Clearwater Specific Plan Environmental Impact Report Appendices

PREPARED FOR:
Town of Mammoth Lakes

PREPARED BY:
RBF Consulting





Administrative Draft EIR Completed:	September 21, 2006
Draft Check Copy EIR Completed:	December 5, 2006
Public Review Draft EIR Completed:	
Final EIR Completed:	

CHECK COPY DRAFT
ENVIRONMENTAL IMPACT REPORT
APPENDICES

THE CLEARWATER SPECIFIC PLAN

SCH NO. 2006062154

Lead Agency:

TOWN OF MAMMOTH LAKES
437 Old Mammoth Road
Mammoth Lakes, Ca 93546
Contact: Mr. William Taylor
Ms. Pam Kobylarz
760/934-8989

Prepared by:

RBF CONSULTING
14725 Alton Parkway
Irvine, California 92618-2027
Contact: Mr. Glenn Lajoie, AICP
Mr. Edward Torres, INCE
949/472-3505

December 5, 2006

JN 10-105084

TABLE OF CONTENTS

Section 15.0: Appendices

15.1 Initial Study and Notice of Preparation

15.2 Notice of Preparation Responses

15.3 Traffic Impact Study

15.4 Air Quality Data

15.5 Noise Data

15.6 Correspondence

15.7 Phase I Environmental Site Assessment

15.8 Preliminary Drainage Study

15.1 Initial Study and Notice of Preparation

COMMUNITY DEVELOPMENT
P.O. Box 1609, Mammoth Lakes, CA 93546
(760) 934-8989 ext. 253, fax (760) 934-8608

TO: Agencies, Organizations and Interested Parties

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report in Compliance with Title 14, Section 15082(a) of the California Code of Regulations

The Town of Mammoth Lakes is the lead agency under the California Environmental Quality Act (CEQA) in the preparation of the Environmental Impact Report (EIR) for the project identified below. We request the view of your agency as to the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by the Town when considering any permits that your agency must issue or for any other approval for the project.

AGENCIES: The Town requests your agency's views on the scope and content of the environmental information relevant to your agency's statutory responsibilities in connection with the proposed project, in accordance with California Code of Regulations, Title 14, Section 15082(b).

ORGANIZATIONS AND INTERESTED PARTIES: The Town requests your comments and concerns regarding the environmental issues associated with construction and operation of the proposed project.

PROJECT TITLE: The Clearwater Specific Plan

PROJECT LOCATION: The 6.09 acre project site is adjacent to Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road, Laurel Mountain Road, and the Mammoth Mall and Krystal Villa East condominiums.

PROJECT DESCRIPTION: The proposed project involves a two-phased condominium/hotel development consisting of 339 units, with 480 sleeping rooms and approximately 28,200 square feet of commercial/retail uses. In addition, 43 three-bedroom workforce-housing units are proposed. The parking configuration would result in 705 subterranean and 35 surface parking spaces for a total of 740 spaces.

POTENTIAL ENVIRONMENTAL EFFECTS: The attached Initial Study describes the potential environmental effects of the proposed project. An EIR will be prepared to evaluate the project's potential impacts on the environment and analyze alternatives.

PUBLIC REVIEW PERIOD: The Town has made this Notice of Preparation (NOP) and Initial Study available for public review and comment pursuant to California Code of Regulations, Title 14, Section 15082(b). Your response must be sent as soon as possible but ***not later than 30 days after receipt of this notice***. All comments must be submitted in writing to the address below. The comment period during which the Town will receive comments on the Notice of Preparation is:

Starting Date: June 30, 2006 ***Ending Date:*** July 31, 2006

RESPONSES AND COMMENTS: Please indicate a contact person for your agency or organization and send your responses and comments to:

Pam Kobylarz
Assistant Planner
Town of Mammoth Lakes
Community Development
437 Old Mammoth Road, Suite R
Mammoth Lakes, California 93546
Fax: 760-934-8608

Or via E-mail to: pkobylarz@ci.mammoth-lakes.ca.us

COMMUNITY DEVELOPMENT
P.O. Box 1609, Mammoth Lakes, CA 93546
(760) 934-8989 ext. 253, fax (760) 934-8608

SCOPING MEETING: As part of the CEQA process, the town will hold a public scoping meeting at the date and time listed below. You are welcome to attend and present environmental information that you believe should be addressed in the EIR:

***Date*:** July 24, 2006

***Time*:** 6:00 pm

***Location*:** Town Council Chambers/Suite Z
Minaret Village Shopping Center
437 Old Mammoth Road
Mammoth Lakes, California 93546

DOCUMENT AVAILABILITY: The NOP and Initial Study are available for public review at the locations listed below during regular business hours:

- Town of Mammoth Lakes Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, CA

If you require additional information please contact Pam Kobylarz at 760-934-8989 ext. 253

Date: June 30, 2006

Signature: Pam Kobylarz

Pam Kobylarz

Title: **Assistant Planner**

Telephone: **760-934-8989 ext. 253**

Mammoth Lake Unified School District
P O Box 3509
Mammoth Lakes CA 93546

Mammoth Community Water District
P O Box 597
Mammoth Lakes CA 93546

Mammoth Lakes Fire Protection District
P O Box 5
Mammoth Lakes CA 93546

Mono County Assessor
P O Box 456
Mammoth Lakes CA 93546

Southern Mono County Health Care District
P O Box 660
Mammoth Lakes CA 93546

SCE
P O Box 7329
Mammoth Lakes CA 93546

Advocates for Mammoth
P O Box 2005
Mammoth Lakes CA 93546

Range of Light Group
Toiyabe Chapter, Sierra Club
P O Box 1973
Mammoth Lakes CA 93546

Mammoth Ranger District
USFS, Inyo National Forest
P O Box 148
Mammoth Lakes CA 93546

Town of Mammoth Lakes Office
437 Old Mammoth Road
Mammoth Lakes CA 93546

Mono County Library
960 Forest Trail
Mammoth Lakes CA 93546

Terry Roberts, Director
State Clearinghouse
1400 Tenth Street, Suite 222
Sacramento CA 95814

Caltrans District 9
500 South Main Street
Bishop CA 93514

California Department of Fish and Game
407 West Line Street
Bishop CA 93514

Great Basin Unified APCD
157 Short Street, Suite 6
Bishop CA 93514

Lahontan Region
California Regional Water Quality Control Board
15428 Civic Drive, Suite 100
Victorville CA 92392

Mono County Clerk
437 Old Mammoth Road, Suite P
Mammoth Lakes CA 93546

Southern California Edison
2244 Walnut Grove Avenue
Rosemead CA 91770

INITIAL STUDY/ENVIRONMENTAL CHECKLIST

The Clearwater Specific Plan

LEAD AGENCY:

TOWN OF MAMMOTH LAKES
437 Old Mammoth Road, Suite R
Mammoth Lakes, California 93546
Contact: Ms. Pamela Kobylarz
760.934.8989 ext. 253

PREPARED BY:

RBF Consulting
14725 Alton Parkway
Irvine, California 92718
Contact: Mr. Glenn Lajoie, AICP
Mr. Eddie Torres, INCE
949.472.3505

June 30, 2006

JN 10-105084

TABLE OF CONTENTS

1.0 Introduction 1

1.1 Statutory Authority and Requirements 1
1.2 Consultation 1
1.3 Incorporation by Reference 1

2.0 Project Description 3

2.1 Project Location and Setting 3
2.2 Project Characteristics 3
2.3 Agreements, Permits, and Approvals 9

3.0 Initial Study Checklist 10

3.1 Background 10
3.2 Environmental Factors Potentially Affected 11
3.3 Lead Agency Determination 11
3.4 Evaluation of Environmental Impacts 12

4.0 Environmental Analysis 21

4.1 Aesthetics 21
4.2 Agriculture Resources 22
4.3 Air Quality 23
4.4 Biological Resources 25
4.5 Cultural Resources 27
4.6 Geology and Soils 28
4.7 Hazards and Hazardous Materials 31
4.8 Hydrology and Water Quality 33
4.9 Land Use and Planning 35
4.10 Mineral Resources 37
4.11 Noise 37
4.12 Population and Housing 38
4.13 Public Services 39
4.14 Recreation 42
4.15 Transportation/Traffic 42
4.16 Utilities and Service Systems 44
4.17 Mandatory Findings of Significance 46

LIST OF EXHIBITS

1 Regional Vicinity 4

2 Site Vicinity 5

3 Preliminary Site Plan 7

LIST OF TABLES

1 Proposed Land Uses 6

1.0 INTRODUCTION

The proposed Clearwater Specific Plan is comprised of three parcels located within the limits of the Town of Mammoth Lakes, California. The site is adjacent to Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road, Laurel Mountain Road, and the Mammoth Mall and Krystal Villa East condominiums. Project implementation would involve a mixed-use Condominium Hotel project, consisting of Condominium Hotel units, work-force housing, retail and restaurant facilities, internal courtyards, and landscape areas. Please refer to Section 2.0 (Project Description), which provides a detailed Project Description.

Following preliminary review of the proposed project, the Town of Mammoth Lakes has determined that the proposed project is subject to the guidelines and regulations of the California Environmental Quality Act (CEQA). This Initial Study addresses the potential for direct, indirect, and cumulative environmental effects associated with the project, as proposed.

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

In accordance with CEQA (Public Resources Code Section 21000 - 21177), this Initial Study has been prepared to analyze the proposed project in order to identify any potential significant impacts upon the environment that would result from construction and implementation of the project. In accordance with Section 15063 of the *CEQA Guidelines*, as amended, this Initial Study is a preliminary analysis prepared by the Lead Agency, the Town of Mammoth Lakes (the Town), in consultation with other jurisdictional agencies, to determine whether a Negative Declaration or Environmental Impact Report (EIR) would be required for the proposed project. The purpose of this Initial Study is to inform Town decision-makers, affected agencies, and the public of potential environmental impacts associated with construction and implementation of the proposed project.

The Initial Study and NOP will undergo a 30-day public review period. During this review, comments by the public on the project relative to environmental issues are to be submitted to the Town. The Town will review and consider all comments as a part of the project's environmental analysis, as required in Section 15082 of the *CEQA Guidelines*, as amended. The comments received with regard to this NOP and Initial Study will be included in the project environmental document, for consideration by the Town.

1.2 CONSULTATION

In accordance with Section 15082 of the *CEQA Guidelines*, this Initial Study is being distributed to the State Clearinghouse and Responsible and Trustee Agencies, along with the Notice of Preparation. Comments will be addressed in the Draft EIR.

1.3 INCORPORATION BY REFERENCE

The references outlined below were utilized during preparation of this Initial Study. These documents are available for review at the Town of Mammoth Lakes Community Development Department, located at 437 Old Mammoth Road, Mammoth Lakes, California 93546.

- *Town of Mammoth Lakes Environmental Impact Report on the General Plan* (1987). Development in Mammoth Lakes is presently regulated by the *1987 General Plan* (*1987 General Plan*), which contains the State-mandated elements governing all development on private property, including residential, commercial, and industrial uses (a new Draft General Plan has been prepared but has not yet been adopted by the Town of Mammoth Lakes). The Clearwater Specific Plan must be consistent with the *1987 General Plan*. The *1987 General Plan* sets general goals and objectives for future development within the Town. The *1987 General Plan* is divided into the following elements:

    - Land Use;
    - Transportation and Circulation;
    - Housing;
    - Conservation and Open Space;
    - Safety;
    - Noise; and
    - Parks and Recreation.

  The goals and policies of the *1987 General Plan* set the overall tone for development and land use in Mammoth Lakes.

- *Town of Mammoth Lakes General Plan* (Draft April 2005; Revised September 2005). The first draft of the Town of Mammoth Lakes General Plan Update (*2005 General Plan Update*) was released during the summer of 2004. Through community input and the General Plan Advisory Group, the Draft has been revised in its entirety with minor amendments made by the Planning Commission (September 2005).

- *Town of Mammoth Lakes Municipal Code (Municipal Code)*. The *Municipal Code* consists of all the regulatory and penal ordinances and administrative ordinances of the Town of Mammoth Lakes. It is the method the Town uses to implement control of land uses, in accordance with *General Plan* goals and policies. The Town of Mammoth Lakes Zoning Ordinance, Title 17, of the *Municipal Code*, identifies land uses permitted and prohibited according to the zoning category of particular parcels. The Buildings and Construction Ordinance, Title 15, specifies rules and regulations for construction, alteration, and building for uses of human habitation.

- *Draft Clearwater Specific Plan* (June 2006). The Clearwater Specific Plan establishes land use guidelines and development standards for the Clearwater site. Implementation of the Clearwater Specific Plan through adoption by ordinance will provide a mechanism for directing and focusing development of the project. Upon approval of the Clearwater Specific Plan, a tentative map, use permits, and other approvals will be necessary to implement the project.

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

PROJECT LOCATION

The Town of Mammoth Lakes is located in the eastern side of the Sierra Nevada Range, in southwestern Mono County, California; refer to Exhibit 1 (Regional Vicinity). The 6.09-acre project site is adjacent to the east of Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road to the south, Laurel Mountain Road to the west, and the Mammoth Mall and Krystal Villa East condominiums to the north; refer to Exhibit 2 (Site Vicinity).

EXISTING CONDITIONS

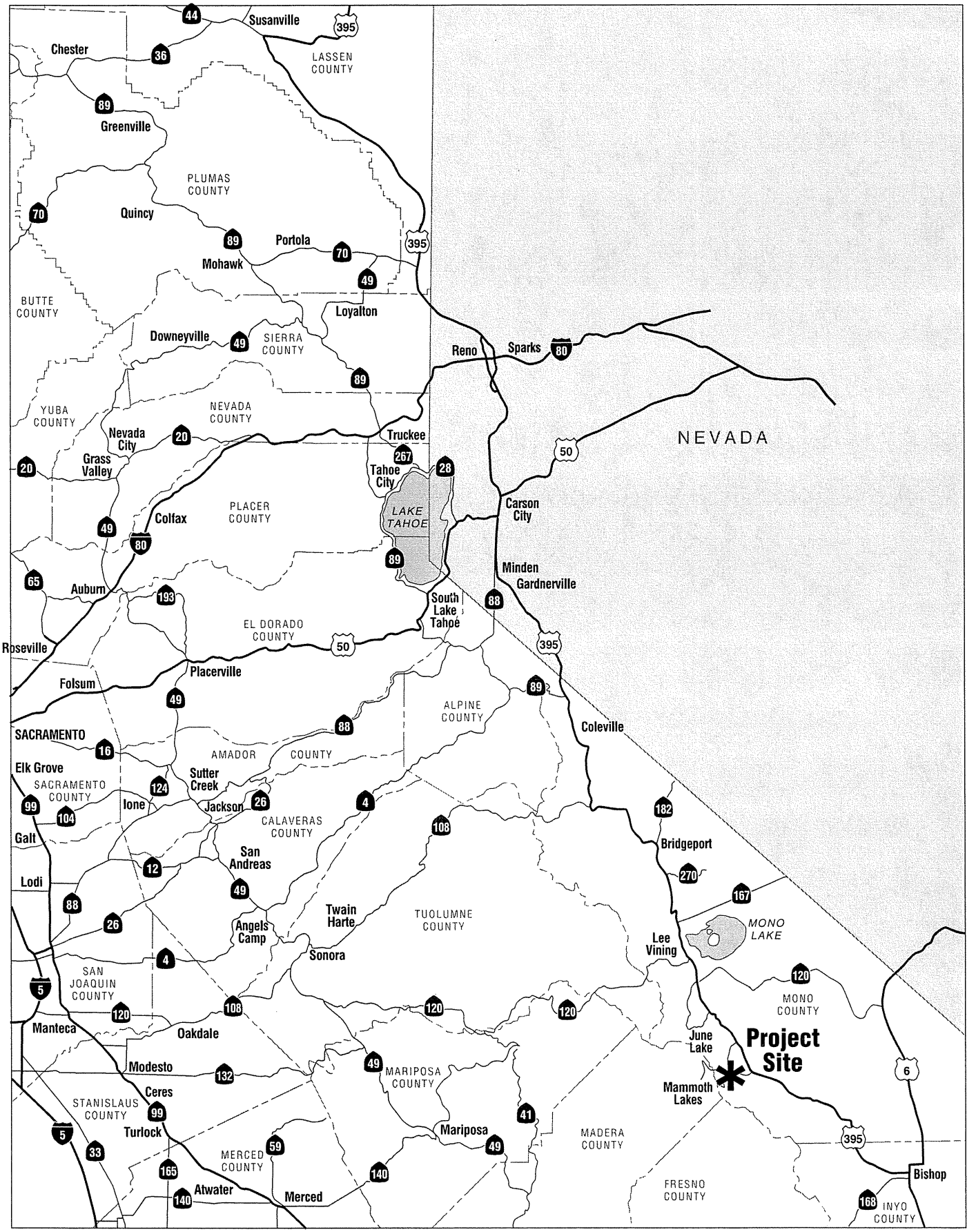
Current uses on the project site include the Sierra Nevada Inn, Igor 's restaurant, and the Ocean Harvest restaurant, which are all permitted under the current Commercial General (GC) zoning on-site. The Sierra Nevada Inn provides 159 bedrooms, consisting of 16 studio units with kitchens, 116 hotel-style units, and eight condominium units with kitchens. Existing vegetation includes perimeter trees and 48 Jeffrey Pines within the paved surface parking lots. Three permanent residences are located at the Sierra Nevada Inn, and are occupied by the maintenance supervisor, shift manager, and relief manager. Igor's restaurant is currently closed, while the Ocean Harvest restaurant is currently occupied but is scheduled to close. The remainder of the site consists of surface parking lots and other hardscape surfaces in varying states of deterioration.

East of the project site, across Old Mammoth Road, is the Sierra Manor condominium project (zoning designation of General Commercial [CG]). South of the project site, across Sierra Nevada Road, is the Sierra Park Villas condominium project (zoning designation of Residential/Multi-Family [RMF-2]). West of the project site, across Laurel Mountain Road, is the Laurel Mountain Professional Center, an unnamed apartment building, and the Sierra Park Apartments (zoning designation of CG). North of the project site is the Mammoth Mall, which houses business offices and retail establishments (zoning designation of CG). The Krystal Villa East condominium project and Chart House restaurant are also located adjacent to the north side of the project site (zoning designation of CG).

