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Sierra Meadows Estates Subdivision (S2001-03) Supplemental Environmental Impact Report

Lead Agency:
County of Madera

Prepared by:
RBF Consulting

Administrative Draft Supplemental EIR Completed: March 7, 2008
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Administrative Final Supplemental EIR Completed: _____

DRAFT
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

SIERRA MEADOWS ESTATES SUBDIVISION (S2001-03)

SCH NO. 2002061001

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1.0 INTRODUCTION AND PURPOSE

1.1 INTRODUCTION

This Environmental Impact Report (EIR) is being prepared to supplement an EIR previously prepared for the proposed project (*Sierra Meadows Estates Subdivision [S2001-03] 2007 Final Environmental Impact Report)*.

In June 2002, the County of Madera, in accordance with the California Environmental Quality Act (CEQA), initiated the environmental review process through the development of a Notice of Preparation (NOP) for the originally proposed project. The NOP was made available for public review from June 3, 2002 through July 2, 2002. The NOP provided a description of the proposed project and a brief summary of the project's potential impacts on the environment.

Based on public responses to the NOP and preliminary analysis performed as part of the EIR scoping effort, certain impacts of the project were found to be less than significant due to the inability of the project to create such impacts or the absence of project characteristics producing effects of this type. The topics determined to have less than significant impacts included:

- Agricultural Resources;
- Hazards and Hazardous Materials; and
- Mineral Resources.

The EIR evaluated potential environmental impacts with respect to the following issue areas:

- Land Use and Relevant Planning;
- Traffic and Circulation;
- Air Quality;
- Noise;
- Aesthetics/Light and Glare;
- Biological Resources;
- Cultural Resources;
- Geology and Soils;
- Hydrology and Drainage;
- Public Services and Utilities; and
- Additional CEQA-mandated impact analysis, such as long-term project-related impacts and growth inducement.

The original Draft EIR for the Sierra Meadows Estates Subdivision (S2001-03) Project was circulated for public review by the County of Madera from May 18, 2005 through July 1, 2005. A total of 66 mitigation measures were applied to the project. With incorporation of the recommended mitigation measures, it was determined that

potentially significant impacts could be reduced to less than significant levels, with the exception of:

- *Air Quality*: Due to NO_x emissions during construction and cumulative air quality impacts;
- *Aesthetics/Light and Glare*: Due to construction-related aesthetic/light and glare impacts, visual character and quality of the site, effects on a scenic vista, and cumulative aesthetic impacts; and
- *Biological Resources*: Due to the cumulative loss of habitat for wildlife and wildlife movement corridors.

The County of Madera received a total of 57 comment letters during the 45-day Draft EIR public review period. The comment letters were received from 12 public agencies, three private/special interest groups, and 42 individuals.

In accordance with Section 15132 of the *CEQA Guidelines*, the County of Madera prepared a Final EIR for the proposed project that included: 1) the Draft EIR, with errata incorporated; 2) the Mitigation Monitoring and Reporting Program for the project; 3) all comments received during the Draft EIR public review period and detailed responses to all comments relevant to CEQA; and 4) technical appendices.

The Final EIR for the proposed project has not been certified by the County of Madera. The Project Applicant determined that revisions to the project description were necessary as the Final EIR was being prepared. The project revisions, as discussed in detail within Section 3.0, *Project Description*, were made in response to input received during and after the Draft EIR comment period from the multiple public agencies, several local interest groups, and individuals. The revisions include: 1) the creation of new outlots for the protection of on-site water features; 2) revisions to residential lot location and phasing to eliminate impacts to certain environmentally sensitive areas; 3) reconfiguration of onsite and offsite roadways, including a modified access point for the project; 4) an increase in minimum lot size; and 5) relocation of the proposed wastewater treatment plant and creation of a new wastewater effluent spray field.

The Supplemental EIR, in combination with the Final EIR, provides analysis of the project as proposed and will be considered for certification by the County of Madera at a later date, in light of the entire administrative record under CEQA. Although Section 15163(d) of CEQA states that a supplement to an EIR may be circulated by itself without recirculating the previous draft or Final EIR, based upon the extended duration of the review for this project, the Final EIR has been included as a compact disc as Appendix 13.2 of this EIR. The County believes that inclusion of the Final EIR will assist reviewers in understanding the original review/analysis and the culmination of this Draft Supplemental EIR. Please note: the County of Madera is accepting comments only for this Draft Supplemental EIR and not the contents of the Final EIR on compact disc.

The 2007 Final EIR for the original Sierra Meadows Estates Project involved buildout of 315 single-family residential lots and necessary infrastructure to support the development. The original project included one water reservoir facility with a storage

capacity of 210 acre-feet to supplement the existing 99 acre-feet of water storage in three existing ponds to store a total of approximately 309 acre-feet of water. Additional project features included onsite water and wastewater treatment plants. The project proposed a total of twelve phases on approximately 487 acres. Lots ranged in size from 7,000 square feet (SF) to just over six acres. Landscape and fencing was proposed to be placed at the discretion of the individual property owners and would not be provided by the Project Applicant. A detailed description of the original project description can be found in Appendix 13.2, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, of this EIR.

1.2 PURPOSE OF THE EIR

As stated above in Subsection 1.1, the County of Madera circulated the Draft EIR (SCH # 2002061001) for the proposed Sierra Meadows Estates Subdivision (S2001-03). The Final EIR for the project was completed in December 2007. Since public review for the Draft EIR, the Project Applicant submitted modifications to the project description in response to agency and public input, which have been determined by the County to be subject to further review pursuant to CEQA. Based upon the proposed changes presented in Section 3.0, *Project Description* of this document, the County of Madera has determined that a Supplemental Environmental Impact Report (SEIR) is the appropriate environmental documentation and processing for the revised project.

The County of Madera is the Lead Agency under CEQA, and is responsible for preparing the SEIR for the Sierra Meadows Estates Subdivision (S2001-03). This SEIR has been prepared in conformance with CEQA (California Public Resources Code Section 21000 et seq.), California *CEQA Guidelines* (California Code of Regulations, Title 14, Section 15000 et seq.), and the rules, regulations, and procedures for implementation of CEQA, as adopted by the County. The principal *CEQA Guidelines* sections governing content of this document are Section 15120 through 15132 (Content of an EIR) and Section 15163 (Supplemental EIR).

The Lead Agency, per *CEQA Guidelines* Section 15163, may choose to prepare a Supplement to the EIR (a Supplemental EIR) if only minor additions or changes would be necessary to make the previous EIR adequately apply to the proposed project, as revised. This SEIR has been prepared in accordance with Sections 15163 of CEQA. Section 15163 states the following:

"(a) The Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

(1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and

(2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

(b) The supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised.

(c) A supplement to an EIR shall be given the same kind of notice and public review as is given to a draft EIR under Section 15087.

(d) A supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR.

(e) When the agency decides whether to approve the project, the decision-making body shall consider the previous EIR as revised by the supplemental EIR. A finding under Section 15091 shall be made for each significant effect shown in the previous EIR as revised."

This SEIR contains the information necessary to make the changes in the proposed Sierra Meadows Estates Subdivision Project. This review meets the requirements for supplemental analysis under Section 15163 of the *CEQA Guidelines*, which requires that only changes to the original EIR that may result in significant impacts and that were not evaluated and not previously disclosed to be included in this SEIR.

In accordance with Section 15063(a) of the *CEQA Guidelines*, the County of Madera, as lead agency, determined a SEIR was clearly required for the revised project, and therefore an Initial Study was not completed.

1.3 COMPLIANCE WITH CEQA

The Draft SEIR is subject to a 45-day review period by responsible and trustee agencies and interested parties. In accordance with the provisions of Sections 15085(a) and 15087(a)(1) of the State *CEQA Guidelines*, as amended, Madera County, serving as the Lead Agency, will: 1) publish a notice of availability of a Draft SEIR in the Sierra Star, the paper of general circulation for the Oakhurst/Ahwahnee area; and, 2) prepare and transmit a Notice of Completion (NOC) to the State Clearinghouse. Proof of publication is available at the offices of the Lead Agency.

Any public agency or members of the public desiring to comment on the Draft SEIR must submit their comments in writing to the lead agency at the address indicated on the document's NOC prior to the end of the public review period. Upon the close of the public review period, the Lead Agency will then proceed to evaluate and prepare responses to all written comments received from both citizens and public agencies during the public review period.

The Final SEIR will consist of revisions to the Draft SEIR, responses to comments on the Draft SEIR addressing concerns raised by responsible agencies or reviewing parties submitted during the public review period, as well as the 2007 Final EIR. After the Final SEIR is completed and at least 10 days prior to the certification hearing, a copy of the response to comments made by public agencies on both the Draft SEIR and 2007 Final EIR will be provided to the respective agency.

1.4 FORMAT OF THE EIR

The Draft SEIR is organized into 13 sections, as follows:

- Section 1.0, *Introduction and Purpose*, provides a historical summary of the CEQA process for the project, in addition to CEQA compliance information.
- Section 2.0, *Executive Summary*, provides a brief project description and summary of the environmental impacts and mitigation measures.
- Section 3.0, *Project Description*, provides a detailed project description indicating project location, background and history, revised project characteristics, phasing and objectives, as well as associated discretionary actions required. This section utilizes Section 3.0, *Project Description*, of the 2007 Final EIR as its basis since several primary project characteristics (e.g., residential unit count, project location, and infrastructure) remain unchanged between the original and revised project descriptions.
- Section 4.0, *Basis for the Cumulative Analysis*, describes the approach and methodology for the cumulative analysis.
- Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures*, provides a description of existing conditions, analysis of project impacts, recommended mitigation measures and unavoidable significant impacts. Information contained within this section, in combination with Section 5.0 of the 2007 Final EIR, provides a comparison of impacts between the original and revised versions of the project description.

  Through analysis of potential impacts, it has been determined that the revised project description would result in a nominal change in impacts for the following impact categories:

  - Aesthetics/Light and Glare;
  - Biological Resources;
  - Cultural Resources;
  - Geology and Soils;
  - Hydrology and Drainage;
  - Noise; and
  - Public Services and Utilities.

  Thus, analysis within these impact sections is limited to a summary of existing conditions and findings within the 2007 Final EIR, along with a comparison of impacts between the original and revised project descriptions.

  Where it has been determined that the potential for a substantial change in impacts could occur, a detailed impact section is provided. These sections are organized to include: 1) a description of existing conditions; 2) a description of significance criteria; 3) an analysis of project impacts; 4) an analysis of cumulative impacts; 5) a listing of mitigation measures; and 5) a conclusion regarding the level of significance after mitigation. These impact categories include:

- Land Use and Relevant Planning;
- Traffic and Circulation; and
- Air Quality.

The Air Quality impact section has been updated to reflect updated analysis methodology and regulatory guidance since the original Draft EIR was prepared and circulated for public review.

- Section 6.0, *Long-Term Implications of the Proposed Project*, discusses significant environmental changes that would be associated with the revised project description, should it be implemented, and discusses growth inducing impacts of the revised project.
- Section 7.0, *Alternatives to the Proposed Project*, provides a summary of project alternatives analyzed within the 2007 Final EIR and a comparison of any changes associated with the revised project description. The purpose of this section is to analyze a reasonable range of alternatives to the revised project or to the location of the revised project that could avoid or substantially lessen the significant impacts of the project and still feasibly attain the basic project objectives.
- Section 8.0, *Inventory of Mitigation Measures*, lists mitigation measures proposed to avoid or substantially lessen the significant impacts.
- Section 9.0, *Inventory of Significance After Mitigation*, describes those impacts which remain significant following mitigation.
- Section 10.0, *Effects Found Not to Be Significant*, provides an explanation of potential impacts which have been determined not to be significant.
- Section 11.0, *Organizations and Persons Consulted*, identifies all Federal, State or local agencies, other organizations and individuals consulted.
- Section 12.0, *Bibliography*, identifies reference sources for the SEIR.
- Section 13.0, *Appendices*, contains technical documentation for the project.

1.5 RESPONSIBLE AND TRUSTEE AGENCIES

Certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as *Responsible Agencies* and/or *Trustee Agencies.* Pursuant to Sections 15381 and 15386 of the State *CEQA Guidelines*, as amended, Responsible Agencies and Trustee Agencies are respectively defined as follows:

> *"Responsible Agency"* means a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term "Responsible Agency" includes all public agencies other than the Lead Agency which have discretionary approval power over the project." (*Section 15381)*

> *"Trustee Agency* means a State agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Trustee Agencies include...." *(Section 15386)*

Responsible and *Trustee Agencies* and other entities which may use this SEIR in their decision-making process or for informational purposes include, but may not be limited to, the following:

- Bass Lake Joint Union Elementary School District
- California Air Resources Board
- California Department of Fish and Game
- California Department of Forestry and Fire Protection
- California Department of Parks and Recreation
- California Department of Transportation
- California Department of Water Resources, Division of Safety of Dams
- California Regional Water Quality Control Board
- California State Water Resources Control Board (Division of Water Rights)
- Emadco Disposal Service
- Federal Emergency Management Agency
- Madera County Engineering Department: Maintenance District 46
- Madera County Fire Department
- Madera County Sheriff's Department
- Madera County Resource Management Agency: Road Department
- Oakhurst Park Committee
- Pacific Gas and Electric Company
- San Joaquin Valley Air Pollution Control District
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- Yosemite Joint Unified School District

1.6 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with Section 15148 of the *CEQA Guidelines*, which encourages incorporation by reference as a means of reducing redundancy and length of environmental reports. The following documents, which are available for public review at Madera County, are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized in the preparation of this EIR.

A brief synopsis of the scope and content of these documents is provided below:

- Ahwahnee/Nipinnawasee Area Plan (Adopted October 19, 1999). The Ahwahnee/Nipinnawasee area is located in the eastern unincorporated area of Madera County at the border with Mariposa County. The area transitions between rolling foothills and the high mountain ranges of the Sierra Nevada

Mountains. State Routes 41/49 and County Road 600 provide the primary access to the area.

In 1969, The Board of Supervisors adopted the original area plans, as part of the County's General Plan, for the communities of Oakhurst, Ahwahnee, and Yosemite Forks. It consisted of an area map showing desired land use patterns for future development and a text explaining and defining land use designations on the map.

In 1995, the County General Plan went through a major revision and update. Since that time and due to the different nature of growth, character, and issues between Oakhurst and Ahwahnee, the Ahwahnee/Nipinnawasee community has diligently worked on development of a separate plan. Responding to this need, the Board of Supervisors directed the Planning Department, in March 1998, to work with the Ahwahnee Community Council to complete the process.

The Ahwahnee/Nipinnawasee Area Plan is intended to refine the goals and policies of the 1995 Madera County General Plan and provide more detailed guidance for future growth and development in the Ahwahnee/Nipinnawasee community of Eastern Madera County.

The Area Plan updates a 1980 study, which remained a part of the 1995 General Plan until superseded by the Area Plan. The Plan incorporates all state required General Plan elements by reference to county-wide documents and by specific sections of the Plan Summary regarding:

- Land Use and Housing;
- Circulation/Transportation and Noise;
- Public Facilities, Utilities, and Safety/Services;
- Open Space/Agriculture and Natural Resources; and
- Implementation Programs.

The Area Plan utilizes both the 1980 Oakhurst-Ahwahnee Growth Management Plan objectives and the 1995 Madera County General Plan policies as a foundation or frame work on which to build more specific community development proposals for future growth in this area.

- Oakhurst-Ahwahnee Area Plan General Growth Management Plan (Adopted May 27, 1980). Similar to the Ahwahnee/Nipinnawasee Area Plan, this document resulted from recommendations for the revision of the original Small Area Plans for the communities of Oakhurst, Ahwahnee and Yosemite Forks; and for the surrounding areas which are considered to be linked to these communities through established and apparent trends of residential and commercial development. The basic purpose and intent of this document is, first, to determine the "willed character" of the communities, as was suggested in the original Small Area Plans. Second, this document assesses the rate and nature of the growth in this area; and evaluates its effect on the overall quality of life and services that are available there. Finally, this document recommends growth management plans and policies

which could be followed by the local government, which would guide future community development in directions which are desirable to the area's residents.

- Shadow Ridge Estates Environmental Impact Report (June 1980). The Shadow Ridge EIR was prepared to assess the possible environmental impacts for a proposed project located between the communities of Oakhurst and Ahwahnee in the northeastern portion of Madera County. The project area encompassed a portion of the proposed Sierra Meadows Estates project site. The Shadow Ridge Estates project area consisted of approximately 1,660 acres and was to be developed with 693 residential lots. Development of the project included paved access roads, a golf course and clubhouse, a community water system with water supplied from surface water of Miami Creek, and a commercial area for use by the residents. The EIR analyzed impacts to geology and soils, hydrology and water quality, biological resources, air quality, land use, population, public services, transportation and circulation, noise, aesthetics, cultural resources and energy. The Madera County Planning Commission certified the Shadow Ridge Estates Final EIR in October of 1980.

- Madera County General Plan. The General Plan consists of two documents: the *General Plan Background Report* and the *General Plan Policy Document*:

  General Plan Background Report (Adopted October 24, 1995): The Background Report inventories and analyzes existing conditions and trends in Madera County. It also provides the formal supporting documentation for general plan policies and addresses the following eight subject areas:

  - Land Use;
  - Population and Employment;
  - Transportation and Circulation;
  - Public Facilities and Services;
  - Recreational and Cultural Resources;
  - Agricultural and Natural Resources;
  - Safety; and
  - Noise.

  General Plan Policy Document (Adopted October 24, 1995): The Policy Document includes the goals, policies, standards, implementation programs, land use diagram, and circulation plan diagram that constitute Madera County's formal policies for land use, development and environmental quality. The Policy Document is divided into two parts. Part I describes the Land Use Diagram and the designations appearing on the diagram, as well as describing the Circulation Plan Diagram and the standards for the roadway classification system appearing on the diagram. Part II contains explicit statements of goals, polices, standards and implementation programs. The Policy Document is divided into the eight sections that roughly correspond to the organization of issues addressed in the *Background Report*.

- Madera County General Plan Environmental Impact Report (Adopted October 24, 1995). This EIR estimates the amount of development under the General Plan that could be expected by 2010 and reaches conclusions regarding the severity of impacts based on these estimates. In some cases, especially where natural resources will be converted, the possible effects of development beyond 2010 are also discussed, but no conclusions concerning the significance of these impacts are reached, as such conclusions are deemed too speculative for purposes of this EIR given the uncertainty about long-term growth trends (beyond 2010) and future technological advances. This EIR focuses primarily on the cumulative impacts of development under the General Plan through 2010. Therefore, the EIR is less detailed than an EIR on a specific development project. Future development projects are required to conduct environmental analysis and analyze site-specific impacts independent of the General Plan EIR.

  Buildout of the General Plan would result in the following issue areas having "significant impacts" after full implementation of General Plan polices and programs and mitigation measures:

  - Land Use;
  - Population;
  - Streets and Highways;
  - Schools;
  - Vegetation and Wildlife Resources (Biological Resources); and
  - Air Quality.

  Buildout of the General Plan would result in the following issue areas having "potentially significant impacts" after full implementation of General Plan policies and programs and mitigation measures:

  - Water Supply, Treatment and Delivery;
  - Cultural Resources;
  - Water Resources;
  - Wildland and Urban Fire Potential; and
  - Noise.

  Buildout of the General Plan would result in the following issue areas having "less than significant impacts" after full implementation of General Plan polices and programs and mitigation measures:

  - Housing;
  - Public Transportation;
  - Non-Motorized Transportation;
  - Air Transportation;
  - Wastewater Treatment and Disposal;
  - Drainage and Flood Control;
  - Solid Waste Management;
  - Law Enforcement;

- Fire Protection;
- Utilities;
- Recreational Resources;
- Forest Resources;
- Seismic and Geologic Hazards;
- Flooding and Dam Failure Inundation; and
- Hazardous Materials.

- Madera County Zoning Ordinance. The Madera County Zoning Ordinance is a section of the Madera County Code that, along with the Zoning Maps, govern development appropriate in Madera County. The Madera County Zoning Maps are an integral part of determining the regulations that apply to each specific property.

- Madera County Municipal Code. The Madera County Municipal Code is the codification of all ordinances (that amend the Code) adopted by the Madera County Council and/or the voters of Madera County.

The 2007 Final EIR prepared for the original project description has been included (on compact disc) as Appendix 13.2 of the Draft SEIR, and thus has not been incorporated by reference.

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2.0 Executive Summary

2.0 EXECUTIVE SUMMARY

2.1 INTRODUCTION

This Supplemental Environmental Impact Report (SEIR) is being prepared to supplement an EIR previously prepared for the proposed project (*Sierra Meadows Estates Subdivision [S2001-03] 2007 Final Environmental Impact Report).*

In June 2002, the County of Madera, in accordance with the California Environmental Quality Act (CEQA), initiated the environmental review process through the development of a Notice of Preparation (NOP) for the originally proposed project. Upon concluding that an EIR was required, the original Draft EIR for the Sierra Meadows Estates Subdivision (S2001-03) Project was circulated for public review by the County of Madera from May 18, 2005 through July 1, 2005.

After receiving public comments regarding the original Draft EIR, in accordance with Section 15132 of the *CEQA Guidelines*, the County of Madera prepared a Final EIR for the proposed project that included: 1) the Draft EIR, with errata incorporated; 2) the Mitigation Monitoring and Reporting Program for the project; 3) all comments received during the Draft EIR public review period and detailed responses to all comments relevant to CEQA; and 4) technical appendices.

The Final EIR for the proposed project has not been certified by the County of Madera. The Project Applicant determined that revisions to the project description (in response to multiple public agencies, several local interest groups, and individuals) were necessary as the Final EIR was being prepared. The project revisions are described below under Section 2.2, *Project Summary* (and discussed in detail in Section 3.0, *Project Description*).

The SEIR, in combination with the Final EIR, provides analysis of the project as proposed and will be considered for certification by the County of Madera at a later date, in light of the entire administrative record under CEQA. Although Section 15163(d) of CEQA states that a supplement to an EIR may be circulated by itself without recirculating the previous draft or final EIR, based upon the extended duration of the review for this project, the Final EIR has been included as a compact disc as Appendix 13.2 of this EIR. The County believes that inclusion of the Final EIR will assist reviewers in understanding the original review/analysis and the culmination of this Draft SEIR. Please note: the County of Madera is accepting and responding to comments only for this Draft SEIR and not the contents of the Final EIR on compact disc.

2.2 PROJECT SUMMARY

The project site is located in the unincorporated area of eastern Madera County, California near the southeast border of Mariposa County. The project area is situated along Opah Drive, approximately 0.75-mile north of its intersection with Harmony Lane.

The project area consists of approximately 537.6 acres proposed for residential uses and water storage facilities. The site is located adjacent to the Sierra Meadows Golf Course, which is an existing 18-hole golf course situated on approximately 142 acres.

The revised project description for the Sierra Meadows Estates Subdivision Project is generally consistent with the previous version. The project location, proposed residential land use, residential unit count, and anticipated permits and approvals remain the same. However, as stated above, several substantial changes to the project description have occurred in response to agency and public input, in an effort to minimize the potential environmental impacts of the project. These revisions include:

- Implementation of three individual outlots for the protection of Miami and Carter Creeks;
- Revisions to residential lot location and project phasing to accommodate for the three outlots mentioned above;
- Reconfiguration of onsite and offsite roadways to allow for efficient emergency access and to minimize traffic impacts due to project access;
- Increase in minimum lot size from 7,000 square feet to 1/3-acre; and
- Relocation of the proposed wastewater treatment plant and the incorporation of a new treated wastewater effluent spray field.

These revisions to the project description are described in detail in Section 3.0 of this SEIR, *Project Description*.

2.3 ENVIRONMENTAL ISSUES/MITIGATION SUMMARY

As stated within Section 1.4 of this SEIR, *Format of the EIR*, it has been determined that revisions to the project description have the potential to result in a substantial change in impacts in regards to: 1) Land Use and Relevant Planning; 2) Traffic and Circulation; and 3) Air Quality. A detailed impact analysis is provided for these issue areas within Sections 5.1 through 5.3. The table shown below provides a summary of impacts, mitigation measures, and unavoidable significant impacts associated with these issue areas.

