measure shall be implemented to reduce impacts to the northern hardpan vernal pool sensitive natural community to a level that is <i>less than significant</i>:</p> <p>1. Implementation of mitigation for federally protected wetlands and jurisdictional Waters (Mitigation Measure #3.4.3) shall ensure the long-term conservation of northern hardpan vernal pools in the region. That measure provides for the acquisition, preservation, and management of large patches of vernal pool and grassland habitats in the project region.</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.4.3 – Impact of Friant Ranch Specific Plan development (including wastewater treatment plant and disposal) to federally protected wetlands and other waters</p>	<p>Mitigation Measure #3.4.3a: The following measures shall be implemented to reduce impacts to wetlands and other waters to a level that is <i>less than significant</i>:</p> <ol style="list-style-type: none"> Mitigation measures for vernal pool fairy shrimp and California tiger salamanders (mitigation measures 3.4.1c and 3.4.1d) are designed to ensure the long-term conservation of wetlands and other waters in the region. Implementation of these measures shall result in the preservation under conservation easement of wetlands and other waters. For example, mitigation parcels currently under evaluation to meet mitigation measures for vernal pool fairy shrimp and CTS would result in preservation of 22.67 acres of wetlands on-site and up to 60.30 acres off-site (Tables 3.4-5 and 3.4-6), for a combined total of 82.97 acres. <p>As can be seen in these tables (Tables 3.4-5 and 3.4-6), the preservation under conservation easement of wetlands and other waters pursuant to mitigation measures for vernal pool and CTS could achieve preservation ratios of:</p> <ul style="list-style-type: none"> ▪ Wetland Channels: 1 acre of disturbed habitat to every 11.1 acres of preserved habitat; ▪ Vernal Swales: 1 acre of disturbed habitat to every 3.7 acres of preserved habitat; ▪ Vernal Pools: 1 acre of disturbed habitat to every 13.6 acres of preserved habitat; <ol style="list-style-type: none"> Prior to the issuance of a grading permit, the project applicant shall create/restore wetlands to compensate for any wetlands and other water bodies subject to the jurisdiction of the USACE that are directly and permanently disturbed by grading and construction associated with the project. The creation/restoration of such wetlands and other 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>waters shall be at a ratio of one acre of created/restored wetlands and other jurisdictional waters for each acre of jurisdictional wetlands and other waters directly and permanently disturbed by grading and construction associated with the project development. Mitigation measure for vernal pool fairy shrimp (mitigation measure 3.4.1c) provides specifically for the creation/restoration of vernal pool habitat. This mitigation measure provides for the creation/restoration of wetlands and other waters such as wetland and non-wetland channels and vernal swales. Creation/restoration of wetland habitat and other water bodies shall be accomplished by one or a combination of the following two mitigation alternatives:</p> <p>a. Off-Site Creation/Restoration. The Project applicant shall conserve through acquisition or conservation easement, off-site lands suitable for the creation/restoration of wetlands and other water bodies in Fresno, Madera, or Merced County. Such lands shall have the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands shall have been previously disturbed by farming, or some other intensive human use); native wetlands and/or other water bodies once occurred on these lands naturally; the soils and hydrology of these lands are suitable for the creation of naturally occurring wetlands and other water bodies; and the natural topography has not been eliminated through land leveling. Topographic depressions, swales and naturalistic drainage channels shall be created/restored on these lands according to a “mitigation and monitoring plan” prepared by a</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>qualified biologist. These engineered features must be inundated and/or experience soil saturation for a duration sufficient to naturally support hydrophytic vegetation native to wetlands of the region. All engineered wetlands and other water bodies shall be revegetated with native hydrophytic species. The wetland creation/restoration plan prepared by the biologist shall provide for long-term management of the mitigation site, mitigation objectives by which the success of the mitigation can be measured, and a monitoring plan for determining the success of the mitigation. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.</p> <p>b. Purchase of Wetland Creation Credits from a Conservation Bank. The Project applicant shall pay the market rate for Wetland Creation Credits at a 1:1 ratio from a Conservation Bank whose service area includes the Friant Ranch Specific Plan Site.</p>			
<p>Impact #3.4.3b – Impacts to water quality in seasonal creeks, reservoirs, and other downstream waters</p>	<p>Mitigation Measure #3.4.3b: To ensure protection of water quality in seasonal creeks, reservoirs, and other downstream waters, the following measures shall be implemented:</p> <p>1. Prior to the onset of construction, an erosion control plan shall be prepared by a qualified engineer consistent with the requirements of a Fresno County grading permit and a General Construction Permit (an NPDES permit issued by the Regional Water Quality Control Board for projects in which one or more acres of land are graded). Typically, specified erosion control measures must be implemented prior to the onset of the rainy season. The project</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>site must then be monitored periodically throughout the rainy season to ensure that the erosion control measures are successfully preventing on-site erosion and the associated deposition of sediment off the project site. Elements of this plan would address both the potential for soil erosion and non-point source pollution. At a minimum, elements of an erosion control plan typically include:</p> <ul style="list-style-type: none"> a. Protection of exposed graded slopes from sheet, rill and gully erosion. Such protection could be in the form of erosion control fabric, hydromulch containing the seed of native soil-binding plants, straw mechanically imbedded in exposed soils, or some combination of the three. b. Protection of natural drainage channels from sedimentation. Hay bale check dams should be installed below graded areas so that any sediment carried by surface runoff is intercepted and retained behind the check dams before it can enter the creek. c. Use of best management practices (BMPs) to control soil erosion and non-point source pollution. BMPs may include measures in a and b above, but they may include any number of additional measures appropriate for this particular project site and this particular project, including grease traps in parking lots, landscape management practices to reduce the use of pesticides and herbicides, the discharge of stormwater runoff from “hardscapes” into grassy swales, regular site inspections for pollutants that could be carried by runoff into natural drainages, etc. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>2. Where possible, project construction should be confined to the dry season, when the chance for significant rainfall and stormwater runoff is very low. Construction during the spring, summer, and fall shall not eliminate the need to implement erosion control measures described in mitigation measures above, but shall ensure that the threat of soil erosion has been minimized to the maximum extent possible.</p> <p>3. All post-construction runoff shall be routed through a system of grease traps, stormwater retention/detention basins, and bio-filtration swales to ensure that water quality of on-site and off-site wetlands, creeks and rivers are maintained at roughly pre-project levels.</p>			
<p>Impact #3.4.5 – Consistency of the Friant Ranch Specific Plan with local policies or ordinances protecting biological resources</p>	<p>Mitigation Measure #3.4.5: Mitigation Measures #3.4.1c and #3.4.1d shall be implemented to preserve pools as breeding habitat and open space for aestivation habitat for tiger salamanders and western spadefoots, through a combination of on-site and off-site conservation easements. These measures shall also serve to maintain buffer zones around wetland features, preserve vernal pool vegetation, maintain habitat functions and values and control siltation and pollutant entry into these habitats. Implementation of Mitigation Measure 3.4.3a would create/restore wetland habitats to preserve the “no net loss” policy of the ACOE, and mitigate for the loss of wildlife habitat. Implementation of Mitigation Measure 3.4.3b establishes best management practices for preventing impacts to waters via pollutants, siltation, etc. Along with mitigation measures prescribed in Chapter 3.8 of this EIR, “Hydrology and Water Quality”, the mitigation measures just described shall ensure consistency with local ordinances and policies, including the County</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	General Plan Policies. Moreover a considerable amount of additional wildlife habitats and wetlands would be preserved off-site incidental to the mitigation measures required for project impacts to California tiger salamanders.			
Impact #3.4-7 - Potential biological impacts resulting from the transport and treatment of water	Mitigation Measure #3.4.7: Because the treatment facility is located immediately adjacent to the Friant Ranch Specific Plan Area, and potential impacts associated with its expansion are treated at a project level, all potential impacts and mitigation measures which would apply to construction associated with increasing treatment capacity would be covered by impact and mitigation measures #'s 3.4.1 to 3.4.6 of this DEIR. Similarly, potential impacts to biological resources resulting from construction of on-site conveyance systems, which would be needed to transport the treated water to end users, are covered by impacts and mitigation #'s 3.4.1 through 3.4.6 (for areas within the Friant Ranch Specific plan Site) and #'s 3.4.9 through 3.4.14 (for areas within the Friant Community Plan Area). No additional mitigation measures are warranted.	Applicant	Fresno County	Prior to construction
Impact #3.4.9 – Impacts of the Friant Community Plan to Candidate, Sensitive, or Special status Species				
Impact #3.4.9a - Vernal Pools and swales in the Friant Community Plan Area potentially contain spiny-sepaed button celery. Projects within the Area have the potential to eliminate	Mitigation Measure # 3.4.9a: To ensure that there is no take of spiny-sepaed button celery, the following measures shall be implemented. 1. Prior to the issuance of a grading permit within the Existing Friant Community Plan Area, a biological survey shall be conducted on the project site during the appropriate phenological period for spiny-	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>this species through grading and construction activities.</p>	<p>sepaled button celery. This period generally occurs between April 1 and May 31, but this species persists and is identifiable through July of most years. Surveys need only be conducted within vernal pools and swales capable of supporting this species.</p> <p>2. If spiny-sepaled button celery is not present, no further action is warranted. If spiny-sepaled button-celery is found to occur on a project site, then the following actions shall be taken.</p> <p>a. Any population of spiny-sepaled button celery shall be completely avoided by grading and construction activities and there shall be no modifications to existing land management practices, or</p> <p>b. If any population of spiny-sepaled button celery cannot be avoided, then the project proponent must:</p> <ul style="list-style-type: none"> ▪ Compensate for the loss of spiny-sepaled button celery at a ratio of 3 acres for each 1 acre of take, either through implementation of a conservation agreement or through purchase of conservation credits in an approved mitigation bank. 			
<p>Impact #3.4.9b – Impacts to vernal pool fairy shrimp</p>	<p>Mitigation Measure #3.4.9b: The following measures shall be implemented to ensure that impacts to vernal pool fairy shrimp are <i>less than significant</i>.</p> <p>1. Prior to issuance of a grading permit, the project proponent must ensure that a qualified biologist conduct a survey for ephemeral pools which potentially support vernal pool fairy shrimp. That survey must be conducted during the wet season</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>(October through April), and immediately after a substantial rainfall event (of 0.5 inches of rainfall or more). If ephemeral pool habitat is found on the project site that is suitable for supporting vernal pool fairy shrimp, then the project applicant must ensure that a qualified biologist implement a standard vernal pool fairy shrimp protocol survey. Alternatively, the project applicant could assume presence of the vernal pool fairy shrimp and implement the provisions listed in a-d below. If vernal pool fairy shrimp or other sensitive vernal pool invertebrates are not found during protocol surveys, then no other actions are warranted. If vernal pool fairy shrimp are found, then the following measures shall be implemented:</p> <ul style="list-style-type: none"> a. The Project shall avoid vernal pool fairy shrimp to the maximum extent feasible. b. Prior to the issuance of a grading permit the project applicant shall compensate for the loss of occupied ephemeral pool habitat through the conservation of vernal pool habitat at a ratio of two acres of conservation for each acre of such habitat directly and permanently disturbed by grading. Conservation of occupied ephemeral pool habitat shall be accomplished by placing a conservation easement on existing pools, either on-site or off-site, or by purchasing credits in an approved conservation bank that has the Existing Friant Community Plan Area within its service boundaries. c. A Section 10(a) 1b permit for take must be acquired from the United States Fish and Wildlife Service, or a Section 7 consultation must be conducted, whichever is appropriate. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>d. Prior to issuance of a grading permit for a project site, a Drainage Plan shall be prepared for the site. Elements of this plan shall include:</p> <ul style="list-style-type: none"> ▪ Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent possible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved ephemeral pools shall be roughly equivalent to pre-project conditions. ▪ All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions, and ▪ Irrigation runoff from landscaped areas shall be routed away from ephemeral pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions. 			
<p>Impact #3.4.9c - Impacts to the Valley elderberry longhorn beetle</p>	<p>Mitigation Measure #3.4.9c: The following measures shall be implemented to ensure that impacts to the Valley elderberry longhorn beetle are at levels that are <i>less than significant</i>.</p> <p>1. Prior to issuance of a grading permit, the project proponent must ensure that a qualified biologist conduct a survey for elderberry bushes. If elderberry bushes with stem diameters of 1 inch or greater are found on or within 100 feet of the project site, then standard stem counts and searches for sign (e.g., exit holes) of the Valley elderberry</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>beetles must be conducted.</p> <p>2. If elderberry bushes do not occur on or within 100 feet of the project site, then no further actions are warranted.</p> <p>3. If elderberry bushes are found on or within 100 feet of the project site, then the following measures shall be implemented:</p> <p>a. For those bushes in which the beetle does not occur, construction within the 100 foot buffer area shall be allowed, provided that:</p> <ul style="list-style-type: none"> ▪ A letter of concurrence shall be obtained from the United States Fish and Wildlife Service authorizing construction within the buffer area. ▪ A biologist is present on-site during construction within the 100 foot buffer area to monitor construction activities and ensure that there are no impacts to the elderberry bushes. ▪ Restoration of habitat within the 100 foot buffer area occurs once construction is complete, except in those instances where permanent facilities are constructed. The applicant must provide a written description to the USFWS of how the buffer areas are to be restored, protected, and maintained after construction is completed. Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five (5) feet of elderberry plant stems. Mowing must be done in a 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).</p> <ul style="list-style-type: none"> ▪ All areas to be avoided during construction activities shall be fenced and flagged. In areas where encroachment on the 100-foot buffer has been approved by the Service, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant. ▪ Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction. ▪ A qualified biologist shall conduct a training program for all construction contractors that shall be working on the project to inform workers of the need to avoid damaging elderberry plants and the possible penalties for not complying with these requirements. The training program must include information on the status of the beetle and the need to protect its elderberry host plant. ▪ No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant.</p> <ul style="list-style-type: none"> ▪ Other protection measures and replacement of elderberry bushes, when applicable, are implemented as outlines in <i>Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> (USFWS 1999, Appendix H), <p>b. For each bush in which the Valley elderberry longhorn beetle is found, the 100 foot buffer area shall be observed during the activity period of the Valley elderberry longhorn beetle (from April to July). Construction activities may occur within the 100 foot buffer area during other periods provided the mitigation measures outlined above are implemented and restoration within the buffer area is completed by beetle emergence (April).</p> <p>c. If elderberry bushes that contain elderberry longhorn beetles cannot be avoided and must be removed, then:</p> <ul style="list-style-type: none"> ▪ Compensation for the loss of elderberry beetles must be accomplished through replanting of elderberries and other native plant species at ratios provided in <i>Conservation Guidelines for the Valley Elderberry Longhorn Beetle</i> (USFWS 1999, Appendix H), and ▪ A Section 10(a) 1B permit for take must be acquired from the United States Fish and Wildlife Service or a Section 7 consultation must be conducted. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>If the elderberry longhorn beetle is de-listed by the United States Fish and Wildlife Service prior to implementation of the Project, then these measures need not apply.</p>			
<p>Impact #3.4.9d – Impacts to the California tiger salamander</p>	<p>Mitigation Measure #3.4.9d: The following measures shall be implemented to ensure that impacts to the California tiger salamander are at levels that are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Prior to issuance of a grading permit, the Applicant shall provide sufficient documentation that determines whether the site contains wetlands that could potentially support breeding California tiger salamanders. If so, the project proponent must ensure that a qualified biologist conduct a survey for wetlands which potentially support breeding California tiger salamanders. That survey must be conducted during the wet season (October through April), and immediately after a substantial rainfall event (of 0.5 inches of rainfall or more). 2. If wetlands are found on a project site that are suitable for supporting breeding California tiger salamanders, then the project applicant must either presume presence in all wetlands onsite and mitigate as prescribed in section 3(a) through (d) below as if breeding California tiger salamanders were found or ensure that a qualified biologist implement a standard California tiger salamander protocol survey (see Appendix I, California Tiger Salamander Protocol Survey). 3. If pools containing breeding California tiger salamanders are found, then the following measures shall be implemented: 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<ul style="list-style-type: none"> a. The Project shall avoid California tiger salamanders to the maximum extent feasible. b. Prior to the issuance of a grading permit the project applicant shall compensate for the loss of occupied ephemeral pool habitat through the conservation of suitable ephemeral pool habitat at a ratio of two acres of conservation for each acre of such habitat directly and permanently disturbed by grading. Conservation of suitable ephemeral pool habitat shall be accomplished by placing a conservation easement on existing pools, either on-site or off-site, or by purchasing credits in an approved conservation bank that has the Friant Community Plan Area within its service boundaries. c. A Section 10(a) 1b permit for take must be acquired from the United States Fish and Wildlife Service, or a Section 7 consultation must be conducted. A 2080 or 2081 Management Agreement with the California Department of Fish and Game may also be needed if the California tiger salamander is listed as a State threatened or endangered species prior to development. d. Prior to issuance of a grading permit for the project site, a Drainage Plan shall be prepared for the site. Elements of this plan shall include: <ul style="list-style-type: none"> ▪ Design plans to ensure that winter stormwater runoff into open space areas of the project site shall mimic to the maximum extent possible pre-project conditions. Upon project completion, surface and subsurface flows of runoff to preserved vernal pools shall be roughly 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>equivalent to pre-project conditions,</p> <ul style="list-style-type: none"> ▪ All runoff originating in developed areas of the site shall pass through retention basins, bio-filtration swales, or both, which shall act together as stormwater filters such that water quality shall not be significantly reduced from pre-project conditions, and ▪ Irrigation runoff from landscaped areas shall be routed away from vernal pool habitats during the summer and fall to ensure that the hydrology of these habitats mimics pre-project conditions, <p>4. If grassland habitat is present on a project site that is capable of supporting aestivating California tiger salamanders (as determined by a qualified biologist), then compensation for the loss of aestivation habitat shall occur prior to issuance of a grading permit. Compensation shall be provided at a ratio of 0.5 acres for each 1 acre removed. Compensation shall be provided by establishing a permanent conservation easement on on-site or off-site grassland habitat that supports aestivating California tiger salamanders or by purchasing credits in an established California tiger salamander Conservation Bank that includes the Friant Community plan within its service area.</p>			
<p>Impact #3.4.9e – Impacts to the Western spadefoot</p>	<p>Mitigation Measure #3.4.9e: To reduce impacts to western spadefoots to a level that is <i>less than significant</i>, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. The western spadefoot utilizes the same habitats as the California tiger salamander for breeding and aestivation (ie, the western spadefoot breeds in 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>vernal pools and aestivates in rodent burrows of surrounding grasslands). Therefore, implementation of mitigation measures for the California tiger salamander (Mitigation Measures 3.4.9d) would reduce the impact to the western spadefoot to a <i>less than significant</i> level.</p>			
<p>Impact #3.4.9f - Impacts to the western pond turtle</p>	<p>Mitigation Measure #3.4.9f: The following measures shall be implemented to ensure that impacts to the western pond turtle are at levels that are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Projects within the Existing Friant Community Plan Area shall maintain a 100 foot construction setback area from the Ordinary High Water Mark of the San Joaquin River (including any backwaters) and from the Ordinary High Water Mark of Lost Lake to protect potential basking sites and upland aestivation sites for the western pond turtle. 2. Projects exceeding one acre in size within the Existing Friant Community Plan Area shall be required to implement a stormwater pollution prevention plan and implement other protective measures as required in mitigation measure 3.4.11b for the protection of downstream water quality. 	Applicant	Fresno County	Prior to construction
<p>Impact #3.4.9g- Impacts to Swainson’s hawks</p>	<p>Mitigation Measure #3.4.9g: The following measures shall be implemented to ensure that impacts to breeding and foraging Swainson’s hawks are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Prior to the issuance of any grading permits exceeding 5 acres in the southern half of the Existing Friant Community Plan Area (exclusive of the Friant Specific Plan Area, Depot Parcel, Beck Property, and Water Treatment Plant and associated pumping facilities), a qualified biologist shall 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>survey the site for Swainson’s hawks. The survey area shall encompass all trees within 0.5 mile of the individual project site. Several projects proposed for construction within a single nesting period may use the results from a single survey, provided the surveyed is conducted within 0.5 mile or more from all individual project boundaries. The survey shall consist of:</p> <p>a. All trees within the survey area suitable for nesting by hawks shall be inspected by a qualified biologist</p> <p>b. Survey periods and survey lengths shall be:</p> <ul style="list-style-type: none"> ▪ Period I. January-March 20. All trees shall be inspected at least once during this period to locate potential nests. The survey(s) may be conducted throughout daylight hours. ▪ Period II. March 20 to April 5. Survey sunrise to 10:00 a.m. and 4:00 p.m. to sunset. Three complete surveys are recommended within this period to locate hawks preparing to nest. ▪ Period III. April 5 to April 20. Survey sunrise to 12:00 p.m. and 4:30 p.m. to Sunset. Three surveys within this period recommended within this period to locate hawks preparing to nest. ▪ Period IV. April 21 to June 10. Monitor known nest sites only. ▪ Period V. June 10 to July 30 (post-fledging). Survey sunrise to 12:00 p.m. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p style="text-align: center;">and 14:00 p.m. to sunset.</p> <ol style="list-style-type: none"> <li>2. If Swainson’s hawks are not found to nest within the survey area, then no further action is warranted. <li>3. If Swainson’s hawks are found to nest within the survey area then the following measures shall be implemented: <ol style="list-style-type: none"> <li>a. Foraging habitat shall be replaced at a ratio of 1 acre of grassland habitat known to provide foraging habitat for Swainson’s hawk for each 1 acre of grassland habitat subject to grading and construction within the Community Plan Area. <li>b. If construction is to occur within the breeding period for Swainson’s hawk (15 February to 15 September), then a 2,500 foot radius no construction area is to be installed around each active Swainson’s hawk nesting site. If a construction area falls within this nesting site, construction must be delayed until the young have fledged (left the nest). The 2,500 foot radius no construction zone may be reduced in size. A qualified biologist must conduct construction monitoring on a daily basis, inspect the nest on a daily basis, and ensure that construction activities do not disrupt breeding behaviors. In no case shall the no construction zone be reduced to less than 500 feet. <li>c. Take of active or inactive Swainson’s hawk nests shall be prohibited within the Existing Community Plan Area. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.4.9h –Impacts to burrowing owls</p>	<p>Mitigation Measure #3.4.9h – The following measures shall be implemented to ensure that impacts to the burrowing owl are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. A pre-construction survey shall be conducted for ground nesting raptors, including burrowing owls, within 14 to 30 days prior to initiation of site grading activities. If the grading activities are implemented in phases, then so shall the surveys be conducted in phases. If more than 30 days lapse between the time of the preconstruction survey (s) and the start of ground-disturbing activities, another preconstruction survey must be completed. This process should be repeated until the habitat is converted (e.g., graded and developed). The survey shall be completed in accordance with the survey requirements detailed in the CDFG’s October 17, 1995 <i>Staff Report on Burrowing Owl Mitigation</i>. 2. If burrowing owls are identified onsite or within the area of influence of the project site (within 250 feet of the project site), an upland mitigation area for burrowing owls shall be established either on or offsite. The mitigation site must be determined to be suitable by a qualified biologist. The size of the required mitigation site shall be based on the number of burrowing owls observed on the project site with a minimum of 6.5 acres preserved per pair of owls or single owl observed using the site. The number of owls for which mitigation is required shall be based on the combined results of the protocol-level survey and the preconstruction surveys (i.e., if two pairs of owls are observed on the project site during the protocol-level survey, the mitigation requirement shall be 2 x 6.5 = 13 acres provided that no more than two pairs of owls are observed during the preconstruction survey; if three pairs of owls are observed during the 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>preconstruction survey, then the mitigation requirement shall be 3 x 6.5 = 19.5 acres). Two natural or artificial nest burrows shall be provided on the mitigation site for each burrow in the project area that shall be rendered biologically unstable.</p> <p>3. If burrowing owls are present on the site and require relocation, an upland mitigation site for burrowing owls shall be designated as provided for in item 2 above. This site may be located within the on-site open space area or it may be located off site. The mitigation site must consist of grassland habitat, contain small mammals (or other prey), and ground squirrel burrows. The mitigation site must be approved by the California Department of Fish and Game. The area shall be preserved in perpetuity as wildlife habitat through a conservation easement that designates the California Department of Fish and Game, or any other qualified conservation organization as the Grantee of the easement. The mitigation area need not be identified prior to finding burrowing owls on the site, however advance planning would reduce the potential for construction delays.</p> <p>4. If a Conservation Easement is established for burrowing owl mitigation, an endowment to cover the management of the area must be provided. The management fund shall be provided by the project applicant to the Grantee of the Conservation Easement within six months of breaking ground on the project site.</p> <p>5. If burrowing owls are present on the project site during the breeding season (peak of the breeding season is April 15 through July 15), and appear to be engaged in nesting behavior, a fenced 250 foot buffer would be required between the nest site(s)</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>(i.e., the active burrow(s)) and any earth-moving activity or other disturbance on the project site. This 250 foot buffer could be removed once it is determined by a qualified biologist that the young have fledged. Typically, the young fledge by August 31st. This date may be earlier than August 31st, or later, and would have to be determined by a qualified biologist. If burrowing owls are present in the non-breeding season a 160 foot buffer area will be established. If construction activities require the removal of an active den, the occupying burrowing owls must be passively relocated from the project site, as approved by the California Department of Fish and Game, passive relocation shall not commence until October 1st and must be completed by February 1st. After passive relocation, the project site and vicinity shall be monitored by a qualified biologist daily for one week and once per week for an additional two weeks to document where the relocated owls move and to ensure that the owls are not reoccupying the project site. A report detailing the results of the relocation and subsequent monitoring shall be submitted to CDFG and the County within two months of the relocation. That report can be incorporated into the monthly monitoring reports as required in item 6 below.</p> <p>6. Monitoring of the project site shall occur on a weekly basis to identify any burrowing owls that may move into the construction area. Monitoring shall be conducted by a qualified biologist provided by the project applicant. Monitoring may be suspended or discontinued if, in the opinion of a qualified biologist, it is determined that suitable habitat for the burrowing owl is absent from the site following mass grading. Monthly reports of monitoring activities shall be submitted by the biologist to the project applicant, the County of</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>Fresno, and the California Department of Fish and Game. A final report of all monitoring application shall be prepared by the biologist and submitted to the project applicant, the County of Fresno, and the California Department of Fish and Game within 90 days of project completion.</p>			
<p>Impact #3.4.9i –Impacts to other nesting raptors</p>	<p>Mitigation Measure #3.4.9i: To protect breeding raptors, the following measures shall be implemented:</p> <p>The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys shall be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 1,000 foot area of influence surrounding the Site. If construction begins between September 2 to February 28, nest surveys shall not be required since this is outside the typical breeding period for raptors.</p> <ol style="list-style-type: none"> 1. The typical breeding period for raptors is March 1 to September 1. If construction commences between March 1 and September 1, surveys will be conducted 30 days prior to the start of construction for the project. The raptor nesting surveys shall include examination of all trees and shrubs on the project site and within a 300 foot area of influence surrounding the Site. If construction begins between September 2 to February 28, nest surveys will not be required since this is outside the typical breeding period for raptors. Surveys need only be performed in areas containing suitable nesting habitat as determined by a qualified biologist. 2. If nesting raptors are identified during the surveys on the project site or within the 300 foot areas of influence, a 300-foot radius buffer around the nest 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>tree or shrub must be fenced with orange construction fencing or rope and flagging. If a nest site is on an adjacent property, the portion of the buffer that occurs on the Site shall be fenced with orange construction fencing. The 300-foot buffer may be reduced in size if a qualified biologist determines through monitoring that the nesting raptors are acclimated to people and disturbance, and otherwise would not be adversely affected by construction activities. The buffer areas shall not be reduced in size to less than a radius of 200 feet. When construction buffers are reduced in size, the biologist shall monitor distress levels of the nesting birds while the birds nest and construction persists. If at any time the nesting raptors show levels of distress that could cause nest failure or abandonment, the qualified biologist shall re-implement the full 300-foot buffer.</p> <p>3. No construction or earth-moving activity shall occur within a non-disturbance buffer until it is determined by a qualified biologist that the young have fledged (that is, left the nest) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by early July, but September 1 is considered the end of the nesting period unless otherwise determined by a qualified biologist. Once raptors have completed nesting and young have fledged, disturbance buffers will no longer be needed and can be removed, and monitoring can be terminated.</p>			
<p>Impact #3.4.9j – Impacts to common and special status nesting birds</p>	<p>Mitigation Measure #3.4.9j: To protect common and special status nesting birds, the following measures shall be implemented:</p> <p>1. A nesting bird survey shall be conducted prior to commencing construction work (including site</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>grading and vegetation removal) if that work would commence between March 15th and August 31st. The nesting bird survey shall be conducted no greater than 30 days prior to commencement of work, nor sooner than 14 days prior to commencement of work. If the construction activities are conducted in phases, then so shall the survey be conducted in phases.</p> <p>2. If special status birds are identified nesting on the construction area or within a 250 foot area of influence, a 150-foot non-disturbance radius around the nest must be fenced using orange plastic construction fencing or rope and stake fencing as previously described (this fencing requirement shall not replace or be constructed in lieu of fencing discussed above for impacts to nesting raptors). No construction or earth-moving activity shall occur within the 150-foot buffer until it is determined by a qualified biologist that the nest is no longer occupied and young have fledged (that is, left the nest and attained sufficient flight skills to avoid project construction activities). This typically occurs by July 1st, but the date may vary, and would need to be confirmed by a qualified biologist. Similarly, the qualified biologist could modify the size of the buffer based upon site conditions and the bird's apparent acclimation to human activities.</p> <p>3. If non-special status birds are identified nesting in any tree or shrub proposed for removal, tree removal would have to be postponed until it is determined by a qualified biologist that the young have fledged and have attained sufficient flight skills to leave the project site. Typically, most passerine birds can be expected to complete nesting by July 1st, with young attaining sufficient flight skills by this date that are sufficient for young to</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>avoid project construction zones. Unless otherwise prescribed for special status bird species, upon completion of nesting no further protection or mitigation measures would be warranted for nesting birds. The mitigation measure shall be implemented by the project applicant and the construction contractor.</p> <p>4. Results of the surveys and monitoring shall be provided in monthly monitoring reports submitted to the project applicant, County of Fresno, and the California Department of Fish and Game.</p>			
<p>Impact #3.4.9k. – Impacts to the American Badger</p>	<p>Mitigation Measure #3.4.9k: The following measures shall be implemented to ensure that impacts to American badgers are <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Pre-construction surveys shall be conducted in development zones no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities, or any project activity likely to impact the American badger. If construction activities (including ground disturbing activities) are phased, then so shall the pre-construction surveys be phased. 2. If dens are found within the construction area and require removal, they shall be monitored for badger presence using a tracking medium or a video probe. Tracking medium must be monitored for 3 consecutive days to provide evidence of vacancy. All dens and burrows within the construction area and which contain badger sign must be hand excavated by a trained wildlife biologist. If a den is found to be occupied by a badger, the den shall not be excavated until the badger is allowed to passively vacate the den. 	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>3. If dens are located within 100 feet of construction areas, but not within construction areas, they shall not be removed. Instead, exclusion fencing shall be constructed around the den (s). The exclusion fencing shall consist of plastic construction fencing held in place by t-posts every 25 feet, or by a rope and flagging fence. The purpose of the fencing is to exclude construction activities occurring near the den (s).</p> <p>4. Project-related vehicles shall observe a 20-mph speed limit while on the project site, except on County roads and State and Federal highways. This is particularly important at night (between sunset and sunrise) when American badgers are most active. Construction activities at night (sunrise to sunset) should be prohibited.</p> <p>5. Off-road construction traffic outside of designated construction areas shall be prohibited.</p> <p>6. To prevent inadvertent entrapment of American badgers or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist or trained monitor.</p> <p>7. In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape. If an entrapped animal is incapable of escaping or is otherwise trapped for an excess of 12 hours, the California Department of Fish and Game should be contacted for advice.</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>8. American badgers are attracted to den-like structures such as pipes and may enter stored pipe, becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored in an unfenced storage yard (see item 4a and b above for appropriate fencing and clearance conditions) for one or more overnight periods should be thoroughly inspected for American badgers before the pipe is subsequently buried, capped, or otherwise used or moved in anyway. Inspections may be conducted by a qualified biologist or trained monitor. If necessary, and under the direct supervision of a biologist, a pipe inhabited by a badger may be moved once to remove it from the path of construction activity, until the animal has escaped.</p> <p>9. During construction, all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers and removed at least once a week from the construction site.</p> <p>10. No firearms shall be allowed on the project site during construction activities.</p>			
<p>Impact #3.4.9I – Impacts to the pallid bat and western mastiff bat</p>	<p>Mitigation Measure # 3.4.9I: Implementation of the following measures shall reduce impacts to the pallid bat and the western mastiff bat to levels that are <i>less than significant</i>:</p> <p>1. Prior to the removal of trees or the demolition of buildings, a qualified biologist shall conduct a pre-construction survey between 14 and 30 days prior to activities, to inspect buildings and trees for the presence of bats. If pallid bats or western mastiff bats are identified to be roosting in the trees or</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>Prior to construction</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>structures, those trees or structures shall not be removed until:</p> <ul style="list-style-type: none"> a. Permanent, elevated bat houses have been installed outside of, but near the construction area. Placement and height shall be determined by a qualified biologist, but the height of bat house shall be at least 15 feet. Bat houses shall be multi-chambered and be purchased or constructed to the specifications provided in Appendix J (bat house design). The number of bat houses required shall be dependant upon the size and number of colonies present, but at least 1 bat house shall be installed for each pair of bats (if occurring individually) or each colony of bats found. b. Bats have been passively relocated from the tree or structure by progressively boarding up any entrances at night while bats are foraging away from the tree or structure. Relocation of bats may not be performed during the breeding season (March 1 to September 15). 			
<p>Impact #3.4.10 – Impacts to riparian habitat or other sensitive natural communities within the Existing Friant Community Plan Area</p>	<p>Mitigation Measure #3.4.10: The following measure shall be implemented to reduce impacts to riparian habitats and other sensitive natural communities to a level that is <i>less than significant</i>:</p> <ul style="list-style-type: none"> 1. The distribution of riparian habitats and other sensitive natural communities within the Existing Friant Community Plan Area shall be mapped prior to issuance of any grading permit. All mapping shall be accomplished using high resolution aerial photographs (1 meter accuracy or better) and be verified by ground inspections using sub-meter GPS. The final map of the distribution of these habitat types shall be rendered using GIS at sub- 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>meter accuracy. All riparian areas and other sensitive natural communities shall be avoided by construction activities, including grading, unless the following measures are implemented prior to site grading:</p> <p>a. The following measures shall be conducted prior to removal of riparian habitat or other sensitive natural community:</p> <ul style="list-style-type: none"> ▪ A Stream Alteration Agreement (SAA) must be obtained prior to removal of riparian habitat, unless it is determined by the California Department of Fish and Game that SAA is not necessary. ▪ For each 1 acre of riparian habitat or other sensitive natural community removed, a total of 3 acres of in-kind habitat shall be acquired by fee title, placed into a permanent conservation easement, and a management endowment provided. Any riparian habitat acquired must be located along the San Joaquin River in Fresno or Madera Counties. ▪ Temporary disturbance to riparian habitat may be mitigated by restoration. A restoration plan must be prepared in cooperation with the California Department of Fish and Game and a SAA must be obtained if required by the California Department of Fish and Game. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.4.11 – Impacts to federally protected wetlands and other waters within the Existing Friant Community Plan Area</p>	<p>Mitigation Measure #3.4.11a: The following measures shall be implemented to reduce impacts to wetlands and other waters to a level that is <i>less than significant</i>:</p> <ol style="list-style-type: none"> 1. Prior to issuing a grading permit for a project within the Existing Friant Community Plan Area, a survey for potential wetlands shall be conducted. If potential wetlands are present, a wetland delineation to ACOE standards shall be conducted for the project site. Either a single wetland delineation can be prepared for the entire Existing Community Plan Area, or individual delineations can be prepared for each project. Regardless, the USACE must verify the delineation(s) and, if necessary, appropriate Clean Water Act 401 and 404 permits be obtained. 2. Prior to the issuance of a grading permit in areas containing jurisdictional wetlands the project applicant shall acquire, or purchase and donate a conservation easement on, suitable off-site lands in Fresno and/or Madera County for the creation/restoration of wetlands and other waters to compensate for any wetlands and other water bodies subject to the jurisdiction of the USACE that are directly and permanently disturbed by grading and construction associated with the project. The creation/restoration of such wetlands and other waters shall be at a ratio of one acre of created/restored wetlands and other jurisdictional waters for each acre of jurisdictional wetlands and other waters directly and permanently disturbed by grading and construction associated with the project development. Creation/restoration of wetland habitat and other water bodies shall be accomplished by one or a combination of the following two mitigation alternatives: <ol style="list-style-type: none"> a. Off-Site Creation/Restoration. The Project 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>applicant shall conserve through acquisition or conservation easement, off-site lands suitable for the creation/restoration of wetlands and other water bodies in Fresno, Madera, or Merced County. Such lands shall have the following characteristics: natural undisturbed native wetlands and habitat suitable for threatened and endangered plant and animal species shall be absent (i.e., these lands shall have been previously disturbed by farming, or some other intensive human use); native wetlands and/or other water bodies once occurred on these lands naturally; the soils and hydrology of these lands are suitable for the creation of naturally occurring wetlands and other water bodies; and the natural topography has not been eliminated through land leveling. Topographic depressions, swales and naturalistic drainage channels shall be created/restored on these lands according to a “mitigation and monitoring plan” prepared by a qualified biologist. These engineered features must be inundated and/or experience soil saturation for a duration sufficient to naturally support hydrophytic vegetation native to wetlands of the region. All engineered wetlands and other water bodies shall be revegetated with native hydrophytic species. The wetland creation/restoration plan prepared by the biologist shall provide for long-term management of the mitigation site, mitigation objectives by which the success of the mitigation can be measured, and a monitoring plan for determining the success of the mitigation. The components of this mitigation and monitoring plan shall be consistent with standard USACE guidelines.</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<ul style="list-style-type: none"> b. Purchase of Wetland Creation Credits from a Conservation Bank. The Project applicant shall pay the market rate for Wetland Creation Credits at a 1:1 ratio from a Conservation Bank whose service area includes the Friant Community Plan Area. 			
<p>Impact #3.4.11b - Impacts to water quality in seasonal creeks, reservoirs, and other downstream waters</p>	<p>Mitigation Measure #3.4.11b: To ensure protection of water quality in the San Joaquin River and other downstream waters, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. Prior to the onset of construction which would disturb one acre or more, an erosion control plan shall be prepared by a qualified engineer consistent with the requirements of a Fresno County grading permit and a General Construction Permit (an NPDES permit issued by the Regional Water Quality Control Board for projects in which one or more acres of land are graded). Typically, specified erosion control measures must be implemented prior to the onset of the rainy season. Each project site must then be monitored periodically throughout the rainy season to ensure that the erosion control measures are successfully preventing on-site erosion and the associated deposition of sediment off the project site. Elements of this plan would address both the potential for soil erosion and non-point source pollution. At a minimum, elements of an erosion control plan typically include: <ul style="list-style-type: none"> a. Protection of exposed graded slopes from sheet, rill and gully erosion. Such protection could be in the form of erosion control fabric, hydromulch containing the seed of native soil-binding plants, straw mechanically imbedded in exposed soils, or some combination of the three. 	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<ul style="list-style-type: none"> <li>b. Protection of natural drainage channels from sedimentation. <li>c. Use of best management practices (BMPs) to control soil erosion and non-point source pollution. BMPs may include measures in 1 and 2 above, but they may include any number of additional measures appropriate for this particular project site and this particular project, including grease traps in parking lots, landscape management practices to reduce the use of pesticides and herbicides, the discharge of stormwater runoff from “hardscapes” into grassy swales, regular site inspections for pollutants that could be carried by runoff into natural drainages, etc. <ul style="list-style-type: none"> <li>2. Where possible, project construction should be confined to the dry season, when the chance for significant rainfall and stormwater runoff is very low. Construction during the spring, summer, and fall shall not eliminate the need to implement erosion control measures described in mitigation measures above, but shall ensure that the threat of soil erosion has been minimized to the maximum extent possible. <li>3. All post-construction runoff shall be routed through a system of grease traps, stormwater retention/detention basins, and bio-filtration swales to ensure that water quality of on-site and off-site wetlands, creeks and rivers are maintained at roughly pre-project levels. 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
Impact #3.4.12 – Impacts to Fish or Wildlife Movement Corridors within the Existing Friant Community Plan Area	Mitigation Measure #3.4.12: Implementation of mitigation measures 3.4.10, 3.4.11a and 3.4.11b shall ensure that the riparian zone around the San Joaquin River and water quality in the San Joaquin River are maintained at level that are appropriate for fish and wildlife migratory movements. No other mitigation measures are warranted.	Applicant	Fresno County	Prior to construction
Impact #3.4.13 – Consistency with local policies or ordinances protecting biological resources within the Friant Community Plan Area	Mitigation Measure #3.4.13a: Mitigation Measures to Ensure Consistency with Local Policies or Ordinances Protecting Biological Resources: Implementation of mitigation measures 3.4.9a through 3.4.9l shall compensate for potential loss of foraging and/or breeding habitat for special status plant and wildlife species. Mitigation Measures #3.4.10, #3.4.11a and #3.4.11b provide for protection and compensation of riparian and wetland habitats potentially affected by projects within the Existing Friant Community Plan Area, and mitigation for potential impacts to water quality downstream of projects. These measures shall also serve to maintain habitat functions and values in riparian and wetland areas and control siltation and pollutant entry into these habitats. Along with mitigation measures prescribed in Chapter 3.8 of this EIR, “Hydrology and Water Quality”, the mitigation measures just described shall ensure consistency with local ordinances and policies, including the County General Plan Policies.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.4.13a: Implementation of the various mitigation measures described in the preceding paragraph required for projects within the Existing Friant Community Plan Area shall ensure compliance with County General Plan Policies.	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>Mitigation Measure #3.4.13b: To ensure compliance with State and local ordinances protecting oak trees and oak woodland habitat, the following measure shall be implemented:</p> <p>Replanting of individual oak trees removed: To compensate for individual oak trees removed by project construction, oaks will be replanted at a ratio of 1:2 for every oak removed, or compensation will be in the form of contribution of funds to the Oak Woodlands Conservation Fund.(Section 1363 of the Fish and Game Code), or some combination of these.</p>	Applicant	Fresno County	Prior to construction
<p>Impact #3.5.1 – Substantial Adverse Changes in the Significance of Historical and/ or Archaeological Resources and Destruction of Unique Paleontological Resources</p>	<p>Mitigation Measure #3.5.1a: Given that excavation is ultimately destructive and avoidance is generally the preferred alternative and consistent with Fresno County General Plan policy, the preferred mitigation is that the significant cultural resource site (CA-FRE-2653) be placed within a development exclusion zone, thus avoiding impacts to the significant cultural resource site (CA-FRE-2653). Subsurface testing suggests that the cultural deposit is contained within a limited area, which roughly coincides with the identified midden deposit and the area of bedrock milling features. Prior to issuance of a grading permit affecting the area surrounding the significant cultural resource site (CA-FRE-2653), the developer shall do one of the following:</p> <p>3.5.1a(1): Retain a qualified archaeologist to identify and mark the boundaries of the cultural deposit so that it is avoided during construction. The significant cultural resource site (CA-FRE-2653) shall be included within a designed open space within the Friant Ranch Specific Plan Area, which may include interpretive information regarding the archaeological site; or</p> <p>3.5.1a(2): If avoidance of the significant cultural resource site (CA-FRE-2653) through design, during</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>construction activities, and long-term protection are not feasible, then treatment of significant effects on the site(s) shall be accomplished through a program of controlled data recovery. A qualified archaeologist shall meet at the site and review the development plans vis-à-vis the significant cultural resource site (CA-FRE-2653) area and put together a data recovery plan (Phase III) to recover the information that would be lost as a result of Project development. The archaeologist shall excavate the significant cultural resource site (CA-FRE-2653) and recover the materials that would otherwise be destroyed. The bedrock milling features shall be thoroughly documented; therefore any adverse impacts as a result of disturbance to these features would be mitigated. Such work is designed to compensate for the impacts of the Project by collecting a representative sample of the cultural remains and other data that would otherwise be destroyed.</p>			
	<p>Mitigation Measure #3.5.1b: A qualified archaeologist and a member of the Dumna Wo-Wah Tribal Government shall be retained by the developer to monitor construction activities around the significant cultural resource site (CA-FRE-2653) to ensure that there is no impact to any significant cultural resource. Prior to construction, the developer shall consult with a designated representative of the Dumna Wo-Wah Tribal Government on the appropriate course of action to be taken should unanticipated cultural materials, and specifically human remains, be discovered during construction.</p>	Applicant	Fresno County	Prior to construction
	<p>Mitigation Measure #3.5.1c: Cultural resource sites protected pursuant to mitigation measure 3.5.1a(1) shall be protected after development from vandalism, illicit excavation or artifact collection. The County shall discuss measures for long-term protection with the Dumna Wo-Wah Tribal Government, and an appropriate</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>plan for permanent protection of the resource shall be instituted by the developer prior to issuance of building permits for the Friant Ranch Specific Plan. The final plan could include any or all of the following: permanent fencing; funding for permanent maintenance of the fencing; annual or semi-annual monitoring by archaeologists and/or by the Dumna Wo-Wah Tribal Government with reports filed with the County and other agencies; acquisition of the site by a group such as the Archaeological Conservancy.</p>			
	<p>Mitigation Measure #3.5.1d: During construction within the Friant Ranch Specific Plan Area, protected cultural resource sites (including CA-FRE-2651, -2652, -2653) shall be protected from vandalism, illicit excavation or artifact collection, or inadvertent direct impact. This may be accomplished in part through the installation of orange protective fencing prior to initiation of any construction activities within 200 feet of the site area.</p>	Applicant	Fresno County	Prior to construction
	<p>Mitigation Measure #3.5.1e: If unknown cultural resources are discovered during Project construction, all work in the area of the find shall cease, and a qualified archaeologist and a member of the Dumna Wo-Wah Tribal Government shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50 feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall</p>	Applicant	Fresno County	During construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.			
	Mitigation Measure #3.5.1f: Construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the Project Area, and shall be instructed in the identification of artifacts, bone and other potential resources. For any construction within the Project area, all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.	Applicant	Fresno County	Prior to construction
	Mitigation Measure #3.5.1g: If unknown cultural resources are discovered during future development in the existing Friant Community Plan Area, including the Depot parcel, all work in the area of the find shall cease, and a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor shall be retained by the developer, and approved by the County, to assess the significance of the find, make recommendations on its disposition, and prepare appropriate field documentation, including verification of the completion of required mitigation. If archaeological or paleontological resources are discovered during earth moving activities, all construction activities within 50	Applicant	Fresno County	Prior to and during construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>feet of the find shall cease until the archaeologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist, as appropriate, shall prepare a research design for recovery of the resource in consultation with SHPO that satisfies the requirements of Public Resources Code Section 21083.2. The archaeologist shall complete a report of the excavations and findings. Upon approval of the report, the developer shall submit the report to the regional office of the California Historical Resources Information System and Fresno County.</p>			
	<p>Mitigation Measure #3.5.1h: Future construction personnel shall be informed of the potential for encountering significant archaeological or paleontological resources within the existing Friant Community Plan Area (other than Friant Depot Parcel and Friant Ranch Specific Plan Area), and shall be instructed in the identification of artifacts, bone and other potential resources. For any future construction within the existing Friant Community Plan Area (other than Friant Depot Parcel and Friant Ranch Specific Plan Area), all construction personnel shall be informed of the need to stop work on the construction site until a qualified archaeologist and a Dumna Wo-Wah Tribal Government Monitor has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel shall also be informed that unauthorized collection of cultural resources is prohibited.</p>	Applicant	Fresno County	Prior to construction