2.2 PROJECT CHARACTERISTICS

As defined by the State of California Government Code, Article 8, Section 6540, a Specific Plan includes text and diagrams which specify the following in detail:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the Specific Plan;



RBF CONSULTING

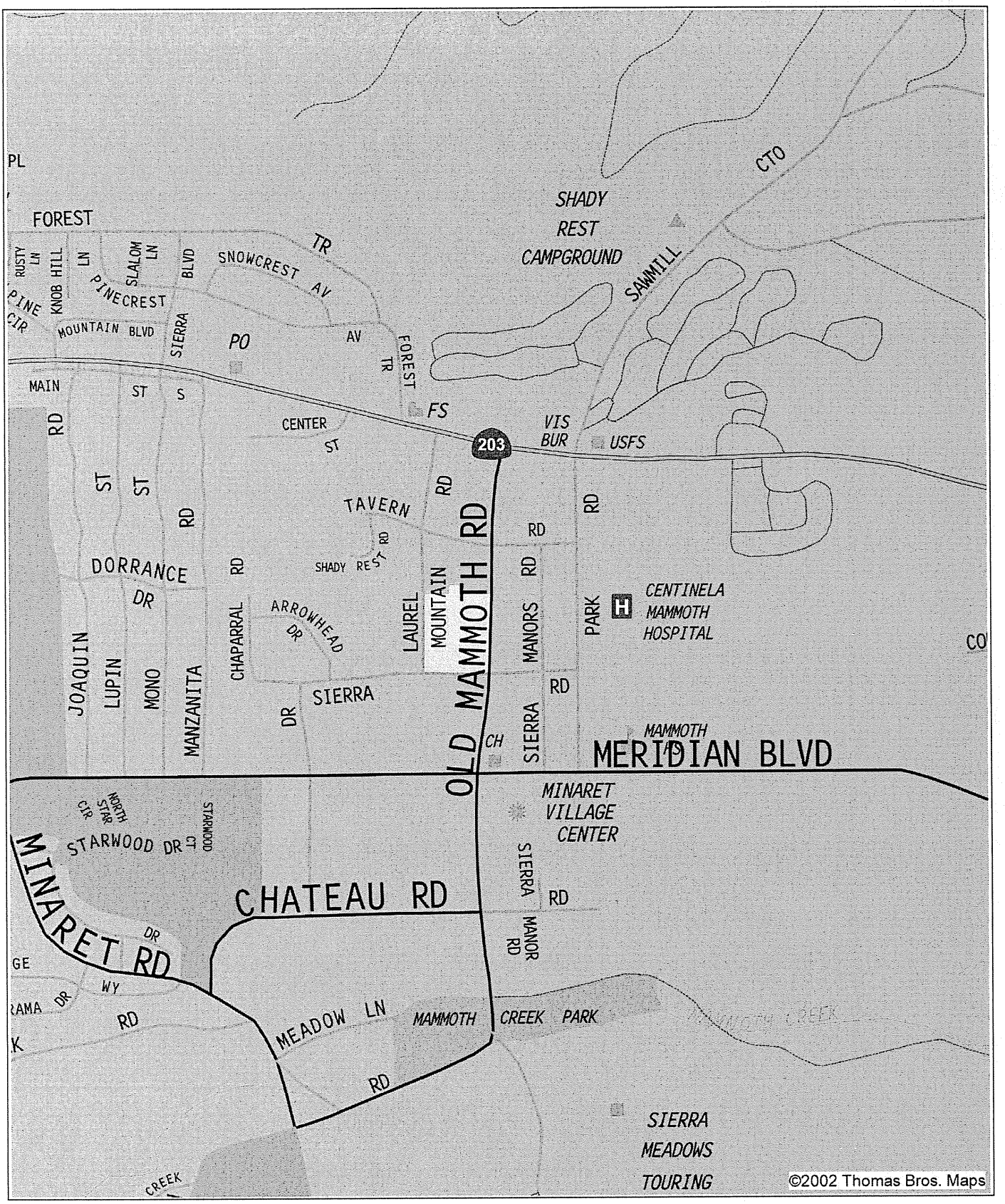
0 10 15 22 miles
APPROXIMATE

6/16/06 JN 10-105084-13043

CLEARWATER SPECIFIC PLAN • INITIAL STUDY

Regional Vicinity

Exhibit 1



Project Site

RBF CONSULTING

not to scale

6/16/06 JN 10-105084-13043

CLEARWATER SPECIFIC PLAN • INITIAL STUDY

Site Vicinity

Exhibit 2

- The proposed distribution, location, extent, and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the Specific Plan, need to support uses described in the Specific Plan;

- Standards and criteria by which development will proceed, and standards for conservation, development, and utilization of natural resources, where applicable; and

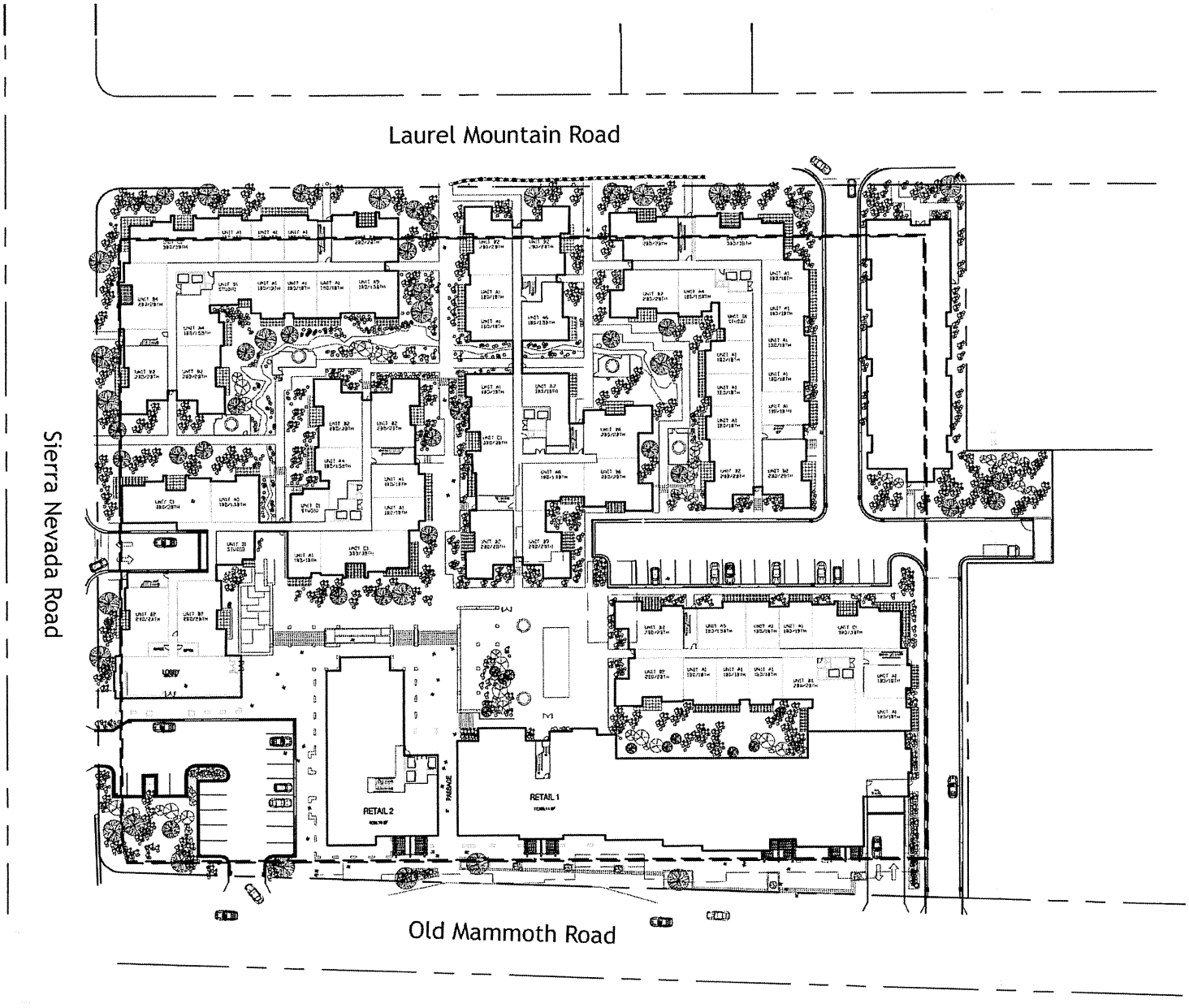
- A program of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the project or projects described in the Specific Plan.

In addition, a Specific Plan includes a statement of its relationship to and conformity with the *1987 General Plan*. The Specific Plan would replace the existing zoning regulations and effectively become the new zoning ordinance for the area. The General Plan would be amended to identify the affected properties as the Clearwater Specific Plan Area.

More specifically, the Clearwater Specific Plan provides Condominium Hotel units, work-force housing, retail and restaurant facilities, and internal courtyard and landscape areas; refer to Exhibit 3 (Preliminary Site Plan). The Condominium Hotel would include 480 rooms in 339 units, resulting in a density of 78.75 rooms per acre. In addition to the Condominium Hotel, the project would have 43 units of work-force housing with three bedrooms in each unit; refer to Table 1 (Proposed Land Uses). The proposed project would include a subterranean parking structure extending over the majority of the site. The parking configuration would result in 705 subterranean and 35 surface parking spaces, for a total of 740 spaces.

Table 1
Proposed Land Uses

Land Use	Size
Condominium Hotel	339 Units[1]
Work-force Housing	43 Units
Restaurant	8,000 s.f.
Retail	20,205 s.f.
1 – The Condominium Hotel would include 480 rooms in 339 units.	
Source: *The Clearwater Specific Plan*, June 2006	



RBF CONSULTING

0 100'
APPROXIMATE

6/27/06 JN 10-105084-13043

CLEARWATER SPECIFIC PLAN • INITIAL STUDY

Preliminary Site Plan

Exhibit 3

Proposed Project Design

The Condominium Hotel would consist of six buildings ranging from one to six stories. Portions of the structures located near the center of the site that may exceed 65 feet would be used for architectural elements only. Buildings fronting Old Mammoth Road would range in height from one to three stories. The buildings are proposed to be designed and sited in order to provide maximum sunlight and minimal shadowing where practical. Retail uses are proposed to extend along Old Mammoth Road, with entries from a covered walkway set back from the existing sidewalk. The proposed project would also include the construction of on-site work-force housing, with the capacity to house the entire work-force employed for the proposed uses. This portion of the project would have a homeowner association and covenants, codes, and restrictions (CC&R).

Project Operations

The individual Condominium Hotel units would be privately owned but would operate similar to a hotel. The facility would include a lobby area for check-in, housekeeping service, laundry facilities, and a small area to purchase food items, toiletries, magazines, and other sundry items. A homeowners association would own and maintain the common areas. The work-force housing and condominium housing may be under separate ownership and have separate homeowners associations. Specific uses on-site would include:

- One or more restaurants and at least one cocktail lounge;
- Commercial shops that may be accessed within the project and along Old Mammoth Road;
- An internal open-space courtyard and landscaped areas for both public and private use;
- Work-force housing;
- A subterranean parking structure; and
- Other facilities such as a fitness center, spa, and conference rooms.

The project would utilize existing shuttle services. The Town shuttle stop along Old Mammoth Road, adjacent to the site, would be utilized and improved by the project applicant. The Condominium Hotel may operate a separate shuttle service to the ski area, the airport, the golf courses, and elsewhere in Town, in addition to a taxi-call service/concierge.

Project Construction and Phasing

Based on market conditions and the availability of a construction workforce, construction of the project is anticipated as follows:

Construction Year 1

- Demolition and removal of existing structures;
- Rough grading;
- Off-site improvements (i.e., utility connections to Old Mammoth Road); and
- Construction of underground parking garage and slab (would require approximately 98,000 cubic yards of excavation and soil export).

Construction Years 2, 3, and 4

- Construction of Condominium Hotel and associated retail improvements;
- Work-force housing;
- Installation of curb, gutter, and sidewalks; and
- Installation of landscaping improvements.

2.3 AGREEMENTS, PERMITS, AND APPROVALS

The Town of Mammoth Lakes approvals required for development of the Clearwater Specific plan would include, but not be limited to:

- Certification of the EIR;
- General Plan Amendment;
- Adoption of the Clearwater Specific Plan;
- Use Permit/Tentative Tract Map/Design Review Approvals; and
- Grading and Building Permits.

3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1.	**Project Title:** The Clearwater Specific Plan
2.	**Lead Agency Name and Address:** Town of Mammoth Lakes 437 Old Mammoth Road, Suite R Mammoth Lakes, California 93546
3.	**Contact Person and Phone Number:** Ms. Pamela Kobylarz Assistant Planner 760.934.8989
4.	**Project Location:** The proposed project site is located in the eastern Sierra, in the southern portion of Mono County, within the limits of the Town of Mammoth Lakes. The 6.09-acre project site is adjacent to Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road, Laurel Mountain Road, and the Mammoth Mall and Krystal Villa East condominiums.
5.	**Project Sponsor's Name and Address:** Metric Mammoth, LLC 16633 Ventura Boulevard Suite #925 Encino, CA 91436
6.	**General Plan Designation:** The project site is currently designated as Commercial General (CG).
7.	**Zoning:** The project site is currently zoned as Commercial General (CG).
8.	**Description of the Project:** Refer to Section 2.2 (Project Characteristics).
9.	**Surrounding Land Uses and Setting:** Refer to Section 2.1 (Project Location and Setting).
10.	**Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement):** Refer to Section 2.3 (Agreements, Permits, and Approvals).

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated," as indicated by the checklist on the following pages.

✓	Aesthetics	✓	Land Use and Planning
	Agriculture Resources		Mineral Resources
✓	Air Quality	✓	Noise
	Biological Resources		Population and Housing
	Cultural Resources		Public Services
	Geology and Soils		Recreation
	Hazards & Hazardous Materials	✓	Transportation/Traffic
	Hydrology & Water Quality	✓	Utilities & Service Systems
✓	Mandatory Findings of Significance (If Necessary)		

3.3 LEAD AGENCY DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ____

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section 4.0 have been added. A NEGATIVE DECLARATION will be prepared. ____

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ✓

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ____

Pam Kobylarz
Signature

Town of Mammoth Lakes
Agency

Pam Kobylarz
Printed Name

June 30, 2006
Date

3.4 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Aesthetics
- Agriculture Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the Town of Mammoth Lakes in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Potentially Significant Impact Unless Mitigated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact**. The development could have impacts which may be considered significant, and therefore additional analysis is required to identify mitigation measures that could reduce potentially significant impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
1. AESTHETICS. *Would the project:*				
a. Have a substantial adverse effect on a scenic vista?	✓			
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	✓			
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	✓			
2. AGRICULTURE RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use?				✓
3. AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:*				
a. Conflict with or obstruct implementation of the applicable air quality plan?	✓			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	✓			
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	✓			
d. Expose sensitive receptors to substantial pollutant concentrations?	✓			
e. Create objectionable odors affecting a substantial number of people?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
4. BIOLOGICAL RESOURCES. *Would the project:*				
a. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?			✓	
b. 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?			✓	
c. 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?				✓
d. 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?			✓	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓
5. CULTURAL RESOURCES. *Would the project:*				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?				✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?			✓	
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			✓	
d. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
6. GEOLOGY AND SOILS. *Would the project:*				
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			✓	
2) Strong seismic ground shaking?			✓	
3) Seismic-related ground failure, including liquefaction?			✓	
4) Landslides?				✓
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓
7. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			✓	
8. HYDROLOGY AND WATER QUALITY. *Would the project:*				
a. Violate any water quality standards or waste discharge requirements?		✓		
b. 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 nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?		✓		
d. 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 which would result in flooding on- or off-site?			✓	
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?		✓		
f. Otherwise substantially degrade water quality?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?			✓	
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓
j. Inundation by seiche, tsunami, or mudflow?				✓
9. LAND USE AND PLANNING. *Would the project:*				
a. Physically divide an established community?			✓	
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	✓			
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓
10. MINERAL RESOURCES. *Would the project:*				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓
11. NOISE. *Would the project result in:*				
a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	✓			
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	✓			
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	✓			

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				✓
12. POPULATION AND HOUSING. *Would the project:*				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			✓	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			✓	
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				✓
13. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?			✓	
14. RECREATION.				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
15. TRANSPORTATION/TRAFFIC. *Would the project:*				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	✓			
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	✓			
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				✓
e. Result in inadequate emergency access?		✓		
f. Result in inadequate parking capacity?	✓			
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				✓
16. UTILITIES AND SERVICE SYSTEMS. *Would the project:*				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	✓			
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	✓			
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✓	
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	

	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
g. Comply with federal, state, and local statutes and regulations related to solid waste?			✓	
17. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			✓	
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✓			
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✓			

4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential project impacts as identified in the Initial Study. Explanations are provided for each item.

4.1 AESTHETICS. *Would the proposal:*

a) *Have a substantial adverse effect on a scenic vista?*

Potentially Significant Impact. The project site is located to the west of Old Mammoth Road, approximately two blocks south of Main Street The site is surrounded on the remaining three sides by Sierra Nevada Road to the south, Laurel Mountain Road to the west, and the Mammoth Mall and Krystal Villa East condominiums to the north. Views in the area include Mammoth Mountain and the ridgeline features associated with the Sherwin Range. The site is generally flat with little or no topographic relief.

Current uses on the Clearwater Specific Plan site include the Sierra Nevada Inn, Igor 's restaurant, and the Ocean Harvest restaurant. The remainder of the site consists of surface parking lots and other hardscape surfaces in varying states of deterioration and scattered Jeffrey Pines.

Construction operations would result in exposed graded surfaces, construction materials, and the presence of construction equipment in areas that would impact the visual character of the site. Construction impacts are temporary and would cease upon completion of such activities. Although the majority of the proposed structures are proposed not to exceed 45 feet, portions of the plan are proposed to have maximum heights of up to 65 feet, with architectural elements of certain buildings extending to 110 feet. The additional height would be utilized to provide architectural variety.

Due to the massing and height of the proposed development, potential impacts to scenic resources in the area have been identified. Additionally, the project has the potential to affect views along Old Mammoth Road, Sierra Nevada Road, and Laurel Mountain Road. Further analysis is required to determine visual impacts as a result of project implementation.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

Less Than Significant Impact. The California Department of Transportation (Caltrans) has designated U.S. Highway 395 as a scenic highway. Highway 395 provides access to the mountain community, which is located approximately 2.75 miles east of the project site. State Route 203, which is located approximately 0.15 miles north of the project site, is eligible for a scenic highway designation, but this designation has not been formally assigned. Vehicle activity during project operations would be conducted in a manner similar to current conditions and would not substantially damage scenic resources or other locally recognized desirable aesthetic natural features within a designated scenic highway. No further analysis is warranted.

c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Potentially Significant Impact. The visual setting of the project area is dominated by the alpine character associated with the Mammoth Lakes area and the associated resort facilities, with a mixed use of commercial services, recreational uses, and residential development. Project construction would result in an impact to the visual character of the site. The project would involve the removal of existing uses and development of new uses with varying heights and massing, altering the existing visual character of the site. Additional analysis is required to determine visual impacts as a result of project implementation.

The project would primarily be subject to the Town of Mammoth Lakes Design Ordinance and Guidelines, which regulate the aesthetic character of all development in the community other than single-family residences (Municipal Code 17.32.120). The proposed project would include features proposed to extend to 110 feet in height, which exceeds the Town's 45-foot building height limit. Due to the intensity and height of the proposed development, the project has the potential to degrade the existing visual character or quality of the site and surrounding area. Additional analysis is required to determine visual impacts as a result of project implementation.

d) *Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?*

Potentially Significant Impact. Currently, the existing on-site uses are not significant sources of light and glare. Sources of light and glare include residential and condominium structures, which cast light and glare in the surrounding area from windows and outdoor lighting, as well as automobiles traveling along the nearby roadways. The Town Municipal Code Chapter 17.34 regulates outdoor lighting and prevents nuisances caused by unnecessary outdoor lighting, with the goal of protecting the ability to view the night sky. The proposed structures and associated vehicles generated by the project would create new sources of light and glare. Therefore, additional analysis is required to determine the light and glare impacts as a result of project implementation.

As the project proposes to allow a maximum height of 110 feet for architectural features, the potential exists for the structures to cast shade or shadow on-site and to surrounding uses. Shade and shadow can have a positive effect during summer months, but may result in the loss of natural light or warming effects during the winter, prolonging icy surface conditions. Therefore, further analysis is warranted for shade/shadow conditions.

4.2 AGRICULTURE RESOURCES. *In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:*

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

No Impact. The project site is urbanized and is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. Project implementation would not result in the conversion of farmland to non-agricultural use.

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

No Impact. The project site is currently zoned Commercial General (CG) with allowed uses currently on-site. Implementation of the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.

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

No Impact. The proposed project does not involve changes in the existing environment that could result in conversion of farmland to non-agricultural uses. The project site is urbanized and there are no farmland uses that are occurring on-site or in the immediate vicinity.

4.3 AIR QUALITY. *Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:*

a) *Conflict with or obstruct implementation of the applicable Air Quality Management Plan or Congestion Management Plan?*

Potentially Significant Impact. The Great Basin Unified Air Pollution Control District (GBUAPCD) is responsible for enforcing applicable air quality regulations and ensuring the Federal and State standards are met. The project site is located in Mono County, within a valley on the eastern slopes of the Sierra Nevada Mountain Range. The area is included in the Great Basin Valley Air Basin (Basin), which includes Mono, Inyo, and Alpine counties. Each Basin in the State is designated either as "attainment," "nonattainment," or "unclassified," depending on whether the Basin meets an ambient air quality standard. Effective in 2005, the Mono County portion of the Basin has a nonattainment designation for the State ozone (O_3) 1-hour standard of 0.09 parts per million (ppm). The Basin is also nonattainment for the State particulate matter (PM_{10}) standard of 50 micrograms per cubic meter ($\mu g/m^3$). In addition, the Mammoth Lakes area of the Basin is designated as nonattainment for the Federal PM_{10} standard of 150 $\mu g/m^3$. The Mammoth Lakes area and Mono County are considered in attainment or are unclassified for all other Federal and State standards.

The GBUAPCD is responsible for establishing significance criteria for construction and operational activities within the Basin. The GBUAPCD has not established numerical thresholds for criteria pollutants to determine the significance of potential impacts associated with construction and operation of development projects. Rather, the GBUAPCD requires comprehensive mitigation measures to reduce potential impacts, such as the implementation of Rule 401 to control fugitive dust emissions. Project

construction would take approximately four years to complete, continuing through the winter months. Construction has the potential to create air quality impacts with the use of construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. Additionally, the project proposes to excavate 98,000 cubic yards of soil in order to develop a subterranean parking structure. The excavated material would be hauled to a U.S. Forest Service site at the Mammoth Yosemite Airport. The air toxic emissions from the combustion of diesel fuel could include small quantities of diesel particulate matter. Additionally, fugitive dust emissions would result from demolition and construction activities.

The Air Quality Management Plan (AQMP) for the Town of Mammoth Lakes was adopted by the Town Council and GBUAPCD Board of Directors in 1990.[1] The AQMP is the primary document for the Town to satisfy the Clean Air Act (CAA) requirements to develop a State Implementation Plan (SIP), which demonstrates how the Mammoth Lakes area will attain and maintain ambient air quality standards for PM_{10}. The AQMP concludes that the primary sources of PM_{10} emissions for the area are wood smoke and road cinders. Control measures in the AQMP include vacuum street sweepers for cinders and road dust, reduction in vehicle traffic, wood stove replacement, opacity limits, fees, and penalties. The road dust reduction measure in the AQMP limits peak day traffic loads to 106,600 vehicle miles traveled. This reduction measure has been incorporated into the Mammoth Lakes Municipal Code Chapter 8.30, referred to as the Particulate Matter Ordinance. The Particulate Matter Ordinance largely implements the mitigation measures identified in the AQMP.