It has also been determined that revisions to the project description would result in a nominal change in impacts for: 1) Aesthetics/Light and Glare; 2) Biological Resources; 3) Cultural Resources; 4) Geology and Soils; 5) Hydrology and Drainage; 6) Noise; and 7) Public Services and Utilities. A brief summary of existing conditions and a comparison of findings between the 2007 Final EIR and the revised project description is provided. These issue areas are analyzed within Sections 5.4 through 5.10. For an executive summary of impacts associated with these issue areas, refer to the Final EIR provided as Appendix 13.2 of this SEIR.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.1	**LAND USE AND RELEVANT PLANNING**		
	Madera County General Plan		
	5.1-1 *The revised project description is consistent with the land use plan, policies and regulations set forth in the Madera County General Plan. Analysis has concluded that impacts would be less than significant following compliance with the recommended mitigation measures, regulatory framework and General Plan Amendment approval.*	5.1-1 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR and this SEIR.	No unavoidable significant impacts related to land use and relevant planning have been identified following compliance with the recommended mitigation measures and regulatory framework, and the policies and standards of the Madera County General Plan and Zoning Ordinance, and the Ahwahnee/Nipinnawasee Area Plan.
	Ahwahnee/Nipinnawasee Area Plan		
	5.1-2 *The revised project description is consistent with the land use plan, policies and regulations set forth in the Ahwahnee/Nipinnawasee Area Plan. Analysis has concluded that impacts would be less than significant following compliance with the recommended mitigation measures and regulatory framework, and General Plan Amendment approval.*	5.1-2 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR and this SEIR.	
	Madera County Zoning Ordinance		
	5.1-3 *The revised project description is consistent with the land use plan, policies and regulations of the Madera County Zoning Ordinance. Analysis has concluded that a less than significant impact would occur with approval of a Zone Change.*	5.1-3 No mitigation measures are recommended.	
	Cumulative Impacts		
	5.1-4 *Buildout of the revised proposed description, together with development anticipated by the Madera County General Plan, would increase the intensity of land uses in the area. Analysis has concluded that cumulative impacts would be less than significant.*	5.1-4 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.2	**TRAFFIC AND CIRCULATION**		
	Traffic and Circulation		
	5.2-1 *The revised project description would result in an increase in traffic volumes that may exceed the County's LOS D Standard, pursuant to the Madera County General Plan. Analysis has concluded that implementation of the recommended mitigation measure would reduce impacts to the intersection of Harmony Lane and SR-49 to a less than significant level.*	5.2-1 The Project Applicant's pro-rata share payment to the area-wide circulation improvements shall pay for the project's fair share contribution to the identified roadway improvement as follows: • Harmony Lane/SR-49: Modify eastbound SR-49 approach from one left-turn lane and one through lane to consist of one left-turn lane and two through lanes. The additional eastbound through lane should be a minimum of 200 feet in length plus taper lengths in accordance with Caltrans design standards. Implementation of this mitigation measure should be coordinated with Caltrans District 6 staff. • Intersection of SR-49/Road 621: A southbound left-turn lane is warranted at this intersection for the 2025 project scenario. This intersection would require a separate northbound right-turn lane, a westbound right-turn lane, and a southbound left-turn lane. These improvements shall be carried out in consultation with Caltrans District 6 staff.	No unavoidable significant impacts related to traffic and circulation have been identified following implementation of recommended mitigation measures and compliance with applicable requirements set forth by Madera County.
	Safety Hazards		
	5.2-2 *The revised project description may increase hazards to vehicles due to planned roadway improvements. Analysis has concluded that implementation of mitigation for Opah Drive would reduce impacts to a less than significant level.*	5.2-2 The Project Applicant shall be required to eliminate the substandard curve and longitudinal grades on the segment of Opah Drive that does not meet current road standards, prior to occupancy of the first dwelling unit.	
	Cumulative Impacts		
	5.2-3 *The revised project description would contribute to year 2025 traffic conditions that would result in an increase in traffic volumes that may exceed Madera County's LOS D Standard. Analysis has concluded that cumulative impacts would be less than significant.*	5.2-3 No mitigation measures are recommended.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
5.3	**AIR QUALITY**		
	Short-Term (Construction) Emissions		
	5.3-1 *Temporary construction-related dust and vehicle emissions would occur during construction within the project area. Analysis has concluded that these short-term impacts would be significant and unavoidable with incorporated mitigation measures.*	5.3-1a Construction of the Project requires the implementation of a dust control plan as set forth under Regulation VIII, Fugitive PM10 Prohibitions of the San Joaquin Valley Air Pollution Control District. The following mitigation measures, in addition to those required under Regulation VIII, shall be implemented to reduce fugitive dust emissions associated with the Project: • All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/ suppressant, covered with a tarp or other suitable cover, or vegetative ground cover. • All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant. • All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking. • When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. • All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)	The following air quality impacts would remain significant and unavoidable following mitigation: • Short-term construction impacts; and • Cumulative air quality impacts. If Madera County approves the project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		• Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant. • Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday. • Any site with 150 or more vehicle trips per day shall prevent carryout and trackout. • Asphalt-concrete paving shall comply with San Joaquin Valley Air Pollution Control District Rule 4641 and restrict the use of cutback, slow-cure and emulsified asphalt paving materials. • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. 5.3-1b The following measures shall be implemented by the construction contractor to minimize construction exhaust emissions: • Heavy construction equipment shall be property tuned and maintained to reduce emissions. Construction equipment shall be fitted with the most modern emission control devices. The construction manager shall monitor compliance with the measure and is subject to periodic inspection by the County. • The Contractor shall install or utilize the extent feasible construction equipment incorporating catalyst equipped engines and/or tier II engines.	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		• Require vapor control from the transfer of fuel from the fuel truck to vehicles both during construction and subsequent operations. • Diesel powered equipment shall be located as far away as possible from sensitive land uses. Specifically, diesel compressors, pumps and other stationary machinery shall be located to the extent feasible, away from sensitive receptors. • Construction equipment shall be shut off to reduce idling when not in direct use for extended periods of time.	
		5.3-1c The construction contractor shall adhere to SJVAPCD District Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations) to reduce emissions during asphalt paving activities. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.	
		5.3-1d The construction contractor shall adhere to the SJVAPCD District Rule 4601 (Architectural Coatings) to limit volatile organic compounds from architectural coatings. This rules specifies architectural coatings storage, clean up and labeling requirements.	
	Long-Term (Operational) Emissions		
5.3-2	*Long-term mobile emissions would occur as a result of project implementation. Analysis has concluded that with implementation of the recommended mitigation, impacts would be less than significant.*	5.3-2a The project shall incorporate the installation of EPA-certified wood burning stoves or fireplaces. If this is not feasible, then the installation of a ceramic coating on the honeycomb inside a catalytic combustor shall be utilized or the use of natural gas fireplaces may be used as a feasible alternative. The project shall also comply with SJVAPCD District Rule 4901 (Wood Burning Fireplaces and Wood Burning Heaters).	
		5.3-2b Prior to development of the Sewer Treatment Plant and Water Treatment Plant, the Applicant shall	

EIR SECTION	IMPACTS	MITIGATION MEASURES	SIGNIFICANCE AFTER MITIGATION
		submit the plans and specifications to the SJVAPCD Small Business Assistance Office for review to determine what specific permitting requirements are necessary (if any).	
	Conformity With Air Quality Attainment Plan		
5.3-3	*The project would be consistent with the Air Quality Attainment Plan (AQAP) criteria. Analysis has concluded that impacts would be less than significant.*	5.3-3 No mitigation measures are required.	
	Cumulative Impacts		
5.3-4	*Impacts to regional air quality resulting from the proposed project and cumulative projects may impact existing regional air quality levels on a cumulative basis. Analysis has concluded that cumulative impacts related to air quality would be significant and unavoidable.*	5.3-4 Refer to Mitigation Measures 5.3-1a through 5.3-1d (as previously stated, a significance determination cannot be made for GCC impacts).	

2.4 SUMMARY OF PROJECT ALTERNATIVES

In accordance with *California Environmental Quality Act (CEQA) Guidelines* Section 15126.6, Section 7.0, *Alternatives to the Proposed Action* describes a range of reasonable alternatives to the proposed project that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The evaluation considers the comparative merits of each alternative. The analysis focuses on alternatives capable of avoiding significant environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the proposed project objectives. Potential environmental impacts associated with three separate alternatives are compared to impacts of the proposed project. The following is a description of each of the alternatives evaluated in Section 7.0.

"NO PROJECT/NO DEVELOPMENT" ALTERNATIVE

Implementation of the No Project/No Development Alternative would retain the site in its current condition. None of the improvements proposed as part of the project and/or the existing General Plan Land Use (or Ahwahnee/Nipinnawasee Area Plan) designation would occur. It is noted that this Alternative is presented for the purposes of this EIR Alternatives Section. It is not the intent of the County to preclude development from occurring within the project site.

"NO PROJECT/EXISTING DESIGNATION" ALTERNATIVE

Implementation of the No Project/Existing Area Plan Designation Alternative would be in accordance with the existing *Ahwahnee/Nipinnawasee Area Plan* land use designations, which allow for 545 dwelling units onsite (as compared to 315 dwelling units under the proposed project). Assuming 3.055 persons per household, approximately 962 persons would be added to the permanent population of Madera County under the proposed project, while 1,665 under this Alternative. This Alternative would result in an increased dwelling unit density onsite, in addition to an increased population introduced to the project area.

"REDUCED DENSITY" ALTERNATIVE

For the Reduced Density Alternative, development of 302 dwelling units and associated infrastructure would occur on project site, as compared to 315 dwelling units under the proposed project. Similar to the proposed project, the proposed densities under this Alternative would be consistent with the General Plan/ *Ahwahnee/Nipinnawasee Area Plan*. This Alternative would downsize Phase 8 of the proposed project, which encompasses lots 213 through 236. Under this Alternative, lots 216, 218, and lots 223 through 233 would be eliminated. Elimination of these lots would result in a net reduction of 13 lots, or 4.1 percent of the proposed project. This would represent an associated reduction of 40 residents from the projected population increase in comparison to the proposed project. This Alternative would also include one water reservoir to serve the proposed residential uses.

"MULTIPLE RESERVOIRS DESIGN" ALTERNATIVE

Development of the Multiple Reservoirs Design Alternative would be similar to the revised project in that it would take into account the entire 537.6-acre property, as well as adjacent land to be utilized for water storage facilities. The Multiple Reservoirs Design Alternative would include the same number of proposed dwelling units (315 dwelling units), at the same density, as the revised project. The difference between the Multiple Reservoirs Design Alternative and the revised project is that the Proposed project includes one 210-acre foot reservoir, while the Multiple Reservoirs Design Alternative would include a series of nine reservoir facilities to provide water storage for the proposed project. The nine reservoirs would be generally located in the same area as the water reservoir included in the proposed project.

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3.0 Project Description

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION AND SETTING

PROJECT LOCATION AND SURROUNDING USES

The project site is located in the unincorporated area of eastern Madera County, California near the western border of Mariposa County (refer to Exhibit 3-1, *Regional Vicinity*). The project site is within a transitional area, between the rolling foothills and mountain ranges of the Sierra Nevada Mountains. The project area is included in the east ½ of Section 31, most of Sections 32 and 33, and a portion of the west ½ Section 34 of Township 6 South, Range 21 East, and northwest ¼ Section 4 and northeast ¼ of Section 5 of Township 7 South, Range 21 East, Mount Diablo Base and Meridian on the Bass Lake 15 minute USGS Quadrangle. Generally, the project area is located in proximity to State Route (SR) 49 and Harmony Lane, approximately 2.5 miles west of SR-41, near Oakhurst. SR-41 provides access to and from the Fresno metropolitan area, to the foothills and mountains of Madera County, traverses through the communities of Coarsegold and Oakhurst and is the major southern route into Yosemite National Park. The project area is situated along Opah Drive, approximately 0.75 miles north of its intersection with Harmony Lane (refer to Exhibit 3-2, *Site Vicinity*).

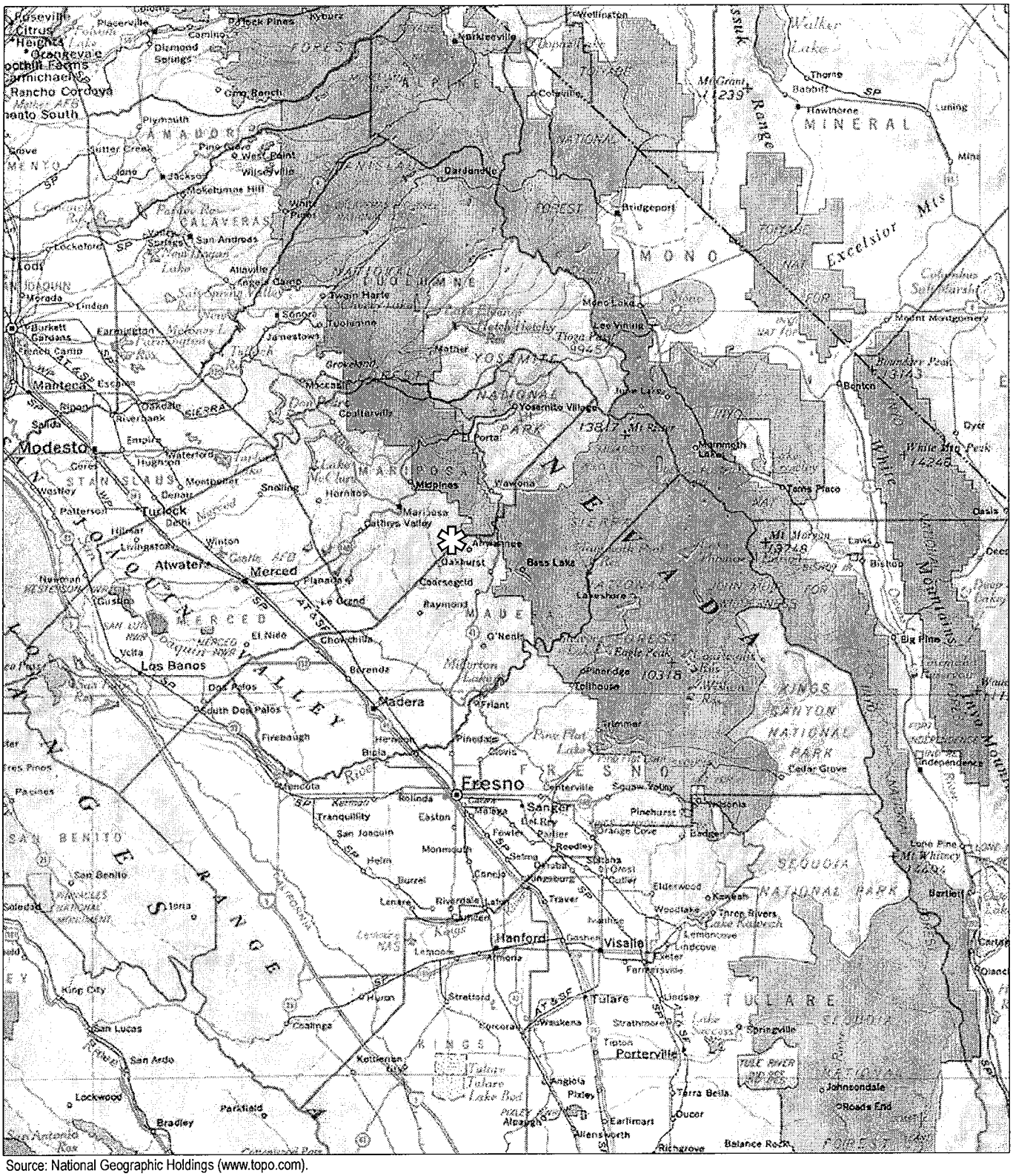
The project area consists of approximately 537.6 acres proposed for residential uses and water storage facilities. The site is located adjacent to the Sierra Meadows Golf Course, which is an existing 18-hole golf course situated on approximately 142 acres. The golf course has been in operation since 1987 and includes a clubhouse, restaurant, pool and associated amenities. As of Summer 2007, approximately 58 residential sites have been developed adjacent to the golf course.[1]

Exhibit 3-3, *Aerial Photograph*, shows the project site and surrounding vicinity. As illustrated in Exhibit 3-3, the surrounding area generally consists of undisturbed foothill woodland vegetation on varying topography. Numerous dirt roads and trails meander through the adjacent foothills. Land use designations for the surrounding area, as well as the proposed project area, are pursuant to the County's General Plan and the Ahwahnee/Nipinnawasee Area Plan (Area Plan). Land use designations in each of these planning documents are consistent for both the proposed project area and the surrounding area.

Land uses surrounding the project site include the following:

- North/Northwest: The Ahwahnee Country Club Estates Subdivision (Ahwahnee Estates) is located to the northwest of the project site. The Ahwahnee Estates have been subdivided into rural residential lots, similar to those of the proposed project, and are designated for Very-Low Density Residential (VLDR) uses (minimum one-acre parcel size) in the Area Plan. Buildout currently continues in the Ahwahnee Estates on a lot-by-lot basis. At

[1] Nolte Associates, Inc., August 28, 2007.



Source: National Geographic Holdings (www.topo.com).

- Project Site

NOT TO SCALE

SIERRA MEADOWS ESTATES SUBDIVISION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Regional Vicinity

Exhibit 3-1

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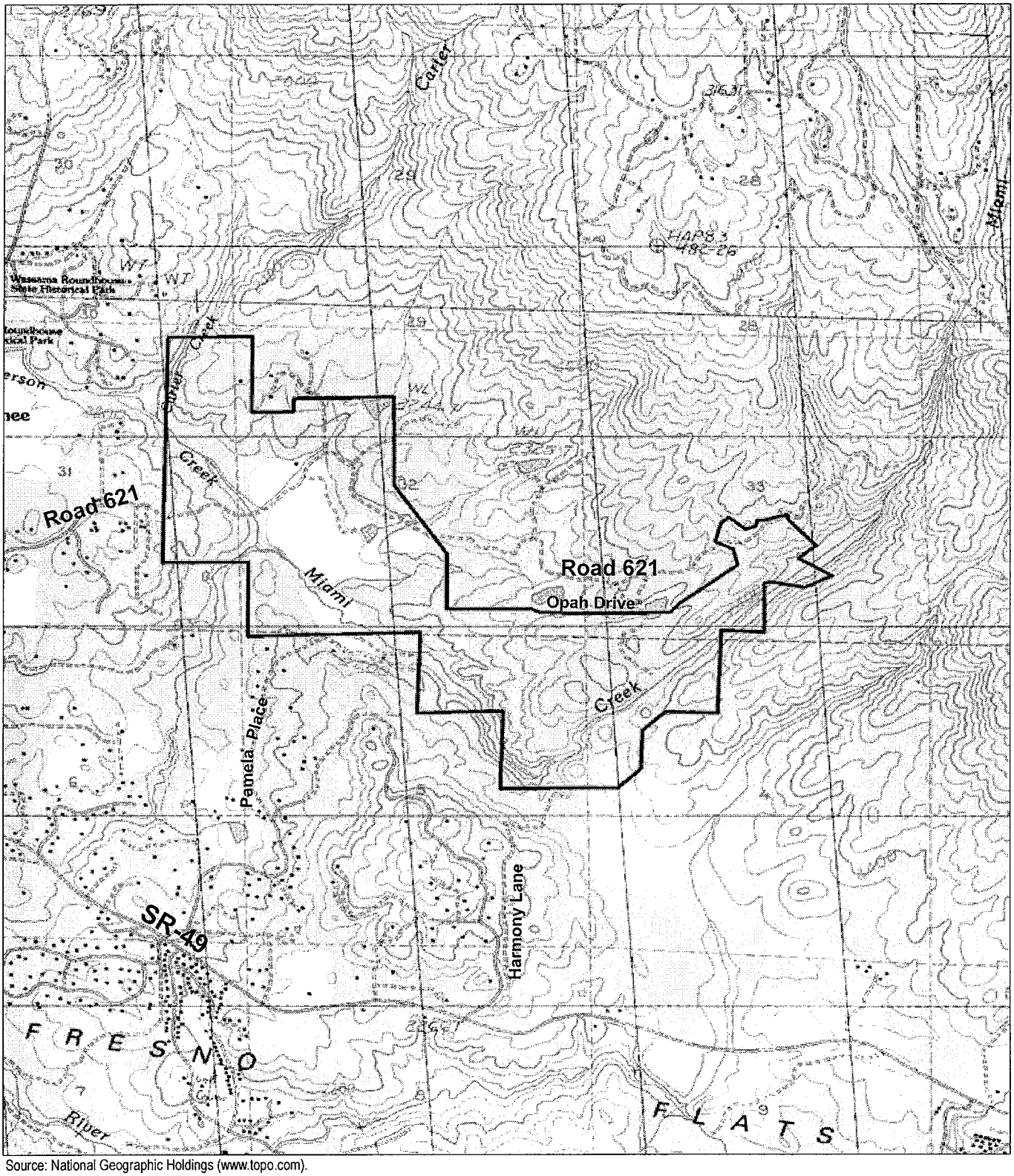

Source: National Geographic Holdings (www.topo.com).

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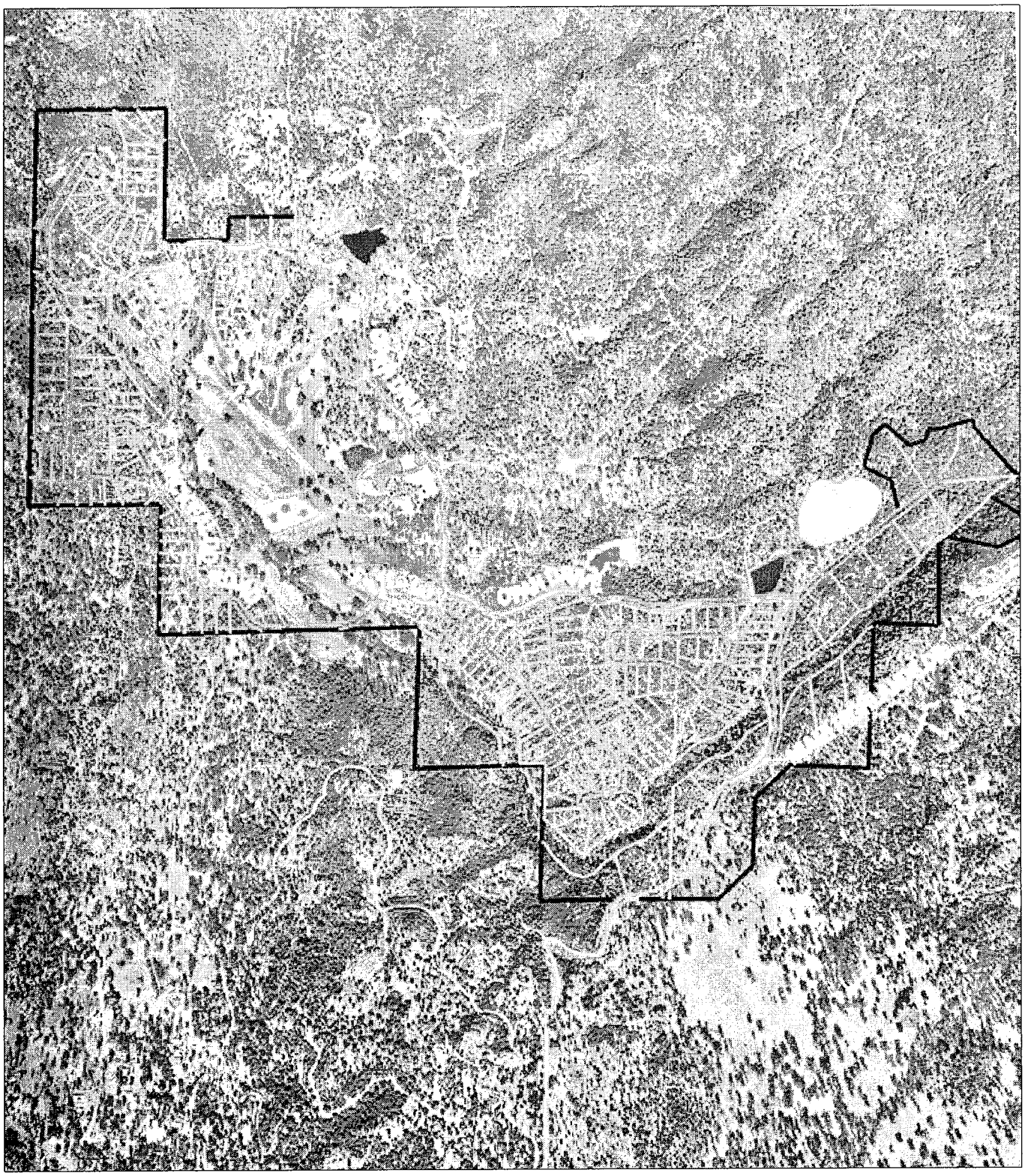
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Site Vicinity

Exhibit 3-2



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SIERRA MEADOWS ESTATES SUBDIVISION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Aerial Photograph

Exhibit 3-3

the northerly most portion of the project area (northwest of the Ahwahnee Estates), the land is designated for Rural Estate Residential (RER) uses (minimum parcel size of five acres).

- East: Open Space (OS), Rural Estates Residential (RER) and Agricultural Residential (AR) uses (minimum parcel size of 10 gross acres). Typical open space uses include agriculture, golf courses and utility easements. To the immediate east of the golf course and north of Opah Drive is a Recreational Vehicle (RV) Park, which currently (as of Fall 2004) provides 54 RV spaces with full hook-ups, including six rental cabins. The RV Park has a conditional use permit (CUP) for up to 600 RV sites. An additional 100 spaces have been rough graded to accommodate expansion. Onsite amenities include showers, laundry rooms and a small 1,600 square foot (sf) recreational building. Additionally, to the east of the southeasterly portion of the project site is the Miami Creek Estates. The Miami Creek Estates is developed on the south side of Miami Creek. The Area Plan designates the Miami Creek Estates area for Rural Estates Residential (RER) uses.

- West: Rural Residential (RR) land uses (2.5-acre minimum lot sizes).

- South: Agricultural Exclusive (AE) (minimum parcel size for AE uses is 36 acres), Agricultural Residential (AR) and Public Institutional (PI) uses. The PI designation provides for institutional uses such as schools, hospitals, libraries, government offices and facilities, churches, parks, etc.

Exhibit 3-3 illustrates that the adjacent lands to the north, west and south of the project area, designated for residential uses, have not been built-out and consist primarily of undeveloped, vacant land.

OVERVIEW OF EXISTING CONDITIONS

The proposed project area incorporates a variety of terrain types, including flat mesas, ridgelines, stream courses and associated valleys, and moderately to very steep terrain along the fairly narrow canyon at the northern end of Carter Creek. The project area is located at elevations ranging from approximately 1,600 feet to 2,500 feet, with terrain that varies from very level to steeply sloping (greater than 30 percent slope). The project area generally has a south to southwesterly sloping aspect. Slopes average between 15 and 30 percent in the project area. Slopes vary from three percent or less in the large alluvial valley, to over 30 percent in the north and northeast along the southern reach of Miami Creek, as well as in other locations onsite locally elsewhere (refer to Section 5.8, *Geology and Soils* of this SEIR and the 2007 Final EIR).

There are two perennial creeks located within the project boundaries. Miami Creek enters the project site from the east and generally traverses the southern boundary of the project site. Carter Creek enters the project site near the northwesterly portion of the project area and the two creeks converge at the existing golf course. In addition, there are several small ponds within the project area. The existing ponds are described in Section 3.2, *Revised Project Description*, below. The project site is within the upper Fresno River watershed. Downstream from the project vicinity is

Hensley Lake, a flood control reservoir operated by the U.S. Army Corps of Engineers.

The project area is in a relatively undisturbed (except for grazing and the stock ponds) foothill woodland vegetation and wildlife community. As previously stated, the project site is within a transitional area between the rolling foothills and mountain ranges of the Sierra Nevada Mountains. Habitat types occurring on the project site include foothill woodland, open water, riverine, riverine seasonal wetland, seasonal marsh, urban, and valley foothill riparian. Section 5.6, *Biological Resources*, of this SEIR and the 2007 Final EIR provide a detailed description of the existing onsite biological resources. Disturbed developed areas in the project vicinity include uses and facilities associated with the Sierra Meadows Golf Course, stock ponds and local roadways.

As previously stated, the project site is within the boundaries of the Ahwahnee/Nipinnawasee Area Plan. The Area Plan consists of approximately 37 square miles, generally centered near the intersection of SR-49 and Road 600. The Area Plan utilizes both the 1980 Oakhurst-Ahwahnee Growth Management Plan objectives and the 1995 Madera County General Plan policies as a foundation or framework on which to build more specific community development proposals for future growth in this area.

The Ahwahnee/Nipinnawasee area contains no public transportation routes or facilities. Therefore, the area is dependent on private automobile and truck access. Bike and pedestrian facilities are absent in the Ahwahnee/Nipinnawasee area, in part because of the area's steep terrain. Opah Drive is the main roadway arterial through the proposed project site. The majority of Opah Drive was constructed approximately 15 years ago as a local road to serve the Sierra Meadows Golf Course and Ahwahnee Country Club Estates Subdivision. Currently, Opah Drive is paved to a point just west of Wallu Lane.