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
Impact #3.5.2 – Disturbance of Human Remains	Mitigation Measure #3.5.2: If human remains are encountered during Project construction, all work shall cease within 50 feet of the find and the Fresno County Coroner’s Office shall be contacted and procedures implemented pursuant to California Public Resources Code Section 5097 et seq. and California Health and Safety Code Sections 7050.5, 7051, and 7054 with respect to treatment and removal, Native American involvement, burial treatment, and re-burial, if necessary.	Applicant	Fresno County	Prior to and during construction
Impact #3.7.6 – Emergency Preparedness	Mitigation Measure #3.7.6a: Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a Community Facilities District shall be formed to provide funding for additional fire protection services in the Project Area sufficient to satisfy the standards set forth in the Fresno County Health and Safety Element.	Applicant	Fresno County	Prior to issuance of a building permit
	Mitigation Measure #3.7.6b: Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD shall be established to provide the funding necessary to maintain adequate law enforcement staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-G.2 and PF-G.4. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.	Applicant	Fresno County	Prior to issuance of a building permit
Impact #3.8.3 – Alteration of the Existing Drainage Pattern and Stormwater Drainage Capacity	Mitigation Measure #3.8.3a: Storm drain design for the Friant Ranch Specific Plan portion of the Project shall be in accordance with approved LID management practices, as recommended in the Friant Ranch IMP and its appendices. The suggested management practices include but are not limited to the following:	Applicant	Fresno County	Prior to issuance of building permit