Emissions from project operations would result primarily from mobile source emissions (e.g., new traffic trips). Other air pollutant emissions associated with proposed project operations could include those generated by the consumption of electricity and natural gas. It should be noted that the project would not involve the use of wood burning fireplaces or wood burning stoves. As the construction and operation of the project would generate air emissions that could impede implementation of the AQMP, further analysis is required for the project's consistency with the AQMP and applicable Federal and State thresholds of significance.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Potentially Significant Impact. As indicated above, the Mammoth Lakes area is designated as nonattainment for O_3 (State standard only) and PM_{10} (State and Federal standard). The O_3 nonattainment status primarily results from pollution generated in the San Joaquin Valley Air Basin, transported by air currents and winds over the Sierra Nevadas into the Mammoth Lakes area, and not a condition generated by Basin activities.

The greatest potential for air quality impacts from the project would be attributed to mobile emissions, especially re-entrained road dust. The project's potential air quality impacts on a local and regional level requires an evaluation pursuant to the GBUAPCD and California Air Resources Board (CARB) requirements and methodology. Additional

[1] Great Basin Unified Air Pollution Control District and Town of Mammoth Lakes, *Air Quality Management Plan for the Town of Mammoth Lakes,* November 1990.

analysis is necessary to identify potential project-related air quality impacts (both short-term and long-term) and appropriate mitigation that would be effective in reducing pollutant emissions.

c) *Result in a cumulatively considerable net increase of any criteria pollutant for which the air basin is nonattainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Potentially Significant Impact. The GBUAPCD does not have numerical thresholds for criteria pollutants to determine whether the project would result in a cumulatively considerable net increase of PM_{10} or O_3 precursors. However, construction and operation of the project would result in an increase in air emissions, such as those associated with construction equipment and vehicle trips, as compared to existing conditions. As the project would result in an increase of emissions, project implementation could result in a cumulative increase of pollutants in the Basin. These impacts require additional analysis to assess their level of significance.

d) *Expose sensitive receptors to substantial pollutant concentrations?*

Potentially Significant Impact. Certain segments of the population, such as children, the elderly, and those individuals with compromised respiratory systems, are more sensitive to the effects of air pollution than is the general population. Those sensitive populations that are in proximity to localized sources of fine particulates, toxics and CO are of concern and are termed sensitive receptors. Adjacent and nearby residential uses could house sensitive receptors. Therefore, project construction and operation could expose sensitive receptors, such as nearby residents, to emissions above current levels. These impacts require additional analysis to assess their level of significance.

e) *Create objectionable odors affecting a substantial number of people?*

Less Than Significant Impact. Construction activity associated with the project may generate detectable odors from heavy-duty equipment exhaust. Construction related odors would be short-term in nature and cease upon project completion. Proposed land uses could create odors. However, odors during project operations are not expected to be objectionable. A less than significant impact would result.

4.4 BIOLOGICAL RESOURCES. *Would the project:*

a) *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 California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant Impact. Due to the high degree of variation in topography and geologic condition, the Mammoth Lakes region supports diverse biological communities. The biological communities primarily consist of species that have adapted to cold, snowy winter and arid summers. Mammals that occur in the area include deer, coyote, marmot, beaver, squirrel, chipmunk, mountain lion, marten, and black bear. More than 150 bird species have been identified in the region, which include the bald eagle, grey owl, red-

tailed hawk, sage-grouse, various woodpeckers, chickadee, nuthatch, northern goshawk, and gray crowned rosy finch. The area also supports approximately 15 species of amphibians and reptiles, which include the western toad, Pacific tree frog, sagebrush lizard, and western terrestrial garter snake.

The five major vegetation communities within the region are Mixed Conifer Fir, Upper Montane Mixed Shrub, Basin Sagebrush, Wet Meadow, and Alder Wouldow Riparian. The most common plant community within the region is the Mixed Conifer Fir, with the Jeffery Pine species commonly occurring on gradual slopes and lower elevation areas.

Currently, the project site is in a disturbed and urbanized condition. The limited vegetation and trees that exist on-site are not State of Federally listed species. Per the *2005 General Plan Update*, the site does not support a critical habitat or species. Section 5.6.2 (Landscape Design Guidelines) of the *Specific Plan* states that provisions would be taken for the protection of existing on-site trees, which are located in the parking areas and along the perimeter. Project implementation is not anticipated to have a significant impact on special status species.

b) *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 California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Less Than Significant Impact. Refer to Response 4.4(a). As previously stated, the project site is currently disturbed, and consists of impermeable surfaces. According to the Conservation and Open Space Element of the *2005 General Plan Update*, riparian vegetation/habitat within the Town is generally found along the banks of Mammoth Creek, and other drainages. Mammoth Creek is located approximately 0.5 miles to the south of the project site. No riparian habitat or sensitive natural communities exist on-site. Project implementation would not create a substantial adverse effect on any riparian habitat or other sensitive natural community.

c) *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, costal, etc.) through direct removal, filling, hydrological interruption, or other means?*

No Impact. Refer to Response 4.4(a). No federally protected wetlands are known to occur on-site. Therefore, implementation of the proposed project would not result in any impacts on federally protected wetlands.

d) *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?*

Less Than Significant Impact. There are specific areas of the Mammoth Lakes region that are utilized by migratory species. For example, the Round Valley herd of mule deer utilizes a route south of the Town of Mammoth Lakes, through the Mammoth Lakes Basin, and then crosses over Mammoth pass into the Middle Fork of the San Joaquin River drainage. The likelihood of the herd migrating onto the project site is minimal as the site is completely surrounded by developed uses. Other migratory species include raptors and songbirds, which could nest within existing trees, shrubs, and groundcover

on-site. Although unlikely, any potential nesting is protected under Fish and Game Code Section 3503. Compliance with regulations and requirements set forth by the Fish and Game Code would reduce potential impacts resulting from project construction and operation activities. The project would not interfere with the movement of any native resident or wildlife species. Therefore, implementation of the proposed project would result in a less than significant impact.

e) *Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.*

Less Than Significant Impact. The Town of Mammoth Lakes currently has several policies, ordinances, and conditions of approval that apply to development, and protect natural resources. Chapter 6.24 of the *Municipal Code* prohibits the feeding of wildlife, Chapter 8.12 requires proper refuse disposal to eliminate the availability of refuse for wildlife and Chapter 17.20.040 requires the preservation of trees and other vegetation in reference to commercial sites. To the extent possible, existing on-site trees would be preserved, and a Tree Health Plan would be established to monitor the trees condition during and after construction.[2] Therefore, project implementation would result in a less than significant impact.

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

No Impact. Conservation and recovery plans for areas which encompass or are in the vicinity of the project site include the Owens Basin Wetland and Aquatic Species Recovery Plan, the Mule Deer herd management Plans, and the Greater Sage-Grouse Conservation Plan for Nevada and Eastern California. However, the project site is not located within any of the Plans identified above, nor do any of the species under special concern exist of traverse through the site. Implementation of the proposed project would not conflict with any adopted Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans.

4.5 CULTURAL RESOURCES. *Would the project:*

a) *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?*

No Impact. The project site consists of surface parking areas and dilapidated structures with no historic significance pursuant to Section 15064.5(a)(3) of the CEQA Guidelines. The existing on-site buildings were constructed in the late 1960's utilizing stick framing and T-111 siding. Thus, the on-site structures do not have historical value. Project implementation would not impact historic resources and no additional analysis is necessary.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?*

[2] Metric Holdings Incorporated, *The Clearwater Specific Plan*, June 2006.

Less Than Significant Impact. Per the *1987 General Plan*, archaeological and historic site surveys should be conducted and results incorporated into environmental review documentation when a critical site(s) exists within a project area. Areas with high levels of disturbance that are predominately urbanized are not considered to have the potential for the discovery of additional archaeological or paleontological resources. No archaeological or paleontological resources are known to occur on-site due to the level of on-site disturbance. If during grading and excavation any archaeological resource is found, construction would be temporarily diverted, redirected, or halted as appropriate. Any discovery of such resources would be treated in accordance with Federal, State and local regulations, including those outlined in the CEQA Guidelines Section 15064.5 (e), and as appropriate, the Native American Historical, Cultural and Sacred Sites Act.

c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact. Refer to Response 4.5(b).

d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Less Than Significant Impact. No known human remains occur on-site and due to the level of past disturbance on-site, it is not anticipated that human remains would be encountered during earth removal or disturbance activities. Should human remains be encountered during excavation or site grading, construction activities would cease immediately and a qualified archaeologist and Native American monitor would be immediately contacted. The Coroner would also be contacted pursuant to Sections 5097.98 and 5097.99 of the Public Resources Code. Should the Coroner determine the human remains are Native American, the Native American Heritage Commission would be contacted pursuant to Public Resources Code Section 5097.98. Therefore, project implementation will not create a significant impact and further analysis is not necessary.

4.6 GEOLOGY AND SOILS. *Would the project:*

a) *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

1) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

Less Than Significant Impact. The project site is located within the Sierra Nevada Mountain range, a tilted fault-block that is bordered on the east by the Sierra Nevada frontal-fault system. The region is considered to be an active seismic region. For the purposes of the Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as those that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch).[3]

[3] California Department of Conservation and California Geologic Survey. Potentially active faults have demonstrated displacement within the last 1.6 million years (during the Pleistocene Epoch), but do not displace Holocene Strata. Inactive faults do not exhibit displacement younger than 1.6 million years before the present.

Active faults may be designated as Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which includes standards regulating development adjacent to active faults. The site is not located within an Earthquake Fault Zone or Alquist-Priolo Hazard Zone. The nearest known active regional fault is the Hartley Springs fault. The closest projected trace for this fault zone is located approximately 1.5 miles southwest of the site. This fault could produce a magnitude 6.6 (Mw) earthquake. The Hilton Creek fault, located approximately 7.5 miles from the site, could produce a magnitude 6.7 (Mw) earthquake.

The Town of Mammoth Lakes is located near the southwest edge of the Long Valley Caldera, which overprints the Sierra Nevada boundary fault system. Persistent earthquake and volcanic activity over the past four million years have formed the eastern Sierra landscape in the vicinity of Long Valley Caldera and the Mono Basin. Detailed surveys indicate that the central portion of the Long Valley Caldera has risen more than 30 inches since the late 1970s, possibly in response to the filling of a shallow magma chamber. In 1990, it was recognized that magmatic gasses were killing trees in certain portions of the caldera. The trees were killed by high carbon dioxide flux in the soil gasses surrounding their roots. The most well known location of high carbon dioxide soil gas is at the north end of Horseshoe Lake where scientists estimate between 50 and 150 tons of carbon dioxide are emitted daily. However, it should be noted that there have been no areas of high carbon dioxide flux identified in the project vicinity.

The project would locate Condominium Hotel uses within an area known to contain potential seismic hazards. However, the project would be required to comply with the California Department of Conservation, *California Geologic Survey Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. In addition, the project would be required to comply with the seismic safety requirements contained in the Town of Mammoth Lakes Municipal Code, Chapter 15.04 (Building Regulations and Uniform Codes). The Code requires that all structures within the boundaries of the Town shall be designed to the requirements of Seismic Zone 4 as defined in the 2001 *California Building Code*. Adherence to applicable regulations would assure appropriate building design, and would reduce the potential impacts of locating people in buildings susceptible to impacts from seismic activity to a less than significant level. Therefore, further analysis of this issue is not warranted.

2) Strong seismic ground shaking?

Less Than Significant Impact. As indicated above, active faults exist within the vicinity of the project site. The project site is located within the Sierra Nevada province, a generally north to northwesterly trending, asymmetric, and tilted fault-block. As a result, the fault system could produce seismic ground shaking that may affect the project site. The project would be required to comply with applicable requirements, such as the *California Geologic Survey Special Publications 117* and the Town of Mammoth Lakes *Municipal Code*, which are discussed above. Compliance with these requirements would reduce potential impacts to the project due to seismic ground shaking to less than significant levels. Therefore, no further analysis of this issue is necessary.

3) *Seismic-related ground failure, including liquefaction?*

Less Than Significant Impact. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soils to behave as a viscous liquid. In order for the potential effects of liquefaction to be manifested at the ground surface, the soils generally have to be granular, loose to medium-dense and saturated relatively near the ground surface, as well as be subjected to ground shaking of a sufficient magnitude and duration. On-site soils are classified by the U.S. Department of Agriculture Soil Conservation Service (SCS) as Type "B". Granular Type B soils are typically cohesive with an unconfined compressive strength yield of less than 1.5 tons per square foot, but more than 0.5 tons per square foot and are also particular angular granular soils. Type B soils may include angular gravel, crushed rock, silt, and silt loam. The project would be required to comply with the State of California's minimum standards for structural design and construction provided in the California Building Code (CBC). Given that the potential for liquefaction is considered very low and the project would comply with applicable requirements, potential impacts with regard to seismic-related ground failure would be less than significant. Therefore, no further analysis of this issue is necessary.

4) *Landslides?*

No Impact. Landslides are earthquake-induced ground failure that occurs primarily in areas with steep slopes, which have loose, granular soils that lose their cohesive characteristics when water-saturated. Landslides are primarily limited to areas with a combination of poorly consolidated material and slopes that exceed 30 percent. While slopes with these gradients are found in portions of Mammoth Mountain, average on-site slopes range from two to three percent. Therefore, no further analysis of this issue is necessary.

b) *Result in substantial soil erosion or the loss of topsoil?*

Less Than Significant Impact. The highest erosion potential occurs in loose and/or shallow soils on steep slopes. Currently, the project site is generally level and developed with a surface parking lot, a hotel, and two restaurants. Construction of the project would produce loose soils, which are subject to erosion as the surface area were to be disturbed or vegetation were to be removed. Grading and trenching for construction may expose soils to short-term wind and water erosion. Implementation of erosion control measures as required in Section 12.08.076 of the *Municipal Code* and adherence to all requirements set forth in the National Pollutant Discharge Elimination System (NPDES) permit for construction activities would reduce potential impacts to less than significant levels.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Less Than Significant Impact. Refer to Response 4.6(a).

d) *Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

Less Than Significant Impact. Expansive soils are typically those of high clay content that swell and shrink during wet and dry climatic events, respectively. As indicated in Section 2.2 (Project Characteristics), 90 percent of the project site would be excavated for the construction of a subterranean parking structure. Development would be subject to a site-specific geotechnical analysis and would be designed in compliance with applicable building codes, reducing impacts to a less than significant level.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?*

No Impact. The Basin Plan for the Lahontan Regional Water Quality Control Board (LRWQCB) prohibits individual septic systems in the Mammoth Basin or within the entire drainage area of the Town. It would not be necessary to install septic tanks or alternative wastewater disposal systems. The proposed project would be connected to the Town's existing sewer line along Old Mammoth Road. Since the project would not involve the use of septic tanks or alternative wastewater disposal systems, no impact would occur. Therefore, no further analysis is required.

4.7 HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

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

Less Than Significant Impact. The proposed project would not create a significant hazard to the public or the environment from the routine transport, use, or disposal of hazardous materials. Small amounts of hazardous materials may be found in solvents and chemicals used for cleaning, building maintenance and landscaping. The materials would be similar to those found in common household products, such as cleaning products or pesticides. Hazardous materials used in construction and operation of the proposed project would be subject to Town, State and federal regulations, reducing impacts to a less than significant level.

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

Less Than Significant Impact. Proposed project uses are not anticipated to result in the creation of health hazards following compliance with health and safety regulations. The proposed uses would not use, generate or dispose of hazardous materials in large quantities. As stated, hazardous materials used in construction and operation of the proposed project would be subject to Town, State and federal regulations, reducing impacts to a less than significant level.

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

No Impact. The project site is located approximately 0.2 miles northwest of Mammoth High School. However, as stated in Response 4.7(a)(b), the project would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials. No impacts would occur in this regard.

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

Less Than Significant Impact. The project site is currently developed with restaurant, hotel, and parking uses. A Phase I Environmental Site Assessment has determined that there is not contamination or a recognized environmental condition (REC) on-site.[4] A less than significant impact would result.

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

No Impact. The project site is not located within an airport land use plan or within two miles of an airport. The nearest airport is the Mammoth Yosemite Airport, approximately 6.7 miles southeast of the project site. No impacts would occur in this regard.

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

No Impact. Refer to Response 4.7(e).

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Less Than Significant Impact. Two year-round emergency evacuation routes serve the Town. State Road 203 and U.S. Highway 395 are the primary routes for evacuation, and a secondary evacuation option is provided by the Scenic Loop extending from Minaret Road to U.S. Highway 395. During the summer months, two additional routes are available including Sherwin Creek Road and the Sawmill cutoff, both of which are graded dirt roads. The project is required to comply with applicable Town of Mammoth Lakes Fire Department codes for emergency vehicle access. In addition, the project may not impede emergency access for adjacent or surrounding properties during construction or operation. Thus, the project would result in a less than significant impact with respect to emergency access and no further analysis of this issue is necessary.

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Less Than Significant Impact. The Town and surrounding area have been rated as having a very high fire potential. The project would be subject to review by the Mammoth Lakes Fire Protection District to ensure that fire regulations are met, such as

[4] EBI Consulting, Phase I Environmental Site Assessment Report for the Clearwater, February 3, 2006.

ensuring adequate clearance of flammable vegetation around individual structures to prevent the spread of fire between wildlands and structures. Thus, compliance with applicable provisions and fire codes pertaining to control of fires would result in a less than significant impact.

4.8 HYDROLOGY AND WATER QUALITY. *Would the project:*

a) *Violate any water quality standards or waste discharge requirements?*

Potentially Significant Impact Unless Mitigated. Currently, storm water runoff from the site and its tributary area flows by sheet flow or through piping, through the property, and enters the Town of Mammoth Lakes storm drain system (TMLSDS).

Impacts related to water quality would range over three different periods: 1) during the earthwork and construction phase, when the potential for erosion, siltation and sedimentation would be the greatest; 2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and 3) following completion of the project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

Any off-site runoff from Laurel Mountain Road would be allowed to enter the site where it would be directed to the on-site retention underneath the parking structure. Currently, this runoff flows down Laurel Mountain Road where it enters the TMLSDS untreated. A Storm Water Pollution Prevention Plan (SWPPP) would be required for the project during the grading permit stage. This requirement is in compliance with Town of Mammoth Lakes and State Water Quality Control Board – Lahontan Region requirements for site disturbance greater than 1 acre. Graded areas would be protected against erosion once they are brought to final grade. A preliminary drainage study prepared by the project applicant states that no graded areas are to be left unstabilized between October 15th and April 15th.[5]

Compliance with Statewide NPDES General Permit for Storm Water Discharges Associated with Construction Activities, which would prevent storm water pollution from impacting waters of the U.S. in the vicinity of the project area, would be required. Impacts would be less than significant.

b) *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 nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

Less Than Significant Impact. The project site is currently developed and disturbed, and surrounding areas are developed as well. Implementation of the project would not cause a significant increase of impervious surfaces and therefore would not substantially deplete groundwater supplies or interfere with groundwater recharge. The proposed project is consistent with current conditions in the area. Impacts would be less than significant.

[5] Triad/Holmes Associates, *Preliminary Drainage Study for the Clearwater Lodge*, June 2006.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

Potentially Significant Impact Unless Mitigated. As previously stated, the project site is currently developed and adjacent areas are predominately built-out. The project area does not contain any streams or rivers. The amount of impervious surfaces would not be significantly altered as a result of project implementation. Additionally, project implementation would not significantly alter the existing drainage pattern of the area resulting in substantial erosion or siltation on-site or in the project vicinity.

Storm water runoff generated on-site would be collected in gutters and inlets, and carried by the gutters and piping to a proposed retention facility. The facility would be located underneath the parking garage. The retention facility would be designed to retain storm water runoff generated from the site for a Lahontan 20-year intensity storm. Overflow from the facility would be directed to one of two drop inlets located at the lower ends of the site, one at the southeast and one at the northeast of the site. The overflow would have to be pumped, as the finished floor of the garage would be 7838.83 feet above mean sea level. Runoff in excess of what is collected by the on-site retention system would be conveyed to the existing storm drain in Old Mammoth Road. As required by the Lahontan Basin Plan, a retention/infiltration system would collect and infiltrate the 20-year, one-hour storm flow generated from the project paving, roofs, landscaping, and natural areas. Total runoff storage volume required for the site is estimated at 19,976 cubic feet.[6] Total storage volume provided by the retention facilities would be developed per the State Water Quality Control Board – Lahontan Region requirements. Less than significant impacts would occur in this regard.

d) *Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

Less Than Significant Impact. Refer to Response 4.8(c).

e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Potentially Significant Impact Unless Mitigated. Refer to Response 4.8(a).

f) *Otherwise substantially degrade water quality?*

Less Than Significant Impact. Short-term surface water quality impacts may occur from water erosion of soils during construction. The project would be required to utilize best management practices (BMPs) and comply with the NPDES stormwater quality requirements. Further analysis is necessary to adequately assess impacts in this regard. Refer to Response 4.8(a).

[6] Ibid.

g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

Less Than Significant Impact. The project site is not located in an area mapped as a 100 year flood corridor.[7] Therefore, the proposed project would not place residential uses within a 100 year flood plain. No further analysis is warranted.

h) *Place within a 100-year flow hazard area structures which would impede or redirect flood flows.*

No Impact. Refer to Response 4.8(g).

i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

No Impact. Refer to Response 4.8(g).

j) *Inundation by seiche, tsunami, or mudflow?*

No Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The project site is relatively distant from the ocean, not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche, and is not positioned downslope from an area of potential mudflow. Therefore, no further analysis with regard to these issues is necessary.

