

**ENVIRONMENTAL ASSESSMENT
AND DRAFT
ENVIRONMENTAL IMPACT REPORT
VOLUME I**



**EAGLE LODGE BASE DEVELOPMENT
PROJECT**

EA Number:
California Clearinghouse Number: 2006012041

NEPA LEAD AGENCY:
USDA FOREST SERVICE
INYO NATIONAL FOREST
873 N. MAIN STREET
BISHOP, CALIFORNIA 93514

CEQA LEAD AGENCY
TOWN OF MAMMOTH LAKES
437 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA 93546

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September 2006

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

1. INTRODUCTION

A. Purpose and Need

The Mammoth Mountain Ski Area (MMSA, the Project Applicant) has applied to the Town of Mammoth Lakes (the Town) and the United States Department of Agriculture (USDA) Forest Service (Inyo National Forest) for approval to construct and operate the proposed Eagle Lodge Base Development. The project site is comprised of approximately 8.67 acres and is located in the southwestern side of the developed part of the Town of Mammoth Lakes.¹ A portion of the site, approximately 4.1 acres, is located within the Inyo National Forest adjacent to the Town of Mammoth Lakes boundary.

The Proposed Action being contemplated by the Forest Service, as the Federal Lead Agency for this project, is whether to grant approval sought by the Project Applicant (MMSA) for the use of National Forest land for the Eagle Lodge project and under what terms and conditions, based on the National Forest plans and policies and considering the potential environmental impacts of the Proposed Action, other action alternatives, and the no action alternative. Various action alternatives were considered; four alternatives were evaluated in detail in the EA/EIR. Depending on the alternative selected (if an action alternative is selected), the Responsible Forest Service official will require a non-significant amendment to the Inyo National Forest Land and Resource Management Plan (LRMP) to assign Visual Quality Objectives (VQOs) to the area.

Should the Forest Service grant approval of the Proposed Action, the Town of Mammoth Lakes would also need to approve the project as proposed herein and therefore, the Town assumes the role and responsibilities of the State of California's Lead Agency.

This EIS/EIR has been prepared to comply with the National Environmental Policy Act of 1969 (NEPA - 42 U.S. Code 4321 et seq.) and the California Environmental Quality Act of 1970 (CEQA - Public Resources Code Section 21100 et seq.).

¹ *The project site boundary has been revised from the boundary shown in the January and March NOPs and the Initial Study. The site area has expanded to include the full extent of grading associated with the project. The change in the site area does not alter the conclusions reached in the Initial Study or change to scope of the EIR/EA.*

B. Agency Use of EA/EIR and Permitting

This EA/EIR has been prepared to inform the public and to meet the needs of the Federal and State Lead Agencies, as well as other permitting agencies in considering MMSA's application for the development of a permanent lodge, and subsequently, any other permits and approvals needed for the project. A list of applicable permit requirements is provided in Section 1.5 of this document. This Draft EA/EIR reflects comments and concerns made by agencies and the public during the scoping process. A public review period will be provided to solicit written comments on the Draft EA/EIR.

Based on the comments received on the Draft EA/EIR, a Final EA/EIR will be prepared that will document and incorporate responses to comments and revisions as appropriate. After release of the Final EA/EIR, the decision of the Forest Service (as Federal Lead Agency) on the project will be documented in a Finding of No Significant Impact and a Decision Notice, including terms and conditions of approval and a determination of whether or not an EIS should be prepared. If the project is approved by the Forest Service, the Town of Mammoth Lakes (as State Lead Agency) will also need to certify the Final EIR prior to their decision on the project, which would be documented in a Notice of Determination.

2. DESCRIPTION OF PROPOSED ACTION

Mammoth Mountain Ski Area (MMSA) is the project applicant. The approximately 8.67 acre project site is located in the southwestern side of the developed part of the Town of Mammoth Lakes.² More specifically, the site is located at the intersection of Meridian Boulevard and Majestic Pines Road. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The site is located at the base of the Eagle Express Chairlift (Chair 15), which is located on lands administered by the Inyo National Forest. A portion of the site, approximately 4.1 acres, is located within the Inyo National Forest.

The proposed Eagle Lodge Base Area Development would develop a permanent lodge facility on the site. The project is a mixed-use development with a condominium/hotel and a mix of recreational-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club.

² *The project site boundary has been revised from the boundary shown in the January and March NOPs and the Initial Study. The site area has expanded to include the full extent of grading associated with the project. The change in the site area does not alter the conclusions reached in the Initial Study or change to scope of the EIR/EA.*

The lodge would front on Majestic Pines Road and would include the majority of the visitor accommodations. A second, smaller building, the Skier Services Building, would be located parallel to Meridian Boulevard. The Skier Services Building would include a convenience market, retail space, and skier ticketing area. The two buildings would be connected by outdoor plazas. An arrival or lower plaza would be created adjacent to the vehicular access to the south side of the site. The skier or upper plaza would connect the buildings and would connect the open ice rink with the facility. The skier plaza would be located at the bottom of the ski slopes and would be accessed by stairs from the lower plaza or from the adjacent slopes.

Development is anticipated to occur in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project site is subject to the existing Juniper Ridge Master Plan (the Master Plan). The project would require amendments to the Master Plan in the areas of parking, height, density, setbacks, and land use. In addition, the project would require a General Plan amendment to redesignate Lot 87 from Low-Density Residential to Resort. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Tract Map, and Design Review Approvals. In addition, the project site is located in the boundaries of the Mammoth Mountain Ski Area Master Development Plan (the MMSA Development Plan), and the Inyo National Forest Land and Resource Management Plan "The Inyo Forest Plan."

3. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

According to CEQA Guidelines §15123(b)(2) and §15123(b)(3), the Executive Summary of an EIR shall identify potential areas of controversy and issues to be resolved by the decision-makers. Generally, these include issue areas where concerns have been raised, primarily through the Notice of Preparation and Scoping processes, indicating a level of controversy, as well as those areas where a significant unavoidable impact has been identified.

The following environmental issues were identified through a review of the written comments and concerns voiced during formal scoping and preliminary agency review of the project: analysis of the three probable State Route 203 access points; control and quality of stormwater runoff; wastewater demand; water pressure relative to proposed building heights; access to Mammoth Community Water District Well 16; need for storefront type office space for police personnel; traffic, access, and parking; air quality; noise; trash; biological resources; aesthetics (building height); and archaeological resources.

The analyses contained in this EA/EIR conclude that after the incorporation of mitigation measures the project would result in a significant and unavoidable impact in the following areas:

- Aesthetic impact to visual resources from Key Observation Point (KOP) #2;

In addition, the cumulative analyses contained in this document conclude that the project would contribute to a cumulative impact in the following area:

- Cumulative roadway noise impacts due to cumulative traffic volumes; and
- Cumulative impacts relative to water supply at Town buildout in 2025.

4. SUMMARY OF IMPACTS AND MITIGATION MEASURES AND COMPARISON OF ALTERNATIVES

Table ES-1

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
LAND USE	No mitigation measures required	Less than significant impact under CEQA and no impacts under NEPA
<p>TRANSPORTATION</p> <p>The Proposed Action could result in short-term parking impacts to adjacent residential streets in the project site vicinity. In addition, construction traffic could result in short-term traffic delays along Meridian Boulevard.</p> <p>Buildout of the Proposed Action would result in significant traffic impacts to the intersections of Majestic Pines Drive/Meridian Boulevard and Meridian Boulevard/Minaret Road based on the Town of Mammoth Lakes level of service criteria.</p>	<p>TR-1: The project applicant shall prepare a construction parking plan for construction personnel to be reviewed and approved by the Town of Mammoth Lakes.</p> <p>TR-2: Construction truck traffic shall not be permitted to queue along Meridian Boulevard where it could interfere with traffic movements or to block access to adjacent residences or businesses. As necessary, flag persons shall be used to assist with truck movements into and out of the site, to ensure that potential disruptions to other traffic and access are accommodated in the safest and most efficient manner.</p> <p>TR-3: To address 2024 with project impact, the project applicant shall pay development impact fees, which include the costs associated with improvements identified in the Mammoth Lakes Capital Improvement Program to the Majestic Pines Drive/Meridian Boulevard and Meridian Boulevard/Minaret Road intersections. The Town of Mammoth Lakes shall implement the intersection improvements.</p>	<p>Less than significant impact under CEQA and no impacts under NEPA</p> <p>Less than significant impact under CEQA and no impacts under NEPA</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>The Proposed Action would result in a significant parking impact as there would be a shortfall of parking relative to the projected demand based on a shared parking analysis.</p>	<p>TR-4: To further address 2024 with project impact, the applicant shall pay a fair share contribution fee to the cost of constructing a southbound left-turn lane at the Majestic Pines Drive/Meridian Boulevard intersection. This fee shall be utilized by the Town to construct a single-lane roundabout with a 100-foot inscribed diameter at the Majestic Pines Drive/Meridian Boulevard intersection. The roundabout shall be constructed prior to the intersection reaching a LOS E. The Town of Mammoth Lakes shall implement the intersection improvements.</p> <p>TR-5: To meet the parking space requirements, in addition to the parking included as a part of the project, the applicant shall implement a program to reduce parking demand. The program shall follow one of the following three options, or some combination thereof, and shall be approved by the Town:</p> <ul style="list-style-type: none"> • <u>Mitigation Option 1:</u> The project applicant shall provide 544 non-drop-off parking spaces and shall be responsible for purchasing and operating four public transit buses with a capacity of at least 60 passengers to provide 16 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March, unless data provided by the applicant indicates that three or fewer buses are adequate to accommodate the transit demand for a particle weekend(s) or holiday based on the maximum number of skiers per day, as shown in the table below. The transit data shall be subject to review 	<p>Less than significant impact under CEQA and no impacts under NEPA</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect																		
	<p>and approval by the Town. Under the 83 multi-family unit option, the project would be required to provide 14 additional bus round trips per day, which would require three new buses.</p> <table border="1"> <thead> <tr> <th>Additional Bus Requirements Beyond Existing Service</th> <th>Maximum Number of Skiers per Day (213 Hotel Units)</th> <th>Maximum Number of Skiers per Day (83 Dwelling Units)</th> </tr> </thead> <tbody> <tr> <td>No additional buses</td> <td>5,050</td> <td>5,200</td> </tr> <tr> <td>One additional bus</td> <td>5,350</td> <td>5,500</td> </tr> <tr> <td>Two additional buses</td> <td>5,650</td> <td>5,800</td> </tr> <tr> <td>Three additional buses</td> <td>5,950</td> <td>>5,800</td> </tr> <tr> <td>Four additional buses</td> <td>> 5,950</td> <td>Not Applicable</td> </tr> </tbody> </table> <p>In addition, the project applicant shall provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March. This report shall provide monitoring data regarding on-street parking, conducted at a minimum two times per day on all weekends and holidays between 9:00 A.M. and 3:00 P.M. If the report identifies illegal parking is occurring at nearby residential/lodging sites within 1,000 feet of the portal, the project applicant shall be responsible for any incremental cost necessary for enforcement. Beyond the initial monitoring period, if future complaints indicate that a parking problem is occurring</p>	Additional Bus Requirements Beyond Existing Service	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)	No additional buses	5,050	5,200	One additional bus	5,350	5,500	Two additional buses	5,650	5,800	Three additional buses	5,950	>5,800	Four additional buses	> 5,950	Not Applicable	
Additional Bus Requirements Beyond Existing Service	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)																		
No additional buses	5,050	5,200																		
One additional bus	5,350	5,500																		
Two additional buses	5,650	5,800																		
Three additional buses	5,950	>5,800																		
Four additional buses	> 5,950	Not Applicable																		

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	<p>generated by Eagle Lodge or ski area activities, the project applicant shall be responsible for conducting additional monitoring as identified by the Town of Mammoth Lakes and be responsible for funding the necessary measures to address any identified impact.</p> <ul style="list-style-type: none"> • <u>Mitigation Option 2</u>: The project applicant shall provide 544 non-drop-off parking spaces on the project site and 76 off-site parking spaces for employees. If the off-site employee parking is not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lot(s) shall be provided. The project applicant shall be responsible for purchasing and operating three public transit buses with a capacity of at least 60 passengers to provide 13 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March, unless data provided by the applicant indicates that two or fewer buses are adequate to accommodate the transit demand for a particular weekend(s) or holiday based on the maximum number of skiers per day, as shown in the table below. The transit data shall be subject to review and approval by the Town. Under the 83 multi-family unit option, the project would be required to provide 10 additional bus round trips per day, which would require two new buses. 	

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect															
	<p style="text-align: center;">Maximum Number of Skiers per Day (213 Hotel Units)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Additional Bus Requirements Beyond Existing Conditions</th> <th style="text-align: center;">Maximum Number of Skiers per Day (213 Hotel Units)</th> <th style="text-align: center;">Maximum Number of Skiers per Day (83 Dwelling Units)</th> </tr> </thead> <tbody> <tr> <td>No additional buses</td> <td style="text-align: center;">5,250</td> <td style="text-align: center;">5,400</td> </tr> <tr> <td>One additional bus</td> <td style="text-align: center;">5,550</td> <td style="text-align: center;">5,700</td> </tr> <tr> <td>Two additional buses</td> <td style="text-align: center;">5,850</td> <td style="text-align: center;">>5,700</td> </tr> <tr> <td>Three additional buses</td> <td style="text-align: center;">> 5,850</td> <td style="text-align: center;">Not Applicable</td> </tr> </tbody> </table> <p>In addition, the project applicant shall provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March, as described under Option 1.</p> <ul style="list-style-type: none"> • <u>Mitigation Option 3</u>: The project applicant shall provide 544 non-drop-off parking spaces on the project site. The project shall request a zone code amendment from the Town to develop and in lieu of parking fee program. The fees shall be used for the construction of off-site parking lots. The fee owed by the project shall be calculated based upon the additional number of spaces that are required. If the parking lots are not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lots shall be provided. <p>TR-6: A sign with an arrow shall be posted along the north side of Meridian Boulevard to direct skiers to the Skier Drop-Off. Bus Only signage shall be posted at the entrance to the bus drop zone to discourage autos from entering the bus</p>	Additional Bus Requirements Beyond Existing Conditions	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)	No additional buses	5,250	5,400	One additional bus	5,550	5,700	Two additional buses	5,850	>5,700	Three additional buses	> 5,850	Not Applicable	<p>Less than significant impact under CEQA and no impacts under NEPA</p>
Additional Bus Requirements Beyond Existing Conditions	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)															
No additional buses	5,250	5,400															
One additional bus	5,550	5,700															
Two additional buses	5,850	>5,700															
Three additional buses	> 5,850	Not Applicable															

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>The Proposed Action could result in vehicular safety hazards within the site’s internal circulation system.</p>	<p>drop zone. No Parking signs shall be posted along Meridian Boulevard adjacent to the auto drop zone, and Do Not Enter signs shall be posted at the west end of the auto and bus drop zones. The signs shall be installed prior to building occupancy.</p> <p>TR-7: The curbs at the west end of the auto drop zone shall be modified to move the intersection of the drop zone and the main parking garage access further north, as determined appropriate by the Town.</p> <p>TR-8: To decrease the potential for vehicular conflict in the ski school drop zone, the circulating area shall be striped for one lane of traffic and one-way operation.</p> <p>TR-9: The distance between sawtooth bus bays shall be increased to 15 feet to provide adequate maneuvering space for buses exiting the bays.</p> <p>TR-10: A “No Left Turn” sign shall be placed at the hotel exit. In addition, “Do Not Enter,” “No Left Turn,” and “No Right Turn” signs shall be located at the appropriate hotel access approaches.</p>	
<p>AIR QUALITY</p>	<p>No mitigation measures required</p>	<p>Less than significant impact</p>
<p>NOISE</p> <p>The Proposed Action would result in temporary construction noise impacts.</p>	<p>NOI-1: Prior to issuance of any grading, excavation, or building permits, the applicant shall provide and secure the approval of the authorized noise control officer for a program designed to adequately comply with Town of Mammoth Lakes Noise Ordinance and respond to possible noise complaints. At a minimum, the program shall include the following requirements:</p>	<p>Less than significant impact</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	<ol style="list-style-type: none"> 1. Noise-generating equipment operated at the project site shall be equipped with effective noise control devices, i.e., mufflers, intake silencers, lagging, and/or engine enclosures. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated. 2. Effective temporary sound barriers shall be used and relocated, as needed, whenever possible, to block the line-of-sight between the construction equipment and the noise-sensitive receptors, i.e., residential uses located to the north and south of the project site. 3. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site. 4. A construction relations officer shall be designated to serve as liaison with residents, and a contact telephone number shall be provided to residents. <p>NOI-2: The applicant shall develop a Blasting Plan that details the measures necessary to ensure potential vibration impacts would comply with Federal and State recommended construction vibration limitations. The plan shall include at a minimum the following:</p> <ul style="list-style-type: none"> • A testing or pilot program shall be conducted to assure that off-site vibration levels do not exceed the 2.0 inches per second PPV significance threshold from blasting activities initiated on the 	

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	<p>site. Under the pilot program the applicant shall install vibration monitors at the following locations: (1) along the fenceline of the closest offsite residential uses, (2) along the fenceline of the MCWD Ground Water Treatment Plant No. 2 located immediately to the east of the site across Majestic Pines Road, and (3) the vault housing for MCWD Well 16 located adjacent to Meridian Boulevard.</p> <ul style="list-style-type: none"> • Once the monitors are in place, a blasting test would commence. The testing procedures would consist of detonation of increasing sized charges with concurrent checking of monitored levels so as to assure that off-site vibration levels do not exceed the 2.0 inches per second PPV significance threshold. Based on this testing program, an optimal set of blasting parameters (e.g., frequency responses and soil damping characteristics for different sized charges) shall be established. • The off-site vibration monitors shall remain in place throughout blasting activities, thereby providing ongoing protection for off-site uses and/or facilities throughout this phase of the Project's construction process. <p>NOI-3: All drilling and blasting operations shall be conducted by a State-licensed blasting contractor with adequate blasting insurance.</p> <p>NOI-4: All drilling and blasting will be performed during hours designated by local, State, or federal ordinances.</p>	

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	<p>back a minimum of 50-feet from the drainage and shall include 2-foot high pre-assembled silt fencing for erosion control as well as 4-foot high mesh orange construction fencing for visibility. The qualified monitor shall inspect the fencing once a month while construction activities are occurring within the vicinity of the drainage and report any damage to the fencing. The construction contractor shall correct any damage to the exclusionary fencing immediately.</p>	
<p>CULTURAL RESOURCES The Proposed Action includes excavation into undisturbed sediments below the modern ground surface of the project site, which has the potential to encounter previously undiscovered archaeological, Native American, or paleontological resources.</p>	<p>CUL-1: A qualified archaeological monitor shall be present during the ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits in the project area. Due to the potential for subsurface cultural deposits, a culturally affiliated Native American monitor with experience in cultural resources also shall monitor these ground-disturbing activities. In the event that the lead agency determines that it will not include a Native American monitor in the archaeological monitoring process, this decision shall be sent in writing to an updated list of all Native American individuals and organizations identified by the NAHC as having affiliation with the project area. These individuals and organizations shall be provided with a comment period of not less than four weeks on this decision. If this course of action is taken, affiliated Native American groups shall also be notified if sensitive deposits or cultural materials are encountered. No monitor is required for construction-related activities in the lower glacial</p>	<p>Less than significant impact</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	<p>deposits.</p> <p>If cultural resources are identified, the archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment. Treatment will include the Town’s goals of preservation where practicable and public interpretation of historic and archaeological resources. The archaeologist shall prepare a final report about the monitoring to be filed with the Project Applicant, Mono County, and the CHRIS-EIC, as required by the State Historic Preservation Officer (SHPO). The report shall include documentation and interpretation of resources recovered, if any. Interpretation will include evaluation of eligibility of the resources with respect to the National Register and California Register. The report shall also include all specialists’ reports as appendices. The lead agency shall designate repositories in the event that significant resources are recovered.</p> <p>CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased</p>	

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
	Native American, who will then help determine what course of action should be taken in dealing with the remains.	
<p>EMPLOYMENT, POPULATION AND HOUSING</p> <p>Construction employment associated with the project is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, the project could result in a significant impact with regard to the provision of short-term housing for construction workers.</p>	<p>POP-1: If the developer of the project enters into a construction contract for the project with any contractor or subcontractor (1) whose principal place of business is outside Mono and Inyo Counties; (2) whose employees will reside in the Town of Mammoth Lakes in association with project construction in excess of 90 consecutive days; and (3) who provides housing for its employees, then the developer shall provide housing units for such employees. The housing provided by the developer for the construction employees shall not be located within the RMF-1 zone within the boundaries of the Town of Mammoth Lakes. However, existing MMSA-owned seasonal employee housing may be utilized in non-ski season months only.</p>	Less than significant impact

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>AESTHETICS</p> <p>Construction activities associated with the Proposed Action could significantly impact the visual quality and character of the site and surrounding area.</p> <p>The Proposed Action would adversely impact views of valued visual resources across the project from Key Observation Point (KOP) #2, which is representative of views for persons utilizing the Mammoth Loop Trail and residences to the north of Majestic Pines Road. This impact is considered significant under CEQA.</p> <p>With the proposed entry to Eagle Lodge off of Majestic Pines Road, additional northbound traffic along this roadway and cars pulling out of the lodge could result in significant adverse impacts to single-family residences to the north of Majestic Pines</p>	<p>AES- 1: The applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner throughout the construction period.</p> <p>AES-2: The applicant shall prepare and submit a construction hauling plan to be reviewed and approved by the Community Development Department prior to issuance of grading permit. The plan shall ensure that construction haul routes do not affect sensitive uses in the project vicinity, including residential uses along Majestic Pines Road.</p> <p>No mitigation measures are provided to reduce the significance of impacts to the visual resources from KOP #2 under CEQA.</p> <p>AES-3: The applicant shall plant landscaping or enhance the existing berm along the northern side of Majestic Pines Road to minimize light intrusion to the adjacent residences. The improvement shall be installed prior to issuance of a certificate of</p>	<p>Less than significant impact under CEQA and no impacts under NEPA</p> <p>Impacts would be significant and unavoidable under CEQA; no adverse impacts under NEPA</p> <p>Less than significant impact under CEQA and no impacts under NEPA</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>Road from vehicle headlights. In addition, the Proposed Action would introduce additional light on site that could affect the surrounding land uses.</p> <p>The Proposed Action would result in shading of Majestic Pines Road that could result in significant adverse safety impacts (i.e., black ice).</p>	<p>occupancy for the lodge.</p> <p>AES-4: The applicant shall prepare and submit an outdoor lighting plan pursuant to the Town’s Lighting Ordinance (Chapter 17.34.060, Outdoor Lighting Plans, of the Municipal Code) to the Community Development Director that includes a footcandle map illustrating the amount of light from the project site at adjacent light sensitive receptors. The sensitive receptor locations shall be determined in consultation with the Community Development Director.</p> <p>AES-5: The project applicant shall implement a proactive snow plowing and cindering plan during the two or three worst-case shadow months of the year at any portion of a pedestrian or vehicular travelway that receives less than two hours of mid-day sun for more than a week. The Town of Mammoth Lakes shall review the methods and effectiveness of the plan during its implementation. If determined by the Town that the plan does not adequately reduce hazards resulting from shadows (i.e. black ice), the Town shall require the applicant to install heat traced pavement at any portion of a pedestrian or vehicular travelway that receives less than two hours of mid-day sun for more than a week.</p>	<p>Less than significant impact under CEQA and no impacts under NEPA</p>
<p>HYDROLOGY AND WATER QUALITY</p> <p>Dewatering activities associated with construction of the subterranean parking garage could significantly impact groundwater supplies or</p>	<p>HYD-1: The applicant in cooperation with the Mammoth Community Water District shall monitor water levels within existing on-site wells on a monthly basis especially during the snowmelt run-</p>	<p>Less than significant impact under CEQA and no impacts under NEPA</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>substantially interfere with groundwater recharge.</p> <p>Operation of the Proposed Action could result in potentially significant water quality impacts as a result of vehicle-related pollutants in the subterranean parking garage and runoff from the project site.</p>	<p>off periods to assess maximum seasonal groundwater underflow rates.</p> <p>HYD-2: The applicant shall fund the installation of at least two monitoring wells adjacent to or up gradient of the proposed construction area to aid in the recording of groundwater depths and flow rates. The wells shall be installed prior to the issuance of building permits for the project.</p> <p>HYD-3: The applicant shall install a sump pump system that lifts stormwater to the surface within the underground parking garage, which conveys water through a device that removes oil and silt, prior to reintroduction into the storm water system. The sump pump system shall be installed prior to use of the parking structure.</p> <p>HYD-4: The applicant shall design on-site detention facilities to capture approximately 22,442 cubic feet of stormwater, which represents the average runoff volume necessary to accommodate the first inch of rainfall during a storm event of 20-year intensity pursuant to Lahontan RWQCB design parameters. The final design of the detention facilities shall be determined during the design process and shall be subject to review and approval by the Town and/or Lahontan RWQCB.</p>	<p>Less than significant impact under CEQA and no impacts under NEPA</p>

Table ES-1 (Continued)

Summary of Mitigation Measures and Residual Effects

Issue	Mitigation Measure	Residual Effect
<p>WATER SUPPLY</p> <p>The well pump for Well 16 and the associated discharge piping may require periodic maintenance and repair. The project could result in a potentially significant impact to the repair and maintenance of the infrastructure.</p> <p>The proposed building height could result in Insufficient water pressure, which would result in a potentially significant impact with regard to fire protection.</p>	<p>WTR-1: The Applicant shall ensure the provision of 40 square feet of work area adjacent to Well 16 on the project site that shall be used by MCWD as needed during periodic maintenance of Well 16.</p> <p>WTR-2: The project applicant shall install a standpipe along the northwest side of the site, near the ice rink and plaza, as approved by MLFD to ensure that adequate fire flows are available at this location. The standpipe shall be operational prior to occupancy of the facility.</p>	<p>Less than significant impact</p>
<p>WASTEWATER</p> <p>The Proposed Action would result in an increase of wastewater generated. MCWD anticipates upgrading the filter backwash system at Groundwater Treatment Plant #2, which will increase capacity in the sewer lines by approximately 300 to 350 gallons per minute.</p>	<p>WW-1: Prior to the issuance of a Certificate of Occupancy for the commercial and residential components of the project, MCWD shall install and have operational the filter backwash system upgrade at Groundwater Treatment Plant #2.</p>	<p>Less than significant impact</p>
<p>STORMWATER</p>	<p>No mitigation measures required</p>	<p>Less than significant impact</p>
<p>Source: PCR Services Corporation, 2006</p>		

1.0 INTRODUCTION

1.0 INTRODUCTION/PURPOSE AND NEED

1.1 OVERVIEW OF PROPOSED ACTION

The Project Applicant, Mammoth Mountain Ski Area (MMSA), proposes to amend the Juniper Ridge Master Plan to accommodate the proposed Eagle Lodge Base Area Development (the project). The project site is comprised of approximately 8.67 acres and is located in the southwestern side of the developed part of the Town of Mammoth Lakes.³ More specifically and as shown in Figure 1 on page 2, the site is located at the intersection of Meridian Boulevard and Majestic Pines Road. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The site is located at the base of the Eagle Express Chairlift (Chair 15), which is located on lands administered by the Inyo National Forest. A portion of the site, approximately 4.1 acres, is located within the Inyo National Forest.

The proposed Eagle Lodge Base Area Development would develop permanent lodge facility on the site. Figure 2 on page 3 provides a conceptual site plan for the project. The project is a mixed-use development with a condominium/hotel and a mix of recreational-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club.

The lodge and associated commercial uses would be located within two buildings. The main building or lodge would front on Majestic Pines Road. The main building, which would include the majority of the visitor accommodations, the day lodge cafeteria and the Ski School/Day Care, would be located on the north side of the site stretching from the eastern boundary to the northwestern corner of the site adjacent to the slopes. A second, smaller building, the Skier Services Building, would be located parallel to Meridian Boulevard. The Skier Services Building would include a convenience market, retail space, and skier ticketing area.

The two buildings would be connected by outdoor plazas. An arrival or lower plaza would be created adjacent to the vehicular access to the south side of the site. The lower plaza

³ *The project site boundary has been revised from the boundary shown in the January and March NOPs and the Initial Study. The site area has been expanded to include the full extent of grading associated with the project. The change in the site area does not alter the conclusions reached in the Initial Study or change to scope of the EA/EIR.*

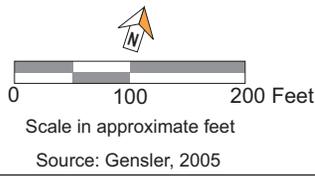
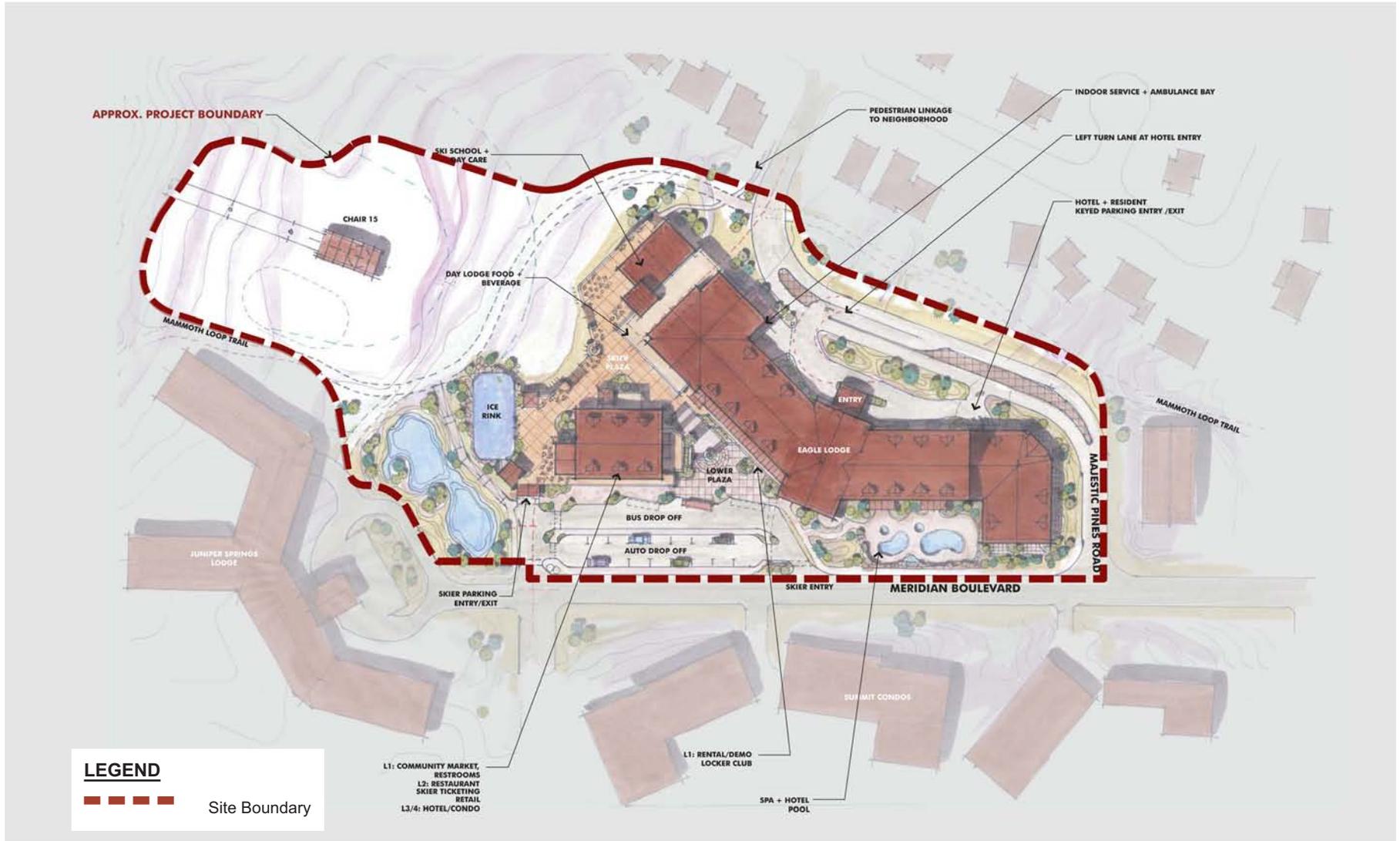


Figure 2
Conceptual Site Plan

would provide access to the two buildings. Stairs would lead up to the upper plaza, creating an entrance for skiers and visitors not residing at the lodge. The skier or upper plaza would connect the buildings and would connect the open ice rink with the facility. The skier plaza would be located at the bottom of the ski slopes and would be accessed by stairs from the lower plaza or from the adjacent slopes.

Development is anticipated to occur in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project site is subject to the existing Juniper Ridge Master Plan (the Master Plan). The project would require amendments to the Master Plan in the areas of parking, height, density, setbacks, and land use. In addition, the project would require a General Plan amendment to redesignate Lot 87 from Low-Density Residential to Resort, with the majority of these lot being utilized for circulation and open space. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Tract Map, and Design Review Approvals. In addition, the project site is located in the boundaries of the Mammoth Mountain Ski Area Master Development Plan (the MMSA Development Plan), and the Inyo National Forest Land and Resource Management Plan “The Inyo Forest Plan.”

1.2 OBJECTIVES, PURPOSE AND NEED FOR THE PROPOSED ACTION

MMSA proposes to develop a permanent lodge facility on the site. The project would include a mix of uses, including transient lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club.

The following describes the key participants and their roles in the development, analysis, and decisions related to the project. Section 1.4 provides a detailed list of the necessary approvals for the project.

United States Department of Agriculture (USDA) Forest Service, Inyo National Forest

The USDA Forest Service (Forest Service), Inyo National Forest is the surface management agency responsible for the public lands within the project area. The Forest Service must amend the existing Special Use Permit for the project. The Forest Service must comply with the National Environmental Policy Act (NEPA) requirements to review and comment on matters that address or relate to its areas of legal jurisdiction and/or area of special expertise.

Consistent with requirements of NEPA, this EA also would serve as a decision-making tool to assist the Forest Service.

Forest Service planning regulations regarding Special Use Permits, require the Forest Service to deny proposals that are inconsistent with Forest Plans, are in conflict with management objectives or Federal statutes and regulations, or can be reasonably accommodated on non-National Forest System lands. The primary objective of the National Forest Management Act is to establish land and resources management planning guidelines, goals, and objectives in order to achieve effective and balanced uses while protecting renewable resources on national Forest System lands. The Act requires each individual forest to develop, adopt and implement a comprehensive planning and management plan.

The Federal Land Policy and Management Act provides a definition for multiple-use and details the criteria and considerations that should be utilized when considering special uses that require a discretionary approval.

Title 36 of the Code of Federal Regulations (CFR) establishes the regulations under the Federal Land Policy and Management Act as implemented by the Forest Service. Title 36 DFR Sections 219.1 through 219.29 provide the guidelines for the development of forest-specific planning documents as required by the National Forest Management Act. A key purpose of the planning documents is to “provide for multiple use and sustained yield of goods and services from the national Forest System in a way that maximizes long term net public benefits in an environmentally sound manner.”

As required by Title 36 CFR 219, a Land and Resource Management Plan (LRMP) for the Inyo National Forest has been prepared and adopted for implementation. Under the Forest Plan, the site is located within the “Alpine Ski Area” (Management Prescription Area #13). The purpose of this prescription is to maintain and manage downhill ski areas for public use. The management direction relating to recreational land use is as follows:

- Permit further expansion of areas already developed for alpine skiing. Expansion may include runs, lifts, base areas, and access to a degree that is often not compatible with other resource management options.
- Allow limited day use and interpretive developments if compatible with ski area development.

Town of Mammoth Lakes

The Town of Mammoth Lakes (Town) is the lead agency for compliance with CEQA for the project. MMSA has filed the required permit applications with the Town to obtain the necessary amendments and approval for the project on private lands within the project boundary. The Town's objectives for preparing this Draft EIR are to comply with the requirements of CEQA to evaluate the potential environmental impacts of the proposed project. Consistent with the requirements of CEQA, the Draft EIR would be used as a decision-making tool to assist the Town in its determination whether to approve, modify or deny the project activities within its jurisdiction.

MMSA (Project Applicant)

MMSA owns the majority of the property on which the lodge would be developed. In addition, MMSA operates the ski facility under a Special Use Permit issued by the USDA Forest Service. The project would provide a permanent lodge at the mountain portal.

Section 15124(b) of the California Environmental Quality Act (CEQA) Guidelines states that the Project Description shall contain "A statement of the objectives sought by the proposed project." Section 15125(b) of the CEQA Guidelines further states that, "The statement of objectives should include the underlying purpose of the project." Consistent with the Guidelines, the following has been identified as the underlying purpose of the project:

- To allow the development of MMSA's permanent lodge and day skier structured parking, which will replace the existing, temporary facilities and existing day skier surface parking lot.

In order to achieve this purpose, MMSA has developed the following set of objectives after careful consideration of relevant goals, objectives, and policies established by the Town of Mammoth Lakes:

- Create a world-class base area facility that supports numerous forms of outdoor recreation through the provision of lodging and conference facilities that encourages year-round tourist visitation.
- Provide a variety of uses so as to encourage family-oriented recreational opportunities.
- Provide amenities for the surrounding neighborhood so that commercial goods and services are within close proximity so as to reduce trips to other parts of Town.

- Contribute to the Town's trail network through the completion of the Mammoth Loop Trail on the site.
- Create an architectural landmark that blends in with the alpine setting and character of the Mammoth area.
- Respect the natural environment of the area through the use of landscape elements such as large boulders, indigenous species of trees, shrubs and wildflowers that echo the distinct geography of the site.
- Promote environmental sustainability by following the Leadership in Energy & Environmental Design (LEED) guidelines in the design and construction implementation processes.
- Further the Town's stated objectives to encourage the pedestrian orientation of the overall resort community by locating increased transient lodging density immediately adjacent to the ski area base lifts.
- Develop high occupancy transient bed base within the resort community, especially developments within 500 feet of a base area chair lifts, to ensure the long term economic sustainability of Town revenue sources.
- Develop a skier day lodge facility of adequate capacity and variety of associated uses to accommodate maximum skier entries at one time as identified in the MMSA Master Development Plan for the Chair 15 Base Area.
- Improve the economic stability of the Town of Mammoth Lakes by developing year-round destination resort amenities with uses including convenience retail, skier services and non-ski season uses such as conference space with associated public parking, food and beverage support, and indoor and outdoor assembly areas that can support community cultural events and group meetings during the non-ski season consistent with the Town's policies in the General Plan Land Use Element.

1.3 JOINT NEPA/CEQA DOCUMENT

a. Conformance with NEPA and CEQA

This Environmental Assessment/Draft Environmental Impact Report (EA/Draft EIR) was prepared as a joint federal/state environmental document, as encouraged by NEPA regulations [40 CFR 1506.2(c)] and CEQA regulations (CEQA Guidelines 15226). A third party consultant, PCR Services Corporation, Inc. (PCR), prepared the NEPA/CEQA document under the direction

of the Forest Service and the Town of Mammoth Lakes. The Forest Service and the Town of Mammoth Lakes determined that a joint environmental document to meet the NEPA/CEQA requirements for evaluating the proposed Eagle Lodge Base Area Development Project would be appropriate.

This EA/Draft EIR was prepared to conform to the policy guidance provided in USFS's Environmental Policy and Procedures Handbook (FSH 1909.15). This handbook also provides instructions for compliance with the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Department of Agriculture's NEPA Policies and Procedures (7 CFR 1b) and the Forest Service Manual (FSM 1950). In addition, Forest Service guidance relative to NEPA is found at 40 CFR 1500, 36 CFR 215, and FSH 1909.15. CEQA guidelines provide some guidance for preparing joint NEPA/CEQA documents (CEQA Guidelines 15220-15228); NEPA does not. This EA/Draft EIR follows CEQA guidance for joint NEPA/CEQA documents.

b. Public Scoping

This Draft EA/EIR was prepared following input from the public, responsible, and affected agencies through the EA/EIR scoping process. In accordance with Section 15063 of the State CEQA Guidelines, an Initial Study was prepared. Based on the Initial Study, it was determined that an EIR should be prepared to more thoroughly analyze potential impacts that might occur from the project. In addition, the USFS determined that an EA was needed. Therefore, a joint Notice of Preparation (NOP) and Notice of Intent (NOI) was prepared and distributed to responsible agencies, affected agencies, and other interested parties on January 6, 2006. As required by CEQA, the NOP was also submitted to the State Clearinghouse to officially solicit participation in determining the scope of the EIR. In addition, the NOP was posted at the Office of the Mono County Clerk for 30 days. The joint notice was published in the local newspaper and in the Federal Registry. A public scoping meeting was held at Eagle Lodge on January 31, 2006 to further solicit public input. The NOP requested that written comments on the project be received by February 10, 2006. Information requested and input provided regarding the scope of the EA/EIR have been considered and incorporated into this document. A copy of the Initial Study, the NOP/NOI, and comments received in response to the NOP/NOI are provided in Appendix A.

In February 2006 MMSA modified the project by reorienting the main entrance of the lodge to Majestic Pines Road rather than Meridian Boulevard. In response, the Town published a Revised NOP/NOI. The notice was published in the local newspaper, posted at the County Clerk, and mailed to agencies and interested parties. The notice initiated a 30-day comment period that began on March 2, 2006 and ended on April 3, 2006. As with comments received on the original NOP/NOI, information requested and input provided regarding the scope of the EA/EIR have been considered and incorporated into this document. A copy of the Revised

NOP/NOI and comments received in response to the Revised NOP/NOI are also provided in Appendix A.

c. Identified Issues and Concerns

The following environmental issues were identified through a review of the written comments and concerns voiced during formal scoping and preliminary agency review of the project: analysis of the three probable State Route 203 access points; control and quality of stormwater runoff; wastewater demand; water pressure relative to proposed building heights; access to Mammoth Community Water District Well 16; need for storefront type office space for police personnel; traffic, access, and parking; air quality; noise; trash; biological resources; aesthetics (building height); and archaeological resources.

1.4 DOCUMENT ORGANIZATION

The EA/Draft EIR is organized by the sections summarized below:

- **Chapter 1, Introduction**, provides a brief overview of the proposed action and the environmental review process, and outlines the organization of the EA/EIR. This chapter also includes the applicant's objectives for the proposed action.
- **Chapter 2, Proposed Action and Alternatives**, describes the site location, the proposed action and the alternatives considered.
- **Chapter 3, Affected Environment and Environmental Consequences**, describes for each environmental issue, the existing conditions or setting before project implementation; methods and assumptions used in the impact analysis; thresholds of significance; impacts that would result from the proposed action; and applicable mitigation measures that would eliminate or reduce significant impacts. Existing regulations that serve to minimize or reduce environmental impacts are not considered as mitigation measures. This section also includes an analysis of the alternatives.
- **Chapter 4, Cumulative Impacts**, provides an analysis of cumulative impacts associated with the implementation of the proposed project and related projects in the area.
- **Chapter 5, Other Considerations**, provides a discussion of the irreversible environmental changes to the natural environment resulting from the implementation of the proposed action. In addition, this section provides a summary of the proposed

project's potential to lead to population growth and indirect implications of that growth on the Town. This section also contains a summary of the issue areas that were determined in the Initial Study for the project to result in less than significant environmental impacts. Furthermore, the significant unavoidable impacts that would result from project implementation are summarized in this section. Finally, an analysis of potential secondary effects that could result from the implementation of recommended mitigation measures is provided in this section.

- **Section 6, Preparers and Persons Consulted**, lists the individuals involved in preparing this EA/Draft EIR and organizations and persons consulted to ascertain supporting information to support the analyses.
- **Chapter 7, References**, identifies the documents (printed references) used in preparing this document.
- **Appendices**, present data supporting the analyses or contents of this EA/Draft EIR. The appendices include the following:
 - Appendix A: Notice of Preparation/Notice of Intent (NOP/NOI), Initial Study, and Comments on the NOP/NOI
 - Appendix B: Traffic Study
 - Appendix C: Air Quality Technical Worksheets
 - Appendix D: Noise Technical Worksheets
 - Appendix E: Floral and Faunal Compendia
 - Appendix F: Cultural Resources Technical Report
 - Appendix G: Detailed Height and Shade/Shadow Analysis
 - Appendix H: Preliminary Hydrogeologic Investigation; Preliminary Drainage Study; Storm Water Pollution Prevention Plan
 - Appendix I: Site Plan, Height Analysis, Visual Simulations and Shade/Shadow Analysis for Alternate Design Alternative

1.5 NECESSARY APPROVALS

Approvals required for development of the Eagle Lodge facility would include, but not be limited to, the following from the Town of Mammoth Lakes:

- Certification of the EIR
- General Plan Amendment
 - Redesignate Lot 87 from Low-Density Residential to Resort

- Amendment to Juniper Ridge Master Plan
 - Land Use: the majority of the project lies on Juniper Ridge Area 4, which was designated for parking and 35,000 sq. ft of commercial within the adopted master plan. There was also an anticipated base lodge facility on Forest Service land of approximately 80,000 square feet which has been incorporated into the project. The project would require amending the permitted uses of Area 4 to allow for development of the mixed use base lodge facility.
 - Access: the Master Plan indicates that access for Area 4 should be from Meridian Boulevard. The project would require an amendment with regard to access to allow the primary access for the lodge to be from Majestic Pines Road.
 - Height: Area #4 is current designated for a parking structure and commercial uses with a building height of up to 35 feet tall for the parking structure and 45 feet as measured from street grade for commercial buildings. The project proposes an average building height above existing grade of 64 feet for the Skier Services Building. The peak building height of this building would be approximately 71 feet above the Meridian Boulevard street grade (8065 feet above mean sea level). The primary structure, the lodge, would have an average building height of 61 feet. The peak building height of the lodge would be approximately 87 feet above the Majestic Pines Road street grade (8065 feet above mean sea level).
 - Parking: the current Master Plan requires that all off street parking shall be provided for all uses in accordance with the requirements and design standards of Title 17, Zoning Code, of the Town's Municipal Code. The project would require amendment to this language to allow for parking to be determined through a needs based analysis instead of an hours of use analysis. The study would be conducted by a Town selected consultant.
 - Setbacks: the project crosses property lines and therefore, amendments to setback provisions of the currently adopted Juniper Ridge Master Plan will be required.
 - Density: the Master Plan currently permits a total of 289 dwelling unit equivalents.⁴ The project proposes an increase in density of 83 dwelling units for a total of 373 dwelling unit equivalents in a worst-case (213) hotel room development program. The proposed density is less than the maximum density permitted under existing zoning, but greater than the density being evaluated under the 2005 Draft General Plan Update and EIR.

⁴ Studios, 1 bdrms and hotels rooms are equivalent to ½ dwelling unit.

- Use Permit/Tentative Tract Map/Design Review Approvals⁵
- Grading and Building Permits

The Forest Service has determined that an EA is required to analyze the effects of the proposed project on National Forest System Lands. Approvals required for development of the Eagle Lodge facility would include, but not be limited to, the following from the Forest Service:

- Decision Notice
- Finding of No Significant Impact
- Non-significant amendment of the Inyo Forest Plan in order to assign visual quality objectives to the area
- An update of the MMSA Master Development Plan to reflect proposed conditions and the proposed facility
- National Forest Management Act Consistency Determination
- Amendment of the MMSA Special Use Permit to allow for new facilities⁶

⁵ *These applications have not been filed with the Town of Mammoth Lakes and may require additional environmental analysis.*

⁶ *The Forest Service amendment of the MMSA Special Use Permit in turn requires and authorizes the Town of Mammoth Lakes to permit and enforce code compliance on the Federal Land portion of the proposal.*

2.0 PROPOSED ACTION AND ALTERNATIVES

2.0 PROPOSED ACTION AND ALTERNATIVES

INTRODUCTION

The Project Applicant, Mammoth Mountain Ski Area (MMSA), proposes to amend the Juniper Ridge Master Plan to accommodate the proposed Eagle Lodge Base Area Development (the project). The project site is comprised of approximately 8.67 acres and is located in the southwestern side of the developed part of the Town of Mammoth Lakes.⁷ A portion of the site, approximately 4.1 acres, is located within the Inyo National Forest. The project is a mixed-use development with a hotel condominium and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project is subject to Town, U.S. Forest Service, and the MMSA plans and regulations. The project site is subject to the existing Juniper Ridge Master Plan “The Master Plan.” The project would require amendments to the Master Plan in the areas of parking, height, density, setbacks, and land use. In addition, the project would require a General Plan amendment to rezone Lot 87 from Residential Single Family to Resort, with the majority of the lot being utilized for circulation and open space. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Map and Design Review Approvals. In addition, the project site is located in the Mammoth Mountain Ski Area Master Development Plan “The MMSA Development Plan,” and the Inyo National Forest Land and Resource Management Plan “The Inyo Forest Plan.”

2.1 PROJECT LOCATION AND SURROUNDING USES

The Town of Mammoth Lakes is a destination resort community located in southwestern Mono County, approximately 37 miles northwest of Bishop and approximately 30 miles east of Yosemite National Park, on the eastern side of the Sierra Nevada mountain range. The Town lies approximately three miles west of U.S. Highway 395, along State Route 203 as shown on

⁷ *The project site boundary has been revised from the boundary shown in the January and March NOPs and the Initial Study. The site area has been expanded to include the full extent of grading associated with the project. The change in the site area does not alter the conclusions reached in the Initial Study or change to scope of the EA/EIR.*

Figure 3 on page 15. The project site is located in the southwestern side of the developed part of Town, west of the intersection of Meridian Boulevard and Majestic Pines Road. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The Eagle Base Area is one of four key access portals to the Mammoth Mountain ski area. The other key portals to the ski area are The Village, Canyon Lodge and Main Lodge, all of which are located within the Town of Mammoth Lakes Municipal Boundary.

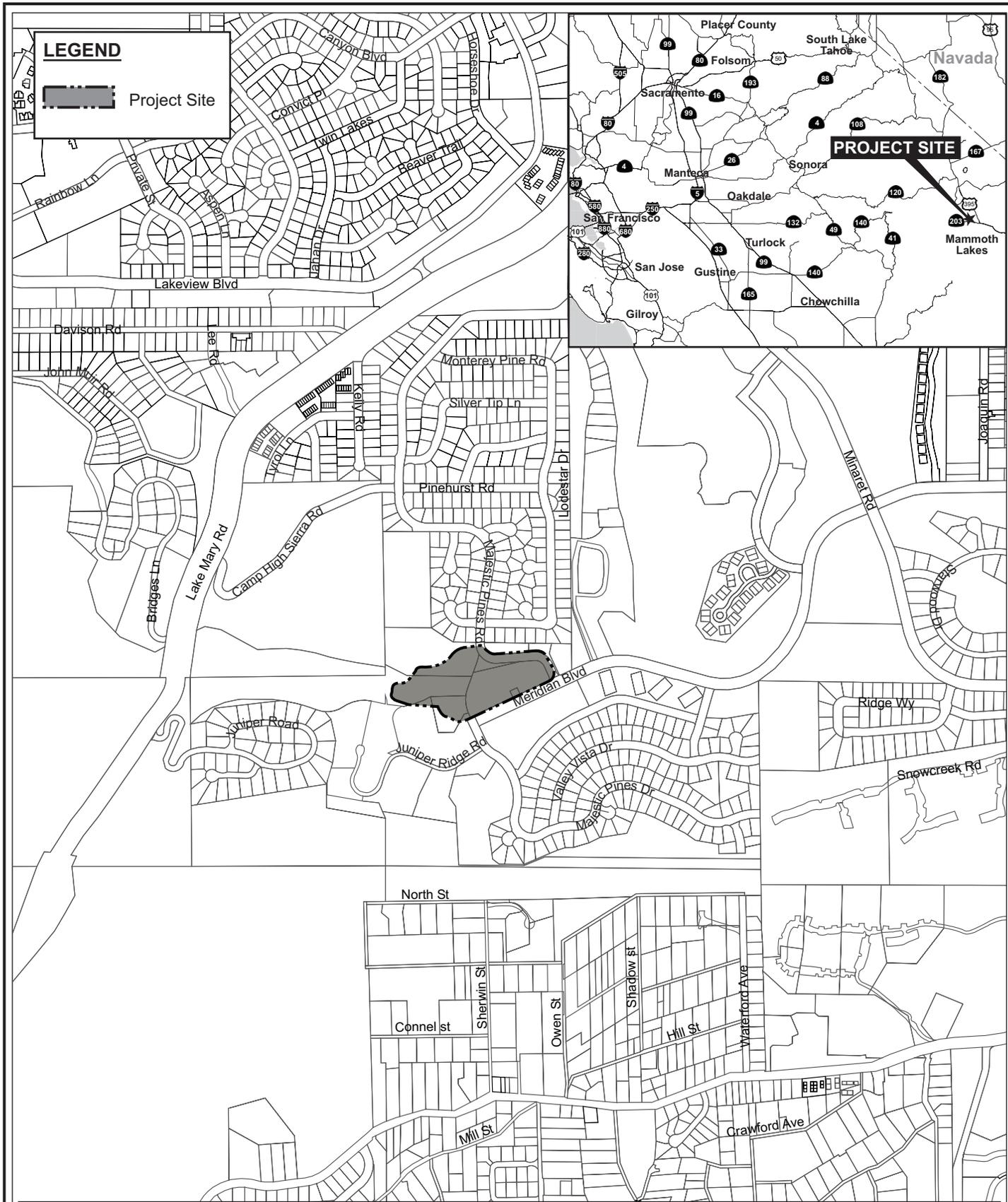
The site is located at the base of the Eagle Express Chairlift (Chair 15), which is located on lands administered by the Inyo National Forest. Property to the north is developed with single family residences. The Summit Condominiums are located to the south of the site across Meridian Boulevard. Southwest of the site is the Juniper Springs Lodge. To the west of the Juniper Springs Lodge is multi-family residential development. Immediately to the east of the site across Majestic Pines Road is the Mammoth Community Water District Ground Water Treatment Plant No. 2. The Mammoth Loop Trail is located to the north of the Treatment Plant and runs to the west ending at Majestic Pines Road directly across from the site.

2.2 EXISTING SITE CONDITIONS

The site, which consists of private and public lands, is approximately 8.67 acres in size.⁸ Table 1 provides a breakdown of site acreage by private land, USDA Forest Service land, and roadway. As shown in Table 1 on page 16 and on Figure 4 on page 17, the majority of the site, approximately 3.55 acres, is located on private property within the Town of Mammoth Lakes. The private land is located within the Town's Urban Growth Boundary (UGB) as well as within the Juniper Ridge Master Plan Area. The majority of the private portion of the site, 3.09 acres, is known as Lot 5 of the Juniper Ridge Subdivision and is within Area 4 of the Juniper Ridge Master Plan. Approximately 0.38 acres of the site are located on Lot 87, which is also within Area 4 of the Juniper Ridge Master Plan. Approximately 0.08 acres of the western portion of the site is located on the Juniper Springs Lodge (JSL) property.

Majestic Pines Road was relocated in the 1990s from along the base of the mountain to its current location. The site area includes 1.02 acres of public right-of-way (roadway), since construction activities would occur within the roadway. A portion of Lots 5 and 87 are located to the north of Majestic Pines Road. As shown on Figure 4, the project includes the

⁸ *The project site boundary has been revised from the boundary shown in the January and March NOPs and the Initial Study. The site area has been expanded to include the full extent of grading associated with the project. The change in the site area does not alter the conclusions reached in the Initial Study or change to scope of the EA/EIR.*



LEGEND

 Project Site

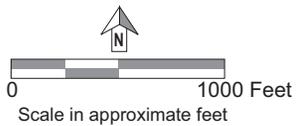


Figure 3
Regional and Project Vicinity Map

Source: PCR Services Corporation, 2005

Table 1**Breakdown of Acreage Within the Project Site**

Private Land	USFS Land	Roadway	MCWD Well 16	Total Development Area
Lot 5 – 3.03 acres ^a	Lot 1 – 0.96 acres	1.02 acres		
Lot 87 – 0.38 acres ^a	Lot 6 – 2.29 acres			
JSL – 0.08 acres	Lot 7 – 0.85 acres			
3.49 acres	4.1 acres	1.02 acres	.06 acres	8.67 acres

JSL = Juniper Springs Lodge

^a *The acreage is the area within which development would occur. The area does not include the portion of Lot 87 that would be redesignated from Low-Density Residential to Resort.*

Source: Gensler, 2006; PCR Services Corporation, 2006

redesignation of Lot 87 from Low-Density Residential to Resort as this area was not redesignated at the time of the realignment of the roadway.⁹

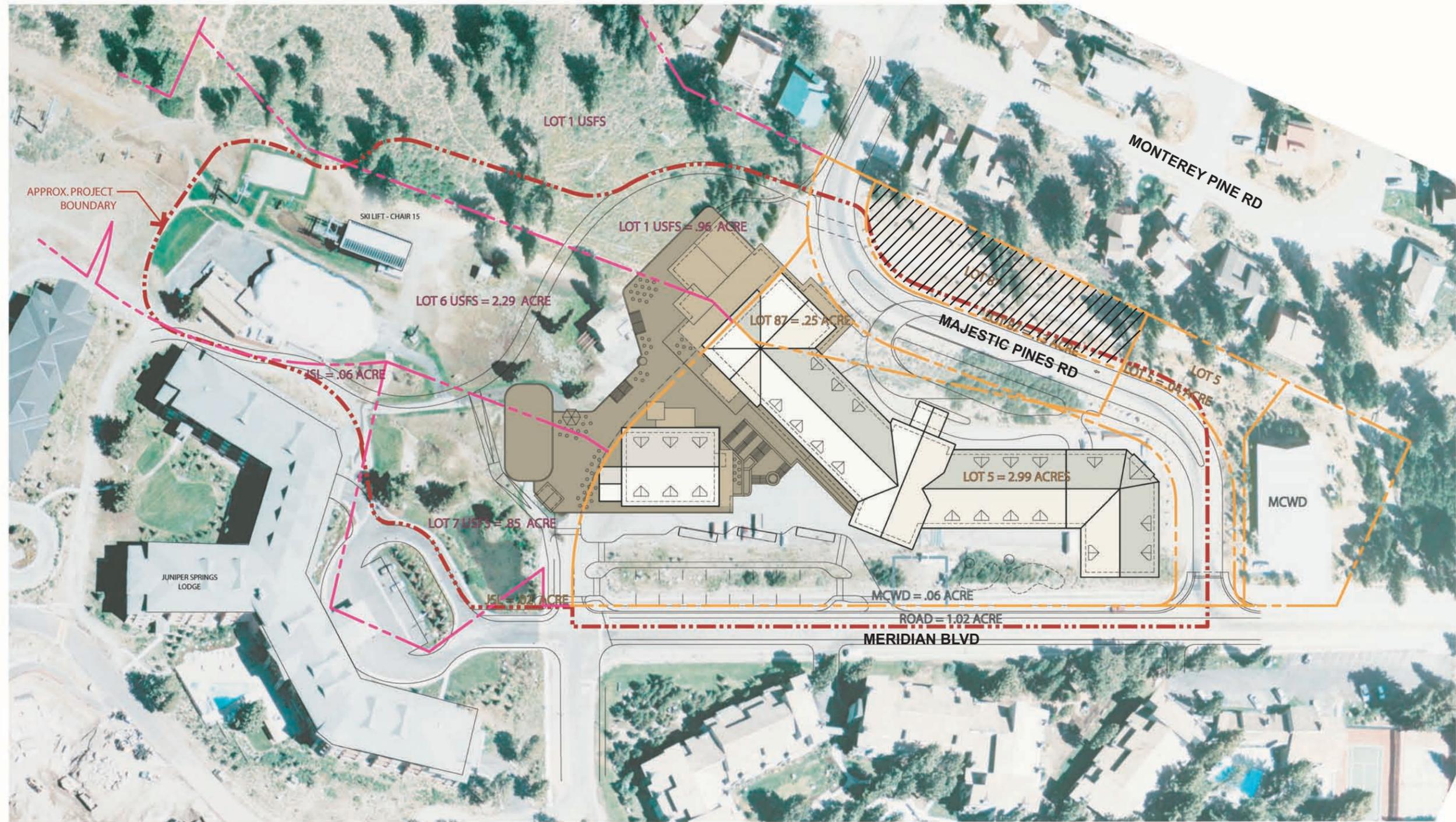
The remainder of the project site encompasses approximately 4.1 acres of land that is located within Inyo National Forest land and is administered by the USDA Forest Service. This portion of the project covers 3 parcels, Lot 7, Lot 6 and Lot 1 (Area 9, 8 and 3 of the Juniper Ridge Master Plan).

Existing uses on the site include a surface parking lot for skiers utilizing Eagle Express and the temporary Little Eagle Base Lodge. The surface parking lot, which is bounded by Meridian Boulevard and Majestic Pines Road, can accommodate approximately 225 vehicles, inclusive of day-skier and temporary/drop-off parking. Access to the surface parking lot is provided from Meridian Boulevard in the southwestern portion of the site.

In the path between the parking lot to the temporary ski facilities are a statue of an eagle in flight and a map of the ski resort indicating the lifts operating daily. The existing ski facilities consist of a temporary, white framed membrane structure with attached trailers which provide support services. Little Eagle Lodge and associated trailers provide approximately 12,000 square feet of interior space.¹⁰ In addition, an approximately 3,000 square foot exterior barbeque and

⁹ *The portion of Lot 87 that would be redesignated from Low-Density Residential to Resort is not included in the project site calculations. The project site boundary shown on Figures 4 and 5 indicates the area in which development activity would occur. The calculations provided are with regard to the development area.*

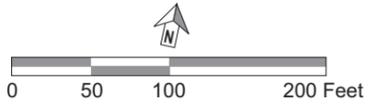
¹⁰ *The existing tent contains approximately 9,000 square feet of floor area. The remainder of the interior square footage, 3,000 square feet, is contained in the associated trailers.*



LEGEND

- Lot Lines
- Development Area
- Area of Proposed Redesignation for Low Density Residential & Resort

USFS LAND	PRIVATE LAND	MCWD	BOUNDARY
LOT 1 = .96 ACRE	LOT 5 = .04 + 2.99 = 3.03 ACRE	MCWD WELL = .06 ACRE	BOUNDARY ACREAGE = 8.67 ACRES
LOT 6 = 2.29 ACRE	LOT 87 = .13 + .25 = .38 ACRE	ROAD = 1.02 ACRE	
LOT 7 = .85 ACRE	JSL = .02 + .06 = .08 ACRE		
TOTAL FOREST SERVICE LAND WITHIN BOUNDARY = 4.10 ACRES	TOTAL PRIVATE LAND WITHIN BOUNDARY = 3.49 ACRES		



Source: Gensler, 2006.

Figure 4
Aerial Showing Development
Relative to Property Lines

dining deck are also located on the site. Existing services at Little Eagle include: ticketing; food and beverage service comprised of an 80 seat interior restaurant, an interior bar/coffee bar area plus the exterior barbeque and dining deck for service of up to 200 seats; limited retail and rental of approximately 600 square feet; public restrooms; and back-of-house administrative space. The existing lift facilities include a six seat (“six-pack”) detachable chairlift with a current maximum uphill capacity of 2,800 skiers per hour. In addition, a single “magic carpet” conveyor belt is used for very limited ski school operations. The conveyor belt is 80 feet long enabling beginner skiers and snowboarders to practice one or two turns before riding on the Chairlift. No formal ski school facilities exist at Little Eagle. Currently, all guests seeking ski school services must travel to Canyon Lodge, which is located approximately 0.7 miles away, or Main Lodge, which is located approximately 2.6 miles away, to enroll.

The Mammoth Community Water District (MCWD) owns a well site parcel that is located adjacent to Meridian Boulevard within the southern portion of Lot 5. The parcel contains the vault housing MCWD Well 16.

The US Forest Service and the Town recently approved the installation of a temporary tent facility that would provide services for the existing beginner/ski school service. The applicant proposes the installation of a 3,400 square foot structure to be located to the east of the existing temporary structure. The application includes the relocation of an existing 900 square foot wooden structure to connect to the temporary structure to provide restroom facilities. The conditional approval granted by the US Forest Service includes the re-siting of the existing 80-foot carpet lift, the addition of a 150-foot carpet, and the addition of a 350-foot poma surface lift. The temporary structure, which is authorized only on an interim basis, is intended to accommodate skier services until the permanent facility is completed.

2.3 PROPOSED ACTION/PROPOSED PROJECT

The proposed Eagle Lodge Base Area Development would develop permanent skier amenities. Figure 5 on page 19 provides a conceptual site plan for the project. The project would include a mixed use of day skier commercial services, general commercial services and a mix of residential product type that will encourage high transient occupancy. Plaza areas and outdoor seating would connect the on-site facilities, which would be housed in two buildings. Amenities would include ticket sales, ski rental and repair, food services, lockers, day spa, retail, ski school, and day care.¹¹ The project is described in more detail below.

¹¹ *In addition, on-hill improvements are anticipated in the future and would include a new detachable four seat (“quad”) beginner chair lift and beginner ski run as well as additional magic carpets located adjacent to the proposed new base lodge. These improvements would be located entirely on Inyo Forest Land and would require environmental review and approval through the U.S. Forest Service. As the detachable quad lift is not proposed or anticipated at this time, it is not reasonably foreseeable.*

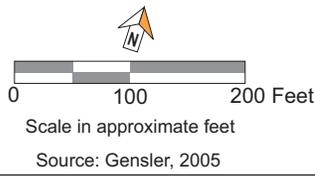
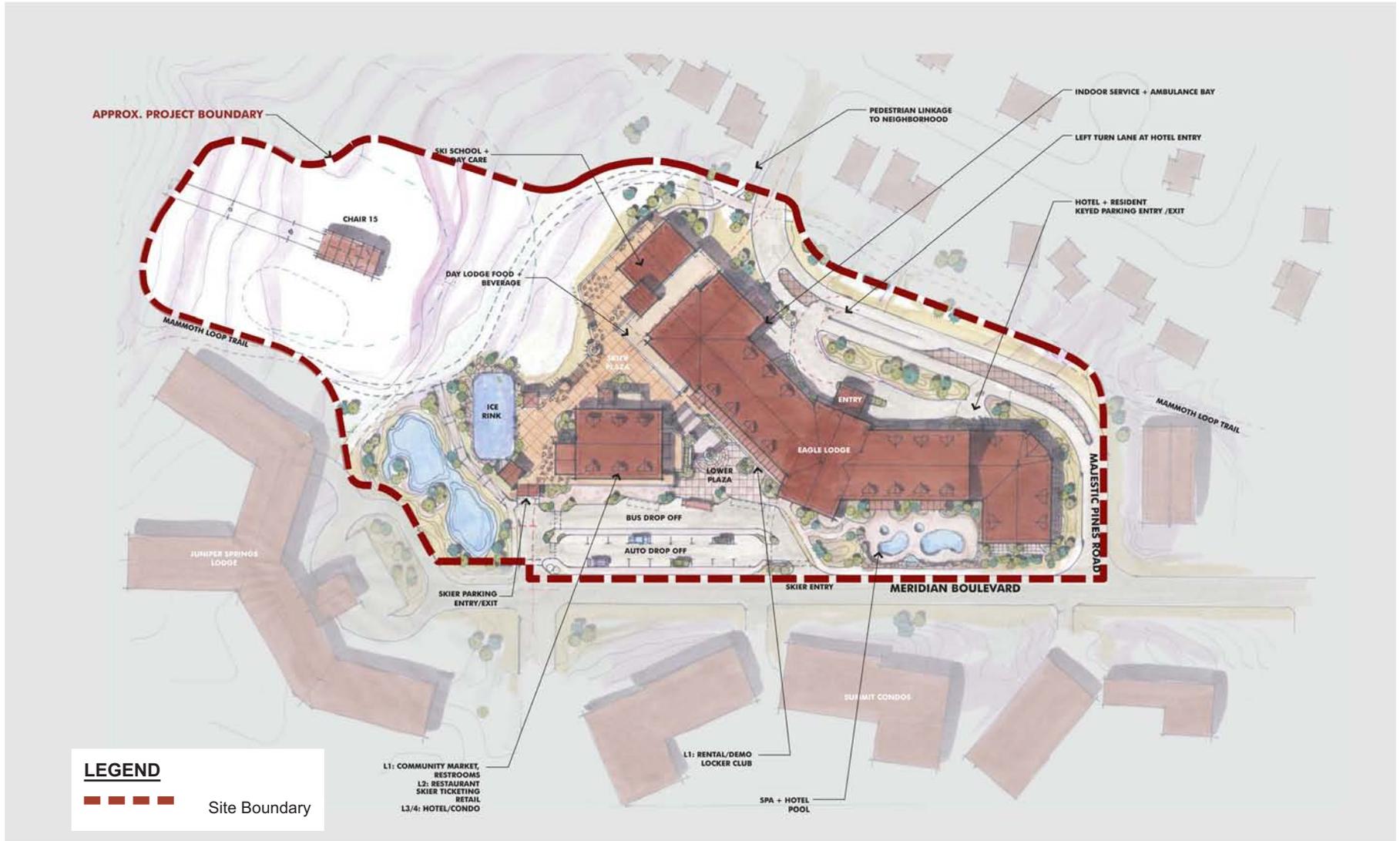


Figure 5
 Conceptual Site Plan

The lodge and associated commercial uses would be located within two buildings. The main building or lodge would front on Majestic Pines Road. The main building, which would include the majority of the visitor accommodations, the day lodge cafeteria and the Ski School/Day Care, would be located on the north side of the site stretching from the eastern boundary to the northwestern corner of the site adjacent to the slopes. The Day Care would provide services for patrons of the ski area. A second, smaller building, the Skier Services Building, would be located parallel to Meridian Boulevard. The Skier Services Building would include a convenience market, retail space, and skier ticketing area.

The two buildings would be connected by outdoor plazas. An arrival or lower plaza would be created adjacent to the vehicular access to the south side of the site. The lower plaza would provide access to the two buildings. Stairs would lead up to the upper plaza, creating an entrance for skiers and visitors not residing at the lodge. The skier or upper plaza would connect the buildings and would connect the open ice rink with the facility. The skier plaza would be located at the bottom of the ski slopes and would be accessed by stairs from the lower plaza or from the adjacent slopes.

Although the majority of day lodge uses contemplated in the project are geared towards winter time use, the facilities would also lend themselves to summer uses such as a summertime outdoor performing arts venue, potential access to the summer mountain bike park, and assembly opportunities. The site location provides easy access to the roads leading up to the Twin Lakes, which is a popular spot for hiking and fishing. While the peak use would be winter, the development would accommodate and provide for year-round use of the facility.

a. Commercial Uses

Table 2 on page 21 shows the proposed uses as well as approximate square footage within the facility. As shown in Table 2, the ski-related commercial uses within the facility would occupy approximately 40,000 gross square feet. Ski-related commercial uses would include a rental/demo/repair shop, retail shop, ticketing, ski school, food and beverage services and back-of-house space for administration, ski patrol, employee break room, and maintenance.

The first floor of the lodge would include the ticketing and ski rental/demo shop that would front on the lower plaza and be accessible to skiers entering from Meridian Boulevard. As shown in Table 2, the lodge would contain an approximately 12,000 square foot Locker Club. The Locker Club would be located on the street level of the lodge and would have approximately 300 members. Membership to the Locker Club would include understructure parking access, exclusive members only access to the Club facilities, oversized wood lockers, men's and women's restroom and shower facilities, a business center, concierge services including a continental breakfast bar, afternoon bar services, ski tuning and other valet services.

Table 2

Commercial Uses and Square Footage

Description	Approximate Square Feet
<i>Commercial Ski-Related Uses</i>	
Skier Food Service	9,500
Dining Area (250 seats)	
Servery	
Kitchen/storage/office	
Food Prep	
Bar & Coffee Bar	
Skier Commercial Services	9,200
Rental/Demo/Repair Shop/Basket Ck	
Retail Shop	
Ski School/Day Care	
Skier Staging Facilities	6,300
Ticketing/Lobby	
Public Restrooms	
Administrative Facilities	5,000
Administrative Offices	
Employee Break Room/Locker Room	
Ski Patrol	
Maintenance / Loading Dock	
Mechanical / Cell Site	
Net Day Lodge Program	30,000
Inefficiencies @ 25%	10,000
<i>Subtotal: Gross Day Lodge Square Footage</i>	<i>40,000</i>
<i>Additional Commercial Uses</i>	
Day Spa	8,000
Locker Club	12,000
Convenience Market	4,000
Restaurant (seating for up to 200 patrons)	4,000
Meeting/Conference Room	4,000
Net Commercial Program	32,000
Inefficiencies @ 20%	8,000
<i>Subtotal: Gross Commercial Square Footage</i>	<i>40,000</i>
Total Commercial Square Footage	80,000

Source: MMSA and PCR Services Corporation, 2006

The second level, or ski plaza level of the lodge would include an 8,000 square foot Day Spa, which would provide traditional full service wet/dry spa services. The Day Spa would be open to guests and the public.

The ski-plaza level would include a full-service food court (cafeteria style) located in the northern portion of the lodge. The food court would provide indoor dining for up to 250 persons. The outdoor patio would provide an additional 250 seats scattered throughout the patio area. An indoor/outdoor bar would also be provided as part of the food court.

The first floor of the lodge would also include administrative offices, an employee break room, ski patrol office, building maintenance shop, mechanical rooms, and a loading dock with dry and refrigerated storage.

A Ski School/Day Care facility would be located in the northwestern portion of the site adjacent to the slopes. The Day Care center would be a supplementary operation of the Ski School, available to guests, and would only be available during the term of the annual ski season. Generally, the Day Care center would not be available to local residents of the community but rather to patrons of the ski area and the ski school in particular.

The main building would also contain an approximately 4,000 square foot meeting/conference facility that would be used to support the hospitality functions of the lodge. The meeting/conference facility would be available to the general public on an as-available commercial basis. During peak ski operations, the meeting/conference facilities would not be available to the public until the close of the chairlift operations and therefore, would not generate external traffic. The conference room could accommodate up to 200 people. In general, the meeting conference facilities would be operated so as to not conflict with peak parking demand during the ski season. It is anticipated the meeting/conference facilities would create incremental off ski season demand for lodging facilities thus promoting the year-round utilization of the lodge.

The Skier Services Building, which is the smaller, separate building on the southern portion of the site, would contain an approximately 4,000 square foot neighborhood convenience market that would provide general food and groceries on the ground floor. The intent of the market would be to provide goods for users of adjacent residential developments and guests of the lodge.

The second level of the Skier Services Building would contain a restaurant, retail space, and café. The restaurant would be located adjacent to the ski slope and ice rink. The restaurant operation would accommodate approximately 120 people at a time with an additional 80 seats provided on an outdoor patio. With the indoor and outdoor dining, the restaurant could

accommodate up to 200 persons at one time. It is anticipated this full-service restaurant would operate year-round.

b. Residential Uses

The proposed Eagle Lodge Base Area Development would include hotel/condominium or hospitality operations that would provide housing for transient visitors. As shown in Table 3 on page 24, the project would include 62 condo/hotel units and 21 fractional ownership condominiums. The 62 condo/hotel units would be wholly owned, individual units and would be located on the third through fifth level of the lodge. The 21 fractional ownership condominium units would be located in the eastern portion of the main building on the first through fourth levels. On-site lodging would accommodate up to 360 people. Related program elements of the hospitality component include a front desk operation, meeting/conference room facilities, as previously mentioned, and a club room. In addition, an outdoor pool and spa for the residents would be located on the southern side of the lodge adjacent to Meridian Boulevard.

Guests staying at the lodge and arriving by vehicle would enter a porte cochere covered driveway on Majestic Pines Road where they could park temporarily to check-in at the front desk. Front desk operations would be linked to the skier day lodge facilities so that guests registering at the lodge, for example, would be able to purchase lift tickets and other skier services such as ski school.

A hotel scenario is also being considered within the proposed building envelope.¹² The proposed building envelope could accommodate up to 213 hotel rooms. Based on this scenario and assuming two visitors per room, the hotel option could accommodate up to 426 visitors. As with the hotel/condominium option, related program elements would include a front desk operation and meeting/conference room facilities. In addition, an outdoor pool and spa would be provided for visitors.

c. Other

In addition to the skiing related services, the proposed base lodge would include a 60 foot by 120 foot outdoor ice skating rink which would be located on the skier plaza adjacent to the ski slope. An insulated blanket would be placed over the ice rink during non-operating hours. Skate rentals would be available at the base lodge rental shop. The ice skating rink could be converted

¹² *The analysis provided in the environmental document considers the scenario that would result in the greatest level of impacts. The consequences of any combination inside the envelope of what is identified in the document would not be permitted if it were determined that impacts would be greater.*

Table 3**Residential/Hospitality Uses and Square Footage**

Description	Number of Units	Square Feet per Unit	Total Square Feet
Condo Hotel (average unit)	62	925	57,365 sf
Private Residence Club (avg unit)	21	2,030	42,635 sf
Commercial Management Office	1	2,000	2,000 sf
PRC Club Room	1	1,120	1,120 sf
Back-of-House Service Areas	1	5,000	5,000 sf
Net Lodging Program			108,120 sf
Inefficiencies @ 20%			27,030 sf
Gross Lodging Program			135,150 sf

Note: Although the residential/hospitality lodging uses currently contemplate a mix of ownership type units, another scenario would be to substitute a pure hotel program within the proposed building envelope. The proposed building envelope could accommodate 213 hotel rooms. The overall intent of the hospitality mix is to encourage the highest level of transient occupancy possible given the constraints of current financial markets.

Source: MMSA, 2006

to seating and a stage for use during the non-winter months. The area would be able to accommodate approximately 200 people.

The project could include a climbing wall, which would be located between the trail and the ski plaza near the ice rink, for warm-weather use. The wall would be approximately 30 feet in height and would be seasonal and the structure would be removed during the winter months.

A snow management plan would be incorporated as part of the project. Snow storage would occur adjacent to the edge of the westernmost development on the site, along Majestic Pines adjacent to the vehicular access points, and just west of the site on the detention pond area.

The existing detention basins within the project boundary would not be used for drainage. However, due to the proximity of development relative to the existing basins it is likely that some landscape maintenance or repair work may be necessary. In terms of site drainage, the project would include the installation of two underground detention facilities. One facility would be located along the eastern boundary of the project site and another along the project's northern boundary near the lodge entrance.

The existing temporary tent would be removed as part of the project. The area around Chair 15 would be regraded so as to change the queuing line from the north side to the south side of the chairlift. Existing fill that is located to the north of the chairlift would be removed. Once the fill area and the tent have been removed, the area would be regraded and revegetated with native grasses.

d. On-Site Circulation and Parking

The lodge would front on Majestic Pines Road. Two vehicular access points would be provided along Majestic Pines Road. The southernmost driveway closest to Meridian Boulevard would provide access to a keyed parking structure for use by hotel guests and residents. Guests staying at the lodge and arriving by vehicle could enter the northernmost driveway on Majestic Pines Road and park under a porte cochere temporarily to check-in at the front desk. In addition, service vehicles would access the site from Majestic Pines Road. A fully enclosed loading dock would be located parallel to Majestic Pines Road in the central portion of the lodge. An ambulance bay would also be provided along Majestic Pines Road.

Two public vehicular access points would be provided to the site along Meridian Boulevard. The easternmost driveway would provide one-way westerly access along the arrival plaza, exiting at the westernmost driveway adjacent to the Juniper Springs Lodge. This driveway would provide site access for auto and transit drop-off. Vehicles would enter the driveway and would drop day skiers off at the arrival plaza. The auto drop-off lane is designed to accommodate up to 16 vehicles at one time. In addition, a bus lane with pullout pockets for up to four buses at one time would be located adjacent to the arrival plaza. The cars and buses would exit the site using the westernmost driveway adjacent to the Juniper Springs Lodge. The westernmost driveway, which would be two-way, would also provide access to underground parking for day users of the facility.

The project proposes a 246,250-square-foot subterranean parking garage with up to 544-spaces. The parking garage would include 2 full levels and one partial level or subterranean parking. The partial level of the parking structure located at the northwestern portion of the building would include an exclusive drop-off parking area that would provide direct access to the ski school facilities above. At the commencement of ski school classes (i.e., 11:00 A.M.) this partial level would convert to day skier parking.

The project proposes to extend the Mammoth Loop Trail through the site. The Trail would be constructed from Majestic Pines Road, across from where the Trail currently ends, along the northwestern side of the lodge to the western end of the site. In addition, the project would include a pedestrian link from the northern end of the lodge to the single family neighborhood to the north of the site. The trail would intersect with the Mammoth Loop Trail.

Additional at grade pedestrian improvements would provide access along the southern and western boundaries of the project site to the adjacent multi-family residential developments.

e. Architecture

As discussed above, the facility would be constructed on multiple levels. Figure 6 and Figure 7 on pages 27 and 28 are renderings of the development from Meridian Boulevard and Majestic Pines Road, respectively. The structure would be articulated in order to break up the massing of the building. There would be an approximately 15 foot elevation difference between the upper skier plaza, lift loading elevation and that of the lower, east end of the site. The elevation difference between the arrival plaza and the skier plaza would provide further variation in the building massing. Story heights from the arrival plaza area would vary from three, four and five stories. However, from the skier plaza end of the development, some portions of the day lodge and commercial uses would be one story from grade.

The average building height above finished grade would be approximately 64 feet for the Skier Services Building. The peak building height of this building would be approximately 71 feet above the Meridian Boulevard street grade (8065 feet above mean sea level). The primary structure, the lodge, would have an average building height of approximately 61 feet. The peak building height of the lodge would be approximately 87 feet above the Majestic Pines Road street grade (8065 feet above mean sea level).¹³

Building materials would include heavy timbers and natural stone. The buildings would have pitched composite shingle roofs. The plazas would be finished with interlocking pavers. Landscaping would be provided on the plazas. The eagle statue that is currently on the site would be relocated to the arrival plaza at the base of the stairs.

The proposed project would be developed in accordance with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards. The goal is to achieve certification level or above. LEED aims to improve occupant well being, environmental performance and economic returns of buildings using established and innovative practices, standards and technology. Major areas of evaluation include the following: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, Innovation & Design Process.

¹³ Please see Appendix G for a detailed height analysis for the Proposed Action.



Figure 6
Rendering from Meridian Boulevard



Figure 7
Rendering from Majestic Pines Road

2.4 CONSTRUCTION

Construction of the project is expected to begin in Spring 2007 and would take approximately two years to complete. Construction would begin with the excavation of the parking garage moving from the western to the eastern portion of the site. Excavation for the project is estimated to be approximately 116,085 cubic yards (cy) of material. The project would require approximately 32,350 cubic yards of backfill material. Approximately 14,000 cy of excavated soil would be hauled off road and temporarily stored on the Lower Pumpkin Ski Trail. An additional approximately 20,000 cy of material would be hauled on Town roads to the MMSA Slash Pit near Chair 2 where it would be temporarily stored. These two locations would be used for temporary storage and the material would be returned to the site and used as backfill. The remaining approximately 82,000 cy of excavated material would be hauled on Town roads to Canyon Lodge near the base of Chair 7.¹⁴ The approximately 82,000 cy of material would be stored for a longer term and the material would be used for a slope regrading project at Canyon Lodge.

With regard to haul routes that are not on Town roads, existing roads and trails would be used whenever possible. Any temporary roads that would be constructed for hauling of material would be removed and the area revegetated upon completion of the project. Best Management Practices (BMPs), such as check dams and sediment barriers (i.e., silt fence, weed-free hay bales, wattles, etc.) would be used to control runoff velocity and encourage sediment deposition. All stockpiled material would be protected from wind and water erosion.

A portion of the garage would be completed for the 2007/2008 ski season such that the usable portion of the parking garage would replace the approximately 225 surface parking spaces so as to result in no loss of parking during the interim ski season. Construction would continue through the winter months. The lodge would be completed by the 2008/2009 ski season. Final completion of the residential/hospitality portions of the project would occur in Spring 2009. The project would include the removal of the existing temporary tent facility and a fill area to the north of Chair 15 and the regrading of the area. Revegetation of the area would also occur.

2.5 PROPOSED ALTERNATIVES

NEPA and CEQA both require the consideration of a range of reasonable alternatives to the Proposed Action. Alternatives must be feasible and must meet the purpose and need of the

¹⁴ *The permanent fill site at the base of Chair 7 at Canyon Lodge would be addressed as a separate NEPA action prior to implementation of hauling operations.*

Proposed Action. Under CEQA, alternatives must attain most of the basic project objectives that are described in Chapter 1. Alternatives must also lessen one or more of the potentially significant effects of the project.

The range of alternatives required is governed by a “rule of reason,” which means that only those feasible alternatives necessary to permit a reasoned choice need to be considered. Reasonable alternatives are those that are practical or feasible based on technical, economic and other considerations. Analysis of the No Action or No Project alternative is specifically required, as is a discussion of those alternatives considered but rejected from detailed consideration.

In selecting project alternatives for analysis, potential alternatives must pass a test of feasibility. CEQA Guidelines Section 15126.6(f)(1) states that:

“Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site”

Section 15126.6 of CEQA also requires an EIR to identify the environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

The four alternatives analyzed in the document are described below. Table 4 on page 31 summarizes the key components of the Proposed Action and the alternatives.

a. Alternative 1 - Development in Accordance with Existing Regulations Alternative

In accordance with CEQA Guidelines § 15126.6(e)(2), this Alternative represents what would be reasonably expected to occur in the foreseeable future if the project as proposed were not approved. Development would be consistent with the existing Juniper Ridge Master Plan. In addition, in accordance with CEQA Guidelines § 15126.6(e)(3)(B), this Alternative represents “predictable actions by others, such as some other project” if disapproval of the project under consideration were to occur.

In accordance with the adopted Juniper Ridge Master Plan, the site (Area 4) would be developed with a parking structure and 35,000 square feet of commercial space replacing the existing surface parking lot. The existing temporary tent facility would be removed and uses would be relocated into the new commercial building. The 35,000 square feet of commercial uses would primarily serve the day skiers, residents, and transient occupants of the lodging units

Table 4**Comparison of the Components of the Proposed Action and Alternatives**

Alternative No.	Alternative	Site Size	Disposition of Temporary Tent	Commercial	Residential	Parking	Height
Proposed Action	Proposed Action	8.67 acres on USFS and private land	Removed	40,000 sf ski-related uses; 40,000 sf other commercial uses	62 condo/hotel units and 21 fractional ownership condominiums OR up to 213 hotel rooms	544 spaces	Lodge – 87 ft above Majestic Pines Road; Skier Services Bldg – 71 ft above Meridian Blvd.
1	Development in Accordance with Existing Regulations	8.67 acres on USFS and private land	Removed	35,000 sf primarily serving day skiers, residents, and transient occupants in the vicinity of the site	0	566 spaces	Comm'l structure - up to 45 ft from street grade; Parking structure - maximum of 35 ft
2	Reduced Intensity Alternative	8.67 acres on USFS and private land	Removed	52,000 sf primarily serving day skiers, residents, and transient occupants in the vicinity of the site	54 condominiums OR up to 138 hotel rooms	350 spaces	45 to 55 ft
3	Alternate Design Alternative	8.67 acres on USFS and private land	Removed	40,000 sf ski-related uses; 40,000 sf other commercial uses	62 condo/hotel units and 21 fractional ownership condominiums OR up to 213 hotel rooms	544 spaces	Lodge - 102 ft above Majestic Pines Road; Skier Services Bldg - 71 ft above Meridian Blvd
4	No Action	8.67 acres on USFS and private land	Removed	0	0	0	NA

Source: PCR Services Corporation, 2006

in the vicinity of the site. The commercial structure would be up to 45 feet in height as measured from street grade, with a setback of 20 feet from Meridian Boulevard and Majestic Pines Drive. The parking structure would be a maximum of 35 feet in height, and would contain a maximum of 566 parking spaces.

Vehicular access to the site would be provided only from Meridian Boulevard. With regard to pedestrian circulation, Alternative 2 would provide an easement of 14 feet in width in non-steep areas of the site and 12 feet in steep areas for a recreational trail.

b. Alternative 2 - Reduced Intensity Alternative

The Reduced Intensity Alternative would provide accommodations for transient visitors as well as commercial uses. The Reduced Intensity would result in a three story structure in order to preserve views to Sherwin Mountain range including Mammoth Rock, Crystal Crag, and Mammoth Crest. Alternative 2 would result in an approximately 35 percent reduction compared with the Proposed Action.

The existing temporary tent facility would be removed and the uses would be relocated into the permanent structure. The Reduced Intensity Alternative would include 54 residential units or up to 138 hotel rooms. This Alternative would include 52,000 square feet of commercial uses that would primarily serve the day skiers, residents, and transient occupants of the lodging units in the vicinity of the site. The mix of commercial uses would be reduced and the day spa and meeting/conference room would not be provided under this Alternative.

The transient housing and commercial services would be located within two buildings. The main building, which would include the majority of the visitor accommodations, the day lodge cafeteria and the Ski School/Day Care, would be located on the north side of the site. A second, smaller building, the Skier Services Building, would be located parallel to Meridian Boulevard. The Skier Services Building would include a small convenience market, retail space, restaurant, ticketing, and employee and administrative space.

The structure would vary slightly in height with the terrain and would be up to approximately 45 to 55 feet in height. The northern portion of the building would be 8115 feet above mean sea level (amsl), which would be 50 feet above the Majestic Pines Road street grade (8065 feet amsl). The Skier Services Building would have a roof height of 8121 feet amsl, which would be 45 feet above the grade of Meridian Boulevard (8076 feet amsl).

Vehicular access to the site would be provided from Majestic Pines Road for the lodge and Meridian Boulevard for the day skier activity. Alternative 2 would provide approximately 350 parking spaces in a two-level subterranean parking structure.

Alternative 2 would include two underground detention facilities along the eastern and northern boundaries of the project site. This Alternative would also include the extension of the Mammoth Loop Trail through the site as well as a pedestrian link from the northern end of the lodge to the single family neighborhood to the north of the site.

c. Alternative 3 - Alternate Design Alternative

The Alternate Design Alternative would contain the same program as the Proposed Action and would include approximately 40,000 gross square feet ski-related commercial uses and 40,000 gross square feet of other commercial uses. In addition, Alternative 3 would include 62 condo/hotel units and 21 fractional ownership condominiums or up to 213 hotel rooms. As with the Proposed Action, on-site amenities, such as meeting/conference room facilities, a club room, an outdoor pool and spa, and outdoor ice skating rink would also be provided.

The transient housing and commercial services would be located within two buildings. The main building or lodge would front on Majestic Pines Road. The main building, which would include the majority of the visitor accommodations, the day lodge cafeteria and the Ski School/Day Care, would be located on the north side of the site. The commercial services would be provided in the first three levels of the western portion of the building. The residential or hotel units would be located above the commercial services on the fourth through seventh levels and in the eastern portion of the building.

A second, smaller building, the Skier Services Building, would be located parallel to Meridian Boulevard. The Skier Services Building would include a convenience market, retail space, restaurant, ticketing, and employee and administrative space on the first two levels of the building. Residential or hotel units would be located on levels four and five of the Skier Services Building.

Under the Alternate Design Alternative, the facility would be constructed on multiple levels and the structure would range from two to seven stories in height. (See Visual Simulations provided in Appendix I of this document.) The northern portion of the building would be 8147 feet above mean sea level (amsl) at its closest point to Majestic Pines Road, which would be 82 feet above the Majestic Pines Road street grade (8065 feet amsl). The highest peak, which would occur in the central portion of the building, would be at 8167 feet amsl. The peak building height from the lowest street grade of Majestic Pines Road (8065 feet amsl) would be 102 feet. The Skier Services Building would have a building peak of 8147 feet amsl, which would be 71 feet above the grade of Meridian Boulevard (8076 feet amsl).

Under Alternative 3, vehicular circulation would occur the same as with the Proposed Action. Two vehicular access points would be provided along Majestic Pines Road for the lodge

and two public vehicular access points would be provided along Meridian Boulevard for the ski operations. Access improvements on Majestic Pines Road to accommodate the proposed site access would occur under the Alternate Design Alternative. Parking would be provided in the 544 space subterranean garage.

The Alternative would include two underground detention facilities along the eastern and northern boundaries of the project site. This Alternative would also include the extension of the Mammoth Loop Trail through the site as well as a pedestrian link from the northern end of the lodge to the single family neighborhood to the north of the site.

d. Alternative 4 - No Action Alternative

The No Action Alternative could occur if the Proposed Action, or the development of the permanent lodge facility, were not approved. As a result, the environmental effects which could occur from the Proposed Action would not occur. Under the No Action Alternative no modifications would be made to the operation of the ski facility. However, the temporary tent that is currently located on Forest Service land would be removed. The existing surface parking lot would remain. No transient lodging or associated commercial activities would be developed on the site.

e. Alternatives Considered but Eliminated from Detailed Consideration

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives to the Proposed Action and to briefly discuss the reasons for eliminating any alternatives that were not analyzed in detail. Eight public comments (letters and emails) received in response to the Proposed Action provided suggestions for alternative methods for achieving the project purpose and need. Some of the alternatives may have been considered outside the scope of the proposal, duplicative of the alternatives considered in detail, or determined to be components that would cause unnecessary environmental harm. Therefore, a number of alternatives were considered, but dismissed from detailed consideration for reasons summarized below.

In accordance with CEQA Guidelines Section 15126.6©, an EIR should identify any alternatives that were considered for analysis but rejected as infeasible and briefly explain the reasons for their rejection. According to the CEQA Guidelines, among the factors that may be used to eliminate alternatives from detailed consideration are the alternative's failure to meet most of the basic project objectives, the alternative's infeasibility, or the alternative's inability to avoid significant environmental impacts. Alternatives that have been considered and rejected as infeasible include:

Development on USFS Land: A project that included development of the lodge entirely on U.S. Forest Service Land. This development was the focus of the 1997 EA. This project or alternative was rejected since development on the existing surface lot would minimize the loss of suitable terrain for skier and lift staging.

Development with Majestic Pines Relocated to the Previous Alignment: A project that included the development of the lodge primarily on private land with the same mix of uses as that proposed under the project. The building massing would be located closer to the single family residences to the north of the site compared with the project under consideration. This project or alternative included the relocation of Majestic Pines to its previous location to the west, running directly through the site. The project or alternative included the creation of a land bridge/tunnel over the relocated road to tie grade separated pedestrian access from the ski slope to the lodge facility. This project or alternative was rejected as it was not the design preferred by the public during a December 2004 open house conducted by MMSA. The conclusion was that this project or alternative resulted in a more confusing traffic circulation pattern. In addition, this project or alternative would have greater shade and shadow impacts on adjacent homeowners than the current Proposed Action. Finally, there were infrastructural challenges to create the tunnel/bridge across the previous alignment of Majestic Pines Drive.

Site Plan with Access on Meridian Boulevard (January 2006 Project): A project that was described in the Notice of Preparation that was circulated in January 2006 and presented at a scoping meeting on January 31, 2006 had the building oriented to Meridian Boulevard. Vehicular access was from Meridian Boulevard. The project would provide the same accommodations and amount of commercial space as proposed with the project analyzed in the EIR. However, upon further analysis by the applicant, the Site Plan with Access on Meridian Boulevard was rejected. The applicant determined that the Site Plan with Access on Meridian Boulevard would create conflicts with regard to vehicular traffic circulating around the building. In addition, Site Plan with Access on Meridian Boulevard would create a large amount of asphalt on the south side of the building. Finally, the plan would locate the building closer to the adjacent single family residences to the north. Consequently, the Site Plan was withdrawn and a new Notice of Preparation was circulated for a 30-day period beginning on March 2, 2006.

Alternate Site: The purpose of the project is to locate a lodge adjacent to the ski slopes to serve the existing portal at Eagle Base. There is no other location on private land owned by MMSA located at the base of the lift that could provide the accommodations and commercial square footage within proximity of the Mountain.

f. Comparison of Alternatives, Federal Lead Agency Preferred and Environmentally Preferable Alternative, and State Lead Agency Environmentally Superior Alternative

Table 5 on page 40 provides a comparison of impacts of the Proposed Action and the four alternatives after application of required mitigation measures. The table provides summaries of the individual environmental issue area impact and mitigation analyses in Section 3, some of which are also supported by technical reports. The No Action Alternative would result in minimal construction and no operation impacts, but also would result in none of the socioeconomic and scientific benefits of the Proposed Action.

The Proposed Action would result in impacts in the following issue areas:

Transportation: temporary impacts with regard to construction parking and traffic; operational impacts at two intersections: meridian Boulevard/Minaret Road and Majestic Pine Drive East/Meridian Boulevard; on-site parking shortfall of 311 spaces; and vehicular safety hazards within the site's internal circulation system. With the incorporation of mitigation measures all impacts related to transportation would be reduced to a less than significant level.

Noise: temporary impacts with regard to construction noise; cumulative roadway noise impacts due to cumulative traffic volumes. With the incorporation of mitigation measures construction noise impacts would be reduced to a less than significant level. The project's contribution to the Town's buildout traffic noise would be significant and unavoidable.

Biological Resources: adjacent drainage to northwestern boundary of site; nesting birds. With the incorporation of mitigation measures construction impacts to biological resources would be reduced to a less than significant level.

Cultural Resources: With the incorporation of mitigation measures impacts to cultural resources would be reduced to a less than significant level.

Employment, Population, and Housing: potential impact to housing from construction workers. With the incorporation of a mitigation measure impacts on housing during construction would be reduced to a less than significant level.

Aesthetics: View from Key Observation Point #2. Significant and unavoidable based on CEQA threshold.

Hydrology and Water Quality: groundwater supply and recharge and water quality during operation. With the incorporation of mitigation measures impacts to hydrology and water quality would be reduced to a less than significant level.

Water Supply: periodic maintenance and repair of MCWD's Well 16; fire flow; and cumulative impact relative to water supply at Town buildout in 2025. With the incorporation of mitigation measures project impacts to water supply would be reduced to a less than significant level. The project's contribution to the 2025 Town buildout water supply impact would be significant and unavoidable.

Wastewater: With incorporation of a mitigation measure impacts to existing wastewater treatment facilities and wastewater systems would be reduced to a less than significant level.

Mitigation measures are provided where feasible to reduce the level of impacts to a less than significant level. In all cases, except aesthetics, cumulative noise and cumulative water supply, the mitigation measures would reduce the impacts to a less than significant level. With regard to aesthetics, the Proposed Action would result in a significant and unavoidable impact based on CEQA thresholds from Key Observation Point #2.

Based on these considerations and the comparison in Table 5, the USDA Forest Service and the Town of Mammoth Lakes have made the following conclusions:

USDA Forest Service (NEPA Lead Agency) - The No Action Alternative provides the least environmental impact and, as such, would be the Environmentally Preferable Alternative under the NEPA regulations at 40 CFR 1505.2(b). The USDA Forest Service has not identified an Environmentally Preferable Alternative among the action alternatives.

The Town of Mammoth Lakes (CEQA Lead Agency) - Section 15126.6 of the CEQA Guidelines indicates that an analysis of alternatives to the proposed project shall identify one alternative to the project as the environmentally superior alternative. Furthermore, if the environmentally superior alternative is the No Project (No Action) Alternative, the EIR shall also identify the environmentally superior alternative from among the other alternatives.

Under CEQA Guidelines Section 15126(e)(2), the Town of Mammoth Lakes has identified the No Action Alternative as the Environmentally Superior Alternative as it would not involve construction or changes that would result in physical impacts on the environment. However, the No Action Alternative would not achieve the project objectives or provide beneficial effects as it would not provide transient lodging within close proximity to the portal and would not provide commercial uses within close proximity to existing residences.

Although the No Action Alternative is considered environmentally superior to the Proposed Action, in accordance with CEQA, an Environmentally Superior Alternative among the build alternatives must also be identified. A comparative evaluation of the remaining alternatives indicates that the Reduced Intensity Alternative would be environmentally superior as it would reduce the significant and unavoidable impact from Key Observation Point #2 that would occur as a result of the Proposed Action. In addition, the Reduced Intensity Alternative would reduce the level of impacts in other issue areas. The Reduced Intensity Alternative would not substantially reduce the cumulative impacts relative to traffic noise and water supply.

With regard to the applicant's objectives, while the Reduced Intensity Alternative would meet some of the objectives, the Alternative would not meet the objectives to the same extent as would the proposed project. While the Reduced Intensity Alternative could result in a world-class base area that would support numerous forms of outdoor recreation, the facility under this Alternative would not provide the mix of uses and the level of amenities. For example, the day skier services would be reduced and the day spa and meeting/conference room would not be provided under this Alternative. The Reduced Intensity Alternative would generally meet the objective of providing a variety of uses to encourage family-oriented recreational opportunities but not to the same extent as the project because of the reduction in commercial floor area. In addition, the Reduced Intensity Alternative would not provide the extent of amenities for the surrounding neighborhood given that the community market would be reduced in size. Therefore, this Alternative would not provide commercial goods and services within close proximity to residents so as to reduce trips to other parts of Town to the same extent as the project.

The Reduced Intensity Alternative would not contribute to the improvement of the Town's economic stability to the same extent as the project since this Alternative would not include the mix and amount of non-residential uses. For example, the Reduced Intensity Alternative would not provide a meeting/conference room to facilitate indoor assembly areas to support community cultural events and group meetings during the non-ski season.

This Alternative would meet the objective to create an architectural landmark that blends in with the alpine setting and character of the Mammoth area. The Alternative would also respect the natural environment of the area through the use of landscape elements such as large boulders, indigenous species of trees, shrubs and wildflowers that echo the distinct geography of the site. The Reduced Intensity Alternative could incorporate environmental sustainability through the design and construction implementation processes. As with the project, the Reduced Intensity Alternative would contribute to the Town's trail network through the completion of the Mammoth Loop Trail on the site.

While the Reduced Intensity Alternative would meet the Town's objective to encourage the pedestrian orientation by locating increased transient lodging density immediately adjacent to

the ski area base lifts, the Alternative would not achieve this objective to the same level as the project due to the reduction in the unit or bed count. The Reduced Intensity Alternative would also not meet the objective to develop high occupancy transient bed base especially in developments that are located within 500 feet of a base area chair lifts to the same extent as the project because of the reduction in the lodging. Therefore, the Reduced Intensity Alternative would not contribute to the long term economic sustainability of the Town's revenue sources to the same extent as the project.

Table 5
Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>Land Use</p> <p>The Proposed Action would result in the development of a permanent recreational, commercial and lodging facility to replace the existing temporary structure. The Proposed Action would be compatible with surrounding land uses.</p> <p>The Proposed Action includes a General Plan amendment for Lot 87; amendments to the Juniper Ridge Master Plan for parking, height, density, setbacks, access, and land use; and an administrative change to the 1984 MMSA Development Plan Update to reflect a Peak Design Capacity (PDC) of 5,960 at Base VII. With the proposed changes to the applicable plans, the Proposed Action would be compatible with applicable plans.</p> <p>The proposed rezoning of a portion of the Juniper Springs</p>	<p>Alternative 1 proposes a permanent commercial facility to replace the existing temporary structure. Alternative 1 would be compatible with surrounding land uses.</p> <p>Alternative 1 would be developed in accordance with existing regulations and amendments would not be necessary. However, an administrative change to the 1984 MMSA Development Plan Update to reflect a Peak Design Capacity (PDC) of 5,960 at Base VII would be required. Alternative 1 would be compatible with applicable plans. Therefore, implementation of Alternative 1 would result in a less than significant impact to land use.</p>	<p>Alternative 2 proposes a permanent recreational, commercial and lodging facility to replace the existing temporary structure. Alternative 2 would be compatible with surrounding land uses.</p> <p>Alternative 2 includes a General Plan amendment for Lot 87; amendments to the Juniper Ridge Master Plan for parking, height, density, setbacks, access, and land use; and an administrative change to the 1984 MMSA Development Plan Update to reflect a Peak Design Capacity (PDC) of 5,960 at Base VII. With the proposed changes to the applicable plans, Alternative 2 would be compatible with applicable plans. Therefore, implementation of Alternative 2 would result in a less than significant impact to land use.</p>	<p>Alternative 3 proposes a permanent recreational, commercial and lodging facility to replace the existing temporary structure. Alternative 3 would be compatible with surrounding land uses.</p> <p>Alternative 3 includes a General Plan (1987) redesignation; amendments to the Juniper Ridge Master Plan in the areas of parking, height, density, setbacks, access, and land use; and an administrative change to the 1984 Mammoth Mountain Ski Area (MMSA) Development Plan Update to reflect a Peak Design Capacity (PDC) of 5,960 at Base VII. With the proposed changes to the applicable plans, Alternative 3 would be compatible with existing regulations. Therefore, implementation of Alternative 3 would result in a less than significant impact to</p>	<p>Under the No Action Alternative, no modifications would be made to the operation of the ski facility. However, the temporary tent that is currently located on Forest Service land would be removed. The existing surface parking lot would remain. As such, the No Action Alternative would not fulfill the goals and policies of the General Plan (1987) or the long-range vision of the Town, the USDA Forest Service, and the MMSA to develop a mixed use, year-round resort facility.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>Master Plan area to Open Space in the 2005 Draft General Plan Update would decrease the permitted density within the area. As such, if the 2005 Draft General Plan were adopted, the hotel scenario would require a reduction in density or a General Plan amendment for the proposed density. The condominium/hotel and fractional ownership unit scenario would be consistent with the density allowed in the 2005 Draft General Plan.</p>			<p>land use.</p> <p>The proposed rezoning of a portion of the Juniper Springs Master Plan area to Open Space in the 2005 Draft General Plan Update would decrease the permitted density within the area. As such, if the 2005 Draft General Plan were adopted, the hotel scenario would require a reduction in density or a General Plan amendment for the proposed density. The condominium/hotel and fractional ownership unit scenario would be consistent with the density allowed in the 2005 Draft General Plan.</p>	
<p><u>Transportation</u></p>	<p>Alternative 1 would result in temporary impacts with regard to parking and traffic during construction. With implementation of the prescribed mitigation measures requiring preparation of a construction parking plan, haul rout plan and traffic</p>	<p>Alternative 2 would result in temporary impacts with regard to parking and traffic during construction. With implementation of the prescribed mitigation measures requiring preparation of a construction parking plan, haul rout plan and traffic</p>	<p>Alternative 3 would result in temporary impacts with regard to parking and traffic during construction. With implementation of the prescribed mitigation measures requiring preparation of a construction parking plan, haul rout plan</p>	<p>No short-term parking or traffic impacts would occur as the No Action Alternative would not result in new construction.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
management procedures, construction traffic impacts would be reduced to a less than significant level.	and traffic management procedures, construction traffic impacts would be reduced to a less than significant level.	management procedures, construction traffic impacts would be reduced to a less than significant level.	and traffic management procedures, construction traffic impacts would be reduced to a less than significant level.	
Long-term operational traffic would result in significant traffic impacts at the following two intersections: Meridian Boulevard/Minaret Road and Majestic Pine Drive East/Meridian Boulevard. No roadway segments would be significantly impacted.	Alternative 1 would result in significant traffic impacts at the following two intersections: Meridian Boulevard/Minaret Road and Majestic Pine Drive East/Meridian Boulevard. No roadway segments would be significantly impacted.	Alternative 2 would result in significant traffic impacts at the following two intersections: Meridian Boulevard/Minaret Road and Majestic Pine Drive East/Meridian Boulevard. No roadway segments would be significantly impacted.	Alternative 3 would result in significant traffic impacts at the following two intersections: Meridian Boulevard/Minaret Road and Majestic Pine Drive East/Meridian Boulevard. No roadway segments would be significantly impacted.	The operation of the ski facility would not change from existing conditions, therefore any additional operational traffic impacts would not occur.
Impacts to the two intersections would be reduced to a less than significant level by mitigation requiring the payment of development impact fees and fair share contributions towards necessary improvements.	Impacts to the two intersections would be reduced to a less than significant level by mitigation requiring the payment of development impact fees and fair share contributions towards necessary improvements.	Impacts to the two intersections would be reduced to a less than significant level by mitigation requiring the payment of development impact fees and fair share contributions towards necessary improvements.	Impacts to the two intersections would be reduced to a less than significant level by mitigation requiring the payment of development impact fees and fair share contributions towards necessary improvements.	
The Proposed Action would result in a parking shortfall of 311 spaces. With implementation of mitigation that identifies three mitigation parking options that include increased transit service, off-	Alternative 1 would result in a parking shortfall of 41 spaces. This Alternative would require implementation of similar mitigation measures as the Proposed Action, but would	Alternative 2 would result in a parking shortfall of 147 spaces. This Alternative would require implementation of similar mitigation measures as the Proposed Action, but would include a proportionate	Alternative 3 would result in a parking shortfall of 311 spaces. With implementation of mitigation that identifies three mitigation parking options that include increased transit service, off-site parking	Parking would continue to occur similar to existing conditions. No additional parking impacts would occur beyond existing conditions.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
site parking and/or in lieu parking fees, parking impacts would be reduced to a less than significant level.	include a proportionate decrease in increased transit, off-site parking and/or in lieu fees, during operation to ensure that long-term parking impacts are reduced to a less than significant level.	decrease in increased transit, off-site parking and/or in lieu fees, during operation to ensure that long-term parking impacts are reduced to a less than significant level.	and/or in lieu parking fees, parking impacts would be reduced to a less than significant level.	
The Proposed Action would increase access to public transit services. Thus, the Proposed Action would result in less than significant impacts with regard to alternative transportation	Alternative 1 would increase access to public transit services. Thus, alternative transportation impacts would be less than significant.	Alternative 2 would increase access to public transit services. Thus, alternative transportation impacts would be less than significant.	Alternative 3 would increase access to public transit services. Thus, alternative transportation impacts would be less than significant.	Alternative transportation would continue to be provided similar to existing conditions. No additional alternative transportation impacts would occur beyond existing conditions.
As access to the project site would be provided from two roadways, adequate emergency access would be provided and no impacts would occur.	As access to the project site would be provided from two roadways, adequate emergency access would be provided.	As access to the project site would be provided from two roadways, adequate emergency access would be provided.	As access to the project site would be provided from two roadways, adequate emergency access would be provided.	Access would continue to be provided from two roadways. Thus, no additional impacts would occur beyond existing conditions.
The Proposed Action could result in vehicular safety hazards within the site's internal circulation system. Mitigation measures addressing the internal circulation of the project site	Internal site circulation would be designed to promote the safe movement of pedestrians and vehicles, and would be subject to design review by the Town of Mammoth Lakes to ensure that safety impacts	Alternative 2 could result in vehicular safety hazards within the site's internal circulation system. Mitigation measures addressing the internal circulation of the project site along with design review by	Alternative 3 could result in vehicular safety hazards within the site's internal circulation system. Mitigation measures addressing the internal circulation of the project site along with design	This Alternative would not include the development of pedestrian and transit friendly drop-off areas. No additional internal site circulation impacts would occur

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
along with design review by the Town of Mammoth Lakes would ensure that internal circulation/safety impacts would be less than significant.	would be less than significant.	the Town of Mammoth Lakes would ensure that internal circulation/safety impacts would be less than significant.	review by the Town of Mammoth Lakes would ensure that internal circulation/safety impacts would be less than significant.	beyond existing conditions.

Air Quality

The Proposed Action would involve demolition, earthwork, hauling, and construction activities. The APCD requires the implementation of specific dust control measures during construction activities, which have been included in the analyses. The air emissions resulting from construction of the project would be below the significance criteria of 250 tpy for each of the criteria pollutants, VOC (an O₃ precursor), NO_x, SO₂, CO, and PM₁₀. Thus, impacts to air quality would be less than significant.

Alternative 1 would involve demolition, earthwork, hauling, and construction activities. The APCD requires the implementation of specific dust control measures during construction activities, which have been included in the analyses. The air emissions resulting from construction of Alternative 1 would be below the significance criteria of 250 tpy for each of the criteria pollutants, VOC (an O₃ precursor), NO_x, SO₂, CO, and PM₁₀. Thus, impacts to air quality would be less than significant.

Alternative 2 would involve demolition, earthwork, hauling, and construction activities. The APCD requires the implementation of specific dust control measures during construction activities, which have been included in the analyses. The air emissions resulting from construction of Alternative 2 would be below the significance criteria of 250 tpy for each of the criteria pollutants, VOC (an O₃ precursor), NO_x, SO₂, CO, and PM₁₀. Thus, impacts to air quality would be less than significant.

Alternative 3 would involve the same level of construction as the Proposed Action as the program would be the same. Alternative 3 would involve demolition, earthwork, hauling, and construction activities. The APCD requires the implementation of specific dust control measures during construction activities, which have been included in the analyses. The air emissions resulting from construction of Alternative 3 would be below the significance criteria of 250 tpy for each of the criteria pollutants, VOC (an O₃ precursor), NO_x, SO₂, CO, and PM₁₀. Thus, impacts to air quality would be less than significant.

Alternative 4 would result in a minimal amount of construction activity and would result in a less than significant impact with regard to construction emissions.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>Operation of the Proposed Action would involve various air pollutant generating activities. The resulting net increase in emissions of VOC, NOx, SO₂, CO, and PM₁₀ would be below the significance criteria of 250 tpy for each criteria or precursor pollutant. Average Daily Trips (ADT) for the Proposed Action would result in 6,356. The Town is currently classified as nonattainment of the State O₃ standard and nonattainment of the Federal PM₁₀ standard. Ozone exceedances are attributable to transport from the San Joaquin Valley, and project related emissions of ozone precursors are not predicted to exasperate local O₃ levels. The Town is subject to a State Implementation Plan (SIP) to obtain the Federal PM₁₀ standard, which includes a maximum allowable daily VMT for the Town. The maximum VMT from the Proposed Action would be below the daily established</p>	<p>Operation of the Alternative 1 would involve various air pollutant generating activities. The resulting net increase in emissions of VOC, NOx, SO₂, CO, and PM₁₀ would be below the significance criteria of 250 tpy for each criteria or precursor pollutant. Average Daily Trips (ADT) for Alternative 1 would result in 1,433, which would equate to less VMT. The Town is currently classified as nonattainment of the State O₃ standard and nonattainment of the Federal PM₁₀ standard. Ozone exceedances are attributable to transport from the San Joaquin Valley, and project related emissions of ozone precursors are not predicted to exasperate local O₃ levels. The Town is subject to a State Implementation Plan (SIP) to obtain the Federal PM₁₀ standard, which includes a maximum allowable daily VMT for the Town. The</p>	<p>Operation of the Alternative 2 would involve various air pollutant generating activities. The resulting net increase in emissions of VOC, NOx, SO₂, CO, and PM₁₀ would be below the significance criteria of 250 tpy for each criteria or precursor pollutant. Average Daily Trips (ADT) for Alternative 2 would result in 2,222, which would equate to less VMT. The Town is currently classified as nonattainment of the State O₃ standard and nonattainment of the Federal PM₁₀ standard. Ozone exceedances are attributable to transport from the San Joaquin Valley, and project related emissions of ozone precursors are not predicted to exasperate local O₃ levels. The Town is subject to a State Implementation Plan (SIP) to obtain the Federal PM₁₀ standard, which includes a maximum allowable daily VMT for the Town. The maximum VMT from the Alternative 2 would be below</p>	<p>Operation of the Alternative 3 would involve various air pollutant generating activities. The resulting net increase in emissions of VOC, NOx, SO₂, CO, and PM₁₀ would be below the significance criteria of 250 tpy for each criteria or precursor pollutant. The Town is currently classified as nonattainment of the State O₃ standard and nonattainment of the Federal PM₁₀ standard. Ozone exceedances are attributable to transport from the San Joaquin Valley, and project related emissions of ozone precursors are not predicted to exasperate local O₃ levels. The Town is subject to a State Implementation Plan (SIP) to obtain the Federal PM₁₀ standard, which includes a maximum allowable daily VMT for the Town. The maximum VMT from the Alternative 3 would be below the daily established level of 106,600 VMT. Therefore, impacts to air quality would</p>	<p>The No Action Alternative would not generate any new trips. Therefore, this Alternative would not increase localized CO or PM10 concentrations within the project vicinity over existing conditions. The localized CO and PM10 hotspot emissions would be less than significant. This Alternative would not increase operational emissions as compared to existing conditions, and Alternative 4 would result in less than significant impacts to air quality during operation.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
level of 106,600 VMT. Therefore, impacts to air quality would be less than significant.	maximum VMT from the Alternative 1 would be below the daily established level of 106,600 VMT. Therefore, impacts to air quality would be less than significant.	the daily established level of 106,600 VMT. Therefore, impacts to air quality would be less than significant.	be less than significant.	
Noise				
The worst-case construction hourly L_{eq} would exceed the allowable construction noise limit at the nearest single-family residence to the north of the site but would not exceed the allowable construction noise limit at the sensitive receptors to the south and southwest of the site. When blasting is required the closest residences could experience a high impulse noise level (L_{max}) of 86 dBA. With the implementation of mitigation measures construction noise and vibration impacts would be less than significant.	Construction activities associated with Alternative 1 would be considerably less than the Proposed Action since the majority of construction would only occur within Area 4 of the Juniper Ridge Master Plan. Under this Alternative fewer noise sensitive receptors would be impacted and there would be fewer days of construction activity since less area would be developed. In addition, less blasting would likely be necessary which would lessen overall blasting vibration at nearby sensitive receptors. With the incorporation of mitigation measures noise and vibration impacts would be less than significant.	Construction activities associated with Alternative 2 would be less than the Proposed Action since less development would be constructed under this Alternative. Under this Alternative fewer noise sensitive receptors would be impacted and there would be fewer days of construction activity. The parking structure would not require as deep of excavation as the proposed subterranean parking structure. Less blasting would likely be necessary which would lessen overall blasting vibration at nearby sensitive receptors. With the incorporation of mitigation measures noise and vibration impacts would be less than significant.	Under Alternative 3 construction activities would be similar to the Proposed Action, since the scope of development would be the same. With the implementation of mitigation measures construction noise and vibration impacts would be less than significant.	No development would occur within the project site under this Alternative and the existing tent would be removed. Construction noise impacts would be less than significant.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>The potential composite noise level impact at sensitive land uses was evaluated by accounting for individual noise sources (e.g., loading dock, ice skating rink, etc.) present on the site and comparing the composite noise level to the Town’s standards and background ambient noise level. The maximum project related noise increase is below the 5 dBA significance threshold, where existing noise levels are less than 60 dB L_{dn} and below the 3 dBA significance threshold, where existing noise levels are greater than 60 dB L_{dn}. Operational noise from on-site noise sources would have a less than significant impact on all nearby residential areas.</p>	<p>Alternative 1 would result in a reduction in noise levels associated with operational on-site equipment and activity compared with the Proposed Action. No outdoor shows and events would occur with this Alternative. On-site equipment and activity would result in a less than significant impact. An expected reduction of 37 percent in traffic volumes associated with alternative 1 would result in a slight reduction in comparison to the Proposed Action traffic noise. This Alternative would result in a less than significant roadway noise impact.</p>	<p>Alternative 2 would result in a reduction in noise levels associated with operational on-site equipment and activity. A reduction of 11 percent in traffic volumes associated with Alternative 2 would result in a slight reduction in comparison to the Proposed Action traffic noise. Alternative 2 would result in a less than significant roadway noise impact.</p>	<p>On-site equipment and activity areas would be the same under Alternative 3 as would occur with the Proposed Action. The on-site equipment and activity noise levels would be less than significant. Total daily traffic would be the same as the Proposed Action. Alternative 3 would result in a less than significant roadway noise impact.</p>	<p>Alternative 4 would not generate any new or increased sources of noise on the project site or within the surrounding vicinity. Impacts would be less than significant.</p>
<p><u>Biological Resources</u></p>				
<p>The Proposed Action would result in less than significant impacts to sensitive plant species, sensitive wildlife species, and sensitive plant communities. No impacts are</p>	<p>The footprint of Alternative 1 would be somewhat smaller than the Proposed Action. Alternative 1 would result in similar impacts to the impacts described for the Proposed</p>	<p>The footprint of Alternative 2 would be the same as that of the Proposed Action. Implementation of Alternative 2 would result in the same potential impacts as the</p>	<p>The footprint of Alternative 3 would be the same as that of the Proposed Action. Implementation of Alternative 3 would result in the same potential impacts as the</p>	<p>Implementation of the No Action Alternative would avoid any impacts to biological resources within the project site.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>expected to jurisdictional features as a result of the proposed project; however, mitigation measures are recommended to protect the drainage adjacent to northwestern boundary of the project site. Compliance with Town guidelines for the protection of jurisdictional trees would reduce any impacts to a less than significant level. Mitigation measures for the protection of nesting birds would reduce any potential impacts to a less than significant level.</p>	<p>Action; however, impacts to common vegetation communities would be reduced.</p>	<p>Proposed Action.</p>	<p>Proposed Action.</p>	
<p><u>Cultural Resources</u></p>	<p>The footprint of Alternative 1 would be somewhat smaller than the Proposed Action. However, as this Alternative would require excavation more than three feet below the present ground surface of the site. Therefore, previously undiscovered archaeological deposits may be encountered and disturbed. With implementation of the</p>	<p>The footprint of Alternative 2 would be the same as that of the Proposed Action. Since this Alternative would require excavation more than three feet below the present ground surface within the site, previously undiscovered archaeological deposits may be encountered and disturbed. With implementation of the mitigation measures impact on</p>	<p>The footprint of Alternative 3 would be the same as the Proposed Action. Since this Alternative would require excavation more than three feet below the present ground surface of the project site, previously undiscovered archaeological deposits may be encountered and disturbed. With implementation of the mitigation measures impact on</p>	<p>Implementation of the No Action Alternative would include the removal of the tent and some minor regrading. Because of the potential for subsurface cultural deposits demonstrated by excavations at nearby site CA-MNO-1529, monitoring is recommended for any</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
determine the effect of excavation on those resources. With implementation of the mitigation measures impact of the Proposed Action on undiscovered resources would be reduced to a less than significant level.	mitigation measures impacts on undiscovered resources would be reduced to a less than significant level.	undiscovered resources would be reduced to a less than significant level.	undiscovered resources would be reduced to a less than significant level.	future ground-disturbing activity on the project site that would extend to depths greater than three feet below the current ground surface.

Employment, Population, and Housing

Construction employment associated with the Proposed Action is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, a mitigation measure is recommended that would provide for the temporary housing of such employees, which would reduce the impact to less than significant.	Construction employment associated with Alternative 1 is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, a mitigation measure is recommended that would provide for the temporary housing of such employees, which would reduce the impact to less than significant.	Construction employment associated with Alternative 2 is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, a mitigation measure is recommended that would provide for the temporary housing of such employees, which would reduce the impact to less than significant. The proposed recreational, commercial, and lodging facilities would generate service-related employment opportunities, which in turn would generate a demand for	Construction employment associated with Alternative 3 is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, a mitigation measure is recommended that would provide for the temporary housing of such employees, which would reduce the impact to less than significant. The proposed recreational, commercial, and lodging facilities would generate service-related employment opportunities, which in turn would generate a demand for	Alternative 4 would result in a minimal amount of construction, primarily the removal of the existing tent structure. Therefore, no impacts to housing would occur during construction. Implementation of Alternative 4 would not provide lodging for the transient population. In addition, Alternative 4 would not generate additional employment opportunities within the Town.
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Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
would generate a demand for affordable housing. During operation, the Proposed Action would result in a less than significant impact, as the applicant would comply with the Town's requirements relative to affordable housing.	affordable housing. During operation, Alternative 1 would result in a less than significant impact, as the applicant would comply with the Town's requirements relative to affordable housing.	affordable housing. During operation, Alternative 2 would result in a less than significant impact, as the applicant would comply with the Town's requirements relative to affordable housing.	would generate a demand for affordable housing. During operation, Alternative 3 would result in a less than significant impact, as the applicant would comply with the Town's requirements relative to affordable housing.	