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>1. LID IMPs:</p> <ul style="list-style-type: none"> a) Bioretention (Rain Gardens) – A practice using landscaped areas on individual lots to hold and infiltrate stormwater. b) Dry Well – Small excavated trenches backfilled with stone, designed to hold and slowly release rooftop runoff. c) Filter/Buffer Strip – Bands of close-growing vegetation, usually grass, planted between pollutant source areas and a downstream receiving water body. d) Swales – Two types of swales may be used. Grass swales provide both quantity (volume) and quality control by facilitating stormwater infiltration. Wet swales use residence time and natural growth to reduce peak discharge and provide water quality treatment before discharge to a downstream location. e) Infiltration Trench – An excavated trench that has been backfilled with stone to form a subsurface basin. Stormwater runoff is diverted into the trench and is stored until it can be infiltrated into the soil. f) Pervious Concrete – A special structural concrete without fine aggregates. This creates 15 to 30 percent voids, allowing water to pass through to a gravel layer and the native soil underneath while maintaining the structural strength of standard concrete pavement. Pervious concrete also provides demonstrable water quality treatment to the waters passing 			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p style="text-align: center;">through its structure.</p> <p>2. Inlet and Outlet Structures:</p> <p>Inlet and Outlet Structures shall be a type and configuration rated to accept the SDMP design flow at the inlet and outlet locations shown on the SDMP.</p> <p>3. Pipelines:</p> <p>Storm drain pipeline design shall conform to the Storm Drain Master Plan (SDMP). Pipeline soffits shall be designed a minimum of one (1) foot below the hydraulic grade line (HGL) or to the soffit control elevation shown in the hydraulic calculations. The design of the storm drain pipeline below the HGL insures full pipe flow and reduces the chance of water seal breaks in the pipe and other hydraulic inefficiencies during pipeline use. Design of pipeline below the soffit control elevation insures proper pipeline performance in sections of the pipe where flow is in the open channel condition due to steep grade construction.</p> <p>4. Culverts and Open Channels:</p> <p>Culverts and open channels shall be designed to the standards of the Federal Highway Administration Hydraulic Design of Highway Culverts (HDS-5, September 2001 or current) and the Fresno County Design Standards. The culverts and channels shall be designed to convey the critical storm event for the Friant Ranch project.</p> <p>5. Detention & Retention Basins:</p> <p>Detention and Retention basin design calculations</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>and minimum basin geometries are provided in Appendix A of the IMP (see Appendix N). The basin geometry for each watershed differs depending on many factors, including the contributing drainage area and the design flow volume. Retention basins are designed to maintain the predevelopment runoff volume by storing the peak storm runoff above a base flow; retention basins in this case have also been sized to provide the storage volume necessary to give the detention time required for water quality control.</p> <p>Detention basin storage is designed to maintain the predevelopment peak runoff rate while capturing all runoff above that amount.</p> <p>Conceptual basin locations are shown in the SDMP. These locations have been selected to work with the existing ground topography and the overall master-planned drainage concept. Exact basin locations shall be determined by the developer, after precise site layouts are determined. The basins shall be permitted to shift, so long as the function provided for in the SDMP is maintained, or appropriate modifications are made to the SDMP as discussed above.</p> <p>Prior to issuance of a grading permit for the Friant Ranch Specific Plan, the Fresno County Engineering Department shall review the project detention and retention basin designs for conformance with the basin calculations and conformance with the basin design guidelines provided in the Friant Ranch IMP.</p>			