3.2 REVISED PROJECT DESCRIPTION

The revised project description for the Sierra Meadows Estates Subdivision Project is generally consistent with the previous version. The project location, proposed residential land use, residential unit count, and anticipated permits and approvals remain the same. However, as stated above, several substantial changes to the project description have occurred in response to agency and public input, in an effort to minimize the potential environmental impacts of the project. These revisions are described in detail below, and a comparison with the original project description is provided within Tables 3-1 through 3-3, below.

IMPLEMENTATION OF THREE INDIVIDUAL OUTLOTS FOR THE PROTECTION OF MIAMI AND CARTER CREEKS

In response to concerns expressed by the United States Army Corps of Engineers (Corps), the original proposal to protect Miami and Carter Creeks through the implementation of restrictive easements has been replaced by the proposed dedication of three lots ("outlots") along each creek corridor. These outlots are intended to minimize the potential for future homeowners to install structures (e.g.

fences) or other impediments that may interfere with water flow or wildlife movement within the creek corridors. Each outlot would be dedicated in fee simple interest to an appropriate independent third party.

The Miami Creek corridor outlot would be 100 feet wide on each side of the centerline of Miami Creek (except where the easement would encroach on the golf course) and would abut new Phases 1, 2, 3, 4 and 5. The Carter Creek outlot would be 50 feet wide on each side of the centerline of the creek, abutting new Phases 7 and 10 (except where it flows through the Sierra Meadows Golf Course itself). A total of approximately 49.1 acres would be dedicated to the protection of the two creek corridors.

REVISIONS TO RESIDENTIAL LOT LOCATION AND PROJECT PHASING

In order to incorporate the three outlots along Miami and Carter Creeks (as described above), the reconfiguration of several residential lots and associated phasing was required. Residential lots previously proposed along each creek corridor have either been resized, reconfigured, and/or relocated to accommodate for each outlot. In general, a substantial number of lots have been created and/or reconfigured within the central portion of the project site (new Phases 3 and 5) to account for the loss of developable area along each of the creek corridors. A description of revisions along each corridor is described below.

Miami Creek Corridor

In order to create the Miami Creek outlot, it became necessary to reconfigure the 2.5-acre residential lots in the original Phases 8 and 9 into lots measuring at least one acre in size. This revised configuration resulted in the new Phases 3 and 5, having a total of 106 one-acre lots verses 67 lots in the same general area per the original layout.

In addition, three five-acre lots in the original Phase 1 (fronting Opah Drive and backing onto Miami Creek) and one lot in the original Phase 2 were eliminated due to the creation of the an outlot dedicated for the protection of Miami Creek.

Carter Creek Corridor

With the dedication of the Carter Creek outlot, a total of thirteen one-acre lots in the original Phase 5. Six of these lots were formerly proposed to receive access from the Sam Sneed Court cul-de-sac, while the remaining seven lots were proposed to take access from the Bobby Jones Court cul-de-sac.

In addition, two bridge crossings over Carter Creek were eliminated. Specifically, the previous extension of Pine River Road (within the northwestern corner of the project site) and the extension of Opah Drive (providing connectivity between original Phases 5 and 10) were eliminated to minimize impacts to the creek corridor.

Additional Wetland/Riparian Areas

In addition to the creation of three outlots along Miami and Carter Creeks, several modifications were made in order to protect areas of wetlands generally located within the northwestern portion of the project site. These modifications were made to increase the buffer zone between residential development and biologically sensitive wetland areas.

Specifically, eleven 7,000 square foot lots that were located in the original Phase 4 (along Nick Price Court at Opah Drive) have been eliminated. This 4.3-acre area was immediately adjacent to a seasonal wetlands area situated north of the Sierra Meadows Golf Course clubhouse. Another four lots have been removed in another section of the original Phase 4 fronting Tiger Woods Court, to afford an additional buffer area around a separate area of seasonal wetlands.

Another twelve 7,000 square foot lots were also eliminated from two of the three original Phase 7 groupings, which fronted on Ben Hogan Court and Walter Hagen Court.

Finally, four lots in Phases 2 and 3 have been eliminated in order to provide a wider buffer zone for another wetland area near the tee box for Sierra Meadows Golf Course hole number seven.

RECONFIGURATION OF ONSITE AND OFFSITE ROADWAYS

Construction of a New Emergency Access Roadway

Pursuant to consultation between the Project Applicant and the County of Madera Resources Management Agency, the project description has been revised to include the construction of a ¾-mile roadway extending Miami Highlands Drive towards the northeast to Road 620. This extension is needed to satisfy the County's need for an emergency roadway out of the Ahwahnee area that avoids the congested intersection of Highway 49 and Highway 41. The proposed roadway would provide more efficient egress from the Ahwahnee area in the event of a natural disaster, such as a large wildfire.

The construction of this emergency access roadway would be contingent upon the County of Madera designating a "Zone of Benefit" within the Ahwahnee area. This Zone of Benefit would determine whom the beneficiaries of the roadway would be, and costs of the roadway would be allocated among all property owners within the zone. Implementation of this roadway may also require the County to acquire adequate right-of-way.

Replacement of Original Secondary Access from Pine River Road with New Secondary Access from the Build-Out of Opah Drive

In response to public input received throughout the 2007 Final EIR process and in consultation with the Corps and County of Madera Road and Planning Departments, the originally-proposed extension of Pine River Road (over Carter Creek) to Road 628 has been eliminated. This roadway extension was eliminated due to concerns

over biological resources impacts to Carter Creek and due to public concerns over traffic generation along Pine River Road.

The new proposed main secondary access point would involve the extension of Opah Drive (along the western boundary of the project site) to Road 621 (which in turn terminates to the west at Highway 49). Refer to Exhibit 3-4, *Revised Site Plan and Phasing Map*.

Reconfiguration of Numerous Internal Residential Circulation Roadways

Revisions to the residential lot layout within the project site created the need to reconfigure many of the internal circulation roadways within the project site (refer to Exhibit 3-4, *Revised Site Plan and Phasing Map*). Although the primary internal access road (Opah Drive) remains unchanged, the majority of the proposed cul-de-sacs onsite are either new or have been realigned. Refer to Section 5.2, *Traffic and Circulation*, for additional information regarding onsite roadways.

INCREASE IN MINIMUM LOT SIZE FROM 7,000 SF TO 1/3-ACRE

In response to public concern regarding the density of the proposed construction of 135 lots with a minimum size of 7,000 square feet, the Project Applicant has eliminated all such lots and increased the minimum lot size throughout the project site to 1/3-acre (approximately 14,500 sf). This increase in lot size was accomplished by substantially increasing the number of one-acre lots and by reducing the number of 2.5- and five-acre lots.

RELOCATION OF THE PROPOSED WASTEWATER TREATMENT PLANT AND INCORPORATION OF NEW TREATED WASTEWATER EFFLUENT SPRAY FIELD

The original project description proposed that a portion of the Sierra Meadows Golf Course serve as the effluent spray field for the project's proposed onsite wastewater treatment plant. The Project Applicant has revised the project description to reflect a dedicated 24.9-acre spray field, to be located north of Opah Drive, within the central portion of the project area. Although the newly designated spray field is deemed adequate at full build-out for its intended purpose, it is conceivable that a portion of the golf course may be utilized as an additional spray field area. Along with this new spray field, relocation of the proposed onsite wastewater treatment plant would be required. A new 2.3-acre outlot for a wastewater treatment plant (to be deeded in fee simple interest to the County's Maintenance District 46) would be created along the proposed Jack Nicklaus Drive, within the central portion of the project site. Refer to Exhibit 3-4, *Revised Site Plan and Phasing Map*, for the new and revised locations of these facilities.

3.3 PROJECT COMPARISON

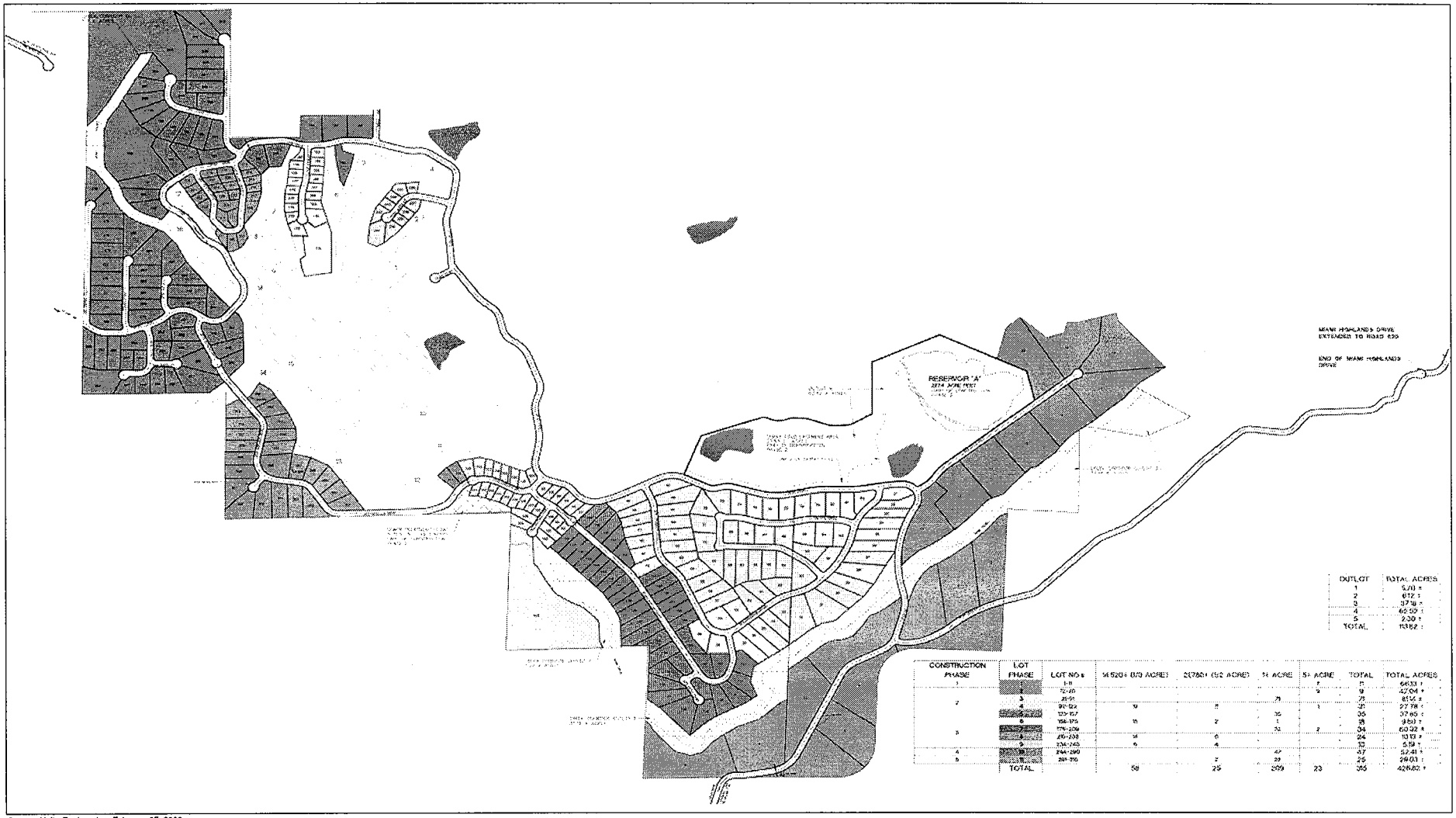
A direct comparison between the original project description and the revised project description is provided within Tables 3-1 through 3-3, below.

Table 3-1
Comparison of Primary Project Components

Project Component	Original Proposal	Current Proposal
Total Project Acreage	487 acres	537.6 acres
Residential Units	315 units	315 units
Primary Access	Opah Drive	Opah Drive
Secondary Access	Pine River Road	Opah Drive to Road 621
Number of Proposed Roadway Crossings Over Creeks	3	1
Location of Effluent Spray Field	Golf Course	Dedicated Spray Field & Golf Course
Location of Wastewater Treatment Plant	Within Northwestern Portion of Site, Adjacent to Golf Course	Within Central Portion of Site, South of Proposed Jack Nicklaus Drive
Protection of Miami and Carter Creeks	Restrictive Easement	Dedication of Three Outlots
Emergency Roadway	None	Extension of Miami Highlands Drive to Road 620
Location of Water Storage Reservoir	Within Northeastern Portion of Site, North of Bob Estes Drive	Within Northeastern Portion of Site, North of Bob Estes Drive
Number of Water Storage Ponds	3	3
Total Water Storage Capacity	309 acre feet	309 acre feet

Table 3-2
Comparison of Proposed Residential Lots

Minimum Lot Size	Original Proposal	Current Proposal
7,000 sf to 1/3-Acre	135	0
1/3-Acre to ½-Acre	0	58
½-Acre to 1 Acre	0	25
1 Acre	111	209
2 ½ Acre	38	0
5 Acres	31	23
TOTAL	**315**	**315**



Source: Nolte Engineering; February 25, 2008.

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SIERRA MEADOWS ESTATES SUBDIVISION
SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

Site Plan and Phasing Map

Exhibit 3-4

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Table 3-3
Comparison of Lots Per Phase

Phase	Original Proposal	Current Proposal
1	28	11
2	32	9
3	21	71
4	25	31
5	14	35
6	29	18
7	33	34
8	30	24
9	37	10
10	23	47
11	19	25
12	24	N/A
TOTAL	**315**	**315**

As shown above within Tables 3-1 through 3-3, substantial revisions to several project components have become necessary, in addition to a reconfiguration of the residential lot layout and phasing program.

3.4 PROJECT OBJECTIVES

The objectives for the Sierra Meadows Project are as follows:

- Develop a single-family residential subdivision consisting of 315 single-family homes on lots ranging from 1/3-acre up to five acres on approximately 541 acres of land. All lots would be sold "as is" with utility connections stubbed out at the property line;
- Create a project with land use designations that are consistent with the Ahwahnee/Nipinnawasee Area Plan;
- Capitalize on aesthetic and view features including the Sierra Meadows Golf Course and the Sierra Nevada Mountains.
- Provide a 50-foot and 100-foot dedicated riparian setback area along both Carter Creek and Miami Creek, respectively, in order to protect habitat conditions;
- Provide a roadway system with a dedicated public right-of-way that allows access to all lots and ingress/egress to the project site from two routes of travel, with direct access to SR-49. Opah Drive would be extended to Road 621 provide a continuous through road ultimately connecting to SR-49; and
- Provide a potable water system by construction and implementation of a water treatment plant to treat the Miami Creek water supply and utilize two existing water wells

3.5 PHASING

It is anticipated that the proposed project would be built in 11 phases. Residential construction would not begin until after recordation of the Final Subdivision Map. The anticipated construction time frame for each phase is shown in Table 3-4, *Project Phasing*, below.

Table 3-4
Project Phasing

Construction Phase	Lot Phases[1]	Anticipated Construction Start Date	Number of Homes
1	1	Immediately After Recordation of First Final Map	11
2	2,3,4,5	Six Months After Recordation of First Final Map	146
3	6,7,8,9	36 Months After Recordation of First Final Map	86
4	10	48 Months After Recordation of First Final Map	47
5	11	60 Months After Recordation of First Final Map	25

[1] Refer to Exhibit 3-4, *Revised Site Plan and Phasing Map* for a depiction of proposed lot phase locations.

3.6 AGREEMENTS, PERMITS, AND APPROVALS

Madera County is the Lead Agency for the proposed project and has discretionary authority over the primary project proposal. To implement this project, the Project Applicant would need to obtain various permits/approvals. The permits/approvals required under the revised project description are anticipated to remain similar to those required for the original proposal. These include, but are not limited to:

Madera County

- Madera County General Plan Amendment – Refer to Section 5.1, *Land Use and Relevant Planning*, for proposed changes to land use designations for the site.
- Ahwahnee/Nipinnawasee Area Plan Amendment – Refer to Section 5.1, *Land Use and Relevant Planning*, for proposed changes to Area Plan designations for the site.
- Zone Change – Refer to Section 5.1, *Land Use and Relevant Planning*, for proposed changes to zoning designations at the site.
- Special District Formation or Expansion – to be determined by the County.
- CEQA Compliance and Certification
- Approval of Tentative and Final Subdivision Maps.

Other Agencies

- California Department of Fish and Game
  - 1603 Permit: Streambed Alternation Permit
- Army Corps of Engineers
  - 404 Permit
- California Regional Water Quality Control Board
  - Section 401 Permit
  - Section 402 NPDES Permit
  - Waste Discharge Permit
- California State Water Resources Control Board (Division of Water Rights)
  - Surface Water Rights
- Any other approvals deemed necessary during the entitlement process

Coordination with adjacent jurisdictions, agencies and utility companies referenced in Section 1.5 of this EIR may also be required.

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4.0 Basis for Cumulative Analysis

4.0 BASIS FOR CUMULATIVE ANALYSIS

Section 15355 of the State California Environmental Quality Act (CEQA) *Guidelines*, as amended, provides the following definition of cumulative impacts: "Cumulative impacts' refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Pursuant to Section 15130(a) of the aforementioned *Guidelines*, cumulative impacts of a project shall be discussed when the project's effect is cumulatively considerable, as defined in Section 15065(c) of the *Guidelines*. Section 5.0 of this EIR provides a cumulative impact assessment for each applicable environmental issue, and does so to a degree which reflects each impact's severity and likelihood of occurrence.

As indicated above, a cumulative impact involves two or more individual effects. Per State *CEQA Guidelines* Section 15130, the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness. Per *CEQA Guidelines* Section 15130(b), the following elements are necessary in an adequate discussion of significant cumulative impacts:

1. Either:

   a. A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or

   b. A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

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

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

Pursuant to *CEQA Guidelines* Section 15130(b), this EIR includes cumulative impact assessments for each applicable environmental issue area based upon a summary of projections in the Madera County General Plan (adopted in 1995) and refined in the Ahwahnee/Nipinnawasee Area Plan (adopted in 1999). An EIR was not prepared for the Ahwahnee/Nipinnawasee Area Plan; however, an EIR is included with the 1995 Madera County General Plan, which focuses on the cumulative impacts of development/buildout under the General Plan through 2010. The cumulative impact assessments reference the impact conclusions in the General Plan EIR for each applicable environmental issue area. This EIR then provides an analysis of any feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects. Based upon this analysis, the EIR provides a

conclusion of the significance of cumulative impacts associated with project build-out conditions.

The 1995 Madera County General Plan considers the project area and shows Oakhurst as a regional retail shopping and commercial service center and the largest concentration of employment in Eastern Madera County, with approximately 2,870 employees as of 1990. The General Plan envisions that the North 41 Corridor Area, which includes communities along SR-49 and along SR-41 north of State Route 45, including Ahwahnee, Oakhurst, Coarsegold, Yosemite Lakes Park and the Bass Lake area, would have a population of 33,000 persons and employment of 8,300 persons by 2010. According to the Ahwahnee/Nipinnawasee Area Plan, by 2020, these projections are anticipated to increase to 40,600 and 11,000 respectively.

5.0 Description of Environmental Setting, Impacts, and Mitigation Measures

5.0 DESCRIPTION OF ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

As stated within Section 1.4 of this SEIR, *Format of the EIR*, it has been determined that revisions to the project description have the potential to result in a substantial change in impacts in regards to: 1) Land Use and Relevant Planning; 2) Traffic and Circulation; and 3) Air Quality. A detailed impact analysis is provided for these issue areas within Sections 5.1 through 5.3.

It has also been determined that revisions to the project description would result in a nominal change in impacts for: 1) Aesthetics/Light and Glare; 2) Biological Resources; 3) Cultural Resources; 4) Geology and Soils; 5) Hydrology and Drainage; 6) Noise; and 7) Public Services and Utilities. A brief summary of existing conditions and a comparison of findings between the 2007 Final EIR and the revised project description is provided. These issue areas are analyzed within Sections 5.4 through 5.10.

5.1 LAND USE AND RELEVANT PLANNING

The purpose of this section is to describe existing land use conditions within the project site vicinity and analyze impacts of the revised project description in comparison to the original *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report (EIR)*. Impacts related to project compatibility with existing uses and consistency with relevant planning policies is provided. Because this EIR serves as a supplement to the 2007 Final EIR, the 2007 Final EIR serves as the primary basis for existing conditions and impact analysis. Specifically, the impact analysis provided within this section will describe changes that have occurred in relation to proposed Madera County *General Plan* land use designations, *Ahwahnee/Nipinnawasee Area Plan* designations, and Madera County zoning designations.

EXISTING CONDITIONS

ON-SITE LAND USES

The 537.6-acre project site is located in the unincorporated area of eastern Madera County, along Opah Drive and approximately 0.75 miles north of its intersection with Harmony Lane (Oakhurst) (refer to Exhibit 3-2, *Site Vicinity*). The property is located in a rural residential area, which transitions between the rolling foothills and mountain ranges of the Sierra Nevada Mountains. Access to the site is provided via State Route (SR) 49, which provides access to and from the Fresno metropolitan area, to the foothills and mountains of Madera County.

The project site contains moderate to steep slopes, including slopes in excess of 30 percent, and intermediate and dense vegetation. Two perennial creeks are located within the project boundaries: Miami Creek enters the site from the east and

generally traverses the southern boundary of the project site; and Carter Creek enters the site from the northwest. The two creeks actually converge to the west of the golf course. In addition, several small ponds are located within the project area.

SURROUNDING LAND USES

Centrally located between the northern and southern portions of the project site is the 142-acre Sierra Meadows Golf Course and Country Club. The Sierra Meadows facility has been in operation for 18 years and includes an 18-hole golf course (Sierra Meadows Ranch Course), driving range, clubhouse, restaurant, pool, and associated amenities. As of Fall 2007, approximately 58 residential sites have been developed adjacent to the golf course. The community involves custom home rural residential lots ranging from 1.2 to 2.99 gross acres. The community includes areas zoned for a mixture of Residential, Rural, Single-Family District (RRS), RRS-2.0 and RRS-2.5, which consist of 1.0-, 2.0-, and 2.5-acre minimum lot sizes, respectively. Additional land uses surrounding the project site include the following:

- North: Vacant areas to the north are zoned Rural, Mountain District (RM) and Residential, Rural, Single-Family 5 (RRS-5). Areas zoned Rural, Mountain (RM) consist of two-acre minimum lot sizes, while Residential, Rural, Single-Family 5 (RRS-5) areas consist of 5-acre minimum lot sizes.

- South: Uses to the south of the project area are zoned Rural, Mountain (RM); Agriculture, Rural, Exclusive, Forty-Acre District (ARE-40); and Residential, Rural, Single-Family 5 (RRS-5). Areas zoned Agriculture, Rural, Exclusive 40 (ARE-40) consist of 36-acre minimum lot sizes.

- East: To the east of the project site are areas zoned as Open Space District (OS). Typical open space uses include agriculture, golf courses, and utility easements. A recreational vehicle (RV) park containing RV spaces and rental cabins is located immediately east of the project site, southeast of the existing golf clubhouse.

- West: Uses to the west of the project consist of undeveloped vacant land zoned Residential, Mountain, Single-Family District (RMS) and Rural, Mountain (RM). Residential, Mountain, Single-Family (RMS) zoned areas consist of lot standards that are to be consistent with County Ordinances and state law.

MADERA COUNTY GENERAL PLAN AND BACKGROUND REPORT

The *Madera County General Plan* consists of two types of documents: the countywide *General Plan* and a set of more detailed area plans covering specific areas of the unincorporated County. The *General Plan* provides an overall framework for development of the County and protection of natural and cultural resources. Area plans, adopted in the same manner as the countywide *General Plan*, provide a more detailed focus on specific geographic areas within the unincorporated County. The goals and policies contained in the area plans supplement and elaborate upon, but do not supersede, the goals and policies of the

Policy Document. The project site is located within the boundaries of the *Ahwahnee/Nipinnawasee Area Plan* (refer to discussion below).

Table 5.1-1, *Summary of Existing General Plan Designations*, outlines the land use designations on the project site and specifies the development standards for each land use designation. As indicated in Table 5.1-1, the project site's residential development potential, based on the existing *General Plan* designations, is approximately 549 dwelling units.

Table 5.1-1
Summary of Existing General Plan Designations

General Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/Maximum DUs per Gross Acre or per Parcel	
Open Space (OS)	124.1	None	Maximum 0.05 DU per gross acre	6.21
Rural Estate Residential (RER)	22.12	5 acres	Maximum 2.00 DU per parcel	8.85
Rural Residential (RR)	265.96	As determined by Zoning	Maximum 0.50 DU per gross acre	132.98
Very Low Density Residential (VLDR)	98.18	As determined by Zoning	Maximum 2.00 DU per gross acre	196.36
Low Density Residential (LDR)	27.22	As determined by Zoning	1.00 to 7.5 DU per gross acre	204.15
Total Acres	**537.58**			**549**

Source: Table I-1 of the *Madera County General Plan Policy Document, Summary of Development Standards.*

Refer to Appendix 13.2, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, for a detailed description of existing land use designations applicable to the site, information regarding the various elements contained within the *General Plan*, and policies applicable to the proposed project.

AHWAHNEE/NIPINNAWASEE AREA PLAN

As previously noted, the project site is located within the boundaries of the *Ahwahnee/Nipinnawasee Area Plan*. The *Area Plan* is intended to refine the goals and policies of the 1995 *Madera County General Plan* and provide more detailed guidance for future growth and development in the Ahwahnee/Nipinnawasee community of Eastern Madera County. The *Area Plan* utilizes both the 1980 *Oakhurst-Ahwahnee Growth Management Plan* objectives and the 1995 *Madera County General Plan* policies as a foundation or framework on which to build more specific community development proposals for future growth in this area. The goals and policies contained in the *Area Plan* supplement and elaborate upon, but do not supersede, the goals and policies of the *General Plan Policy Document*.

Table 5.1-2, *Summary of Existing Area Plan Designations*, outlines the *Area Plan* designations on the project site and specifies the development standards for each

land use designation. As indicated in Table 5.1-2, the project site's residential development potential, based on the existing *Area Plan* designations, is approximately 356 dwelling units. The project proposes 315 units, which represents 88 percent of the units allowed by the *Area Plan*.

Table 5.1-2
Summary of Existing Area Plan Designations

Area Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/ Maximum Dwelling Units	
Open Space (OS)	124.10	None	Maximum 1.0 DU per 20 gross acres	6.21
Rural Estate Residential (RER)	22.12	5 acres	Maximum 2.00 DU per parcel and secondary unit	8.85
Rural Residential (RR)	265.96	2.5 acres	Maximum 1.0 DU per 2.5 gross acres[1]	106.38
Very Low Density Residential (VLDR)	98.18	1.0 acre	Maximum 1.00 DU per gross acre[2]	98.18
Low Density Residential (LDR)	27.22	Not specified	1.00 to 5.00 DU per gross acre[3]	136.10
Total Acres	**537.58**			**356**

1. Although the County General Plan enables RR residential densities up to 0.5 dwelling units per 1.0 gross acre, the Area Plan proposes this more restrictive standard.
2. Although the County General Plan enables VLDR residential densities up to 2.0 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
3. Although the County General Plan enables LDR residential densities up to 7.5 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.