Aesthetics

Construction vehicle trips could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. However, construction activities would be short-term and with the incorporation of recommended mitigation measures, the impact of construction activities to the site's visual quality and character would be less than significant pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that no significant adverse visual	Construction vehicle trips could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. However, construction activities would be short-term and with the incorporation of recommended mitigation measures, the impact of construction activities to the site's visual quality and character would be less than significant pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that no significant adverse visual	Construction vehicle trips could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. However, construction activities would be short-term and with the incorporation of recommended mitigation measures, the impact of construction activities to the site's visual quality and character would be less than significant pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that no significant adverse visual	Construction vehicle trips could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. However, construction activities would be short-term and with the incorporation of recommended mitigation measures, the impact of construction activities to the site's visual quality and character would be less than significant pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that no significant adverse visual	The on site tent would be removed under this Alternative. This action would not result in short-term aesthetics impacts. No additional aesthetics impacts would occur beyond existing conditions.
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Table 5 (Continued)

Summary and Comparison of Environmental Consequences

<u>Proposed Action</u>	<u>Alternative 1 - Development in Accordance with Existing Regulations</u>	<u>Alternative 2 - Reduced Intensity Alternative</u>	<u>Alternative 3 - Alternate Design Alternative</u>	<u>Alternative 4 - No Action</u>
impacts would occur pursuant to NEPA.	impacts would occur pursuant to NEPA.	impacts would occur pursuant to NEPA.	impacts would occur pursuant to NEPA.	
The Proposed Action would be consistent with the “Maximum Modification” management objective assigned to the project site as determined by the Scenic Management System (SMS) Methodology. Impacts to the visual character and quality of the site and its surrounding would be less than significant under CEQA. Similarly, no adverse impacts would occur under NEPA.	Alternative 1 would be consistent with the “Maximum Modification” management objective assigned to the project site as determined by SMS Methodology. Impacts to the visual character and quality of the site and its surrounding would be less than significant under CEQA. Similarly, no adverse impacts would occur under NEPA.	Alternative 2 would be consistent with the “Maximum Modification” management objective assigned to the project site as determined by the SMS Methodology. Impacts to the visual character and quality of the site and its surrounding would be less than significant under CEQA. Similarly, no adverse impacts would occur under NEPA.	Alternative 3 would be consistent with the “Maximum Modification” management objective assigned to the project site as determined by the SMS Methodology. Impacts to the visual character and quality of the site and its surrounding would be less than significant under CEQA. Similarly, no adverse impacts would occur under NEPA.	The operation of the ski facility would not change from existing conditions, with the exception that the on site tent would be removed. Therefore, no visual quality impacts would occur.
No significant impacts to scenic views under both CEQA and NEPA would occur at all of the eight identified Key Observation Points (KOPs), with the exception of KOP #2. The valued visual resources to the south, including the Sherwin Mountains, would be substantially obstructed from KOP #2. Visual impacts at KOP #2 would be significant under CEQA standards only, not NEPA. As no mitigation measures are provided to	Scenic views of valued visual resources under this Alternative would not be substantially altered at all of the eight identified KOPs. Thus, less than significant impacts would occur under CEQA. Foreground views would be consistent with the urban context of the existing setting. Middleground views of the valued visual resources, including the Sherwin Mountains to the south, would be partially	Scenic views of valued visual resources under this Alternative would not be substantially altered at all of the eight identified KOPs. Thus, less than significant impacts would occur under CEQA. Foreground views would be consistent with the urban context of the existing setting. Middleground views of the valued visual resources, including the Sherwin Mountains to the south, would be partially retained from this	No significant impacts to scenic views under both CEQA and NEPA would occur at all of the eight identified KOPs, with the exception of KOP #2. The valued visual resources to the south, including the Sherwin Mountains, would be substantially obstructed from KOP #2. Visual impacts at KOP #2 would be significant under CEQA standards only, not NEPA. As no mitigation measures are provided to	The operation of the ski facility would not change from existing conditions, with the exception that the on site tent facility would be removed. Therefore, no new view impacts would occur.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

<u>Proposed Action</u>	<u>Alternative 1 - Development in Accordance with Existing Regulations</u>	<u>Alternative 2 - Reduced Intensity Alternative</u>	<u>Alternative 3 - Alternate Design Alternative</u>	<u>Alternative 4 - No Action</u>
<p>reduce the significance of impacts to the identified visual resources from this vantage point, view impacts from KOP #2 would be significant and unavoidable under CEQA.</p>	<p>retained from this KOP, which is consistent with the visual quality objective for Management Prescription Area #13. No adverse visual impacts would occur at all eight KOPs pursuant to NEPA.</p>	<p>KOP, which is consistent with the visual quality objective for Management Prescription Area #13. No adverse visual impacts would occur at all eight KOPs pursuant to NEPA.</p>	<p>reduce the significance of impacts to the identified visual resources from this vantage point, view impacts from KOP #2 would be significant and unavoidable under CEQA.</p>	
<p>Additional northbound traffic along this Majestic Pines Road could result in significant impacts under CEQA and NEPA to single-family residences to the north of Majestic Pines Road from vehicle headlights. In addition, potentially significant light intrusion impacts from the project site to the single-family residences to the north and condominium/resort units to the south and southwest could occur. With implementation of the prescribed mitigation measures requiring enhancement of the berm along the northern side of Majestic Pines Road and an approved outdoor lighting plan and landscaping, the Proposed Action would result in less</p>	<p>Additional northbound traffic along this Majestic Pines Road could result in significant impacts under CEQA and NEPA to single-family residences to the north of Majestic Pines Road from vehicle headlights. In addition, potentially significant light intrusion impacts from the project site to the single-family residences to the north and condominium/resort units to the south and southwest could occur. With implementation of the prescribed mitigation measures requiring enhancement of the berm along the northern side of Majestic Pines Road and an approved outdoor lighting plan and landscaping, this</p>	<p>Additional northbound traffic along this Majestic Pines Road could result in significant impacts under CEQA and NEPA to single-family residences to the north of Majestic Pines Road from vehicle headlights. In addition, potentially significant light intrusion impacts from the project site to the single-family residences to the north and condominium/resort units to the south and southwest could occur. With implementation of the prescribed mitigation measures requiring enhancement of the berm along the northern side of Majestic Pines Road and an approved outdoor lighting plan and landscaping, this Alternative would result in less than</p>	<p>Additional northbound traffic along this Majestic Pines Road could result in significant impacts under CEQA and NEPA to single-family residences to the north of Majestic Pines Road from vehicle headlights. In addition, potentially significant light intrusion impacts from the project site to the single-family residences to the north and condominium/resort units to the south and southwest could occur. With implementation of the prescribed mitigation measures requiring enhancement of the berm along the northern side of Majestic Pines Road and an approved outdoor lighting plan and landscaping, this</p>	<p>The operation of the facility would not change from existing conditions, with the exception that the on site tent facility would be removed. Therefore, no new lighting impacts would occur.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>than significant lighting impacts under CEQA. Similarly, the prescribed mitigation measures would ensure that no significant adverse impacts from vehicular headlights and operational lighting would occur pursuant to NEPA.</p>	<p>Alternative would result in less than significant lighting impacts under CEQA. Similarly, the prescribed mitigation measures would ensure that no significant adverse impacts from vehicular headlights and operational lighting would occur pursuant to NEPA.</p>	<p>significant lighting impacts under CEQA. Similarly, the prescribed mitigation measures would ensure that no significant adverse impacts from vehicular headlights and operational lighting would occur pursuant to NEPA.</p>	<p>Alternative would result in less than significant lighting impacts under CEQA. Similarly, the prescribed mitigation measures would ensure that no significant adverse impacts from vehicular headlights and operational lighting would occur pursuant to NEPA.</p>	
<p>Daytime views would not be affected by glare emitted from the project site and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.</p>	<p>Daytime views would not be affected by glare emitted from the project site and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.</p>	<p>Daytime views would not be affected by glare emitted from the project site and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.</p>	<p>Daytime views would not be affected by glare emitted from the project site and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.</p>	<p>The operation of the facility would not change from existing conditions with the exception that the on site tent facility would be removed. Therefore, no new glare impacts would occur.</p>
<p>Shading would not adversely affect residents and persons utilizing the Mammoth Loop Trail to the north. However, shading could result in significant adverse safety hazards (i.e., black ice) along Majestic Pines Road. With implementation of the prescribed mitigation requiring implementation of a snow plowing and cindering plan or</p>	<p>Shading would not adversely affect residents and persons utilizing the Mammoth Loop Trail to the north. However, shading could result in significant adverse safety hazards along Majestic Pines Road. With implementation of the prescribed mitigation requiring implementation of a snow plowing and cindering plan or installation of heat</p>	<p>Shading would not adversely affect residents and persons utilizing the Mammoth Loop Trail to the north. However, shading could result in significant adverse safety hazards along Majestic Pines Road. With implementation of the prescribed mitigation requiring implementation of a snow plowing and cindering plan or installation of heat</p>	<p>Shading would not adversely affect residents and persons utilizing the Mammoth Loop Trail to the north. However, shading could result in significant adverse safety hazards along Majestic Pines Road. With implementation of the prescribed mitigation requiring implementation of a snow plowing and cindering plan or installation of heat</p>	<p>The operation of the facility would not change from existing conditions, with the exception that the on site tent facility would be removed. Therefore, no new shading impacts would occur.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
installation of heat traced pavement, the Proposed Action would result in less than significant shading impacts.	traced pavement, this Alternative would result in less than significant shading impacts.	traced pavement, this Alternative would result in less than significant shading impacts.	traced pavement, this Alternative would result in less than significant shading impacts.	
<u>Hydrology and Water Quality</u>				
Runoff would not exceed the capacity of existing or planned drainage systems. With implementation of the proposed drainage and grading plans, impacts regarding hydrology and drainage would be less than significant.	Under Alternative 1, runoff would not exceed the capacity of existing or planned drainage systems. The grading and drainage plans for Alternative 1 would ensure that hydrology and drainage impacts would be less than significant.	Under Alternative 2, runoff would not exceed the capacity of existing or planned drainage systems. The grading and drainage plans for Alternative 2 would ensure that hydrology and drainage impacts would be less than significant.	Under Alternative 3, runoff would not exceed the capacity of existing or planned drainage systems. The grading and drainage plans for Alternative 3 would ensure that hydrology and drainage impacts would be less than significant.	Alternative 4 would result in the removal of the existing tent. The operation of the ski area would not change from existing conditions. Therefore, Alternative 4 would result in no new operational hydrology or drainage impacts.
Dewatering activities associated with construction of the subterranean parking garage could significantly impact groundwater supplies or substantially interfere with groundwater recharge. Compliance with the Lahontan Regional Water Quality Control Board (RWQCB) and Town regulations and implementation of the prescribed mitigation measures requiring the monitoring of the	This Alternative would not require dewatering activities during construction activities. Thus, no impacts would occur regarding water supply or recharge during construction activities.	Dewatering activities associated with construction of the subterranean parking garage could significantly impact groundwater supplies or substantially interfere with groundwater recharge. Compliance with the Lahontan Regional Water Quality Control Board (RWQCB) and Town regulations and implementation of the prescribed mitigation measures requiring the monitoring of the	Dewatering activities associated with construction of the subterranean parking garage could significantly impact groundwater supplies or substantially interfere with groundwater recharge. Compliance with the RWQCB and Town regulations and implementation of the prescribed mitigation measures requiring the monitoring of the existing on site well and installation of	Alternative 4 would result in the removal of the existing tent. However, no construction-related impacts regarding groundwater recharge and supply would occur.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>existing on site well and installation of new wells would ensure that construction activities, including dewatering, would not substantially deplete groundwater supplies or interfere with groundwater recharge. Thus, impacts regarding groundwater supply and recharge during construction would be less than significant.</p>		<p>existing on site well and installation of new wells would ensure that construction activities, including dewatering, would not substantially deplete groundwater supplies or interfere with groundwater recharge. Thus, impacts regarding groundwater supply and recharge during construction would be less than significant.</p>	<p>new wells would ensure that construction activities, including dewatering, would not substantially deplete groundwater supplies or interfere with groundwater recharge. Thus, impacts regarding groundwater supply and recharge during construction would be less than significant.</p>	
<p>During operation, due to the small increase in impermeable area combined with the fact that groundwater flow through the site area should be continuous and not static, this increase would not substantially affect groundwater recharge. Furthermore, the Proposed Action would not require the use of groundwater and, thus, would not deplete groundwater supplies. Thus, less than significant impacts regarding groundwater supply and recharge would occur during</p>	<p>At buildout of this Alternative there would be a negligible change in the amount of impermeable surface when compared to existing site conditions, would not substantially affect groundwater recharge. Furthermore, this Alternative would not require the use of groundwater and, thus, would not deplete groundwater supplies. Thus, less than significant impacts regarding groundwater supply and recharge would occur during</p>	<p>At buildout of this Alternative there would be a negligible change in the amount of impermeable surface when compared to existing site conditions, would not substantially affect groundwater recharge. Furthermore, this Alternative would not require the use of groundwater and, thus, would not deplete groundwater supplies. Thus, less than significant impacts regarding groundwater supply and recharge would occur during</p>	<p>During operation, due to the small increase in impermeable area combined with the fact that groundwater flow through the site area should be continuous and not static, this increase would not substantially affect groundwater recharge. Furthermore, this Alternative would not require the use of groundwater and, thus, would not deplete groundwater supplies. Thus, less than significant impacts regarding groundwater supply and recharge would occur during</p>	<p>The operation of the facility would not change from existing conditions, therefore no new impacts regarding groundwater recharge and supply would occur.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
operation of the Proposed Action.	operation of this Alternative.	operation of this Alternative.	operation of this Alternative.	
Construction activities associated with the Proposed Action could result in potentially significant short-term water quality impacts. However, compliance with regulatory requirements, including the Construction General Permit that requires implementation of Best Management Practices (BMPs) identified in a Storm Water Pollution Prevention Plan (SWPPP) would reduce short-term construction impacts to surface and groundwater quality to a less than significant level.	Construction activities associated with this Alternative could result in potentially significant short-term water quality impacts. However, compliance with regulatory requirements, including the Construction General Permit that requires implementation BMPs identified in a SWPPP would reduce short-term construction impacts to surface and groundwater quality to a less than significant level.	Construction activities associated with this Alternative could result in potentially significant short-term water quality impacts. However, compliance with regulatory requirements, including the Construction General Permit that requires implementation BMPs identified in a SWPPP would reduce short-term construction impacts to surface and groundwater quality to a less than significant level.	Construction activities could result in potentially significant short-term water quality impacts. However, compliance with regulatory requirements, including the Construction General Permit that requires implementation of BMPs identified in a SWPPP would reduce short-term construction impacts to surface and groundwater quality to a less than significant level.	Alternative 4 would result in the removal of the existing tent. However, no construction-related impacts regarding water quality would occur.
Operation of the Proposed Action could result in potentially significant water quality impacts as a result of vehicle-related pollutants in the subterranean parking garage and runoff from the project site. Implementation of the prescribed mitigation measures requiring the	Since Alternative 1 would not include a subterranean parking garage, no operational water quality impacts would occur from vehicle pollutants in the garage. Operation could result in potentially significant water quality impacts as a result of runoff	Operation of Alternative 2 could result in potentially significant water quality impacts as a result of vehicle-related pollutants in the subterranean parking garage and runoff from the project site. Implementation of the prescribed mitigation measures requiring the installation of	Operation of Alternative 3 could result in potentially significant water quality impacts as a result of vehicle-related pollutants in the subterranean parking garage and runoff from the project site. Implementation of the prescribed mitigation measures requiring the	Alternative 4 would result in the removal of the existing tent. However, the operation of the ski facility would not change from existing conditions, therefore no new water quality impacts as a result of operational activities would occur.

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action	
<p>installation of sump pump system in the parking garage that removes contaminants and on-site detention/retention facilities to remove pollutants from rainfall, as well as compliance with the applicable regulatory requirements, including preparation of a SWPPP, would reduce potentially significant impacts to water quality during operation to a less than significant level.</p>	<p>from the project site. This Alternative would be subject to regulatory requirements of the NPDES, Lahontan RWQCB, and Town of Mammoth Lakes that would minimize runoff pollutants at the project site. Nonetheless, mitigation requiring the installation of on-site detention/retention facilities to remove pollutants from rainfall would be required to reduce potentially significant water quality impacts during operations to a less than significant level.</p>	<p>sump pump system in the parking garage that removes contaminants and on-site detention/retention facilities to remove pollutants from rainfall, as well as compliance with the applicable regulatory requirements, including preparation of a SWPPP, would reduce potentially significant impacts to water quality during operation of this Alternative to a less than significant level.</p>	<p>installation of sump pump system in the parking garage that removes contaminants and on-site detention/retention facilities to remove pollutants from rainfall, as well as compliance with the applicable regulatory requirements, including preparation of a SWPPP, would reduce potentially significant impacts to water quality during operation of this Alternative to a less than significant level.</p>		
<p><u>Water Supply</u></p>	<p>Implementation of the Proposed Action would result in a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet</p>	<p>Operation of the commercial uses under Alternative 1 would generate an average potable water demand of 5,250 gallons per day (gpd), or 5.9 acre feet, and a peak water demand of 9,100 gpd. MCWD would be able to meet the water demand of the Town plus Alternative 1 at 2009 buildout of the site. Therefore, impacts to water</p>	<p>Alternative 2 would generate a net total potable water demand of 10,950 gpd or 12.3 acre-feet per year for the residential option, with a peak net water demand of 16,030 gpd. The hotel only option would generate a net total potable water demand of 16,590 gpd or 18.6 acre-feet per year, with a peak net water demand of 26,920 gpd. MCWD would be</p>	<p>Alternative 3 would generate a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet per year, with a peak net water</p>	<p>Under the No Action Alternative, no demand for water supply would occur as the existing uses on the site would be removed. As such, the No Project Alternative would generate a less than significant impact to water supply and infrastructure.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

<u>Proposed Action</u>	<u>Alternative 1 - Development in Accordance with Existing Regulations</u>	<u>Alternative 2 - Reduced Intensity Alternative</u>	<u>Alternative 3 - Alternate Design Alternative</u>	<u>Alternative 4 - No Action</u>
<p>per year, with a peak net water demand of 43,760 gpd. MCWD would be able to meet the water demand of the Town plus the Proposed Action at 2009 buildout of the site. Therefore, impacts to water supply would be reduced to a less than significant level in normal, single dry, and multiple dry water years with the incorporation of mitigation measures relative to water infrastructure.</p>	<p>supply would be reduced to a less than significant level in normal, single dry, and multiple dry water years.</p>	<p>able to meet the water demand of the Town plus Alternative 2 at 2009 buildout of the site. Therefore, impacts to water supply would be reduced to a less than significant level in normal, single dry, and multiple dry water years.</p>	<p>demand of 43,760 gpd. MCWD would be able to meet the water demand of the Town plus Alternative 3 at 2009 buildout of the site. Therefore, impacts to water supply would be reduced to a less than significant level in normal, single dry, and multiple dry water years with the incorporation of mitigation measures relative to water infrastructure.</p>	
<p><u>Wastewater</u></p>	<p>Wastewater generated by Alternative 1 would result in a less than significant impact to the existing wastewater infrastructure and facilities with implementation of similar mitigation measures as the Proposed Action. The construction and operation of Alternative 1 would generate 9,800 gallons per day of wastewater on a peak day which would be accommodated by the 4.9 mgd capacity of the existing</p>	<p>Wastewater generated by Alternative 2 would result in a less than significant impact to the existing wastewater infrastructure and facilities with implementation of similar mitigation measures as the Proposed Action. The construction and operation of Alternative 2 would generate 13,800 gallons per day of wastewater on a peak day which would be accommodated by the 4.9 mgd capacity of the existing</p>	<p>Wastewater generated by Alternative 3 would result in a less than significant impact on the existing wastewater infrastructure and facilities with implementation of the prescribed mitigation measure requiring MCWD to upgrade and have operational Groundwater Treatment Plant No. 2 prior to the issuance of a certificate of occupancy. This upgrade would increase the capacity of the existing sewer lines and accommodate</p>	<p>This Alternative would result in less than significant impacts to the existing wastewater infrastructure and wastewater facilities as no wastewater would be generated on-site with the removal of the existing tent.</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

<u>Proposed Action</u>	<u>Alternative 1 - Development in Accordance with Existing Regulations</u>	<u>Alternative 2 - Reduced Intensity Alternative</u>	<u>Alternative 3 - Alternate Design Alternative</u>	<u>Alternative 4 - No Action</u>
<p>41,630 gallons per day of wastewater that would be generated by the Proposed Action on a peak day.</p> <p>The existing wastewater treatment facility currently has a capacity of 4.9 million gallons per day which would be able to accommodate the wastewater generated by the Proposed Action. Thus, impacts to wastewater treatment facilities would be less than significant.</p> <p>The Proposed Action would comply with applicable policies and regulations as well as the LRWQCB wastewater treatment requirements during the construction and operation of the Proposed Action. Thus, construction and operation impacts regarding wastewater would be less than significant.</p>	<p>wastewater treatment facility.</p> <p>Alternative 1 would comply with applicable policies and regulations as well as the LRWQCB wastewater treatment requirements during construction and operation. Thus, construction and operation impacts regarding wastewater would be less than significant.</p>	<p>wastewater treatment facility.</p> <p>Alternative 2 would comply with applicable policies and regulations as well as the LRWQCB wastewater treatment requirements during the construction and operation. Thus, construction and operation impacts regarding wastewater would be less than significant.</p>	<p>the 30,700 gallons per day of wastewater that would be generated by this Alternative on a peak day.</p> <p>The existing wastewater treatment facility currently has a capacity of 4.9 million gallons per day which would be able to accommodate the wastewater generated by Alternative 3. Thus, impacts to wastewater treatment facilities would be less than significant.</p> <p>This Alternative would comply with applicable policies and regulations as well as the LRWQCB wastewater treatment requirements during the construction and operation. Thus, construction and operation impacts regarding wastewater would be less than significant.</p>	<p>The No Action Alternative would result in less than significant impacts as a result of the reduction in</p>
<p><u>Stormwater</u></p>	<p>Impacts to stormwater drainage facilities from Alternative 1 would be reduced to a less than</p>	<p>Impacts to stormwater drainage facilities from Alternative 2 would be reduced to a less than significant level with the</p>	<p>Impacts to stormwater drainage facilities from Alternative 3 would be reduced to a less than</p>	<p>The No Action Alternative would result in less than significant impacts as a result of the reduction in</p>

Table 5 (Continued)

Summary and Comparison of Environmental Consequences

Proposed Action	Alternative 1 - Development in Accordance with Existing Regulations	Alternative 2 - Reduced Intensity Alternative	Alternative 3 - Alternate Design Alternative	Alternative 4 - No Action
<p>significant level with the installation of two underground detention facilities on-site to capture the first flush of a 20-year intensity storm as well as the Town’s continued upgrades to its existing undersized conveyance pipelines.</p> <p>Stormwater generated on-site would have peak flows of 8.8 cfs which would be conveyed to the Murphy Gulch watershed.</p> <p>Stormwater drainage impact fees would be paid by the applicant as required by the Town’s Municipal Code. The implementation of a SWPPP and BMPs would reduce impacts to a less than significant level. Thus, construction and operation impacts with regard to stormwater drainage facilities would be less than significant.</p>	<p>significant level with the installation of two underground detention facilities on-site to capture the first flush of a 20-year intensity storm as well as the Town’s continued upgrades to its undersized conveyance pipelines.</p> <p>Stormwater drainage impact fees would be paid by the applicant as required by the Town’s Municipal Code. The implementation of a SWPPP and BMPs would reduce impacts to a less than significant level. Thus, construction and operation impacts with regard to stormwater drainage facilities would be less than significant.</p>	<p>installation of two underground detention facilities on-site that would capture the first flush of a 20-year intensity storm, drainage facilities on and off-site and the Town’s continued upgrades to its undersized conveyance pipelines.</p> <p>Stormwater drainage impact fees would be paid by the applicant as required by the Town’s Municipal Code. The implementation of a SWPPP and BMPs would reduce impacts to a less than significant level. Thus, construction and operation impacts with regard to stormwater drainage facilities would be less than significant.</p>	<p>significant level with the installation of two underground detention facilities on-site to capture the first flush of a 20-year intensity storm in addition to the Town’s continued upgrades to its undersized conveyance pipelines.</p> <p>Stormwater drainage impact fees would be paid by the applicant as required by the Town’s Municipal Code. The implementation of a SWPPP and BMPs would reduce impacts to a less than significant level. Thus, construction and operation impacts with regard to stormwater drainage facilities would be less than significant.</p>	<p>stormwater runoff from the project site. However, the Alternative would not result in the installation of underground detention facilities on-site which would decrease peak flows to the stormwater infrastructure thereby increasing the capacity of the system.</p>

Source: PCR Services Corporation, 2006

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

Chapter 3 of this Draft EA/EIR provides the affected environment (existing conditions) associated with the Proposed Action and the Alternatives as they are described in Chapter 2. Chapter 3 is organized by environmental issue area as follows:

- 3.2 Land Use
- 3.3 Transportation
- 3.4 Air Quality
- 3.5 Noise
- 3.6 Biological Resources
- 3.7 Cultural Resources
- 3.8 Employment, Population, and Housing
- 3.9 Aesthetics
- 3.10 Hydrology and Water Quality
- 3.11 Water Supply
- 3.12 Wastewater
- 3.13 Stormwater

Detailed technical analyses were prepared for some of the environmental issue areas. The relevant technical information supporting the documentation is provided in appendices to this document. The appendices include:

- Appendix A Notice Of Preparation/Notice Of Intent (NOP/NOI), Initial Study, And Comments on the NOP/NOI
- Appendix B Traffic Study
- Appendix C Air Quality Technical Worksheets
- Appendix D Noise Technical Worksheets
- Appendix E Floral And Faunal Compendia
- Appendix F Cultural Resources Technical Report
- Appendix G Detailed Height and Shade/Shadow Analysis for Proposed Action
- Appendix H Preliminary Hydrogeologic Investigation; Preliminary Drainage Study; Storm Water Pollution Prevention Plan
- Appendix I Site Plan, Height Analysis, Visual Simulations and Shade/Shadow Analysis for Alternate Design Alternative

The determination with regard to “significant” varies between NEPA and CEQA. Under NEPA, the term significant takes into account both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole, the affected region, the affected interests, and the locality. In the case of a site-specific action, significance depends upon the effects in the locale. Both short- and long-term effects are relevant. Intensity refers to the severity of the impact. In determining intensity, the following factors are considered: 1) impacts that may be both beneficial and adverse; 2) the degree to which the action affects public health and safety; 3) unique geographic characteristics, such as proximity to cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas; 4) the degree to which the effects on the quality of the human environment are likely to be highly controversial; 5) the degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks; the degree to which the action may establish precedent; 6) whether the action is related to other actions with individually insignificant but cumulatively significant impacts; 7) the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register or may cause loss or destruction of significant scientific, cultural, or historical resources; 8) the degree to which the action may adversely affect an endangered or threatened species or habitat; and 9) whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

Under CEQA, a significant effect on the environment means a substantial, or potentially substantial, adverse change in a physical condition within the area affected by the project. An economic or social change by itself is not considered a significant effect on the environment. However, a social or economic change related to a physical change may be considered in determining whether the physical change is significant.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.2 LAND USE

The section discusses the regulations and policies that are applicable to the project. Given that the site lies within the Town boundary and on USDA Forest Service (USFS) land, this section considers applicable plans for each agency. The section provides an analysis of the project's consistency with the Town's General Plan, the Town's 2005 Draft General Plan Update, the Juniper Ridge Master Plan, the Town's Zoning Code, the Inyo National Forest Land Resources Management Plan, and the Mammoth Mountain Ski Area (MMSA) Development Plan. In addition, the section also provides an analysis of the project's compatibility with surrounding uses.

3.2.1 REGULATORY FRAMEWORK

The project site consists of private and public lands, which together comprise approximately 8.67 acres. As shown in Figure 5 on page 19, in Chapter 2, Proposed Action and Alternatives, the private land owned by MMSA, which includes Lot 5 and Lot 87, totals approximately 3.49 acres. The portion of Lot 5 planned for development is 3.03 acres and includes Well 16, which is 0.06 acres. The Mammoth Community Water District (MCWD) holds fee title to the Well 16 parcel. The portion of Lot 87 within the development area totals 0.38 acres. In addition, approximately 1.02 acres of the project site comprise portions of Meridian Boulevard and Majestic Pines Road.

Goals and policies contained in the Town of Mammoth Lakes General Plan (1987) are applicable to the project. In addition, the project site is also located within the Juniper Springs Master Plan Area, which contains development standards specific to that area. Finally, the project is subject to development regulations set forth in Title 17, the Zoning Code of the Town's Municipal Code.

Approximately 4.1 acres, which cover portions of Lot 1, Lot 6, and Lot 7, are lands located within the Inyo National Forest and are administered by the USDA Forest Service. As such, the project is subject to both the Land and Resource Management Plan of the Inyo National Forest and the Special Permit under which the existing recreational facility operates. The MMSA Development Plan provides the long-range plan for build out of the MMSA facilities, including Eagle Lodge.

Privately Owned Land

The project would be subject to goals and policies contained within the Land Use Element of the Town of Mammoth Lakes General Plan, which was adopted in 1987. The Town is currently in the process of revising its General Plan. While the 2005 Draft General Plan Update is underway, it has yet to be formally adopted. Both the 1987 General Plan and the Update are discussed below.

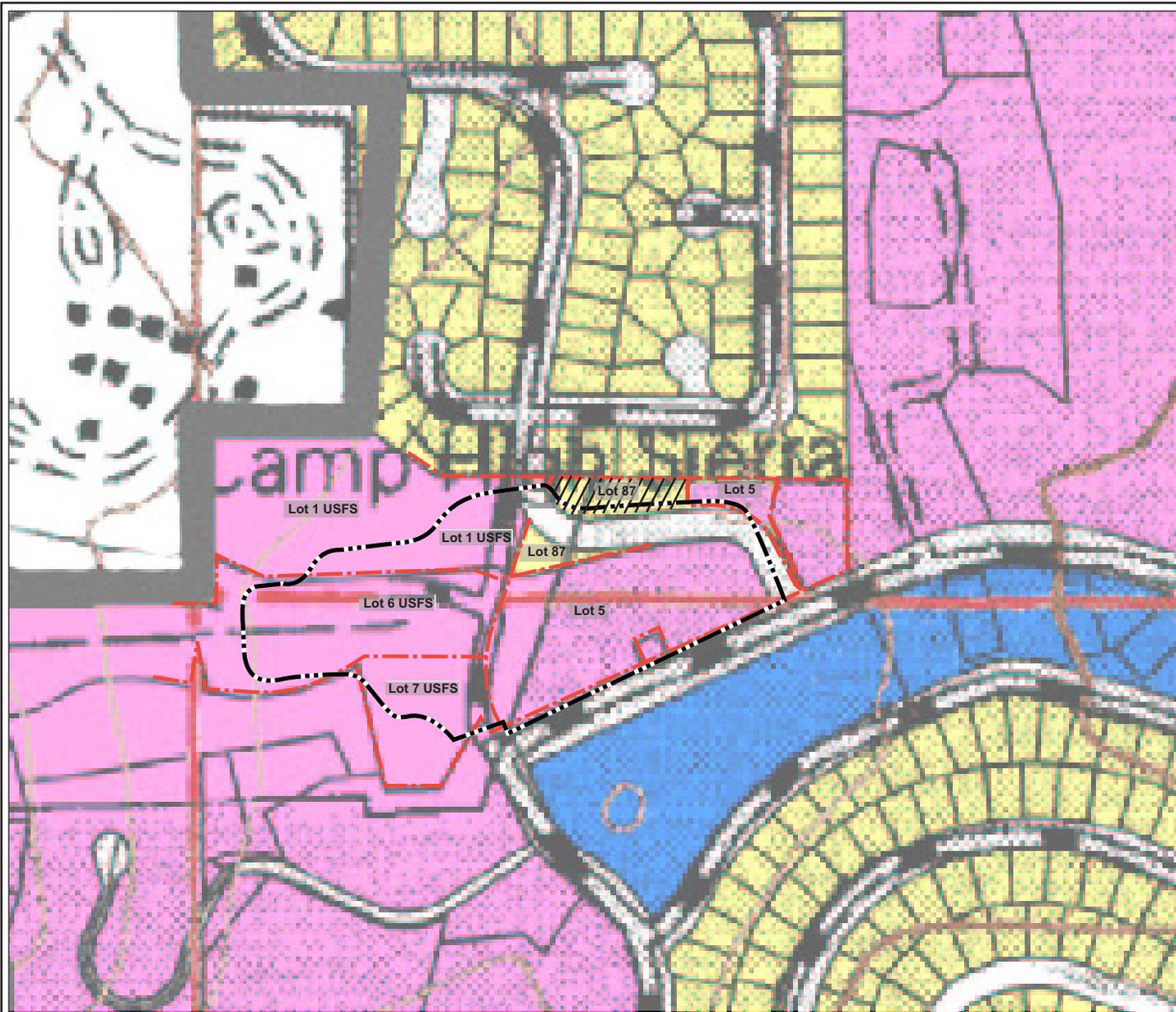
a. The Town of Mammoth Lakes General Plan (1987)

The Town of Mammoth Lakes General Plan, which was adopted in 1987, is intended to promote the public health, safety, and general welfare of the community. The General Plan comprises an Introduction and seven elements that each address particular issue areas. The elements include: Land Use, Transportation and Circulation, Housing, Conservation and Open Space, Safety, Noise, and Parks and Recreation. The Town's General Plan contains the goals and policies that guide the community's growth and development. These goals and policies are implemented through the Town's Municipal Code. Goals and policies from the Land Use Element that are relevant to the proposed project are discussed in this section. For a discussion regarding other applicable General Plan policies, please see Section 3.3, Transportation; Section 3.4, Air Quality; Section 3.5, Noise; Section 3.6, Biological Resources; Section 3.7, Cultural Resources; Section 3.8, Population, Housing and Employment; Section 3.9, Aesthetics; Section 3.10, Hydrology; Section 3.11, Water Supply; Section 3.12, Wastewater; and Section 3.13, Stormwater of this Draft EA/EIR.

(1) Land Use Element

As shown in Figure 8 on page 65, the project includes a General Plan amendment that would change the designation of Lot 87 from Low-Density Residential to Resort. The Low-Density Residential designation allows residential uses with a density ranging from three to five dwelling units per acre. When Majestic Pines Road was realigned in the 1990s, Lot 87 was part of the Mammoth Vista I single family subdivision north of Majestic Pines Road. However, the land south of those homes was not developed following the realignment, and no changes were made to the General Plan designation of the property.

The Resort designation allows mixed visitor-oriented uses, such as visitor housing/lodging and tourist-oriented commercial and recreational uses. Housing densities within the Resort designation are allowed to range from six to eight units per acre, with one condominium unit being equivalent to two hotel/motel units. The General Plan defines a dwelling unit as three sleeping areas (bedrooms or lofts) in all multifamily designations. Commercial development is encouraged to support the residential uses within the same resort

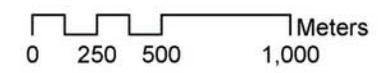


LEGEND:

- Project Boundary
- Lot Lines

Explanation

- High Density Residential
- Low Density Residential
- Resort
- National Forest Lands
- Area of Proposed Redesignation for Low Density Residential & Resort



Base Maps: Old Mammoth, Mammoth Mountain, Crystal Crag & Bloody Mountain
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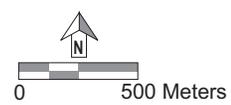


Figure 8
Existing Land Use Designations
(General Plan 1987)

Source: Town of Mammoth Lakes, PCR Services Corporation, 2006

complex. Amendment 97-2, Exhibit 1 of the General Plan limits the intensity of development through the use of floor area ratio (FAR).¹⁵ As it is applied by the Town, FAR of the support commercial cannot exceed 0.1 square feet of commercial floor area for each square foot of land area of resort development within the Juniper Springs Master Plan. The Juniper Springs Master Plan is discussed in further detail below. The amendment was approved to inhibit large shopping malls, yet allow for a balance of commercial development within the Town.

The Land Use Element designates particular areas in the Town as “activity nodes.” The purpose of designating activity nodes is to plan development around these nodes “with activities appropriate for the area [that] may include hotel and motel room development, with recreational amenities, appropriate tourist commercial space, overhead and surface transit facilities and interconnection to the community’s trail system.”¹⁶ In other words, these activity nodes are intended to be the focal points around which resort and related tourist activities are concentrated. MMSA Chair 15 is indicated as one of five activity nodes of the Town as shown in Figure 17 of the General Plan.

The following are the goals and policies contained in the adopted Land Use Element of the Town’s General Plan that are applicable to the proposed project. The numbers provided are the goal or policy number contained in the Element.

(a) Overall Goals and General Policies

Goals

1. To protect and enhance the natural environment, resources and wildlife habitat of the Mammoth Lakes area.
2. To improve the economic stability of Mammoth Lakes by establishing the community as a year-round destination resort, while preserving the unique natural setting of the community and wildlife habitat which attracts both visitors and residents.
3. To address the needs of the permanent residents of Mammoth Lakes, including the provision of: public facilities and services, improved retail and service commercial development, and adequate housing opportunities.

¹⁵ Floor area ratio is the relationship of square feet of floor area to square feet of land area. A 0.1:1 FAR means that the building would contain 0.1 square feet of floor area for each square foot of land area; or floor area 0.1 times greater than land area.

¹⁶ *Town of Mammoth Lakes General Plan (1987), p. 60.*

General Policies

1. In furtherance of the Overall Goals set forth above, and the General Goals of the General Plan listed on Page 6,¹⁷ it is the policy of the Town that the developable land area designations (all areas not designated Open Space) set forth in this plan and the overall development intensity described herein are to be the ultimate size and intensity for the community and no intensive development (housing, commercial, or industrial) shall take place outside the area designated for such development in this plan.

(b) Recreation and Resort Land Uses

As previously discussed, Lot 5 is designated Resort. While Lot 87 is currently designated Low-Density Residential, policies from that designation are not included since the project would include a General Plan amendment from Low-Density Residential to Resort. Therefore, the following are the applicable goals and policies with regard to recreation and resort land uses that are contained in the Land Use Element of the General Plan:

Goals

1. To develop the Mammoth Lakes community as a quality year-round recreation destination resort.
2. To encourage recreation related development to locate near designated recreation activity [sic] nodes.
3. To increase expenditures per visitor in order to improve and maintain the Mammoth Lakes economy.
4. To support future ski area development in a manner which minimizes impacts on the Town and its natural resources.
5. To support Nordic skiing and winter play developments and activities [sic].
6. To encourage recreation visitor-related commercial to locate or relocate near recreational activity nodes or the transit hub.
7. To encourage more family-oriented recreational activities.

¹⁷ Note: Denotes page 6 in the General Plan, not in this Draft EA/EIR.

Policies

1. Each recreation activity node and related development shall have an architectural theme, and a well integrated design plan which encourages visitors to stay in the designated resort nodes.

(2) Town of Mammoth Lakes Trail System Plan

The Town of Mammoth Lakes adopted a Parks and Recreation Element in 1990 as part of the Town's General Plan. The importance of developing a trails system is emphasized in the Parks and Recreation Element, and following extensive public input, the Town adopted the Mammoth Lakes Trail System Plan in May 1991. While the Plan is a separate document from the General Plan, it is considered an outgrowth of the goals and policies contained within the Parks and Recreation Element of the General Plan. The purpose of the Plan is to provide potential routing locations of the Main Path and associated trails of the system, and to identify challenges, opportunities, and costs involved with implementation of the system. As such, the Plan provides for the conceptual development of a continuous trail system traversing the Town.

Under the Plan, the trails would connect parks and open space areas, and would offer several access points to schools, business hubs, recreation areas, and residential communities. Intended for multi-seasonal use, the trails system could be used for such activities as walking, jogging, biking, and skiing. Some of the trails would pass through public land administered by the Forest Service, and a future loop of the trail, the Mammoth Mountain Trail, was planned for the westernmost portion of the system that would occur on lands associated with MMSA. The Mammoth Mountain Trail would be extended from the point at which the Main Path would end at Meridian Boulevard and Majestic Pines Road.

b. Town of Mammoth Lakes Draft General Plan Update (2005)

The 2005 Draft General Plan Update proposes the adoption of numerous policies and implementation measures to reduce potential impacts associated with land use. The following policies and implementation measures from the 2005 Draft Update would be applicable to the project:

- II.1.B.b.1 Require that new development areas and associated community-wide facilities (open space resources, parks libraries, etc.) be linked and oriented to existing developed areas of the community through road networks, public transit systems, open space systems, bicycle, and pedestrian systems.

- I.3.A.1.a The Town will work with the Inyo National Forest, BLM, LADWP, Mono County, and other regional land management agencies to ensure that surrounding public lands are protected while remaining readily accessible to residents and visitors on a year-round basis, and where feasible trails shall be connected to the larger regional network.
- I.3.A.1.b All new development along adjacent to National Forest Lands shall be required to provide pedestrian access routes.
- I.7.B.a.4 Higher density residential and mixed-use development shall be encouraged adjacent to commercial centers, mountain portals, and transit corridors to reduce vehicle trips.
- VI.1.D.a.1 The Town, through development approvals and other Town programs shall support the development of land use patterns and mixed use developments that integrate residential and non-residential land uses, such that residents and visitors may easily walk or bike to shopping, services, and employment and leisure activities.
- VI.1.D.a.2 Require that new developments are linked to communitywide facilities (open space resources, parks, libraries, etc.) through road networks, public transit systems, open space systems, bicycle, and pedestrian routes.
- VII.1.A.a.6 The Town, through the development approval process, shall require developers to finance and install pedestrian walkways, and multi-use trails in new development, consistent with adopted plans and policies, or as appropriate and necessary to address circulation needs.

c. Juniper Ridge Master Plan

The project site is located in the Juniper Ridge Master Plan (the Master Plan) Area. The Master Plan Area is generally located in the westernmost portion of the Town and within the Town's Urban Growth Boundary (UGB). The Master Plan was originally adopted in March 1990 and establishes permitted uses and development standards for proposed projects within the Master Plan Area, which comprises approximately 44.45 acres. A district zoning change that amended the boundaries and conditions of approval of the document was adopted by the Town in February 1999.

The Master Plan divides the acreage into five areas. As shown in Figure 9 on page 70, the privately owned portion of the project site is located primarily in Area 4 of the Master Plan. The Master Plan designates Area 4 for parking that would accommodate up to 566 vehicles and 35,000 square feet of support commercial retail space. In addition, the Master Plan limits the

LEGEND

--- Project Boundary

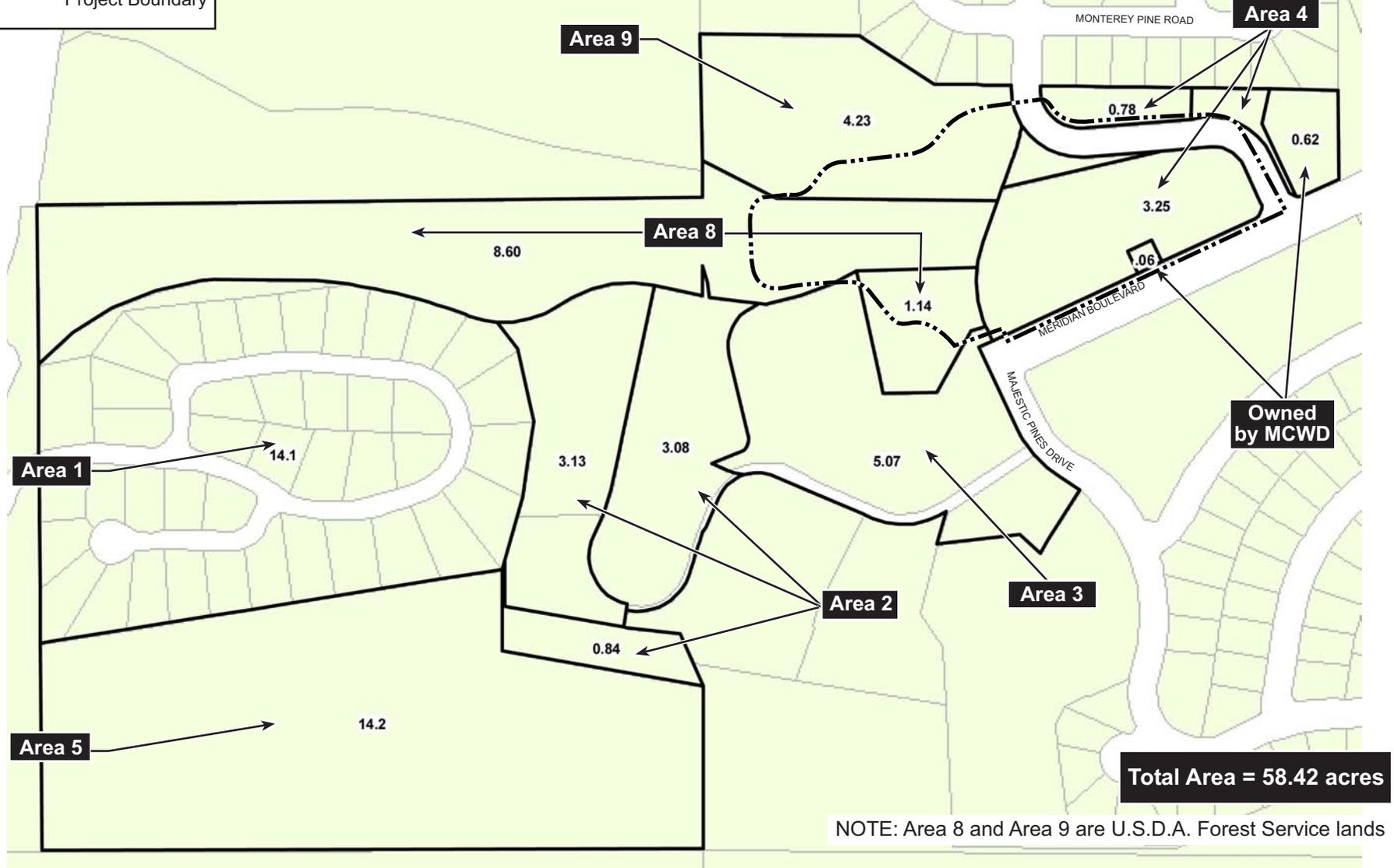


Figure 9
Juniper Ridge Master Plan Area

height of a parking structure to 35 feet and limits commercial buildings to 45 feet as measured from street grade. The Master Plan requires that commercial buildings maintain a minimum setback of 20 feet from Meridian Boulevard and/or Majestic Pines Road. In addition, the Master Plan requires a minimum of 25 feet between buildings if the buildings are oriented any way other than side to side.¹⁸

In addition to uses, heights, and setbacks, the Master Plan contains various development requirements. Under the Master Plan visitor and customer vehicular access is restricted to Meridian Boulevard. With regard to parking, the Master Plan requires that all off-street parking be provided for all uses in accordance with the requirements and design standards of Title 17, the Zoning Code of the Town's Municipal Code. The Master Plan also requires the provision of a trail easement consistent with the Parks and Recreation Element of the General Plan and the Master Trail System Plan, which are discussed above. The Master Plan requires an easement of 14 feet in width in non-steep areas and 12 feet in steep areas are to be provided for a recreational trail. The project would be required to provide a 14-foot-wide easement to comply with the Master Plan requirement. Overall design of the project would be subject to the provisions of Section 17.32, Special Uses and Conditions, of Title 17 of the Municipal Code.

The majority of the Master Plan Area has been developed and includes the 40-lot Juniper Ridge single-family subdivision, the Juniper Springs Lodge resort condominiums with 174 units, and the Sunstone and Eagle Run Condominiums with approximately 120 residential units. Area 4, which is the project site, is the remaining undeveloped parcel.

d. Zoning Code

Title 17, the Zoning Code of the Municipal Code, regulates development within the Town. Lot 5 and Lot 87 are zoned Resort (R) (see Figure 10 on page 72). Section 17.28.220 of the Zoning Code, the Resort Zone, is designed to classify parcels of land as comprehensive projects, to provide for a diversification of land uses, and to allow for a zone classification that would include a variety of land use types, including but not limited to hotels with related support commercial facilities, recreational amenities, and public uses. While the Master Plan provides the majority of development guidelines under which the project would be built and would operate, portions of Title 17 would be applicable, including those sections relevant to parking and project design.

¹⁸ *The Master Plan provides setbacks specific to side to side orientation, which are linked to building heights. For buildings oriented side to side, 10 feet between buildings is required for buildings up to 35 feet in height; 20 feet between buildings up to 45 feet in height; and, 25 feet between buildings in excess of 45 feet in height.*

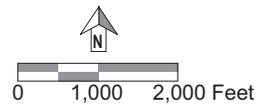
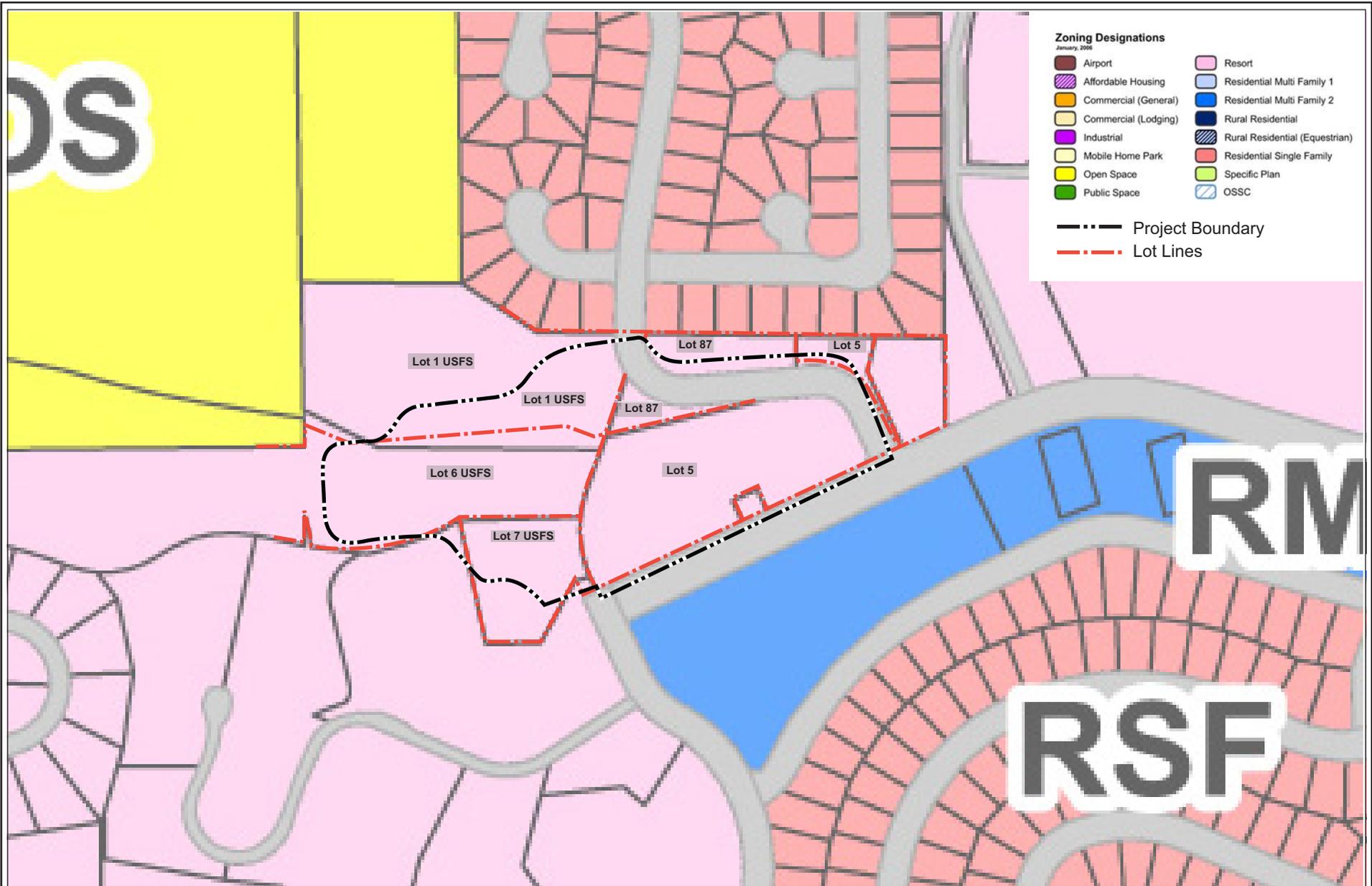


Figure 10
Zoning Map

Source: Town of Mammoth Lakes, PCR Services Corporation, 2006

The Zoning Code provides for the establishment of fractional use projects, which Section 17.30.210 defines as “any project where a purchaser receives the right in perpetuity, for life, or for a term of years to the recurrent, exclusive use or occupancy of a lot, parcel, unit rooms, or segment of a real property, annually or on some other periodic basis, for a period of time that has been or will be allotted from the use or occupancy periods into which the fractional-use project has been divided.” New fractional-use projects are intended to achieve the following purposes: to increase vitality; preserve and enhance the Town’s lodging inventory; upgrade the quality of accommodations; and maintain community character.

Forest Service Land

e. Inyo National Forest Land and Resource Management Plan

The California Wilderness Act of 1984 transferred the administration of approximately 23,000 acres of land within the Mono Basin National Forest Scenic Area from the Bureau of Land Management to the Inyo National Forest. The boundary of the Inyo National Forest includes 2,046,346 acres, 116,591 acres of which are in non-federal ownership. The portion of the site that is located on Lots 1, 6, and 7 are administered by the Forest Service and would be subject to the Inyo National Forest Land and Resource Management Plan (the Forest Plan) of 1988.

Generally, Resource Management Plans link the requirements of laws, regulations, executive orders, policies, and the Forest Service National Strategic Plan to specific National Forests. Resource Management Plans are required under the National Forest Management Act (NFMA), and by law must be updated at least once every 15 years. The Forest Plan for the Inyo National Forest provides management direction, sets objectives, and provides a framework to address major public issues and management concerns. Objectives of the Forest Plan were intended to provide multiple resource management direction for the 10-year period from 1988 to 1997

In January 2001, the Pacific Southwest Region of the USDA Forest Service adopted the Sierra Nevada Forest Plan Amendment (SNFPA) for managing 11 national forests and 11.5 million acres of national forest land, which includes the Inyo National Forest. The amendment serves to reduce the use of fuels that cause wildfires and improve the protection of older forests and wildlife habitats. A Record of Decision was signed in January 2004 that improved upon the management approach of the 2001 document.

Chapter 2 of the Forest Plan includes the public issues (p) and management concerns (m) that were identified in the original public involvement process for the Plan. The following are issues/concerns that are related to recreation and are also directly associated with Forest lands

administration. These issues/concerns are based upon what would be considered by the public to be the “best recreational opportunity program for the Inyo (considering supply, demand, other resource management and development opportunities, and environmental protection needs).”

- The public is collectively interested in the entire range of development options. (p)
- The public is dissatisfied with the reduced use seasons and deteriorating facilities they have encountered in recent years. (p & m)
- The supply of overnight facilities is falling behind demand. (m)
- Day use facilities, such as trails and interpretive sites, are insufficient to meet demands. (m)
- Should more land be made available immediately for added alpine ski area capacity? (p)

Chapter 3 of the Forest Plan provides a summary analysis of the management situation for each of the resources within the region. As noted within this chapter, “Land is made available under special use permit if the proposed use is compatible with the established multiple-use objectives of the affected area and if no suitable private land as [sic] reasonably available for the use.” Chapter 3 also indicates that “the major source of demand for Inyo National Forest land is the rapid expansion of communities associated with alpine skiing, several of which are within or adjacent to the Forest boundary. These communities are interested both in land exchange so that more private land as available for development and in land uses under permit to accommodate community service facilities.”

Chapter 4 of the Forest Plan discusses the ways in which the Inyo National Forest will be managed. Applicable lands-related management goals for the Inyo National Forest include:

LANDS

The Forest has a land and resource management structure and program with compatible relationships between National Forest System lands and adjacent non-federal lands. Specific activities to accomplish this goal are: special use administration, electronic site¹⁹ management, utility corridor management, rights-of-way management, withdrawal, landownership adjustment, and property boundary resurvey and monumentation.

¹⁹ *An electronic site is a parcel of National Forest System land on which buildings, antenna towers, and other electronic equipment designed for communication are located.*

RECREATION

A broad range of developed and dispersed recreation opportunities in balance with identified existing and future demand is provided.

Forest-wide Standards and Guidelines provide specific guidelines for the management of each resource to ensure its enhancement and protection. Applicable Standards and Guidelines include the following:

Lands

Special Uses

- Issue special use permits only if private land suitable for the use is not reasonably available and if the use is compatible with established Forest goals and objectives.
- Apply the following priority when evaluating special use permit application:
 1. public uses (governmental)
 2. semi-public uses
 3. private (exclusive) uses.

Recreation

Developed Recreation: Private

- Encourage the updating of master development plans for existing commercial developments. Require master development plans for new developments or before allowing any new major construction on existing developments. Require the permittee to submit these plans for Forest Service approval.

Management Prescriptions identify the ways in which all Forest resources will be managed with specific resource emphasis. The project site is located within the “Alpine Ski Area” (Management Prescription Area #13). The purpose of this prescription is to maintain and manage downhill ski areas for public use. The management direction relating to recreational land use is as follows:

Permit further expansion of areas already developed for alpine skiing. Expansion may include runs, lifts, base areas, and access to a degree that is often not compatible with other resource management options.

Allow limited day use and interpretive developments if compatible with ski area development.

f. Mammoth Mountain Ski Area Master Development Plan

The MMSA Development Plan (the Development Plan) is the conceptual guide for buildout of MMSA's facilities and provides the foundation for the Forest Service Special Use Permit under which MMSA operates. Originally approved by the Forest Service in September 1981, the Development Plan applies only to lands administered by the Forest Service. The Development Plan is a requirement of both the Special Use Permit and Section 2700 of the Forest Service Manual, and is based on the Forest Service "Environmental Analysis for Expansion of Mammoth Mountain Ski Area," which was approved in June 1980. The Forest Service approved an update of the Development Plan in 1984.

The Development Plan guides the growth of MMSA's capacity to 24,000 Peak Design Capacity (PDC) in four flexible phases of development. More specifically, the Development Plan guides the expansion of the MMSA with regard to new ski runs, ski lifts, utilities, base lodges, hotel expansion, employee housing, snow making, summer recreation, and other facilities that would allow MMSA to expand to 24,000 PDC. Phase III of the Development Plan included an upgrade of the capacity of Chair 15, which was partially completed in 2000 with the installation of the Eagle Express Chairlift. While the Development Plan focuses on development goals for specific base areas, the Plan is intended to guide the overall direction of the MMSA while also addressing the ultimate limits to development.

Toward achieving 24,000 PDC, the Development Plan provides for eight key elements that identify improvements to be implemented to meet skier demand while also increasing the quality of skiing within the MMSA. A number of the improvements discussed in the following elements have been implemented since 1981, when the plan was initially approved. The eight elements are as follows: (1) Spread skier peak demand; (2) Additional lifts, trails and maintenance; (3) Base lodges; (4) Balance summer and winter economics; (5) Employee Housing; (6) Transportation; (7) Snow making; and (8) Minaret Area facilities. The Development Plan also provides a more general discussion of issue areas that include avalanches, erosion prevention, electrical power, communications, road systems, water systems, and sewer systems.

As discussed in the 1984 update, a permanent ski facility, Base VII, located immediately west of the intersection of Meridian Boulevard and Majestic Pines Road, has been envisioned as part of the overall development of the MMSA. As such, the 1984 update provides for an expedited schedule to develop ski facilities on the east side of the ski area and to increase the

skier capacity of Base VII to 7,900 PDC.²⁰ Capacity increases were expected to result from: (1) walk-ins from new housing developments in the vicinity; (2) construction of overhead transport; (3) development of public or private shuttle bus transport; (4) tour bus drop offs; and (5) increased capacity of access roads.

3.2.2 AFFECTED ENVIRONMENT

The project site is located within the Town of Mammoth Lakes, a destination resort community located in southwestern Mono County, on the eastern side of the Sierra Nevada mountain range. The Town lies approximately three miles west of U.S. Highway 395, along State Route 203.

The project site is situated at the eastern base of Mammoth Mountain, and is specifically located on the southwestern side of the developed part of the Town, west of the intersection of Meridian Boulevard and Majestic Pines Road. The area in which the project site is located is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The Eagle Base Area is one of four key access portals to the Mammoth Mountain Ski Area.

The site is located within a primarily residential and resort area. Within the immediate project area, Mammoth Vista I single family subdivision is located to the north of the project site. The Summit Condominiums are located to the south of the site across Meridian Boulevard. Southwest of the site is the Juniper Springs Lodge. To the west of the Juniper Springs Lodge is multi-family residential development. Currently, there are no grocery stores, convenience markets, or general retail uses in the immediate vicinity of the project site. In terms of non-residential uses in the immediate area, Camp High Sierra is located to the northeast. Camp High Sierra, which is owned and operated by the City of Los Angeles Department of Recreation and Park, is open during summer months, and provides camping grounds for trailers, campers, cabin and tent camping. The Mammoth Loop Trail is located to the north of the Treatment Plan and runs to the west, ending at Majestic Pines Road directly across from the project site. Immediately to the east of the site across Majestic Pines Road is the Mammoth Community Water District Ground Water Treatment Plant No. 2.

²⁰ According to the Mammoth Mountain Master Plan Update 2000 Technical Summary, Peak Design Capacity is determined by evaluating all of MMSA's ski facilities in terms of ski lift and trail capacity, capacity of skier services, accommodation capacity of the Town, parking capacity, and a number of other factors. The 1981 Development Plan had envisioned a PDC of 5,960. According to the Mammoth Mountain Ski Area Base VII Expansion Project Environmental Assessment, the 1984 Update increased the PDC to 7,900 with the expectation that additional facilities at Base VII would be constructed, such as a second Lake Mary Bridge, two gondolas, and a base lodge. As these facilities have not been constructed, portal capacity is assumed to be 5,960 PDC, which is considered by the Town to be the maximum allowable capacity for the portal.

Generally, the project site is developed with uses that support skiing activities at Mammoth Mountain, but also includes undeveloped land in the western portion of the site. More specifically, Lot 5, located in the central portion of the site, is developed with a paved, surface parking lot that serves the temporary ski facility, the Little Eagle Base Lodge. The parking lot can accommodate approximately 225 vehicles, inclusive of day-skier and temporary/drop-off parking. The northern portion of Lot 5 consists primarily of disturbed area, while the southern perimeter of Lot 5 supports vegetation. The Mammoth Community Water District (MCWD) owns a well site parcel that is located adjacent to Meridian Boulevard within the southern portion of Lot 5. Circulation improvements associated with the project would occur on an approximately 0.04-acre portion of Lot 5 and a 0.13-acre portion of Lot 87, both located north of Majestic Pines Road.

As discussed earlier, Majestic Pines Road was realigned in the mid-1990s. Previously, the alignment ran along the western boundary of Lot 5. The realignment was completed to eliminate the separation by a roadway of the parking area and the ski facility. Currently, Majestic Pines Road is a dedicated right of way of the Town that crosses Lot 5 and Lot 87. As part of the realignment project, a berm and landscaping were developed on Lot 87 to screen single-family homes located north of Majestic Pines Road from vehicle headlights.

The western part of the project site consists of portions of Lot 1, Lot 6, and Lot 7, which are administered by the Forest Service. Lot 1 is largely undeveloped; however, there is a developed area (roadway/walkway) along the eastern portion of Lot 1. The eastern portion of Lot 6 comprises primarily developed and/or disturbed areas, which includes a maintenance structure adjacent to the western perimeter of the parking lot. Just beyond the proposed project boundaries, but also within Lot 6, is the temporary Little Eagle Base Lodge, situated adjacent to the Eagle Express. The Little Eagle Base Lodge is approximately 12,000 square feet of interior space, which includes a tent facility and attached trailers. The Little Eagle Base Lodge currently provides basic amenities to day-skiers such as ticketing, a restaurant, and a bar/coffee bar area, limited retail, and public restrooms. An exterior barbeque and dining deck comprises approximately 3,000 square feet. The Eagle Express chairlift (Chair 15) is located on Lot 6, which is administered by the Inyo National Forest. A pathway connecting the parking lot and the temporary lodge traverses the Lot 6 and the northern portion of Lot 7. Lot 7 occupies the southwestern portion of the project site and consists of developed area, including the existing detention basins.

3.2.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

The project would result in a significant land use impact if the project would:

- Result in substantial conflicts with surrounding land uses due to an incompatible interface between such uses and the physical and/or operational characteristics of the proposed uses; or
- Conflict with an applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental impact.

Impacts on the environment pursuant to CEQA ordinarily focus on changes in the physical environment. In itself, an inconsistency between a project and a plan is a legal determination rather than a physical impact on the environment. Where a plan is adopted for the sole purpose of avoiding or mitigating a physical impact on the environment, an inconsistency may be evidence that the project may result in a significant effect on the environment.²¹

b. Methodology

The evaluation of land use impacts is based on site visits conducted in September 2005 and January 2006, as well as a review of the regulations and policies contained within relevant planning documents. As such, the analysis addresses the compatibility of the project with surrounding uses in the project vicinity. Additionally, the consistency of the proposed project with adopted plans, policies and ordinances is discussed. The lodging component of the project that is discussed in the analysis addresses the two options: (1) condominium/hotel and fractional ownership units and (2) hotel units.

c. Environmental Consequences of the Proposed Action

(1) Land Use Compatibility

The proposed project would be compatible with the surrounding land uses. A permanent facility offering skier and other recreational and commercial amenities, along with a hospitality component, would be constructed on the site. The proposed facility would replace the temporary tent facility, which would be removed. The proposed project reflects a long-range plan by the Town, the Forest Service, and MMSA to expand resort facilities in the project area. The project site is primarily surrounded by single- and multi-family residential, resort, and recreational uses. Consistent with the residential uses surrounding the site, the project would provide for on-site lodging, either with condominium/hotel units and fractional ownership units or a hotel option.

²¹ *Stephen L. Kosta and Michael H. Zischke, Practice Under the California Environmental Quality Act, Continuing Education of the Bar, Chapter 12, Section 12.36, p. 496.4, January 2002.*

The neighborhood convenience market, day spa, and full-service restaurant proposed as part of the project would support the on-site lodging, as well as patronage by neighboring residents. The project would create pedestrian linkages within the resort facility, as well as between adjacent neighborhoods and the facility such that amenities could be accessed easily by residents of the surrounding single- and multi-family residences. The provision of a neighborhood market would provide a convenient food market within proximity of a number of residences and would serve to eliminate vehicle trips to the existing supermarket that serves the Town. In addition, the project proposes to extend the Mammoth Loop Trail through the site. This extension would serve as an additional pedestrian link to and from the site. It also would complement other recreational amenities proposed under the project, including the outdoor skating rink, the summer stage and the climbing wall. In addition, by virtue of its being a resort facility, the project would be compatible with the Juniper Springs resort directly to the west of the site.

While not a complementary use per se, the Mammoth Community Ground Water District Treatment Plant No. 2, located just east of the site, would not disrupt the operation of the project, nor would the project affect the operation of the treatment plant. As such, the two uses would not be incompatible.

(2) Consistency with Adopted Plans, Policies, and Ordinances

(a) Privately Owned Land

(i) Town of Mammoth Lakes General Plan (1987)

The proposed project reflects a long-range plan by the Town, the Forest Service, and MMSA to expand resort facilities in the project area, as evidenced by policies contained within the General Plan, the Forest Plan, and the Development Plan. The realignment of Majestic Pines Road, which occurred in the mid-1990s, provided a situation in which the proposed project would not be separated from the ski facilities by a roadway. The realignment was consistent with the long-range vision for the area.

The project would be consistent with the types of uses allowed in the Resort designation, as the project would provide mixed visitor-oriented uses. The project proposes a year-round resort complex, which would offer a range of recreational and commercial opportunities to visitors, along with lodging facilities. The project would provide for an array of winter recreational activities, including direct access to MMSA Chair 15, which is designated as a recreation activity node in the General Plan Land Use Element. Other winter-weather amenities include a 5,000-square-foot outdoor ice-skating rink and a ski school. The project also proposes warm-weather facilities that include a rock-climbing wall and performance stage. The project

would also provide access to the Mammoth Loop Trail and the summer mountain bike park. As such, the project would contribute to developing the community as a year-round recreation destination resort that is situated near a designated activity node, which would be consistent with Recreation and Resort Land Use Goals 1, 2, and 5. Furthermore, due to the type and mix of the proposed amenities, particularly the ice-skating rink, the ski school, associated day care, direct access to Chair 15, and spa the project would be consistent with Recreation and Resort Land Uses Goal 7, which encourages family-oriented recreational activities.

In addition to recreational activities, the project would provide for approximately 80,000 square feet of visitor-related commercial space. Commercial amenities targeted to visitors include a rental/demo/repair shop, retail shop, a ski school with associated day care, and food and beverage services. A Locker Club, a day spa, and a convenience market are also proposed by the project. In addition, an approximately 4,000 square foot meeting/conference facility that would accommodate up to 200 people would be provided to support the hospitality functions of the lodge. The meeting/conference facility would be available to the general public on an as-available commercial basis. As such, the project would be consistent with Recreation and Resort Goal 6, which encourages recreation visitor-related commercial facilities to locate near activity nodes.

Consistent with Overall Goals and General Policies Goal 4 of the Land Use Element, the project would address the needs of the Town's permanent residents by providing commercial and retail uses, a restaurant, and a convenience market that would be within close proximity to the surrounding single- and multi-family residences. As discussed above, pedestrian linkages would be incorporated to provide easy access for adjacent residents to the commercial uses. These commercial facilities would also be accessible to visitors lodging in the transient housing provided under the project.

In addition, consistent with General Policy 1 of the Land Use Element, the project would not exceed the density allowed under the General Plan, and implementation of the project would occur in an area designated for development. Table 6 on page 82 provides the allowed, existing and proposed number of units within the Master Plan area. As can be seen in Table 6, based on the maximum allowable density of eight units per acre, the Master Plan area could have 467 units. The project in addition to the existing development in the Master Plan area would not exceed the allowable density.

With regard to the commercial portion of the property, the project would provide approximately 80,000 square feet of publicly available commercial area. As discussed earlier, the General Plan restricts FAR for commercial uses to 0.1. FAR for the Town's commercial uses is determined by using the total area of the Juniper Ridge Master Plan, which is 44.45 acres, or 1,936,242 square feet. Existing commercial within the Juniper Springs Master Plan Area is located in the Juniper Ridge Resort development adjacent to the project site, and totals

Table 6
Existing and Proposed Number of Units in Juniper Springs Master Plan Area

Area	Acres	Development	Number of Units Proposed/Developed
1	14.1	Juniper Ridge Subdivision	40
2	7.05	Sunstone Condo-Hotel	65
		Eagle Run Townhomes	36
3	5.07	Juniper Springs Lodge	125
4	4.03	Eagle Lodge (Project)	83 ^a
5	14.2	Dedicated Open Space	0
8	9.74	Open Space	0
9	4.23	Open Space	0
TOTAL	58.42		349
Allowed Density Based on 8 Units Per Acre			467

^a The 213 hotel room option would convert to 107 units, and as such, the number of units proposed or developed would total 373, which is within the maximum allowable density based on eight units per acre.

Source: Town of Mammoth Lakes and PCR Services Corporation, 2006

approximately 3,100 square feet. Adding the project's square footage to the existing commercial square footage and dividing the total by 1,936,242 would result in an FAR of 0.04. As such, the amount of proposed commercial floor area within the project would be compatible with the General Plan.

The project would expand the economic base of the Town through the development of a year-round resort complex, which, as discussed above, would offer recreational, commercial, and housing opportunities to visitors. With regard to increasing expenditures per visitor, the project would include the removal of the temporary tent ski facility that currently exists on the site, and the construction of a substantially larger, permanent resort complex that would include a mix of uses. In addition to the approximately 80,000 square feet of commercial uses, the project also proposes approximately 135,150 gross square feet of residential/hospitality uses. The mix of uses would be incorporated into a single resort facility, facilitating access to basic amenities and thus encouraging visitors to remain within the project area. Given the scope of development relative to existing conditions, as well as the expanded amenities proposed, the project is anticipated to result in an increase in expenditures per visitor. Therefore, the project would be consistent with Overall Goals and General Policies 3, Recreation and Resort Land Uses Goal 3, and Recreation and Resort Land Uses Policy 4 of the Land Use Element.

The project is designed to evoke a mountain lodge style with the incorporation of natural materials such as wood and stone that would be consistent with other development in the project area. The structures would be articulated to break up the massing of the resort complex. Trash enclosures would use bear-proofing devices. Lighting would be shielded and directed downward in accordance with Title 17 of the Municipal Code. While some trees and shrubs would be removed during project construction, replacement landscaping would include native plantings. Nesting birds could be impacted by the project; however, a mitigation measure would reduce the impact to a less than significant level. Overall, project implementation would not result in significant impacts to biological resources, and as such, wildlife habitats would be protected. In addition, the project would not impact water quality or runoff, as discussed in Section 3.10, Hydrology. (Refer to Section 3.6, Biological Resources, Section 3.9, Aesthetics, and Section 3.10, Hydrology, for a more detailed discussion of the project's effects on the natural environment and visual resources.)

Given the above, the project would be consistent with the Overall Goals and General Policies 2, Recreation and Resort Land Uses Goal 4, and Recreation and Resort Land Uses Policy 4 of the Land Use Element. For a more detailed discussion of potential impacts of the project please see Section 3.3, Transportation; Section 3.4, Air Quality; Section 3.5, Noise; Section 3.7, Cultural Resources; Section 3.8, Population, Housing and Employment; Section 3.10, Hydrology; Section 3.12, Water Supply; Section 3.13, Wastewater; and Section 3.14, Stormwater.

(ii) Town of Mammoth Lakes Draft General Plan Update (2005)

The project site is situated adjacent to a key mountain portal, a community-wide facility. As previously stated, the project involves the development of a mixed-use facility that includes both commercial and hospitality components. The project is situated proximate to the Eagle Base Area, which is one of four key access portals to the Mammoth Mountain Ski Area. As such, the project would be consistent with policy and implementation measure I.7.B.a.4, which encourages mixed-use development to be located adjacent to mountain portals.

The project would create pedestrian links within the resort facility, as well as between adjacent neighborhoods and the facility, such that residents of the surrounding single- and multi-family residences could access amenities easily. In addition, the project proposes to extend the Mammoth Loop Trail through the site. Therefore, the project would be consistent with policy and implementation measures II.1.B.b.1, I.3.A.1.a, I.3.A.1.b, VI.1.D.a.2, and VII.1.A.a.6, which support pedestrian linkages.

The project also would be consistent with policy and implementation measures II.1.B.b.1 and VI.1.D.a.2, which encourage new development to integrate with existing community facilities. The provision of a neighborhood market would provide a convenient food market

within proximity of a number of residences and would serve to eliminate vehicle trips to the existing supermarket that serves the Town, consistent with policy and implementation measure VVI.1.D.a.1.

The 2005 Draft General Plan Update proposes to rezone the southwestern portion of the Juniper Springs Master Plan area (Area 5 on Figure 9) to Open Space (OS), which would result in a reduction from the developable area of the Juniper Springs Master Plan. Therefore, the 2005 Draft General Plan Update would decrease the permitted density with the Juniper Springs Master Plan from 467 to 354 units. Therefore, the project density for the condominium/hotel and fractional ownership unit scenario would be consistent with the 2005 Draft General Plan Update. However, the hotel scenario would not be consistent with the 2005 Draft General Plan Update relative to density.

(iii) Juniper Ridge Master Plan

The project would not be consistent with the Juniper Ridge Master Plan and would require various amendments. As previously indicated, the Master Plan designates Area 4 for parking and 35,000 square feet of commercial retail uses. As such, the Master Plan would require an amendment of the permitted uses of Area 4 to accommodate the mix of uses proposed for the site, which would include approximately 80,000 square feet of commercial uses and residential units.

Further, the Master Plan requires that all off-street parking shall be provided for all uses in accordance with the requirements and design standards of Title 17 of the Municipal Code. The project includes an amendment to this language to allow for parking to be determined through a needs-based analysis, rather than an hours-of-use analysis. The parking study has been completed as part of the environmental analysis. Please see Section 3.3, Transportation, for a more detailed discussion of parking as it relates to the proposed project.

The project proposes an average building height above existing grade of 64 feet for the Skier Services Building, with a peak building height of approximately 71 feet above the Meridian Boulevard street grade (8065 feet above mean sea level). The primary structure, the Lodge, would have an average building height of 61 feet and a peak building height of approximately 87 feet above the Majestic Pines Road street grade (8065 feet above mean sea level). As the project would not comply with the allowed heights, an amendment to the Master Plan with regard to building heights would be required to accommodate the proposed heights of the structures. Refer to Section 3.9, Aesthetics, for a more detailed discussion of height as it relates to the proposed project and impacts to visual resources.

The Master Plan requires a minimum setback of 20 feet from Meridian Boulevard and/or Majestic Pines Road. The project as proposed would maintain a 20-foot setback from both Meridian Boulevard and Majestic Pines Road. The proposed building would maintain a 0-foot setback on Lot 5 and would cross the property line between Lot 5 and Lots 6 and 7, which are administered by the U.S. Forest Service. In addition, the parking structure would maintain a 0-foot setback from the Well 16 property. As such, the project includes an amendment to the setback provisions of the Master Plan.

The project would provide 40 feet between the two buildings and therefore, would comply with the requirement of 25 feet between buildings that are oriented in a non-side by side configuration.

In addition, the project as proposed does not comply with the Master Plan restriction regarding vehicular access. The Master Plan limits vehicular access to Meridian Boulevard. As proposed, the main driveway and entry for the lodge would be located on Majestic Pines Road. The parking garage for hotel guests and residents would be from Majestic Pines Road. However, skier parking access as well as auto and bus drop-off would be from Meridian Boulevard. The project includes an amendment to the Master Plan regarding access.

In accordance with the Master Plan, the project would obtain a Use Permit from the Town prior to development. The discussion above addresses the amendments to the Master Plan that are included as part of the project. With the approval of the amendments discussed above, the project would be consistent with the Master Plan.

(iv) Zoning Code

The project and the proposed uses would be consistent with the zoning of the site, which is Resort, as the project would include transient lodging with related support commercial facilities, recreational amenities, and public uses.

As discussed earlier, the project includes two lodging options, one of which is condo/hotel and fractional ownership units. Under the condo/hotel and fractional units option, the project proposes the development of 21 fractional ownership units. The project would meet the purposes of fractional units by increasing the Town's lodging inventory and upgrading the quality of accommodations. The project would also maintain community character as the building has been designed to be compatible with the area. As discussed above, the project would develop a high-quality, destination resort for visitors that would include expanded amenities and fractional-use and condo/hotel units. If the hotel option, rather than the condo/hotel and fractional ownership units option, were implemented, Section 17.30.210 of Title 17 would not apply to the project.

(b) Forest Service Land**(i) Forest Plan**

The proposed project would reflect a long-range plan by the Forest Service and MMSA to expand resort facilities in the project area, as evidenced by policies contained within the Forest Plan and the Development Plan. An Environmental Assessment (EA) under NEPA was prepared for a resort complex that would have expanded the Base VII facility on Forest Service lands in 1997. The adequacy of the document was legally challenged and the Forest Service lost on appeal due to inadequate analysis of visual quality impacts. Ultimately, the EA was not approved.

The project responds to public issues and management concerns contained in Chapter 2 of the Forest Plan relative to land use and recreational land uses through the development of a permanent, year-round resort complex that is open for public use. The development of a resort facility in this area had been envisioned as part of a long-range plan by the Forest Service.

The project comprises a mix of uses designed to meet the recreational needs of the community, including overnight lodging facilities, access to Chair 15 and associated ski services, an ice-skating rink, and a climbing wall. The project would provide specifically for day-use ski facilities, food and beverage amenities for day skiers, as well as the expansion of the Mammoth Loop Trail through the site on Lots 1, 6 and 7 of Forest Service land. Potential increases in alpine ski capacity demand also would be addressed through the implementation of the project.

The project would include the removal of the temporary tent facility on Lot 6 of Forest Service lands. The proposed permanent resort facility would be located primarily on private property but a portion of the facility would cross on to Forest Service lands. As such, while implementation of the project would result in only a small portion of development on Forest Service lands, the components of the project could not occur separately, absent the whole development. As such, the project on Forest Service lands would be considered new development.

Given the above, the project would result in the expansion of existing development on Lots 1, 6, and 7 that would be compatible with other recreational and resort uses in the immediate vicinity of the site. As the portion of the site administered by the Forest Service is already under Special Use Permit, the project would be compatible with regard to Special Uses under the Standards and Guidelines. As such, the project would be compatible with Chapter 4 of the Forest Plan relative to Special Uses.

With regard to Forest-wide Standards and Guidelines as they relate to Recreation, master development plans are required for new commercial developments on lands administered by the Forest Service. As the conceptual guide for future development, the MMSA Development Plan would undergo an administrative change to reflect project implementation. Please see the following section regarding the MMSA Development Plan for a more detailed discussion regarding the project relative to the Development Plan.

The Forest Plan would be compatible with the Management Prescriptions identified for the Alpine Ski Area (#13). The site is already developed as a temporary ski facility in an area that is generally considered the largest alpine resort in the Eastern Sierra Nevada Mountains. As such, further expansion of the site for alpine ski purposes would be considered acceptable under the Forest Plan. Expansion of the site would include the development of a permanent resort facility within the base area adjacent to Chair 15. In addition, the project would be compatible with the Management Prescription concerning day-use development in ski areas. As discussed above, the proposed resort facility provides day-use amenities that include access to Chair 15 and related amenities for day skiers. Given the above, the project would be consistent with the Forest Service Plan.

(ii) MMSA Development Plan

The project would be consistent with the Development Plan since the project would provide for the development of a resort facility with ski-related amenities that are anticipated to support the existing ski facility associated with Chair 15, which is an identified goal of Phase III. The 1981 Development Plan had envisioned a PDC of 5,960. According to the Mammoth Mountain Ski Area Base VII Expansion Project Environmental Assessment, the 1984 update increased the PDC to 7,900 with the expectation that additional facilities at Base VII would be constructed, such as a second Lake Mary Bridge, two gondolas, and a base lodge. As these facilities have not been constructed, portal capacity is assumed to be 5,960 PDC, which is considered by the Town to be the maximum allowable capacity for the portal. As such, the Development Plan would undergo an administrative change to reflect the maximum 5,960 PDC and to account for project implementation.

In addition, the 1984 update indicates that the development of Base VII would result in all planned ski facilities, with the exception of parking, to be built on Forest Service lands. Since the project proposes development on only a portion of Forest Service lands, with the remainder to be built on privately owned land, the Development Plan would require an amendment that would clarify the extent of development at Base VII. Given the above, the project would be compatible with the Development Plan, provided that the necessary amendments would be applied for and approved.

d. Mitigation Measures

As analyzed in this section, the project as proposed would be compatible with surrounding land uses, as the project is the development of a resort facility that would be located in an area that is adjacent to another resort and residential communities. With the proposed amendment to the General Plan land use designation for Lot 87, the project would comply with the 1987 General Plan²². With the proposed amendments to the Juniper Springs Master Plan regarding access, height, parking, and setbacks, the project would comply with the Master Plan. The project would also be consistent with the Forest Service Plan. Following an administrative change to reflect project implementation and a maximum PDC of 5,960 at Base VII, the project would be compatible with the Development Plan. Therefore, under CEQA, the project would result in a less than significant impact with regard to land use and no mitigation measures are necessary. Additionally, since the Proposed Action would be consistent with applicable plans, there would be no impact on Forest Service lands and, therefore, no land use impacts under NEPA.

e. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Alternative 1 would be located on approximately 8.67 acres, immediately adjacent to a major ski portal. The majority of the site lies within Area 4 of the Juniper Ridge Master Plan. Area 4 is designated for the development of a parking structure comprising 566 spaces and 35,000 square feet of commercial space, consistent with the Juniper Ridge Master Plan. Also consistent with the plan, the Alternative would provide an easement of 14 feet in width in non-steep areas of the site and 12 feet in steep areas for a recreational trail, facilitating pedestrian and bicycle circulation.

The site is surrounded by resort, recreational, and residential uses. As such, Alternative 1 would provide commercial amenities and parking to day skiers served by Chair 15 and transient occupants of the lodging units in the vicinity of the site. While Alternative 1 would not provide accommodations within close proximity to the ski slope, the Alternative would provide day-skier uses. As such, Alternative 1 would be compatible with Goal 3 of the General Plan's Overall

²² *Although the project would generally comply with the 2005 General Plan Update except in the case of density for the hotel scenario, the General Plan Update has not been adopted by the Town. As indicated previously, the hotel scenario would not comply with the maximum allowable density given that the Draft General Plan Update would rezone the southwestern portion of the Juniper Springs Master Plan area to Open Space (OS), which would result in a reduction from the developable area of the Juniper Springs Master Plan. As such, if the 2005 Draft General Plan were adopted, the hotel scenario would require a reduction in density or a General Plan amendment for the proposed density. The condominium/hotel and fractional ownership unit scenario would be consistent with the density allowed in the 2005 Draft General Plan.*

Goals and Policies, which encourages the provision of commercial development to address the needs of Town residents. The Alternative would also be compatible with goal and policy measure VVI.1.D.a.1 of the 2005 Draft General Plan Update, which encourages development located within easy walking or biking distance to residents and visitor lodging. In addition, Alternative 1 would provide for a recreational trail for pedestrian and bicycle circulation in the area. Therefore, Alternative 1 would be consistent with policies and implementation measures contained in the 2005 Draft General Plan Update requiring linkages between new development and existing developed areas of the community, Forest Service lands, as well as community-wide facilities.

As Alternative 1 would provide commercial facilities for day skiers and other visitors, the Alternative would be compatible with the Management Prescriptions relating to Area #13 of the Forest Plan. Specifically, the prescription permits expansion of areas already developed for alpine skiing and allows limited day use consistent with ski area development. As the MMSA Development Plan envisions the development of a permanent ski-related facility at the site, an administrative change to the 1984 Update would be required to reflect implementation of the Alternative.

Under the General Plan, the allowable FAR for commercial uses is 0.1. Alternative 1 would have an FAR of 0.01, and as such, would comply with the General Plan. The Alternative would require a General Plan amendment to redesignate Lot 87 to Resort, which allows mixed visitor-oriented uses, such as tourist-oriented commercial uses. Under Section 17.28 of the Town's Code, the Alternative would be limited to a maximum site coverage of 50 percent.

Given the above, Alternative 1 would generally comply with the plans analyzed in this section and would allow for an expansion of uses beyond what currently exists. However, the Alternative would not provide for the same level of recreational opportunities, nor a hospitality component, as envisioned for the site by both the Town and the Forest Service.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Alternative 2 would be compatible with surrounding land uses. Under this Alternative, a permanent lodge facility offering recreation-related and commercial amenities, along with a hospitality component, would be developed on the site. Single- and multi-family residential, resort, and recreational uses surround the site. Consistent with the residential uses in the vicinity of the site, Alternative 2 would provide for on-site lodging, either with condominium/hotel units and fractional ownership units or a hotel option. In addition, the neighborhood convenience market, retail uses, and full-service restaurant proposed under Alternative 2 would support the on-site lodging, as well as some patronage by neighboring residents. As a resort facility, Alternative 2 would be compatible with the Juniper Springs resort adjacent to the site.

Alternative 2 would be compatible with the design of surrounding uses. Natural materials such as wood and stone evoking a resort lodge style are incorporated into land uses surrounding the site. Under Alternative 2, the site would be constructed with heavy timbers and natural stone. For a discussion of height under this Alternative, refer to Section 3.9, Aesthetics, in this Draft EA/EIR.

As a year-round resort facility located adjacent to Chair 15, Alternative 2 would provide a mix of uses comprising commercial and recreational amenities, as well as a hospitality component. As such, Alternative 2 would be compatible with the long-range vision of the Town, the Forest Service, and MMSA to expand resort facilities in the project area. However, the commercial square footage would be less than that of the Proposed Action and therefore, Alternative 2 would not provide as much in terms of mix and amount of amenities for the surrounding neighborhood. Also under Alternative 2, pedestrian linkages would be incorporated into the site and the Mammoth Loop Trail would be extended through the site. Given the above, Alternative 2 would generally be consistent with the goals and policies contained within the Town's 1987 General Plan, the 2005 Draft General Plan Update, and Title 17 of the Town's Municipal Code.

Alternative 2 would not be consistent with the Juniper Ridge Master Plan and would require amendments in the areas of parking, height, density, setbacks, access, and land use. In addition, Alternative 2 would include a General Plan amendment to redesignate Lot 87 to Resort, which allows mixed visitor-oriented uses, such as tourist-oriented commercial uses.

Alternative 2 would reflect a long-range plan by the Forest Service and MMSA to enhance resort facilities in the area. Therefore, Alternative 2 would be consistent with the policies contained in the Inyo Forest Plan. In addition, Alternative 2 would be consistent with the Development Plan since it would provide for the development of a resort facility with ski-related amenities that are expected to support the capacity of Chair 15, an identified goal of Phase III of the Development Plan. The Development Plan would require an administrative change in accordance with existing conditions of a maximum 5,960 Peak Design Capacity (PDC) and to account for project implementation.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Alternative 3 would be compatible with surrounding land uses. A permanent lodge facility offering recreation-related and commercial amenities, along with a hospitality component, would be developed on the site under this Alternative. The site is primarily surrounded by single- and multi-family residential, resort, and recreational uses. Consistent with the residential uses surrounding the site, Alternative 3 would provide for on-site lodging, either with condominium/hotel units and fractional ownership units or a hotel option. In addition, the

neighborhood convenience market, day spa, and full-service restaurant proposed as part of Alternative 3 would support the on-site lodging, as well as patronage by neighboring residents. By virtue of its being a resort facility, Alternative 3 would be compatible with the Juniper Springs resort located directly to the west of the site.

Alternative 3 would also be compatible with the design of surrounding uses. Land uses surrounding the site incorporate natural materials such as wood and stone that evoke a resort lodge style, consistent with the mountain character of the area. Alternative 3 would be constructed with heavy timbers and natural stone, and would range from two to seven stories in height. For a detailed discussion of height under this Alternative, refer to Section 3.9, Aesthetics, in this Draft EA/EIR.

As a mixed-use, year-round resort facility located adjacent to Chair 15, Alternative 3 would include a program of uses that would be the same as the project. As such, Alternative 3 would be compatible with the long-range vision of the Town, the Forest Service, and MMSA to expand resort facilities in the project area. Specifically, Alternative 3 would provide ski-related and other recreational amenities to visitors while also addressing the needs of the Town's permanent residents by providing commercial and retail uses, a restaurant, and a convenience market. Pedestrian linkages would be incorporated into the site, and under Alternative 3, the Mammoth Loop Trail would be extended through the site. Given the above, Alternative 3 would be generally consistent with the goals and policies contained within the Town's 1987 General Plan, the 2005 Draft General Plan Update, and Title 17 of the Town's Municipal Code.

Alternative 3 would not, however, be consistent with the Juniper Ridge Master Plan and would require amendments in the areas of parking, height, density, setbacks, access, and land use. In addition, Alternative 3 would include a General Plan amendment to redesignate Lot 87 to Resort, which allows mixed visitor-oriented uses, such as tourist-oriented commercial uses.

Alternative 3 would reflect a long-range plan by the Forest Service and MMSA to expand resort facilities in the project area. As such, Alternative 3 would be consistent with the policies contained within the Inyo Forest Plan. In addition, the Alternative would be consistent with the Development Plan since it would provide for the development of a resort facility with ski-related amenities that are anticipated to support the capacity of Chair 15, an identified goal of Phase III of the Development Plan. The Development Plan would undergo an administrative change in accordance with existing conditions of a maximum 5,960 PDC, and to account for project implementation.

h. Environmental Consequences of Alternative 4- No Action Alternative

The No Action Alternative assumes that the project would not be developed and that no other development of the site would occur. The temporary Little Eagle Base Lodge would be

removed and surface parking lot would remain. As the project would not be developed, the land use designation of Lot 87 would not be amended from Low-Density Residential to Resort. Further, no amendments to the Juniper Ridge Master Plan would be needed.

The No Action Alternative would not comply with the plans analyzed in this section, since the plans envision an expansion of resort facilities beyond what currently exists at the time of the respective plans' approval, as evidenced by the goals and policies contained within the plans. Therefore, the No Action Alternative would not provide for the same level of benefits to the Town nor would the project provide for an increase in recreational opportunities.

More specifically on a local level, the No Action Alternative would not support a number of the goals and policies contained within the Land Use Element of the Town's General Plan. For example, given the removal of the basic, winter-time amenities currently offered by the Little Eagle Base, the No Action Alternative would not be compatible with Goal 2 of Overall Goals and General Policies or Recreation and Resort Land Use Goal 1, which encourages establishing the community as a year-round resort. The No Action Alternative would not be compatible with Goal 4 of Overall Goals and General Policies, which seeks to address the needs of permanent residents, since no neighborhood commercial services would be introduced into the area.

The No Action Alternative would not meet the Recreation and Resort Land Use Goal 2, since the Little Eagle Base Lodge would be removed. The No Action Alternative would not create a year-round destination point at a designated activity node. With regard to expenditures per visitor, under the No Action Alternative it is likely that expenditures per visitor would decline. Therefore, the No Action Alternative would not fulfill Recreation and Resort Land Use Goal 3, to increase expenditures per visitor to improve and maintain the Town's economy.

The No Action Alternative would not implement Recreation and Resort Land Use Goal 7, which encourages more family-oriented recreational activities. Recreation and Resort Land Use Policy 4 encourages designated activity nodes and related development to have both an architectural theme and an integrated design plan that invites visitors to remain within the designated resort node. Under the No Action Alternative, a facility would not be developed at a designated resort node. The No Action Alternative would not provide the mix of visitor-oriented amenities, such as a ski school, Day Spa, a range of dining facilities, and on-site lodging, in one facility. Given the above, the No Action Alternative would not fulfill Recreation and Resort Land Use Policy 4.

With regard to the Forest Plan, the No Action Alternative would not adequately respond to the issues/concerns indicated in Chapter 2 in the areas of reduced-use seasons and the supply of overnight facilities. Also under the No Action Alternative, the Mammoth Loop Trail would not be extended, and as such, would not address management concerns that day-use facilities such as trails are insufficient to meet demands.

Based on the analysis above, land use impacts associated with the No Action Alternative would be greater, in the case of overall consistency with the Town's General Plan, than those projected for the Proposed Action. More specifically, the No Action Alternative would not fulfill the goals and policies of the General Plan, or would not fulfill those goals and policies to the same extent as would occur under the proposed project. Land use impacts under the No Action Alternative would be generally equivalent to the project with regard to the Juniper Ridge Master Plan, the Forest Plan, and the MMSA Development Plan. As indicated previously, the applicable plans analyzed in this section envisioned an expansion of resort facilities beyond what currently existed at the time of the respective plans' approval, as evidenced by the goals and policies contained within each plan. The No Action Alternative would not ultimately fulfill the long-range vision of the Town, the Forest Service, and the MMSA to develop a year-round resort facility encompassing a mix of uses in the project area and enhancing the capacity of ski-related facilities.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.3 TRANSPORTATION

The following transportation and circulation analysis is based upon the Traffic Study prepared by LSC Transportation Consultants, Inc., dated August 2006, which is provided in Appendix B of this Draft EIR/EA. This section includes an analysis of impacts to intersections and roadway segments during construction and operation of the project, with operational impacts based on service level thresholds established in the Town's General Plan. Impacts regarding parking are evaluated based on standards set forth in the Town's Municipal Code. The project's internal circulation and emergency access are evaluated to determine if safety hazards would occur. In addition, a consistency analysis with the applicable transportation-related goals, policies and implementation measures in the Town's General Plan is provided.

3.3.1 REGULATORY FRAMEWORK

a. Town of Mammoth Lakes General Plan (1987)

The Town of Mammoth Lakes General Plan includes a Transportation and Circulation Element adopted in 2001 that identifies transportation-related goals and policies to guide future development in the Town. Goals and policies in the Town primarily focus on providing safety improvements to existing highways and roadways, and developing a trail system for use by non-motorized methods of transportation, such as bicycling, walking, horseback riding and cross country skiing, and promoting public transit. The goals and policies support the Town's overall goal of minimizing the use of motor vehicles in order to improve air quality, support a pedestrian friendly community, avoid the need for significant street improvements, and enhance the mountain resort image of the Town.

The General Plan establishes level of service (LOS) standards for the Town's roadways. According to Policy 1.7, a LOS D or better must be established or maintained on a typical winter Saturday peak-hour for signalized intersections and for primary through movements for unsignalized intersections along arterial and collector roads. This standard is expressly not applied to absolute peak conditions, as it would result in construction of roadway improvements that are warranted only a limited number of days per year and that would unduly impact pedestrian and visual conditions. Definitions of LOS are provided in Section 3.3.2.b, below. The evaluation of transportation-related impacts within section 3.3.3, Environmental Consequences, below, includes a consistency analysis between the project development and the applicable General Plan goals and policies.

b. The Town of Mammoth Lakes Draft General Plan (Update 2005)

The Town is currently in the process of revising its General Plan. The preliminary draft, dated April 2005, includes updated goals/objectives, policies and implementation measures that have been designed to realize the community's vision and support Guiding Principal VII of the Vision Statement: "Mammoth Lakes has a variety of transportation options that emphasize connectivity, convenience, and alternatives to personal vehicle use with a strong pedestrian emphasis." The LOS standards in the Draft General Plan Update are the same as the standards included in the 2001 Transportation Element. Although the 2005 General Plan Update has not yet been adopted, there are numerous policies (P) and implementation measures (IM) from the Draft General Plan Update that have been identified that are applicable to the project. Many of the policies and implementation measures are based upon goals and/or policies in the 2001 Transportation and Circulation Element. The evaluation of transportation-related impacts within Section 3.3.3, Environmental Consequences, below, includes a consistency analysis between the project development and the applicable Draft General Plan Update goals and policies.

c. Town of Mammoth Lakes Municipal Code

Title 17, Zoning, within the Town of Mammoth Lakes Municipal Code includes minimum parking space requirements for development projects in the Town. As the project site is located within the boundaries of the Juniper Springs Master Plan, the parking provisions of the Master Plan would also be applicable to development of the site. The Master Plan requires that all off-street parking be provided for all uses in accordance with the requirements and design standards of Title 17 of the Municipal Code. The proposed mix of land uses would result in variations in the need for parking over the day and would allow for shared parking. The use of shared parking would serve to reduce the overall parking demand of the project. Therefore, the project would include an amendment to the Master Plan to allow for parking requirements to be analyzed through a needs-based analysis, rather than an hours-of-use analysis. As discussed below in Section 3.3.3, Environmental Consequences, the parking requirements in the Town's Code are applicable to the project, unless the parking requirements rates were found to not be applicable based on a needs-based analysis.

3.3.2 AFFECTED ENVIRONMENT**a. Existing Roadway System**

The characteristics of the roadways within the traffic study area are summarized below.

SR 203 (Main Street) provides the major access into the Town of Mammoth Lakes, which intersects with US Highway 395 just to the east of the Town limits. SR 203 is a four-lane road from US 395 through the majority of the developed portion of the Town. SR 203 returns to two lanes north of the intersection of Main Street and Minaret Road. The highway continues from the developed area of the Town to the Mammoth Mountain Ski Area Main Lodge, and terminates at the Mono-Madera County line. Portions of SR 203 are augmented by frontage roads. According to Caltrans' classification system, SR 203 is a minor arterial for the first 8.5 miles from US 395 eastward through the Town, and a minor collector for the westernmost 0.7 miles. Mammoth Scenic Loop, a two-lane road off of SR 203, provides secondary access from the Town to US 395 to the north.

Meridian Boulevard is an arterial with an east-west alignment. The roadway contains a four-lane cross section west of Sierra Park Road and a two-lane cross section east of Sierra Park Road. This roadway provides access to the Cerro Coso College, commercial uses near Old Mammoth Road, residential uses, and lodging uses.

Minaret Road is a two-lane arterial with a north-south alignment. It provides access to the Village area, as well as residential areas to the south. Its intersections with both Main Street and Meridian Boulevard are signalized.

Old Mammoth Road serves as a north-south arterial in the eastern portion of Mammoth Lakes, as well as an east-west arterial in the southern portion of Mammoth Lakes. East of Minaret Road, Old Mammoth Road is an arterial roadway that provides access to commercial, residential, and lodging facilities. Within the study area, the roadway is a three-lane roadway with two travel lanes and a center two-way left-turn lane.

Lake Mary Road is a collector roadway that connects Main Street (SR 203) with the western portion of town, including the Tamarack Lodge and Twin Lakes. Within the past five years, a traffic signal was installed at its intersection with realigned Canyon Boulevard, which provides access to residential uses and a skier portal.

Majestic Pines Drive is a two-lane collector roadway that connects residential uses with Meridian Boulevard. Along with Kelly Road, this roadway provides an alternate north-south through route between Meridian Boulevard and Lake Mary Road.

Kelly Road is a two-lane collector roadway connecting residential uses to Lake Mary Road. Along with Majestic Pines Drive, it provides an alternate north-south through route between Meridian Boulevard and Lake Mary Road.

Figure 11 on page 98 shows the study area and the 10 intersections analyzed in the Traffic Study and also illustrates the existing turn lanes and stop controls of these intersections. The following are the intersections analyzed in the study area:

- Old Mammoth Road/SR 203 (signalized);
- Old Mammoth Road/Meridian Boulevard (signalized);
- Minaret Road/Meridian Boulevard (signalized);
- Minaret Road/SR 203 (signalized);
- Lake Mary Road/Kelly Road (unsignalized);
- Meridian Boulevard/Majestic Pines Drive (East) (unsignalized);
- Meridian Boulevard/Majestic Pines Drive (West) (unsignalized);
- Meridian Boulevard/Drop Off Area (unsignalized);
- Majestic Pines Drive/Hotel Exit (unsignalized); and
- Majestic Pines Drive/Hotel Entrance (unsignalized).

b. Existing Traffic Volumes

The traffic volumes throughout the Town of Mammoth Lakes vary greatly by time of day, day of week and, more importantly, by season. To avoid the development of facilities that are only needed a relatively few days per year, the traffic engineering profession has adopted a standard procedure of basing roadway design on volumes slightly below the absolute peak volumes. *A Policy on Geometric Design of Highways and Streets* states that, “the design hourly volume for rural highways should generally be the 30th highest volume of the future year chosen for design.”²³ The Town of Mammoth Lakes has focused its design policies on a typical winter Saturday peak hour, rather than the highest winter peak hour. During winter peak periods in the Town, traffic volumes occasionally exceed the resulting intersection and roadway capacity. However, to avoid the development of facilities that are only needed during peak periods on a relatively few days per year, the typical winter Saturday peak hour was analyzed, which is consistent with standard engineering design practice. The 2005 without project traffic volumes are illustrated in Figure 12 on page 99. The traffic volumes are based on intersection turning movement counts conducted in December 2005 and January 2006 and data provided by MMSA regarding estimated number of skiers visiting the Eagle Lodge portal and all other portals at Mammoth Mountain. Please refer to the Traffic Study for a detailed discussion of the methodology used to calculate the 2005 existing winter weekday P.M. peak hour traffic volumes.

²³ *A Policy on Geometric Design of Highways and Streets, prepared by the American Association of State Highway and Transportation Officials, 2001.*

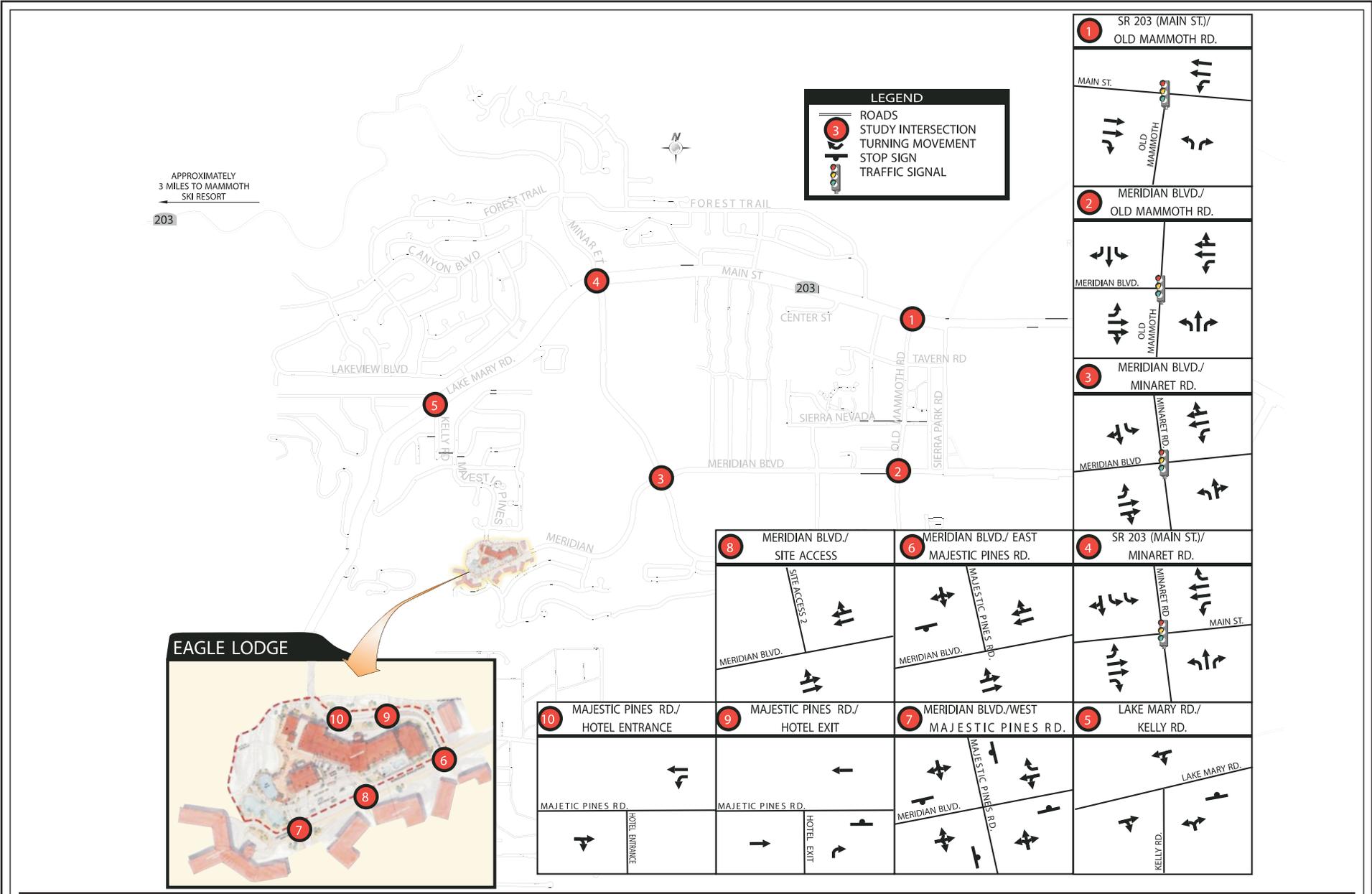
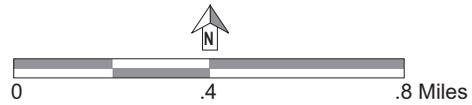


Figure 11
Existing Intersection Geometry
and Land Configuration



Source: Transportation Consultants, Inc., 2006

APPROXIMATELY
3 MILES TO MAMMOTH
SKI RESORT
← 203

LEGEND

ROADS
 STUDY INTERSECTION
 TURNING MOVEMENT
 TRAFFIC VOLUME

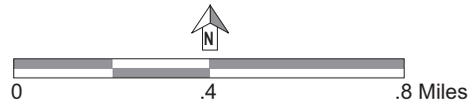
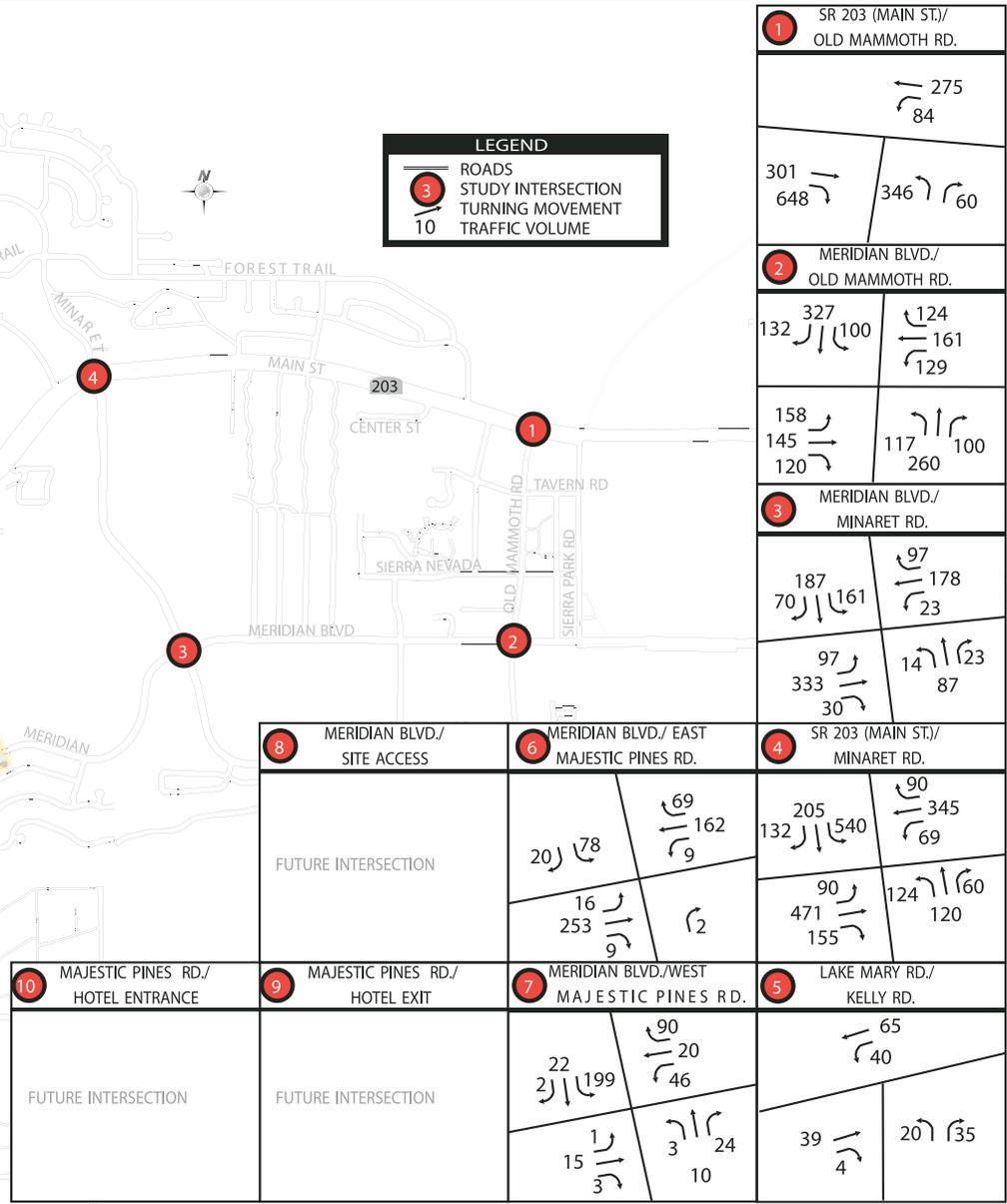
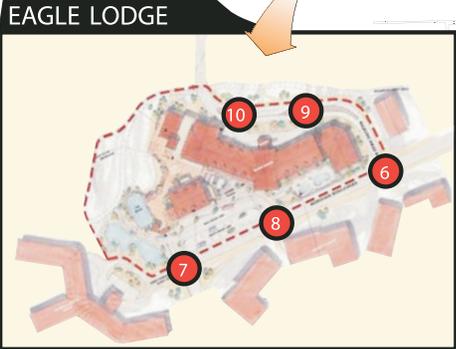


Figure 12
Typical Winter Saturday
P.M. Peak-Hour Traffic Volumes

Source: Transportation Consultants, Inc., 2006

c. Existing Levels of Service

LOS is defined as a qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. A LOS definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of roadway facility. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst. The LOS are described in Table 7 on page 101. Table 8 on page 102 shows the LOS criteria at unsignalized and signalized intersections in terms of delay per vehicle.

Table 9 on page 103 indicates the results for existing (2005) LOS the study are intersections. As shown in Table 9, the LOS at all the study intersections is LOS C or better. Based on the Town's General Plan standards (refer to Policy 1.7 in the 2001 Transportation and Circulation Element) that require a LOS D or better on a typical winter Saturday peak-hour for signalized intersections and for primary through movements for un-signalized intersections along arterial and collector roads, all the study intersection are operating at an acceptable service level under existing conditions.

d. Existing Roadway Capacity

Based on default directional lane split assumptions included within the Highway Capacity Manual and reductions to roadway capacity, as required on individual segments, to account for the presence of pedestrian crossings, on-street parking maneuvers, vehicles searching for parking spaces, and conflicting driveway turning movements, the capacity of the roadways within the study area were determined. The existing roadway capacities are shown in Table 10 on page 104. As shown in Table 10, the study roadways volume to capacity ratio is less than one. Thus, all of the study area roadways are operating below capacity.

e. Existing Parking Conditions

Due to snow storage and parking efficiency variations from day-to-day, the existing surface parking lot on the site currently contains roughly 220 to 240 parking spaces, 26 (not including two charter bus spaces) of which are designated for Juniper Springs Lodge per an agreement between MMSA and the Lodge. The number of parking spaces cited is in a range since the parking lot is an unmarked, unstriped lot. In addition, skiers park vehicles in parallel parking spaces along Meridian Boulevard. Parking is allowed along Meridian Boulevard from the west Majestic Pines Drive/Meridian Boulevard intersection eastward to Sierra Star Parkway. However, on most ski weekends, vehicles are parked along Meridian Boulevard from the west Majestic Pines Drive/Meridian Boulevard intersection all the way to Minaret Road. On very

Table 7

Level of Service Definitions

LOS	Characteristics
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This level of service represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted with platoons of vehicles.
C	This level of service still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level of service encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this level of service. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level of service describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: *Highway Capacity Manual, 1985*

busy days vehicles sometimes are parked in the area that begins to widen to provide an eastbound left-turn lane at the Meridian Boulevard/Minaret Road intersection.

f. Existing Transit Service

Mammoth Area Shuttle (MAS) offers several free public shuttles in the Town of Mammoth Lakes during the winter season. The following five routes operate during daytime hours:

The Main Lodge/Snow Creek Line (Red Line) provides service to and from the Main Lodge and Snowcreek Athletic Club, traveling along Minaret Road, Main Street, Old Mammoth Road, and Chateau Road. At Gondola Village riders can transfer to all other lines. The Red Line service begins daily at 7:00 A.M. at the Snowcreek Athletic Club and ends at 5:30 P.M., with 15-minute headways.

Table 8

Level of Service Criteria for Unsignalized and Signalized Intersections

LOS	Unsignalized Intersection	Signalized Intersection
	Average Delay per Vehicle (sec)	Average Delay per Vehicle (sec)
A	≤ 10	≤ 10
B	>10 and ≤ 15	>10 and ≤ 20
C	>15 and ≤ 25	>20 and ≤ 35
D	>25 and ≤ 35	>35 and ≤ 55
E	35 and ≤ 50	>55 and ≤ 80
F	> 50	> 80

Source: LSC Transportation Consultants, Inc., 2006

The Canyon Lodge Line (Blue Line) provides service to and from Gondola Village and Canyon Lodge, traveling along Lakeview Boulevard, Canyon Boulevard, and Forest Trail. Riders can transfer to all other lines at Gondola Village. Service begins daily at Gondola Village at 7:00 A.M. and ends at 5:30 P.M., with half-hour headways.

The Juniper Springs Line (Green Line) provides service to and from Eagle Lodge and Old Mammoth Road, traveling along Azimuth, Meridian, and Sierra Nevada Boulevards. Riders can transfer to all other lines at stop #32 (the intersection of Sierra Nevada Boulevard and Old Mammoth Road). The Green Line operates daily beginning at 7:30 A.M. and ends at 5:30 P.M., providing half-hour headways.

The Canyon Lodge/Juniper Springs Line (Yellow Line) provides service to and from Canyon Lodge and Chair 15 Outpost (Juniper Springs), traveling along Canyon Boulevard, Lake Mary Road, Kelly Road, and Majestic Pines Drive. Riders can transfer to all other lines at Gondola Village. Providing up to half-hour headways, the Yellow Line operates daily from 7:30 A.M. to 5:30 P.M.

The Tamarack Lodge/Gondola Village Line (Orange Line) provides service to and from Tamarack Lodge and Gondola Village, traveling along Lake Mary Road. Riders can transfer to all other lines at Gondola Village. The bus departs from Tamarack Lodge three times a day (9:00 A.M., noon, and 4 P.M.).

There are also four routes that provide service during evening hours. Riders can transfer between the following four Nightlines at Gondola Village:

The Gondola Village/Snowcreek Nightline (Red Line) provides service to and from Gondola Village and Snowcreek Athletic Club. The Red Line services Main Street, Old

Table 9
2005 Typical Winter Saturday Intersection LOS

Intersection	Unmitigated Traffic Control	Approach	Delay (seconds per vehicle)	LOS
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	22.9	C
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	21.4	C
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	20.5	C
Minaret Road/Main Street	Traffic Signal	Total Intersection	20.8	C
Lake Mary Road/Kelly Road (North)	Two-Way Stop Controlled	Worst Approach	3.5	A
		Total Intersection	1.5	A
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop Controlled	Worst Approach	8.3	A
		Total Intersection	1.6	A
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop Controlled	Worst Approach	9.7	A
		Total Intersection	8.9	A

Source: LSC Transportation Consultants, Inc., 2006

Mammoth Road, Chateau Road, and Minaret Road. Beginning at Gondola Village, the bus departs every half-hour from 5:00 P.M. to Midnight.

The Canyon Lodge Nightline (Blue Line) provides service to and from Gondola Village and Canyon Lodge. The Green Line night service operates on Friday and Saturday nights only, every half hour from 5:00 P.M. to Midnight.

The Juniper Springs Line (Green Line) provides night service to and from Eagle Lodge and Old Mammoth Road, traveling along Azimuth, Meridian, and Sierra Nevada Boulevards. The Green Line night service operates on Friday and Saturday nights only, every half hour from 5:00 P.M. to Midnight.

The Canyon Lodge/Juniper Springs Line (Yellow Line) provides service to and from Canyon Lodge and Chair 15 Outpost (Juniper Springs), traveling along Canyon Boulevard, Lake Mary Road, Kelly Road, and Majestic Pines Drive. The Yellow Line night service operates on Friday and Saturday nights only, every half hour from 5:00 P.M. to Midnight.

In addition, the Town of Mammoth Lakes, through Inyo-Mono Transit, operates “The Lift” bus service during the non-winter seasons, as well as a summer-only rubber-tired Trolley

Table 10
2005 Roadway Capacity Summary

Roadway Segment	Capacity (Vehicles per Hour per Peak Direction)	Existing Conditions		
		Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded?
Main Street East of Old Mammoth Road	2,600	361	0.14	No
Main Street West of Old Mammoth Road	2,600	949	0.37	No
Main Street East of Minaret Road	2,600	1,071	0.41	No
Lake Mary Road West of Minaret Road	1,600	716	0.45	No
Lake Mary Road West of Kelly Road	1,600	85	0.05	No
Old Mammoth Road South of Main Street	1,600	732	0.46	No
Old Mammoth Road North of Meridian Boulevard	1,600	559	0.35	No
Old Mammoth Road South of Meridian Boulevard	1,600	576	0.36	No
Meridian Boulevard East of Old Mammoth Road	1,600	414	0.26	No
Meridian Boulevard West of Old Mammoth Road	2,600	423	0.16	No
Meridian Boulevard East of Minaret Boulevard	2,600	517	0.20	No
Meridian Boulevard West of Minaret Road	2,600	460	0.18	No
Meridian Boulevard East of Majestic Pines Road North	2,600	333	0.13	No
Meridian Boulevard West of Majestic Pines Road North	2,600	278	0.11	No
Minaret Road Main Street to Forest Trail	1,300	877	0.67	No
Minaret Road South of Main	1,600	429	0.27	No
Majestic Pines Drive North of Meridian	1,600	98	0.06	No
Majestic Pines Drive South of Meridian Boulevard	800	711	0.09	No
Kelly Road South of Lake Mary Road	800	55	0.07	No

Source: LSC Transportation Consultants, Inc., 2006

program. These services do not serve the Eagle Lodge site. The entire Town, including the Eagle Lodge site, is served by a Dial-A-Ride program.

3.3.3 ENVIRONMENTAL CONSEQUENCES

a. Significance Criteria

(1) Local Transportation System

(a) Construction Traffic

The proposed project would result in a significant construction traffic impact if it would cause a substantial temporary inconvenience or hazardous condition.

(b) Intersections and Roadway Capacity

Based on the LOS standards adopted in the Town's General Plan, the following thresholds are applicable to determining impacts to intersections in the study area:

For Signalized Intersections: Total intersection LOS D or better must be maintained. Therefore, if a signalized intersection is found to operate at a total intersection LOS E or F, mitigation is required. This same threshold applies to roundabouts.

For Unsignalized Intersections: In order to avoid the identification of a LOS failure for intersections that result in only a few vehicles experiencing a delay greater than 50 seconds (such as at a driveway serving a few homes that accesses onto a busy street), a LOS deficiency is not identified for all intersections with approach LOS E or F. Instead, a LOS deficiency is assumed to occur at an unsignalized intersection only if an individual minor street movement operates at LOS E or F and total minor approach delay exceeds four vehicle hours for a single lane approach and five vehicle hours for a multi-lane approach. In other words, a deficiency is found to occur if the average number of vehicles queued over the peak-hour exceeds four at a single-lane approach, or exceeds five at a multi-lane approach.

In addition, impacts are considered significant if the in the future year scenarios (2009 and 2024) with the project, the volume to capacity ratio along any of the study area roadways is greater than one.

(2) Parking

Based on minimum parking requirements set forth in the Town of Mammoth Lakes Municipal Code, parking impacts are considered to be significant if the project's parking demand, including reductions and shared parking, plus the 26 spaces (not including two charter bus spaces) to be allocated for the Juniper Springs Lodge is greater than the number of parking spaces to be provided by the project.

(3) Internal Site Circulation

Impacts regarding internal site circulation are considered significant if the project would substantially increase hazards due to a design feature or incompatible uses.

(4) Emergency Access

Impacts regarding emergency access would occur if the project did not provide adequate space and/or access for emergency vehicles to serve the project site or its surroundings.

(5) Alternative Transportation

Alternative transportation impacts would occur if the project would conflict with adopted policies, plans or programs supporting alternative transportation (i.e., bus routes, bicycle paths).

(6) Consistency with Applicable Regulations

Impacts would occur if the project would conflict with the goals and/or policies in the Town's adopted 1997 General Plan or policies and/or implementation measures in the proposed 2005 General Plan Update for the purpose of avoiding or mitigating an impact to the transportation system.

b. Methodology**(1) Local Transportation System****(a) Construction Traffic**

Construction traffic (e.g., worker travel, hauling activities, and the delivery of construction materials) could affect existing traffic in the project vicinity. Construction impacts are analyzed based on the anticipated number of worker and haul trips to and from the site. The configuration of Meridian Boulevard, which is a four-lane roadway, is considered in determining if construction activities would cause substantial delays and disruption of existing traffic.

(b) Intersections and Roadway Capacity

The net impact of the added traffic volumes to the study area intersections and roadway capacity expected to be generated by the proposed project during the typical winter Saturday P.M. peak hour was evaluated based on analysis of future operating conditions at the 10 study intersections, with and without the proposed project. The previously discussed LOS and roadway capacity analysis methodology was utilized to evaluate the future characteristics at each study location intersection and roadway segment. Traffix (Version 7.1, Dowling Associates) software was utilized to calculate the LOS at the study area intersections and the aaSIDRA Software (version 2.1, Akcelik & Associates Pty Ltd.) was utilized to calculate the LOS for roundabouts.

(i) Project Trip Generation and Distribution

Because of the unique transportation factors impacting ski area access and the need to consider the interaction between the various uses proposed for the site, as well as the interaction with other nearby land uses, an analysis was conducted for typical P.M. peak hour winter and summer conditions. The project's net impact (total site trip generation minus existing site trip generation) on typical summer Saturday Summer P.M. peak-hour traffic is 523 trips, which is three percent higher than the winter net impact of 509 trips, as described below. However, as traffic volumes are greater during the winter and because the project generates approximately 40 percent less traffic during the summer than the winter, the winter condition is evaluated in this analysis as the worse case. In addition, the trip generation is based on the hotel only development scenario, as it would generate more trips when compared to the hotel/condominium development scenario. If the hotel/condominium development scenario were to be developed instead, the traffic analysis and mitigation measures, if necessary, would be analyzed upon project definition to determine the proportionate decrease in traffic impacts. Please refer to the Traffic Study for a detailed discussion of the summer trip generation.

The project's net impact on trip generation during typical P.M. peak hour winter conditions is shown in Table 11 on page 108. As shown in Table 11, upon project buildout on a typical winter Saturday, the project would generate a total of 914 P.M. peak-hour trips (320 entering and 594 exiting). Deducting the existing 405 trips generated under existing conditions results in a net increase of 509 P.M. peak-hour trips (219 entering and 290 exiting). Please refer to Figures 3 and 5 in the Traffic Study for an illustration of the distribution of project-generated trips and the net increase in trips as a result of the project on existing winter traffic volumes, respectively.

(ii) Year 2009 (Project Buildout Conditions) and Year 2024 (General Plan Buildout Traffic Conditions)

Two future traffic year scenarios were analyzed: Year 2009 (project buildout) and Year 2024 (General Plan buildout) with project traffic included. The methodology for forecasting project impacts under these scenarios is as follows:

The 2009 without project traffic volumes were forecasted as follows:

1. A list of 28 projects assumed to be built by 2009 was provided by the Town of Mammoth Lakes. These projects were added to the existing land uses defined in the Mammoth Lakes Transportation Demand Model. Please refer to Chapter 4.0, Cumulative Effects, for a list of the projects.

Table 11

Project Auto Trip Distribution - Winter

Use	P.M. Peak Hour External Trips			Reductions for External Walking Trips	P.M. Peak Hour External Auto Trips			Percent Pass-By	P.M. Peak Hour New External Auto Trips		
	In	Out	Total		In	Out	Total		In	Out	Total
Skiers ^a	213	415	628	--	213	415	628	0%	213	415	628
Base Lodge	0	43	43	0%	0	43	43	0%	0	43	43
Ice Rink	3	3	6	5%	3	3	6	0%	3	3	6
Commercial	175	172	347	42%	102	100	202	25%	77	75	152
Lodging	20	51	71	0%	20	51	71	0%	20	51	71
Buses	2	2	4	0%	2	2	4	0%	2	2	4
Trucks	<u>5</u>	<u>5</u>	<u>10</u>	0%	<u>5</u>	<u>5</u>	<u>10</u>	0%	<u>5</u>	<u>5</u>	<u>10</u>
Total	418	691	1,109		345	619	964		320	594	914
Existing Traffic Generated by Site									101	304	405
Project's Net Impact on Trip Generation									219	290	509

^a Reduction for walking trips reflected in Appendix A of the Traffic Study (Table A), which is provided in Appendix B of this document.

Source: LSC Transportation Consultants, Inc., 2006

- The growth at the external nodes was estimated by straight line interpolation between the volumes at each node in the 2004 and 2024 traffic models.
- The Mammoth Lakes Transportation Demand Model was run to estimate a set of 2009 traffic volumes, assuming development on the Eagle Lodge site.
- The traffic volumes generated by the Eagle Lodge Transportation Analysis Zone (TAZ) in the model were then subtracted from the model-generated traffic volumes.
- The traffic currently generated by the site (from the 2005 counts) was then added to the traffic volumes, as the no project condition assumes no change in traffic from today's current condition.

The 2024 without project traffic volumes were forecasted as follows:

- The land uses contained in the 2024 Existing General Plan Mammoth Lakes Transportation Demand Model were updated to better represent the current development proposals for the Cerro Coso College site. The need for this update was generated based upon comments received as part of the General Plan Update process.

2. The 2024 Mammoth Lakes Transportation Demand Model was then re-run to develop a set of 2024 traffic volumes that assume development on the Eagle Lodge site consistent with the model assumptions.
3. The traffic volumes generated by the Eagle Lodge TAZ were then subtracted from the model traffic volumes.
4. The traffic currently generated by the site was then added to the traffic volumes.

(2) Parking

The parking demand generated by the various uses within the project was projected using the Town of Mammoth Lakes parking requirements set forth in the Municipal Code, unless the parking requirements were not found to be applicable. The following are the primary assumptions that were used to estimate parking demand for the project.

- As most of the uses contained in the Base Lodge are skier amenities, no customer parking would be required aside from the skier parking. However, parking would be required for employees, the ice rink, and day care/ski school drop offs.
- The parking demand for Day Care drop-off was estimated based upon the Day Care A.M. peak-hour trip generation rate identified in the *ITE Trip Generation Manual*. It was also assumed that 40 percent of the drop off vehicles per hour would enter the site within the peak 15 minutes. Each Day Care parking space was assumed to turn over every 15 minutes. Based upon these assumptions (reflecting the relatively long time needed for the paperwork associated with first-time visitor daycare customers), it is estimated that five day care drop-off spaces are required.
- According to MMSA, the maximum drop-off activity for the ski school would occur at between 9:00 and 10:00 A.M., during which time 223 students arrive at the ski school. Assuming half of these students are dropped off, an average student vehicle occupancy of 1.5 (2.5 skiers per vehicle minus the driver), 27 parking spaces would be required for ski school drop off.
- The employee schedule was used to estimate how many employees for the base lodge would park on site at one time.²⁴ Assuming an average employee vehicle occupancy of 1.2, 0.83 parking spaces would be required per employee of the Base Lodge.²⁵

²⁴ Based upon a review of parking permits at the existing employee housing and the Town of Mammoth Lakes Employer/Employee Commute Survey, it was assumed that 25 percent of the employees would take transit to get to/from work.

- As the Town does not have a parking requirement for a day spa, the *ITE Parking Generation Manual* was used to estimate a parking demand rate based upon the Health/Fitness Club land use (5.19 spaces per 1,000 square feet of floor area).
- Similarly, as the Town does not have specific parking demand rates for a convenience market, the ITE Parking Generation rate was used.
- The parking demand for the hotel only development scenario, based upon the Mammoth parking requirements, was calculated as it represents a worse case scenario of parking impacts when compared to the hotel/condominium development scenario.

Next, parking reductions for internal and pedestrian/bicycle trips were calculated. As the project is a mixed-use development near other trip generators, there could be internal pedestrian trips that could tend to reduce parking needs as well as pedestrian trips to other nearby land uses. However, the applicable internal reductions for a parking analysis are not the same as a trip generation analysis. If, for example, a person decides to go skiing and then, afterwards, go out to dinner at the ski base, the ski area to dinner trip generates no auto trips. However, the parking demand remains on-site even though the land use generating the parking demand shifts. Therefore, it is only appropriate to make reductions in parking demand for the following two types of trips:

- Trips with one trip end internal to the site and one trip end external to the site that occur via non-auto modes. As skier walking trips between the Base Lodge and residences is already accounted for in the skier parking calculation, this reduction primarily applies to the commercial uses and is consistent with the assumptions identified in the trip generation analysis above.
- Walking trips between the lodging and commercial uses. As 95 percent of the hotel parking are assumed to be dedicated for hotel guest use only, an internal reduction is applicable for trips between lodging and other uses. A reduction of four to seven percent was applied to the ice rink, skier, and commercial uses, based upon the internal trip analysis presented in Appendix A of the Traffic Study.

A shared parking demand analysis was conducted based upon the methodology for assessment of shared parking developed by the Urban Land Institute.²⁵ A shared parking analysis considers how two or more individual land uses can be provided with adequate shared

²⁵ *This vehicle occupancy is consistent with journey to work vehicle occupancy of 1.14 per the 2001 national Household Travel Survey, factored up to account for the fact that ski area employees are more likely to carpool.*

²⁶ *Shared Parking, Second Edition, Urban Land Institute, 2005.*

parking, considering the variation in the peak accumulation of parked vehicles for different nearby land uses by time of day. This strategy recognizes the fact that some land uses (such as skiing) have peak parking needs that occur at different times than other land uses (such as lodging). In mixed-use development the parking supply required to accommodate the needs of all land uses is less than the sum of the peak parking needs for the individual land uses.

The basis for this analysis is an hour-by-hour assessment of parking needs for individual land uses, which can then be added to identify the peak parking needs for the total land uses, and when this peak in demand occurs. Accordingly, parking demand for each individual land use in a development block by time of day is estimated. Based on these estimates, the total number of parking spaces required for all the land uses during a particular hour is calculated by adding the parking requirements for all the land uses within the block for that hour.