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
Impact #3.10.1 – Exposure to Excessive Noise Levels or Vibration	<p>Mitigation Measure #3.10.1a:</p> <ol style="list-style-type: none"> 1. Prior to issuance of any grading permit for new public and private development proposals within the Friant Community Plan Area, the County shall review the proposal to determine conformance with the policies of the Fresno County General Plan and the Friant Community Plan. 2. Where the development of any future project within the Friant Community Plan Area (other than the Friant Ranch Specific Plan Area and Depot Parcel) may result in noise sensitive land uses being exposed to existing or projected future noise levels exceeding the levels specified by the policies of the General Plan and Community Plan, the County shall require that an acoustical analysis be submitted as part of the entitlement application that designates that adequate noise mitigation is included in the project design to comply with County standards. 3. Prior to issuance of a grading permit for proposed development within the Friant Community Plan Area (other than the Friant Ranch Specific Plan Area and Depot Parcel), site-specific acoustical analyses shall be conducted to determine setbacks and any other feasible mitigation measures (e.g. berms, site design, location of structures, noise walls/barriers) required to reduce traffic noise to levels that meet County design standards and comply with the Fresno County Noise Ordinance. 	Applicant	Fresno County	Prior to and during construction
Impact #3.10.2 – Construction Noise	<p>Mitigation Measure #3.10.2a: Construction projects and any other noise generators shall be regulated by the standards identified in Chapter 8.40 of the Fresno County Ordinance Code.</p>	Applicant	Fresno County	On going