4.9 LAND USE AND PLANNING. *Would the project:*

a) *Physically divide an established community?*

Less Than Significant Impact. The Clearwater Specific Plan is subject to the *1987 General Plan* (the *2005 General Plan Update* has been prepared but has not yet been adopted by the Town of Mammoth Lakes). According to the *1987 General Plan*, the 6.09 acre site is currently zoned Commercial General ("CG"). Development in Mammoth Lakes is presently regulated by the *1987 General Plan*, which contains the State-mandated elements governing all development on private property, including residential, commercial, and industrial uses.

Existing uses on the site include a hotel and two restaurants (Igor's is currently vacant). East of the project site, across Old Mammoth Road, is the Sierra Manor condominium project (zoning designation of CG). South of the project site, across Sierra Nevada Road, is the Sierra Park Villas condominium project (zoning designation of RMF-2). West of the project site, across Laurel Mountain Road, is the Laurel Mountain Professional Center, an unnamed apartment building, and the Sierra Park Apartments

[7] Town of Mammoth Lakes, *Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update*, 2005.

(zoning designation of CG). North of the project site is the Mammoth Mall, which houses business offices and retail establishments (zoning designation of CG). The Krystal Villa East condominium project and Chart House restaurant are also located to the north side of the project site (zoning designation of CG). The project would not introduce buildings or infrastructure that would physically divide the existing residential and commercial community. Therefore, no further analysis of this issue is necessary.

b) *Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

Potentially Significant Impact. As indicated above, the site is currently zoned CG. The Clearwater Specific Plan would establish land use guidelines and development standards for the project site. Implementation of the Clearwater Specific Plan through adoption by ordinance would provide a mechanism for directing the development of the project. Upon approval of the Clearwater Specific Plan, a tentative map, use permits, and other approvals would be necessary to implement the project.

The Clearwater Specific Plan identifies two land use designations for the project site:

- Condominium Hotel ("CH") - This designation would permit visitor-oriented, major lodging activities and appurtenant commercial activities, including retail shops, restaurants, bars, recreational facilities, spas and parking facilities (to include parking for on-site work-force). The individual units within the project would be privately owned. The term Condominium Hotel includes resort condominium lodging and similar visitor oriented lodging.

- Work-force Housing ("WF") - This designation permits the construction and operation of a building or buildings and related appurtenances for on-site housing of the workers serving the project.

It is noted that the *1987 General Plan* establishes maximum allowable site coverage of 70 percent, including all paved and impervious surface, for properties zoned for CG. The Clearwater Specific Plan establishes an allowable site coverage of 92 percent (the majority of that coverage is due to the underground parking structure). Therefore, the project would require a General Plan Amendment (GPA) to allow for the increased site coverage. Further analysis is required with regard to the project's consistency with applicable regional, state and local land use plans and policies, including the Town's proposed *2005 General Plan Update*.

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

No Impact. There are no habitat conservation plan(s) or natural community conservation plan(s) applicable to the project site or project area. As such, project implementation would not conflict with any habitat conservation plans. Therefore, no further analysis of this issue is necessary.

4.10 MINERAL RESOURCES. *Would the project:*

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

No Impact. Mineral resources in the Mammoth Lakes region include industrial minerals (clay, aggregate, cinders, etc.) and precious metals associated with volcanic rocks and hot springs. There are not any mining activities at the project site or in the project vicinity. Additionally, the California Geological Survey (CGS) has not classified the site as being located in a principal mineral-producing locality. Implementation of the proposed project would not result in the loss of availability of such resources considered to be of value to the region or the state. No additional analysis of this issue is necessary.

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

No Impact. Refer to Response 4.10(a). As the project is not a designated mineral extraction site or a regionally or locally-important significant mineral resources area, project implementation would not create an impact and no additional analysis of this issue is necessary.

4.11 NOISE. *Would the project result in:*

a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Potentially Significant Impact. Existing noise sources in the project area include traffic from Old Mammoth Road, occasional flyover aircraft from operations at the Mammoth Yosemite Airport, and intermittent noise associated with snow removal activities. There are existing sensitive receptors adjacent to the project site, including residences to the east, south, and west. Sources of noise associated with the proposed project include noise generated during construction activities and noise generated during operation of the project. Long-term operational noise could result from increased traffic volumes as well as potential on-site noise intensive activities (e.g., restaurants, open space plaza, and commercial shops). Finally, operational noise could also result from mechanical equipment associated with restaurant activities and other building operations. Therefore, an analysis of the potential for these sources of noise to result in significant impacts associated with the exposure of persons to or generation of noise levels in excess of established standards is required.

b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

Potentially Significant Impact. Due to the proximity of sensitive receptors from such construction activities, an analysis of the potential impacts associated with groundborne vibration and groundborne noise is required. With regard to project operation, the project would not include the use of equipment that would expose persons to excessive groundborne vibration or noise levels. This issue would require further analysis.

c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact. Refer to Response 4.11(a) above.

d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Potentially Significant Impact. Construction related activities and equipment used during the project's construction phase could result in a temporary or periodic increase in ambient noise levels above existing levels. During the operational phase, stationary equipment could also result in temporary or periodic increase in ambient noise levels. Therefore, further analysis of the potential impacts associated with temporary or periodic increases in ambient noise levels is required.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive nose levels?*

No Impact. The project site is not located within an airport land use plan area or within two miles of a public airport or public-use airport. The Mammoth Yosemite Airport is located approximately 6.7 miles southeast from the project site. Areas exposed to aircraft noise of CNEL 65 and higher remain within the airfield boundary of the Airport on either Airport property or vacant land controlled by the Airport through leases or use permits. Therefore, no further analysis of this issue is required.

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

No Impact. The project is not located in the vicinity of a private airstrip. Therefore, the proposed project would not expose people to excessive noise levels associated with the operation of a private airstrip, and no further analysis of this issue is necessary.

4.12 POPULATION AND HOUSING. *Would the project:*

a) *Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

Less Than Significant Impact. The State of California and the *1987 General Plan* require the development of a balanced residential environment with provision of suitable housing for all people regardless of age, race, status or income. The Condominium Hotel units that would be developed as part of the Clearwater Specific Plan would establish rent and/or sales prices based on Town requirements in force at the time of project approval. Depending on developments during the entitlement process, there may be a mixture of rental and for-sale units. As a transient population would utilize a majority of the Condominium Hotel units, it is not anticipated that they would result in a substantial increase in the permanent population.

The proposed project would provide housing for the employees generated by the proposed development. Based upon the Town guidelines, the project is anticipated to require 163 full time employees.[8] The developer would be required to provide on-site employee housing as set forth in the Town's Housing Development Mitigation Plan. As a component of the project's housing mitigation plan, 43 work-force housing units of three bedrooms would be developed on-site. The work force housing units would be constructed contemporaneously with the Condominium Hotel project. Construction would commence immediately upon receipt of all required project entitlements. Certificates of occupancy for the work force housing units will be obtained before a simultaneously certificates of occupancy for the Condominium Hotel units. Therefore, no further analysis of this issue is required.

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

Less Than Significant Impact. The project site is currently developed with a hotel, two restaurants (one of which is vacant), and a surface parking lot. Development of the proposed project would displace three existing residences. These are currently utilized as employee housing for the Sierra Nevada Inn, and are occupied by the maintenance supervisor, shift manager, and relief manager. However, it should be noted that these three current occupants would have the first option to move into the work-force housing complex. Therefore, no further analysis of this issue is required.

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

No Impact. Refer to Response 4.12(b).

4.13 PUBLIC SERVICES.

a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

1) Fire protection?

Less Than Significant Impact. The Mammoth Lakes Fire Protection District (MLFPD) provides fire protection and emergency response to the project site. The MLFPD service area includes approximately 3,000 acres of mountain resort area in and around the Town and over 2,500 acres within the Town. The MLFPD currently responds to calls for service from two fire stations. Fire Station No.1, the primary station, is located at 3150 Main Street and is in the process of being replaced with a larger, more updated facility. This facility is located approximately 1/3 mile north of the project site. Fire Station No.2 is located at 1574 Old Mammoth Road and contains housing facilities for full-time employees. This facility is located approximately 1.3 miles southwest of the project site.

[8] Based upon a formula of 0.000675 full time employees per 1,000 square feet of lodging and 0.00042 full-time employees per 1,000 square feet of commercial uses.

Fire ratings range from one to ten, with one representing the best rating. The Town currently has a fire rating of three, as a result of the recent Insurance Service evaluation conducted within the Town.[9] The project could result in an increase in the quantity of emergency calls received by the MLFPD due to the increase in activity and use in the area. The project would comply with the applicable provisions as set forth in the Town Municipal Code (MLMC). In addition, the Town currently collects between $648.00 and $1,349.00 per unit of new development and between $1.79/sq. ft. and $0.86/sq. ft. for non-residential uses, which is used to fund the required fire suppression equipment. While the project could result in an increase in calls, the project would not result in development that is unique in the area. The project would be subject to review by the MLFPD to ensure that the project complies with fire requirements. Therefore, further analysis of potential impacts associated with fire protection is not required.

2) Police protection?

Less Than Significant Impact. Police protection and law enforcement in the Town of Mammoth Lakes are provided by the Mammoth Lakes Police Department (MLPD), the Mono County Sheriff's Department (MCSD), and the California Highway Patrol (CHP). The MLPD provides all non-traffic related services for the project area. Criminal investigation calls, the primary job function of the MLPD, increase during the peak visitor months. MLPD is responsible for all traffic related offences within the Town except for along State Route 203 where CHP also provides traffic related services. The MLPD staff is currently comprised of 20 sworn officers, two non-sworn investigators and one Animal Control officer, all of whom operate out of the leased facility on Old Mammoth Road. Typically, two to four sworn officers are on duty at any one time. Dispatches for both the MLPD and MCSD are routed by Mono County.

The increase in visitors resulting from implementation of the project could result in a greater volume of emergency calls for police services and could potentially impact police protection and law enforcement services and facilities. The MLPD's goal is to provide a sworn officer to resident ratio of 0.8 to 1,000 for permanent residents and fractional ownership units, 1.6 to 1,000 for seasonal residents, 0.4 to 1,000 for second home residents and visitors.[10] As indicated in Section 2.2 (Project Characteristics) the project would consist of a Condominium Hotel with associated restaurants and commercial uses. The project would result in a demand for police services. The Condominium Hotel portion of project would provide 480 rooms in 339 units (which are assumed to be utilized by second home residents and visitors) and 43 work force housing units (which are assumed to be utilized by permanent residents). Based upon these assumptions, the project would generate a demand for 0.63 officers.[11] The Town currently collects between $473.00 and $788.00 per residential unit and between $0.78/sq. ft. and $0.14/sq. ft. for non-residential uses. The development impact fees would serve to mitigate potential impacts to police services. Therefore, no further analysis of potential impacts associated with police protection is required.

[9] Town of Mammoth Lakes, *Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update*, 2005.

[10] Ibid.

[11] The hotel/fractional condominium units would generate the following demand: 339 units with 4 persons/unit = 1,356 persons x 0.4/1,000 = 0.5424 + 43 work-force units with 2.4 persons/unit = 103.2 persons x 0.8/1,000 = 0.08256. The total demand under this scenario would be 0.6250 officers.

3) Schools?

Less Than Significant Impact. The Town is located within the jurisdiction of the Mammoth Unified School District (MUSD). The MUSD provides education to students in grades kindergarten (K) through grade 12 with facilities that include Mammoth High School, Mammoth Middle School, Mammoth Elementary School, Sierra High School, and the Mammoth Olympic Academy for Academic Excellence. The total current enrollment in MUSD schools is approximately 1,191 students in grades K through 12, slightly below the current estimated capacity of 1,290 students.[12] The current capacity is based on the highest number of students accommodated in a school year by the MUSD. In addition, MUSD is currently completing a land trade with the U.S. Forest Service for approximately 11 acres of land that could be used for expansion of an existing facility. The MUSD currently maintains an average pupil to teacher ratio throughout the District of 20 to one. The average per pupil spending throughout the District is approximately $7,425 per student per year, including approximately $1,400 per student in federal and state aid for categorical, special education, and support programs. Development of the project would result in an increase in employees, which would result in an indirect demand for additional housing. The additional housing could generate additional students within the MUSD service area.

Senate Bill 50 (SB 50), enacted in 1998, is a program for funding school facilities largely based on matching funds. SB 50 allows the MUSD to levy a fee, charge, dedication, or other requirement against any development project within its boundaries, for the purpose of funding the construction or reconstruction of school facilities. The current fees as of 2005 collected by the Town on behalf of MUSD are $2.24/sf for residential and $0.34/sf for nonresidential.[13] The payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to levels that are less than significant (Government Code Section 65995). Therefore, no further analysis of potential impacts associated with schools is required.

4) Parks?

Less Than Significant Impact. The Mammoth Mountain Ski Area is one of the nation's leading ski resorts, with 1.3 million skier visits annually.[14] The project would include on-site active and passive recreational opportunities, including a pool, spas, fitness centers, and landscaped open spaces. With regard to local parks, the Town provides public recreation facilities for use by the general public. The existing park areas, which are owned and operated by the Town, equal approximately 18 acres. In addition, there are four acres at Mammoth Creek Park and 12.5 acres at Shady Rest Park that are not owned, but are operated by the Town under a Special Use Permit from the U.S. Forest Service. Whitmore Park, which is 18.66 acres, is operated jointly by the Town and Mono County on land leased from the Los Angeles Department of Water and Power. In total, there are over 53 acres of park and recreation land currently developed. The project would generate employees, which could increase the Town population. However, the

[12] Town of Mammoth Lakes, *Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update*, 2005.

[13] Ibid.

[14] Ibid.

existing park areas would not be significantly impacted from employee growth due to the recreational opportunities available in the area. Therefore, no further analysis is required.

5) Other public facilities?

Less Than Significant Impact. Other public services potentially impacted include public libraries, hospitals/healthcare, and public roadway maintenance. Additional discussions of roadway impacts are provided in Response 4.15 (Transportation/Traffic). The Mammoth Lakes Branch Library, located at 960 Forest Trail, serves the Town and surrounding communities. The library is a branch of the Mono County Library and is operated in conjunction with the Mono County Office of Education under the direction of the Mono County Superintendent of Schools. The latest remodel occurred in 1996 and expanded the building to approximately 4,700 square feet. The current structure cannot be expanded further and there is no adjacent land for a new building. The library is currently at capacity with no shelf space for new materials.[15] A second library facility was opened in August 2004 in the Crowley Lakes community. Known as the Crowley Library at Hilton Creek, the library facility was not designed to expand or replace the Mammoth Lakes Branch Library. A parcel of land has been purchased to accommodate a new library. It is anticipated that construction of the new library could begin as early as spring of 2006. Development associated with the project would result in an increase in transient population and a potential increase in demand for library services due to an indirect demand for new housing. However, the Town currently collects between $448.00 and $2,593.00 per residential unit to mitigate potential impacts to libraries.[16] Therefore, no further analysis of potential impacts associated with library capacity is required.

4.14 RECREATION.

a) *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

Less Than Significant Impact. Refer to Response 4.13(a)(4).

b) *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Less Than Significant Impact. Refer to Response 4.13(a)(4).

4.15 TRANSPORTATION/TRAFFIC. *Would the project:*

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

[15] Ibid.

[16] Ibid.

Potentially Significant Impact. Implementation of the proposed project would increase vehicular movement in the project vicinity. The proposed increase of residential uses to the area would result in increased traffic volumes to existing roadways. Therefore, a Traffic Impact Analysis (TIA) is required. Project-generated traffic volumes will be based on the amount and type of land uses proposed by the project. Project-generated traffic will be compared to traffic generation associated with existing facility at the site. The analysis of traffic impacts will identify key intersections, quantify existing and future traffic conditions at those locations, identify impacts caused by the addition of project-generated traffic, and identify mitigation measures to reduce any potentially significant impacts generated by the project, as appropriate and where feasible. Consistent with traffic studies that have been prepared for the Town in the past, the traffic study will be primarily based upon typical winter Saturday p.m. peak-hour traffic volumes. Further analysis to assess the impact on traffic and circulation in the area is required.

b) *Exceed, either individually or cumulatively, a level of service standard established by the Town for designated roads or highways?*

Potentially Significant Impact. Refer to Response 4.15(a). Given the proposed mix of uses and the proposed increase in intensity of development at the site, the project could result in potentially significant impacts associated with a substantial increase in traffic or an exceedance of level of service standards. Therefore, project implementation could individually or cumulatively affect the LOS standard established by the Town for specific roads or highways. The traffic study will be required to analyze project and cumulative conditions.

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

No Impact. As discussed previously, the closest airport to the project site is the Mammoth Yosemite Airport, which is located approximately 6.7 miles southeast of the project site. The project site is not located within the planning boundary of the Mammoth Yosemite Airport. The project does not propose any uses that would increase the frequency of air traffic or alter air traffic patterns. As such, safety risks associated with a change in air traffic patterns would not occur and no further analysis of this issue is necessary.

d) *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. There are no existing hazardous design features such as sharp curves or dangerous intersections on-site. Project implementation would not involve the construction of new roadways. Access to the project site would be required to comply with all Town design standards, which would reduce potential impacts to a less than significant level.

e) *Result in inadequate emergency access?*

Potentially Significant Impact Unless Mitigated. The project would be required to comply with applicable Town of Mammoth Lakes Fire Department codes for emergency vehicle access. In addition, the project may not impede emergency access for adjacent

or surrounding properties during construction or operation. Bollards would be removable to allow access to emergency vehicles. Thus, the project would result in a less than significant impact with respect to emergency access and no further analysis of this issue is necessary.

f) *Results in inadequate parking capacity?*

Potentially Significant Impact. The proposed project includes a subterranean parking structure to provide parking for residential and commercial uses. The project design includes 705 subterranean and 35 surface parking spaces, for a total of 740 spaces. Given that shared parking is anticipated due to the integration of uses, further analysis is required.

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

No Impact. Transit services during the ski season are operated by the Mammoth Mountain Ski Area (MMSA). The closest lines to the project site are the Green Line and Red Line. The Red Line generally runs along Old Mammoth Road to SR-203. The Green Line generally runs along Sierra Nevada Road, Minaret Road, and SR-203.

During the summer months, the Town of Mammoth Lakes operates a transit service, with the closest stop to the project site being located at the corner of Tavern Road and Old Mammoth Road. The Town also operates a free trolley during the summer that follows the same route as the Red Line. The project would include a bus drop-off area along Old Mammoth Road. The project would be designed to encourage guests to utilize existing shuttle services. The Condominium Hotel may operate a separate shuttle service to the ski area, the airport, the golf courses, and elsewhere in Town, in addition to a taxi-call service/concierge. As such, the project would result in a less than significant impact with respect to alternative transportation and no further analysis of this issue is necessary.

4.16 UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

Less Than Significant Impact. The Mammoth Community Water District (MCWD) owns, operates and maintains the wastewater collection and treatment systems for the Town, including pump stations and over 35 miles of sewer mains and interceptors.[17] The wastewater treatment facility for the Town provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through utilization of chlorine. The existing wastewater treatment facility is designed to provide treatment for peak daily flows of 3.0 million gallons per day (mgd) and the current average daily flow is 1.4 mgd with a peak daily flow of 2.4 mgd. An expansion of the wastewater treatment plant was completed in March 2006, which increased the design capacity of the

[17] Ibid.

treatment facility to 4.9 mgd.[18] Thus, it is not anticipated that the proposed project would not exceed the MCWD wastewater treatment requirements.

b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Less Than Significant Impact. Refer to Response 4.16(a).

c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Potentially Significant Impact. The proposed project, which would replace the existing on-site facilities with a Condominium Hotel and associated restaurant and retail uses, would result in an increase of wastewater generated at the site. The incremental quantity of wastewater generated by the proposed project will be estimated and compared with available treatment capacity. Further analysis is required to assess the capacity of the water and wastewater infrastructure located along Old Mammoth Road. The analysis will include a discussion of the wastewater infrastructure plan and improvements proposed as part of the project to adequately serve the wastewater needs of the project site.

d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Potentially Significant Impact. The Mammoth Community Water District (MCWD) is the water supplier (public water system) for the Town of Mammoth Lakes. The project would result in an increase in the level of development and intensity of uses at the site. Therefore, the project would generate an increase in the demand for water as compared with existing conditions. Further analysis with regard to water demand from the project will be included in the Draft EIR.

e) *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Less Than Significant Impact. Refer to Response 4.16(a).

f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Less Than Significant Impact. Solid waste disposal service for the Town of Mammoth Lakes is currently contracted to Mammoth Disposal Incorporated. Solid waste is disposed at the Benton Crossing Landfill, which is located within Mono County. The landfill has a remaining capacity of 1.7 million cubic yards of compacted waste and is anticipated to have the capacity to accommodate the Town's waste generation and

[18] Telephone conversation with Gary Sisson, General Manager, Mammoth Community Water District, June 19, 2006.

disposal needs for the next 20 years. In addition, the Town has an option for five years at the Pumice Valley Landfill.[19] With the existing capacity in the Benton Crossing Landfill as well as the option for disposal for five years at the Pumice Valley Landfill, there is adequate landfill capacity for the project population.