Accounting for the parking reductions from the internal and pedestrian/bicycle trips and shared parking, the parking demand for the project is calculated. The 26 spaces allocated to the Juniper Springs Lodge were added to the project's parking demand. In addition to these 26 parking spaces, two existing on site charter bus parking spaces, although currently unofficial and not striped, are required to be maintained per an agreement between Juniper Springs Lodge and MMSA.²⁷

(3) Internal Site Circulation

The proposed auto and bus drop off-zones were reviewed with respect to drop-off space supply and demand. The internal site circulation analysis evaluates whether project design features would result in safety hazards. The proposed layout and circulation were reviewed to ensure safe and efficient operation. Access to the hotel from Majestic Pines Drive was reviewed to ensure that hotel access approaches would not result in safety hazards. The skier/public parking area was reviewed to ensure that parking space size and aisle widths would be consistent with Town standards. Truck access to the site was reviewed to ensure that adequate space would be provided in the proposed truck turnaround.

(4) Emergency Access

The proposed emergency access was evaluated to determine if the project design is consistent with the requirements of the Mammoth Lakes Fire Department.

²⁷ Letter from Inyo-Mono Title Company to MMSA: File No. 128681, June 8, 2006.

(5) Alternative Transportation

Alternative transportation was analyzed to evaluate the adequacy of the proposed transit facilities (i.e., bus drop-off area). In addition, the proposed pedestrian and bicycle facilities were reviewed to determine consistency with the Town of Mammoth Lakes 2003 Sidewalk Master Plan.

(6) Consistency with Applicable Regulations

The General Plan was reviewed to identify applicable goals and polices. A consistency analysis with the applicable goals and polices stated in the 2001 Transportation and Circulation Element and the policies and implementation measures in the proposed 2005 General Plan Update is provided. As the policies and implementation measures in the proposed 2005 General Plan Update are based on the 2001 Transportation and Circulation Element, the consistency analysis table cross references the policies in the adopted and Draft General Plan.

c. Environmental Consequences of the Proposed Action

(1) Local Transportation System

(a) Construction Traffic

Project construction would generate traffic from construction worker travel, as well as the arrival and departure of trucks delivering construction materials to the site and the hauling of materials generated by on-site grading activities. Both the number of construction workers and trucks would vary throughout the construction process in order to maintain a reasonable schedule of completion. The number of on-site construction workers, based on the specific construction activity underway (i.e., grading, building erection, etc.), could range from approximately 25 to 50, with the lower end of the range occurring during building site grading and the upper end of the range occurring during finishing work (i.e., drywall, paring, electrical, etc.).

In general, it is anticipated that the majority of the construction workers would arrive and depart the site during off-peak hours (i.e., arrive prior to 7:00 A.M. and depart between 3:00 to 4:00 P.M.). The construction work force would likely be from all parts of the Mammoth region, but would access the site via Meridian Boulevard. During the non ski-season, construction workers would park along the shoulder of Meridian Boulevard and on site, depending on the nature of the construction activities. During the ski season, construction workers would park at the Sierra Star Golf Course and on site. However, construction personnel could park on adjacent residential streets throughout the construction period resulting in short-term parking impacts. Mitigation Measure TR-1 requires the applicant to prepare a construction parking plan for

construction personnel to be reviewed and approved by the Town of Mammoth Lakes. With implementation of Mitigation Measure TR-1, potentially significant short-term construction parking impacts would be reduced to a less than significant level.

Depending upon the specific nature of the construction activity (e.g., grading, finish construction, landscaping), it is assumed that the majority of truck traffic would be distributed evenly across the workday. It is anticipated that during peak construction activity, project construction would generate up to approximately 170 peak daily truck trips during the excavation stage. However, an average construction day would include approximately 20 trips per day (e.g., concrete pours, debris hauls, deliveries, etc.). Anticipated haul routes for semi-trailers, trucks and trailers, and other construction-related vehicles would access the project site via Meridian Boulevard. However, other roadways would be utilized when transporting excavated materials from the site to temporary and/or permanent off-site storage areas. All on-road construction traffic routes would be subject to review and approval by the Town of Mammoth Lakes. Mitigation Measure AES-2 requires the applicant to prepare and submit a construction hauling plan to be reviewed and approved by the Community Development Department prior to issuance of grading permit. The plan would ensure that on-road construction haul routes do not affect sensitive uses in the project vicinity, including residential uses along Majestic Pines Road.

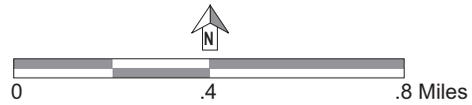
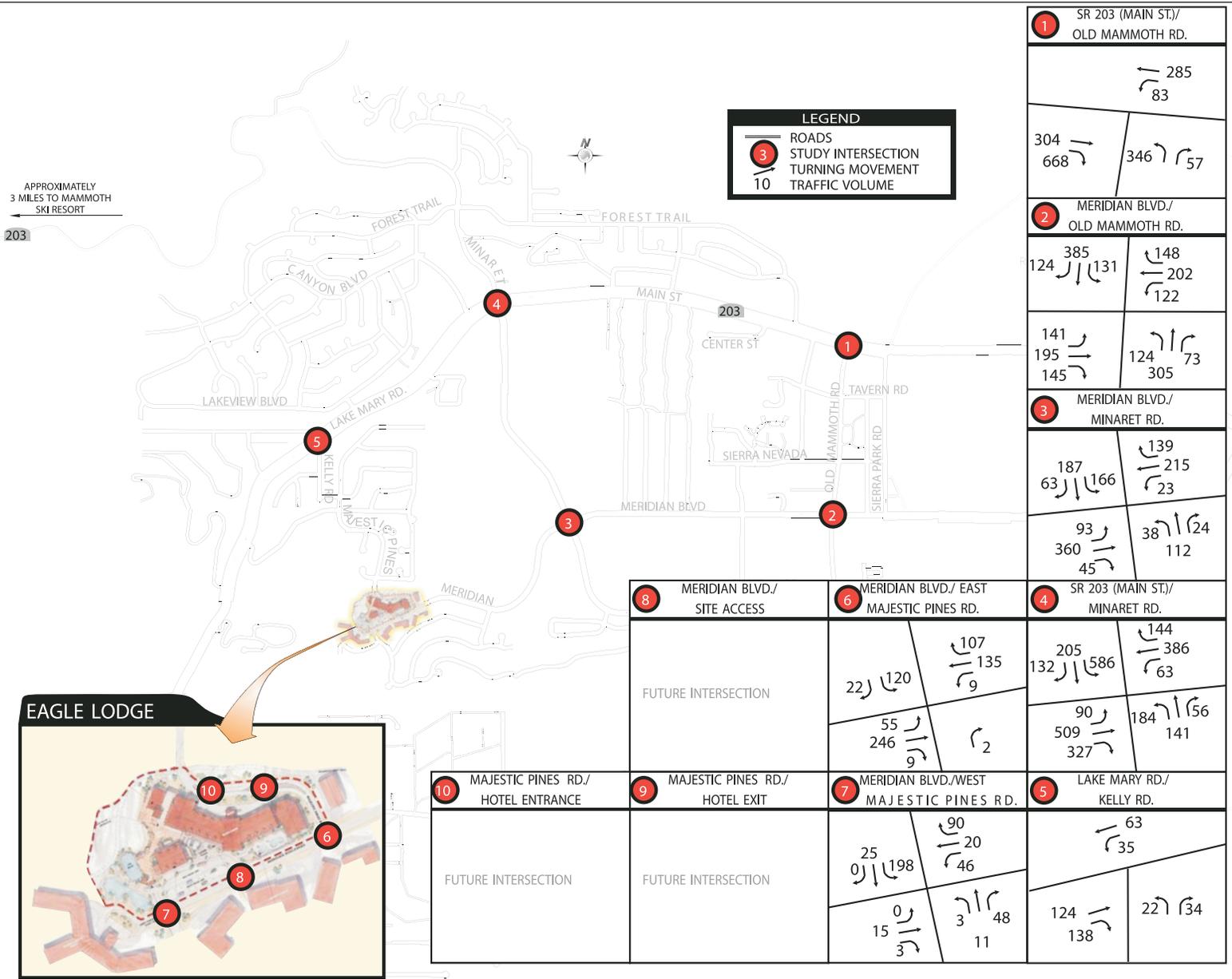
Given the off-peak nature of construction worker traffic and number of hourly construction-related trips, construction traffic is not anticipated to cause substantial delays and disruption to existing traffic. Given that Meridian Boulevard is a four-lane highway, traffic delays during construction activities are not likely to occur. Nonetheless, it is plausible that delays could occur during construction activities at various stages. Therefore, Mitigation Measure TR-2 has been prescribed to ensure that construction activities do not cause substantial delays and disruption of existing traffic. With implementation of Mitigation Measures TR-2 and AES-2, traffic impacts during construction would be less than significant.

(b) Operational Traffic

(i) Year 2009 (Project Buildout) Traffic Conditions

The Year 2009 without and with project turning movement traffic volumes are shown in Figure 13 on page 114 and Figure 14 on page 115, respectively.

The study area intersections were evaluated to determine operational conditions during the 2009 typical Saturday winter P.M. peak hour both with and without the project. As shown in Table 12 on page 116, intersection LOS does not exceed LOS D at any of the study intersections in 2009 with or without the project, with the exception of the southbound approach to the



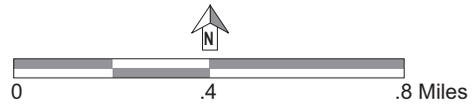
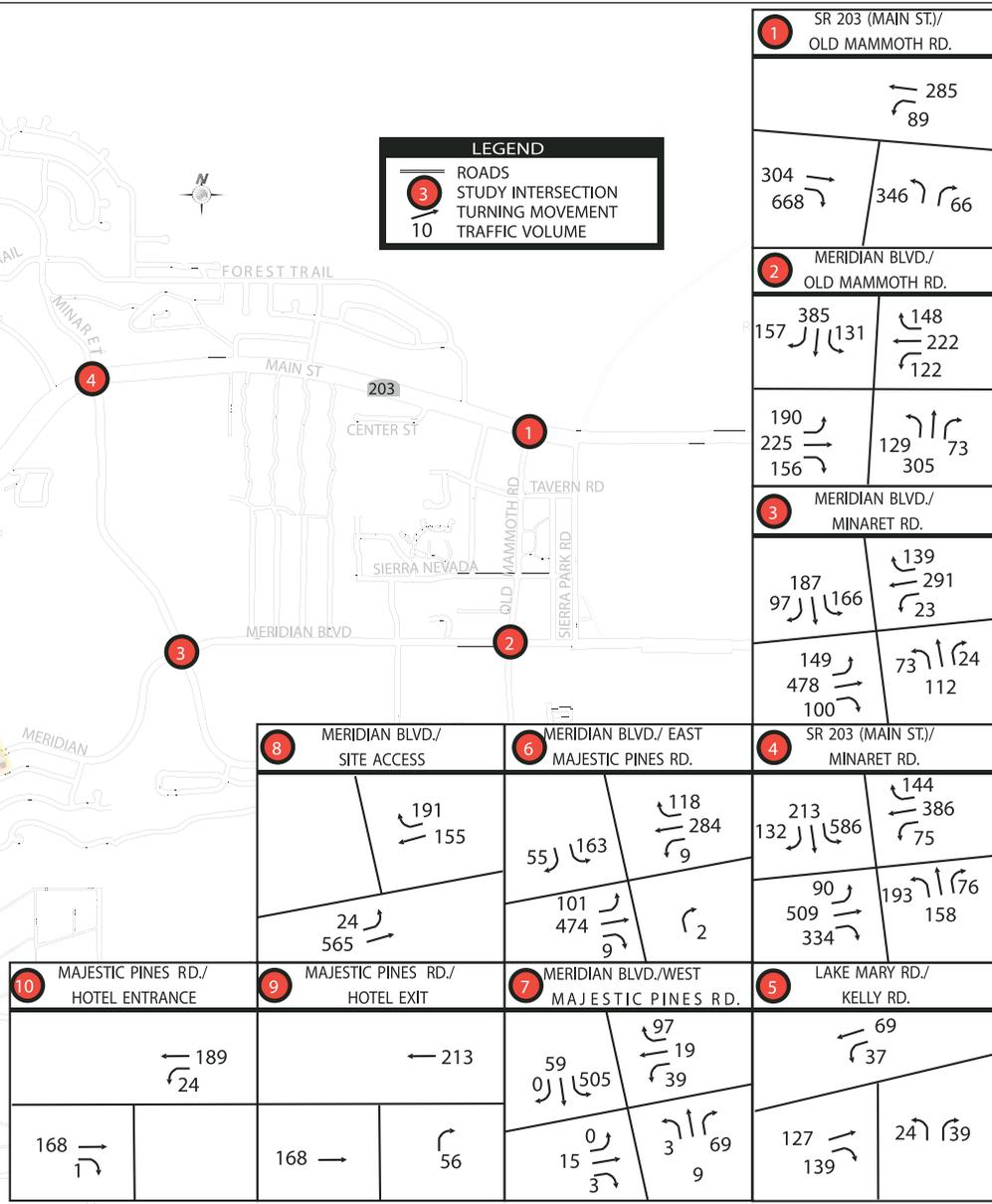
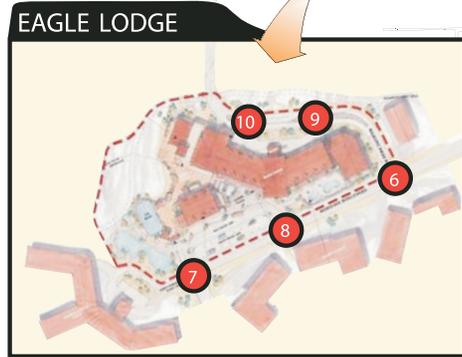
Source: Transportation Consultants, Inc., 2006

Figure 13
2009 Without Project Winter Saturday
P.M. Peak - Hour Traffic Volumes

APPROXIMATELY
3 MILES TO MAMMOTH
SKI RESORT
← 203

LEGEND

ROADS
STUDY INTERSECTION
TURNING MOVEMENT
TRAFFIC VOLUME



Source: Transportation Consultants, Inc., 2006

Figure 14
2009 With Project Winter Saturday
P.M. Peak - Hour Traffic Volumes

Table 12

2009 Typical Winter Saturday Intersection LOS

Intersection	Unmitigated Traffic Control	Approach	Without Project		With Project		Approach Vehicle Hours of Delay ^a
			Delay (sec. per vehicle)	LOS	Delay (sec. per vehicle)	LOS	
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	20.8	C	21.1	C	--
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	23.8	C	25.6	C	--
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	21.3	C	27.4	C	--
Minaret Road/Main Street	Traffic Signal	Total Intersection	26.8	C	28.5	C	--
Lake Mary Road/Kelly Road (North)	Two-Way Stop	Worst Approach	10.2	B	10.3	B	--
	Control	Total Intersection	2.0	A	2.2	A	--
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop	Worst Approach	15.1	C	52.0	F	3.3
	Control	Total Intersection	3.8	A	10.1	B	--
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop	Worst Approach	9.5	A	21.6	C	--
	Control	Total Intersection	8.7	A	17.7	C	--
Meridian Boulevard/Drop Off Area	Two-Way Stop	Worst Approach	--	--	9.0	A	--
	Control	Total Intersection	--	--	0.2	A	--
Majestic Pines Drive/Hotel Exit	Two-Way Stop	Worst Approach	--	--	9.4	A	--
	Control	Total Intersection	--	--	1.2	A	--
Majestic Pines Drive/Hotel Entrance	Two-Way Stop	Worst Approach	--	--	12.0	B	--
	Control	Total Intersection	--	--	0.5	A	--

^a Worst Approach vehicles hours of delay reported only if approach LOS exceeds threshold.

Source: LSC Transportation Consultants, Inc., 2006

Majestic Pine Drive East/Meridian Boulevard intersection. With project implementation, the southbound approach at this intersection would change from LOS C to LOS F. However, the approach delay would be 3.3 vehicle hours, which does not exceed the four vehicle hour delay threshold for unsignalized intersections. Thus, the project would result in less than significant LOS impacts at the study area intersections during Year 2009.

In addition, the study area roadway segments were evaluated to determine whether there would be available capacity on the roadways to serve the project. Table 13 on page 118 provides a summary of the roadway capacity in Year 2009 with and without project conditions. As shown in Table 13, the volume to capacity ratio of the study area roadway segments would be less than one under without and with project conditions. As such, the study roadways would operate at acceptable levels of service. Therefore, the project would result in less than significant roadway capacity impacts along the study area roadway segments during Year 2009.

(ii) Year 2024 (General Plan Buildout) Traffic Conditions

The 2024 without and with project traffic turning movement volumes are shown in Figure 15 on page 119 and Figure 16 on page 120, respectively.

The study intersections were evaluated to determine operational conditions during the 2024 typical Saturday winter P.M. peak hour both with and without the project. As shown in Table 14 on page 121, LOS D standards would be exceeded in 2024 at the following intersections:

- Meridian Boulevard/Minaret Road (LOS E with the project)
- Majestic Pine Drive East/Meridian Boulevard (LOS E without the project and LOS F with the project)

At the Meridian Boulevard/Minaret Road intersection, the provision of an eastbound right-turn lane would result in an acceptable LOS D condition. In addition, the construction of a dual lane roundabout at this location would result in an acceptable LOS B. As the current Development Impact Fee program includes the cost associated with construction of a roundabout at this intersection, this potentially significant impact would be mitigated to a less than significant level by payment of the Development Impact Fee, as prescribed in Mitigation Measure TR-3.

At the Majestic Pines Drive/Meridian Boulevard intersection, the traffic analysis that was prepared for the Mammoth Lakes Capital Improvement Program indicates that the provision of a two-way left-turn lane along Meridian Boulevard to provide for two-stage southbound left turns

Table 13
2009 Roadway Capacity Summary

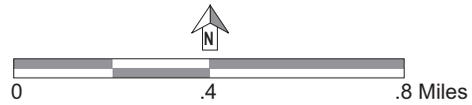
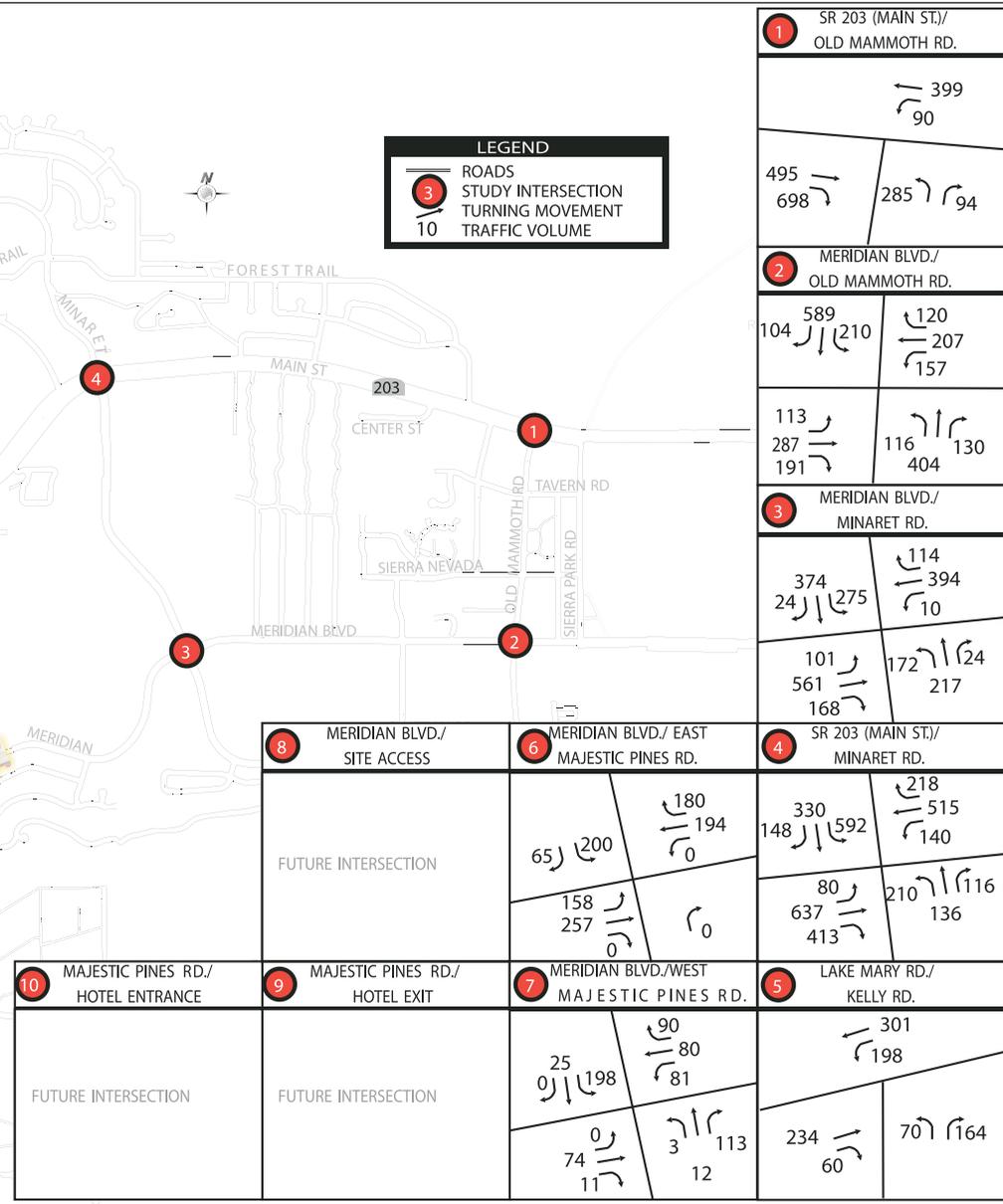
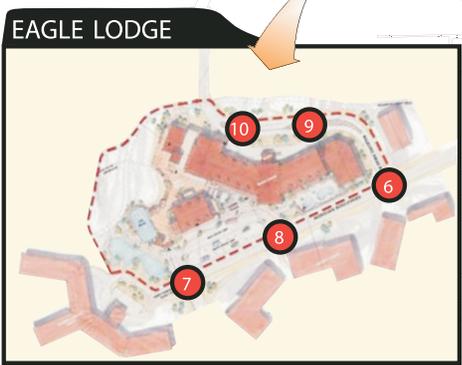
Roadway Segment	Without Project				With Project			Percent Increase in Peak-Hour Traffic Generated by the Project
	Capacity (Vehicles per Hour per Peak Direction)	Maximum Vehicles per Direction per Hour	Volume/Capacity	Capacity Exceeded?	Maximum Vehicles per Direction per Hour	Volume/Capacity	Capacity Exceeded?	
Main Street East of Old Mammoth Road	2600	368	0.14	No	374	0.14	No	2%
Main Street West of Old Mammoth Road	2600	972	0.37	No	972	0.37	No	0%
Main Street East of Minaret Road	2600	1,151	0.44	No	1,171	0.45	No	2%
Lake Mary Road West of Minaret Road	1600	926	0.58	No	933	0.58	No	1%
Lake Mary Road West of Kelly Road	1600	262	0.16	No	266	0.17	No	2%
Old Mammoth Road South of Main Street	1600	751	0.47	No	757	0.47	No	1%
Old Mammoth Road North of Meridian Boulevard	1600	640	0.40	No	673	0.42	No	5%
Old Mammoth Road South of Meridian Boulevard	1600	652	0.41	No	663	0.41	No	2%
Meridian Boulevard East of Old Mammoth Road	1600	472	0.30	No	492	0.31	No	4%
Meridian Boulevard West of Old Mammoth Road	2600	481	0.19	No	571	0.22	No	19%
Meridian Boulevard East of Minaret Boulevard	2600	550	0.21	No	668	0.26	No	21%
Meridian Boulevard West of Minaret Road	2600	498	0.19	No	727	0.28	No	46%
Meridian Boulevard East of Majestic Pines Road North	2600	368	0.14	No	639	0.25	No	74%
Meridian Boulevard West of Majestic Pines Road North	2600	310	0.12	No	584	0.22	No	88%
Minaret Road Main Street to Forest Trail	1300	923	0.71	No	931	0.72	No	1%
Minaret Road South of Main	1600	595	0.37	No	622	0.39	No	5%
Majestic Pines Drive North of Meridian	1600	162	0.10	No	219	0.14	No	35%
Majestic Pines Drive South of Meridian Boulevard	800	74	0.09	No	101	0.13	No	36%
Kelly Road South of Lake Mary Road	800	173	0.22	No	176	0.22	No	2%

Source: LSC Transportation Consultants, Inc., 2006

APPROXIMATELY
3 MILES TO MAMMOTH
SKI RESORT
← 203

LEGEND

- ROADS
- STUDY INTERSECTION
- TURNING MOVEMENT
- TRAFFIC VOLUME



Source: Transportation Consultants, Inc., 2006

Figure 15
2024 Without Project Winter Saturday
P.M. Peak - Hour Traffic Volumes

APPROXIMATELY
3 MILES TO MAMMOTH
SKI RESORT
← 203

LEGEND

- ROADS
- STUDY INTERSECTION
- TURNING MOVEMENT
- TRAFFIC VOLUME

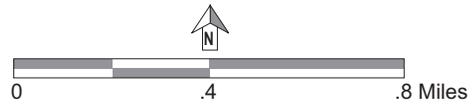
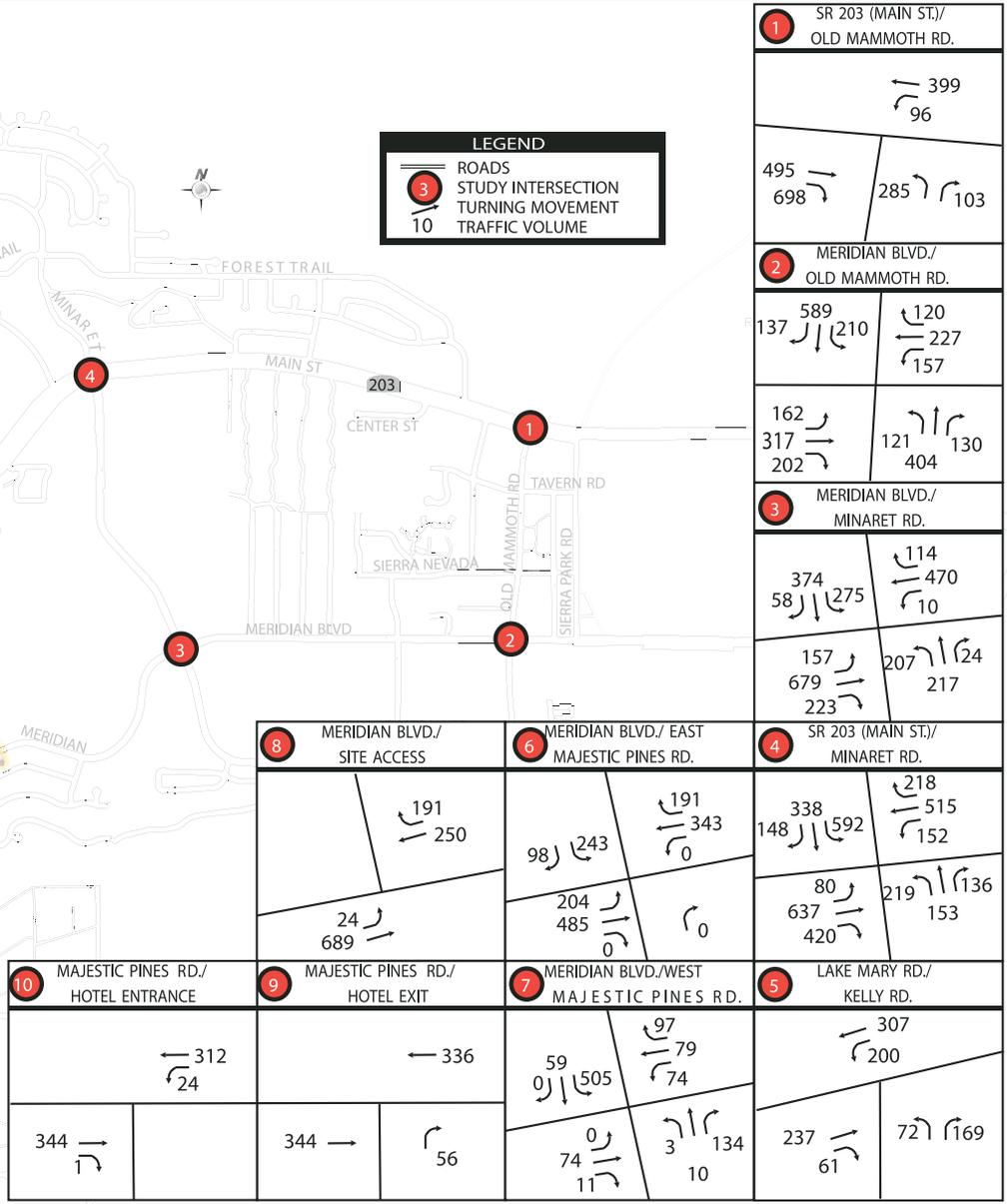
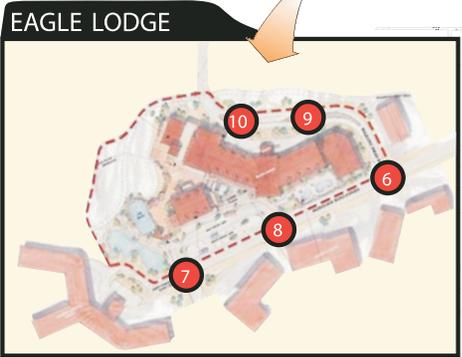


Figure 16
2024 With Project Winter Saturday
P.M. Peak - Hour Traffic Volumes

Source: Transportation Consultants, Inc., 2006

Table 14

2024 Typical Winter Saturday Intersection LOS

Intersection	Unmitigated Traffic Control	Approach	No Project			Plus Project		
			Delay (seconds per vehicle)	LOS	Approach Vehicle Hours of Delay ^a	Delay (seconds per vehicle)	LOS	Approach Vehicle Hours of Delay 1
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	17.4	B	--	17.7	B	--
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	34.8	C	--	36.7	D	--
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	45.7	D	--	69.6	E	--
Minaret Road/Main Street	Traffic Signal	Total Intersection	49.5	D	--	53.1	D	--
Lake Mary Road/Kelly Road (North)	Two-Way Stop Controlled	Worst Approach Total Intersection	22.3 6.7	C A	-- --	23.4 7.0	C A	-- --
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop Controlled	Worst Approach Total Intersection	43.1 12.1	E B	3.3 --	394.8 87.3	F F	39.4 --
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop Controlled	Worst Approach Total Intersection	10.7 9.7	B A	-- --	34.6 23.6	D C	-- --
Meridian Boulevard/Drop Off Area	Two-Way Stop Controlled	Worst Approach Total Intersection	-- --	-- --	-- --	9.0 0.2	A A	-- --
Majestic Pines Drive/Hotel Exit	Two-Way Stop Controlled	Worst Approach Total Intersection	-- --	-- --	-- --	10.7 0.8	B A	-- --
Majestic Pines Drive/Hotel Entrance	Two-Way Stop Controlled	Worst Approach Total Intersection	-- --	-- --	-- --	8.0 0.3	A A	-- --

^a Worst approach vehicles hours of delay reported only if approach LOS exceeds threshold.

Source: LSC Transportation Consultants, Inc., 2006

out of Majestic Pines onto Meridian Boulevard would result in a LOS D or better at this intersection. However, this provision does not mitigate the LOS to an acceptable level under 2024 with project conditions. The provision of a separate left-turn lane at this location would reduce the vehicle hours of delay for the southbound approach to 3.9 vehicle hours, which would no longer exceed Town thresholds. However, if Meridian Boulevard were reduced to a three-lane cross section (one lane per direction plus a center turn lane), the addition of these lanes would not result in an acceptable LOS of D or better.

Therefore, the construction of a single-lane roundabout at this location is recommended, which would allow for the narrowing of Meridian Boulevard from four lanes to three lanes (one lane in each direction plus a center turn lane). As discussed below, adequate roadway capacity along Meridian Boulevard would still be provided with a three-lane configuration. A single-lane roundabout with a 100-foot inscribed diameter would operate result in LOS B at the worst approach and LOS A for the total intersection. The current Development

Fee Impact program includes the construction of a two-way left-turn lane along Meridian Boulevard at this intersection. However, it does not include the cost of a separate southbound left-turn lane at this intersection. Therefore, as prescribed in Mitigation Measure TR-4, the project would be responsible for paying its fair share towards the cost of constructing a southbound left-turn lane at this intersection. This fee would be utilized by the Town to construct the single-lane roundabout at the intersection. In addition, the project would be responsible for paying development impact fees towards the cost of improvements identified in the Mammoth Lakes Capital Improvement Program for this intersection. With implementation of Mitigation Measures TR-3 and TR-4, potentially significant impacts to the Majestic Pines Drive and Meridian Boulevard intersection would be reduced to a less than significant level.

In addition, the study area roadway segments were evaluated to determine whether there would be available capacity on the roadways to serve the project. Roadway capacities for Year 2005 and Year 2024 would be the same. Table 15 on page 123 provides a summary of the roadway capacity under Year 2024 with and without project conditions. As shown in Table 15, the volume to capacity ratio of the study area roadway segments would be less than one without and with the project. As such, the study roadways would operate at acceptable levels of service. Therefore, the project would result in less than significant roadway capacity impacts along the study area roadway segments during Year 2024.

(2) Parking

As shown in Table 16 on page 124, the total parking demand for the project would be 994 parking spaces, without reductions for internal trips, walking trips, or shared parking. Table 17 on page 125 presents the shared parking analysis for typical winter weekend conditions. As

Table 15
2024 Roadway Capacity Summary ^a

Roadway Segment	No Project Condition				Plus Project Condition			Percent Increase in Peak-Hour Traffic Generated by Project
	Capacity (Vehicles per Hour per Peak Direction)	Maximum Vehicles per Direction per Hour	Volume/Capacity	Capacity Exceeded	Maximum Vehicles per Direction per Hour	Volume/Capacity	Capacity Exceeded	
Main Street East of Old Mammoth Road	2,600	589	0.23	NO	598	0.23	NO	2%
Main Street West of Old Mammoth Road	2,600	1,193	0.46	NO	1,193	0.46	NO	0%
Main Street East of Minaret Road	2,600	1,345	0.52	NO	1,365	0.53	NO	1%
Lake Mary Road West of Minaret Road	1,600	1,130	0.71	NO	1,137	0.71	NO	1%
Lake Mary Road West of Kelly Road	1,600	371	0.23	NO	379	0.24	NO	2%
Old Mammoth Road South of Main Street	1,600	788	0.49	NO	794	0.50	NO	1%
Old Mammoth Road North of Meridian Boulevard	1,600	903	0.56	NO	936	0.59	NO	4%
Old Mammoth Road South of Meridian Boulevard	1,600	937	0.59	NO	948	0.59	NO	1%
Meridian Boulevard East of Old Mammoth Road	1,600	627	0.39	NO	657	0.41	NO	5%
Meridian Boulevard West of Old Mammoth Road	2,600	591	0.23	NO	681	0.26	NO	15%
Meridian Boulevard East of Minaret Boulevard	2,600	860	0.33	NO	978	0.38	NO	14%
Meridian Boulevard West of Minaret Road	2,600	830	0.32	NO	1,059	0.41	NO	28%
Meridian Boulevard East of Majestic Pines Road North	2,600	457	0.18	NO	728	0.28	NO	59%
Meridian Boulevard West of Majestic Pines Road North	2,600	415	0.16	NO	689	0.27	NO	66%
Minaret Road Main Street to Forest Trail	1,300	1,070	0.82	NO	1,078	0.83	NO	1%
Minaret Road South of Main	1,600	883	0.55	NO	910	0.57	NO	3%
Majestic Pines Drive North of Meridian	1,600	338	0.21	NO	395	0.25	NO	17%
Majestic Pines Drive South of Meridian Boulevard	800	128	0.16	NO	147	0.18	NO	15%
Kelly Road South of Lake Mary Road	800	258	0.32	NO	261	0.33	NO	1%

^a As a three-lane roadway, the capacity of Meridian Boulevard would be reduced to 1,600 vehicles per hour per direction.

Source: LSC Transportation Consultants, Inc., 2006

Table 16

Base Parking Demand

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand
Skiers	6,000	Skiers per Day	See Table A in Appendix A of Traffic Study		497
Base Lodge					
Food and Beverage	8.74	KSF ^a	No Incremental Parking Demand		
Bar and Coffee Bar	0.7	KSF	No Incremental Parking Demand		
Rental / Demo / Repair Shop / Basket Check	3.7	KSF	No Incremental Parking Demand		
Retail Shop	1.2	KSF	No Incremental Parking Demand		
Ski School / Day Care (Drop Off Only) ^b	4.3	KSF	7.44	LSC	32
Ticketing / Lobby	2.6	KSF	No Incremental Parking Demand		
Restrooms	4.5	KSF	No Incremental Parking Demand		
Administrative	1.03	KSF	No Incremental Parking Demand		
Employee Break Room	1.55	KSF	No Incremental Parking Demand		
Ski Patrol	0.46	KSF	No Incremental Parking Demand		
Maintenance/Loading Dock	1.5	KSF	No Incremental Parking Demand		
Mechanical / Cell Site	0.55	KSF	No Incremental Parking Demand		
Ice Rink	5	KSF	3.60	LSC	18
Maximum Employees at One Time	122	Employees	0.83	LSC	101
Commercial					
Day Spa	8	KSF	5.19	ITE	42
Locker Club	12	KSF	No Incremental Parking Demand		
Convenience Market	4	KSF	3.4	ITE	14
Sit-Down Restaurant	200	Seats	0.33	Town Code	66
Lodging					
Hotel Equivalents	213	Rooms	1.05	Town Code	224
TOTAL					994

^a KSF = 1,000 square feet of floor area.

^b Demand parking is estimated based on the Day Care A.M. peak hour trip generation rate identified in Trip Generation Manual (ITE, 2003). While Ski School parking demand is estimated based on the maximum number of Ski School attendees and skier vehicle occupancy. Each drop off activity is assumed to take 15 minutes.

Source: LSC Transportation Consultants, Inc., 2006

shown in Table 17, during the weekend a total of 829 shared parking spaces would be required upon buildout of the project, assuming only 5 percent of the hotel spaces are not designated and can be shared. This, with the 26 spaces required for the Juniper Springs Lodge per a previous agreement, the project's shared parking demand (not including drop-off zones) would be 855 spaces. As the project proposes to provide 544 parking spaces, the project would result in a parking shortfall of 311 parking spaces. Since the project would result in a shortfall of parking relative to the projected demand based on a shared parking analysis, the project would result in a

Table 17

Parking Demand by Hour for Shared Parking Analysis^a

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand	Total Reduction for Non-Auto Access ^b	Dedicated Parking	Available Spaces for Shared Parking	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	Max Required Spaces Without Shared Use	Max Required Spaces With Shared Use
Skiers^c	6,000	skiers/day		See Table A in App. A of Traffic Study	497	5.0%	0	472	0	3	80	208	328	402	447	472	466	435	356	162	3	0	0	0	0	0	0	472	472
Base Lodge																													
Ice Rink ^d	5	KSF ^e	3.6	LSC	18	5.0%	0	17	0	1	3	7	10	12	16	17	17	17	16	15	14	13	11	9	6	3	0	17	17
Employees ^f	122	Employees	0.83	LSC	101	25.0%	0	76	26	59	71	73	76	76	74	72	72	69	68	36	24	20	19	15	8	0	76	72	
Ski School / Day Care ^g	4.3	KSF	--	ITE	32	0.0%	0	0	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	
Commercial																													
Day Spa ^h	8	KSF	5.19	ITE	42	16.0%	0	35	18	17	17	18	17	18	18	17	17	17	26	35	35	26	17	7	7	7	0	35	17
Convenience Market	4	KSF	3.4	ITE	14	54.0%	0	6	0	0	1	2	3	4	6	6	6	6	6	5	5	5	4	3	2	1	0	6	6
Sit-Down Restaurant ⁱ	200	Seats	0.33	Town Code	66	16.0%	0	55	4	9	14	20	25	25	28	24	19	25	27	36	48	55	45	21	17	12	8	55	48
Lodging																													
Hotel	213	Rooms	1.05	Town Code	224	0.0%	0	224																					
Hotel Parking Available for Shared Use ^j					11			11	9	9	10	9	8	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	8
Dedicated Hotel Parking					213			0	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213
TOTAL					1,005			896	302	343	441	582	712	758	810	829	818	790	721	511	351	341	318	278	263	246	231	906	829

^a The parking analysis is prepared for weekend conditions, as parking demand would be higher on weekends due to high skier visitor numbers.

^b Estimated walking trips from nearby residences.

^c The variation by time of day of skier parking spaces is based upon accumulation counts provided by the Northstar-at-Tahoe and Heavenly Valley ski areas.

^d The hourly variation in the parking demand generated by the ice rink was assumed to equal that of a shopping center.

^e KSF = 1,000 square feet

^f The hourly variation in parking demand for employees is estimated based upon the employee schedule provided by MMSA.

^g As the Ski School / Day Care parking will be provided as drop-off spaces and peak parking demand is assumed to occur during A.M. peak hour of skier traffic, all drop-off parking spaces were assumed to be utilized during A.M. peak hour and not available for shared parking. It was also assumed that the ski school and day care parking spaces would be available to skiers from 11:00 A.M. on.

^h The hourly variation in the parking demand generated by the Day Spa is assumed to equal that of a health club.

ⁱ The parking demand for the restaurant was reduced by 50 percent during the noon peak hours to account for the fact that people will be less likely to travel to the site during this time period since the area would be crowded with skiers. It is assumed that more customers would be skiers during this hour.

^j Only five percent of the parking for lodging is not considered to be dedicated and therefore can be shared with other uses.

Source: LSC Transportation Consultants, Inc., 2006

significant project impact. However, this represents a worst case scenario. If the project is built to include 83 multi-family units, the peak parking shortfall of the site would be reduced to 263 spaces.

To mitigate this impact to a less than significant level, the Traffic Study identifies three options, prescribed within Mitigation Measure TR-5. The following provides a summary of the options.

Parking Mitigation Option 1 - Based upon the assumptions used in this analysis, an additional 950 skiers per day would be required to use transit on a typical winter Saturday to access the Eagle Lodge base in order to reduce the parking demand of the site to 544. Assuming a bus standing capacity of 60 passengers, an additional 16 bus trips would be needed to the site during a peak day, and in the afternoon an additional 16 bus trips would be needed from the site. Assuming a half-hour route cycle length and a 2.5-hour-long peak period, four additional buses would be needed to provide this capacity. The applicant would be responsible for purchasing and operating the additional four vehicles. So long as good transit ridership can be maintained on both routes, this would mitigate the parking impact. Therefore, the project applicant would be required to provide 16 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March.

The requirement for the project applicant to purchase and operate four additional buses is based on the assumption that the Eagle Lodge portal would be operating at or near capacity on a typical winter Saturday. Under the 83 multi-family unit option, the project would be required to provide 14 additional bus round trips per day, which would require three new buses. However, as transit demand is dependent on the number of skiers, the number of buses needed is dependent upon the skier visitors per day. Therefore, the number of buses that the applicant would be required to purchase and operate would be tied to the number of skier visits per day, as follows:

Additional Bus Requirements Beyond Existing Service	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)
No additional buses	5,050	5,200
One additional bus	5,350	5,500
Two additional buses	5,650	5,800
Three additional buses	5,950	>5,800
Four additional buses	> 5,950	Not Applicable

If the applicant provides data to the Town that demonstrates three or fewer additional buses are adequate to accommodate the transit demand based on the number of skiers for a particle weekend(s) or holiday and the Town approves such data, the applicant would operate the requisite number of buses based on the criteria stated above.

In addition, as the project would result in a parking shortfall, it could be expected to increase the occurrence of illegal parking within the project vicinity. Therefore, the project applicant would be required to provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March. This report would provide monitoring data regarding on-street parking, conducted at a minimum two times per day on all weekends and holidays between 9:00 A.M. and 3:00 P.M. If the report identifies illegal parking is occurring at nearby residential/lodging sites within 1,000 feet of the portal, the project applicant would be responsible for any incremental cost necessary for enforcement. Beyond the initial monitoring period, if future complaints indicate that a parking problem is occurring generated by Eagle Lodge or ski area activities, the project applicant would be responsible for conducting additional monitoring as identified by the Town of Mammoth Lakes and be responsible for funding the necessary measures to address any identified impact.

Parking Mitigation Option 2 - To mitigate the potential parking impacts, the project could also provide off-site employee parking, increased transit service, and provide parking monitoring and enforcement. If all Eagle Lodge employees were required to park off site the peak parking demand would be reduced by 76 spaces. The remainder of the parking demand could be reduced by adding more transit such that an additional 750 skiers arrive to the site per day on transit. Assuming a bus standing capacity of 60 passengers, an additional 13 bus trips would be needed to the site during a peak day, and in the afternoon an additional 13 bus trips would be needed from the site. Three additional buses would be needed to provide this capacity. The applicant would be responsible for purchasing and operating the additional three vehicles. The project applicant would be required to provide 13 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March. However, under the 83 multi-family unit option, the project would be required to provide 10 additional bus round trips per day, which would require two new buses.

Similar to Mitigation Option 1, the number of buses assumed necessary under Parking Mitigation Option 2 is based on the assumption that the Eagle Lodge portal is operating at capacity during a typical winter Saturday. However, as transit demand is dependent on the number of skiers, the number of buses needed is dependent upon the skier visitors per day. Therefore, the number of buses that the applicant would be required to purchase and operate would be tied to the number of skier visits per day, as follows:

Additional Bus Requirements Beyond Existing Conditions	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)
No additional buses	5,250	5,400
One additional bus	5,550	5,700
Two additional buses	5,850	>5,700
Three additional buses	> 5,850	Not Applicable

If the applicant provides data to the Town that demonstrates two or fewer additional buses are adequate to accommodate the transit demand based on the number of skiers for a particle weekend(s) or holiday and the Town approves such data, the applicant would operate the requisite number of buses based on the criteria stated above.

In addition, the project applicant would be required to provide a monitoring report regarding illegal parking within the project vicinity to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March, as described under Parking Mitigation Option 1.

Parking Mitigation Option 3- The project could request a zone code amendment from the Town to develop an in lieu parking fee program. This would allow the project to pay a fee that would go towards the construction of off site parking lots. The fee would be calculated based upon the additional number of spaces that are required. If the parking structures are not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lots would need to be provided.

With implementation of one of the three parking mitigation options, parking impacts would be reduced to a less than significant level.

(3) Internal Site Circulation

(a) General Site Circulation and Layout

One-way circulation is proposed throughout the drop zones, and a two-way drive aisle is provided at the western access point. This configuration would allow for safe and efficient operation.

A left-turn lane warrant analysis was performed for the project access point along Meridian Boulevard using the “Guidelines for Left-Turn Lanes” presented in the ITE 1990 *Compendium of Technical Papers*. The analysis concluded that a left-turn lane into the auto and bus drop off area on Meridian Boulevard is not warranted and, therefore, need not be provided.²⁷

(b) Auto and Bus Drop Zones

The proposed auto and bus drop zones were reviewed with respect to layout and circulation and drop-off space supply and demand.

²⁷ Refer to Table 14 in the Traffic Study for a detailed summary of the left-turn warrant analysis.

Auto Drop-Off Activity

Approximately 800 skiers per day would be dropped off at the project site. Dividing 800 skiers per day by an average vehicle occupancy of 1.5 skiers per car, approximately 530 vehicles are expected to use the drop-off zone over the course of a peak day. To determine the drop zone parking demand, the highest number of vehicles entering the drop zone at once was estimated based on use patterns at the Northstar-at-Tahoe Ski Area. According to the Northstar Village Drop-Off Area Design Review, the highest number of vehicles entering the drop zone within any 5-minute period was 22 vehicles.²⁸ However, a maximum of 20 vehicles were observed in the drop zone at any one time. The total number of skiers (paid and ski pass) at Northstar-at-Tahoe on the peak day during the 2002/2003 ski season was approximately 9,732. In comparison, the total number of skiers on the peak day at the proposed Eagle Lodge site is expected to be approximately 6,000. Dividing this figure (6,000) by the total number of skiers at Northstar-at-Tahoe (9,732) yields a factor of approximately 0.62. This factor can be applied to the Northstar drop zone activity, in order to estimate the Eagle Lodge drop zone activity. The resulting maximum number of vehicles expected in the proposed auto drop zone at any one time is therefore 20 multiplied by 0.62, or approximately 12 vehicles. The project would include 18 auto drop-off spaces not including ski school drop-off spaces. Therefore, the proposed auto drop zone would be adequate.

According to the MMSA, the maximum drop off activity for the ski school would occur at 10:00 A.M., during which time 223 students arrive at the ski school. Assuming half of these students are dropped off and an average student vehicle occupancy of 1.5 (2.5 people per vehicle minus the driver), 27 parking spaces would be required for ski school drop off. As the project proposes to construct 38 short-term parking spaces at the ski school, the project would provide adequate ski school drop-off parking.

The proposed auto drop zone would provide parallel parking spaces along both sides of a one-way drive aisle. To ensure that impacts regarding safety hazards are minimized to the extent feasible, Mitigation Measure TR-6 would require various signs to be posted. A sign with an arrow would need to be posted along the north side of Meridian Boulevard to direct skiers to the Skier Drop-Off zone. In addition, the mitigation requires that Bus Only signage be posted at the entrance to the bus drop zone to discourage autos from entering the bus drop zone. The measure would also require the posting of No Parking signs along Meridian Boulevard adjacent to the auto drop zone and Do Not Enter signs at the west end of the auto and bus drop zones.

In addition, Mitigation Measure TR-7 requires that the curbs at the west end of the auto drop zone be modified to move the intersection of the drop zone and the main parking garage

²⁸ LSC Transportation Consultants, Inc., 2003.

access further north. This would increase the stopping sight distance for drivers on the two-way western driveway, increase the corner sight distance for autos exiting the drop zone, and make the right-turn movement easier for drivers going from the auto drop zone to the parking structure. Without this, drivers exiting the auto drop-off zone would not be able to make an adequate left turn to approach the Meridian Boulevard/Majestic Pines (west) intersection at a right-angle, and instead would often end up at the Stop bar at an angle, potentially blocking the inbound lane to the parking structure. With implementation of the prescribed mitigation measures, potentially significant safety impacts regarding internal site circulation within the drop-off areas would be less than significant.

The proposed ski school drop-off area would be located inside the parking structure at the street level. Two lanes of circulation are proposed through the ski school drop zone, providing access to 38 drop-off spaces. Due to the sharp corners at the north end of the drop zone and the two structural columns shown on the inside of the circulating lanes, it would not be possible for larger vehicles (such as SUVs) using the inside lane to stay in that lane while circulating through this area. Therefore, in order to decrease the potential for vehicular conflict in the ski school drop zone, Mitigation Measure TR-8 has been prescribed that requires the circulating area to be striped for one lane of traffic and one-way operation. Implementation of this mitigation measure would ensure that potentially significant safety impacts within the ski-school drop zone would be reduced to a less than significant level.

Bus Drop-Off Activity

The proposed bus drop zone would accommodate two MMSA buses and two charter buses, which are stipulated in an agreement between Juniper Springs Lodge and MMSA.²⁹ The charter bus activity would be managed to avoid more than two charter buses on-site at a time. As a maximum of one MMSA bus in each direction (eastbound and westbound) is expected on-site at any one time, the proposed bus drop zone parking supply would be adequate.

Sawtooth bus bays are proposed for the bus drop zone, which is appropriate in that it would reduce the total length of curb required to accommodate the four buses, while allowing buses at all bays to operate without being blocked by buses in adjacent bays. Design standards for off-street bus stations are provided in the *Designing for Transit Manual*.³⁰ The proposed 20-foot wide one-way drive aisle and 48-foot long bus bays are consistent with these standards. However, the standard distance between sawtooth spaces is 15 feet. The proposed plan provides 12 feet between spaces. This is considered a significant impact that could result in safety hazards. Therefore, Mitigation Measure TR-9 has been prescribed that would require that the

²⁹ Letter from Inyo-Mono Title Company to MMSA: File No. 128681, June 8, 2006

³⁰ *Designing for Transit Manual, Monterey-Salinas Transit, 1996.*

distance between sawtooth bus bays be increased to 15 feet to provide adequate maneuvering space for buses exiting the bays. With implementation of the prescribed mitigation measure, this safety impact would be reduced to a less than significant level.

(c) Hotel Access

Primary access to the hotel would be provided via Majestic Pines Drive. Left turns onto Meridian Boulevard from the hotel would be prohibited. Although a raised median at this location is not recommended (due to the need to use this space for exiting truck movements), the absence of such a raised median would make it difficult to prohibit all left turns. Left turns at this intersection could result in potentially significant safety impact. Therefore, Mitigation Measure TR-10 has been prescribed that requires a No Left Turn sign to be placed at the hotel exit. In addition, the prescribed mitigation requires that a Do Not Enter, No Left Turn, and No Right Turn signs be located at the appropriate hotel access approaches.

Implementation of the prescribed mitigation measure would sure that potentially significant safety impacts at the hotel access approaches are reduced to a less than significant level.

(d) Skier/Public Parking

The project would include a three-level parking structure to provide skier/public parking, as well as parking for hotel guests and residents. The public entrance to the parking structure would be located at the western access point along Meridian Boulevard. Public parking would be provided in the two subterranean levels. In addition, a keyed parking entry/exit would be provided on the northeast side of the structure, with access via Majestic Pines Drive. This access point is designated for hotel guests and residents only. The parking space size and aisle widths would be consistent with Town standards. Thus, no impacts would occur regarding the parking structure.

(e) Truck Access

A service yard would be located on the north side of the structure, with access provided via Majestic Pines Drive. The proposed truck turnaround would accommodate a 55-foot long (WB-50) truck. No trucks longer than 55 feet long are anticipated to utilize the truck turnaround. Thus, no impacts would occur regarding truck access.

(f) Corner Sight Distance

According to the *Caltrans Highway Design Manual*, at a 30-mile per hour design speed, an intersection should provide at least 330 feet of corner sight distance. Corner sight distance is measured from the minor approach at a point 15 feet back from the end of the travel way at a height of 3.5 feet to an object at a height of 4.25 feet in the center of the nearest lane to the left or to the centerline of the road to the right. A review of the site plan determined that the corner sight distance from all proposed site access locations would be adequate. While the sight distance from the hotel exit along Majestic Pines Drive to the east may not be 330 feet or more, since left turns at this location would be prohibited, there is not a potential for drivers turning left out of the hotel access to pull out in front of westbound traffic along Majestic Pines Drive. Thus, no impacts would occur regarding corner sight distance.

(4) Emergency Vehicle Access

Access to the site would be provided via Majestic Pines Drive and via Meridian Boulevard. Therefore, since access would be provided by two streets, one being a collector and the other being an arterial, the project would provide adequate emergency access to the site.

(5) Alternative Transportation**(a) Transit Services**

The project site is located on both the existing Yellow and Green bus routes. The project would improve service to the site with the provision of the bus drop-off area, which provides safe pedestrian access to transit. This is considered a beneficial impact to transit. However, as discussed above and pursuant to Mitigation Measure TR-5, the project would be required to fund additional transit service to the site. Overall, impacts to transit services would be less than significant with incorporation of Mitigation Measure TR-5.

(b) Pedestrian and Bicycle Facilities

A total of 1,600 skiers are anticipated to walk to the Eagle Lodge from nearby residences. The project would provide adequate pedestrian access throughout the site, and to/from other properties within the vicinity of the project site. Pedestrian connections would be provided to the Mammoth Loop Trail Majestic Pines to the north, Juniper Springs Lodge, and sidewalks along Meridian Boulevard. In addition, the project proposes to construct a sidewalk along Meridian Boulevard, which is consistent with the Sidewalk Master Plan (Town of Mammoth Lakes, 2003). The Sidewalks Master Plan requires the installation of sidewalks on both sides of Meridian

Boulevard. Therefore, the project has a beneficial effect on pedestrian and bicycle facilities and no impacts to pedestrian or bicycle facilities would occur.³¹

(6) Consistency with the Town's General Plan

Table 18 on page 134 provides an analysis of the project with applicable General Plan goals and policies. As indicated previously, the Town is currently in the process of revising its General Plan. The 2005 General Plan Update contains polices and implementation measures that are based on the goals and polices in the adopted 2001 Transportation and Circulation Element. Thus, since the policies and implementation measures in the 2005 General Plan Update closely mirror the 2001 Transportation and Circulation Element goals and polices, the consistency analysis included in Table 18 lists the 2001 Transportation and Circulation Element goal or policy and cross references the 2005 General Plan Update Policies.

As shown in Table 18, the project would be consistent with the applicable goals, policies and implementation measures in the adopted 2001 Transportation and Circulation Element and the 2005 Draft General Plan Update. Therefore, the project would result in less than significant impacts with regard to consistency with applicable implementation measures, goals and policies in the General Plan and Draft General Plan Update.

d. Mitigation Measures

Local Transportation System Impacts

Construction Impacts

Please refer to Mitigation Measure AES-2 regarding construction haul routes. The following mitigation measures are also prescribed to ensure that potentially significant impacts regarding roadway segments and parking during project construction are reduced to a less than significant level:

- TR-1:** The project applicant shall prepare a construction parking plan for construction personnel to be reviewed and approved by the Town of Mammoth Lakes.
- TR-2:** Construction truck traffic shall not be permitted to queue along Meridian Boulevard where it could interfere with traffic movements or to block access to adjacent residences or businesses. As necessary, flag persons shall be used

³¹ *It is assumed that bicycles would be ridden on the sidewalks.*

Table 18

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<u>Goal 1</u> - Provide for the long-range development of the Town's roadway system that is consistent with adopted land use patterns, ensures the safe and efficient movement of the people and goods, minimizes impacts on the attractiveness of the community, and implements funding strategies for construction, improvement, and maintenance of existing and new roadways.	(P) VII.1.B.a	Traffic improvements prescribed as mitigation measures are consistent with the roadway classifications in the General Plan. In addition, the traffic analysis has concluded that with implementation of the prescribed mitigation measures, the project would not result in hazards due to a project design feature or incompatible uses. The project would be consistent with this goal.
<u>Policy 1.6</u> - Use alternatives to the construction of new traffic signals, including modern roundabouts and prohibitions on turn movements where they can be shown to benefit roadway capacity with other community goals.	(IM) VII.1.B.a.6	Mitigation Measure TR-4 would require payment of fees for the installation of a single-lane roundabout with a 100-foot inscribed diameter at the Majestic Pines Drive/Meridian Boulevard intersection. This traffic improvement would achieve an acceptable service level at this intersection while maintaining consistency with this policy.
<u>Policy 1.7</u> - Establish and maintain a Level of Service D or better on a typical winter Saturday peak-hour for signalized intersections and for primary through movements for un-signalized intersections along arterial and collector roads. This standard is expressly not applied to absolute peak conditions, as it would result in construction of roadway improvements that are warranted only a limited number of days per year and that would unduly impact pedestrian and visual conditions.	(P) VII.1.B.c	The Traffic Study was conducted in accordance with the Town standards using established thresholds based on this policy. The traffic Study concluded that all study area intersections and roadway segments would operate at acceptable service levels and would not exceed roadway capacities, respectively, in accordance with this policy. Therefore, the project would be consistent with this policy.
<u>Policy 1.8</u> - Require the preparation of a traffic impact analysis report to identify impacts and mitigation measures for projects that may potentially result in significant traffic	(IM) VII.1.B.c.1	A traffic study was prepared for the proposed project and is provided in Appendix B and is summarized in this section. The study includes project buildout (Year 2009) cumulative and General Plan buildout

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<p>impacts. Level of service shall be computed according to the methodology presented in the <i>Highway Capacity Manual</i>. Cumulative impacts shall be modeled assuming full build-out of the General Plan.</p>	(IM) VII.1.B.c.2	<p>(Year 2024) analyses. The LOS for with and without project traffic scenarios have been computed according to the methodology presented in the Highway Capacity Manual. Therefore, the project would be consistent with this policy.</p>
<p><u>Policy 1.9</u> - In planning the Town’s transportation system, strive for a balanced system that provides alternatives to the automobile while still meeting the level of service standards expressed in this Element.</p>	(IM) VII.1.B.c.2	<p>Based on the traffic analysis, all study area intersections and roadway segments would operate at acceptable service levels and would not exceed roadway capacities in accordance with Town standards. The project would improve transit service to the site with the provision of the bus drop-off area, which would provide safe pedestrian access to transit. In addition, pedestrian connections would be provided to the Mammoth Loop Trail. In addition, the project proposes to construct a sidewalk along Meridian Boulevard, which is consistent with the Sidewalk Master Plan. Therefore, the project would be consistent with this policy.</p>
<p><u>Policy 1.12</u> - As feasible, while maintaining the level of service policy, reduce the number of travel lanes on Minaret Road, Old Mammoth Road, and Meridian Boulevard. Excepting turn lanes at signalized intersections, Minaret Road south of Main Street, Meridian Boulevard west of Old Mammoth Road, and Old Mammoth Road from south of Chateau Road to Main Street should be provided with a maximum of three travel lanes (including a center two-way, left-turn lane).</p>	(IM) VII.1.B.c.3	<p>Meridian Boulevard borders the site to the south. The Town plans to reduce the existing Meridian Boulevard cross section from four lanes to two lanes and a center turn lane. The volume to capacity ratio along Meridian Boulevard would be less than 0.5 under 2024 with project conditions. Therefore, reducing the capacity of this roadway by one half would not exceed the reduced roadway capacity. Therefore, under 2024 with project conditions, Meridian Boulevard could operate adequately with a three-lane cross section. In addition, a single-lane roundabout at the Meridian Boulevard/Majestic Pines (East) intersection would operate at adequate LOS. Therefore, the project would be consistent with this policy.</p>

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<p><u>Policy 1.21</u> - Develop shared use of existing parking facilities for day visitor parking (such as the use of school parking on weekends and in the summer and the use of golf course parking in the winter) and develop tour bus parking facilities served by the community transit system. Parking facilities shall be strategically located to promote visitors parking their vehicles and using alternate modes of transportation.</p>	<p>(IM) VII.1.F.a.4 (IM) VII.1.F.a.5</p>	<p>The proposed project would provide lodging facilities whose guests would utilize the on-site commercial facilities and walk to the adjacent ski facilities at Mammoth Mountain. The project would also provide convenient access to bus routes and pedestrian connections. As such, guests would likely not generate additional trips once parked at the facility. In addition, the proposed parking would include shared parking utilized by the various proposed land uses. Thus, the project would be consistent with this policy.</p>
<p><u>Policy 1.22</u> - Promote the construction of parking facilities that reduce congestion on the circulation system, concentrate usage in specified areas, promote the use of alternatives to the automobile, and support a pedestrian orientation to the Town’s commercial activity areas.</p>	<p>(P) VII.1.F.a</p>	<p>The project is a mixed-use project that would include skiing-related, resort and commercial uses. The project would include on-site parking to accommodate the proposed uses and would improve transit service to the site with the provision of a bus drop-off area. The project would provide various pedestrian connections, as described above. In addition, the project would provide for an array of winter recreational activities, including direct access to MMSA Chair 15, which is designated as a recreation activity node in the General Plan Land Use Element. Thus, the project would be consistent with this policy.</p>
<p><u>Policy 1.23</u> - Encourage the use of alternative transportation modes, as a means of reducing parking demand.</p>	<p>(IM) VII.1.F.a.6</p>	<p>Refer to discussion under Policy 1.9, above. The project would be consistent with this policy.</p>
<p><u>Policy 1.24</u> - Eliminate winter parking on the Town’s arterial and collector roadways, except short term parking in commercial areas where specifically permitted as a part of an adopted master plan or specific plan.</p>	<p>(IM) VII.1.F.a.7</p>	<p>Parking signs would be provided in accordance with adopted Town standards to ensure consistency with this policy.</p>

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<u>Policy 3.3</u> - Develop transit and parking requirement management strategies that encourage visitors to leave their private vehicles at their lodging facilities throughout the course of their stay.	(IM) VII.2.B.a.2	Refer to discussion under Policies 1.21 and 1.22, above. The project would be consistent with this policy.
<u>Policy 3.7</u> - In the development of both community-wide land use plans and site plans for individual projects, strive to provide a development pattern that supports use of public transit through clustering of land use density near established transit stops and the provision of convenient pedestrian connections to transit stops.	(IM) VII.2.B.b.1	Refer to discussion under Policy 1.22, above. The project would be consistent with this policy.
<u>Policy 3.8</u> - Require new development to provide sheltered public transit stops with turnouts where appropriate. Consider development of turnouts in existing developed areas when roadway improvements are made, or as deemed necessary for traffic flow and public safety.	(IM) VII.2.B.b.3	The project would include a bus drop off area and public transit facilities that would be constructed per applicable Town standards. Thus, the project would be consistent with this policy.
<u>Goal 4</u> - Maximize the efficient use of transportation facilities to: <ul style="list-style-type: none"> ▪ Reduce travel demand on the town's roadway system; ▪ Reduce the amount of investment required in new or expanded facilities needed to accommodate increased demand on the town's roadway system; ▪ Reduce pollution emissions from motor vehicles; and ▪ Increase the energy efficiency of the transportation system. 	(P) VII.2.B.c	Refer to discussion under Policies 1.21, 1.22, and 4.4. For a discussion of air quality impacts, refer to Section 3.4, Air Quality. The project would be consistent with this goal.

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<p><u>Policy 4.1</u> - Promote the use of transportation control measures (TCMs) that divert automobile trips to transit, walking, and bicycling through planning and provision of appropriate facilities and incentives. TCMs shall include the following:</p> <ul style="list-style-type: none"> ▪ Telecommunications support for telecommuting, ▪ Traffic flow improvements, ▪ Improvements in transit operations, ▪ Park-and-Ride lots, ▪ Alpine and Nordic ski back trails from MMSA, ▪ Alternate work schedules, ▪ Ride-share and bicycling programs, ▪ Expansion of transit services, ▪ Ski area employee transit programs, ▪ Lift facilities into developed areas of Town (Gondola Village), ▪ Provide on-mountain facilities such as lockers and changing rooms to promote viable transit alternatives for Alpine and Nordic skiers, ▪ Après-ski activities at ski portals, and ▪ Ski pricing strategies to minimize concentration of departing skiers, such as 1/2 day morning lift tickets. 	(IM) VII.2.B.c.1	<p>As discussed above, the project would promote the use alternative transportation through increased transit services, connections to pedestrian/bicycle trails and clustering of a mix of uses at a ski portal. In addition, the TCMs identified within the General Plan would be implemented by the Town and MMSA, as feasible and applicable to the project. Thus, the project would be consistent with this policy.</p>

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<p><u>Policy 4.4</u> - Encourage major traffic generators, including the school district and ski resorts, to develop and implement trip reduction measures. In particular, ski area operations should be managed to reduce the overall P.M. peak traffic generation and to disperse these trips between the various mountain portals.</p>	(IM) VII.2.B.a.1	<p>The project would include various pedestrian connections and provide convenient access to bus routes. As the proposed resort is located at the base of Mammoth Mountain, skiers would be able to walk to their lodging facilities after skiing for the day. The project would also provide retail use adjacent to residential use, which would serve as a trip reduction measure. As such, the project would be consistent with this policy.</p>
<p><u>Policy 4.5</u> - Require transportation studies for major development projects to address potential use of bicycle routes, pedestrian trail, and public transportation to mitigate traffic impacts.</p>	(IM) VII.2.A.a.2	<p>A traffic study has been prepared and is provided in Appendix B and summarized in this section. The traffic study addresses bicycle routes, pedestrian trail, and public transportation to mitigate traffic impacts. Also, refer to discussion under Policy 4.1, above. The project would be consistent with this policy.</p>
<p><u>Goal 5</u> - Provide safe, comprehensive, and integrated system facilities for non-motorized transportation to meet the needs of commuters and recreational uses, to provide an alternative to auto transportation, and to link recreational activity areas, commercial areas, and residential areas.</p>	(P) VII.1.A.a	<p>The project would expand the Mammoth Loop Trail through the site and would provide connections to Majestic Pines to the north, Juniper Springs Lodge, and sidewalks along Meridian Boulevard. In addition, the project would include the installation of a sidewalk along Meridian Boulevard, which is consistent with the Sidewalk Master Plan. Therefore, the project would be consistent with this goal.</p>
<p><u>Policy 5.4</u> - Provide a high-quality pedestrian environment (including amenities such as benches, shuttle shelters, street lights, protected roadway crossings, and snow removal along sidewalks) throughout all commercial districts to encourage pedestrian travel as well as economic activity</p>	(IM) VII.1.A.a.3	<p>As stated above, the project would include a variety of pedestrian connections. The project would incorporate high quality landscaping and wall cladding at the street level to enhance the pedestrian scale of the project. Please refer to Section 3.9, Aesthetics, for a discussion of the visual character of the site. The project would be consistent with this policy.</p>

Table 18 (Continued)

**Analysis of Project Consistency With General Plan
Transportation Goals, Policies and Implementation Measures**

2001 Transportation Element Goals and Policies	Corresponding 2005 General Plan Update Policy (P) or Implementation Measure (IM)	Project Consistency Analysis
<p><u>Policy 5.7</u> - Establish Pedestrian and bicycle access standards. Require developers to finance and install pedestrian walkways, equestrian trails, cross-country ski trails, and multi-use trails in new development, consistent with adopted plans and policies, or as appropriate and necessary to address circulation needs.</p>	<p>(IM) VII.1.A.a.6</p>	<p>Refer to discussion under Goal 5, above. The project would be consistent with this policy.</p>

The 2005 General Plan Update contains implementation measures and policies that are based on the goals and polices in the adopted 2001 Transportation and Circulation Element. Thus, since the policies and implementation measures in the 2005 General Plan Update closely mirror the 2001 Transportation and Circulation Element goals and polices, the consistency analysis included as part of this table lists the applicable 2001 Transportation and Circulation Element goal or policy and cross-references the applicable 2005 General Plan Update implementation measure or policy.

Source: PCR Services Corporation, 2006

to assist with truck movements into and out of the site, to ensure that potential disruptions to other traffic and access are accommodated in the safest and most efficient manner.

Operation Impacts

The traffic impact analysis is based on the hotel only development scenario. If the hotel/condominium development scenario were to be developed instead, the mitigation measures regarding operational impacts would be proportionately decreased based on a reduction in traffic impacts that would result. Thus, the fees identified in TR-3 and TR-4 would be proportionately decreased based on the Town's regulations. Should a less intense development be constructed, mitigation measures and/or fees would be determined during project definition. The following mitigation measures would reduce potentially significant impacts under the worse-case development scenario (hotel only) to intersections as a result of cumulative development within the project area to a less than significant level:

- TR-3:** To address 2024 with project impact, the project applicant shall pay development impact fees, which include the costs associated with improvements identified in the Mammoth Lakes Capital Improvement Program to the Majestic Pines Drive/Meridian Boulevard and Meridian Boulevard/Minaret Road intersections. The Town of Mammoth Lakes shall implement the intersection improvements.
- TR-4:** To further address 2024 with project impact, the applicant shall pay a fair share contribution fee to the cost of constructing a southbound left-turn lane at the Majestic Pines Drive/Meridian Boulevard intersection. This fee shall be utilized by the Town to construct a single-lane roundabout with a 100-foot inscribed diameter at the Majestic Pines Drive/Meridian Boulevard intersection. The roundabout shall be constructed prior to the intersection reaching a LOS E. The Town of Mammoth Lakes shall implement the intersection improvements.

Parking

Based on the shared parking analysis for the hotel only development scenario, the project would result in an overall parking shortfall of 311 parking spaces. This is considered the worse-case parking scenario for development on the project site. Comparatively, under the 83 multi-family unit option, the parking shortfall would be reduced to 263 parking spaces. If the project were developed under a scenario that would require less parking, the mitigation measures regarding parking impacts would be proportionately decreased based on the reduction of parking impacts that would result. Should a less intense development scenario be constructed, mitigation measures would be determined during project definition. The following mitigation measure

includes three options to mitigate the parking shortfall. The project applicant would choose to implement one of the three mitigation measure options.

TR-5: To meet the parking space requirements, in addition to the parking included as a part of the project, the applicant shall implement a program to reduce parking demand. The program shall follow one of the following three options, or some combination thereof, and shall be approved by the Town:

- Mitigation Option 1: The project applicant shall provide 544 non-drop-off parking spaces and shall be responsible for purchasing and operating four public transit buses with a capacity of at least 60 passengers to provide 16 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March, unless data provided by the applicant indicates that three or fewer buses are adequate to accommodate the transit demand for a particle weekend(s) or holiday based on the maximum number of skiers per day, as shown in the table below. The transit data shall be subject to review and approval by the Town. Under the 83 multi-family unit option, the project would be required to provide 14 additional bus round trips per day, which would require three new buses.

<u>Additional Bus Requirements Beyond Existing Service</u>	<u>Maximum Number of Skiers per Day (213 Hotel Units)</u>	<u>Maximum Number of Skiers per Day (83 Dwelling Units)</u>
No additional buses	5,050	5,200
One additional bus	5,350	5,500
Two additional buses	5,650	5,800
Three additional buses	5,950	>5,800
Four additional buses	> 5,950	Not Applicable

In addition, the project applicant shall provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March. This report shall provide monitoring data regarding on-street parking, conducted at a minimum two times per day on all weekends and holidays between 9:00 A.M. and 3:00 P.M. If the report identifies illegal parking is occurring at nearby residential/lodging sites within 1,000 feet of the portal, the project applicant shall be responsible for any incremental cost necessary for enforcement. Beyond the initial monitoring period, if future complaints indicate that a parking problem is occurring generated by Eagle Lodge or ski area activities, the project applicant shall be responsible for conducting additional monitoring as identified by the Town of Mammoth Lakes and

be responsible for funding the necessary measures to address any identified impact.

- **Mitigation Option 2:** The project applicant shall provide 544 non-drop-off parking spaces on the project site and 76 off-site parking spaces for employees. If the off-site employee parking is not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lot(s) shall be provided. The project applicant shall be responsible for purchasing and operating three public transit buses with a capacity of at least 60 passengers to provide 13 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March, unless data provided by the applicant indicates that two or fewer buses are adequate to accommodate the transit demand for a particle weekend(s) or holiday based on the maximum number of skiers per day, as shown in the table below. The transit data shall be subject to review and approval by the Town. Under the 83 multi-family unit option, the project would be required to provide 10 additional bus round trips per day, which would require two new buses.

Additional Bus Requirements Beyond Existing Conditions	Maximum Number of Skiers per Day (213 Hotel Units)	Maximum Number of Skiers per Day (83 Dwelling Units)
No additional buses	5,250	5,400
One additional bus	5,550	5,700
Two additional buses	5,850	>5,700
Three additional buses	> 5,850	Not Applicable

In addition, the project applicant shall provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March, as described under Option 1.

- **Mitigation Option 3:** The project applicant shall provide 544 non-drop-off parking spaces on the project site. The project shall request a zone code amendment from the Town to develop and in lieu of parking fee program. The fees shall be used for the construction of off-site parking lots. The fee owed by the project shall be calculated based upon the additional number of spaces that are required. If the parking lots are not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lots shall be provided.

Internal Site Circulation Impacts

The following mitigation measures would reduce potentially significant impacts regarding safety hazards associated with the project's internal site circulation to a less than significant level:

- TR-6:** A sign with an arrow shall be posted along the north side of Meridian Boulevard to direct skiers to the Skier Drop-Off. Bus Only signage shall be posted at the entrance to the bus drop zone to discourage autos from entering the bus drop zone. No Parking signs shall be posted along Meridian Boulevard adjacent to the auto drop zone, and Do Not Enter signs shall be posted at the west end of the auto and bus drop zones. The signs shall be installed prior to building occupancy.
- TR-7:** The curbs at the west end of the auto drop zone shall be modified to move the intersection of the drop zone and the main parking garage access further north, as determined appropriate by the Town.
- TR-8:** To decrease the potential for vehicular conflict in the ski school drop zone, the circulating area shall be striped for one lane of traffic and one-way operation.
- TR-9:** The distance between sawtooth bus bays shall be increased to 15 feet to provide adequate maneuvering space for buses exiting the bays.
- TR-10:** A "No Left Turn" sign shall be placed at the hotel exit. In addition, "Do Not Enter," "No Left Turn," and "No Right Turn" signs shall be located at the appropriate hotel access approaches.

Emergency Access Impacts

No impacts with regard to vehicular emergency access would occur. Therefore, no mitigation measures are required.

Alternative Transportation Impacts

As impacts to alternative transportation would be less than significant, no mitigation measures are required.

Consistency with Applicable Regulations

The project would be generally consistent with the applicable transportation-related goals, policies and implementation measures in the adopted 1987 General Plan and the Draft 2005 General Plan Update. Thus, less than significant impacts would occur in this regard.

e. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulations Alternative

Construction traffic under Alternative 1 has the potential to delay or disrupt existing traffic along Meridian Boulevard. In addition, construction activities could result in temporary parking impacts. Thus, Mitigation Measures AES-2, TR-1 and TR-2 would be implemented to ensure that potentially significant traffic and parking impacts during construction would be reduced to a less than significant level.

Alternative 1 would generate 573 P.M. peak-hour trips, which would be a net increase of 168 P.M. peak-hour trips over existing conditions (405 P.M. peak-hour trips).³² Impacts to intersections and local street segments under buildout conditions (Year 2009) would be less than significant. However, as this Alternative would contribute to traffic deficiencies at the Minaret Boulevard/Meridian Boulevard and Meridian Boulevard/Majestic Pines Road Drive (east) intersections during General Plan buildout conditions (Year 2024), this Alternative would result in potentially significant impacts regarding roadway capacity. However, mitigation requiring the applicant to pay fair share contribution fees to identified improvements in the Town's Capital Improvement Program and improvements necessary as a result of project development, prescribed as Mitigation Measures TR-3 and TR-4, at these intersections would reduce potentially significant impacts to a less than significant level.

This Alternative would provide 566 on-site parking spaces in an above-ground parking structure. The parking demand for this Alternative would be approximately 607 spaces.³³ Therefore, as this Alternative would result in a shortfall of parking spaces, potentially significant parking impacts would occur. Implementation of mitigation requiring that the project applicant increase public transit to the site during each weekend day and holiday from Christmas week to the end of March and/or provide off-site parking to make up the difference between parking spaces provided and demand would reduce potentially significant parking impacts to a less than significant level.

³² Based on trip distribution data provided by LSC Transportation Consultants, Inc.

³³ *Ibid.*

Under this Alternative, the site would be served by the Yellow and Green bus routes. However, a new bus drop-off area would not be developed under this Alternative. Nonetheless, adequate public transit would be provided to and from the site with implementation of the parking mitigation measures, described above. With regard to pedestrian circulation, this Alternative would provide an easement of 14 feet in width in non-steep areas of the site and 12 feet in steep areas for a recreational trail. This Alternative would also include pedestrian connections to the Mammoth Loop Trail and sidewalks along Meridian Boulevard. Thus, this Alternative would result in less than significant alternative transportation impacts.

This Alternative would provide vehicular access from Meridian Boulevard. Internal site circulation would be designed to promote the same movement of pedestrians and vehicles, and would be subject to design review by the Town of Mammoth Lakes to ensure that safety impacts would be less than significant. In addition, emergency access to the site would be provided via Majestic Pines Drive and Meridian Boulevard. Thus, less than significant impacts regarding emergency access would occur under this Alternative.

The construction and operation of this Alternative would comply with all applicable transportation-related policies and regulations. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Construction traffic under this Alternative has the potential to delay or disrupt existing traffic along Meridian Boulevard. In addition, construction activities could result in temporary parking impacts. Thus, Mitigation Measures AES-2, TR-1 and TR-2 would be implemented to ensure that potentially significant traffic and parking impacts during construction would be reduced to a less than significant level.

This Alternative would generate 813 P.M. peak-hour trips, which would be a net increase of 408 P.M. peak-hour trips over existing conditions (405 P.M. peak-hour trips).³⁴ Impacts to intersections and local street segments under buildout conditions (Year 2009) would be less than significant. However, as this Alternative would contribute to traffic deficiencies at the Minaret Boulevard/Meridian Boulevard and Meridian Boulevard/Majestic Pines Road Drive (east) intersections during General Plan buildout conditions (Year 2024), this Alternative would result in potentially significant impacts regarding roadway capacity. However, mitigation requiring the applicant to pay fair share contribution fees to identified improvements in the Town's Capital Improvement Program and improvements necessary as a result of project development,

³⁴ *Ibid.*

prescribed as Mitigation Measures TR-3 and TR-4, at these intersections would reduce potentially significant impacts to a less than significant level.

This Alternative would provide 350 on-site parking spaces in a two-level subterranean parking structure. The parking demand for this Alternative would be approximately 497 spaces.³⁵ As this Alternative would result in a shortfall of parking spaces, potentially significant parking impacts would occur. Implementation of mitigation requiring that the project applicant increase public transit to the site during each weekend day and holiday from Christmas week to the end of March and/or provide off-site employee parking to make up the difference between parking spaces provided and demand would reduce potentially significant parking impacts to a less than significant level.

Under this Alternative, the site would be served by the Yellow and Green bus routes. A bus drop-off area would be developed under this Alternative, which is considered a beneficial impact to public transit service. With regard to pedestrian circulation, this Alternative would provide pedestrian/bicycle connections to the Mammoth Loop Trail and sidewalks along Meridian Boulevard. Thus, this Alternative would result in less than significant alternative transportation impacts.

This Alternative would provide vehicular access from Meridian Boulevard and Majestic Pines Drive. To ensure that potentially significant safety impacts regarding internal site circulation are reduced to a less than significant level, this Alternative would be required to implement Mitigation Measures TR-6 to TR-10. In addition, emergency access to the site would be provided via Majestic Pines Drive and Meridian Boulevard. Thus, less than significant impacts regarding emergency access would occur under this Alternative.

The construction and operation of this Alternative would comply with all applicable transportation-related policies and regulations. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

The Alternate Design Alternative would result in the same uses and internal circulation pattern as the Proposed Action. Therefore, the same impacts and mitigation measures regarding construction activities, roadway capacity, parking, internal circulation, emergency access and alternative transportation would occur for this Alternative and the Proposed Action. In addition, the construction and operation of this Alternative would comply with all applicable

³⁵ *Ibid.*

transportation-related policies and regulations. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Under the No Action Alternative, the temporary tent would be removed but the ski facilities would continue to operate during the winter season. This Alternative stipulates no development, which would prevent any significant short-term construction related transportation impacts. The operation of the facility would not change, therefore no additional operational transportation impacts would occur. However, if the Proposed Action were not developed, skiers may utilize other portals which could indirectly result in increased traffic impacts and numbers of skiers at other portals. In addition, this Alternative would not include the development of pedestrian friendly drop-off areas, whereas the Proposed Action and Alternatives 1, 2 and 3 would provide improved transit drop-off and pick-up facilities. Therefore, these beneficial design features would not be developed under this Alternative. As the No Project Alternative would not include these project features and could result in indirect traffic impacts, this Alternative would not be generally consistent with the applicable transportation-related policies and regulations.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.4 AIR QUALITY

INTRODUCTION

This section addresses the air emissions generated by the construction and operation of the proposed project. The analysis also addresses the consistency of the project with respect to the air quality policies set forth by the Great Basin Unified Air Pollution Control District (GBUAPCD) and Mono County. The air quality analysis focuses on whether the project would cause an exceedance of an ambient air quality standard.

GREAT BASIN VALLEYS AIR BASIN

The State of California is divided into multiple air basins, which are grouped into geographic areas with similar topographical and meteorological conditions. Mono County is located in the Great Basin Valleys Air Basin, which also encompasses Alpine and Inyo Counties. The area is defined by the Sierra Nevada mountain range to the west, the White, Inyo, and Coso ranges to the east, Mono Lake to the north, and Little Lake to the south.

CLIMATE

The Town of Mammoth Lakes is located in the eastern Sierra Mountains, within Mono County, California. Mono County's climate is characterized by large fluctuations in diurnal temperatures, clear skies, excellent visibility and relatively hot summers. The project area is located at an elevation of approximately 8,000 feet above mean sea level (amsl), and receives an average of 14 inches of rainfall and 66 inches of snowfall per year. Typically, the majority of precipitation occurs between November and March as recorded at Lee Vining and Mono Lake Climate Monitoring Stations. The average minimum temperature is approximately 35°F and the average maximum temperature is approximately 62°F. Table 19 on page 150 provides the recorded summary data from the Mammoth Lakes Ranger Station. The station is located within 10 miles of the project site. Data from this station are considered to be representative of the project area, because of the proximity and similarity in elevation (6,800 feet amsl).

Spring is the windiest season with fast-moving northerly weather fronts. Summer winds blow out of the north at night as a result of cool air draining off the sides of the mountains. Southerly winds during the day result from strong solar heating of the mountain slopes causing

Table 19

Local Average Temperatures and Precipitation

Month	Temperature (°F)		Precipitation (inches)	
	Maximum	Minimum	Total	Snow
January	40.3	16.6	4.88	45.4
February	39.5	15.8	4.06	44.9
March	44.9	20.6	2.62	33.3
April	48.9	24.3	1.37	16.2
May	60.3	33.0	1.33	4.6
June	69.8	39.9	0.58	0.7
July	77.9	45.7	0.52	0.0
August	77.1	44.9	0.37	0.0
September	70.6	37.2	0.46	0.0
October	60.9	28.2	1.20	8.1
November	47.8	21.3	2.31	15.2
December	41.7	15.7	4.05	42.9
Annual (Average/Total)	56.7	28.6	23.76	211.3

^a Period of record is from December 1, 1993 to December 31, 2005

Source: Western Regional Climate Center www.wrcc.dri.edu accessed August 2006

up-slope circulation. The mean annual wind speed in the Town is less than 11 miles per hour (mph). Mean annual wind speeds measured just outside of Town, at elevations of 8,900 feet amsl and 7,800 feet amsl, average 21.7 mph and 11.5 mph, respectively.

Wind patterns in the San Joaquin Valley region continually transport air into the GBVAB. Daily wind patterns blow air through the warmer valleys and up the western side of the Sierras. The transported air cools at night and falls down the eastern slopes of the mountains. This pattern occurs throughout the year and is the source of transported air pollutants including ozone.

3.4.1 REGULATORY FRAMEWORK

Criteria air pollutants are defined as those for which the Federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations in order to protect public health. The project site and surrounding areas are subject to air quality regulations developed and implemented at the Federal, State, and local levels. At the Federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of the Federal Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile sources and other requirements) are implemented directly by the USEPA. Other portions of the CAA (e.g.,

stationary source requirements) are implemented by State and local agencies. Plans, policies and regulations that are relevant to the proposed project are discussed below.

Federal Standards

The CAA establishes Federal air quality standards, known as National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the State submit and implement a State Implementation Plan (SIP) for areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards would be met.

The 1990 Amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and an incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA that are most applicable to the proposed project include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).

Title I of the CAA identifies attainment, nonattainment, and unclassifiable areas with regard to the criteria pollutants and sets deadlines for all areas to reach attainment for the following criteria pollutants: ozone, nitrogen dioxide, sulfur dioxide, fine particulates, carbon monoxide, and lead. The NAAQS were amended in July 1997 to include the 8-hour Ozone standard and a NAAQS for PM_{2.5}. Table 20 on page 152 shows the NAAQS currently in effect for each criteria pollutant.

Title II of the CAA contains a number of provisions with regard to mobile sources, including requirements for reformulated gasoline, new tailpipe emissions standards for cars and trucks, nitrogen oxides standards for heavy-duty vehicles, and a program for cleaner fleet vehicles. Identification and regulation of hazardous air pollutants (HAPs) are addressed in Title III. Under Title V, conditions for operating permits are specified.

In 1978 the Federal EPA published final regulations implementing the Prevention of Significant Deterioration (PSD) Program. This program, contained under part C of the CAA, requires major stationary sources to formally demonstrate that operations of a new or modified source would not cause an exceedance of applicable NAAQS. A major source is defined as emitting 250 tons per year of any criteria or precursor pollutant for which the basin is in attainment.³⁷

³⁷ www.EPA.gov

Table 20
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a		Federal Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Ozone (O ₃)	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		(157 µg/m ³) ^h		
Respirable Particulate Matter (PM ₁₀)	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		50 µg/m ³		
Fine Particulate Matter (PM _{2.5})	24 Hour	No Separate State Standard		65 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	15 µg/m ³		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry NDIR)	9 ppm (10 mg/m ³)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—		
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	—	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.25 ppm (470 µg/m ³)		—		
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m ³)	—	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (365 µg/m ³)		
Lead	3 Hour	—	Atomic Absorption	—	0.5 ppm (1300 µg/m ³)	—
	1 Hour	0.25 ppm (655 µg/m ³)		—		
	30 Day Average	1.5 µg/m ³		—		
Lead	Calendar Quarter	—	—	1.5 µg/m ³	Same as Primary Standard	High Volume Sampler and Atomic Absorption

Table 20 (Continued)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ^a		Federal Standards ^b		
		Concentration ^c	Method ^d	Primary ^{c,e}	Secondary ^{c,f}	Method ^g
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.			No Federal Standards	
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ⁱ	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

^a California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM₁₀, PM_{2.5}, 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.

^b 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. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, 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. Contact U.S. EPA for further clarification and current federal policies.

^c Concentration 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 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

^d Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

^e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

^f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^g Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

^h New federal 8-hour ozone and fine particulate matter standards were promulgated by U.S. EPA on July 18, 1997. Contact U.S. EPA for further clarification and current federal policies.

ⁱ The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: California Air Resources Board, 2006

State Standards

In 1988, the State legislature adopted the California Clean Air Act (CCAA), which established a statewide air pollution control program. The CCAA requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and has set standards for other pollutants recognized by the State. In general, CAAQS are more stringent than corresponding NAAQS. Table 20 lists the current CAAQS.

Toxic Air Contaminants

The EPA regulates emissions of the 189 designated HAPs under Federal Title III of the CAA. The CARB regulates additional hazardous pollutants, designated as Toxic Air Contaminants (TACs), including those with predicted carcinogenic and non-carcinogenic health-effects. The Air Toxics Hot Spots Information and Assessment Act (AB 2588) requires inventories and public notices for facilities that emit TACs above established thresholds.

The CARB has created 35 local air agencies throughout California, responsible for promulgating and enforcing rules and regulations governing most stationary sources of emissions. Each air district not in attainment of a NAAQS must develop a Plan, commonly called an Air Quality Management Plan (AQMP). An AQMP demonstrates the effectiveness of proposed measures to bring the air basin into attainment of the standard by the applicable deadline. The local regulations are discussed in detail below.

REGIONAL RULES AND REGULATIONS

The GBUAPCD has promulgated numerous rules and regulations²⁸ governing the construction and operation of new or modified sources of air pollutant emissions within the Great Basin Valleys Air Basin. The following provides a discussion of the applicable GBUAPCD rules for the proposed project.

The AQMP for the Town (adopted by the Town Council and GBUAPCD Board of Directors in November and December 1990) established that Mammoth Lakes is susceptible to air pollution episodes during the winter ski season. This condition is due to the increased use of both mobile sources and stationary sources including wood burning stoves and fireplaces. The resulting action taken by the GBUAPCD was the implementation of air quality control regulations to curtail PM₁₀ emissions. Additionally, the Town of Mammoth Lakes has

²⁸ www.GBUAPCD.org

implemented numerous guidelines that govern the design of development projects, and are provided in Section 3.2, Land Use, of this Draft EA/EIR. The following are rules enforced by the GBUAPCD as well as municipal code sections specific to the Town of Mammoth Lakes.

a. GBUAPCD Rule 200-A and 200-B. Permits Required

Before any individual builds or operates anything which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the issuance of air contaminants, such person must obtain a written *authority to construct* and *permit to operate* from an Air Pollution Control Officer.

b. GBUAPCD Rule 209-A. Standards for Authority to Construction

Under Rule 209-A, new stationary sources with air emissions above applicable thresholds must be constructed with Best Available Control Technologies (BACT).

c. GBUAPCD Rule 216-A. New Source Review Requirements for Determining Impact on Air Quality Secondary Sources

Rule 216-A states a person shall not initiate, modify, construct or operate any secondary sources that will cause the emission of any air pollutant without first obtaining a permit. A secondary source is defined by the GBUAPCD as any structure, building, facility, equipment, installation, or operation which is located on one or more bordering properties within the District and which is owned, operated, or under shared entitlement to use by the same person.

d. GBUAPCD Rules 401 and 402. Fugitive Dust and Nuisance

Rule 401 requires that airborne particles remain on the site they originate from under normal wind conditions. Proper mitigation techniques approved by the GBUAPCD must be implemented to ensure that fugitive dust is contained. This does not apply to dust emissions discharged through a stack or other point source.

Rule 402 states that any air discharge that may cause injury or detriment, nuisance or annoyance, or damage to any public property or considerable number of people is regulated. This rule discusses all the health and safety issues that may interfere with public and private areas surrounding the site.

e. GBUAPCD Rules 404-A and Rule 404-B. Particulate Matter and Oxides of Nitrogen

Rule 404-A states that a person shall not discharge from any source whatsoever, particulate matter in excess of 0.3 grains per standard dry cubic foot of exhaust gas. Rule 404-B states that a person shall not discharge from fuel burning equipment having a maximum heat input rate of more than 1.5 billion BTU per hour (gross), flue gas having a concentration of nitrogen oxides calculated as Nitrogen Dioxide (NO₂) in parts per million of flue gas by volume at 3 percent oxygen: 125 ppm with natural gas fuel, or 225 ppm with liquid or solid fuel. Additionally, a person shall not discharge from sources other than combustion sources, nitrogen oxides, calculated as nitrogen dioxide, 250 parts per million (ppm) by volume.

f. GBUAPCD Rule 416. Sulfur Compounds and Nitrogen Oxides

A person shall not discharge sulfur compounds from any single source calculated as sulfur dioxide at 0.2 percent by volume.

g. GBUAPCD Rule 431; Town of Mammoth Lakes Municipal Code Section 8.30.030. Standards for Regulation of Solid Fuel Appliances and Section 8.30.110. Road Dust Reduction Measures

Both the GBUAPCD and the Town of Mammoth Lakes AQMP discuss the following rules on PM reduction control measures.

Rule 431 and Section 8.30.030: Wood burning stoves must comply with 1991 EPA Phase II Certified Stoves standards. Hotel/Condominium common areas are limited to no more than one wood burning stove or fireplace.

Rule 431 and Section 8.30.110: Requirements include vacuum street sweeping of volcanic cinders, requires vehicle miles traveled (VMT) reduction measures for new developments, and limits peak VMT in the Town to 106,600 VMT.

h. GBUAPCD Toxic Risk Assessment Policy

The GBUAPCD regulates new toxic air emission sources under a new source assessment policy. The policy requires that all new sources emitting TACs must apply for a permit. Once the application is received, the GBUAPCD performs a screening risk assessment based on the following: If an individual is exposed to a lifetime carcinogenic risk of greater than one in one million, then the permit will be granted; if exposed to a risk between one and 10 in one million, then mitigation measures must be implemented before the permit is granted; if exposed to a risk greater than 10 in one million the permit will not be granted.

3.4.2 AFFECTED ENVIRONMENT

Existing uses on the site include a surface parking lot for skiers utilizing Mammoth Mountain. Existing conditions for the air quality analysis include the VMT associated with the current uses of the project site. The impact analyses for both construction and operation are net increases resulting from the difference between the project conditions and existing conditions.

Under the provisions of the Federal Clean Air Act, the Environmental Protection Agency is required to classify each air pollution control district as attainment or nonattainment status determined by the Federal standards. The CARB has similar responsibilities related to the State standards. Areas that violate Federal or State ambient air quality standards are referred to as nonattainment areas for the respective pollutants.

As shown in Table 21 on page 158, Mono County is classified as attainment for all CAAQS, except ozone and PM₁₀, and all NAAQS except PM₁₀. However, there is no ozone implementation plan for attainment in Mono County, nor is one required as outlined in the 2001 CARB Ozone transport review (CARB 2001, page 45). Under State law, the CARB determines the contribution of transported pollution as overwhelming, significant, inconsequential, or some combination of the three. The CARB Ozone Transport Review states that; “Transport from the central portion of the (San Joaquin) Valley is responsible for ozone violations in Mammoth Lakes . . .” and that the resulting impacts on the Town’s air quality were classified as “overwhelming”.

a. Local Area Conditions

The GBUAPCD operates several air quality monitoring stations within the GBVAB. One air quality monitoring station is located within the Town of Mammoth Lakes. Air quality monitoring is performed by the APCD at the corner of Highway 203 and Old Mammoth Road. The site is equipped with a state of the art continuous-reading Tapered Element Oscillating Microbalance PM₁₀ monitor. Additionally, the APCD continues to use a co-located Partisol PM₁₀ monitor operated every third day to demonstrate compliance with the ambient standards. Ozone and CO concentrations were monitored in the past, but these monitoring programs have been discontinued. A summary of the air quality data from 2000 to 2005 for the Mammoth Lakes Monitoring Station is provided in Table 22 on page 159.

Discussions of each pollutant, including emission sources, historical ambient levels recorded at the Mammoth Lakes Monitoring Station, and recent trends in ambient conditions are presented below.

Table 21**Mono County Area Designation**

Pollutant	California Status	National Status
Ozone	Non-Attainment	Attainment
PM _{2.5}	Unclassified	Attainment
PM ₁₀	Non-Attainment	Non-Attainment ^a
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
SO ₄	Attainment	Attainment
Lead	Attainment	Attainment
H ₂ S	Attainment	Attainment
Visibility Reducing Particles	Unclassified	Unclassified

^a *PM₁₀ nonattainment does not represent all of Mono County, only a subset including Mammoth Lakes: http://www.arb.ca.gov/desig/adm/fed_pm10_desig.pdf*

Source: CARB 2004

b. Carbon Monoxide

CO is a colorless and odorless gas. Motor vehicles are the primary source of CO in the GBVAB. CARB and the EPA classify Mono County in attainment of the CO standards. CO monitoring in the Town was discontinued in 2002. The State one-hour standard for CO is 20.0 parts per million (ppm), while the Federal standard is 35 ppm. The maximum one-hour concentration per calendar year has fluctuated at the Mammoth Lakes Monitoring Station from 4.2 ppm in 2000 to 15.4 ppm in 2001. Both the State and Federal eight-hour standard for CO is 9.0 ppm. CO concentrations, as recorded in the Mammoth Lakes station, have not exceeded the State or National standards since 1991 (Table 22).

c. Ozone

Ozone is categorized as a photochemical oxidant. Oxidants are formed when nitrogen oxides, hydrocarbons, related compounds called volatile organic compounds and reactive organic compounds interact in the presence of ultraviolet sunlight.

In 2001 CARB published an O₃ transport review, which discussed the movement of O₃ among the various air basins contained within the State. CARB is responsible for classifying the contribution of transported O₃ in a given area based on the level of significance. CARB's

Table 22
Mono County Air Quality Levels

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Year	Maximum Concentration	Days Above State/Federal Standard^a
Carbon Monoxide (CO)	1-Hour	20 ppm	35 ppm	2000	4.2 ^b	0/0
				2001	15.4	0/0
				2002	-- ^c	-/-
				2003	-- ^c	-/-
				2004	-- ^c	-/-
	8-Hour	9 ppm	9 ppm	2000	2.5 ^b	0/0
				2001	2.5	0/0
				2002	-- ^c	-/-
				2003	-- ^c	-/-
				2004	-- ^c	-/-
Ozone (O₃)	1-Hour	0.09 ppm	0.12 ppm	2000	-- ^b	-/-
				2001	0.10 ^b	4/0
				2002	0.07 ^b	0/0
				2003	-- ^c	-/-
				2004	-- ^c	-/-
	8-Hour	No State Standard has been promulgated	0.08 ppm	2000	-- ^b	-/-
				2001	0.09	-/2
				2002	0.07	-/0
				2003	-- ^c	-/-
				2004	-- ^c	-/-
PM₁₀	24 Hour	50 mg/m ³	150 mg/m ³	2000	70 ^d	2/0
				2001	134	4/0
				2002	129 ^b	4/0
				2003	62	1/0
				2004	73	3/0
	Annual	20 mg/m ³	50 mg/m ³	2000	27 ^{b,d}	1/0
				2001	26	1/0
				2002	30 ^b	1/0
				2003	-- ^b	-/-
				2004	19.6	0/0
2005	19.5	0/0				

Table 22 (Continued)

Mono County Air Quality Levels

Pollutant	Averaging Time	California Standard	Federal Primary Standard	Year	Maximum Concentration	Days Above State/Federal Standard ^a
PM _{2.5}	24 Hour	No separate State Standard	65 mg/m ³	2000	31 ^b	-/0
				2001	41 ^b	-/0
				2002	-- ^b	-/-
				2003	34	-/0
				2004	27	-/0
				2005	27 ^b	-/0
				Annual	12 mg/m ³	15 mg/m ³
	2001	10.3 ^b	-/-			
	2002	-- ^b	-/-			
	2003	-- ^b	-/-			
	2004	-- ^b	-/-			
	2005	-- ^b	-/-			

^a The number of days above the standard is not necessarily the number of violations of the standard for the year. Data from CARB (<http://www.arb.ca.gov/adam/welcome.html>) unless otherwise noted.

^b Years with incomplete data.

^c Mono County stopped monitoring for CO and Ozone in 2002. Data not available

^d 2002 Values posted from EPA (<http://www.epa.gov/air/data/>).

Source: PCR Services Corporation, 2006

research has proven that seasonal and diurnal variations in weather patterns play an important role in determining the fate of O₃, especially in the San Joaquin Valley Air Basin.²⁹

The San Joaquin Air Basin is the primary source for transported O₃ entering the Town of Mammoth Lakes. Precursor pollutants, NO_x and VOCs, emitted in the San Joaquin Valley react in the presence of sunlight, creating ozone. Recirculating air patterns and warmer temperatures, which are frequently experienced in the San Joaquin Valley, increase the photochemical production of O₃. As discussed in Section 3.4, diurnal wind patterns carry O₃ eastward to the crest of the Sierras during the day. As the air cools, O₃ flows down the eastern slopes into Mammoth Lakes, which accounts for the O₃ violations occurring late at night and in the early morning. Nearly all of the O₃ responsible for the violations in Mammoth Lakes has been

²⁹ CARB 2001= Austin, J. and Gouze, S. *Ozone Transport: 2001 Review*. California Air Resource Board, April 2001

transported from the west. This process is intensified in the summer months when photochemistry significantly increases production of O₃ in the San Joaquin Valley.³⁰

The maximum 1-hour O₃ concentration recorded at the Mammoth Lakes Station during the 2000 to 2005 period was 0.1 ppm, which was recorded in 2001. During the reported period, the California standard of 0.09 ppm was exceeded 4 times in 2001; the Federal standard of 0.12 ppm was not exceeded during this time. The maximum 8-hour O₃ concentration was 0.09 ppm, which was recorded in 2001. During the same period, the Federal standard of 0.08 ppm was exceeded two times in 2001.

d. Particulate Matter

PM₁₀ arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. The maximum recorded concentration during 2000 to 2005 at the Mammoth Lakes Monitoring Station was 134 micrograms per cubic meter (µg/m³), recorded in 2001. During this time period, the California standard was exceeded between two and six times (three percent to 10 percent of the time) annually, with the highest number of exceedances in 2005 and the lowest number of exceedances recorded in 2000.³¹ PM₁₀ is monitored every six days coincident to a national schedule; therefore, PM₁₀ exceedances are based on the number of sampling days. California is in non-attainment for PM₁₀ under both National and State designations.

As of June 5, 2003, the State annual PM₁₀ standard is 20 µg/m³, which is based on the geometric mean of the monitored one-hour values. This is a reduction from the previous State annual standard of 30 µg/m³. The Federal standard is 50 µg/m³ based an average of the one-hour concentrations. The State standard has been exceeded in the years 2000, 2001, and 2002. There have been no exceedances of the Federal annual standard during this monitoring period.

e. Fine Particulate Matter

PM_{2.5} is primarily a result of combustion. Combustion products emitted into the atmosphere as well as those particles that are formed in the atmosphere from gaseous pollutants are PM_{2.5} precursors. As a result of atmospheric chemistry (secondary formation) the primary particles from combustion eventually form PM_{2.5}. Generally, PM_{2.5} poses a greater health risk than larger particulates. This is due to the more toxic chemical composition of smaller particles and their ability to deposit deep into the human lung, which results in more absorption into the

³⁰ *Ibid.*

³¹ <http://www.arb.ca.gov/aaqm/partic.htm>

blood stream and an increased risk of associated health affects. In addition to health impacts, these particles can reside in the atmosphere for long periods of time and are the main contributors to reduced visibility and regional haze.³²

The State established a 24-hour PM_{2.5} standard in 2003, coincident with the Federal standard of 65 µg/m³. However, while the State standard is not to be exceeded, the Federal standard's criteria allows for some exceedances as long as the three-year average of the annual 98th percentile concentration distributions at each monitoring site meet the standard.

The APCD began monitoring for PM_{2.5} in 2000. With monitoring data through 2004, no exceedance of the State standard has been reported. The State PM_{2.5} annual standard is 12 µg/m³ (not to be exceeded); while the Federal standard is 15 µg/m³ (averaged over three years). No full year of data collected from the monitoring station in the Town violates the State standard. EPA issued official designations for the PM_{2.5} standard in December 2004 and made modifications in April 2005. Mono County is designated as unclassifiable/attainment.

f. Odor

Potential sources of odors related to the project include restaurant operations, chlorination of spas and pools, and on-site laundry services. In addition, smoke from wood burning stoves and fireplaces, vehicle exhaust from tour buses, RVs, and other diesel powered vehicles may be generated with implementation of the project.

g. Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations that are in close proximity to localized sources of toxics and CO are of particular concern and are termed sensitive receptors. Land uses considered to be sensitive receptors with regard to air quality include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The closest sensitive receptors to the site include single family residences located to the north, the Summit Condominiums located to the south, and the Juniper Springs Lodge located to the southwest. The closest residences are located approximately 70 feet to the north of the project site boundary. Other potentially sensitive uses in the more distant area include multi-family residential development to the west of Juniper Springs Lodge.

³² *Ibid.*

3.4.3 ENVIRONMENTAL CONSEQUENCES

Significance Criteria

Significance criteria used in this analysis are based on NEPA criteria and CEQA guidelines (for determining the significance of environmental impacts).

a. NEPA Significance Criteria

NEPA guidance suggests the evaluation of whether a Proposed Action threatens a violation of Federal, State, local law, or any established requirements protecting the environment. For attainment pollutants PSD major source thresholds, of 250 tons per year, would be used to determine significance of potential impacts. Mobile sources, the primary source of air pollutant emissions from the proposed project, are exempt from PSD permitting. The stationary source PSD applicability emission levels are being used only as mass based significance levels under NEPA, since no similar emission levels have been established for hotel/residential/retail projects.

b. CEQA Significance Criteria

Based on Appendix G in the CEQA Guidelines, implementation of the Eagle Base Lodge Development project would be considered to have a significant impact on air quality if the project would

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project's region is categorized as nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors, for example NO_x);
- Expose sensitive receptors to substantial pollutant concentrations, or;
- Create objectionable odors affecting a substantial number of people.

Air Pollution Control Districts commonly establish mass-based significance criteria against which to measure a project's potential impacts. Projects resulting in emissions below these mass-based criteria are presumed to result in less than significant impact on the basin's

ability to obtain or maintain ambient air quality standards. This method provides an acceptable alternative to performing refined demonstrations. However, the GBUAPCD has not established mass-based significance criteria.

For this project, CEQA significance criteria for attainment pollutants would be the Federal PSD applicability thresholds used under NEPA. Applicability with rules, regulations, control measures, and limits contained in the AQMP for PM₁₀ are used to determine significance. Projects that incorporate BMPs to control PM₁₀ emissions during construction would be considered to have a less than significant impact. Furthermore, projects that would contribute to an exceedance of the Town's maximum allowed 106,600 VMT would contribute to a significant air quality impact. The VMT control measure, contained under the Mammoth Lakes AQMP, is a combined maximum for the Town. Vehicle miles traveled associated with the project are combined with the existing numbers.

c. Methodology

The evaluation of potential impacts on local and regional air quality that may result from construction and long-term operations of the proposed project are based on the following methodological approach:

(1) Construction Phase

Construction of the proposed project would generate air pollutant emissions from the following activities: the commute of workers to and from the project site; delivery and hauling of construction materials and supplies to and from the project site; fuel combustion by on-site construction equipment; dust generating activities from soil disturbance; and the application of architectural coatings and other building materials.

As mentioned previously in Chapter 2, Proposed Action, two options are proposed for the project. The first option is the construction of 83 condo units, and the second option is a 213-room hotel. Although two different types of land uses are proposed, the construction activities (equipment mix, duration, intensity) for both options would be the same. Construction of either option would occur within the proposed building envelope in terms of construction activity. Thus, the most conservative option would be applied to construction phase emissions.

Emission levels from construction activities would vary based on the type of equipment, duration of use, operation schedules, and number of construction workers. Construction emissions were estimated using the URBEMIS2002 emissions inventory model which incorporates calculation formulas and emissions factors prescribed by the California Air Resources Board (CARB), various local air quality management districts and the USEPA AP-42.

(2) Operational Phase - Regional

Project operation emissions were calculated using the URBEMIS 2002 emissions inventory model, which multiplies an estimate of daily vehicle miles traveled by applicable EMFAC2002 emission factors. Emissions predicted under Existing Conditions are calculated using 2006 estimates of VMT, while emissions resulting from the proposed Project are assumed to occur in 2009, using predicted VMT. VMT is a daily combined total for the Town of Mammoth Lakes, which includes all existing Town VMT as an existing condition. As mentioned previously, either a hotel option or and a condo option are under consideration for the project. The numbers of trips generated and total VMT for both options are expected to be similar for both options. However, stationary and area emissions which include consumer products usage, natural gas consumption and electricity usage may vary slightly between the two options, due to the difference in land use types. Under the condo option, residential uses may be occupied for a longer duration than the hotel option resulting in a slight increase in operational emissions. As a result, both options are considered in the operational emissions analysis. Also, to account for the differing seasonal visitation patterns and emission factors, the model was run separately for summer and winter seasons, then compiled onto one table to encompass yearly emissions.

Pollutant emissions associated with energy demand (i.e., electricity generation and natural gas consumption) are classified as regional stationary source emissions. Electricity is considered an area source since it is produced at various locations within, as well as outside of, Mono County. Because it is not possible to isolate the exact location of electricity production, these emissions are conservatively considered to occur within the GBVAB, and are regional in nature.

(3) Operational Phase - Localized

There are two potential localized impacts to air quality from operation of the proposed project: ambient PM_{10} levels in the Town and CO hotspots at roadway intersections. Each is discussed below.

(a) Particulate Matter

Based on data provided in the traffic study (Appendix B), PM_{10} emissions were calculated using URBEMIS2002 for operational emissions. PM_{10} emissions from electricity generation were calculated using a spreadsheet methodology and is accounted for in the total operational emissions inventory. The GBUAPCD has also developed a spreadsheet model which accounts for emissions from vehicle miles traveled (VMT) throughout the Town and use of fireplaces or stoves to determine whether the PM_{10} AAQS would be exceeded. Project-related

VMT data provided in the traffic study (Appendix X) and the number of proposed fireplaces or stoves was incorporated into the spreadsheet model to determine if the project would contribute to an exceedance of the PM₁₀ AAQS.

(b) Carbon Monoxide

Within the Town of Mammoth Lakes, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations are generally found within close proximity of congested intersection locations on the weekends. Proposed project traffic, during the operational phase of the project, would have the potential to create local area CO impacts. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (i.e., congested intersection) increases. For purposes of providing a conservative impact analysis, CO concentrations are typically analyzed at congested intersection locations. A conservative approach would be conducted on the following premise: if impacts are less than significant in close proximity of the congested intersections, then impacts would also be less than significant at more distant sensitive receptor locations.

Local area CO concentrations for roadways were evaluated using the CALINE4 traffic pollutant dispersion model, developed by Caltrans with EMFAC 2002 emission factors. The analysis of roadway CO impacts followed the protocol recommended by Caltrans and published in the document titled *Transportation Project-Level Carbon Monoxide Protocol*, December 1997.

Although the GBUAPCD does not have specific requirements for analyzing CO hotspots, most air quality management districts within California recommend a hotspot evaluation of potential localized CO impacts when volume-to-capacity ratios increase by two percent at intersections with a level of service (LOS) of C or worse. In order to conform to the Caltrans CO protocol, all four corners of each intersection were analyzed with receptor locations positioned three meters from each intersection for the 1-hour analysis and seven meters for the 8-hour analysis. The estimated CO concentrations from the CALINE4 modeling results were then compared to State and Federal CO standards to determine whether the project would have a significant air quality impact.

d. Environmental Consequences of the Proposed Action

Construction of the project is expected to start in spring of 2007 and would take approximately 24 months to complete. During this time, construction would continue throughout the year including the winter months. As mentioned previously, two possible options are considered for the project. Both options would occur within the proposed building envelope in terms of duration and construction activities required. Thus, the construction emissions analysis

would take into consideration the worst case option and would apply to either option. Construction-related emissions include on-site and off-site emissions. On-site construction emissions are associated with a variety of activities including: (1) earthwork activities such as grading, excavation, blasting, transporting fill material on paved and unpaved roads, and paving activities; (2) exhaust emissions from diesel and gasoline-powered construction equipment such as bulldozers and excavators; (3) architectural coatings; and (4) asphalt paving emissions. Off-site emissions would mainly result from travel by workers commuting to and from the project site, in addition to construction equipment and haul trucks delivering materials (e.g., excavated soil, concrete and building material) to and from the construction site. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Emissions were calculated for all phases of construction, and results are presented in Table 23 on page 168. Detailed discussions for each pollutant are provided below.

(1) Ozone Precursor Emissions

Emissions of VOCs and NO_x result from the combustion of fossil fuels in on- and off-road vehicles and construction equipment. In addition, activities such as architectural coating, welding, and asphalt operations would generate VOC emissions during construction of the project.

The air quality of the project site and surrounding area is currently classified as non-attainment of the State standard for ozone, but is in attainment of the NAAQS. As discussed previously, CARB has determined that local ozone violations are the result of pollutant transport from the San Joaquin Valley. Ozone levels should improve in the GBVAB when substantial mitigation measures are more fully implemented in upwind air basins.

Once created and transported, ground level ozone would dissipate both spatially and temporally as winds disperse the pollutant. It is unlikely that ozone precursor pollutants emitted within the Town would contribute toward local ground level ozone levels. Local conditions as described in Section 3.4 are much less conducive for the formation of photochemical ozone. Cold windy conditions experienced on the eastern slopes of the Sierras quickly transport any precursor pollutants out of the area before they can impact the ambient environment. During calm mornings, the prevailing cold temperatures are not favorable to the formation of ozone. As discussed in Section 3.4.3, Affected Environment, ozone exceedances in Mono County are attributable to upwind sources. Local sources are not considered to have a considerable impact on ambient levels.

Table 23

Pollutant Emissions from Construction Activities (Total Tons Emitted)

Construction Phase	VOC	NO _x	SO ₂	CO	PM ₁₀
Year 1					
Demolition (1 month)	<0.1	0.6	<0.1	0.5	0.1
Site Preparation (8 months)	1.3	9.8	<0.1	10.3	4.5
Building Construction (3 months)	0.2	1.0	<0.1	1.2	<0.1
Year 1 Total	1.6	11.3	<0.1	12.0	4.6
Year 2					
Building Construction (12 months)	5.0	6.9	<0.1	8.8	0.3
Year 2 Total	5.0	6.9	<0.1	8.8	0.3
Grand Total	6.5	18.2	<0.1	20.8	4.9

^a Construction emissions calculated using URBEMIS2002 v. 8.7

^b PM₁₀ emissions assume water is applied to exposed surfaces 2x daily during construction activities for a 50% control of fugitive dust emissions

Note: Numbers may not add up exactly due to rounding

Source: PCR Services Corporation, 2006

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide estimate of NO_x is approximately 986 tons per year for 2005. The maximum annual emissions of NO_x predicted to be generated occur as a result of construction are estimated to be approximately 11 tpy, one percent of the GBVAB total. Additionally, NO_x emissions are below the PSD applicability threshold of 250 tons/year. Therefore, emissions are not likely to contribute to a violation of applicable NO_x standards. Impacts are considered less than significant for VOCs as an ozone precursor, and less than significant for NO_x as an ozone precursor and as a primary pollutant.

(2) Sulfur Dioxide Emissions

As shown in Table 23, the emissions of SO_x from construction activities are fairly negligible. SO₂ emissions would not result in a violation of ambient air quality standards. The County-wide estimate of SO_x is 10.95 tons per year for 2005. The maximum annual emissions of SO_x predicted to occur as a result of construction are estimated to be approximately one percent of the GBVAB total. It should be noted that sulfur levels in liquid fossil fuels are regulated under California State law. Effective June 2006, sulfur levels in diesel fuel are now limited to 15 parts per million as opposed to the previous regulation of 500 parts per million. URBEMIS2002 applies the outdated state controls for fuel sulfur levels, which suggests that actual emission of SO_x would be lower than the data shown in Table 23. Maximum SO_x emissions of <0.1 tons per year is below the 250 tons/year PSD threshold and are unlikely to

threaten regional ambient air quality. Based on this data SO_x emissions are predicted to result in a less than significant impact.

(3) CO Analysis

CO is the result of incomplete combustion of fossil fuels. Circumstances that lead to increased CO emissions are cold wintertime conditions, and vehicles idling. The emissions shown on Table 23 represent emissions produced by equipment directly involved in the construction of the project and commuting construction workers. The 2005 county-wide emission inventory calculated by CARB in Mono County was 19,199 tons per year of CO. The incremental increase in emissions resulting from construction activities is approximately 0.1 percent of the County totals and are below the 250 tons per year PSD threshold. These emission levels are unlikely to threaten ambient air quality in the surrounding areas. Therefore, predicted inputs from the emissions of CO during construction would be less than significant.

(4) Fugitive dust (PM₁₀) Emissions

Best Management Practices (BMPs) would be implemented during construction of the project to minimize emissions of fugitive dust. These practices include: use of water or chemicals for control of dust in the demolition of existing structures, construction operations, the grading of roads or the clearing of land; application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts; use of water, chemicals, venting, or other precautions to prevent particulate matter from becoming airborne in handling dusty materials to open stockpiles and mobile equipment; and maintenance of roadways in a clean condition.

Even with the implementation of these BMPs, fugitive dust emissions would be generated during ground disturbing activities such as clearing, excavation, blasting, grading and trenching, hauling on paved and unpaved surfaces, in addition to wind blowing over disturbed surface areas. According to the project development schedule (Appendix X), the most intensive earthwork activities would occur during the 3rd quarter of 2007. During this phase, site clearing, blasting and mass excavation activities would be performed simultaneous with the parking garage construction activities, including excavation of footings and structural work for the garage foundation. Emission values could vary depending on soil moisture, silt content, wind speed, and other factors. PM₁₀ emissions also would result from the combustion of fossil fuels, such as diesel in construction equipment and on-road vehicles, and brake and tire wear from on-road mobile sources.

As discussed above, BMPs would be implemented during construction of the project to minimize emissions of fugitive dust. Therefore, the proposed project would result in a less than

significant impact for PM₁₀ emissions during construction. As described in Table 24, fugitive dust emissions relevant to the construction of the project would have a less than significant impact.

e. Operation Impacts

Project operations include all of the daily activities of the project that may generate pollutant emissions. For projects containing indirect sources such as office parks, shopping centers, and residential subdivisions, motor vehicles traveling to and from the project site represent the primary source of air pollutant emissions. The proposed project is a mixed use development, which contains a hotel condominium and numerous ski-related uses (e.g., food service, retail shops, ski-school, and a day care). It should be noted that this project does include VMT reducing measures as part of the operational plan. The project promotes the use of shuttle buses for travel around town and encourages walking by locating people close to the mountain and by providing a convenience market within the neighborhood to limit additional trips to the existing commercial area for groceries (Vons).

Predicted annual emissions in tons per year for both the hotel and condo options are summarized in Table 24 and Table 25 on pages 171 and 172, respectively.

(1) Ozone Precursor Emissions

Emissions of VOCs and NO_x result from the combustion of fossil fuels in on-road vehicles and stationary sources such as generators, heaters, and boilers. In addition, wood burning in fireplaces, application of architectural coatings for continuous maintenance, and consumer products usage contribute to VOC emissions during operations of the project.

As described in Section 3.4.3, Construction Impacts, there is an overwhelming amount of transported ozone from the San Joaquin Valley impacting the Town of Mammoth Lakes. As a result of this, the air quality of the project site and surrounding area is currently classified as non-attainment of the state standard for ozone, but is in attainment of the NAAQS. The CARB has discussed local ozone violations as the result of pollutant transport from the San Joaquin Valley in the 2001 Ozone Transport Review. Ozone levels should improve in the air basin only when substantial mitigation measures are more fully implemented in upwind air basins.

The incremental increase in emission of VOCs is estimated to be approximately 2 tpy, below the 250 tpy threshold. Local sources are not considered to have a considerable impact on ambient levels due to the climactic patterns located on the eastern slopes of the Sierras discussed under Construction Impacts.

Table 24**Proposed Project-Related Operational Emissions (Hotel Option)
(Tons/Year)**

Emission Source	CO	NO_x	PM₁₀	VOC	SO_x
Existing Condition					
On-Road Mobile Sources	25	3	2	2	< 1
Area Sources ^a	< 1	< 1	0	< 1	0
Stationary Sources ^b	0	0	0	0	0
Total Existing Emissions	25	3	2	2	0
Proposed Project					
On-Road Mobile Sources	48.2	6.6	6.0	4.0	<0.1
Area Sources ^a	0.5	0.4	<0.1	0.4	<0.1
Stationary Sources ^b	0.4	<0.1	2.4	<0.1	0.2
Total Project Emissions	49.2	7.1	8.3	4.4	0.3
Net Emissions	77.8	11.2	14.5	8.4	0.5

^a Examples of area sources include: architectural coatings and consumer products.

^b Based on electricity and usage obtained from the GBUAPCD

Source: PCR Services Corporation, 2006

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide inventory of NO_x is approximately 986 tons per year. The incremental increase in NO_x emissions predicted to occur as a result of project operations is estimated to be 4 tpy, less than one percent of the basin-wide inventory. In addition, this level of NO_x emissions is below the PSD permitting threshold of 250 tons per year. Impacts are considered less than significant for VOCs as an ozone precursor, and less than significant for NO_x as an ozone precursor and as a primary pollutant.

(2) Sulfur Dioxide Emissions

As shown in Tables 24 and 25 above, the project would contribute small amounts of SO₂ emissions from combustion sources. It is not anticipated that SO₂ emissions would result in a violation of the standards. It should be noted that sulfur levels in liquid fossil fuels is regulated under California State law. Effective June 2006, sulfur levels in diesel fuel are now limited to 15 parts per million as opposed to the previous regulation of 500 parts per million. URBEMIS2002 applies the outdated state controls for fuel sulfur levels, which suggests that actual emission of SO_x would be lower than the data shown in Tables 24 and 25. Maximum SO_x emissions of less than 0.1 tons per year is below the 250 tons per year PSD threshold and, therefore, is unlikely to threaten regional ambient air quality. Based on this data the predicted impact to SO_x from the incremental increase in project-related emissions would be less than significant

Table 25

**Proposed Project-Related Operational Emissions (Condo Option)
(Tons/Year)**

Emission Source	CO	NO_x	PM₁₀	VOC	SO_x
Existing Condition					
On-Road Mobile Sources	25	3	2	2	< 1
Area Sources ^a	< 1	< 1	0	< 1	0
Stationary Sources ^b	0	0	0	0	0
Total Existing Emissions	25	3	2	2	0
Proposed Project					
On-Road Mobile Sources	115.3	15.9	14.5	9.3	<0.1
Area Sources ^a	4.3	0.6	0.5	3.4	<0.1
Stationary Sources ^b	0.3	<0.1	1.5	<0.1	0.2
Total Project Operation Emissions	119.9	16.4	16.5	12.7	0.2
Net Emissions	94.4	13.0	13.6	10.6	0.2

^a Examples of area sources include: landscaping emissions, architectural coatings, and consumer products.

^b Based on electricity and usage obtained from the GBUAPCD

Source: PCR Services Corporation, 2006

(3) CO Emissions

CO is the result of incomplete combustion of fossil fuels, and emissions are greatest in the cold winter months and when vehicles are idling and accelerating. At roadway intersections, queuing and departure of vehicles could increase CO concentrations at nearby sensitive receptors, potentially contributing to an exceedance of the 1-hour State standard of 9.0 ppm or the 8-hour State standard of 20 ppm. In order to analyze intersection CO impacts on nearby sensitive receptors, a CO hotspots analysis was performed for the following potentially impacted intersections:

- Meridian Boulevard and East Majestic Pines Road North
- Meridian Boulevard and West Majestic Place
- Minaret Road and Meridian Boulevard
- Old Mammoth Road and Meridian Boulevard

As shown in Tables 26 and 27 on pages 173 and 174, respectively, emissions resulting from project-generated traffic volumes are forecasted to have a negligible effect on the projected

Table 26

Local Area Carbon Monoxide Dispersion Analysis (2009)

Intersection	Peak Period ^a	Maximum 1-Hour 2009 Base Concentration ^b (ppm)	Maximum 1-Hour 2009 w/ Project Concentration ^c (ppm)	Significant 1-Hour Impact ^d	Maximum 8-Hour 2009 Base Concentration ^e (ppm)	Maximum 8-Hour 2009 w/ Project Concentration ^f (ppm)	Significant 8-Hour Impact ^d
Meridian Boulevard and East Majestic Place	WKND	3.04	3.54	NO	1.92	2.20	NO
Meridian Boulevard and West Majestic Place	WKND	3.04	4.84	NO	1.36	1.36	NO
Minaret Road and Meridian Boulevard	WKND	3.74	4.04	NO	1.92	2.55	NO
Old Mammoth Road and Meridian Boulevard	WKND	4.44	4.74	NO	1.36	1.36	NO

ppm = parts per million.

^a Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by LSC traffic Associates, which is provided in Appendix C of this EA/EIR.

^b GBVAB 2009 1-hour ambient background concentration (1.94 ppm) + 2009 Base traffic CO 1-hour contribution.

^c GBVAB 2009 1-hour ambient background concentration (1.94 ppm) + 2009 w/ Project traffic CO 1-hour contribution.

^d The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.

^e GBVAB 2009 8-hour ambient background concentration (1.36 ppm) + 2009 Base traffic CO 8-hour contribution.

^f GBVAB 2009 8-hour ambient background concentration (1.36 ppm) + 2009 w/ Project traffic CO 8-hour contribution.

Source: PCR Services Corporation, 2006

1-hour and 8-hour CO concentrations at these intersections. Since project build-out CO concentrations would remain below the 1-hour and 8-hour thresholds at the intersections which operate the highest V/C ratio, any other analyzed roadway intersection would also remain below the thresholds.

The 2005 county-wide emissions inventory calculated by CARB was 19,199 tons per year of CO. The emissions for operation of this project are approximately 0.1 percent of the county totals and are below the 250 tons per year PSD thresholds. These emission levels are unlikely to threaten ambient air quality in the surrounding areas. Therefore, predicted impacts from emissions of CO during operation would be less than significant.

Table 27

Local Area Carbon Monoxide Dispersion Analysis (2024)

Intersection	Peak Period ^a	Maximum 1-Hour 2024 Base Concentration ^b (ppm)	Maximum 1-Hour 2024 w/ Project Concentration ^c (ppm)	Significant 1-Hour Impact ^d	Maximum 8-Hour 2024 Base Concentration ^e (ppm)	Maximum 8-Hour 2024 w/ Project Concentration ^f (ppm)	Significant 8-Hour Impact ^d
Meridian Boulevard and East Majestic Place	WKND	2.34	2.54	NO	1.57	1.64	NO
Meridian Boulevard and West Majestic Place	WKND	2.24	2.64	NO	1.36	1.36	NO
Minaret Road and Meridian Boulevard	WKND	2.54	2.64	NO	1.50	1.64	NO
Old Mammoth Road and Meridian Boulevard	WKND	2.64	2.74	NO	1.36	1.36	NO

ppm = parts per million.

^a Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by LSC Traffic Associates, which is provided in Appendix C of this EA/EIR.

^b GBVAB 2024 1-hour ambient background concentration (1.94 ppm) + 2024 Base traffic CO 1-hour contribution.

^c GBVAB 2024 1-hour ambient background concentration (1.94 ppm) + 2024 w/ Project traffic CO 1-hour contribution.

^d The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.

^e GBVAB 2024 8-hour ambient background concentration (1.36 ppm) + 2024 Base traffic CO 8-hour contribution.