Source: *Ahwahnee/Nipinnawasee Area Plan*, October 19, 1999.

Refer to Appendix 13.2, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, for a detailed description of existing area plan designations applicable to the site, information regarding the various components of the *Area Plan*, and policies applicable to the proposed project.

MADERA COUNTY ZONING ORDINANCE

Madera County is divided into zoning districts as illustrated on the official Zoning Maps. According to County zoning maps, the project site is within the boundaries of multiple zoning districts. Existing zoning for the project site is outlined in Table 5.1-3, *Summary of Existing Zoning*. Based on existing zoning, the residential development potential on the project site is approximately 98 dwelling units.

MADERA COUNTY REGIONAL TRANSPORTATION PLAN

The Madera County Transportation Commission (MCTC) is the Regional Transportation Planning Agency (RTPA) and Metropolitan Planning Organization (MPO) for Madera County. The Madera metropolitan boundary covers all of Madera

County. The Commission is responsible for the development and adoption of the *Regional Transportation Plan* (RTP) and *Transportation Improvement Program* (TIP) as required by state law.

Table 5.1-3
Summary of Existing Zoning Districts

Zoning District	Project Site Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area (gross)	Range/Maximum Dwelling Units	
Residential, Rural, Single-Family District (RRS-2.5)	158.41	2.5 acres	Maximum 1.00 DU Per parcel	63.36
Residential, Rural, Single-Family District (RRS-5.0)	27.82	5.0 acres	Maximum 1.00 DU Per parcel	5.56
Open Space District (OS)	109.84	5.0 acres	Maximum 1.00 DU per farm or ranch	21.97
Agricultural, Rural, Exclusive District (ARE-40).	241.51	36 acres	1.00 DU per farm/ranch	6.71
Total Acres	**537.58**			**98**
Source: Madera County Zoning Ordinance.				

The latest Madera County RTP was prepared and approved by the MCTC on May 23, 2007. The RTP reflects the regional transportation system through Fiscal Year (FY) 2030. The RTP ensures that the County's transportation system and implementation policies/programs through FY 2030 will safely and efficiently accommodate growth envisioned in the Land Use Elements of the cities of Chowchilla and Madera, and Madera County. Recent recommendations included in special studies related to transportation and circulation were also reviewed and incorporated into the RTP document, where appropriate.

IMPACTS

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to land use and relevant planning. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Physically divides an established community (refer to Section 10.0, *Effects Found Not To Be Significant*);
- Conflicts with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general

plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect (refer to Impact Statements 5.1-1 through 5.1-3); and/or

- Conflicts with any applicable habitat conservation plan or natural community conservation (refer to Section 5.6, *Biological Resources* of both the 2007 Final EIR and this SEIR).

Generally, the intermixing of land uses may result in land use incompatibilities. Land use compatibility impacts associated with land development are a factor of quality of life issues, including, but not limited to traffic, noise, risk, and aesthetics (views/ physical scale). While these may generally be perceived as subjective issues, the significance criteria detailed in each of the respective issue sections provides a basis for assessing land use compatibility impacts.

Potential impacts related to land use and consistency with related planning documents and policies have been identified. Mitigation measures are provided to avoid or substantially lessen significant impacts, if necessary.

CHANGES WITHIN THE REVISED PROJECT DESCRIPTION

Several revisions to the project description related to land use and relevant planning have occurred since preparation of the 2007 Final EIR. These changes include revisions to residential lot locations and sizes. These revisions have necessitated associated changes to proposed *General Plan, Area Plan,* and zoning designations applicable to the project.

Since amendments to the *General Plan, Area Plan,* and *Zoning Ordinance* would be required for project approval (similar to the 2007 Final EIR), these revisions are not anticipated to result in new significant impacts, nor would the severity of previously-identified impacts substantially increase. A comparison between the potential land use/planning effects of the original project description and the revised project description is provided below.

MADERA COUNTY GENERAL PLAN

5.1-1 *The revised project description is consistent with the land use plan, policies and regulations set forth in the Madera County General Plan. Analysis has concluded that impacts would be less than significant following compliance with the recommended mitigation measures, regulatory framework and General Plan Amendment approval.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Under the County's General Plan, the 2007 Final EIR found that the original project description would result in the range of land use designations shown in Table 5.1-4, *Summary of Proposed General Plan Designations – 2007 Final EIR.*

The 2007 Final EIR provided analysis for the original project description's consistency with the *General Plan* under land use, transportation and circulation,

public facilities and services, cultural and recreational resources, agricultural and natural resources, and safety. The project was determined to be consistent with the goals and policies of each issue area, upon compliance with recommended mitigation measures, existing regulatory requirements, and approval of a General Plan Amendment. Refer to Appendix 13.2 of the SEIR, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, for detailed impact analysis for the original project description.

Table 5.1-4
Summary of Proposed General Plan Designations – 2007 Final EIR

General Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/Maximum DUs per Gross Acre or per Parcel	
Open Space (OS)	0.00	None	Maximum 0.05 DU per gross acre	0.00
Rural Estate Residential (RER)	198.40	5 acres	Maximum 2.00 DU per parcel	79.36
Rural Residential (RR)	107.51	As determined by Zoning	Maximum 0.50 DU per gross acre	53.76
Very Low Density Residential (VLDR)	136.44	As determined by Zoning	Maximum 2.00 DU per gross acre	272.88
Low Density Residential (LDR)	97.41	As determined by Zoning	1.00 to7.5 DU per gross acre	730.58
Total Acres	**540**[1]			**1,137**

1. Various portions of the project area are included within larger General Plan designated areas, which extend beyond the project area. Where General Plan amendments would be necessary, land use designation changes would occur for the entire encompassing General Plan designated area. Thus, while the General Plan designations total 540 acres, the actual project area considered in the 2007 Final EIR was 487 acres.

Source: Table I-1 of the Madera County General Plan Policy Document, *Summary of Development Standards*.

REVISED PROJECT DESCRIPTION

The revised project description would be similar to the 2007 Final EIR in that only residential uses would be constructed as part of the proposed project. However, revised residential lot locations and sizes require that the acreages proposed under the General Plan Amendment change, and that a new land use designation (Agricultural Residential, or AR) is also incorporated into the Amendment. Table 5.1-5, *Summary of Proposed General Plan Designations – Revised Project Description*, provides the revised range of land use designations for the proposed project.

The proposed General Plan Amendment would increase the project site's development potential by approximately 177 dwelling units over existing designations (refer to Table 5.1-6, *Summary of Change in General Plan Designations Under the Revised Project Description*). In addition, the revised project description represents a 411 dwelling unit reduction in development potential in comparison to the original project description analyzed within the 2007 Final EIR

Table 5.1-5
Summary of Proposed General Plan Designations – Revised Project Description

General Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/Maximum DUs per Gross Acre or per Parcel	
Open Space (OS)	114.64	None	Maximum 0.05 DU per gross acre	5.73
Agricultural Residential (AR)	29.41	10 acres	Maximum 2.00 DU per parcel	5.88
Rural Estate Residential (RER)	120.27	5 acres	Maximum 2.00 DU per parcel	48.11
Rural Residential (RR)	4.82	As determined by Zoning	Maximum 0.50 DU per gross acre	2.41
Very Low Density Residential (VLDR)	245.39	As determined by Zoning	Maximum 2.00 DU per gross acre	490.78
Low Density Residential (LDR)	23.05	As determined by Zoning	1.00 to7.5 DU per gross acre	172.88
Total Acres	**537.58**			**726**

Source: Table I-1 of the Madera County General Plan Policy Document, *Summary of Development Standards.*

Table 5.1-6
Summary of Change in General Plan Designations Under the Revised Project Description

General Plan Land Use Designation	Existing		Proposed		Change	
	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential
Open Space (OS)	124.1	6.21	114.64	5.73	-9.46	-0.47
Agricultural Residential (AR)			29.41	5.88	29.41	5.88
Rural Estate Residential (RER)	22.12	8.85	120.27	48.11	98.15	39.26
Rural Residential (RR)	265.96	132.98	4.82	2.41	-261.14	-130.57
Very Low Density Residential (VLDR)	98.18	196.36	245.39	490.78	147.21	294.42
Low Density Residential (LDR)	27.22	204.15	23.05	172.88	-4.17	-31.27
Total Acres	**537.58**	**549**	**537.58**	**726**	**0**	**177**

The 315 dwelling units proposed by the project would represent approximately 57 percent of the 549-dwelling unit potential under existing *General Plan* designations. Additionally, development under the proposed *General Plan* designations would involve a decrease in OS, RR, and LDR-designated areas, while an increase in RER

and VLDR-designated areas would occur. A new *General Plan* designation, Agricultural Residential (AR) would be introduced to the site as part of the proposed project.

Although the proposed land use designations associated with the revised project description would allow for a higher number of dwelling units onsite, only 315 units would be constructed (similar to the 2007 Final EIR).

The revised project description would not result in substantially increased land use and relevant planning impacts under the *General Plan* in comparison to the 2007 Final EIR. Similar to the 2007 Final EIR, a General Plan Amendment would be necessary for the revised project description, and the same number of residential dwelling units (315) are proposed. Upon compliance with recommended mitigation measures, existing regulatory requirements, and approval of a General Plan Amendment, the revised project description would not result in significant impacts in this regard.

AHWAHNEE/NIPINNAWASEE AREA PLAN

5.1-2 *The revised project description is consistent with the land use plan, policies and regulations set forth in the Ahwahnee/Nipinnawasee Area Plan. Analysis has concluded that impacts would be less than significant following compliance with the recommended mitigation measures and regulatory framework, and General Plan Amendment approval.*

2007 FINAL EIR - ORIGINAL PROJECT DESCRIPTION

Under the *Ahwahnee/Nipinnawasee Area Plan*, the 2007 Final EIR found that the original project description would result in the range of area plan designations shown in Table 5.1-7, *Summary of Proposed Area Plan Designations – 2007 Final EIR.*

The 2007 Final EIR provided analysis for the original project description's consistency with the *Area Plan* under specific objectives, basic concepts, land use and housing, circulation/transportation, and open space. The project was determined to be consistent with the goals and policies of the *Area Plan*, upon compliance with recommended mitigation measures, existing regulatory requirements, and approval of a General Plan Amendment (under which the *Area Plan* would also be amended).

Refer to Appendix 13.2 of the SEIR, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, for detailed impact analysis of *Area Plan* consistency for the original project description.

REVISED PROJECT DESCRIPTION

Like the 2007 Final EIR, the revised project description proposes 315 dwelling units within the project site. However, revised residential lot locations and sizes require that the acreages proposed under the *Area Plan* change, and that a new *Area Plan* designation (Agricultural Residential, or AR) is also incorporated into the General Plan Amendment. Table 5.1-8, *Summary of Proposed Area Plan Designations –*

Revised Project Description, provides the revised range of *Area Plan* designations for the proposed project.

Table 5.1-7
Summary of Proposed Area Plan Designations – 2007 Final EIR

Area Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/Maximum Dwelling Units	
Open Space (OS)	73.43	None	Maximum 1.0 DU per 20 gross acres	0.00
Rural Estate Residential (RER)	40.10	5 acres	Maximum 2.00 DU per parcel and secondary unit	79.36
Rural Residential (RR)	260.31	2.5 acres	Maximum 1.0 DU per 2.5 gross acres[1]	43.00
Very Low Density Residential (VLDR)	102.22	1.0 acre	Maximum 1.00 DU per gross acre[2]	136.44
Low Density Residential (LDR)	63.70	not specified	1.00 to 5.00 DU per gross acre[3]	487.05
Total Acres	**540[4]**			**746**

1. Although the County General Plan enables RR residential densities up to 0.5 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
2. Although the County General Plan enables VLDR residential densities up to 2.0 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
3. Although the County General Plan enables LDR residential densities up to 7.5 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
4. Various portions of the project area are included within larger General Plan designated areas, which extend beyond the project area. Where General Plan amendments would be necessary, land use designation changes would occur for the entire encompassing General Plan designated area. Thus, while the General Plan designations total 540 acres, the actual project area considered in the 2007 Final EIR was 487 acres.

Source: *Ahwahnee/Nipinnawasee Area Plan*, October 19, 1999.

The proposed *Area Plan* designations would increase the project site's development potential by approximately 66 dwelling units over existing designations (refer to Table 5.1-9, *Summary of Change in Area Plan Designations Under the Revised Project Description*). The revised project description would represent a decrease of 324 dwelling units in development potential in comparison to the original project description analyzed within the 2007 Final EIR

The 315 dwelling units proposed by the project would represent approximately 88 percent of the 356-dwelling unit potential under existing *Area Plan* designations. Additionally, development under the proposed *General Plan* designations would involve a decrease in OS, RR, and LDR-designated areas, while an increase in RER and VLDR-designated areas would occur. A new *Area Plan* designation, Agricultural Residential (AR) would be introduced to the site as part of the proposed project.

Table 5.1-8
Summary of Proposed Area Plan Designations – Revised Project Description

Area Plan Land Use Designation	Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area	Range/Maximum Dwelling Units	
Open Space (OS)	114.64	None	Maximum 1.0 DU per 20 gross acres	5.73
Agricultural Residential (AR)	29.41	10 acres	Maximum 2.00 DU per parcel	5.88
Rural Estate Residential (RER)	120.27	5 acres	Maximum 2.00 DU per parcel and secondary unit	48.11
Rural Residential (RR)	4.82	2.5 acres	Maximum 1.0 DU per 2.5 gross acres[1]	1.93
Very Low Density Residential (VLDR)	245.39	1.0 acre	Maximum 1.00 DU per gross acre[2]	245.39
Low Density Residential (LDR)	23.05	Not Specified	1.00 to 5.00 DU per gross acre[3]	115.25
Total Acres	**537.58**			**422**

5. Although the County General Plan enables RR residential densities up to 0.5 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
6. Although the County General Plan enables VLDR residential densities up to 2.0 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.
7. Although the County General Plan enables LDR residential densities up to 7.5 dwelling units per 1.0 gross acres, the Area Plan proposes this more restrictive standard.

Source: *Ahwahnee/Nipinnawasee Area Plan*, October 19, 1999.

Table 5.1-9
Summary of Change in Area Plan Designations Under the Revised Project Description

General Plan Land Use Designation	Existing		Proposed		Change	
	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential
Open Space (OS)	124.10	6.21	114.64	5.73	-9.46	-0.48
Agricultural Residential (AR)			29.41	5.88	29.41	5.88
Rural Estate Residential (RER)	22.12	8.85	120.27	48.11	98.15	39.26
Rural Residential (RR)	265.96	106.38	4.82	1.93	-261.14	-104.45
Very Low Density Residential (VLDR)	98.18	98.18	245.39	245.39	147.21	147.21
Low Density Residential (LDR)	27.22	136.10	23.05	115.25	-4.17	-20.85
Total Acres	**537.58**	**356**	**537.58**	**422**	**0**	**66.57**

As stated above, although the proposed land use designations associated with the revised project description would allow for a higher number of dwelling units onsite, only 315 units would be constructed (similar to the 2007 Final EIR).

The revised project description would not result in substantially increased land use and relevant planning impacts under the *Area Plan* in comparison to the 2007 Final

EIR. Similar to the 2007 Final EIR, a General Plan Amendment (under which *Area Plan* designations would also be amended) would be necessary for the revised project description, and the same number of residential dwelling units (315) are proposed. Upon compliance with recommended mitigation measures, existing regulatory requirements, and approval of a General Plan Amendment, the revised project description would not result in significant impacts in this regard.

MADERA COUNTY ZONING ORDINANCE

5.1-3 *The revised project description is consistent with the land use plan, policies and regulations of the Madera County Zoning Ordinance. Analysis has concluded that a less than significant impact would occur with approval of a Zone Change.*

2007 FINAL EIR - ORIGINAL PROJECT DESCRIPTION

Under the County's *Zoning Ordinance*, the 2007 Final EIR found that the original project description would result in the range of area plan designations shown in Table 5.1-10, *Summary of Proposed Zoning Districts – 2007 Final EIR.*

Table 5.1-10
Summary of Proposed Zoning Districts – 2007 Final EIR

Zoning District	Project Site Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area (gross)	Range/Maximum Dwelling Units	
Residential, Rural, Single-Family District (RRS-1.0)	144.47	1.0 acres	Maximum 1.00 DU Per parcel	144.47
Residential, Rural, Single-Family District (RRS-2.5)	109.58	2.5 acres	Maximum 1.00 DU Per parcel	43.83
Residential, Rural, Single-Family District (RRS-5.0)	192.32	5.0 acres	Maximum 1.00 DU Per parcel	38.46
Open Space District (OS)	0.00	5.0 acres	Maximum 1.00 DU per farm or ranch	0.00
Agricultural, Rural, Exclusive District (ARE-40).	0.00	36 acres	1.00 DU per farm/ranch	0.00
Residential, Urban, Single-Family District (RUS)	40.72	4,500 square feet	Maximum 1.00 DU Per parcel	394.19
Total Acres	**487**			**621**
Source: Madera County Zoning Ordinance.				

The 2007 Final EIR provided analysis for the original project description's consistency with the *Zoning Ordinance* in regards to allowable densities and lot sizing. The original project description was found to be inconsistent with existing zoning designations, in that it exceeded the allowable number of dwelling units onsite (the original project description proposed 315 dwelling units, while existing zoning for the site allows for 98 dwelling units). However, analysis concluded that upon the incorporation of a zoning district change, impacts would be less than significant. In addition, the original project description would be subject to subject to land use,

structure location, structure height, lot dimension, and off-street parking requirements as described within the *Zoning Ordinance.*

Refer to Appendix 13.2 of the SEIR, *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report*, for detailed impact analysis of *Zoning Ordinance* consistency for the original project description.

REVISED PROJECT DESCRIPTION

The revised project description would be similar to the 2007 Final EIR in that only residential uses would be constructed as part of the proposed project. However, revised residential lot locations and sizes require that the acreages proposed under the *Zoning Ordinance* change. Table 5.1-11, *Summary of Proposed Zoning Districts – Revised Project Description*, provides the revised range of zoning designations for the proposed project. Table 5.1-12, *Summary of Change in Zoning Districts Under the Revised Project Description* provides the proposed changes in comparison to the existing *Zoning Ordinance*.

Table 5.1-11
Summary of Proposed Zoning Districts – Revised Project Description

Zoning District	Project Site Acres	Development Standards		Dwelling Unit Potential
		Minimum Lot Area (gross)	Range/Maximum Dwelling Units	
Residential, Rural, Single-Family District (RRS-1.0)	119.83	1.0 acres	Maximum 1.00 DU Per parcel	119.83
Residential, Rural, Single-Family District (RRS-3)	3.20	3 acres	Maximum 1.00 DU Per parcel	1.07
Residential, Rural, Single-Family District (RRS-5.0)	120.27	5.0 acres	Maximum 1.00 DU Per parcel	24.05
Open Space District (OS)	114.64	5.0 acres	Maximum 1.00 DU per farm or ranch	22.93
Residential, Rural, Single Family District (RRS-10).	29.41	10 acres	1.00 DU per farm/ranch	2.94
Residential, Urban, Single-Family District (RUS)	150.23	4,500 square feet	Maximum 1.00 DU Per parcel	1,454.23
Total Acres	**537.58**			**1,625**
Source: Madera County Zoning Ordinance.				

As indicated in Table 5.1-11 the project site's residential development potential, based on the proposed zoning districts, is approximately 1,625 dwelling units. Comparatively, the proposed zoning districts would increase the area's development potential by approximately 1,527 dwelling units over existing zoning, and by 1,004 dwelling units over the original project description analyzed within the 2007 Final EIR.

Table 5.1-12
Summary of Change in Zoning Districts Under the Revised Project Description

Zoning District	Existing		Proposed		Change	
	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential	Acres	Dwelling Unit Potential
Residential, Rural, Single-Family District (RRS-2.5)	158.41	63.36			-158.41	-63.36
Residential, Rural, Single-Family District (RRS-5.0)	27.82	5.56	120.27	24.05	92.45	18.49
Open Space District (OS)	109.84	21.97	114.64	22.93	4.8	0.96
Agricultural, Rural, Exclusive District (ARE-40)	241.51	6.71			-241.51	-6.71
Residential, Rural, Single-Family District (RRS-1)			119.83	119.83	119.83	119.83
Residential, Rural, Single-Family District (RRS-3)			3.2	1.07	3.2	1.07
Residential, Rural, Single-Family District (RRS-10)			29.41	2.94	29.41	2.94
Residential, Urban, Single-Family District (RUS)			150.23	1,454.23	150.23	1,454.23
Total Acres	**537.58**	**98**	**537.58**	**1,625**	**0**	**1,527**

Like the original project description, the revised project description would result in an inconsistency with existing zoning, since it would exceed the allowable development potential by 217 dwelling units. A Zone Change would be required for project consistency with the *Zoning Ordinance*. Similar to the original project description, the proposed residential development would be subject to review through the Development Permit application process and shall be analyzed by the County to ensure that each application is consistent with the pertinent residential development regulations and requirements. Therefore, with approval of the proposed Zone Change, the project would be considered consistent with the *Zoning Ordinance* and a less than significant impact would occur in this regard. The revised project description would not result in new significant effects or a substantial increase in impacts in comparison to the 2007 Final EIR.

CUMULATIVE IMPACTS

5.1-4 *Buildout of the revised proposed description, together with development anticipated by the Madera County General Plan, would increase the intensity of land uses in the area. Analysis has concluded that cumulative impacts would be less than significant.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Cumulative impacts resulting from construction of the original project description were found to be less than significant within the 2007 Final EIR. The County's *General Plan EIR* identifies a significant adverse impact would occur for growth within "new growth areas". These new growth areas are defined as areas not

located within an adopted area plan. Since the project site is within the *Ahwahnee/Nipinnawasee Area Plan*, the significant adverse impacts identified within the *General Plan EIR* are not applicable to the project. The *Area Plan* sets goals and objectives to provide detailed guidance for future growth within the Ahwahnee/Nipinnawasee community. Thus, cumulative impacts for the within the 2007 Final EIR were determined to be less than significant.

REVISED PROJECT DESCRIPTION

The revised project description would not change the project location, within the boundaries of the *Ahwahnee/Nipinnawasee Area Plan*. The significant adverse impacts for growth identified within the *General Plan EIR* for "new growth areas" would not apply to the revised project. In addition, similar to the 2007 Final EIR, the revised project description includes a General Plan Amendment (and associated Area Plan amendments) and Zone Change to assist in guiding development and growth within the Awhahnee/Nipinnawasee area. Thus, the revised project description would not result in new significant impacts or substantially increased impacts related to cumulative growth.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

MADERA COUNTY GENERAL PLAN

5.1-1 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR* and this SEIR.

AHWAHNEE/NIPINNAWASEE AREA PLAN

5.1-2 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR* and this SEIR.

MADERA COUNTY ZONING ORDINANCE

5.1-3 No mitigation measures are recommended.

CUMULATIVE IMPACTS

5.1-4 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to land use and relevant planning have been identified following compliance with the recommended mitigation measures and regulatory framework, and the policies and standards of the Madera County *General Plan* and *Zoning Ordinance*, and the *Ahwahnee/Nipinnawasee Area Plan*.

5.2 TRAFFIC AND CIRCULATION

The purpose of this section is to describe existing traffic conditions within the project site vicinity and analyze impacts of the revised project description in comparison to the original *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report (EIR)*. Impacts related to traffic generation, safety, and cumulative effects are analyzed below. Because this SEIR serves as a supplement to the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR*, the 2007 Final EIR serves as the primary basis for existing conditions and impact analysis. Specifically, the impact analysis provided within this section will describe changes that have occurred in relation to site access and internal circulation since the original 2007 Final EIR was prepared.

EXISTING CONDITIONS

Since preparation of the 2007 Final EIR, existing traffic conditions and facilities within the project site vicinity have not substantially changed. Thus, the following discussion summarizes the existing roadway distribution system for the project site and surrounding area as identified in Section 5.3 of the 2007 Final EIR. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions within the project area.

STUDY AREA STREET SYSTEM

Roadway Descriptions

The project site is located along Opah Drive east of State Route (SR) 49 in unincorporated Madera County. The roadway system provides two points of access to the project site. Harmony Lane and Opah Drive provide the primary access locations from SR-49. In addition, County Road 621 provides access from SR-49 further to the west of the primary access location. The characteristics of the roadway system in the vicinity of the project site are described below:

- SR-49. This roadway provides regional access for the project site as a two-lane, undivided highway facility, trending in a northwest-southeast orientation.
- SR-41. This roadway provides regional access for the project site as a two-lane, undivided highway facility, trending in a north-south direction.
- Harmony Lane. A two-lane, undivided roadway, trending in a north-south direction. Both shoulders along Harmony lane are graded without curbs.
- County Road 621. A two-lane, undivided roadway, trending in an east-west direction. Both shoulders along County Road 621 are graded without curbs. County Road 621 provides access to SR-49 to the southwest of the project site.
- County Road 628. A two-lane, undivided roadway, trending in an east-west direction. County Road 628 intersects with Pine River Road to the northwest

of the project site. Both shoulders along County Road 628 are graded without curbs.

- Pine River Road. A two-lane, undivided roadway, trending in an east-west direction. Pine River Road intersects with County Road 628 to the northwest of the project site. Both shoulders along Pine River Road are graded without curbs.

- Opah Drive. A two-lane, undivided roadway, trending in a north-south direction between the intersections with Harmony Lane and Miami Highlands Drive, and a northwest-southeast orientation from Miami Highlands Drive to Pine River Road. Opah Drive is the main arterial through the Sierra Meadows Estates project. The majority of Opah Drive was constructed approximately 15 years ago as a local road to serve the Sierra Meadows Golf Course and Ahwahnee Country Club Estates Subdivision. Currently, Opah Drive is paved to a point just west of Wallu Lane. Both shoulders along Opah Drive are graded without curbs.

- Miami Highlands Drive. Miami Highlands Drive is a two-lane, undivided roadway, trending in an east-west direction. Both shoulders along Miami Highlands Drive are graded without curbs. Currently, Miami Highlands Drive extends from Opah Drive towards the east, where it terminates approximately 0.75-miles west of County Road 620.

Study Area Intersections

The following five intersections were identified by Madera County staff as being potentially affected by the project:

- Harmony Lane/SR-49 (3-way stop controlled);
- SR-49/County Road 621 (3-way stop controlled);
- SR-49/County Road 628 (3-way stop controlled);
- Opah Drive/Harmony Lane (3-way stop controlled); and
- Opah Drive/Miami Highlands Drive (3-way stop controlled).