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	Mitigation Measure #3.10.2b: Effective mufflers shall be fitted to gas- and diesel-powered equipment to reduce noise levels as much as practicable.	Applicant	Fresno County	On going
	Mitigation Measure #3.10.2c: All construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 7:00 a.m. to 5:00 p.m., Saturday and Sunday.	Applicant	Fresno County	On going
Impact #3.12.1 – Increased Demand for Fire Protection Services and Personnel	Mitigation Measure #3.12.1: Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD shall be established to provide the funding necessary to maintain adequate staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-H.2, PF-H.5 and PF-H.8. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.	Applicant	Fresno County	Prior to issuance of building permit
Impact #3.12.2 – Increased Demand for Law Enforcement Services	Mitigation Measure #3.12.2: Prior to issuance of a building permit for construction within the Friant Ranch Specific Plan Area, a CFD shall be established to provide the funding necessary to maintain adequate staffing and facilities to serve the Friant Ranch Specific Plan Area consistent with the standards set forth in the Fresno County General Plan policy PF-G.2 and PF-G.4. The CFD shall be structured to provide initial capital contribution through a per-unit fee and thereafter impose a special tax assessment within the CFD boundaries to fund ongoing operations and maintenance.	Applicant	Fresno County	Prior to issuance of building permit
Impact #3.13-1 (TR-20): The Project will cause the level of service to fall below the minimum acceptable level of service	Mitigation Measure #3.13-1 (TR-20): The Project shall construct traffic signals at the intersection of Friant Road and the Site Access intersection north of Lost Lake Road prior to construction of the 201 st residential unit and prior to the construction of any commercial/office	Applicant	Fresno County	The applicant shall post the funds required for the signal prior to construction of the 201 st residential unit and prior to the construction of any

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
at the intersection of Friant Road and the Site Access north of Lost Lake Road.	aspects of the Project if an engineering study indicates that the signals are warranted at that time. The applicant shall utilize the services of a traffic engineer to determine if traffic signals are warranted based on CMUTCD traffic signal warrants. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall install traffic signals at the intersection when they are warranted at the discretion of the Director.			commercial/office aspects of the Project if an engineering study indicates that the signals are warranted at that time. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall install traffic signals at the intersection when they are warranted at the discretion of the Director.
<p>Impact #3.13-2 (TR-6): The Project will cause the level of service to fall below the minimum acceptable level of service at the intersection of Friant Road and Lost Lake Road.</p>	<p>Mitigation Measure #3.13-2 (TR-6): The Project shall construct traffic signals at the intersection of Friant Road and Lost Lake Road prior to construction of the 201st residential unit and prior to the construction of any commercial/office aspects of the Project if an engineering study indicates that signals are warranted at that time. The applicant shall utilize the services of a traffic engineer to determine if traffic signals are warranted based on CMUTCD traffic signal warrants. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall install traffic signals at the intersection when they are warranted at the discretion of the Director.</p>	Applicant	Fresno County	The applicant shall post the funds required for the signal prior to construction of the 201 st residential unit and prior to the construction of any commercial/office aspects of the Project if an engineering study indicates that the signals are warranted at that time. If traffic signals are not warranted, then traffic signals shall not be installed and an engineering study shall be performed at the discretion of the Director prior to each subsequent interval of 200 dwelling units and prior to each phase of commercial construction. The Project shall