^f GBVAB 2024 8-hour ambient background concentration (1.36 ppm) + 2024 w/ Project traffic CO 8-hour contribution.

Source: PCR Services Corporation, 2006

(4) Fugitive Dust (PM₁₀) Emissions

As mentioned previously, the GBUAPCD has developed a spreadsheet model to characterize localized PM₁₀ concentrations in the area based on VMT and fireplace or stove emissions. In situations where vehicle travel in the region is reduced, (i.e. off peak season, weekdays, etc.) wood burning emissions may be greater than road dust emissions. On the other hand, during peak season and weekends, road dust would be the main contributor to ambient PM₁₀ emissions. As shown in Table 28 on page 175, this spreadsheet methodology analyzes situations where wood burning emissions are greater than road dust emissions and vice versa.

Table 28

Operational Emissions – Localized PM₁₀ Analysis

Scenario	Vehicle Miles Traveled (VMT)	Emissions (kg/day) ^a	PM ₁₀ Concentrations (µg/m ³)			
			Wood Burning Dominated Day ^b	Road Dust Dominated Day ^c	Federal 24-hr Standard	Exceed Standard?
Existing - 2006	78,537	2,285	77.2	107.2	150.0	No
Future No Project - 2009	80,204	2,320	77.2	108.5	150.0	No
Future With Project - 2009	88,239	2,493	78.2	115.2	150.0	No

^a Existing (2006) PM₁₀ emissions assume a 34% control factor for street sweeping. Future (2009) PM₁₀ emissions assume 40% control factor for street sweeping.

^b Wood burning dominated day represents worst case scenario in which wood burning emissions are greater than road dust emissions.

^c Road dust dominated day represents worst case scenario in which road dust emissions are greater than wood burning emissions.

Source: GBUAPCD, PCR Services Corporation, 2006

A majority of fugitive dust emissions would be generated as a result of entrained cinder dust resulting from vehicle travel on roads. Emission of fugitive dust from vehicle travel varies depending on the type of surface and whether the roads are paved or unpaved. It is expected that most roads in the project vicinity are paved and a regular street sweeping program is implemented to minimize generation of fugitive dust. Other sources of PM₁₀ include wood burning in fireplaces, brake and tire wear, and combustion of fossil fuels from stationary sources such as generators. The project would not contain any wood burning or natural gas fireplaces that could increase airborne levels of PM₁₀. Also shown in Table 28, the cumulative town-wide VMT would remain below the 106,600 VMT limit with project buildout. Regional PM₁₀ net project emissions are estimated at a maximum of 14.5 tpy, which is less than two percent of the basin totals. Therefore, the project would result in a less than significant impact for PM₁₀ emissions.

Green Building Standards

As indicated in Chapter 2, Proposed Action and Alternatives, the facility would be developed in accordance with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards. LEED provides a complete framework for assessing building performance and meeting sustainability goals, which emphasizes state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. There are no LEED strategies that directly address air pollutant emissions. However, LEED strategies that relate to sustainable sites (e.g., reduce

sprawl by developing in urban areas) and energy efficiency (e.g., reduce thermal loss by providing sufficient insulation) would have a secondary effect with respect to air pollutant emissions. For example, reduced sprawl leads to a reduction in vehicle miles traveled (when compared to sprawling development), which leads to a reduction in mobile-source air pollutant emissions. Reductions in thermal loss would reduce energy demands related to temperature control, thereby reducing the stationary-source emissions associated with energy production.

Operation of Stationary Sources

Certain stationary sources of air pollution (i.e., boilers, heaters and generators) may require permits from the GBUAPCD, and must be operated in accordance to the standards established in Rules 404, 416 and 431. Emission increases related to these sources may be subject to GBUAPCD Rule 209A, or 209B which, among other things, may require that Best Available Control Technology (BACT) be utilized to reduce pollutants.

The estimated emissions from the 1,000 KVa generator in tons per year would be approximately 2 tons of CO, 8 tons of NO_x, 3 tons of SO_x, and less than 1 ton of PM₁₀.³³ These emissions are incorporated into the daily operational emissions analysis for the project, shown in Tables 25 and 26. Prior to installation, permits from the GBUAPCD would need to be obtained. These estimates reflect BACT requirements that would be imposed by GBUAPCD, except for the estimate of sulfur dioxide, which is based on published emission factors for large stationary diesel engines (USEPA, 1996). In addition, new sources of diesel particulate matter (DPM) emissions, recognized by the state of California as a carcinogenic TAC, the generator may be subject to GBUAPCD's TAC screening policy.

Summary of Conclusions

Based on the operational impact analyses, the project would result in less than significant impacts to O₃, NO_x, SO₂, and PM₁₀. As discussed previously, local ozone violations are the result of pollutant transport from the San Joaquin valley. Ozone levels should improve in the GBVAB when substantial mitigation measures are more fully implemented in upwind air basins. No project mitigation measures are required. To bring the area into attainment of the PM₁₀ NAAQS, the Town and GBUAPCD have promulgated rules to limit total daily VMT. Although the project would result in an incremental increase in PM₁₀ emissions, the impacts to ambient levels is considered less than significant because the cumulative VMT with implementation of this project would remain below the 106,600 VMT limit established.

³³ <http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s04.pdf> One year is based on 500 hours total usage. (AP42 Large Diesel Stationary Source Emission Factors)

f. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Alternative 1 would result in development on approximately 50 percent of the project site and would contain 35,000 square feet of commercial space replacing the existing parking lot. The number of daily trips generated by this Alternative would be approximately 1,433 ADT.

(1) Ozone Precursor Emissions

The project site and surrounding area are currently classified as non-attainment of the State standard for ozone, but is in attainment of the NAAQS. The CARB has determined that local ozone violations are the result of pollutant transport from the San Joaquin Valley. Ozone levels should improve in the air basin when substantial mitigation measures are more fully implemented in upwind air basins. The incremental increase from existing conditions to future with project conditions in emission of VOCs is estimated to be negligible, below the 250 tons per year thresholds, during both construction and operation of Alternative 1.

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide inventory of NO_x is approximately 986 tons per year. The incremental increase in NO_x emissions predicted to occur as a result of project operations is estimated to be three tons per year, which is less than one percent of the basin-wide inventory. NO_x emissions resulting from construction are predicted to be less than one percent of basin-wide levels as well. NO_x emission levels are also below the PSD permitting threshold of 250 tons per year. Emissions of NO_x are predicted to result in a less than significant impact to ambient levels of NO_x during both construction and operation of Alternative 1.

(2) Sulfur Dioxide Emissions

As shown in Table 29 on page 178, Alternative 1 would contribute small amounts of SO₂ emissions from combustion sources associated with both operations and construction activities. It is not anticipated that SO₂ emissions would result in a violation of the standards. Maximum SO_x emissions of less than 0.1 tons per year is below the 250 tons per year PSD threshold and, therefore, is unlikely to threaten regional ambient air quality. Based on this data, the predicted project-related SO_x emissions would be less than significant.

(3) CO Emissions

The 2005 county-wide emissions inventory calculated by CARB was 19,199 tons per year of CO. The emissions for operation of Alternative 1 would be approximately 0.1 percent of the County totals and are below the 250 tons per year PSD threshold for CO. Emissions from

Table 29

**Alternative 1-Related Operational Emissions
(Tons/Year)**

Emission Source	CO	NO _x	PM ₁₀	VOC	SO _x
Existing Condition					
On-Road Mobile Sources	25	3	2	2	< 1
Area Sources ^a	< 1	< 1	0	< 1	0
Stationary Sources ^b	0	0	0	0	0
Total Existing Emissions	25	3	2	2	< 1
Proposed Project					
On-Road Mobile Sources	23	3	3	2	< 1
Area Sources ^a	< 1	< 1	0	< 1	0
Stationary Sources ^b	< 1	< 1	3	< 1	< 1
Total Project Emissions	24	3	3	2	< 1
Net Emissions	< 1	< 1	1	< 1	< 1

^a Examples of area sources include: architectural coatings and consumer products.

^b Based on electricity and usage obtained from the GBUAPCD

Source: PCR Services Corporation, 2006

construction are estimated to be approximately the same as operations, which are below the PSD threshold. These emission levels are unlikely to threaten ambient air quality in the surrounding areas. Therefore, predicted impacts from emissions of CO during construction activities and operations would be less than significant.

Localized CO impacts are determined by evaluating the peak hour intersection traffic volumes. The most impacted roadway intersection analyzed is Meridian Boulevard and West Majestic Pines Street, which would not have a significant impact under this Alternative. Thus, Alternative 1 would result in less than significant impacts for localized CO levels.

(4) Fugitive Dust (PM₁₀) Emissions

Localized impacts are determined mainly by evaluating the peak hour intersection traffic volumes for local CO hotspots and daily VMT for localized PM₁₀ impacts. This Alternative would generate 1,433 trips per day, which is within the daily total VMT threshold for the Town. The most impacted roadway intersection analyzed is Meridian Boulevard and West Majestic Pines Street, which would not have a significant impact. Regional PM₁₀ emissions are estimated to be 1 tpy, which is less than one percent of the basin total. Thus, Alternative 1 would result in less than significant impacts for localized CO and PM₁₀ hotspot emissions.

With respect to potential air toxic impacts, Alternative 1 is not expected to generate any substantial air toxics emissions.

g. Environmental Consequences of Alternative 2 -Reduced Intensity Alternative

The Reduced Intensity Alternative would consist of either 54 residential dwelling units or 138 hotel rooms and 52,000 square feet of commercial uses.

(1) Ozone Precursor Emissions

The site and surrounding area is currently classified as non-attainment of the State standard for ozone, but is in attainment of the NAAQS. The CARB has determined that local ozone violations are the result of pollutant transport from the San Joaquin Valley. Ozone levels should improve in the air basin when substantial mitigation measures are more fully implemented in upwind air basins. The incremental increase in emissions of VOCs is estimated to be approximately one ton per year, below the 250 tons per year threshold, and impacts to ozone would be less than significant under this Alternative.

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide inventory of NO_x is approximately 986 tons per year. The incremental increase in NO_x emissions predicted to occur as a result of Alternative 2 operations is estimated to be four tons per year, less than one percent of the basin-wide inventory. In addition, this level of NO_x emissions is below the PSD permitting threshold of 250 tons per year. Emissions of NO_x are predicted to result in a less than significant impact to ambient levels of NO_x under Alternative 2.

(2) Sulfur Dioxide Emissions

As shown in Tables 30 and 31 on pages 180 and 181, respectively, the emissions of SO_x from construction activities would be fairly negligible. SO₂ emissions would not result in a violation of ambient air quality standards. The County-wide estimate of SO_x is 10.95 tons per year for 2005. The maximum annual emissions of SO_x predicted to occur as a result of construction are estimated to be approximately one percent of the GBVAB total, therefore, SO_x impacts are considered less than significant.

(3) CO Emissions

The 2005 county-wide emissions inventory calculated by CARB was 19,199 tons per year of CO. The emissions for operation of this Alternative are approximately 0.1 percent of the county totals and are below the 250 tons per year PSD thresholds. CO emissions from

Table 30

Alternative 2 - Local Area Carbon Monoxide Dispersion Analysis (2009)

Intersection	Peak Period ^a	Maximum 1-Hour 2009 Base Concentration ^b (ppm)	Maximum 1-Hour 2009 w/ Project Concentration ^c (ppm)	Significant 1-Hour Impact ^d	Maximum 8-Hour 2009 Base Concentration ^e (ppm)	Maximum 8-Hour 2009 w/ Project Concentration ^f (ppm)	Significant 8-Hour Impact ^d
Meridian Boulevard and East Majestic Place	WKND	3.04	3.22	NO	1.92	2.02	NO
Meridian Boulevard and West Majestic Place	WKND	3.04	3.67	NO	1.36	1.36	NO
Minaret Road and Meridian Boulevard	WKND	3.74	3.85	NO	1.92	2.14	NO
Old Mammoth Road and Meridian Boulevard	WKND	4.44	4.55	NO	1.36	1.36	NO

ppm = parts per million.

^a Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by LSC traffic Associates, which is provided in Appendix C of this EA/EIR.

^b GBVAB 2009 1-hour ambient background concentration (1.94 ppm) + 2009 Base traffic CO 1-hour contribution.

^c GBVAB 2009 1-hour ambient background concentration (1.94 ppm) + 2009 w/ Project traffic CO 1-hour contribution.

^d The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.

^e GBVAB 2009 8-hour ambient background concentration (1.36 ppm) + 2009 Base traffic CO 8-hour contribution.

^f GBVAB 2009 8-hour ambient background concentration (1.36 ppm) + 2009 w/ Project traffic CO 8-hour contribution.

Source: PCR Services Corporation, 2006

construction are estimated to be approximately the same as operations, below the PSD threshold. These emission levels are unlikely to threaten ambient air quality in the surrounding areas. CO analyses for roadway segments are listed in Table 32 on page 182. Maximum 1-hour and 8-hour CO levels for both future conditions (2009 and 2024) would be less than significant. Therefore, predicted impacts from total project related emissions of CO would be less than significant under Alternative 2.

(4) Fugitive Dust (PM₁₀) Emissions

Localized impacts are determined mainly by evaluating the peak hour intersection traffic volumes for local CO hotspots and daily VMT for localized PM₁₀ impacts. This Alternative

Table 31

Alternative 2 - Local Area Carbon Monoxide Dispersion Analysis (2024)

Intersection	Peak Period ^a	Maximum 1-Hour 2024 Base Concentration ^b (ppm)	Maximum 1-Hour 2024 w/ Project Concentration ^c (ppm)	Significant 1-Hour Impact ^d	Maximum 8-Hour 2024 Base Concentration ^e (ppm)	Maximum 8-Hour 2024 w/ Project Concentration ^f (ppm)	Significant 8-Hour Impact ^d
Meridian Boulevard and East Majestic Place	WKND	2.34	2.41	NO	1.57	1.595	NO
Meridian Boulevard and West Majestic Place	WKND	2.24	2.38	NO	1.36	1.36	NO
Minaret Road and Meridian Boulevard	WKND	2.54	2.58	NO	1.50	1.55	NO
Old Mammoth Road and Meridian Boulevard	WKND	2.64	2.68	NO	1.36	1.36	NO

ppm = parts per million.

^a Peak hour traffic volumes are based on the Traffic Impact Study prepared for the Project by LSC Traffic Associates, which is provided in Appendix C of this EA/EIR.

^b GBVAB 2024 1-hour ambient background concentration (1.94 ppm) + 2024 Base traffic CO 1-hour contribution.

^c GBVAB 2024 1-hour ambient background concentration (1.94 ppm) + 2024 w/ Project traffic CO 1-hour contribution.

^d The most restrictive standard for 1-hour CO concentrations is 20 ppm and for 8-hour concentrations is 9.0 ppm.

^e GBVAB 2024 8-hour ambient background concentration (1.36 ppm) + 2024 Base traffic CO 8-hour contribution.

^f GBVAB 2024 8-hour ambient background concentration (1.36 ppm) + 2024 w/ Project traffic CO 8-hour contribution.

Source: PCR Services Corporation, 2006

would generate 1,103 daily VMT, which is below the Town's threshold of 106,600 VMT. Regional PM₁₀ emissions are estimated to be one tpy, which is less than 1% of the basin total. Thus, Alternative 2 would result in less than significant impacts to regional and localized PM₁₀ levels.

h. Environmental Consequences of Alternative 3 – Alternative Design Alternative

The following impact analysis is relevant to both construction and operational impacts associated with build-out of Alternative 3. Alternative 3 would contain the same amount and type of development as the Proposed Action.

Table 32

**Alternative 2-Related Operational Emissions
(Tons/Year)**

Emission Source	CO	NO _x	PM ₁₀	VOC	SO _x
Existing Condition					
On-Road Mobile Sources	25	3	2	2	0.1
Area Sources ^a	0.1	0.1	0	0.1	0
Stationary Sources ^b	0.1	0.0	0.4	0.0	0.0
Total Existing Emissions	25.2	3.1	2.4	2.1	0.1
Proposed Project					
On-Road Mobile Sources	40.58	5.61	5.14	3.33	0.03
Area Sources ^a	2.99	0.55	0.34	2.4	0.01
Stationary Sources ^b	1	0	3	0	0
Total Project Emissions	44	6	9	6	0
Net Emissions	19	3	9	4	< 1

^a Examples of area sources include: architectural coatings and consumer products.

^b Based on electricity and usage obtained from the GBUAPCD

Source: PCR Services Corporation, 2006

Construction

(1) Ozone Precursor Emissions

The air quality of the project site and surrounding area is currently classified as non-attainment of the State standard for ozone, but is in attainment of the NAAQS. As discussed previously, CARB has determined that local ozone violations are the result of pollutant transport from the San Joaquin Valley. Ozone levels should improve in the GBVAB when substantial mitigation measures are more fully implemented in upwind air basins.

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide estimate of NO_x is approximately 986 tons per year for 2005. The maximum annual emissions of NO_x predicted to occur as a result of construction are estimated to be approximately one percent of the GBVAB total. Additionally, NO_x emissions are below the PSD permitting threshold of 250 tons/year as shown in Table 24.

Impacts would be less than significant for NO_x and VOCs as a primary pollutants. Although this alternative would result in additional VOC and NO_x emissions and the air basin is non attainment for the State ozone standard, the meteorological conditions are such that these emissions would not exacerbate the ozone exceedances. As discussed above, the ozone

exceedances are caused by pollutant transport from the San Joaquin Valley and are not related to Town emission sources.

(2) Sulfur Dioxide Emissions

As shown in Table 23, the emissions of SO_x from construction activities are fairly negligible. SO₂ emissions would not result in a violation of ambient air quality standards. The County-wide estimate of SO_x is 10.95 tons per year for 2005. The maximum annual emissions of SO_x predicted to occur as a result of construction are estimated to be approximately one percent of the GBVAB total, therefore, SO_x emissions are considered not significant.

(3) Fugitive dust (PM₁₀) Emissions

BMPs would be implemented during construction of the project to minimize emissions of fugitive dust. These practices include: use of water or chemicals for control of dust in the demolition of existing structures, construction operations, the grading of roads or the clearing of land; application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can give rise to airborne dusts; use of water, chemicals, venting, or other precautions to prevent particulate matter from becoming airborne in handling dusty materials to open stockpiles and mobile equipment; and maintenance of roadways in a clean condition.

Even with the implementation of these BMPs, fugitive dust emissions would be generated during ground disturbing activities such as clearing, excavation, blasting, grading and trenching, in addition to wind blowing over disturbed surface areas. Emission values could vary depending on soil moisture, silt content, wind speed, and other factors. PM₁₀ emissions also would result from the combustion of fossil fuels, such as diesel in construction equipment and on-road vehicles, and brake/tire wear from on-road mobile sources.

As shown in Table 24 above, BMPs would be implemented during construction of the project to minimize emissions of fugitive dust. Therefore, Alternative 3 would result in a less than significant impact for PM₁₀ emissions during construction.

Operation Impacts

Predicted annual emissions in tons per year for both the hotel and condo options are summarized in Table 24 and Table 25 on pages 171 and 172, respectively.

(1) Ozone Precursor Emissions

The project site and surrounding area is currently classified as non-attainment of the State standard for ozone, but is in attainment of the NAAQS. The CARB has determined that local ozone violations are the result of pollutant transport from the San Joaquin Valley. Ozone levels should improve in the air basin when substantial mitigation measures are more fully implemented in upwind air basins. The incremental increase in emissions of VOCs is estimated to be approximately 2 tons per year, below the 250 tons per year threshold.

Ambient levels of NO_x in the air basin are below the applicable CAAQS and NAAQS. The County-wide inventory of NO_x is approximately 986 tons per year. As shown in Tables 25 and 26, the incremental increase in NO_x emissions predicted to occur as a result of project operations is estimated to be 4 tons per year, less than one percent of the basin-wide inventory. In addition, this level of NO_x emissions is below the PSD permitting threshold of 250 tons per year. Impacts are considered to be less than significant for NO_x and VOCs.

(2) Sulfur Dioxide Emissions

As shown in Table 24 and Table 25, the project would contribute small amounts of SO₂ emissions from combustion sources. It is not anticipated that SO₂ emissions would result in a violation of the standards. Based on this data the predicted impact to SO_x from the incremental increase in project-related emissions would be less than significant

(3) CO Emissions

In order to analyze intersection CO impacts on nearby sensitive receptors, a CO hotspots analysis was performed for the following potentially impacted intersections:

- Meridian Boulevard and East Majestic Pines Road North
- Meridian Boulevard and West Majestic Place
- Minaret Road and Meridian Boulevard
- Old Mammoth Road and Meridian Boulevard

As shown in Table 26 and Table 27 on pages 173 and 174, respectively, emissions resulting from project-generated traffic volumes are forecasted to have a negligible effect on the projected 1-hour and 8-hour CO concentrations at these intersections. The 2005 county-wide emissions inventory calculated by CARB was 19,199 tons per year of CO. The emissions for operation of this project are approximately 0.1 percent of the county totals and are below the 250 tons per year PSD thresholds. These emission levels are unlikely to threaten ambient air quality

in the surrounding areas. Therefore, predicted impacts from emissions of CO during operation would be less than significant.

(4) Fugitive Dust (PM₁₀) Emissions

As mentioned previously, the GBUAPCD has developed a spreadsheet model to characterize localized PM₁₀ concentrations in the area based on VMT and fireplace or stove emissions. Emission of fugitive dust from vehicle travel varies depending on the type of surface and whether the roads are paved or unpaved. It is expected that most roads in the project vicinity are paved and a regular street sweeping program is implemented to minimize generation of fugitive dust. Other sources of PM₁₀ include wood burning in fireplaces, brake and tire wear, and combustion of fossil fuels from stationary sources such as generators. Also shown in Table 10, the cumulative town-wide VMT would remain below the 106,600 VMT limit after project build-out. Regional PM₁₀ net project emissions are estimated at a maximum of 14.5 tpy, which is less than 2% of the basin totals. Therefore, the project would result in a less than significant impact for PM₁₀ emissions.

Based on the operational impact analyses, the project would result in less than significant impacts to O₃. This region is classified as nonattainment of the State ozone standard as a result of pollutant transport. Emissions of VOCs and NO_x are relatively minor, and they would not further exacerbate ozone nonattainment. As discussed previously, local ozone violations are the result of pollutant transport from the San Joaquin valley. Ozone levels should improve in the GBVAB when substantial mitigation measures are more fully implemented in upwind air basins. No project mitigation measures are required to reduce the impacts. To bring the area into attainment of the PM₁₀ NAAQS, the Town and GBUAPCD have promulgated rules to limit total daily VMT. Although the project would result in an incremental increase in PM₁₀ emissions, the impacts to ambient levels is considered less than significant because the cumulative VMT would remain below the 106,600 VMT limit established.

i. Environmental Consequences of Alternative 4 - No Action Alternative

Alternative 4 would include the removal of the existing tent facility and minor grading associated with its removal. Alternative 4 would result in a minimal amount of construction activity. Therefore, Alternative 4 would result in a less than significant impact with regard to construction emissions.

The No Action Alternative is not expected to generate any additional trips above existing conditions. The total contribution to regional emissions under this Alternative would be minimal since no land uses would be added. Localized air quality impacts are determined mainly by the peak hour intersection traffic volumes. This Alternative is not expected to increase localized CO

or PM₁₀ concentrations within the project vicinity over existing conditions. The localized CO and PM₁₀ hotspot emissions would be less than significant.

With respect to potential air toxic impacts, this Alternative is not expected to generate any additional air toxics emissions. With respect to air toxics, the no action alternative would result in a less than significant impact. In summary, impacts under this Alternative would not increase construction or operational emissions as compared to existing conditions, and Alternative 4 would result in less than significant impacts to air quality for both construction and operations.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.5 NOISE

INTRODUCTION

Noise

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility of sound is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as “noisiness” or “loudness.” Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which gives the level of sound in decibels (dB). The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human, frequency-dependent response, the A-weighted filter system is used to adjust measured sound levels. The A-weighted sound level is expressed in dBA. This scale de-emphasizes low frequencies to which human hearing is less sensitive and focuses on mid- to high-range frequencies. Due to the physical characteristics of noise transmission and reception, an increase of 10 dBA is normally required to achieve a doubling of loudness, as perceived by the human ear. In addition, a 3-dBA increase is recognizable to most people in the context of the community noise environment. A change in noise level will usually not be detectable unless the new noise source is at least as loud as the ambient conditions.

Objects that obstruct the line-of-sight between a noise source and a receptor reduce the noise level if the receptor is located within the “shadow” of the obstruction, such as behind a sound wall. This type of sound attenuation is known as barrier insertion loss. If a receptor is located behind the wall but has a view of the source (i.e., line-of-sight not fully blocked), some barrier insertion loss would still occur, though to a lesser extent. Conversely, a receptor located on the same side of the wall as a noise source may actually experience an increase in the perceived noise level as the wall reflects noise back to the receptor, thereby compounding the noise.

Time variation in noise exposure is typically expressed in terms of the average energy over time (L_{eq}), or alternatively, as a statistical description of the sound level that is exceeded over some fraction of a period of time (typically conducted over one hour). For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_8 and L_{25}

represent the noise levels that are exceeded 8 and 25 percent of the time, respectively, or for 5 and 15 minutes during a 1-hour period, respectively.

Although the A-weighted scale accounts for the range of people's response, and therefore, is commonly used to quantify individual event or general community sound levels, the degree of annoyance also depends on several other perceptibility factors. These factors include:

- Ambient (background) sound level;
- Magnitude of sound event with respect to the background noise level;
- Duration of the sound event;
- Number of event occurrences and their repetitiveness; and
- Time of day that the event occurs.

Several methods have been devised to relate noise exposure over time to human response. Commonly used noise metrics for this type of study are the Community Noise Equivalent Level (CNEL) or day-night average level (L_{dn}). Both of these descriptors represent the weighted energy noise level for a 24-hour day after including a 10 dB penalty for noise levels occurring at night between the hours of 10:00 P.M. to 7:00 A.M. The CNEL, originally developed for use in the California Airport Noise Regulation, additionally includes a 5 dBA penalty to noise occurring during evening hours from 7:00 P.M. to 10:00 P.M. These descriptors account for the increased sensitivity to noise events that occur during the quiet late evening and nighttime periods.

Ground-Borne Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source.

3.5.1 REGULATORY FRAMEWORK

Many government agencies have established noise standards and guidelines to protect people from potential hearing damage and various other adverse physiological and social effects associated with noise. Standards and guidelines that are applicable to implementation of the Eagle Base Lodge Development Project are discussed below.

a. Federal

The United States Department of Housing and Urban Development (HUD) has set a goal of 45 dBA L_{dn} as a desirable maximum interior noise standard for HUD-assisted residential units.⁴⁴ This same noise level is also generally accepted within the State of California. While HUD does not specify acceptable exterior noise levels, standard construction of residential dwellings constructed under Title 24 standards typically provide 20 dBA of attenuation with the windows closed. Based on this attenuation, the exterior L_{dn} for HUD assisted dwelling units should not exceed 65 dBA.

The United States Environmental Protection Agency has developed guidelines on recommended maximum noise levels to protect public health and welfare.⁴⁵ For example, 55 dBA is recommended as the maximum for the annual average L_{dn} in outdoor residential areas and areas where people spend widely varying amounts of time and other places in which quiet is a basis for use. With regard to worker noise exposure, Federal regulations (e.g., 29 CFR Part 1919.120) safeguard the hearing of workers exposed to occupational noise, enforced by the Occupational Safety and Health Administration (OSHA). For example, it is illegal for employees to be exposed to noise levels of 115 dBA for more than 15 minutes during any workday.

There are no federal standards for ground-borne vibration; however, the Federal Transit Authority (FTA) has established a PPV threshold of 0.2 inch per second for vibration in proximity to fragile buildings and 2.0 inches per second as a safe criterion for well engineered structures.⁴⁶

⁴⁴ The day-night average level (L_{dn}) is the average equivalent A-weighted sound level during a 24-hour day, obtained after addition of ten decibels to sound levels during the nighttime from 10 P.M. to 7 A.M. The 10-decibel penalty is applied to account for increased noise sensitivity during the nighttime hours. The L_{dn} represents the daily energy noise exposure averaged on an annual basis.

⁴⁵ USEPA, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, March 1974.

⁴⁶ Federal Transit Authority, *Transit Noise and Vibration Impact Assessment, Final Report*, April 1995.

b. State

The State of California, Department of Health Services, Environmental Health Division, has published the Guidelines for Noise and Land Use Compatibility (the State Guidelines) which recommend guidelines for local governments to use when setting standards for human exposure to noise and preparing Noise Elements for General Plans. The State Guidelines, summarized in Table 33 on page 191, indicate that residential land uses and other noise sensitive receptors generally should be located in areas where outdoor ambient noise levels do not exceed 65 to 70 dBA (CNEL or L_{dn}). Application of this compatibility matrix to development projects is not mandated by the Department of Health Services; however, each jurisdiction is required to consider the State Guidelines when developing its General Plan Noise Element and when determining acceptable noise levels within its community.

There are no adopted State policies or standards for ground-borne vibration. The traditional view has been that common vibrations related to roadway traffic and construction activities pose no threat to buildings or structures. However, the California Department of Transportation (Caltrans) does recommend that extreme care be taken when sustained pile driving occurs within 7.5 meters (25 feet) of any building, and 15 to 30 meters (50 to 100 feet) of a historic building or a building in poor condition. According to data published by the California Department of Transportation (Caltrans), 0.1 inch/sec PPV is the level at which continuous vibrations begin to annoy people, and 0.2 inch/sec PPV is the threshold at which there is a risk of architectural damage to normal dwelling structures that contain plastered walls and/or ceilings.⁴⁷

c. Local

Town of Mammoth Lakes General Plan

As required under Section 65302(f) of the California Government Code, each community must prepare and adopt a comprehensive long-range General Plan for its physical development containing seven mandatory elements, including a Noise Element. The Noise Element must: (1) identify and appraise noise problems in the community; (2) recognize the State Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels. The Town of Mammoth Lakes Noise Element policies that relate to the proposed project include the following:

- Policy 4.2.1—New development of noise sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise

⁴⁷ California Department of Transportation, *Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

Table 33

Land Use Compatibility for Community Noise Sources

Land Use Category	Noise Exposure (L_{dn} or CNEL, dBA)					
	55	60	65	70	75	80
Residential – Low-Density Single-Family, Duplex, Mobile Homes	Shaded	Shaded				
Residential – Multiple Family	Shaded	Shaded	Shaded			
Transient Lodging – Motel, Hotels	Shaded	Shaded	Shaded	Shaded		
Schools, Libraries, Churches, Hospitals, Nursing Homes	Shaded	Shaded	Shaded	Shaded		
Auditorium, Concert Hall, Amphitheaters	Shaded	Shaded	Shaded	Shaded	Shaded	
Sports Arena, Outdoor Spectator Sports	Shaded	Shaded	Shaded	Shaded	Shaded	
Playgrounds, Neighborhood Parks	Shaded	Shaded	Shaded	Shaded	Shaded	
Golf Courses, Riding Stables, Water Recreation, Cemeteries	Shaded	Shaded	Shaded	Shaded	Shaded	
Office Buildings, Business Commercial and Professional	Shaded	Shaded	Shaded	Shaded	Shaded	
Industrial, Manufacturing, Utilities, Agriculture	Shaded	Shaded	Shaded	Shaded	Shaded	
	<i>NORMALLY ACCEPTABLE: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.</i>					
	<i>CONDITIONALLY ACCEPTABLE: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.</i>					
	<i>NORMALLY UNACCEPTABLE: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.</i>					
	<i>CLEARLY UNACCEPTABLE: New construction or development should generally not be undertaken. Construction costs to make the indoor environmental acceptable would be prohibitive and the outdoor environment would not be usable.</i>					
Source: State of California, General Plan Guidelines, Governor’s Office of Planning and Research, 2003						

sources which exceed 60 dB L_{dn} in outdoor activity areas or 45 dB L_{dn} in interior spaces.

- Policy 4.2.2—Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed 60 dB L_{dn} within

Table 34

Maximum Allowable Noise Exposure-Stationary Noise Sources^a

Noise Descriptor	Daytime (7 A.M. to 10 P.M.)	Nighttime (10 P.M. to 7 A.M.)
Hourly L_{eq} , dB	50	45
Maximum Level, dB	70	65

^a As determined at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property line noise mitigation measures.

Source: Revised Mammoth Lakes Noise Element of the General Plan, 1997

outdoor activity areas and 45 dB L_{dn} within interior spaces of existing noise sensitive land uses.

- Policy 4.2.3—New development of noise sensitive land uses shall not be permitted where the noise level from existing stationary noise sources exceed a daytime noise standard of 50 dBA L_{eq} or 70 dBA L_{max} and a night time noise standard of 45 dBA L_{eq} or 65 dBA L_{max} .
- Policy 4.2.4—Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards provided in Policy 4.2-3 at noise-sensitive uses.

To achieve compliance with the policies of the Noise Element, the Noise Element provides implementation measures. The following implementation measures are applicable to the proposed project.

Measure 5.1 The Town shall review new public and private development proposals to determine conformance with the policies of the Noise Element.

Measure 5.2 The Town shall require an acoustical analysis in those cases where a project potentially threatens to expose noise-sensitive land uses to excessive noise levels. The presumption of the noise levels shall be based on the location of new noise-sensitive uses to known noise sources, or staff's professional judgment that a potential for adverse noise impacts exists. Acoustical analyses shall be required early in the review process so that noise mitigation may be included in the project design. For development not subject to environmental review, the requirements for an acoustical analysis shall be implemented prior to the issuance of building permits.

- Measure 5.3 The Town shall develop and employ procedures to ensure that noise mitigation measures required pursuant to an acoustical analysis are implemented in the development review and building permit processes.
- Measure 5.4 The Town shall develop and employ procedures to monitor compliance with the policies of the Noise Element after completion of projects where noise mitigation measures have been required.
- Measure 5.5 The Town shall enforce the State Noise Insulation Standards (California Code of Regulations, Title 24) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multi-family housing, hotels and motels.
- Measure 5.6 The Town shall request the California Highway Patrol, the sheriff's office and the police department to actively enforce the California Vehicle Code sections relating to adequate vehicle mufflers and modified exhaust systems.

The Town is currently in the process of revising its General Plan. The Draft Updated General Plan, dated April 2005, maintains the same list of goals and policies for noise and, therefore, the list of goals and policies provided above would remain applicable to the proposed project.

Town of Mammoth Lakes Municipal Code

Chapter 8.16 of the Mammoth Lakes Municipal Code (Town Noise Ordinance) controls unnecessary, excessive and annoying noise in the Town. However, this chapter does not control noise sources that are preempted by other jurisdictions including in-flight aircraft and motor vehicles operating on public rights-of-way. As outlined in Section 8.16.070 of the Town Noise Ordinance and presented in Table 35 on page 194, the Town has established maximum exterior noise levels based on land use zones. Noise levels in excess of the levels indicated in Table 35 are conditionally permitted, depending on the intensity of the noise and the duration of exposure.⁴⁸ The Town Noise Ordinance also states that interior noise levels resulting from outside sources within residential units shall not exceed 45 dBA L₅₀ between 7 A.M. and 10 P.M.,

⁴⁸ *Noise levels may not exceed the exterior noise standard for a cumulative period of more than thirty minutes in any hour; or plus five decibels for a combined period of more than fifteen minutes in any hour; or plus ten decibels for a combined period of more than five minutes in any hour; or plus fifteen decibels for a combined period of more than one minute in any hour; or plus twenty decibels for any period of time (maximum noise level).*

Table 35

Town Exterior Noise Ordinance Standards

Receiving Land Use	Time Period	Noise Zone Classification ^a Maximum Noise Levels (dBA) L ₅₀		
		Rural/ Suburban	Suburban	Urban
One and Two Family Residential	10 P.M. to 7 A.M.	40	45	50
	7 A.M. to 10 P.M.	50	55	60
Multiple Dwelling Residential/Public Space	10 P.M. to 7 A.M.	45	50	55
	7 A.M. to 10 P.M.	50	55	60
Limited Commercial/Some Multiple Dwellings	10 P.M. to 7 A.M.	55	—	—
	7 A.M. to 10 P.M.	60	—	—
Commercial	10 P.M. to 7 A.M.	60	—	—
	7 A.M. to 10 P.M.	65	—	—
Light Industrial	Anytime	70	—	—
Industrial	Anytime	75	—	—

^a The classification of different areas of the community in terms of environmental noise zones shall be determined by the noise control officer, based upon assessment of community noise survey data. Additional area classifications should be used as appropriate to reflect both lower and higher existing ambient levels than those shown. Industrial noise limits are intended primarily for use at the boundary of industrial zones rather than for noise reduction within the zone.

Source: Town of Mammoth Lakes Noise Ordinance, Chapter 8.16

and 35 dBA L₅₀ between 10 P.M. and 7 A.M.⁴⁹ If the existing interior or exterior ambient noise levels exceed the permissible level within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level (Section 8.16.070 and 8.16.080 of the Town Noise Ordinance).

Town Code Section 8.16.090 (B)(6) establishes exterior noise standards that regulate construction noise from mobile and stationary equipment for various general zoning classifications. Non-scheduled, intermittent, short-term operations (less than 10 days) of mobile equipment (e.g., backhoes, bulldozers, etc.) standards are provided in Table 36 on page 195. Noise standards for repetitively scheduled and relatively long-term construction operations

⁴⁹ Noise levels may not exceed the interior noise standard for a cumulative period of more than five minutes in any hour; or plus five decibels for a combined period of more than one minute in any hour; or plus ten decibels for any period of time (maximum noise level).

Table 36

Town Construction Noise Standards

Construction Equipment^a	Type I Areas Single-Family Residential	Type II Areas Multi-Family Residential	Type III Areas Semi-Residential Commercial^a	Business Properties
Mobile Equipment^b				
Daily, except Sundays and legal holidays; 7:00 A.M. to 8:00 P.M.	75 dBA L ₅₀	80 dBA L ₅₀	85 dBA L ₅₀	----
Daily, 8:00 P.M. to 7:00 A.M. and all day Sunday and legal holidays	60 dBA L ₅₀	64 dBA L ₅₀	70 dBA L ₅₀	----
Daily, including Sunday and legal holidays, all hours	----	----	----	85 dBA L ₅₀
Stationary Equipment^c				
Daily, except Sundays and legal holidays; 7:00 A.M. to 8:00 P.M.	60 dBA L _{eq}	65 dBA L _{eq}	70 dBA L _{eq}	----
Daily, 8:00 P.M. to 7:00 A.M. and all day Sunday and legal holidays	50 dBA L _{eq}	55 dBA L _{eq}	60 dBA L _{eq}	----
Daily, including Sunday and legal holidays, all hours	----	----	----	75 dBA L ₅₀

^a The Town requires that all mobile or stationary internal combustion engine-powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.

^b Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment (e.g., excavator, backhoe, dozer, etc.).

^c Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment (e.g., generators, compressors, etc.).

Source: Town of Mammoth Lakes Noise Ordinance, Section 8.16.090

(periods of 10 days or more) of stationary equipment (e.g., compressors and generators) are also provided in Table 36. Section 15.08.020 of the Town Code limits construction noise between 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays shall be limited to the hours between 9 A.M. and 5 P.M. and permitted only with the approval of the building official or designee.

The Town has established a vibration threshold within the Noise Ordinance. According to Section 8.16.090 of the Noise Ordinance, operating or permitting the operation of any device that creates a vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at one 150 feet (46 meters) from the source if on a public space or public right-of-way. While not defined, the perception threshold is generally defined as a motion velocity of 0.01 inch per second.

3.5.2 AFFECTED ENVIRONMENT

a. Existing Noise Environment

The existing noise environment in the project area is dominated by traffic noise from nearby roadways. The heaviest traveled roadways in the vicinity of the project area include Meridian Boulevard and Majestic Pines Road, which are located along the southern and northeastern boundaries of the project site, respectively. Additional sources of noise within the project vicinity are associated with recreation activities, lodges, and residential uses (e.g., barking dogs, property maintenance). In addition, intermittent noises associated with construction, snow removal activities, snowmaking operations, and avalanche control).

(1) Ambient Noise Levels

The noise environment in the project area was characterized by conducting a survey of the area and performing long-term and short-term noise measurements from January 18th to 23rd, 2006. Long-term ambient sound measurements were conducted at three different locations, using Larson-Davis Model 820 Type I sound level meters. These monitoring locations were selected to characterize the general ambient noise level in the project area. As shown in Figure 3.5-1, Location 1 was north of the proposed project site in close proximity to nearby residential uses. Location 2 was located northeast of the project site, also near residential uses to represent conditions approximately 100 feet from Majestic Pines Road. Location 3 was located within the southwest corner of the project site, approximately 50 feet north of Meridian Boulevard and indicative of conditions approximately 50 feet from Meridian Boulevard. A summary of sound measurement data collected from the three measurement locations is provided in Table 37 on page 197. As shown in Table 33, the measured L_{dn} was substantially higher for the first two measurement days and was the result of high wind conditions, heavy snow fall, and resultant snow removal. The latter two days, on Friday and Saturday, were substantially quieter and indicative of a weekend ski day. The measured L_{dn} for Location 1 ranged from 48.3 dBA to 62.1 dBA L_{dn} and the average noise level over the weekend was 49.0 dBA L_{dn} . The measured L_{dn} for Location 2 ranged from 51.9 dBA to 66.9 dBA L_{dn} and the average noise level over the weekend was 53.7 dBA L_{dn} . The measured L_{dn} for Location 3 ranged from 62.1 dBA to 69.2 dBA L_{dn} and the average noise level over the weekend was 62.8 dBA L_{dn} .

Long-term noise measurements were conducted in July of 2005 by Brown-Buntin Associates to characterize noise conditions in the Town during summertime conditions. The closest and most representative noise monitoring location was approximately 2,000 feet north of the project site, located at 107 Sugar Pine. The measured L_{dn} for this location was 50.7 dBA and is within the range of noise levels measured during wintertime conditions at the project site (49.0 dBA to 53.7 dBA L_{dn}).

Table 37

Summary of Long-Term Ambient Noise Measurement Data for Year 2006 (dBA)^a

Measurement Location and Day	Daytime Hourly Ambient L_{eq} (Weekday/Weekend) ^b			Nighttime Hourly Ambient L_{eq} ^b			L_{dn}
	Avg.	Min.	Max.	Avg.	Min.	Max.	
Location 1 (North)							
January 18, 2006	57.4	44.5	61.0	55.2	41.1	63.0	62.1
January 19, 2006	47.0	39.3	52.1	48.6	37.8	54.5	54.8
January 20, 2006	46.9	39.4	50.9	41.6	33.9	48.7	49.6
January 21, 2006	46.6	40.1	52.3	39.3	37.1	41.3	48.3
Location 2 (North-East)							
January 18, 2006	62.2	51.2	66.2	60.1	45.4	67.5	66.9
January 19, 2006	50.4	44.2	53.3	54.9	43.1	60.8	60.9
January 20, 2006	50.6	47.2	54.3	48.7	29.5	57.0	55.6
January 21, 2006	46.5	44.4	49.1	44.9	42.5	46.7	51.9
Location 3 (South)							
January 18, 2006	63.3	56.1	68.5	62.3	44.9	67.1	69.2
January 19, 2006	60.7	56.2	64.9	65.4	55.3	69.5	71.4
January 20, 2006	59.8	56.1	61.4	56.1	38.4	62.7	63.5
January 21, 2006	59.3	55.7	61.0	54.1	50.1	58.1	62.1

^a Based on a continuous ambient sound measurement using a Larson-Davis 820 Type 1 Integrating Sound Level Meter. Measurement locations are depicted in Figure 17 on page 200, and noise measurement data is provided in Appendix D.

^b Per the Town Noise Ordinance, daytime hours are from 7 A.M. to 10 P.M., and nighttime hours are from 10 P.M. to 7 A.M.

Source: PCR Services Corporation, 2006

In addition to continuous long-term noise monitoring, short-term noise measurements were also conducted to characterize the noise level of the activities associated with the project, such as outdoor eating areas, snow blower operation, ski-lift, and parking lot activities. The short-term measured noise summary is provided in Table 38 on page 198.

The 1997 Noise Element also contains information on noise levels from snow removal and avalanche control operations. These are normal and existing noise sources within the Town of Mammoth Lakes. As indicated in the Noise Element, snow removal activities on roadways and in parking lots generate noise levels of 68 to 87 dBA at 100 feet from the equipment and can occur at any time during a 24-hour day. These noise levels are consistent with the short-term measured noise levels provided in Table 38. Snow removal activities for purposes of public safety are considered emergency work and are therefore exempt from noise level limits of the Town's Noise Ordinance.

Table 38

Short Term Noise Measurements (Interval Data)

Date	Time (PST)	Duration (mm:ss)	Source or Location	L _{eq} (dBA) @ 50 ft.
January 21, 2006	13:42	14:15	Eagle Lodge Outdoor Eating Area	65.1
January 21, 2006	14:01	15:03	Eagle Lodge Ski Lift Line	62.9
January 21, 2006	14:18	04:45	Snow Blower	61.6
January 21, 2006	14:27	15:49	Juniper Springs Lodge Auto Entrance	51.5
January 21, 2006	14:46	13:47	Eagle Lodge Parking Lot	59.8
January 21, 2006	15:28	00:33	Snow Mobiles	64.1
January 21, 2006	20:10	03:42	Snow Groomers	62.8
January 21, 2006	7:45	01:06	Bobcat with Snow Blower	70.0

Source: PCR Services Corporation, 2006

In summary, ambient noise levels may be expected to vary considerably in the area surrounding the project area due to weather conditions, proximity to roadways and whether or not snow removal equipment is in use. This is evidenced in the ambient noise measurement data provided in Table 37.

(2) Traffic Noise Levels

To further characterize the area's noise environment, the L_{dn} generated by existing traffic on local roadways was established using roadway noise equations provided in the Caltrans Technical Noise Supplement (TeNS) document and traffic volume data provided by the Project's traffic consultant. As indicated in Table 39 on page 199, the calculated L_{dn} for the analyzed roadway segments as a result of existing traffic volumes ranged from 47.6 dBA L_{dn} to 60.2 dBA L_{dn} at 100 feet from the roadway right-of-way based on surface-street traffic volumes only. Existing vehicular generated noise levels along the roadway segments with residential uses are consistent with the 60 L_{dn} noise standard, with the exception of Main Street east of Minaret Road segment.

b. Sensitive Receptors

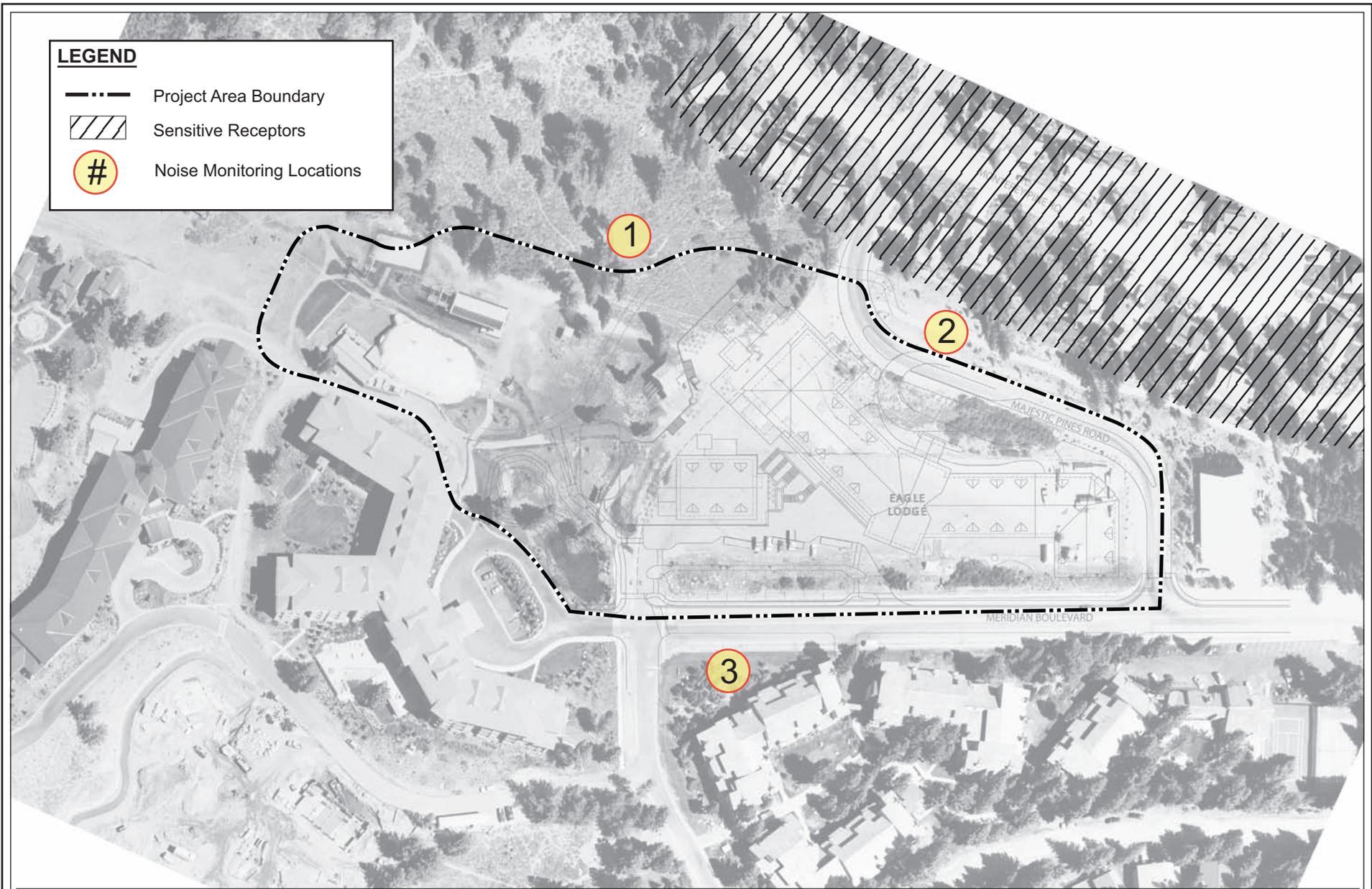
Some land uses are considered more sensitive to intrusive noise and vibration than others due to the amount of exposure and the types of activities typically involved at the receptor location. Residences, schools, motels and hotels, libraries, religious institutions, hospitals, nursing homes, and parks are generally more sensitive to noise and vibration than commercial and industrial land uses. As shown in Figure 17 on page 200, the Summit Condominiums are located to the south of the site across Meridian Boulevard. Southwest of the site is the Juniper

Table 39

Predicted Existing Vehicular Traffic Noise Levels

Roadway Segment	Adjacent Land Use	Noise Exposure Compatibility Category	Existing L _{dn} (dBA) at 100 feet from Roadway Right-of-Way
			100 Feet
Main Street East of Old Mammoth Road	Commercial/Residential	Conditionally Acceptable	55.5
Main Street West of Old Mammoth Road	Commercial/Residential	Conditionally Acceptable	59.7
Main Street East of Minaret Road	Commercial/Residential	Conditionally Acceptable	60.2
Lake Mary Road West of Minaret Road	Commercial/Residential	Conditionally Acceptable	58.5
Lake Mary Road West of Kelly Road	Commercial/Residential	Normally Acceptable	49.5
Old Mammoth Road South of Main Street	Commercial/Residential	Conditionally Acceptable	58.8
Old Mammoth Road North of Meridian Boulevard	Commercial/Residential	Conditionally Acceptable	57.7
Old Mammoth Road South of Meridian Boulevard	Commercial/Residential	Conditionally Acceptable	57.8
Meridian Boulevard, East of Old Mammoth Road	Commercial/Residential	Conditionally Acceptable	56.1
Meridian Boulevard, West of Old Mammoth Road	Commercial/Residential	Conditionally Acceptable	56.2
Meridian Boulevard, East of Minaret Boulevard	Commercial/Residential	Conditionally Acceptable	57.1
Meridian Boulevard, West of Minaret Road	Commercial/Residential	Conditionally Acceptable	56.6
Meridian Boulevard, East of Majestic Pines Road North	Commercial/Residential	Conditionally Acceptable	55.2
Meridian Boulevard, West of Majestic Pines Road North	Commercial/Residential	Conditionally Acceptable	54.4
Minaret Road, Main Street for Forest Trail	Commercial/Residential	Conditionally Acceptable	59.6
Minaret Road, South of Main	Commercial/Residential	Conditionally Acceptable	56.5
Majestic Pines Drive, North of Meridian Boulevard	Residential	Conditionally Acceptable	50.1
Majestic Pines Drive, South of Meridian Boulevard	Residential	Conditionally Acceptable	48.7
Kelly Road, South of Lake Mary Road	Residential	Normally Acceptable	47.6

Source: PCR Services Corporation, 2006



LEGEND

-  Project Area Boundary
-  Sensitive Receptors
-  Noise Monitoring Locations



Scale not provided
 Source: PCR Services Corporation, 2006

Figure 17
 Noise Monitoring Locations

Springs Lodge. To the west of the Juniper Springs Lodge is multi-family residential development. The closest residences are located approximately 70 feet from the project site boundary. Other potentially sensitive uses in the more distant area include multi-family residential development to the west of Juniper Springs Lodge.

Vibration sensitive infrastructure within the project vicinity include the Mammoth Community Water District (MCWD) Ground Water Treatment Plant No. 2 located immediately to the east of the site across Majestic Pines Road and the vault housing for MCWS Well 16 within the southern portion of Lot 5 located adjacent to Meridian Boulevard.

3.5.3 ENVIRONMENTAL CONSEQUENCES

a. Criteria for Determining Impact Significance

(1) CEQA Significance Criteria

Pursuant to Appendix G of the CEQA Guidelines, projects would be considered to have a significant impact on noise if the project would:

- Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The specific noise significance thresholds presented below are based on the CEQA Guidelines, industry standards, and standards provided by the Town of Mammoth Lakes. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions. Changes of 1 to 3 dBA are detectable under quiet, controlled conditions and changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an exterior environment. Table 33, Table 34, and Table 35 provide the Town of Mammoth Lakes stationary source noise standards, exterior noise standards, and construction noise standards, respectively. Based on these factors and Town of Mammoth Lakes policies and

standards that are relevant for project development, noise impacts are considered significant if any of the following conditions are met:

- The project's on-site construction noise levels exceed Town Code Section 8.16.090 (B)(6) standards;
- The project's operational stationary noise sources exceed 50 dBA L_{eq} or 70 dBA L_{max} between 7 A.M. and 10 P.M., and 45 dBA L_{eq} or 65 dBA L_{max} between 10 P.M. and 7 A.M. at the nearest receptors;
- The project's on-site operational noise sources exceed 55 dBA L_{50} between 7 A.M. and 10 P.M. and 50 dBA L_{50} between 10 P.M. and 7 A.M. at the nearest receptors (Exterior Noise Standards for Suburban Multiple Dwelling Residential/Public Space);⁵⁰
- The project's on-site operational noise sources increase ambient levels at the nearest receptors by more than 5 dBA, where ambient noise levels remain below the Town of Mammoth's Exterior Noise Standards and by more than 3 dBA, where noise levels exceed the Town of Mammoth's Exterior Noise Standards.
- The project's mobile source noise increases the ambient L_{dn} by more than 5 dBA, where residential uses are exposed to existing noise levels of less than the recommended 60 dB L_{dn} noise level provided in Policy 4.2.1 of the Town of Mammoth Lakes Noise Element.
- The project's mobile source noise increases the ambient L_{dn} by more than 3 dBA, where residential uses are exposed to existing noise levels that exceed the recommended 60 dB L_{dn} noise level provided in Policy 4.2.1 of the Town of Mammoth Lakes Noise Element.

A cumulative impact is considered significant if any of the following conditions are met:

- The cumulative mobile source noise levels from the project and related projects increase the ambient L_{dn} by more than 5 dBA, where residential uses are exposed to existing noise levels of less than the recommended 60 dB L_{dn} noise level provided in Policy 4.2.1 of the Town of Mammoth Lakes Noise Element.

⁵⁰ *The Town's Noise Ordinance states that if the existing interior or exterior ambient noise level exceeds that permissible within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level (Section 8.16.070 and 8.16.080 of the Town Noise Ordinance).*

- The cumulative mobile source noise levels from the project and related projects increase the ambient L_{dn} by more than 3 dBA, where residential uses are exposed to existing noise levels that exceed the recommended 60 dB L_{dn} noise level provided in Policy 4.2.1 of the Town of Mammoth Lakes Noise Element.

(2) Methodology

(a) Construction Noise

Construction noise impacts are evaluated by determining the noise levels generated by the different types of construction activity, calculating the construction-related noise level at nearby sensitive receptor locations, and comparing these construction-related noise levels to ambient noise levels (i.e., noise levels without construction noise). More specifically, the following steps were undertaken to calculate construction-period noise impacts:

1. Ambient noise levels at surrounding sensitive receptor locations were estimated based on field measurement data (see Table 37 on page 197);
2. Noise levels for each construction phase were obtained from the United States Environmental Protection Agency's (USEPA) published construction equipment noise exposure levels;
3. Distances between construction site locations (noise source) and surrounding sensitive receptors were measured;
4. The construction noise level was then calculated for sensitive receptor locations based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance;
5. For each sensitive receptor location, the construction noise level obtained above from Step 4 was added to the ambient noise level described in Step 1 to calculate the construction noise impact in terms of an hourly L_{eq} ; and
6. Noise level increases were compared to the construction noise significance thresholds identified above.

(b) Roadway Noise

Roadway noise impacts are evaluated using the Caltrans Technical Noise Supplement (TeNS) methodology with the roadway traffic volume data provided in the Traffic Study (see Appendix B of this Draft EIR). This methodology allows for incorporation of roadway

configurations, barrier information (if any), and receiver distances. Roadway-noise attributable to project development is calculated and compared to baseline noise levels that would occur under the “No Project” condition.

(c) Stationary Point-Source Noise During Project Operations

Stationary point-source noise impacts are evaluated by identifying the noise levels generated by outdoor stationary noise sources such as rooftop mechanical equipment and loading dock activities, calculating the hourly L_{eq} noise level from each noise source at surrounding sensitive receiver property line locations, and comparing such noise levels to ambient noise levels. More specifically, the following steps were undertaken to calculate outdoor stationary point-source noise impacts:

1. Ambient noise levels at surrounding sensitive receptor locations were determined based on field measurement data (see Table 37 on page 197);
2. Mechanical equipment noise levels (hourly L_{eq}) were estimated based on Town Noise Ordinance requirements;
3. Additional sources (e.g., plaza, parking, loading dock) were evaluated based on field measurement data;
4. Distances between stationary noise sources and surrounding sensitive receptor locations were measured;
5. Stationary-source noise levels were then calculated for each sensitive receptor location based on the standard point source noise-distance attenuation factor of 6.0 dBA for each doubling of distance;
6. For each surrounding sensitive receptor location, stationary-source noise levels obtained from Step 4 were added to the ambient noise level described in Step 1 to ascertain stationary-source noise impacts in terms of a hourly L_{eq} ; and
7. Noise level increases were compared to the stationary source noise significance thresholds identified above.

(d) Ground-Borne Vibration During Construction and Project Operations

Ground-borne vibration impacts were evaluated by identifying potential vibration sources, measuring the distance between vibration sources and surrounding structure locations, and making a significance determination based on the PPV (construction-period) and RMS (operations-period) significance thresholds described above.

c. Environmental Consequences of the Proposed Action

(1) Construction Impacts

(a) Noise

(i) On-site Construction Noise

Construction of the project is expected to start in spring 2007 and to take approximately two years to complete. Noise impacts from construction activities occurring within the project site would be a function of the noise generated by construction equipment, the equipment location, and the timing and duration of the noise-generating activities. Construction activities would include four stages: (1) site clearing, mass excavation, and site preparation; (2) foundation construction; (3) buildings construction; and (4) finishing and cleanup. Each stage involves the use of different types of construction equipment and, therefore, has its own distinct noise characteristics. Furthermore, construction of the subterranean parking garage may involve some blasting.

Site preparation activities including excavation and grading require use of earth moving equipment, such as heavy-duty trucks, excavators, backhoes, and front-end loaders. Foundation construction generally involves use of concrete trucks, cranes and pneumatic tools. Building construction typically includes use of hammers, generators, compressors, and delivery trucks. Finishing and site cleanup activities generally require use of trucks, landscape rollers, and compactors.

Individual pieces of construction equipment that would be used for project construction produce maximum noise levels of 74 dBA to 91 dBA at a reference distance of 50 feet from the noise source, as shown in Table 40 on page 206. These maximum noise levels would occur when equipment is operating under full power conditions or during impact moment such as during pile driving or jack hammering. However, the equipment used on construction sites often operate under less than full power condition, or part power. Actual measurements performed while equipment is performing work indicate that shift-long equivalent L_{eq} sound levels are typically 2 dBA to 15 dBA less than maximum noise levels. For project-long (i.e., total duration of construction activity) equivalent L_{eq} levels can be further reduced to account for the percentage of time that equipment actually operate on the construction site.⁵¹

⁵¹ *Beranek and Ver, Noise and Vibration Control Engineering, Principles and Applications, p. 652, 1992.*

Table 40**Construction Equipment Maximum Noise Levels**

Equipment	Noise Level (dBA) at 50 feet
Air Compressor	81
Backhoe	80
Blasting	94
Compactor	82
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Crane, Derrick	88
Crane, Mobile	83
Dozer	85
Generator	81
Grader	85
Jack Hammer	88
Loader	85
Paver	89
Pile Driver (Impact)	101
Pile Driver (Sonic)	96
Pneumatic Tool	85
Pump	76
Roller	74
Saw	76
Scraper	89
Truck	88

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, 1995

To better characterize construction-period noise levels, the average composite noise level (L_{eq}) associated with each construction stage is provided in Table 41 on page 207. These average composite noise levels are based on the quantity, type, and usage factors for each type of equipment that would be used during each construction stage, and is typically attributable to multiple pieces of equipment operating simultaneously. As shown in Table 41, the average construction-period noise level is expected to range from 77 dBA to 92 dBA at a reference distance of 50 feet. These estimated construction noise levels are governed primarily by the high noise-producing pieces of equipment to be used and represent conservative worst-case conditions in which the maximum amount of construction equipment would be operating during a one-hour period. Furthermore, the assumptions involved in estimating these noise levels do not include existing noise reducing factors such as topographic features and wind effects. In addition, these estimated maximum hourly noise levels would not be typical of noise levels throughout the construction period.

Table 41
Composite Average L_{eq} Noise Levels Per Construction Stage

Construction Stage	Composite Sound Level in dBA (L_{eq}) at Indicated Distance from Center of Construction Activity				
	50 feet	100 feet	150 feet	200 feet	500 feet
Ground Clearing	82	76	72.5	70	62
Excavation, Grading	86	80	76.5	74	66
Foundation	77	71	67.5	65	57
Structural	83	77	73.5	71	63
Finishing	86	80	76.5	74	66

Notes: A hard surface propagation path drop-off rate of 6-dB per doubling of distance, corresponded to point source (such as construction equipment) sound attenuation is used.

Source: EPA, Noise from Construction Equipment and Operations, Building Equipment and Home Appliances, PB 206717, 1971; and PCR Services Corporation, 2006

In order to present a conservative analysis for construction noise, the 86 dBA noise level, the highest composite noise level, at a reference distance of 50 feet, was used to evaluate the proposed project's construction noise impacts related to each of the construction stages except blasting activities. The estimated aggregate construction noise levels during the heaviest periods of activity at residential uses on the north and south of the project site are provided in Table 42 on page 208. As shown in Table 42, the residences located to the north and south of the project site immediately across the adjacent roadways, would occasionally experience construction noise levels of 78 dBA (hourly L_{eq}) during the heaviest periods of construction. Visitors residing at Juniper Springs Lodge could experience intermittent noise levels up to 76 dBA during heaviest period of construction. Comparison of these predicted noise levels with the Town's maximum allowable construction noise (L_{eq}), as provided in Table 37 shows that the worst-case construction hourly L_{eq} would exceed the allowable construction noise limit at the nearest single-family residence to the north and 2) would not exceed the allowable construction noise limit at the sensitive receptors to the south and southwest of the project site. In addition, when blasting is required, then the closest residences could experience a high impulse noise level (L_{max}) of 86 dBA. As a result, the proposed project would result in a short-term significant impact without incorporation of mitigation measures.

Maximum construction noise levels would be experienced intermittently as only portions of the project site would be under construction at any one time. The majority of the time construction noise levels at sensitive locations would be much lower due to reduced construction activity and the phasing of construction (i.e., construction noise levels at a given location would be reduced as construction activities conclude or move to another more distant location of the site).

Table 42

**Highest Estimated L_{eq} Construction Noise Levels at Receptor Locations
(During Heaviest Periods of Construction Activity for One-Hour Period)**

Receptor Number and Land Use^a	Measured Baseline Ambient Noise (dBA)^b	Closest Distance to Construction Site (feet)	Predicted Aggregate Construction Noise (dBA)^c	Applicable Standards (mobile construction)^d (dBA)	Predicted Blasting Noise L_{max} (dBA)
1-Residential Uses to the North (Single-Family)	62.2	125	78.0	75	84.0
2-Summit Condominiums to the South	63.3	125	78.0	80	84.0
3- Juniper Springs Lodge to the Southwest	63.3	160	75.9	85	81.9

^a Receptors are shown in Figure 17.

^b Based on the measures data shown in Table 38 on page 198.

^c Based on heaviest period of construction activity over a one-hour period.

^d Maximum construction noise limits, per Noise Ordinance §8.16.090, provided in Table 35 on page 194.

Source: PCR Services Corporation, 2006

(ii) Truck Haul Route Noise

Project construction would generate traffic from construction worker travel, as well as the arrival and departure of trucks delivering construction materials to the site and the hauling of debris generated by on-site grading activities. Both the number of construction workers and trucks would vary throughout the construction process in order to maintain a reasonable schedule of completion. The number of on-site construction workers, based on the specific construction activity underway (i.e., grading, building erection, etc.), could range from approximately 25 to 50, with the lower end of the range occurring during building site grading and the upper end of the range occurring during finishing work (i.e., drywall, paring, electrical, etc.).

In general, it is anticipated that the majority of the construction workers would arrive and depart the site during off-peak hours (i.e., arrive prior to 7:00 A.M. and depart between 3:00 to 4:00 P.M.). The construction work force would likely be from all parts of the Mammoth region, but would access the site via Meridian Boulevard.

Depending upon the specific nature of the construction activity (e.g., grading, finish construction, landscaping), the majority of truck traffic would be distributed evenly across the workday. It is anticipated that during peak construction activity, project construction would generate up to approximately 167 daily trips (i.e., average of approximately 21 haul trips per hour). Excavated material that would be reused for backfill on the site would be stored

temporarily on the Lower Pumpkin Trail and at the MMSA Gravel Pit near Chair 2 on Highway 203. Material would be hauled off-road to the Pumpkin Trail. Material would be hauled on-road to the Gravel Pit adjacent to Chair 2 for temporary storage. In addition, on-road hauling would occur to transport excavated material to Canyon Lodge where it would be stored near the base of Chair 7 for future use on MMSA on-mountain projects. All on-road construction traffic routes would be subject to review and approval by the Town of Mammoth Lakes, pursuant to Mitigation Measure AES-2. Anticipated haul routes for semi-trailers, trucks and trailers, and other construction-related vehicles would be via Meridian Boulevard.

Noise levels associated with the construction related traffic are anticipated to temporarily increase the ambient noise level along the off-road and on-road haul routes (each truck by pass would last less than five seconds). As such, it is assumed that less than two minutes of truck passing noise occurring each hour (i.e., 105 seconds). This temporary noise increase would occur during peak periods of construction and cease upon completion of the initial construction phases. As with the general construction activities, truck trips would be limited to the hours of construction as outlined within Chapter 8.16 of the Mammoth Lakes Ordinance Code. Therefore, a less than significant noise impact is anticipated to occur along the off-road and on-road truck haul routes.

(b) Vibration

The Project would be constructed using typical construction techniques. As such, it is anticipated that the equipment to be used during construction would not cause excessive groundborne noise or vibration. However, construction of the subterranean parking garage would involve blasting activities. Since no data is currently available regarding the specific locations of blasting or the charge sizes necessary, measures the following mitigation measures are recommended to ensure that the potential vibratory effects of blasting are mitigated to a less than significant impact.

(2) Operation Noise Impacts

(a) Off-site Roadway Noise

Project implementation would result in additional traffic, thereby contributing to noise levels on local roadways in and around the project area. Table 43 on page 210 provides the calculated L_{dn} for analyzed roadway segments for the near-term cumulative condition and includes the following scenarios: existing conditions; near-term future without development of the proposed project; near-term future with development of the proposed Project; the increase attributed to Project-generated traffic volumes; and the near-term cumulative increase (i.e., increase attributable to ambient growth, related projects, and proposed Project traffic volumes)

Table 43
Year 2009 Traffic Noise Levels

Roadway Segment	Calculated Future L _{dn} (dBA) at Roadway Right-of-Way				
	Existing L _{dn}	Future No Project	Future with Project	Project Increment ^a	Cumulative Increment ^b
Main Street East of Old Mammoth Road	55.5	55.6	55.7	0.1	0.2
Main Street West of Old Mammoth Road	59.7	59.8	59.8	0.0	0.1
Main Street East of Minaret Road	60.2	60.6	60.6	0.0	0.4
Lake Mary Road West of Minaret Road	58.5	59.6	59.6	0.0	1.1
Lake Mary Road West of Kelly Road	49.5	54.4	54.4	0.0	4.9
Old Mammoth Road South of Main Street	58.8	59.0	59.0	0.0	0.2
Old Mammoth Road North of Meridian Boulevard	57.7	58.3	58.5	0.2	0.8
Old Mammoth Road South of Meridian Boulevard	57.8	58.3	58.4	0.1	0.6
Meridian Boulevard, East of Old Mammoth Road	56.1	56.7	56.9	0.2	0.8
Meridian Boulevard, West of Old Mammoth Road	56.2	56.8	57.5	0.7	1.3
Meridian Boulevard, East of Minaret Boulevard	57.1	57.3	58.2	0.9	1.1
Meridian Boulevard, West of Minaret Road	56.6	56.9	58.6	1.7	2.0
Meridian Boulevard, East of Majestic Pines Road North	55.2	55.6	58.0	2.4	2.8
Meridian Boulevard, West of Majestic Pines Road North	54.4	54.9	57.6	2.7	3.2
Minaret Road, Main Street for Forest Trail	59.6	59.9	59.9	0.0	0.3
Minaret Road, South of Main	56.5	57.9	58.1	0.2	1.6
Majestic Pines Drive, North of Meridian Boulevard	50.1	52.3	53.6	1.3	3.5
Majestic Pines Drive, South of Meridian Boulevard	48.7	48.9	50.2	1.3	1.5
Kelly Road, South of Lake Mary Road	47.6	52.6	52.7	0.1	5.1

Note: Traffic noise levels are calculated based on the project traffic study, which is provided in Appendix B of this document..

Source: PCR Services Corporation, 2006

above existing noise levels. Table 44 on page 211 provides the calculated L_{dn} for analyzed roadway segments for the 2024 cumulative condition. It should be noted that identified estimates do not adjust for any existing noise barriers or differences in elevation and identify traffic noise only generated along a specific roadway segment). A 30 mph average vehicle speed was assumed for all conditions. This is considered a conservative (a high estimate) as lower average speeds may occur, due to the majority of vehicle travel occurring in the day when higher vehicle use may cause slowing.

Table 44
Year 2024 Traffic Noise Levels

Roadway Segment	Calculated Future L _{dn} (dBA) at Roadway Right-of-Way				
	Existing L _{dn}	Future No Project	Future with Project	Project Increment ^a	Cumulative Increment ^b
Main Street East of Old Mammoth Road	55.5	60.7	60.7	0.0	5.2
Main Street West of Old Mammoth Road	59.7	63.7	63.7	0.0	4.0
Main Street East of Minaret Road	60.2	64.2	64.3	0.1	4.1
Lake Mary Road West of Minaret Road	58.5	63.5	63.5	0.0	5.0
Lake Mary Road West of Kelly Road	49.5	58.9	59.0	0.1	9.5
Old Mammoth Road South of Main Street	58.8	62.2	62.2	0.0	3.4
Old Mammoth Road North of Meridian Boulevard	57.7	62.8	62.9	0.1	5.2
Old Mammoth Road South of Meridian Boulevard	57.8	62.9	63.0	0.1	5.2
Meridian Boulevard, East of Old Mammoth Road	56.1	60.9	61.1	0.2	5.0
Meridian Boulevard, West of Old Mammoth Road	56.2	60.7	61.3	0.6	5.1
Meridian Boulevard, East of Minaret Boulevard	57.1	62.3	62.9	0.6	5.8
Meridian Boulevard, West of Minaret Road	56.6	62.1	63.2	1.1	6.6
Meridian Boulevard, East of Majestic Pines Road North	55.2	59.6	61.6	2.0	6.4
Meridian Boulevard, West of Majestic Pines Road North	54.4	59.1	61.3	2.2	6.9
Minaret Road, Main Street for Forest Trail	59.6	63.5	63.5	0.0	3.9
Minaret Road, South of Main	56.5	62.7	62.8	0.1	6.3
Majestic Pines Drive, North of Meridian Boulevard	50.1	58.5	59.2	0.7	9.1
Majestic Pines Drive, South of Meridian Boulevard	48.7	54.3	54.9	0.6	6.2
Kelly Road, South of Lake Mary Road	47.6	57.3	57.4	0.1	9.8

Note: Traffic noise levels are calculated based on the project traffic study, which is provided in Appendix B of this document..

Source: PCR Services Corporation, 2006

As indicated in Table 43, the maximum project related noise increase of 2.7 dBA occurs along Meridian Boulevard, West of Majestic Pines Road North, from 54.9 dBA to 57.6 dBA. The maximum project related noise increase is below the 5 dBA significance threshold, where existing noise levels are less than 60 dB L_{dn} and below the 3 dBA significance threshold, where existing noise levels are greater than 60 dB L_{dn}. As indicated in Table 43, all but one of the roadway segments modeled for existing, future without project, and future with project traffic volumes would result in projected vehicular generated noise levels below the 60 dBA L_{dn} recommended noise level established by the Town of Mammoth Lakes in the Noise Element.

Main Street, east of Minaret Road, would result in projected vehicular generated noise levels above the 60 dBA L_{dn} noise standard established by the Town of Mammoth Lakes for both existing and near-term cumulative conditions. As shown in the table, the near-term cumulative noise level would increase from 60.2 dBA to 60.6 dBA or 0.4 dBA and the project related increase would be less than 0.1 dBA and below the 3 dB significance threshold. The maximum near-term cumulative noise increase from 47.6 dBA to 52.7 dBA or 5.1 dBA occurs along Kelly Road, South of Lake Mary Road, of which the project contributes approximately 0.1 dBA.

As indicated in Table 44, roadway segments along Main Street, Lake Mary Road, Old Mammoth Road, Meridian Boulevard, and Majestic Pines Drive modeled for cumulative without project, and cumulative with project traffic volumes would result in projected vehicular generated noise levels above the 60 dBA L_{dn} recommended noise level established by the Town of Mammoth Lakes in the Noise Element. As shown in the table, the analyzed roadway segments would exceed the cumulative 5 dBA significance threshold, where existing noise levels are less than 60 dB L_{dn} and the cumulative 3 dBA significance threshold, where existing noise levels are greater than 60 dB L_{dn} . The maximum 2024 cumulative noise increase from 47.6 dBA to 57.4 dBA or 9.8 dBA occurs along Kelly Road, South of Lake Mary Road, of which the project contributes approximately 0.1 dBA.

(i) Stationary Point-Source Noise

The project site currently consists of temporary ski facilities which include a surface parking lot with approximately 225 parking spaces; ski facilities consisting of a temporary structure with attached trailers, that provide approximately 12,000 square feet of interior space; and an exterior barbeque and dining area. A permanent ski facility, Base VII, located immediately west of the intersection of Meridian Boulevard and Majestic Pines Road, has been envisioned as part of the overall development of the MMSA. As such, the proposed project would include the 1984 update for an expedited schedule to develop ski facilities on the east side of the ski area and to increase the skier capacity of Base VII. The underlying purpose of the project is to allow the development of MMSA's permanent lodge, which would replace the existing, temporary facility.

The proposed Eagle Base Lodge Development project would develop permanent skier amenities and expand the service capacity to include a mixed use of day skier commercial services, general commercial services and a mix of residential product type that will encourage high transient occupancy. In addition, although the majority of the project uses are geared toward winter time, the facilities would also lend themselves to summer uses such as a summertime outdoor performing arts venue, potential access to the summer mountain bike park, other outdoor activities such as a climbing rock or challenge ropes course, and assembly opportunities. While the peak use would be winter, the development would accommodate and provide for year-round use of the facility.

The proposed project would introduce new sources of noise to the area, but would largely replace or redistribute existing sources of noise (e.g., surface parking lot, barbeque, and dining area) to different areas on the project site. As an example, residential uses to the north and northeast of the project site currently experience noise from the parking lot and from the dining area. However, the proposed project would include a subterranean parking structure that would reduce parking activity noise levels and the proposed permanent structure would buffer these residential uses from the exterior activity areas (e.g., swimming pool/ice rink). No changes in existing MMSA operations would occur as a result of the proposed project (i.e., gondolas, chairlifts, snow making, grooming, avalanche control).

Specific noise sources associated with the operation of the expanded facilities (Eagle Base Lodge Development Project) would include:

- Mechanical equipment (e.g., boiler, chiller, and emergency generator) and miscellaneous rooftop mechanical equipment;
- Loading dock activities (maneuvering and idling trucks, trash compactors, banging and clanging of equipment);
- Ambulance bay;
- Parking activities;
- Vehicle Access (passenger loading/unloading); and
- Plaza activities (crowds, ice skating, music events and public announcement (PA) systems).

Although several noise sources would be introduced on the project site, many of them would operate for brief periods of times, such as ambulances, truck movements, trash compactors and trash collection, and parking lot sweepers/snow plows. These types of sources usually do not operate concurrently and can meet the hourly permitted noise standards described in the Town's Noise Ordinance.

Other daily noise sources, such as air conditioning equipment, parking lot/garage traffic, and loading dock activities, operate for comparatively longer periods. A discussion of each of these noise sources is provided below, followed by a discussion of the potential composite noise level increase (due to multiple noise sources) at sensitive receptors.

Mechanical Equipment

Project development would include mechanical equipment, which could generate noise levels that are audible at both on- and off-site noise sensitive locations. Such equipment could include, but not be limited to, boilers, chillers, emergency generators, air conditioners, fans, blowers, compressors, and pumps that would be used to support the basic functioning of various structures and/or facilities on the property. However, most of this mechanical equipment would be enclosed or would include noise control measures such as intake/exhaust silencers, acoustical linings, and parapet screens to ensure that the noise generated by mechanical equipment operations would meet Mammoth Lakes Municipal Code noise standards (see Table 34 on page 192). As such, noise from stationary mechanical equipment associated with the proposed project would not exceed 50 dBA during daytime hours and 45 dBA during nighttime hours at the nearest sensitive receptors. Impacts are expected to be less than significant and no mitigation measures are required.

Loading Dock and Refuse Collection/Recycling

The project would include a loading dock and trash/recycling area, which would be enclosed and screened from residential uses north of the project site. By blocking the sound transmission path between the loading dock-area noise sources and nearby residential uses, noise levels would comply with the Mammoth Lakes Municipal Code noise standards.

Parking Activities

Various noise events would also occur within the proposed 544-space subterranean parking garage with up to 544-spaces. The parking garage would include two full levels and one partial level of subterranean parking. This subterranean parking garage would replace the existing surface parking lot, in which measured noise levels were approximately 60 dBA at a reference distance of 50 feet. As such, the noise from parking activities would be enclosed within the structure and would be reduced compared to the current use of the existing parking lot. Therefore, noise from parking activities would be less than significant and no mitigation measures would be required.

Vehicle Access

The proposed project would provide a delivery truck access and drop off loading/unloading for lodging along Majestic Pines Road. This area currently generates noise level associated with parking activities. Based on ambient measurement data presented in Table 38, noise levels associated with the proposed activities versus parking activities would be approximately eight dBA lower. In addition, a skier/shuttle and charter bus drop off

loading/unloading area is located along Meridian Boulevard. The uses in this area would be generally similar to existing uses and a change in noise levels associated with these activities is not anticipated.

Plaza Activities

As shown in Figure 5 on page 19, much of the outdoor space (e.g., skating rink, dining common areas, etc), would be shielded from the nearby residential uses by proposed buildings and/or intervening slope. Noise measurements conducted for crowd and outdoor dining areas were approximately 65.1 dBA at a distance of 50 feet. This noise level would be approximately 47 dBA at the closest residential uses to the north of the project site and would not exceed the Town's Noise Ordinance standards. Impacts are expected to be less than significant and no mitigation measures are required.

The proposed project may utilize outdoor background music and PA systems, the use of which would increase ambient noise levels in the vicinity. In an effort to reduce the significance of stationary noise impacts associated with the outdoor activities, background music, or PA systems, noise reduction measures, such as the use of directional speakers that are directed away from adjacent residential uses, modification to speaker systems and sound level limitations would serve to reduce the potential for significant noise impacts to adjacent residential uses. With the implementation of the aforementioned noise reduction or similar measures, it is anticipated that noise levels associated with outdoor background music and PA systems would not exceed the 55 dBA L_{50} and the 75 dBA L_{max} hourly maximum noise level during any one hour time period between the hours of 7:00 a.m. and 10:00 p.m. in accordance with Chapter 8.16 of the Town's Noise Ordinance, as measured at the property line of a receiving land use.

It is expected that the plaza and outdoor gathering places would host outdoor events and activities. The Town's Noise Ordinance considers outdoor activities that are "occasional outdoor gatherings, public dances, shows, sporting or entertainment events, subject to permit or license issued by the Town" to be exempt from the noise regulations. Therefore, activities which are defined as the above would fall below the Town's threshold of significance and do not require additional mitigation.

(3) Composite Noise Level Impacts from Proposed Project Operations

The potential composite noise level noise impact at sensitive land uses was evaluated by accounting for individual noise sources (e.g., loading dock, ice skating rink, etc.) present on the project site and comparing the composite noise level to the Town's standards and background ambient noise level.

The noise from each of these activities was logarithmically summed at the nearest residential uses. These noise levels are included in Table 45 on page 217. The nearest residential uses to the northeast could be exposed to composite noise from on-site activities of 44.9 dBA L₅₀. This value is less than the Town's daytime standard of 55 dBA. In comparison to the measured ambient average daytime noise level of 50.6 dBA at Location 1, combined on-site activities could increase the ambient noise level by approximately 1.4 dBA. Therefore, noise from combined activities at these residential uses would be less than the 5-dBA incremental significance threshold for areas that comply with the Town's daytime noise standard of 55 dBA. Therefore, for the nearest residential uses northeast of the project site, combined noise levels are considered to have a less than significant impact.

The nearest residential uses to the north could be exposed to noise from on-site activities of 49.9 dBA L₅₀, which is less than the Town's daytime standard of 55 dBA. In comparison to the measured ambient average daytime noise level of 46.8 dBA at Location 2, combined on-site activities could increase the ambient noise level by approximately 4.8 dBA. Therefore, noise from combined activities at these residential uses would be less than the 5-dBA incremental significance threshold for areas that comply with the Town's daytime noise standard of 55 dBA. Therefore, for the nearest residential uses north of the project site, combined noise levels are considered to have a less than significant impact.

The nearest residential uses to the south (Summit Condominiums) could be exposed to noise from on-site activities of 55.6 dBA L₅₀, which exceeds the Town's daytime standard of 55 dBA. However, the measured ambient average daytime noise level representative of this area at Location 3 is 59.9 dBA. The Town's Noise Ordinance states that if the existing interior or exterior ambient noise level exceeds that permissible within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level (Section 8.16.070 and 8.16.080 of the Town Noise Ordinance). Thus, on-site activities would be less than the existing daytime ambient noise level. In comparison to the measured ambient average daytime noise level of 55.9 dBA at Location 3, combined on-site activities could increase the ambient noise level by approximately 1.4 dBA. Therefore, noise from combined activities at these residential uses would be less than the 3-dBA incremental significance threshold for areas that exceed the Town's daytime noise standard of 55 dBA. Therefore, for the nearest residential uses south of the project site, combined noise levels are considered to have a less than significant impact.

The nearest sensitive land uses to the west (Juniper Springs Lodge) could be exposed to noise from on-site activities of 51.4 dBA L₅₀, which is less than the Town's daytime standard of 55 dBA. In comparison to the measured ambient average daytime noise level of 59.5 dBA at Location 3, combined on-site activities could increase the ambient noise level by approximately 0.6 dBA. Therefore, noise from combined activities at these residential uses would be less than the 3-dBA incremental significance threshold for areas that exceed the Town's daytime noise

Table 45
Combined Noise Levels Generated by On-Site Activities

Activity/ Noise Source	Reference Noise Level @ 50 feet	Distance (Feet)	Barrier Insertion Loss	Adjusted Noise Level	Existing Ambient Noise Level	Future Ambient Noise Level	Noise Level Increase
Residential Uses (Northeast)							
Veh/Delivery Truck Access North	52	200	0	39.5	49.2	49.6	0.4
Vehicle/Bus Access South	60	450	12	28.7	49.2	49.2	0.0
Ice Skating Rink/Pool	65	550	12	32.3	49.2	49.3	0.1
Parking Garage	60	300	10	34.2	49.2	49.3	0.1
Arrival Lower Plaza	65	350	12	36.2	49.2	49.4	0.2
Upper Plaza	65	400	12	35.0	49.2	49.4	0.2
Loading Dock	72	200	20	40.0	49.2	49.7	0.5
Composite Noise Level				44.9	49.2	50.6	1.4
Residential Uses (North)							
Vehicle/Delivery Truck Access North	52	450	5	27.4	46.8	46.8	0.0
Vehicle/Bus Access South	60	600	12	26.2	46.8	46.8	0.0
Ice Skating Rink/Pool	65	450	0	45.9	46.8	49.4	2.6
Parking Garage	60	450	10	30.7	46.8	46.9	0.1
Arrival Lower Plaza	65	450	12	34.0	46.8	47.0	0.2
Upper Plaza	65	400	0	46.9	46.8	49.9	3.1
Loading Dock	72	300	20	36.4	46.8	47.2	0.4
Composite Noise Level				49.9	46.8	51.6	4.8
Residential Uses (South)							
Vehicle/Delivery Truck Access North	52	400	12	21.4	59.9	59.9	0.0
Vehicle/Bus Access South	60	125	0	51.8	59.9	60.5	0.6
Ice Skating Rink/Pool	65	350	0	48.2	59.9	60.2	0.3
Parking Garage	60	150	10	40.3	59.9	59.9	0.0
Arrival Lower Plaza	65	250	0	51.1	59.9	60.4	0.5
Upper Plaza	65	375	12	35.6	59.9	59.9	0.0
Loading Dock	72	400	20	33.9	59.9	59.9	0.0
Composite Noise Level				55.6	59.9	61.3	1.4
Residential Uses (South)							
Veh/Delivery Truck Access North	52	1,000	12	13.5	59.9	59.9	0.0
Vehicle/Bus Access South	60	450	0	40.7	59.9	60.0	0.1
Ice Skating Rink/Pool	65	300	0	49.5	59.9	60.3	0.4
Parking Garage	60	650	10	27.5	59.9	59.9	0.0
Arrival Lower Plaza	65	650	12	30.8	59.9	59.9	0.0
Upper Plaza	65	500	0	45.1	59.9	60.0	0.1
Loading Dock	72	750	20	28.5	59.9	59.9	0.0
Composite Noise Level				51.4	59.9	60.5	0.6

Source: PCR Services Corporation, 2006

standard of 55 dBA. Therefore, combined noise levels at the adjacent Juniper Springs Lodge are considered to have a less than significant impact.

d. Mitigation Measures

The following mitigation measure is required to reduce construction noise levels, particularly at the northern residences, to a less than significant level.

NOI-1: Prior to issuance of any grading, excavation, or building permits, the applicant shall provide and secure the approval of the authorized noise control officer for a program designed to adequately comply with Town of Mammoth Lakes Noise Ordinance and respond to possible noise complaints. At a minimum, the program shall include the following requirements:

1. Noise-generating equipment operated at the project site shall be equipped with effective noise control devices, i.e., mufflers, intake silencers, lagging, and/or engine enclosures. All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
2. Effective temporary sound barriers shall be used and relocated, as needed, whenever possible, to block the line-of-sight between the construction equipment and the noise-sensitive receptors, i.e., residential uses located to the north and south of the project site.
3. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site.
4. A construction relations officer shall be designated to serve as liaison with residents, and a contact telephone number shall be provided to residents.

The following mitigation measures are required to reduce construction vibration impacts from blasting activities to a less than significant level.

NOI-2: The applicant shall develop a Blasting Plan that details the measures necessary to ensure potential vibration impacts would comply with Federal and State recommended construction vibration limitations. The plan shall include at a minimum the following:

- A testing or pilot program shall be conducted to assure that off-site vibration levels do not exceed the 2.0 inches per second PPV significance threshold from blasting activities initiated on the site. Under the pilot program the applicant shall install vibration monitors at the following locations: (1) along the fenceline of the closest offsite residential uses, (2) along the fenceline of the MCWD Ground Water Treatment Plant No. 2 located immediately to the east of the site across Majestic Pines Road, and (3) the vault housing for MCWD Well 16 located adjacent to Meridian Boulevard.
- Once the monitors are in place, a blasting test would commence. The testing procedures would consist of detonation of increasing sized charges with concurrent checking of monitored levels so as to assure that off-site vibration levels do not exceed the 2.0 inches per second PPV significance threshold. Based on this testing program, an optimal set of blasting parameters (e.g., frequency responses and soil damping characteristics for different sized charges) shall be established.
- The off-site vibration monitors shall remain in place throughout blasting activities, thereby providing ongoing protection for off-site uses and/or facilities throughout this phase of the Project's construction process.

NOI-3: All drilling and blasting operations shall be conducted by a State-licensed blasting contractor with adequate blasting insurance.

NOI-4: All drilling and blasting will be performed during hours designated by local, State, or federal ordinances.

NOI-5: Written notice shall be provided to MCWD and residents within a quarter-mile radius of the blast site 24 prior to the initiation of blasting.

e. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulations Alternative

Construction activities associated with Alternative 1 would be considerably less than the Proposed Action since the majority of construction would only occur within Area 4 of the Juniper Ridge Master Plan. Because the type of construction associated with this Alternative would be similar to the Proposed Action, daily construction-related noise levels experienced both within the site and the immediate vicinity would be less than significant with incorporation of mitigation measures. Under this Alternative fewer noise sensitive receptors would be impacted due to the reduced scope of this Alternative. In addition, there would be fewer days of construction activity associated with this Alternative since less area would be developed.

Alternative 1 would be constructed using typical construction techniques and the equipment to be used during construction would not cause excessive groundborne noise or vibration. Blasting activities would still be necessary for construction of the parking structure. However, the parking structure would not require as deep of excavation as the proposed subterranean parking structure. Thus, less blasting would likely be necessary and would lessen overall blasting vibration at nearby sensitive receptors. Regardless, with the incorporation of mitigation measures vibration impacts are considered less than significant.

This Alternative would result in a reduction in noise levels associated with operational on-site equipment and activity and would be less than significant. No outdoor shows and events would occur with this Alternative. An expected reduction of 37 percent in traffic volumes associated with this Alternative would yield a slight reduction in comparison to the Proposed Action traffic noise. This Alternative would result in a less than significant project-level roadway noise impact, but would contribute to a cumulative roadway noise impact.

f. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Construction activities associated with Alternative 2 would be less than under the Proposed Action since less development would be constructed under this Alternative. Because the type of construction associated with this Alternative would be similar to the Proposed Action, daily construction-related noise levels experienced both within the site and the immediate vicinity would be similar to the Proposed Action and are considered less than significant with incorporation of mitigation measures. However, fewer noise sensitive receptors would be impacted due to the reduced scope of this Alternative. In addition, there would be fewer days of construction activity associated with this Alternative since less development would be developed.

This alternative would be constructed using typical construction techniques and the equipment to be used during construction would not cause excessive groundborne noise or vibration. Blasting activities would be necessary for construction of the underground parking structure. However, the parking structure would not require as deep of excavation as the proposed subterranean parking structure. Thus, less blasting would likely be necessary and would lessen overall blasting vibration at nearby sensitive receptors. With the incorporation of mitigation measures vibration impacts are considered less than significant.

This Alternative would result in a reduction in noise levels associated with operational on-site equipment and activity. The on-site equipment and activity noise levels associated with the Proposed Action are not considered significant and would be less so with this Alternative. An expected reduction of 11 percent in traffic volumes associated with this Alternative would yield a slight reduction in comparison to the Project traffic noise. Alternative 2 would result in a

less than significant project-level roadway noise impact, but would contribute to a cumulative roadway noise impact.

f. Environmental Consequences of Alternative 3 – Alternate Design Alternative

Under this alternative, construction activities would be similar to the Proposed Action, since the scope of development would be the same. Daily construction-related noise levels experienced both within the site and the immediate vicinity would be similar to the Proposed Action and are considered less than significant with incorporation of mitigation measures.

This Alternative would be constructed using typical construction techniques and the equipment to be used during construction would not cause excessive groundborne noise or vibration. The depth of excavation would be the same as the Proposed Action and therefore, the amount of blasting activities would be the same. However, vibration impacts are considered less than significant with incorporation of mitigation measures.

On-site equipment and activity areas would be consistent with noise sources included as part of the Proposed Action. The on-site equipment and activity noise levels would be less than significant. Total daily traffic would be the same as the Proposed Action. Alternative 3 would result in a less than significant project-level roadway noise impact, but would contribute to a cumulative roadway noise impact.

g. Environmental Consequences of Alternative 4 – No Action Alternative

No development would occur within the project site under this Alternative and the existing tent would be removed. Consequently, the No Action Alternative would not generate any new or increased sources of noise on the project site or within the surrounding vicinity. Impacts would be less than significant.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.6 BIOLOGICAL RESOURCES

INTRODUCTION

This section summarizes a biological resource field assessment as well as a review of literature regarding biological resources in the area. In addition, the section summarizes the applicable regulations and policies regarding biological resources. The section provides an analysis of direct and indirect impacts to biological resources that could occur as a result of project implementation. A detailed Floral and Faunal Compendia is provided in Appendix E of this EIR/EA.

3.6.1 REGULATORY FRAMEWORK

As part of the proposed project's review and approval there are a number of performance criteria and standard conditions that must be met relative to biological resources. These include compliance with all of the terms, provisions, and requirements of applicable laws that relate to Federal, State, and local regulating agencies for impacts to sensitive plant and wildlife species, wetlands, riparian habitats, and stream courses. The following provides a discussion of the applicable regulatory framework.

a. State of California Fish and Game Code, Section 1602

Section 1602 of the California Fish and Game Code requires any entity (e.g., person, State or local government agency, or public utility) who proposes a project that will substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, to notify California Department of Fish and Game (CDFG) of the proposed project. In the course of this notification process, the CDFG will review the proposed project as it affects streambed habitats within the project site. The CDFG may then place conditions on the Section 1602 clearance to avoid, minimize, and mitigate the potentially significant adverse impacts within CDFG jurisdictional limits.

b. Federal Clean Water Act, Section 404

Section 404 of the Clean Water Act (CWA) regulates the discharge of dredged material, placement of fill material, or excavation within “Waters of the U.S.” and authorizes the Secretary of the Army, through the Chief of Engineers, to issue permits for such actions. “Waters of the U.S.” are defined by the CWA as “rivers, creeks, streams, and lakes extending to their headwaters and any associated wetlands.” Wetlands are defined by the CWA as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.” The permit review process entails an assessment of potential adverse impacts to U.S. Army Corps of Engineers (ACOE) jurisdictional “Waters of the U.S.” and wetlands. In response to the permit application, the ACOE will also require conditions amounting to mitigation measures. Where a Federally listed species may be affected, they will also require Section 7 consultation with the U.S. Fish & Wildlife Service (USFWS) under the Federal Endangered Species Act (ESA) unless a Section 10(a) permit for the species has already been issued.

c. Federal Clean Water Act, Section 401

The mission of the California Regional Water Quality Control Board (RWQCB) is to develop and enforce water quality objectives and implement plans, which will best protect the beneficial uses of the State’s waters, recognizing local differences in climate, topography, geology, and hydrology. Section 401 of the CWA requires that:

“any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.”

Therefore, before the ACOE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB. A complete application for 401 Certification will include a conceptual Water Quality Management Plan that will address the key water quality features of the project to ensure the integrity of water quality in the area during and post-construction.

Under separate authorities granted by State law (i.e., the Porter-Cologne Water Quality Control Act), a RWQCB may assert jurisdiction over dredge or fill activities within non-Federal waters through issuance of Waste Discharge Requirements (WDRs). Processing of a WDR is similar to that of a Section 401 certification and addressing impacts to non-Federal waters may be streamlined within the 401 process at RWQCB discretion.

The Town of Mammoth Lakes entered into a Construction Sites Erosion Control Memorandum of Understanding (MOU) with the RWQCB in 1991. Under this MOU, the Town is able to expedite construction permits for project encompassing less than five acres and administer erosion control measures through site inspections and plan reviews.

d. Federal Endangered Species Act, Section 10 and Section 7

Take of a threatened or endangered species is prohibited under federal law without a special permit. Section 10(a)(1)(B) of the ESA allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS. For federal projects (including those involving federal funding), Section 7 of the ESA allows for consultation between the affected agency and the USFWS to determine what measures may be necessary to compensate for the incidental take of a listed species. A “federal” project is any project that is proposed by a federal agency or is at least partially funded or authorized by a federal agency. If the listed species or federally designated “critical habitat” for that species occurs in a portion of the project subject to federal jurisdiction or activity (such as “Waters of the United States”), then consultation under Section 7 of the Act is usually permissible and may be required.

e. The Town of Mammoth Lakes General Plan (1987)

The objective of the Town of Mammoth Lakes General Plan, Conservation and Open Space Element, is to provide goals and policies which will manage and protect the community’s resources to assure their continued existence. Biological resources that need protection include the following:

- Vegetation – The retention of vegetation will contribute to the natural beauty and ecological balance of Mammoth Lakes. This includes listed and sensitive plants which are known to occur in the Mammoth Lakes area.
- Wildlife and Fisheries – The natural habitats in the Mammoth Lakes area support a diverse wildlife population to include approximately 75 species of mammals, 150 species of birds, and 15 species of reptiles and amphibians. In addition, several sensitive or listed wildlife species occur in the Mammoth Lakes area. Mule deer, although not considered sensitive, are a concern considering new growth and development. Mule deer spend the summer in the Mammoth Lakes area and migrate to an area southeast of Mammoth Lakes during the winter. The Hot Creek Fish Hatchery is one of the most productive in the State. Hot Creek is a designated wild trout stream and is considered a blue ribbon stream according to the CDFG. The viability of this hatchery depends upon the quantity of surface water from Mammoth

Creek and the continued natural flows of warm spring water. The quality of water from Mammoth Creek has declined in recent years.

f. The Town of Mammoth Lakes Draft General Plan (Update 2005)

One of the objectives of the Town of Mammoth Lakes Draft General Plan is to ensure that “wildlife, habitat, fisheries, water, and vegetation resources of significant biological, ecological, aesthetic, and recreational value are protected and conserved.” The habitat and wetland conservation policies of the General Plan include the following:

- “The Town shall protect wetlands, wet meadows, and riparian areas from impacts related to development.” Implementation measures for this goal include continuing efforts to ensure a continuous public corridor along Mammoth Creek with a defined corridor width, obtaining appropriate permits through the ACOE, CDFG, and RWQCB for all activities within jurisdictional wetlands, and compensating for loss of wetlands and/or riparian vegetation through replacement, rehabilitation, or creation of wetland habitat as approved by appropriate State and federal agencies.
- “The Town shall identify and protect important wildlife and biological habitat in town.” Implementation measures for this goal include maintaining an up-to-date inventory of all special status wildlife species, plant species, and plant communities within the Planning Area; assessing site-specific resource values and potential impacts for future development projects; and preparing species, habitat, and natural community conservation strategies.
- “The Town shall minimize wildlife and human interactions as much as feasible.” Implementation measures include maintaining animal-resistant trash receptacles at town facilities and requiring private land owners to adopt good wildlife management practices.
- “The Town shall protect and conserve forest woodland resources for their wildlife habitat, recreation, water production, and aesthetic values.” Implementation measures include incorporating a site design that will make every feasible effort to avoid large specimen trees and replant with native trees, complying with the California Department of Forestry timber harvesting regulations for private lands, and prohibiting tree removal activities that facilitate improved views.
- “The Town shall protect and enhance the region’s fish habitat.” Implementation measures include supporting fishery management activities, supporting efforts to regulate in-stream flows and lake levels, and requiring new development in the

vicinity of Mammoth Creek to preserve stream bank vegetation and maintain minimum setbacks.

Another objective of the Town of Mammoth Lakes Draft General Plan is to ensure that “trees, native vegetation, and wildlife maintain a prominent place in the community.” The native environment preservation policies of the Draft General Plan include the following:

- “The Town shall ensure that new development is designed to protect and showcase our natural environment.” Implementation measures for this goal include possibly requiring a tree survey with a preservation and replacement plan to be filed with the Town prior to issuance of a grading permit, planting of native trees to replace the loss of trees removed during construction, and incorporating “aggressive replanting with native trees”. Thinning of trees will be permitted where needed to maintain public safety and encourage growth of new trees.

g. USDA Forest Service

USDA Forest Service Sensitive Species

The National Forest Management Act (NFMA) of 1976 and its implementing regulations require the Forest Service to ensure a diversity of animal and plant communities and maintain viable populations of existing native species as part of their multiple use mandate. The USDA Forest Service (USFS) sensitive species program is a proactive approach to conserving species to ensure the continued existence of viable, well-distributed populations, and to maintain biodiversity of National Forest Service lands (USDA Forest Service 2004). In addition, the Secretary of Agriculture’s policy on fish and wildlife (Department Regulation 9500-4) directs the USFS to avoid actions “which may cause a species to become threatened or endangered.”

The USFS defines sensitive species as those animal and plant species identified by a regional forester for which population viability is a concern. This may be a result of significant current or predicted downward trends in habitat that would reduce a species’ existing distribution or significant current or predicted downward trends in density or population numbers (CNDDDB 2005, Special Animals List).

The USFS, Pacific Southwest Region, maintains a Regional Forester's Sensitive Species List. This list was last updated in 1998 and consists of rare plants and animals which are given special management consideration to ensure their continued viability on the national forests. Species on the sensitive species list are considered sensitive for every forest where they occur in the region (USDA Forest Service 1998).

Inyo National Forest Land and Resource Management Plan

The Inyo National Forest Land and Resource Management Plan establishes the management, direction, and long-range goals for the Inyo National Forest (U.S. Forest Service 1988). Management goals for the Inyo National Forest include (but are not limited to) the following:

- Protect and improve riparian area-dependent resources while allowing for management of other compatible uses.
- Protect or improve the habitats of threatened or endangered species in cooperation with State and other federal agencies.
- Protect sensitive plants to ensure they will not become threatened or endangered.
- Manage wildlife habitat to provide species diversity, ensure that viable populations of existing native wildlife is maintained, and that the habitats of management emphasis species are maintained or improved.
- Manage timber resources to provide a sustained yield of commercial sawtimber, public fuelwood, and wood products while maintaining other resource values.

Forest-wide Standards and Guidelines provide specific guidelines for the management of each resource to ensure its enhancement and protection. These include (but are not limited to) the following:

Riparian Areas

- Protect streams, streambanks, lakes, wetlands, and shorelines, and the plants and wildlife dependant on these areas.
- Prevent adverse riparian area changes in water temperature, sedimentation, chemistry, and water flow.
- Rehabilitate and/or fence riparian areas that consistently show resource damage.
- Allow new developments and surface disturbance in riparian areas only after on-site evaluations have determined that resources are not adversely affected, or mitigation of any adverse impacts is identified and incorporated into the project design.

Sensitive Plants

- Allow no new disturbance of identified sensitive plant habitat without direction from Interim Management Guidelines, Species Management Guides, or an environmental analysis.
- Complete inventories of project sites and areas of disturbance if there is potential habitat or known population locations identified.

Wildlife – Threatened, Endangered, and Sensitive Wildlife Species

- Cooperate with the USFWS and the CDFG in the management of threatened and endangered species.
- Submit proposals for actions that might affect the continued existence of a threatened or endangered species to the USFWS for formal consultation.

Wildlife – Management Indicator Species

- Carnivores (Sierra Nevada red fox, pine marten, fisher, and wolverine): Maintain the integrity of habitats required by these species. Inventory project areas where development could alter habitats required by these species.
- Mule Deer: Maintain or enhance the integrity of key winter ranges, holding areas, migration routes, and fawning areas. The goal is to maintain deer habitat to support deer populations consistent with herd management area objectives. Coordinate with the CDFG in implementing existing deer herd plans. Goals of the CDFG herd management plans for the Buttermilk and Sherwin Grade Herds (which now comprise the Round Valley Herd) include maintaining the population of the Buttermilk Herd near current levels (3,000 deer) and maintaining the Sherwin Grade Herd at the current population (2,300 to 2,400 deer).
- Bald Eagle: Maintain the integrity of existing wintering areas. Maintain and enhance prey-base populations within winter foraging areas. Implement the Pacific States Bald Eagle Recovery Plan, and prepare a local winter bald eagle management plan.
- Golden Eagle and Prairie Falcon: Maintain and enhance the integrity of nesting habitats.
- Tule Elk: Follow the guidelines of the Tule Elk Management Plan for the Owens Valley.

- Peregrine Falcon: Establish two nesting pairs of peregrine falcons and implement the Pacific Coast American Peregrine Falcon Recovery Plan prepared by the USFWS.
- Goshawk: Maintain a density of at least one goshawk territory per eighteen square miles within goshawk habitat range. Maintain at least one hundred acres of mature timber per territory. Exclude timber activities within occupied nest stands during the nesting period.
- Blue Grouse: Maintain or enhance blue grouse habitat by protecting vegetative diversity, riparian habitat, and down logs.
- Sage Grouse: Allow no vegetative treatment in sage grouse habitats that would have a significant negative impact on the species. Recognize the sensitivity of sage grouse leks during March 1 through April 30.
- Spotted Owl and Great Gray Owl: Conduct periodic inventories. If owls are located, maintain foraging and nesting habitat.
- Sierra Nevada Mountain Sheep and Nelson Mountain Sheep: Maintain existing sheep habitat, and maintain the health of established mountain sheep populations.
- Riparian Area-Dependant Species: Maintain the viability of the yellow warbler by implementing management direction for riparian habitats.
- Snag-Dependant Species: Maintain the habitat of the hairy woodpecker and Williamson sapsucker by implementing management direction for snags, down logs, and habitat diversity.

Sierra Nevada Forest Plan Amendment

On January 21, 2004, a new Record of Decision (ROD) for the Sierra Nevada Forest Plan Amendment (SNFPA) was signed. The final Supplemental Environmental Impact Statement (SEIS) and ROD amended the existing Sierra Nevada Forest Plan to improve the protection of wildlife habitats, watersheds, old forests, and communities in the Sierra Nevada Mountains and Modoc Plateau. The SEIS evaluates new information available since the adoption of the SNFPA ROD and proposes to make changes in specific standards and guidelines. The SEIS, therefore, focuses on those management indicator species (MIS) that may be affected by changes in levels of activity or habitat as a result of the proposed alternatives.

MIS are identified in the Land and Resources Plans of each national forest. MIS are designated as such because they are sensitive to National Forest System management activities and/or they represent habitat types that occur within the national forest boundary. Federally

listed threatened, endangered, or proposed species and Forest Service sensitive species were excluded from further evaluation in the SEIS because effects to those species are considered in more detail in the FEIS, SEIS, and other environmental documentation. The remaining MIS were assigned to one or more primary habitat associations because lists of MIS for individual forest plans vary in terms of habitat representation or sensitivity to management activity.

Habitat classifications that correspond with each MIS include the following: Snag and Down Log; Meadow, Riparian (Wetlands); Aquatic (Lakes/Streams); Chaparral; Cliff, Caves, Talus, and Rock Outcrops; Hardwoods (Oaks, Aspen); Openings and Early Seral Stages; Pinyon Juniper; Eastside Pine; Ponderosa Pine; Grasslands and Shrub-Steppe; Mature Conifer; Multi-Habitat; and Mixed Conifer.

h. California Department of Forestry

According to the 2005 California Forest Practice Rules, Title 14, California Code of Regulations, Chapter 4, Subchapter 7, Administration, Article 2, Timber Harvesting Plan; Section 1038, Exemption, persons who conduct the following types of timber operations are exempt from submission requirement and plan preparation:

- Harvesting of Christmas trees.
- Harvesting of dead, dying, or diseased trees.
- Cutting or removal of trees for fuel modification purposes: only trees within 150 feet from any point of an approved structure that complies within the California Building Code may be harvested.

No trees existing before 1800 A.D., Sierra or coast redwoods greater than 60 inches in diameter at stump height, or trees species 48 inches in diameter at stump height shall be harvested unless done so under the conditions outlined in subsection 1038 (h). California Department of Forestry Rules do not generally apply to federal forest lands and therefore, would apply to the privately-owned portion of the project site.

3.6.2 AFFECTED ENVIRONMENT

a. Biological Survey Methods

The assessment of biological resources contained in this EIR/EA is based on information compiled through field reconnaissance, previous documentation, and appropriate reference

materials. The project site was surveyed by PCR biologists on September 23, 2005 to document the plant communities, to assess the potential for the project site to support sensitive species and/or habitats, and to determine the potential planning constraints. The project site includes those areas within the grading limits of the proposed project. No focused surveys were conducted. A jurisdictional delineation was not conducted for the project site.

The study began with a review of relevant literature on the biological resources of the project site and the surrounding vicinity. Initially, the California Natural Diversity Database (CNDDDB), a CDFG sensitive resources account database, was reviewed for all pertinent information regarding the locations of known observations of sensitive species and habitats in the vicinity of the Eagle Lodge project site. Federal register listings, protocols, and species data provided by the USFWS and CDFG were reviewed in conjunction with anticipated federally and State listed species potentially occurring within the vicinity. Information pertaining to sensitive species provided by the Inyo National Forest was also reviewed. In addition, numerous regional flora and fauna field guides were utilized to assist in the identification of species and suitable habitats. In addition, previous documentation relevant to the project site was reviewed to include the following:

- Biological Evaluation for Mammoth Mountain Ski Area Base VII Expansion Project, dated March, 1998.
- Botanical Survey of the Juniper Ridge Revised Project Area, Mammoth Lakes, Mono County, California, prepared by Mark Bagley, dated September, 1994.
- Initial Study for Eagle Lodge Base Area Development Project, prepared by PCR, January 2006.
- Juniper Ridge, Revised Master Plan Environmental Impact Report, prepared by L.K. Johnston and Associates, dated December 1, 1989.
- Mammoth Mountain Ski Area, Base VII Expansion Project, Environmental Assessment, prepared by LSA Associates, Inc., dated July, 1996.
- Mammoth Mountain Ski Area Base VII Expansion Project, Environmental Assessment, prepared by LSA, dated February, 1997.
- Town of Mammoth Lakes 2005 General Plan Update, Revised Draft Program, Environmental Impact Report, prepared by PCR Services Corporation, dated October, 2005.

Plant communities within the project site were mapped with the aid of a 1"=600' scale aerial photograph. Plant community boundaries were delineated directly onto the aerial

photograph while in the field. Plant communities were then digitized using Geographic Information System (GIS) technology to calculate acreage. Plant community names and hierarchical structure follows the CDFG *List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base* (September 2003). Plant community descriptions were based on PCR findings and descriptions contained in Sawyer and Keeler-Wolfe's *A Manual of California Vegetation* (1995) and Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986). Scientific names are employed upon initial mention of each species; common names are employed thereafter.

All plant species observed during surveys were either identified in the field or collected and later identified using taxonomic keys. Plant taxonomy follows Hickman (1993). Common plant names were taken from Hickman (1993) and Munz (1974). Because common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. All plant species observed are included in Appendix E, *Floral and Faunal Compendia*.

All wildlife species observed during the field surveys by sight, call, tracks, nests, scat (fecal droppings), remains, or other sign were recorded. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. All wildlife species observed within the project site, as well as diagnostic signs, were recorded in field notes. In addition to species actually detected, expected use of the project site by other wildlife was derived from the analysis of habitats within the project site combined with known habitat preferences of regionally-occurring wildlife species.

Wildlife taxonomy follows Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. Scientific names are used during the first mention of a species; common names only are used in the remainder of the text. A list of all wildlife species detected within the project site is included in Appendix E, *Floral and Faunal Compendia*.

b. Plant communities

The Eagle Lodge project site supports seven plant communities, ponds, disturbed areas, and developed areas. Three of these plant communities occur within the portion of the project site owned by MMSA and four plant communities occur within property owned by the USFS as shown in Table 46, *Plant Communities Within Project Site*, on page 233 and Figure 18, *Plant Communities*, on page 234. Plant community classifications follow Holland and, where appropriate, Sawyer and Keeler-Wolfe.

Table 46

Plant Communities Within Project Site

Vegetation Community	Acres Within Privately Owned Land	Acres Within USFS- Owned Land
Native		
Aspen Series	0.1	0.0
Big Sagebrush Scrub	0.0	0.6
Jeffrey Pine Forest	0.0	0.2
Narrow-leaf Willow Series (Scrub)	0.2	0.0
Ruderal		
Ruderal	0.0	1.3
Ruderal/Big Sagebrush Scrub	0.6	0.0
Ruderal/Montane Meadow	0.0	<0.1
Other		
Pond	<0.1	0.1
Disturbed	0.8	0.0
Developed	<u>3.1</u>	<u>1.8</u>
TOTAL	4.8¹	4.0

¹ The total land area includes the Majestic Pines Road right-of-way since the right-of-way is an easement over Lots 5 and 87. Therefore, the privately owned land is greater than the number used in other places in this document.

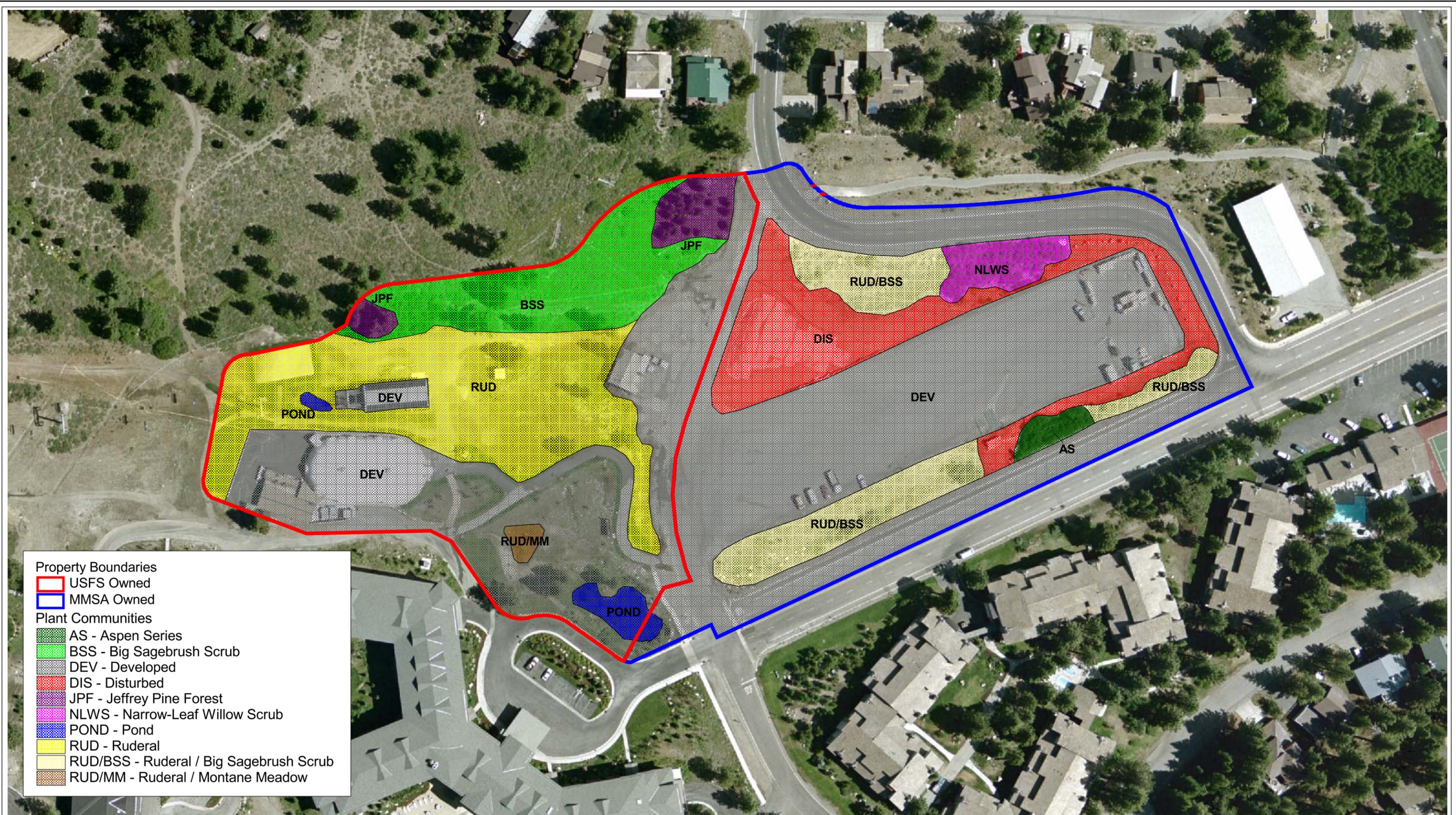
Source: PCR Services Corporation, 2006

Native

Aspen series consists of quaking aspen (*Populus tremuloides*) as the sole or dominant tree in the tree canopy. Trees tend to be less than 35 meters in height with a continuous, intermittent, or open canopy. This plant community occurs on seasonally and permanently saturated soils and along streambanks or springs. Additional plant species that may occur in this community include red fir (*Abies magnifica*) and white fir (*Abies concolor*).

The dominant species within this plant community on-site includes quaking aspen. Additional species observed include snowberry (*Symphoricarpos parishii*) and arroyo willow (*Salix lasiolepis*). This community occupies 0.1 acre within privately owned land, and occurs adjacent to a parking lot in the southern portion of the project site.

Big sagebrush scrub consists of mostly soft-woody shrubs usually with bare ground underneath and between shrubs. Great Basin sagebrush (*Artemisia tridentata*) is the dominant species, and growth occurs mostly in late spring and early summer. This plant community is dormant during the winter and occurs on a wide variety of soils and terrain, from rocky, well-drained slopes to fine-textured, valley soils with a high water table. Characteristic species may include Great Basin sagebrush, four-wing saltbush (*Atriplex canescens*), rubber rabbitbrush



- Property Boundaries
- ▬ USFS Owned
 - ▬ MMSA Owned
- Plant Communities
- AS - Aspen Series
 - BSS - Big Sagebrush Scrub
 - DEV - Developed
 - DIS - Disturbed
 - JPF - Jeffrey Pine Forest
 - NLWS - Narrow-Leaf Willow Scrub
 - POND - Pond
 - RUD - Ruderal
 - RUD/BSS - Ruderal / Big Sagebrush Scrub
 - RUD/MM - Ruderal / Montane Meadow

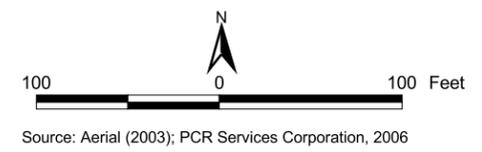


Figure 18
Plant Communities
 within the Project Site

(*Chrysothamnus nauseosus*), Idaho fescue (*Festuca idahoensis*), antelope bitterbrush (*Purshia tridentata*), and elymus (*Elymus cinereus*).

The dominant species observed within this plant community on-site is Great Basin sagebrush. Additional species observed include antelope bitterbrush, slender cinquefoil (*Potentilla gracilis*), common yarrow (*Achillea millefolium*), and silver wormwood (*Artemisia ludoviciana*). Big sagebrush scrub occupies 0.6 acre within USFS-owned land, and occurs within the northwestern portion of the project site.

Jeffrey pine forest is characterized as a tall, open forest dominated by Jeffrey pine (*Pinus jefferyi*) with sparse understories of either montane chaparral or sagebrush scrub. This community occurs on dry, cold sites, especially on well-drained slopes, ridges, or cold air accumulation basins. Characteristic species may include Jeffrey pine, Great Basin sagebrush, antelope bitterbrush, huckleberry oak (*Quercus vaccinifolia*), and snowberry.

The dominant species observed within the Jeffrey pine forest on-site is Jeffrey pine. Additional species observed include lodgepole pine (*Pinus contorta*), antelope bitterbrush, Great Basin sagebrush, clover (*Trifolium cyathiferum*), silver wormwood, common yarrow, snowberry, and aster (*Aster integrifolius*). Jeffrey pine forest occupies 0.2 acre within USFS-owned land, and occurs within the northwestern portion of the project site.

Narrow-leaf willow series (scrub) consists of narrow-leaf willow (*Salix exigua*) as the sole or dominant shrub in the shrub canopy. Shrubs tend to be less than seven meters in height with a continuous canopy. This plant community occurs on seasonally flooded or saturated habitats, within floodplains, and along rivers and streams. Additional plant species that may occur in this community include Fremont cottonwood (*Populus fremontii*), white alder (*Alnus rhombifolia*) and willow (*Salix* spp.)

This plant community on-site consists of a monoculture of narrow-leaf willow shrubs. Narrow-leaf willow scrub occupies 0.2 acre within privately owned land, and occurs adjacent to a parking lot in the eastern portion of the project site.

Ruderal

Ruderal vegetation consists of a predominance of non-native weedy species that readily colonize disturbed ground. Characteristic species may include tumble mustard (*Sisymbrium altissimum*), Russian thistle (*Salsola tragus*), and white sweetclover (*Melilotus alba*).

Species observed within the ruderal areas on-site include tumble mustard, Kentucky bluegrass (*Poa pratensis*), and peppergrass (*Lepidium virginicum* var. *virginicum*). A ruderal

area is present in the western portion of the project site and comprises 1.3 acre within USFS land.

Ruderal/big sagebrush scrub consists of vegetation characteristic of a big sagebrush scrub community with an equal or greater percent cover of non-native, ruderal species. Big sagebrush scrub and ruderal communities are described above.

Species within this plant community on-site include horseweed (*Conyza canadensis*), mountain tarweed (*Madia glomerata*), tumble mustard, blue wild rye (*Elymus glaucus*), rubber rabbitbrush, peppergrass, Kentucky bluegrass, desert crested wheatgrass (*Agropyron desertorum*), silver wormwood, and a few small Jeffrey pine and lodgepole pine. Non-native species contributed to approximately 50 percent of the vegetation cover in this community. Big sagebrush scrub/ruderal occupies 0.6 acre within privately owned land and occurs adjacent to a parking lot within the eastern portion of the project site.

Ruderal/montane meadow consists of vegetation characteristic of a montane meadow community with an equal or greater percent cover of non-native, ruderal species. Montane meadow is characterized by a dense growth of sedges and other perennial herbs which has its main growth period from late spring through summer. This plant community includes both wet and dry montane meadows, and wet montane meadows have soils that remain saturated throughout the year. This plant community occurs on fine-textured, more or less permanently moist or wet soils. Characteristic species may include sedge (*Carex* spp.), spikerush (*Eleocharis acicularis*), rush (*Juncus* spp.), lupine (*Lupinus polyphyllus*), and scirpus (*Scirpus congdonii*).

The dominant species observed within ruderal/montane meadow on-site include Kentucky bluegrass (*Poa pratensis*), and spikerush (*Eleocharis macrostachya*). Additional species observed include rush (*Juncus* sp.), bent grass (*Agrostis* sp.), lupine (*Lupinus latifolius*), narrow-leaved cattail (*Typha angustifolia*), fireweed (*Epilobium ciliatum*), creeping bent (*Agrostis stolonifera*), sedge, spikerush (*Eleocharis palustris*), cudweed (*Gnaphalium purpureum*), oniongrass (*Melica bulbosa*), annual beard grass (*Polypogon monspeliensis*), mayweed (*Anthemis cotula*), slender cinquefoil (*Potentilla gracilis*), and pineapple weed (*Chamomilla suaveolens*). Non-native species contributed to approximately 60 percent of the vegetation cover in this community. Ruderal/montane meadow occupies less than 0.1 acre (0.03 acre) within USFS-owned land. This community occurs within a man-made detention basin adjacent to Juniper Lodge in the southwestern portion of the project site.

Other

Two **ponds** were observed within the project site at the time of the September 23, 2005 site visit within a man-made detention basin adjacent to Juniper Lodge in the southwestern

portion of the project site and within a man-made detention basin below Chair 15. A small amount of narrow-leaved cattail is present within these ponds. The ponds comprise 0.1 acre within USFS owned land and less than 0.1 acre (0.01 acre) within privately owned land for a total of 0.1 acre on-site.

Disturbed areas consist of areas that lack vegetation or contain a sparse amount (less than 20 percent) of vegetative cover that usually consists of ruderal species. Disturbed areas comprise 0.8 acre of privately owned land adjacent to a parking lot in the northeastern and southeastern portion of the project site.

Developed areas on-site consist of ornamental plantings, roads, and a parking lot. Developed areas comprise approximately 3.1 acres within privately owned land and 1.8 acres within USFS-owned land for a total of 4.9 acres on-site. Developed areas occur throughout the eastern and southwestern portion of the project site.

c. Town of Mammoth Lakes Jurisdictional Trees

A few immature lodgepole pine and Jeffrey pine, as well as small stands of quaking aspen, narrow-leaf willow and a few arroyo willow occur adjacent to the existing parking lot within the privately owned portion of the project site⁵². The stand of quaking aspen comprises approximately 0.1 acre, and the stand of narrow-leaf willow comprises approximately 0.2 acre within the project site. The narrow-leaf willows and arroyo willows in the area adjacent to the existing parking are better classified as shrubs than trees due to their small stature.

Several mature Jeffrey pines and lodgepole pines are located within USFS land on-site. In addition, mature pines are located within developed areas surrounding the detention basins adjacent to Juniper Lodge.

d. Existing Jurisdictional Waters

A jurisdictional delineation has not been conducted on site; however, it is believed that no ACOE jurisdictional “waters of the U.S.” and ACOE jurisdictional wetlands exist within the project site. It appears that wetlands occur within the two man-made detention basins in the southwestern portion of the project site and the man-made detention basin at the base of Chair 15; however, these are isolated, man-made features. Since these features are isolated and are located on naturally occurring uplands that lack natural wetland or water features and do not naturally support riparian or wetland vegetation, the detention basins would not be considered

⁵² A tree survey was not conducted by PCR during the September, 2005 site visit.

under the jurisdiction of the ACOE as “waters of the U.S.” These features may be considered “waters of the State” and fall under the jurisdiction of the CDFG and RWQCB.

Based upon observations made during the field visit conducted on September 23, 2005, one drainage feature which may be considered under the jurisdiction of the ACOE and/or the CDFG is located very close to the northwestern boundary of the project site. This drainage is ephemeral and only contains water during winter and spring months. Water was present within the drainage during the time of the site visit as a result of a broken water main further upstream.

Additional details regarding drainage patterns on-site are provided in Section 3.10, Hydrology and Water Quality, of this document.

Wildlife

The plant communities discussed above provide wildlife habitat; however, due to the fact that the project site is almost completely surrounded by development, wildlife diversity within the project site is expected to be low. Natural open space exists within USFS land in the northwestern corner of the project site within the vicinity of Chair 15; however, this area also accommodates a functioning chair lift. Only wildlife species accustomed to human disturbance due to noise, traffic, etc. are expected to occur.

Following are discussions of wildlife populations within the project site, segregated by taxonomic group. Representative examples of each taxonomic group either observed or expected within the project site are provided. Wildlife species actually observed, as well as those expected to occur, within the project site are indicated in Appendix E, *Floral and Faunal Compendia*.

(1) Invertebrates

Focused surveys for common invertebrate species were not conducted; however, the project site would be expected to support populations of a diverse assortment of invertebrates due to the number of diverse plant communities on-site.