Public Transportation Routes

The Ahwahnee/Nipinnawasee area contains no public transportation routes or facilities. Therefore, the area is dependent on private automobile and truck access. Bike and pedestrian facilities are absent in the Ahwahnee/Nipinnawasee area, in part because of the area's steep terrain.

EXISTING TRAFFIC CONDITIONS

Existing Peak Hour Level of Service

As part of the 2007 Final EIR, a.m. and p.m. peak hour intersection movement counts were taken at the five intersections described above. According to Madera County intersection performance criteria, all intersections were found to be operating

at an acceptable level of service (LOS) of "D" or better during the a.m. and p.m. peak hours.

IMPACTS

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to traffic and circulation. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections) (refer to Impact Statement 5.2-1);

- Exceed, either individually or cumulatively, a LOS standard established by the County CMP agency for designated roads or highways (refer to Impact Statements 5.2-1 and 5.2-3);

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (refer to Section 10.0, *Effects Found Not To Be Significant*);

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Impact Statement refer to Impact Statement 5.2-2);

- Result in inadequate emergency access (refer to Section 10.0, *Effects Found Not To Be Significant*);

- Result in inadequate parking capacity (refer to Section 10.0, *Effects Found Not To Be Significant*); and/or

- Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) (refer to Section 10.0, *Effects Found Not To Be Significant*).

Threshold of Significance

To determine whether the addition of project-generated trips results in a significant impact at a study intersection, Madera County has established the following threshold of significance (per Madera County General Plan Policy Document, Policy 2.A.8):

- At intersections operating at LOS D or better, a significant project impact occurs when a proposed project decreases the peak hour LOS at a study intersection to LOS E or worse.

Impacts to traffic and circulation are analyzed below according to topic. Mitigation measures at the end of this section directly correspond with the identified impact.

CHANGES WITHIN THE REVISED PROJECT DESCRIPTION

Several transportation-related changes to the project description have occurred since preparation of the 2007 Final EIR. These changes pertain to access to the project site, in addition to the reconfiguration of internal circulation roadways. These changes are described in detail below:

- **Construction of a New Emergency Access Roadway:** Pursuant to consultation between the Project Applicant and the County of Madera Resources Management Agency, the project description has been revised to include the construction of a ¾-mile roadway extending Miami Highlands Drive towards the northeast to Road 620. This extension is needed satisfy the County's need for an emergency roadway out of the Ahwahnee area that avoids the congested intersection of Highway 49 and Highway 41. The proposed roadway would provide more efficient egress from the Ahwahnee area in the event of a natural disaster, such as a large wildfire.

- **Replacement of Original Secondary Access from Pine River Road with New Secondary Access from the Build-Out of Opah Drive:** In response to public input received through the 2007 Final EIR process and in consultation with the U.S. Army Corps of Engineers and County of Madera Road and Planning Departments, the originally-proposed extension of Pine River Road (over Carter Creek) to Road 628 has been eliminated. This roadway extension was eliminated due to concerns over biological resources impacts to Carter Creek and traffic generation along Pine River Road.

  The new proposed main secondary access point would involve the extension of Opah Drive (along the western boundary of the project site) to Road 621 (which in turn terminates to the west at Highway 49).

- **Reconfiguration of Numerous Internal Residential Circulation Roadways:** Revisions to the residential lot layout within the project site created the need to reconfigure many of the internal circulation roadways within the project site (refer to Exhibit 3-4, Site Plan and Phasing Map). Although the primary internal access road (Opah Drive) remains unchanged, several of the proposed cul-de-sacs onsite have been eliminated, while others are either new or have been realigned.

The revisions to the project description described above are not anticipated to result in new significant effects, nor would the severity of previously-identified impacts substantially increase. An impact analysis and comparison of impacts to the original project description is provided below.

TRAFFIC AND CIRCULATION

5.2-1 *The revised project description would result in an increase in traffic volumes that may exceed the County's LOS D Standard, pursuant to the Madera County General Plan. Analysis has concluded that implementation of the recommended mitigation measure would reduce impacts to the intersection of Harmony Lane and SR-49 to a less than significant level.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that project trip generation would result in an acceptable LOS at all intersections, with the exception of the Harmony Lane/SR-49 intersection (LOS E). To mitigate this deficiency, the 2007 Final EIR recommended a modification of the SR-49 eastbound approach from one left-turn lane and one through lane to one left-turn lane and two through lanes. In addition, the Project Applicant would be required to fund its pro-rata share to improve the SR-49/Road 621 intersection to include a separate northbound right-turn lane, a westbound right-turn lane, and a southbound left-turn lane to accommodate project trip generation.

Upon implementation of recommended mitigation measures, it was concluded that all traffic and circulation impacts of the original project description would be less than significant.

REVISED PROJECT DESCRIPTION

Modifications to transportation facilities as part of the revised project description are not anticipated to result in a substantial difference in impacts, in comparison to the 2007 Final EIR. The construction of a new, ¾-mile emergency access road would result in a nominal impact to the existing circulation system, since it would only be utilized in emergency situations and would not be accessible by the public.

The build-out of Opah Drive to Road 621 would allow for access to the project site from SR-49, which provides regional access to the area. This access point would replace the previously-proposed extension of Pine River Road to Road 628. Since both Road 621 and 628 connect to SR-49, this change in the project description would result in shift in project access from the northwest to the west. This shift in project access would not result in any additional trip generation, but rather a redistribution of trips to Road 621. Given the concerns expressed during the 2007 Final EIR process over traffic along Road 628, this revision to the project description can be considered a beneficial impact. Moreover, the site's other point of access (Harmony Lane/SR-49, from the south) would not change and would continue to provide access to the site.

As stated above, revisions to the residential lot layout within the project site also necessitated the reconfiguration of internal circulation roadways (refer to Exhibit 3-4, *Site Plan and Phasing Map*). However, impacts in regards to internal circulation would not substantially increase in comparison to the original project description analyzed within the 2007 Final EIR. As part of the revised project description,

internal roadways would be designed to meet County standards, and would adequately accommodate residential traffic within site boundaries. Opah Drive would remain the main arterial providing circulation through the project site. No increase in internal traffic movements would occur.

As described above, impacts resulting from changes to emergency access, public access, and internal circulation would not result in new significant effects, nor would the severity of previously-identified impacts substantially increase. The same mitigation measures for the Harmony Lane/SR-49 and SR-49/Road 621 intersections would be required in order to mitigate all traffic and circulation impacts to less than significant levels.

SAFETY HAZARDS

5.2-2 *The revised project description may increase hazards to vehicles due to planned roadway improvements. Analysis has concluded that implementation of mitigation for Opah Drive would reduce impacts to a less than significant level.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that impacts related to safety hazards would be less than significant upon implementation of the recommended mitigation measure. Recommendations within the 2007 Final EIR (e.g., the extension of Opah Drive to connect to Road 621, and the creation of a perpendicular intersection between Pine River Road and Opah Drive) were found to minimize impacts in regards to vehicular safety. As mitigation for potential safety impacts along Opah Drive, the Project Applicant would be required to eliminate the substandard curve and longitudinal grades on the segment of Opah Drive that does not meet current road standards, prior to occupancy of the first dwelling unit in Phase 2.

REVISED PROJECT DESCRIPTION

Revisions to the project description including emergency access, public access, and internal circulation would not result in new significant effects, nor would the severity of previously-identified impacts substantially increase. All proposed roadways associated with the revised project description would be designed in accordance with Madera County design standards to ensure vehicular safety. Similar to the original project description analyzed within the 2007 Final EIR, the Project Applicant would be required to improve Opah Drive to current County road standards to mitigate safety impacts along this roadway. Upon adherence to County design standards/recommendations and implementation of mitigation, impacts would be less than significant in regards to safety.

CUMULATIVE IMPACTS

5.2-3 *The revised project description would contribute to year 2025 traffic conditions that would result in an increase in traffic volumes that may exceed Madera County's LOS D Standard. Analysis has concluded that cumulative impacts would be less than significant.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Cumulative impacts resulting from construction of the original project description were found to be less than significant within the 2007 Final EIR. According to the Madera County General Plan EIR, in order to address roadway segments identified as having a LOS below D, continued monitoring of traffic volumes on SR-41 and Road 626 in the vicinity of Oakhurst is recommended. Roadway improvements should be planned when and if there is greater certainty regarding future travel patterns and service levels in this area. Inclusion of such improvements in the County's Capital Improvement Program (CIP) would reduce the impacts on these roadway segments to a less than significant level.

Implementation of the recommended mitigation measure would serve to reduce all potentially significant impacts to less than significant levels. The project would not contribute to any significant cumulative effects to traffic. It is concluded that the project's contribution to cumulative traffic impacts associated with the anticipated development identified in the Madera County General Plan is a less than significant impact.

REVISED PROJECT DESCRIPTION

Revisions to the project description including emergency access, public access, and internal circulation would not result in new or increased significant cumulative effects. None of the revised circulation facilities would result in significant impacts, since the same mitigation measures included in the 2007 Final EIR would apply to the revised project description. Since project-specific impacts related to traffic/circulation and safety would be less than significant, the revised project description would not contribute to any significant cumulative traffic effects.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the impacts subsection.

TRAFFIC AND CIRCULATION

5.2-1 The Project Applicant's pro-rata share payment to the area-wide circulation improvements shall pay for the project's fair share contribution to the identified roadway improvement as follows:

- Harmony Lane/SR-49: Modify eastbound SR-49 approach from one left-turn lane and one through lane to consist of one left-turn lane and two through lanes. The additional eastbound through lane should be a minimum of 200 feet in length plus taper lengths in accordance with Caltrans design standards. Implementation of this mitigation measure should be coordinated with Caltrans District 6 staff.

- Intersection of SR-49/Road 621: A southbound left-turn lane is warranted at this intersection for the 2025 project scenario. This intersection would require a separate northbound right-turn lane, a westbound right-turn lane, and a southbound left-turn lane. These improvements shall be carried out in consultation with Caltrans District 6 staff.

SAFETY HAZARDS

5.2-2 The Project Applicant shall be required to eliminate the substandard curve and longitudinal grades on the segment of Opah Drive that does not meet current road standards, prior to occupancy of the first dwelling unit.

CUMULATIVE IMPACTS

5.2-3 No mitigation measures are recommended.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

No unavoidable significant impacts related to traffic and circulation have been identified following implementation of recommended mitigation measures and compliance with applicable requirements set forth by Madera County.

5.3 AIR QUALITY

The purpose of this section is to describe existing air quality conditions within the project site vicinity and analyze impacts of the revised project description in comparison to the original *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report (EIR)*. Impacts related to short-term (construction), long-term (operational), conformity with the existing Air Quality Attainment Plan, and cumulative impacts are analyzed below. Because this SEIR serves as a supplement to the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR*, the 2007 Final EIR serves as the primary basis for existing conditions and impact analysis. Specifically, the impact analysis provided within this section will describe changes that have occurred in relation to updated methodologies for analysis and the existing regulatory framework for regional air quality.

EXISTING CONDITIONS

Since preparation of the 2007 Final EIR, air quality conditions and facilities within the project site vicinity have not substantially changed. Thus, the following discussion summarizes the existing air emissions for the project site and surrounding area as identified in Section 5.4 of the 2007 Final EIR. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions within the project area.

SAN JOAQUIN VALLEY AIR BASIN

The project is located in the San Joaquin Valley Air Basin (SJVAB), characterized as having an "inland Mediterranean" climate (a semi-arid environment with cool winters, dry summers and moderate rainfall). The SJVAB is approximately 250 miles long and averages 35 miles wide. The San Joaquin Valley (SJV) is considered a "bowl" since it has a generally flat characteristic with a slight downward gradient to the northwest. The climate is characterized by moderate temperatures and comfortable humidities with precipitation limited to a few storms during the winter season (November through April). The average annual temperature varies little throughout the SJVAB, and averages 90 degrees Fahrenheit. However, with a less pronounced oceanic influence, the northern and southern portions of the SJVAB show greater variability in annual minimum and maximum temperatures. Precipitation is typically 9.25 inches annually in the Valley floor.

One of the most important climatic factors is the direction and intensity of the prevailing winds. During the summer months, the wind usually originates at the north end of the SJV and flows in the south-southeasterly direction into the Southeast Desert Air Basin. In the winter, the wind originates from the south end of the SJV and flows in a northeasterly direction. With very light average wind speeds (less than 10 miles per hour), the SJVAB has a limited capability to disperse air contaminants horizontally.

MONITORED AIR QUALITY LEVELS

The SJVAPCD and the California Air Resources Board (CARB) monitor ambient air quality. Air quality monitoring stations usually measure pollutant concentrations ten

feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

Currently, the Madera-Pump Yard station is the only air quality monitoring station within Madera County[1]. The Madera-Pump Yard monitor is located approximately 51 miles south of the project site. However, as this station does not monitor every pollutant, it was necessary to also use monitoring data from the Turlock Monitoring Station and the Merced-2334 M Street Monitoring Station. Although the Fresno-area stations provide more comprehensive monitoring of pollutants, the abovementioned stations were chosen for the similarity in geographic and meteorological conditions. As Fresno is a large urban area, the data from the monitoring station would not be representative of conditions near the project site. Air quality data from 2002 through 2006 is provided in Table 5.3-1, *Local Air Quality Levels*.

San Joaquin Valley Air Pollution Control District

The SJVAPCD has jurisdiction in eight counties located in the SJV, including Madera County. Until the passage of the CCAA, SJVAPCD's primary role was the control of stationary sources of pollution such as industrial processes and equipment that stayed within their political boundaries. With the passage of the CCAA and FCAAA, air districts were also required to implement transportation control measures and were encouraged to adopt indirect source control programs to reduce mobile source emissions. These mandates created the necessity for the SJVAPCD to work more closely with cities and counties and with regional transportation planning agencies to develop new programs.

The SJVAPCD has the primary responsibility to control air pollution from all sources other than those directly emitted from motor vehicles, which are the responsibility of the CARB and the EPA. The SJVAPCD is also required to adopt and enforce rules and regulations (produce attainment plans) that include air pollution control programs designed to achieve the NAAQS and CAAQS within their air basin and enforce applicable state and Federal law; refer to Table 5.3-2, *National and California Ambient Air Quality*. It should be noted that the SJVAPCD has adopted Indirect Source Rule 9510 and a companion Rule 3180. These rules will allow the district to assess fees based on mobile source emissions related to new development projects and to utilize a portion of the collected fees on air emission reduction projects.

The SJVAPCD has set up the Indirect Source Review (ISR) Program in order to address new development projects that have not yet gained discretionary approval from the applicable public agency. The ISR Program is based on SJVAPCD Rules 9510 and 3180 which provide a methodology for assessing the air quality impacts created by a new development, provides regulations to limit the emissions of pollutants during the construction process, and provides the developer with the option of on-site emissions reduction measures or the option of off-site emission reduction through fees which are used to fund off-site emission reduction projects or some combination of both options.

[1] The air monitoring network is widely dispersed throughout the San Joaquin Valley Air Basin. Thus, the Madera Pump Yard, Merced 2334 M Street and Turlock Monitoring Stations were utilized for their geographical and meteorological similarities to the project site.

Table 5.3-1
Local Air Quality Levels

Pollutant	California Standard	Federal Primary Standard	Year	Maximum[1] Concentration	Days (Samples) State/Federal Std. Exceeded
1-hour Ozone (O_3)[5]	0.09 ppm for 1 hour	NA[4]	2002 2003 2004 2005 2006	0.141 0.120 0.097 0.095 0.113	21/NA 15/ NA 3/ NA 1/ NA 4/ NA
8-hour Ozone (O_3)[5]	0.07 ppm for 8 hours	0.08 ppm for 8 hours	2002 2003 2004 2005 2006	0.110 0.102 0.084 0.081 0.095	NA/18 NA/14 NA/0 NA/0 NA/1
Carbon Monoxide (CO)[7]	9.0 ppm for 8 hour	9.0 ppm for 8 hour	2002 2003 2004 2005 2006	2.68 2.31 1.78 2.34 2.06	0/0 0/0 0/0 0/0 0/0
Nitrogen Dioxide (NO_2)[5]	0.18 ppm for 1 hour	0.053 ppm annual average	2002 2003 2004 2005 2006	0.058 0.054 0.053 0.057 0.051	0/NA 0/NA 0/NA 0/NA 0/NA
Fine Particulate Matter ($PM_{2.5}$)[2, 3,6]	No Separate Standard	35µg/m^3 for 24 hours	2002 2003 2004 2005 2006	66.0 46.7 53.1 53.9 55.8	NA/1 NA/0 NA/0 NA/0 NA/0
Particulate Matter (PM_{10})[2,7]	50 µg/m^3 for 24 hours	150 µg/m^3 for 24 hours	2002 2003 2004 2005 2006	97.0 88.0 60.0 87.0 98.0	12/0 8/0 5/0 8/0 9/0

ppm = parts per million; PM_{10} = particulate matter 10 microns in diameter or less; µg/m^3 = micrograms per cubic meter; $PM_{2.5}$ = particulate matter 2.5 microns in diameter or less; NM = not measured

1. Maximum concentration is measured over the same period as the California Standards.
2. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
3. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.
4. The Federal standard was revoked in June 2005.
5. Data is based on measurements taken at the Madera-Pump Yard monitoring station located at Avenue 8 and Road 29, Madera, California.
6. Data is based on measurements taken at the Merced-2334 M Street monitoring station located at 2334 M Street, Merced, California.
7. Data is based on measurements taken at the Turlock-S Minaret Street monitoring station located at 900 South Minaret Street, Turlock, California.

Source: Data obtained from the California Air Resources Board ADAM Data Summaries Website, www.arb.ca.gov/adam/welcome.html.

Table 5.3-2
National and California Ambient Air Quality

Pollutant	Averaging Time	California[1]		Federal[2]	
		Standard[3]	Attainment Status	Standards[4]	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m³)	**Nonattainment**	NA[5]	NA[5]
	8 Hours	0.07 ppm (137 µg/m³)	**Nonattainment**	0.08 ppm (157 µg/m³)	**Nonattainment**
Particulate Matter (PM_{10})	24 Hours	50 µg/m³	**Nonattainment**	150 µg/m³	**Nonattainment**
	Annual Arithmetic Mean	20 µg/m³	**Nonattainment**	NA[7]	NA[7]
Fine Particulate Matter ($PM_{2.5}$)	24 Hours	No Separate State Standard		35 µg/m³	Unclassified
	Annual Arithmetic Mean	12 µg/m³	**Nonattainment**	15 µg/m³	**Nonattainment**
Carbon Monoxide (CO)	8 Hours	9.0 ppm (10 mg/m³)	Attainment	9 ppm (10 mg/m³)	Attainment
	1 Hour	20 ppm (23 mg/m³)	Attainment	35 ppm (40 mg/m³)	Attainment
Nitrogen Dioxide (NO_2)[6]	Annual Arithmetic Mean	0.030 ppm (56 µg/m³)	NA	0.053 ppm (100 µg/m³)	Attainment
	1 Hour	0.18 ppm (338 µg/m³)	Attainment	NA	NA
Lead (Pb)	30 days average	1.5 µg/m³	Attainment	NA	NA
	Calendar Quarter	N/A	NA	1.5 µg/m³	Unclassified
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	N/A	NA	0.030 ppm (80 µg/m³)	Attainment
	24 Hours	0.04 ppm (105 µg/m³)	Attainment	0.14 ppm (365 µg/m³)	Attainment
	3 Hours	N/A	NA	N/A	Attainment
	1 Hour	0.25 ppm (655 µg/m³)	Attainment	N/A	NA
Visibility-Reducing Particles	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	**No Federal Standards**	
Sulfates	24 Hour	25 µg/m³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Unclassified		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m³)	Attainment		

µg/m³ = micrograms per cubic meter; ppm = parts per million; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; NA = Not Applicable.

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, suspended particulate matter-PM_{10} and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In 1990, CARB identified vinyl chloride as a toxic air contaminant, but determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. EPA also may designate an area as *attainment/unclassifiable*, if: (1) it has monitored air quality data that show that the area has not violated the ozone standard over a three-year period; or (2) there is not enough information to determine the air quality in the area. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. Concentration is expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
5. The Federal 1-hour ozone standard was revoked on June 15, 2005 in all areas except the 14 8-hour ozone nonattainment Early Action Compact (EAC) areas.
6. The Nitrogen Dioxide ambient air quality standard was amended in February 22, 2007 to lower the 1-hour standard to 0.18 ppm and establish a new annual standard of 0.030 ppm. These changes become effective after the regulatory changes are submitted and approved by the Office of Administrative Law, expected later this year.
7. The EPA revoked the annual PM_{10} standard in 2006 (effective December 16, 2006).

Source: California Air Resources Board and U.S. Environmental Protection Agency, February 22, 2007.

IMPACTS

SIGNIFICANCE CRITERIA

Appendix G of the California Environmental Quality Act (CEQA) Guidelines contains the Initial Study Environmental Checklist form which includes questions relating to air quality. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan (refer to Impact Statement 5.3-3);
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation (refer to Impact Statements 5.3-1 and 5.3-2);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) (refer to Impact Statement 5.3-4);
- Exposes sensitive receptors to substantial pollutant concentrations (refer to Impact Statement 5.3-2 and 5.3-3); and/or
- Create objectionable odors affecting a substantial number of people (refer to Impact Statement 5.3-1).

San Joaquin Valley Air Pollution Control District

Buildout of the project would be required to implement control measures during construction activities in order to reduce the amount of emissions to below the significance thresholds. The SJVAPCD does not have construction thresholds and states within the GAMAQI that:

> *The SJVAPCD emphasizes implementation of effective and comprehensive control measures rather than detailed quantification of construction emissions. The SJVAPCD recommends that Lead Agencies consider the size of the construction area and the nature of the activities that will occur, and require the implementation of all feasible control measures (as indicated in Table 6-3).*[2]

For operational emissions, the SJVAPCD has established thresholds for ROG and NO_X emissions at 10 tons per year. Anything at or above this operational threshold amount would be considered a significant impact.

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[2] San Joaquin Valley Air Pollution Control District, *Guide for Assessing and Mitigating Air Quality Impacts*, January 10, 2002, Table 6-3, *Enhanced and Additional Control Measures For Construction Emissions of PM-10*, Page 66.

The SJVAPCD *2002 and 2005 Rate of Progress Plan and CEQA Guidelines* (SJVAPCD CEQA Guidelines), establishes thresholds for pollutant emissions generated both during and following construction. Buildout of the project would be required to implement control measures during construction activities in order to reduce the amount of emissions to below the significance thresholds, when possible. The SJVAPCD CEQA Guidelines requires CO "Hot Spot" modeling if a traffic study reveals that the project would reduce the Level of Service (LOS) on one or more roadways to E or F; or, if the project would worsen an existing LOS F.[3]

CHANGES WITHIN THE REVISED PROJECT DESCRIPTION

Several air quality-related changes to the project description have occurred since preparation of the 2007 Final EIR. These changes pertain to construction phasing of the project, in addition to the addition of new internal roadways.

- **Adjusted Construction Phasing:** As a result of revising the residential lot layout within the project site, the construction phasing of the proposed project has changed. Even though the same number of residential dwelling units are proposed, the acreage of each lot and placement has changed. Therefore, construction emissions emitted during the 2007 Final EIR construction phases is changed to reflect the revised project description construction phasing.

- **Reconfiguration of Internal Roadways:** Revisions to the residential lot layout within the project site created the need to reconfigure many of the internal circulation roadways within the project site (refer to Exhibit 3-4, *Site Plan and Phasing Map*).

The revisions to the project description described above are not anticipated to result in new significant effects, nor would the severity of previously-identified impacts substantially increase. An impact analysis and comparison of impacts to the original project description is provided below.

SHORT-TERM (CONSTRUCTION) EMISSIONS

5.3-1 *Temporary construction-related dust and vehicle emissions would occur during construction within the project area. Analysis has concluded that these short-term impacts would be significant and unavoidable with incorporated mitigation measures.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that short-term (construction) emissions would result in a significant and unavoidable impact in regards to NO_X and ROG emissions emitted during construction. To reduce the impacts to the greatest extent possible, mitigation measures were recommended. To limit dust emissions, as recommended by the SJVAPCD, the construction

[3] San Joaquin Valley Air Pollution Control District, *2002 and 2005 Rate of Progress Plan and CEQA Guidelines*, May 2002, page 49.

contract would be required to comply with the SJVAPCD Rule VIII which includes measures to stabilize dust emissions by covering exposes areas, watering, cleaning adjacent roadways of accumulated mud or dirt, eliminate trackout, limit traffic speeds to 15 mph on unpaved roads, or install sandbags as an erosion control measure. In addition, to limit construction exhaust emissions, the construction equipment would be properly tuned and maintained, require vapor control during fuel transfers, strategic location of diesel powered equipment, and limit equipment idling. During asphalt paving activities, the SJVAPCD Rule 4641 would be followed and during architectural coatings, the SJVAPCD Rule 4601 would be adhered to.

Upon implementation of recommended mitigation measures, it was concluded that short-term (construction) impacts of the original project description would be significant and unavoidable.

REVISED PROJECT DESCRIPTION

Modification to construction phasing as part of the revised project description are not anticipated to result in a substantial difference in impacts, in comparison to the 2007 Final EIR. The project would be developed in five Construction Phases; refer to Table 3-4, *Project Phasing*. Each Construction Phase would develop between 11 to 146 dwelling units. It is assumed that the 210-acre foot reservoir, water treatment plant, wastewater treatment plant, and spray field would be constructed during Construction Phase Two. The number of residential units and acres disturbed has remained the same, however, the revised project description includes an increased amount of paved roadway to accommodate the reconfiguration of internal roadways within the lot layout of the revised project site.

As the number of residential units and area has remained the same, the construction emissions would remain similar to the 2007 Final EIR. However, with the inclusion of additional roadway, construction impacts would increase. Therefore, the same mitigation measures during short-term (construction) impacts would be required. Although short-term impacts would increase with the revised project description, the significance conclusion of the 2007 Final EIR is still applicable. Thus, short-term (construction) impacts would be significant and unavoidable with mitigation measures incorporated.

LONG-TERM (OPERATIONAL) EMISSIONS

5.3-2 *Long-term mobile emissions would occur as a result of project implementation. Analysis has concluded that with implementation of the recommended mitigation, impacts would be less than significant.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that long-term (operational) emissions would result in less than significant impacts upon implementation of the recommended mitigation measures. Recommendations within the 2007 Final EIR would mitigate impacts in regards to long-term (operational) impacts: CO "hotspots," area source emissions, mobile source emissions, and stationary source emissions. Mitigation measures include the installation of EPA-

certified wood burning stoves or fireplaces and submittal of plans and specifications of the Wastewater Treatment Plant and the Water Treatment Plant to the SJVAPCD Small Business Assistance Office for review.