While the project would generate an increase in the amount of solid waste disposed of at the landfill, the project would not result in the need to construct a new landfill or expand existing facilities to accommodate the project's solid waste disposal needs due to recycling efforts. An organized recycling program would be implemented throughout the proposed facility to include the collection and redemption of California Redemption Value (CRV) plastic, glass, and aluminum. Permanent recycling bays would be built into public food service areas for guest use, as well as public indoor and outdoor containers to be sited alongside trash containers, including portable containers for events. Back of house collection containers would also be sited in areas generating recyclables, including staff break rooms, offices and food service. Mixed paper and cardboard would also be collected where generated, including offices, food service and retail locations. All CRV materials, mixed paper and cardboard would be taken to Mammoth Disposal's recycling facility for regular redemption by staff or contracted recycling service provider. Maintenance areas would also have programs and containers for collecting and properly disposing of universal and hazardous wastes, such as used batteries, fluorescent lamps, motor fluids, unused cleaning and landscaping supplies, and painting materials. With the proposed recycling, the project would not generate an increase in the amount of solid waste disposed of at the landfill, such that the project would result in the need to construct a new landfill or expand existing facilities. Therefore, no additional analysis is required.

g) *Comply with federal, state and local statutes and regulations related to solid waste?*

Less Than Significant Impact. The project must comply with adopted programs and regulations pertaining to solid waste. Refer also to Response 4.16(f).

4.17 MANDATORY FINDINGS OF SIGNIFICANCE.

a) *Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

Less Than Significant Impact. Based on the analysis contained in this Initial Study, the project would not have a significant impact to biological or cultural/paleontological resources. A less than significant impact would result.

[19] Town of Mammoth Lakes, *Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update*, 2005.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Potentially Significant Impact. A review of cumulative impacts for each issue area that has been identified as potentially significant is required pursuant to Section 15130 of CEQA. Therefore, the potential for cumulative impacts related to aesthetics, air quality, land use, noise, transportation/traffic, and utilities resulting from the project in conjunction with related projects will be require further analysis.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Potentially Significant Impact. Based on the above discussion, construction and operation of the proposed project could potentially result in environmental impacts, which may cause adverse effects on human beings, either directly or indirectly. Further evaluation of potential impacts associated with environmental effects on human beings, including impacts related to aesthetics, air quality, land use, noise, transportation, and utilities will be required.

15.2 Notice of Preparation Responses

Clearwater Specific Plan EIR
NOP Comments
Updated August 15, 2006

Commenter	Date	Topic	Comment
Agencies			
Dave Singleton, Program Analyst Native American Heritage Commission 915 Capitol Mall, Room 364 Sacramento, CA 95814	7/18/06	Cultural Resources	• Contact the California Historic Resources Center for a record search • Contact the Native American Heritage Commission for a Scared Lands File • Plan provisions for accidental resource discovery. *See Attachment B for Native American Contacts
Gayle J. Rosander, IGR/CEQA Coordinator Caltrans	7/13/06	Traffic Parking	• Traffic analysis needs to address SR-203, especially at Old Mammoth Road. • Concerned about the increase in pedestrian traffic, particularly along Main Street where the pedestrian path is not continuous. • Suggests fair share fees for pedestrian facilities as mitigation • Need to address parking impacts
Ericka Hegeman Pubic Affairs and Environmental Specialist Mammoth Community Water District	7/20/06	Utilities/Service Systems	• Project does not require an SB610 Assessment • Project's additional water demand was not analyzed in the 2005 Urban Water Management Plan. • Request consultation with District staff on the preparation of a water and wastewater demand analysis.
Judy Keir – Env. Scientist California Regional Water Quality Control Board – Lahontan Region	7/31/06	Hydrology/Drainage Utilities/Service Systems	• Construction – describe material to be demolished, where it will be hauled to, and whether dewatering will occur, and how water will be managed throughout construction • EIR needs to provide a comparison between existing and post development hydrologic conditions • Need to cite the applicable provisions of the Water Quality Control Plan for the Lahontan Region • Need to address the ways the site will retain stormwater flows on-site • Integrate the "Low Impact Development" principals into site design (i.e., maintain natural drainage paths, reduce impervious surfaces, manage runoff as close to source as possible, use vegetated areas for stormwater management) • Address BMPs during construction and for post-development • Need to address impacts on exiting water and wastewater systems
Local Groups			
Ron Fausset, President Sierra Manors HOA	7/22/06	Population Utilities/Service Systems	• Population increase, should reduce project density; needs more study on timeshare occupancy • Service systems – snow removal and storage

Stan Kolodzi, President Sierra Park Villas HOA	7/12/06	Aesthetics Air Quality Hydrology/Water Quality Traffic Utilities/Service Systems	• Aesthetics – reduce building heights and overall mass; compatibility with adjacent uses; aesthetic impact of associated traffic; consistency with pedestrian plans for the area; architectural design and building materials; lighting impacts • Project needs to evaluate the pedestrian overlay zone for Old Mammoth Road • Project density needs to be reduced to be compatible with surrounding uses • Air Quality – construction activity, grading activity mitigation • Hydrology & Water Quality – storm drainage (existing drainage along Old Mammoth Road and Sierra Nevada Road is deficient) • Traffic – LOS along Old Mammoth Road, Sierra Nevada, and Laurel Mountain; winter Saturday impacts 8 a.m. through 6 p.m.; Sierra Park Villas property line, traffic and parking. Traffic needs to analyze all intersections on Old Mammoth Road from the 203 to Mammoth Creek Park. • Need to address impacts upon Town's shuttle system. • Property line for Sierra Park Villas extends 20 feet beyond the grass. This needs to be reflected in the traffic and parking analyses. • Utilities and Service Systems – Existing site is used as snow storage. The issue of snow removal and storage needs to be addressed.
Mike Ponck, Board President of Mountain Shadows HOA PO Box 265 Mammoth Lakes, CA 93546 (661) 447-4306	8/11/06	Aesthetics Traffic	• Aesthetics – concerned with tree removal, complex height and size, and Dark Sky Ordinance • Traffic – traffic congestion, shuttle service not sufficient, parking issues • Concerned with the fast paced planning process of the project
John Walter Chair, Advocates for Mammoth	8/11/06	Traffic Air Quality Cultural Resources Hazards Water Quality Land Use Population Utilities/Service Systems	• Traffic – hazards from turn-ins, pedestrian safety • Air Quality – air quality degradation from vehicular traffic • Cultural Resources - massive excavation should require monitoring program, special training for workers, and an action program for work stoppage and resource preservation should remains/artifacts be found • Hazards – removal of buildings, should be plans for cleanups and disposal of materials • Water Quality – should require treatment of wastewater, stormwater runoff • Land Use – relationship of Specific Plan to General Plan, project will divide community, too high of density • Population – induce population growth • Utilities/Service Systems – system capabilities (contaminated runoff)
Public			
Cara Isaac P.O. Box 7172 Mammoth Lakes, CA 93546 (760) 934-0213	7/24/06	Traffic Aesthetics Public Services Utilities/Service	• Traffic – for pedestrians, school children, parking, cars, delivery truck access • View/Aesthetics – if taller features are aesthetic, need redesign • Weather – storm drainage, snow storage/removal • Garbage – concern with odor, volume, animals infestation

		Systems	• Security – concern with crime as a result of an increased population and new uses (bars)
Shawn Wilders (760) 914-7000	7/24/06	Traffic	• Concerned with public safety during peak winter and holiday traffic periods, especially children traveling by bike or foot to school.
Peyo Michaels, AIA SPV owner & Board member	7/24/06	Traffic	• Traffic – residents at Sierra Park Villas Condominiums will not be able to park along Sierra Nevada Road, it will become a regular circulation path for the cars parked underground; also the project would conflict with sidewalk improvement plans for Old Mammoth Road. • Mitigation – limit density/parking to same density existing today; take access off of Laurel Mountain Road with the primary driveways *See attachments A-1 and A-2
Joel Fadem Timberline owner	7/24/06	Aesthetics Traffic	• Traffic – increased congestion along Laurel, Azimuth, Old Mammoth Road, and Sierra Nevada Road • Aesthetics – scale, elimination of sunlight, not consistent with Dark Sky Ordinance • Elimination of mature trees • Project should not exceed three stories
Marcie Pettigrew Mountain Shadows – F13 Sierra Nevada Rd., Mammoth Lakes, CA (760) 924-5883	7/24/06	Aesthetics Population Traffic	• Aesthetics – building heights, compatibility with surrounding uses; concerns regarding increased lighting, project is not consistent with the Town's Dark Sky Ordinance • Increase in population, most dense project of Mammoth • Traffic – underground parking lot on Sierra Nevada Road will increase traffic along Sierra Nevada Road and can an unsafe condition for pedestrians
Bill MacBride, Homeowner	7/19/06	Aesthetics Traffic	• Aesthetics – size, compatibility, blocked views, lighting, not consistent with Dark Sky Ordinance • Traffic – concern with additional peak a.m. and p.m. hours, increase in congestion at Old Mammoth Road and Sierra Nevada Road • Biology – concern with tree removal
Margaret Clevenger, Sierra Park Villas Resident (760) 934-9744	7/18/06	Traffic	• Concern over parking situation along Sierra Nevada Road • Increase in traffic will make it hard to back out • Increased congestion at Old Mammoth Road and Sierra Nevada Road may necessitate a signal and pedestrian crossing *See Attachment C
David Mordaunt 2621 Grant Avenue, #C Redondo Beach, CA 90278 (310) 372-2312	7/18/06	Aesthetics Traffic	• Aesthetics – building heights, compatibility; lighting, Dark Sky ordinance violation • Traffic – infrastructure inadequate to support increase in traffic; congestion on Sierra Nevada Road and Laurel; project may need more parking
Hassan A. Mohaggegh 3305 Monterey Road San Marino, CA 91108 (626) 578-0260	7/12/06	Aesthetics Traffic	• Aesthetics – building mass and heights; lighting • Traffic – project will increase traffic volumes • Concerned about the tree removal

Bart and Mary Huffman Timberline Unit #31	7/21/06	Aesthetics Traffic	• Aesthetics – building mass and heights; lighting • Traffic – project will increase traffic volumes • Concerned about the tree removal
Roger Patrick, Homeowner Timberline Unit #26	7/21/06	Aesthetics Traffic	• Aesthetics – building mass and heights; lighting • Traffic – project will increase traffic volumes • Concerned about the tree removal
Jonathan Rawitz	7/22/06	Aesthetics Noise	• Concerned about the projects height, noise, pollution, and density
Gracie Garcia, Mammoth Lakes Property Owner	7/24/06	Aesthetics Traffic	• Aesthetics – lighting, building height concerns, shadows, Dark Sky Ordinance • Concerned about the tree removal • Traffic – significant increase that existing roads cannot accommodate (i.e., Azimuth and Laurel)
Sally Gessford, Public Arts Commissioner P.O. Box 2056 Mammoth Lakes, CA 93546 (760) 924-2628	7/24/06	Aesthetics	• Aesthetics – building heights • Tree removal concern • Service systems – snow removal and storage
Gail Heck 2005 Hawthorne Terrace, Unit 11 Novato, CA 94945	7/28/06	Aesthetics	• Concern with building heights, tree removal, and lighting
Ronald M. Takehara Takehara & Stuart, LLP 100 Wilshire Blvd, Ste 1755 Santa Monica, Ca 90401 (resident of 20 Timberline)	8/1/06	Aesthetics Traffic	• Concerned about the project's density, height, and compatibility with surrounding uses • Wants impacts on shuttle system analyzed
Owen Maloy	8/1/06	Land Use Utilities/Service Systems	• Concerned about the projects consistency with General Plan and Municipal Code • Indicates that the Specific Plan does not meet the legal requirements • Suggests that the Project needs an SB 221 assessment for water demand
John Brabson 2290 Sierra Nevada Road Mammoth Lakes, CA Timberline Unit #50 owner	8/1/06	Aesthetics Traffic	• Aesthetics – concern with height of proposed structures, up-lighting (not consistent with Dark Sky Ordinance), and future property values • Traffic – worried about increase of traffic on Sierra Nevada Road
Kathryn Knott Faris 165 Old Mammoth Rd. #137 Mammoth Lakes, CA 93546 (310) 470-2522	8/9/06	Aesthetics Traffic	• Aesthetics – height, density, "uplighting" of buildings • Traffic – increase in traffic, not enough parking as is, safety issues • Concerned with possible vacancies with the large amount of proposed housing and retail • Thinks project has been rushed, wants more discussion and time for review
Robert Provost Sierra Manors, Unit #7	8/11/06	Traffic Noise	• Traffic – traffic congestion on Old Mammoth Road, parking issues at Sierra Manors, pedestrian safety, emergency access, alternate routes through town

POB 7786 Mammoth Lakes, CA 93546		Aesthetics Utilities/Service Systems	• Noise – traffic noise, disruptive activities due to night clubs, and snow removal • Aesthetics – height of structures, set backs, Dark Sky Ordinance, and views • Utilities/Service Systems – increase in demand for police/fireman, medical aid, waste management, water, drainage systems, snow removal, and power • Unrestricted and irresponsible growth, property values
The Meador Family 2289 Sierra Nevada Road Mammoth Lakes, CA 93546	8/2/06	Aesthetics	• Building height, ambience
Scott Coltrane 2288 Sierra Nevada Road Mammoth Lakes, CA 93546 A-16 Mountain Shadows (760) 924-7156	8/11/06	Aesthetics Traffic Housing	• Aesthetics – scale of project, views, design, tree removal • Traffic – project will impact local streets • Housing – needs to include multiple income levels and types of housing, inclusionary zoning
Wendy Wheeler 106 Sweetwood Court Riverside, CA 92506	8/11/06	Aesthetics Traffic	• Aesthetics – architectural design, scale of project, should keep trees, should be low man-made skylines, preserve ambiance • Traffic – inlets/outlets of parking garage
John Wilson, Sierra Manors Manager Sierra Manors, Unit 61 PO Box 615 Mammoth Lakes, CA 93546 (760) 934-2870	8/11/06	Traffic Utilities/Service Systems	• Traffic – already congested, safety issues; project should be smaller than proposed • Service Systems – snow removal issues, traffic restricts the loader access • Bar on Old Mammoth Road would be a huge mistake
Jane Kenyon PO Box 814 Mammoth Lakes, CA 93546 (760) 934-0372	8/15/06	Biology	• Concerned with preserving the forest ecosystem, conifer habitat trees, biodiversity of wild birds, and native plants • Wants the project to be compatible with the unique resources of the Town
Phillip Presser	8/11/06	Biology Aesthetics	• Biology – study should cover the project's effect on existing/proposed wildlife corridors • Aesthetics – include analysis on visual impacts of the Knolls
Sandy Hogan Mammoth Lakes resident	8/18/06	Traffic	• Traffic – would like to see design for reduced auto dependence, less parking, encourages a round-a-bout on Old Mammoth Road/Sierra Nevada Road • Supports a "village" experience – mixed use, pedestrian friendly environment • Would like to see uses such as a supermarket, mini-malls, public open space, snowmelt

STATE OF CALIFORNIA — Arnold Schwarzenegger, *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

RECEIVED
JUL 18 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

July 13, 2006

Ms. Pam Kobylarz
City of Mammoth Lakes
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

Re: SCH# 2006062154; Clearwater Specific Plan NOP for Environmental Impact Report (EIR); Mixed Use Development

Dear Ms. Kobylarz::

Thank you for the opportunity to comment on the above-referenced document. The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the area of project effect (APE), and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS). The record search will determine:

- If a part or the entire APE) has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ Contact the Native American Heritage Commission (NAHC) for:

* A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity who may have information on cultural resources in or near the APE. Please provide us site identification as follows: USGS 7.5-minute quadrangle citation with name, township, range and section. This will assist us with the SLF.

- Also, we recommend that you contact the Native American contacts on the attached list to get their input on potential project impact.

√ Lack of surface evidence of archeological resources does not preclude their subsurface existence.

- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse
Attachment: List of Native American Contacts

Native American Contacts
Mono County
July 13, 2006

Benton Paiute Reservation
Joseph C. Saulque, Chairperson
Star Route 4, Box 56-A
Benton , CA 93512
numic@qnet.com
(760) 933-2321

(760)933-2412

Paiute

Bridgeport Paiute Indian Colony
Charlotte Baker, Chairperson
P.O. Box 37
Bridgeport , CA 93517
bic@gnet.com
(760) 932-7083

(760) 932-7846 Fax

Paiute

Mono Lake Indian Community
Ronald Balncey, Chairperson
P.O. Box 237
Lee Vining , CA 93451

Mono
Northern Pauite

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH 2006062154; Clearwater Specific Plan EIR; Momoth Lakes, California 93546.

DEPARTMENT OF TRANSPORTATION
District 9
500 South Main Street
Bishop, CA 93514
PHONE (760) 872-0785
FAX (760) 872-0754
TTY (760) 872-9043

RECEIVED
JUL 17 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

Flex your power!
Be energy efficient!

July 13, 2006

Ms. Pam Kobylarz
Assistant Planner
Mammoth Lakes Community Development Department
P.O. Box 1609
Mammoth Lakes, California 93546

File: 09-MNO
NOP
SCH #: 2006062154

Dear Ms. Kobylarz:

Clearwater Specific Plan Notice of Preparation (NOP) of an Environmental Impact Report (July 2006)

Thank you for giving the California Department of Transportation (Caltrans) the opportunity to comment during the NOP phase for the Clearwater Specific Plan along Old Mammoth Road that has proposed uses of hotel, condominium, commercial, retail and workforce housing.

We have the following comments to offer:

- Ensure the Traffic Analysis addresses impacts to State Route 203 (Main Street) - especially at its intersection with Old Mammoth Road, and includes motorized, bicycle and pedestrian transportation modes. Any development in the area could increase pedestrian traffic along Main Street where the pedestrian path is not continuous on the north side between Old Mammoth and Laurel Mountain Roads. Fair share fees for pedestrian facilities could be an appropriate mitigation.

- Although not directly affecting the State highway, a thorough analysis of project parking needs should also be made.

Please forward pertinent information on this proposed Specific Plan. We value a cooperative working relationship with the Town of Mammoth Lakes in transportation matters. You may contact me at (760) 872-0785 with any questions.

Sincerely,

Gayle J. Rosander

GAYLE J. ROSANDER
IGR/CEQA Coordinator

c: State Clearinghouse
Terry Gess, Caltrans

Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546
(760) 934-2596; fax (760) 934-4080

RECEIVED
JUL 24 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

July 20, 2006

Pan Kobylarz
Assistant Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Re: Notice of Preparation of a Draft Environmental Impact Report for the Clearwater Specific Plan

Dear Ms. Kobylarz,

The District has reviewed the Initial Study for the Clearwater Specific Plan and we appreciate the opportunity to comment on the scope of the Draft EIR.

Although the District has determined that this project does not require a SB 610 Water Assessment, water and wastewater demand will increase from existing uses. This additional demand was not analyzed for in the District's 2005 Urban Water Management Plan and, thus, was not included in the Town of Mammoth Lakes October 2005 General Plan Draft EIR. The District has estimated a shortfall in water supply at buildout, as projected in the October General Plan Draft EIR in multiple dry years which would be exacerbated by this project. Therefore, the District requests an assessment of water demand from the proposed project in the EIR. The District has calculated water demand factors for various customer categories that can be made available to assist in this analysis. A similar analysis should also be conducted in the EIR for wastewater demand from the proposed project.

To assist in the analysis of increased wastewater and water demand from the project, a more detailed explanation of the type (condominium, apartment, hotel etc.) and number of existing residential units compared the type and number of planned future residential units is

requested. Such information will support the preparation of the water and wastewater analysis. While the District is not required to prepare a water assessment for this project, the District is happy to provide any assistance that may be necessary to determine water and wastewater demands.

While the Notice of Preparation correctly states on page 45 that the existing capacity of the wastewater treatment plant is 4.9 mgd, the District has been investigating several locations in the sewer collection system that will require capacity upgrades to meet planned development in Town. The increased wastewater demand from the proposed project must be determined and then the District can evaluate sewer collection lines that may be impacted by the project.

Thank you again for the opportunity to comment on this document. Please feel free to contact the District if you have any questions.

Sincerely,



Ericka Hegeman
Public Affairs and Environmental Specialist
Mammoth Community Water District

California Regional Water Quality Control Board
Lahontan Region

Linda S. Adams
Secretary for Environmental Protection

Victorville Office
14440 Civic Drive, Suite 200, Victorville, California 92392
(760) 241-6583 • Fax (760) 241-7308
http://www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger
Governor

July 31, 2006

File: Mono County

Ms. Pam Kobylarz, Assistant Planner
Town of Mammoth Lakes
Community Development
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546
FAX (760) 934-8608

COMMENTS ON THE NOTICE OF PREPARATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CLEARWATER SPECIFIC PLAN, WHICH INVOLVES A TWO-PHASED CONDOMINIUM/HOTEL DEVELOPMENT CONSISTING OF 339 UNITS, WITH 480 SLEEPING ROOMS AND APPROXIMATELY 28,200 SQUARE FEET OF COMMERCIAL/RETAIL USES, IN ADDITION TO 43 THREE-BEDROOM WORKFORCE-HOUSING UNITS AND A PARKING CONFIGURATION OF 705 SUBTERRANEAN AND 35 SURFACE PARKING SPACES FOR A TOTAL OF 740 SPACES, LOCATED ON 6.09 ACRES ADJACENT TO OLD MAMMOTH ROAD AND SURROUNDED ON THE REMAINING THREE SIDES BY SIERRA NEVADA ROAD, LAUREL MOUNTAIN ROAD, AND KRYSTAL VILLA EAST CONDOMINIUMS, IN THE TOWN OF MAMMOTH LAKES, SCH #2006062154

California Regional Water Quality Control Board staff (Board staff) has reviewed the Notice of Preparation (NOP) dated June 30, 2006 for the above-referenced Project proposed by the Town of Mammoth Lakes.