(2) Amphibians

Terrestrial amphibian species may or may not require standing water for reproduction. Terrestrial species avoid desiccation by burrowing underground; within crevices in trees, rocks, and logs; and under stones and surface litter during the day and dry seasons. Due to their secretive nature, terrestrial amphibians are rarely observed, but may be quite abundant if conditions are favorable. Aquatic amphibians are dependent on standing or flowing water for

reproduction. Such habitats include fresh water marshes and open water (reservoirs, permanent and temporary pools and ponds, and perennial streams). Many aquatic amphibians will utilize vernal pools as breeding sites. These pools are temporary in duration and form following winter and spring rains.

One detention basin contained water during the September 23, 2005 surveys; however, this water source may not contain water perennially. The project site has the potential to support a few amphibian species including Pacific treefrog (*Hyla regilla*) and California toad (*Bufo boreas halophilus*). All amphibian species expected to occur within the project site are included in Appendix E, *Floral and Faunal Compendia*. Sensitive amphibian species are discussed further in Section 3.6.2,(d), Sensitive Biological Resources.

As noted previously, Pacific tree frog may occur on-site. This is a MIS associated with meadow, riparian (wetlands), and aquatic (lakes/streams) habitat types in the SEIS of the SNFPA.

(3) Reptiles

Reptiles, as a group, occupy a much broader spectrum of habitats than amphibians. Reptilian diversity and abundance typically varies with habitat type and character. Some species prefer only one or two natural communities; however, most will forage in a variety of communities. A number of reptile species prefer open habitats that allow free movement and high visibility. Most species occurring in open habitats rely on the presence of small mammal burrows for cover and escape from predators and extreme weather.

Several species have the potential to occur on-site. These include rubber boa (*Charina bottae*), mountain garter snake (*Thamnophis elegans elegans*), Sierra alligator lizard (*Elgaria coerulea palmeri*), and Sierra fence lizard (*Sceloporus occidentalis*). All reptile species expected to occur within the project site are included in Appendix E, *Floral and Faunal Compendia*. Sensitive reptile species are discussed further in Section 3.6.2,(d), Sensitive Biological Resources.

As noted previously, mountain garter snake may occur on-site. This is a subspecies of the western terrestrial garter snake (*Thamnophis elegans*), which is a MIS associated with meadow and riparian (wetlands) habitat types in the SEIS of the SNFPA.

(4) Birds

The upland and riparian habitats within the project site provide foraging and cover habitat for year-round and seasonal residents; however, due to the project site's small size and proximity

to development and human disturbance, bird diversity is expected to be low. Bird species detected during the September 23, 2005 site visit include European starling (*Sturnus vulgaris*), Stellar's jay (*Cyanocitta stelleri*), Brewer's blackbird (*Euphagus cyanocephalus*), and American crow (*Corvus brachyrhynchos*). Bird species expected to occur on-site include mourning dove (*Zenaida macroura*), rufous hummingbird (*Selasphorus rufus*), Allen's hummingbird (*Selasphorus sasin*), northern flicker (*Colaptes auratus*), Clark's nutcracker (*Nucifraga columbiana*), common raven (*Corvus corax*), mountain chickadee (*Poecila gambeli*), house wren (*Troglodytes aedon*), spotted towhee (*Pipilo erythrophthalmus*), white-crowned sparrow (*Zonotrichia leucophrys*), song sparrow (*Melospiza melodia*), and lesser goldfinch (*Carduelis psaltria*).

Raptor species expected to occur on-site include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), and American kestrel (*Falco sparverius*). All bird species expected to occur within the project site are included in Appendix E, *Floral and Faunal Compendia*. Sensitive bird species are discussed further in Section 3.6.2(d), Sensitive Biological Resources.

As noted previously, northern flicker, song sparrow, and white-crowned sparrow have the potential to occur on-site. Northern flicker is a MIS associated with snag and down log (cavity-nesters) and mixed conifer habitat types in the SEIS of the SNFPA. The song sparrow and white-crowned sparrow are MIS associated with meadow and riparian (wetlands) habitat types.

(5) Mammals

Due to the project site's small size and proximity to development and human disturbance, mammal diversity is expected to be low, especially for large mammal species. Most mammals are either nocturnal, reclusive, or both, and are more often detected by their sign, denning sites, etc., or through live-trapping (rodents).

Mammal species expected to occur on-site include those species more adapted to urban environments including California ground squirrel (*Spermophilus beecheyi*), lodgepole chipmunk (*Tamias speciosus*), mountain pocket gopher (*Thomomys monticola*), deer mouse (*Peromyscus maniculatus*), long-tailed weasel (*Mustela frenata*), and raccoon (*Procyon lotor*). There is a low potential for mule deer (*Odocoileus hemionus hemionus*) to occur on-site, since this species is more secretive and less tolerant of human disturbance. All mammal species expected to occur within the project site are included in Appendix E, *Floral and Faunal Compendia*. Sensitive mammal species are discussed further in Section 3.6.2(d), Sensitive Biological Resources.

As noted previously, mule deer has a low potential to occur on-site, and raccoon has a moderate to high potential to occur on-site. Mule deer is a MIS associated with multi-habitat and openings and early seral stages habitat types in the SEIS of the SNFPA. Raccoon is a MIS associated with multi-habitat and riparian (wetland) habitat types.

Although not considered a sensitive wildlife species, mule deer are considered an important harvest species by the CDFG. The Town of Mammoth Lakes is located within the Eastern Sierra Nevada Deer Assessment Unit. Deer populations within the Town of Mammoth Lakes consist of Rocky Mountain mule deer from the Round Valley and Casa Diablo herds. Some deer from both herds use the Doe Ridge area (approximately seven miles east of the project site) throughout the summer. These herds are migratory. Deer herd management plans were prepared by the CDFG in the mid 1980's for both herds. Management objectives include enhancing important winter, holding, migratory, and fawning habitats. Migratory movements occur over a six to ten week period. Deer begin their spring migration in April or May after occupying holding areas to feed and regain strength lost over the winter. When the snow recedes and forage is available at their higher elevation summer ranges (usually mid-June), they migrate to these areas.

The Round Valley herd encompasses approximately 2,000 square miles and includes the west slope of the Sierra Nevada to the San Joaquin Ridge. The Mammoth Pass herd segment of the Round Valley herd uses a route that heads westerly below Mammoth Rock, passes through the Mammoth Lakes Basin, and then crosses over Mammoth Pass into the Middle Fork of the San Joaquin River Drainage (Town of Mammoth Lakes General Plan EIR 2005). The project site is located within the Mammoth Lakes Basin.

The Casa Diablo herd's winter range includes the lower elevations near Benton, California to the north end of Owen's Valley. Some deer from this herd migrate across Doe Ridge towards their summer range on the higher elevations of the eastern Sierra Nevada (between June Lake and Lee Vining).

e. Wildlife Movement

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because such conditions preclude the infusion of new individuals and genetic information into isolated populations (MacArthur and Wilson 1967, Soule 1987, Harris and Gallager 1989, Bennett 1990).

Corridors effectively act as links between different populations of a species. A group of smaller populations (termed “demes”) linked together via a system of corridors is termed a “metapopulation.” The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population’s genetic variability is generally associated with an increase in a population’s health and long-term viability.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds, on a “local” level to many square mile home ranges of large mammals moving at a “regional” level.

A number of terms have been used in various wildlife movement studies, such as “travel route,” “wildlife corridor,” and “wildlife crossing” to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this section, these terms are defined as follows:

Travel route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relative direct link between target habitat areas.

Wildlife corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.

Wildlife crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often “choke points” along a movement corridor.

Existing developed areas in the Town of Mammoth Lakes occur to the north, east, south, and west of the project site. A small area of open space within USFS land occurs to the northwest of the project site; however this area is almost entirely surrounded by development, and access to additional open space areas is only provided via a small linear strip of land along Chair 15. For this reason, the project site does not serve as a component of a significant regional wildlife movement corridor per se, nor does it serve as a linkage between two or more larger habitat areas.

Movement on a smaller or “local” scale likely occurs within the surrounding vicinity to the northwest as well as within the project site itself. The project site contains habitat that likely supports a few common species of invertebrates, amphibians, reptiles, birds, and mammals. The home range and average dispersal distance of many of these species may be entirely contained within the project site and immediate vicinity. Populations of animals such as insects, amphibians, reptiles, small mammals, and a few bird species may find all their resource requirements within the project site and its immediate vicinity. Occasionally, individuals expanding their home range or dispersing from their parental range will attempt to move outside of the project site. Local movement by small and medium-sized mammals such as California ground squirrel (*Spermophilus beecheyi*), mountain pocket gopher (*Thomomys monticola*), deer mouse (*Peromyscus maniculatus*), and long-tailed weasel (*Mustela frenata*) may occur within the open space portion of the project site and the adjacent open space area.

f. Critical Habitat

The project site does not fall within the Critical Habitat boundaries as designated by the USFWS for any threatened or endangered plant or wildlife species.

g. Sensitive Biological Resources

Special status, or sensitive, biological resources include declining habitats as well as species that have been afforded special recognition by Federal, State, or local conservation agencies and organizations as endangered, threatened, rare, or otherwise sensitive, principally due to the species' declining or limited range, usually resulting from habitat loss. Watch lists of such resources are maintained by the CDFG, the USFWS, and groups such as the California Native Plant Society (CNPS).

(1) Sensitive Resource Classification

(a) Federal Protection and Classifications

A federally endangered species is a species of invertebrate, plant, or wildlife formally listed by the USFWS under the ESA as facing extinction throughout all or a significant portion of its geographic range. A federally threatened species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range. "Take" of a Federally endangered or threatened species or, in some cases, its habitat is prohibited by Federal law without a special permit. The term "take," under the ESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Harm is defined by the USFWS to encompass "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering."

A federal species of concern is an informal term that refers to a species that the USFWS believes might be declining and in need of concentrated conservation actions to prevent decline. These species receive no legal protection, and the use of the term does not mean that they will eventually be proposed for listing. The federal species of concern status has not been maintained on a statewide basis, so this designation has been removed from CDFG's "Special Animals" list. Some USFWS field offices (e.g., Sacramento) continue to maintain lists of federal species of concern.

The National Forest Management Act (NFMA) of 1976 and its implementing regulations require the Forest Service to ensure a diversity of animal and plant communities and maintain viable populations of existing native species as part of their multiple use mandate. The USDA Forest Service sensitive species program is a proactive approach to conserving species, to ensure the continued existence of viable, well-distributed populations, and to maintain biodiversity of National Forest Service lands (USDA Forest Service 2004).

The USDA Forest Service defines sensitive species as those animal and plant species identified by a regional forester for which population viability is a concern. This may be a result of significant current or predicted downward trends in habitat that would reduce a species' existing distribution or significant current or predicted downward trends in density or population numbers (CDFG 2006, Special Animals List). The USDA Forest Service, Regional Forester's, Pacific Southwest Region, has published a list of sensitive animal and plant species that is organized according to the forest in which the species occurs.

(b) State of California Protection and Classifications

The State of California considers an endangered species one whose prospects of survival and reproduction are in immediate jeopardy; a threatened species is one present in such small numbers throughout its range that it is considered likely to become an endangered species in the near future in the absence of special protection or management; and a rare species is one present in such small numbers throughout its range that it may become endangered if its present environment worsens. The designation "rare species" applies only to California native plants. State threatened and endangered species include both plants and wildlife but do not include invertebrates and are legally protected against "take" as this term is defined in the California Endangered Species Act (California Fish & Game Code, Section 2050 et seq.).

Species of special concern is an informal designation used by the CDFG for some declining wildlife species that are not officially listed as endangered, threatened, or rare. This designation does not provide legal protection, but signifies that these species are recognized as vulnerable by CDFG.

Species that are California fully protected include those protected by special legislation for various reasons, such as the white-tailed kite (*Elanus leucurus*).

(c) California Native Plant Society

The CNPS is a statewide resource conservation organization that has developed an inventory of California's special status plant species (CNPS 2001). This inventory is a summary of information on the distribution, rarity, and endangerment of California's vascular plants. This rare plant inventory consists of four lists. CNPS List 1A plant species are presumed extinct in California because they have not been seen in the wild for many years. List 1B plants are considered as rare, threatened, or endangered throughout their range. List 2 plant species are considered rare, threatened, or endangered in California, but more common in other states. Plant species on Lists 1A, 1B, and 2 generally meet the CDFG criteria for endangered, threatened, or rare listing. Plant species for which CNPS requires additional information in order to properly evaluate their status are included on List 3. List 4 plant species are those of limited distribution

in California whose susceptibility to threat is considered low at this time, or for which more survey data must be acquired within the State to adequately assess whether the species is rare in California.

The following sections indicate the habitats, as well as plant and animal species, present or potentially present on the site that have been afforded special recognition. Sources used to determine the potential occurrence of special status resources in the vicinity of the site include USFWS (USFWS 1997), CDFG (CDFG 2005, 2003), CNPS (CNPS 2001), and California Natural Diversity Data Base (CNDDDB 2005).

(2) Sensitive Plant Communities

The site supports two plant communities considered sensitive by the CDFG's CNDDDB due to their scarcity and/or because they support State and/or Federal listed endangered, threatened, or rare vascular plants and animals. These communities are considered highest-inventory priority communities by the CDFG, indicating that they are declining in acreage throughout their range due to land use changes. These communities are described previously and include aspen series and narrow-leaf willow series (scrub).

(3) Sensitive Plant Species

Sensitive plants include those listed, or candidates for listing, by the USFWS and CDFG, and species considered sensitive by the CNPS (particularly Lists 1A, 1B, and 2). Several sensitive plant species were reported in the CNDDDB from the vicinity, and one was determined to be potentially present through the literature review. A discussion of each sensitive plant species observed, as well as those potentially present within the project site, is presented in Table 47, *Sensitive Plant Species*, on page 247.

A few plant species listed as sensitive by the USDA Forest Service (Inyo National Forest) may occur within the general bioregional location of the project site; however, the majority of these species are not expected to occur within the project site due to a lack of suitable habitat and/or restricted elevation range. These species are also included in Table 47, *Sensitive Plant Species*.

In addition, several plant species listed as sensitive by the USDA Forest Service (Inyo National Forest) are not expected to occur within the project site due to a restricted bioregional distribution (i.e., only occur in desert mountains or desert floristic province); therefore, they have not been included in Table 47, *Sensitive Plant Species*.

Table 47
Sensitive Plant Species

VASCULAR PLANTS									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
BRYOPHYTES									
Orthotrichaceae									
<i>Orthotrichum spjutii</i>	orthotrichum	N/A (moss)	NONE	NONE	1B	FS: SENSITIVE	Lower montane coniferous forest, pinyon and juniper woodland, subalpine coniferous forest, upper montane coniferous forest on granitic rock. Elevations from 2100 to 2400 meters (m).	Kern and Mono Cos., CA. Known only from near Sonora Pass.	NE
GYMNOSPERMS									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
Ophioglossaceae									
Adder's Tongue Family									
<i>Botrychium ascendens</i>	upswept moonwort	July-Aug.	NONE	NONE	2		Lower montane coniferous forest on mesic soil. Elevations from 1500 to 1830 m.	Known in California only from two occurrences: near Jonesville on the Butte and Tehama County border, and south of Fallen Leaf Lake, El Dorado County. Butte, El Dorado, Tehama Cos., CA; ID, NV, OR, WA, and WY.	NE
<i>Botrychium crenulatum</i>	Scalloped moonwort	June-Jul.	NONE	NONE	2	FS: SENSITIVE	Bogs and fens, lower montane coniferous forest, meadows and	Butte, Colusa, Los Angeles, Mono, San Bernardino, Tehama,	NE

Table 47 (Continued)

Sensitive Plant Species

GYMNOSPERMS									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
							seeps, marshes and swamps. Elevations from 1500 to 3280 m.	and Tulare Cos., CA; AZ, ID, NV, OR, UT, WA, and WY.	
<i>Botrychium lineare</i>	slender moonwort	Unknown	FC	NONE	1B	FS: SENSITIVE	Upper montane coniferous forest. Elevation 2600 m.	Known in California only from one small occurrence near Piute Pass. Inyo Co.	NE
<i>Botrychium minganense</i>	mingan moonwort	July-Aug.	NONE	NONE	2	FS: SENSITIVE	Lower montane coniferous forest on mesic soils. Elevations from 1500 to 1830 m.	Butte, Fresno, and Tehama Cos., CA; AZ, ID, NV, OR, UT, and WA.	NE

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
Asteraceae	Sunflower Family								
<i>Ericameria gilmanii</i>	Gilman's goldenbush	Aug.-Sept.	NONE	NONE	1B	FS: SENSITIVE	Subalpine coniferous forest, and upper montane coniferous forest on carbonate or granitic, rocky soil. Elevations from 2100 to 3400 m.	Inyo and Kern Cos., CA. Inyo, White, and desert mountains.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Erigeron aequifolius</i>	Hall's fleabane	July-Aug.	NONE	NONE	1B	FS: SENSITIVE	Broadleaved upland forest, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest on rocky, granitic soil. Elevations from 1500 to 2440 m.	Fresno, Kern, and Tulare Cos., CA. Southern high Sierra Nevada floristic province.	NE
<i>Erigeron uncialis</i> <i>var. uncialis</i>	lone fleabane	June-July	NONE	NONE	2	FS: SENSITIVE	Great Basin scrub, subalpine coniferous forest on carbonate soils. Elevations from 2100 to 2900 m.	Inyo, San Bernardino, Cos., CA; NV; White, Inyo, and desert mountains.	NE
<i>Hulsea brevifolia</i>	short-leaved hulsea	May-Aug.	NONE	NONE	1B		Upper montane coniferous forest on granitic or volcanic (pumice) soil of forest openings and road cuts	Fresno, Madera, Mariposa, Tulare, Tuolumne Cos., CA.	NE
Boraginaceae	Borage Family								
<i>Cryptantha roosiorum</i>	bristlecone cryptantha	June-July	NONE	SR	1B	FS: SENSITIVE	Subalpine coniferous forest on rocky carbonate soils. Elevations from 2440 to 3230 m.	White and Inyo Mountains. Inyo County, CA.	NE
Brassicaceae	Mustard Family								
<i>Arabis bodiensis</i>	Bodie Hills rock cress	June-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, Great Basin scrub, pinyon and juniper woodland. Elevations from 2195-3530 m.	Great Basin floristic province, White and Inyo Mountains. Fresno, Inyo, Mono, and Tulare Cos., CA; NV	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Arabis pinzlae</i>	Pinzl's rock cress	July	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest on scree or sandy soils. Elevations 3000 to 3350 m.	Great Basin floristic province, White and Inyo Mountains. Mono Co., CA; NV.	NE
<i>Arabis tiehmii</i>	Carson Range rockcress	July-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field on granitic soil. Elevation from 2970 to 3590 m.	Mono County, CA; NV.	NE
<i>Draba asterophora</i> var. <i>asterophora</i>	Lake Tahoe draba	July-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest. Elevations from 2500 to 3505 m.	Alpine, El Dorado, Mono, Tuolumne Cos., CA; NV.	NE
<i>Draba breweri</i> var. <i>cana</i>	hoary draba	July	NONE	NONE	2		Alpine boulder and rock field, meadows, subalpine coniferous forest. Elevations from 3000 to 3505 m.	In California, known only from two occurrences near Lake Genevieve and Wheeler Peak.	NE
<i>Draba incrassate</i>	Sweetwater Mountains draba	July-Aug.	NONE	NONE	1B		Alpine boulder and rock field; endemic to the rhyolite substrates of the Sweetwater Mountains on loose, steep, talus slopes. Elevations from 2500 to 3500 m.	Mono County, CA. Sweetwater Mountains.	NE
<i>Draba lonchocarpa</i> var. <i>lonchocarpa</i>	spear-fruited draba	June-Jul.	NONE	NONE	2		Alpine boulder and rock fields on limestone scree. Elevations from 3000 to 3295 m.	Inyo and Mono Cos., CA; ID, NV, OR, UT, WA, and WY.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Draba monoensis</i>	White Mountains draba	August	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, meadows and seeps. Elevations from 3000 to 3960 m.	Known only from the White Mountains. Mono Co., CA.	NE
<i>Draba praealta</i>	subalpine draba	July-Aug.	NONE	NONE	2		Meadow and seeps on mesic soils. Elevations from 2500 to 3415 m.	Fresno, Inyo, Mono, and Tuolumne Cos., CA; NV, OR, WA, and WY.	NE
<i>Draba sharsmithii</i>	Mountain Whitney draba	July-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest. Elevations from 3355 to 3960 m.	Fresno, Inyo, and Tulare Cos. Southern high Sierra Nevada floristic province.	NE
<i>Polyctenium williamsiae</i>	William's combleaf	Mar.-July	NONE	NONE	1B	FS: SENSITIVE	Marshes and swamps (alkali), playas, vernal pools. Elevations from 1350 to 2700 m.	Lassen and Mono Cos., CA; NV, OR.	NE
<i>Streptanthus oliganthus</i>	Masonic Mountain jewelflower	June-July	NONE	NONE	1B	FS: SENSITIVE	Pinyon and juniper woodland on volcanic or granitic, rocky soils. Elevations from 1980 to 3050 m.	Inyo and Mono Cos., CA; NV. White and Inyo Mountains.	NE
Crassulaceae	Stonecrop Family								
<i>Sedum pinetorum</i>	Pine City sedum	July	NONE	NONE	3		Habitat known. Elevation 2650 m.	Known only from type collection from deserted Pine City above Mammoth.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
Fabaceae	Pea Family								
<i>Astragalus johannis-howellii</i>	Long Valley milk vetch	June-Aug.	NONE	SR	1B		Great Basin scrub on sandy loam soils. Elevation from 2040 to 2530 m.	Mono Co., CA; NV. Occurs northeast of Whitmore Hot Springs in the vicinity of Hot Creek gorge.	NE
<i>Astragalus lemmonii</i>	Lemmon's milk-vetch	May-Aug.	NONE	NONE	1B		Great Basin scrub, meadows and seeps, marshes and swamps within lake shores. Elevations from 1280 to 2200m.	Lassen, Mono, Modoc, Plumas, and Sierra Cos. CA; NV, OR. Occurs at Hot Creek Fish Hatchery.	NE
<i>Astragalus lentiginosus</i> var. <i>kernensis</i>	Kern milkvetch	June-July	NONE	NONE	1B	FS: SENSITIVE	Meadows and seeps, subalpine coniferous forest on sandy soil. Elevations from 2350 m. to 2750 m.	Inyo and Tulare Cos., CA; NV. Southern high Sierra Nevada Floristic Province.	NE
<i>Astragalus monoensis</i> var. <i>monoensis</i>	Mono milk-vetch	June-Aug.	NONE	SR	1B		Great Basin scrub and upper montane coniferous forest on pumice flats with sparse vegetative cover; Elevations from 2110 to 3355 m.	Mono County	NE
<i>Astragalus monoensis</i> var. <i>ravenii</i>	Raven's milk-vetch	July-Sept.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, upper montane coniferous forest on gravelly soil. Elevations from 3355 to 3460 m.	Fresno, Inyo, and Mono Cos., CA. Great Basin floristic province.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Lupinus duranii</i>	Mono Lake lupine	May-Aug.	NONE	NONE	1B		Great Basin scrub, subalpine coniferous forest, and upper montane coniferous forest on pumice sand flats and coarse barren soils of volcanic origin. Elevations from 2000 to 3000m.	Mono County, CA.	NE
<i>Lupinus lepidus</i> var. <i>culbertsonii</i>	Hockett Meadows lupine	July-Aug.	NONE	NONE	1B		Meadow and seeps, upper montane coniferous forest on mesic, rocky soil. Elevations from 2440 to 3000 m.	Fresno, Mono, and Tulare Cos., CA. Occurs in Convict Lakes Basin.	NE
<i>Lupinus padre-crowleyi</i>	Father Crowley's lupine	July-Aug.	NONE	SR	1B		Great Basin scrub, riparian scrub, upper montane coniferous forest on decomposed granite. Elevations from 2500 to 4000 m.	Inyo, Mono, and Tulare Cos., CA. Southern high Sierra Nevada floristic province. Inyo and White Mountains.	NE
Hydrophyllaceae	Waterleaf Family								
<i>Phacelia monoensis</i>	Mono County phacelia	May-July	NONE	NONE	1B	FS: SENSITIVE	Great basin scrub, pinyon and juniper woodland on clay soils, often along roadsides. Elevations from 1900 to 2900 m.	Mono Co., CA; NV	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Phacelia novemmillensis</i>	Nine-Mile Canyon phacelia	May-June	NONE	NONE	1B	FS: SENSITIVE	Broadleaved upland forest, cismontane woodland, pinyon and juniper woodland, upper montane coniferous forest on sandy or gravelly soil. Elevations from 1645 to 2640 m.	Inyo, Kern, and Tulare Cos., CA. Southern high Sierra Nevada and Mojave floristic provinces.	NE
Lamiaceae	Mint Family								
<i>Monardella beneolens</i>	sweet-smelling monardella	July-Sept.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest, upper montane coniferous forest on granitic soil. Elevations from 2500 to 3500 m.	Inyo, Kern, and Tulare Cos. Southern high Sierra Nevada floristic province.	NE
Nyctaginaceae	Four O'Clock Family								
<i>Abronia alpina</i>	Ramshaw Meadows abronia	July-Aug.	FC	NONE	4	FS: SENSITIVE	Meadow and seeps on granitic, gravelly margins. Elevations from 2400 to 2700 m.	Known from only two extant occurrences at Ramshaw Meadows and Temleton Meadows. Tulare County, CA.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Abronia nana</i> ssp. <i>Covillei</i>	Coville's dwarf Abronia	May-Aug.	NONE	NONE	4	FS: SENSITIVE	Great Basin scrub, Joshua tree woodland, pinyon and juniper woodland, subalpine coniferous forest, upper montane coniferous forest on sandy, carbonate soils. Elevations from 1600 to 3100 m.	Desert Mountains. Inyo, Mono, and San Bernardino Cos., CA; NV.	NE
Onagraceae	Primrose Family								
<i>Epilobium howellii</i>	subalpine fireweed	July-Aug.	NONE	NONE	1B		Meadow and seeps, subalpine coniferous forest on mesic soil, mossy seeps. Elevations from 1970 to 2700 m.	Fresno, Mono, and Sierra Cos., CA.	NE
Polemoniaceae	Phlox Family								
<i>Polemonium chartaceum</i>	Mason's sky pilot	June-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest on rocky, serpentine, granitic, or volcanic soil. Elevations from 1800 to 4200 m.	Mono, Siskiyou, and Trinity Cos., CA; NV; Inyo and White Mountains.	NE
Polygonaceae	Buckwheat Family								
<i>Dedeckera eurekensis</i>	July gold	June-Aug.	NONE	SR	1B	FS: SENSITIVE	Mojavean desert scrub on carbonate soil. Elevations from 1220 to 2200 m.	White, Inyo, and desert mountains. Inyo and Mono Cos., CA.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Eriogonum wrightii</i> var. <i>olanchense</i>	Olancha Peak buckwheat	July-Sept.	NONE	NONE	1B	FS: SENSITIVE	Alpine boulder and rock field, subalpine coniferous forest on gravelly or rocky soils. Elevations from 3260 to 3535 m.	Known from only two occurrences on Olancha Peak. Tulare County, CA.	NE
Rosaceae	Rose Family								
<i>Horkelia hispidula</i>	White Mountains horkelia	June-Aug.	NONE	NONE	1B	FS: SENSITIVE	Alpine dwarf scrub, Great Basin scrub, subalpine coniferous forest. Elevations from 3000 to 3400 m.	Inyo and White Mountains. Inyo and Mono Cos., CA.	NE
<i>Ivesia kingii</i> var. <i>kingii</i>	alkali ivesia	June-Aug.	NONE	NONE	1B		Great Basin scrub, meadows and seeps, playas, on mesic, alkaline, clay soils. Elevations from 1200 to 2130 m.	Inyo and Mono Cos., CA; NV and UT.	NE
Salicaceae	Willow Family								
<i>Salix brachycarpa</i> ssp. <i>brachycarpa</i>	short-fruited willow	June-July	NONE	NONE	2		Alpine dwarf scrub, meadows and seeps, and subalpine coniferous forest; edges of lakes and in wet meadows on limestone, marble, and metamorphic substrates. Elevations from 3150 to 3500 m.	Mono Co. CA; ID, NM, OR, and WA.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (DICOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
Scrophulariaceae	Figwort Family								
<i>Pedicularis crenulata</i>	scalloped-leaved lousewort	June-July	NONE	NONE	2		Meadows and seeps in mesic soils. Elevations from 2100 to 2300 m.	Mono Co., CA; NV, and WY. Occurs at Sierra Nevada Aquatic Research Lab along the north side of Convict Creek, approx. 1 mile west of Hwy. 395.	NE
<i>Penstemon papillatus</i>	Inyo beardtongue	June-July	NONE	NONE	4	FS: SENSITIVE	Pinyon and juniper woodland, subalpine coniferous forest on rocky, granitic soil. Elevations from 2000 to 2700 m.	Inyo, Kern, and Mono Cos.	P (USFS owned portion of project site); NE (Privately owned portion of project site)
Violaceae	Violet Family								
<i>Viola pinetorum</i> ssp. <i>grisea</i>	grey-leaved violet	Apr.-July	NONE	NONE	1B	FS: SENSITIVE	Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest. Elevations from 1500 to 3400 m.	Fresno, Kern, San Bernardino, and Tulare Cos. Southern high Sierra Nevada floristic province.	NE

Table 47 (Continued)

Sensitive Plant Species

ANGIOSPERMS (MONOCOTYLEDONS)									
Scientific Name	Common Name	Flowering Period	Federal	State	CNPS List	Other	Preferred Habitat	Distribution	Occurrence On-site
Cyperaceae	Sedge Family								
<i>Carex tiogana</i>	Tioga sedge	July-Aug.	NONE	NONE	1B	FS: SENSITIVE	Meadows and seeps in mesic soils, lake margins. Elevations from 3100 to 3300 m.	Mono County, CA.	NE
<i>Kobresia bellardii</i>	seep kobresia	August	NONE	NONE	2		Alpine boulder and rock field, meadows, subalpine coniferous forest in mesic soils; can occur on limestone substrate. Elevations from 2955 to 3230 m.	Mono Co., CA; OR, and ID.	NE
Poaceae	Grass Family								
<i>Elymus scribneri</i>	Scribner's wheat grass	July-Aug.	NONE	NONE	2		Alpine boulder and rock field on rocky slopes. Elevations from 2900 to 4200 m.	Mono Co., CA and NV.	NE
Potamogetonaceae	Pondweed Family								
<i>Potamogeton robbinsii</i>	Robbins's pondweed	July-Aug.	NONE	NONE	2		Marshes and swamps, deep water lakes. Elevations from 1520 to 3500m.	Alpine, Inyo, Mono, Lassen, Madera, Nevada, Sierra, Siskiyou, and Tuolumne Cos., CA; ID, OR, UT, and WA.	NE

Table 47 (Continued)

Sensitive Plant Species

Key to Species Listing Status Codes

FE	<i>Federally Listed as Endangered</i>	FC	<i>Federal Candidate Species</i>	SCT	<i>State Candidate for Threatened</i>
FT	<i>Federally Listed as Threatened</i>	SE	<i>State Listed as Endangered</i>	SFP	<i>State Fully Protected</i>
FPE	<i>Federally Proposed as Endangered</i>	ST	<i>State Listed as Threatened</i>	SR	<i>State Rare</i>
FPT	<i>Federally Proposed as Threatened</i>	SCE	<i>State Candidate for Endangered</i>	CSC	<i>California Special Concern Species</i>
FPD	<i>Federally Proposed for Delisting</i>	FS: SENSITIVE	<i>Inyo National Forest Sensitive Species</i>		

California Native Plant Society (CNPS)

List 1A: *Presumed extinct in California.*

List 1B: *Rare, threatened, or endangered throughout their range.*

List 2: *Rare, threatened, or endangered in California, but more common in other states.*

List 3: *Plant species for which additional information is needed before rarity can be determined.*

List 4: *Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.*

Source: *PCR Services Corporation, 2006*

The Botanical Survey of the Juniper Ridge Revised Project Area, Mammoth Lakes, Mono County, California, prepared by Mark Bagley, dated September, 1994, noted that no federal or state listed, proposed or candidate, threatened or endangered plant species were observed within the Juniper Ridge Revised Project Area. The current project site encompasses a small portion within the Juniper Ridge Revised Project Area. In addition, this report stated that “no other plant species of concern were found to occur within the survey area, none have been previously reported, and none would be expected. Pumice flat and meadow habitats which are known to support plant species of concern in the region do not occur on the Site.” PCR biologist did not observe any sensitive plant species during the site visit conducted in September, 2005. No focused surveys for sensitive plants were conducted by PCR biologists during the 2005 site visit.

Many sensitive plant species are found exclusively within specific soil types (i.e. pumous soils). A review of the soil survey for the Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties (USDA 2002) determined that the project site supports the following soil type: Chesaw family, 0 to 5 percent slopes. The Chesaw Series consists of deep, somewhat excessively drained soils formed in glacial outwash on terraces, terrace escarpments, and eskers. For this soil type, the average precipitation is approximately 17 inches, mean annual temperature is approximately 43 degrees F, and the growing season is 100 to 120 days.

(4) Sensitive Wildlife Species

Sensitive wildlife species include those species listed as endangered or threatened under FESA or CESA, candidates for listing by USFWS or CDFG, and species of special concern to CDFG. In addition, species considered sensitive by the USFS (Inyo National Forest) have also been included and analyzed in this document to provide a comprehensive list of species.

A number of sensitive wildlife species were reported in the CNDDDB as occurring in the vicinity of the project site. These species are included in Table 48, *Sensitive Wildlife Species*, on page 261, which provides a summary of the sensitive wildlife species occurring or potentially occurring within the project site based upon their known geographic ranges, distributions, and preferred habitats. The majority of these species are not expected to occur on-site due to a lack of suitable habitat or lack of tolerance for human disturbance.

In addition, several wildlife species listed as sensitive by the USFS (Inyo National Forest) may occur within the general bioregional location of the project site; however, none of these species are expected to occur within the project site due to a lack of suitable habitat. These species are also included in Table 48, *Sensitive Wildlife Species*.

Table 48
Sensitive Wildlife Species

INVERTEBRATES							
Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name	Scientific Name
GASTROPODA							
SNAILS AND SLUGS							
Hydrobiidae	Aquatic Snails						
<i>Pyrgulopsis owensensis</i>	Owens Valley springsnail	NONE	NONE	FS: SENSITIVE	Freshwater.	Crowley Lake	NE
<i>Pyrgulopsis wongi</i>	Wong's springsnail	NONE	NONE	FS: SENSITIVE	Freshwater.	Crowley Lake	NE
VERTEBRATES							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
FISHES							
Salmonidae	Trout and Salmon						
<i>Oncorhynchus clarkii seleniris</i>	Paiute cutthroat trout	FT	NONE		Cool, well-oxygenated waters. Cannot tolerate the presence of other salmonids, required clean gravel for spawning.	Eastern Sierra Nevada and northwestern coastal California.	NE
Cyprinidae	Minnnows and Carp						
<i>Oncorhynchus mykiss aguabonita</i>	Volcano Creek golden trout	NONE	CSC	FS: SENSITIVE	Shallow, slow moving streams. Pools, runs, and riffles within the following habitat types: undercut banks, willows, bare banks, collapsed banks, open channel, aquatic vegetation, sedge, boulders, or rootwads.	Kern Plateau, southern Sierra Nevada.	NE
Cyprinidae	Minnnows and Carp						
<i>Rhinichthys osculus</i> ssp. 2	Owens speckled dace	NONE	CSC		Small streams, spring systems, irrigation ditches.	Owens River and tributaries.	NE

Table 48 (Continued)

Sensitive Wildlife Species

VERTEBRATES							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Gila bicolor snyderi</i>	Owens tui chub	FE	SE		Found in shallow water associated with submerged objects or beds of aquatic vegetation, or in the quiet waters of sluggish rivers. Clear, clean water with adequate cover and adequate insect food.	Owens River and tributaries.	NE
Catostomidae	Suckers						
<i>Catostomus fumeiventris</i>	Owens sucker	NONE	CSC		Silty to rocky pools and creek runs. Most abundant in sections of the lower Owens River and tributaries with long runs and few riffles, over substrates of mostly fine material. Adults can thrive in reservoirs, but need gravelly riffles in tributary streams for spawning.	Sierra Nevadas and coastal south-central California; Owens River drainage.	NE
AMPHIBIANS							
Plethodontidae	Lungless Salamanders						
<i>Batrachoseps campi</i>	Inyo Mountains salamander	NONE	CSC	FS: SENSITIVE	Found in isolated springs and stream areas chiefly below the pinon-juniper belt. Found along watercourses vegetation with willow and wild rose. Found under stones and in crevices in damp places near water. Surrounding slopes are arid and vegetated with sagebrush, buckwheat, rabbitbrush, and cactus.	Inyo Mountains.	NE

Table 48 (Continued)

Sensitive Wildlife Species

VERTEBRATES							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Batrachoseps robustus</i>	Kern Plateau salamander	NONE	NONE	FS: SENSITIVE	Frequents habitats mainly of Jeffrey pine and red fir in the northern and eastern humid parts of its range and lodgepole, pinon pine, rabbitbrush, sagebrush, black oak and canyon oak in drier parts of its range. Found under rocks, bark fragments, logs, and within and under wet logs, especially in spring and seep areas near outflow streams.	Southeast Sierra Nevada on Kern Plateau, Olancha Peak to Nine Mile Canyon on the eastern slope of the Sierra Nevadas, and the Scodie Mountains, Kern County, CA.	NE
Bufonidae	True Toads						
<i>Bufo canorus</i>	Yosemite toad	FC	NONE	FS: SENSITIVE	Occurs in the vicinity of wet meadows in the central high Sierra Nevadas. Primarily occurs in montane wet meadows; also in seasonal ponds associated with lodgepole pine and subalpine coniferous forests. Breeds in shallow edges of snowmelt pools and ponds or along edges of lakes or slow-moving streams.	Central high Sierra Nevadas, CA.	NE
Ranidae	True Frogs						
<i>Rana muscosa</i>	Mountain yellow-legged frog	FC (SIERRA NEVADA)	CSC	FS: SENSITIVE	Inhabits mid to upper-elevation perennial streams, often in locations with bedrock pools. Always encountered within a few feet of water.	Sierra Nevada and southern California mountains.	NE

Table 48 (Continued)

Sensitive Wildlife Species

VERTEBRATES							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Rana pipens</i>	Northern leopard frog	NONE	CSC	FS: SENSITIVE	Found in a variety of habitats including grasslands, brushland, woodland, and forest, ranging high into the mountains. Frequents springs, slow moving streams, slowly flowing streams, marshes, bogs, ponds, canals, and reservoirs, usually permanent water with grass, cattails, or other aquatic vegetation. May forage far from water in damp meadows.	North and central U.S., Canada, in California near the Oregon border.	NE
REPTILES							
Anguidae	Alligator Lizards						
<i>Elgaria panamintina</i>	Panamint alligator lizard	NONE	CSC	FS: SENSITIVE	Ranges from creosote bush scrub desert and Joshua tree zone into the lower edge of the pinon juniper belt. Found beneath thickets of willow and wild grape near water or in drier habitats	Desert mountains of Inyo and Mono County.	NE
BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
Accipitridae	Hawks, Kites, Harriers, and Eagles						
<i>Accipiter gentilis</i>	northern goshawk	NONE	CSC	FS: SENSITIVE	Nests within mature or old-growth coniferous forests. Usually nests on north slopes, near water. Typical nest trees include red fir, lodgepole pine, Jeffrey pine, and aspens.	Through U.S. and Canada.	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Accipiter striatus</i>	sharp-shinned hawk	NONE	CSC		Woodlands; forages over chaparral and other scrublands; prefers riparian habitats and north-facing slopes, with plucking perch sites.	Entire State of CA, although only winters in most of southern California.	NE
<i>Accipiter cooperii</i>	Cooper's hawk	NONE	CSC		Open woodlands especially riparian woodland.	Entire State of CA.	NE
<i>Aquila chrysaetos</i>	golden eagle	NONE	CSC, SFP		Mountains, deserts, and open country; prefer to forage over grasslands, deserts, savannahs and early successional stages of forest and shrub habitats.	Throughout U.S. and Canada.	NE
<i>Buteo swainsoni</i>	Swainson's hawk	NONE	CSC	FS: SENSITIVE	Plains, ranges, open hills, sparse trees.	Through U.S. and Canada.	NE
<i>Circus cyaneus</i>	Northern harrier	NONE	CSC		Coastal salt marshes, freshwater marshes, grasslands, and agricultural fields; occasionally forages over open desert and brushlands.	U.S. and Canada	NE
<i>Haliaeetus leucocephalus</i>	bald eagle	SE	FT, SFP		Found near water.	Throughout U.S. and Canada	NE
Falconidae	Falcons						
<i>Falco peregrinus anatum</i>	American peregrine falcon	FD	SE, SFP		Open country, cliffs (mountains to coasts).	Very uncommon breeding resident along coast and Sierra Nevada and uncommon migrant along coast and W. Sierra Nevada. Winters inland in central valley.	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Falco mexicanus</i>	Prairie falcon	NONE	CSC		Grasslands, savannahs, rangelands, agricultural fields, and desert scrub; often uses sheltered cliff ledges for cover.	Western United States.	NE
Phasianidae	Grouse and Ptarmigan						
<i>Centrocercus urophasianus</i>	greater sage-grouse	NONE	CSC	FS: SENSITIVE	Dry sagebrush plains.	Northwestern United States; Sierra Nevada.	NE
Cuculidae	Cuckoos and Relatives						
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FC	SE	FS: SENSITIVE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods with lower story of blackberry, nettles, or wild grape.	Western United States.	NE
Strigidae	Owls						
<i>Strix nebulosa</i>	great gray owl	NONE	SE	FS: SENSITIVE	Nests in mixed conifer or red fir forests in or on the edge of meadows; requires large diameter snags in a forest with high canopy closure which provides a cool sub-canopy microclimate.	Sierra Nevadas, CA; Alaska, Canada, and northern United States.	NE
<i>Strix occidentalis occidentalis</i>	California spotted owl	NONE	CSC	FS: SENSITIVE	Typically in dense, multi-layered evergreen forest that includes a diversity of tree species including large trees. Most often on lower, north-facing slopes of canyons, usually within 0.3 km of water.	Western United States.	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
Tyrannidae							
Tyrant Flycatchers							
<i>Empidonax traillii</i>	willow flycatcher	NONE	NONE	FS: SENSITIVE	Low brushy vegetation in wet areas, especially riparian willow thickets.	Throughout the United States.	NE
MAMMALS							
Soricidae							
Shrews							
<i>Sorex lyelli</i>	Mount Lyell shrew	NONE	CSC		High elevation riparian areas in the southern Sierra Nevada. Requires moist soil, lives in grass or under willows; uses logs, stumps, etc. for cover.	In the vicinity of Mount Lyell near Yosemite National Park, Sierra Nevadas.	NE
Vespertilionidae							
Mouse-eared Bats							
<i>Antrozous pallidus</i>	pallid bat	NONE	CSC	FS: SENSITIVE	Nests in dry, rocky habitats/caves, crevices in rocks, arid habitats including deserts, chaparral, and scrublands.	Common in low elevations throughout California except for the high Sierra Nevada from Shasta to Kern Co. and the northwestern corner of the State of CA.	NE
<i>Corynorhinus (Plecotus) townsendii townsendii</i>	Townsend's western big-eared bat	NONE	CSC	FS: SENSITIVE	Found in all but sub-alpine and alpine habitats. Commonly occurs in mesic habitats characterized by coniferous and deciduous forests, but occupies a broad range of habitats. Maternity and hibernation colonies typically are in caves and mine tunnels.	Throughout CA.	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
<i>Lasiurus blossevillii</i>	Western red bat	NONE	NONE	FS: SENSITIVE	Prefers riparian habitat; Sonoran and transitional life zones in California. Young are born and perch among tree foliage.	Southern British Columbia in Canada, through much of the western United States, through Mexico and Central America, to Argentina and Chile in South America.	NE
Leporidae	Rabbits and Hares						
<i>Lepus townsendii</i>	western white-tailed jackrabbit	NONE	CSC		Sagebrush scrub, subalpine conifer forests and juniper woodlands, alpine dwarf shrub and perennial grassland. Prefers open areas with scattered shrubs and exposed flat-topped hills with open stands of trees and a brushy or herbaceous understory.	Eastern Sierra Nevadas, northeastern California.	P (USFS owned portion of project site); NE (Privately owned portion of project site)
Aplodontidae	Mountain Beavers						
<i>Aplodontia rufa californica</i>	Sierra Nevada mountain beaver	NONE	CSC		Mountain streams with dense, deciduous riparian vegetation.	Northwestern California and southern California mountains.	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
Mustelidae	Weasels, Martins, and Allies						
<i>Gulo gulo</i>	California wolverine	NONE	ST	FS: SENSITIVE	Found mainly in subalpine forest and alpine fellfields within alpine meadows, lodgepole forests, and red fir forests. Dens in caves, rock crevices, under fallen trees or tree roots, and in thickets. Needs water source – can travel long distances.	Sierra Nevadas and northwestern California.	NE
<i>Martes americana</i>	American marten	NONE	NONE	FS: SENSITIVE	Dense coniferous forest and lowland forest. May use rocky alpine areas. May occupy holes in dead or live trees or stumps, abandoned squirrel nests, rock piles, or burrows.	Sierra Nevadas, Klamath Ranges and north Coast Ranges.	NE
<i>Martes pennanti pacifica</i>	Pacific fisher	FC	NONE	FS: SENSITIVE	Intermediate to large-tree stages of coniferous forests and deciduous riparian areas with high percent canopy closure. Use cavities, snags, logs, and rocky areas for cover and dens sites; need large areas of mature, dense forest.	Sierra Nevadas, Klamath Ranges and north Coast Ranges	NE

Table 48 (Continued)

Sensitive Wildlife Species

BIRDS							
Scientific Name	Common Name	Federal	State	Other	Preferred Habitat	Distribution	Occurrence On-site
Canidae	Foxes, Wolves, & Coyotes						
<i>Vulpes vulpes necator</i>	Sierra Nevada red fox	NONE	ST	FS: SENSITIVE	Found in a variety of habitats from wet meadows to forested areas; use dense vegetation and rocky areas for cover and den sites. Prefers forests interspersed with meadows or alpine fell-fields.	From Cascades to Sierra Nevada.	NE
Bovidae	Sheep and Relatives						
<i>Ovis canadensis californiana</i>	Sierra bighorn sheep	FE	SE, SFP	FS: SENSITIVE	Rocky, steep slopes and canyons with adjacent open areas; forages in meadows and brushlands.	High elevations of southern Sierra Nevada to Owens Valley.	NE

Key to Species Listing status Codes

FE	Federally Listed as Endangered	SE	State Listed as Endangered
FT	Federally Listed as Threatened	ST	State Listed as Threatened
FPE	Federally Proposed as Endangered	SCE	State Candidate for Endangered
FPT	Federally Proposed as Threatened	SCT	State Candidate for Threatened
FPD	Federally Proposed for Delisting	SFP	State Fully Protected
FC	Federal Candidate Species	CSC	California Special Concern Species

Source: PCR Services Corporation, 2006

The Biological Evaluation for Mammoth Mountain Ski Area Base VII Expansion Project, Inyo National Forest, dated March, 1998, noted that two species listed as sensitive for Region 5 of the USFS, northern goshawk (*Accipiter gentilis*) and American marten (*Martes americana*) potentially exist within or adjacent to the project boundaries. Northern goshawk nests are generally located in dense patches of timber stands, and no known nests are known to occur within the project boundaries. Although portions of the Mammoth Mountain Ski Area Base VII Expansion project site “provide marginal nesting and foraging habitat for the northern goshawk...no nests are known to occur within the project boundaries.” The current project site comprises a small portion of the Mammoth Mountain Ski Area Base VII Expansion Project and is surrounded by development. Goshawks are not expected to nest or forage within the current project site. The American marten prefers dense (60-100% canopy closure), multi-storied coniferous forests with a high number of large snags and downed logs. Although the forested portion of the Mammoth Mountain Ski Area Base VII Expansion Project provided suitable habitat for this species, the current project site, given its proximity to development, small size, and lack of dense coniferous forest is not expected to support this species.

No sensitive wildlife species were observed within the project site during the site visit conducted by PCR in September 2005. No focused surveys for sensitive wildlife species were conducted by PCR biologists during the 2005 site visit. A discussion of the sensitive wildlife species potentially present within the project site is presented in Table 48, *Sensitive Wildlife Species*.

3.6.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Using guidelines from Appendix G of the California Environmental Quality Act (CEQA), a project may have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool,

coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources such as a tree preservation policy or ordinance.

In addition, Section 15065(a) of the *State CEQA Guidelines* establishes that a significant impact may occur if the project would:

- Substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare or threatened species.

The biological resources within the project site were evaluated on the basis of the above criteria in determining whether or not the proposed project will cause one or more significant impacts. The evaluation of whether an impact to biological resources would be significant considered the resource and how that resource fits into a regional or ecological context.

The definition of “significant,” as applied for this assessment, considered both the local and regional status of each resource. Significant impacts are those that would diminish or result in the loss of an important biological resource, or those that would conflict with local, State, or Federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant because, although they would result in an adverse alteration of existing local conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

b. Methodology

Project-related impacts to biological resources take two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of natural habitats (i.e., vegetation or plant communities), which in turn, directly affect plant and wildlife species dependent on that habitat. Direct impacts also include the destruction of individual plants or wildlife, which is typically the case in species of low mobility (i.e., plants, amphibians, reptiles, and small mammals). The collective loss of individuals in these manners may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and, hence, population stability.

Indirect impacts are considered to be those that involve the effects of increases in ambient levels of sensory stimuli (e.g., noise, light), unnatural predators (e.g., domestic cats and other non-native animals), and competitors (e.g., exotic plants, non-native animals). Indirect impacts may be associated with the construction and/or eventual habitation/operation of a project; therefore, these impacts may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

The determination of impacts in this analysis is based on both the features of the proposed project and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Relevant project features (e.g., limits of grading) were provided by the project applicant. Much of this information was supplied in digital format and impacts were calculated using GIS technology in order to maximize the accuracy of the assessment.

The biological values of resources within, adjacent to, and outside the area to be affected by the project were determined by consideration of several factors. These included the overall size of habitats to be affected, the current level of disturbance of the habitats on the site, the site’s surrounding environment and regional context, the on-site biological diversity and abundance, the presence of sensitive and special-status plant and wildlife species, the site’s importance to regional populations of these species, and the degree to which on-site habitats are limited or restricted in distribution on a regional basis and, therefore, are considered sensitive in themselves. Whereas this assessment is comprehensive, the focus is on sensitive plant communities/habitats, resources that play an important role in the regional biological systems, and special-status species.

c. Environmental Consequences of the Proposed Action

Those impacts determined to be less than significant include impacts to biological resources that are relatively common or exist in a degraded or disturbed state rendering them less valuable as habitat or impacts that do not meet or exceed the significance thresholds defined previously. Those impacts determined to be significant are those that do meet the thresholds of significance defined above. Conclusions are based on both the features of the proposed project and the biological values of the habitat and/or sensitivity of plant and wildlife species to be affected. Specific considerations included the overall size of habitats to be affected, the site’s previous land uses and disturbance history, the site’s surrounding environment and regional context, the on-site biological diversity and abundance, the presence of sensitive and special-status plant and wildlife species, the site’s importance to regional populations of these species, and the degree to which on-site habitats are limited or restricted in distribution on a regional basis and, therefore, are considered sensitive in themselves.

(1) Sensitive Plant Species

Privately owned Land

The sensitive plant species mentioned in Section 3.6.2,(9)(c), Sensitive Plant Species, Table 47, *Sensitive Plant Species*, may occur within the region but none are expected to occur within the Privately owned portion of the project site due to the lack of suitable habitat. As such, no impacts are expected to occur to these species, and the proposed project would not have a substantial adverse affect to special status species within the Privately owned portion of the project site.

USFS-Owned Land

One sensitive species, Inyo beardtongue (CNPS List 4), was not detected within the project site, but still retains a low potential to occur on-site within the USFS-owned portion of the project site. CNPS List 4 species are not considered rare for purposes of analysis under CEQA/NEPA; however the CNPS strongly recommends that impacts to List 4 species be addressed during the environmental review process. The List 4 status denotes that a species is of limited distribution or is infrequent throughout a broader area in California and its vulnerability or susceptibility to threat appears to be low; moreover, the designation denotes that more survey data is needed before a conclusion ought to be drawn regarding the species' limits in California. List 4 plants cannot be called "rare" from a statewide perspective; however, they are uncommon enough that they should be monitored regularly. Many CNPS List 4 plants are of local interest. Although these List 4 species may have a limited distribution in California, their susceptibility to threat is considered low, based on their List 4 status, and the existing data on these species does not support a conclusion that these species are rare.

As this species is not protected by Federal or State listings as threatened or endangered, any loss of individuals from the limited populations potentially present would not threaten the regional population. Therefore, removal of potential habitat represents an adverse, but less than significant impact to regional populations of this species.

No impacts are expected to occur to the other species mentioned in Section 3.6.2,(9)(c), Sensitive Plant Species, Table 47, *Sensitive Plant Species*, of this document due to a lack of suitable habitat within the USFS-owned portion of the project site. As such, the proposed project would not have a substantial adverse affect to special status species within the USFS-owned portion of the project site.

(2) Sensitive Wildlife Species

Privately owned Land

The sensitive wildlife species mentioned in Section 3.6.2,(9)(d), Sensitive Wildlife Species, Table 48, *Sensitive Wildlife Species*, may occur within the region but none are expected to occur within the project site due to the lack of suitable habitat. As such, no impacts are expected to occur to these species, and the proposed project would not have a substantial adverse affect to special status species within the Privately owned portion of the project site.

USFS-Owned Land

One sensitive wildlife species, western white-tailed jackrabbit (a California Species of Special Concern), has a potential to occur within the USFS-owned portion of the project site. Long- and short-term impacts may occur as a result of construction activities and development of a portion of the project site. This species is not protected by Federal or State listings as threatened or endangered. Project implementation would not threaten the regional populations; therefore, removal of its habitat represents a less than significant impact to regional populations of this species.

No impacts are expected to occur to the other species mentioned in Section 3.6.2,(9)(d), Sensitive Wildlife Species, Table 48, *Sensitive Wildlife Species*, of this document due to a lack of suitable habitat within the USFS-owned portion of the project site. As such, the proposed project would not have a substantial adverse affect to special status species within the USFS-owned portion of the project site.

(3) Plant Communities

Privately Owned Land

As shown in Table 49, *Impacts to Plant Communities Within the Privately Owned Portion of the Project Site*, on page 276 and Figure 19, *Impacts to Plant Communities Within the Project Site*, on page 277, project development would result in the loss of approximately 0.1 acre of aspen series, 0.2 acre of narrow-leaf willow scrub, 0.6 acre of ruderal/big sagebrush scrub, less than 0.1 acre (0.01 acre) of ponded areas, 0.8 acre of disturbed areas, and 2.8 acres of developed areas. All of the project site is being impacted.

These natural communities (except for aspen series and narrow-leaf willow scrub) are not considered sensitive plant communities according to the CNDDDB. Therefore, impacts to these common plant communities are considered less than significant. Impacts to sensitive plant communities are address in Section 3.6.3,(c)(6), Sensitive Plant Communities.

Table 49**Impacts to Plant Communities Within the Privately Owned Portion of the Project Site**

Vegetation Community	Acres
Native	
Aspen Series	0.1
Narrow-leaf Willow Series (Scrub)	0.2
Ruderal	
Ruderal/Big Sagebrush Scrub	0.6
Other	
Pond	<0.1
Disturbed	0.8
Developed	<u>3.1</u>
TOTAL	4.8

Source: PCR Services Corporation, 2006

USFS-Owned Land

As shown in Table 50, *Impacts to Plant Communities Within the USFS-Owned Portion of the Project Site*, on page 278 and Figure 2, project development would result in the loss of approximately 0.6 acre of big sagebrush scrub, 0.2 acre of Jeffrey pine forest, 1.3 acres of ruderal areas, less than 0.1 acre (0.03 acre) of ruderal/montane meadow, 0.1 acre of ponded areas, and 1.8 acres of developed areas. All of the project site is being impacted by the proposed project.

These natural communities are not considered sensitive plant communities according to the CNDDDB. Therefore, impacts to these common plant communities are considered less than significant.

(4) Wildlife Movement**Privately Owned Land/USFS-Owned Land**

Migratory wildlife corridors are discussed in detail in the Initial Study which is contained in Appendix A of this Draft EA/EIR. The Round Valley Herd of mule deer utilizes a migratory path south of the Town of Mammoth Lakes, through the Mammoth Lakes Basin, over Mammoth Pass into the Middle Fork of the San Joaquin River drainage. The project site is almost completely surrounded by development; therefore, does not provide an effective route for migratory species including the mule deer. As such, development of the proposed project would not have a significant adverse effect on any known or suspected wildlife movement corridors.



- Property Boundaries
- ▬ USFS Owned
 - ▬ MMSA Owned
- Plant Communities
- AS - Aspen Series
 - BSS - Big Sagebrush Scrub
 - DEV - Developed
 - DIS - Disturbed
 - JPF - Jeffrey Pine Forest
 - NLWS - Narrow-Leaf Willow Scrub
 - POND - Pond
 - RUD - Ruderal
 - RUD/BSS - Ruderal / Big Sagebrush Scrub
 - RUD/MM - Ruderal / Montane Meadow

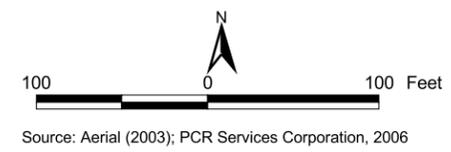


Figure 19
Impacts to Plant Communities
Within the Project Site

Table 50**Impacts to Plant Communities Within the USFS-Owned Portion of the Project Site**

Vegetation Community	Acres
Native	
Big Sagebrush Scrub	0.6
Jeffrey Pine Forest	0.2
Ruderal	
Ruderal	1.3
Ruderal/Montane Meadow	<0.1
Other	
Pond	0.1
Developed	<u>1.8</u>
TOTAL	4.0

Source: PCR Services Corporation, 2006.

(5) Sensitive Plant Communities**Privately Owned Land**

As shown in Table 49, *Impacts to Plant Communities Within the Privately Owned Portion of the Project Site* and Figure 19, project development would result in the loss of approximately 0.1 acre of aspen series and 0.2 acre of narrow-leaf willow scrub (series) within privately owned property, which are considered sensitive plant communities by the CNDDDB and resource agencies.

Aspen series and narrow-leaf willow scrub (series) comprise 0.1 acre and 0.2 acre on-site, respectively and are located in a narrow band of otherwise disturbed habitat which is completely surrounded by paved roads. These plant communities are not expected to support sensitive plant or wildlife species and are not connected to habitat areas up or downstream. Therefore, impacts to sensitive plant communities would not have a substantial adverse effect on these communities and are considered less than significant.

USFS-Owned Land

The USFS-owned portion of the project site does not support any plant communities considered sensitive by the CDFG's CNDDDB; therefore, no impacts to sensitive plant communities will occur as a result of the proposed project.

(6) Jurisdictional Features

Privately Owned Land/USFS-Owned Land

A jurisdictional delineation has not been conducted on site; however, no ACOE jurisdictional wetlands and “waters of the U.S.” exist within the project site. It appears that wetlands occur within the two man-made detention basins in the southwestern portion of the project site and the man-made detention basin below Chair 15; however, these are isolated man-made features. Since these features are isolated and are located on naturally occurring uplands that lack natural wetland or water features and do not naturally support riparian or wetland vegetation, they would not be considered under the jurisdiction of the ACOE as “waters of the U.S.” These features may be considered “waters of the State” and fall under the jurisdiction of the CDFG and RWQCB. A portion of the southernmost detention basin falls within the privately owned portion of the property, but the remainder of this basin as well as the northernmost basin falls within the USFS-owned portion (Lot 7). No impacts to these two detention basins are expected as a result of the proposed project. The three detention basins would not be impacted as a result of the proposed project; therefore, a jurisdictional delineation is not necessary.

One drainage feature which may be considered under the jurisdiction of the ACOE, RWQCB, and/or the CDFG occurs very close to the northwestern boundary of the project site within USFS-owned land. A mitigation measure is provided to require the installation of exclusionary fencing to ensure avoidance of this resource. In addition, the measure would require that a qualified monitor oversee the installation of the fencing and that the monitor conduct site inspections throughout the construction process to ensure the integrity of the exclusionary fencing. Additional details regarding impacts to water quality and drainage patterns on-site are provided in Section 3.10, Hydrology and Water Quality, of this document.

(7) Nesting Birds

(a) Privately Owned Land/USFS-Owned Land

The project site provides habitat for several native bird species within both the privately owned and USFS owned portions of the project site. Disturbance to nesting birds during the nesting season (approximately mid-February to the end of August) would be a violation of the Migratory Bird Treaty Act of 1918. Nests and eggs of these species are also protected under Fish and Game Code Section 3503. The project site has the potential to support nesting birds due to the presence of trees and shrubs. Therefore, since the removal of vegetation could result in a significant impact with regard to nesting birds, a mitigation measure is provided to ensure the protection of nesting birds if vegetation removal were to occur during the nesting season. With implementation of the mitigation measure, impacts related to nesting birds would be reduced to a level of less than significant.

(8) Jurisdictional Trees

(a) Privately Owned Land

Jurisdictional trees are discussed in detail in the Initial Study which is included in Appendix A of this document. The Town of Mammoth Lakes may warrant replacement of trees if impacted during construction or operation. According to the *Design Guidelines for the Town of Mammoth Lakes* (Section 5.0, Landscape and Public Space Guidelines, 5.1, Objective), each development application shall evaluate all existing trees on-site greater than six inches in diameter at shoulder height, and substantiate proposed removal to the Town. Project development will result in the removal of a few immature lodgepole and Jeffrey pine, and a small stand of quaking aspen which may be jurisdictional. Consistency with local policies ordinances would reduce such impacts to a less than significant level.

In addition, project development will result in the removal of a few arroyo willow shrubs adjacent to the stand of quaking aspen and a stand of narrow-leaf willow shrubs. The arroyo willow and narrow-leaf willow within the development footprint are better classified as shrubs due to their small stature; therefore, their removal will most likely not require a tree survey and preservation and replacement plan.

(b) USFS-Owned Land

Several mature Jeffrey pines, lodgepole pines, and arroyo willows are located within USFS land on-site. In addition, mature pines are located within developed areas surrounding the detention basins adjacent to Juniper Lodge. No tree removal immediately surrounding the detention basins is expected as a result of the proposed project; however, up to six mature tree removals are anticipated as part of the required backfill necessary to create a land bridge between the existing chair lift queuing area and the proposed western edge of the new skier plaza of Eagle Lodge. Trees within USFS land are not protected through any USFS regulations.

(9) Indirect Impacts

(a) Privately Owned Land/USFS-Owned Land

The potential for the proposed project to result in indirect impacts to biological resources as a result of construction activities and development of the site is evaluated with a focus on effects associated with drainage (increased urban run-off and pollutant concentration), lighting, noise, barriers, invasive species, introduced humans and pets, and hauling of material off-site. These areas with the potential to result in indirect effects on biological resources are each discussed below.

Drainage—In accordance with the National Pollutant Discharge Elimination System (NPDES) Program, the project would be required to prepare a SWPPP that would include construction related best management practices (BMPs), and the BMPs would ensure that storm water pollution is addressed through the operational life of the project through the incorporation of BMPs in the design of the development. Compliance with the SWPPP would result in a less than significant impact with regard to stormwater run-off. Additional details regarding impacts to water quality and drainage patterns on-site are provided in Section 3.10, Hydrology and Water Quality, of this document.

Lighting—Town Municipal Code Chapter 17.34, which was adopted in May 2003, regulates outdoor lighting and provides rules and regulations for outdoor lighting. This ordinance implements requirements to utilize the most effective design standards to reduce or eliminate glare, light trespass, and light pollution. These rules and regulations prevent nuisances caused by unnecessary light, protect the ability to view the night sky, phase out nonconforming fixtures, and promote energy conservation. This impact is considered less than significant with compliance with this municipal code.

Noise—Sources of urban noise (project construction, daily traffic) associated with the project would create a less than significant nuisance to surrounding wildlife resources due to the location of the project site almost entirely within existing development.

Invasives—According to the *Design Guidelines for the Town of Mammoth Lakes* (Section 5.0, Landscape and Public Space Guidelines, 5.2.5, Planting), drought tolerant plants native to the Mammoth Lakes area shall be used for landscaping to the maximum extent possible. In addition, non-invasive plant species shall be used. Furthermore, only native plants can be used for landscaping within the USFS owned portion of the site.⁴² This impact is considered less than significant with compliance with these design guidelines.

Addition of Humans and Pets—Indirect effects include trampling, trash, and mortality of wildlife by unleashed pets and human foot and vehicular traffic; however, due to the fact that the project site is almost completely surrounded by developed areas, this impact is considered less than significant.

Hauling of Material Off-Site - Improvements to and use of the proposed haul roads and storage areas by trucks has the potential to crush existing vegetation and result in increased road kill of animals. In addition, this element of the project has the potential to generate dust and result in the accumulation of dust on the surface of leaves of trees, shrubs and herbs. These indirect impacts, while potentially adverse, are not expected to be significant for several reasons,

⁴² *Personal communication with Mike Schlafmann, USFS, August 15, 2006.*

including: 1) the haul roads and storage sites are located within areas of existing disturbance, such as existing roads, existing ski runs, chair lift bases, and a gravel pit that are largely devoid of native vegetation; 2) no sensitive plant species are expected to be affected; 3) the habitat existing in these areas is disturbed and ruderal with low values and functions to wildlife; therefore, wildlife use is expected to be low; 4) no sensitive animals are expected to be affected; and 5) the duration of haul road use would be relatively short thereby preventing the accumulation of dust on vegetation to the point where it would be deleterious to plant life.

d. Mitigation Measures

Mitigation measures are recommended for those impacts determined to be significant to sensitive natural resources. Mitigation measures for impacts considered to be significant were developed in an effort to reduce such impacts to a level of insignificance, while at the same time allowing the project applicant an opportunity to realize development goals.

(1) Privately Owned Land/USFS-Owned Land

(a) Nesting Birds

BIO-1: The project applicant shall schedule construction, grading, and vegetation removal activities outside the nesting season is typically February 15–August 31 to the extent feasible to avoid the taking of migratory bird species. If initial vegetation removal occurs during the nesting season, all suitable habitat shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of vegetation clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet for raptors) shall be delineated, flagged, and avoided until the nesting cycle is complete as determined by the biological monitor or until construction, grading, and vegetation removal activities are completed (whichever comes first). The results of the monitoring shall be provided in writing by the biological monitor to the CDFG subsequent to the monitoring activities.

(b) Existing Jurisdictional Features

BIO-2 A qualified biological monitor shall oversee the installation of exclusionary fencing adjacent to the drainage located in close proximity to the northwestern boundary of the project site within USFS-owned land. The exclusionary fencing shall be installed prior to the commencement of construction in that area, shall remain in place during construction and shall be removed once construction disturbance has concluded. The exclusionary fencing shall be set back a minimum of 50-feet from the drainage and shall include 2-foot high pre-assembled silt fencing for erosion control as well as 4-foot high mesh orange construction fencing for visibility. The qualified monitor shall inspect

the fencing once a month while construction activities are occurring within the vicinity of the drainage and report any damage to the fencing. The construction contractor shall correct any damage to the exclusionary fencing immediately.

e. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulatory Alternative

Alternative 1 would include 35,000 square feet of commercial uses and a parking structure. The project footprint may be reduced and would not include grading around Chair 15 and the adjacent tent structure. This would result in similar impacts to the Proposed Project Alternative, with a reduction in impacts to big sagebrush scrub, Jeffrey pine forest, and ruderal plant communities as well as a reduction in impacts to developed areas.

f. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Alternative 2 would include a reduced intensity with lower building heights, but would include the same development footprint as the Proposed Project Alternative. Implementation of Alternative 2 would result in the same potential impacts as the Proposed Project Alternative.

g. Environmental Consequences of Alternative 3 – Alternative Design Alternative

Although Alternative 3 involves a different massing of the project (lowering a portion of the building and increasing the height of another to seven stories), Alternative 3 would include the same development footprint as the Proposed Project Alternative. Implementation of Alternative 3 would result in the same potential impacts as the Proposed Project Alternative.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Implementation of the No Action Alternative would avoid any impacts to biological resources within the project site.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.7 CULTURAL RESOURCES

This section discusses cultural and paleontological resources within the proposed project's Area of Potential Effect (APE), addressing existing conditions, applicable regulations, and the potential for significant impacts associated with the project. The APE for purposes of analyzing potential impacts on cultural and paleontological resources consists of the 5.85 acre project site. In order to avoid confusion with archaeological sites, in this section the project site will be referred to as the "project area." This discussion is based on an archival records search conducted at the Eastern Information Center, Department of Anthropology, University of California, Riverside (CHRIS-EIC), Native American Heritage Commission (NAHC) consultation, and archaeological field survey. A technical report prepared by PCR Services Corporation is provided in Appendix _ of this document.

Cultural resources include prehistoric resources, Native American resources, and historical-period resources. Prehistoric resources are physical properties resulting from human activities that predate written records and are generally identified as isolated finds or sites. Prehistoric resources can include village sites, temporary camps, lithic (stone tool) scatters, roasting pits/hearths, milling features, rock features, and burials.

Native American resources are sites, areas, and materials important to Native Americans for religious, spiritual, or traditional reasons. These resources may include villages, burials, rock art, rock features, or spring locations. Fundamental to Native American religions is the belief in the sacred character of physical places, such as mountain peaks, springs, or burials. Traditional rituals may also prescribe the use of particular native plants, animals, or minerals that may be found in certain locations. Developments that may affect sacred areas, their accessibility, or the availability of materials used in traditional practices are considered when identifying these resources.

Historic resources consist of physical properties, structures, or built items resulting from human activities after the time of written records. In North America, the historical-period is generally considered to be equivalent to the time period since European contact, beginning in a.d. 1492. Historic resources can include archaeological remains and architectural structures. Historic archaeological site types include town sites, homesteads, agricultural or ranching features, mining-related features, refuse concentrations, and features or artifacts associated with early military use of the land. Historic architectural resources can include houses, cabins, barns, lighthouses, early military structures, and local structures, such as missions, post offices, and meeting halls.

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints from a previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

The Initial Study for the project area determined that no historical structures or paleontological resources would be impacted by the proposed project actions. Therefore, the following sections cover the regulatory framework, methods, and findings pertaining to archaeological and Native American cultural resources.

3.7.1 REGULATORY FRAMEWORK

Numerous laws and regulations require federal, State, and local agencies to consider the effects a project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office and the Advisory Council on Historic Preservation). The National Historic Preservation Act (NHPA) of 1966, as amended; the California Environmental Quality Act (CEQA); and the California Register of Historical Resources, Public Resources Code (PRC) 5024, are the primary federal and State laws governing and affecting preservation of cultural resources of national, State, regional, and local significance. The applicable regulations are discussed below.

a. Federal Level

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the NHPA of 1966, as “an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation’s historic resources and to indicate what properties should be considered for protection from destruction or impairment.”⁵⁴ The National Register recognizes both historical-period and prehistoric archaeological properties that are significant at the national, state, and local levels. In the context of this project, which does not involve any historical-period structures, the following National Register criteria are given as the basis for evaluating archaeological resources.

⁵⁴ *Code of Federal Regulations (CFR), 36 Section 60.2.*

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria:⁵⁵

1. Are associated with events that have made a significant contribution to the broad patterns of our history;
2. Are associated with the lives of persons significant in our past;
3. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least fifty years old to be eligible for National Register listing.⁵⁶

In addition to meeting the criteria of significance, a property must have integrity. Integrity is defined as “the ability of a property to convey its significance.”⁵⁷ The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.⁵⁸ The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

b. State Level

The State implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP), as an

⁵⁵ U.S. Department of the Interior, National Park Service, *National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, DC: National Park Service, 1995).

⁵⁶ *Exceptional Significance as defined by National Register Criteria Consideration G: Properties That Have Achieved Significance Within the Past Fifty Years. National Register Bulletin: How to Apply the National Register Criteria for Evaluation* (Washington, DC: National Park Service, 1995).

⁵⁷ *National Register Bulletin 15*, p. 44.

⁵⁸ *Ibid.*

office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions.

(1) California Register of Historical Resources

The California Register of Historical Resources (California Register) is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."⁵⁹ The criteria for eligibility for the California Register are based upon National Register criteria.⁶⁰ Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.⁶¹

To be eligible for the California Register of Historical Resources, a prehistoric or historical-period property must be significant at the local, state, and/or federal level under one or more of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

⁵⁹ *California Public Resources Code § 5024.1(a).*

⁶⁰ *Ibid, § 5024.1(b).*

⁶¹ *Ibid, § 5024.1(d).*

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places.
- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5.⁶²
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

(2) California Environmental Quality Act

The CEQA is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological resources. CEQA is codified at Public Resources Code sec. 21000 et seq. As defined in Section 21083.2 of CEQA a “unique” archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.

⁶² *Those properties identified as eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, and/or a local jurisdiction register.*

- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, the *State CEQA Guidelines* recognize that certain historical resources may also have significance. The Guidelines recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *State CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *State CEQA Guidelines*, then the site is to be treated in accordance with the provisions of CEQA Section 21083, which is a unique archaeological resource. The *State CEQA Guidelines* note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (*State CEQA Guidelines* Section 15064.5(c)(4)).

(3) SB 18

Senate Bill 18, hereafter referred to as SB 18, is State legislation enacted for the purpose of establishing meaningful consultation between California Native American tribal governments and California local governments at the earliest possible point in local government land use planning. The objective of the consultation is to identify and allow careful consideration of important Native American places, including archaeological, cultural, spiritual, and ceremonial places, in the planning process at the government-to-government level. The circumstances and timeframes of consultation are as follows:

- Prior to the adoption or any amendment of a city or county's general plan, proposed on or after March 1, 2005, the city or county shall conduct consultations with California Native American tribes that are on the contact lists maintained by the Native American Heritage Commission [NAHC] for the purpose of preserving or

mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that are located within the city or county's jurisdiction. Tribes have 90 days from the date they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code §65352.3).

- Prior to the adoption or substantial amendment of a general plan or specific plan, a local government must refer the proposed action to those tribes that are on the NAHC contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45 day comment period (Government Code §65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
- Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code §65092).

The locations and characteristics of the Native American places considered during the SB 18 consultation process are protected, as follows:

- Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Section 65040.2, the city or county shall protect the confidentiality of information concerning the specific identity, location, character, and use of those places, features, and objects (Government Code §65352.3 (b)).

The SB 18 consultation process is considered complete when the proposed plan amendment is adopted. However, if sensitive Native American places will be affected by the plan amendments, consultation may continue in order to ensure protection or management of those places.

b. Local Level

Cultural resources within the jurisdiction of the Town of Mammoth Lakes are subject to documentation and subsequent planning and preservation consideration.

(1) Town of Mammoth Lakes Adopted General Plan (1987)

The objectives of the cultural resource provisions of the Town's adopted General Plan (1987) are to conserve the historical and scientific qualities of the resources, which include

historical and archaeological resources, and to promote heritage tourism. Specific goals for management of cultural resources include the following directives:

1. To attempt to locate and record all known archaeological and historic resources of Mammoth Lakes and the adjacent areas.
2. To preserve, interpret and, where feasible, make accessible to the public archaeological and historic resources of Mammoth Lakes and adjacent areas.
3. To preserve archaeological and historic sites for present and future scientific research and educational programs.

Policies in support of these goals include the following:

1. Comprehensive studies and inventories of the Mammoth Lakes area archaeological and historic sites should be supported by the Town in coordination with the Southern Mono County Historic Society to identify undiscovered sites.
2. An archaeological and historic site survey shall be conducted for environmental impact reports whenever a critical site(s) might exist within a project area and to the maximum practicable extent any discovered site shall be preserved or treated in accordance with the recommendations in the survey report.
3. The Town shall strive to ensure that historic and archaeological sites are available to residents and visitors by: 1) establishing funding for historic and archaeological preservation through state and federal grants, private trusts, and donations, 2) actively promoting the Town's cultural resources in cooperation with the Mammoth Lakes, Resort Association and Historic Society, and 3) encouraging the provision of publications about and tours of the sites.
4. Primary (1) archaeological and historic sites should be protected through: 1) the adoption of an ordinance designed to protect primary sites and where necessary, provide for the purchase of significant sites, and 2) the obtaining of state and/or national register status where appropriate.

(2) The Town of Mammoth Lakes Draft General Plan (Update 2005)

- L.U.3.a. The Town shall develop and maintain a cultural resources database that includes data regarding historic and archaeological resources within the Planning Area as that information is developed through project reviews or other archaeological/historical surveys. The database shall be used to ensure

the protection and preservation of historic and archaeological resources within the Planning Area.

3.7.2 AFFECTED ENVIRONMENT

The affected environment in the case of cultural resources is the physical remains of past human occupation. Current evidence indicates that humans began to live in western North America by approximately 13,000 years ago. Because of this great temporal span, and the potential uniqueness of archaeological materials, which are the traces of past human behavior, the effects of a project on the cultural resource environment can be large, even if the geographic extent of the project is relatively small. The following summary of human prehistory and history in the region surrounding the project area is given to provide a context for evaluating the potential effects of the proposed project on project area cultural resources.

a. Paleoindian Period (ca. 13,000 to 7,000 years before present [YBP])

The first people in California may have been among the first people in North America. Recent research at the Monte Verde site in Chile has demonstrated human presence in the Americas by approximately 12,500 years ago, and challenged the established model of initial overland migration from Siberia through western Canada into the Great Plains at the end of the last Ice Age. Initial migration down the western coast of North America, including coastal California, now appears to be a more likely scenario (Surovell 2000). One of the earliest radiocarbon dates from North America come from the Arlington Springs Woman site on Santa Rosa Island, in southern California. The human remains from this site have been dated to approximately 13,000 YBP (Dr. John Johnson, personal communication, May 12, 2005).

The rate of movement from the coast to inland California locations such as the Eagle Lodge project area is not known (see Rockman 2003), but may have been relatively rapid. Many early California sites, characterized as Late Paleoindian/Early Archaic period, are located near pluvial desert valley lakes formed by glacial meltwaters that are now evaporated or much reduced in size (Moratto 1984). Lakeshore occupation sites often include artifacts such as large projectile points (e.g., Lake Mohave), flaked stone debitage, and fire-affected rock concentrations.

Lifeways during the Paleoindian Period were characterized by highly mobile hunting and gathering. Prey included megafauna such as mammoth and technology included a distinctive flaked stone toolkit that has been identified across much of North America and into Central America. The megafauna went extinct during a warming trend that began approximately 10,000 years ago, and both the extinction and climatic change (which included warmer temperatures in desert valleys and reduced precipitation in mountain areas) were factors in widespread cultural

change. Lifeways continued to be organized around hunting and gathering, but the resource base expanded and used a wider range of plant and game resources. Technological traditions also became more localized. This constellation of characteristics has been given the name “Archaic” and it was the most enduring of cultural adaptations to the North American environment.

b. Early Archaic (7,000-4,000 YBP)

The Early Archaic in the Mammoth Lakes region is known as the Little Lake Phase, dating from ca. 7,500 to 3,150 YBP. Between 7,500 and 5,500 YBP the period is not as well defined for the rest of the Western Great Basin. The climate in the middle Holocene was generally hot and dry. During this time, people used base camps adjacent to rivers, and used temporary task-based camps at higher altitudes on a seasonal basis. These lithic scatters higher than 6,000 feet above mean sea level are thought to be hunting camps. Diagnostic tools of the Early Archaic include Pinto and Little Lake series projectile points. The Early Archaic economy was still organized around hunting of large game.

c. Middle Archaic (4,000-1,500 YBP)

Bettinger and Taylor (1974) refer to the Middle Archaic as the Newberry Phase (3,150-1,350 YBP) in the southern section of the Eastern Sierra Front. The Middle Archaic is characterized by a transition from the Early Archaic emphasis based on hunting to a more diversified subsistence base that included the exploitation of plant and small animal resources. Grinding stones appear in the archaeological record for the first time in the region. This is consistent with the archaeological remains recovered from Mammoth Creek Cave and Hot Creek Shelters. Large bifaces were fashioned to export raw material. Diagnostic artifact types include Elko and Humboldt series dart points. Site types include quarries, multipurpose camps located in upland valleys, and seed camps located near springs and creeks. Base camps contained features such as pithouses, storage areas, and burials. Seasonal camps were often reoccupied year after year. Kobari and others (1980) suggest that high altitude resources were also exploited as hunting camps were located at high elevations, such as the Casa Diablo and Long Valley Caldera.

d. Late Archaic (1,500-400 YBP)

The Late Archaic in the region is subdivided into the Haiwee Phase (1,350 to 650 YBP) and the Marana Phase (650 YBP to EuroAmerican contact). During this time, a wide range of resources and ecozones were exploited. There was an increased emphasis on plant resources, and small game hunting replaced large game hunting. There were many technological changes during the Late Archaic. For example, the bow and arrow replaced the atlatl and darts. Diagnostic artifacts include Rose Spring, Eastgate, and Desert Side-Notched projectile points

and brownware ceramics (after 900 YBP). Rosegate projectile points are characteristic of the Haiwee Phase, while small Desert Side-Notched and Cottonwood arrow points, and brownware ceramics define the Marana. Steatite disk beads are also common. Obsidian trade was thought to be east-west from Mono Lake and Long Valley Caldera over the Sierra Nevada. As the climate again oscillated to a warmer and drier regime, the area also experienced significant human population increase. With the shift to dryer conditions came a shift to piñon exploitation. Higher elevations continued to be exploited at this time (Bettinger 1977). After 750 YBP, wild crop irrigation and lowland base camps were common. Food processing implements such as flat slab schist milling stones, milling slicks, and bedrock mortars were first used extensively during the Late Archaic. The Marana Phase sites are thought to represent Owens Valley Paiute pre-contact sites, as the Owens Valley Paiute were the occupants of the region at the time of contact.

e. Ethnographic Context

The following ethnographic summary of the Owens Valley Paiute is derived in part from the Cultural Resources section of Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes General Plan Update (Town of Mammoth Lakes 2005). In addition, Sven Liljeblad and Catherine S. Fowler (1986) provide a comprehensive synthesis of the Owens Valley Paiute.

Traditionally, groups of Owens Valley Paiute have occupied an area from the Town to approximately 60 miles to the east and 100 miles to the south. A ten to 15 mile-wide band of land immediately north-northeast of the Town was jointly used by Owens Valley Paiute and Northern Paiute groups from Mono Lake. This territory includes all of Owens Valley, Round Valley, Long Valley, Fish Lake Valley, and Deep Springs Valley. While both Paiute groups speak Western Numic languages, the Northern Paiute speak Northern Paiute and the Owens Valley Paiute speak Owens Valley Paiute (Nancy Peterson Walter 2005). Other neighboring groups, on the west side of the Sierra Nevada (the Monache) and south of the Town on both flanks of the mountains (Monache and Owens Valley Paiute) speak other dialects of Mono and share many cultural bonds.

The Owens Valley Paiute occupied the Owens Valley on a year-round basis with many semi-sedentary settlements located on major rivers and streams along the west side of the valley. Closer to the Town, in both Long Valley and in the Mammoth Basin, the pre-contact and historic use of the area by the Owens Valley Native American groups has been vaguely documented. However, according to Wally Woolfenden, the ethnographic notes of F.S. Hules and F.J. Essene from the 1930s, and oral interviews of local people from the 1970s clearly document the year-round occupation of Long Valley by the Long Valley Paiute (a subgroup of the Owens Valley Paiute), during the 1800s and 1900s. Jeff Burton cites the work of Emma Lou Davis, Matthew Hall, E.W. Gifford, and Helen Doyle in suggesting that Long Valley included an indigenous population of Northern Paiute in historic times, and provided resources and refuge on an

occasional basis to Northern Paiute from Mono Lake, to Monache and Miwok from the west side of the Sierra, and to surrounding Mono-speaking groups of Paiute from Benton, Round Valley, and Owens Valley.

In contrast to the Owens Valley Paiute, the Long Valley Paiute were very mobile in historic times, constantly moving in search of food resources and often gathering resources beyond Long Valley. Their movements included frequent trips over the Sierra crest, through Mammoth Pass, in order to collect acorns and to fish and hunt in the San Joaquin River drainage, and area within North Fork Mono Territory.

In the vicinity of Mammoth Lakes, Mammoth Mountain is reported by Julian Steward as being a scared place as it stands on the border between the Monache (western Mono) and the Owens Valley Paiute (eastern Mono), and is considered to be the place of origin in all Mono-speakers' traditional myths. The actual locations of human origin there are marked by particular geographic features. Elsewhere in Mammoth Basin, ethnographic use by Long Valley Paiute and others is assumed to be seasonal rather than year round.

Extensive trading with their neighbors was done by Owens Valley Paiute groups in order to acquire additional foods as well as ornaments, money, and other commodities. Owens Valley Paiute traded salt, piñon pine nuts, seeds, obsidian, sinew-backed bows, rabbit skin blankets, deerskins, moccasins, mountain sheepskin, fox skin leggings, balls of tobacco, baskets, basketry water bottles waterproofed with pitch, wooden hot rock lifters, and red and white pigments, in exchange for shell money (e.g., disc beads, tubular clam beads, and more recently, glass beads), acorns and acorn meal, finely-constructed Yokuts baskets, cane for arrows, manzanita berries, squaw berries, and elderberries from the Monache. The Mono Paiute traded salt, piñon pine nuts, piagi (i.e., Pandora moth larvae), brine fly larvae, rabbit skin blankets, baskets, pumice stones, and red and white pigments to the Sierra Miwok, in exchange for shell money, acorns, baskets, arrows, a fungus used in paints, manzanita berries, elderberries, and squaw berries.

In Owens Valley, the population was sedentary, with year-round occupation in permanent villages and short-term visits to temporary camps for resource procurement. Leadership was hereditary, and headmen were responsible for organizing communal work projects and festivals that may have served to redistribute resource surpluses as well as to fulfill other social functions. As for the other groups using Long Valley, the Monache and the Southern Sierra Miwok groups were probably similar in their social organization to the Owens Valley Paiute, with at least some hereditary rulers and semi-permanent villages. Some researchers have postulated that any indigenous Long Valley groups that may have existed would have followed a pattern closer to that of the Mono Lake Paiute (and other Great Basin groups) than that of Owens Valley Paiute, due to similarities in environmental constraints. However, Long Valley residents may have been closely tied to the Owens Valley Paiute through kinship and trade.

Long Valley offered a variety of food resources during snow-free months. In the spring, Tui chub, speckled dace, and Owens sucker may have been dished from creeks, while roots, wild onions and greens along creeks and meadows might have replenished dwindling winter stores. Small game, deer, and antelope could have been hunted nearby. In the summer, grass seeds may have been collected from meadows and drier upland areas. Fall subsistence activities of both the Mono Lake and Owens Valley Paiute revolved around the collection of piñon. Piagi are another food resource available every two years in the Jeffery pine forests. Piagi were collected as they descended the Jeffery pine trees during mid to late summer. Nancy Peterson Walter, a local ethnologist, has extensive knowledge of the Owens Valley Paiute exploitation of piagi (Fowler and Walter 1985). Also, there are several recorded archaeological sites in the region that are associated with piagi exploitation (Weaver and Basgall 1986).

Much of the trade and travel likely occurred during the summer months, when the high Sierra passes were free of deep snow. Inter- and intra-regional trade may have had extensive ramifications for subsistence and settlement systems of the Owens Valley and Long Valley areas. It is proposed that an elaborate exchange system might account for the relatively complex sociopolitical organization of the Owens Valley Paiute.

f. Environmental Context

As described above, human occupation of the region surrounding the project area has a time depth of approximately 10,000 years. The environment 10,000 years ago was at the end stages of the last Ice Age. Therefore, all sediments younger than the glacial period have the potential to contain traces of human activity, that is- cultural resources.

Investigations at archaeological site CA-MNO-1529, located northeast of the project area, identified three artifact-bearing strata overlying cemented glacial deposits. These strata included a thin (3-5 centimeters) upper humus/loam layer, derived from decomposition of organic duff and roots, a thicker (30-60 centimeter) sandy loam layer, and an unsorted loose glacial till-gravel layer that measured 30-50 centimeters or thicker (bottom not reached in some excavations). The sandy loam layer had the highest artifact content and largest artifact size. It was described as a colluvial layer of “medium brown, unbedded deposit of sand to silt-size particles intermixed with volcanic ash/pumice gravels and obsidian blast” (Basgall 1984:10). Similar artifact-bearing strata have been identified at nearby sites CA-MNO-529, located east of the project area, and sites CA-MNO-714 and CA-MNO-561, located in the Long Valley-Mammoth Mountain region to the west of the project area. Artifact density and size was lower in the loose glacial till-gravel layer than in the sandy layer and both decreased with depth. These characteristics suggest that some of the artifacts in this layer may be “drift and have been introduced into the layer from the sandy layer through natural processes such as movement of ground water and freeze-thaw action. No artifacts were identified in the cemented glacial deposits.

Results of the geotechnical study for the proposed action indicate that deposits comparable to the artifact-bearing sandy loam colluvial and unconsolidated glacial till deposit layers identified at site CA-MNO-1529 are present at depth in the project area. Coring determined that the upper four feet of sediment below the modern ground surface of the project area consists of undocumented fill (i.e., introduced sediments). This fill overlies a combination of alluvium, which is similar to the description of the sandy loam layer provided by Basgall (1984:10-16), and glacial till deposits. The alluvial layer is approximately 6 feet deep in the project area. Variable glacial deposits underlie the alluvial layer to the base of the test boring holes.

3.7.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

In accordance with Appendix G of the *CEQA Guidelines* the project would have a significant effect if it would:

- Cause a substantial adverse change in the significance of a historical resource [inclusive of archaeological resources] which is either listed or eligible for listing on the National Register of Historic Places, the California Register of Historic Resources, or a local register of historic resources.
- Cause a substantial adverse change in the significance of a unique archaeological resources (i.e., an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it contains information needed to answer important scientific research questions, has a special and particular quality such as being the oldest or best available example of its type, or is directly associated with a scientifically recognized important prehistoric or historic event or person).

(1) Native American Resources

Project impacts on Native American resources would be considered significant if the project would:

- Result in physical demolition, destruction, relocation, or alteration of an important Native American Resource or its immediate surroundings such that its significance would be materially impaired. A resource is “materially impaired” if those physical characteristics that convey its religious, spiritual or traditional significance are

demolished or materially altered. Native American resources include but are not necessarily limited to villages, burials, rock art, rock features, or spring locations.

- Disturb any human remains, including those interred outside of formal cemeteries.

b. Methodology

The methods described in the following section were used to investigate archaeological and Native American cultural resources in the project area. They included a cultural resources record search, Native American consultation, and an archaeological pedestrian survey.

(1) Cultural Resource Records Search

The primary cultural resource record search was conducted at the California Historical Resources Information System Eastern Information Center located at the Department of Anthropology, University of California, Riverside (CHRIS-EIC) on September 20, 2005, by CHRIS-EIC personnel. This records search included an examination of previous survey coverage and reports, historic maps, and known cultural resources within a half-mile radius of the project site. Other sources that were reviewed included the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historic Places (California Register), the National Register of Historic Places (National Register), and the California State Historic Resources Inventory (HRI). PCR personnel also contacted the United States Forest Service (USFS) (Inyo National Forest) regarding any cultural resource studies or recorded cultural resources within the project area.

(2) Native American Consultation

A Sacred Lands Search for the Eagle Lodge project area was requested by PCR from the Native American Heritage Commission (NAHC) in Sacramento on September 15, 2005. The NAHC replied with an updated list of individuals and organizations that might have knowledge of sacred lands in the area in February 2006. PCR sent letters describing the proposed project to the persons on the list requesting input on February 16, 2006. An SB 18 consultation list was requested from the NAHC on March 20, 2006.

c. Archaeological Pedestrian Survey

Fieldwork for the cultural resources investigation consisted of intensive pedestrian surface survey of the project area. The survey was conducted by PCR on September 23, 2005. At the time of survey, the project boundary had only been approximately defined by the Town of Mammoth Lakes and the USFS. The PCR archaeologist surveyed within the approximate

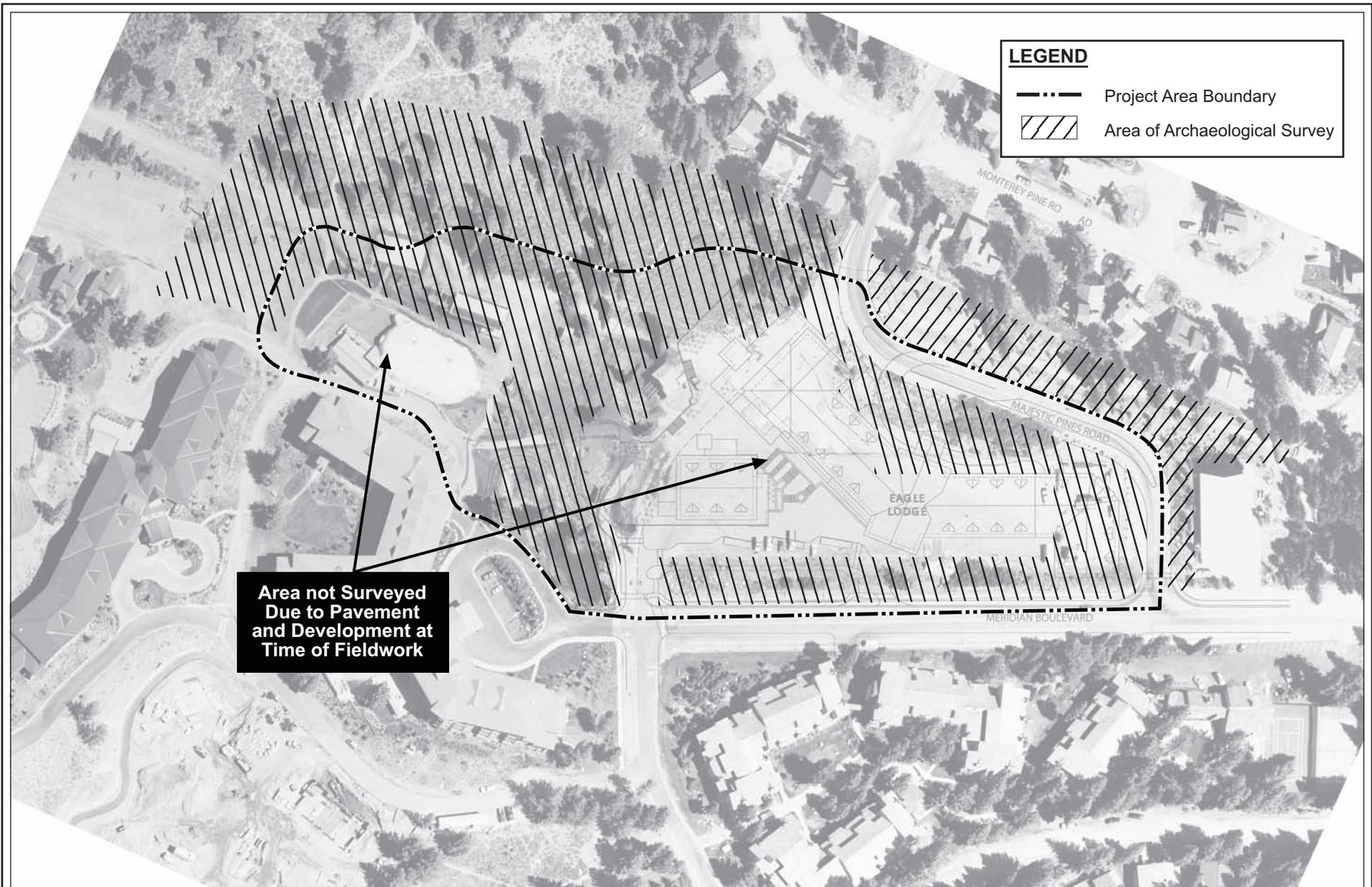
project site boundary and beyond the current western project site boundary in the vicinity of the Chair 15 ski lift. The area surveyed in relation to the current project boundary is shown in Figure 20 on page 300.

The exposed ground surface was inspected for prehistoric and historical-period artifacts and features. Due to the developed nature of much of the project area, less than half of the surface of the project area could be visually inspected. All unpaved portions of the project area were walked over in a pattern of transects spaced not more than 15 meters apart. These included the unpaved sections of Lot 1, Lots 5-7, and Lot 87, the landscaped medians that surround the parking lot, and the unpaved area between the parking lot and the Chair 15 ski lift. The landscaped medians contain large granite boulders; these boulders were examined for cultural features such as milling slicks and cupules. Photographs of the project site were taken and disturbances to the ground surface were noted.

(1) Cultural Resource Investigation Results

(a) Cultural Resource Records Searches

Record search information indicates that there has been a substantial amount of cultural resource activity in the vicinity of the project area, with at least 22 previous cultural resource studies within a one-mile radius of the project area that have identified at least 29 cultural resource properties. Only one previous survey has covered a portion of the project area, however, and no sites have been previously identified within the project boundaries. This previous survey, on record with the US Forest Service, was conducted in 1981 as part of the Camp High Sierra Land Exchange, and identified CA-MNO-1529, a prehistoric archaeological site with an obsidian flaked stone scatter and bedrock milling features (Taylor 1981), approximately 900 feet (275 m) outside of the current project boundaries upslope from Chair 15. CA-MNO-1529 was excavated by a University of California, Davis Field Class in Archaeology in 1982. Obsidian hydration dates suggest an occupation range that may have extended from the Little Lake Phase of the Early Archaic (7,000 to 3,150 years ago) to the Haiwee Phase of the Late Archaic (1,350 to 650 years ago), with intensification of occupation during the Haiwee



Scale not provided
Source: Gensler, 2006

Figure 20
Area Surveyed in Relation
to the Project Boundary

Phase (Basgall 1984). Despite this level of work, the site has not been formally evaluated with respect to the National Register and California Register. An EA prepared for the current project in 1997 (USDA-FS 1997) stated that the current project area was completely surveyed in conjunction with the Camp High Sierra Land Exchange, and that all potentially significant cultural resources were mitigated.

(2) Native American Consultation

To date, none of the Native American groups contacted with regard to this project have identified any locations or areas of concern that will be affected by the proposed project. Five Native American organizations were identified by the NAHC as having affiliation with the project site. Letters describing the proposed development and a map of the project site were mailed to these organizations on April 20, 2006 via certified mail. These organizations, including concerned tribes and other parties, had 90 days from receipt of the letter to request consultation in the planning process. Follow-up phone calls to letter recipients were made in the final week of the 90-day comment period to confirm receipt of the letters and to provide a chance for final comment.

(3) Cultural Resources

No cultural resources were observed on the ground surface of the project area or on the boulders in the landscaped medians. Ground surface visibility in the unpaved areas was good (i.e., 50-75 percent visible). A scatter of obsidian flakes was observed northwest of the current project area boundary, approximately 82 feet (25 m) upslope from the Chair 15 ski lift. This flake scatter is likely part of archaeological site CA-MNO-1529 that has eroded down slope.

d. Environmental Consequences of the Proposed Action

The proposed action has the potential to disturb buried cultural resources in the project area. As described above, the geotechnical study for the project determined that the stratigraphy of the project area consist of an upper four feet of undocumented fill over a combination of alluvium and glacial till deposits. It is unlikely that there are archaeological deposits within the glacial fill, as these likely predate the human occupation of the Mammoth Lakes area. However, several factors suggest that there may be intact archaeological deposits in the alluvium or at the contact of the glacial deposits and the alluvium. Foremost, the alluvial deposit described by the geotechnical study is similar to the artifact-bearing alluvial unit excavated at nearby site CA-MNO-1529, described in Basgall (1984), and other sites in the region, as described above. Other contributing factors include the relative proximity of the project area to prehistoric routes through the Sierras, particularly in relation to the obsidian source at Casa Diablo approximately 22 miles to the east-southeast (Bettinger, Basgall, and Delacorte 1983), the number of sites in a

one-mile radius of the project area indicated by the cultural resources records search, and the location of the project area at the base of a hill which can be conducive to the burial and preservation of archaeological materials. Therefore, there is potential for subsurface cultural deposits in the project area. As discussed further below, monitoring is recommended for all ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits related to the project in order to reduce the impact of the proposed action on previously undiscovered cultural resources in the project area.

The proposed action would not affect cultural resources on the surface of the project area. The project area has been extensively disturbed by the construction of the parking lot, medians, and the landscape features. Due to the developed and disturbed nature of the project area, less than half of the total project area could be visually inspected (see Figure 20). No archaeological or other cultural resources were identified on the visible surfaces. The potential for cultural resources remaining below current development would be addressed by the monitoring recommended for potential subsurface resources. The current standard for archaeological monitoring is a team of two monitors, one qualified archaeologist and one Native American monitor. At present, there is no legal requirement in California to include a Native American monitor in a monitoring program. The NAHC recommends, however, that if a lead agency prefers not to include a Native American monitor, the lead agency notify or otherwise clear this decision with all of the Native American groups identified by the NAHC as having affiliation with the project area.

A temporary dirt haul route and storage area that extends west of the project area toward the Pumpkin Ski Run is not anticipated to affect any cultural resources. The haul route would be confined to a pre-existing road in the vicinity of site CA-MNO-1529. Outside of the site vicinity, the haul route would follow the graded route of a pre-established ski run. The haul route-ski run route was surveyed pursuant to the 1997 Environmental Assessment conducted for the Mammoth Mountain Base VII Expansion and no sites were found on or in the near vicinity of the route.⁶³ Consultation with the USFS has indicated that activity planned for the haul route and storage area is not expected to result in notable ground disturbance and would not break previously undisturbed ground.

(1) Native American Resources

No areas containing human remains have been documented at the CHRIS-EIC in the project area or within a one-mile radius of the project area. If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety

⁶³ *LSA Associates, Inc. Mammoth Mountain Ski Area, Base VII Expansion Project, Environmental Assessment, February, 1997.*

Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

Responses to date to the NAHC Sacred Lands Search indicate that there are no sensitive Native American cultural resources in the project area.

e. Mitigation Measures

The following mitigation measures are recommended to ensure that potential impacts to buried archaeological and Native American resources that may remain in the alluvial deposits or at the contact between the alluvial deposits and underlying glacial deposits are reduced to a less than significant level:

CUL-1: A qualified archaeological monitor shall be present during the ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits in the project area. Due to the potential for subsurface cultural deposits, a culturally affiliated Native American monitor with experience in cultural resources also shall monitor these ground-disturbing activities. In the event that the lead agency determines that it will not include a Native American monitor in the archaeological monitoring process, this decision shall be sent in writing to an updated list of all Native American individuals and organizations identified by the NAHC as having affiliation with the project area. These individuals and organizations shall be provided with a comment period of not less than four weeks on this decision. If this course of action is taken, affiliated Native American groups shall also be notified if sensitive deposits or cultural materials are encountered. No monitor is required for construction-related activities in the lower glacial deposits.

If cultural resources are identified, the archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment. Treatment will include the Town's goals of preservation where practicable and public interpretation of historic and archaeological resources. The archaeologist shall prepare a final report about the monitoring to be filed with the Project Applicant, Mono County, and the CHRIS-EIC, as required by the State Historic Preservation Officer (SHPO). The report shall include documentation and interpretation of resources recovered, if any. Interpretation will include evaluation of eligibility of the resources with

respect to the National Register and California Register. The report shall also include all specialists' reports as appendices. The lead agency shall designate repositories in the event that significant resources are recovered.

CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

f. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulations Alternative

Alternative 1 proposes to remove the residential component of the project, raise the height of the commercial structure, and slightly increase the number of parking spaces. The footprint of this Alternative is anticipated to be somewhat smaller than the proposed project. As this Alternative would require excavation more than three feet below the present ground surface, previously undiscovered archaeological deposits may be encountered and disturbed. Mitigation Measures Cult-1 and Cult-2 are recommended for the footprint of Alternative 1 and any associated ground disturbance extending more than three feet below the present ground surface.

g. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Alternative 2 proposes to lower the height of the commercial structures and consequently reduce commercial usage of the property. The footprint of this Alternative is anticipated to be somewhat smaller than the Proposed Action. As this Alternative would require excavation more than three feet below the present ground surface, previously undiscovered archaeological deposits may be encountered and disturbed. Mitigation Measures Cult-1 and Cult-2 are recommended for the footprint of Alternative 2 and any associated ground disturbance extending more than three feet below the present ground surface.

h. Environmental Consequences of Alternative 3 – Alternate Design Alternative

Alternative 3 proposes to vary the height and layout of the developed area from the design of the proposed project. The footprint of this Alternative would be the same as the Proposed Action. As this Alternative would require excavation more than three feet below the present ground surface, previously undiscovered archaeological deposits may be encountered

and disturbed. Mitigation Measures Cult-1 and Cult-2 are recommended for the footprint of Alternative 3 and any associated ground disturbance extending more than three feet below the present ground surface.

i. Environmental Consequences of Alternative 4 - No Action Alternative

No archaeological resources have been identified on the surface of the project area. If no actions are taken on the surface of the project area, no cultural resources would be disturbed. Because of the potential for subsurface cultural deposits demonstrated by excavations at nearby site CA-MNO-1529 (described above), monitoring is recommended for any future ground-disturbing activity on the project site that would extend to depths greater than three feet below the current ground surface.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.8 EMPLOYMENT, POPULATION, AND HOUSING

This section assesses the effects of project implementation as it relates to employment, population, and housing within a local and regional context. The geographic areas of analyses include the Town of Mammoth Lakes and Mono County. The California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) focus on the physical effects of a project. Generally, economic and social changes resulting from a project are not treated as physical effects on the environment. Employment, population, and housing impacts are typically economic or social in nature, although the analysis of such impacts often supports other impact analyses. The analysis identifies any potential physical changes that may be caused by employment, population, and/or housing impacts resulting from the project. Information contained in this section is based on the Town of Mammoth Lakes 2005 General Plan Update Draft Environmental Impact Report; data from the State of California Employment Development Department (Labor Market Division); data from the U.S. Census Bureau; and the 2003 Housing Element of the Town's General Plan.

3.8.1 REGULATORY FRAMEWORK

As discussed in Section 3.2, Land Use, the project site consists of private and public lands, which together comprise approximately 8.67 acres. Since a portion of the project site is located within the Town of Mammoth Lakes, the project is subject to the goals and policies set forth in the 2003 Housing Element of the Town of Mammoth Lakes General Plan. Goals and policies from the Housing Element that are relevant to the proposed project are discussed in this section. In addition, the project site is located within the Juniper Springs Master Plan Area, and as such, is subject to the Juniper Ridge Master Plan with regard to affordable housing requirements. The project is also subject to the regulations regarding affordable housing that are contained in Title 17 of the Town Municipal Code.

The project site is also located on lands within the Inyo National Forest, which is administered by the USDA Forest Service. The Land and Resource Management Plan of the Inyo National Forest (the Forest Plan) provides management direction to protect the natural resources of the forest while administering the development of forest lands in way that is compatible with Forest Service goals and objectives. The MMSA Development Plan (the Development Plan) is the conceptual guide for buildout of MMSA's facilities. The Development Plan provides the foundation for the Forest Service Special Use Permit under which MMSA operates and applies only to lands administered by the Forest Service. Employee housing is

addressed in the Development Plan; however, the housing demand discussed is specific to the Minaret Facilities area, and as such, is not applicable to the project. Therefore, since both the Forest Plan and the Development Plan do not address residential populations, housing demand, or employment that is relative to the project site, these documents are not relevant to these analyses.

a. Town of Mammoth Lakes General Plan Housing Element (2003)

The Town of Mammoth Lakes General Plan, which was adopted in 1987, is intended to promote the public health, safety, and general welfare of the community. The General Plan comprises an Introduction and seven elements that each address particular issue areas. Applicable to the analysis contained within this section is the Housing Element of the General Plan. Under California law, the Housing Element of a General Plan must be updated every five years and is subject to mandatory review by the California Department of Housing and Community Development. The Town's Housing Element was updated and certified by the California Department of Housing and Community Development on December 29th 2003.

The Housing Element provides a comprehensive analysis of housing needs, including current population, housing stock characteristics, and employment. In addition, the Housing Element identifies market and governmental resources and constraints, and provides for a housing program that includes goals, policies, and implementation measures. The following are the goals and policies contained within the Housing Element of the Town's General Plan that are applicable to the proposed project:

Goal 1

To ensure the provision of a variety of housing types suitable to the needs of the different social and economic segments of Mammoth Lakes' population.

Goal 2

Housing programs and opportunities that maximize choice, and avoid discrimination based upon age, ethnic background, sex, marital status, handicaps, or family size.

Goal 3

Energy efficient structures and sites.

Policy 3.A.

The Town shall work to assure that all new development is energy efficient.

The Town is currently in the process of revising its General Plan. The 2005 Draft Updated General Plan maintains the same list of goals and policies for housing and, therefore, the list of goals and policies provided above would apply to the proposed project.

b. Juniper Ridge Master Plan

As indicated above, the project site is located in the Juniper Ridge Master Plan (the Master Plan) Area. As discussed in more detail in Section 3.2, Land Use, the Master Plan primarily establishes permitted uses and development standards for proposed projects within the Master Plan Area. The Master Plan also recognizes a need for employee housing and, as such, requires that project applicants submit an employee housing plan and program for approval by the Town Planning Commission. The plan and program must provide for the needs of full time equivalent employees (FTEE) that would be generated by the project, such that employees must be housed either on site or at a location off site. The Town Council would review and grant final approval of the plan and program, and a certificate of occupancy for the project would be issued only after the required employee housing is established.

c. Town Municipal Code

In October 2001, the Town Council adopted Section 17.36, Affordable Housing Mitigation Regulations (AHMR), of the Zoning Code. AHMR addresses the impacts of new development on the supply of affordable housing.⁶⁴ Under the AHMR, new developments must provide housing for the estimated number of employees that earn below median income levels, or 58.5% of its full time equivalent employees (FTEE). In addition, the AHMR requires that the developer submit a Housing Mitigation Development Plan (HMDP). The HMDP must contain the following, which is subject to approval by the Town:

- The housing requirements generated by the project;
- The method or combination of methods by which housing is to be mitigated;
- The timetable for the mitigation;
- A description of the land proposed and the type, number and unit size of the proposed housing plus any management/operational plans;
- Preliminary plans showing the site and floor plans;

⁶⁴ “Affordable housing” is defined by Section 17.36.020 of the Zoning Code as “housing that is restricted as to rental rate or sales price based upon household income and size criteria as defined by the state of California or the town of Mammoth Lakes.”

- The proposed rent or sales prices; and
- A statement as to the way that the HMDP meets the intent of these regulations.

Section 17.36.030 of the Zoning Code provides a formula that is used to determine the standard number of FTEE by land use type based on square footage for particular uses. The formula is based on the land use category's pro rata share of the aggregate induced demand for employment in town, rather than direct employee generation. Section 17.36.030D indicates the provision rate for mitigating the employee housing demands created by new development. All calculations are based upon one FTEE equaling a minimum of 250 square feet of living space. The total square footage is then converted to number of units or bedrooms.

d. Transient Occupancy Tax

An ordinance, Measure "T", approved in June 2006 set the transient occupancy tax rate at 13 percent, effective October 1, 2006. The tax is to be imposed on transient visitors to the Town and is to be collected at the time rent to a transient occupancy facility is due. The ordinance directs the Town to deposit transient occupancy tax revenues into the Town's General Fund for general government-related purposes.

3.8.2 AFFECTED ENVIRONMENT

a. Employment

In February 2006, the Town's estimated labor force totaled 5,700. By comparison, Mono County's labor force in February 2006 comprised approximately 9,540 people. As such, nearly 60% of the County's employment was based in the Town of Mammoth Lakes. Approximately 200, or 3.5%, of the Town's estimated labor force was unemployed in February 2006, while Mono County had an unemployment rate of 4%.⁶⁵

The Town's economy is largely based on its year-round tourism, and specifically its ski facilities and summer recreation activities. As shown in Table 51 on page 310, the majority of the Town's population is employed by the arts, entertainment, recreation and services sector, followed by education and health and social services. Historically, typical seasonal workers have been of college-age or early 20s, without families. Jobs that have been filled by these employees generally are service-related and low-paying, with the length of employment and

⁶⁵ *State of California Employment Development Department (Labor Market Division)*

Table 51**Town of Mammoth Lakes Employment by Industry
(2000)**

Industry Type	Number of Employees	Percent
Agriculture, forestry, fishing and hunting, and mining	40	0.9
Construction	350	8.1
Manufacturing	113	2.6
Wholesale trade	77	1.8
Retail trade	424	9.8
Transportation and warehousing, and utilities	60	1.4
Information	46	1.1
Finance, insurance, real estate, rental and leasing	166	10.8
Professional, scientific, management, administration	379	8.8
Education, health and social services	482	11.2
Arts, entertainment, recreation, and services	1,598	37.1
Other services	117	2.7
Public administration	161	3.7
TOTAL	4,013	100%

Source: Census Bureau (2000 Census, SF3:P49)

number of hours worked dependent upon timing and amount of snowfall. In warmer-weather months, these employees fill other positions within the Town, leave the area, or are unemployed.

Median per capita income for the Town was \$24,526 in 1999, according to the 2000 Census. Approximately 14.4%, or 1,018, individuals and 8.4%, or 134, families were below the poverty level. The median per capita income for Mono County in January 2002 was \$46,000.⁶⁶

Currently, there are 46 people employed during the peak winter season by the Little Eagle Base Lodge. The facility includes ticketing, a restaurant, a bar/coffee bar area, limited retail and administration of the base lodge. The facility is open only during peak winter season and, as such, provides seasonal employment opportunities. The restaurant is also used periodically during the summer and fall for special events.

b. Population

Due to its nature as a resort destination community, the Town characterizes population intensity by permanent residents as well as transient residents and visitors. As the Town is principally a tourism-based economy, resident populations fluctuate seasonally. According to

⁶⁶ *Town of Mammoth Lakes 2005 General Plan Update Draft EIR; Section 4.9, Population, Housing and Employment.*

the 2000 Census, there were 7,093 permanent residents living in the Town, which accounts for more than half of the 12,853 residents in Mono County (refer to Table 52, on page 312). Between 1990 and 2000, the Town's population grew by 48%. The population of Mono County, by comparison, grew slower, at a rate of approximately 29% between 1990 and 2000. The Town's resident population has increased by approximately 80% since 1985, and more than 48% since 1995. These increases are substantially greater than growth experienced by the State of California, which had a 13.8% increase in its overall population between 1990 and 2000.⁶⁷

According to Census estimates of population trends, approximately 7,259 people were residents of the Town in 2004, which represents a 2% growth in the permanent resident population since 2000. In contrast, the population of Mono County was estimated at 12,766 in 2004, which represents a decrease in the permanent population by 0.7%. The permanent resident population of the Town is anticipated to grow to 11,000 people by 2023, according to the 2003 Housing Element.

The Town's General Plan (1987) expresses population intensity as "persons at one time" (PAOT). In addition, the capacity of the Eagle Lodge facility is expressed as the Peak Design Capacity (PDC). PDC is the number of skiers that can be supported by the MMSA's ski lifts and trail system or the daily lift capacity.⁶⁸

The Town has estimated that the average peak PAOT in 2004 was 34,265, which represents the average winter Saturday.⁶⁹ Under the Town's 1987 General Plan, population at one time at buildout is estimated at 61,375 PAOT. Buildout under the 2005 Draft General Plan Update is estimated at 60,727 PAOT. With regard to PDC, MMSA currently accommodates more than 20,000 skiers, and has a capacity of 24,000 skiers. The PDC of Eagle Lodge is 5,960 persons.

c. Housing

There is no housing within the project site, which is currently developed with a surface parking lot. However, within the project area, Mammoth Vista I single family subdivision is located to the north of the project site and the Summit Condominiums are located to the south of

⁶⁷ *Ibid.*

⁶⁸ *The daily lift capacity is calculated as a product of the uphill lift capacity (vertical supply or VTF/day) of all lifts at the resort and the amount of vertical consumed by the average skier (vertical demand) on each lift.*

⁶⁹ *Town of Mammoth Lakes 2005 General Plan Update Draft EIR. To calculate PAOT, the Town used a person/unit occupancy, based upon the Census average of 2.4 people per household for all units occupied by permanent residents. A person/unit occupancy of 4.0 was applied to all remaining visitor, second home, and season resident units.*

Table 52**Town of Mammoth Lakes and Mono County Populations (1990-2004)**

	1990	2000	2004*
Town	4,785	7,093	7,259
County	9,956	12,853	12,766

* Projections provided by Census Bureau

Source: Census Bureau, 1990 and 2000.

the site across Meridian Boulevard. The Juniper Springs Lodge is located immediately to the west of the site and a multi-family residential development is located further west of the Juniper Springs Lodge.

As shown in Table 53 on page 313, there were an estimated 7,958 housing units in the Town in 2000, an increase of 856 units as compared to 7,102 housing units in 1990. This represents a 12% increase of the housing stock over a 10-year period. In Mono County in 2000, there were approximately 11,757 housing units, compared to 10,664 units in 1990, representing an approximate 10% increase over that decade.⁷⁰

Multi-family units are the Town's most prevalent housing type, as indicated in Table 53. From 1990 to 2000, apartments comprising 20 or more units increased more than any other housing type, with an 86% rate of growth. The majority of the Town's housing stock was built between 1970 and 1979, with 3,748 units constructed in that period. Only 115 units were built prior to 1950. Approximately 609 housing units, which represent 8% of the Town's housing stock, were built between 2000 and 2003.

Since the Town is a recreation destination, a majority of the housing units are not occupied year-round. Based on the 2000 Census, 4,579, or 57.5%, of the Town's total housing units were used for seasonal, recreational, or occasional use, while 2,814, or 35.4%, were occupied year-round. As shown in Table 54 on page 313, of the 2,814 year-round occupied units, approximately 52.8% were owner-occupied housing and 47.2% were renter-occupied housing. This represents a change in the balance of owner-occupied and rental housing. In comparison, there were more renters in 1990; of the 1,952 occupied housing units, 44% were owner-occupied and 56% were renter-occupied units. Families comprised nearly 55% of the Town's households in 2000.

⁷⁰ 1990 Census STF-1 data.

Table 53

Housing Units by Type (1990-2000)

Housing Unit Type	1990		2000		Change	
	Number	Percent	Number	Percent	Number	Percent
Single-Family Detached	1,671	23.5	2,122	26.7	451	27
Single-Family Attached	588	8.3	965	12.1	377	64
2 units	325	4.6	301	3.8	-24	-7
3-4 units	1,300	18.3	1,239	15.6	-61	-5
5-9 units	1,310	18.4	1,169	14.7	-141	-11
10-19 units	1,018	14.3	749	9.4	-269	-26
20+ units	655	9.2	1,220	15.3	565	86
Mobile Homes	177	2.5	183	2.3	6	3
Boat, RV, van, etc.	58	0.8	10	-0.1	-48	-83
TOTAL	7,102	100%	7,958	99.7%	856	12%

Source: Census Bureau (2000 Census, SF3:H30) and (1990 Census, SF:H20)

Table 54

Households by Tenure (1990-2000)

	1990		2000		Change	
	Number	Percent	Number	Percent	Number	Percent
Owner	858	44	1,485	53	627	73
Renter	1,094	56	1,329	47	235	22
TOTAL	1,952	100	2,814	100	862	44

Source: Census Bureau (2000 Census, SF3:H30)

Given the rising number of second homeowners in the Town, a survey was conducted in March and April 2005 in order to gauge the ways in which second homeownership affected the local economy. The survey found that second homeowner properties were occupied about 25.7 weeks on average, or 49% of the year. Second homeowner properties were used during the winter season for approximately 10 weeks on average, and during the summer for approximately 8 weeks. These properties were occupied for an average of 7.4 weeks during the spring and fall. In addition, between 45% and 51% of condo/townhouse owners reported using their property as a vacation rental, versus only 3% of single-family homeowners.⁷¹

⁷¹ Mammoth Lakes 2005 Second Homeowner Survey Results, August 2005.

Overall, increasing real estate values and escalating rents in the Town have made housing prohibitively expensive for both seasonal and year-round employees. As such, these employees have either relocated outside the Town to areas that are more affordable or have lived in overcrowded conditions.

With regard to overcrowding, according to the Town's Housing Element, 301 of the Town's 2,814 households, or approximately 11%, were living in overcrowded conditions in 2000.⁷² By comparison, the statewide average for overcrowding in 2000 was 15.2%. In 2000, MMSA employees had an average of 2.8 roommates, in contrast with the 2.3 roommates of the average Mammoth area employee.⁷³ Since the Census does not account for seasonal overcrowding, the number of overcrowded households in the Town may have been greater than the number represented. MMSA owns and operates units within the area on privately owned lands to address the housing need for seasonal employees. Specifically, MMSA owns properties containing up to 533 individual beds and leases properties containing an additional 114 beds, totaling 647 beds dedicated to the seasonal housing demand of MMSA.

In order to provide for a larger stock of workforce housing, in 2003 the Town established the Mammoth Lakes Housing, Inc., a private, non-profit organization.⁷⁴ The Town, MMSA, and Intrawest Corporation made initial start-up contributions to the organization.

As a result of the Town's initiatives to provide more affordable housing, more than 282 deed-restricted, affordable residential units were developed.⁷⁵ The total number of deed-restricted bedrooms (existing or planned) in the Town is approximately 572.⁷⁶ Section 17.36.020 of the Zoning Code defines deed restriction as "a recorded contract entered into between the town of Mammoth Lakes and the owner or purchaser of real property identifying the conditions of occupancy and resale."

⁷² *Town of Mammoth Lakes Housing Element, 2003. Overcrowded households are those with 1.01 or more persons per room, and severely overcrowded units are those with more than 1.5 persons per room.*

⁷³ *Town of Mammoth Lakes Housing Element, 2003. Census data may not reflect data specific to MMSA employees, as many ski area employees are not permanent residents of the Town.*

⁷⁴ <http://www.mammothlakeshousing.com/>

⁷⁵ *Town of Mammoth Lakes Housing Element, 2003.*

⁷⁶ *Town of Mammoth Lakes 2005 General Plan Update Environmental Impact Report.*

3.8.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Impacts to employment, population, and housing would be considered significant if:

- The project would induce substantial population growth directly or indirectly; or
- The project's construction or operation would substantially alter the location, distribution, density, or growth rate of employment, population, and/or housing planned for the area.

b. Methodology

The analysis contained in this section is based on data from the U.S. Census Bureau, the State of California Employment Development Department (Labor Market Division), the Town of Mammoth Lakes 2005 General Plan Update Draft Environmental Impact Report, and information provided by MMSA as part of the application materials. The analysis addresses the potential impacts of the proposed project relative to employment, population, and housing. The analysis is also based on a review of applicable planning documents, including the 2003 Housing Element of the Town's General Plan, the Juniper Ridge Master Plan, and the Town's Zoning Code. The analysis includes an evaluation of the project's consistency with the applicable policies and regulations described above.

For purposes of analysis, employment generated by the project is expressed in terms of full time equivalent employees, or FTEE. Section 17.36.020 of the Zoning Code defines FTEE as a full-time employee or combination of part-time employees. When an employee generation calculation results in seasonal or part-time employees, those employees are grouped together to form FTEEs. A full-time, year-round employee is equivalent to one FTEE, while part-time, year-round employees and full-time seasonal employees are equivalent to one-half FTEE. A part-time, seasonal employee is equivalent to one-quarter FTEE. See Table 55 on page 316 for a breakdown of how FTEE is calculated.

c. Environmental Consequences of the Proposed Action

(1) Construction

Construction employment opportunities are most often regional in nature, such that employees in the construction industry may work at different locations throughout a county, depending upon where the construction is located. These employees do not typically relocate

Table 55**Employee Generation by Use**

1. Multi-unit ^a and Single Family ^b Transient	.0005 per square feet
2. Commercial/Office Uses: Includes all non-residential except industrial.	.00042 FTEE per square feet
3. Industrial Uses: Includes all uses involving manufacturing, distribution and warehousing.	.00011 FTEE per square feet
4. Multi-unit non-transient: This category includes all attached dwelling units including deed restricted and market rate apartments and multi-family condominiums which prohibit transient rentals. This includes all multi-unit developments located within the Residential Multi-Family 1 zone and Affordable Housing zone and any other multi-unit development in town that prohibits transient rental.	Market Rate Units .00012 FTEE per square feet
	Rental Apartments and Deed Restricted Units 0 FTEE
5. Single-family non-transient. This category of land use encompasses all detached dwelling units located in the Town's Low Density Residential [LDR] land use designation and includes both the Rural Residential and Residential Single Family zones.	For that portion of the building area from:
	0-2,000 square feet, .00006 FTEE per square feet
	2,001-4,000 square feet, .00009 FTEE per square feet
	4,001-6,000 square feet, .00012 FTEE per square feet
	6,001-8,000 square feet, .00015 FTEE per square feet
	8,001 square feet and up, .00018 FTEE per square feet
	*Calculate the building square footage between 0 and 2,000 square feet at rate as shown. Then, for square footage exceeding 2000 square feet calculate at rates as shown. Continue until all square footage has been calculated. Add all lines for total.
6. Uses not listed.	To be determined by Community Development Director based upon comparisons with like businesses.

^a This category includes all attached dwelling units within the Resort, Specific Plan, Commercial General, Commercial Lodging and Residential Multi-family 2 zones which are either intended for transient occupancy or can be rented out on a nightly basis. These include all hotel, motel, fractional and resort condominium lodging as well as condominium units which are privately owned and can be rented out on a nightly basis.

^b This category of land use encompasses all detached dwelling units located within the Resort and Specific Plan zones which are permitted by Master Plan and/or Specific Plan conditions to be rented out on a nightly basis.

Source: Section 17.36.030, Town of Mammoth Lakes Zoning Code

closer to a construction site, as the length of time spent at a specific job site is limited. Construction employment associated with the project is anticipated to draw from the regional population. However, in the event that construction workers are drawn from outside Mono or Inyo Counties, a mitigation measure is recommended that would provide for the temporary housing of such employees. With the implementation of the mitigation measure, construction

employment at the project site would not substantially alter the location, distribution, density, or growth rate of construction employment in the Town or Mono County. Therefore, impacts associated with construction employment would be less than significant.

(2) Operation

(a) Employment and Population

The project would increase the recreational capacity of the area by providing a year-round resort facility that would offer a range of recreational and commercial opportunities for visitors. The project would provide food and beverage service, including a full-service restaurant, skier services, as well as other commercial uses, such as a day spa, convenience market, conference facilities, and a retail store. The project also would provide lodging facilities that would, under both options being considered, include associated concierge services.

The proposed recreational, commercial, and lodging facilities would generate service-related employment opportunities. The project would employ both part time and full time workers in shifts. While the facility would provide year round employment opportunities, the greater demand for employees would occur during the ski season. The highest number of employees on site would be expected to occur on Saturdays during the ski season. During an average peak Saturday, the number of employees on the site at a given time would likely range from a low of 29 to a high of approximately 176 employees. The peak employee generation would occur mid day, between 8:00 A.M. and 5:00 P.M. The number of employees during this time period would range from between 111 to 176, with the greatest number of employees working at the 10 A.M. and 11 A.M. shifts. A peak of 176 employees would represent a net increase of 130 employees under the project, compared with the 46 employees currently at the site. Overall, the majority of workers on site during an average peak Saturday during the ski season would be employed in food and beverage, the ski and snowboard school, and in housekeeping.

(b) Housing

Project implementation would generate a demand for two types of housing: transient lodging and affordable housing units.

(i) Transient Housing

As the project would increase the recreational capacity of the Town, a greater number of facilities could accommodate a greater number of visitors to the project site. As such, under the project, the number of skiers are anticipated to increase and, therefore, a demand for transient housing would likely increase as well. As discussed above, the project would provide transient

housing under the two potential lodging options that would accommodate additional skier populations. The project would provide for 62 condo/hotel and 21 fractional ownership units, for a total of 83 units under the first lodging option. Together, the condo/hotel and fractional ownership units could provide accommodations for up to 360 people. The hotel only option would provide 213 rooms which, assuming two persons per room, could provide accommodations for approximately 426 people.

Given the above, the project would be consistent with Goals 1 and 2 of the 2003 Housing Element, since the lodging proposed under the project would ensure the provision of housing for the tourist/visitor segment of the population. Neither the condo/hotel and fractional ownership option nor the hotel only option would discriminate based on age, ethnic background, sex, marital status, handicaps, or family size. The project would comply with the Americans With Disabilities Act (ADA) and would provide family-oriented accommodations.