Upon implementation of recommended mitigation measures, it was concluded that short-term (construction) impacts of the original project description would be less than significant.

REVISED PROJECT DESCRIPTION

Modifications to the 2007 Final EIR residential lot layout as part of the revised project description are not anticipated to result in a substantial difference in impacts, in comparison to the 2007 Final EIR. The revised project description includes relocating the Wastewater Treatment Plant from being located south of Payne Steward Court, near the 7th fairway on the existing golf course to Outlot 5, south of Jack Nicklaus Drive and south of the golf course Hole 12. The reservoir and water treatment plant have no changes. In addition, the reconfiguration of internal roadways within the residential lot layout would not change the significance finding as the number of proposed residential uses has not changed.

Even though the wastewater treatment plant has been relocated with the revised project description, the mitigation measures from the 2007 Final EIR are applicable. With implementation of mitigation measures, impacts would remain less than significant for stationary and area source emissions. Although the revised project description includes reconfiguring internal roadways, impacts would remain less than significant for mobile source emissions. Thus, long-term (operational) emissions would remain less than significant with incorporation of mitigation measures.

CONFORMITY WITH AIR QUALITY ATTAINMENT PLAN

5.3-3 *The project would be consistent with the Air Quality Attainment Plan (AQAP) criteria. Analysis has concluded that impacts would be less than significant.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that the project would be consistent with the Air Quality Attainment Plan (AQAP) criteria and result in less than significant impacts. There are no recommended mitigation measures as the 2007 Final EIR is considered consistent with the growth projections in the County of Madera and the original project would not exceed the SJVAPCD operational thresholds of significance and therefore is consistent with the current AQAP criteria.

It was concluded that the project, of the original project description, would be consistent with the AQAP and be less than significant.

REVISED PROJECT DESCRIPTION

Modifications to the 2007 Final EIR as part of the revised project description are not anticipated to result in a substantial difference in impacts, in comparison to the 2007 Final EIR. The revised project description proposes the same number of residential dwelling units thus resulting in similar growth projections as the 2007 Final EIR and is therefore consistent with the growth projections in the County. In addition, the revised project description would not exceed the SJVAPCD operational thresholds of significance. As such, the revised project description is considered consistent with the AQAP and a less than significant impact would occur.

CUMULATIVE IMPACTS

5.3-4 *Impacts to regional air quality resulting from the proposed project and cumulative projects may impact existing regional air quality levels on a cumulative basis. Analysis has concluded that cumulative impacts related to air quality would be significant and unavoidable.*

2007 FINAL EIR – ORIGINAL PROJECT DESCRIPTION

Analysis of the original project description within the 2007 Final EIR found that cumulative impacts would result in a significant and unavoidable impact with implementation of the recommended mitigation measures. Recommendations within the 2007 Final EIR would mitigate impacts in regards to short-term (construction) impacts as operational scenarios and construction would occur simultaneously at the project site since construction would occur in phases. Mitigation measures include those to be implemented during short-term (construction); refer to Impact Statement 5.3-1, above. Implementation of the original project description in conjunction with local cumulative projects would cause a significant and unavoidable impact to the existing regional air quality.

Upon implementation of recommended mitigation measures, it was concluded that cumulative impacts of the original project description would be significant and unavoidable.

REVISED PROJECT DESCRIPTION

Modifications to the 2007 Final EIR as part of the revised project description are not anticipated to result in a substantial difference in impacts, in comparison to the 2007 Final EIR. The revised project description does not change the number of proposed residential dwelling units and therefore does not change the anticipated amount of operational emissions. Construction impacts do not change and remain significant and unavoidable. Thus, the revised project description would remain significant and unavoidable with implementation of mitigation measures in regards to cumulative construction-related impacts.

GLOBAL CLIMATE CHANGE DISCUSSION

California is a substantial contributor of global greenhouse gases (GHGs), emitting over 400 million tons of carbon dioxide (CO_2) a year.[4] Climate studies indicate that California is likely to see an increase of three to four degrees Fahrenheit over the next century. Methane is also an important GHG that potentially contributes to global climate change (GCC). GHGs are global in their effect, which is to increase the earth's ability to absorb heat in the atmosphere. Because primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well mixed, their impact on the atmosphere is mostly independent of the point of emission.

Sources of GHGs

Levels of several important GHGs have increased by about 25 percent since large-scale industrialization began. During the past 20 years, about three-quarters of human-made carbon dioxide emissions were from burning fossil fuels.[5] Fossil fuel combustion accounts for approximately 98 percent of carbon dioxide emissions from human activity.

The proposed project would develop a total of 315 residential dwelling units. Table 5.3-3, *Estimated Annual Greenhouse Gas Emissions Projections by Pollutant Source*, estimates the CO_2 emissions of the proposed project. These estimations are based on energy emissions from both electrical power and natural gas generation and usage, as well as automobile emissions. Currently, there is no industry-wide accepted method to quantify GHGs from development projects. As shown in Table 5.3-3, the proposed project would result in 4,785.25 tons of CO_2 GHG emissions. As such, the proposed project would be subject to any regulations developed under Assembly Bill 32 and Senate Bill 97 as determined by the CARB.

Table 5.3-3
Estimated Annual Greenhouse Gas Emissions Projections by Pollutant Source

Source	CO_2 Emissions[1] (tons/year)
Mobile Source Emissions	921.60
Area Source Emissions	3,863.65
Total Emissions	4,785.25

Note:
1 – Emissions calculated using the URBEMIS2007 Version 9.2.2 Computer Model as recommended by the SJVAPCD.
2 – The project is not expected to result in the emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) or sulfur hexafluoride (SF_6), the other gases identified as GHGs in Assembly Bill 32.

[4] California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks*: 1990 to 2004 (Staff Final Report). Publication CEC-600-2006-013-SF, 2006. http://www.energy.ca.gov/ global_climate_change/inventory/ documents/index.html.

[5] United States Department of Energy, *Greenhouse Gases, Climate Changes, and Energy.* http://www.eia.doe.gov/oiaf/1605/ggccebro/chapter1.html

Conclusion

Although the issue of GCC remains a widely accepted theory, the extent of GCC or the exact contribution from anthropogenic sources is still highly debated. For instance, the following is a sample of the variability in the current GCC models and world temperature data collection methods has been documented:

"Since 1940 . . . data have undergone predominantly a cooling trend . . . . The Greenland ice sheet and coastal regions are not following the current global warming trend" (P. Chylek, et al. 2004, *Global warming and the Greenland ice sheet*, Climatic Change 62, 201-21.).

"In climate research and modeling [sic], we should recognize that we are dealing with a coupled non-linear chaotic system, and therefore that the long-term prediction of future climate states is not possible" (United Nations Intergovernmental Panel on Climate Change, *Climate Change 2001: The Scientific Basis*. Cambridge, UK: Cambridge University press, 2001, p. 774.).

"Natural climate variability on long-term scales will continue to be problematic for CO_2 climate change analysis and detection" (United Nations Intergovernmental Panel on Climate Change, *Climate Change 1995: The Science of Climate Change*, p. 330.).

CEQA requires an agency to engage in forecasting "to the extent that an activity could reasonably be expected under the circumstances. An agency cannot be expected to predict the future course of governmental regulation or exactly what information scientific advances may ultimately reveal" (*CEQA Guidelines* Section 15144, Office of Planning Research commentary, citing the California Supreme Court decision in Laurel Heights Improvement Association v. Regents of the University of California [1988] 47 Cal. 3d 376).

CEQA does not require an agency to evaluate an impact that is "too speculative" provided that the agency identifies the impact, engages in a "thorough investigation" but is "unable to resolve an issue," and then discloses its conclusion that the impact is too speculative for evaluation (*CEQA Guidelines* Section 15145, Office of Planning and Research commentary). Additionally, *CEQA* requires that impacts be evaluated at a level that is "specific enough to permit informed decision making and public participation" with the "production of information sufficient to understand the environmental impacts of the proposed project and to permit a reasonable choice of alternatives so far as environmental aspects are concerned" (*CEQA Guidelines* Section 15146, Office of Planning and Research commentary).

Table 5.3-4, *Applicable Global Climate Change Strategies*, provides a list of recommended measures and strategies to help reduce global climate impacts that was provided by CARB and the Climate Action Team. The strategies listed in Table 5.3-4 would directly apply to the proposed project. Table 5.3-4 provides an analysis of the project's conformance with the GHG reduction strategies.

GCC impacts are a result of cumulative emissions from human activities in the region, the state, and the world. A reduction in vehicle miles traveled results in a

decrease in fuel consumption and a decrease in GHG emissions. Based on an investigation of compliance with local air quality thresholds and resultant future long-term operational impacts, the proposed project would still have the potential to result in emissions associated with GHG emissions and GCC. However, there is significant uncertainty involved in making predictions regarding the extent to which the operations of mixed use developments, such as the proposed project, would affect GHG emissions and GCC. Therefore, a conclusion on the significance of the environmental impact of climate change cannot be reached. Section 15145 of the *CEQA Guidelines* provides that, if after a thorough investigation a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impacts.

Table 5.3-4
Applicable Global Climate Change Strategies

Strategies for Reducing Greenhouse Gas Emission Reduction[1]	Project Conformance
Vehicle Climate Change Standards. AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the CARB I September 2004.	Following a phase-in period, the majority of the vehicles that access the project would be expected to be in compliance with any vehicle standards that CARB adopts.
Other Light Duty Vehicle Technology. New standards would be adopted to phase in beginning in the year 2017 model year.	Following a phase-in period, the majority of the vehicles that access the project would be expected to be in compliance with any vehicle standards that CARB adopts.
Diesel Anti-Idling. In July 2004, the CARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	All vehicles, including diesel trucks accessing the project site, would be subject to the CARB measures and would be required to adhere to the 5-minute limit for vehicle idling.
Heavy-Duty Vehicle Emission Reduction Measures. Increased efficiency in the design of heavy-duty vehicles and an education program for the heavy-duty vehicle sector.	These are CARB enforced standards; vehicles that access the project that are required to comply with the standards would comply with the strategy.
Achieve 50% Statewide Recycling Goal and Zero Waste – High Recycling - 1) Design locations for separate waste and recycling receptacles; and 2) Utilize recycled components in the building design.	Pursuant to Assembly Bill 939, all development projects within the County of Madera (including the proposed project) would be required to divert 50 percent of their solid waste stream.
Appliance Energy Efficiency Use. Use of energy efficient appliances (i.e., washer/dryers, refrigerators, stoves, etc.).	In October 2006, the State of California adopted Appliance Efficiency Regulations, which include standards for both Federally regulated appliances and non-Federally-regulated appliances. These regulations would apply to the proposed project.
Solar Homes Partnership. In late 2006, the Energy Commission approved implementation rules for new residential solar installations. Effective in January 2007, approved solar systems will receive incentive funds based on system performance above building standards.	If the proposed project included solar panels on homes, the Energy Commission incentive would apply.
Water Use Efficiency Features. To increase water use efficiency include use of both potable and non-potable water to the maximum extent practicable and use of low flow appliances (i.e., toilets, shower heads, washing machines, etc).	The proposed project would be required to comply with California Health and Safety Code (HSC) section 17921.3, which sets efficiency standards for bathroom fixtures. Additionally, California Code of Regulations, Title 20, Division 2, Chapter 4, Article 4, Section 1605.3 sets standards for washing machines and commercial pre-rinse spray valves.
Achieve 50 percent Statewide Recycling Goal. In multi-family housing, separate recycling and waste receptacles should be planned.	The County of Madera is required to meet the 50 percent Statewide recycling goal, and would continue to implement solid waste reduction measures.

Notes:
1 - Only the applicable strategies for reducing GHG emissions were included.

Source: California Environmental Protection Agency, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006.

MITIGATION MEASURES

This section directly corresponds to the identified Impact Statements in the Impacts section.

SHORT-TERM (CONSTRUCTION) EMISSIONS

5.3-1a Construction of the Project requires the implementation of a dust control plan as set forth under Regulation VIII, *Fugitive PM10 Prohibitions of the San Joaquin Valley Air Pollution Control District*. The following mitigation measures, in addition to those required under Regulation VIII, shall be implemented to reduce fugitive dust emissions associated with the Project:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/ suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.

- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.
- Asphalt-concrete paving shall comply with San Joaquin Valley Air Pollution Control District Rule 4641 and restrict the use of cutback, slow-cure and emulsified asphalt paving materials.
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

5.3-1b The following measures shall be implemented by the construction contractor to minimize construction exhaust emissions:

- Heavy construction equipment shall be property tuned and maintained to reduce emissions. Construction equipment shall be fitted with the most modern emission control devices. The construction manager shall monitor compliance with the measure and is subject to periodic inspection by the County.
- The Contractor shall install or utilize the extent feasible construction equipment incorporating catalyst equipped engines and/or tier II engines.
- Require vapor control from the transfer of fuel from the fuel truck to vehicles both during construction and subsequent operations.
- Diesel powered equipment shall be located as far away as possible from sensitive land uses. Specifically, diesel compressors, pumps and other stationary machinery shall be located to the extent feasible, away from sensitive receptors.
- Construction equipment shall be shut off to reduce idling when not in direct use for extended periods of time.

5.3-1c The construction contractor shall adhere to SJVAPCD District Rule 4641 (*Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations*) to reduce emissions during asphalt paving activities. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

5.3-1d The construction contractor shall adhere to the SJVAPCD District Rule 4601 (*Architectural Coatings*) to limit volatile organic compounds from architectural coatings. This rules specifies architectural coatings storage, clean up and labeling requirements.

LONG-TERM (OPERATIONAL) EMISSIONS

5.3-2a The project shall incorporate the installation of EPA-certified wood burning stoves or fireplaces. If this is not feasible, then the installation of a ceramic coating on the honeycomb inside a catalytic combustor shall be utilized or the use of natural gas fireplaces may be used as a feasible alternative. The project shall also comply with SJVAPCD District Rule 4901 (*Wood Burning Fireplaces and Wood Burning Heaters*).

5.3-2b Prior to development of the Sewer Treatment Plant and Water Treatment Plant, the Applicant shall submit the plans and specifications to the SJVAPCD Small Business Assistance Office for review to determine what specific permitting requirements are necessary (if any).

CONFORMITY WITH AIR QUALITY ATTAINMENT PLAN

5.3-3 No mitigation measures are required.

CUMULATIVE IMPACTS

5.3-4 Refer to Mitigation Measures 5.3-1a through 5.3-1d (as previously stated, a significance determination cannot be made for GCC impacts).

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The following air quality impacts would remain significant and unavoidable following mitigation:

- Short-term construction impacts; and
- Cumulative air quality impacts.

If Madera County approves the project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

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5.4 NOISE

SUMMARY OF EXISTING CONDITIONS

Based on existing conditions information within the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR), the project site is undeveloped, is surrounded by rural development and golf course uses, and natural vegetation. The project site's existing exterior mobile source noise levels range from 40.8 dBA Ldn to 61.2 dBA Ldn. Existing noise at the project site ranges from 37.5 dBA Ldn to 53.7 dBA Ldn. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to noise.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

The 2007 Final EIR concluded that the development of the original project description would not result in significant impacts in regards to noise during short-term construction, long-term operation, stationary source noise, and cumulative impacts. Mitigation to reduce short-term construction impacts included measures to limit construction activities, require mufflers on equipment, strategic placement of equipment so noise is directed away from sensitive receptors, and reduce potential vibration impacts. There are no mitigation measures to lessen long-term operational impacts as impacts would be less than significant. Stationary noise mitigation includes regulating Heating/Ventilation/Air Conditioning units to comply with the County's noise standards. Cumulative impacts would result in less than significant impact and therefore required no mitigation measures.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

The revised project description presented as part of this SEIR would not substantially alter the conclusions or mitigation measures presented in the 2007 Final EIR. The revised project description has the same number of dwelling units as before and therefore the trip generation has not changed. Therefore, the operational (long-term) and cumulative impacts would remain the same. In addition, the project still proposes a wastewater treatment plant and a water treatment plant. The relocation of the wastewater treatment plant from the northern portion of the site to the central portion of the site would not substantially increase stationary source impacts, thus the existing mitigation measures would still apply.

No new significant environmental effects would occur, nor would the severity of previously-identified impacts be substantially increased. Similar to the 2007 Final EIR, the revised project description would result in less than significant impacts in regards to noise, upon implementation of recommended mitigation measures.

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5.5 AESTHETICS/LIGHT AND GLARE

SUMMARY OF EXISTING CONDITIONS

Based on existing conditions information within the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR), the project site lies adjacent to the existing Sierra Meadows Golf Course and overlays a variety of terrain types, including flat mesas, ridgelines, stream courses, and steep hillsides. The project site is undeveloped and is occupied by a variety of natural habitat types. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to aesthetics, light and glare.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

The 2007 Final EIR concluded that the development of the original project description would not result in significant impacts in regards to light and glare, during both construction and long-term operation. Mitigation to reduce light and glare impacts included measures to aim construction lighting away from adjacent residential uses, in addition to limitations on building materials to reduce glare and recommendations for nighttime lighting to reduce light spillover.

The *Sierra Meadows Estates Subdivision (S2001-03) Final EIR* identified significant and unavoidable impacts in regards to construction-related aesthetics, site character, and the area viewshed. These impacts would occur primarily due to the undeveloped condition of the project site in addition to the steep terrain of portions of the site. No mitigation measures were identified that could feasibly reduce these significant impacts to a less than significant level.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

The revised project description presented as part of this SEIR would not substantially alter the conclusions or mitigation measures presented in the 2007 Final EIR. The creation of new outlots along the Miami and Carter Creek corridors would ensure protection of sensitive views along these waterways. In addition, the configuration of proposed residential units has been altered to preserve wetland and riparian areas, particularly in an area west of Opah Drive, north of the existing Sierra Meadows Golf Course clubhouse. The reconfiguration of roadways associated with the revised project description is not expected to result in new significant impacts, since the previously-proposed construction of extension of Pine River Road would be replaced by the extension of Opah Drive to Road 621. The incorporation of a 24.9-acre effluent spray field would not result in aesthetic impacts since only minor improvements would be necessary. In addition, the relocation of the wastewater treatment plant from the northern portion of the site to the central portion of the site would not result in substantially increased impacts.

No new significant environmental effects would occur, nor would the severity of previously-identified impacts be substantially increased. The revised project description would result in the same unavoidable significant impacts as concluded within the Final EIR.

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5.6 BIOLOGICAL RESOURCES

SUMMARY OF EXISTING CONDITIONS

Based on an overview of site conditions within the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR), the project site is occupied by foothill woodland habitat, valley foothill riparian habitat, riverine watercourses, seasonal wetlands, and manmade drainage and impoundment facilities. A range of special status wildlife species exist throughout the project site. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to biological resources.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

Analysis within the 2007 Final EIR found that the loss of habitat for common wildlife would not be significant, since common species existing onsite are abundant in the region and throughout California. In addition, no special status plant species occur on the project site, and no mitigation measures were recommended. It was also determined that the preservation of riparian habitat within on-site creeks would serve as a design feature to minimize impacts to wildlife corridors.

The 2007 Final EIR concluded that the development of the original project description would not result in significant impacts in regards to foothill woodland vegetation or valley foothill riparian habitat. Mitigation measures in relation to landmark trees within areas of foothill woodland vegetation were recommended to minimize impacts to a less than significant level. Measures to reduce impacts to valley foothill riparian habitat include the attainment of a Section 1600 Streambed Alteration Agreement through the California Department of Fish and Game (CDFG), buffering, fencing, and habitat mitigation per the County's General Plan.

Impact analysis within the 2007 Final EIR for Valley Elderberry longhorn beetle, California horned lizard, California red-legged frog, foothill yellow-legged frog, western pond turtle, and special status bird/bat species determined that the original project description would not result in significant impacts and no mitigation would be required. However, mitigation to minimize impacts to the Valley Elderberry longhorn beetle included consultation with the U.S. Fish and Wildlife Service (USFWS), attainment of credits at an approved mitigation bank, and/or on-site mitigation and monitoring for elderberry replanting/transplanting. Mitigation for special-status bird species included preconstruction surveys and avoidance of nesting raptors during the breeding season.

The 2007 Final EIR also concluded that the project would create impacts to jurisdictional waters of the U.S. and State. The acquisition of regulatory permits through the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and CDFG would provide mitigation to reduce impacts to less than significant levels.

The 2007 Final EIR determined that impacts in regards to cumulative biological impacts would be significant and unavoidable. Although the project includes mitigation measures that minimize biological impacts on a project-specific basis to

less than significant levels, the project's cumulative contribution to loss of habitat for wildlife and wildlife corridor movement would remain significant.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

According to a letter dated February 7, 2008 from Live Oak Associates, Inc. (who performed the biological field analysis within the 2007 Final EIR) which is provided as Appendix 13.1 of this SEIR, on-site biological conditions have not substantially changed since previous field studies were performed. The revised project description presented as part of this SEIR would not substantially alter the conclusions or mitigation measures presented in the previous 2007 Final EIR. The creation of new outlots along the Miami and Carter Creek corridors would ensure protection of sensitive habitat along these waterways. In addition, the configuration of proposed residential units has been altered to preserve wetland and riparian areas, particularly in an area west of Opah Drive, north of the existing Sierra Meadows Golf Course clubhouse. The protection of on-site water features and wetland/riparian areas represents a beneficial impact of the revised project description.

The reconfiguration of roadways associated with the revised project description is not expected to result in new significant impacts, since the previously-proposed construction of extension of Pine River Road would be replaced by the extension of Opah Drive to Road 621.

A minimal direct impact to biological resources would occur as part of the new effluent spray field. Moreover, the relocation of the wastewater treatment plant is expected to affect similar habitat as the previously-proposed location within the northern portion of the project site. The Project Applicant would be required to consult with Federal and State agencies regarding impacts to sensitive plant and animal species within the spray field outlot and the relocated wastewater treatment plant site.

No new significant environmental effects related to biological resources would occur, nor would the severity of previously-identified impacts be substantially increased. The revised project description would result in the same unavoidable significant impact for cumulative effects as concluded within the 2007 Final EIR.

5.7 CULTURAL RESOURCES

SUMMARY OF EXISTING CONDITIONS

The previous *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR) included analysis of the original project description's potential to impact archaeological, historical, and paleontological resources. According to the 2007 Final EIR, a total of nine prehistoric sites have been documented within project boundaries. These sites are composed of special use sites and/or occupation sites, some with middens, subsurface artifacts, and/or housepit depressions. In addition, the site was utilized for historical mining, logging, and ranching activities from the mid-19th century into the early 20th century. Since no structures exist on-site, no impacts to historic structures would occur. Moreover, paleontological resources were not anticipated to occur due to the igneous nature of bedrock beneath the project site. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to cultural resources.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

As stated above, analysis within the 2007 Final EIR concluded that impacts related to paleontological resources would not be significant due to the igneous nature of bedrock beneath the site. Impacts to archaeological resources and potential burial sites would be less than significant upon implementation of recommended mitigation measures. These mitigation measures include archaeological and/or Native American monitoring during construction, in addition to avoidance and/or data collection at the prehistoric sites. Compliance with Section 5097.98 of the Public Resources Code would minimize potential impacts in the event a burial site is discovered on-site. Cumulative cultural resources impacts were determined to be less than significant, since the project would include mitigation measures to minimize all cultural resources impacts to less than significant levels.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

The revised project description presented as part of this SEIR would not substantially alter the conclusions or mitigation measures presented in the previous 2007 Final EIR. The creation of new outlots along the Miami and Carter Creek corridors would ensure protection of any cultural resources potentially occurring along these waterways. In addition, the configuration of proposed residential units has been altered to preserve wetland and riparian areas, particularly in an area west of Opah Drive, north of the existing Sierra Meadows Golf Course clubhouse. The reconfigured roadways, spray field, and wastewater treatment plant associated with the revised project description would all be subject to the same Native American and archaeological monitoring requirements as the original project description. As such, no new significant impacts related to cultural resources would occur.

For the reasons described above, conclusions and mitigation measures presented in the 2007 Final EIR would not substantially change. The revised project description would not result in new significant environmental effects, nor would the severity of previously-identified impacts substantially increase. Like the original 2007 Final EIR, no unavoidable significant impacts would occur in regards to cultural resources.

5.8 GEOLOGY AND SOILS

SUMMARY OF EXISTING CONDITIONS

Based on existing conditions information within the previous *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR), the project site lies within an upland valley, with elevation ranging from as high as 2,450 feet to as low as 1,640 feet above mean sea level (MSL). The site is underlain entirely by granitic bedrock. The majority of the project area is capped by residual soils derived from weathering of underlying granitic rocks. Although no seismic faults traverse the site, the site is subject to seismic events due to the proximity of several faults (the closest being the Foothills Fault system). Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to geology and soils.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

Analysis within the 2007 Final EIR concluded that all impacts related to geology and soils (slope stability, groundwater, soil erosion, sewage disposal, collapsible/liquefiable soils, and ground shaking) would be less than significant upon implementation of recommended mitigation measures.

Mitigation measures related to slope stability, collapsible/liquefiable soils, and ground shaking consist of grading, slope, drainage, and compaction requirements as part of site design, setbacks for homes and septic systems, and additional site-specific geotechnical review. Potential groundwater impacts near the dam would be mitigated by construction of a "cut-off trench" at the foundation of the dam, if deemed necessary by site-specific geotechnical review. Mitigation measures for soil erosion include requirements for vegetative cover and soil stabilization, drainage requirements for site design, and a minimization of grading near natural springs. Potential sewage disposal impacts due to septic systems would be mitigated by detailed leach field studies for each septic system, along with a testing program for coliform bacteria and other possible pollutants.

On a cumulative basis, the 2007 Final EIR determined that the original project description would not contribute to significant impacts related to geology and soils. The County's *General Plan EIR* concludes that seismic and geologic impacts resulting from buildout of the *General Plan* would be less than significant. Moreover, the project would include mitigation measures to reduce project-specific impacts to less than significant levels.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

The revised project description would have a similar area of impact as the original (2007 Final EIR) project description. The creation of outlots along Miami Creek, Carter Creek, and for the effluent spray field would not affect geologic conditions. Construction of the proposed reconfigured roadways and the relocated wastewater treatment plant would be subject to similar geologic hazards as those identified for the original project description, and similar mitigation measures would apply.

For the reasons described above, conclusions and mitigation measures presented in the 2007 Final EIR would not substantially change. The revised project description would not result in new significant environmental effects, nor would the severity of previously-identified impacts substantially increase. Like the original 2007 Final EIR, no unavoidable significant impacts would occur in regards to geology and soils.