Project Description

The proposed Clearwater Specific Plan is comprised of three parcels located within the limits of the Town of Mammoth Lakes. The site is adjacent to Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road, Laurel Mountain Road, and the Mammoth Mall and Krystal Villa East condominiums. Project implementation would involve a mixed-use condominium hotel project, consisting of condominium hotel units, work-force housing, retail and restaurant facilities, internal courtyards, and landscape areas.

The NOP states that there is potential for impacts to hydrology and water quality, and to utilities and service systems. The NOP states that all the potential environmental impacts will be analyzed, examined, and quantified further in the Environmental Impact Report (EIR).

The NOP does not state when development is anticipated to begin.

General Comments

The mitigation measures identified in the EIR should be very specific in nature and should have adequate detail. All mitigation measures required for the project should be specifically described in the EIR. It is not sufficient to state that mitigation will be accomplished through

permits acquired and that appropriate governmental agencies will be notified. Specifically, project alternatives should be developed and areas where impacts can be avoided or minimized should be identified. Any unavoidable impacts must be mitigated. Additionally, please be sure that the EIR completely evaluates the potential cumulative impacts of the project considering other existing and potential projects.

The EIR needs to describe the type of materials to be removed in the demolition work, and where the debris will be placed. Please also address whether construction dewatering will be necessary, and how water will be managed throughout the process.

Item 4.8 Hydrology and Water Quality, pages 33-35

The EIR needs to provide information on hydrology and water quality with regard to alteration of pre-existing hydrology, including groundwater recharge, alteration of existing drainage patterns of the area in a manner which would result in substantial erosion or siltation on- or off-site or result in flooding on- or off-site, or provide substantial additional sources of polluted runoff, or otherwise substantially degrade surface or ground water quantity or quality.

The Regional Board has adopted a Water Quality Control Plan for the Lahontan Region (Basin Plan), which contains prohibitions, water quality standards, and policies for implementation of standards. The Basin Plan is available on line at the Regional Board's Internet site at http//:www.swrcb.ca.gov/rwqcb6/. Please cite and discuss applicable portions of the Basin Plan in the EIR. The Project will need to comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

The EIR for this project must specifically identify features for the post-construction period that will control stormwater on-site or prevent pollutants from non-point sources from entering and degrading surface or ground waters. The foremost method of reducing impacts to watersheds from urban development is "Low Impact Development" (LID), the goals of which are maintaining a landscape functionally equivalent to predevelopment hydrologic conditions and minimal generation of nonpoint source pollutants. LID results in less surface runoff and less pollution routed receiving waters. Principles of LID include:

- Maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge,
- Reducing the impervious cover created by development and the associated transportation network, and
- Managing runoff as close to the source as possible.

We understand that LID development practices that would maintain aquatic values could also reduce local infrastructure requirements and could benefit energy conservation, air quality, open space, and habitat. Many planning tools exist to implement the above principles, and a number of recent reports and manuals provide specific guidance regarding LID.

Please consider using vegetated areas for stormwater management and infiltration on-site, which may enhance the aesthetics of the property. These principles can be incorporated into the proposed project design. We request natural infiltration and drainage patterns be maintained to the extent feasible. Minimum-disturbance activities (such as preservation of vegetation and grade) are preferable to more structural (hard scape) control measures because they protect and preserve the natural drainage system. Natural drainage, including the use of

vegetated buffer zones, is the most effective means of filtering sediment and pollution and regulating the volume of runoff from land surfaces to adjacent streams, including washes. In addition, preservation and minimum-disturbance activities may be more cost effective than revegetation practices or structural controls, especially long-term.
Please consider designs that minimize impervious surface, such as permeable surface shoulders, directing runoff onto vegetated areas using curb cuts, etc., and infiltrating runoff as close to the source as possible.

Please identify short-term (construction) vs. long-term (post-construction) implementation of Best Management Practices (BMPs), and provide appropriate mitigation and monitoring of mitigation measures. An appropriate stormwater pollution control plan that includes provisions for winterizing the site should be developed and implemented.

Please implement appropriate control measures to retain all sediment on site and provide controls for wind erosion. Please ensure that immediate measures are taken to protect the site during winter storms and throughout the spring runoff.

Item 4.16 Utilities and Service Systems – pages 44-46

The EIR needs to evaluate and provide information on utilities and service systems with regard to wastewater treatment requirements, construction of new water or wastewater treatment facilities or expansion of existing facilities, construction of new stormwater drainage facilities, and a determination by the water and the wastewater treatment providers that serve or may serve the project, that it has adequate capacity to serve the project's expected demand in addition to the provider's existing commitments.

Thank you for the opportunity to comment on your project. If you should have any questions regarding our comments, please contact me at (760) 241-7366 or Cindi Mitton at (760) 241-7413.

Sincerely,

Judith Keir

Judith Keir
Environmental Scientist

cc: State Clearinghouse (#2006061101)

U:\Mojave\JMK\2006-06-2154 Mammoth Clearwater Specific Plan EIR.doc

Sierra Manors HOA, PO Box 615, Mammoth Lakes,CA 93546
July 22, 2006

TO: Town of Mammoth Lakes
Community Development, Planning Commission
% Ms. Pamela Kobylarz

RE: Clearwater Project. Response to NOP and Initial Study

FROM: Sierra Manors HOA

Sierra Manors condominium units are directly across the street (Old Mammoth Road) from the proposed project. Our property would be directly impacted by the Project. We have read the Initial Study and note that it identifies most of the significant impacts of the Project. We have also read the comments set forth by Sierra Park Villas HOA and concur with them. In addition to the impacts set forth in the Initial Study and the Sierra Park Villas HOA, we also wish to point out the following:

1. The proposed project would significantly increase the population density of the area. Sierra Manors has 148 units directly across the street in an area approximately the same size as the Clearwater Project which proposes 400 units, plus some commercial development. As was pointed out in the remarks of SPV HOA, this increase in density needs to be mitigated by downsizing the project.

2. This Initial Study does not find that the project would significantly induce growth, even though over 400 condo units are being planned plus commercial development. This issue needs more study in that interval type ownership (timeshares) may have a much higher occupancy rate than full ownership vacation condos, perhaps having the same impact as full time occupied residential units.

3. Our complex, as the others, has snow removal problems already. The impact on the area of the elimination of a significant snow storage area needs to be addressed.

Hopefully, our comments as well as others will be addressed in the DEIR. Please keep us informed of all notices and meetings regarding this project.

Thank you for allowing us to comment. We look forward to your response.

Sincerely,

Ron Fausset
President, Sierra Manors HOA

Sierra Manors,Johnboy@npgcable.com, 760-934-2870, P.O. Box 615, Mammoth Lakes, CA 93546

July 12, 2006

RECEIVED
JUL 24 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

TO: Town of Mammoth Lakes
Community Development, Planning Commission
% Ms. Pamela Kobylarz

RE: Clearwater Project. Response to NOP and Initial Study

FROM: Sierra Park Villas HOA

While the Initial Study has properly identified most of the significant impacts of the proposed Clearwater Project, we wish to particularly emphasize specific impacts not fully addressed, and to urge staff and decision makers to conscientiously mitigate these impacts to less than significant through the environmental review process, by requiring the applicant to revise the project and by conditioning the project adequately.

1. AESTHETICS

A. While the character of the existing site is not aesthetically pleasing, the proposed project presents some aesthetic impacts that need to be mitigated by reducing the building heights and overall mass of the project. The building heights of 65 feet plus architectural elements extending to 110 feet not only substantially exceeds Mammoth's 45 foot building height limit but presents neighboring residents with a concrete massing that significantly alters the scenic quality of this viewshed along Sierra Nevada Road and Laurel Canyon Road.

Even though proposed building heights are highest along Sierra Nevada and Laurel Canyon Roads, the scenic impacts of the excessive building heights will not be invisible from Old Mammoth Road, the gateway to our community.

The building height of the existing adjacent condo project (Sierra Park Villas) does not exceed 35 feet. Reducing the proposed building height substantially, to be consistent with neighboring projects should mitigate the impact on Old Mammoth Corridor

The source of the aesthetic impacts is the proposed excessive density of 78.8 units per acre. This density is substantially higher than surrounding properties including Sierra Park Villas, a similar condo project of 100 units fronting Old Mammoth Road and Sierra Nevada Road at 20 units per acre. The visual character of the proposed project with this density at such building heights is the most significant impact that needs to be conscientiously evaluated and seriously mitigated. An alternative design with less density and much lower building heights would have less negative visual impact and would be more compatible with existing adjacent residential uses.

B. B. Please also evaluate the aesthetic impact of the associated traffic on the character of Old Mammoth Road. As homeowners along Old Mammoth Road we just spent substantial sums for sidewalks, landscaping, and lighting to make this corridor "Pedestrian friendly." Is the density request with the resultant traffic it will generate, consistent with this vision for Old Mammoth Road? This is an aesthetic impact that must be addressed.

Community Development is currently creating a pedestrian overlay zone for Old Mammoth Road and performance zoning that would apply to Old Mammoth Road. The purpose of both plans is to enhance the aesthetics of this corridor. Is the design of this project consistent with the aesthetic goals of these regulations? Please identify this as a potential impact that needs to be evaluated. It would be a shame for a project of this magnitude to escape efforts to enhance this corridor.

C. C. There is no description of architectural design nor building materials to access the aesthetic impact on our Old Mammoth Road corridor and adjacent projects. This impact needs to be identified and evaluated with complete descriptions and drawings from the applicant.

D. D. Lighting impacts associated with the project on adjacent homeowners needs to be identified as an impact and properly mitigated.

2. AIR QUALITY

This impact is identified and addressed well by the I. S. However, as adjacent neighborhoods to the construction activity we wish to emphasize that the review process adequately mitigate grading activity and road dust from mobile emissions.

3. HYDROLOGY AND WATER QUALITY.
While most of the issues connected with this impact appear to be identified, we would particularly emphasize the need to provide adequate storm-off retention on site so as not to overload the stormdrain on Old Mammoth Road. Presently, the drainage at Old Mammoth Road and Sierra Nevada appears not to be adequate as evidenced by significant ponds during storms and road damage. This specific impact does need to be addressed in the EIR.

4. TRANSPORTATION/TRAFFIC
   A. The traffic impact analysis should clearly identify the levels of service that will exist along Old Mammoth Road intersections from 203 to Mammoth Creek Park, as well as the impact on Sierra Nevada, and Laurel Mountain Road where ingress/egress is proposed.

   B. The traffic study needs to address typical winter Saturday impacts 8AM through 6PM <u>not just PM</u> as stated in the initial study.

C. The applicant indicated they "may" operate their own shuttle. In evaluating the traffic impacts be cautious regarding any assumptions about public or private shuttles unless they are part of a condition on the project, contain a realistic schedule, and will be permanently funded.

D. Our HOA wishes to draw your attention to the fact that the property line for Sierra Park Villas extends 20 feet beyond the end of our grass into our angle parking area on Sierra Nevada Road. This should be considered in evaluating traffic on this road, parking on the applicant's side of Sierra Nevada, and the safety of ingress/egress of 200-300 cars onto Sierra Nevada with cars backing out of Sierra Park Villa spaces.

5. UTILITIES AND SERVICE SYSTEMS

There is no discussion regarding snow removal, nor especially snow storage. The parking lot of this site was used for snow storage. This represents a potentially significant impact that should be evaluated through the EIR process.

Thank you for allowing us to comment. We look forward to your response.

Sincerely,

Stan Kolodzi, President
Sierra Park Villas HOA

MOUNTAIN SHADOWS P.O. Box 265 Mammoth Lakes, CA 93546 Phone/Fax (760) 934-4993

DATE: August 11, 2006

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

FROM: Mike Ponek
Board President of Mountain Shadows, HOA
PO Box 265
Mammoth Lakes, Ca. 93546
661 477-4306

TO: Mammoth Lakes Community Development Department,

We see the Clearwater Project having potential positive impact for the community. However, the items below are issues that the Mountain Shadows Board sees as needing further resolution regarding the Clearwater Project.

- The complex height and size is excessive in a neighborhood of two-story homes. This appears to be outside or at best at the boundary of the code for the area. This specific issue will need further public address and comment.
- I'm very concerned about the traffic that will be generated by all of these housing units and businesses. We can also expect the existing shuttle service to be even more crowded. The Clearwater Plan says they "may" provide private shuttle service for their guests, but makes no promises. Traffic congestion along Sierra Nevada Road will be impacted and needs to be addressed.
- Parking is a major issue and we see Mountain Shadow being negatively impacted. This could cost us upwards of $40,000 to control parking with full time personnel.
- The entire six-acre site would be cleared of trees. The architectural drawings show large trees (taller than the buildings), but newly planted trees will obviously not grow that tall for many years. Could they not leave some existing trees along the periphery?
- Clearwater is proposing to shine floodlights into the sky to "uplight" their buildings. Does Mammoth's "Dark-Sky" ordinance apply only to smaller complexes?
- Mostly, I'm concerned about the fast pace of project planning. Interested parties in Mammoth Lakes have only received project details recently. It takes time for those parties to send the information to everyone who may be impacted by the project. Yet the public review meeting was scheduled less than a week after release of the documents. (Written comments will be accepted until August 11.) Deliberate or not, this has the effect of excluding most residents from the meeting. I was not able to attend the planning meeting due to the very short notice.

Mike Ponek
Board President, Mountain Shadows HOA

Advocates for Mammoth P.O. Box 2005 Mammoth Lakes, CA 93546

Pam Kobylarz
Assistant Planner
Town of Mammoth Lakes
Community Development
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

received
8-11-06

Dear Ms Kobylarz: Aug 11th 2006

RE Clearwater EIR

Thank you for the opportunity to comment on the scope of the EIR for the proposed Clearwater Project. The Advocates for Mammoth is a citizens organization concerned with the development process in Mammoth Lakes particularly with respect to the citizens quality of life as influenced by the adherence to the Towns' current General Plan and to the process of the General Plan Update.

The information packet mailed to us and the data presented in the scoping meeting did not provide much detail upon how the proposed Specific Plan would be worded and how it would relate to the current General Plan as required by State law. Based on the lack of detail provided and the current uncertainty on what the General Plan Update will require it would seem premature to prepare an EIR. It also seems unwise to have a specific plan for this small an area when the General Plan Update will almost certainly spell out new specific requirements and objectives for the Old Mammoth corridor. Doing the proposed Specific Plan for a 6 acre plot seems to be an end run around the General Plan Update. It certainly meets neither the requirements of the current General Plan nor the current zoning ordinances derived from the General Plan. The massive size of the proposed structures, the excessive height that at 110 feet is almost three times what would normally be allowed, the extreme high density, and the excessive lot coverage are completely out of character with the Towns' vision.. We believe that the Town should insist on complete compliance with the Current General Plan with no new specific plans until the General Plan Update process is completed.

However if you do precede with a EIR at this time we think it is essential to consider, analyze and mitigate as appropriate and required, the following features in addition to the detailed concerns raised by Mr. Walter of the Advocates for Mammoth and others at the scooping meeting:

1. A quick estimate is that about 1000 people might occupy the Clearwater Development at capacity. If half are skiing at any given time it would take about 10 buses to transport them to the various venues- far beyond the capacity of the current or proposed transportation systems. This situation needs to be analyzed it detail and appropriate circulation mitigations committed to.

2. Detailed traffic and pedestrian flow studies need to be preformed taking into account the adjacent properties and children going to and from school (See 1 above)

3. Consider maximum credible rain in analyzing the effect of putting 6 acres of rain water into the parking garage and then into the storm drain system.

4. The trees retained in the sketches are misleading . The extensive excavations will not allow any of the large native trees to survive and no large trees can grow above a parking structure.

5. The sketches indicate tandem parking which is not allowed by Town codes.

6. Height, lot coverage, snow storage, parking, and setbacks do not meet Town codes which were drawn up to support the General plan. The proposed Specific Plan for this project should justify each variation and explain why the proposed variations still support the Towns General Plan and Vision statement.

Regarding the items in the CEQA checklist we feel that the following items should be included in the detailed analysis in addition to the items indicated by the checklist prepares for detailed analysis.

Section 3 Air quality. Since transit can not be expected to handle the circulation needs of this project and the Town is already out of state and federal compliance, the detailed analysis and mitigations on air quality degradation by vehicular traffic should not count on significant traffic mitigation by public transit.

Section 5. Cultural Resources: The area to be covered by this project was used extensively prehistorically. This proposed massive excavation should require a detailed monitoring program, special training for excavation workers and an action program for work stoppage and resource preservation should historical or prehistoric remains or artifacts be uncovered.

Section 7. Hazards and Hazardous Materials: During removal of extensive 40 year old buildings and parking areas hazardous materials are sure to be uncovered (asbestos, lead residues, hydrocarbons etc.). Detailed plans for these cleanups and disposals should be required particularly since this work will take place only 0.2 miles from schools.

Section 8. Hydrology and Water Quality: Since the storm water and other runoff will drain through the parking area treatment of waste water mingled with the residues from over 700 vehicles should be required.

Section 9. Land Use Planning

9a. Dropping this huge project into the middle of an area surrounded on three sides by residential and second home owner condominiums will certainly divide an established community.

Section 12. Population and Housing:

12a Induce population growth. Since a project of this size will require 100s of employees and these employees will have families and require teachers, nurses, checkers, tellers, etc. this project will certainly have a significant population growth effect on a town of

only about 7000 people with an firm Urban Growth Boundary and no significant adjacent communities. A detailed population analysis should be required.

Section13. and 14. Public Services and Recreation: The population effects pointed out above under 12a should be considered.

Section 15.Transportation and Traffic:

15d.The new hazards from turn ins and the narrow streets particularly the hazards to pedestrians including school children should be analyzed .

Section 16. Utilities and Service Systems:

16a. contaminated runoff from parking structures is a potential problem that should be analyzed in terms of system capabilities. .

16b. see 16a above.

16f Materials from extensive demolition including lead and asbestos should be considered.

Section 17. Mandatory Findings of Significances:

17a See Section 5 above for potential effects on history and prehistory.

Misc. Note 8. on checklist, There seems to be an error of a factor of 1000 in the formula given.

We look forward to the chance to comment on the completed draft EIR.

Sincerely,

John Walter
Chair, Advocates for Mammoth

PUBLIC COMMENT FORM

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

Cara Isaac
Box 7172
Mammoth Lakes CA 93546

Telephone Number: 760-934-0213

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to Town Staff at the Scoping Meeting or mailed by July 31, 2006 to the Town of Mammoth Lakes, Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, California, 93546, Attention: Pam Kobylarz, Assistant Planner.

1) reiterate everybody else's concerns with
traffic - for pedestrians, school children, parking, cars
view/aesthetics - if taller features are purely aesthetic, need redesign!
weather - storm drainage, snow storage/removal
delivery truck access -

2) ensure adequate garbage/recycling for animals (bears getting into cans + making a mess) - make sure garbage is secured?
- the volume of garbage (+ hopefully recycling)
- the odor of garbage

3) Please address crime/security issues. Increased population, especially with restaurants + bars, will increase crime. What will the security measures be? Lighting, call booths, security personnel or ongoing funding of existing police resources so they can meet the demand

PUBLIC COMMENT FORM

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)
SHAWN WILDERS - RESIDENT & PARENT

Telephone Number: 760-914-7000

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to Town Staff at the Scoping Meeting or mailed by July 31, 2006 to the Town of Mammoth Lakes, Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, California, 93546, Attention: Pam Kobylarz, Assistant Planner.

PUBLIC SAFETY IS THE KEY CONCERN, ESPECIALLY DURING PEAK HOLIDAY & WINTER TRAFFIC PERIODS. CHILDREN WALKING OR RIDING BIKES TO SCHOOL WOULD BE REGULARLY TRAVELING BY THE SITE.

Pam Kobylarz

From:	Peyo [Peyo@cox.net]
Sent:	Monday, July 24, 2006 2:27 PM
To:	Pam Kobylarz; "'Bill Taylor '"
Cc:	stanley.kolodzi@ngc.com; no1auction@aol.com; Lanie@mammothreservations.com; info@advocatesformammoth.org; Lin@mammothreservatons.com; owen.maloy@verizon.net; jrawitz@msn.com; Maryannd@jps.net; psd@qnet.com; jen_omara@hotmail.com; rprovost@excite.com; 'Tom Moody'; Walter@qnet.com; janoff@schat.com
Subject:	FW: Clearwater Development EIR
Attachments:	Clearwater Underground.pdf; Clearwater Groundfloor.pdf

Dear Pat, Bill, Planning Commissioners, et al,

This is to clarify a significant traffic problem that is being created for owners and guests at Sierra Park Villas Condominiums by the proposed plans being considered for the "Clearwater" development. The problem will also severely impact general traffic congestion, safety, noise and pollution for the proposed project frontage on Sierra Nevada Road.