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
				install traffic signals at the intersection when they are warranted at the discretion of the Director.
<p>Impact #3.13-3: The Project will contribute to the following deficiencies to Caltrans intersections:</p>	<p>Mitigation Measure #3.13-3: Prior to issuance of a building permit, the applicant shall contribute to its pro rata share of the cost of future off-site traffic improvements to Caltrans intersections through payment of a per trip fee to Caltrans. If Caltrans has not established a per trip fee prior to issuance of a building permit, the applicant shall contribute a fair share fee to the County for the identified improvements based on the then-current estimated traffic volume attributable to the Project. If the Measure C Regional Transportation Mitigation Fee program establishes a fair share fee for an intersection(s) identified above, the applicant may satisfy this mitigation requirement through payment of said fee. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The traffic improvements and current Caltrans fees or estimated percentage of the 2030 cumulative traffic volume are as follows:</p>			
<p>Impact #3.13-3a (TR-1): The Project will exacerbate anticipated delays and a cumulative LOS that will fall below the minimum acceptable LOS in the 2030 condition without the Project at the intersection of SR 41 and Road 145 under the 2030 cumulative condition</p>	<p>Mitigation Measure #3.13-3a (TR-1): The intersection of SR 41 and Road 145 should be converted to an interchange by the year 2030. Caltrans has not established a set fee for this intersection at this time. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	shown in Table 3.13-22) is 3.2%.			
<p>Impact #3.13-3b (TR-2): The Project will exacerbate existing delays and an existing LOS already below the minimum acceptable LOS at the intersection of SR 41 and Avenue 12, and is expected to exacerbate a cumulative LOS that will fall below the acceptable LOS in the anticipated 2030 cumulative condition without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-3b (TR-2): The intersection of SR 41 and Avenue 12 should be converted to an interchange by the year 2030. The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small total peak hour traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 0.5%.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-3c (TR-3): The Project will exacerbate an existing LOS already below the minimum acceptable LOS at the intersection of SR 41 and Avenue 15, and is expected to exacerbate a cumulative LOS that will fall below the acceptable</p>	<p>Mitigation Measure #3.13-3c (TR-3): The intersection of SR 41 and Avenue 15 should be converted to an interchange by the year 2030. The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
LOS in the anticipated 2030 cumulative condition without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. For those improvements to Caltrans roadways that fall within Madera County, which are covered by the Madera County fee program, the applicant may satisfy this mitigation requirement through an agreement with Madera County for participation in the Madera County fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 0.8 %.			
Impact #3.13-3d (TR-11): The Project will exacerbate a cumulative LOS anticipated to fall below the minimum acceptable LOS in the 2030 cumulative condition without the Project at the intersection of Friant Road and the SR 41 northbound off ramp. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	Mitigation Measure #3.13-3d (TR-11): The intersection of Friant Road and the State Route 41 northbound offramp is expected to operate at LOS C with the addition of a fifth westbound through lane. It is contemplated that a future Measure C Regional Transportation Mitigation Fee program may include mitigation for this intersection. Caltrans typically collects per-trip fees for this interchange as follows: <ul style="list-style-type: none"> ▪ Widen Friant Road under SR 41 with four additional lanes, \$900 per trip; ▪ SR 41 northbound on ramp from eastbound Friant Road: additional ramp lane and auxiliary lane, \$757 per trip; and ▪ SR 41 northbound on ramp from westbound Friant Road: additional ramp lane and auxiliary lane, \$1,300 per trip. 	Applicant	Fresno County	As determined by Fresno County
Impact #3.13-3e (TR-12): The Project will exacerbate anticipated delays and unacceptable LOS in the cumulative 2030 No Project condition at the intersection of Friant Road and SR 41	Mitigation Measure #3.13-3e (TR-12): The intersection of Friant Road and the State Route 41 southbound offramp is expected to operate at LOS C with the addition of a second southbound left-turn lane and a second southbound right-turn lane. It is contemplated that a future Measure C Regional Transportation Mitigation Fee program may include mitigation for this intersection. Caltrans typically	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
southbound off ramp. The Project's contribution to the anticipated cumulative condition is cumulatively considerable. The Project shall have an individually and cumulatively significant impact on this intersection.	<p>collects per-trip fees for this interchange as follows:</p> <ul style="list-style-type: none"> ▪ Widen Friant Road under SR 41 with four additional lanes, \$900 per trip; ▪ SR 41 southbound on ramp from westbound Friant Road: additional ramp lane and auxiliary lane, \$1,200 per trip; ▪ SR 41 southbound on ramp from eastbound Friant Road: additional ramp lane and auxiliary lane, \$1,200 per trip; and ▪ SR 41 southbound off ramp to Friant Road: additional ramp lane and auxiliary lane, \$834 per trip. 			
Impact #3.13-4: The Project will contribute to the following deficiencies to Madera County intersections and roadways:	Mitigation Measure #3.13-4: Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements necessary to accommodate the 2030 cumulative condition through payment of a fair share fee to Fresno County and/or Madera County as appropriate. The traffic improvements and, where an improvement is identified, the estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23) are as follows:	Applicant	Fresno County	As determined by Fresno County
Impact #3.13-4a (TR-4): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition at the intersection of Road 145 and Road 206. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	Mitigation Measure #3.13.4a (TR-4): The intersection of Road 145 and Road 206 will require signalization with two northbound left-turn lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 7.2 %.	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13.4b (TR-34): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition on the Madera County segment of Road 206, including the bridge, west of Friant Road. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13.4b (TR-34): The Madera County segment of Road 206, including the bridge, west of Friant Road should be widened to four lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) is 17.1%.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-5: The Project will contribute to the following deficiencies to Fresno County* intersections and roadways:</p>	<p>Mitigation Measure #3.13-5: Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and, where an improvement is identified, the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23) are as follows:</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-5a (TR-5): The Project will contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and North Fork Road (Road 206) under the 2030 no Project condition. The Project's</p>	<p>Mitigation Measure #3.13-5a (TR-5): The intersection of Friant Road and North Fork Road (Road 206) should be signalized to achieve an acceptable level of service (LOS C). The ultimate lane configurations required are as follows:</p> <p>Northbound: two left-turn lanes and two through lanes with a shared right turn</p> <p>Southbound: one left-turn lane, two through lanes, and one right-turn lane</p> <p>Eastbound: two left-turn lanes, one through lane, and two right-turn lanes</p> <p>Westbound: one left-turn lane and one shared</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p style="text-align: center;">through/right-turn lane</p> <p>The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 17.2%. This signalization shall also provide an opportunity to satisfy the Friant Community Plan Policy 1.6 which states, <i>“Identify key locations for safe pedestrian access across Friant Road and install crosswalks, signage, lighting, traffic signals, and/or pedestrian signals, as warranted.”</i></p>			
<p>Impact #3.13-5b (TR-6): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and Lost Lake Road under the 2030 no Project condition. The Project’s contribution to the anticipated cumulative condition is cumulatively considerable. However, mitigation measure 3.13-1a requires the applicant to construct the requisite improvement.</p>	<p>Mitigation Measure #3.13-5b (TR-6): No additional mitigation required. See Mitigation Measure 3.13-1.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
Construction of the intersection will achieve a LOS B with the cumulative condition plus Project and thus reduce the Project's contribution to less than cumulatively considerable.				
<p>Impact #3.13-5c (TR-7): The Project will contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Friant Road and Willow Avenue under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5c (TR-7): Signalization of the intersection of Friant Road and Willow Avenue to achieve an acceptable level of service (LOS B). The ultimate lane configurations required are as follows:</p> <p>Northbound: one left-turn lane (protected), two through lanes, and one right-turn lane</p> <p>Southbound: two left-turn lanes (protected), two through lanes with a shared right turn</p> <p>Eastbound: one shared lane (permissive)</p> <p>Westbound: one shared left-turn/through lane (permissive) and one right-turn lane</p> <p>The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 29.6%.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-5d (TR-13): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Winchell Cove Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5d (TR-13): Signalization of Millerton Road and Winchell Cove Road and widening of Millerton Road to four lanes at this intersection is needed to achieve appropriate levels of service to accommodate the 2030 cumulative condition plus the Project. Mitigation Measure 3.13-5n requires payment of a fair share fee for the widening of Millerton Road between North Fork Road (Road 206) and Sky Harbour Road. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 3.3%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-5e (TR-14): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Brighton Crest Drive under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5e (TR-14): The intersection of Millerton Road and Brighton Crest Drive should be signalized and Millerton Road should be widened to four lanes to accommodate the 2030 cumulative condition plus Project. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 3.7%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-5f (TR-15): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Sky</p>	<p>Mitigation Measure #3.13-5f (TR-15): The intersection of Millerton Road and Sky Harbour Road should be signalized and Millerton Road should be widened to four lanes to provide an acceptable level of service (LOS A) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Harbour Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>3.13-22) is 2.9%. The Measure C Tier 2 Rural project plans to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road. However, the Tier 2 projects are not yet funded.</p>			
<p>Impact #3.13-5g (TR-16): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Table Mountain Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5g (TR-16): The intersection of Millerton Road and Table Mountain Road should be signalized and Millerton Road should be widened to four lanes. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 2.1%.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-5h (TR-17): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Millerton Road and Auberry Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5h (TR-17): The intersection of Millerton Road and Auberry Road should be signalized. The intersection will likely require either two northbound left turn lanes on Millerton Road or an extended single left-turn lane to accommodate queues up to approximately 600 feet in length in the ultimate condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 1.8%.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-5i (TR-18): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Copper Avenue and Auberry Road under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5i (TR-18): The intersection of Copper Avenue and Auberry Road should be signalized to provide an acceptable level of service (LOS B) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22 is 0.7%. The ultimate lane configurations required are as follows:</p> <p>Southbound: one left-turn lane and one right-turn lane Eastbound: two left-turn lanes and two through lanes Westbound: two through lanes with a shared right turn.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-5j (TR-21): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS at the intersection of Willow and Copper Avenues under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5j (TR-21): The intersection of Willow and Copper Avenues should be signalized to provide an acceptable level of service (LOS D) under the 2030 condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 10.6%. The additional lanes on Willow Avenue are included in the Measure C Tier 1 Urban project to widen Willow Avenue to six lanes between Copper Avenue and Barstow Avenue.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-5k (TR-27): The Project will contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable</p>	<p>Mitigation Measure #3.13-5k (TR-27): None feasible. Friant Road between North Fork Road (Road 206) and Lost Lake Road requires six lanes to achieve an acceptable LOS (LOS C or better). Widening this segment of Friant Road to six lanes is not feasible due to the physical constraints of the adjacent land uses and the Fresno County General Plan policy that prohibits six lane rural roadways. Although the Measure C Tier 1</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>LOS under the 2030 no Project condition at the following County of Fresno segments of Friant Road:</p> <ul style="list-style-type: none"> ▪ Between North Fork Road (Road 206) and Parker Avenue; ▪ Between Parker and Granite Avenues; ▪ Between Granite and Root Avenues; and ▪ Between Root Avenue and Lost Lake Road. <p>The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Rural project widening Friant Road to four lanes between Copper Avenue and Millerton will partially mitigate this impact, the impact will remain <i>significant and unavoidable</i>.</p>			
<p>Impact #3.13-51 (TR-30): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Willow Avenue between Friant Road and Silaxo Avenue. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-51 (TR-30): Willow Avenue should be widened to four lanes between Friant Road and Silaxo Avenue to provide an acceptable level of service (LOS B) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) is 18.9%.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-5m (TR-31): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Willow Avenue between Silaxo Avenue and Copper Avenue. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5m (TR-31): Willow Avenue should be widened to four lanes between Silaxo Avenue and Copper Avenue to provide an acceptable level of service (LOS B or better) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) is 18.9%.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-5n (TR-33): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition on Millerton Road at the following locations:</p> <ul style="list-style-type: none"> ▪ Between North Fork Road (Road 206) and Winchell Cove Road; ▪ Between Winchell Cove Road and Brighton Crest Drive; ▪ Between Brighton Crest Drive and Sky Harbour Road; ▪ Between Sky Harbour Road and Table Mountain Road; ▪ Between Table 	<p>Mitigation Measure #3.13-5n (TR-33): Millerton Road should be widened to four lanes between Road 206 and Sky Harbour Road to provide LOS C or better. The Measure C Tier 2 Rural project to widen Millerton Road to four lanes between North Fork Road (Road 206) and Sky Harbour Road would mitigate a portion of the impact. However, the Tier 2 projects are not yet funded. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) for the segment from Road 206 to Winchell Cove is 4.8%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) for the segment from Winchell Cove to Brighton Crest is 4.0%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) for the segment from Brighton Crest to Sky Harbour is 3.2%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) for the segment from Sky Harbour to Table Mountain is 2.4%. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) for the segment</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Mountain Road and Auberry Road.</p> <p>The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>from Table Mountain to Auberry is 2.0%.</p>			
<p>Impact #3.13-5o (TR-34): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable LOS in the anticipated 2030 No Project condition on the Fresno County segment of Road 206, including the bridge, west of Friant Road. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-5o (TR-34): Road 206, including the bridge, west of Friant Road for the Fresno County segment should be widened to four lanes to provide an acceptable level of service (LOS C or better) under the 2030 cumulative condition. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) is 17.1%.</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>As determined by Fresno County</p>
<p>Impact #3.13-5p (TR-35): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Parker Avenue. However, traffic signal warrants on Parker Avenue are not satisfied at this unsignalized intersection.</p>	<p>Mitigation Measure #3.13-5p (TR-35): None feasible. Peak-hour traffic signal warrants for Parker Avenue are not expected to be satisfied at the intersection. The County may consider constructing a median to prevent left turns from Parker Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants on Parker Avenue are not satisfied and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain <i>adverse but not significant</i>.</p>	<p>Applicant</p>	<p>Fresno County</p>	<p>As determined by Fresno County</p>