5.9 HYDROLOGY AND DRAINAGE

SUMMARY OF EXISTING CONDITIONS

The previous *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR) included analysis of the original project description's potential to result in impacts related to hydrology and drainage. According to the 2007 Final EIR, the project site is located within the Miami and Carter Creek watersheds. Miami Creek flows along the southern boundary of the project site, while Carter Creek exists along the western boundary. A portion of the project site is within the 100-year floodplain, according to the Flood Insurance Rate Map (FIRM) for the site. Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to hydrology and drainage.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

Analysis within the 2007 Final EIR concluded that impacts related to alteration of drainage courses and on-site hydrology would be less than significant upon compliance with applicable Madera County and Federal Emergency Management Agency (FEMA) requirements. No mitigation measures would be required.

Impact analysis within the 2007 Final EIR also determined that impacts related to flooding could be mitigated through the attainment of a Letter of Map Revision (LOMR) through FEMA, due to proposed construction within the mapped floodplain. Short-term, construction-related water quality impacts would be less than significant with mitigation, where the Project Applicant would be required to attain a Construction General Permit from the Regional Water Quality Control Board (RWQCB). Long-term operational water quality impacts would be mitigated by compliance with California Department of Transportation (Caltrans) and County standards.

On a cumulative basis, impacts related to hydrology and drainage would be less than significant. The County's *General Plan EIR* determined that impacts related to *General Plan* buildout would be less than significant. In addition, the project includes mitigation to reduce all impacts to hydrology and drainage to less than significant levels.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

Under the revised project description, the creation of outlots along Miami and Carter Creeks would result in a reduced impact related to hydrology and drainage, since this would ensure that no structures or improvements would be constructed within the creek corridors that could impede water flow. The creation of an outlot for the effluent spray field would not result in substantially increased impacts, since spray field operations would not result in ponding or off-site runoff.

Construction and operation of the reconfigured and relocated roadways and wastewater treatment plant would be subject to the same RWQCB and Caltrans requirements and mitigation measures described in the 2007 Final EIR. Moreover,

the revised project description would have a similar area of impact and grading plan as the original project description.

Thus, the revised project description analyzed within this SEIR would not substantially alter the conclusions or mitigation measures presented in the previous 2007 Final EIR. The revised project description would not result in new significant environmental effects, nor would the severity of previously-identified impacts substantially increase. Like the original 2007 Final EIR, no unavoidable significant impacts would occur in regards to hydrology and drainage.

5.10 PUBLIC SERVICES AND UTILITIES

SUMMARY OF EXISTING CONDITIONS

The *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR) provides an analysis of the original project description's potential impacts to public services and utilities. Public services and utilities within the project area are provided by a range of agencies, districts, and parties, and include:

- Fire Protection: Fire protection is provided by the Madera County Fire Department. The Fire Department operates a total of 15 fire stations, the nearest of which are Ahwahnee Station No. 16 and Oakhurst Station No. 12.
- Police Protection: Police protection is provided by the Madera County Sheriff's Department. The Sheriff's Department operates two police substations near the project site, which include the Bass Lake Substation and the Oakhurst Substation.
- Schools: The site is located within the jurisdiction of the Bass Lake Joint Union Elementary School District (BLJUESD) and Yosemite Unified School District (YUSD). The BLJUESD operates four schools within the project area (one elementary school in Ahwahnee, and an elementary school, intermediate school, and charter school in Oakhurst), while the YUSD operates one primary high school (Yosemite High School in Oakhurst) within the area.
- Libraries: Madera County also provides library service to the project area, and operates Oakhurst Branch Library, which is the nearest facility to the site.
- Recreation: Madera County does not have a Parks and Recreation Department and does not play a significant role in providing recreational facilities or services in the area. Existing parks, schools, and open space facilities provide for recreational opportunities in the area.
- Roadway Maintenance: Madera County provides roadway maintenance services for the area, and maintains, repairs, and constructs roads when necessary.
- Wastewater: Wastewater service is provided by Madera County's Maintenance District 46 (MD46). MD46 currently does not have wastewater facilities within the project site. Existing uses within the project area utilize on-site septic systems.
- Water: Water service is also provided by the Madera County MD46. Water sources within the project area include surface water from Miami Creek and groundwater.
- Solid Waste: Solid waste disposal service is provided by Emadco Disposal Service, a private disposal company. Solid waste from the project area is

taken to a transfer station in Oakhurst, and then to the Fairmead Solid Waste Disposal Site in Chowchilla.

- Electricity and Natural Gas: Electricity service is provided by Pacific Gas and Electric (PG&E). Natural gas is provided via individual on-site propane tanks, and are refilled and serviced by the Ferrellgas Company.

Refer to Appendix 13.2 of this SEIR for a detailed description of existing conditions in relation to public services and utilities.

SUMMARY OF IMPACT ANALYSIS WITHIN THE 2007 FINAL EIR

According to analysis within the 2007 Final EIR, impacts in regards to police protection, schools, libraries, solid waste, and natural gas would not be significant, and no mitigation measures would be required. Payment of standard taxes and impact fees would minimize impacts in regards to police protection, schools, and libraries, while a contractual agreement with Ferrellgas Company would offset natural gas costs.

The 2007 Final EIR also concludes that impacts in regards to fire protection, recreation, roadway maintenance, wastewater, water, and electricity would be less than significant upon incorporation of recommended mitigation measures. Mitigation measures for fire protection would include the payment of fire impact fees and the provision of appropriate fire flows and emergency access. Mitigation for recreational impacts would include the dedication of land for park uses or the payment of park dedication fees in accordance with County standards. Impacts in regards to roadway maintenance would be addressed by improvements to Opah Drive, along with a maintenance assessment to determine the assessment per residential lot for maintenance purposes. Wastewater impacts would be mitigated through the provision of an on-site wastewater treatment plant, which would be utilized to irrigate the existing Sierra Meadows Golf Course. The mitigation for water impacts includes the provision of an on-site water reservoir. Electricity impacts would be mitigated through verification (prior to final map approval) that PG&E would be able to provide safe and reliable maintenance and operation of its facilities.

On a cumulative basis, impacts in regards to public services and utilities were found to be less than significant. Although the County's *General Plan EIR* identifies a potentially significant impact for water, wastewater, and schools, the project provides mitigation to reduce impacts to less than significant.

COMPARISON OF IMPACTS BETWEEN THE 2007 FINAL EIR AND THE REVISED PROJECT DESCRIPTION

Under the revised project description, the new outlots/spray field and reconfigured site plan, roadways, and wastewater treatment plant would not result in any significant change in impacts to public services and utilities. The capacity of the on-site wastewater treatment plant would not be altered as part of the revised project description. Proposed roadways would be subject to the same maintenance assessment mitigation as the original project description.

The revised project description would not substantially differ from the original site plan in regards to public services and utilities. The range of required services/utilities and consumption factors would not be substantially different from those provided in the 2007 Final EIR. Thus, the revised project description analyzed within this Supplemental EIR would not substantially alter the conclusions or mitigation measures presented in the previous 2007 Final EIR. The revised project description would not result in new significant environmental effects, nor would the severity of previously-identified impacts substantially increase. Like the original 2007 Final EIR, no unavoidable significant impacts would occur in regards to public services and utilities.

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6.0 Long-Term Implications of the Proposed Project

6.0 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

6.1 THE RELATIONSHIP BETWEEN SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

If the revised project description is approved and constructed, a variety of short-term and long-term impacts would occur on a local level. During project grading and construction, portions of surrounding land uses may be temporarily impacted by increased dust and noise. Short-term erosion may occur during grading. There may also be an increase in vehicle emissions caused by grading and construction activities. However, these disruptions would be temporary, and may be avoided or lessened to a large degree through mitigation cited in this report and through compliance with the *Madera County Zoning Ordinance* (refer to Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures*).

Ultimate development of the project site would create long-term environmental consequences associated with development of previously vacant land. Development of the revised project description and the subsequent long-term effects may impact the physical, aesthetic, and human environments. Long-term physical consequences of development include: increased traffic volumes, increased noise from project-related mobile (traffic) and stationary (mechanical and landscaping) sources, incremental increased demands for public utilities, and increased energy and natural resource consumption. Long-term visual impacts would occur with the alteration of views across the project site. Incremental degradation of local and regional air quality would also occur as a result of mobile source emissions generated from project-related traffic and stationary source emissions generated from the natural gas and electricity consumption.

6.2 IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

Approval of the revised project would cause irreversible environmental changes, resulting in the following:

- Permanent commitment of land that would be physically altered to a residential development and support infrastructure.
- Soil erosion due to grading and construction activities.

- Alteration of the human environment as a consequence of the development process. The project represents an enhanced commitment to residential uses that would replace vacant land with development.

- Utilization of various new raw materials, such as lumber, sand and gravel for construction. Some of these resources are already being depleted worldwide. The energy consumed in development and maintenance of the site may be considered a permanent investment.

- Incremental increases in vehicular activity in the surrounding circulation system, resulting in associated increases in air emissions and noise levels.

6.3 GROWTH-INDUCING IMPACTS

Section 15126 of the CEQA Guidelines requires that an EIR include a discussion of the project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section provides an analysis of such potential growth-inducing impacts based on criteria suggested in the CEQA Guidelines.

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

- Removal of an impediment to growth (e.g., establishment of an essential public service or the provision of new access to an area);

- Foster economic expansion or growth (e.g., changes in revenue base, employment expansion, etc.);

- Foster population growth (i.e., the construction of additional housing), either directly or indirectly;

- Establishment of a precedent setting action (e.g., an innovation, a change in zoning, or general plan amendment approval); or

- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an "infill" type of project).

Should a project meet any one of the above listed criteria, it may be considered growth inducing.

The *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR) provided an analysis of the original project description's potential to result in growth inducement. Existing population, housing, and employment figures for the project vicinity were summarized. Analysis within the 2007 Final EIR concluded that the original project description could be considered growth inducing for the following reasons:

- The project would require the expansion of water, wastewater, and transportation/circulation facilities to meet increased demands associated with the project. This could be considered as a removal of an impediment to growth.
- The project would foster indirect economic expansion and growth, since the project would involve the development of residential uses that would increase the County's revenue base attributable to the future residents' purchases of commercial goods and services.
- The project site is proposed adjacent to the existing Sierra Meadows Golf Course, along with existing residential uses adjacent to the golf course. Although the project is not proposed within an area of isolated open space, the project would encroach into an adjacent area of open space.

The project would foster direct population growth by developing 315 new residential units on undeveloped land within Madera County, although this growth would not be considered growth inducing since it has been accounted for within the County's *General Plan* (refer to Section 5.1, *Land Use and Relevant Planning*).

The revised project description would not substantially differ from the original project description in regards to growth inducement. The revised project description proposes the same number of residential units (315) within the same project area, which has been accounted for within the County's *General Plan*. Similar to the original project description, the revised project description could be considered growth inducing since it would remove an impediment to growth (through provision of infrastructure), would foster indirect economic expansion and growth, and would encroach into adjacent areas of open space.

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7.0 Alternatives to the Proposed Action

7.0 ALTERNATIVES TO THE PROPOSED PROJECT

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, the following section describes a range of reasonable alternatives to the revised project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. As described within Section 3.0, *Project Description*, the revised project description is similar to the original project description presented in the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final Environmental Impact Report* (EIR). The revised project description would occupy a similar impact area, propose the same uses, and develop the same number of residential units. Moreover, as presented in Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures,* impacts associated with the revised project description would be similar to those of the original project description. Thus, the alternatives presented within this section and associated impact analyses are similar to those presented in the 2007 Final EIR.

Potential environmental impacts associated with four separate alternatives are compared to impacts from the proposed project. The alternatives include the "No Project/No Development", "No Project/Existing Designation", "Reduced Density" and "Multiple Reservoirs Design" Alternative. The chapter concludes with identification of the "Environmentally Superior" Alternative. Refer to Table 7-1, *Comparison of Alternatives*, at the end of this section for an impact matrix which compares the alternatives to the revised project description.

A brief summary of project alternatives and a comparison to the revised project description is provided below. For a detailed description of alternatives, refer to Appendix 13.2 of this SEIR.

7.1 "NO PROJECT/NO DEVELOPMENT" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Implementation of the No Project/No Development Alternative would retain the site in its current condition. None of the improvements proposed as part of the project and/or the existing General Plan Land Use (or Ahwahnee/Nipinnawasee Area Plan) designation would occur. It is noted that this Alternative is presented for the purposes of this EIR Alternatives Section. It is not the intent of the County to preclude development from occurring within the project site. The following discussion evaluates the potential environmental impacts associated with the No Project/No Development Alternative and compared to impacts from the proposed project.

IMPACT COMPARISON TO THE PROPOSED PROJECT

None of the impacts associated with the revised project description would occur upon implementation of the No Project/No Development Alternative. The project site would remain in its existing state. This Alternative would avoid potential impacts

resulting from alterations of the project sites' physical characteristics and construction of new structures and uses.

ABILITY TO MEET PROJECT OBJECTIVES

This Alternative is not consistent with the primary project objective, which are to provide 315 single-family homes, on lots ranging from 1/3-acre up to five (5) acres on approximately 537.6 acres of land.

7.2 "NO PROJECT/EXISTING AREA PLAN DESIGNATION" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Implementation of the No Project/Existing Area Plan Designation Alternative would be in accordance with the existing *Ahwahnee/Nipinnawasee Area Plan* land use designations, which allow for 545 dwelling units onsite. Assuming 3.055 persons per household, approximately 962 persons would be added to the permanent population of Madera County under the proposed project. This Alternative would result in an increased dwelling unit density onsite, in addition to an increased population introduced to the project area.

IMPACT COMPARISON TO THE PROPOSED PROJECT

The No Project/Existing Area Plan Designation Alternative would be environmentally inferior to the revised project description (i.e., result in increased impacts) in regards to recreation, public services and utilities, aesthetics/light and glare, traffic and circulation, air quality, noise, biological resources, cultural resources, geology and soils, and hydrology and drainage. This is due to the increased intensity of development onsite, associated with the existing *Area Plan* land use designations. This Alternative would be environmentally superior (i.e., result in reduced impacts) in regards to land use and relevant planning, since the Alternative would be consistent with existing land use designations and no *General Plan* or *Area Plan* amendment would be necessary.

ABILITY TO MEET PROJECT OBJECTIVES

The No Project/Existing Area Plan Designation Alternative would increase the intensity of the environmental impacts associated with the proposed construction and development when compared to the proposed project. This Alternative meets the objectives established in the *Madera County General Plan* and *Ahwahnee/Nipinnawasee Area Plan* and the objectives established for the proposed project.

7.3 "REDUCED DENSITY" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

For the Reduced Density Alternative, development of 302 dwelling units and associated infrastructure would occur on project site, as compared to 315 dwelling units under the proposed project. Similar to the proposed project, the proposed densities under this Alternative would be consistent with the General Plan/ *Ahwahnee/Nipinnawasee Area Plan.* This Alternative would downsize Phase 8 of the proposed project, which encompasses lots 213 through 236. Under this Alternative, lots 216, 218, and lots 223 through 233 would be eliminated. Elimination of these lots would result in a net reduction of 13 lots, or 4.1 percent of the proposed project. This would represent an associated reduction of 40 residents from the projected population increase in comparison to the proposed project. This Alternative would also include one water reservoir to serve the proposed residential uses.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Due to the reduced density of development within site boundaries, this Alternative would be environmentally superior to the revised project in relation to recreation, public services and utilities, traffic and circulation, air quality, noise, biological resources, geology and soils, and hydrology and drainage. The project would be neither environmentally superior nor inferior to the revised project in regards to land use and relevant planning, aesthetics/light and glare, and cultural resources.

ABILITY TO MEET PROJECT OBJECTIVES

The Reduced Density Alternative would decrease the intensity of the environmental impacts associated with the proposed construction and development of the proposed project. Although this Alternative includes 301 single-family homes, it generally meets the project objectives, which include the development of a single-family residential subdivision consisting of 315 single-family homes.

7.4 "MULTIPLE RESERVOIRS DESIGN" ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Development of the Multiple Reservoirs Design Alternative would be similar to the revised project in that it would take into account the entire 537.6-acre property, as well as adjacent land to be utilized for water storage facilities. The Multiple Reservoirs Design Alternative would include the same number of proposed dwelling units (315 dwelling units), at the same density, as the revised project. The difference between the Multiple Reservoirs Design Alternative and the revised project is that the Proposed project includes one 210-acre foot reservoir, while the Multiple Reservoirs Design Alternative would include a series of nine reservoir facilities to provide water storage for the proposed project. The nine reservoirs would be generally located in the same area as the water reservoir included in the proposed project.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Since this Alternative would only affect reservoir locations at the site, impacts in comparison to the revised project description would be neither superior nor inferior in relation to land use and relevant planning, recreation, public services and utilities, aesthetics/light and glare, traffic and circulation, air quality, noise, and cultural resources. Due to the increased area of multiple reservoirs potentially affecting sensitive biological habitat or the increased potential for geological/hydrological safety impacts, this Alternative would be environmentally inferior in regards to biological resources, geology and soils, and hydrology and drainage.

ABILITY TO MEET PROJECT OBJECTIVES

Since the residential development proposed under this Alternative would not change in comparison to the revised project, this Alternative is consistent with the project objectives, which are to provide up to 315 single-family homes, on lots ranging from 1/3-acre up to five acres on approximately 537.6 acres of land.

7.5 "ENVIRONMENTALLY SUPERIOR" ALTERNATIVE

The No Project/Existing Designation Alternative would increase impacts from those anticipated for the proposed project. The Multiple Reservoir Design Alternative would increase impacts to biological resources, geology and soils, and hydrology and drainage. The Reduced Density Alternative would result in reduced impacts related to recreation, public services and utilities, aesthetics, traffic and circulation, air quality, noise, biological resources, geology and soils, and hydrology and drainage. The No Project/No Development Alternative would eliminate and/or reduce all environmental impacts from those anticipated for the proposed project. Thus, the No Project/No Development Alternative would be the Environmental Superior Alternative. However, as cited in Section 15126.6(e)(2) of the *CEQA Guidelines*: *"If the environmentally superior alternative is the "No Project" Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."* Although the Multiple Reservoir Design Alternative would meet the project objectives, it would present significant safety issues for surrounding land uses and the proposed residential uses in the water reservoir(s) area. Thus, the Multiple Reservoir Design Alternative is not being considered as the Environmentally Superior Alternative.

The Reduced Density Alternative is concluded as the environmentally superior alternative, since it not only would reduce impacts as compared to the proposed project, but also more closely meets the objectives of the proposed project by including the development of 301 single-family homes.

Table 7-1
Comparison of Alternatives

Issue	No Project/No Development	No Project/ Existing Designation	Reduced Density	Multiple Reservoir Design
Land Use and Relevant Planning	□	□	=	=
Recreation	□	■	□	=
Fire and Police Protection	□	■	□	=
Schools	□	■	□	=
Libraries	□	=	=	=
Water and Sewer	□	■	□	=
Solid Waste	□	■	□	=
Utilities	□	■	□	=
Aesthetics/Light and Glare	□	■	=	=
Traffic and Circulation	□	■	□	=
Air Quality	□	■	□	=
Noise	□	■	□	=
Biological Resources	□	■	□	□
Cultural Resources	□	=	=	=
Geology and Soils	□	■	□	□
Hydrology and Drainage	□	■	□	□

= Impact is equivalent to impact of proposed project (neither environmentally superior nor inferior).
□ Impact is less than impact of proposed project (environmentally superior).
■ Impact is greater than impact of proposed project (environmentally inferior).

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8.0 Inventory of Mitigation Measures

8.0 INVENTORY OF MITIGATION MEASURES

LAND USE AND RELEVANT PLANNING

Madera County General Plan

5.1-1 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR* and this SEIR.

Ahwahnee/Nipinnawasee Area Plan

5.1-2 Refer to Mitigation Measures outlined in Sections 5.2 through 5.10 of both the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR* and this SEIR.

Madera County Zoning Ordinance

5.1-3 No mitigation measures are recommended.

Cumulative Impacts

5.1-4 No mitigation measures are recommended.

TRAFFIC AND CIRCULATION

Traffic and Circulation

5.2-1 The Project Applicant's pro-rata share payment to the area-wide circulation improvements shall pay for the project's fair share contribution to the identified roadway improvement as follows:

- Harmony Lane/SR-49: Modify eastbound SR-49 approach from one left-turn lane and one through lane to consist of one left-turn lane and two through lanes. The additional eastbound through lane should be a minimum of 200 feet in length plus taper lengths in accordance with Caltrans design standards. Implementation of this mitigation measure should be coordinated with Caltrans District 6 staff.

- Intersection of SR-49/Road 621: A southbound left-turn lane is warranted at this intersection for the 2025 project scenario. This intersection would require a separate northbound right-turn lane, a westbound right-turn lane, and a southbound left-turn lane. These improvements shall be carried out in consultation with Caltrans District 6 staff.

Safety Hazards

5.2-2 The Project Applicant shall be required to eliminate the substandard curve and longitudinal grades on the segment of Opah Drive that does not meet current road standards, prior to occupancy of the first dwelling unit.

Cumulative Impacts

5.2-3 No mitigation measures are recommended.

AIR QUALITY

5.3-1a Construction of the Project requires the implementation of a dust control plan as set forth under Regulation VIII, *Fugitive PM10 Prohibitions of the San Joaquin Valley Air Pollution Control District*. The following mitigation measures, in addition to those required under Regulation VIII, shall be implemented to reduce fugitive dust emissions associated with the Project:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/ suppressant, covered with a tarp or other suitable cover, or vegetative ground cover.

- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)

- Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.

- Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

- Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

- Asphalt-concrete paving shall comply with San Joaquin Valley Air Pollution Control District Rule 4641 and restrict the use of cutback, slow-cure and emulsified asphalt paving materials.

- Limit traffic speeds on unpaved roads to 15 mph.

- Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.

5.3-1b The following measures shall be implemented by the construction contractor to minimize construction exhaust emissions:

- Heavy construction equipment shall be property tuned and maintained to reduce emissions. Construction equipment shall be fitted with the most modern emission control devices. The construction manager shall monitor compliance with the measure and is subject to periodic inspection by the County.

- The Contractor shall install or utilize the extent feasible construction equipment incorporating catalyst equipped engines and/or tier II engines.

- Require vapor control from the transfer of fuel from the fuel truck to vehicles both during construction and subsequent operations.

- Diesel powered equipment shall be located as far away as possible from sensitive land uses. Specifically, diesel compressors, pumps and other stationary machinery shall be located to the extent feasible, away from sensitive receptors.

- Construction equipment shall be shut off to reduce idling when not in direct use for extended periods of time.

5.3-1c The construction contractor shall adhere to SJVAPCD District Rule 4641 (*Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations*) to reduce emissions during asphalt paving activities. This rule applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations.

5.3-1d The construction contractor shall adhere to the SJVAPCD District Rule 4601 (*Architectural Coatings*) to limit volatile organic compounds from

architectural coatings. This rules specifies architectural coatings storage, clean up and labeling requirements.

LONG-TERM (OPERATIONAL) EMISSIONS

5.3-2a The project shall incorporate the installation of EPA-certified wood burning stoves or fireplaces. If this is not feasible, then the installation of a ceramic coating on the honeycomb inside a catalytic combustor shall be utilized or the use of natural gas fireplaces may be used as a feasible alternative. The project shall also comply with SJVAPCD District Rule 4901 (*Wood Burning Fireplaces and Wood Burning Heaters*).

5.3-2b Prior to development of the Sewer Treatment Plant and Water Treatment Plant, the Applicant shall submit the plans and specifications to the SJVAPCD Small Business Assistance Office for review to determine what specific permitting requirements are necessary (if any).

CONFORMITY WITH AIR QUALITY ATTAINMENT PLAN

5.3-3 No mitigation measures are required.

CUMULATIVE IMPACTS

5.3-4 Refer to Mitigation Measures 5.3-1a through 5.3-1d (as previously stated, a significance determination cannot be made for GCC impacts).

NOISE

Short-Term Construction Noise And Vibration Impacts

5.4-1a Construction activities shall be limited to the hours of 7:00 a.m. and 8:00 p.m. Monday to Saturday and prohibited on Sundays and Federal Holidays.

5.4-1b All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers, to the satisfaction of the County Engineer.

5.4-1c Stationary construction shall be placed such that emitted noise is directed away from sensitive noise receptors, to the satisfaction of the County Engineer.

5.4-1d Stockpiling and staging areas shall be located as far as practical from noise sensitive receptors during construction activities, to the satisfaction of the County Engineer.

5.4-1e If blasting is required during construction of the reservoir, a qualified geophysical firm, approved by Madera County, shall monitor noise and vibration levels during blasting activities. The geophysical firm shall ensure that vibration due to blasting during reservoir construction is

limited to a peak particle velocity of 0.2 inches per second (in/sec) at the nearest sensitive receptor (i.e., residence). If vibration measurements indicate at any time that vibration due to blasting at any sensitive receptor has exceeded a peak particle velocity of 0.2 in/sec, the geophysical firm shall cease blasting and immediately notify Madera County. A mitigation plan shall then be developed by the geophysical firm to achieve compliance with the maximum allowable peak velocity. The plan shall be reviewed and approved by Madera County.

Long-Term Noise Impacts

5.4-2 No mitigation measures are recommended.

Stationary Noise

5.4-3 Noise levels emanating from Heating/Ventilation/Air Conditioning (HVAC) units, the water treatment plant and the sewer treatment plant shall comply with the Madera County General Plan Policy 7.A.5, which sets exterior control noise limits.

Cumulative Impacts

5.4-4 No mitigation measures are recommended.

AESTHETICS/LIGHT AND GLARE

Construction-Related Aesthetic/Light And Glare Impacts

5.5-1a Construction equipment staging areas shall be located away from existing residential uses and appropriate screening (i.e., temporary fencing with opaque material), used to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on project Final Development Plans and Grading Plans and are subject to review and approval of Madera County. Compliance with this measure is subject to periodic field inspection by Madera County Staff.

5.5-1b All construction-related lighting associated with the construction of new roadways and the installation of utilities shall be located and aimed away from adjacent residential areas. Lighting shall use the minimum wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to Madera County for review concomitant with Grading Permit applications for the subdivision of the lots.

Site Character

5.5-2 No mitigation measures are recommended.

Area Viewshed

5.5-3 No mitigation measures are recommended.

Long-Term Light And Glare Impacts

5.5-4 Prior to final structural approval, the following design features shall be incorporated into applicable building plans:

- Project elevations and materials of proposed structures and facilities shall not produce excessive glare.
- All security light fixtures and standards shall be either shielded or directed away from neighboring properties and streets. Exposed bulbs shall not be permitted. All new installation fixtures shall have glare control shields.
- The type and location of lighting standards and the intensity of lighting shall be approved by Madera County Engineering and General Services Department, Building Division.

Cumulative Impacts

5.5-5 No mitigation measures are recommended.