Much of the parking at Sierra Park Villas Condominiums was originally approved and is being used as 90° parking that backs out onto Sierra Nevada Road. This lightly traveled street serves as the turning and back-up aisle for our parking stalls. The property line for our condominium complex is located at the rear of these ± 20 ft. deep parking stalls. Cars MUST back out onto Sierra Nevada Road for egress.

The "Clearwater" development proposes to locate 705 underground parking stalls that will have their primary driveway access centered directly across from our parking that must back out into their added traffic stream created by cars that check in and out at a small (± 20 car) surface parking lot that is also across from our parking on Sierra Nevada Road.

Thus, Sierra Nevada Road will not only serve as our parking back-up aisle as it has for more than 30 years, it will become the circulation path for up to 705 vehicles checking in and out of the proposed "Clearwater" project and using their vehicles to access the local and regional activities that they come to visit.

Please address this problem and related issues when performing traffic, noise and pollution studies for the Environmental Impact Report.

Obvious mitigation would be to limit the density, and therefore parking, to the same density that exists today in the entire surrounding area and along Old Mammoth Road. These areas have already been developed and have set a standard that should be kept in the future. Other measures to correct the problem might include taking access off of Laurel Mountain Road with the primary driveways.

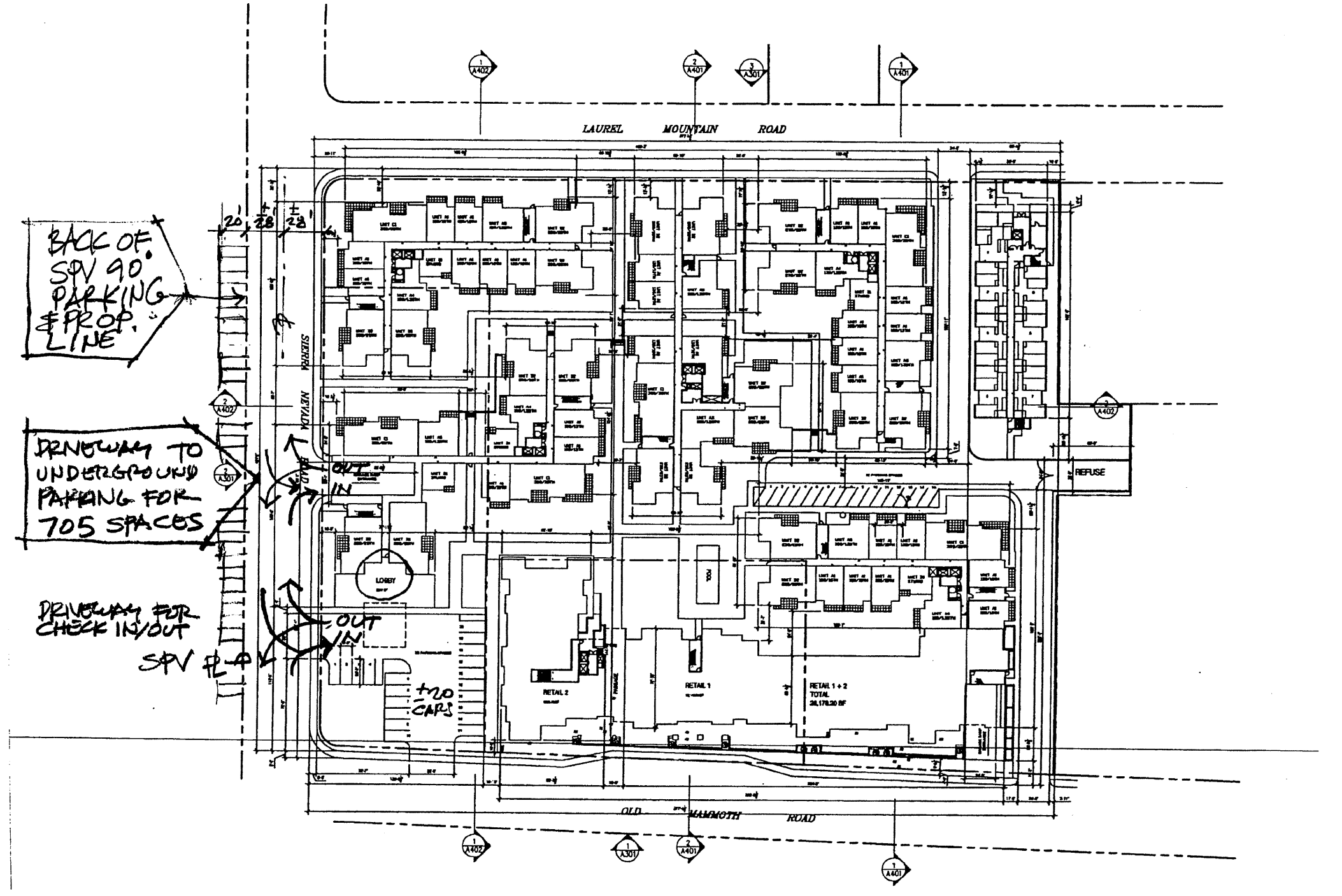
Recently our association has worked with the City and has helped to fund the sidewalk improvements to Old Mammoth Road so that it may become one of the few pedestrian friendly public streets in Mammoth Lakes. The traffic and density that this project creates are contrary to our expectations for this concept and will significantly harm the quality of our neighborhood.

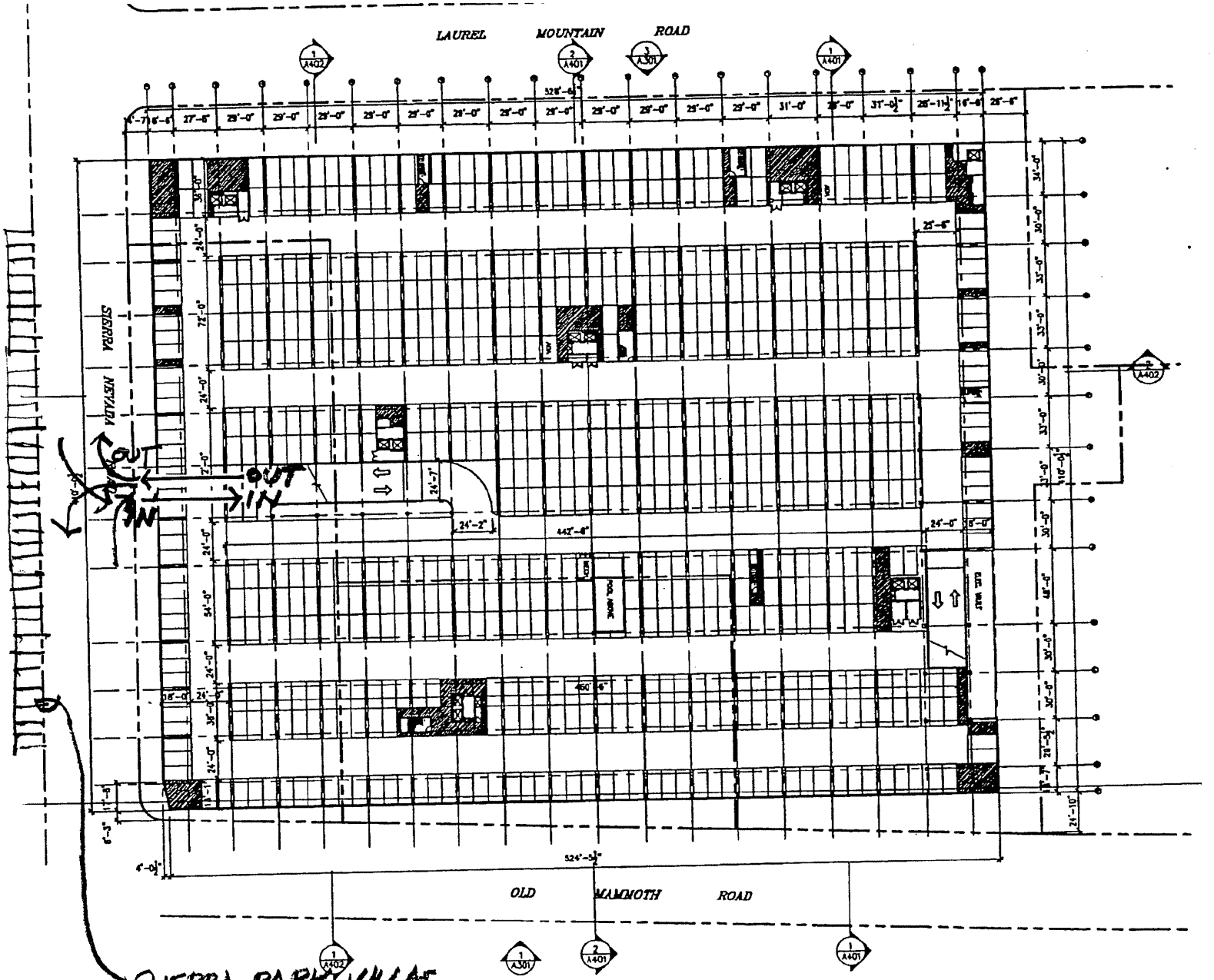
Please pass this information on to anyone that can help us with this impending problem.

Best regards,

Peyo Michaels, AIA
SPV owner & Board member

Attachments


BACK OF SPV 90° PARKING & PROP. LINE
DRIVEWAY TO UNDERGROUND PARKING FOR 705 SPACES
DRIVEWAY FOR CHECK IN/OUT SPV #4
LAUREL MOUNTAIN ROAD
OLD MAMMOTH ROAD
SIERRA NEVADA ROAD
OUT
IN
OUT
IN
±20'
±28'
±28'
LOBBY
RETAIL 2
RETAIL 1
RETAIL 1 + 2
TOTAL
28,178.20 SF
REFUSE
±20 CARS



SIERRA PARK VILLAS PROPERTY LINE & BACK OF 90° PARKING

PARKING LEVEL P1
SCALE: 1" = 40'-0"

705 PARKING SPACES
UNDERGROUND
+35 SURFACE PARKING
740 TOTAL PARKING SPACES

Project: The Clearwater	Client: Metric Holdings
Location: Old Mammoth Lakes Rd., Mammoth Lakes, CA	Title: Parking Level P

Pam Kobylarz

From: Joel Fadem [joel.fadem@anderson.ucla.edu]
Sent: Monday, July 24, 2006 11:31 AM
To: Pam Kobylarz
Subject: Fwd: Proposed Clearwater development

Dear Ms. Kobylarz,

I am a Timberline owner and writing to register my both my concern over the proposed Clearwater development and the untimely manner in which I was notified. I am on business travel and unable to attend this meeting. I happened to only stumble upon the fact that a meeting was being held tonight. Apparently notice went out only last week. An objective observer might conclude that this manner of notification could only serve to benefit the Clearwater developer and any special relationship they might have with Mamoth Lakes planning staff or their principals.

While I endorse the idea of a high quality development on the property under consideration - and the Clearwater version does have its attractions - its sheer scale will disrupt the surrounding neighborhood - both in terms of the traffic density on Laurel, Azimuth and Sierra Nevada - as well as Old Mammoth Road - and the elimination of desirable sunlight. Sunlight and spacial openness is extremely important!

The total elimination of mature trees is another problem - while re-planting can be expected to occur, it will take decades to replicate what exists now.
Mammoth is a mountain community and its residents value trees. While uplighting is highly desirable on Sunset blvd in Hollywood, the proposed Clearwater lighting plan violates Mammoth's dark skies ordinance and would be an eyesore.

This development, if it proceeds, should not exceed 3 stories. The underground parking is a definite plus. If this development proceeds as proposed, it will be a detriment to the neighborhood and to Mammoth.

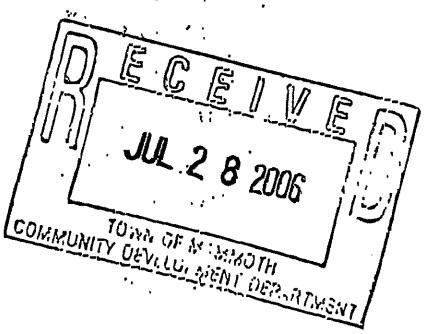
Thank you in advance for your attention.

Sincerely,

Joel A. Fadem

----- End forwarded message -----

Marcie Pettigrew
Mountain Shadows – F13
Sierra Nevada Rd., Mammoth Lakes, CA
Marcie44@earthlink.net



Pam Kobylarz, Assistant Planner
Town Council
Minaret Village Shopping Center
437 Old Mammoth Rd
Mammoth Lakes, CA 93546

Dear Pam Kobylarz, Assistant Planner,

SUBJECT: CLEARWATER PROJECT

I am writing to voice my concerns regarding the proposed Clearwater Project. As the project is currently proposed, it is my understanding that they are requesting variances to the building codes of Mammoth Lakes. I would like to voice my opinion that the requested variances not be granted.

I understand that upgrading that particular property is necessary and that development is good for the town of Mammoth. However, this particular project has issues that clearly are of concern.

The first and foremost issue would be the proposed six-story buildings (which in some areas will rise to 100 feet as proposed). The current neighborhood consists of one and two story buildings. Six-story buildings in that area are not consistent with the character of the neighborhood, and will clearly dwarf anything around it. The height of the project will have other unintended consequences such as decrease sun, increase shade, and noise. Further, the number of beds proposed will make this particular project the most densely populated project in the town of Mammoth.

Another major concern is the traffic pattern proposed. It is proposed that the entrance and exit of the underground parking lot be only on Sierra Nevada Rd, a residential street. This will cause an increase in traffic on that neighborhood street, where children walk to and from school. There is limited walking area on Sierra Nevada Rd. in the winter months due to snow storage. Increased traffic on that street will be a hazard to our children and other pedestrians walking to take the town shuttles. Further, with only one level of parking proposed, there will be excess parking that will flow onto the private properties of the neighboring condominium complexes.

Another concern is the UpLighting proposed, which on first blush appears to be directly in opposition to the city's Dark Sky ordinance.

I am in favor of development, but not development which is contrary to the values and wishes of the people of the town of Mammoth. I feel that a project which is more limited in scope (three to four stories tall, maximum) would be both viable to the developer and the town. I know that developers want to get the MOST bang for their buck, and they do not like to settle for a modest profit. However, reigning in the "slash and burn" developers, who develop, then run away with the money, is difficult but necessary. The developers need to know that the Town Council has a mandate from the community that development is welcomed, but not at any price or cost to the community.

As a representative of the people of Mammoth, and as whom who has the power, I would beg that you take the high road, and not grant the variances as requested. That you suggest to the developer that they come back to the table with the good of Mammoth in mind as well as their profit margins.

Thank you for your consideration on this matter.

Marcie Pettigrew

Marcie Pettigrew

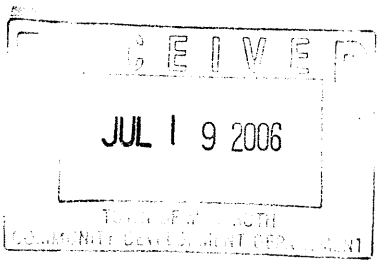
(760)-924-5883

(310)- 546-2172

Date: July 19,2006

To: Pam Kobylarz, Assistant Planner

Town of Mammoth Lakes



From: Bill MacBride

Subject: Proposed Clearwater Development

Hi Pam,

I am a homeowner at Mountain Shadows.

I just received a copy of the detailed plans for the Clearwater Development.

While I believe that is highly desirable to have a high quality development on this site, I am concerned that the size and scope of this proposed development does not conform to the town of Mammoth Lakes General Use Plan.

Other thoughts:

1. The neighborhood is older and is comprised of condominium developments that are two stories tall. Clearwater indicates a six story building with an allowance to go up another 50 feet. This is way too high. It will block views to the West, East and potentially detract from the property values of the condominiums nearest this development.

2. Traffic. During early morning and evening hours, the traffic at Old Mammoth Rd. and Sierra Nevada Rd. can build up significantly. With the addition of 339 units, the traffic will be much more severe and will stall everyone to a glacial pace.

3. Landscaping. We all understand the need for return of investment/ return on investment,thus the density, but why remove all the trees? Why not make a portion of this development a green belt. We all moved up here for the trees, views, lack of congestion, space etc.

4. Lighting. Mountain Shadows just reduced the lighting from the parking lot fixtures to comply with the towns Dark Sky ordinance. Clearwater is proposing to shine floodlights into the sky to "uplight" their buildings. Can they really do this?

5. Planning Schedule. I just received the project overview a few days ago and I'm sure many people who live in the immediate area have not received the information to comment on. These people will be excluded from commenting, due to the timing of the documents and town meeting, and they shouldn't be.

6. Escrow. When this project was in escrow, did they approach the town planning department with an overview of this project? Did you provide feedack? Is that available for review?

See you at the meeting!

Thank you for your time and consideration.

Sincerely,



Bill MacBride

billmacbride@hotmail

RECEIVED
JUL 18 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

Hi Bill,

How are you?

I left a message for you today about the Clearwater Project and concerns I have about our current parking at Sierra Park Villas.

We live in Unit 8, and our parking is along Sierra Nevada Road, opposite Ocean Harvest. I have colored our parking spaces black in this diagram. The green cars demonstrate the current flow of traffic on a typical day. Some days are quieter, some much busier.

You can see that the parked cars need to back out onto Sierra Nevada Road in order to leave. Typically, the road is not very busy and the wait would be just a couple of cars. Sometimes there is a wait because the cars waiting to enter Old Mammoth Road are backed up. The parking along this road is utilized completely and often overflows to the Ocean Harvest parking lot. The fact that we have insufficient parking is not the problem I am most concerned about.

The problem is the increase of traffic from the point of ingress and egress for the Clearwater Project on Sierra Nevada Road. With the increase in traffic coming onto the road from Clearwater, I anticipate there will be continual back-up traffic waiting to enter Old Mammoth Road. Oftentimes a left turn onto Old Mammoth Road is virtually impossible. I imagine a light will be required one day, especially with the pedestrian cross-walk (red dots). When cars are backed up waiting, the parked cars are locked in. Light or no light, there will be many parking places that will not be usable. The green cars parked on the project on Old Mammoth Road (in my drawing) are spaces that mostly go unused because it is too difficult to back out onto Old Mammoth Road. I see a scenario like that coming – even worse because cars have to stop at Old Mammoth Road and wait to enter. I think the result would be that those of us who park along Sierra Nevada Road would simply not be able to park there any more. And there is no place else to park. I don't even think we would be able to sell our condo should this problem arise.

Our Manager mentioned this project a couple of weeks ago and indicated we would be getting a letter because we would be impacted. No letter has come. Vern is presently in treatment, entering his fourth week of radiation in Carson City, so things are hectic.

I sure would like to hear what you think about this and whether the problem would be remedied. Naturally, we're quite concerned.

Please give us a call. Home: 934-9744; Vern's cell 920-0118; my work 934-3343 x18. I called Elizabeth Tinney earlier today and she said to contact you and that this information is important. Evidently, things are proceeding towards a point of no return. Yikes!

Thanks Bill,

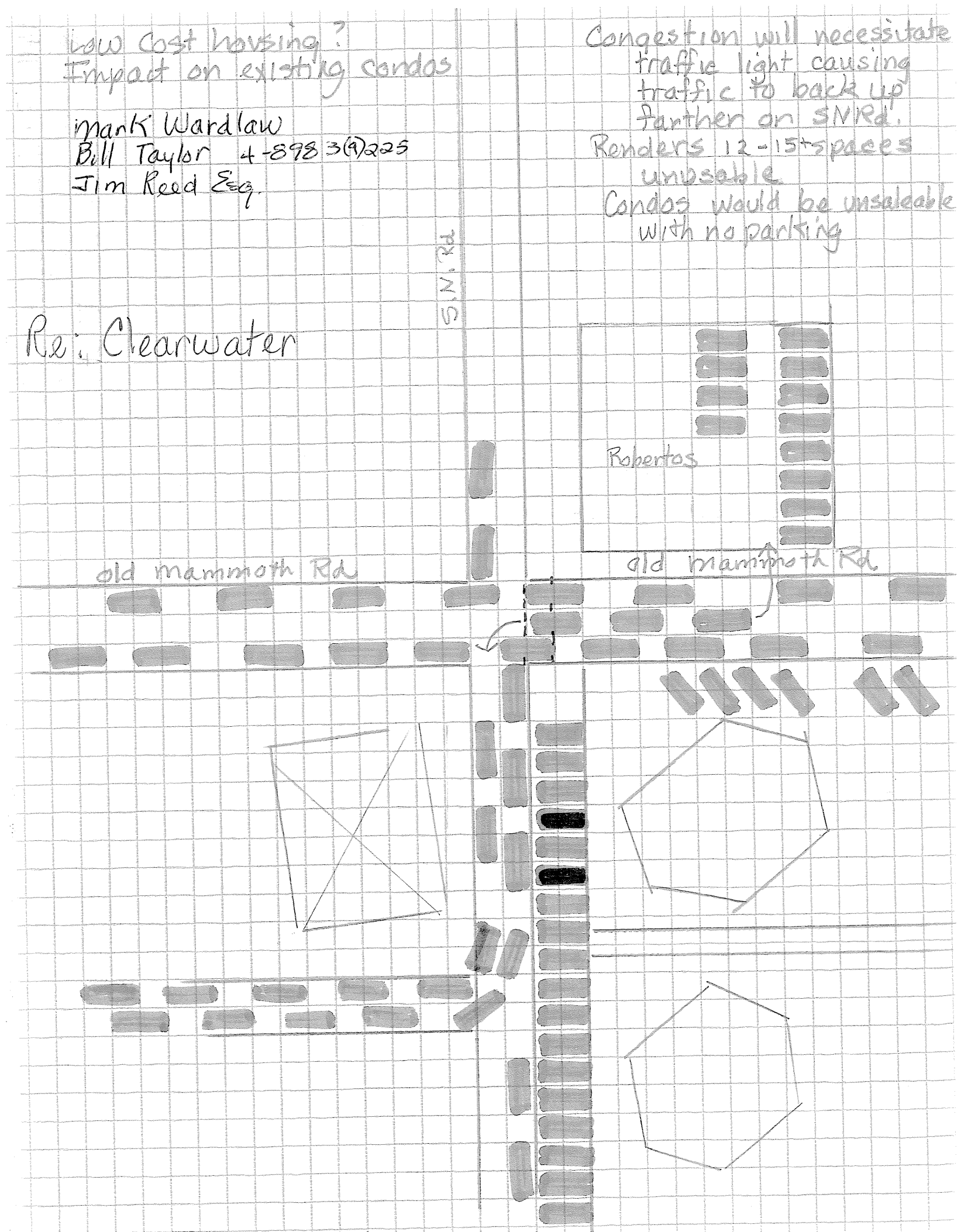
Margaret Clevenger

Low Cost Housing?
Impact on existing condos

Mark Wardlaw
Bill Taylor 4-898 3(9)225
Jim Reed Esq.