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>As explained on page 3-282 of this EIR, traffic impacts are considered “adverse but not significant” if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic volume does not satisfy traffic signal warrants. As such, the Project’s contribution to the anticipated cumulative condition is <i>adverse but not significant</i>.</p>				
<p>Impact #3.13-5q (TR-36): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Granite Avenue. However, traffic signal warrants on Granite Avenue are not satisfied at this unsignalized intersection. As explained on page 3-282 of this EIR, traffic impacts are considered “adverse but not significant” if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic</p>	<p>Mitigation Measure #3.13-5q (TR-36): None feasible. Peak-hour traffic signal warrants are not expected to be satisfied at the intersection on Granite Avenue. The County may consider constructing a median to prevent left turns from Granite Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants are not satisfied on Granite Avenue and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain <i>adverse but not significant</i>.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>volume does not satisfy traffic signal warrants. As such, the Project's contribution to the anticipated cumulative condition is <i>adverse but not significant</i>.</p>				
<p>Impact #3.13-5r (TR-37): The Project will exacerbate a cumulative LOS that will fall below the minimum acceptable level of service in the anticipated 2030 No Project condition at the intersection of Friant Road and Root Avenue. However, traffic signal warrants on Root Avenue are not satisfied at this unsignalized intersection. As explained on page 3-282 of this EIR, traffic impacts are considered "adverse but not significant" if the LOS standard at an unsignalized intersection is exceeded, but the projected traffic volume does not satisfy traffic signal warrants. As such, the Project's contribution to the anticipated cumulative condition is <i>adverse but not significant</i>.</p>	<p>Mitigation Measure #3.13-5r (TR-37): None feasible. Peak-hour traffic signal warrants on Root Avenue are not expected to be satisfied at the intersection. The County may consider constructing a median to prevent left turns from Root Avenue; however, current plans are to construct a full-access intersection. Since traffic signal warrants on Root Avenue are not satisfied and it is desirable to maintain access at the intersection, there are no feasible mitigations and the impact will remain <i>adverse but not significant</i></p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
*Fresno County roadways and intersections that also fall within the jurisdictions of City of Fresno and City of Clovis are addressed in Impact # 3.13-6 and 3.13-7.				
Impact #3.13-6: The Project will contribute to the following deficiencies to City of Fresno* roadways and intersections:	Mitigation Measure #3.13-6: Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23) are as follows:	Applicant	Fresno County	As determined by Fresno County
Impact #3.13-6a (TR-8): The Project will contribute to an unacceptable LOS under the existing plus Project condition and exacerbate a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition at the intersection of Friant Road and Shepherd Avenue. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	Mitigation Measure #3.13-6a (TR-8): The intersection of Friant Road and Shepherd Avenue should be provided with a second northbound right-turn lane in addition to the funded third westbound left-turn lane and third southbound through lane to achieve an acceptable level of service (LOS C). The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for the identified improvement, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct an improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22) is 6.3%.	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-6b (TR-9): The Project will exacerbate existing delays and an existing LOS already below the minimum acceptable LOS at the intersection of Friant Road and Audobon Drive, and is expected to exacerbate anticipated delays and a cumulative LOS that will fall below the acceptable LOS even without the Project under the 2030 no Project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-6b (TR-9): None feasible. The intersection of Friant Road and Audubon Drive is constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue and accepts LOS F with six lanes since additional widening is not considered to be feasible. This impact is <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-6c (TR-10): The Project will exacerbate delays and a cumulative LOS that will fall below the minimum acceptable LOS under the 2030 no Project condition at the intersection of Friant Road and Fresno Street. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-6c (TR-10): None feasible. The intersection of Friant Road and Fresno Street is constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue and accepts LOS F with six lanes since additional widening is not considered to be feasible. This impact is <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-6d (TR-19): The Project will exacerbate an existing LOS already below the minimum acceptable LOS at the intersection of Audobon Drive and Nees Avenue, and is expected to exacerbate delays and a cumulative LOS that will fall below the acceptable LOS even without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-6d (TR-19): The intersection of Nees Avenue and Audubon Drive should be signalized with two eastbound left-turn lanes to provide an acceptable level of service (LOS D) under the existing and the 2030 cumulative condition. The results of the existing-plus-Project conditions analyses and the 2030 no-Project conditions analyses indicate that the Project alone does not create the need for improvements at this intersection, but the need is created primarily by regional growth. It is unreasonable to expect the Project applicant to construct this major improvement necessitated by the regional growth condition and to which the Project contributes a proportionately small traffic volume. The Project can mitigate its fair share of the impact by paying a fair share of the cost of construction. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-22) is 2.0%. The intersection is funded by the City of Fresno Traffic Signal Mitigation Impact Fee.</p>	Applicant	Fresno County	As determined by Fresno County when signal warrants are met
<p>Impact #3.13-6e (TR-28): The Project will contribute to an unacceptable LOS on the City of Fresno segment of Friant Road between Champlain Avenue and Ft. Washington Road under the 2030 cumulative condition (2030 with Project). The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-6e (TR-28): Friant Road between Champlain Avenue and Ft. Washington Road will require six lanes to provide an acceptable level of service (LOS D or better) under the 2030 cumulative condition. The City of Fresno has planned for this improvement in its capital improvement program and its current citywide traffic fee program. The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table 3.13-23) is 14.7%.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.13-6f (TR-29): The Project will contribute to an existing and cumulative LOS already below the minimum acceptable LOS on the following City of Fresno segments of Friant Road:</p> <ul style="list-style-type: none"> ▪ Between Shepherd Avenue and Audubon Drive. ▪ Between Audubon Drive and Fresno Street; and ▪ Between Fresno Street and SR 41. 	<p>Mitigation Measure #3.13-6f (TR-29): None feasible. The City of Fresno General Plan identifies the need for 12 lanes on Friant Road between SR 41 and Shepherd Avenue to accommodate the anticipated cumulative conditions due to regional growth and accepts LOS F with six lanes since additional widening is not feasible due to physical constraints associated with the adjacent land uses. This condition, as already contemplated and accepted in the City of Fresno General Plan, is <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-7: The Project will contribute to the following deficiencies to intersections and roadways within the shared jurisdiction of City of Clovis and City of Fresno:</p>	<p>Mitigation Measure #3.13-7: Prior to issuance of a building permit, the applicant shall contribute its pro rata share of the cost of future off-site traffic improvements through payment of a fair share fee to Fresno County. The traffic improvements and, where an improvement is identified, the estimate percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Tables 3.13-22 and 3.13-23) are as follows:</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-7a (TR-22): The Project will exacerbate existing and anticipated future delays and will contribute to a cumulative level of service below the minimum acceptable level of service at the intersection of Willow Avenue and Nees Avenue in the 2030 plus</p>	<p>Mitigation Measure #3.13-7a (TR-22): None feasible. The intersection of Willow Avenue and Nees Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. This impact is <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
project condition. The Project's contribution to the anticipated 2030 cumulative condition is cumulatively considerable.				
Impact #3.13-7b (TR-23): The Project will exacerbate anticipated delays and contribute to a cumulative level of service that will fall below the minimum acceptable level of service at the intersection of Willow Avenue and Herndon Avenue in the 2030 plus project condition. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.	Mitigation Measure #3.13-7b (TR-23): None feasible. The intersection of Willow Avenue and Herndon Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. The City of Fresno General Plan identifies the ultimate need for 12 lanes on Herndon Avenue and accepts LOS F with six lanes since additional widening is not feasible. This impact is <i>significant and unavoidable</i> .	Applicant	Fresno County	As determined by Fresno County
Impact #3.13-7c (TR-24): The Project will exacerbate anticipated delays and a cumulative level of service that will fall below the minimum acceptable level of service at the intersection of Willow Avenue and Sierra Avenue in the 2030 condition without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively	Mitigation Measure #3.13-7c (TR-24): None feasible. The intersection of Willow Avenue and Sierra Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. Therefore, this impact is <i>significant and unavoidable</i> .	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
considerable.				
<p>Impact #3.13-7d (TR-25): The Project will exacerbate existing delays, and will exacerbate anticipated delays and a cumulative level of service below the minimum acceptable level of service at the intersection of Willow Avenue and Bullard Avenue under the 2030 condition without the Project. The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-7d (TR-25): None feasible. The intersection of Willow Avenue and Bullard Avenue is planned to be constructed to the largest reasonable configuration and no further intersection improvements are feasible. Therefore, this impact is <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.13-7e (TR-26): The Project will exacerbate existing delays at the intersection of Willow Avenue and Barstow Avenue. The Project will also exacerbate anticipated delays and a cumulative level of service that will fall below the minimum acceptable level of service at the intersection of Willow Avenue and Barstow Avenue in the 2030 condition without the Project. The Project's contribution to the</p>	<p>Mitigation Measure #3.13-7e (TR-26): The intersection of Willow Avenue and Barstow Avenue should be widened to the following lane configurations to provide an acceptable level of service (LOS D) in the 2030 cumulative condition.</p> <ul style="list-style-type: none"> ▪ Northbound: two left-turn lanes, three through lanes, one right-turn lane ▪ Southbound: two left-turn lanes, three through lanes, one right-turn lane ▪ Eastbound: one left-turn lane, two through lanes, and two right-turn lanes ▪ Westbound: one left-turn lane and two through lanes with a shared right turn. <p>The estimated percentage of the 2030 cumulative traffic volume attributable to the Project (as shown in Table</p>	Applicant	Fresno County	As determined by Fresno County