In addition, the project would provide for energy-efficient facilities, as the architecture and construction would comply with the Leadership in Energy and Environmental Design (LEED) guidelines. LEED is a rating system developed by the U.S. Green Building Council to reduce environmental impacts through construction best practices. Under LEED, emphasis is placed on architecture and design, and performance standards are rated in five categories: (1) sustainable sites; (2) water efficiency; (3) energy and atmosphere; (4) materials and resources; and (5) indoor environmental quality.⁷⁷ CEQA does not require a project to be rated by the LEED system. However, the project as proposed would employ sustainable building practices, such as using recycled materials and implementing energy-saving measures in excess of Title 24, Energy Efficiency Standards for Residential and Nonresidential Buildings, of the California Code of Regulations. Given the above, the project would be consistent with Goal 3 of the 2003 Housing Element, which encourages energy-efficient structures and sites. The project would also be compatible with Housing Element Policy 3.A., which calls upon the Town to assure that all new development is energy efficient.

(ii) Affordable Housing

As the project would increase the number of FTEEs, the project would generate an accompanying demand for affordable housing. Some of the FTEEs necessary to fulfill the project's employment demand would likely be drawn from both the local and regional workforce. However, for purposes of this analysis, it is assumed that all FTEEs would be not be Town residents, and therefore, would require new housing within the Town boundaries.

⁷⁷ https://www.usgbc.org/Docs/LEEDdocs/LEED-NC_checklist-v2.1.xls

As required by the Juniper Ridge Master Plan and the AHMRs of the Town's Zoning Code, MMSA is required to submit with its application an Affordable Housing Mitigation Plan (AHMP) for the FTEEs generated by the project. The AHMP would indicate the number of employees that would be generated by each of the project's land uses and the number and type of required affordable housing to meet the Town's mitigation requirements. It is anticipated that MMSA would provide affordable housing at off-site locations. Such housing would be located within the Town boundaries as required by the AHMRs. It is anticipated that the affordable housing would be provided through the conversion of existing structures, and that no new development would be associated with the provision of the required affordable housing.

The project would generate an increase in construction and operation employment opportunities beyond current conditions, which could be considered a project benefit. In addition, since the affordable housing proposed under MMSA's AHMP is anticipated to involve the conversion of units, rather than new development, no environmental impacts with regard to the provision of affordable housing would occur. As such, the project's construction and operation would not substantially alter the location, distribution, density, or growth rate of the Town's employment, population, or housing, as planned for the area. Therefore, impacts resulting from project implementation would result in a less than significant impact to employment, population, and housing.

d. Mitigation Measures

In the event that construction workers are drawn from outside Mono or Inyo Counties the following mitigation measure is recommended to reduce potential short-term housing impacts to a less than significant level.

POP-1: If the developer of the project enters into a construction contract for the project with any contractor or subcontractor (1) whose principal place of business is outside Mono and Inyo Counties; (2) whose employees will reside in the Town of Mammoth Lakes in association with project construction in excess of 90 consecutive days; and (3) who provides housing for its employees, then the developer shall provide housing units for such employees. The housing provided by the developer for the construction employees shall not be located within the RMF-1 zone within the boundaries of the Town of Mammoth Lakes. However, existing MMSA-owned seasonal employee housing may be utilized in non-ski season months only.

In addition, under the Juniper Ridge Master Plan and the AHMR, the project applicant is required to submit an affordable housing plan for employees generated by the project. Compliance with a regulatory requirement is not considered a mitigation measure under CEQA. Therefore, with implementation of the mitigation measure, above, and the applicant's AHMP,

the project would result in a less than significant impact to employment, population, and housing.

e. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Alternative 1 would include the development of 35,000 square feet of commercial uses and a 566-space parking structure. Under the Alternative there would be no residential component and, therefore, no provision of transient lodging facilities. However, the Alternative itself would not generate an increase in the transient population.

Construction of Alternative 1 would result in an increase in the number of construction-related employees on the site. In the event that construction workers are drawn from Mono or Inyo Counties, the incorporation of Mitigation Measure POP-1, which relates to the provision of housing for construction employees, would reduce potential short-term housing impacts to a less than significant level.

With the development of commercial ski-related facilities, there would be an accompanying demand for service-related employment opportunities. Employees would be needed for such uses as food and beverage service, ticketing, and other ski-related services that had previously existed as part of the temporary Little Eagle Base Lodge. Alternative 1 would employ both part time and full time workers in shifts. Alternative 1 would generate up to 70 employees based on a general planning standard of 1 employee per 500 square feet of floor area. Alternative 1 would increase the number of full-time equivalent employees in the Town. Therefore, an accompanying demand for affordable housing would be generated. As required by the Juniper Ridge Master Plan and the Affordable Housing Mitigation Regulations (AHMR) of the Town's Zoning Code, MMSA would be required to submit an Affordable Housing Mitigation Plan (AHMP) for the FTEEs generated by the Alternative. The AHMP would indicate the number of employees that would be generated and type of required affordable housing to meet the Town's mitigation requirements. With compliance with the Town's requirements with regard to affordable housing, Alternative 1 would result in a less than significant impact with regard to employment, population, and housing.

f. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Alternative 2 would provide residential accommodation or hotel rooms, and a mix of commercial uses. Construction of Alternative 2 would result in an increase in the number of construction-related employees on the site. In the event that construction workers are drawn from Mono or Inyo Counties, the incorporation of Mitigation Measure POP-1, which relates to the provision of housing for construction employees, would reduce potential short-term housing impacts to a less than significant level.

Alternative 2 proposes recreational, commercial, and lodging facilities that would generate service-related employment opportunities. This Alternative would employ both part time and full time workers in shifts. While the facility would provide year round employment opportunities, the greater demand for employees would occur during the ski season. The highest number of employees on site would be expected to occur on Saturdays during the ski season. During an average peak Saturday, the number of employees on the site at a given time would likely range from a low of 18 to a high of approximately 112 employees. The peak employee generation would occur mid day, between 8:00 A.M. and 5:00 P.M. The number of employees during this time period would range from between 70 to 112, with the greatest number of employees working at the 10 A.M. and 11 A.M. shifts. A peak of 112 employees would represent a net increase of 66 employees under Alternative 2, compared with the 46 employees currently at the site. Overall, the majority of workers on site during an average peak Saturday during the ski season would be employed in food and beverage, the ski and snowboard school, and in housekeeping.

Alternative 2 would generate a demand for affordable housing based on the increase in full-time equivalent employees that would result from implementation of Alternative 2. As required by the Juniper Ridge Master Plan and the Affordable Housing Mitigation Regulations (AHMR) of the Town's Zoning Code, MMSA would be required to submit an Affordable Housing Mitigation Plan (AHMP) for the FTEEs generated by Alternative 2. The AHMP would indicate the number of employees that would be generated and type of required affordable housing to meet the Town's requirements. Given compliance with the Town's requirements associated with affordable housing, Alternative 2 would result in a less than significant impact with regard to employment, population, and housing.

g. Environmental Consequences of Alternative 3 – Alternate Design Alternative

Alternative 3 would generate the same number of transient visitors to the site and PDC as the Proposed Action. Construction of Alternative 3 would result in an increase in the number of construction-related employees on the site. In the event that construction workers are drawn from Mono or Inyo Counties, the incorporation of Mitigation Measure POP-1, which relates to the provision of housing for construction employees, would reduce potential short-term housing impacts to a less than significant level.

Alternative 3 would generate a demand for affordable housing based on the increase in full-time equivalent employees that would result. As required by the Juniper Ridge Master Plan and the Affordable Housing Mitigation Regulations (AHMR) of the Town's Zoning Code, MMSA would be required to submit an Affordable Housing Mitigation Plan (AHMP) for the FTEEs generated by Alternative 3. The AHMP would indicate the number of employees that would be generated and type of required affordable housing to meet the Town's mitigation requirements. With compliance with the Town's requirements with regard to affordable housing,

Alternative 3 would result in a less than significant impact with regard to employment, population, and housing.

h. Environmental Consequences of Alternative 4 - No Action Alternative

While the No Action Alternative assumes the removal of the temporary Little Eagle Base Lodge, the number of visitors to the area could remain unchanged. However, Alternative 4 would result in a decrease in employment and a subsequent decrease in the demand for affordable housing.

The No Action Alternative would not provide lodging for the transient population or increase the employment opportunities within the Town. As such, the goals and policies of the 2003 Housing Element would not apply to the project site. In addition, the No Action Alternative would not be subject to either the Master Plan, relative to employee housing, or the AHMRs. No plans or programs to develop affordable housing, such as those required by the Master Plan or the AHMRs, would be necessary. As no new housing would be built under the No Action Alternative, the Transient Occupancy Tax would not apply to the project site as it currently exists.

Given that PAOT and the number of skiers would remain similar to current conditions and there would be no new demand for housing under the No Action Alternative, impacts associated with population and housing would be less than those projected for the project. However, given that the No Action Alternative would not provide an increase in construction and operation employment opportunities, or an increase in visitor revenues, the No Action Alternative would not provide beneficial effects that would occur with the Proposed Action.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.9 AESTHETICS

This section describes the existing visual environment in and around the Eagle Lodge Base area. It assesses the potential for aesthetics, light and glare, and shade/shadow impacts using accepted methods of evaluating visual landscape quality and predicts the type and degree of changes the Eagle Lodge Base Area Development would likely have.

The analysis in this section is primarily based on information provided by the applicant and verified through site visits by the EIR/EA consultants conducted in September 2005 and February 2006. Where additional information has been used to evaluate the potential impacts associated with the project that information has been referenced. The visual impact assessment uses the Scenery Management System (SMS) defined in *Landscape Aesthetics, A Handbook for Scenery Management* prepared by the USFS in 1995. The SMS satisfies the NEPA requirements of the Inyo National Forest for a project-specific visual impact analysis. The SMS analysis is also utilized, in part, to satisfy the CEQA project-specific analysis for lands under the jurisdiction of the Town of Mammoth Lakes. Photographic documentation and visual simulations of the project site and proposed site conditions are utilized to supplement the SMS analysis to provide a comprehensive visual analysis to fulfill the requirements of CEQA. A detailed height and shade/shadow analysis are provided in Appendix G of this document.

3.9.1 REGULATORY FRAMEWORK

The project site is located on lands administered by the Inyo National Forest and under the jurisdiction of the Town of Mammoth Lakes. As such, the site is subject to the regulatory requirements set forth by the USFS and the Town. Visual resources on USFS land within the project site are subject to the requirements of the Inyo National Forest Land and Resources Management Plan dated 1988. In addition, the USFS implements the Scenic Management System methodology to identify and assess visual resources. Visual resources on lands under the jurisdiction of the Town are subject to the policies set forth in the Town's General Plan. Thus, the policies and regulations of the USFS and the Town are utilized to assess impacts to visual resources and applicable policies and regulations are discussed below.

a. Inyo National Forest Land and Resources Management Plan

The Inyo National Forest Land and Resources Management Plan ("Forest Plan") was developed to provide an "integrated, multiple resource management direction for all forest

resources” and thereby contributes to defining the area's land use and visual policy context. Chapter 2 includes the public issues (p) and management concerns (m) that were identified in the original public involvement process for the Forest Plan. For visual resources, the following issues/concerns were identified:

- Maintain and manage for visual quality (p);
- Resolve conflicts between visual quality and other resources (m); and
- Maintain or enhance current visual resources and scenic attractions (m).

Chapter 3 of the Forest Plan provides a summary analysis of the management situation for each of the resources within this region. It is noted in this chapter that the “Mammoth and June Lake communities and associated winter sports development represent the most significant visual impacts within the Forest boundary.” This section further notes that “additional winter sports development...could cause major visual resource disruptions during the planning period” and that there is a need to establish direction for applying Visual Quality Objectives (VQOs) to such developments. VQOs describe the degree to which the natural landscape can acceptably be modified. Additionally, the Forest Plan emphasizes a continued high level of visual quality for its economic and social benefits to local communities and to millions of annual recreation visitors. This emphasis is expressed by mapping VQOs to specific acres of land that are consistent with the overall management direction for that land. Specific VQOs are set forth in Chapter 4 of the Forest Plan.

Chapter 4 of the Forest Plan documents how the Inyo National Forest will be managed. The Forest Plan identifies maintaining or enhancing the quality of scenic resources and viewing opportunities as a management goal for visual resources. The Forest Plan provides specific Standards and Guidelines pertaining to the protection and enhancement of visual resources. The following Management Direction applies to the proposed project:

- Obtain the Forest Supervisor’s Approval through the environmental analysis process for any deviations from VQOs assigned in Prescriptions (described below);

In Chapter 4 of the Forest Plan, Management Prescriptions are prescribed that provide direction as to how areas of the forest will be managed with a specific resources emphasis. In 1991, when the USFS acquired land that is a portion of the project site, it was assumed that the project site would adopt the Management Prescription of the surrounding land, which is “Alpine Ski Area” (Management Prescription Area #13). The purpose of this prescription is to maintain and manage existing downhill ski areas for public use. The management direction for visual resources within an Alpine Ski Area is to “meet or exceed the Partial Retention VQO for runs, lifts, and base areas as seen at middle ground distances from Sensitivity Level 1 routes and

occupancy sites.” Based on correspondence with the USFS, although the project site is located within Management Prescription Area #13, no mapped VQO was assigned to the project area. Thus, there currently is no VQO for the project site. As a result of the proceeding analysis, a VQO would be assigned for the site consistent with existing site conditions, the Mammoth Mountain Ski Area Master Development Plan, and Forest Plan direction.

b. Town of Mammoth Lakes General Plan (1987)

The Town of Mammoth Lakes General Plan, which was adopted in 1987, includes an Open Space and Conservation Element that includes goals and policies that acknowledge the connection between the pleasant surrounding in the built environment and the natural beauty of the area. The General Plan defines a viewshed as a visually significant area that may be viewed from the Town of Mammoth Lakes, along roadways to and within the community, and from other areas utilized by residents and visitors. According to the General Plan, significant view points that have views to the project area include the ski slopes on Mammoth Mountain and Lake Mary Road. Views from Lake Mary Road and from Mammoth Mountain are discussed below. The following goals under the issue of Visual Resources and Community Design from the General Plan have been identified that are applicable to the project:

- Goal 1: To protect and enhance the natural scenic resources of the Town of Mammoth Lakes.

- Goal 4: To establish a distinctive and attractive townscape for the developed and developing portions of Mammoth Lakes.

The General Plan also includes Visual Resources and Community Design policies that provide direction for the Town to achieve the identified goals, as applicable. Relevant policies regarding Goals 1 and 4 include Policies 1, 2, 3, 6, and 7. Policy 1 and 2 refer to adopting community design standards to preserve and enhance the aesthetics environment. According to Policy 3, scenic resources should be mapped as a first step to assuring their preservation. Policy 6 states that primary scenic areas and scenic resources should be protected through design criteria and incentives and disincentives in the Town Development Code. Additionally, Policy 7 directs the Town to preserve the important scenic vistas which occur along Old Mammoth Road, Meridian Boulevard and other defined areas through requirements in the Town Development Code that retain sufficient minimum building setbacks and through the adoption of viewshed protection criteria. While Policy 7 states to preserve the important scenic vistas that occur along Meridian Boulevard; the scenic vistas along Meridian Boulevard are generally provided in the Gateway District. Since the project area is not visible from the Gateway District, Policy 7 is deemed not applicable to the project.

c. The Town of Mammoth Lakes Draft General Plan (Update 2005)

The Town is currently in the process of revising its General Plan. The preliminary draft, dated April 2005, includes updated goals and policies that have been designed to realize the community's vision and support Guiding Principal VI of the Vision Statement: "Mammoth Lakes has maintained high standards for development and design while allowing for a variety of styles that are complementary and appropriate to the Sierra Nevada alpine setting." While the 2005 General Plan Update is underway, it has yet to be formally adopted. However, the following policies from the preliminary draft have been identified that are applicable to the project:

- VI.1.A.a: Proposed developments shall address the opportunities and limitations of the site and its surroundings.
- VI.1.A.c: Building placement, massing, form and materials shall be appropriate to the mountain setting of Mammoth Lakes.
- VI.1.D.b: Attention to detail at the pedestrian scale to develop a more hospitable pedestrian environment shall be a priority within commercial and resort areas of town.

d. Juniper Ridge Master Plan

The privately owned portion of the project site is located in the Juniper Ridge Master Plan (the Master Plan) Area. Details of the Master Plan are included in Section 3.2, Land Use, of this EA/EIR. Since a portion of the site is within the Master Plan area, the project is subject to the development standards set forth in the Master Plan. The Master Plan limits building height to 45 feet as measured from street grade for commercial buildings. Additionally, the Master Plan specifies setback requirements, including a minimum setback of 20 feet from Majestic Pines Drive. The height and setback limitations in the Master Plan serve to preserve views across the site and to soften the appearance of mass at the pedestrian level.

e. Town of Mammoth Lakes Municipal Code

Town Municipal Code (Section 17.32.120 [Ord. 90-06 and 89-05]) regulates the aesthetic characteristics of all development in Mammoth Lakes other than single-family residences. These regulations are enforced through application of Design Guidelines. The purposes of Design Review are as follows:

- To implement the goals, policies and objectives of the General Plan;

- To regulate the design, coloration, materials, illumination and landscaping of new construction, renovations, and signage within the town in order to maintain and enhance the image, attractiveness and environmental qualities of the town;
- To ensure that property development or redevelopment and building construction or renovation do not detract from the value or utility of adjoining properties as a result of inappropriate, inharmonious, or inadequate design;
- To prevent indiscriminate destruction of trees and natural vegetation, excessive or unsightly grading, indiscriminate clearing of property, and destruction of natural significant landforms;
- To ensure that the architectural design of structures and their materials and colors are appropriate to the function of the project and are visually harmonious with surrounding development and natural landforms, trees, and vegetation; and
- To ensure that the location, size, design, and illumination of signs, their material, and colors are consistent with the scale and design of the building to which they are attached or which is located on the same site, and to assure that signs are visually harmonious with the surrounding environment.

In addition, Chapter 17.34, Outdoor Lighting, in the Town of Mammoth Lakes Municipal Code provides rules and regulations for outdoor lighting within the Town of Mammoth Lakes. This section is also referred to as the Lighting Ordinance. The Lighting Ordinance identifies standards that apply to all non-exempt outdoor lighting fixtures to accomplish the following:

1. To promote a safe and pleasant nighttime environment for residents and visitors;
2. To protect and improve safe travel for all modes of transportation;
3. To prevent nuisances caused by unnecessary light intensity, direct glare, and light trespass;
4. To protect the ability to view the night sky by restricting unnecessary upward projection of light;
5. To phase out existing non-conforming fixtures that violate this chapter, including those owned by the Town and other public agencies; and
6. To promote lighting practices and systems to conserve energy.

To ensure compliance with the established lighting standards, an outdoor lighting plan must be submitted in conjunction with an application for design review approval; conditional use permit, subdivision approval; or a building permit for a new structure or addition(s) of 25 percent or more in terms of gross floor area, seating capacity, or parking spaces (either with single addition or cumulative additions). The Community Development Director may approve, deny, or require modifications to any outdoor lighting plan to meet the purpose of the Lighting Ordinance.

f. Design Guidelines for the Town of Mammoth Lakes

The policies and goals presented in the Design Guidelines represent the goals and desires of residents and property owners pertaining to the design of new development in the Town. All new structures and all structures that are being renovated other single-family homes below 8,250 feet elevation are subject to compliance with the Design Guidelines. The Design Guidelines provide a greater level of detail regarding the type of development that promotes the Town's Vision Statement, General Plan and Municipal Code. Items addressed in the Design Guidelines include:

- Project Concept
- Site Design
- Building Design
- Landscape Design
- Public Space Furnishings
- Lighting
- Signage
- Outdoor Sales/Storefront Displays

Pursuant to Chapter 9.0, Design Review Process, the Design Guidelines review process is to be conducted by the Community Development Department (CDD) and the Planning Commission. As part of the Design Guidelines Review Process, the CDD and/or an Advisory Design Panel (ADP) reviews project materials such as drawings, site development plans, landscape plans, building elevations, cross-sections, sample materials/color palettes, and visual simulations to determine compliance with the Design Guidelines. All Town Staff and ADP findings and recommendations are forwarded to the Planning Commission in a staff report. At the Planning Commission Meeting, the Planning Commission may deny, approve, approve with conditions or continue the hearing to receive additional input with regards to a project's compliance to the Design Guidelines. The Design Guidelines review process would occur pursuant to Chapter 9.4.1, Process, in the Design Guidelines.

3.9.2 AFFECTED ENVIRONMENT

a. Landscape Character

(1) Town Setting

The Town of Mammoth Lakes is the largest alpine resort in the Eastern Sierra Nevada Mountains. Mammoth is located within a valley floor surrounded by moderately to steeply rising slopes on the south, west, and north. The Town center is situated at approximately 7,800 feet, while the surrounding snow capped peaks rise abruptly up to approximately 11,000 feet. Visual access into Mammoth commences from the east at the U.S. 395 interchange State Highway 203. The California Department of Transportation (Caltrans) has designated U.S. 395 as a scenic highway, which includes the stretch from the Mammoth-June Lake Airport to the Mammoth Scenic Loop. State Highway 203 is eligible for designation as a scenic highway in its entirety but has not been formally established as such. Generally, most foreground views in the Mammoth area are dominated by urbanization typical of a destination resort, with the middle ground views providing a mixture of structures and trees on moderate to steeply rising slopes. Background views from the valley floor consist of mountains with variable topographic shapes.

Figure 21 on page 330 provides views from State Highway 203 and U.S. 395 towards the project site. As shown in Photograph A, which provides a view looking westerly towards the project site from State Highway 203 approximately 200 meters east of Meridian Boulevard, the site is obstructed by intervening topography and existing vegetation. Similarly, as shown in Photograph B, views to the site from the intersection Sherwin Creek Road and U.S. 395 are not available due to intervening topography and existing vegetation. Figure 22 on page 331 provides a line of sight illustration from the vantage illustrated in Photograph A of Figure 21 to the project site. As shown in Figure 22, the line of sight to the project site is approximately 213 feet above the existing site grade. Figure 23 on page 332 provides a line of sight illustration from the vantage illustrated in Photograph B of Figure 20 to the project site. As shown in Figure 23, the line of sight to the project site is approximately 678 feet above the existing site grade. Since a building less than 213 and 678 feet in height would not be visible from State Highway 203 (Photograph A) and U.S. 395 (Photograph B), respectively, no further analysis of these points is necessary.

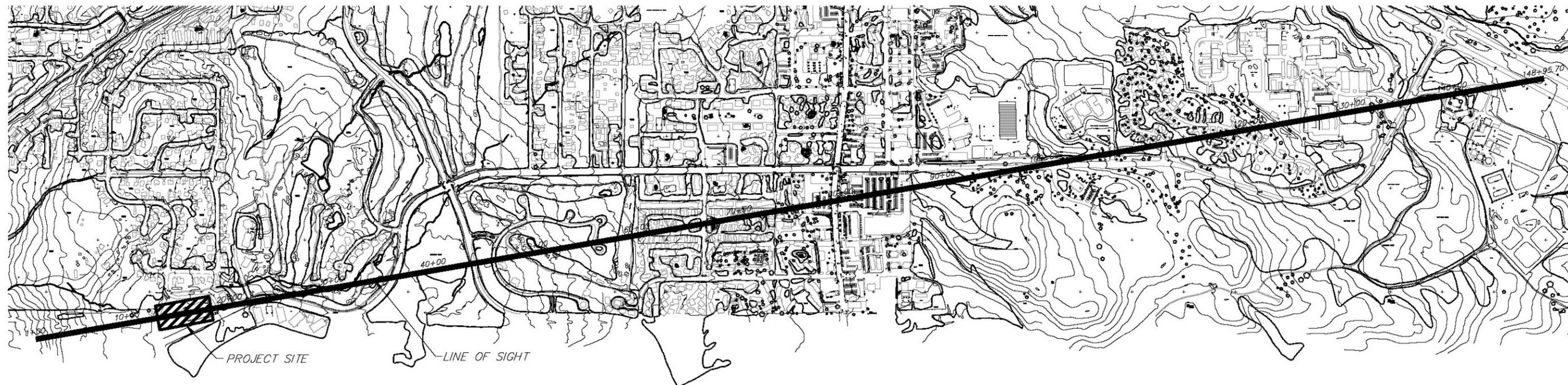
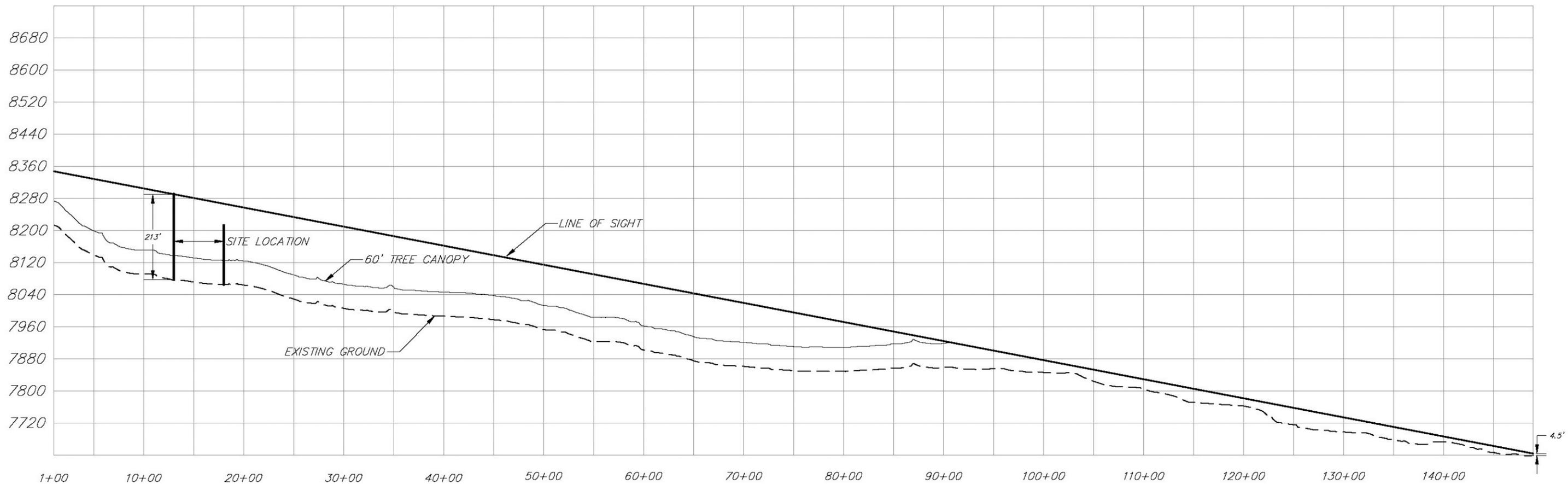
Mammoth Mountain, located directly west of the Town provides a prominent visual backdrop from the Eagle Lodge Base site. With or without snow, it is apparent the natural character of Mammoth Mountain has been altered to accommodate skiing as the Mountain consists of stands of trees associated with the subalpine forest community interspersed among large, extended open areas cleared for ski runs. The Sherwin Mountains to the south and Mammoth Knolls to the north, are similarly proximal to the Town, but are less prominent than Mammoth Mountain due to their form and use. These mountains do not have the degree of



Photograph A: Looking westerly towards project site from Highway 203, approximately 200 meters east of Meridian Boulevard



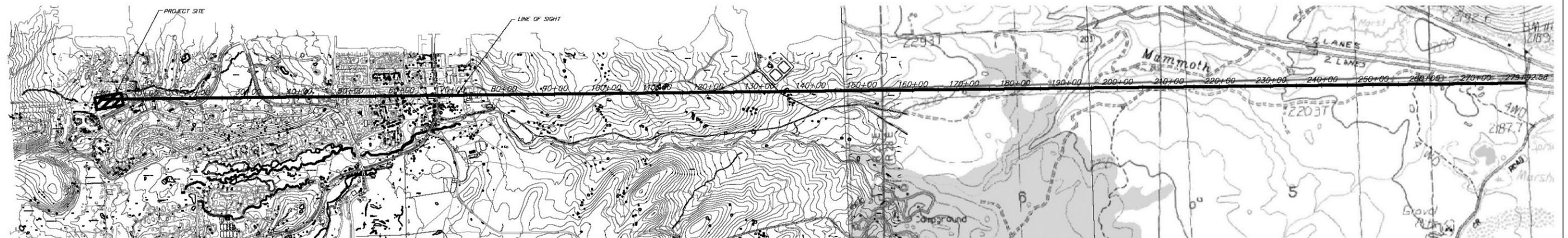
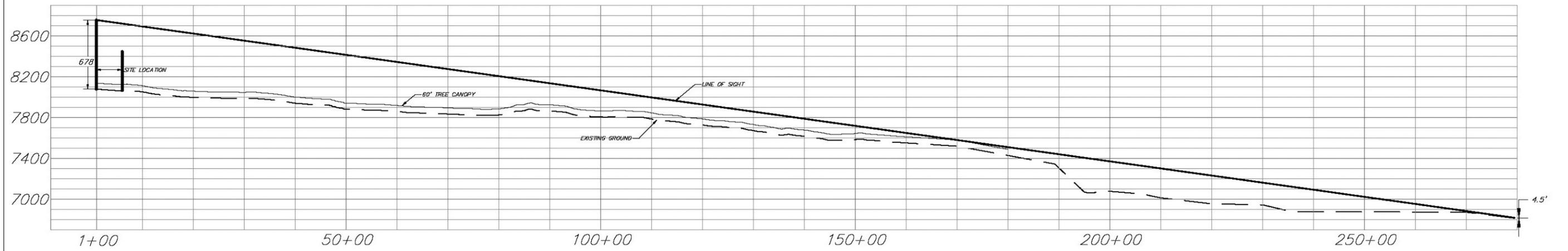
Photograph B: Looking westerly towards project site from the intersection of Sherwin Creek Road and U.S. 395



No scale

Source: Triad/Holmes Associates, 2006

Figure 22
Sight Line from Lower Highway 203
200 Meters East of Meridian Boulevard



Source: Triad/Holmes Associates, 2006

Figure 23
Sight Line from Intersection of
Sherwin Creek Road and U.S. 395

physical alteration apparent on Mammoth Mountain; however, roadways on some slopes are visible from the valley floor. The Sherwin Mountains include a range of peaks on a variety of moderate to steep slopes that include varying sizes of tree stands. In addition, Mammoth Rock, a large rock pillar, is located at the base of the Sherwin Mountains. The elevations and slopes of the Mammoth Knolls are less than those associated with the Sherwin Mountains and Mammoth Mountain. Additionally, Mammoth Knolls is more rounded, with fewer ridges, in comparison to Mammoth Mountain and the Sherwin Mountains.

(2) Surrounding Visual Environment

Table 56 on page 334 provides a summary of the visual resources within the surrounding visual environment of the project site. The preceding discussion provides detailed descriptions of the visual resources identified in Table 1.

The project site is located at the eastern base of Mammoth Mountain, which is in the southeastern portion of the Town. To the west/northwest of the site, Mammoth Mountain provides a distinctive landscape feature in the site vicinity. From the project site, all (lower, middle and upper) elevations of Mammoth Mountain are visible. Transitioning from the upper reaches of Mammoth Mountain to the project site, the visual character changes from steep-sloped forested land to a broadly sloping alpine community. The Sherwin Mountains to the south are also visually prominent from the project site. From the project site, the lower elevations of the Sherwin Mountains are only partially visible from the project site due to intervening development and tree stands. However, substantial portions of the middle to upper elevations of the Sherwin Mountains are visible from the project site. Intervening development and tree stands block much of the lower to mid-level elevation views of the Mammoth Knolls, and as such, these mountains are less visible than Mammoth Mountain and the Sherwin Mountains from the project site.

Within the immediate project area, Majestic Pines Road and the Mammoth Vista I single family subdivision consisting of one- and two-story residences are located to the north of the project site. These residences are constructed primarily of dark wood materials designed to blend in with the natural environment. The Camp High Sierra cabins are located to the northwest of the project at a slightly higher elevation. The Camp High Sierra cabins also complement the surrounding natural forested environment as they are constructed of dark wood and materials typical of mountain cabins. Due to the intervening vegetation and varying topography, views of Camp High Sierra are limited from the project site.

Meridian Boulevard and the Summit Condominiums, up to three-stories in height, are located to the south of the site across Meridian Boulevard. Unlike the residences to the north, the materials and design of the Summit Condominiums are less oriented towards the forested

Table 56

Visual Resources in Surrounding Environment

Direction From Site	Visual Resources	Non-Valued Visual Resources
All	Forested areas (i.e., Jeffrey pine stands)	Developed areas
North	Mammoth Knolls – upper elevations	Residential structures, infrastructure
South	Sherwin Mountains – middle and upper elevations, including Mammoth Rock	Summit Condominiums, infrastructure, Juniper Springs Lodge
East	White Mountains and Glass Mountains	MCWD Water Treatment Plant No. 2, infrastructure
West	Mammoth Mountain: lower, middle and upper elevations	Skiing-related structures and facilities, Sunstone and Eagle Run buildings

Source: PCR Services Corporation, 2006

environment. The siding of the Summit Condominiums is constructed of light earth tone colors and the roof is constructed of dark wood shingles. Southwest of the site is the Juniper Springs Resort, which consists of the Juniper Springs Lodge building, the Sunstone building and the Eagle Run building, from east to west.

Views of the Sunstone and Eagle Run buildings from the project site are limited to few vantages within the project site, while the Juniper Springs Lodge building is located directly adjacent to the project site and is visible from the entire project site. The Lodge includes dark wood side paneling and a forest green roof. To the west of the Juniper Springs Resort is a multi-family residential development. From the project site, views to of these residences are limited to the rooflines from limited vantages within the project site. These residences are constructed of light brown wood siding and reddish-brown roof panels. Beyond these multi-family uses to the west, custom single-family residences are located along Juniper Road. These large one- and two-story residences exhibit various architectural styles, but have been generally designed to complement the surrounding mountain setting. Immediately to the east of the site across Majestic Pines Road is the Mammoth Community Water District Ground Water Treatment Plant No. 2. The Treatment Plant incorporates natural earth tones and is landscaped with numerous trees of varying height that reduce the overall massing of the single structure. The Mammoth Loop Trail is located to the north of the Treatment Plant and runs to the west, ending at Majestic Pines Road directly across from the site.

(3) Project Site Character

Table 57 on page 335 provides a summary of the valued visual resources within each lot of the project site. The preceding discussion provides detailed descriptions of the valued visual resources identified in Table 57.

Table 57

Visual Resources Within Project Site

Lot Number	Visual Resources	Non-Valued Visual Resources
Lot No. 5	None	Parking lot, non-native vegetation
Lot. No. 87	None	Parking lot, non-native vegetation, Majestic Pines Road
Lot No. 1	Jeffrey Pine Trees	Parking lot, dirt pathway
Lot No. 6	Eagle statue	Dirt pathway, temporary ski and lodge facilities, chair lift, non-native vegetation
Lot No. 7	None	Dirt pathway, non-native vegetation

Source: PCR Services Corporation, 2006

The project site is developed with uses that support skiing activities at Mammoth Mountain, but also includes undeveloped land in the western portion of the site. As illustrated in Figure 26, the central portion of the site consisting of the majority of Lot 5 and a portion of Lot 87 is developed with a paved parking lot that serves the temporary Eagle Base Lodge. The northern portion of Lot 5 and the portion of Lot 87 located south of Majestic Pines Road generally lack vegetation or contain a sparse amount (less than 20 percent) of non-native vegetative cover. However, small, dense clusters of native vegetation occur on the northern perimeter of the parking lot.⁷⁶ Additionally, a series of rock and boulders have been placed around the perimeter of the parking lot.

The southern perimeter of Lot 5 consists mostly of sparse vegetative cover, but does include some small areas of native vegetation.⁷⁷ Additionally, the Mammoth Community Water District (MCWD) owns a well site parcel that is located adjacent to Meridian Boulevard within the southern portion of Lot 5.

To the north of Majestic Pines Road, the developed area encompasses a small portion of Lot 87 and Lot 5. This area includes an earthen berm of varying height up to approximately six feet tall from street grade that is sparsely covered with non-native plant species. The berm was created back in the mid 1990's to screen single-family homes located north of Majestic Pines Road from vehicle headlights.

⁷⁶ The native vegetation consists includes big sagebrush scrub that consists mostly of soft-woody shrubs usually with bare ground underneath and between shrubs and narrow-leaf willow scrub that typically includes shrubs less than 23 feet in height with a continuous canopy.

⁷⁷ The native vegetation includes big sagebrush scrub/ruderal plant communities, with the exception of a small area that contains Aspen Series vegetation. Trees associated with the Aspen Series can be up to 115 feet in height with a continuous, intermittent, or open canopy. However, the vegetation within the on-site Aspen community includes vegetation less than approximately ten feet tall.

The western portion of the project site consists of a portion of three lots (Lots 1, 6, 7) that are owned by the USFS. Lot 1, the most northerly lot, is primarily undeveloped. This area is characterized by sparse Jeffrey pine stands and native plant shrubs. The Jeffrey pines trees are an extension of the forested land to the north that traverses up the base of Mammoth Mountain. There is also a developed area (roadway/walkway) along the eastern portion of Lot 1.

The eastern portion of Lot 6 includes a maintenance structure adjacent to the western perimeter of the parking lot and non-native weedy plants. The western portion of Lot 6 includes the temporary Eagle Base Lodge, which is situated adjacent to Chairlift 15. The temporary ski facilities consist of a white sprung fabric structure with attached trailers that provide approximately 12,000 square feet of interior space. In addition, there is an approximately 3,000 square foot exterior barbeque and dining deck adjacent to the tent structure. Being all white, the temporary tent facility blends in with the snow as far as color when there is snow on the ground. However, architecturally it is inconsistent with both the natural environment and adjacent structures. In addition, a large statue of an eagle in flight is located in front of the tent facility.

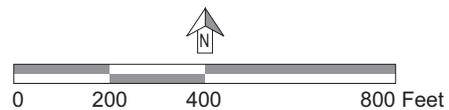
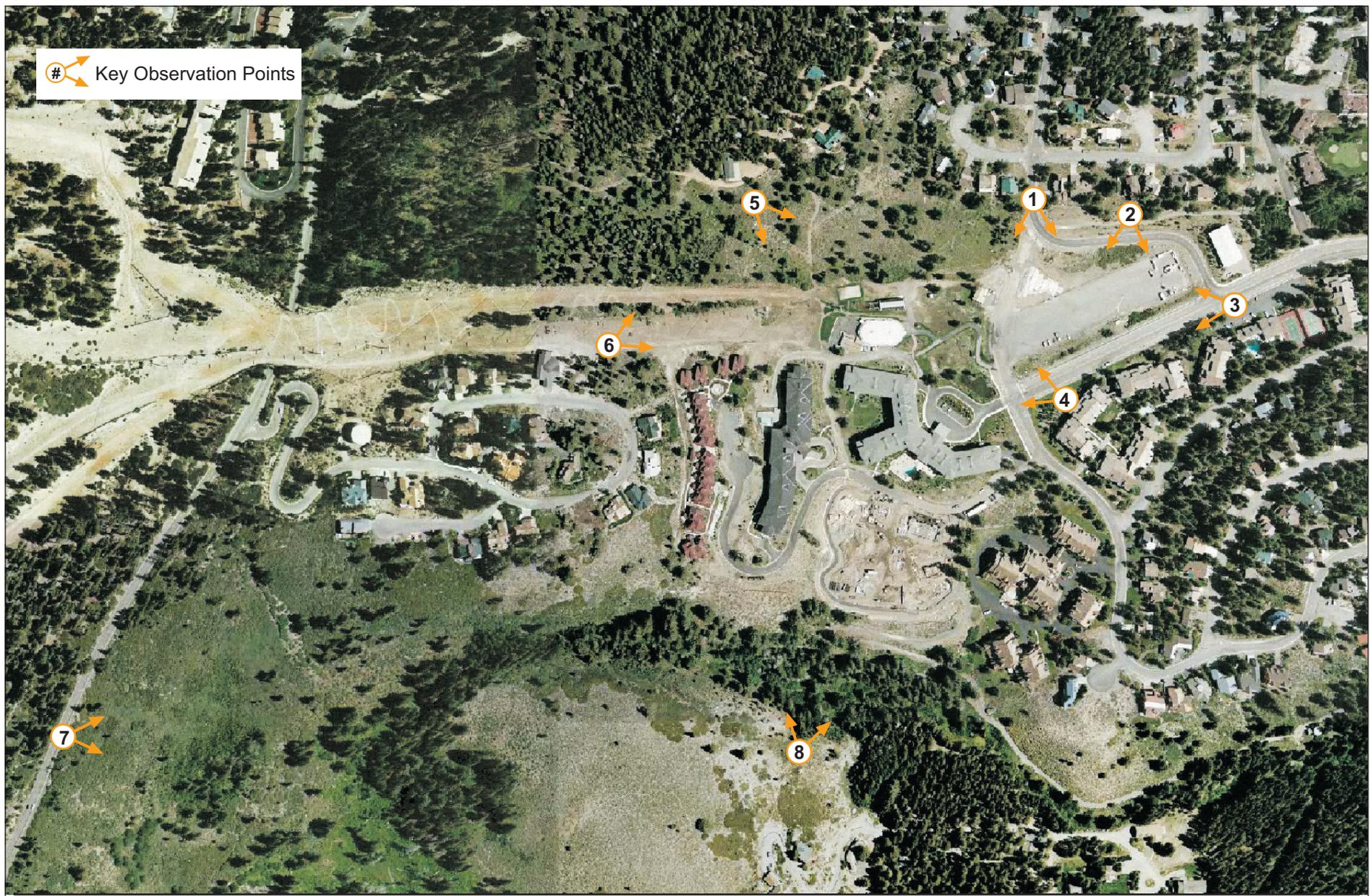
Lot 7 occupies the southwestern portion of the project site and consists mostly of non-native plant species, but also includes a small community of native plant species, as well as a detention basin, which is less than 0.1 acre.⁷⁸ Additionally, a concrete/gravel pathway traverses the northern portion of Lot 7 in a meandering manner.

Generally, the western portion of the project site is at a slightly lower elevation than the eastern portion of the project site which transitions to the base of the Mountain. As such, views across the project site and of Mammoth Mountain are available from anywhere within the site. Views to and across the site are described below.

(4) Key Observation Points

Key Observation Points (KOPs) are specific points that are representative of important views of the project site and surrounding area. The KOPs are representative of views from adjacent residential uses and roadways that may have views of the project site. Eight KOPs were selected based on consultation with Town and USFS Staff. Photographs were taken in February 2006 from each of the KOPs to establish the existing views from these locations. Figure 24 on page 337 illustrates the locations and direction of the photographs taken from each of the KOPs. Figure 25 through Figure 28 on page 338 - 341 provides the photographs taken from each KOP.

⁷⁸ *The native plant species consist of Montane meadow, which is characterized by a dense growth of sedges and other perennial herbs.*



Source: PCR Services Corporation, 2006

Figure 24
Key Observation Points



Photograph 1: Looking southerly from Majestic Pines Road at intersection with Monterey Pine Road



Photograph 2: Looking southerly from residences located north of Majestic Pines Road



Photograph 3: Looking northwesterly from the intersection of Meridian Boulevard and Majestic Pines Road



Photograph 4: Looking northwesterly from the Summit Condos located southeast of the intersection of Meridian Boulevard and Majestic Pines Drive



Photograph 5: Looking southeasterly from northeastern portion of Lot 1



Photograph 6: Looking west from ski run located to the north of Juniper Road



Photograph 5: Looking southeasterly from northeastern portion of Lot 1



Photograph 6: Looking west from ski run located to the north of Juniper Road

Based on the SMS methodology, views are generally broken into four categories: 1) immediate foreground; 2) foreground; 3) middleground; and 4) background. Table 58 on page 343 provides the distances associated with each view category and the distinguishable details within each view category. Depending on the vantage, views may include one or more categories of views and may include all four categories of views.

The valued visual resources within the four view categories for each of the identified KOP sites are summarized in Table 59 on page 343. A detailed discussion for views from each KOP is provided below.

Existing features that represent the Town's valued views include:

- Immediate Foreground/Foreground views consisting of architecturally interesting or culturally important, high quality structures, and prominent and/or unique vegetation;
- Middleground views of national forest landscape scenes that consist of treeforms, large boulders, flower fields, small openings in the forest, small rock outcrops, etc. Ridgelines and horizon lines may also occur within Middleground views;
- Background views also include national forest landscape scenes that can include groves or stands of trees, large openings in the forest, large rock outcrops, as well as ridgelines and horizon lines.

The following is a description of the existing views from each KOP.

KOP #1 provides views of the site looking southerly from the intersection of Monterey Pine Road and Majestic Pines Road located to the north of the project site. This view is representative of views from vehicular travelers going south on Majestic Pines Road. Views from KOP #1 are only available for several moments to vehicular travelers due to the short distance and winding nature of Majestic Pines Road. As illustrated in Photograph 1 in Figure 25, KOP #1 contains immediate foreground views that consist of developed and natural areas. Since the photograph was taken in the winter, the shrubs along the northern perimeter of the Eagle Base Lodge are not visible. The developed area in the immediate foreground includes the roadway itself and paved surface parking lot. As such, vehicular and pedestrian activity is common in the immediate foreground. Foreground views include views of the Summit Condominiums and stands of Jeffrey pine trees. The middleground views consist of the Sherwin Mountains with individual trees visible on the slopes. Background views are limited to a small portion of the distant Sherwin Mountains. The valued visual resources from this location include foreground views of the existing Jeffrey pine stands and middle ground and background views of the Sherwin Mountains.

Table 58**View Categories**

View Category	Distance from Observer	Distinguishable Details
Immediate Foreground	0 to 300 feet	Leaves, grasses, flowers, and small animals
Foreground	300 feet to ½ mile	Large tree branches, shrubs, moderately sized animals, and movement of plant material due to wind
Middleground	½ mile to 4 miles	Vegetation forms, unique topographic formations and flower fields
Background	4 miles to horizon	Mountain ranges, large expanses of wooded hillsides, and open spaces

Source: *Landscape Aesthetics, A Handbook for Scenery Management, USFS, 1995*

Table 59**Valued Visual Resources From Key Observation Points**

Key Observation Point (KOP)	Immediate Foreground	Foreground	Middleground	Background
#1	None	Jeffrey pine stands	Sherwin Mountains	Sherwin Mountains
#2	None	Jeffrey pine stands	Sherwin Mountains	Sherwin Mountains
#3	None	None	Mammoth Mountain	None
#4	None	Mammoth Mountain	Mammoth Mountain	None
#5	Jeffrey pine stands	Jeffrey pine stands	Sherwin Mountains	Glass Mountains and White Mountains
#6	None	Jeffrey pine stands	Jeffrey pine stands	Glass Mountains and White Mountains
#7	Jeffrey pine stands	Jeffrey pine stands	Jeffrey pine stands	Glass Mountains and White Mountains
#8	Jeffrey pine stands	Jeffrey pine stands	Mammoth Knolls	Mammoth Knolls

Source: *PCR Services Corporation, 2006*

KOP #2 provides a view of the site looking southerly from the single-family residences located on the north side of Majestic Pines Road. This view is also representative of the views that pedestrians utilizing the Mammoth Loop Trail would have. As is evident in Photograph 2 in Figure 25, the immediate foreground consists entirely of developed areas and/or areas disturbed by human activity. Immediate foreground views from KOP #2 include the Mammoth Loop Trail, beyond which is Majestic Pines Road. Beyond Majestic Pines Road is the surface parking lot, which during the ski season is typically filled with cars to its maximum capacity. As such, vehicular and pedestrian activity is common in the immediate foreground. Foreground views are dominated by the Summit Condos and Juniper Springs Lodge. However, there are Jeffrey Pine Trees adjacent to these structures. Middleground views consist of the middle to upper elevations

of the Sherwin Mountains. Tree stands are visible on the mountain slopes. In addition, Mammoth Rock is visible from KOP #2. Background views are limited to a small portion of the distant Sherwin Mountains. The valued visual resources from KOP #2 include foreground views of the existing Jeffrey pine stands and middle ground and background views of the Sherwin Mountains.

KOP #3 provides a view of the project site looking westerly from the intersection of Meridian Boulevard and Majestic Pines Road. As illustrated in Photograph 3 in Figure 26, the immediate foreground includes the intersection of Meridian Boulevard and Majestic Pines Road and the Eagle Base Lodge parking lot, both of which are subject to high amounts of vehicular activity, especially during the peak snow season. Parked vehicles and pedestrians along Meridian Boulevard are common. Foreground views include Juniper Springs Lodge and the Eagle Base Lodge and associated facilities at the base of Mammoth Mountain. However, foreground views are dominated by Mammoth Mountain as it rises above and beyond these structures. Yet, with or without snow, it is apparent the natural vegetation on Mammoth Mountain has been altered to provide ski runs. Additionally, limited views of residential uses associated with Camp High Sierra are visible on the north side of Chairlift 15. Middleground views consist of the upper reaches of Mammoth Mountain, which are generally considered to be above Lake Mary Road from views west of the Eagle Lodge Base site. Although the ski lifts and runs are less visible when compared to the foreground views, it is still apparent that the natural vegetation of the Mountain has been altered to accommodate skiing. No background views are available from this location. The valued visual resources from KOP #3 are the middleground views of Mammoth Mountain.

KOP #4 provides a view of the site looking northwesterly from the Summit Condominiums located southeast of the intersection of Meridian Boulevard and Majestic Pine Drive. As shown in Photograph 4 in Figure 23, similar to KOP #3, the immediate foreground is dominated by vehicular activity associated with Meridian Boulevard and the Eagle Base Lodge parking lot. Vehicle parking and pedestrians along Meridian Boulevard are also common. Temporary bus parking and loading activities are common at this intersection and within the parking lot during the skiing season. Immediate foreground views also include Juniper Springs Lodge, Eagle Base Lodge and associated facilities. Foreground views consist primarily of the lower reaches of Mammoth Mountain and associated natural vegetation, which generally is considered the area east of Lake Mary Road. From this vantage point, the ski runs are minimally visible due to vegetation and existing development in the immediate foreground. Limited views of the residential uses associated with Camp High Sierra are visible on the lower reach of the Mountain. Middleground views consist of the upper reaches of Mammoth Mountain. No background views are available from this location. The foreground views of the Jeffrey pine trees on the lower reaches of the Mountain and middleground views of the upper reaches of the Mountain comprise the valued visual resources from this vantage point.

KOP #5 provides a view of the site looking southeasterly from the northeastern portion of Lot 1. This vantage point is located northwest of the site and to the north of Chairlift 15. This vantage offers views from the residential uses associated with Camp High Sierra. As illustrated in Photograph 5 in Figure 24, immediate foreground and foreground views are dominated by Jeffrey pine trees. Partial views of the Eagle Lodge Base facilities are visible through the trees. Pedestrian activity associated with the Eagle Lodge Base facility is also visible from this vantage point. Although not visible in Photograph 5, middleground views include limited views of the Sherwin Mountains. Background views of the White Mountains and Glass Mountains to the east are also available from this vantage. Valued visual resources from KOP #5 include the Jeffrey pine trees in the immediate foreground and foreground, the Sherwin Mountains in the middleground and the White Mountains and Glass Mountains in the background view.

KOP #6 provides views of the site looking easterly from the Lupin ski run beneath the Chair 15 ski lift, as well as from several residences located along the northern side of Juniper Road, which are located above the site to the west on the base of Mammoth Mountain. As shown in Photograph 6 in Figure 27, the immediate foreground includes a variety of natural and man-made features. The primary visual feature in the immediate foreground is the ski run itself. Residential uses are located along the southern side of the ski run, which are partially screened by existing stands of Jeffrey pine trees. The northern side of the run is comprised of stands of Jeffrey pine trees. At the base of the ski run, the Eagle Lodge Base facilities are visible. Foreground views include the parking lot and the Mammoth Community Water District Ground Water Treatment Plant No. 2, beyond which views consist of the canopy of dense forested land. Middleground views also consist of the canopy of forested land on the valley floor. Background views consist of the distant Glass Mountains, White Mountains and valley floor. The valued visual resources from this vantage point include the foreground and middleground views of the tree canopy and valley floor beyond the project site to the east, as well as the background views of the distant Glass Mountains, White Mountains and valley floor.

KOP #7 provides a view of the site looking northeasterly towards the project area from Lake Mary Road. As illustrated in Photograph 7 in Figure 28, the immediate foreground includes the downward sloping base of Mammoth Mountain. This area is undeveloped and consists of scattered stands of Jeffrey pine trees. Foreground views consist of residential uses that are situated southwest of the project site and the tops of the tree canopy of scattered and densely forested areas. The project site is situated within the foreground view from this vantage point. Middleground views consist of the canopy of forested land on the valley floor. Background views consist of the distant Glass Mountains, White Mountains and valley floor. The valued visual resources from this vantage include the tree canopy in the immediate foreground, foreground and middleground, as well as the Glass Mountains and White Mountains in the background view.

KOP #8 provides a view of the site looking northerly towards the project area from the Valentine Reserve. As illustrated in Photograph 8 in Figure 28, the immediate foreground includes the downward sloping base of Mammoth Mountain. This area is undeveloped and consists of scattered stands of Jeffrey pine trees. Foreground views consist of residential uses that are situated southwest of the project site and the tops of the tree canopy of scattered and densely forested areas. The project site is situated within the foreground view from this vantage point. However, as a result of the curving roadway and intervening forests, the existing on-site developed features are primarily screened or hidden from view. Middleground and background views consist of the Mammoth Knolls. The valued visual resources from this vantage include the tree canopy in the immediate foreground and foreground, as well as the Mammoth Knolls in the middleground and background views.

b. Scenic Management System

Although the project site consists of lands under the jurisdiction of the USFS and the Town of Mammoth Lakes, the methodologies presented in the Scenery Management System (SMS) have been applied to the entire project site, to the extent necessary, to identify the scenic class of the project site and to assess the potential visual impacts of the proposed project.

The SMS is typically a regional approach to understanding and classifying the visual context of an area, but can be utilized to address project-specific visual impacts. The SMS is established in *Landscape Aesthetics, A Handbook for Scenery Management* prepared by the USFS in 1995, also referred to as Agricultural Handbook Number 701. The SMS creates an inventory and analysis of aesthetic values while attempting to determine the relative value and importance of scenery in a national forest.

The SMS establishes a series of components to analyze scenery in a rational sequential format to arrive at a set of visual goals and objectives for USFS lands. The initial component is the Landscape Character description, which is developed by characterizing the site's natural site character and the existing landscape, as well as describing any unique, natural elements. The Landscape Character description is provided as part of this Affected Environment discussion. Once this general description is established, Scenic Attractiveness Classes are developed: Class A (Distinctive), Class B (Typical), and Class C (Indistinctive). Scenic Attractiveness Classes attempt to further describe the existing landscape in terms of line, color, form, texture, and the combined context. Scenic Integrity is then described and categorized in qualitative rankings ranging from Very High to Unacceptably Low.

Landscape Visibility rates the viewing constituency in terms of vantage points and distance to the area in question. Then, based on Constituent data and information, which connects the relative importance of the viewed landscape to the public, a Concern Level is

determined ranging from High to Low. Seen Areas and Distance Zones are determined to indicate the distance of the public viewers from the viewed landscape, with general categories of Foreground, Middleground, and Background. Scenic Attractiveness and Landscape Visibility are combined to determine a numerically ranked Scenic Class. These Scenic Classes are ranked in an order identifying relative scenic importance, or value, of discrete landscape areas.

Background

The Inyo National Forest Land and Resources Management Plan was developed in 1988, prior to the publication of Agricultural Handbook No. 701. The Forest Plan analysis of visual resources is based on the Visual Management System created in 1974 by the USFS, upon which the current SMS is predicated. Based on correspondence with the USFS, the project site is located within the Management Prescription #13, Alpine Ski Area, Existing and Under Study: Management Prescription (#13). However, upon acquisition of the land in 1991 by the USFS, the environmental analysis did not assign a VQO to the area, a portion of which is the project site. To date, no VQO has been assigned to the project site. Therefore, the purpose of this analysis is to identify a VQO, otherwise referred to as a Scenic Integrity Objective in the SMS, for the project site.

The following discussions regarding Scenic Attractiveness, Scenic Integrity, Landscape Visibility and Scenic Class are all relative to the existing visual character of the site. These components are then applied to the project site to assess potential impacts to the existing visual quality and character of the site.

(1) Scenic Attractiveness

Pursuant to the SMS for visual analysis, to assess project impacts relative to the visual character and quality, first it is necessary to determine the scenic attractiveness of the project site. Scenic Attractiveness is described in the SMS as a “primary indicator of the intrinsic scenic beauty of a landscape and of the positive responses it evokes in people.” Scenic Attractiveness usually involves the combined visual effect of the natural landscape and its stability. Three classes encompass the category of Scenic Attractiveness: Distinctive (Class A), Typical (Class B), and Indistinctive (Class C). The three classes of Scenic Attractiveness are as follows:

- Class A: Distinctive: Areas where landform, vegetation patterns, water characteristics, and cultural features combine to provide ordinary or common scenic quality. These landscapes have strong positive attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance.
- Class B: Typical: Areas where landform, vegetation patterns, water characteristics, and cultural features combine to provide unusual, unique, or outstanding scenic

quality. These landscapes have generally positive, yet common, attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance. Normally, these landscapes form the basic matrix within the ecological unit.

- **Class C: Indistinctive:** Areas where landform, vegetation patterns, water characteristics, and cultural land use have low scenic quality. Often water and rockform of any consequence are missing in Class C landscapes. These landscapes have weak or missing attributes of variety, unity, vividness, mystery, intactness, order, harmony, uniqueness, pattern, and balance.

Like many other areas at the base of Mammoth Mountain, the project site and the surrounding vicinity are occupied by development that is typical in a resort community. The site does not exhibit features that make it unique to the Mammoth area. The general area is comprised of fairly dense residential uses with supporting infrastructure. The development has changed the natural landscape character of the area, resulting in a low level of intactness. Within the project site, the developed areas have replaced sparse stands of Jeffrey pine trees and scattered communities of big sagebrush scrub. As such, there are missing elements of the natural character, which decreases the wholeness and harmony of the area. There is a low level of mystery to the area, which curtails curiosity and diminishes interest in the landscape. Based on these characteristics, the Scenic Attractiveness of the project site and surrounding vicinity falls within Class C, Indistinctive.

(2) Scenic Integrity

Scenic Integrity indicates the degree of intactness and wholeness of the landscape character. Scenic Integrity is a continuum ranging over five levels of integrity from very high to very low. The frame of reference for measuring achievement of scenic integrity levels is the valued attributes of the existing landscape character being viewed. In this project's case, since the site has been previously developed, scenic integrity will describe the existing condition as well as establish a standard for management. Alterations and changes in the natural landscape reduce the Scenic Integrity of an area. Scenic Integrity levels become Scenic Integrity Objectives pursuant to the management prescription identified in the Forest Plan. Under the SMS, the term "Visual Quality Objective" in the Visual Management System (VMS) has been changed to "Scenic Integrity Objective." Agricultural Handbook Number 701 provides the proceeding frame of reference for the various scales of Scenic Integrity. Corresponding levels of existing scenic conditions (i.e., unaltered) and visual quality objective levels (i.e., preservation) from the original VMS, as utilized in the 1988 Inyo National Forest Land and Resource Management Plan, are shown to the right of each level.

Scenic Integrity Level (SMS)VQO (VMS)Very High (Unaltered):

Preservation

Very High Scenic Integrity refers to landscapes where the valued landscape character is intact with only minute, if any, deviations. The existing landscape character and sense of place is expressed at the highest possible level.

High (Appears Unaltered):

Retention

High Scenic Integrity refers to landscapes where the valued landscape character appears intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.

Moderate (Slightly Unaltered):

Partial retention

Moderate Scenic Integrity refers to landscapes where the valued landscape character appears slightly altered. Noticeable deviations must remain visually subordinate to the landscape character being viewed, as described below.

Low (Moderately Altered):

Modification

Low Scenic Integrity refers to landscapes where the valued landscape character appears moderately altered. Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes or architectural styles outside the landscape being viewed. Deviations should not only be appear as valued character outside of the landscape being viewed, but compatible with or complimentary to the character within.

Very Low (Heavily Altered):

Maximum Modification

Very Low Scenic Integrity refers to landscapes where the valued landscape character appears heavily altered. Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes or architectural styles within or outside the landscape being viewed. However, deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the composition.

Unacceptably Low:

Unacceptably Low Scenic Integrity refers to landscapes where the valued landscape character being viewed appears extremely altered. Deviations are extremely dominant and borrow little if any form, line, color, texture, pattern or scale from the landscape character. Landscapes at this level of integrity need rehabilitation. This level of integrity is not utilized as a management objective, but is only utilized to inventory existing integrity.

Table 60, Scenic Integrity Summary, on page 351 provides a summary of scenic integrity levels. Upon review of the definitions in Agricultural Handbook No. 701 for Scenic Integrity Classes, the following two classes are applicable to the project area within the relative aesthetic context.

Low: This level applies to Lots 1, 6, 7 and 87. Although these lots maintain some components of their natural plant communities and vegetation, the landscape character appears moderately altered from its natural state. There are paved roadways/pathways associated with the existing Eagle Lodge Base facility and the Juniper Springs resort within these areas. There is a maintenance structure in Lot 6 that incorporates no architectural design features and/or characteristics of the surrounding natural environment. These deviations are more evident than the natural landscape character of the site. The level of intactness of these lots is low as there appears to be missing parts of the natural vegetation due to the developed areas. As such, the area lacks a degree of wholeness. Furthermore, the developed and disturbed areas contribute to a low expression of character for these lots relative to undeveloped areas at the base of Mammoth Mountain.

Very Low: This level applies to Lot 5, which includes the paved parking lot for the existing Eagle Base Lodge facility. This level of integrity is based primarily on the fact that the parking lot, especially when occupied by vehicles, dominates the landscape character. The degree of deviation from the natural landscape context can be defined as dominant, with a small portion of the natural landscape remaining intact. This deviation is clearly evident from any vantage point around Lot 5.

In summary, the USFS owned lands (Lots 1, 6 and 7) have been assessed with a Low scenic integrity level. The privately owned lands under the jurisdiction of the Town including Lots 5 and 87 have been assessed with a Very Low and Low level of scenic integrity, respectively. Since Lot 5 comprises the majority of the project site, the scenic integrity of the entire project site is concluded to be Very Low. This class is assigned to the entire site due to the overwhelming sense that the site is viewed almost entirely as disturbed and/or developed for uses that support the skiing industry. The natural vegetation is sparse when compared to other undeveloped or less developed areas at the base of the Mountain. Thus, the degree of intactness

Table 60

Scenic Integrity Summary

Criteria for Scenic Integrity of the Landscape Character Image/Sense of Place	Very High (VH)	High (H)	Moderate (M)	Low (L)	Very Low (VL)	Unacceptably Low (UL)
<i>Dominance</i> Landscape Character vs. Deviation	Landscape Character	Landscape Character	Landscape Character	Deviation	Deviation	Deviation
<i>Degree of Deviation</i> From Landscape Character	None	Not evident	Evident but not dominant	Dominant	Very dominant	Extremely dominant
Intactness of the Landscape Character	Fully expressed	Largely expressed	Slightly altered and moderate expression of landscape character	Altered and low expression of landscape character	Heavily altered and very low expression of landscape character	Extremely altered
Corresponding VQO to Scenic Integrity Level	Preservation	Retention	Partial Retention	Modification	Maximum Modification	N/A ¹

¹ This level of integrity is not utilized as a management objective, but is only utilized to inventory existing integrity.

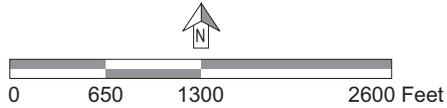
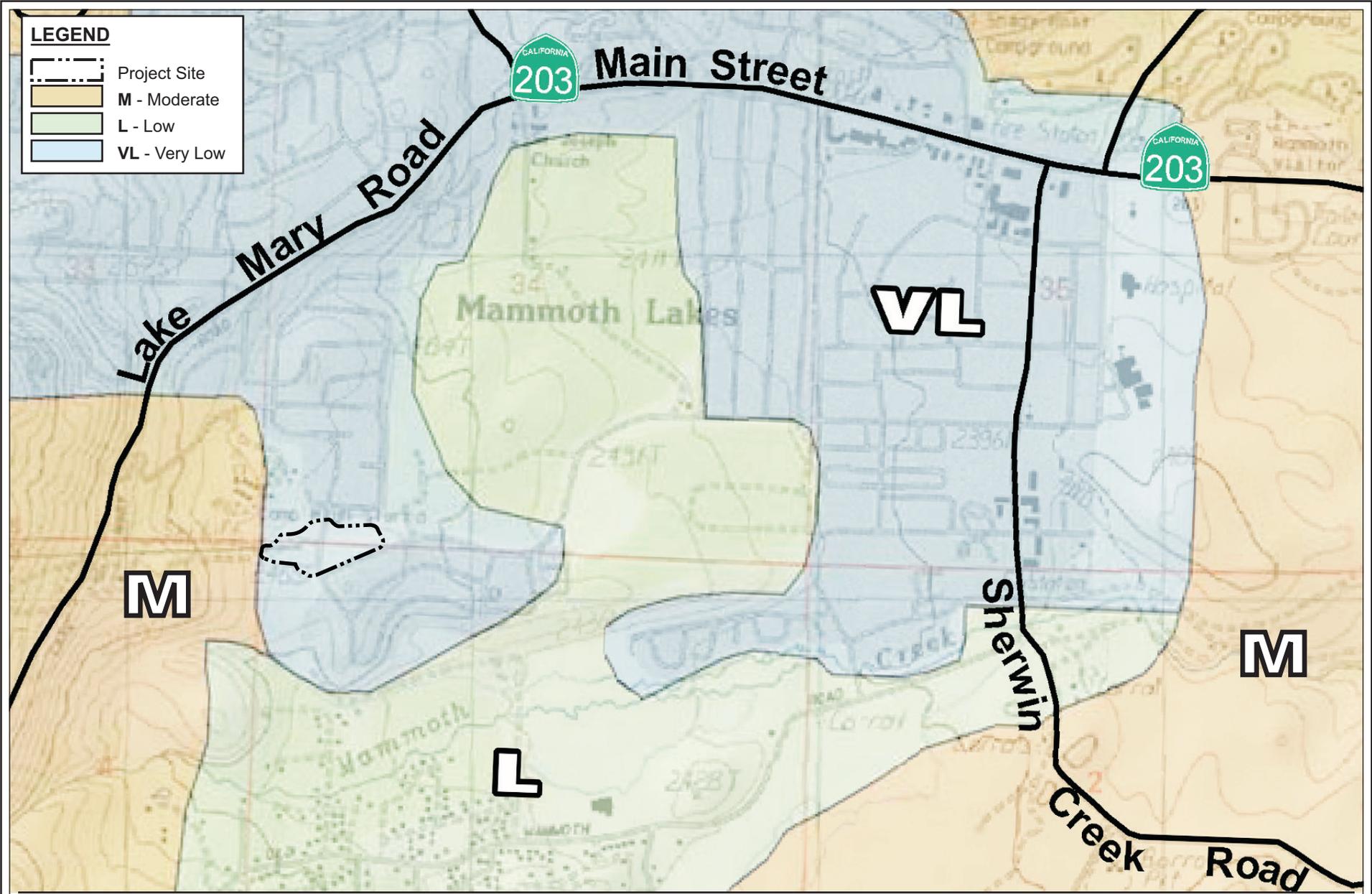
Source: *Landscape Aesthetics, A Handbook for Scenery Management (U.S. Forest Service 1995)*

and wholeness of the natural landscape character appears heavily altered. Furthermore, the developed areas do not borrow from the alpine characteristics and setting of the surrounding project area being viewed. Figure 29 on page 352 illustrates the scenic integrity of the site and the surrounding areas. As shown in Figure 29, the surrounding areas within the site vicinity have been assigned a Moderate, Low or Very Low scenic integrity classification.

(3) Landscape Visibility

Landscape visibility addresses the relative importance and sensitivity of what is seen and perceived in the landscape. Landscape visibility is a function of several interconnected considerations: (1) context of viewers; (2) duration of views; (3) degree of discernable detail; (4) seasonal variation; and (5) number of viewers. The SMS provides four ranges of views: Immediate Foreground; Foreground; Middleground and Background, which are defined above.

Existing travelways and use areas are used by the SMS to prioritize the observer positions, which is then combined with the distance component of the SMS. Travelways are defined as “linear concentrations of public viewing, including freeways, highways, roads, railroads, trails, commercial flight paths, rivers, canals, and other waterways.” These travelways are then separated into categories ranging from Primary Travelways with High Use to Secondary Travelways with Low Use. Primary Travelways typically include roadways such as designated



Source: Mammoth Mountain Ski Back Trail
Visual Resources Analysis, June 2005.

Figure 29
Scenic Integrity Map

scenic highways, scenic byways or other special designation roadways within areas such as national parks, national recreation areas and national forests. Secondary Travelways are all roadways not listed under the Primary Travelways designation. Use areas are defined as spots/locations that receive concentrated public-viewing use. The “use” level is determined by assessing the amount of concentrated public viewing from a particular location.

As Meridian Boulevard is frequently used by visitors and residents of the Town to access the Eagle Base Lodge and surrounding residential uses and contains views of the lower and upper reaches of Mammoth Mountain, this roadway exhibits Moderate Use. As such, Meridian Boulevard is considered a Secondary Travelway with Moderate Use. Similar to Meridian Boulevard, Majestic Pines Road does not fall into the category of a Primary Travelway, therefore, it is considered a Secondary Travelway. This roadway is also utilized by residents and visitors of the Town to access the Eagle Base Lodge and surrounding area, however, to a much lesser degree than Meridian Boulevard. As such, Majestic Pines Road is classified as a Secondary Roadway with Low Use. Lake Mary Road provides immediate foreground, foreground, middleground background views, all of which contain valued visual resources of the natural vegetation, mountains and horizon. This roadway is frequently utilized by residents and visitors to access the available scenic views from this vantage, especially during the summer. As such, Lake Mary Road is classified as a Primary Roadway with Moderate Use.

The degree of public importance assessed to landscapes as viewed from travelways and use areas are measured in terms of Concern Levels. As discussed in the Affected Environment section above, eight KOPs have been identified that have views to the project site. The concern levels from KOP #1, KOP #3 and KOP #7 have been determined based on Table 61, Hierarchy of Concern Levels, on page 354 that provides a matrix to assist with determining applicable Concern Levels. Since views from KOP #1 and KOP #3 of the site’s existing landscape character are primarily of developed or areas, including vehicular activity within the parking lot and pedestrian activity at the Eagle Lodge Base area, the interest in scenery of the existing landscape character is considered low. Based on the discussions above, KOP #1 would fall under the Secondary Travelway/Use Area: Low Use – “Low” interest in scenery category and KOP #3 would fall under the Secondary Travelway/Use Area: Moderate Use – “Low” interest in scenery category. Each of the locations is identified with a Concern Level of 3.

As stated above, Lake Mary Road is classified as a Primary Roadway with Moderate Use. Although KOP #7 provides views with valued scenic resources at all view ranges, views of the project site are limited due to intervening development and vegetation. Thus, the interest in scenery of the landscape character of the site is low from KOP #7. Therefore, KOP #7 would fall under the Primary Travelway/Use Area: Moderate Use – “Low” interest in scenery category. Thus, KOP #7 is identified with a Concern Level of 2.

Table 61
Hierarchy of Concern Levels

Travelway Type/Use Area	Interest In Scenery		
	High	Moderate	Low
Primary Travelways/Use Area High Use	1	2	2
Primary Travelways/Use Area Moderate Use	1	2	2
Primary Travelways/Use Area Low Use	1	2	3
Secondary Travelways/Use Area High Use	1	2	2
Secondary Travelways/Use Area Moderate Use	1	2	3
Secondary Travelways/Use Area Low Use	1	2	3

Note: The numbers in this table represent the Concern Level from a particular view, or a Key Observation Point (KOP). The Concern Level from a particular view (or KOP) is determined by a combination of the Travelway/Use Area and Interest in Scenery from a particular view. The Concern level is then utilized as a component in Table 62, below, to determine the Scenic Class of a particular landscape.

Source: Landscape Aesthetics, A Handbook for Scenery Management (U.S. Forest Service 1995)

In order to determine concern levels for KOP numbers 2, 4, 5 and 6, constituent information based on input and comments gathered from two public open houses held by the applicant have been analyzed. Views from KOP numbers 2, 4, 5 and 6 represent views from residential uses adjacent to the site or in the immediate surrounding vicinity. KOP #6 also represents skier views from the Lupin ski run beneath Chair Lift 15 on Mammoth Mountain. The open houses were held to assist in developing the concept for the proposed Eagle Lodge Base Area development. The first open house was held in April 2004. In this concept meeting, the day lodge development was contemplated on the USFS parcels. Many comments were received about the lack of amenities available to serve the neighboring residences, such as a stand-alone restaurant and neighborhood convenience market. In addition, participants expressed their dissatisfaction with the lack of ski school facilities at the base. As a result of that feedback, the applicant revised the proposed project to incorporate the public's comments. A subsequent open house was held in December 2004 to share the revised plans with the community. Two versions of the concept were presented and attendees of the open house were polled as to their preferred alternative. Overwhelmingly, participants favored the general concept that was developed into the project as described in Section 2.0 of this document. Specifically, participants preferred the building massing of this concept, which incorporates a variety of angles and corners in the design of the proposed structures. Participants expressed that the project design creates a mini-village feel for the neighborhood. Participants expressed interest in the amenity mix provided in response to comments made at the April open house.

Participants also commented favorable on the expanded ski school facilities at the mountain base and the open space immediately around the base of the Chairlift.

Overall, the public comments were generally related to the architectural form, massing and amenities to be provided as part of the project. The participants wanted to make sure that the project, as a resort use, fits into the alpine setting and character of the Mammoth area. Thus, although the level concern for the design and amenities of the project are considered high, the level of concern for the preservation of the existing landscape character is considered to be low. Thus, KOP numbers 2, 4, 5 and 6 are assigned a Concern Level of 3.

With regard to KOP #8, similar to KOP #7, this vantage provides views of valued scenic resources at all view ranges. However, since views to the project site are limited from this vantage, the interest in scenery of the landscape character of the site is low from KOP #8. Thus, KOP #8 is identified with a Concern Level of 3.

Based on the previous discussion of the site's visibility and associated concern levels from the various identified KOPs, a single concern level and distance zone can be applied to the project site. Generally, views to the site are limited from KOP numbers 5, 7 and 8. However, from KOP numbers 1,2 3, 4, and 6, the site is contained with the foreground views. From these KOPs, the concern level has been identified as 3. Thus, for purposes of this analysis, the site is described as being within foreground views (FG) that have a Concern Level of 3, otherwise referred to as "FG3."

(4) Scenic Class

Scenic classes measure the relative importance, or value, of discrete landscape areas having similar characteristics of scenic attractiveness and landscape visibility. Scenic classification is possible by combining the Scenic Attractiveness classification and Landscape Visibility (Distance Zones). As previously noted, Scenic Attractiveness measures the visual importance of the natural landscape and is divided into three general categories: (1) Distinctive, (2) Typical, and (3) Indistinctive. The proposed project is within an area tentatively identified as Indistinctive landscape for the Mammoth area. As previously indicated the visibility of the project site is primarily limited to foreground views of vehicular travelers along Meridian Boulevard and Majestic Pines Road, as well as adjacent residential uses. The distance zone and concern level for these vantages have been identified as FG3. Table 62, Scenic Class Matrix, on page 356 provides a matrix that determines scenic class based on the distance zone/concern level and Scenic Attractiveness classification. As illustrated in Table 62, since the project site has been assigned within a Class 3 (Indistinctive) category and a FG3 distance zone/concern level, the project site has a corresponding Scenic Class of 5. Pursuant to the SMS, the lower the combined "score," the higher the public value. Generally, Scenic Classes 1-2 have high public

Table 62

Scenic Class Matrix

		Distance Zones & Concern Levels											
		Fg1 ¹	Mg1	Bg1	Fg2	Mg2	Bg2	Fg3	Mg3	Bg3	Ss1 ²	Ss2	Ss3
Scenic Attractiveness	A	1	1	1	2	2	2	2	3	3	1	2	3
	B	1	2	2	2	3	4	3	5	5	2	3	5
	C	1	2	3	2	4	5	5	6	7	3	5	7

Notes:

FG = Foreground, Mg = Middleground, BG = Background, SS = Seldom Seen.

¹ *FG1 represents foreground views with a High Concern Level. High Concern = Level 1, Moderate Concern = Level 2, Low Concern = Level 3.*

² *Seldom seen areas represent views seldom seen by anybody. The KOPs identified in this analysis do not represent any seldom seen views.*

Source: Landscape Aesthetics, A Handbook for Scenery Management (U.S. Forest Service 1995)

value, Classes 3-5 have moderate value, and Classes 6-7 have low value. Therefore, the project site has scenic value on the lower end of the moderate value.

c. Light and Glare

Light impacts are typically associated with the use of artificial light during the evening and nighttime hours. Artificial light may be generated from point sources (i.e., a lit sign), as well as from indirect sources (i.e., reflected light). Uses such as residences, hospitals, and hotels are considered light sensitive since they are typically occupied by persons who have expectations for privacy during evening hours and who are subject to disturbance by bright light sources.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light off of polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Daytime glare generation is common in urban areas and is typically associated with exterior façades largely or entirely comprised of reflective glass or mirror-like materials from which the sun can reflect, particularly following sunrise and prior to sunset. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources, such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses generally include residences and transportation corridors (i.e., roadways).

The existing sources of light on the project site include a few windows and outdoor lighting associated with the temporary Eagle Base Lodge tent facility and vehicle headlights

using the surface parking lot during evening hours. The surface parking lot, which can accommodate approximately 225 vehicles, does not have permanent lighting. As such, the project site emits very little nighttime lighting. There are no buildings or facilities on the project site that presently generate substantial glare since the tent facility is constructed of low-reflective materials. However, the on-site surface parking lot has a limited potential to generate glare reflected off vehicle windows and surfaces in some locations during daytime hours.

In the surrounding area, sources of light and glare include residential and condominium structures as part of the Summit Condominiums, Juniper Springs Lodge and single-family residences located north of Majestic Pines Road. These sources cast light and glare from windows and outdoor lighting. While these sources generate nighttime lighting, they are also sensitive to excessive amounts of light and glare. Additionally, automobiles traveling along Meridian Boulevard and Majestic Pines Road generate light from headlights. Sensitive receivers relative to daytime glare from reflected sunlight include motorists traveling on Meridian Boulevard and Majestic Pines Road and adjacent residential and condominium uses.

d. Shade/Shadow

Shading pertains to the blockage of direct sunlight by buildings and other structures, which has the potential to affect adjacent uses. Shading is generally a function of the season of the year (i.e., summer, winter, etc.), the height and shape of the structure casting the shadow and topography. The sensitivity of a location to the presence or absence of solar access is dependent on the land use and size of the parcel. Facilities and operations sensitive to the effects of shading include: solar collectors; nurseries; primarily outdoor-oriented retail uses (e.g., certain restaurants); or, routinely useable outdoor spaces associated with recreational, institutional (e.g., schools), or residential land uses. These uses are considered sensitive because sunlight is important to function, physical comfort, and/or commerce. The approximately one-story temporary tent facility and the small maintenance facility on the western side of the parking lot are the only manmade sources of shade or shadow on the project site. However, no substantive shading is currently generated by either structure on the project site. As such, no off-site uses are affected by shading from the project site. However, the surrounding area contains various residential uses that are considered potentially sensitive to shading. Potentially sensitive uses identified in the area include:

- Single-family residences, including the residences themselves and their backyards, located to the north of the project site located along Monterey Pine Road;
- The Summit Condominiums, particularly the balconies and patios that from Meridian Boulevard, located to the south of the site; and

- Lodging units within the Juniper Springs Resort, particularly the balconies and patios that front Majestic Pines Road, located to the southwest of the site.

Additionally, in areas subject to high amounts of snowfall, such as Mammoth, shade can prevent snow from melting which can lead to snow accumulation in undesirable areas. This can be especially problematic for residential, recreational and other uses. Furthermore, shading on roadways can lead to slick roads and “black ice” conditions where roadway safety may become a concern. Roadways in the project area potentially subject to shading are Meridian Boulevard and Majestic Pines Road.

3.9.3 ENVIRONMENTAL CONSEQUENCES

a. Significance Criteria

The proposed project would have a significant impact on visual resources if it would:

- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Have a substantial adverse effect on a scenic vista;
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area; or
- Conflict with an applicable plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the Inyo National Forest Land and Resource Management Plan, General Plan, Juniper Ridge Master Plan or Municipal Code) adopted for the purpose of avoiding or mitigating an impact to visual resources.

Additionally, the proposed project would have significant impacts on visual resources relative to the Scenic Management System if it would:

- Result in a substantial change to the Scenic Attractiveness or Integrity of the site or its surroundings.

In determining shadow effects, several factors are considered:

- Affected land use (i.e., is it a light-sensitive use whereby sunlight is essential to its use);
- Duration (i.e., how many hours per day might a use be shadowed);
- Time of day (i.e., is it in shadow at a time of day when sunlight is most important);
- Season (i.e., what time of year might a particular use be in shadow);
- Extent (i.e., what percentage of a particular use may be in shadow);
- Nature of the shadows (i.e., is the shadow more solid or more dappled in nature); and,
- Pre-existing conditions (i.e., are there existing buildings, landscaping or other features that currently shadow the use).

In order for a project to generate a shadow impact, a project must result in increased shadows cast upon light-sensitive uses. Shadow impacts are significant if shadow-sensitive uses would be shaded by project-related structures for more than three hours between 9:00 A.M. and 3:00 P.M. PST between late October and early April, or for more than four hours between early April and late October. Facilities and operations sensitive to the effects of shading include: solar collectors; nurseries; primarily outdoor-oriented retail uses (e.g., certain restaurants); or, routinely useable outdoor spaces associated with recreational, institutional (e.g., schools), or residential land uses. These uses are considered sensitive because sunlight is important to function, physical comfort, and/or commerce.

In addition, shading can cause hazardous roadway conditions (i.e., black ice), as described above. Although impacts to roadways as a result of shading can be considered a hazardous design impact under the topic of transportation, these impacts are addressed in this section. Like the sensitive uses described above, shading impacts to roads are considered significant if roadways would be shaded by project-related structures for more than three hours between 9:00 A.M. and 3:00 P.M. PST between late October and early April, or for more than four hours between early April and late October. In addition, shade impacts are considered significant if shading would create hazardous road conditions (i.e., black ice).

b. Methodology

(1) Visual Quality and Character

The analysis of visual quality and character relies upon each step of the SMS methodology, described above, to determine the scenic qualities and management objectives of

the site. A determination is made whether development of the project meets the Scenic Integrity Objectives (or formally referred to as VQOs in the Visual Management System) established for the project site, based on the SMS analysis. This determination is made by comparing the resulting appearance to the existing site appearance and character of adjacent uses and determining whether and/or to what extent a degrading of the visual character of the site area could occur (considering factors such as changes in the appearance of natural features and open space, and the blending/contrasting of new and existing buildings given uses, density, height, bulk, setbacks, signage, etc.) and whether or not such change is acceptable under the assigned Scenic Integrity Objective. A determination is also made whether the project is consistent with the Scenic Class assigned to the project site. Pursuant to CEQA, a determination is made whether the visual quality and character of the site and its surroundings would be substantially degraded. In addition, impacts regarding visual quality and character are evaluated with consideration given to context and intensity to provide impact significance conclusions per NEPA standards.

(2) Views

The analysis of views compares the changes resulting from the development of the proposed project to the quality of existing views. The intent of the analysis is to determine if valued view resources exist and whether valued view resources would be blocked or diminished. The analysis further considers whether the proposed project includes design features that would offset or mitigate specific impacts. To determine whether a potential view impact would occur, a four-step process is used to weigh several considerations, as follows:

Step 1: Define the view resources (refer to Key Observation Point discussion, above).

Step 2: Identify the potential obstruction of view resources (attractive visual features) as a result of development of the project site. An assumption is made that any obstruction of a resource would constitute a change in the environment and would be considered an adverse impact regardless of effect on the overall view.

Step 3: Evaluate whether a potential obstruction would substantially alter the view. The “substantiality” of an alteration in viewing is somewhat subjective and depends on many factors. In this case an obstruction in the view of a particular view resource was considered substantial if it exhibited the following traits: (1) the area viewed contains a valued view resource; (2) the obstruction of the resource covers more than an incidental/small portion of the resource; and (3) the duration of the view is available long enough to ascertain discernable details of the valued view resource. In addition, for purposes of the NEPA analysis, impacts to views are considered in terms of context and intensity.

To assist in the analysis of the project's potential view impacts, visual simulations of the proposed conditions from the KOPs, identified above, have been prepared to ascertain the changes in conditions attributable to the project. The visual simulations are intended for purposes of understanding the scale, mass and height of the proposed project. The architectural details will be resolved through the Town's Design Review process. As such, the simulations are sufficient to utilize as a planning tool to assess impacts to valued visual resources from the identified KOPs.

Step 4: Consider whether the proposed project includes design features that offset the alteration in views or loss of views of particular valued view resources. To be considered as a mitigating factor for a particular adverse view impact, a design feature would need to lessen the proposed project's impact for viewers of the specific view that was adversely affected. If development substantially obstructs an existing view of a valued view resource and no mitigating factors are available, a significant and unavoidable view impact would occur.

(3) Light and Glare

The process for determining potential light and glare impacts is to identify the uses and types of lighting and building materials that are anticipated to be a part of the proposed project. The analysis then determines whether such lighting and building materials would contribute to light and/or glare impacts in surrounding areas.

(4) Shade/Shadow

The analysis of shade/shadow was conducted based on analyses of the length of shadow that would be cast by the proposed structures at different times of day on the winter and summer solstices. The shading analysis prepared by the applicant includes simulations for representative hours (9:00 A.M., 12:00 P.M. and 3:00 P.M. Pacific Standard Time) during the Spring (March 21) and Fall (September 21) Equinoxes and Winter (December 21) and Summer (June 21) solstices. The periods were evaluated to assess the most extreme shadow effects and the times were selected as a representative sample of shadow migration throughout the day. As stated above, the existing on-site facilities do not cast shadows off the project site. Thus, shadows under the proposed conditions were evaluated to determine if impacts would occur, based on the significant criteria stated above.

c. Environmental Consequences of the Proposed Action

(1) Project Construction Impacts

(a) Visual Quality and Character

Construction of the project would involve site preparation activities including the removal of the surface parking lot and temporary structures. Specifically, construction would remove the existing asphalt surface parking, some of the temporary facilities, and other on-site manmade features, such as on-site walkways and landscaping. On-site vegetation also would be removed to allow for construction of the proposed project. Following site preparation activities, the construction of the proposed structures and landscape improvements would occur. In terms of context, the project area is urban in nature and construction activities would be visible from the surrounding land uses, including adjacent residential uses. Since the project site is in a generally developed and/or disturbed state, it is generally devoid of substantial vegetation representing the natural character of the site and other aesthetic amenities. Thus, construction activities on the project site would not detract from the valued visual quality of the area.

Temporary barriers (fencing) would be placed along the periphery of the site that would screen much of the construction activity from view from the street level. Although the construction site would be screened, the pedestrian interface along a construction site and work-in-progress visible above the fencing are generally not considered attractive since construction sites have a general aspect of untidiness and are devoid of landscaping and architectural detail. However, for those who consider construction activities interesting, view holes would be provided in security fencing for interested onlookers. Although a percentage of viewers would consider removal, excavation, and construction activities interesting, others would consider these activities detrimental to the aesthetic value of Majestic Pines Road and Meridian Boulevard and as such, the visual quality of the area. To ensure that visual impacts associated with the construction site are maintained at a less than significant level, Mitigation Measure AES-1 has been prescribed that requires no unauthorized materials to be posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways be maintained in a visually attractive manner throughout the construction period.

During project construction, dump trucks and other trucks hauling demolition or grading materials from the project site would be required to access the site via local roadways. Trucking would also be required for the delivery and removal of excavation equipment, cranes, other machinery, and for the delivery of materials. As with on-site activities, the visual aspect of trucks loaded with debris and/or soils would be interesting to some viewers and unsightly to others. Proposed access to the site for dump trucks, semi-trailers, and truck and trailers in the removal of construction debris and excavated soils and delivery of heavy equipment would occur

via Meridian Boulevard. In addition, although Meridian Boulevard includes residential areas, the visual effects of construction hauling would be less than significant since this roadway can accommodate a range of vehicle types, including trucks incidental to construction and deliveries. Nonetheless, to ensure that construction haul routes do not affect sensitive uses in the project vicinity, including residential uses along Majestic Pines Road, Mitigation Measures AES-2 has been prescribed that requires approval of Hauling Plan by the Town's Community Development Department.

Although construction activities, including the removal of existing vegetation, trucking of construction debris and excavated soils, and alteration of the project site could reduce the existing visual attributes of the project site during the construction phase, the project's construction activities would not substantially detract from the existing visual character of the project site. Construction activities would not severely impact existing biological or cultural resources that contribute to the visual character of the site. Construction activities would not result in unique or unknown effects on the human environment. Therefore, the intensity of impacts would be minimal. In addition, construction activities would occur in accordance with Municipal Code requirements, thus outdoor nighttime lighting required would be limited to a few evening hours. Furthermore, construction activities would be short-term and, with the incorporation of recommended mitigation measures, the impact of construction activities on visual quality would be less than significant pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that no significant adverse visual impacts would occur pursuant to NEPA.

(2) Project Operation Impacts

(a) Visual Quality and Character

As previously stated in Section 3.9.1, Regulatory Framework, the project site does not have an assigned Scenic Integrity Objective (formerly referred to as VQO in the VMS). Thus, no established management direction regarding aesthetics has been assigned to the project site. However, the SMS analysis conducted for the project site and contained in this section concludes that scenic attractiveness and integrity level for the project site is "Indistinctive" (Class C) and "Very Low," respectively, which indicates that the site's natural character has been heavily altered. Since the site has a "Very Low" scenic integrity level it is subject to the "Maximum Modification (MM)" VQO, as referred to in the Visual Management System. The MM VQO states that:

"Management activities of vegetative and landform alterations may dominate the characteristic landscape. However, when viewed as background, the visual characteristics must be those of natural occurrences within the surrounding area"

or character type. When viewed as foreground or middleground, they may not appear to completely borrow from naturally established form, line, color, or texture. Alterations may also be out of scale or contain detail that is incongruent with natural occurrences as seen in foreground or middleground. Reduction in visual contrast should be accomplished within five years.”

Additionally, the SMS analysis conducted for the project site and contained in this section concludes that the project site is within Scenic Class 5, which indicates the site has a moderate value of importance, from the perspective of adjacent residential uses and visitors to the area. Pursuant to the Standards and Guidelines regarding visual resources established in the Forest Plan, approval from the Forest’s Supervisor is required for any deviations from VQOs assigned in Prescriptions as a result of environmental analysis. Since no Scenic Integrity Objective (VQO) has been assigned to the project site, approval would occur via a Non-Significant Forest Plan Amendment to the Inyo National Forest Land and Resources Management Plan, which would assign a scenic class and scenic integrity level to the project site. These assignments would be based on the conclusions rendered in this environmental analysis. The Non-Significant Forest Amendment would not generate additional environmental impacts beyond those that are identified within this document. As such, no additional NEPA environmental analysis pertaining to the Forest Plan would be necessary beyond the requirements of the Non-Significant Forest Amendment.

According to the SMS, different approaches have been identified to meet scenic integrity levels. One approach to meet scenic integrity levels is to borrow form, line color, texture, pattern and scale from similar but different valued landscapes being viewed. Because these are introduced elements from landscape character outside the one being viewed they are usually evident (Moderate) if not dominant (Low). An approach for the “Very Low” level is to shape and blend only with the landforms. For example, roads and landings would conform to folds and ridgelines in the landscape to avoid dominance.

In the case of the proposed project, the proposed structures and associated facilities would be visually dominant over the natural character of the site. However, the MM management objective permits development to dominate the visual character of the area. The existing parking lot and temporary facilities associated with the existing Eagle Base Lodge on the project site, which are somewhat unattractive, are not features that substantially contribute to the area’s valued visual character. The existing vegetation in the western portion of the site positively contributes to the visual character of the area. The majority of the trees and natural vegetation within this area would be preserved under the project. In addition, landscaped areas would include a variety of public outdoor spaces along Meridian Boulevard and Majestic Pines Road, as well in the internal areas of the project site. Thus, the proposed landscaping would be an improvement or otherwise enhance the visual quality of the existing vegetation at the project site. As a result, impacts regarding the removal of existing temporary Eagle Lodge Base Area

facilities and onsite vegetation of the project site would be less than significant pursuant to CEQA. In addition, since the majority of the project site to be developed does not consist of valued cultural or biological resources, the intensity of impacts would be minimal. Furthermore, as developed areas, including the base of Mammoth Mountain, surround the project site, development of the site would serve as an extension to the existing local community. Thus, when viewed in context with adjacent development, the minimal loss of on site biological resources would not represent a significant adverse impact under NEPA.

Grading of the site would be necessary to accommodate the proposed uses, as well as excavation required for the parking garage. However, the site contains minimal natural topography as there is only an approximately 15-foot elevation difference between the easternmost and westernmost sides of the project site. The majority of the site (Lot 5) is generally flat, while the difference in elevation is primarily attributed to a small incline between the westernmost portion of parking lot (Lot 5) and the Lots 1, 6 and 7 that provide access to the existing lodge facilities. Due to the site's existing topography, minimal grading would be required and as such, the design of the project would compliment the natural environment as the proposed structures and associated lodge facilities would generally conform to the existing contours of the land.

The strong aesthetic components that represent the Town's valued aesthetic image are its forest, mountains and meadows situated within an alpine setting. The proposed structures and the project open space would be developed with architectural features and landscaped setbacks to reflect the Town's alpine setting. The project would incorporate battered stone bases, oversized rough-hewn timbers, simpler gable and shed roof forms with dormers, stone wall planters, heavy timber site furnishings, and natural materials, such as timber and stone, which would reflect the natural environment in which the facility would be developed. In addition, project components, such as half log benches, would be installed to provide seating areas and would also provide accents to the architecture that reflect the Town's alpine setting. The landscape plan for the project would incorporate elements such as large boulders, indigenous species of trees, shrubs and wildflowers. Project features such as these described above borrow form, line color, texture, pattern and scale from similar valued landscapes in the local area and region.

The project would result in an increase in the intensity of use and the building height, mass and bulk compared to existing conditions. From the skier plaza end of the development, some portions of the day lodge and commercial uses would be one story from grade. Story heights from the arrival plaza area would vary from three, four and five stories. The maximum building height would be approximately 87 feet above street grade. Please refer to Appendix G for illustrations of the proposed building heights. The sense of mass related to exterior building walls along Meridian Boulevard and Majestic Pines Road would be reduced through the design and incorporation of a variety of angles and corners, as well as roof heights. Additionally, due to existing grade differentials, there would be an approximately 15'-0" elevation difference between

the upper skier plaza, lift loading elevation and the lower, east end of the site. The elevation difference between the arrival plaza and the skier plaza helps in varying the building masses. The varying building heights and multiple structures not only break up the building massing, but also reflect the staggered ridgelines of the surrounding mountains and form of the adjacent Jeffrey pine trees. The proposed heights would be similar to the story heights of surrounding developments, including the Summit Condos and Juniper Springs Resort buildings that have heights ranging from three to five stories. Therefore, the project's structures would be consistent in form and height with other resorts and structures in the adjacent community, as well as the surrounding natural environment. The project would incorporate landscaping consisting of trees and shrubbery, as well as high-quality wall cladding at the street level, which would serve to soften the appearance of mass at the pedestrian level. The landscaping and use of high quality treatment of building surfaces and windows at the street level would also enhance the pedestrian scale of the project. The project design (i.e., materials and general architectural treatments) would be developed in context with the surrounding land uses and the local alpine community. In addition, the project would replace a surface parking lot that is generally void of substantial vegetation representing the natural character of the site and other aesthetic amenities. Furthermore, the site does not contain any known cultural resources. Thus, the intensity of impacts in relation to existing site features would be minimal in regards to the NEPA factors to consider when addressing intensity. Development of the site would not substantially degrade the visual quality or character of the site and its surroundings. Therefore, the contrast between the project and existing features that represent surrounding aesthetic environment would be less than significant under CEQA. Similarly, development of the project site would not result in a significant adverse visual impact under NEPA.

The final design of the project would occur in consultation with the Inyo National Forest staff. As such, the design would be responsive to the architectural guidance provided in applicable Forest Service Manuals and by National Forest Visual Resources staff. Additionally, the project would be subject to the Design Guidelines review process, pursuant to Chapter 9.4.1, Process, in the Design Guidelines.

Based on the discussion above, the project would meet the "Maximum Modification" management objective assigned to the project site as determined by the SMS methodology. This objective correlates to deviations that may strongly dominate the existing landscape character of the site. The deviations do not have to borrow from valued attributes such as size, shape, edge effect and pattern of natural openings within or outside the landscape being viewed. However, deviations must be blended and shaped with the natural terrain so that elements such as unnatural edges, roads and structure do not dominate the composition. As described above, the contrast between the project and existing features that represent the surrounding aesthetic environment would be less than significant. Unlike existing conditions, although the proposed project's features would dominate the valued landscape character being viewed, they would borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type

changes or architectural styles outside the landscape being viewed. Accordingly, the Scenic Attractiveness of the site would change from “Very Low” to “Low.” Nevertheless, the project would still represent a substantial deviation from the natural environment similar to existing conditions. Thus, the scenic attractiveness of the site with the project would remain at Class C, Indistinctive.

For the reasons cited above, the project is determined to be consistent with the Scenic Class 5 assigned to the project site. Overall, the project would be consistent with the objectives set forth in the SMS. Based on the discussion above, impacts to the visual character and quality of the site and its surrounding are concluded to be less than significant under CEQA. Similarly, no significant adverse impacts would occur under NEPA.

(b) Views

Based on visual simulations from each of the eight KOPs identified above, the following provides a discussion of impacts to views and/or scenic vistas as a result of project development. The simulations provide the conceptual design of the buildings, which indicate the height, mass, and bulk of the structures. However, the simulations do not provide the final architectural treatment as that would be determined as the project is reviewed by the Town through the Design Guidelines review process. The analysis of impacts to scenic views is based on the significance thresholds described in Section 3.9.3.a, Significance Criteria, and the methodology described in Section 3.9.3.b(ii), Views.

View from KOP #1

As illustrated in Figure 30 on page 368, the majority of the immediate foreground and foreground views of the parking lot and existing vegetation for vehicular travelers heading south on Majestic Pines Road would be replaced with the north side of the main lodge building. Valued immediate foreground views of the existing Jeffrey pine trees located on the western portion of the site would be partially maintained. Valued middleground views of the distant mountain ranges would be replaced with the lodge structure, with the exception of a portion of the base of Mammoth Mountain. Although views of the available valued resources would be altered by the lodge, the view from KOP #1 is only for several moments due to the short distance and winding nature of Majestic Pines Road. From this point, the road curves to the east providing a view of adjacent residential uses, which lacks any valuable scenic resources. Since the available view is of such short duration, vehicular travelers along Majestic Pines Road have little time to ascertain the discernable details and enjoy the valued view resources. Due to the short duration of the views from this location, the project would not meet all the significance criteria for substantial alteration of valued scenic resources. Thus, less than significant impacts from vantages at KOP #1 would occur under CEQA.



Before



After

Since the view from KOP #1 is available for a short duration from a secondary travelway, view impacts from this KOP would affect only a limited number of vehicular travelers who are not utilizing the roadway for purposes of viewing the Town's valued visual resources. Similarly, due to short duration of views from this KOP, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA.

View from KOP #2

As can be seen in Figure 31 on page 370, the majority of the existing middleground views for residences located to the north of Majestic Pines Road and pedestrians utilizing the Mammoth Loop Trail would be replaced with the north side of the main lodge. Only a small portion of the ridgelines of the Sherwin Mountains would remain above the roofline of the proposed structure. Unlike KOP #1, the view from KOP #2 would occur for long enough duration for residents and pedestrians utilizing the Mammoth Loop Trail to ascertain the discernable details and enjoy the valued view resource. Although the project design features would incorporate architectural details that would enhance the visual quality of the site, these features do not offset alteration of views or loss of views to the valued visual resources from this vantage point. Thus, impacts to valued visual resources from KOP #2 would be significant under CEQA. There are no mitigation measures provided that would reduce the alteration or loss of views from this location. Therefore, the alteration of views or loss of views to the valued visual resources from KOP #2 would be considered significant and unavoidable under CEQA.

Since the project site is currently developed, the foreground views would be consistent with the urban context of the existing setting. Middleground views of the valued visual resources, including the Sherwin Mountains to the south, would be partially retained from this KOP, which is consistent with the visual quality objective for Management Prescription Area #13. Based on these factors and the project's consistency with the visual quality objective for Management Prescription Area #13, no adverse visual impacts would occur from KOP #2 pursuant to NEPA.

View from KOP #3

As illustrated in Figure 32 on page 371, the south sides of the proposed structures would be visible in the foreground views, which extend to Lake Mary Road, along Meridian Boulevard. The structures displace views of the existing vegetation at the base of the mountain, as well as portions of the mountainous topography at the lower mountain elevations. Although a small portion of the middleground views, which are considered to be beyond Lake Mary Road, would be obstructed by the proposed structures, the obstructed views in the middleground would not substantially alter the view as the higher topography and ridgelines of the mountain's peak would mostly be maintained from this location. The middleground views would be partially retained



Before



After



Before



After

from KOP #3. The higher topography and ridgelines are considered more valuable than the lower elevations since the natural character of the Mountain has been altered to accommodate skiing as stands of Jeffrey pines are interspersed among large, extended open areas cleared for ski runs. Additionally, the base of the mountain consists of high amounts of human activity, especially during the ski season. Since the proposed structures would obstruct only a small portion of Mammoth Mountain in the middleground, the project would not substantially degrade views of the valued visual resources from this vantage point. Thus, the project would result in less than significant view impacts from KOP #3 under CEQA standards.

In terms of context, KOP #3 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the middleground view of the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #3 would occur under NEPA.

View from KOP #4

Figure 33 on page 373 provides a visual simulation of the proposed improvements to the site from this vantage. As shown in Figure 33, the proposed structure along Meridian Boulevard would obstruct views of the lower elevations of the Mountain. However, views of the higher elevations of the mountain topography in the middleground views would be preserved, which are considered the valued scenic resources. Thus, the project would result in less than significant view impacts from this location under CEQA. In terms of context, KOP #4 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #4 would occur under NEPA.

View from KOP #5

Figure 34 on page 374, provides a dotted line illustrating the roofline of the proposed buildings from KOP #5. The outline of the proposed building massing was created from a 3-D computer model of the project, which corresponds to the perspective and elevation of KOP #5. Only small portions of the proposed structures would be noticeable from Camp High Sierra, as a result of the intervening vegetation and downward sloping topography. Since the existing Jeffrey pine trees would remain visually prominent, foreground views would not be substantially altered by development of the site. In addition, the valued visual resources from KOP #5 consisting of the Sherwin Mountains in the middleground and the Glass and White Mountains in



Before



After



Before



After

the background views would not be substantially altered. Thus, less than significant view impacts would occur from this vantage point under CEQA. In terms of context, views from this vantage would be available to a limited number of residents at Camp High Sierra. Since the valued visual resources in the foreground, middleground and background would be at least partially retained, if not fully retained, the intensity of visual impacts from this location would be minimal. Therefore, no adverse visual impacts from KOP #5 would occur under NEPA. .

View from KOP #6

As shown in Figure 35 on page 376, due to the downward sloping topography, the proposed structures would not extend above the tree canopy located beyond the project site to the east. Accordingly, valued resources in the foreground (tree canopy), middleground or background views would not be obstructed by the project. Thus, the project would not substantially degrade views of the valued visual resources from this vantage point. As such, the project would result in less than significant view impacts from this location under CEQA.

In terms of context, KOP #6 is representative of views available for residents, as well as a substantial number of skiers with expectations of having views of valued visual resources, as they would be utilizing a recreational amenity. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal, as the valued visual resources, described above, would remain visible. Therefore, no adverse visual impacts from KOP #6 would occur under NEPA..

View from KOP #7

As illustrated in Figure 36 on page 377, due to the existing topography and vegetation, the features of the project site from this vantage point are primarily screened from this location. Only a portion of the roof and southern side of the proposed building(s) can be seen. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources as seen from this location. As such, the project would result in less than significant view impacts from this location under CEQA.

In regards to context, this vantage would be available to a substantial number of people utilizing Lake Mary Road with the expectation of having views of valued visual resources, as they would be traveling along a primary roadway. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.



Before



After



Before



After

View from KOP #8

As illustrated in Figure 37 on page 379, the features of the project site from this vantage are primarily screened or hidden from view. However, the roofs of the proposed structures would be visible just beyond the rooftop of the Juniper Springs Resort. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources from this vantage. As such, the project would result in less than significant view impacts from this location under CEQA.

In terms of context, this view would be available to a moderate number of people at the Valentine Reserve with the expectation of having views of valued visual resources, as the reserve consists of an open, expansive area. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

Overall, based on the significance thresholds described in Section 3.9.3.a, Significance Criteria, and the methodology described in Section 3.9.3.b(ii), Views, no significant impacts to scenic views under both CEQA and NEPA would occur at all of the eight identified KOPs, with the exception of KOP #2. Visual impacts at KOP #2 would be significant under CEQA. As no mitigation measures are available to reduce the significance of impacts to the identified visual resources from this vantage point, view impacts from KOP #2 would be significant and unavoidable under CEQA.

(c) Light and Glare

The project would introduce increased light and glare within the project site compared to existing conditions due to an increase in intensity of development. The project's proposed buildings and landscaped areas would include low-level accent lighting and possibly some pole mounted fixtures with shields to limit spillover of lighting onto adjacent properties. Security lighting would be provided in the plazas and walkways to enhance visibility within the site. Signage for the project would consist of monument and building signs, which would include minimal lighting to facilitate Fire Department access to the site. The project would not include any illuminated advertising signs, brightly illuminated signs, or movable signs.

During project operations, ambient lighting would be greater than under existing conditions due to light spillage from windows, security lighting, architectural lighting and other light sources during the evening hours. Such light spillage, however, has a low glare potential and minimal effect on ambient lighting. Architectural lighting would be directed toward the building walls and, as such, would also have a low ambient effect and glare (reflective) potential.



Before



After

The increase in ambient light and light spillage from the project site would not be great enough to interfere with activities at surrounding residential uses, due to the distance of the proposed structures from the adjacent residential uses and the low light levels associated with the project. Furthermore, although light spillage would be visible from off-site residential locations, the project's light sources are not close enough to off-site residences to substantially alter the character of off-site areas. In addition, lighting for signage would be subtle and would not alter the character of off-site areas. Also, as activity areas at the Juniper Springs Resort are located to the west of the Juniper Springs Lodge building and would be screened from the project site, any light spillage would not be expected to interfere with the performance of an activity at off-site locations. Thus, the intensity of operational lighting impacts would be minimal.

With the proposed entry to Eagle Lodge off of Majestic Pines Road, additional northbound traffic along this roadway and cars pulling out of the lodge could result in significant adverse impacts to single-family residences to the north of Majestic Pines Road from vehicle headlights. Additionally, traffic and/or landscape improvements located along the northern side of Majestic Pines Road could result in the removal and/or effectiveness of the existing berm that currently provides screening from vehicular headlights along Majestic Pines Road. To reduce the potential for such impacts, mitigation has been prescribed that requires landscaping along the northern side of Majestic Pines Road or enhancement the existing berm along the northern side of Majestic Pines Road to minimize light intrusion to the adjacent residences. With implementation of the mitigation measure, impacts from vehicle lights to the residences north of Majestic Pines Road would be reduced to a less than significant level pursuant to CEQA standards. Similarly, the prescribed mitigation measures would ensure that adverse impacts from vehicular headlights would not be significant pursuant to NEPA.

The project would be required to submit an outdoor lighting plan, pursuant to Chapter 17.34.060, Outdoor Lighting Plans, of the Municipal Code. One of the purposes of the lighting ordinance is to protect the ability to view the night sky by restricting unnecessary upward projection of light. As such, preparation of an outdoor lighting plan would ensure that lighting from the project site does not reduce night sky visibility. To ensure compliance with the intent of the Lighting Ordinance, mitigation is prescribed that requires the outdoor lighting plan to include a footcandle map illustrating the amount of light from the project site at adjacent light sensitive receptors. Sensitive receptor locations would be determined in consultation with the Community Development Director. The lighting plan would be submitted in conjunction with the application for design review approval. The Community Development Director may approve, deny, or require modifications to any outdoor lighting plan to meet the purpose of the Lighting Ordinance. Approval of the outdoor lighting plan would ensure compliance with the Municipal Code requirements pertaining to outdoor lighting. With implementation of an approved outdoor lighting plan and prescribed mitigation measure, the project would result in less than significant lighting impacts under CEQA.

In regards to context, glare could affect adjacent residents and vehicular travelers and pedestrians along Meridian Boulevard and Majestic Pines Road. The project's building façades would consist of non-reflective materials, such as timber or stone, as well as non-reflective glass. Thus, the proposed buildings would not generate significant amounts of glare. The project also includes an underground parking structure, thus, there would be no glare impacts associated with vehicle windows, with the exception of cars and buses located in the drop-off areas. As the drop-off areas would contain only a minimal amount of vehicles for a short duration, significant glare impacts from vehicles would not occur. Accordingly, the intensity of impacts would be minimal. Thus, daytime views would not be affected by glare emitted from the project site and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.

(d) Shading

A shade/shadow analysis was prepared by the applicant and is provided in Appendix G of this document. The shade/shadow analysis evaluated the extent of shading from project structures on nearby sun-sensitive uses during the hours when daylight/sun intensity is most prominent: the hours of 9:00 A.M., 12:00 P.M. and 3:00 P.M. Pacific Standard Time during the Spring (March 21) and Fall (September 21) Equinoxes and Winter (December 21) and Summer (June 21) solstices. As shown in Figure 38 through Figure 40 on page 382 - 384, the greatest shading during the hours analyzed would occur during the winter solstice at 3:00 P.M. Under the worst-case shadow scenario at 3:00 P.M. (refer to Figure 35), shading from the proposed project would not occur to the south of the project site, where the Summit condominium and the Juniper Springs Lodge are located. Shading would fall just short of the residences located to the north of Majestic Pines Road. Thus, the project would result in less than significant shading impacts to the adjacent residential uses surrounding the project site.

The Mammoth Loop trail would be partially shaded as a result of the proposed project. However, during the winter, the trail is typically covered in snow and is not utilized during this time of year. Furthermore, if access were available along the trail, pedestrian users would only be in the shade for moments as they would traverse through this portion of the trail. Thus, trail users would be exposed to only minimal amounts of shade, which could also be considered a positive benefit or relief to trail users. As such, the project would result in less than significant shading impacts to pedestrians along the Mammoth Loop Trail.

As illustrated in Figures 38 to 40, the proposed buildings would shade a substantial portion of Majestic Pines Road during the winter solstice for more than three hours between 9:00 A.M. and 3:00 P.M. PST between late October and early April. Shading of this roadway for such extended periods of time could lead to hazardous roadway conditions. As such, impacts are considered to be significant. To ensure that shading of Majestic Pines Road does not result in hazardous roadway conditions (i.e., black ice), mitigation has been prescribed that requires the

Winter
Dec 21
9am



No scale

Source: Gensler, 2006

Figure 38
Shadow Analysis
December 21, 9:00 A.M.

Winter
Dec 21
12pm



No scale

Source: Gensler, 2006

Figure 39
Shadow Analysis
December 21, 12:00 P.M.

Winter
Dec 21
3pm

Mammoth Lake
California



No scale

Source: Gensler, 2006

Figure 40
Shadow Analysis
December 21, 3:00 P.M.

applicant to implement a proactive snow plowing and cindering plan during the two or three worst-case shadow months of the year or to install heat traced pavement at any portion of a pedestrian or vehicular travelway that receives less than two hours of mid-day sun for more than a week. The Town of Mammoth Lakes shall review the methods and effectiveness of the plan during its implementation to ensure that hazardous conditions do not occur. Implementation of the prescribed mitigation measure would reduce potentially significant hazardous roadway impacts as a result of shading along Majestic Pines Road to a less than significant level.

(e) Consistency With Applicable Regulations

Inyo National Forest Land and Resources Management Plan

As discussed in Section 3.9.1, Regulatory Framework, the project is required to be consistent with the regulations set forth in the Inyo National Forest Land and Resources Management Plan. As discussed under the Visual Quality and Character section above, since the project would meet the Maximum Modification management objective established for the project site and a Non-Significant Forest Plan Amendment would be adopted to include the identified scenic integrity objectives established for the project site, the project would be consistent with the Forest Plan in regards to visual resources.

Town of Mammoth Lakes General Plan (1987)

As discussed in the Project Operation Impacts section above, impacts to the Visual Quality and Character of the site and its surroundings would be less than significant. However, as identified under the Views subsection, the project would result in the loss of valued visual resources within middleground views for persons utilizing the Mammoth Loop Trail, as well as residents to the north of Majestic Pines Road. These impacts have been identified as significant and unavoidable. As such, the project would not fully comply with Goal 1 of the Visual Resources and Community Design component of the General Plan in that the project would not protect natural scenic resources. However, through consultation with the Inyo National Forest staff and compliance with the Design Guidelines review process, pursuant to Chapter 9.4.1, Process, in the Design Guidelines, the project would comply with Goal 4.

The Town of Mammoth Lakes Draft General Plan (Update 2005)

As part of the preliminary draft update, dated April 2005, to the 1987 General Plan, three policies have been identified that relate to development of the project. Policy VI.1.A.a requires that proposed developments address the opportunities and limitations of the site and its surroundings. Policy VI.1.A.c requires that building placement, massing, form and materials be appropriate to the mountain setting of Mammoth Lakes. As discussed under the Visual Quality

and Character section, above, development of the project meets the “Maximum Modification” management objective assigned to the project site as determined by the SMS methodology. Additionally, the project features would borrow form, line color, texture, pattern and scale from similar valued landscapes in the local area and region. The analysis concluded for the project concluded less than significant impacts to the visual quality and character of the site and its surroundings would occur as a result of project implementation. Therefore, the project would be consistent with Policy VI.1.A.a and Policy VI.1.A.c. Lastly, Policy VI.1.D.b requires that attention to detail at the pedestrian scale to develop a more hospitable pedestrian environment should be a priority within commercial and resort area of Town. The project proposes landscaping consisting of trees and shrubbery, as well as high-quality wall cladding at the street level to soften the appearance of building massing at the pedestrian level. Additionally, the use of landscaping and high quality building materials at the street level would enhance the pedestrian scale of the project. These project features would provide a hospitable pedestrian environment in the project area. Thus, the project would be consistent with Policy VI.1.D.b.

Town of Mammoth Lakes Municipal Code

As described under the Light and Glare section above, the project would prepare an outdoor lighting plan pursuant to requirements of Section 17.34.060, Outdoor Lighting Plans, in the Municipal Code. The lighting plan would be submitted in conjunction with the application for design review approval.

Juniper Ridge Master Plan

The project proposes a peak building height of approximately 87 feet above street grade, which is approximately 42 feet higher than the permitted 45-foot height in the Juniper Ridge Master Plan. Therefore, an amendment to the Master Plan with regard to building heights would be required to accommodate the proposed heights of the proposed structures. As discussed under the Views subsection, if the requested height amendment were approved, the project would result in significant impacts to valued visual resources contained in the middleground views of the distant mountains from KOP #2. If the project were to incorporate building heights consistent with the maximum allowable building height of 45 feet set forth in the Juniper Ridge Master Plan, the valued visual resources would only be partially obstructed beyond the Summit Condos to the south. As discussed below, the Development in Accordance with Existing Regulations (Alternative 1) would include buildings that cover only an incidental/small portion of the Sherwin Mountains in the middleground views, which would result in less than significant view impacts from KOP #2 under CEQA. Although view impacts at KOP #2 would be reduced by complying with the height provisions set forth in the Master Plan, the project would be generally consistent with the applicable plans and policies regarding visual resources with approval of the requested amendments.

(3) Mitigation Measures

Visual Quality and Character Impacts

Construction Impacts

Construction vehicle trips associated with the project could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. The following mitigation measures would reduce potentially significant construction-related impacts to the site's visual character and quality to a less than significant level under CEQA. Similarly, the prescribed mitigation measures would ensure that adverse visual impacts would not be significant pursuant to NEPA.

AES- 1: The applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials are posted on any temporary construction barriers or temporary pedestrian walkways, and that any such temporary barriers and walkways are maintained in a visually attractive manner throughout the construction period.

AES-2: The applicant shall prepare and submit a construction hauling plan to be reviewed and approved by the Community Development Department prior to issuance of grading permit. The plan shall ensure that construction haul routes do not affect sensitive uses in the project vicinity, including residential uses along Majestic Pines Road.

Operation Impacts

Impacts to the visual quality and character of the site and its surroundings would be less than significant under CEQA and NEPA criteria and no mitigation measures are necessary.

Views

No significant view impacts under CEQA and NEPA would occur at the eight identified KOPs, with the exception of KOP #2. At KOP #2, significant view impacts would occur based on CEQA thresholds. Although the project would incorporate high quality architectural details that would enhance the visual quality of the site, these features do not offset alteration of views or loss of views to the valued visual resources from this vantage in such a manner that would result in a less than significant impact under CEQA. No mitigation measures are provided to reduce the significance of impacts to the visual resources from KOP #2 under CEQA. Thus, impacts would be significant and unavoidable under CEQA. Please refer to the analysis of alternatives, below, for discussion of alternative building heights and massing to the project that would reduce view impacts associated with the project.

Light/Glare

With the proposed entry to Eagle Lodge off of Majestic Pines Road, additional northbound traffic along this roadway could result in significant impacts under CEQA and NEPA to single-family residences to the north of Majestic Pines Road from vehicle headlights. The following mitigation measure would reduce significant light intrusion impacts from vehicles on the adjacent single-family residences to a less than significant level under CEQA. Similarly, the prescribed mitigation measure would ensure that adverse vehicular lighting impacts would not be significant pursuant to NEPA.

AES-3: The applicant shall plant landscaping or enhance the existing berm along the northern side of Majestic Pines Road to minimize light intrusion to the adjacent residences. The improvement shall be installed prior to issuance of a certificate of occupancy for the lodge.

The following mitigation measure would reduce significant light intrusion impacts from the project site to the single-family residences to the north and condominium/resort units to the south and southwest to a less than significant level under CEQA. Similarly, the prescribed mitigation measure would ensure that adverse operational lighting impacts would not be significant pursuant to NEPA.

AES-4: The applicant shall prepare and submit an outdoor lighting plan pursuant to the Town's Lighting Ordinance (Chapter 17.34.060, Outdoor Lighting Plans, of the Municipal Code) to the Community Development Director that includes a footcandle map illustrating the amount of light from the project site at adjacent light sensitive receptors. The sensitive receptor locations shall be determined in consultation with the Community Development Director.

Shade/Shadow

Development of the project would result in shading that could create hazardous roadway conditions (i.e., black ice) along Majestic Pines Road to the north of the project site. The following mitigation measure is prescribed to reduce shading impacts to Majestic Pines Road to a less than significant level.

AES-5: The project applicant shall implement a proactive snow plowing and cindering plan during the two or three worst-case shadow months of the year at any portion of a pedestrian or vehicular travelway that receives less than two hours of mid-day sun for more than a week. The Town of Mammoth Lakes shall review the methods and effectiveness of the plan during its implementation. If determined by the Town that the plan does not adequately reduce hazards resulting from shadows (i.e. black ice), the Town shall require the applicant to

install heat traced pavement at any portion of a pedestrian or vehicular travelway that receives less than two hours of mid-day sun for more than a week.

Consistency with Applicable Regulations

Although the project would reduce views of valued visual resources from KOP #2, the project would be generally consistent with the applicable plans and policies regarding visual resources. Thus, less than significant impacts would occur regarding the project's consistency with an applicable plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an impact to visual resources.

e. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulations Alternative

Construction vehicle trips associated with this Alternative could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. Thus, this Alternative would be required to implement Mitigation Measures AES-1 and AES-2 to reduce significant construction-related impacts to the site's visual character and quality to a less than significant level under CEQA and NEPA criteria. This Alternative would result in an increase in intensity of use and the building height, mass and bulk compared to existing conditions. However, the overall design would be consistent with the Scenic Class 5 designation assigned to the project site. The final design of this Alternative would occur in consultation with the Inyo National Forest staff and Town of Mammoth Lakes to ensure the proposed buildings are visually compatible with the surrounding environment. Therefore, visual quality and character impacts would be less than significant under CEQA and no adverse impacts would occur under NEPA.

Views of the proposed structures under this Alternative from State Highway 203 (approximately 200 meters east of Meridian Boulevard) and from the intersection of Sherwin Creek Road and U.S. Highway 395 would be not available due to intervening topography and existing vegetation. The proposed structures would be below the line of sight illustrated in Figures 21 and 22.

The valued visual resources (i.e., forested areas and surrounding mountains) visible from the eight identified KOP locations would not be substantially covered with implementation of this Alternative. Accordingly, the intensity of impacts regarding views would be minimal.

From KOP #1, although valued middleground views of the distant mountain ranges would be replaced with the lodge structure, the available views would be of such short duration that vehicular travelers along Majestic Pines Road would have little time to ascertain the

discernable details and enjoy the valued view resources. Due to the short duration of the views from this location, not all of the significance criteria for substantial alteration of valued scenic resources would be from this KOP. Thus, less than significant impacts from vantages at KOP #1 would occur under CEQA.

Since the view from KOP #1 is available for a short duration from a secondary travelway, the context of view impacts from this KOP would affect only a limited number of vehicular travelers who are not utilizing the roadway for purposes of viewing the Town's valued visual resources. Similarly, due to short duration of views from this KOP, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA.

From KOP #2, in terms of context, views would be available for a substantial number of people utilizing the Mammoth Loop Trail with expectations of having views of valued visual resources, as they would be utilizing a recreational amenity. In addition, residents to the north of the project site would have direct views of the project site from their backyards. The proposed structures would obstruct portions of the Sherwin Mountains in the middleground views. However, the structures would not cover a substantial portion of the Sherwin Mountains, such that views of the valued visual resources would be significantly impacted under CEQA. Since the middleground and background views of the valued visual resources would be partially retained, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA.

From KOP #3, a small portion of the middleground views, which are considered to be beyond Lake Mary Road, would be obstructed by the proposed structures. However, the obstructed views in the middleground would not substantially alter the view as the higher topography and ridgelines of the mountain's peak would mostly be maintained from this location. Since the proposed structures would obstruct only a small portion of Mammoth Mountain in the middleground, this Alternative would not substantially degrade views of the valued visual resources from this vantage point. Thus, this Alternative would result in less than significant view impacts from KOP #3 under CEQA standards.

In terms of context, KOP #3 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the middleground view of the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #3 would occur under NEPA.

From KOP #4, views of the higher elevations of the mountain topography in the middleground views would be preserved, which are considered the valued scenic resources.

Thus, the project would result in less than significant view impacts from this location under CEQA. In terms of context, KOP #4 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #4 would occur under NEPA.

From KOP #5, portions of the proposed structures would be noticeable from Camp High Sierra beyond the intervening vegetation and downward sloping topography. Foreground views would not be substantially altered by development of the site, as the existing Jeffrey pine trees would remain visually prominent. Furthermore, as the temporary tent would be removed and the area revegetated as part of project implementation, foreground views would include increased views of vegetation located south of the tent facility. Thus, less than significant view impacts would occur from this vantage point under CEQA. In regards to context, views from this vantage would be available to a limited number of residents at Camp High Sierra. Since the valued visual resources from KOP #5 consisting of the Jeffrey pine trees in the foreground, the Sherwin Mountains in the middleground, and the Glass and White Mountains in the background views would be at least partially retained, if not fully retained, the intensity of visual impacts from this location would be minimal. Therefore, no adverse visual impacts from KOP #5 would occur under NEPA.

From KOP #6, due to the downward sloping topography, the proposed structures would not extend above the tree canopy located beyond the project site to the east. Accordingly, valued resources in the foreground (tree canopy), middleground or background views would not be obstructed by this Alternative. Thus, this Alternative would not substantially degrade views of the valued visual resources from this vantage point. As such, this Alternative would result in less than significant view impacts from this location under CEQA.

In terms of context, KOP #6 is representative of views available for residents, as well as a substantial number of skiers with expectations of having views of valued visual resources, as they would be utilizing a recreational amenity. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources, described above, would remain visible. Therefore, no adverse visual impacts from KOP #6 would occur under NEPA.

From KOP #7, only a portion of the roof and southern side of the proposed building(s) can be seen. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources as seen from this location. As such, this Alternative would result in less than significant view impacts from this

location under CEQA. In regards to context, this vantage would be available to a substantial number of people utilizing Lake Mary Road with the expectation of having views of valued visual resources, as they would be traveling along a primary roadway. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

From KOP #8, the features of the project site from this vantage are primarily screened or hidden from view. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources from this vantage. As such, the project would result in less than significant view impacts from this location under CEQA. In terms of context, this view would be available to a moderate number of people at the Valentine Reserve with the expectation of having views of valued visual resources, as the reserve consists of an open, expansive area. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

This Alternative would be required to implement Mitigation Measures AES-3 and AES-4 to reduce significant lighting impacts the single-family residences to the north and condominium/resort units to the south and southwest to a less than significant level under CEQA. Similarly, no adverse lighting impacts would occur under NEPA with implementation of the prescribed mitigation measures. Daytime views would not be affected by glare emitted from the project site with implementation of this Alternative and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.

During the winter solstice, shadows cast by this Alternative would fall short of the residences located to the north of Majestic Pines Road. Therefore, no adverse impacts to adjacent residential uses would occur with this Alternative. However, this Alternative would result in significant shading impacts regarding hazardous road conditions along Majestic Pines Road. Therefore, Mitigation Measure AES-5 would be implemented to reduce potentially significant shadow impacts to a less than significant level.

This Alternative would require a Non-Significant Forest Plan Amendment to the Inyo National Forest Land and Resources Management Plan. This Alternative would not require amendments to the Juniper Ridge Master Plan. Overall, this Alternative would be generally consistent with the applicable plans and policies regarding visual resources. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Construction vehicle trips associated with this Alternative could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. Thus, this Alternative would be required to implement Mitigation Measures AES-1 and AES-2 to reduce potentially significant construction-related impacts to the site's visual character and quality to a less than significant level under CEQA and NEPA criteria. This Alternative would result in an increase in intensity of use and the building height, mass and bulk compared to existing conditions. However, the overall design would be consistent with the Scenic Class 5 designation assigned to the project site. The final design of this Alternative would occur in consultation with the Inyo National Forest staff and Town of Mammoth Lakes to ensure the proposed buildings are visually compatible with the surrounding environment. Therefore, visual quality and character impacts would be less than significant under CEQA and no adverse impacts would occur under NEPA.

Views of the proposed structures under this Alternative from State Highway 203 (approximately 200 meters east of Meridian Boulevard) and from the intersection of Sherwin Creek Road and U.S. Highway 395 would be not available due to intervening topography and existing vegetation. The proposed structures would be below the line of sight illustrated in Figures 21 and 22.

The valued visual resources (i.e., forested areas and surrounding mountains) visible from the eight identified KOP locations would not be substantially covered with implementation of this Alternative. Accordingly, the severity of impacts regarding views would be minimal.

From KOP #1, although valued middleground views of the distant mountain ranges would be replaced with the lodge structure, the available views would be of such short duration that vehicular travelers along Majestic Pines Road would have little time to ascertain the discernable details and enjoy the valued view resources. Due to the short duration of the views from this location, not all of the significance criteria for substantial alteration of valued scenic resources would be from this KOP. Thus, less than significant impacts from vantages at KOP #1 would occur under CEQA.

Since the view from KOP #1 is available for a short duration from a secondary travelway, the context of view impacts from this KOP would affect only a limited number of vehicular travelers who are not utilizing the roadway for purposes of viewing the Town's valued visual resources. Similarly, due to short duration of views from this KOP, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA.