BIOLOGICAL RESOURCES

Foothill Woodland Vegetation

5.6-1a Prior to the onset of construction activities, the Project Applicant shall contract with an Arborist to complete a tree survey in the developable area focused on landmark trees. Upon completion of the survey, the arborist will submit a tree survey map of landmark trees that may be disturbed during development. If no landmark trees are found, no further studies are necessary. The survey map shall be reviewed and approved by Madera County.

5.6-1b Pursuant to Mitigation Measures 5.6-1a, if landmark trees are found during the tree survey that must be removed during construction activities, then a landmark tree mitigation and monitoring plan shall be prepared by an arborist and subject to review and approval by Madera County.

Habitat For Common Wildlife

5.6-2 No mitigation measures are recommended.

Special-Status Plant Species

5.6-3 No mitigation measures are recommended.

Special-Status Invertebrate Species

Valley Elderberry Longhorn Beetle

5.6-4 As VELB habitat exists on the project site and if elderberry shrubs in the project area cannot be avoided, consultation with USFWS shall be required. If feasible, the project shall be revised to avoid removal of or indirect impacts to elderberry shrubs. Typically, the USFWS requires a 100-foot setback from the outer dripline edge of each shrub; however, this setback may be reduced substantially depending on the site design. If shrubs cannot be avoided, a mitigation plan prepared by a qualified biologist and subject to review and approval by the USFWS, which must include one or more of the following, shall be implemented:

- Obtain credits at an approved mitigation bank; or
- Implement an onsite mitigation and monitoring plan that includes transplantation of the shrub and planting of elderberry seedlings. Specific transplanting procedures shall be included in the plan and shall follow the measures outlined in the USFWS *General Compensation Guidelines for the Valley Elderberry Longhorn Beetle* (July 1999). All transplanting shall occur during the shrub's dormant season (November through mid-February). Elderberry seedlings shall be planted for all shrubs with stems measuring one inch or greater at ground level that are transplanted or destroyed. Elderberry seedlings shall be planted in an approved mitigation location and shall follow mitigation ratios (seedlings per shrub disturbed) outlined in the USFWS *General Compensation Guidelines for the Valley Elderberry Longhorn Beetle* (July 1999). Ratios are based on location (riparian vs. non-riparian), stem diameter at ground level, and presence or absence of exit holes of affected elderberry shrubs and range from 1:1 to 8:1.

Special-Status Amphibian/Reptile Species

California Horned Lizard

5.6-5 No mitigation measures are recommended.

California Red-Legged Frog

5.6-6 No mitigation measures are recommended.

Foothill Yellow-Legged Frog

5.6-7 No mitigation measures are recommended.

Western Pond Turtle

5.6-8 No mitigation measures are recommended.

Special-Status Bird Species

5.6-9a If project construction is proposed during breeding season (February through August), a focused survey for raptors and their nests shall be conducted in the project area within 30 days prior to the beginning of construction activities by a qualified biologist in order to identify active nests on the project site. The survey shall be reviewed and approved by Madera County and/or CDFG. If no active nests are identified during the surveys or if project construction is proposed to occur during the non-breeding season (September through January), no further mitigation would be required. If active nests are identified in the project area during the focused surveys, Mitigation Measure 5.6-9b shall be implemented.

5.6-9b Pursuant to Mitigation Measure 5.6-9a, if active nests are identified in the project area during the focused surveys for raptors, no construction activities shall take place within a certain distance of raptor nests (to be determined under consultation) with CDFG, until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September through January). Madera County and/or CDFG shall monitor and enforce Mitigation Measure 5.6-9b.

Special-Status Bat Species

5.6-10 No mitigation measures are recommended.

Sensitive Habitats

Valley Foothill Riparian Habitat

5.6-11a Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream.

5.6-11b To ensure impacts to Valley foothill riparian habitat is minimized, during grading plan review by Madera County, the County shall ensure that the buffer around riparian habitats is widened to encompass the entire riparian corridor and provides a 50-foot buffer from the canopy edge as per Madera County General Plan - Policy 5.D.4.

5.6-11c During construction activities within 100 feet of riparian habitats, such as the construction of road crossings, valley foothill riparian habitat that is not proposed for removal shall be protectively fenced in the areas where construction activity will directly impact the habitat. This fence shall be maintained until all construction activities are completed.

5.6-11d Riparian vegetation removed as part of construction activities shall be replaced at a 3:1 (3 new acres per one lost acre) mitigation ratio, per Madera County General Plan - Policy 5.D.6.

Jurisdictional Waters of the U.S.

5.6-12a Based upon the jurisdictional waters of the U.S. delineation, an impact/fill map shall be submitted to the Corps with the appropriate Section 404 permit application. A Section 401 Water Quality certification or waiver also is required.

5.6-12b Any jurisdictional waters that would be lost or disturbed shall be replaced or rehabilitated on a "no-net-loss" basis in accordance with the Corps' mitigation guidelines and the Madera County General Plan (Policy 5.D.2). Habitat restoration, rehabilitation, and/or replacement shall be at a location and by methods agreeable to the Corps.

5.6-12c Prior to issuance of a grading permit, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the Project Applicant shall coordinate with CDFG in developing appropriate mitigation, and shall abide by the conditions of any executed permits.

Wildlife Movement Corridors

5.6-13 No mitigation measures are recommended.

Cumulative Impacts

5.6-14 No mitigation measures are recommended.

CULTURAL RESOURCES

Archaeological/Historical Resources

5.7-1a An archaeologist and/or a Native American Monitor appointed by Madera County shall conduct periodic inspections of the project site during earth removal or disturbance activities related to rough grading and other excavation for foundations and utilities. The inspections schedule shall be determined by the County of Madera prior to issuance of a grading permit. If any earth removal or disturbance activities result in the discovery of cultural resources, the project proponent's contractors shall cease all earth removal or disturbance activities in the vicinity and immediately notify the County selected archaeologist and/or Native American Monitor, who shall immediately notify the County. The County selected archaeologist will have the power to temporarily halt or divert the excavation equipment in order to evaluate any potential cultural material. The County selected archaeologist shall evaluate all potential cultural

findings in accordance with standard practice, the requirements of the Madera County General Plan, and other applicable regulations. Consultation with the Native American Heritage Commission and data/artifact recovery, if deemed appropriate, shall be conducted.

5.7-1b Potential impacts to sites C-MAD-623, -625, -626, –629, -634 and -635 shall be avoided with implementation of the following treatment options:

Treatment Option #1: The first choice of treatment is to preserve the sites intact by means of an impact avoidance strategy. Impact avoidance and site preservation are compatible with the proposed residential development since surface indicators are generally minimal and most casual passers-by would not recognize surface features at these sites as evidence that buried cultural material is also present. Preservation could be achieved by locating proposed residential structures, driveways, associated outbuildings, utilities, and access roads in such a way as to avoid directly impacting these sites.

In order to ensure impact avoidance and site preservation, and to ensure that the sites are not inadvertently affected or impacted during construction, the boundaries of the sites shall be clearly identified as "impact avoidance zones" on all project and development maps, and the sites temporarily flagged at the time of construction. If construction activity is to occur within approximately 25-30 feet of the mapped site boundaries, and/or if construction involves large pieces of equipment near either site, then the preservation/site areas shall also be temporarily fenced during the construction period.

Treatment Option #2: If preservation "as is" cannot be ensured by adopting a preservation plan detailed above, then those specific attributes and qualities which may render these prehistoric sites significant per CEQA shall be further specified through formal archaeological data collection work. At a minimum, such data collection work (archaeological testing) shall include excavation of a sample of cultural material sufficient to evaluate site and midden depth, age and make-up of the components of the sites, and characterization of artifactual and midden constituents in terms of major data categories present. The overall objectives of any such data collection work shall be to identify those research questions for which the sites contain relevant information, with the research questions representing those presently being expressed by the body of professional archaeologists in the region. Any such data collection program shall culminate in a professional report of findings that contains explicit recommendations for any mitigative-level data recovery work that might be justified or warranted on the basis of the specific findings of the testing program and the proposed level of project effects.

Paleontological Resources

5.7-2 No mitigation measures are recommended.

Burial Sites

Refer to Mitigation Measure 5.7-1a. The following mitigation measure is also recommended.

5.7-3 In the event human remains are discovered during grading/ construction activities, work shall cease in the immediate area of the discovery and the Project Applicant shall comply with the requirements and procedures set forth in Section 5097.98 of the Public Resources Code, including notification of the County Coroner, notification of the Native American Heritage Commission, and consultation with the individual identified by the Native American Heritage Commission to be the "most likely descendent."

Cumulative Impacts

5.7-4 No mitigation measures are recommended.

GEOLOGY AND SOILS

Slope Stability

Residential Development

5.8-1a Where cut slopes are planned, they shall be excavated primarily within granitic bedrock materials at inclinations not exceeding 1.5:1 (horizontal to vertical). A qualified engineering geologist shall conduct periodic inspections and compaction testing during excavation of cut slopes.

5.8-1b Fill slopes shall be constructed with engineered fill at inclinations no steeper than 2:1. A qualified geotechnical specialist shall conduct periodic inspections and compaction testing during placement of fill slope areas.

5.8-1c Adequate structural setbacks for homes and septic systems from the steep natural slopes adjacent to Miami and Carter Creeks shall be established per the findings of the leach field suitability study (refer to Mitigation Measure 5.8-4a). Structural setbacks shall be in compliance with all applicable Madera County Development Code and/or Uniform Building Code setback requirements. The design and locations of all on-site septic systems shall be approved by the Madera County Environmental Health Department.

5.8-1d Surface drainage shall be directed away from steep natural slopes adjacent to Miami and Carter Creeks.

5.8-1e Prior to issuance of Grading Permits, the Project Applicant shall fund site-specific geologic analysis/studies that includes 1) quantitative geotechnical analysis of collapsible and/or liquefaction-prone soils; 2) a design level geotechnical engineering report; 3) a design-level

engineering geology report; and 4) analysis of seismically induced seiching. Pending the results of the geologic analysis/studies, site-specific design-level measures shall be developed to address issues relating to slope stability, collapsible and/or liquefaction-prone soils, including alluvial soils, and seiching.

5.8-1f If the housing pads expose a combination of competent bedrock and loose soil, to achieve a uniform foundation for a home, the entire pad shall be over excavated a minimum of three feet and replaced with compacted fill.

Reservoir Construction

Refer to Mitigation Measure 5.1-B. The following mitigation measures are also recommended:

5.8-1g The Project Applicant shall fund design-level geotechnical studies that focus on the various geotechnical and hydrologic aspects for the safe design and construction of the dams. These studies would include, but are not be limited to, an evaluation of the quantity and engineering properties of on-site soils and bedrock materials necessary for construction of the dams, dam foundation characteristics, hydrogeologic conditions within the reservoirs and beneath the dams, hydrology calculations of dams and reservoir, modeling of the potential changes in groundwater levels, and stability of interior and exterior slopes of the reservoir, etc. The information generated from the geotechnical design-level study shall be forwarded to the California Department of Water Resources Division of Safety of Dams for their review and comment prior to the issuance of Grading Permits by Madera County.

5.8-1h Test excavations using a D9 bulldozer with ripper shanks shall be performed to evaluate the depth to which the granite can be readily excavated by typical construction equipment.

5.8-1i A seepage analyses shall be performed during the actual design phase for the project to determine if a chimney drain is required in addition to a blanket drain at the base of the embankment.

Groundwater

5.8-2 To preclude any significant leakage beneath the dam, a "cut-off trench" shall be constructed within the foundation of the dam, if necessary, pending the hydrogeologic findings of the design-level studies referenced in Mitigation Measure 5.8-1f.

Soil Erosion

5.8-3a Upon completion of grading for each lot, a protective vegetative cover shall be established in all disturbed areas via planting and/or seeding followed by placing a temporary protective cover, such as jute netting,

mulch, hay or other non-erodable form of ground cover, until a vegetative cover is established.

5.8-3b Surface drainage shall be diverted from cut and fill slopes via brow ditches, collected in ditches with relatively shallow gradients, and provide a means to inhibit sediment runoff into natural drainages until such time as a protective vegetative cover effectively mitigates further soil erosion. Energy dissipating devices shall be placed in drainages subject to increased runoff.

5.8-3c Grading shall attempt to minimize the area of disturbance and be avoided near natural springs.

5.8-3d Prior to the issuance of Grading Permits, the Project Applicant shall post a Soil Stabilization and Revegetation Bond for the estimated cost of soil stabilization and revegetation of the grading site, for submittal and approval by the Madera County Department of Engineering and General Services.

Sewage Disposal

5.8-4a Prior to issuance of Grading Permits, a detailed study of leach field suitability shall be conducted for on-site sewage disposal systems. The study shall investigate and evaluate all the factors involved in individual sewage disposal system utilization, including soil types and their depths, permeability, slopes, the locations of springs and depth to seasonal groundwater, drainage, effluent volume, and setbacks to watercourses and other features. The study shall be reviewed and approved by the Madera County Environmental Health Department.

5.8-4b A testing program for coliform bacteria and other possible pollutants shall be established for all on-site wastewater systems, per the approval of the Madera County Environmental Health Department. The testing program shall include monitoring of surface water quality in Miami and Carter Creeks and/or groundwater supplies, pending County discretion.

Collapsible and/or Liquefaction-Prone Soils

5.8-5 Refer to Mitigation Measure 5.8-1e. No additional mitigation measures are required.

Ground Shaking

5.8-6 Refer to Mitigation Measure 5.8-1e. No additional mitigation measures are required.

Cumulative Impacts

5.8-7 No mitigation measures are recommended.

HYDROLOGY AND DRAINAGE

Drainage

5.9-1 No mitigation measures are recommended.

Hydrology

5.9-2 No mitigation measures are recommended.

Flooding

5.9-3 The Project Applicant shall obtain a conditional Letter of Map Revision and Letter of Map Revision from FEMA for the proposed construction with the mapped floodplain.

Water Quality – Construction

5.9-4a The Project Applicant shall prepare and submit a Notice of Intent to comply with the Construction General Permit to the California State Water Resources Board.

5.9-4b The Project Applicant shall prepare a Storm Water Pollution Prevention Plan (SWPPP) per requirements of the Construction General NPDES Permit.

Water Quality – Long-Term

5.9-5 The Project Applicant shall prepare and implement all applicable Caltrans guidelines, as deemed appropriate by the County, to address post-construction water quality management.

Cumulative Impacts

5.9-6 No mitigation measures are recommended.

PUBLIC SERVICES AND UTILITIES

Fire Protection

5.10-1a In addition to development impact fees imposed on a per dwelling unit basis, the Project Applicant shall pay impact fees (per California Government Code Section 66000 et. seq. (AB 1600)) to provide for the expansion of existing facilities, equipment and staffing for a permanent, full-time career fire fighter at Ahwahnee Station No. 16. This fee shall be determined through an agreement between the Project Applicant and the Madera County Fire Department in cooperation with the California Department of Forestry and Fire Protection. The need for additional full-time firefighting staff is required to provide adequate fire protection services to this project area.

- The Fire Chief reserves the right to use the funding and staffing resources to address the needs of the project area, as determined by the Chief to be the best to serve this project area.

- Full-time career firefighter shall be a minimum of 2.3 p/y FAE (Fire Apparatus Engineer) pay, with the Chief's discretion on actual appointment.

5.10-1b Fire flows shall be a minimum of 1,000 gallons per minute at 20 residual pounds per square inch (psi) for two hours duration, per Appendix IIIA and 901.3 of the Uniform Fire Code.

- Minimum fire flows shall be 1,500 gpm at 20 psi for homes larger than 3,600 up to 4,800 square feet, per Appendix IIIA and 901.3 of the California Fire Code.

- Homes exceeding 4,800 square feet shall be provided with a residential automatic fire sprinkler system as approved by Madera County Fire Department, except where fire flow is provided per CFC Appendix IIIA.

5.10-1c Sierra Meadows Estates shall join a Community Services District to assist with looped and through roads projects.

Police Protection

5.10-2 No mitigation measures are recommended.

Schools

5.10-3 No mitigation measures are recommended.

Libraries

5.10-4 No mitigation measures are recommended.

Recreation

5.10-5 The Project Applicant shall be required to dedicate land and/or pay park dedication fees to ensure the funding for the acquisition and development of 2.9 acres of improved parkland. The fees are to be set by Madera County to provide for a level of funding that meets the actual costs to provide for all of the public parkland and park development needs generated by the proposed project.

Roadway Maintenance

5.10-6a Opah Drive shall be improved to conform to Madera County and/or Caltrans Highway Design Manual standards pertaining to horizontal and vertical site distance and structural strength requirements. Prior to final

map approval, the Madera County Road Department shall review and approve the proposed improvements to Opah Drive.

5.10-6b An engineering study shall be conducted for all of Maintenance District No. 46 to determine the maintenance assessment per lot required for proper road maintenance. The study shall be reviewed and approved by the Madera County Road Department prior to final map approval. In accordance with the findings of the study, an election shall be requested by the Road Department pursuant to Proposition 218 to adjust the annual road maintenance assessment, which would be adjusted annually for inflation based upon the construction cost index.

Wastewater

Refer to Mitigation Measures 5.8-4a and 5.8-4b. The following mitigation measure is also recommended:

5.10-7 The project shall include a Waste Water Treatment Plant (WWTP) that has a minimum treatment capacity of 130,000 gallons per day. Recycled water from the WWTP shall be used for irrigation of the golf course only and/or discharge onto the spray fields proposed as part of the project.

Water

5.10-8 The project shall include a water reservoir that has a minimum operational/usable capacity of 210 acre-feet. The design and operational capacity of the reservoir shall be reviewed and approved by Madera County and the California Department of Water Resources Division of Safety of Dams (DSOD).

Solid Waste

5.10-9 No mitigation measures are recommended.

Electricity

5.10-10 Prior to final map approval, Madera County in cooperation with Pacific Gas and Electric (PG&E), shall verify that the site plan provides for unrestricted utility access and does not include easement encroachments that might impair the safe and reliable maintenance and operation of PG&E's facilities.

Natural Gas

5.10-11 No mitigation measures are recommended.

Cumulative Impacts

5.10-12 No mitigation measures are recommended.

9.0 Inventory of Significance After Mitigation

9.0 INVENTORY OF SIGNIFICANCE AFTER MITIGATION

This SEIR, in combination with the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR*, provides analysis of the revised project description's potential impacts on the environment in accordance with the California Environmental Quality Act (CEQA). Detailed analysis of potential environmental impacts is provided within Section 5.0, *Description of Environmental Setting, Impacts and Mitigation Measures* of this SEIR and within the Final EIR (provided as Appendix 13.2).

LAND USE AND RELEVANT PLANNING

No unavoidable significant impacts related to land use and relevant planning have been identified following compliance with the recommended mitigation measures and regulatory framework, and the policies and standards of the Madera County General Plan and Zoning Ordinance, and the Ahwahnee/Nipinnawasee Area Plan.

TRAFFIC AND CIRCULATION

No unavoidable significant impacts related to traffic and circulation have been identified following implementation of recommended mitigation measures and compliance with applicable requirements set forth by Madera County.

AIR QUALITY

The following air quality impacts would remain significant and unavoidable following mitigation:

- Short-term construction impacts; and
- Cumulative air quality impacts.

If Madera County approves the project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

NOISE

No new significant environmental effects would occur, nor would the severity of previously-identified impacts be substantially increased. Similar to the 2007 Final EIR, the revised project description would result in less than significant impacts in regards to noise, upon implementation of recommended mitigation measures.

AESTHETICS/LIGHT AND GLARE

The following aesthetics/light and glare impacts would remain significant and unavoidable following mitigation:

- Construction-related aesthetic/light and glare impacts;
- Visual character or quality of the site;
- Effects on a scenic vista; and
- Cumulative aesthetic impacts.

If Madera County approves the proposed project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

BIOLOGICAL RESOURCES

The following biological resources impacts would remain significant and unavoidable:

- Cumulative loss of habitat for wildlife and wildlife movement corridors (such as riparian zones), despite the elimination of two creek crossings as part of project design.

If Madera County approves the project, the County shall be required to cite their findings in accordance with Section 15091 of CEQA and prepare a Statement of Overriding Considerations in accordance with Section 15093 of CEQA.

CULTURAL RESOURCES

No unavoidable significant impacts related to Cultural Resources have been identified following implementation of mitigation measures referenced in this section.

GEOLOGY AND SOILS

No unavoidable significant impacts related to Geology and Soils have been identified following implementation of mitigation measures and/or compliance with all applicable Madera County, DSOD and Uniform Building Codes design standards.

HYDROLOGY AND DRAINAGE

No unavoidable significant impacts related to hydrology and water quality have been identified following implementation of the recommended mitigation measures and/or through regulatory compliance.

PUBLIC SERVICES AND UTILITIES

No unavoidable significant impacts related to public services and utilities have been identified following implementation of the recommended mitigation measures and compliance with applicable County, service or utility provider requirements, and County Codes and Ordinances.

10.0 Effects Found Not To Be Significant

10.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

In the course of this evaluation, certain impacts of the revised project description were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the EIR. In accordance with *CEQA Guidelines* Section 15128, the following section provides a brief description of potential impacts found to be less than significant, as determined by both this SEIR and the *Sierra Meadows Estates Subdivision (S2001-03) 2007 Final EIR* (provided as Appendix 13.2).

AGRICULTURAL RESOURCES. Would the Project:

- *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

- *Conflict with existing zoning for agricultural use, or a Williamson Act contract?*

- *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?*

The project site is not known to contain soils that have been designated as prime or unique agricultural soils and agricultural activities have not historically occurred at the project site. The project would not adversely impact prime or locally important agriculture as none occur within the project area. The project site is zoned for residential and open space uses and is not under a Williamson Act contract. No further discussion of agricultural resources is required in this SEIR.

BIOLOGICAL RESOURCES. Would the Project:

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No habitat conservation plans exist in the project area; this project would not pose any conflict with existing plans for biological resource conservation.

HAZARDS AND HAZARDOUS MATERIALS. Would the Project:

- *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

- *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

- *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

Development of the proposed residential uses would not include the use of hazardous chemicals or materials. However, operation of the proposed wastewater and water treatment plants may include the routine transport, use, or disposal of hazardous materials. Use of these materials would be subject to local, State and Federal regulations. Additionally, no schools are located or proposed within one-quarter mile of the project site.

- *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The project site is not included on a list of hazardous materials sites that would create a significant hazard to the public or the environment.

- *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

- *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

The proposed project area is not located within an airport land use plan area. Project implementation would not impact any airport operations or create any airport related safety hazards.

- *Impair implementation of or physically interfere with an adopted emergency evacuation plan?*

The project site is located in an area where adequate circulation and access is provided to address emergency responses. Future construction of structures would be subject to all emergency access standards and requirements of the Madera County Fire Department and/or California Department of Forestry and Fire Protection.

Appendix G of the *California Environmental Quality Act* (CEQA) *Guidelines* contains the Initial Study Environmental Checklist form that includes questions relating to public services and utilities.

It is also noted that in Appendix G of the *CEQA Guidelines*, under Hazards and Hazardous Materials, impacts should be evaluated that regard exposure of people or structures to wildland fires. This impact is considered in Section 5.10, *Public*

Services and Utilities (under the "Fire Protection" subsection) of both this SEIR and the 2007 Final EIR. The analysis concludes that impacts regarding fire protection service would be less than significant following compliance with Madera County development standards and conditions of approval set forth by the MCFD and/or CDF, payment of applicable development fees and taxes, and implementation of the recommended mitigation measures. As part of the conditions of approval set for the by the MCFD and/or, a fuel modification plan would be required, which would be reviewed and approved by the MCFD and/or CDF. Implementation of the conditions of approval set forth by the MCFD and/or CDF would ensure that wildland fire impacts are less than significant.

LAND USE AND PLANNING. Would the Project:

- *Physically divide an established community?*

The project site is designated for residential uses and consists of undeveloped vacant land adjacent to the Sierra Meadows golf course. The project would be consistent with similar land development projects that have been proposed in the Ahwahnee/Oakhurst area in recent years, including the Ahwahnee Country Club Estates located to the northeast and the Miami Creek Estates located to the east of the project site. Since the project would not divide any contiguous established community, no impacts would occur in this regard.

- *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

No habitat conservation or natural community conservation plans exist in the project area; this project will therefore not pose any conflict with existing plans for conservation.

MINERAL RESOURCES. Would the Project:

- *Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

- *Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

The site is not within an area designated by the State for locally important mineral resources and it does not lie within the Fresno Production-Consumption (PC) region, which is identified by the Madera County General Plan Background Report as having known mineral resources. Thus, no impacts to mineral resources would occur as a result of the project implementation.

NOISE. Would the Project:

- *For a project located within an airport land use plan or, where such a plan has bet been adopted, within two miles of a public airport or public use*

airport, would the project expose people residing or working in the project area to excessive noise levels?

- *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

The proposed project area is not located within an airport land use plan area or in the vicinity of a private airstrip. Thus, the proposed project would not expose people to excessive noise levels

POPULATION AND HOUSING. Would the Project:

- *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

- *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

The project is a 315-lot residential development on undeveloped vacant land. There would be no displacement of existing housing or people

RECREATION

In Appendix G of the *CEQA Guidelines*, under Recreation, impacts regarding existing park facilities and proposed park facilities should be included as part of the environmental analysis of a project. For purposes of the EIR evaluation, impacts to recreational facilities are discussed in Section 5.10, *Public Services and Utilities* (under the "Recreation" subsection) of both this SEIR and the 2007 Final EIR. The analysis recommends mitigation that would require the Project Applicant to either dedicate land and/or pay park dedication fees, pursuant to County *General Plan* Policy 4.A.5, to reduce impacts park and recreation facilities to a less than significant level. Implementation of the recommended mitigation measure would reduce impacts park and recreation facilities to a less than significant level.

TRANSPORTATION/TRAFFIC. Would the Project:

- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?*

No changes to air traffic patterns would result from the proposed residential subdivision project.

- *Result in inadequate emergency access?*

The project would be accessible from multiple points from Highway 49, including Opah Drive via Harmony Lane and Opah Drive via Road 621. The site plan must satisfy all Madera County design standards related to emergency access. In addition, the project would include the extension of a Miami Highlands Drive to Road 620 to provide a new emergency access point. Thus, impacts regarding emergency access would be less than significant.

- *Result in inadequate parking capacity?*

There is no public parking associated with the development project. Each individual lot would have typical residential parking provisions.

Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Project implementation would not include modifications to the roadway system or existing land uses that would conflict with adopted policies, plans or programs supporting alternative transportation. The Ahwahnee/Nipinnawasee area contains no public transportation routes or facilities. Additionally, bike and pedestrian facilities are absent in the Ahwahnee/Nipinnawasee area, in part because of the area's steep terrain. The area is dependent on private automobile and truck access.

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