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
anticipated cumulative condition is cumulatively considerable.	3.13-22) is 1.0%.			
<p>Impact #3.13-7f (TR-32): The Project will exacerbate a cumulative LOS that falls below the minimum acceptable level of service under the 2030 condition without the Project on Willow Avenue at the following locations:</p> <ul style="list-style-type: none"> ▪ Between Alluvial and Herndon Avenues; ▪ Between Herndon and Sierra Avenues; ▪ Between Sierra and Bullard Avenues; and ▪ Between Bullard and Barstow Avenues. <p>The Project's contribution to the anticipated cumulative condition is cumulatively considerable.</p>	<p>Mitigation Measure #3.13-7f (TR-32): None feasible. The City of Fresno General Plan identifies the ultimate need for six lanes on Willow Avenue between Alluvial and Barstow Avenues and accepts LOS E. The City of Clovis requires LOS D. A width of six lanes is typically considered the maximum width for roadways in Fresno even when additional lanes are warranted (for example, Herndon Avenue and Friant Avenue are limited to six lanes even where the ultimate mitigation requires more lanes). The proposed Project does not create the need for additional lanes. The Project's share of this cumulative impact is considered to be <i>significant and unavoidable</i>.</p>	Applicant	Fresno County	As determined by Fresno County
<p>Impact #3.14.1 –Water Supply</p>	<p>Mitigation Measure #3.14.1: Prior to recordation of any final subdivision map within the Friant Community Plan area, inclusive of the Friant Ranch Specific Plan, a water transfer agreement to serve the proposed development shall be approved by the USBR, WWD 18 and/or the LTRID as appropriate. Approval and execution of the water transfer agreement for the full project water amount shall be required prior to approval</p>	Applicant	Fresno County	Prior to recordation of a final subdivision map

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	of any land use entitlements.			
Impact #3.14.3 – Inadequate Wastewater Treatment Capacity and Facilities	Mitigation Measure #3.14.3a: All new development in the Friant Community Plan area, inclusive of the Friant Ranch Specific Plan, shall comply with Fresno County General Plan policy PF-D.2, which requires that any new community sewer and wastewater treatment facilities serving residential subdivisions be owned and maintained by a County Service Area or other public entity approved by the County, such as Waterworks District No. 18.	Applicant	Fresno County	Prior to development
	Mitigation Measure #3.14.3b: Adequately sized on-site collection facilities, including lift stations, shall be installed for each subdivision in the Specific Plan area concurrent with road construction for individual subdivisions. A “backbone” conveyance system sufficient to serve each subdivision shall be installed prior to issuance of building permits for that subdivision.	Applicant	Fresno County	Prior to issuance of building permits
	Mitigation Measure #3.14.3c: Wastewater collection, treatment and disposal of the Friant Ranch Specific Plan Area shall adhere to Section VI of the Friant Ranch Infrastructure Master Plan. The applicant and/or WWD 18 must demonstrate adherence to Section VI of the Friant Ranch Infrastructure Master Plan prior to issuance of an occupancy permit for development within the Friant Ranch Specific Plan Area.	Applicant	Fresno County	Prior to issuance of occupancy permit
	Mitigation Measure #3.14.3d: Commitments from the wastewater treatment provider to receive anticipated flows from the Friant Ranch Specific Plan Area and Millerton Lake Village Mobile Home Park at the WWTP shall be secured by Fresno County prior to County approval of improvement plans for wastewater collection and transmission infrastructure.	Applicant	Fresno County	Prior to approval of improvement plans

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	Mitigation Measure #3.14.3e: Prior to issuance of building permits for each increment of new development within the Project Area, the County shall confirm that all necessary permits (e.g., NPDES) are in place for the WWTP to discharge additional treated effluent in the amounts associated with new development. This shall include a determination that development timing shall not impede other development for which entitlements have been issued.	Applicant	Fresno County	Prior to issuance of building permits
	Mitigation Measure #3.14.3f: Prior to approval of improvement plants and wastewater collection and infrastructure, the applicant must demonstrate to the County that on- and off-site sewer pipelines shall have watertight joints and be in accordance with design standards adopted by Fresno County in order to minimize the potential for accidental discharge.	Applicant	Fresno County	Prior to approval of improvement plans
	Mitigation Measure #3.14.3g: The design plans for the WWTP shall incorporate appropriate and cost-effective odor and noise reduction measures as described in the Infrastructure Master Plan, to the satisfaction of the Fresno County Public Works and Planning Department prior to issuance of the conditional use permit for the WWTP.	Applicant	Fresno County	Prior to issuance of CUP for the WWTP
Impact #3.14.6 – Compliance with Federal, State, and Local Solid Waste Regulations	Mitigation Measure #3.14.6a: Contractors shall be required to provide on-site separation of construction debris to assure a minimum 50% diversion of this material from the landfill.	Applicant	Fresno County	On going
	Mitigation Measure #3.14.6b: A source-separated green waste program shall be implemented within the project area, subject to review and approval by the Fresno County Department of Public Works and Planning, Resources and Parks Division.	Applicant	Fresno County	On going

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
<p>Impact #3.14.7 – Development of the Community Plan area shall increase the demand for electricity and natural gas and shall result in the need to construct new infrastructure to serve the Community Plan area</p>	<p>Mitigation Measure #3.14.7a: The Specific Plan applicants and subsequent developers within the Community Plan area shall work closely with PG&E or other utility provider to ensure that development of electrical and natural or propane gas infrastructure with the capacity to service the proposed development is located and provided concurrently with roadway construction and in accordance with PUC regulations. The applicant(s) shall grant all necessary easements for installation of electrical and natural/propane gas facilities, including utility easements along existing and future on-site arterial roads. Coordination with PG&E and/or alternative providers shall occur, and any required agreements shall be established prior to recordation of a final subdivision map.</p>	Applicant	Fresno County	On going
	<p>Mitigation Measure #3.14.7b: Implement Mitigation Measure 3.3.2 as set forth in Section 3.3 of this Draft EIR.</p>	Applicant	Fresno County	See mitigation for specific time span
<p>Impact #3.15.1 – Development of the Project could potentially result in a cumulatively considerable incremental contribution to the significant cumulative impact of global climate change</p>	<p>Mitigation Measure #3.15.1a: The applicant shall select and locate trees carefully to protect buildings from energy consuming environmental conditions, and to shade paved areas. Trees selected to shade paved areas should be species that shall shade 25% of the paved area within 20 years.</p>	Applicant	Fresno County	Prior to development
	<p>Mitigation Measure #3.15.1b: The applicant shall distribute a tree planting informational packet to help project area residents understand their options for planting trees that can absorb carbon dioxide.</p>	Applicant	Fresno County	Prior to resident occupancy

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>Mitigation Measure #3.15.1c: Prioritized parking within commercial and retail areas shall be given to electric vehicles, hybrid vehicles, and alternative fuel vehicles.</p>	Applicant	Fresno County	Prior to resident occupancy
	<p>Mitigation Measure #3.15.1d: The County shall utilize the following guidelines during review of future project-specific submittals for non-residential development within the Specific Plan area and the Community Plan boundary:</p> <ul style="list-style-type: none"> ▪ Equip HVAC units with a PremAir or similar catalyst system, if reasonably available and economically feasible at the time building permits are issued. Catalyst systems are considered feasible if the additional cost is less than 10% of the base HVAC unit cost; and ▪ Install two 110/208 volt power outlets for every two loading docks. 	Applicant	Fresno County	Prior to resident occupancy
	<p>Mitigation Measure #3.15.1e: Develop walking trails throughout the Friant Ranch Specific Plan Area in accordance with the plan</p>	Applicant	Fresno County	Prior to resident occupancy
	<p>Mitigation Measure #3.15.1f: Implement the following measures as determined appropriate by the County in consultation with the SJVAPCD:</p> <ul style="list-style-type: none"> ▪ Establish paving guidelines that encourage businesses, if feasible, to pave all privately-owned parking areas with a substance with reflective attributes (albedo = 0.30 or better) similar to Portland cement concrete. The use of a paving substance with reflective attributes similar to Portland Cement concrete is considered feasible under this measure if the additional cost is less than 10% of the cost of applying a standard asphalt 	Applicant	Fresno County/SJVAPCD	Prior to development

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	product.			
	<p>Mitigation Measure #3.15.1g: The following measures shall be used singularly or in combination to accomplish an overall reduction of 10 to 20% in residential energy consumption relative to the requirements of the 2008 State of California Title 24:</p> <ul style="list-style-type: none"> ▪ Prior to issuance of an occupancy permit, the applicant shall demonstrate the use of air conditioning systems that are more efficient than Title 24 requirements; ▪ In marketing materials associated with any project within the Friant Community Plan Area, the applicant shall encourage the use of high-efficiency heating and other appliances, such as water heaters, cooking equipment, refrigerators, and furnaces; ▪ Encourage photovoltaic rooftop energy systems in community buildings and larger commercial buildings. ▪ Prior to issuance of an occupancy permit, the applicant shall establish tree-planting guidelines that require residents to plant trees to shade buildings primarily on the west and south sides of the buildings. Use of deciduous trees (to allow solar gain during the winter) and direct shading of air conditioning systems shall be included in the guidelines. ▪ As required by the Friant Specific Plan, prohibit any wood-burning fireplaces, woodstoves, or similar wood-burning devices. This prohibition shall be included in any CC&Rs that are established. 	Applicant	Fresno County	Prior to issuance of occupancy permit

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<p>Mitigation Measure #3.15.1h: The following measures shall be used to demonstrate sustainable building practices and lessen the impact on Greenhouse Gases.:</p> <ul style="list-style-type: none"> ▪ Provide parks and open space throughout the residential developments as required by the Friant Ranch Specific Plan; ▪ Prior to issuance of an occupancy permit, all non-residential projects within the Community Plan Area shall demonstrate that bicycle racks shall be provided. ▪ Prior to issuance of an occupancy permit, all apartment complexes or condominiums without garages within the Community Plan Area shall demonstrate that at least two Class I bicycle storage spaces per unit shall be provided; ▪ As required by the Friant Community Plan Update and Friant Ranch Specific Plan, residential neighborhoods shall be interconnected, with easy access to commercial and recreational land uses. ▪ Prior to issuance of an occupancy permit within the Friant Ranch Specific Plan area, the applicant shall create informational materials informing occupants of: <ul style="list-style-type: none"> ○ The alternative travel amenities provided, including ridesharing and public transit availability schedules. ○ The Community Plan’s pedestrian, bicycle, and equestrian paths to community centers, shopping areas, employment areas, schools, parks, and recreation areas; ○ The SJVAPCD programs to reduce county-wide emissions. 	Applicant	Fresno County/SJVAPCD	Prior to issuance of occupancy permit

Impact Number	Mitigation Measures	Implementation	Monitoring	Time Span
	<ul style="list-style-type: none"> ▪ Any new park areas within the Community Plan Area shall include: <ul style="list-style-type: none"> ○ Bicycle racks at all appropriate locations; and ○ A community notice board and information kiosk with information about community events, ride sharing, and commute alternatives. ▪ Provide a community notice board and information kiosk with information about community events, ride-sharing, and commute alternatives. 			