From KOP #2, in terms of context, views would be available for a substantial number of people utilizing the Mammoth Loop Trail with expectations of having views of valued visual

resources. In addition, residents to the north of the project site would have direct views of the project site from their backyards. The proposed structures would obstruct portions of the Sherwin Mountains in the middleground views. However, the structures would not cover a substantial portion of the Sherwin Mountains, such that views of the valued visual resources would be significantly impacted under CEQA. Since the middleground and background views of the valued visual resources would be partially retained, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA.

From KOP #3, a small portion of the middleground views, which are considered to be beyond Lake Mary Road, would be obstructed by the proposed structures. However, the obstructed views in the middleground would not substantially alter the view as the higher topography and ridgelines of the mountain's peak would mostly be maintained from this location. Since the proposed structures would obstruct only a small portion of Mammoth Mountain in the middleground, this Alternative would not substantially degrade views of the valued visual resources from this vantage point. Thus, this Alternative would result in less than significant view impacts from KOP #3 under CEQA standards.

In terms of context, KOP #3 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the middleground view of the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #3 would occur under NEPA.

From KOP #4, views of the higher elevations of the mountain topography in the middleground views would be preserved, which are considered the valued scenic resources. Thus, the project would result in less than significant view impacts from this location under CEQA. In terms of context, KOP #4 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #4 would occur under NEPA.

From KOP #5, portions of the proposed structures would be noticeable from Camp High Sierra beyond the intervening vegetation and downward sloping topography. Foreground views would not be substantially altered by development of the site, as the existing Jeffrey pine trees would remain visually prominent. Furthermore, as the temporary tent would be removed and the area revegetated as part of project implementation, foreground views would include increased views of vegetation located south of the tent. Thus, less than significant view impacts would occur from this vantage point under CEQA. In terms of context, views from this vantage would

be available to a limited number of residents at Camp High Sierra. Since the valued visual resources from KOP #5 consisting of the Jeffrey pine trees in the foreground, the Sherwin Mountains in the middleground, and the Glass and White Mountains in the background views would be at least partially retained, if not retained, the intensity of visual impacts from this location would be minimal. Therefore, no adverse visual impacts from KOP #5 would occur under NEPA.

From KOP #6, due to the downward sloping topography, the proposed structures would not extend above the tree canopy located beyond the project site to the east. Accordingly, valued resources in the foreground (tree canopy), middleground or background views would not be obstructed by this Alternative. Thus, this Alternative would not substantially degrade views of the valued visual resources from this vantage point. As such, this Alternative would result in less than significant view impacts from this location under CEQA.

In terms of context, KOP #6 is representative of views available for residents, as well as a substantial number of skiers with expectations of having views of valued visual resources, as they would be utilizing a recreational amenity. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources, described above, would remain visible. Therefore, no adverse visual impacts from KOP #6 would occur under NEPA.

From KOP #7, only a portion of the roof and southern side of the proposed building(s) can be seen. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources as seen from this location. As such, this Alternative would result in less than significant view impacts from this location under CEQA. In regards to context, this vantage would be available to a substantial number of people utilizing Lake Mary Road with the expectation of having views of valued visual resources, as they would be traveling along a primary travelway. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

From KOP #8, the features of the project site from this vantage are primarily screened or hidden from view. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources from this vantage. As such, the project would result in less than significant view impacts from this location under CEQA. In terms of context, this view would be available to a moderate number of people at the Valentine Reserve with the expectation of having views of valued visual resources, as the reserve consists of an open, expansive area. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the

intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

This Alternative would be required to implement Mitigation Measures AES-3 and AES-4 to reduce significant lighting impacts the single-family residences to the north and condominium/resort units to the south and southwest to a less than significant level under CEQA. Similarly, no adverse lighting impacts would occur under NEPA with implementation of the prescribed mitigation measures. Daytime views would not be affected by glare emitted from the project site with implementation of this Alternative and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.

During the winter solstice, shadows cast by this Alternative would fall short of the residences located to the north of Majestic Pines Road. Therefore, no adverse impacts to adjacent residential uses would occur with this Alternative. However, this Alternative would result in potentially significant shading impacts regarding hazardous road conditions along Majestic Pines Road. Therefore, Mitigation Measure AES-5 would be implemented to reduce potentially significant shadow impacts to a less than significant level.

This Alternative would require a Non-Significant Forest Plan Amendment to the Inyo National Forest Land and Resources Management Plan and amendments to the Juniper Ridge Master Plan. Nonetheless, this Alternative, assuming approval of the requested approvals, would be consistent with the applicable plans and policies regarding visual resources. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Construction vehicle trips associated with this Alternative could affect sensitive uses in the project vicinity. In addition, temporary construction barriers and pedestrian walkways are subject to unwanted posting. Thus, this Alternative would be required to implement Mitigation Measures AES-1 and AES-2 to reduce potentially significant construction-related impacts to the site's visual character and quality to a less than significant level under CEQA and NEPA criteria. This Alternative would result in an increase in intensity of use and the building height, mass and bulk compared to existing conditions. However, the overall design would be consistent with the Scenic Class 5 designation assigned to the project site. The final design of this Alternative would occur in consultation with the Inyo National Forest staff and Town of Mammoth Lakes to ensure the proposed buildings are visually compatible with the surrounding environment. Therefore, visual quality and character impacts would be less than significant under CEQA and no adverse impacts would occur under NEPA.

Views of the proposed structures under this Alternative from State Highway 203 (approximately 200 meters east of Meridian Boulevard) and from the intersection of Sherwin

Creek Road and U.S. Highway 395 would be not available due to intervening topography and existing vegetation. The proposed structures would be below the line of sight illustrated in Figures 21 and 22.

Based on visual simulations included within Appendix I, an analysis of views from each identified KOP for this Alternative was conducted to evaluate view impacts.

From KOP #1, although valued middleground views of the distant mountain ranges would be replaced with the lodge structure, the available views would be of such short duration that vehicular travelers along Majestic Pines Road would have little time to ascertain the discernable details and enjoy the valued view resources. Due to the short duration of the views from this location, not all of the significance criteria for substantial alteration of valued scenic resources would be from this KOP. Thus, less than significant impacts from vantages at KOP #1 would occur under CEQA.

Since the view from KOP #1 is available for a short duration from a secondary travelway, the context of view impacts from this KOP would affect only a limited number of vehicular travelers who are not utilizing the roadway for purposes of viewing the Town's valued visual resources. Similarly, due to short duration of views from this KOP, the intensity of impacts would be minimal. Therefore, no adverse impacts would occur under NEPA..

From KOP #2, although the project design features would incorporate architectural details that would enhance the visual quality of the site, these features do not offset alteration of views or loss of views to the valued visual resources from this vantage point. Thus, impacts to valued visual resources from KOP #2 would be significant under CEQA. There are no mitigation measures provided that would reduce the alteration or loss of views from this location. Therefore, the alteration of views or loss of views to the valued visual resources from KOP #2 would be considered significant and unavoidable under CEQA.

Since the project site is currently developed, the foreground views would be consistent with the urban context of the existing setting. Middleground views of the valued visual resources, including the Sherwin Mountains to the south, would be partially retained from this KOP, which is consistent with the visual quality objective for Management Prescription Area #13. Based on these factors and the project's consistency with the visual quality objective for Management Prescription Area #13, no adverse visual impacts would occur from KOP #2 pursuant to NEPA.

From KOP #3, a small portion of the middleground views, which are considered to be beyond Lake Mary Road, would be obstructed by the proposed structures. However, the obstructed views in the middleground would not substantially alter the view as the higher

topography and ridgelines of the mountain's peak would mostly be maintained from this location. Since the proposed structures would obstruct only a small portion of Mammoth Mountain in the middleground, this Alternative would not substantially degrade views of the valued visual resources from this vantage point. Thus, this Alternative would result in less than significant view impacts from KOP #3 under CEQA standards.

In regards to context, KOP #3 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the middleground view of the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #3 would occur under NEPA.

From KOP #4, views of the higher elevations of the mountain topography in the middleground views would be preserved, which are considered the valued scenic resources. Thus, less than significant view impacts from this location would occur under CEQA. In terms of context, KOP #4 is representative of views available for residents, as well as pedestrian and vehicular travelers along Meridian Boulevard. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources in the Mountain's upper reaches would remain visible. Therefore, no adverse visual impacts from KOP #4 would occur under NEPA.

From KOP #5, portions of the proposed structures would be noticeable from Camp High Sierra beyond the intervening vegetation and downward sloping topography. Foreground views would not be substantially altered by development of the site, as the existing Jeffrey pine trees would remain visually prominent. Furthermore, as the temporary tent base facility would be removed upon project implementation, foreground views would include increased views of vegetation located south of the tent facility. Thus, less than significant view impacts would occur from this vantage point under CEQA. In terms of context, views from this vantage would be available to a limited number of residents at Camp High Sierra. Since the valued visual resources from KOP #5 consisting of the Jeffrey pine trees in the foreground, the Sherwin Mountains in the middleground, and the Glass and White Mountains in the background views would be at least partially retained, if not fully retained, the intensity of visual impacts from this location would be minimal. Therefore, no adverse visual impacts from KOP #5 would occur under NEPA..

From KOP #6, due to the downward sloping topography, the proposed structures would not extend above the tree canopy located beyond the project site to the east. Accordingly, valued resources in the foreground (tree canopy), middleground or background views would not be obstructed by this Alternative. Thus, this Alternative would not substantially degrade views of

the valued visual resources from this vantage point. As such, this Alternative would result in less than significant view impacts from this location under CEQA.

In terms of context, KOP #6 is representative of views available for residents, as well as a substantial number of skiers with expectations of having views of valued visual resources, as they would be utilizing a recreational amenity. Although this view would be available for many people at durations long enough to ascertain the discernable details and enjoy the valued view resources, the intensity of the impacts would be minimal as the valued visual resources, described above, would remain visible. Therefore, no adverse visual impacts from KOP #6 would occur under NEPA.

From KOP #7, only a portion of the roof and southern side of the proposed building(s) can be seen. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources as seen from this location. As such, this Alternative would result in less than significant view impacts from this location under CEQA. In regards to context, this vantage would be available to a substantial number of people utilizing Lake Mary Road with the expectation of having views of valued visual resources, as they would be traveling along a primary travelway. However, since the project features would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

From KOP #8, the features of the project site from this vantage are primarily screened or hidden from view. However, the roofs of the proposed structures would be visible just beyond the rooftop of the Juniper Springs Lodge. The project site is viewed as a continuation of the existing surrounding development and would not substantially block any valued visual resources from this vantage. As such, the project would result in less than significant view impacts from this location under CEQA. In terms of context, this view would be available to a moderate number of people at the Valentine Reserve with the expectation of having views of valued visual resources, as the reserve consists of an open, expansive area. However, since the project buildings would be primarily screened from this location and views of valued visual resources would be preserved, the intensity of impacts would be minimal. Therefore, no adverse visual impacts from KOP #7 would occur under NEPA.

This Alternative would be required to implement Mitigation Measures AES-3 and AES-4 to reduce significant lighting impacts the single-family residences to the north and condominium/resort units to the south and southwest to a less than significant level under CEQA. Similarly, no adverse lighting impacts would occur under NEPA with implementation of the prescribed mitigation measures. Daytime views would not be affected by glare emitted from the project site with implementation of this Alternative and less than significant glare impacts would occur under CEQA. Similarly, no adverse glare impacts would occur under NEPA.

During the winter solstice, shadows cast by this Alternative would fall short of the residences located to the north of Majestic Pines Road. Therefore, no adverse impacts to adjacent residential uses would occur with this Alternative. However, this Alternative would result in potentially significant shading impacts regarding hazardous road conditions along Majestic Pines Road. Therefore, Mitigation Measure AES-5 would be implemented to reduce potentially significant shadow impacts to a less than significant level.

This Alternative would require a Non-Significant Forest Plan Amendment to the Inyo National Forest Land and Resources Management Plan and amendments to the Juniper Ridge Master Plan. Nonetheless, this Alternative, assuming approval of the requested approvals, would be consistent with the applicable plans and policies regarding visual resources. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Under the No Action Alternative, the temporary tent would be removed and ski facilities would continue to operate during the winter season. This Alternative stipulates no development, which would prevent any significant short-term construction related aesthetic impacts. The operation of the facility would not change, therefore any additional operational aesthetic impacts would not occur. In summary, the No Action Alternative would result in no aesthetic impacts.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.10 HYDROLOGY AND WATER QUALITY

This section addresses the potential impacts of the proposed project with regard to drainage patterns, groundwater supply and recharge, and surface and groundwater water quality during both project construction and operation. The analysis of groundwater supply and recharge impacts are based on the *Preliminary Hydrogeologic Investigation*, dated March 2006, prepared by Sierra Geotechnical Services, Inc. The analysis of water quality and surface drainage impacts is based on the *Preliminary Drainage Study*, dated August 2006, and the *Storm Water Pollution Prevention Plan (SWPPP)*, dated April 2006, prepared by Triad/Holmes Associates. These studies are provided in Appendix H of this document. Additional reference documents include the *Town of Mammoth Lakes General Plan* dated October 1987, the *Town of Mammoth Lakes Draft General Plan* dated April 2005, the *Town of Mammoth Lakes 2005 General Plan Update Revised Draft Program Environmental Impact Report (EIR) dated October 2005*, the *Mammoth Lakes Storm Drainage Master Plan (SDMP) Update* dated May 2005, the *Inyo National Forest Land and Resource Management Plan ("Forest Plan")* dated 1988, and the *Water Quality Control Plan for the Lahontan Region, North and South Basins* dated March 1995.

3.10.1 REGULATORY FRAMEWORK

Hydrology and water quality is regulated at the Federal, State, and local levels. The U.S. Army Corps of Engineers (USACE), United States Environmental Protection Agency (USEPA), the California State Water Resources Control Board (SWRCB), the Lahontan Regional Water Quality Control Board (RWQCB), and the Town of Mammoth Lakes regulate hydrology and water quality in the project area.

a. Federal

(1) Federal Clean Water Act, Section 404

The USACE regulates "discharge of dredged or fill material" into "waters of the U.S.," which includes tidal waters, interstate waters, and all other waters that are part of a tributary system to interstate waters or to navigable "waters of the U.S.," as well as the use, degradation, or destruction of which could affect interstate or foreign commerce or which are tributaries to waters subject to the ebb and flow of the tide (33 C.F.R. 328.3(a)), pursuant to provisions of Section 404 of the Clean Water Act (CWA). Section 401 of the CWA requires that any applicant

for a federal permit that involves activities resulting in a discharge to “waters of the U.S.” shall provide a certification from the State in which the discharge is proposed. The State certification needs to conclude that the discharge will comply with the applicable provisions under the federal CWA. Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a CWA Section 401 Water Quality Certification.

In the State of California, the overall regulation, protection, and administration of water quality is carried out by the SWRCB. Potential impacts to designated “waters of the U.S.” are discussed in subsection 3.6, Biological Resources of this EIR/EA. However, no ACOE jurisdictional “waters of the U.S.” and ACOE jurisdictional wetlands exist within the project site.

Section 303(d) of the CWA requires the identification and listing of water quality limited or “impaired” waterbodies where water quality standards and/or receiving water beneficial uses are not met. Once a waterbody is listed as “impaired,” total maximum daily loads (TMDLs) must be established for the pollutants or flows causing the impairment (33 U.S.C. §1313(d)(c)). A TMDL, which is a written plan that describes how an impaired water body will meet water quality standards, contains:

- A measurable feature to describe attainment of the water quality standard(s);
- A description of required actions to remove the impairment; and
- An allocation of responsibility among dischargers to act in the form of actions or water quality conditions for which each discharger is responsible.

(2) National Pollutant Discharge Elimination System

The USEPA established the National Pollutant Discharge Elimination System (NPDES) Program as the primary implementation program for regulating surface water quality. The NPDES Program requires permits for storm water discharge from storm drain systems into “waters of the U.S.” The NPDES Program addresses storm water discharge during both pre- and post-construction activities.

Construction activities disturbing one acre or more are required to comply with the SWRCB General Construction Activity Storm Water Permit. This requires the preparation and approval of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must include the implementation of Best Management Practices (BMPs) that would reduce the potential for discharge of accidental and/or implicit pollutants into the storm drain system during grading and construction. The BMPs should be designed to maintain construction areas in such a condition that storm flows do not carry wastes or pollutants off-site. The General Construction Activity Storm Water Permit requires that these BMPs be in place prior to issuance of a grading permit.

As many of the BMPs are incorporated as project design features, the BMPs serve not only to protect water quality during construction activities, but also during the operation of the project.

(3) Inyo National Forest Land and Resource Management Plan

The Inyo National Forest Land and Resource Management Plan (“Forest Plan”) includes Forest-wide Standards and Guidelines for the management of resources to ensure their protection and enhancement. Forest-wide Standards and Guidelines regarding water quality and erosion that are applicable to the project include:

- I. Stabilize all areas disturbed by management activities to minimize soil erosion.
- II. Apply the BMPs from the handbook, “Water Quality Management for National Forest System Lands in California” when implementing ground-disturbing activities that may reduce the productivity of the landbase or cause surface erosion or mass wasting.
- III. Maintain or improve water quality to meet state and federal standards. Cooperate and coordinate with state and federal agencies when planning projects that could offset water quality.
- IV. Implement BMPs to meet water quality objectives and maintain or improve the quality of surface water on the Forest. Identify methods and techniques for applying BMPs during project level environmental analysis and incorporate into the associated project plan and implementation documents.
- V. Avoid creating berms that hinder drainage on low gradient roads.

The following Management Direction for Management Prescription Area #13 also applies to the project:

- I. Monitor water quality to ensure compliance with water discharge requirements.

b. State**(1) Porter-Cologne Water Quality Control Act**

California's primary statute governing water quality and water pollution issues is the Porter-Cologne Water Quality Control Act of 1970. The Porter-Cologne Act grants the SWRCB and the RWQCBs broad powers to protect water quality, and it is the primary vehicle for implementation of California's responsibilities under the Federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites and to require cleanup of discharges of hazardous wastes and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil/petroleum products.

(2) Water Quality Control Plan for the Lahontan Region, North and South Basins

The Town is within the jurisdictional boundaries of the Lahontan RWQCB. One of nine regional boards in the state, the Lahontan RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Its duties include developing "basic plans" for its hydrologic area, issuing waste discharge requirements, taking enforcement action against violators, and monitoring water quality. In March 1995, a Water Quality Control Plan for the Lahontan Region, North and South Basins (Basin Plan), adopted by the Lahontan RWQCB, took effect. The Basin Plan outlines policies and regulations for municipal wastewater, treatment, disposal, and reclamation. The Basin Plan also establishes specific erosion and sediment control guidelines for development within the Town. Chapter 4.8, Land Development, requires that a Report of Waste Discharge be prepared to control erosion and drainage in the Mammoth Lakes watershed at an elevation above 7,000 feet. The Report of Waste Discharge must contain a description of, and time schedule for implementation, for both the interim erosion control measures to be applied during project construction, and short- and long-term erosion control measures to be employed after the construction phase of the project. According to the Lahontan RWQCB, implementation of an approved SWPPP, pursuant to the SWRCB General Construction Activity Storm Water Permit authorized under the NPDES program, satisfies the requirements of a Report of Waste Discharge.⁸¹

The standards contained within the Basin Plan are designed to provide developers with a uniform approach for the design and installation of adequate systems to control erosion and

⁸¹ Telephone conversation with Doug Fay, Engineering Geologist at Lahontan RWQCB, April 18, 2006.

mitigate urban drainage impacts from the Town in an effort to prevent the degradation of waters of Mammoth Creek and Hot Creek.

In 1991, the Lahontan RWQCB and the Town of Mammoth lakes adopted a memorandum of understanding (MOU) regarding storm water objectives and control measures. Per the MOU, the Town was granted the authority to issue construction permits for all developments less than 5 acres and provide site inspection. This MOU includes guidelines for the control and prevention of pollution from storm water, as follows:

1. Drainage, collection, retention and infiltration shall be constructed and maintained to prevent transport of the runoff from a 20-year, 1-hour design storm from the project site. The 20-year, 1-hour storm for the Mammoth Lakes area is equal to 1.0 inch.
2. Surplus or waste materials shall not be placed in drainage ways or within the 100-year flood plan of surface waters.
3. All loose piles of soil, silt, clay, sand, debris, or earthen materials shall be protected in a reasonable manner to prevent any discharge to waters of the State.
4. Dewatering shall be done in a manner so as to prevent the discharge of earthen material from the site.
5. All disturbed areas shall be stabilized by appropriate stabilization measures by October 15 of each year.
6. All work performed between October 15 and May 1 of each year shall be conducted in such a manner that the project can be winterized or protected from storm events within 48 hours.
7. Where possible, existing drainage patterns shall not be significantly modified.
8. After completion of a construction project, all surplus or waste earthen material shall be removed from the site and deposited at a legal point of disposal.
9. Drainage swales disturbed by construction activities shall be stabilized by the addition of crushed rock or riprap as necessary or other appropriate stabilization methods.
10. All nonconstruction areas shall be protected by fencing or other means to prevent unnecessary disturbance.

11. During construction, temporary erosion control facilities (e.g., impermeable dikes, filter fences, hay swales, etc.) shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff.
12. Revegetated areas shall be continually maintained in order to assure adequate growth and root development. Physical erosion control facilities shall be placed on a routine maintenance and inspection program to provide continued erosion control integrity.
13. Where construction activities involve the crossing and/or alteration of a stream channel, such activities shall be timed to occur during the period in which stream flow is expected to be lowest for the year.

Pursuant to the Lahontan RWQCB Design Parameters, development projects must include facilities and/or features, also referred as treatment control BMPs, that treat, infiltrate, and/or filter the first inch of rainfall from a storm event of 20-year intensity. These project design features and/or treatment control BMPs also serve to manage runoff during the operation of a project.

The water resource protection efforts of the SWRCB and the Regional Boards are guided by a five year *Strategic Plan for the State Water Resources Control Board and the Regional Water Resources Control Boards* (updated 2001). The Strategic Plan lays out the Boards' mission "To preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations." To help accomplish this mission, a key component of the Strategic Plan is a watershed management approach for water resources protection. To protect water resources within a watershed management context, a mix of point and non-point source discharges, ground and surface water interactions, and water quality/water quantity relationships must be considered. These complex relationships present considerable challenges to water resource protection programs. The State and Regional Boards are responding to these challenges with the Watershed Management Initiative (WMI). Each Regional Board has prepared a WMI designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. A WMI is also designed to focus limited resources on key issues. The overall purposes of the WMI are to direct resources towards the highest priority water quality issues throughout the state, and to aim towards achieving water quality goals in all of California's watersheds by supporting the development of local solutions to local problems with full participation of all affected parties.

The Clean Water Act requires the states to develop rankings for TMDLs. California, ranks TMDLs as high, medium or low priority based on a number of factors including the severity of the impairments and the importance of the specific beneficial uses. Regional Boards develop schedules that set the order for TMDL completion. These schedules are contained in the

Regional Boards WMI work plans. The WMI identifies the TMDL priority ranking, TMDL End Dates, and provides comments on the status of the TMDL. The TMDL End Date refers to the estimated year for the RWQCB to adopt of an amendment to the Basin Plan stating the TMDL.

c. Local

(1) Town of Mammoth Lakes Storm Drainage Master Plan Update

In May 2005, the Town updated its 1984 Storm Drain Master Plan (SDMP). The following are the objectives of the 2005 SDMP:

1. Assess the adequacy of the existing conveyance structures of the storm drain system in the Town.
2. Make specific recommendations for future improvements to the storm drain system.
3. Recommend and assess the impact of specific detention facilities as specified by the Town. The intent of these facilities is to reduce the drainage burden on downstream storm drain system.
4. Provide a basis for the cost estimates and financing necessary to make the storm drain and detention improvements recommended in (2) and (3) above.
5. Review the area's hydrology for both winter rain and snow and summer rain events.
6. Provide a concise and simple hydrologic methodology necessary for developers to plan and design specific design improvements and assess the impact of development on downstream constituents. This methodology will be designed so that it will be compatible with methods adopted in the 1984 study.

The 2005 SDMP updates the watershed and tributary subarea boundaries of the Basin that have resulted from development in the area and the availability of more accurate topographic data. In addition, the 2005 SDMP inventories all the existing storm drain pipe facilities and assesses the adequacy of the Town's storm drain system(s) under three general scenarios, namely existing conditions, future conditions, and "improved" conditions. The latter condition is defined as the future condition together with impacts due to the construction of a detention facility proposed as part of the SDMP. In the future and improved scenarios, future land uses as defined in the 1987 General Plan are considered in order to account for planned development. In all storm drain scenarios, the 20-year and 100-year return periods are considered.

Two separate criteria were applied to assess whether or not each pipe is considered to be adequately sized: (1) each pipe is to have adequate capacity to convey the 20-year discharge; and (2) in the cases of storm drain flows under streets, the combined street capacity and storm drain capacity is to have the necessary capacity to convey the 100-year flow. In the case where inadequate pipes are encountered, the pipes are identified and enlarged accordingly to meet the adequacy criteria for the future and improved condition scenarios. The drainage improvements would be primarily funded through payment of developer impact fees and would be constructed as needed or as further development occurs. According to the Exhibit 8.5, Area 2.3 West Plan, in the SDMP, no storm water improvements have been identified for the project site or the surrounding roadways (i.e., Meridian Boulevard and Majestic Pines Road).

As stated in the 2005 SDMP, the nature of engineering hydrology is inherently probabilistic and that related hydrologic calculations are typically estimates. Except for the most fundamental engineering equations, the various parameters that are determined as part of a hydrologic analysis are typically subject to statistical variance, especially in the study of rare events. The Town's 1984 SDMP was reviewed and it was concluded that the scope and detail of this report was generally satisfactory. Thus, according to Town Staff, current development projects may utilize the hydrology and hydrologic procedures set forth in the 1984 SDMP, subject to review and approval by the Town. Generally, under the current 2005 SDMP, the hydrology calculations result in estimates of greater runoff when compared to flows calculated using the 1984 SDMP methodology.⁸²

(2) Town of Mammoth Lakes General Plan (1987)

The Town of Mammoth Lakes General Plan, which was adopted in 1987, includes a Land Use Element that includes Storm Water Drainage System policies to be implemented by the Town. The Storm Water Drainage System Policy #2 is applicable to development of the proposed project:

Policy #2: The Town shall, through requirements in the Town Development Code, assure that development projects provide the necessary on and off site drainage facilities and erosion control measures which assure that Mammoth Creek and other properties are not significantly affected by development runoff.

⁸² Telephone conversation with Peter Bernasconi, PE, Associate Engineer at Town of Mammoth Lakes, April 26, 2006.

Additionally, the Conservation and Open Space Element provides goals and policies related to Water Resources. The following Water Resources goals and policies are applicable to the proposed project:

- Goal #1: To maintain and improve water quality and dependability of water supplies.
- Goal #2: To safeguard the productivity and capacity of surface and ground waters, the flood carrying capacity of streams, the storage of reservoirs.
- Policy #1: The quality and quantity of surface and groundwaters should be maintained at acceptable levels as determined by appropriate agencies.
- Policy #5: The Town shall carefully regulate construction and other activities and development, that which would cause or accelerate erosion sedimentation, water pollution and runoff volumes.

(3) The Town of Mammoth Lakes Draft General Plan Update (2005)

The Town is currently in the process of revising its General Plan. The preliminary draft, dated April 2005, includes updated goals/objectives, policies and implementation measures that have been designed to realize the community's vision and support Guiding Principal VI of the Vision Statement: "Mammoth Lakes has maintained high standards for development and design while allowing for a variety of styles that are complementary and appropriate to the Sierra Nevada alpine setting." While the 2005 General Plan Update is underway, it has yet to be formally adopted. However, the following policies and implementation measures from the preliminary draft have been identified that are applicable to the project:

- Policy I.1.A.a: Erosion of soils and stream and lake embankments shall be minimized.

Implementation Measures

- I.1.A.a.1: The Town shall require the use of BMPs during and after construction and development as a means to prevent erosion, siltation, and flooding.
- I.1.A.a.2: Projects requiring a grading permit shall implement BMPs and shall be required to control erosion and sedimentation.
- Policy I.7.A.b: The quality of Mammoth Lakes water resources is protected.

Implementation Measures

- I.1.A.b.4: The Town shall require where practical and when warranted by the size of the project that parking lot storm drainage shall include facilities to separate oils from storm water.

(4) Town of Mammoth Lakes Development Code

Section 12.08.090, Drainage and Erosion Design Standards, in the Town's Development Code provides standards that runoff calculations and design must conform to in addition to the Lahontan RWQCB requirements. The following presents a summary of the key standards applicable to the proposed project cited in Section 12.08.090:

- New construction resulting in a total impervious surface on a lot of four thousand square feet or more shall meet Lahontan requirements if they apply, or shall provide a dry well per town standards if the Lahontan requirements do not apply.
- Erosion and sedimentation control shall effectively control erosion and sedimentation and shall conform to these standards as well as standard engineering practices.
- The planting or seeding of vegetative cover, including shrubs and trees, must be effective in preventing erosion and sedimentation. If the vegetation does not grow and offer the proper protection, as determined by the director, it shall be replanted or reseeded.
- The maintenance of vegetative protection shall be the responsibility of the owner of the land and shall be guaranteed until the vegetation is well established as determined by the director.
- Sediment control facilities must be constructed and in working order prior to the beginning of the winter season and must prevent sediment from being transported from the site.
- During snow melt runoff conditions, and at other times as necessary, the permittee shall inspect all erosion and sediment control devices and repair any damage.

3.10.2 AFFECTED ENVIRONMENT

The project site is located at the southwestern edge of the Long Valley caldera near the eastern flank of the Sierra Nevada. The caldera (collapsed volcano) is an east-west elongate,

oval depression formed approximately 760,000 years ago with continued volcanic activity to the present. The pre-volcanic basement rock in the Mammoth Lakes area is predominantly Mesozoic granitic rocks of the Sierra Nevada batholith. The batholith is a series of intrusions that displaced overlying ancient sedimentary sea floor rocks (roof pendants) during the Jurassic and Cretaceous Periods. Piedmont glaciation occurred throughout the Pleistocene leaving a mantle of glacial till covering the basement and volcanic rocks throughout the area now occupied by the Town of Mammoth Lakes.

The approximately 8.7 acre project site is almost entirely disturbed. The project site includes Majestic Pines Road, Meridian Boulevard, an approximately two-acre parking lot, the temporary Eagle Lodge Base Facility, lift towers and other miscellaneous facilities. Site elevations range between approximately 8,100 feet and 8,060 feet above mean sea level. In general, the subject site slopes gradually down toward the east/northeast.

Vegetation surrounding the parking area in the central and eastern portions of the site consists of a light growth of shrubs with few trees. Vegetation within the eastern portion of the site, which generally includes the USFS owned land (Lots 1, 6 and 7), consists of a light to moderate growth of grasses, shrubs and trees. It is believed that no ACOE jurisdictional “waters of the U.S.” and ACOE jurisdictional wetlands exist within the project site. Please refer to Section 3.6, Biological Resources, of this EIR/EA for a detailed discussion of onsite vegetation.

a. Hydrologic Setting

(1) Regional Watershed and Hydrologic Setting

The Town is located within the approximately 45,000-acre (71 square miles) Mammoth Basin (Basin). The Basin includes the entire watershed of Mammoth Creek. More specifically the site is located in the Upper Mammoth Creek watershed. Mammoth Creek and Hot Creek are the same stream, but the name changes to Hot Creek downstream of the U.S. Highway 395 crossing due to historical precedent. The general trend of the Basin is generally northeasterly, extending from Mammoth Crest at elevation 11,053 on the southwest, to the Hot Creek Gorge in the Upper Owens Valley at elevation 6,960 on the northeast. The total flow length of the Mammoth Creek/Hot Creek drainage system is approximately 18 miles.

The Basin includes a complex drainage system comprised of lakes and interconnecting surface streams in the higher elevations of its southwestern portion. All of these lakes and streams are eventually tributary by either surface flow or underground flow to Mammoth Creek.

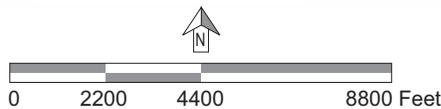
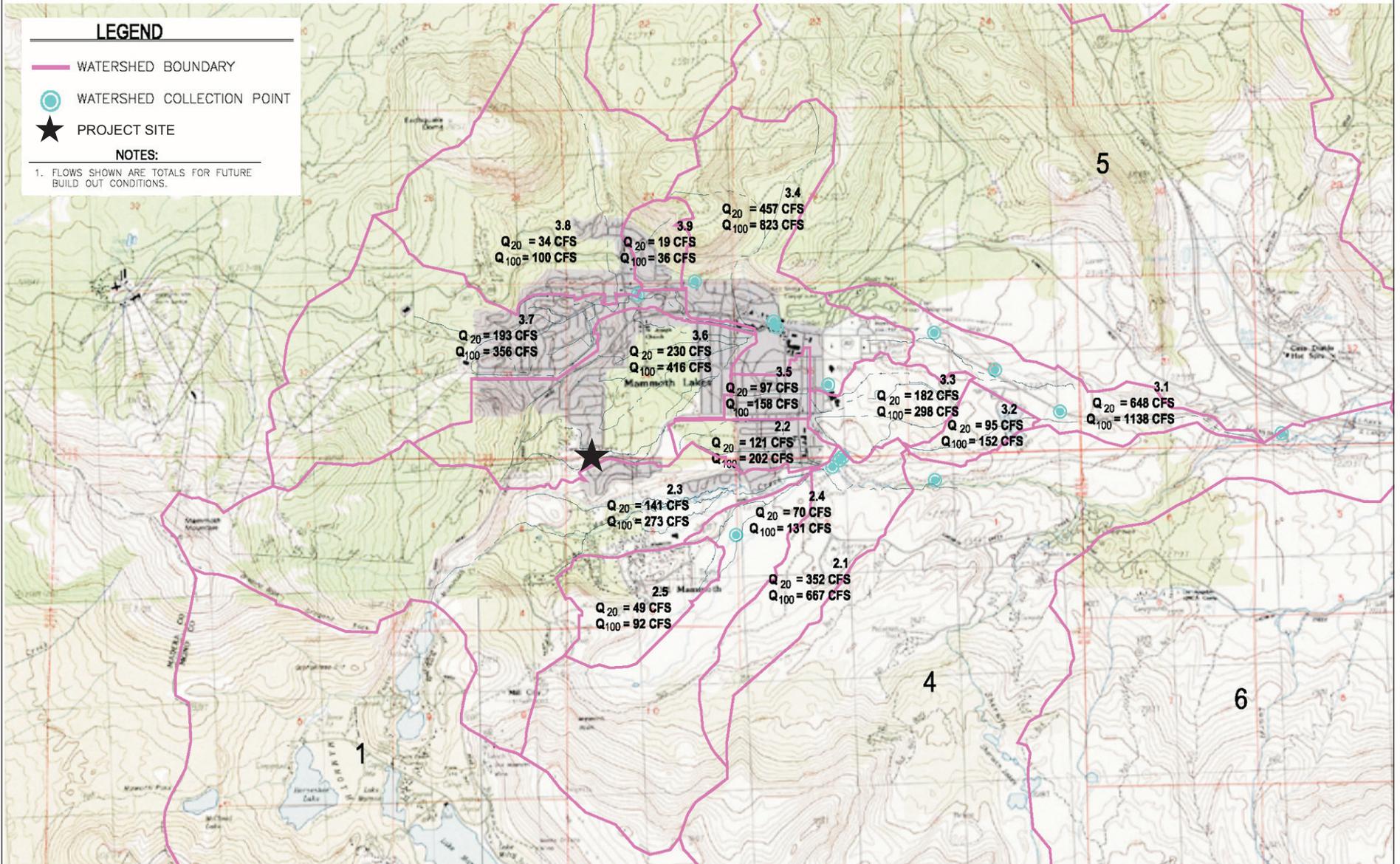
The Basin contains six smaller drainage basins, or watersheds, that are ultimately tributaries to both the Owens River and Crowley Lake. Figure 41 on page 412 illustrates the

LEGEND

- WATERSHED BOUNDARY
- WATERSHED COLLECTION POINT
- ★ PROJECT SITE

NOTES:

1. FLOWS SHOWN ARE TOTALS FOR FUTURE BUILD OUT CONDITIONS.



Source: Town of Mammoth Lakes, 2005 Storm Drain Master Plan Update

Figure 41
Watershed Map

boundaries of the Basin and the Tributary Subareas within the six watersheds. As shown in Figure 3.10-1, which reflects the watersheds defined in the 2005 SDMP, the project site is located within Watershed 3, which is also referred to as the Murphy Gulch Watershed. The Murphy Gulch Watershed is approximately 5,120 acres (8 square miles) and encompasses most of the more intensely developed areas of the Town of Mammoth Lakes. More specifically, the project site is located within Tributary Subarea 3.6. Tributary Subarea 3.6 has a flow of 416 cfs during a storm of 100-year intensity.

(2) Local Watershed and Hydrologic Setting

Within Tributary Subarea 3.6, the offsite area that is directly tributary to the project site is approximately 111 acres. Offsite storm water enters the site in sheet flow and in a natural swale from the west. Figure 42 on page 414 illustrates the direct tributary area to the project site.⁸³ Based on calculations in conformance with the Storm Drainage Design Manual and topographic information from the Town aerial photo maps prepared in 2000, under existing conditions runoff in this tributary area is approximately 103.8 cfs in a storm of 100-year intensity.⁸⁴ Currently, the project site consists of approximately 3.35 acres of impermeable surface areas or 39 percent of the site and contributes 8.4 cfs to this tributary area during a storm of 100-year intensity. Figure 43 on page 415 illustrates the existing site conditions, including paved area (2.86 acres), building area (0.39 acres) and landscape area (5.33 acres).

Runoff from the project site flows to the Town of Mammoth Lakes Separate Storm Sewer System (TMLSSS). This system is made up of underground and surface storm drainage facilities. Under existing conditions, runoff from the western portion of the site (Lots 1, 6 and 7) generally flows westerly towards the surface parking lot. The elevation of the parking lot and Majestic Pines Road directs flows to several storm drain inlets located in the southwestern portion of the site, near the entrance to the parking lot off of Majestic Pines Road, as well as several inlets located within the central portion of the parking lot.

All onsite flows are conveyed in an existing 36-inch corrugated metal pipe (CMP) that runs northeasterly under the surface parking lot and to two 36-inch storm drain pipes under Majestic Pines Road that outlet at the southwest corner of the Sierra Star (also known as Loadstar) Golf Course. From the Golf Course, runoff crosses Meridian Boulevard twice, enters a storm drain in Joaquin Road to Dorrance Avenue, where it outflows into a natural channel in the Shady Rest Parcel. A large inlet is located adjacent to Center Street that collects the runoff from this location. This runoff eventually is conveyed to storm drain pipes within Main Street

⁸³ *The final offsite tributary area will be determined during final design as inlets are placed in their final locations.*

⁸⁴ *Preliminary Hydrogeologic Investigation For MMSA Eagle Base Lodge Development: Mammoth Lakes, California, March 31, 2006, prepared by Sierra Geotechnical Services, Inc.*

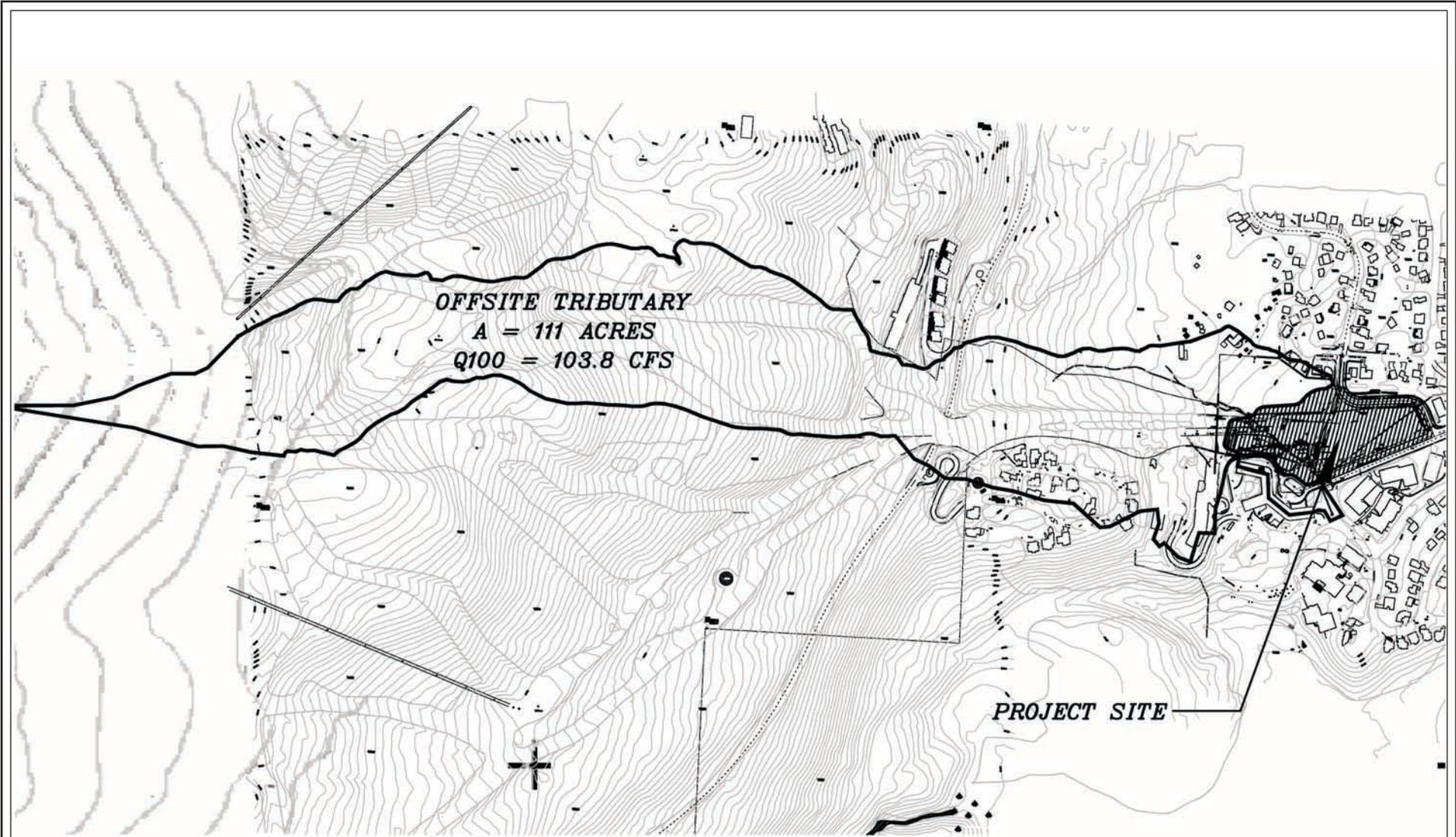
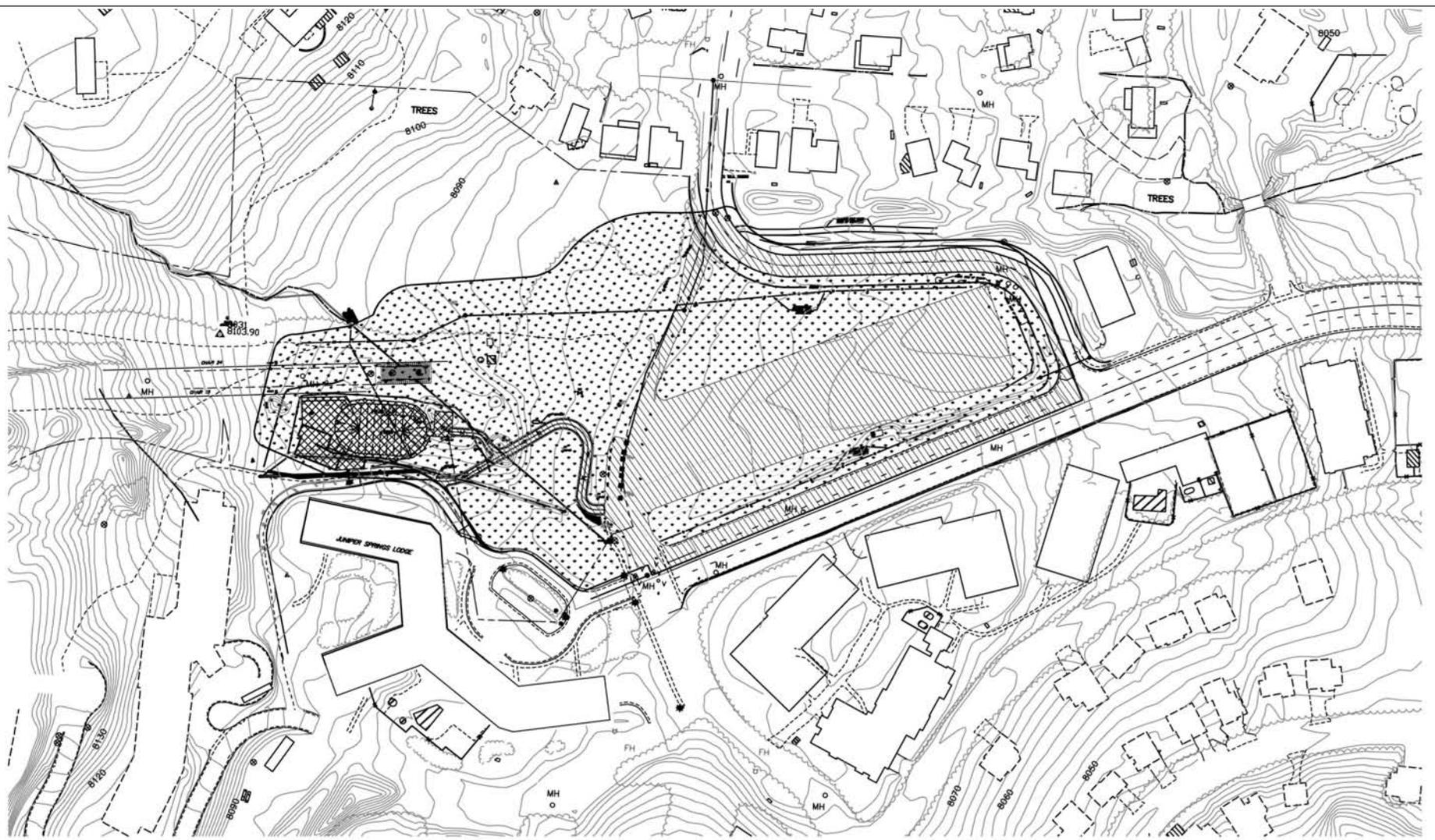


Figure 42
Area Basin Drawing



-  *BASIN BOUNDARY (8.68 ACRES)*
-  *PAVED AREA (2.96 ACRES)*
-  *BUILDING AREA (0.39 ACRES)*
-  *LANDSCAPE AREA (5.33 ACRES)*



No scale

Figure 43
Existing Site Basin Drawing

Source: Triad/Holmes Associates, 2006

then into natural and manmade channels that outlet into Murphy Gulch. Runoff through Murphy Gulch goes through two desiltation basins, prior to entering a pipe that crosses under Highway 203 and entering Mammoth Creek. Runoff from the project site does not enter the existing retention/infiltration ponds facilities located in front or to the east of the Juniper Springs Resort. These facilities collect runoff from the Junipers Springs Resort facilities located to the southwest of the project site.

b. Groundwater

(1) Regional Groundwater Setting

The Town is located on the margin of Long Valley Ground Water Basin. The Basin is bordered to the west and southwest by the Sierra Nevada mountain range, to the north by Bald and Glass Mountains, and to the east by Round Mountain. The groundwater within the Mammoth Hydrologic Basin generally flows northeast and east from Mammoth Crest at an elevation of 11,600 feet above mean sea level (amsl) on the southwest, to the Hot Creek Gorge in the Upper Owens Valley at an elevation of 6,950 feet amsl on the northeast where it may seep through tuffaceous deposits into Owens Valley.⁸⁵ Recharge occurs around the Long Valley Caldera rim, within the western portion of the Caldera, and beneath the resurgent area in the northwestern central portion of the Caldera. Groundwater discharge also occurs in springs located around the Caldera rim, and along the south and east sides of the resurgent area.⁸⁶

Groundwater hydrology in the Mammoth Hydrologic Basin is complex and has not been fully evaluated to date. Boundaries of the groundwater basin have not been specifically defined due to the complex hydrogeologic conditions of the basin. Generally, the groundwater basin lies largely within the central part of the Mammoth Basin watershed. Geophysical studies have identified at least two separate aquifers within the Town's Planning Area. Subsurface water in portions of the Mammoth Hydrologic Basin has been measured at less than ten feet beneath the surface. These saturated soils are probably fed by lateral migration of subsurface watercourses and probably do not represent the Mammoth Hydrologic Basin's true subsurface hydrology. The deeper aquifer is estimated to be at least 500 feet deep, but is otherwise poorly defined. The aquifers supply water to Mammoth Creek, Hot Creek, and lakes in the Lakes Basin. The California Department of Water Resources (CDWR) estimates that the subsurface flow in the Mammoth Lakes Basin is roughly equal to the surface flows.

⁸⁵ *Tuffaceous deposits is rock composed of compacted volcanic ash varying in size from fine sand to coarse gravel.*

⁸⁶ *Town of Mammoth Lakes 2005 General Plan Update Revised Draft Program Environmental Impact Report, October 2005.*

(2) Local Groundwater Setting

(a) Groundwater Levels

Groundwater underlying the project site generally trends to the east/northeast in the direction of the topographic gradient. According to Mammoth Community Water District (MCWD) water well records, the depth to permanent static groundwater aquifer is approximately 450 feet below ground surface (bgs), as recorded from MCWD Well No. 16, which is located within an easement adjacent to the southern property line of the site.⁸⁷

According to the Hydrogeologic Study prepared for the project site, two thirty-foot deep piezometers, which measure pressure or compressibility, were installed within two borings located in the central portion of the project site to the north of the parking lot. Depth to perched groundwater observed in these borings was approximately two to four feet bgs. The perched groundwater is a result of the water from surface flows permeating into the ground surface to the well-cemented zones, which consist of earthen materials that are mostly impermeable. The well-cemented zones are located at approximately four feet bgs. However, some groundwater seepage below the well-cemented zones does occur. During exploratory drillings conducted on the project site between October 6th and November 9th 2005, light to heavy perched groundwater seepage below the well-cemented zones was encountered at depths varying from approximately 4½-feet to 21-feet below grade. Zones of seepage varied based upon the subsurface lithology. In general, seepage occurred above and/or below the well-cemented zones where the grain size as well as the amount of gravels and cobbles increased.

(b) Groundwater Budget

The groundwater budget components consist of the inflow and outflow volumes. Inflow volumes include water from recharge, stream loss, sub-flow from adjacent basins, and return flow from municipal, mining, or irrigation uses. Outflow volumes include removed groundwater as a result of pumping from municipal, commercial, domestic, irrigation, industrial, livestock, mining, and power generation wells, evapotranspiration, discharge to springs, and sub-flow to other basins. As part of the Hydrogeologic Study prepared for the project, an estimate of the preliminary groundwater budget for the site was prepared based primarily on the relatively small direct offsite tributary area that surrounds the site. According to the Hydrogeologic Study, the direct offsite tributary area measures approximately 128 acres.⁸⁸ Based on estimated

⁸⁷ *Preliminary Hydrogeologic Investigation For MMMSA Eagle Base Lodge Development: Mammoth Lakes, California, March 31, 2006, Sierra Geotechnical Services, Inc.*

⁸⁸ *This area slightly varies from the offsite tributary area calculated in the Preliminary Drainage Study, primarily because the Preliminary Drainage Study does not include the project site itself in the area calculation.*

precipitation and evapotranspiration data provided by the CDWR, approximately 210 acre-feet per year of precipitation is available to recharge the basin surrounding the site.

Groundwater removal occurs from two MCWD horizontal wells that are located beneath Lake Mary Road, directly upslope and to the west of the site, and from MCWD Well No.16. Between 1995 and 2000 Well No. 16 has been reported to have static levels ranging from 414 to 484 feet bgs, pumping levels between 471 and 492 feet bgs, pumping discharge rates of 350 to 500 gallons per minute (gpm), and a projected annual pumping rate of approximately 135 acre-feet during drought conditions. Overall, the MCWD removes approximately 357 acre-feet of water per year.⁸⁹ Water within the well and the surrounding area is likely replenished from deep recharge emanating from the fractured Lincoln Peak volcanics underlying the glacial till material as opposed to percolation from shallow run-off.⁹⁰ Lincoln Peak is a small sub-peak on the southern end of Mammoth Mountain.

(c) Groundwater Underflow and Drawdown Levels

On March 24, 2006, a pump test within Boring B-9, located in the central portion of the project site and north of the parking lot, yielded a sustained pumping rate of 1.62 gpm for a duration of 35 minutes.⁹¹ Drawdown in the well was estimated at three feet, and the well water recharged to its static level at 4.05 feet bgs within 4.5 minutes of measured recovery time. Since these readings were collected prior to the beginning of the spring/summer snowmelt run-off season, groundwater flows are anticipated to be considerably higher during the run-off period. Based on this data, the groundwater underflow through the proposed Eagle Lodge building footprint was estimated at 1,312 cubic feet per day (ft³/day) or 9,815 gallons per day (gpd).⁹²

The recorded underflow is comparative to results obtained in the fall of 1997 from monitoring well B-4, which was located adjacent the Juniper Springs Lodge development. The results of this pump test indicated a sustained pumping flow of 1.2 gpm. This well along with the three others drilled prior to development of Juniper Springs Resort were destroyed during construction of the resort.

⁸⁹ 1 acre-foot = 325,850 gallons of water.

⁹⁰ *Ibid.*

⁹¹ Refer to Figure 3 in the Hydrogeologic Study for mapped location of borings on the project site.

⁹² Please refer to the Hydrogeologic Study in Appendix H for the calculation used to determine the groundwater underflow.

c. Water Quality

(1) Surface Water Quality

A net effect of development can be to increase pollutant export over naturally occurring conditions. The impact of the higher export can be on the adjacent water bodies and also on the downstream receiving waters. An important consideration in evaluating storm water quality from a project is to assess if it impairs the beneficial use to the receiving waters. Receiving waters can assimilate a limited quantity of various constituent elements, however, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. Background of these standard water quality categories provides an understanding of typical impacts.

Sediment - Sediment is made up of tiny soil particles that are washed or blown into surface waters and is the major pollutant by volume in surface water. Suspended soil particles can cause the water to look cloudy or turbid. The fine sediment particles also act as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons. Construction sites are typically a large source of sediment..

Nutrients - Nitrogen, phosphorous, and potassium are the major nutrients used for fertilizing landscaped areas. Heavy use of commercial fertilizers can result in discharge of nutrients to water bodies where they may cause excessive algae growth.

Trace Metals - Trace metals are primarily a concern because of their toxic effects on aquatic life and their potential to contaminate drinking water supplies. The most common trace metals found in runoff are lead, zinc, and copper. Fallout from automobile emissions is a major source of lead in urban areas. Materials such as galvanized metals, paint, or preserved wood may also contain metals.

Oil and Grease - Oil and grease contain a wide variety of hydrocarbons some of which could be toxic to aquatic life in low concentrations. These materials initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity for sediment and quickly become absorbed to it. The major sources of hydrocarbons are through leakage of crankcase oil and other lubricating agents from automobiles. High hydrocarbon levels are typically found in the runoff from parking lots, roads, and service stations.

Other Toxic Chemicals - If improperly stored and/or disposed of, synthetic organic compounds (such as adhesives, cleaners, sealants, and solvents) could have a significant impact on receiving waters.

Miscellaneous Wastes - These may include wash water from concrete mixers, paints and painting equipment cleaning activities, solid wastes from land clearing activities, wood and paper material from packaging of building material, and sanitary wastes. Improper/illegal disposal of these wastes can lead to polluted waterways.

The quantity of a material in the environment and its characteristics determine the degree of availability as a pollutant in surface runoff. In a developed environment, the quantity of certain pollutants in the environment is a function of the intensity of the land use. For instance, a high density of automobile traffic makes a number of potential pollutants (such as lead and hydrocarbons) more available. The availability of a material, such as a fertilizer, is a function of the quantity and the manner in which it is applied. Applying fertilizer in quantities that exceed plant needs leaves the excess nutrients available for loss to surface or ground water.

The physical properties and chemical constituents of water traditionally have served as the primary means for monitoring and evaluating water quality. Evaluating the condition of water through a water quality standard refers to its physical, chemical, or biological characteristics. Water quality parameters for storm water comprise a long list and are classified in many ways. In many cases, the concentration of pollutant is needed to assess a water quality problem, instead of the annual pollutant loads. Some of the typical physical, chemical or biological characteristics used to evaluate the quality of the surface runoff include dissolved oxygen, biochemical oxygen demand, chemical oxygen demand, total dissolved solids (TDS), pH, alkalinity, specific conductance, turbidity, nitrogen, and phosphorus levels.

The project site lacks any measured data on storm water runoff quality. In the absence of site-specific data, expected storm water quality can be qualitatively discussed by relating typical pollutants to specific land uses. Currently, the project vicinity includes the temporary Eagle Lodge Base Area facility, a surface parking lot, roads, and permeable areas associated with various plant communities. The expected pollutants in the existing condition storm water runoff from the developed areas of the site include trash, sediments, nutrients, pesticides and herbicides, oil and grease, trace metals, synthetic organic compounds in from cleaning products and miscellaneous wastes.

According to the most recent CWA Section 303(d) List of Water Quality Limited Segments, approved by the USEPA in July 2003, “metals” have been identified as pollutant/stressor in Mammoth Creek. Mammoth Creek was identified with a “Low” TMDL priority on the 303(d) List. According to the Lahontan RWQCB WMI, a study is needed to verify the need for establishing a TMDL of metals in Mammoth Creek.⁹³ The TMDL end date

⁹³ *Lahontan RWQCB Watershed Management Initiative, 2002.*

for Mammoth Creek is 2008. Thus, currently there is no adopted TMDL plan that addresses metals in Mammoth Creek.

Additionally, Crowley Lake is listed as a water body having impaired water quality according to the 2003 CWA Section 303(d) List. The 303(d) List identifies nitrogen and phosphorus as pollutants/stressors within Crowley Lake. Potential sources of nitrogen include grazing-related sources, atmospheric deposition, internal nutrient cycling (primarily lakes), natural sources and non-point sources. Potential sources of phosphorus include grazing-related sources, erosion-siltation, internal nutrient cycling (primarily lakes), natural sources and non-point sources. Crowley Lake is identified with a “Low” TMDL priority for nitrogen and phosphorus on the 303(d) List. The TMDL end date for Crowley is 2008. Currently, no formal TMDL plan for Crowley Lake has been adopted. According to the Lahontan RWQCB WMI, nutrient loading in Crowley Lake is currently under study.

(2) Groundwater Quality

According to water quality data for MCWD Well No. 16, secondary drinking standards established by the State Health Department have historically been met for water extracted from Well No. 16, with the exception of iron and manganese standards.⁹⁴ These groundwater contaminants, including regulated and unregulated constituents, are currently removed from the MCWD groundwater supplies at two MCWD treatment facilities located within the Town. Compliance with primary drinking standards is determined by testing water within the distribution system, which supplies drinking water to the Town.

3.10.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on hydrology and/or surface or groundwater quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing

⁹⁴ *Water quality data for MCWD Well No. 16 provided by Gary Sisson, General Manager, Mammoth Community Water District, April 27, 2004.*

- nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a substantial adverse effect on any riparian areas;
 - Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;
 - Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site; or
 - Otherwise substantially degrade water quality.

b. Methodology

(1) Hydrology

According to the Preliminary Drainage Study prepared for the project, the existing conditions and post-development hydrology calculations for the project have been developed per the requirements and standards set forth in the Town of Mammoth Lakes Design Manual, Storm Drainage and Erosion Control. Hydraulic calculations are generally based on Manning's, Darcy-Weisbach, and Bernoulli's equations. LANDesk programs were used for some of the hydraulic calculations, with remaining hydraulic equations and hydrologic calculations written to Excel Spreadsheet programs.⁹⁵ To determine the extent of hydrology impacts as a result of rain or snowfall, first the analysis compares the post-development expected hydrologic runoff quantities from on and offsite sources with existing site conditions. Then, the size of facilities necessary to collect and convey storms of levels as indicated in the Town of Mammoth Lakes Design Manual is provided. Additionally, an estimate of the size required for the proposed infiltration/retention facilities is provided. The analysis assumes that infiltration/retention pipe systems and drywells would be designed to contain one hour of a 20 year intensity storm, which is assumed to be 1 inch (0.83 feet) x Area (square feet) x C (Infiltration Coefficient), as required by the Water Quality Control Plan for the Lahontan Region.⁹⁶

⁹⁵ *Hydraulic calculations are included in Appendix C of the Preliminary Drainage Study.*

⁹⁶ *Water Quality Control Plan for the Lahontan Region, North and South Basins, prepared by the State of California, Regional Water Quality Control Board, Lahontan Region, 1994.*

(2) Groundwater Recharge

Based on the Hydrogeologic Report prepared for the project, groundwater underflow through the proposed project's footprint is determined through field-testing. Although groundwater flows could be higher than anticipated based on the field tests, since the groundwater flows calculated based on the field testing are lower than what are anticipated during the runoff period, this analysis presents flows that are indicated of a "low flow" scenario, which assumes a worse case scenario of impacts to groundwater flows and recharge capabilities. Thus, the calculated groundwater underflow conditions are acceptable to utilize in assessing groundwater supply and recharge impacts as a result of project development. As construction of the project requires excavation activities that would involve dewatering, impacts to riparian areas located to the west and up-gradient to the site are evaluated based on direction and quantities of flow of groundwater beneath the site, as well as data from drawdown tests conducted on the project site. Additionally, the calculated underflow rates and drawdown tests are utilized to determine whether the increased amount of impermeable surfaces associated with the project when compared to existing conditions would substantially interfere with groundwater recharge such that there would be net deficit in aquifer volume or lowering of the groundwater table level.

(3) Water Quality

Existing storm water quality is qualitatively discussed, as there is no measured data on storm water quality for the project site. For purposes of the surface water quality analysis, impacts are assessed by evaluating the types of pollutants and/or effects on water quality likely to be associated with construction and operation of the project, and how and where they would be conveyed. With this basis, the potential for project generated pollutants to impact sensitive receiving waters is assessed. Where potential impacts are identified, relevant BMPs in the Preliminary SWPPP prepared for the project and regulatory permits/requirements are considered.

As project operation would not include the use of below ground storage tanks and runoff would be conveyed into the Town's storm drain systems, direct impacts to groundwater quality would not occur as a result of project implementation. However, groundwater quality impacts could occur as a result of construction activities, particularly during dewatering activities. The potential for groundwater quality impacts during project construction are evaluated based on compliance with regulatory requirements and BMPs set in the Preliminary SWPPP prepared for the project.

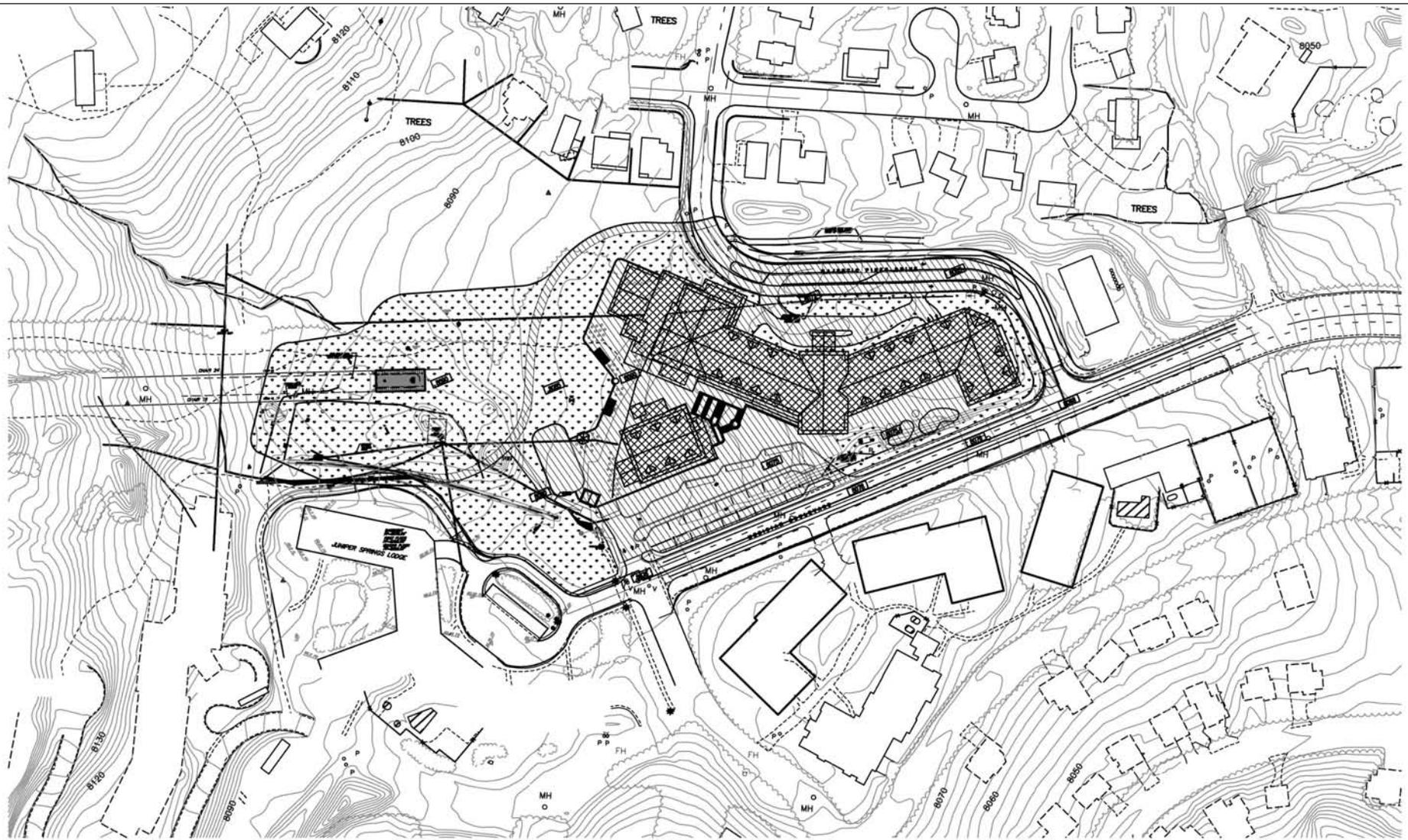
c. Environmental Consequences of the Proposed Action

(1) Hydrology and Drainage

Under the proposed development conditions, the amount of impermeable surface would be approximately 4.8 acres or 55 percent of the site. The permeable areas would consist of landscaped areas that would comprise approximately 45 percent of the site. Figure 44 on page 425 illustrates the proposed site conditions, including paved area (3.15 acres), building area (1.64 acres) and landscape area (3.89 acres). Thus, under the proposed site conditions, the amount of impermeable surface would increase by approximately 1.44 acres or approximately 13 percent when compared to existing conditions. Under the proposed project conditions, runoff from the site would be approximately 9.9 cfs during a storm of 100-year intensity. This is an increase of 1.5 cfs, out of total 103.8 cfs that is developed by the direct offsite tributary, or an increase of approximately two percent. An 18-inch diameter CMP pipe would convey 9.9 cfs. Thus, the maximum size of onsite storm drains would not need to exceed 18-inches in diameter.

As shown in Figure 45 on page 426, offsite runoff would be collected in a new inlet installed upstream of the project site. The existing 36-inch storm drain that traverses diagonally across the site would be removed as part of the proposed project. The new storm drain has been preliminarily routed from the northwest side of the project, to the intersection of Meridian Boulevard and the west intersection with Majestic Pines, along Meridian Boulevard, north at the east intersection with Majestic Pines, and would connect to the existing two, 36-inch storm drain pipes. It is estimated that runoff under the proposed conditions can be contained in one 36-inch smooth flow storm drain pipe at 2.1 percent or one 42-inch smooth flow storm drain pipe at 1 percent. The proposed storm drain facilities would accommodate 9.9 cfs of runoff during a storm of 100-year intensity. Similar to existing conditions, stormwater runoff from the project site would be conveyed through the existing two, 36-inch storm drains that cross under Majestic Pines Road and outlet at the southwest corner of the Sierra Star Golf Course. This runoff eventually would be conveyed to Main Street then into natural and manmade channels that outlet into Murphy Gulch. Runoff through Murphy Gulch goes through two desiltation basins, prior to entering a pipe that crosses under Highway 203 and entering Mammoth Creek. Please see Section 3.13, Stormwater, for a discussion infrastructure capacity.

The proposed on-site storm drain facilities would accommodate the offsite flows and increased onsite flows as a result of the increased impermeable surfaces associated with project development when compared to existing conditions. The underground parking garage would be at a lower elevation than the surrounding grades or storm drainage. Therefore, the project would include the installation of a sump pump system in the parking garage that would lift stormwater to the surface.



- BASIN BOUNDARY (8.68 ACRES)

▨ PAVED AREA (3.15 ACRES)
- ▩ BUILDING AREA (1.64 ACRES)

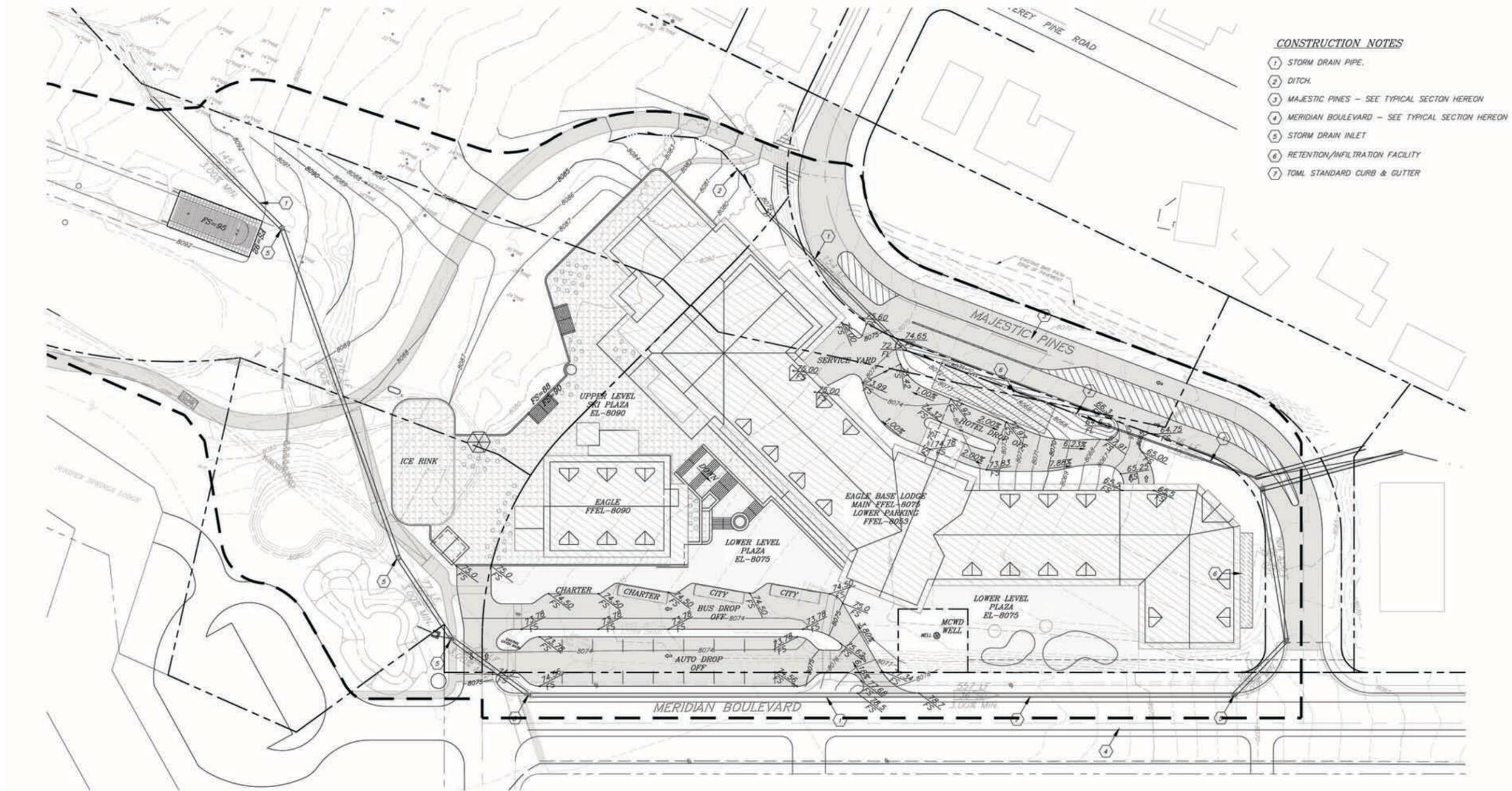
▫ LANDSCAPE AREA (3.89 ACRES)



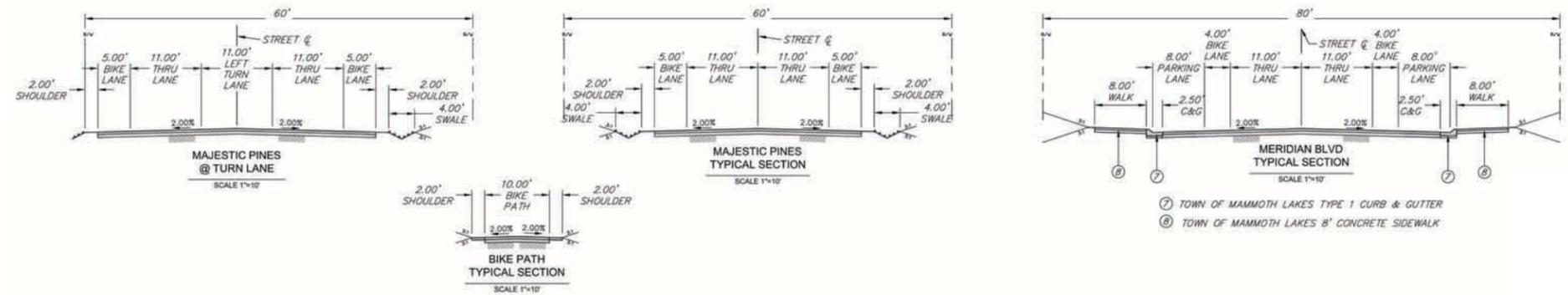
No scale

Figure 44
Post-Development Basin Drawing

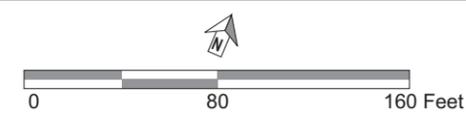
Source: Triad/Holmes Associates, 2006



- CONSTRUCTION NOTES**
- ① STORM DRAIN PIPE.
 - ② DITCH.
 - ③ MAJESTIC PINES - SEE TYPICAL SECTION HEREON
 - ④ MERIDIAN BOULEVARD - SEE TYPICAL SECTION HEREON
 - ⑤ STORM DRAIN INLET
 - ⑥ RETENTION/INFILTRATION FACILITY
 - ⑦ TOWN OF MAMMOTH LAKES TYPE 1 CURB & GUTTER



- ⑦ TOWN OF MAMMOTH LAKES TYPE 1 CURB & GUTTER
- ⑧ TOWN OF MAMMOTH LAKES 8" CONCRETE SIDEWALK



Source: Triad/Holmes Associates, 2006

Figure 45
Grading and Drainage Plan

Based on the Lahontan RWQCB design parameters, the Preliminary Drainage Study calculated runoff volumes and necessary infiltration/retention facility capacities to capture the first inch of rainfall during a storm event of 20-year intensity. Rainfall is assumed to occur at 1-inch/hour or 0.083 feet/hour. Based on the various types of proposed surfaces (i.e., roof area and pavement area) on the project site, the average rainfall coefficient for the project site under the proposed conditions is 0.72.⁹⁷ Average runoff volume is calculated by multiplying the total area (378,100 square feet) by the average rainfall coefficient (0.71) by the rainfall (first inch) (0.083 ft./hr.). Thus, the average runoff volume for the project site would be 22,442 cubic feet per hour.⁹⁸

The project would include one infiltration/retention facility along the eastern boundary of the project site and another along the project's northern boundary near the lodge entrance, as illustrated in Figure 3.10-3. The drainage facilities would be below the ground and would have landscaping above. There are several infiltration/retention facility sizing options that can be used and the preliminary analysis prepared for the project considered four options (see Appendix D of the Preliminary Drainage Study contained in Appendix H of this document). The actual design would be determined during the design phase of the project. Since the depth of the infiltration/retention facilities can be varied to accommodate the flow, the necessary area below grade to incorporate the facilities within the project site would be provided with the footprint of the facilities as shown in Figure 45. In other words, the proposed building footprints would not be affected should additional capacity be required beyond the runoff volume calculation in the Preliminary Drainage Study. The size of the proposed infiltration/retention facilities would provide the necessary storage capacity to accommodate the first inch of rainfall during a storm event of 20-year intensity based on the Lahontan RWQCB Design Parameters. The final details of the proposed drainage facilities would be determined during the final project design. The criteria followed during the design process would address issues such as safety, erosion protection and water quality, as well as conforming to the requirements of the Clean Water Act, the State, Town of Mammoth Lakes and/or Lahontan RWQCB.

In conclusion, due to the topography of the site, which slopes downward from west to east, there would be no impacts regarding drainage patterns to sites above or to the west of the site. Drainage impacts to downstream sites or to the east of the site would be less than significant as drainage facilities would be constructed onsite to adequately collect and convey runoff under the proposed conditions across the site and outflow would be as close to historic conditions as practicable. As the project would increase the amount of runoff by 1.5 cfs out of total 103.8 cfs of runoff from the direct offsite tributary area, or an increase of approximately

⁹⁷ Refer to Appendix D in the Preliminary Drainage Study for average runoff coefficient calculation.

⁹⁸ The factors in the average runoff volume calculation have been rounded off, which accounts for the difference in the calculated runoff volume utilizing the factors shown above.

two percent, there would not be a significant increase in runoff quantities beyond exiting site conditions. Since onsite and offsite drainage facilities would be sized to accommodate flows entering and exiting the site during a storm of 100-year intensity, runoff would not exceed the capacity of existing or planned drainage systems. As such, drainage patterns would not be substantially altered, which in turn would not result in substantial erosion or siltation on- or offsite. Additionally, the rate of runoff would not be substantially increased in a manner that would result in flooding on- or offsite. Furthermore, the proposed infiltration/retention facilities would accommodate the first inch of rainfall during a storm event of 20-year intensity, which would allow the necessary water quality treatment measures to be implemented, as discussed under Water Quality, below. Thus, with implementation of the proposed drainage and grading plans, impacts regarding hydrology and drainage would be less than significant.

(2) Groundwater Supply and Recharge

As discussed in the section entitled Groundwater Underflow and Drawdown Levels above, approximately 9,815 gpd of water would move into the excavation area required for the proposed subterranean parking garage every day, subject to seasonal variation and to local precipitation events. Since excavation during project construction would result in contact with the groundwater table, dewatering would be required to lower the groundwater in the project area. The maximum amount of groundwater to be removed as a result of dewatering activities would equal approximately the amount of water anticipated to enter the site (approximately 9,815 gpd) during excavation activities.

During pump tests conducted on the project site, water levels were continuously recorded in two borings, one (Boring B-10) located in the north/central portion of the site and the other (Boring B-9) located “downstream” and to the east of Boring B-10 in the eastern portion of the site, to ascertain whether removal of water from B-9 would have an affect on water levels in B-10.⁹⁹ Prior to the test water levels in B-10 were recorded at approximately two feet bgs. During the testing period the change in water levels in B-10 were negligible.

Although no drawdown impact was observed during the field-testing, dewatering activities could result in drawdown levels that exceed those observed in the field tests. As stated above, there is a high volume of groundwater underflow through the proposed Eagle Lodge building footprint, estimated at approximately 1,312 ft³/day or 9,815 gpd. Although flow rates would vary depending upon seasonal conditions, shallow groundwater flow through the site area should be continuous and not static. Since flow rates are relatively large, and the groundwater condition is not static, the bypass/removal of water from the proposed down-gradient construction area would not adversely affect any up-gradient vegetation.

⁹⁹ Refer to Figure 3 in the Preliminary Hydrogeologic Study for location of the Boring B-9 and B-10.

Since the field testing utilized to determine groundwater underflow rates occurred in March and not during the latter portion of spring when runoff is at its peak from the snow melting, the calculated groundwater underflow rates do not represent maximum underflow rates. Thus, mitigation has been recommended that the water levels within existing on-site wells be monitored on a monthly basis (especially during the snow melt run-off periods) to further assess seasonal flow rates. In addition, a mitigation measure is provided that would require that prior to construction, at least two monitoring wells would be installed adjacent to or up gradient of the proposed construction area to aid in the recording of groundwater depths and flow rates. This data would be utilized to determine the amount of water to be removed as part of the dewatering activities.

Additionally, all water removed from the site during dewatering activities would be re-introduced back into the down stream drainage system. All dewatering-related activities would occur in accordance with the Lahontan RWQCB and Town regulations. Compliance with the Lahontan RWQCB and Town regulations, combined with implementation of the prescribed mitigation would ensure that construction activities would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge.

At the completion of the project, the amount of impermeable surface would increase from approximately 3.35 acres to 4.79 acres when compared to existing site conditions. Thus, there would be an increase in impermeable surface area of approximately 1.44 acres under the proposed development conditions. Due to the small increase in impermeable area combined with the fact that groundwater flow through the site area should be continuous and not static, this increase would not substantially affect groundwater recharge. Furthermore, the project would not require the use of groundwater and, thus, would not deplete groundwater supplies. Please refer to Section 3.11, Water Supply, for a discussion of impacts regarding water supply.

In conclusion, compliance with the Lahontan RWQCB and Town regulations and implementation of the prescribed mitigation measures would ensure that construction activities, including dewatering, as well as project operation would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a substantial adverse effect on any riparian areas or a net deficit in aquifer volume or lowering of the local groundwater table.

(3) Water Quality

(a) Construction

Construction controls are temporary and specific to the type of construction. Construction controls typically address issues regarding exposed soils and the potential for

erosion. Grading, excavation and construction activities associated with the proposed project could impact water quality due to sheet erosion of exposed soils and subsequent deposition of particles and pollutants in drainage areas. Construction of the proposed project has the potential to produce typical pollutants such as nutrients, heavy metals, toxic chemicals related to construction and cleaning, waste materials including wash water, paints, wood, paper, concrete, food containers, and sanitary wastes, fuel, and lubricants. Thus, increased pollutant loading could occur immediately offsite as a result of construction activities.

Since the proposed project would disturb one (1) or more acres of soil, the applicant must comply with the requirements set forth in the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit, Permit Order 99-08-DWQ). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. In addition, off-site haul routes and temporary/permanent fill storage areas, as applicable, are considered within the scope of construction activities.

The Construction General Permit requires the development and implementation of a SWPPP. The applicant would prepare and submit a Notice of Intent to comply with the Construction General Permit to the California State Water Resources Board. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. As required, the applicant has prepared a Preliminary SWPPP in accordance with the Construction General Permit. The Preliminary SWPPP prepared for the project is included in Appendix H of this document. The SWPPP identifies erosion control notes that specify inspection practices, training requirements, reporting requirements, penalties for violations of permit conditions, and construction scheduling in regards to the erosion control measures. The SWPPP also contains general interim erosion control measures that prescribe construction phase strategies, activities and revegetation plans to reduce short- and long-term erosion and sedimentation associated with project development. The general interim erosion control measures are separated into pre-construction and during construction measures.

The general interim erosion control measures (pre-construction) include the following:

- Employee/Subcontractor training regarding the installation, maintenance and inspection of BMPs.
- Preservation of existing vegetation. Native vegetation shall be retained, protected and supplemented wherever possible. Exposure of soil areas shall be immediately limited to the area required for construction operations. The native vegetation ground cover shall not be destroyed, removed or disturbed more than 15 days prior to grading.

- Grading areas shall be clearly marked and no equipment or vehicles shall disturb slopes or drainages outside of the drainage area.
- Contractor shall keep informed of potential weather conditions and limit excavation and grading activities to dry weather conditions. This reduces the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas.
- Reduce the probability of significant wind erosion during the dry season, which would occur due to the wind regime and fine soils, by implementing a dust abatement program.

The following presents a summary of the general interim erosion control measures (during construction):

- Employee/Subcontractor training regarding the installation, maintenance and inspection of BMPs.
- Measures to reduce the tracking of sediment onto public or private roads at all times, such as stabilized construction entrances and vehicle and road inspections and cleaning as necessary.
- Preservation of existing vegetation (refer to pre-construction BMP, above).
- Limit excavation and grading activities to dry weather conditions (refer to pre-construction BMP, above).
- Water conservation practices shall be used for the project.
- Dewatering: During dewatering activities, the contractor shall use sediment controls and test the groundwater for pollution, to prevent or reduce the discharge of pollutants to storm water.
- Paving operations: Contractor shall prevent or reduce the discharge of pollutants for paving operations, using measures to prevent runoff and runoff pollution, properly disposing wastes and training employees and contractors. Drainage courses shall be protected. Onsite mixing plants shall not be permitted. A separate industrial activities permit would be required to allow an onsite mixing plant.
- Vehicle and equipment maintenance: Contractor shall prevent or reduce the discharge of pollutants to storm water from vehicle and equipment maintenance by a “dry site.” This involves using offsite facilities, fueling in designated areas only, providing cover

for materials stored outside, checking for leaks and spills, containing and cleaning up spills immediately, and training employees and contractors.

- **Vehicle and equipment cleaning:** Offsite facilities shall be used for vehicle cleaning.
- **Vehicle and Equipment Fueling:** It is anticipated that vehicle and equipment fueling would take place offsite. Contractor shall prevent fuel spills and leaks, and reduce their impacts to storm water by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors.
- **Dust Control:** Dust control measures shall be used to stabilize soil from wind erosion, and reduce dust generated by construction activities.
- **Material delivery and storage:** Hazardous materials stored onsite shall be minimized. Specific areas shall be designated for materials storage. Designated areas shall not be near drainage paths or waterways. Material (except soil, gravel, and sand) shall not be stored on the ground (consider pallets). Stored materials shall be covered during the rainy season, or when a storm is predicted within 24 hours.
- **Material Use:** Use of hazardous materials, such as fertilizers, herbicides, pesticides, shall be minimized. Alternate materials (non-hazardous) shall be used where possible and/or use of hazardous material shall be minimized. Employees and subcontractors shall be trained in the use of hazardous materials.
- **Spill prevention and control:** Hazardous materials shall be protected from vandalism. Employees shall be trained in spill prevention and cleanup.
- **Solid waste management:** Contractor shall prevent or reduce discharge of pollutants to storm water from solid waste by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.
- **Hazardous waste management:** Hazardous waste materials shall be removed from the site at the earliest convenience. Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal and training employees and subcontractors.
- **Contaminated soil management:** Contaminated soil is not anticipated. However, should contaminated be encountered, notify the RWQCB and the engineer, and prevent or reduce the discharge of pollutants to storm water from contaminated soil and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

- Concrete waste management: Whenever possible, concrete washout shall occur offsite. When it must occur onsite, an area must be designated, and employees and subcontractors must be trained in its use. If onsite, a concrete washout must be at least 50 feet from storm drains, open ditches or water bodies. No runoff is allowed from the site. Washout must go into a temporary pit where the concrete can set, be broken up, and then disposed of properly.
- Sanitary/septic waste management: Sanitary/septic facilities shall be placed in convenient locations, at least 50 feet from any discharge path. They shall be inspected regularly. Contractor shall arrange regular waste collection. Untreated raw wastewater shall never be discharged or buried. Portable sanitary facilities must be secured to prevent overturning.
- Structure construction and painting: Contractor shall prevent or reduce the discharge of pollutants to storm water by enclosing or covering or berming building materials storage areas, using good housekeeping practices, using safer alternative products where possible, and training employees and subcontractors.

The BMPs contained within the SWPPP would avoid or mitigate runoff pollutants at the project construction site to the maximum extent practicable. The SWPPP would be subject to review and approval by the Lahontan RWQCB and/or the Town, if directed by the Lahontan RWQCB. As such, the RWQCB and/or the Town may recommend additional BMPs beyond those identified in the SWPPP.

The BMPs identified within the SWPPP have been developed based on the BMP Consideration Checklist provided in the California Storm Water Quality Handbook for construction activities. The BMP Checklist prepared for the project is included within Appendix H of this document. The BMP Checklist lists BMPs that should be considered for every project. The BMPs are separated with the following categories: erosion control, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and materials pollution control. The Checklist requires a determination to be made whether each listed BMP was considered for the project, used by the project, and/or not used by the project. As shown on the BMP Checklist for the project, every BMP was considered for the project. For those BMPs that are not being used by the project, an explanation is provided why the project is not using the applicable BMP. Additionally, a Program for Maintenance, Inspection, and Repair of Construction Site BMPs has been prepared for the project that the contractor would use as guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP.

As a result of excavation required for the proposed parking structure, dewatering would be required to remove groundwater. Groundwater removed from the site would be discharged into the storm drain system. However prior to discharge into the storm drain system, pursuant to

the Preliminary SWPPP, the contractor would use sediment controls and test the groundwater for contaminants, to prevent and/or reduce the discharge of pollutants to storm water. In addition, the applicant would obtain the necessary permits for dewatering and discharge of removed groundwater into the Town's storm drain system through the Town and/or RWQCB and would comply with the conditions as required at that time for on-site dewatering activities. Therefore, with implementation of the BMPs in the SWPPP and issuance of dewatering permits by the Town and/or RWQCB, construction activities associated with the project would not degrade the groundwater quality to levels below standards considered acceptable by the Lahontan RWQCB or other regulatory agencies. As such, groundwater quality impacts during construction of the project would be less than significant.

In summary, construction activities associated with the proposed project could result in potentially significant short-term water quality impacts. However, compliance with regulatory requirements, including the Construction General Permit that requires implementation of BMPs identified in a SWPPP would reduce short-term construction impacts to surface water quality to a less than significant level. Additionally, groundwater impacts would be less than significant as groundwater would be treated pursuant to regulatory requirements and in accordance with the BMPs stated in the SWPPP.

(b) Operation

Operation of the proposed project would produce pollutants typically associated with urban uses, such as oil and grease, metals, fertilizers, pesticides, dirt from landscaped areas, and litter. Pollutants in the runoff have the potential to infiltrate pervious surfaces and affect groundwater quality. In accordance with the NPDES Program, the project would be required to prepare a SWPPP that would include construction-related BMPs, however, the BMPs would also ensure that storm water pollution is addressed through the operational life of the project through the incorporation of BMPs in the design of the development. For example, all final surfaces would be stabilized to eliminate the potential for erosion. Additionally, the Lahontan RWQCB requires that the storm water system be designed to treat potential pollutants and runoff from the first inch of rainfall during a storm event of 20-year intensity prior to its discharge to a storm water conveyance system. As such, the project would include two detention infiltration/retention facilities that would collect the first inch of rainfall from a storm event of 20-year intensity. The infiltration/retention facilities would include inlets that contain basic sediment control devices to minimize sediment transport to the storm drain system. Since metals are often attached to sediments, the proposed infiltration/retention facilities would also serve to reduce the introduction of metals into the storm drain system. Other permanent BMPs may include, but are not limited to, catch basin filters, biofilters, prohibitive stenciling at on-site catch basins, and oil/water separators at on-site parking areas. Additionally, the project would comply with Lahontan RWQCB regulatory requirements regarding outdoor trash, storage areas and storm drain stenciling standards.

Source control has been stated by the Lahontan RWQCB as the best way to limit sediment transport in stormwater. Accordingly, runoff quality would also be managed with landscaping and sediment traps prior to runoff entering the retention/infiltration facilities. The proposed landscaping would be designed as part of the sediment elimination system and would be maintained throughout the life of the project.

The final location and details of drainage facilities, as well as proposed permanent BMPs to manage runoff during operation of the project, would be determined during the final design plans for the project. The criteria followed during the design process would address erosion protection and water quality, as well as conforming to the requirements of the Clean Water Act, the State and Lahontan RWQCB. Since the existing site did not have infiltration/retention facilities, and since there was a significant amount of existing impervious surfaces, the project would result in an improvement with regard to drainage when compared with the existing conditions.

In addition to the regulatory requirements described above, to ensure that the proposed uses do not violate water quality standards or otherwise substantially degrade water quality, mitigation measures have been prescribed. Mitigation has been prescribed that requires that water conveyed from the subterranean parking garage be conveyed through a device that removes oil and silt, prior to reintroduction into the storm water system. The prescribed mitigation requires that the proposed infiltration/retention facilities be adequately sized to accommodate the first inch of rainfall during a storm event of 20-year intensity, pursuant to Lahontan RWQCB requirements. Implementation of the prescribed mitigation measures and project design features, as well as compliance with the applicable regulatory requirements, including preparation of a SWPPP, would reduce potentially significant impacts to water quality during project operations to a less than significant level.

(4) Consistency With Applicable Regulations

(a) Federal

(i) Federal Clean Water Act, Section 404

Potential impacts to designated “waters of the U.S.” cited under the Federal Clean Water Act, Section 404 are discussed in subsection 3.6, Biological Resources of this EIR/EA. However, it is believed that no ACOE jurisdictional “waters of the U.S.” and ACOE jurisdictional wetlands exist within the project site.

(ii) National Pollutant Discharge Elimination System

Pursuant to the NPDES Program, the applicant has prepared a SWPPP to comply with the requirements set forth in the SWRCB General Construction Activity Storm Water Permit. Preparation of the SWPPP, along with the BMP Checklist and Program for Maintenance, Inspection, and Repair of Construction Site BMPs would ensure that the project complies with the NPDES Program.

(iii) Inyo National Forest Land and Resource Management Plan

The project would incorporate BMPs provided in a SWPPP approved by the Town and/or Lahontan RWQCB. The BMPs would minimize soil erosion in an effort to meet water quality objectives and maintain or improve the quality of affected surface waters. Furthermore, the BMPs would be similar to or reflect the BMPs stated in the Water Quality Management for National Forest System Lands handbook. Thus, the project would be consistent with Forestwide Standards and Guidelines I, II, and IV. The SWPPP would be subject to regulatory review and approval, upon which coordination with the applicable regulatory agencies would occur to implement water quality control measures. As such, the project would comply with Forestwide Standard and Guideline III, which requires cooperation and coordination with state and federal agencies when planning projects that could offset water quality. Additionally, in regards to Forestwide Standard and Guideline V, the project would improve the existing berm located along the north side of Majestic Pines Road pursuant to Mitigation Measure 2 in Section 3.9, Aesthetics, but would not substantially alter any drainage patterns along this roadway. As such, the project would not create a berm that hinders drainage on a low-gradient road and would be consistent with the Forestwide Standards and Guidelines set forth in the Forest Plan.

The Forest Plan establishes Management Directions for Management Prescription Areas. The project area is located within Management Prescription Area #13. Management Prescription I requires that water quality be monitored to ensure compliance with water discharge requirements. The project would adhere to all Federal, State and local storm water quality monitoring requirements. Overall, the project would be consistent with the applicable Forestwide Standards and Guidelines and the Management Directions for Management Prescription Area #13 set forth in the Forest Plan.

(b) State**(i) Porter-Cologne Water Quality Control Act**

The project would comply with the requirements of the Lahontan RWQCB, including the preparation of a SWPPP that includes pre-construction and during construction BMPs, as well as

construction of infiltration/retention facilities that would capture and treat the first inch of rainfall during a storm event of 20-year intensity. Compliance with the Lahontan RWQCB regulatory requirements would ensure that the project is consistent with the Porter-Cologne Water Quality Control Act.

(ii) Lahontan Regional Water Quality Control Board

The applicant prepared a Preliminary SWPPP that will be reviewed and approved by the Town and/or Lahontan RWQCB prior to the issuance of a grading permit. The Town and/or Lahontan RWQCB may require additional erosion control measures beyond the Preliminary SWPPP to ensure that impacts to surface and groundwater quality are reduced to the maximum extent practicable. Implementation of an approved SWPPP would supercede the requirement to prepare a Report of Waste Discharge. Thus, implementation of the approved SWPPP would ensure compliance with the Water Quality Control Plan for the Lahontan Region, North and South Basins, prepared by the Lahontan RWQCB.

(c) Local

(i) Mammoth Lakes Storm Drain Master Plan

As discussed in Section 3.9.1, Regulatory Framework, no storm water improvements have been identified for the project site or the surrounding roadways (i.e., Meridian Boulevard and Majestic Pines Road) in the SDMP. The proposed improvements incorporated in the Drainage and Grading Plans would accommodate the slight increase in onsite stormwater flows that would occur with the project. Therefore, the project would not conflict with the proposed improvements identified within the SDMP. Although no storm water improvements have been identified, the project is required to pay developer impact fees that would be utilized for offsite storm drain system improvements that may be necessary to accommodate runoff from the project site as well as offsite areas. Payment of the developer impact fees would result in the project's fair share contribution to offsite improvements identified in the SDMP.

(ii) Town of Mammoth Lakes General Plan (1987)

Storm Water Drainage System Policy #2 in the 1987 General Plan requires that development projects provide the necessary on and off site drainage facilities and erosion control measures to assure that Mammoth Creek and other properties are not significantly affected by development runoff. As discussed under the Hydrology and Drainage section above, the proposed improvements as part of the Drainage and Grading Plans would accommodate offsite and onsite stormwater flows that would occur with project implementation. Additionally,

erosion control measures would be implemented as part of the SWPPP. As such, the project would be consistent with Policy #2.

In addition, the Conservation and Open Space Element provides goals (Goal #1 and #2) and policies (Policy #1 and #5) relate to Water Resources. As discussed under the Water Quality section above, compliance with regulatory requirements, including the Construction General Permit that requires implementation of BMPs identified in a SWPPP would reduce short-term construction impacts to surface water and groundwater quality to a less than significant level. Furthermore, impacts regarding groundwater supplies and groundwater recharge would be less than significant. As such, the project would be consistent with the goals and policies set forth in the Open Space and Conservation Element.

(iii) The Town of Mammoth Lakes Draft General Plan (Update 2005)

As part of the Draft 2005 General Plan Update, two policies have been identified that relate to development of the project. Policy I.1.A.a requires that erosion of soils and stream and lake embankments be minimized. To implement this policy, Implementation Measure I.1.A.a.1 requires the use of BMPs during and after construction and development as a means to prevent erosion, siltation, and flooding. Implementation Measure I.1.A.a.2 states that projects requiring a grading permit need to implement BMPs and be required to control erosion and sedimentation. The SWPPP prepared for the project would ensure that erosion of soils is minimized as a result of runoff under the proposed conditions. The SWPPP would also incorporate BMPs to control erosion and sedimentation. Thus, the project would be consistent with Policy I.1.A.a.

Policy I.7.A.b requires that the quality of Mammoth Lakes water resources be protected. To implement this policy, Implementation Measure I.1.A.b.4 requires that parking lot storm drainage include facilities to separate oils and salts from storm water, where practical and when warranted by the size of the project. As stated above, the project would be required to implement measures contained in the SWPPP to protect water resources. The proposed mitigation for impacts regarding water quality during project operation requires that a sump pump system that lifts stormwater to the surface be installed within the underground parking garage. The system would convey water through a device that removes oil and silt prior to reintroduction into the storm water system. Additionally, the project would incorporate mitigation that would require adequate sizing of infiltration/retention facilities to capture and treat the first inch of rainfall during a storm event of 20-year intensity. The prescribed mitigation measures would ensure that water quality impacts during operation of the project would be reduced to a less than significant level. In addition, compliance with regulatory requirements would ensure that water quality impacts during construction are reduced to a less than significant level. Thus, compliance with the regulatory requirements regarding stormwater discharge and implementation of the prescribed mitigation measure would ensure consistency with Policy

I.7.A.b. Overall, the project would be consistent with the policies and implementation measures set forth in the Town of Mammoth Lakes Draft General Plan (Update 2005).

(iv) Town of Mammoth Lakes Development Code

As discussed above, the project would comply with all applicable requirements of the Lahontan RWQCB regarding erosion control and design standards during construction and operation of the project. The project would include infiltration/retention facilities to capture and treat the first inch of rainfall during a storm event of 20-year intensity. The infiltration/retention facilities would be constructed and in working order prior to the beginning of the winter season and would prevent sediment from being transported from the site to the Town's storm drain system. During snow melt runoff conditions, and at other times as necessary, the applicant would inspect all erosion and sediment control devices and repair any damage, as necessary, in compliance with the Development Code. In addition, landscaping to be maintained by the applicant would be utilized to prevent sedimentation and erosion during project operations. Thus, the project would be consistent with the standards and guidelines set forth in Section 12.08.090, Drainage and Erosion Design Standards, in the Development Code.

d. Mitigation Measures

Hydrology Impacts

With implementation of the proposed drainage and grading plans, impacts regarding hydrology and drainage would be less than significant.

Groundwater Supply and Recharge Impacts

HYD-1: The applicant in cooperation with the Mammoth Community Water District shall monitor water levels within existing on-site wells on a monthly basis especially during the snowmelt run-off periods to assess maximum seasonal groundwater underflow rates.

HYD-2: The applicant shall fund the installation of at least two monitoring wells adjacent to or up gradient of the proposed construction area to aid in the recording of groundwater depths and flow rates. The wells shall be installed prior to the issuance of building permits for the project.

Water Quality Impacts

Construction Impacts

Compliance with regulatory requirements would reduce short-term construction impacts to surface water and groundwater quality to a less than significant level. Thus, no mitigation measures are necessary.

Operation Impacts

HYD-3: The applicant shall install a sump pump system that lifts stormwater to the surface within the underground parking garage, which conveys water through a device that removes oil and silt, prior to reintroduction into the storm water system. The sump pump system shall be installed prior to use of the parking structure.

HYD-4: The applicant shall design on-site detention facilities to capture approximately 22,442 cubic feet of stormwater, which represents the average runoff volume necessary to accommodate the first inch of rainfall during a storm event of 20-year intensity pursuant to Lahontan RWQCB design parameters. The final design of the detention facilities shall be determined during the design process and shall be subject to review and approval by the Town and/or Lahontan RWQCB.

Consistency with Applicable Regulations

The project would be generally consistent with the applicable plans and policies regarding hydrology and water quality. Thus, less than significant impacts would occur regarding the project's consistency with an applicable plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an impact regarding hydrology and water quality.

e. Environmental Consequences of Alternative 1 – Development in Accordance with Existing Regulations Alternative

Due to the topography of the site, which slopes downward from west to east, there would be no impacts regarding drainage patterns to sites above or to the west of the site under the Development in Accordance with Existing Regulations Alternative. This Alternative would not substantially change the amount of impermeable surface when compared to existing conditions such that a significant change in runoff quantities would occur. On- and off-site drainage facilities under this Alternative would be sized to accommodate flows entering and exiting the site during a storm of 20-year intensity. Thus, runoff would not exceed the capacity of existing

or planned drainage systems. Thus, impacts regarding hydrology and drainage would be less than significant.

This Alternative would not require dewatering activities during construction activities. Thus, no impacts would occur regarding water supply or recharge during construction activities. At buildout of this Alternative, there would be a negligible change in the amount of impermeable surface when compared to existing site conditions. Thus, impacts regarding groundwater supply and recharge during operation would be less than significant.

During construction activities, this Alternative would comply with applicable regulatory requirements to reduce short-term construction impacts to surface water and groundwater quality to a less than significant level. Thus, no mitigation measures would be necessary.

During operation, this Alternative would be subject to regulatory requirements of the NPDES, Lahontan RWQCB, and Town of Mammoth Lakes that would minimize runoff pollutants at the project site. Nonetheless, mitigation requiring the installation of on-site detention/retention facilities to accommodate the first inch of rainfall during a 20-year intensity storm would be required to reduce potentially significant water quality impacts during operations to a less than significant level.

The construction and operation of this Alternative would comply with all applicable policies and regulations regarding hydrology and water quality. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Due to the topography of the site, which slopes downward from west to east, there would be no impacts regarding drainage patterns to sites above or to the west of the site under the Reduced Intensity Alternative. This Alternative would not substantially change the amount of impermeable surface when compared to existing conditions such that a significant change in runoff quantities would occur. On- and off-site drainage facilities under this Alternative would be sized to accommodate flows entering and exiting the site during a storm of 20-year intensity. Thus, runoff would not exceed the capacity of existing or planned drainage systems. Thus, impacts regarding hydrology and drainage would be less than significant.

Alternative 2 would include a subterranean parking garage that could result in potentially significant impacts to groundwater supply and recharge during construction activities. Thus, mitigation would be required to monitor water levels within existing on-site wells on a monthly basis (especially during the snow melt run-off periods) to further assess seasonal flow rates. In addition, the prescribed mitigation would require that prior to construction, at least two monitoring wells be installed adjacent to or up gradient of the proposed construction area to aid

in the recording of groundwater depths and flow rates. This data would be utilized to determine the amount of water to be removed as part of the dewatering activities. Additionally, all water removed from the site during dewatering activities would be re-introduced back into the down stream drainage system. All dewatering-related activities would occur in accordance with the Lahontan RWQCB and Town regulations. Compliance with the Lahontan RWQCB and Town regulations, combined with implementation of the prescribed mitigation would ensure that construction activities would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge.

During construction activities, this Alternative would comply with applicable regulatory requirements to reduce short-term construction impacts to surface water and groundwater quality to a less than significant level. Thus, no mitigation measures would be necessary.

During operation, this Alternative would be subject to regulatory requirements of the NPDES, Lahontan RWQCB, and Town of Mammoth Lakes that minimize runoff pollutants at the project site. However, this Alternative would require mitigation to install a sump pump system that lifts stormwater to the surface within the underground parking garage, which conveys water through a device that removes oil and silt, prior to reintroduction into the storm water system and installation of on-site detention/retention facilities to accommodate the first inch of rainfall during a 20-year intensity storm event. Potentially significant operational water quality impacts would be reduced to a less than significant level with incorporation of the prescribed mitigation measures.

The construction and operation of this Alternative would comply with all applicable policies and regulations regarding hydrology and water quality. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Due to the topography of the site, which slopes downward from west to east, there would be no impacts regarding drainage patterns to sites above or to the west of the site under the Reduced Intensity Alternative. This Alternative would not substantially change the amount of impermeable surface when compared to existing conditions such that a significant change in runoff quantities would occur. On- and off-site drainage facilities under this Alternative would be sized to accommodate flows entering and exiting the site during a storm of 20-year intensity. Thus, runoff would not exceed the capacity of existing or planned drainage systems. Thus, impacts regarding hydrology and drainage would be less than significant.

The Alternate Design Alternative would include a subterranean parking garage that could result in potentially significant impacts to groundwater supply and recharge during construction activities. Thus, mitigation would be required to monitor water levels within existing on-site

wells on a monthly basis (especially during the snow melt run-off periods) to further assess seasonal flow rates. In addition, the prescribed mitigation would require that prior to construction, at least two monitoring wells be installed adjacent to or up gradient of the proposed construction area to aid in the recording of groundwater depths and flow rates. This data would be utilized to determine the amount of water to be removed as part of the dewatering activities. Additionally, all water removed from the site during dewatering activities would be re-introduced back into the down stream drainage system. All dewatering-related activities would occur in accordance with the Lahontan RWQCB and Town regulations. Compliance with the Lahontan RWQCB and Town regulations, combined with implementation of the prescribed mitigation would ensure that construction activities would not substantially deplete groundwater supplies or substantially interfere with groundwater recharge.

At buildout of this Alternative, there would be a negligible change in the amount of impermeable surface when compared to existing site conditions. Thus, impacts regarding groundwater supply and recharge during operation would be less than significant under this Alternative.

During construction activities, this Alternative would comply with applicable regulatory requirements to reduce short-term construction impacts to surface water and groundwater quality to a less than significant level. Thus, no mitigation measures would be necessary.

During operation, this Alternative would be subject to regulatory requirements of the NPDES, Lahontan RWQCB, and Town of Mammoth Lakes that would minimize runoff pollutants at the project site. However, this Alternative would require mitigation to install a sump pump system that lifts stormwater to the surface within the underground parking garage, which conveys water through a device that removes oil and silt, prior to reintroduction into the storm water system and installation of on-site detention/retention facilities to accommodate the first inch of rainfall during a 20-year intensity storm event. Potentially significant operational water quality impacts would be reduced to a less than significant level with incorporation of the prescribed mitigation measures.

The construction and operation of this Alternative would comply with all applicable policies and regulations regarding hydrology and water quality. Therefore, impacts regarding consistency with applicable regulations would be less than significant.

h. Environmental Consequences of Alternative 4 – No Action Alternative

This Alternative stipulates no development, which would prevent any significant short-term construction related hydrology or water quality impacts. Under Alternative 4 the operation of the ski area would not change although the existing tent would be removed. Therefore, Alternative 4 would not result in any operational hydrology or water quality impacts.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.11 WATER SUPPLY

This section addresses the potential impacts of the project on water supply to determine whether sufficient water capacity is available to meet the project's demand. Water supply and distribution were analyzed using data from and in consultation with the Mammoth Community Water District (MCWD). The section also contains an analysis of project compatibility with applicable plans.

3.11.1 REGULATORY FRAMEWORK

There are several regulations and plans regarding water supply and water use that are applicable to the project site and the proposed development. These regulations and plans are discussed below.

a. State Level

(1) California Urban Water Management Planning Act

Section 10610 of the California Water Code establishes the Urban Water Management Planning Act, which addresses several state policies regarding the conservation of water including the policy that urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies. In accordance with the Water Code, municipal water suppliers that serve more than 3,000 customers or provide more than 3,000 acre-feet per year¹⁰⁰ of water must adopt an urban water management plan (UWMP). UWMPs are required to include estimates of past, current, and projected potable and recycled water uses, to identify conservation and reclamation measures currently in practice, to describe conservation measures, and to provide a water shortage contingency plan. UWMPs must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry, and multiple dry years.

¹⁰⁰ An acre-foot equals approximately 325,829 gallons.

(2) Senate Bill 610 and Senate Bill 221

State legislation addressing water supply, Senate Bill (SB) 610 (Costa) and SB 221 (Kuehl), became effective January 1, 2002 and include additional UWMP requirements, which are summarized below.

SB 610, which was codified in the California Water Code, §10910 et seq., describes requirements for both water supply assessments and UWMPs and applies to the CEQA process. SB 610 requires that for specified projects that are subject to CEQA, the urban water supplier must prepare a water supply assessment that determines whether the projected water demand associated with a proposed project was included as part of the most recently adopted UWMP. Included in the requirements for a water supply assessment are the identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, and prior years' water deliveries received by the public water system. The water supply assessment must address project supplies over a 20 year period and consider average, dry, and multiple dry years. In accordance with SB 610 and Section 10912 of the Water Code such projects that are subject to CEQA include:

- Proposed residential development of more than 500 dwelling units;
- Shopping center or business establishment employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- Hotel, motel, or both, having more than 500 rooms;
- Industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- Mixed-use project that includes one or more of the projects specified in this subdivision; or;
- A project that would demand an amount of water equivalent to or greater than the amount of water required by a 500 dwelling unit project (typical water use for 500 dwelling units: one acre-foot per two to three units).

The water supply assessment must be approved by the public water system at a regular or special meeting and must be incorporated into the CEQA document. The lead agency must then make certain findings related to water supply based on the water supply assessment.

In addition, under SB 610, an urban water supplier responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, additional information must be included in the UWMP, such as: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.

SB 221 also addresses water supply in the land use planning process and focuses on new large projects in non-urban areas and applies at the subdivision map approval process. SB 221 requires written verification from the water service provider that sufficient water supply is available to serve a proposed subdivision or that the local agency make a specified finding that sufficient water supplies are or will be available prior to completion of a project. While SB 221 applies to residential subdivisions of 500 units or more, Government Code Section 66473.7(i) exempts “. . . any residential project proposed for a site that is within an urbanized area and has been previously developed for urban uses, or where the immediate contiguous properties surrounding the residential project site are, or previously have been, developed for urban uses, or housing projects that are exclusively for very low and low-income households.”

Based on the requirements of SB 610, the project does not meet the definition of a project per Section 10912 of the Water Code, and as such, SB 610 does not apply to the proposed project.¹⁰¹ Therefore, MCWD is not required to provide a Water Supply Assessment for the project. In addition, while the project with the condo/hotel and fractional ownership units option would be part of a residential subdivision, the number of units proposed is under 500. As such, based on the requirements of SB 221, written verification of adequate water supply for the project is not required.

(3) Assembly Bill 3030

Assembly Bill (AB) 3030, the Groundwater Management Act, is Section 10750 et. seq. of the California Water Code. AB 3030 provides local water agencies with procedures to develop a groundwater management plan so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a groundwater management plan by a local water agency is voluntary. Once a

¹⁰¹ *The project would include 83 dwelling units. With regard to determining whether the project would generate an equivalent demand to 500 dwelling units, as shown later in the section, the project (hotel option) would generate a water demand of up to 30 acre feet. A 500 unit development would generate a demand of 56 acre feet per year. Therefore, the project would not generate a demand equivalent to a 500 unit development.*

plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan.

(4) Efficiency Standards

Title 24 of the California Administrative Code contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote water conservation. In addition, a number of State laws listed below require water-efficient plumbing fixtures in structures.

- Title 24, California Administrative Code, Sections 25352(i) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.
- Title 20, California Administrative Code, Section 1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets and tub spout diverters.
- Title 20, California Administrative Code, Section 1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.
- Health and Safety Code, Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.
- Health and Safety Code, Section 116785 prohibits installation of residential water softening or conditioning appliances unless certain conditions are satisfied and includes the requirement that water conservation devices on fixtures using softened or conditioned water be installed.

b. Regional Level – MCWD

(1) 2005 Urban Water Management Plan

In accordance with State legislation, MCWD, the water provider for the project area, prepared an updated UWMP, dated December 2005. The UWMP analyzes past, current, and projected future water supply and demand as they relate to population density, types of water use, water quality, climate, water source availability and reliability, alternate water sources, and potential water shortages. In addition, MCWD has developed a strategy to increase water supply and reduce demand through the identification of alternative water sources, the modification of existing wells to improve capacity and drilling of new wells within the Mammoth Basin, and the

use of recycled water, which would be used specifically for golf course and park irrigation. Water conservation measures have also been considered by MCWD, as discussed in the UWMP.

(2) Groundwater Management Plan for the Mammoth Basin Watershed

The Groundwater Management Plan for the Mammoth Basin Watershed (the Groundwater Plan) was developed with guidance from AB 3030. MCWD's Groundwater Plan, dated July 2005, generally adheres to the guidelines provided in AB 3030. Information and analysis contained within the Groundwater Plan is based on previously published reports, conclusions of recent research and MCWD data compilations on hydrologic conditions, facility locations, and water production for the Mammoth Basin watershed.

c. Local Level

(1) Town of Mammoth Lakes General Plan (1987)

As discussed in Section 3.2, Land Use, the project site consists of private and public lands. Since the project site is partially located within the Town of Mammoth Lakes, it is subject to the goals and policies set forth in the Town's General Plan of 1987. The following are the goals and policies relating to water supply that are applicable to the proposed project:¹⁰²

Policies

1. The Town shall only approve development when adequate water supply and fire flows can be demonstrated at the appropriate stage of development as identified in the Development Code. When evaluating available water supply, the Town shall consider water available during a year where precipitation is less than 50% of normal.
2. The Town shall work with the Mammoth County Water District (MCWD) and other potential water suppliers to provide adequate water. The Town shall support MCWD actions to reduce per capita usage, increase groundwater capabilities and develop additional storage and where feasible, secure additional water rights, initiate appropriate water reclamation and reuse and possible water importation programs.
5. The Town may only permit development which can show that the provision of water service is coordinated with the provision of other public facilities and services.

¹⁰² Only the policies of the 1987 General Plan that are applicable to water supply as it relates to the project are listed here, and are numbered as they appear in the General Plan.

6. The Town shall ensure water system improvements are made with the least disruption to the environment and community through its reviewing powers.

(2) Town of Mammoth Lakes Draft General Plan Update (2005)

The Draft General Plan includes policies and implementation measures to reduce potential impacts associated with water supply. These policies and measures are as follows:

I.7.A.a.1 Establish water conservation programs that include both drought tolerant landscaping and efficient building design requirements.

I.7.A.a.4 New development will use native and compatible non-native plant species, especially drought resistant species, to the extent possible when fulfilling landscaping requirements. Use of turf shall be limited to avoid or minimize adverse impacts on native trees.

(3) Town of Mammoth Lakes Municipal Code

Chapter 15.36 of the Town's Municipal Code requires the installation of water efficient landscaping in new developments to reduce the water demand for landscaping.

3.11.2 AFFECTED ENVIRONMENT

a. Water Sources

MCWD is the water service provider for the Town and for portions of USDA Forest Service land. As such, MCWD provides water service to the temporary Little Eagle Base Lodge. MCWD's service area comprises approximately 3,640 acres of land in the developed portion of the Town. The primary sources of the Town's potable water are from surface water diverted from the Mammoth Basin watershed, as well as eight groundwater production wells within the Town limits, including Well 16, which is located within the southern portion of the project site. Well 16 is contained within an underground vault. MMSA holds fee title to that portion of Lot 5 on which the well is located.¹⁰³

The availability of surface water is directly affected by the amount of precipitation, while groundwater supplies accumulate gradually over several years. The Town experiences the

¹⁰³ *The parcel on which Well 16 is located was acquired by MCWD from Lot 5 in a condemnation process for public benefit in 1994.*

greatest amount of precipitation in the form of snow during winter months, when temperatures average between a high of 30 to 40 degrees Fahrenheit and a low of 10 to 20 degrees Fahrenheit. Rain typically occurs during summer and fall months. Yearly precipitation is dependent in part on location within the general area. The northeastern extremities generally receive less than 10 inches while the Mammoth Mountain to the west has experienced more than 80 inches. Average annual precipitation for Mammoth Pass is 43 inches, while the Town averages about 23 inches.

MCWD monitors its surface and groundwater sources to ensure that water supplies are not over-drafted. Surface water levels and flow rates are monitored at 12 locations throughout the Mammoth Basin watershed. Groundwater levels are monitored in the MCWD's eight production wells, including Well 16, as well as 15 shallow and deep monitoring wells. MCWD prepares an annual groundwater monitoring report that evaluates groundwater levels, surface flow, and water quality.

b. Water Supply

(1) Surface Water

Lake Mary is the primary source of surface water for the MCWD service area. Surface water is delivered from Lake Mary to the MCWD water system through a 12-inch pipeline along Lake Mary Road. Water availability from the lake is inconsistent as a result of periods of drought, as well as constraints on lake level drawdown and stream flow requirements for Mammoth Creek. As such, MCWD has obtained water rights from the State Water Resources Control Board (SWRCB) to divert and store surface water from Lake Mary.

Two of the MCWD's three water rights are licensed and one is permitted. License 5715 allows for the direct diversion of 25,000 gpd from May 1 to November 1. License 12593 authorizes the direct diversion of two cubic feet per second (cfs) year round. Under both licenses, the total amount of water diverted cannot exceed 1,463 acre-feet per year. In addition, under Permit 17332, MCWD is authorized to divert three cfs year round. Also under the permit, the SWRCB limits MCWD's storage rights to 660 acre-feet per year, of which 606 acre-feet may be collected between April 1 and June 30. The remaining 54 acre-feet may be collected once each year from September 1 to September 30.

MCWD is limited by SWRCB to a maximum three feet drawdown of Lake Mary between June 1 and September 15, and a total maximum annual drawdown of 5.7 feet. In addition, under its two licenses and one permit, MCWD may divert a maximum of 2,760 acre-feet each year from Lake Mary, at a maximum diversion rate of five cfs from November 2 to April 30, and 5.039 cfs from May 1 to November 1.

(2) Groundwater

MCWD draws its groundwater from the Mammoth Basin watershed, which is located on the eastern side of the Sierra Nevadas and within the Long Valley Groundwater Basin. The State Department of Water Resources (DWR) has identified the Long Valley Groundwater Basin as part of the South Lahontan Hydrologic Region. Mammoth Basin is the watershed of Mammoth Creek and comprises approximately 71 square miles, extending about 13 miles west to east and nine miles north to south. More specifically, Mammoth Basin is bounded by Mammoth Crest on the west, extends along the watershed of Hot Creek to the east, and is bordered by the drainage divide of Dry Creek to the north and the drainage divide of Convict Creek to the south. Elevations in the Mammoth Basin watershed range from 7,000 feet to 12,000 feet.

Between 2000 and 2004, MCWD pumped approximately 10,850 acre-feet of groundwater, averaging approximately 2,170 acre-feet per year. As shown in Table 63 on page 452, the greatest quantity of groundwater was pumped in 2002, when 2,717 acre-feet were drawn from the Mammoth Basin. According to the Groundwater Plan, groundwater may not be extracted at a rate greater than 4,000 acre-feet annually to ensure a safe yield. According to the UWMP, DWR has not identified the Mammoth Basin as being overdrafted. As discussed earlier, MCWD has an extensive monitoring system in place to prevent overdrafting.

(3) Water Availability

In accordance with the State Urban Water Management Planning Act, MCWD analyzed water supply in the UWMP by addressing availability of water during normal, single dry, and multiple dry water years. Table 64 on page 452 provides a breakdown of existing water supplies for surface and groundwater water sources. Normal water years are based on a 10% deviation from an April 1 average snow water content of 43 inches, or 38.7 to 47.3 inches. Normal water years historically have occurred every nine years. The base years for normal water years on which MCWD analyzes its data are: 1946, 1949, 1954, 1971, 1984, 1996, and 1997. Single dry years are based on the lowest yearly runoff since the water year beginning in 1928. The year with the lowest April 1 snow pack is 1997, with 12.3 inches of snow water equivalent for the Mammoth watershed. Groundwater data for single dry water years is determined using the driest years for which the MCWD's production wells were in use: 1992 for wells 1, 6, 10 and 15; 2001 for wells 16, 17, 18, and 20. In addition, MCWD bases multiple dry years on the lowest average runoff for a consecutive, multiple year period (i.e., three years or more) since 1903. The driest multiple year period for the Mammoth watershed was the six years from 1987 to 1992, which averaged 28.7 inches of snow water content at Mammoth Pass.

Table 63**Groundwater Pumped 2000-2004**

Year	Groundwater Pumped (Acre-Feet)
2000	1,288
2001	2,410
2002	2,717
2003	2,511
2004	1,923

Source: 2005 Urban Water Management Plan, MCWD

Table 64**Existing Water Supply Reliability (Acre-Feet)^a**

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000	3,410	3,410	3,408	3,408	3,408
Projected Total Supply	6,760	3,410	5,190	4,908	4,508	4,492

^a An acre foot equals approximately 325,829 gallons.

Source: 2005 Urban Water Management Plan, MCWD

(4) Water Demand

In 2004, water demand in the MCWD's service area generated a total annual water demand of 3,427 acre-feet. The Town of Mammoth Lakes water demand is driven largely by population and climate. As a resort destination community, population fluctuates seasonally due to changes in the climate. As discussed in Section 3.8, Employment, Population and Housing of this Draft EA/EIR, the General Plan (1987) measures population by permanent residents and by population intensity or "persons at one time" (PAOT). PAOT in the Town is greatest between October and March, which is the Town's winter ski season, and from July through September, when visitors travel to the area for warm-weather outdoor recreation activities.

With the seasonal fluctuations of population there is an accompanying change in water demand. Residential uses account for the greatest water demand. Condominiums represent the largest share of water use at 30% of overall use, followed by single-family residences at 18%. According to the 2005 UWMP, water demand is highest during summer months due to the irrigation of residential landscaping. The lowest water demand occurs in October and November.

The existing temporary Little Eagle Base Lodge, which is located on Forest Service lands, requires water service for its 15,000 square feet of commercial space that includes food and beverage facilities and restrooms. Based on MCWD water demand factors, the existing facility requires an estimated 2,250 gallons per day (gpd), or 2.5 acre feet per year, and a peak demand of 3,900 gpd.¹⁰⁴

(5) Water Infrastructure

There are several water lines of varying sizes serving the project site, as shown in Figure 46 on page 454. The water pipelines are constructed of either steel, ductile iron pipe (DIP), or polyvinyl chloride (PVC). As shown in Figure 46, the existing water pipelines in the project area are located along Meridian Boulevard and Majestic Pines Drive, with laterals extending to the residential community to the south of the site. A 14-inch DIP line that provides water service to the temporary Little Eagle Base Lodge facility currently runs from the Juniper Springs Lodge to the temporary facility, crossing the western corner of the site.. There are no water lines traversing the surface lot on the project site.

Fire flow or water pressure is the quantity of water available or necessary for fire protection, and is measured in pounds per square inch (psi) and gallons per minute. According to MCWD, existing pressure levels of the water supply infrastructure at the corner of Meridian Boulevard and Majestic Pines Drive range between 97 and 102 psi and are capable of providing flows of up to 3,500 gallons per minute.

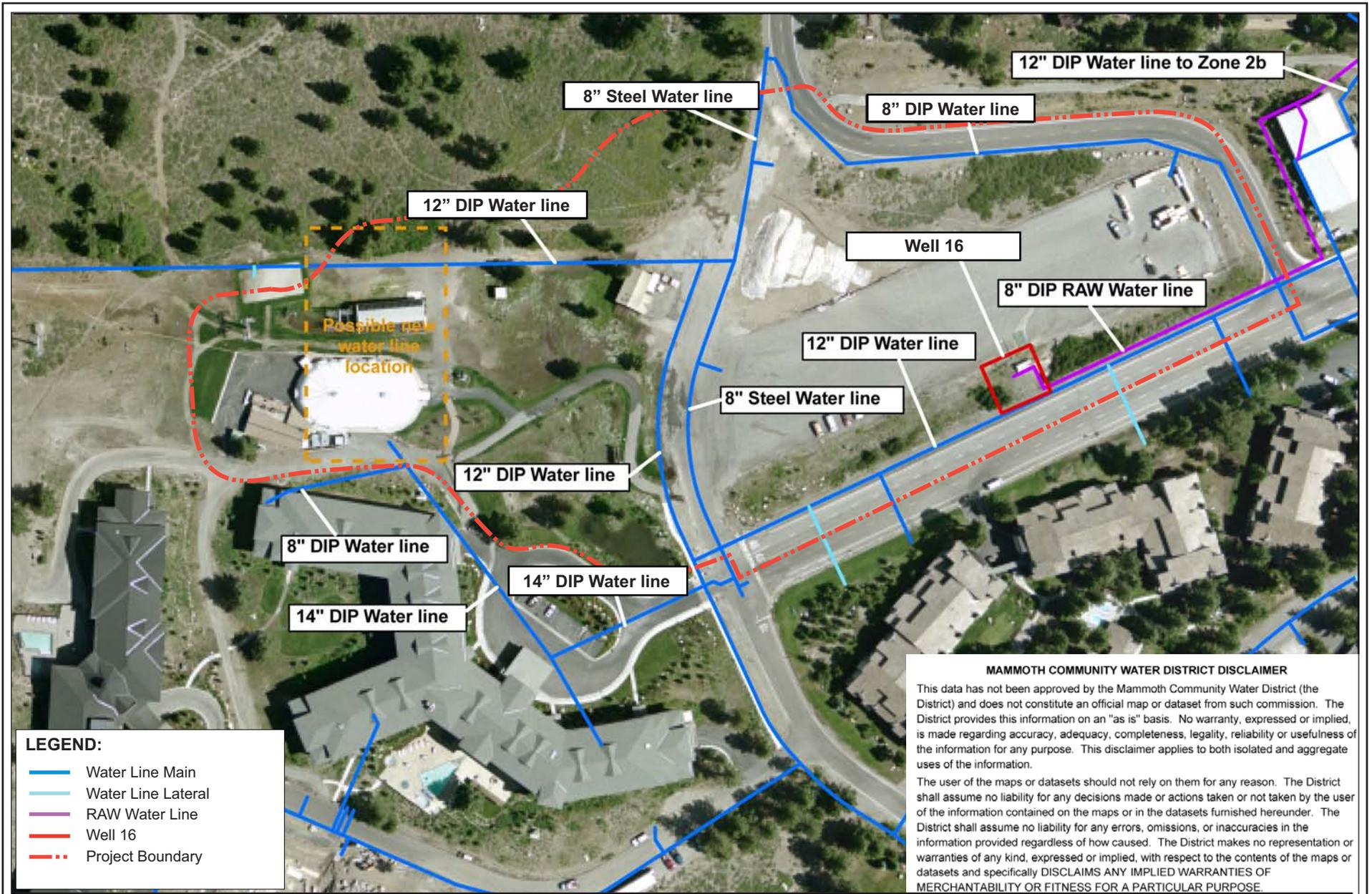
3.11.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Based on Appendix G of the State CEQA Guidelines, impacts to water supply or infrastructure would be considered significant if:

- The estimated water demand for the proposed project would exceed available water supplies or the capacity of the existing delivery system by a substantial magnitude; or
- The project would require or result in the construction of new water facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects.

¹⁰⁴ MCWD's water demand factor for commercial uses is 0.15 gallons per day. The peak rate is calculated by multiplying average daily demand by a peaking factor of 1.7.



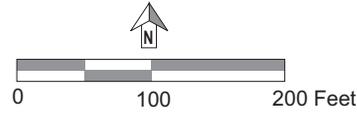
LEGEND:

- Water Line Main
- Water Line Lateral
- RAW Water Line
- Well 16
- - - Project Boundary

MAMMOTH COMMUNITY WATER DISTRICT DISCLAIMER

This data has not been approved by the Mammoth Community Water District (the District) and does not constitute an official map or dataset from such commission. The District provides this information on an "as is" basis. No warranty, expressed or implied, is made regarding accuracy, adequacy, completeness, legality, reliability or usefulness of the information for any purpose. This disclaimer applies to both isolated and aggregate uses of the information.

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Source: Mammoth Community Water District, 2006

Figure 46
Existing Water Lines
in Project Area

b. Methodology

The analysis of the project's potential impacts on water supply and infrastructure was developed in consultation with the MCWD and also uses data from the 2005 UWMP and the Groundwater Management Plan for the Mammoth Basin Watershed. The analysis is based on the anticipated increase in water demand resulting from project implementation, relative to the MCWD's existing water supply and infrastructure. The respective impacts of the project's two accommodation scenarios, the condo/hotel and fractional use option and the hotel only option, are analyzed in this section.

c. Environmental Consequences of the Proposed Action

(1) Construction

Project implementation would require the realignment of the 12-inch DIP water line that runs east to west on the western portion of the project site. The 8-inch steel and 12-inch DIP water lines in the old alignment of Majestic Pines Drive would be abandoned as part of project implementation. In addition, the project would require tie-ins to the existing water mains. The locations and sizes of such tie-ins would be determined during the final design stages for the project.

Water would be used during the two-year construction period for the project. The temporary Little Eagle Base Lodge would continue to operate during the first year of project construction. As discussed in Section 2.0, Proposed Action and Alternatives, construction in the first year would involve excavation and the building of the parking garage. Construction activities in year two would involve the construction of the facility.

Construction activities would include demolition, excavation, and grading of the site. The demand for water would be for soil watering (fugitive dust control), clean up, masonry, painting, and other short-term activities. During grading and excavation, water demand would be similar to irrigation demand, or approximately 3,000 gallons per acre per day. Due to water demand generated by construction activities, in addition to the water demand generated by the Little Eagle Base Lodge, there would be an increase in water demand over current conditions. Overall, however, project construction would result in a water demand less than that of the project during operation. As such, construction activities would result in a less than significant impact on the existing water supply and infrastructure.

(2) Operation

(a) Water Supply

Implementation of the project would result in a long-term water demand for operational uses, including visitor accommodations, dining facilities, restrooms, day spa, locker club, administrative uses, and landscaping. Table 65 on page 457 shows a breakdown of proposed land uses and their corresponding estimated average total water demands. As indicated in Table 65, operation of the project would have a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet per year, with a peak net water demand of 43,760 gpd. Since the project with the hotel only option would generate a greater water demand than the project with the condo/hotel and fractional ownership use option, this analysis of projected water supply and demand focuses specifically on the impacts of the project with the hotel only option.

As previously discussed, the amount of precipitation directly impacts water supply, including the supply during drought conditions. MCWD has analyzed existing and projected water supply in normal, single dry,¹⁰⁵ and multiple dry years. According to MCWD, assuming a normal water year at project build out in 2009, there would be a water supply of 6,760 acre feet and a total water demand of 3,656 acre feet, resulting in a surplus of 3,104 acre-feet in 2009. Therefore, in a normal water year MCWD would have an adequate water supply to meet the potable water demand of the project in combination with other water demand. As such, 2009 operation of the project would result in a less than significant impact on water supply.

As shown in Table 66 on page 458, based on MCWD 2009 projections of water supply and demand in a single dry year, there would be a shortage of 246 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. However, the implementation of Level 1 Conservation Controls, which would occur three days a week at four hours per day, would provide for a 12% reduction of overall demand. In addition to water conservation measures, MCWD has planned and implemented a number of programs to address anticipated water supply deficiencies and meet water demands. These include water system loss reduction, the use of recycled water, and development of new water supplies. MCWD has initiated a water pipeline loss reduction program that is expected to be completed by 2010.

¹⁰⁵ A single dry year is generally considered to be the lowest annual runoff for a watershed since the water-year beginning in 1903. The records for the Mammoth Basin begin in 1928 and the lowest April 1 snow water content, which generally equates to the runoff for the watershed occurred in 1977 with about 12 inches. This data was used in the 2005 UWMP to prepare projections for a single dry year where essentially no surface water would be available for the District to divert.

Table 65

Proposed Project - Estimated Water Demands

Use Type	Amount of Development	Units	Average Water Use Per Unit (gal/day) ^a	Total Average Demand (gal/day) ^b	Total Average Demand (acre-feet/year)	Peak Water Use Per Unit (gal/day) ^c	Total Peak Demand (gal/day)
Condo/Hotel and Fractional Use Option							
Condo/Hotel	62	units	100	6,200	6.9	105	6,510
Fractional Ownership Use ^d	21	units	100	2,100	2.4	105	2,205
Commercial	80,000	sq ft	0.15	12,000	13.4	0.28	22,400
Subtotal				20,300	22.7		31,115
Less Existing Development	15,000	sq ft	0.15	<u>2,250</u>	<u>2.5</u>	0.28	<u>4,200</u>
Net Total				18,050	20.2		26,915
Hotel Only Option							
Hotel	213	units	80	17,040	19.1	120	25,560
Commercial	80,000	sq ft	0.15	12,000	13.4	0.28	22,400
Subtotal				29,040	32.5		47,960
Less Existing Development	15,000	sq ft	0.15	<u>2,250</u>	<u>2.5</u>	0.28	<u>4,200</u>
Net Total				26,790	30.0		43,760

^a Factors obtained from MCWD. Average day is the average day calculated from the average of 36 months of usage. Factors are inclusive of irrigation water use.

^b An acre-foot equals approximately 325,829 gallons

^c Peak day is the daily average of the peak month water usage over 36 months. Peak factors for commercial were calculated by multiplying the average water use per unit by a peaking factor of 1.7.

^d The water demand for fractional ownership units are considered the same as for condo/hotel.

Source: PCR Services Corporation, 2006

Table 66

**Projected Demand Plus Project with Hotel Only Option in a Single Dry Water Year
(acre feet per year)**

	Projected Demand	Project Demand	Total Demand	Projected Supply in Single Dry Water Year	Available Supply in 2009
2009 Demand Plus Project in a Single Dry Water Year	3626	30	3656	3410	-246
2009 Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls ^a	3191	30	3221	3410	189
2010 Town Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls and Recycled and Loss Reduction	2644	30	2674	3410	736

^a *Level 1 Conservation Controls, which would occur three days a week at four hours per day, would provide for a 12% reduction of overall demand*
Source: MCWD and PCR Services Corporation, 2006

Overall, this reduction program would reduce demand by 310 acre feet per year. The use of recycled water, which is planned to begin in 2008, would reduce demand by 360 acre feet per year.

As Table 66 shows, in the case of a single dry year in which the Town could experience a shortfall of water supplies, MCWD would initiate Level 1 Conservation Controls. Given 2009 projections, this reduction would represent a decrease in water demand by 435 acre feet per year, and in turn would result in a water surplus of 189 acre feet in 2009. Additionally, in 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 736 acre feet in 2010. As such, with the implementation of recycled water use, loss reduction measures, and Level 1 Conservation Controls, impacts to water supply in a single dry year would be less than significant at the time of project completion in 2009.

As shown in Table 64, in a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. Therefore, the projected demand plus the project's demand of 3,656 acre feet in 2009 would be met in a four-year multiple dry water year scenario. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls,

which would reduce the demand. In addition, planned improvements discussed above (water pipeline loss and use of recycled water) would also provide additional water supply.

The project would be required to comply with Title 24 and Title 20 of the CAC, which relates to water conservation. Compliance could result in a reduction of water consumption and, therefore, a decreased demand on MCWD water supplies.

The project would be consistent with the policies of the Town's 1987 General Plan, which ensure that a project is approved only when sufficient water supplies can be demonstrated and which support activities that provide for water use reduction and increased water storage, reclamation, and reuse. The project would also comply with policies and implementation measures in the Town's 2005 Draft General Plan Update relating to water supply. In addition, the project would be consistent with the Town's Municipal Code through the installation of drought resistant landscaping and water efficient landscaping practices.

(b) Infrastructure

As discussed above, a 12-inch DIP water line is located on the project site that would require realignment. Aside from this modification, existing water infrastructure would be able to accommodate the proposed project, and no upgrades to the water distribution system would be necessary. In addition, the construction or expansion of new water facilities would not be required.

Water quality of Well 16 would continue to be tested monthly by MCWD. The well pump and approximately 550 feet of discharge piping may require periodic maintenance and repair. This maintenance would involve pulling the piping from the vault using a drilling rig, as well as the storage of the piping in 21-foot sections. Approximately 40 square feet of work area to conduct maintenance activities would be necessary. As such, with the incorporation of a mitigation measure relating to maintenance activities involving Well 16, impacts to the water distribution infrastructure would be less than significant.

The Town of Mammoth Lakes Fire Protection District (MLFPD) would provide fire protection and emergency response to the project site. MCWD has concluded that there is sufficient pressure and volume in the water distribution system to provide fire protection services to the project site. However, as the maximum building height proposed by the project would be 77 feet, a standpipe would be required to supply the necessary water pressure to the top floors of the structure. During the plan check review process, the MLFPD would determine the required fire flow for the project. The project would comply with the requirements of the MLFPD relative to the installation of a standpipe, as well as any necessary fire hydrants or the provision of sprinklers to ensure that adequate fire flow is provided.

d. Mitigation Measures

Project demand would exceed water supply in a single dry year scenario without the implementation of the District's Level 1 Conservation Controls. Under the MCWD's current policies, Level 1 Conservation Controls are implemented if a single dry year supply scenario occurs. These Conservation Controls allow the MCWD to meet District-wide demand during the applicable period. The project would have a less than significant impact on MCWD water supplies in normal years and in dry years with the implementation of the District's Level 1 Conservation Controls. Therefore, no mitigation measures are required with regard to water supply.

Mitigation Measure WTR-1, below, is recommended to assure the availability of space required for periodic maintenance and repair of MCWD's well pump and approximately 550 feet of discharge piping. In addition, WTR-2 is recommended to ensure that potentially significant impacts to fire flow are reduced to a less than significant level.

WTR-1: The Applicant shall ensure the provision of 40 square feet of work area adjacent to Well 16 on the project site that shall be used by MCWD as needed during periodic maintenance of Well 16.

WTR-2: The project applicant shall install a standpipe along the northwest side of the site, near the ice rink and plaza, as approved by MLFD to ensure that adequate fire flows are available at this location. The standpipe shall be operational prior to occupancy of the facility.

With the incorporation of the mitigation measures, above, impacts to water infrastructure would be less than significant.

e. Environmental Consequences of Alternative 1 – Development in Accordance With Existing Regulations Alternative

Development of the commercial facility would result in a long-term water demand for operational uses. Operation of the commercial uses under Alternative 1 would generate an average potable water demand of 5,250 gallons per day (gpd), or 5.9 acre feet, and a peak water demand of 9,100 gpd.⁹³ There is adequate water supply to meet the demand of Alternative 1.

Assuming a normal water year at build out of Alternative 1 in 2009, there would be a water supply of 6,760 acre feet, and a water demand of 3,626 acre feet, resulting in a surplus of

⁹³ Based on the MCWD's water consumption factor of .015 for commercial uses, and a peaking rate of 1.7.

3,134 acre feet in 2009. Therefore, in a normal water year MCWD would have an adequate water supply to meet the potable water demand of Alternative 1 in combination with other water demand. As such, 2009 operation of Alternative 1 would result in a less than significant impact on water supply.

Based on MCWD's 2009 projections of water supply and demand in a single dry year in addition to Alternative 1's demand of 5.9 acre feet, there would be a shortage of 222 acre feet of water if the use of recycled water or loss reduction measures were not implemented. With the implementation of Level 1 Conservation Controls, 2009 demand plus Alternative 1 would result in a surplus of 213 acre feet. Additionally, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 760 acre feet in 2010. As such, Alternative 1 would result in a less than significant impact with regard to water supply in 2009 with the implementation of recycled water use, loss reduction measures, and Level 1 Conservation Controls.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls, which would reduce projected demand plus Alternative 1 demand to 3,191 acre feet. In addition, with the implementation of recycled water use and loss reduction measures in conjunction with Level 1 Conservation Controls, overall demand would be reduced to 2,644 acre feet. Therefore, the water demand that would result under Alternative 1 would be met in a four-year multiple dry water year scenario. As such, Alternative 1 would result in less than significant impacts to water supply in a multiple dry year scenario.

f. Environmental Consequences of Alternative 2 – Reduced Intensity Alternative

Alternative 2 would generate a net total potable water demand of 10,950 gpd or 12.3 acre-feet per year for the residential option, with a peak net water demand of 16,030 gpd. The hotel only option would generate a net total potable water demand of 16,590 gpd or 18.6 acre-feet per year, with a peak net water demand of 26,920 gpd. Since Alternative 2 with the hotel only option would generate a greater water demand than the project with the condo/hotel and fractional ownership use option, this analysis of projected water supply and demand focuses specifically on the impacts of this Alternative with the hotel only option.

There would be adequate supply in a normal dry year to meet projected potable water demand plus the demand of Alternative 2 in 2009. Based on MCWD 2009 projections of water supply and demand in a single dry year, Alternative 2 would result in a shortfall of 234.6 acre

feet per year of water if the use of recycled water or loss reduction measures were not implemented. MCWD would initiate Level 1 Conservation Controls in the case of a single dry year, which would result in a water surplus of 200.4 acre feet per year. In 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of approximately 747 acre feet.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls. Therefore, water demand with Alternative 2 would be approximately 3,214 acre feet in 2010 and would be met in a four-year multiple dry water year scenario. As such, Alternative 2 would result in less than significant impacts to water supply in a multiple dry year scenario.

g. Environmental Consequences of Alternative 3 – Alternate Design Alternative

Alternative 3 proposes the same program of uses as proposed under the Proposed Action. As such, Alternative 3 would generate a net total potable water demand of 18,050 gpd or 20.2 acre-feet per year for the condo/hotel and fractional ownership option, with a peak net water demand of 26,915 gpd. The hotel only option would generate a net total potable water demand of 26,790 gpd or 30.0 acre-feet per year, with a peak net water demand of 43,760 gpd.

Given the above, there would be adequate supply in a normal dry year to meet projected potable water demand plus the demand of Alternative 3 in 2009. Based on MCWD 2009 projections of water supply and demand in a single dry year, Alternative 3 would result in a shortage of 246 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. MCWD would initiate Level 1 Conservation Controls in the case of a single dry year, which would result in a water surplus of 189 acre feet per year. Additionally, in 2010, with the inclusion of recycled water use and water loss reduction measures in conjunction with Level 1 Conservation Controls, water demand would be further reduced, resulting in a surplus of 736 acre feet in 2010.

In a multiple dry year scenario, the water supply from groundwater wells in Year 2 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. During a multiple dry water year scenario, MCWD would implement Level 1 Conservation Controls. Therefore, water demand with Alternative 3 would be 3,263 acre feet in 2010 and would be met in a four-year multiple dry water year scenario. As such, Alternative 3 would

result in less than significant impacts to water supply in normal water year, single dry year, and multiple dry year scenarios.

h. Environmental Consequences of Alternative 4 – No Action Alternative

Under the No Action Alternative, no demand for water supply would occur as the existing uses on the site would be removed. Given the above, the No Project Alternative would generate a less than significant impact to water supply and infrastructure.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.12 WASTEWATER

This section addresses the potential impacts of the project on local and regional wastewater facilities and infrastructure. The proposed project's consistency with adopted wastewater plans and policies is also discussed. The information contained in this section is based on data from and in consultation with the Mammoth Community Water District (MCWD) and current and future wastewater flows provided by the MCWD in the 2005 Urban Water Management Plan.

3.12.1 REGULATORY FRAMEWORK

There are several regulations and plans regarding wastewater that are applicable to the project site and the proposed development. The project is subject to the Lahontan Regional Water Quality Control Board (RWQCB), the 2005 Mammoth Community Water District Urban Water Management Plan, the Town of Mammoth Lakes adopted General Plan (1987), the Town Draft General Plan Update (2005), and the Mammoth Mountain Ski Area (MMSA) Development Plan. These are discussed in detail below.

a. Regional

(1) Water Quality Control Plan for the Lahontan Region, North and South Basins

The Town is within the jurisdictional boundaries of the Lahontan RWQCB. The Lahontan RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Chapter 4.4 of the Water Quality Control Plan for the Lahontan Region, North and South Basins, outlines policies and regulations for municipal wastewater treatment, disposal, and reclamation. The standards contained within the Water Quality Control Plan are designed to provide developers with a uniform approach for the design and installation of adequate systems to control wastewater and wastewater treatment/sewage disposal impacts from the Town, and to prevent any potential contamination of groundwater at the discharge site.

(2) Mammoth Community Water District 2005 Urban Water Management Plan

Formed in 1958, the Mammoth Community Water District provides water and wastewater service to the community of Mammoth Lakes. The updated 2005 Urban Water Management Plan (UWMP) for the Mammoth Community Water District provides information about MCWD's responsibilities towards water supply and water recycling in the community including wastewater generation, collection, treatment, and disposal. Treated wastewater recycling is currently under evaluation and is anticipated to be used for irrigation purposes on the Sierra Star Golf Course, Snow Creek Golf Course, and the Shady Rest Park in the community.

b. Local

(1) Town of Mammoth Lakes General Plan (1987)

The Land Use Element of the Town of Mammoth Lakes General Plan, which was adopted in 1987, includes the following policies regarding wastewater management:

1. The Town shall work cooperatively with the Mammoth County Water District, Mono County and other agencies, to provide the needed sewage facilities for the community's present and future needs.
2. The Town shall monitor growth trends and wastewater tap requirements to assure development does not exceed the capacity of sewage lines and facilities. The Town shall encourage the MCWD to have adequate sewage capacity available when needed.
3. The Town shall permit only that development which can be adequately accommodated by the sewage facilities and lines, through conditions in the Town Development Code.

(2) The Town of Mammoth Lakes Draft General Plan (Update 2005)

The 2005 Draft General Plan Update includes goals, objectives, policies, and implementation measures regarding wastewater. The following policies and implementation measures regarding wastewater are applicable to the project:

Policy II.1.C.a: Ensure that new development densities do not exceed the capacity of public service infrastructure and utility systems. Require new development to upgrade or fund facilities to meet increased demand or require reduced density or project redesign for any project that would result in deterioration of service

levels or cause available capacity to be exceeded if capacity expansion is infeasible.

Implementation Measure

II.1.C.a.1: The Town shall ensure service providers are involved in development review process.

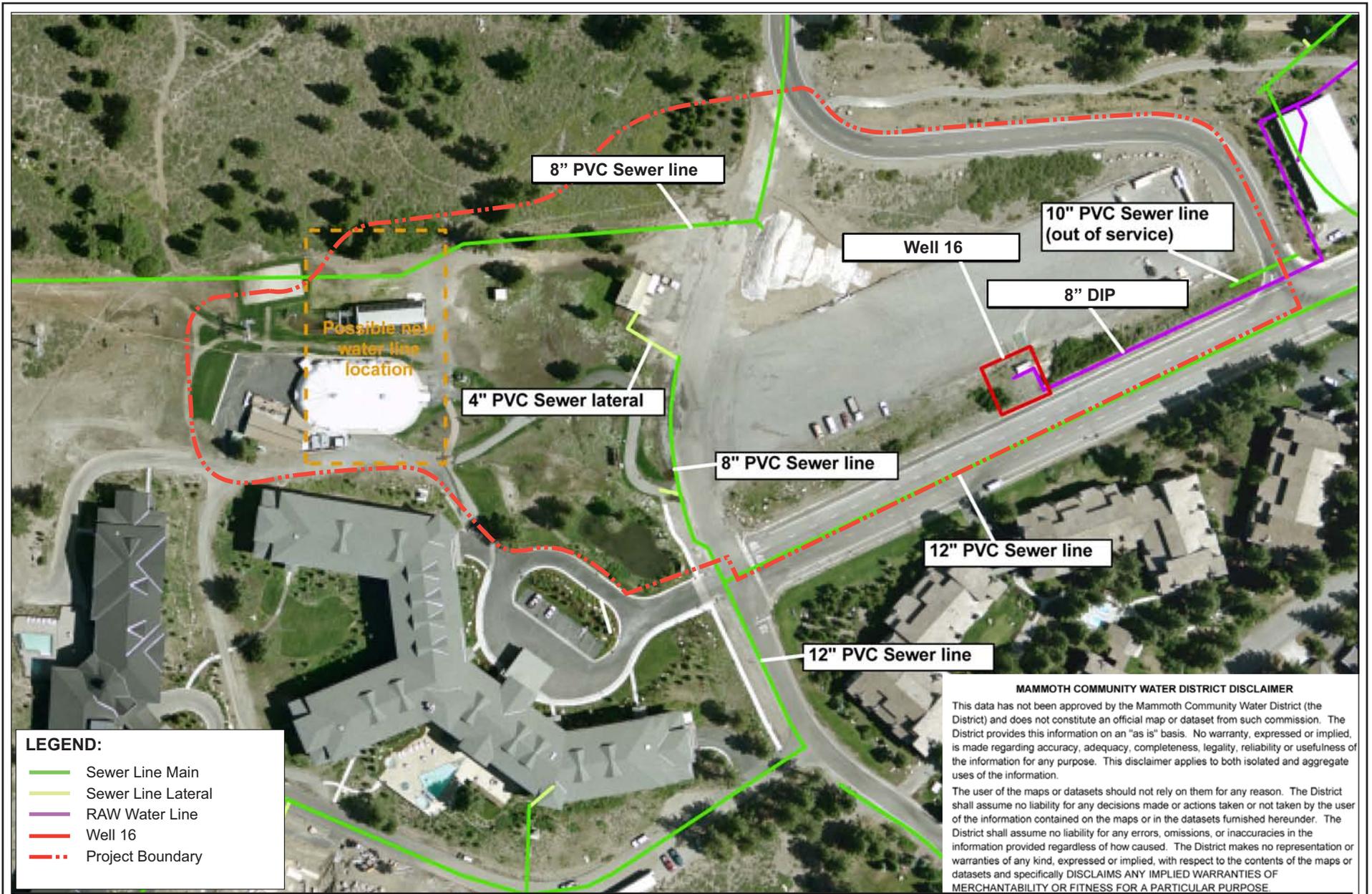
(3) Mammoth Mountain Ski Area Master Development Plan

The MMSA Development Plan (the Development Plan) is the overall operational plan for buildout of MMSA's facilities and provides the foundation for the Forest Service Special Use Permit under which MMSA operates. The Development Plan applies only to lands administered by the Forest Service. The Development Plan proposes to utilize the current existing wastewater facility systems. The two wastewater systems that currently service the area include: the MCWD sewage system and the Mammoth Mountain Ski Area sewage system. Currently, these two wastewater facilities serve 7 base lodges. The project area is considered a part of Base Lodge 7 and would be served by the MCWD. Fee payment is required prior to issuance of a permit to connect to MCWD wastewater facilities.

3.12.2 AFFECTED ENVIRONMENT

The MCWD provides wastewater collection and treatment facilities for the Town of Mammoth Lakes, including the existing temporary facility. MCWD operates and maintains pump stations and over 35 miles of sewer mains and interceptors. There are four main trunks of the wastewater collection system, which are located along Old Mammoth Road, Meridian Boulevard, Sierra Star Golf Course to Center Street, and Main Street. Interceptor lines vary in diameter from 18 to 21 inches.

Based on general commercial numbers provided by the MCWD a factor of 0.14 gallons per square feet, the existing temporary facility generates 2,250 gpd of wastewater on average with 3,900 gpd on peak days. As shown in Figure 47 on page 467, the existing wastewater infrastructure within the project area consists of five wastewater pipelines ranging from 6 to 18 inches in diameter. East of the project site, there is a 10 inch PVC wastewater line that is out of service. Northwest of the site there is an 8 inch PVC wastewater main line that runs west laterally and a short 4 inch PVC wastewater line that runs southeasterly and connects to an 8 inch PVC wastewater main line running longitudinally. This 8 inch wastewater line connects to a 12 inch PVC wastewater line that continues to run south past Meridian Boulevard and then west on Spring Road. Perpendicular to this 8 inch PVC wastewater main line, at the intersection of Majestic and Meridian Boulevard, there is a 12 inch PVC wastewater main line that runs east



LEGEND:

- Sewer Line Main
- Sewer Line Lateral
- RAW Water Line
- Well 16
- - - Project Boundary

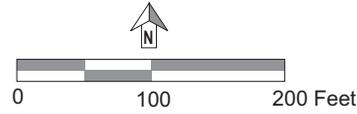
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NOTE TO TOWN/MCWD:
 PCR is not able to remove the "Possible new water line location" text & boundary line, and the "8-inch DIP RAW Water line" text box and line from this figure.



Source: Mammoth Community Water District, 2006.

Figure 47
 Existing Sewer Lines
 in Project Area

laterally. Additionally, there is a wastewater line to the south of the project site that only services the existing restrooms.

The wastewater generated by the existing facility is conveyed to the 10-inch wastewater line located in Minaret Road and Main Street, which is the main confluence for the Town and has a total capacity of 310 gallons per minute.

The wastewater treatment plant, which is located in the Valley District east of the Gateway area near the intersection of Meridian Boulevard and State Route 203, is owned and operated by the MCWD. As shown in Table 67 on page 469, the 2005 UWMP indicates that an average of approximately 1.7 million gallons per day (mgd) of wastewater are generated, collected, and treated. Peak wastewater flows in 2005 were 2.6 mgd generated on average during the holiday seasons. By the year 2025, MCWD projects that 2.6 million gallons per day of wastewater will be generated and collected on average with peak flows reaching approximately 4.3 million gallons per day. The current existing design capacity for the plant is estimated at 4.9 million gallons per day (mgd). The existing wastewater treatment plant capacity is designed to accommodate the average and peak amounts of wastewater generated in the community through the year 2025.

All raw wastewater is delivered to the MCWD wastewater treatment facility through two 18-inch interceptor wastewater lines. The treatment facility provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through the utilization of chlorine. The treated wastewater then discharges into Laurel Pond, an effluent water body located approximately 5.5 miles southeast of the Town on Forest Service land. The District has been discharging treated effluent to this pond since 1985 and holds a waste discharge permit for the discharge. Throughout the years, this effluent water body has become a year round migratory magnet for waterfowl and shorebirds.¹⁰⁷ Disposal occurs at the pond through percolation into the ground and through evaporation into the atmosphere. There are no reported water quality issues associated with the discharged wastewater.

In terms of planned improvements to the system, MCWD anticipates upgrading the filter backwash system at Groundwater Treatment Plant #2, which is located adjacent to the project site. The planned upgrade would increase capacity in the sewer lines by about 300 to 350 gallons per minute. This would be achieved by reclaiming the filtered backwash water and could recycle as much as 95 to 99 percent of the backwash that currently goes into the sewer. Although the improvement has not yet been designed, construction may occur as early as the winter 2006/2007 or as late as winter 2007/2008.¹⁰⁸ Planned improvements to the system include an expansion of

¹⁰⁷ <http://www.fs.fed.us/outdoors/naturewatch/california/Wildlife/laurel-ponds/index.shtml>

¹⁰⁸ *Ericka Hegeman, MCWD May, 2006.*

Table 67

**Current and Projected Daily Wastewater Flows Generated and Collected
(Million Gallons per Day)**

	2005	2010	2015	2020	2025
Average Wastewater Flows collected and treated in service area	1.65	1.89	2.13	2.37	2.6
Peak Wastewater Flows	2.6				4.3
Wastewater Treatment Plant Design Capacity	4.9	4.9	4.9	4.9	4.9

Source: MCWD Urban Water Management Plan, 2005

the current wastewater collection pipeline from Meridian Boulevard to Sierra Industrial Park by 2009.

3.12.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Based on the criteria set forth in Appendix G of the CEQA Guidelines, the project would have a significant impact on wastewater conveyance and treatment if:

- the project would require or result in the construction of new wastewater treatment facilities or an expansion of the existing MCWD treatment facility, the construction of which could cause significant environmental effects;
- the project would result in the determination by MCWD, the wastewater treatment service provider which serves the project, that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- the project would exceed wastewater treatment requirements of the Lahontan Regional Water Quality Control Board.

b. Methodology

The analysis estimates and compares the expected demand for service to the capacity of the existing collection, conveyance, and treatment facilities. Wastewater generation estimates for

the proposed project were evaluated by the MCWD to determine the potential impacts on the wastewater conveyance and treatment facilities. MCWD staff installed wastewater line flow monitoring equipment downstream of the proposed location of Eagle Lodge to collect data on the pipeline capacity. Water meter data was then used to develop wastewater generation rates. Then, the generation rate (the average wastewater flow per unit) was multiplied by the amount of units (or square feet respectively) to determine the total average and peak wastewater flows to be generated by each project option. The total amount of wastewater generated for each option was then compared to the existing wastewater generation rates onsite to calculate the net increase of wastewater that would be generated by the site. The wastewater and treatment facility capacities were considered to determine if sufficient capacity exists to serve the site.

c. Environmental Consequences of the Proposed Action

(1) Construction

Portable toilets are anticipated to be provided during construction, as well as maintained during all phases of construction by a private contracted vendor who would dispose of waste off-site. Construction personnel would generate a negligible amount of wastewater. Thus, no measurable wastewater flows are anticipated to constrain the existing wastewater capacity during construction.

Project construction activities would include the realignment or abandonment of the 12 inch PVC wastewater lines servicing the restrooms, the expansion of the wastewater system on Majestic Pines Drive and Meridian Boulevard where an 8 inch on site PVC wastewater line would tie in to the main system, and the possible installation of a new line at the corner of Old Mammoth Road and SR-203. Wastewater line abandonment would include capping off of pipelines and plugging manholes with water tight plugs or completely removing manholes. In cases where abandoned wastewater lines interfere with construction of underground facilities, the lines must be removed. Any sewer line abandonment would be completed to the satisfaction of MCWD requirements. In addition, construction would include the installation of tie-ins of new wastewater lines to the existing lines. Final determination of the necessary size and capacities of the wastewater tie-ins for the project is dependent upon the final design of the project.

In compliance with Lahontan RWQCB policies, Best Management Practices (BMPs) would be incorporated during pre-and post-construction. All wastewater lines to be sited shall be a minimum of 50 feet from any well and 25 feet from any drainage course or ephemeral stream (as measured from the edge of the channel). Any further upgrades to the wastewater system collection would be the responsibility of the MCWD. In addition, no disruption of service is expected to occur as a result of construction activities with regard to public utilities and

wastewater services. Therefore, impacts related to construction of the proposed project expected to occur as a result of wastewater construction would be less than significant.

(2) Operation

Table 68 on page 472 provides the estimated wastewater generation rates that would result from the project. As shown in Table 68, the project would generate peak wastewater flows of 30,700 gallons per day (gpd) for the condo/hotel option and 45,830 gpd for the hotel only option. The project would result in a net increase on a peak day of 26,500 gpd for the condo/hotel option and 41,630 gpd for the hotel only option. Based on the MCWD Urban Water Management Plan, the existing capacity at the MCWD treatment facility is 4.9 million gallons per day (mgd) of which 1.65 mgd is generated and collected on average and a peak of 2.6 mgd is currently treated in the Town. The project net increase in wastewater generation would represent an approximately 0.010 percent increase out of the current 2.6 million gallons per day that is treated in the Town on a peak day for the condo/hotel option and an approximately 0.016 percent increase for the hotel only option. Therefore, the 4.9 mgd design capacity of the wastewater facility would be able to accommodate wastewater generated by the project.

While the wastewater treatment plant would accommodate the project's increase in wastewater, the existing off site wastewater infrastructure has insufficient capacity to accommodate the project flows. The main collection line at Old Mammoth Road and Meridian Boulevard is at capacity and additional wastewater flows would exceed capacity. In order to resolve this shortfall in capacity the District anticipates upgrading the filter backwash system at Groundwater Treatment Plant #2. In conjunction with the filter backwash recycling project, the District is currently working on ways to reduce infiltration to this pipe, which plays a major role in the lack of capacity in this pipe. If these two projects do not create enough capacity for increased flows as a result of the Eagle Lodge project, then the District may need to upsize the sewer pipeline on Meridian Boulevard near the Bell Shaped Parcel and/or construct a new main line from the intersection of Old Mammoth Road and Meridian Boulevard down Meridian Boulevard to the wastewater treatment plant.

As indicated previously, MCWD anticipates upgrading of the filter backwash system at Groundwater Treatment Plant #2, which is located adjacent to the project site. This upgrade is anticipated to increase capacity in the sewer lines by approximately 300 to 350 gallons per minute. This would be achieved by reclaiming the filtered backwash water, possibly recycling as much as 95 to 99 percent of the backwash that currently goes into the sewer. Construction is likely to begin as early as during the winter of 2006/2007 or as late as winter 2007/2008.¹⁰⁹ However, this upgrade is necessary to provide services to the project. Therefore, a mitigation

¹⁰⁹ *The upgrade of the wastewater collection system will be the responsibility of the MCWD.*

Table 68

Estimated Wastewater Generation Rates^a

Use Type	Amt of Development	Unit of Measure	Average Wastewater Flow (gal/day)	Peak Wastewater Flow ^b (gal/day)	Average Total Wastewater Flow (gal/day)	Peak Daily Flows (gal/ day)
Condo/Hotel Option						
Condo/Hotel Fractional Ownership Use ^c	62	Units	60/ unit	100/unit	3,720	6,200
Commercial	80,000	sq ft	0.15/sq ft	0.28/sq ft	12,000	22,400
Subtotal					16,980	30,700
Less Existing Development	15,000	sq ft	0.15/sq ft	0.28/sq ft	<u>2,250</u>	<u>4,200</u>
Net Total					14,730	26,500
Hotel Option						
Hotel	213	Units	75/unit	110/ unit	15,975	23,430
Commercial	80,000	sq ft	0.15/sq ft	0.28/sq ft	12,000	22,400
Subtotal					27,975	45,830
Less Existing Development	15,000	sq ft	0.15/sq ft	0.28/sq ft	<u>2,250</u>	<u>4,200</u>
Net Total					25,725	41,630

^a Factors obtained from MCWD. Average day is the average day calculated from the average 36 months of usage.

^b Wastewater peak day is based on the peak winter month water usage.

^c The wastewater generation rates for fractional ownership units are considered the same as for condo/hotel.

Note: sq ft= square feet

Source: PCR Services Corporation, 2006

measure is included to require that the upgrade be operational prior to the occupancy of the project.

In conclusion, the project would result in an increase of wastewater generated, but not to the extent that it would constrain the capacity of the existing wastewater infrastructure at the MCWD Wastewater Treatment Facility. The proposed project would not require the construction of new facilities or the expansion of the existing wastewater treatment facilities. In addition, the proposed project would not exceed wastewater treatment requirements of the LRWQCB. Furthermore, the increase of wastewater generated on site that would result from the project would be accommodated by MCWD's planned improvements to the existing infrastructure. Therefore, impacts regarding wastewater associated with the project implementation would be less than significant.

(3) Consistency With Applicable Regulations

The project would comply with all polices and regulations outlined within the Water Quality Control Plan to be reviewed and approved by the Town and/or the Lahontan RWQCB. As stated above, construction would incorporate BMP's during pre- and post-construction in compliance with Lahontan RWQCB policies. Additionally, the proposed project would ensure compliance with the minimum distances for siting any wastewater lines. Thus, project implementation would comply with the Water Quality Control Plan for the Lahontan Region, North and South Basins.

As the project would be served by the MCWD, all wastewater generated, collected, treated, and disposed would comply with the MCWD 2005 Urban Water Management Plan. Additionally, any efforts to undergo treated wastewater recycling would be supported by the project in compliance with the 2005 Urban Water Management Plan.

Wastewater Management Policy 1 in the 1987 General Plan requires that the Town work cooperatively with the MCWD, Mono County, and other agencies to provide the necessary wastewater facilities for the community's present and future needs. As discussed in this section, the Town has coordinated with MCWD to ensure that adequate wastewater facilities exist to accommodate the proposed project. As required by Policy 2 of the General Plan, the Town monitors growth trends and wastewater generation to ensure that the service provider can accommodate the projected growth. In compliance with Policy 3, occupancy of the development would not occur prior to a necessary upgrade of the wastewater system.

With regard to the 2005 Draft General Plan Update, Policy II.1.C.a requires that new development densities do not exceed the capacity of public service infrastructure and utility systems. The project would comply with the Policy and its associated implementation measures as the Town has coordinated with MCWD to ensure that adequate capacity exists to serve the proposed development.

d. Mitigation Measures

WW-1: Prior to the issuance of a Certificate of Occupancy for the commercial and residential components of the project, MCWD shall install and have operational the filter backwash system upgrade at Groundwater Treatment Plant #2.

With incorporation of the recommended mitigation measure above, impacts to existing wastewater treatment facilities and wastewater systems would be reduced to a less than significant level.

e. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Based on generation factors provided by the MCWD, the Alternative would generate 4,900 gallons per day on average with peak wastewater generation rates at 9,800 gallons per day. When compared to existing conditions, these rates represent a 0.0012 percent increase in wastewater generated on an average day in the Town and a 0.0022 percent increase in wastewater flows on peak days. Conveyance facilities onsite would be re-aligned to accommodate the project. Wastewater generated onsite would be conveyed to the MCWD wastewater treatment facility plant and discharged to Laurel Pond. The wastewater treatment facility plant has a design capacity of 4.9 million gallons of wastewater per day, which would be sufficient to accommodate the wastewater generated under Alternative 1. Therefore, the construction of new facilities or the expansion of existing facilities would not be required. Construction and operation of the Alternative would comply with all applicable policies and regulations, including compliance with LRWQCB wastewater treatment requirements. Thus, impacts with regard to wastewater facilities for Alternative 1 would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Under Alternative 2, the development would contain either 138 hotel rooms or 54 residential units. The 138 hotel room option under this Alternative would create 8,280 gallons per day on an average day and 13,800 gallons per day during a peak day. The 54 residential units that would occur under Alternative 2 would create 3,240 gallons per day of wastewater and 5,400 gallons per day on peak days. Either scenario would result in an increase considerably less than one percent (0.009 and 0.007, respectively) when compared to the existing peak wastewater flows produced by the existing land uses. Wastewater would continue to be accommodated by the existing wastewater facilities and conveyed in the same manner as under existing conditions. Construction and operation of this Alternative would comply with all applicable policies and regulations of the LRWQCB and impacts with regard to wastewater would be considered less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Average wastewater flows would be 16,980 gallons per day with peak flows of 30,700 gallons per day, which represents an approximately 0.012 percent increase in wastewater flows generated per day in the Town on a peak day. Wastewater conveyance pipelines would continue to direct flows to the MCWD wastewater treatment facility and discharge into Laurel Pond. The treatment facility has the design capacity to accommodate wastewater generated under Alternative 3. As the Alternative would be accommodated by the existing wastewater facilities, the Alternative would not require the construction of a new facility nor an expansion of the existing one. In addition, the construction and operation of the Alternative would comply with all

applicable policies and regulations of LRWQCB. Therefore impacts with regard to wastewater facilities would be less than significant.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Under the No Action Alternative, the existing tent would be removed and the Alternative would result in a reduction of wastewater generation compared with existing conditions. The minimal flow rates that would occur could be accommodated by the existing wastewater conveyance system and wastewater treatment plant. Therefore, impacts to the existing wastewater collection and treatment system would be less than significant under the No Action Alternative.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.13 STORMWATER

This section provides an analysis of the potential impacts on the existing stormwater system that would result from project implementation. The analysis is based on the Preliminary Drainage Study prepared by Triad/Holmes Associates, which is provided in Appendix H of this document, and the 2005 Town of Mammoth Lakes Storm Drain Master Plan Update.

3.13.1 REGULATORY FRAMEWORK

Stormwater flows and stormwater drainage systems associated with the project site are subject to the Town of Mammoth Lakes Storm Drainage Master Plan Update, the Town of Mammoth Lakes General Plan of 1987, the Draft General Plan Update 2005, and the Town's Municipal Code.

a. Town of Mammoth Lakes Storm Drainage Master Plan Update

In May 2005, the Town updated its 1984 Storm Drain Master Plan (SDMP). The SDMP was primarily formulated to control the existing drainage and erosion problems by establishing a program to rehabilitate existing development areas, while also providing policies, standards, and procedures to guide future development. The SDMP identifies several existing drainage problems in the Town including the following:

- Lack of a stable drainage system in much of the community located within the Urban Growth Boundary;
- Roadside and slope erosion due to uncontrolled runoff in poorly defined channels from steep areas;
- Drainage that crosses private property, and development in or near the natural drainage channels;
- Undersized culverts and channels; and
- Discharge of runoff from developed areas directly to Mammoth Creek resulting in high sediment loads to the creek and water quality degradation.

In response to these problems, the SDMP identifies general drainage improvements throughout the Town to remedy existing drainage problems and accommodate projected buildout of the Town. Construction of the SDMP facilities can be spread out over a number of years. This would allow facilities to be built as they are needed or as further development occurs. Three priority levels have been established in the SDMP for construction of the improvements as summarized below:

- Priority 1 improvements focus primarily on eliminating existing drainage and erosion control problems;
- Priority 2 improvements include solutions to less critical drainage problems and facilities required to provide adequate drainage trunk capacity for the ultimate development; and
- Priority 3 improvements include the remainder of SDMP facilities, which are principally improvements for local storm drainage.

The SDMP strives to retain or improve natural streams where possible, rather than replacing them with storm pipes for aesthetic, economic, and functional purposes. Storm pipes would be placed in streets where feasible; however, some easements would be required on private property, primarily where existing development has occurred near stream zones. The updated SDMP recommends the Town replace corrugated metal pipelines that failed to transmit the required 20-year flows, with pipes of the same size made of concrete, PVC, HDPE, or other materials that do not have a rough texture.

The SDMP also includes guidelines for erosion control for the Mammoth Lakes area. In an effort to remedy drainage and erosion problems, the erosion guidelines prescribe requirements that must be followed during all phases of developments involving soil disturbance on one-quarter acre or more. The erosion guidelines also provide a basis for consistent design of storm drainage and erosion control facilities. Please see Section 3.10, Hydrology and Water Quality, for a more detailed discussion regarding erosion.

The 2005 SDMP inventories all of the existing storm drain pipe facilities and assesses the adequacy of storm drain system(s) under three general scenarios: 1) existing conditions, 2) future conditions, and 3) improved conditions. An improved condition is defined as the future condition in conjunction with impacts due to the construction of a detention facility proposed as part of the SDMP. In the future and improved scenarios, future land uses are considered to

account for planned development. In all storm drain scenarios, the 20-year and 100-year return periods are considered.¹¹⁰

The 2005 SDMP applies two criteria to assess whether the existing stormwater conveyance pipelines are considered to be adequately sized: 1) each pipe is to have adequate capacity to convey the 20-year discharge; and 2) in the cases of storm drain flows under streets, the combined street capacity and storm drain capacity is to have the necessary capacity to convey the 100-year flow. In the case where inadequate pipes are encountered, the pipes would be identified and enlarged to meet the adequacy criteria for the future and improved condition scenarios. The drainage improvements would be primarily funded through payment of developer impact fees and would be constructed as needed or as further development occurs.

b. Town of Mammoth Lakes General Plan (1987)

The Town of Mammoth Lakes General Plan, which was adopted in 1987, contains goals and policies relating to stormwater drainage systems. The Conservation and Open Space Element contains the following applicable goal and policy relative to stormwater for the proposed project:

Goal #2 To safeguard the productivity and capacity of surface and ground waters, the flood carrying capacity of streams, the storage of reservoirs.

Policy #5 The Town shall carefully regulate construction and other activities and development, that which would cause or accelerate erosion sedimentation, water pollution and runoff volumes.

c. The Town of Mammoth Lakes Draft General Plan (Update 2005)

The Town has prepared a Draft General Plan Update 2005. The Draft Update contains the following policy and implementation measure regarding stormwater, which would be applicable to the project:

Policy II.1.C.a: Ensure that new development densities do not exceed the capacity of public service infrastructure and utility systems. Require new development to upgrade or fund facilities to meet increased demand or require reduced density or project redesign for any project that would result in deterioration of service levels or cause available capacity to be exceeded if capacity expansion is infeasible.

¹¹⁰ A return period is the probability that a storm of a particular magnitude will occur in a one-year time period.

Implementation Measure

II.1.C.a.1: The Town shall ensure service providers are involved in development review process.

d. Town of Mammoth Lakes Municipal Code

Section 13.20.040 of the Town's Municipal Code, Storm drainage impact fee, requires that all projects that require the issuance of a building permit shall pay a storm drainage connection, or impact, fee at the time of occupancy of the project.

3.13.2 AFFECTED ENVIRONMENT

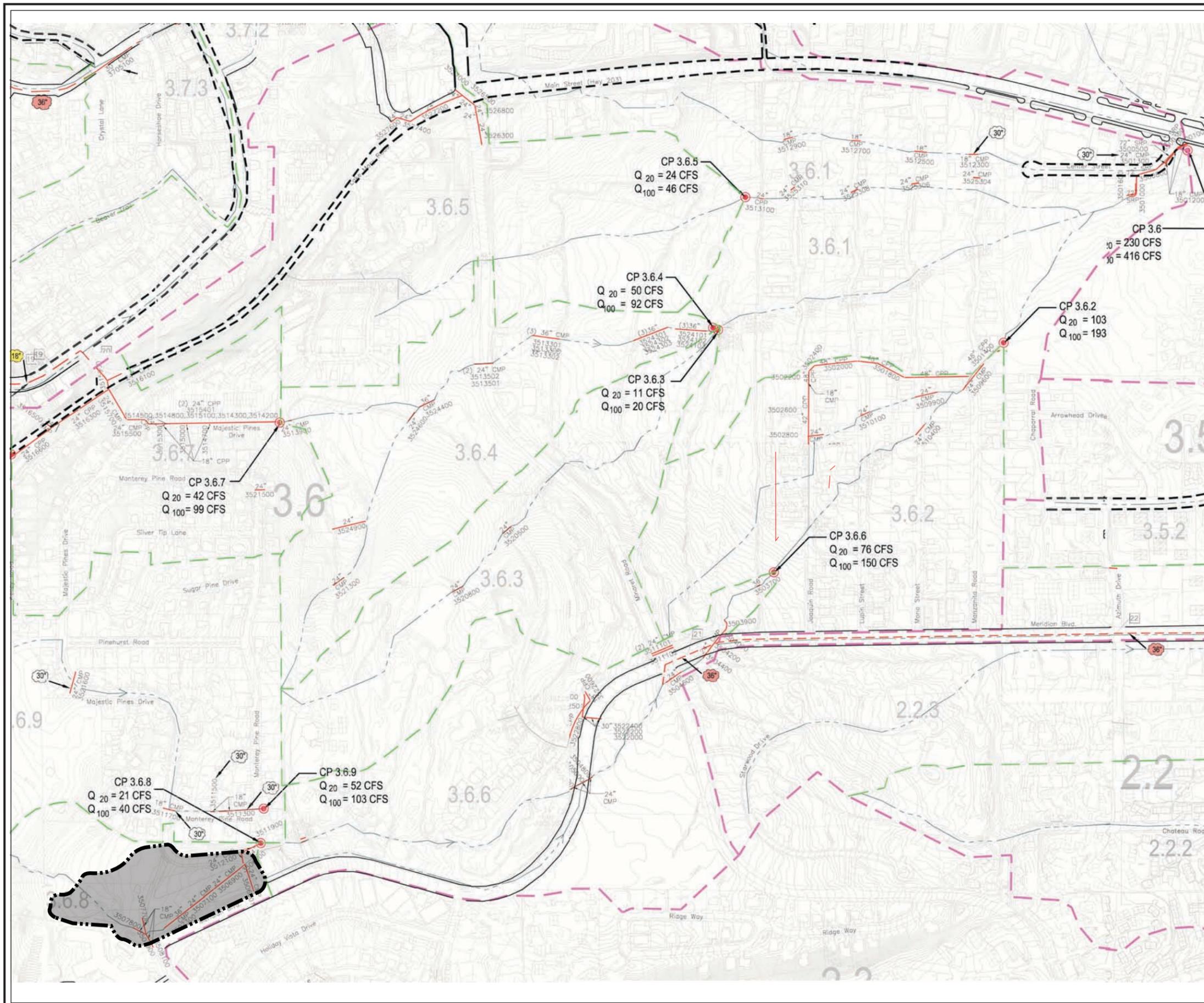
The project site consists of both undeveloped areas on the western portion of the site and developed areas on the eastern portion of the site. Developed areas on the site include the temporary Eagle Lodge Base facility, the Chairlift, and the associated surface parking lot which all provide services for the ski facilities at Mammoth Mountain.

As indicated in Section 3.10, Hydrology and Water Quality, the general trend of the Mammoth Basin is generally northeasterly, extending from Mammoth Crest to the Hot Creek Gorge. The complex drainage system comprised of lakes and interconnecting surface streams has a flow length of approximately 18 miles with sheet flow and natural swales flowing from the west. The land upstream of the project site is relatively steep, so there is no impact to lands above the site from surface runoff. Based on the Preliminary Drainage Study, the site contributes 7.6 cubic feet per second (cfs) to the tributary area during a storm of 100-year intensity.

a. Existing Drainage Facilities

Runoff from the project site flows to the Town of Mammoth Lakes Separate Storm Sewer System (TMLSSS) which is made up of underground and surface storm drainage facilities. The elevation of the parking lot and Majestic Pines Road directs stormwater flows to several storm drain inlets located in the southwestern portion of the site, as well as several inlets located within the central portion of the parking lot. There are currently no infiltration/retention basins onsite.

As shown in Figure 48 on page 480, existing drainage facilities onsite convey flows through an existing 36-inch corrugated metal pipe (CMP) that runs northeasterly under the surface parking lot and into two 36-inch storm drain pipes under Majestic Pines Road that outlet at the southwest corner of the Sierra Star (also known as Loadstar) Golf Course. From the Golf



LEGEND

- MAJOR WATERSHED BOUNDARY
- DETAILED DRAINAGE WATERSHED BOUNDARIES
- FLOWLINE
- STORM DRAIN, EXISTING
- STORM DRAIN, RECOMMENDED
- CURB AND GUTTER, EXISTING
- CURB AND GUTTER, RECOMMENDED
- WATERSHED COLLECTION POINT, CP
- 30" RECOMMENDED PIPE REPLACEMENT OR NEW PIPE. (RED SHADING = PRIORITY 1, YELLOW SHADING = PRIORITY 2)
- 10 NEW PIPE ID

- Project Area Boundary

Not to scale



Figure 48
 Existing Drainage Facilities

Source: Town of Mammoth Lakes, PCR Services, 2006

Course, the offsite runoff crosses Meridian Boulevard twice through a drainage course that enters a 36-inch storm drain under Joaquin Road. From the 36-inch drain in Joaquin Road lowflow stormwater drains northeasterly through one 36-inch CMP and three 24-inch CMPs that cross Dorrance Avenue at Manzanita Road. Currently, this low-flow diverter only allows approximately 1 cfs into the stream beds flowing northeasterly. However, the Town is planning on updating the pipe capacities in the area to allow larger low-flow to increase to 10 or 15 cfs, and possibly 20 cfs. Currently any runoff that is conveyed at more than 1 cfs at maximum is considered high-flow. This high-flow stormwater is diverted north perpendicular to Dorrance Avenue in a 42-inch CPP that runs east into a 48-inch CPP along Dorrance Avenue. All discharge then outflows into a natural channel in the Shady Rest Parcel and is collected from this location in an inlet located adjacent to Center Street. From Center Street, the runoff is conveyed to stormdrain pipes within Main Street then into natural and manmade channels that outlet into Murphy Gulch into Mammoth Creek and eventually to the Owens River system and Crowley Lake.

The Murphy Gulch watershed, into which the runoff first discharges, is a seasonal stream that has very little or even no flow during dry months. Currently, runoff from the project site is 7.6 cfs. Offsite runoff quantity as indicated in the SDMP for Tributary Subarea 3.6 is 334 cfs for a 20-year intensity storm, and 603 cfs for a 100 year-intensity storm, inclusive of the project site's current stormwater flows. During the spring snowmelt and heavy rainfall however, estimated peak flows within the Murphy Gulch area is approximately 550 cubic feet per second (cfs). Mammoth Creek, where the runoff ultimately discharges into, has an average annual flow of 20 cubic feet per second with peak 100-year flows estimated at 640 cubic feet per second¹¹¹ Flows of these magnitudes create flood conditions and are dangerous to portions of the Town.

According to Exhibit 8.5, Area 2.3 West Plan, in the SDMP, no stormwater improvements have been identified for the project site or the surrounding roadways (i.e., Meridian Boulevard and Majestic Pines Road). Appendix E of the SDMP Update includes an evaluation of the existing facilities within each drainage area for flow capacity, street capacity, and existing flooding problems. The analysis in the SDMP Update found that 50 of the 445 stormdrain pipes in the Town did not meet the required capacity for the 20-year event. Of these 50 pipes, seven were identified as pipes that would convey stormwater runoff from the project site. The seven pipelines that were identified as providing insufficient capacity are located along the drainage course that runs northeasterly crossing Lupin Street, Mono Street, and Manzanita Road towards Center Street and Highway 203. The SDMP Update also contains an analysis of the 100-year event for pipes that run parallel to the street. The study found that 16 of the 82 pipes were undersized. None of the seven pipelines that convey stormwater runoff from the site were analyzed in the SDMP for the 100-year event.

¹¹¹ *Town of Mammoth Lakes General Plan (2005 Update)*

Appendix G of the SDMP Update provides an evaluation of the necessary pipe capacities required to convey runoff assuming the projected land uses based on the 1987 General Plan. In the modeling, the seven pipelines that were determined to provide insufficient capacity in the 20-year event, which are located along the drainage course that runs northeasterly crossing Lupin Street, Mono Street, and Manzanita Road towards Center Street and Highway 203, were provided with the necessary replacement sizes. Of the seven pipelines, one pipe was identified by the Town to be a priority replacement. The pipeline identified as a priority replacement is currently a 24-inch CMP located in the Shady Parcel Area at the end of Center Street near Highway 203. The SDMP Update indicates that this pipeline will be replaced by a 30-inch stormdrain pipe in the future. The inadequacies of the four other pipes will be offset by the low-flow diverter on Joaquin Road. This diverter has an orifice that directs low-flow to the existing four undersized pipes. As stated above, any non-low-flow stormwater is directed north to a 42-inch CPP that runs along Joaquin Road and connects to a 48-inch CPP at the intersection of Dorrance Avenue and runs east.

In order to correct the remaining two pipeline inadequacies, which are the 48 inch CPP and 24 inch CPP that are both located off Manzanita Road, north of Dorrance Avenue, the SDMP identifies the installation of larger storm drainage piping. However, the timing of the installation of larger pipes has not been determined.

The Town considered the use of detention basins rather than increasing the size of the pipes. However, an economic analysis conducted as part of the SDMP indicates that the use of detention basins is too costly. Therefore, according to the SDMP, the proposed replacement of using larger pipelines is the more feasible approach to the necessary system upgrades. In accordance with the SDMP, the 20-year basin flows will be conveyed in pipelines, culverts, natural channels, and man-made channels while the streets will help convey the 100-year flows.

3.13.3 ENVIRONMENTAL CONSEQUENCES

a. CEQA Significance Criteria

Based on Appendix G of the CEQA Guidelines, the proposed project would have a significant impact on stormwater facilities if the project would:

- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems; or

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;

b. Methodology

The analysis contained in this section is based on the information provided in the Preliminary Drainage Study, which is contained in Appendix H, as well as the Town's SDMP Update, which was adopted in 2005. Peak post-development flows from the Preliminary Drainage Study were compared to the allowable discharge rates of the existing drainage facilities in Tributary Subarea III-5. In addition, a review of policy documents to identify goals and policies regarding stormwater facilities that are relevant to the project was conducted.

c. Environmental Consequences of the Proposed Action

(1) Construction

Project construction would include the removal of the existing 36-inch storm drain pipeline that traverses diagonally across the site. The removal of this pipe would not affect the existing stormwater infrastructure that currently conveys stormwater offsite. The project would implement a Storm Water Pollution Prevention Plan (SWPPP) during construction. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. With the implementation of the SWPPP and the associated BMPs, impacts with regard to stormwater runoff during construction would be less than significant.

(2) Operation

As indicated in Section 3.10, Hydrology and Water Quality, the project would result in an increase of 1.08 acres of impermeable surface or approximately 14 percent when compared to existing conditions. The peak runoff flow from the site would be approximately 8.8 cubic feet per second (cfs) during a storm of 100-year intensity. In comparison to the direct offsite tributary, the increase of 1.2 cubic feet per second out of a total 103.8 cubic feet per second represents an increase of approximately 1.5 percent.

As indicated in the Preliminary Drainage Study, rainfall is assumed to occur at 1-inch/hour or 0.083 feet/hour. Based on the various types of proposed surfaces (i.e., roof area and pavement area) on the project site, the average runoff volume from the project site would be 19,962 cubic feet per hour. As indicated in Section 3.10, Hydrology and Water Quality, the project would include the installation of one infiltration/detention facility along the eastern

boundary of the project site and another along the project's northern boundary near the lodge entrance. These facilities would be sized for a storm of 100-year intensity. As indicated in the SDMP, detention basins serve to reduce adverse flooding impacts by decreasing the peak flow to downstream watersheds and/or by delaying the time at which downstream hydraulic systems are impacted. For runoff associated with the Eagle Lodge Project, the infiltration/ detention basins would capture the first flush of a 20—year intensity storm acting as a groundwater recharge and as a filter by removing any silt or pollutants collected in the system. In addition, the project would also include stormwater drainage facilities that would run east along Meridian Boulevard and would turn north as it intersects Majestic Pines Drive. These drainage facilities would then connect to the Town's existing stormwater drainage system. In conjunction with the infiltration/detention facility the stormwater drainage facilities would delay the release of stormwater to the Town's system by allowing a longer period for downstream watersheds to drain.

Runoff from the project site would continue to drain through the existing two 36-inch storm drain pipelines that outlet at the southwest corner of the Sierra Star Golf Course. As stated above, the four undersized pipelines are offset by a low-flow diverter that conveys non-lowflow north on Joaquin then east on Dorrance Avenue. Then, the runoff is conveyed to storm drain pipes within Main Street then into natural and manmade channels that outlet into Murphy Gulch. Runoff through Murphy Gulch then enters a pipe that crosses under Highway 203 and enters Mammoth Creek and eventually to the Owens River system and Crowley Lake.

Based on comparisons between current runoff capacities, the rate of runoff generated by the project site would increase a maximum of 1.2 cubic feet per second of stormwater, a total 8.8 cfs. The project runoff would be conveyed through the existing two-36 inch stormdrain pipes. The project runoff would not exceed the flow capacities of the pipes. In addition, the proposed infiltration/detention facilities onsite would collect and store stormwater runoff, slowly releasing the runoff in a way as to reduce the stormwater runoff rates to the downstream areas.

In conclusion, the increase of stormwater flows that would result from project implementation would not be a significant increase in runoff quantities beyond existing stormwater runoff rates. The project would include the installation of infiltration/detention facilities on site, as well as drainage facilities south of the site which would serve to collect stormwater runoff and allow a slow release of runoff into the existing public infrastructure. The site would continue to drain as it does under existing conditions. Since the project would not result in an increase in runoff that would exceed the capacity of existing or planned stormwater drainage systems, the project would result in a less than significant impact on existing stormwater facilities. In addition, the project would not result in the need to construct stormwater drainage facilities or the expansion of existing facilities, the construction of which would cause significant environmental effects.

The project would comply with the relevant policies regarding stormwater facilities. The project would reduce flooding potential through the installation of infiltration/detention facilities on site. The project would be consistent with Policy II.1.C.a of the 2005 Draft General Plan Update as the project would not exceed the capacity of the stormwater infrastructure. With regard to Policy #5 of the Conservation and Open Space Element, the project would implement a Storm Water Pollution Prevention Plan (SWPPP) during construction. The SWPPP must list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. With the implementation of the SWPPP and the associated BMPs, impacts with regard to stormwater runoff during construction would be less than significant. In addition, the applicant would pay the storm drainage impact fee as required by the Town's Municipal Code.

d. Mitigation Measures

The proposed project would result in a less than significant impact with regard to stormwater infrastructure. Therefore, no mitigation measures are necessary.

e. Environmental Consequences of Alternative 1 - Development in Accordance with Existing Regulations Alternative

Surface runoff from Alternative 1 would be conveyed in the Town's existing stormwater drainage pipes. An infiltration/detention facility would be installed onsite to retain the first inch of rainfall during a 20-year intensity storm as required by the Town. It is anticipated that the Town would continue to upgrade the undersized pipeline offsite to accommodate this Alternative and other development projects as planned in the SDMP. Therefore, runoff would not exceed the capacity of the existing or planned drainage systems in this alternative and impacts would be less than significant. Since the alternative would install stormwater drainage facilities onsite and offsite, Alternative 1 would not require or result in the construction of new stormwater drainage facilities or an expansion of the existing facilities, the construction of which would cause significant environmental effects. Therefore, impacts with regard to stormwater under Alternative 1 would be less than significant.

f. Environmental Consequences of Alternative 2 - Reduced Intensity Alternative

Alternative 2 would result in the same amount of impermeable surfaces as the Proposed Action and would therefore, generate the same amount of stormwater runoff in the project area. Alternative 2 would include the installation of two underground infiltration/detention facilities along the eastern and northern boundaries of the site. The underground detention facilities would capture the first flush of a 20-year intensity storm and would lessen the amount of runoff downstream. With the installation of these facilities and the continued improvements of the

Town to the undersized pipelines, runoff would not exceed the current capacity of the existing or planned drainage system. In addition, Alternative 2 would not require or result in the construction or expansion of stormwater facilities, the construction of which would cause significant environmental effects. Therefore, impacts of Alternative 2 with regard to stormwater would be less than significant.

g. Environmental Consequences of Alternative 3 - Alternate Design Alternative

Alternative 3 would result in the same amount of impermeable surfaces as the Proposed Action and would therefore, generate the same amount of stormwater runoff in the project area. In accordance with Town requirements, Alternative 3 would install an infiltration/detention facility to retain the first inch of rainfall during a 20-year intensity storm. In addition, on- and off-site drainage facilities under this alternative are expected to be sized to accommodate flows entering and exiting the site during a storm of 100-year intensity. Thus, runoff that would occur under Alternative 3 would not exceed the capacity of the existing or planned drainage system. The Alternative would not require or result in the construction of new stormwater drainage facilities or an expansion of the existing facilities, the construction of which would cause significant environmental effects. Therefore, Alternative 3 would result in less than significant impacts with regard to stormwater.

h. Environmental Consequences of Alternative 4 - No Action Alternative

Under the No Action Alternative, the existing tent would be removed thereby reducing the amount of impermeable surface on the site. The runoff would discharge as it does today and the existing stormwater infrastructure would continue to accommodate runoff from the project site. The No Action Alternative would not result in the installation of infiltration/detention basins on the site, which would decrease the peak flows to the stormwater infrastructure. Thus, the No Action Alternative would not enhance the existing stormwater drainage systems and its capacity. However, the No Action Alternative would result in a less than significant impact to the storm drain system as the existing system is adequate to serve the site.

4.0 CUMULATIVE EFFECTS

4.0 CUMULATIVE EFFECTS

4.1 EXISTING, PROPOSED, AND REASONABLY FORESEEABLE PROBABLE FUTURE PROJECTS

Both NEPA and CEQA require the consideration of cumulative impacts for a proposed action or project. CEQ regulations (40 CFR 1508.7) implementing NEPA define a cumulative impact as follows:

“Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future action regardless of what agency (Federal or non-Federal) or person undertakes such other action. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

Section 15355 of the CEQA Guidelines provides a similar definition of cumulative impact as follows:

“Cumulative impact refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects/

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

According to Section 15130(b)(1) of the CEQA Guidelines, either one of the following elements is necessary to an adequate discussion of significant cumulative impacts:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental planning document which has been adopted or

certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

Known planned and pending projects in the project area are listed in Table 69 on page 489 and shown in Figure 49 on page 491. These projects, as appropriate and pertinent, are considered in the cumulative analyses contained in this section.

4.2 EVALUATION OF POTENTIAL CUMULATIVE EFFECTS

Land Use

Based on the list of related projects, two projects (Nos. 16 and 17) are located within close proximity to the project site. Development of the related projects would occur in accordance with adopted plans and regulations. The related projects in the area surrounding the project site would implement and support important local and regional planning goals and policies. Any new projects would be subject to the project permit approval process and would incorporate any identified mitigation measures necessary to reduce potential land use impacts. Therefore, no significant impacts with regard to adopted land use plans would occur.

As discussed in Section 3.2, Land Use, of this Draft EA/EIR, the proposed project would be compatible with surrounding land uses, as the project is the development of a resort facility that would be located in an area that is adjacent to another resort and residential communities. The project is consistent with the applicable land use policies and regulations of the Forest Plan, the MMSA Development Plan, and the Town's Zoning Code. With amendments to the General Plan of 1987 and the Juniper Ridge Master Plan, the project would be consistent with these documents as well. Since land use impacts associated with the proposed project would be less than significant, and since no significant impacts to land use associated with the related projects is expected occur, the project in conjunction with related projects would result in a less than significant cumulative impact to land use.

Transportation

A project buildout (Year 2009) and general plan buildout (Year 2024) cumulative analyses of traffic impacts were conducted as part of the traffic study and are described in detail in Section 3.3 of this document. All of the identified related projects shown in Table 69 have been considered for the purposes of assessing cumulative traffic impacts. Construction traffic impacts for each related project would be similar to those identified for the proposed project.

Table 69
Related Projects

ID No.	Location	Amount of Development	Project Description
1	39-030-11 1102 Forest Trail	6 units	Condominium project in the North Village Specific Plan Area
2	33-043-05, 33-043-06, 33-043-15, and 33-043-16	149 units	"South Hotel" in the East Village (Phase 2) of the Village at Mammoth; the project is a condominium "flag" hotel with spa and pool facilities, meeting rooms, two retail units along Minaret Road, and a two-level understructure parking garage with 211 spaces
3	31-110-33 59 Hillside Drive	6 units	Townhomes within 3 buildings and understructure parking
4	33-020-36	340 spaces	Parking garage
5	33-020-31 Hillside Drive	230 units	Condominium unit lodge with 7 commercial condominium units
6	31-110-27, 33-010-02, 32-020-10, -11, -21, -31	193 units	Request for Phase I approval of a mixed-use, condominium hotel in the North Village Specific Plan area (west side of Canyon Boulevard above Lake Mary Road). The project includes 30 townhome condominiums (Phase II), conference facilities (6,300 sf), restaurant (5,070 sf), spa/fitness (9,038 sf), and understructure parking garage with 260 spaces on approximately a 7-acre site
7	33-044-04 6085 Minaret Road 8050 C	21 units 3,335 sf retail	Fractional-share condominium ownership units and 76 understructure parking spaces; the units are to be maintained as a private residence club
	8050 A & B	23 units	First phases of the 8050 project
8	33-080-07, -09, -10, -11	71 units	Swiss Chalet hotel/condominium and residence club
9	33-110-01, 02 3863 and 3905 Main Street	54 units	Condominium building with understructure parking facility (139 spaces) on a 1.54 acre site (Holiday Haus)
10	33-110-03 Westwood Lofts	23 units	One bedroom condo lofts and one full-time employee unit
11	Mammoth Gateway/Darin Davis	11 units	Residential condominium project
12	33-330-44, -50 4B Project	40 units	Tentative Tract Map and Use Permit Application to subdivide a 2.49-acre site within Planning Area 4 of the Lodestar Master Plan into Residential Condominium Units within 7 structures for Workforce Housing
13	33-330-47 5862 Minaret Road Lode*Star	45 units	Condominium hotel located in Planning Area 1 of the Lodestar Master Plan.
14	33-100-26, -41 Minaret Road	14 units	Single residential units
15	31-070-03	3 units	Condominium project

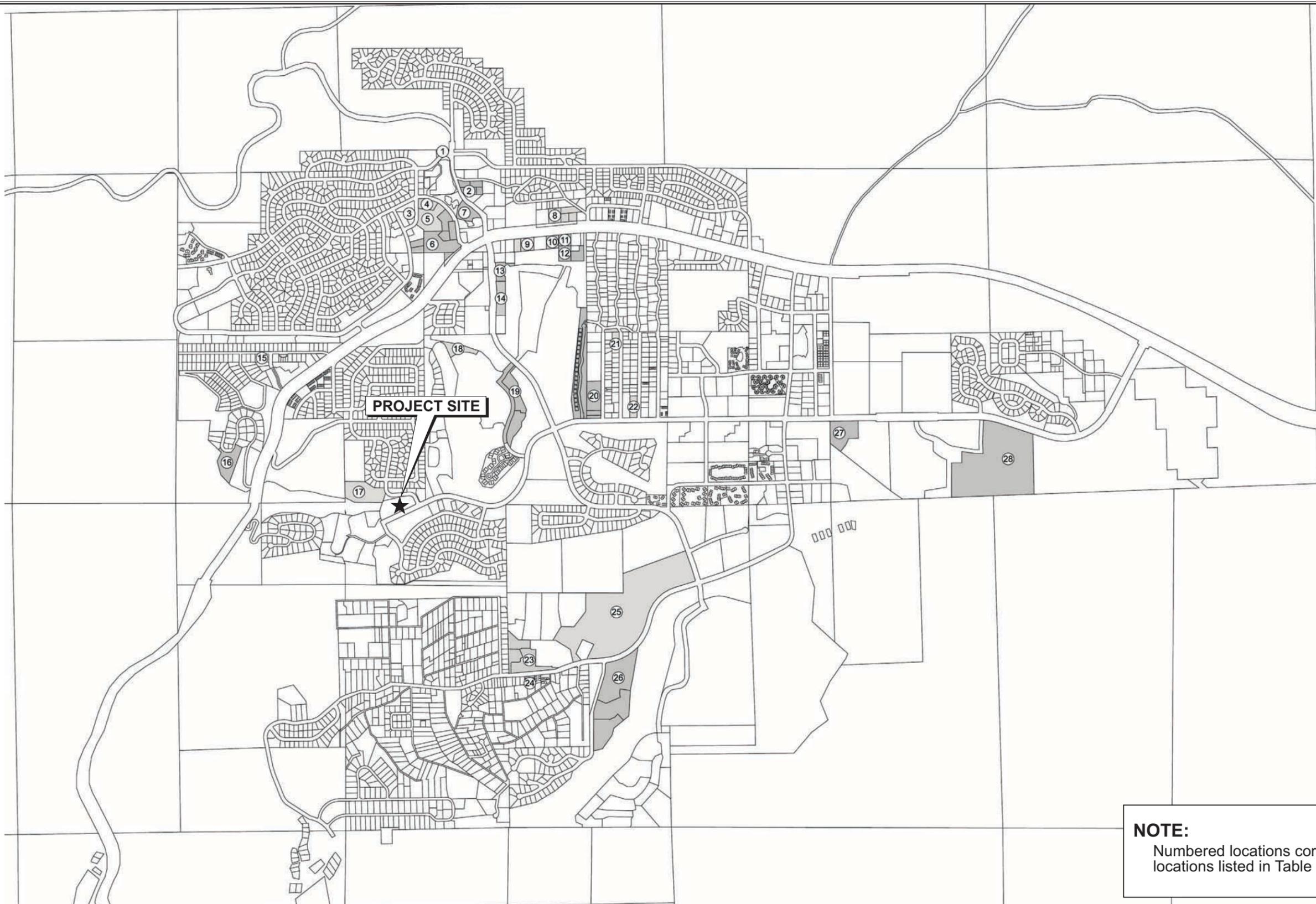
Table 69 (Continued)**Related Projects**

ID No.	Location	Amount of Development	Project Description
16	31-010-14 888 Bridges Lane	22 units	Fractional ownership condominium units on a 3.2-acre site
17	32-040-11	-	"Magic Carpet" chairlift
18	Woodwinds	12 units	Residential condominium project
19	33-330-36, -37, -39, -46 Sierra Star Parkway	58 units	Residential condominium units within 9 structures
20	33-330-51	18 units	Single family residences, fractional use
21	The Jeffreys	14 new units	Affordable housing community
22	33-160-53, -54	24 units	Workforce housing
23	22-500-05, 40-040-33, 40-040-39 1616 Old Mammoth Road Aspen Village I	48 units	Affordable housing project with a community center; located adjacent to (behind) workforce housing units under development ("Aspen Village") to the immediate west of the Snowcreek Athletic Club
	Aspen Village II	24 units	Phase II of affordable housing project (#20)
24	22-330-50, -51 - Tosca	11 units	PUD (2 buildings)
25	40-040-20 85 & 1254 Old Mammoth Road	118 units	Request for development of Snowcreek VII; multi-family residential project with condominiums within 37 buildings on 38.26 acres
26	40-070-17	106 units	Snowcreek VI Condominiums
27	35-040-44	16,000 sf	Library
28	35-010-46	74 units	Student housing (at college)

Source: Town of Mammoth Lakes, 2006

Cumulative construction traffic impacts would only occur during periods when construction of one or more of the related projects is occurring at the same time that project construction is anticipated to occur and then only to the extent that construction traffic is traveling on the same streets at the same time. Pursuant to Mitigation Measure AES-2, since construction activities would be required to prepare a Haul Route Plan, subject to review and approval by the Town's Community Development Department, construction traffic from cumulative projects would result in less than significant impacts.

Cumulative effects on intersection and street segment operations attributable to traffic from projected growth from related projects under Year 2009 conditions and from buildout of the



NOTE:
 Numbered locations correspond to
 locations listed in Table 69



Scale not provided
 Source: Town of Mammoth Lakes, 2006

Figure 49
 Related Projects Locations

General Plan under Year 2024 conditions have been incorporated into the traffic analysis in Section 3.3 of this document. As described under the Year 2009 with project traffic scenario, cumulative development and project-generated traffic would not exceed the Town's established traffic impact threshold for the study area roadway segments or intersections. Thus, less-than-significant cumulative impacts regarding traffic would occur with project implementation under Year 2009 conditions. Under Year 2024 conditions, potentially significant impacts would occur at two intersections: Minaret Road/Meridian Boulevard and Majestic Pines Drive/Meridian Boulevard. However, with implementation of Mitigation Measures TR-2 and TR-3, the project's contribution to cumulative traffic impacts at these intersections would be reduced to a less than significant level.

Cumulative growth in the project area would result in increases in traffic, which could potentially impact on-street parking in the project vicinity. However, the project would provide adequate parking through implementation of Mitigation Measure TR-4, which would reduce potentially significant parking impacts to a less than significant level. Furthermore, it is anticipated that related projects contributing to cumulative growth would be required on an individual level to mitigate any significant parking impacts to less-than-significant levels.

Related projects contributing to cumulative growth would be required on an individual level to conduct traffic signal warrant analyses, as necessary, to mitigate any traffic related or pedestrian crossing safety impacts to less than significant levels. The project would improve public transit service to the site with the provision of the bus drop-off area, which would provide safe pedestrian access to public transit. In addition, as prescribed in Mitigation Measure TR-4, the project would be required to fund additional transit service to the site. Impacts to transit services would be less than significant with incorporation of Mitigation Measure TR-4. It is anticipated that related projects contributing public transit service impacts would be required on an individual level to mitigate any significant alternative transportation impacts to less-than-significant levels.

Overall, with the incorporation of mitigation, the project would result in less than significant cumulative impacts regarding transportation and circulation.

Air Quality

The 28 identified related projects include primarily hotel, condominium, and residential housing projects, and a few infrastructure improvement projects. Construction of these projects would contribute additional emissions of criteria pollutants from sources such as fuel burning, painting, and asphalt application, TACs such as diesel particulate matter, and fugitive sources of dust from earth disturbing activities.

Implementation and operation of these related projects would result in an increase in the number of residents and visitors, causing additional VMT and an accompanying increase in tail pipe emissions and roadway dust. Fireplaces and wood burning stoves installed as part of these related projects would need to comply with local regulations aimed at minimizing emission of particulate matter. A cumulative increase in emissions of pollutants would still occur from these and other stationary sources. Additionally, emissions of VOCs from consumer goods would increase as residency and visitation rates increase.

Related projects would also be required to implement BMPs during construction to minimize PM₁₀ emissions. To achieve attainment of the NAAQS for PM₁₀, the cumulative VMT from the implementation of the project and the related projects is restricted by GBUAPCD Rule and Town of Mammoth Lakes Municipal Code from exceeding a maximum of 106,600 VMT. Cumulative daily VMT associated with 2009 project build-out is estimated at a maximum of 84,708, below the 106,600 limit. Cumulative VMT associated with longer term build-out would be addressed in the Mammoth Lakes General Plan Update process.

As with the implementation of the proposed project, emissions of ozone precursors (VOCs and NO_x) from the related projects would not affect local levels of ozone, due to the overwhelming amount of ozone transported from the San Joaquin Valley. Emissions of ozone precursors from sources in the San Joaquin Valley are subject to reduction strategies under their applicable SIP, which must demonstrate reasonable progress towards attainment levels by 2009. Emission of NO_x, SO_x, and CO from the related projects would result in less than significant cumulative impacts to ambient NO_x, SO_x, and CO standards. The cumulative impact to PM₁₀ would be less than significant with the inclusion of BMPs during construction and the limitation of 106,600 VMT. Therefore, the cumulative impacts to air quality would be less than significant.

Noise

All of the identified related projects have been considered for the purposes of assessing cumulative noise impacts. The potential for noise impacts to occur are specific to the location of each related project as well as the cumulative traffic on the surrounding roadway network. Due to the rapid attenuation characteristics of ground-borne vibration, there is no potential for a cumulative construction- or operational-period impact with respect to ground-borne vibration.

a. Construction-Period Noise

Of the 28 related projects that have been identified within the project study area, the proposed Project has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis that assumes multiple, concurrent construction projects would be

entirely speculative. Construction-period noise for the proposed project and each related project (that has not yet been built) would be localized. In addition, it is likely that each of the related projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA. As such cumulative construction noise impacts would be less than significant.

b. Operational-Period Noise

Each of the related projects that have been identified within the general project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. All related projects are of a residential, retail, commercial, or institutional nature, and these uses are not typically associated with excessive exterior noise; however, each project would produce traffic volumes that are capable of generating a roadway noise impact. As discussed previously, traffic volumes from the proposed project and the 28 related projects, combined with ambient growth traffic, were evaluated and presented in Tables 11 and 12 in Section 3.5, Noise, of this document.

As shown in Table 11, the maximum near-term cumulative noise increase occurs along Kelly Road, South of Lake Mary Road, and would be from 47.6 dBA to 52.7 dBA or 5.1 dBA. The proposed project contributes approximately 0.1 dBA to this cumulative impact. As indicated in Table 12, roadway segments along Main Street, Lake Mary Road, Old Mammoth Road, Meridian Boulevard, and Majestic Pines Drive modeled for cumulative without project, and cumulative with project traffic volumes would result in projected vehicular generated noise levels above the 60 dBA L_{dn} recommended noise level established by the Town of Mammoth Lakes in the Noise Element. As shown in the table, the analyzed roadway segments would exceed the cumulative 5 dBA significance threshold, where existing noise levels are less than 60 dB L_{dn} and the cumulative 3 dBA significance threshold, where existing noise levels are greater than 60 dB L_{dn} . The maximum 2024 cumulative noise increase from 47.6 dBA to 57.4 dBA or 9.8 dBA occurs along Kelly Road, South of Lake Mary Road, of which the project contributes approximately 0.1 dBA. Therefore, the proposed project would contribute to roadway noise impacts due to cumulative traffic volumes and the impact would be significant and unavoidable.

Due to Mammoth Lakes Municipal Code provisions that limit stationary-source noise from items such as roof-top mechanical equipment and emergency generators, noise levels would be less than significant at the property line for each related project. For this reason on-site noise produced by any related project would not be additive to project-related noise levels. As the project's composite noise impacts would be less than significant, composite stationary-source noise impacts attributable to cumulative development would also be less than significant.

Biological Resources

The study area for cumulative impacts on biological resources includes the 28 developments listed in Table 69 and is defined as the region of biological relevance to resources within the Eagle Lodge study area, incorporating the Town of Mammoth Lakes and USFS land directly adjacent to the Town. This area contains a regional complex of relevant habitats, species populations, and biological systems bounded to the north, west, and south by higher elevation USFS land and to the east by lower elevation USFS land. Potentially affected resources were categorized in accordance with their sensitivity, significance (i.e., importance to habitat functions and values), and role in ecosystem sustainability (i.e., contribution to biological diversity). The analysis considers cumulative impacts to be additive in their effects.

Vegetation Communities

The Town of Mammoth Lakes 1987 General Plan describes the Town of Mammoth Lakes as a transition life zone characterized by moderately dense stands of Jeffrey pine. The transition life zone lies between the upper Sonoran life zone of Long Valley (mainly brushland) and the Canadian life zone on the lower slopes of Mammoth Mountain (mainly lodgepole pine forest). Major plant habitats within the Town of Mammoth Lakes include coniferous forest, chaparral, sagebrush, riparian vegetation, and meadow. According to the *Revised Draft Program, Environmental Impact Report, Town of Mammoth Lakes 2005 General Plan Update*, October 2005, the five major vegetation communities within the planning area are mixed conifer fir, upper montane mixed scrub, basin sagebrush, wet meadow, and alder-willow riparian.

Vegetation types found on the Eagle Lodge study area were described according to Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986) and Sawyer and Keeler-Wolfe's *A Manual of California Vegetation* (1995) and include aspen series, big sagebrush scrub, Jeffrey pine forest, narrow-leaf willow series, ruderal, ruderal/big sagebrush scrub, and ruderal/montane meadow.

In a regional context, the cumulative loss of vegetation communities dominated by non-native species such as ruderal, ruderal/big sagebrush scrub, and ruderal/montane meadow contribute very little to regional biological diversity and ecosystem stability. In addition, the cumulative loss of vegetation communities that are widespread within the study area such as big sagebrush scrub and Jeffrey pine forest remain incremental and insignificant. These vegetation communities are not considered to warrant further analysis. Less common vegetation communities, such as aspen series and narrow-leaf willow series, require closer examination in order to assess the significance of cumulative losses.

Sensitive Vegetation Communities

The Eagle Lodge study area supports aspen series and narrow-leaf willow series which are considered sensitive by the CDFG's CNDDDB due to their scarcity. These communities are considered to be highest-inventory priority communities by the CDFG, indicating that they are declining in acreage throughout their range due to land use changes. The aspen series and narrow-leaf willow series within the study area encompass 0.1 acre and 0.2 acre respectively. In addition, these communities are located in a narrow band of otherwise disturbed habitat which is completely surrounded by paved roads. These plant communities are not expected to support sensitive plant or wildlife species and are not connected to habitat areas up or downstream. With the removal of such a small area of isolated habitat within the Eagle Lodge study area, cumulative impacts to sensitive vegetation communities resulting from the proposed project are not expected to be significant.

Plants and Wildlife

The primary effects of cumulative project impacts on common plants and wildlife would be the direct loss of common plant species and wildlife habitat. The majority of the plant and wildlife diversity and wildlife habitats within the cumulative study area are most likely within protected USFS lands and Valentine Camp, a 154-acre reserve within the vicinity of the Eagle Lodge study area. Vegetation communities within Valentine Camp (a part of the Valentine Eastern Sierra Reserve) include Sierran upper montane forest, Sierran upper montane chaparral, Great Basin sagebrush, wet montane meadow, and sagebrush meadow (Howald 2000). Approximately 88 percent of the area within the Eagle Lodge study area include non-native vegetation communities, disturbed areas, developed areas, and ponds. Approximately 12 percent of the area within the Eagle Lodge study area includes native vegetation communities. The dominant species within these native vegetation communities include quaking aspen, big basin sagebrush, Jeffrey pine, and narrow-leaf willow, and all of these species are listed as "common" in the *Flora of Valentine Eastern Sierra Reserve*. Therefore, cumulative impacts to common plants and wildlife would be less than significant.

Threatened and Endangered Species

No threatened or endangered plant or wildlife species are expected to occur within the Eagle Lodge study area; therefore, the project would not contribute to cumulative impacts to threatened and endangered plants or wildlife species.

Other Special Status Species

One special status plant species, Inyo beardtongue (CNPS List 4) has the potential to occur within the Eagle Lodge study area. Inyo beardtongue is not protected by federal or State listings as threatened or endangered. CNPS List 4 species are not considered rare for purposes of analysis under CEQA/NEPA; however, the CNPS strongly recommends that impacts to List 4 species be addressed during the environmental review process. The List 4 status denotes that a species is of limited distribution or is infrequent throughout a broader area in California, and its vulnerability or susceptibility to threat appears to be low; moreover, the designation denotes that more survey data is needed before a conclusion should be drawn regarding the species' limits in California.

One special status wildlife species, western white-tailed jack rabbit (a California Species of Special Concern), has a potential to occur within the Eagle Lodge study area. The designation of Species of Special Concern does not provide legal protection, but signifies the species is recognized as vulnerable by the CDFG. The western white-tailed jackrabbit is not protected by federal or State listings as threatened or endangered.

Inyo beardtongue and western white-tailed jackrabbit were not observed on-site. In addition, these species are not protected by federal or State listings, and any potential loss of individuals from the limited populations potentially present would not threaten the regional population. It is assumed that most of these species are found, at least locally, within preserved open space areas in the Inyo National Forest due to the presence of suitable habitat throughout the forest. The CNDDDB reports occurrences of the white-tailed jackrabbit in Long Valley, at U.S. Highway 395, about 1.2 miles southeast of Casa Diablo Hot Springs and at Lake Mary in the Mammoth Lakes area. Inyo beardtongue occurs generally on the eastern slope of the Sierra Nevada in Inyo, Kern and Mono Counties. Lands not potentially affected by cumulative development impacts are sufficient in extent to preserve habitat for each of these species. Cumulative impacts to non-listed special status species would therefore, be less than significant.

Wildlife Movement

Wildlife movement corridors can potentially be analyzed at a number of scales. Locally, the Eagle Lodge study area is almost completely surrounded by development. Therefore, the site does not provide an effective travel route for migratory species such as the mule deer. As such, development of the proposed project would not have a significant adverse effect on any known or suspected wildlife movement corridors and would not contribute cumulatively to any impacts to wildlife movement.

Jurisdictional Features

The Eagle Lodge study area may support jurisdictional “waters of the State” within two man-made detention basins within the southwestern and western portions of the study area; however, a jurisdictional delineation has not been conducted to verify the presence of jurisdictional “waters of the State.” No changes to the bed, bank, or channel of these detention basins are expected as a result of the proposed project. A preliminary investigation determined that no jurisdictional waters of the U.S. are present within the Eagle Lodge study area; therefore, no cumulative impacts to jurisdictional waters of the U.S./State are expected. No cumulative impacts to jurisdictional features are expected.

Regulated Trees

Impacts to regulated trees within the Town of Mammoth Lakes is expected to be mitigated on a site-by-site basis. According to the Design Guidelines for the Town of Mammoth Lakes (Section 5.0, Landscape and Public Space Guidelines, 5.1, Objective), each development application shall evaluate all existing trees on-site greater than six inches in diameter at shoulder height, and substantiate proposed removal to the Town. The Town of Mammoth Lakes may warrant replacement of these resources if impacted. Compliance with Town policies and ordinances would assure that cumulative impacts from project implementation would be less than significant.

Cultural Resources

Archaeological resources are traces of past human behavior at a particular place and point in time, and so each archaeological resource can be considered unique. Further, human activity has seldom occurred in isolation, but rather has taken place as part of a network of interactions between people and their social and natural environments. Therefore, loss of any archaeological resource can have a significant impact on future representation of local, regional, and potentially national, history and prehistory.

No cultural resources have been identified on the surface of the project site. The proposed project, therefore, would not contribute to a cumulative impact on known cultural resources. Literature review of previous cultural resource investigations in the project region indicated that there is a substantial number of archaeological sites within a one-mile radius of the project site. Stratigraphy uncovered at a nearby site appears similar to stratigraphy of the project site as indicated by project-specific geotechnical studies. Therefore, there is potential for subsurface cultural deposits at the project site. Recommended mitigation measures would reduce the effects of the project on any subsurface cultural resources to a less than significant effect.

Given the inter-relatedness of cultural resources with respect to understanding the past and change in social and environmental interactions over time, and the density of cultural resources in the project site vicinity identified in the literature review, it is likely that continued development of the area would impact the integrity of local and regional cultural resources. Continued analysis of such impacts through the environmental review process and implementation of related archaeological research and protection measures would reduce the cumulative effects of development on cultural resources to a less than significant level.

Employment, Population, and Housing

Since the Town is principally a tourism-based economy, resident populations fluctuate seasonally. As such, the Town's General Plan of 1987 measures population by permanent residents and by population intensity or "persons at one time" (PAOT). Under the Town's 1987 General Plan, population at buildout is estimated at 61,375 PAOT, and under the 2005 Draft General Plan Update, the population at buildout is estimated at 60,700. The project is within the projected growth identified in the 1987 General Plan. The growth associated with the related projects would also be included in Town buildout. As such, the project would contribute to a less than significant cumulative impact with regard to population.

The project proposes the provision of transient housing, as do other related projects. As such, the project in conjunction with related projects would provide lodging for transient visitors to the Town. In addition, projects that would generate employment, including the proposed project, would generate an indirect demand on housing. As with the project, the related projects would be required to comply with the Town's Affordable Housing Mitigation Regulations (AHMR) contained in the Zoning Code. Under the AHMR, new developments must provide housing for the estimated number of employees that earn below median income levels, or 58.5% of its full time equivalent employees. As such, cumulative impacts to employment and housing would be less than significant.

Aesthetics

While several related projects are proposed in the general vicinity of the project site, due to the intervening topography, vegetation and development, only one of these projects would be visible from the project site or the immediately surrounding area. The "Magic Carpet" chairlift (Related Project No. 17) is proposed to the east of Chairlift 15. The Magic Carpet chairlift would be designed in coordination with the proposed Eagle Lodge ski facilities by MMSA. Due to the nature of this project, it would not substantially contribute to cumulative aesthetic, view, light, or glare impacts. The proposed chairlift would be a distance from the project components and would not contribute to the perceived mass and bulk of the proposed project. In addition, each of the related projects would be subject to the Town's and/or USFS project and permit

approval process. As such, the project and related projects would not result in a significant cumulative impact with regard to aesthetics, views, or light and glare.

Hydrology and Water Quality

Twenty-eight (28) related projects were identified for cumulative impact evaluation. Similar to the project site, 22 of the 28 related projects are located within Watershed 3 of the Mammoth Basin. More specifically, similar to the project, 15 of the related projects (Nos. 6, and 9 to 22) are located within Tributary Subarea 3.6. Related Project Nos. 23 to 26 are located within Watershed 2. Most of the related projects are sufficiently distant from the project site to preclude any significant cumulative impacts to the storm drain system. The 15 related projects within Tributary Subarea 3.6 in combination with the proposed project have the potential to cumulatively affect the storm drain system. However, all of the related projects, including those within Tributary Subarea 3.6, would be required to comply with current development regulations, including the same or similar general flood control, erosion prevention and water quality requirements as the proposed project and other site-specific requirements that the Town of Mammoth Lakes and/or Lahontan RWQCB would specifically identify for those projects. These requirements would serve to avoid the potential for creating flooding, erosion, siltation, drainage, and water quality impacts in the Mammoth Basin. Furthermore, the project would increase the amount of runoff by 1.2 cfs of the total 103.8 cfs of runoff from the direct offsite tributary area, or an increase of approximately 1.5 percent. Given the nominal increase that would occur from the project, the project would not substantially contribute to a cumulative increase in runoff. Therefore, the potential cumulative impacts with respect to hydrology and water quality would be less than significant.

Water Supply

Cumulative impacts on water supply are directly related to the quantity of water consumed relative to supplies available. Development of the project in conjunction with the 28 related projects listed in Table 69 on page 489 would result in a cumulative increase in the demand for water. As discussed in Section 3.11, Water Supply, the project with the hotel only option would generate a water demand greater than that of the project with the condo/hotel and fractional ownership units option. As such, this analysis of cumulative impacts on water supply focuses specifically on the impacts of the related projects in conjunction with the project with the hotel only option. A near-term (2009) cumulative analysis is provided, which includes the project as well as the 28 projects listed in Table 69. In addition, a long-term analysis, which includes projected cumulative potable water demand at General Plan buildout in 2025, is provided.

Near-Term Water Supply and Demand

As discussed in Section 3.11, Water Supply, the 2005 Urban Water Management Plan (UWMP) provides an analysis of existing and projected water supply in normal, single dry, and multiple dry years. Normal water years are based on a 10% deviation from an April 1 average snow pack water content of 43 inches, or 38.7 to 47.3 inches. Normal water years historically have occurred every nine years. The base years for normal water years on which MCWD analyzes its data are: 1946, 1949, 1954, 1971, 1984, 1996, and 1997. Single dry years are based on the lowest yearly runoff since the water year beginning in 1903. The year with the lowest April 1 snow pack is 1997, with 12.3 inches of snow water equivalent for the Mammoth watershed. Groundwater data for single dry water years is determined using the driest years for which the MCWD's production wells were in use: 1992 for wells 1, 6, 10 and 15; 2001 for wells 16, 17, 18, and 20. In addition, MCWD bases multiple dry years on the lowest average runoff for a consecutive, multiple year period (i.e., three years or more) since 1903. The driest multiple year period for the Mammoth watershed was the six years from 1987 to 1992, which averaged 28.7 inches of snow water content at Mammoth Pass.

MCWD has planned a number of programs to address anticipated water supply deficiencies and meet water demand. These include the implementation of Level 1 Conservation Controls, which would occur three days a week at four hours per day, and would provide for a 12% reduction of overall demand. MCWD's planned programs also incorporate water system loss reduction; the use of recycled water, which would be used specifically for golf course and park irrigation; and the development of new water supplies. MCWD has initiated a water pipeline loss reduction program that is expected to be completed by 2010.

Table 70 on page 502 provides the water demand of the project together with the 28 related projects. As indicated in Table 70, the project plus related projects would generate a total water demand of approximately 257,752 gallons per day (gpd), or 289 acre feet in 2009. The project plus related projects would cumulatively generate a peak water demand of 396,329 gpd.

As indicated in the 2005 UWMP, assuming a normal water year in 2009, there would be a water supply of 6,760 acre feet. Adding the water demand of the project plus related projects to existing (2006) demand of 3,476 acre feet would generate a projected 2009 demand of 3,765 acre feet. As such, during a normal year there would be a surplus of 2,995 acre feet, and as such, MCWD would have an adequate water supply to meet the potable water demand of the project in combination with other water demand. Given the above, cumulative impacts on water supply of the project plus related projects at buildout would be less than significant.

In a single dry year, there would be a supply of 3,410 acre feet. Adding the water demand of the project plus related projects to existing (2006) demand of 3,476 acre feet would

Table 70

Forecast of Near-Term Cumulative Water Demand (2009)

ID	Location	Use Type	Amount of Development	Unit	Daily Average Consumption Rate (gpd) ^a	Total Average Water Consumption (gpd)	Peak Consumption Rate (gpd) ^b	Total Peak Water Demand (gpd)
1	1102 Forest Trail	Condo	6	units	170	1,020	295	1,770
2	33-043-05,33-043-06, 33-043-15, & 33-043-16	Condo/Hotel	241	units	100	24,100	105	25,305
		Conference Facilities ^c	5,104	sq ft	125	638	230	1,174
		Night Club	6,037	sq ft	1,160	3,501	1,370	4,135
		Restaurant ^d	4,292	sq ft	1,160	2,489	1,370	2,940
		Retail	783	sq ft	0.15	117	0.26	200
		Spa/Fitness	4,720	sq ft	170	802	345	1,628
3	59 Hillside Drive	Condo	6	units	170	1,020	295	1,770
4	33-020-36	Parking	340	stalls	n/a	n/a	n/a	n/a
5	Hillside Drive (Westin)	Condo	231	units	170	39,270	295	68,145
		Conference Facilities ^c	3,500	sq ft	125	438	230	805
		Parking	231	stalls	n/a	n/a	n/a	n/a
		Restaurant ^d	4,300	sq ft	1,160	2,494	1,370	2,946
6	31-110-27,33-010-02, 32-020-10,-11,-21,-31 Phase 2	Condo/Hotel	193	units	100	19,300	105	20,265
		Condo	30	units	170	5,100	295	8,850
		Conference Facilities	6,300	sq ft	125	788	230	1,449
		Parking	260	stalls	n/a	n/a	n/a	n/a
		Restaurant ^d	5,070	sq ft	1,160	2,941	1,370	3,473
	Spa/Fitness	9,038	sq ft	170	1,536	345	3,118	
7	6085 Minaret Road 8050 C 8050 A & B	Condo	21	units	170	3,570	295	6,195
		Retail	3,335	sq ft	0.15	500	0.26	850
		Condo	23	units	170	3,910	295	6,785
8	33-080-07,-09,-10,-11	Condo/Hotel	71	units	100	7,100	105	7,455
9	3863 & 3905 Main Street	Condo	54	units	170	9,180	295	15,930
10	Westwood Lofts	Condo	23	units	170	3,910	295	6,785
11	Mammoth Gateway/ Darin Davis	Condo	11	units	170	1,870	295	3,245

Table 70 (Continued)

Forecast of Near-Term Cumulative Water Demand (2009)

ID	Location	Use Type	Amount of Development	Unit	Daily Average Consumption Rate (gpd) ^a	Total Average Water Consumption (gpd)	Peak Consumption Rate (gpd) ^b	Total Peak Water Demand (gpd)
12	4B Project	Condo	40	units	170	6,800	295	11,800
13	5862 Minaret Road Lode*Star	Condo/Hotel	45	units	100	4,500	105	4,725
14	Minaret Road	Condo	14	units	170	2,380	295	4,130
15	31-070-03	Condo	3	units	170	510	295	885
16	888 Bridges Lane	Condo	22	units	170	3,740	295	6,490
17	32-040-11 Magic Carpet Chairlift	Ski Chair Lift	n/a	n/a	n/a	n/a	n/a	n/a
18	Woodwinds	Condo	12	units	170	2,040	295	3,540
19	Sierra Start Parkway	Condo	58	units	170	9,860	295	17,110
20	33-330-51	SFR	18	units	250	4,500	455	8,190
21	The Jeffreys	Apartments	14	units	135	1,890	200	2,800
22	33-160-53,-54	Condo	24	units	170	4,080	295	7,080
23	1616 Old Mammoth Road Aspen Village I	Condo	48	units	170	8,160	295	14,160
	Aspen Village II	Community Center	1,820	sq ft	61	111	127	231
		Condo	24	units	170	4,080	295	7,080
24	22-330-50,-51- Tosca	Condo	11	units	170	1,870	295	3,245
25	85 & 124 Old Mammoth Road	MFR	118	units	135	15,930	200	23,600
26	40-070-17	Condo	106	units	170	18,020	295	31,270
27	35-040-44	Library	16,000	sq ft	61	976	127	2,032
28	35-010-46	Student Housing ^e	74	units	80	<u>5,920</u>	120	<u>8,880</u>

Table 70 (Continued)

Forecast of Near-Term Cumulative Water Demand (2009)

ID	Location	Use Type	Amount of Development	Unit	Daily Average Consumption Rate (gpd)^a	Total Average Water Consumption (gpd)	Peak Consumption Rate (gpd)^b	Total Peak Water Demand (gpd)
Total - Related Projects						230,962		352,569
Proposed Project						<u>26,790</u>		<u>43,760</u>
Total 2009 Cumulative Water Demand (gpd)						257,752		396,329
Total 2009 Cumulative Water Demand (acre feet)						289		444

^a Factors obtained from MCWD. Average day is the average day calculated from the average of 36 months of usage. Factors are inclusive of irrigation water use.

^b Peak day is the daily average of the peak month water usage over 36 months. Peak factors for commercial were calculated by multiplying the average water use per unit by a peaking factor of 1.7.

^c The consumption factor for conference facilities is per 1,000 square feet.

^d The consumption factor for restaurant uses is per 2,000 square feet.

^e Assumes the same water use as a hotel.

Source: MCWD and PCR Services Corporation, 2006

generate a projected 2009 demand of 3,765 acre feet, resulting in a deficit of 355 acre feet if conservation, recycled water use, and loss reduction measures were not implemented. As discussed earlier, the implementation of Level 1 Conservation Controls would result in an overall 12% reduction in demand. As such, in a single dry water year with Level 1 Conservation Controls, demand in 2009 would be reduced by 452 acre feet per year, which would result in a surplus of 97 acre feet. The use of recycled water and loss reduction measures would further reduce demand. As such, the project with related projects would have a less than significant impact on water supply in a single dry water year.

As shown in Table 71 on page 506, in a multiple dry year scenario, the water supply from groundwater wells in Year 2 through Year 4 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. The projected demand in 2009 without recycled water or loss reduction measures would be 3,765 acre feet, resulting in a surplus in multiple dry water years. Therefore, the cumulative impact on water supply of the project with the related projects during multiple dry years would be less than significant.

General Plan Buildout (2025) Water Supply and Demand

According to MCWD, assuming a normal water year at Town build out in 2025, there would be a water supply of 6,760 acre feet. Since the project and related projects are included in Town buildout, in 2025 there would be a potable water demand of 4,898 acre feet, resulting in surplus of 1,862 acre feet. The implementation of recycled water and loss reduction measures would further reduce demand to 4,228 acre feet per year, providing a surplus of 2,532 acre feet. As such, 2025 cumulative impacts on water supply during a normal dry year would be less than significant.

As shown in Table 72 on page 507, based on MCWD 2025 projections of water supply and demand in a single dry year, there would be a shortage of 1,488 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. Also as shown in Table 72, while water demand would be reduced with the implementation of Level 1 Conservation Controls, recycled water, and loss reduction measures, a deficit of potable water would still occur. As such, the project would contribute to a cumulatively significant impact relative to water supply in a single dry water year.

As shown in Table 71, in a multiple dry year scenario, the water supply from groundwater wells in Year 2 through Year 4 would be approximately 3,408 acre-feet per year. The surface water supply would decline each year due to reduced availability. In Year 4, the total projected supply would be 4,492 acre-feet. According to MCWD, the projected demand in 2025 without recycled water or loss reduction measures would be 4,898 acre feet per year,

Table 71

Existing Water Supply Reliability (Acre-Feet)^a

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000	3,410	3,410	3,408	3,408	3,408
Projected Total Supply	6,760	3,410	5,190	4,908	4,508	4,492

^a An acre foot equals approximately 325,829 gallons.

Source: 2005 Urban Water Management Plan, MCWD

resulting in a deficit of 390 acre feet per year in Year 3 and 406 acre feet per year in Year 4. However, the implementation of Level 1 Conservation Controls in conjunction with the use of recycled water and loss reduction measures would reduce demand to 3,721 acre feet per year, resulting in a surplus of 771 acre feet of potable water in Year 4 during multiple dry years. Therefore, 2025 cumulative impacts on water supply during multiple dry years would be less than significant, as projected in 2005.

With regard to the significant cumulative impact in the single dry year, MCWD is seeking additional water sources that could supplement the existing supply in addition to conservation, recycled water use, and loss reduction measures. MCWD has begun the review of an alternative water source located in the Dry Creek drainage basin that would be used for groundwater extraction. This potential water source would augment the existing the groundwater system in the Mammoth Basin and would also serve as an additional source during drought years. Other potential sources of potable water considered by MCWD include drilling new wells within Mammoth Basin, as well as modifying existing wells to increase capacity. However, due to the uncertainty of the viability of these potential water sources, these sources have not been included as part of the long-term cumulative analysis of water supply at Town buildout in 2025. As such, the project would contribute to a cumulative impact at Town buildout in a single dry year.

Wastewater

All of the 28 related projects except of Nos. 4 and 17, would increase the amount of wastewater that is currently generated. As shown in Table 73 on page 508, the related projects would generate approximately 227,817 gallons per day (gpd) of wastewater. The total cumulative peak amount of wastewater that would be generated by the Eagle Lodge project in conjunction with all other related projects would be approximately 269,447 gallons per day (gpd). The MCWD treatment facility has a design capacity of 4.9 million gallons per day of

Table 72

**2005 Projected Demand Plus Project with Hotel Only Option in a Single Dry Water Year
(acre feet per year) ^a**

	Projected Demand	Projected Supply in Single Dry Water Year	Available Supply in 2025
2025 Demand Plus Project in a Single Dry Water Year Without Recycled or Loss Reduction	4898	3410	-1488
2025 Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls	4310	3410	-900
2025 Demand Plus Project in a Single Dry Water Year With Level 1 Conservation Controls and Recycled or Loss Reduction	3721	3410	-311

^a Projections calculated above utilize data from the MCWD's 2005 UWMP, which is based on the 2005 Draft General Plan Update Town buildout projections. Based on 1987 General Plan buildout projections and with the implementation of recycled water and loss reduction measures in a normal water year there would be a water surplus of 2,532 acre feet. As such, 1987 General Plan buildout impacts on water supply during a normal dry year would be less than significant. In a single dry year, there would be a shortage of 1,630 acre feet per year of water if the use of recycled water or loss reduction measures were not implemented. While water demand would be reduced with the implementation of Level 1 Conservation Controls, recycled water, and loss reduction measures, a deficit of 436 acre feet would still occur. Therefore, using the 1987 General Plan buildout projections, the project would contribute to a cumulatively significant impact relative to water supply in a single dry water year. In a multiple dry year scenario, the implementation of Level 1 Conservation Controls in conjunction with the use of recycled water and loss reduction measures would reduce water demand to 3,846 acre feet per year, resulting in a surplus of 646 acre feet of potable water in Year 4 during multiple dry years. Therefore, using 1987 buildout projections, 2025 cumulative impacts on water supply during multiple dry years would be less than significant.

Source: MCWD and PCR Services Corporation, 2006

wastewater which would be sufficient to accommodate the increase of wastewater flows from the Eagle Lodge Base project and other related projects.

As stated in Section 3.12, Wastewater, of this document, blockages currently exist in the wastewater infrastructure in the Town. MCWD is currently investigating the Town's wastewater conveyance pipeline capacities, in particular the pipeline along Mammoth Road and State Route 203. If this pipeline needs to be resized, MCWD would replace the pipeline as necessary to accommodate the additional wastewater generated by the Eagle Lodge project and other related projects. Therefore cumulative impacts on the local conveyance system would be less than significant.

Sufficient capacity exists to accommodate the cumulative projected wastewater that would occur with the project and related projects. Therefore, the projected increase in

Table 73

Forecast of Cumulative Wastewater Flows

ID	Location	Uses	Amount of Development	Unit	Average Wastewater Generation Rate (gal/day) ^a	Projected Average Wastewater Flows (gal/day)	Peak Wastewater Generation Rate (gal/day) ^b	Projected Peak Wastewater Flows (gal/day)
1	1102 Forest Trail	Condo	6	units	110	660	150	900
2	33-043-05,33-043-06,33-043-15, & 33-043-16	Condo/Hotel	241	units	60	14460	100	24100
		Conference Facilities	5,104	sq ft	150	766	255	1302
		Night Club	6,037	sq ft	510	3079	560	3381
		Restaurant	4,292	sq ft	510	2189	560	2404
		Retail	783	sq ft	150	117	280	219
		Spa/Fitness	4,720	sq ft	185.29	875	315	1487
3	59 Hillside Drive	Condo	6	units	110	660	150	900
4	33-020-36	Parking Spaces	340	units	n/a	n/a	n/a	n/a
5	Hillside Drive (Westin)	Condo	231	units	110	25410	150	34650
		Conference Facilities	3,500	sq ft	150	525	255	893
		Parking Spaces	231	units	n/a	n/a	n/a	n/a
		Restaurant	4,300	sq ft	510	2193	560	2408
6	31-110-27,33-010-02,32-020-10,-11,-21,-31 Phase 2	Condo/Hotel	193	units	60	11580	100	19300
		Condo	30	units	110	3300	150	4500
		Conference Facilities	6,300	sq ft	150	945	255	1607
		Parking Spaces	260	units	n/a	n/a	n/a	n/a
		Restaurant	5,070	sq ft	510	2586	560	2839
		Spa/Fitness	9,038	sq ft	185.29	1675	315	2847
7	6085 Minaret Road	Condo	21	units	110	2310	150	3150
	8050 C	Retail	3,335	sq ft	150	500	280	934
	8050 A & B	Condo	23	units	110	2530	150	3450
8	33-080-07,-09,-10,-11	Condo/Hotel	71	units	60	4260	100	7100
9	3863 & 3905 Main Street	Condo	54	units	110	5940	150	8100
10	Westwood Lofts	Condo	23	units	110	2530	150	3450
11	Mammoth Gateway/ Darin Davis	Condo	11	units	110	1210	150	1650

Table 73 (Continued)

Forecast of Cumulative Wastewater Flows

ID	Location	Uses	Amount of Development	Unit	Average Wastewater Generation Rate (gal/day) ^a	Projected Average Wastewater Flows (gal/day)	Peak Wastewater Generation Rate (gal/day) ^b	Projected Peak Wastewater Flows (gal/day)
12	4B Project	Condo	40	units	110	4400	150	6000
13	5862 Minaret Road Lode*Star	Condo/Hotel	45	units	60	2700	100	4500
14	Minaret Road	Condo	14	units	110	1540	150	2100
15	31-070-03	Condo	3	units	110	330	150	450
16	888 Bridges Lane	Condo	22	units	110	2420	150	3300
17	32-040-11 Magic Carpet Chairlift	n/a	n/a	n/a	n/a	n/a	n/a	n/a
18	Woodwinds	Condo	12	units	110	1320	150	1800
19	Sierra Star Parkway	Condo	58	units	110	6380	150	8700
20	33-330-51	SFR	18	units	135	2430	180	3240
21	The Jeffreys	Apartments	14	units	170	2380	195	2730
22	33-160-53,-54	Condo	24	units	110	2640	150	3600
23	1616 Old Mammoth Road Aspen Village I Aspen Village II	Condo Community Center Condo	48 1,820 24	units sq ft units	110 92 110	5280 167 2640	150 156.4 150	7200 285 3600
24	22-330-50,-51- Tosca	Condo	11	units	110	1210	150	1650
25	85 & 124 Old Mammoth Road	MFR	118	units	170	20060	195	23010
26	40-070-17	Condo	106	units	110	11660	150	15900
27	35-040-44	Library	16,000	sq ft	92	1472	156.4	2502
28	35-010-46	Student Housing (Dorms) ^c	74	units	75	5550	110	8140
Total Wastewater Flows (of all Related Projects) (mgd)							164878	230276
Proposed Eagle Lodge Base Project							25725	41630
Total Cumulative Wastewater Flows							190603	271906
Total Cumulative Wastewater Flows (acre feet per year)							214	305

Table 73 (Continued)

Forecast of Cumulative Wastewater Flows

ID	Location	Uses	Amount of Development	Unit	Average Wastewater Generation Rate (gal/day)^a	Projected Average Wastewater Flows (gal/day)	Peak Wastewater Generation Rate (gal/day)^b	Projected Peak Wastewater Flows (gal/day)
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^a Factors obtained from MCWD. Wastewater average day is based on the average of winter months water usage (November, December, January, February, and March).

^b Peak day is the daily average of the peak winter month water usage over 36 months. Peak factors for commercial were calculated by multiplying the average wastewater generated per unit by a peaking factor of 1.7.

^c Assumes the same wastewater generated as a hotel.

Proposed Parking Spaces & the Proposed Magic Carpet Chairlift are not expected to generate wastewater.

1 acre foot= 325, 850 gallons of water

Source: MCWD & PCR Services Corporation, 2006

wastewater generation from the project in combination with other related projects would result in less than significant impacts to the existing wastewater treatment facility.

Stormwater

As shown in Figure 49 two of the 28 related projects are located near the project site in a way that could potentially contribute to cumulative stormwater impacts. The remaining 26 related projects are located at a distance away from the project site so that the stormwater runoff generated by those projects would not utilize the same storm drain facilities. The two that are located near the project site include Project Nos. 16 and 17. While Project No. 16 is located near the project site, it would not convey any runoff through the project area. Project No 17 would not significantly alter the drainage pattern in the project area. The project would install two detention basins onsite that would collect, store, and release stormwater runoff at rates that are similar to existing conditions. All projects are required to comply with applicable regulations with regard to runoff. Therefore, the project in conjunction with other projects in the area would result in less than significant impacts with regard to stormwater.

5.0 OTHER REQUIRED CONSIDERATIONS

5.0 OTHER REQUIRED CONSIDERATIONS

5.1 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

According to Section 15126.2(c) of the State CEQA Guidelines, “[u]ses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would necessarily lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and people to and from the project site.

Construction of the project would consume certain types of lumber and other forest products, the raw materials in steel, metals such as copper and lead, aggregate materials used in concrete and asphalt such as sand and stone, water, petrochemical construction materials such as plastic, petroleum based construction materials and other similar slowly renewable or nonrenewable resources. Additionally, fossil fuels for construction vehicles and equipment would also be consumed. In terms of project operations, the following slowly renewable and nonrenewable resources would be required: natural gas and electricity; petroleum based fuels; fossil fuels, and water. Title 24 of the California Administrative Code regulates the amount of energy consumed by new development for heating, cooling, ventilation, and lighting purposes. Nevertheless, the consumption of such resources would represent a long-term commitment of those resources.

The project site is located within the Urban Growth Boundary of the Town of Mammoth Lakes. As such, while the development of the project would commit the land to a resort facility, such a commitment would be justified based on the location of the site adjacent to the slopes of Mammoth Mountain. MMSA Chair 15 is designated as one of five activity nodes in the Town. Activity nodes are intended to be the focal points around which resort and related tourist activities are concentrated. In addition, the Town has a goal of establishing the community as a

year-round destination resort. The project would serve to create an activity node and establish year-round activity in the area. In addition, the project would provide amenities for guests as well as residents within the neighborhood.

The commitment of the nonrenewable resources required for the construction and operation of the project would limit the availability of these resources for future generations or for other uses during the life of the project. However, continued use of such resources would be of a relatively small scale and would be consistent with projected regional and local growth in the area. As such, the use of such resources would not be considered significant.

5.2 GROWTH-INDUCING IMPACTS

Pursuant to Section 15126.2(d) of the State CEQA Guidelines, an EIR must address whether a project will directly or indirectly foster growth. Section 15126.2(d) reads as follows:

“[An EIR shall] discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of wastewater treatment plant, might, for example, allow for more construction in service areas). Increases in the population may further tax existing community service facilities so consideration must be given to this impact. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”

Implementation of the proposed project would involve the development of an area within the Juniper Springs Master Plan Area. The Master Plan envisioned phased build-out of the area as a mixed use area, including primarily residential uses with ancillary commercial uses and parking. The project would replace an existing temporary tent facility that provides commercial uses in support of the MMSA ski facility. The project would result in the development of a lodge facility with transient housing and associated commercial uses at one of the four key access portals to the Mammoth Mountain ski area. As such, the project would encourage both economic growth from the revenue generated by the project and population growth from the increased employment that would occur as a result of the project.

The project would result in an increase in employment, which may bring new residents into the area. However, the Town addresses the impacts of new development on the supply of affordable housing through the Affordable Housing Mitigation Regulations (AHMR) contained

in the Zoning Code. Under the AHMR, new developments must provide housing for the estimated number of employees that earn below median income levels, or 58.5% of its full time equivalent employees (FTEE). The project would comply with the Town's requirement regarding the provision of affordable housing.

The proposed Eagle Lodge Base Area Development would include hotel/condominium or hospitality operations that would provide housing for transient visitors. In addition, the project would provide services for visitors to the area as well as for residents within the neighborhood. The project would not increase the portal capacity but would improve the services that are provided at the existing ski facility. In addition, the project would provide for year-round use of the area through the provision of indoor and outdoor assembly areas that can support community cultural events during the non-ski season.

The project would contribute to the overall economic well being of the community through the provision of high occupancy transient beds within the resort community. The project would also provide amenities including convenience retail, conference space, public parking, and food and beverage services. The project would expand the City's commercial base as well as improve the City's tax base, which would be a beneficial impact.

An existing temporary tent facility currently provides some of the commercial amenities that would be provided by the project. As such, infrastructure is already in place to support the proposed development. The proposed project would not involve any extension of infrastructure, such as roads or utilities. Consequently, it would not open up undeveloped areas to new development. The project would replace an existing temporary facility and therefore, would constitute infill development, which, by its very nature, is not growth-inducing.

The proposed project would be located primarily within the Town's Urban Growth Boundary and within an area that is well-served by existing infrastructure. The Town has accounted for the project in its long-range plans for infrastructure and services. Since the proposed project constitutes infill development within a developed area and does not require the extension of new infrastructure through undeveloped areas, project implementation would not remove an obstacle to growth.

5.3 ISSUES FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines states:

“An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and

were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of an Initial Study.”

In addition to the environmental impact categories analyzed in detail in this EA/EIR, the Town of Mammoth Lakes determined through the preparation of an Initial Study (see Appendix A of this EIR) that the proposed project would not result in potentially significant impacts with respect to agricultural resources; cultural resources (historic); geology and soils; hazards and hazardous materials; mineral resources; public services (police, fire, and schools); recreation; and utilities and service systems (solid waste).

5.4 SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL IMPACTS

The potentially adverse effects of the proposed project are discussed in Chapter 3, Affected Environment and Environmental Consequences, of this document. Mitigation measures have been recommended that would reduce all of the significant impacts to a less than significant level, with the exception of significant and unavoidable impacts in the following areas:

- Aesthetic impact to visual resources from vantage point KOP #2;
- Cumulative roadway noise impacts due to cumulative traffic volumes; and
- Cumulative impacts relative to water supply at Town buildout in 2025.

These impacts are discussed further in Section 3.5, Noise; Section 3.9, Aesthetics; and Section 4.0, Cumulative Impacts, respectively.

5.5 POTENTIAL SECONDARY EFFECTS

Section 15126.4(a)(1)(D) of the CEQA Guidelines requires that, “If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed.” With regard to this section of the CEQA Guidelines, the potential impacts that could result with the implementation of each mitigation measure proposed for the project was reviewed. The following provides a discussion of the potential secondary impacts that could occur as a result of the implementation of the measures by environmental issue area.

Land Use

Since the project would not result in significant impacts to land use, no mitigation measures are required. Therefore, no secondary impacts regarding land use would occur.

Transportation

Mitigation Measure TR-1 addresses construction parking. Mitigation Measure TR-1 would not include physical improvements but rather a means to ensure that construction parking is available without affecting sensitive uses in the project vicinity. Mitigation Measure TR-2 addresses construction truck traffic. TR-2 would not include physical improvements but rather a means through which to ensure that potential disruptions to traffic and access are not affected. Mitigation Measures TR-3 and TR-4 would require the construction of traffic improvements, including a right-turn lane and single-lane roundabout, respectively. The implementation of physical improvements could result in secondary effects, such as traffic, noise, and air quality. However, appropriate construction practices intended to minimize impacts would be required. For example, the implementation of best management practices with regard to erosion, the watering of construction sites, the use of properly operating equipment, and the use of noise reduction devices would minimize environmental impacts. In addition, traffic flow during construction of the improvements would be considered by the Town.

Mitigation Measure TR-5 provides options to reduce the parking demand at the site. These measures would serve to increase the use of alternative transportation thereby reducing environmental impacts. Mitigation Measures TR-6 through TR-10 address site circulation issues and include things such as the installation of signs, and modifications to the site design to improve circulation and avoid on-site conflicts. These measures would not result in secondary effects.

Air Quality

Since the project would not result in significant impacts to air quality, no mitigation measures are required. Therefore, no secondary impacts regarding air quality would occur.

Noise

All of the noise mitigation measures would be implemented during construction of the project and, thus, would be temporary in nature. Mitigation Measures NOI-1 through NOI-5 require that construction equipment be fitted with noise mufflers, proper maintenance of construction equipment, placement of stationary noise generating equipment as far as possible from sensitive uses, and posting of name and telephone number of a contact person on-site. In

addition, measures NOI-2 through NOI-5 address blasting on site and require testing to ensure that blasting would not exceed the vibration threshold. Implementation of these measures would not result in physical changes to the environment but would ensure that noise and vibration are reduced during construction to less than significant levels. As such, implementation of these measures would not result in secondary impacts.

Biological Resources

Mitigation Measure BIO-1 ensures the implementation of the Migratory Bird Treaty Act (MBTA). This measure would require a biological survey be conducted prior to the removal of vegetation, if removal occurs between February and September. In the event that nesting is observed, the biologist shall recommend a buffer area with a specified radius to be established. Provision of a buffer area would not result in a significant effect but would rather provide an undisturbed area within which no intrusion shall be allowed until the young had fledged and left the nest. Mitigation Measure BIO-2 requires the installation of exclusionary fencing adjacent to drainage. The approximately 4 foot high fencing would be in place during construction in the area of the drainage. The installation would be overseen by a qualified biological monitor to ensure that impacts to biological resources would not occur. The fencing would not result in visual impacts due to its size and the limited duration. As such, no significant secondary impacts would result from implementation of these mitigation measures.

Cultural Resources

Mitigation Measure CUL-1 would require a monitor during the ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits in the project area. The presence of a monitor would not result in impacts and would ensure that any discovered archaeological remains would be protected. Mitigation Measure CUL-2 addresses the unexpected discovery of human remains. As such, no significant secondary impacts would result from implementation of these mitigation measures.

Employment, Population, and Housing

Mitigation Measure POP-1 addresses the provision of housing in the event that construction workers come to the Town from outside of Mono or Inyo Counties. The implementation of the measure would not result in the construction of new housing given the short-term nature of the construction project. In addition, the measure is intended to preserve the existing housing stock in the RMF-1 zone within the community for permanent residents.

Aesthetics

Mitigation Measures AES-1 and AES-2 address the construction phase of the project. AES-1 is intended to ensure that the site is maintained in a visually attractive manner. Mitigation Measure AES-2 requires a hauling plan. AES-3 would require that the berm on the north side of Majestic Pines Road is replaced and enhanced after the construction period. Mitigation Measure AES-4 requires the submittal and review of an outdoor lighting plan to ensure that on-site lighting is consistent with the Town's Lighting Ordinance. Mitigation Measure AES-5 requires the implementation of a snow plowing and cindering plan or the installation of heat traced pavement along Majestic Pines Road to ensure that shading does not result in hazardous conditions to the north of the site. As such, no significant secondary impacts would result from implementation of these mitigation measures.

While the project would result in a significant view impact at KOP #2, no mitigation measures are available to reduce the significance of impacts to the visual resources from KOP #2.

Hydrology and Water Quality

Mitigation Measure HYD-1 would require monitoring of existing on-site wells to assess seasonal groundwater underflow rates. Mitigation Measure HYD-2 requires the installation of two wells upgradient of the construction area. The location of the wells would need to be reviewed to ensure that no impacts to biological resources would occur. The installation would be within the parameters of the development analyzed with regard to air quality and noise.

Mitigation Measure HYD-3 requires the installation of a sump pump system in the underground parking garage. The sump pump system would be located within the area the construction area on the site. Mitigation Measure HYD-4 addresses the size of the detention facilities that would be installed as part of the project and therefore, has been included in the analyses conducted for the project. As such, no significant secondary impacts would result from implementation of these mitigation measures.

Water Supply

Mitigation Measure WTR-1 would require the provision of a work area on the site to ensure adequate area is available for MCWD to conduct any necessary maintenance for Well 16. In addition, WTR-2 would require the installation of a standpipe to ensure adequate fire flows to the site. No significant secondary impacts would result from implementation of these mitigation measures.

Wastewater

Mitigation Measure WW-1 addresses the timing of the completion of an improvement being implemented by MCWD. The improvement would not result in any environmental impacts.

Stormwater

Since the project would not result in significant impacts to stormwater, no mitigation measures are required. Therefore, no secondary impacts regarding stormwater would occur.

6.0 LIST OF PREPARERS AND ORGANIZATIONS CONSULTED

6.0 LIST OF PREPARERS AND ORGANIZATIONS CONSULTED

LIST OF PREPARERS

PCR Services Corporation

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Mike Harden	B.A. Environmental Studies	Aesthetics, Transportation, Hydrology and Water Quality
Lauren Siniawer	M.P.L. Land Use, Sustainability, & Regional Growth Specialization B.A. Government	Land Use, Employment, Population, and Housing, Water Supply
Ailene Batoon	B.A. Geography/ Environmental Studies	Wastewater, Stormwater
Linda Robb	B.S. Biology B.A. Economics	Biological Resources
Amy Holmes	M.A. Anthropology B.A. Anthropology	Archeology
Marcy Rockman, Ph.D.	Ph.D. Anthropology M.A. Anthropology B.S. Geology	Cultural Resources
J. D. Stewart	Ph.D. Systematics & Ecology	Cultural Resources
Mark Hagmann	M.A. Environmental Engineering B.S. Environmental Engineering	Air Quality & Noise
Heidi Rous	B.S. Physics	Air Quality
Everest Yan	B.S. Chemical Engineering (Environmental Emphasis)	Air Quality & Noise
Jeff Baldino	M.E. Environmental Quality Management B.S. Environmental Biology	Air Quality
Terrence P. Keelan	B.A. History/ Fine Arts	Document Publication Editor
Michelle Holmes	M.F.A. Fine Arts/ Drama B.S. Speech	Publications Specialist
Bob Langson		Production
Jamie Barrios	A.S. Web Design & Development A.S. Science CIS Cert.	Graphics
Robert Leomo	B.A Fine Arts	Graphics

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Name	Title	Agency
EA/EIR Management		
Mike Schlafmann	Winter Sports Specialist/Project Environmental Coordinator	US Forest Service, Inyo Natl. Forest
Sonja Porter	Sr. Planner	Town of Mammoth Lakes
Bill Taylor	Director, Community Development Department	Town of Mammoth Lakes
Mark T. Wardlaw	Director, Community Development Department	Town of Mammoth Lakes
Land Use		
Pam Kobylarz	Assistant Planner	Town of Mammoth Lakes
Mike Schlafmann	Park Ranger	U.S. DA Forest Service
Transportation		
Rebecca L. Bucar	Project Engineer	LSC Transportation Consultants
Gordon Shaw	Principal	LSC Transportation Consultants
Air Quality		
Larry Cameron	Air Pollution Control Officer	Great Basin Unified Air Pollution Control District
Duane Ono	Deputy Air Pollution Control Officer	GBUAPCD
Biological Resources		
Mike Schlafmann	USFS Park Ranger	US Forest Service, Inyo Natl. Forest
Cultural Resources		
Kay White	Director	CA Historical Resources Info System
Rob Wood	Environmental Specialist III	Native American Heritage Commission
Population and Housing		
Bill Taylor	Deputy Director	Town of Mammoth Lakes, Community Development Department
Sonja Porter	Senior Planner	Town of Mammoth Lakes
Pam Kobylarz	Assistant Planner	Town of Mammoth Lakes
Aesthetics		
Mike Niemann	Senior Associate	Gensler
Hydrology		
Paul E. Roten	Project Engineer	Triad/Holmes Associates
Doug Fay	Engineering Geologist	Lahontan RWQCB
Joseph A. Adler	Principal Geologist	Sierra Geotechnical Services
Peter Bernasconi	PE, Associate Engineer	Town of Mammoth Lakes
Gary Sisson	General Manager	Mammoth Community Water District
Water Supply		
Gary Sisson	General Manager	Mammoth Community Water District
Ericka Hegeman	Public Affairs/ Environmental Specialist	Mammoth Community Water District

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Ericka Hegeman	Public Affairs/ Environmental Specialist	Mammoth Community Water District
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Stormwater		
Peter Bernasconi	Town Engineer	Town of Mammoth Lakes
Jeffrey Mitchell	Town Engineer	Town of Mammoth Lakes
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Paul E. Roten	Project Engineer	Triad/Holmes Associates

7.0 REFERENCES

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