Re: Clearwater

Congestion will necessitate traffic light causing traffic to back up farther on SNRd.
Renders 12-15+ spaces unusable
Condos would be unsaleable with no parking



Pam Kobylarz

From: David Mordaunt [d_mordaunt@yahoo.com]
Sent: Tuesday, July 18, 2006 9:59 AM
To: Pam Kobylarz
Subject: Clearwater Specific Plan

Dear Ms. Kobylarz,

I am writing in regard to the plan for the Clearwater development. I currently own and operate a rental condominium at 2290 Sierra Nevada Road (Timberline project) and have some concerns about the Clearwater plan. Several elements of the plan seem to require significant exemptions to the Mammoth Lakes General Use Plan. My specific concerns are summarized in the 4 areas below:

- Aesthetics. The proposed 6-story, 110-foot high development is well in excess of the General Plan limits, which I think limits elevations to around 35 feet. This would make Clearwater one of the tallest (if not the tallest) structure in Mammoth Lakes. I see no reason why such an exemption should be granted. I expect that a substantial profit for the developer and tax revenues for the town could be obtained with a more reasonable 3 or 4 story structure. The unit density per acre for Clearwater also significantly exceeds the General Plan limits, and I oppose such an exemption.

- Parking. The proposed 740 spaces of parking will likely be inadequate for the proposed use. With 400-odd bedrooms of rental units and another 129 residential units for employees, over 600 of the available parking spaces could be consumed by residents and renters.
This leaves only about 100 spaces for retail and restaurant use, creating a potential parking problem. As the recent Jazz Festival shows, parking is at a premium in this area, and likely to lead to overflow problems for those developments, like Timberline, that adjoin the proposed Clearwater project.

- Traffic. The existing infrastructure is inadequate to support the traffic likely to be created by an additional 600-odd cars concentrated in this small area. At a minimum, an additional traffic light at the intersection of Old Mammoth Road and Sierra Nevada Road would be necessary. In addition, the proposed parking garage exits on Sierra Nevada Road and would likely lead to significant increases in traffic flow on Sierra Nevada and Laurel Mountain Roads. Neither of these roads is suitable for significant traffic flows, being only two lanes wide and running through residential neighborhoods.

- Lighting. The Town of Mammoth Lakes has a "Dark Sky" ordinance that limits night time lighting in order to provide an unhindered view of the night sky for residents and visitors. The Timberline Condominium project recently underwent renovation of all of our outside lighting to comply with this ordinance. Yet Clearwater proposes to up-light the fronts of their buildings. I find this arrogant and offensive and see no reason why this development should be allowed to grossly violate an
existing town ordinance.

In summary, I feel that a suitable development of the existing site at Old Mammoth and Sierra Nevada Roads would be a benefit to the community and provide increased revenue for the town. However, there is no reason to allow violations of the General Use Plan with respect to building height, unit density, or lighting. Although I will be unable to attend the meeting on July 24, I would be interested in receiving further updates on the Clearwater project if such are available. Feel free to contact me for questions or clarifications. Thank you for your consideration.

Sincerely,

David Mordaunt
2621 Grant Avenue, #C
Redondo Beach, CA 90278
310-372-2312
d_mordaunt@yahoo.com

Pam Kobylarz

From: Hass Mohaghegh [hdmo@sbcglobal.net]
Sent: Friday, July 21, 2006 11:17 AM
To: Pam Kobylarz
Cc: Arch McCulloch
Subject: "CLEARWATER PROJECT"

HASSAN A. MOHAGHEGH, M.D.
3305 Monterey Road
San Marino, CA 91108
Phone: (626) 578-0260 Fax: (626) 792- 9322 Email: hdmo@sbcglobal.net

July 21, 2006

P. K. Obylarz, Assistant Planner,
Town of Mammoth Lakes,
P.O. Box 1609,
Mammoth Lakes, CA 93546

Dear Ms. Obylarz:

I am the owner of a 2 bedroom unit (# 48) in the Timberline Condominiums project. For the past 30 years my family has enjoyed the quiet peace and unique serenity of the town of Mammoth Lakes. The city planners deserve major credit in allowing Mammoth to grow over the years while maintaining its unique serenity and small town character.

The purpose of this letter is to share the following concerns about the "Clearwater" which is a six acre project planned for the corner of Old Mammoth and Sierra Nevada Roads.

- **This six story project with 339 units and 480 rooms may look out of place in a two story neighborhood.**
- **The 100 foot high "Architectural Elements" and flood lights proposed for this project is more fitting for Las Vegas not Mammoth Lakes with our "Dark-Sky" Ordinance.**
- **When fully occupied, this project will add at least 400 cars to the immediate neighborhood traffic - not including the additional traffic it will attract to its shops and restaurants. The city has to address this traffic issue now before it is too late.**
- **The city should not allow the developers to remove all existing trees from the site, even if they plan on planting new trees.**

Instead of putting this project on fast track, I would herby urge the City Planners to evaluate the Developers proposal carefully and make decisions that are consistent with wishes of the local tenants and property owners as well as the over all vision of the town of Mammoth Lakes.

Sincerely,

H. A. Mohaghegh, MD

August 4, 2006

RECEIVED
AUG 11 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546
Attn. Pam Kobylarz

Re: Clearwater project

To Whom It May Concern:

Although it may be early in the planning and approval stages of the above referenced project, we wish to express our concern. As property owners near the intersection of Laurel Mountain and Sierra Nevada (Timberline) we question the impact that a project of this scope will have on the surrounding area. Although there may be economic justification for substantially increasing the residential and commercial space in the area, we can only imagine the negative effects that will result with the large increase in traffic on Old Mammoth Road and Sierra Nevada. Just the shear size and proposed lighting of the project itself seems to be inconsistent with the Town's growth plan and ordinances.

The construction plan, as we understand it, calls for the removal of all the existing trees on the property. This we find utterly appalling. Perhaps with a more sensitive design, Clearwater could be scaled down significantly and take into consideration the on-site flora and the surrounding area. We feel this is not the location to create a mega project of this nature. It is incongruous with the neighborhood and not in keeping with the bucolic nature of Mammoth Lakes.

Do not misconstrue our position on growth. Surely we understand that Mammoth Lakes must grow and do not object to organized, well-planned, architecturally and economically viable projects. We do not, however, agree with growth for the sake of creating another ski metropolis aimed purely at profits for investors.

Larger projects may, indeed, be ultimately a part of the growth of Mammoth but we must try to limit them to areas when the impact is minimized, perhaps on the town's eastern periphery.

We are hopeful that some agreement can be made that will negate the concerns of those of us who have similar feelings regarding this development. We look forward to constructive hearings and reviews as opportunities are available to be involved.

Regards,

Bart & Mary Huffman
430 N. Burnaby Avenue
Glendora, CA 91741
bartmanh@aol.com

Pam Kobylarz

From: Roger [ctcrunners@adelphia.net]
Sent: Friday, July 21, 2006 3:24 PM
To: Pam Kobylarz
Cc: Arch McCulloch
Subject: Clearwater Project

Dear Ms. Kobylarz:

I am a homeowner in the Timberline development on Sierra Nevada. I see the detailed plans for this development were just released and that a meeting to review the plans has been scheduled for the 24th. This short notice makes it impossible for me to attend the meeting. I'm deeply disappointed in the scope of the plan and the lack of time for the public to review it and make arrangements to attend the meeting. This plan if implemented would be disastrous for the entire community. Six story buildings fit in somewhat in the village as they abut the mountains as does Juniper Springs. Old Mammoth Road as well as most of Main Street have always been no more than two stories high. The congestion on the corner of Old Mammoth and Sierra Nevada is already to the breaking point. What this town needs is another super market not more condo's. Restaurants and Retail Development belong on Old Mammoth Road, Condo's do not belong on this street. Removing the large trees on the perimeter also makes no sense nor does illuminating and breaking the "dark sky" ordinance. The traffic and existing shuttle service just could not handle all these Condo's. The parking spaces would be filled with the Condo tenants and retail workers, leaving no space for the retail customers.

Please save Mammoth from the greed of the developers. They can make a tremendous profit with a Super Market, Restaurants and retail shops with commercial offices on the second and TOP floor.

Thank you for listening to my concerns,

Roger Patrick-

Homeowner- #26 Timberline

I would appreciate an acknowledgement that you received and read my concerns.

22 July, 2006

Dear Pam Kobylarz,

Recent Articles are appearing regarding a large Project planned above current Building Codes and Street Capabilities with the Mammoth Lakes area on Old mammoth Road and Sierra Nevada Roads.

The new project is slated to begin in 2007 and will be an eyesore to the current growing city that has taken a vision that is not in line with the peaceful setting Mammoth Lakes inspired. The current growth around the entire city has created a large city feel that does not denote the peaceful setting that many people wish.

Current Plans suggest a 480 unit mixed use building with flat roofs, 2 story underground parking and 60 plus feet in height that is **almost 100% greater than the current 35 foot permit limits**. Simply put this is unacceptable to neighbors regarding noise, use, and added pollution to an already busy area.

Please reconsider any project that is greater than the current permit height restrictions as completely unacceptable. We do not require another village in Mammoth. Please convince all to stop the uncontrollable building projects that are being planned throughout Mammoth Lakes. Please stop the "Clearwater Project" on Old Mammoth Road that is being considered.

Yours truly,

Jonathan Rawitz
Sierra Park Villas Unit Owner

Pam Kobylarz

From: Gracie Garcia [ggarcia@rydek.com]

Sent: Monday, July 24, 2006 9:17 AM

To: Pam Kobylarz

Subject: Concern regarding the Clearwater Specific Plan Initial Study

To: Pam Kobylarz, Assistant Planner
Town of Mammoth Lakes

Fm: Grace Garcia
Property owner at Timberline Condominium Complex on Sierra Nevada Road

Subject: Concerns regarding the proposed Clearwater Development

Dear Ms. Kobylarz,

I am a property owner on Sierra Nevada Road. I have reviewed the Clearwater Specific Plan Initial Study. I am writing to express a few important concerns I have regarding this proposed development. I will appreciate that these concerns be represented and discussed at this evening Town Council meeting. My concerns are as follows:

1. I believe that a six level complex is too tall. A complex of this height will not only appear inappropriate within the surrounding area, but it will also have negative effects, such as: The shadow cast by such tall complex will disturb the local ecosystem, and the well-being of the local residents and business owners. (We need our daylight!)

2. The few large trees within the boundaries of the proposed complex should be preserved for a number of reasons. Large trees are beautiful, and it will take several decades before any new small trees could be as beautiful as the natural large trees. We also need our natural large trees to help retain the look of a "mountain" community.

3. Both Old mammoth Road and Sierra Nevada Road will not accommodate the increased traffic resulting from the Clearwater complex. Also, the access roads such as Azimuth and Laurel will also not accommodate the increase in traffic.

4. Once the Clearwater complex evening lights are turned on, I believe there will be no compliance with our towns' "dark sky" ordinance. This truly has a negative impact upon the local residents.

Please note that I would like to see something pleasing to the eye, a positive addition to our community, and appropriate at this intersection of Old Mammoth Road & Sierra Nevada Road. However, as currently planned, I feel the Clearwater development can only have a negative impact upon the local residents and businesses.

Thank you for taking note of my concerns.
Yours truly,

Grace Garcia
Mammoth Lakes property owner
gracegarcia9@verizon.net

PUBLIC COMMENT FORM

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

SALLY GESSFORD, Public Arts Commissioner
PO BOX 2056
Mammoth Lakes, CA 93546

Telephone Number: 760 924-2628 cell 760 218 0083

RECEIVED
JUL 28 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to Town Staff at the Scoping Meeting or mailed by July 31, 2006 to the Town of Mammoth Lakes, Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, California, 93546, Attention: Pam Kobylarz, Assistant Planner.

Thank you for welcoming our comments. Since I am very concerned about the aesthetics of the Clearwater project, I know many of my concerns will come up a bit later in its time frame. But indeed they will come! I was at the initial meeting (July 24) so you already have been exposed to the fervor of interest related to this project.

I can't begin to tell you how much I have enjoyed and treasure the trees – the Jeffrey Pines – that grow on Laurel and Sierra Nevada Roads. If you have a 10 foot easement on these streets there is no reason you can't encorporate them into your landscape plans. Please don't take them out. I pass them everyday as I walk right by the 6 acre every day. I live at Timberline.

I like your promises to use rock, landscaping and natural materials in your project.

Now for my important question. What percentage of the 6 acres will be 6 stories high? From the model it looked like such a tiny hotel. I want to know how much and what percentage of the area will be 6 stories high?

Also the buses bringing visitors is a big issue with me. I want to know where these buses will park?

And finally, snow storage. Where will the snow-removers put the snow in the winter?

I really welcome a good-quality good-looking development next door to where I live.

I have asked 3 questions and request a reply sent to the above address.

Thank You,
Sally Gessford #43 Timberline

GAIL HECK
2005 HAWTHORNE TERRACE, UNIT 11
NOVATO, CALIFORNIA 94945

RECEIVED
JUL 28 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

July 22, 2006

Pam Kobylarz, Assistant Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, California 93546

Dear Ms. Kobylarz:

As I am unable to attend the public meeting regarding the Clearwater project to be held on July 24, 2006, due to lack of sufficient notice, I feel compelled to write my comments regarding such an overwhelming endeavor on the part of the city for the construction of this huge project.

When I bought my little place in Mammoth Lakes, I loved the surrounding area, quiet atmosphere, no traffic thinking it would be a great place to retire. Although, I have profited from the development that has taken place, there comes a time when one has to say enough. Why do buildings have to be so tall? Why so many units? Why the lighting and some parts of the construction to be over 100 feet tall? Why remove all the beautiful trees?

Do the owners of property in the surrounding area have no voice in the matter? As always, money speaks very loudly. I know this letter is probably pointless, but I am truly disturbed about whether I'm going to be able to retire there as planned. My property value will probably be significantly impacted also. Who wants to live right behind a major development as is planned?

As I've learned, this project exceeds Mammoth's General Use Plan in just about every conceivable way. What's the use of setting guidelines and rules and then not following them? I guess MONEY! What a disappointment in the City of Mammoth Lakes. Is there anything one person can do?

Gail Heck
Gail C Heck
CC: Arch McCulloch

From: "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us>
To: <egtorres@rbf.com>, "Glenn Lajoie" <GAL@rbf.com>
Date: 8/1/2006 8:50:11 AM
Subject: FW: Clearwater Development

From: Ronald Takehara [mailto:ron@takeharalaw.com]
Sent: Monday, July 31, 2006 5:30 PM
To: Pam Kobylarz
Cc: 'Arch McCulloch'
Subject: Clearwater Development

Dear Ms. Kobylarz,

This email pertains to the Clearwater development proposed in Mammoth Lakes, CA. I am an owner of Timberline Unit 20, which is adjacent to the proposed development. While I am not opposed in principle to the concept of developing the proposed area, I am concerned about the extent of the development, the proposed planned use, and congestion which it will create. In addition, proposed structures of 65 feet and 110 feet seem considerably disproportionate to the surrounding environment.

Most concerning is the number of residential units, including the 339 units, and 45 three-bedroom "work force" units which will be built. The impact of this amount of additional people during peak season will undoubtedly increase the local traffic congestion as well as the public shuttle. Is there a plan in place to increase the shuttle service on the Green and Red lines? Please consider these concerns in the developmental process. Thank you.

Ron Takehara, Esq.

Ronald M. Takehara, Esq.
Takehara & Stuart, LLP
Attorneys at Law
100 Wilshire Bl. Suite 1755
Santa Monica, CA 90401
Tel. 310.260.6970
Fax. 310.260.5015

From: "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us>
To: <egtorres@rbf.com>, "Glenn Lajoie" <GAL@rbf.com>
Date: 8/1/2006 8:51:41 AM
Subject: FW: Clearwater

From: Owen Maloy [mailto:owen.maloy@verizon.net]
Sent: Tuesday, July 25, 2006 12:55 PM
To: Pam Kobylarz; Bill Taylor
Subject: Clearwater

I could not attend the Clearwater meeting last night, but I have a few comments.

It's clear that this project is not compliant with the general plan, and what passes for a specific plan can't be either, as the law requires.

Consistency of the general and specific plans is required by the government code. This was not enforced by litigation for North Village, and the results are unfortunate (lack of parking, no setback, etc). That mistake is unlikely to be repeated. Especially with so many homeowners objecting, the plan itself, not just the EIR, is likely to be the subject of litigation. The proponent should realize that there is no way to avoid this except by complying.

This is the same issue that arose at the June Lake Rodeo Grounds. I've attached the letter written by the June Lake Advocates to the supervisors. One of the writers is dean of the Stanford Law School and a 2nd homeowner. The same issues exist here. One of the issues they raise is that staff should not waste the public's time with non-compliant proposals. Let the proponents comply. What happens if someone, including a proponent, sues the Town on the basis that an illegal plan was encouraged by staff?

Another issue is water. This plan has more units than them minimum set by SB221 (500 units or 10% of the water connections, whichever is smaller -- connections in this case). The proponent (not the water district) must provide a water assessment that shows that there is enough water. The Rodeo Grounds proposal is currently stuck on this point, because in fact there is not enough water. for the grandiose Intrawest proposal.

The atmosphere in Mammoth Lakes has changed and it no longer a good idea to push projects without following the letter of the law. It's clear that the present draft GPU will not pass. Even if the Council approves it the voters won't. As long as the 1987 plan remains in force, proponents should comply with it and its EIR. There can be no "done deals" any more.

From the 2005 state planning manual:

Consistency

The general plan is the basis for all local land use decisions. Zoning (except in most charter cities), subdivisions, and public works projects can only be approved when they are consistent with the general plan. An action, program or project is consistent with the general plan if, considering all its aspects, it will further the goals, objectives and policies of the plan and not obstruct their attainment. Not only must all local land use be consistent with the general plan, the plan itself must be internally consistent. Each part of the general plan, be it a goal, policy or map/diagram, must mesh with all of the other parts of the plan. For instance, the land use element must not contain statements or assertions that conflict with the housing element. Similarly, the location of a major highway on the land use element diagram must match its location on the circulation element diagram as well.

Specific Plans

A specific plan implements, but is not technically a part of, the local general plan. Specific plans describe allowable land uses, identify open space, and detail infrastructure availability and financing for a portion of the community. In some jurisdictions, specific plans also take the place of zoning. These specific plans must be consistent with the general plan. In turn, zoning, subdivision, and public works decisions must comply with the provisions of the specific plan. Specific plans are adopted and amended in the same manner as general plans.
--

Owen Maloy <owen.maloy@verizon.net>

From: "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us>
To: <egtorres@rbf.com>, "Glenn Lajoie" <GAL@rbf.com>
Date: 8/1/2006 1:34:48 PM
Subject: FW: Proposed Clearwater Development

-----Original Message-----
From: John Brabson [mailto:johnmbrab@earthlink.net]
Sent: Tuesday, August 01, 2006 1:07 PM
To: Pam Kobylarz
Cc: Kathleen Schmidl; Arch McCulloch; Nick Moore; Jessie Butler; Tom Carlin; Joel Fadem
Subject: Proposed Clearwater Development

Dear Town of Mammoth Lakes Representatives:

My name is John Brabson, and I am an owner of Timberline Condominiums Unit #50 located at 2290 Sierra Nevada Road, Mammoth Lakes, CA. I wish to make my feelings known regarding the proposed Clearwater Development adjacent to Old Mammoth Rd., Sierra Nevada Rd., and Laurel Mountain Rd.

I am FOR:
* Underground parking.
* Classy restaurants and shops to replace the existing eyesores.
* Minimal removal of existing trees.

I am AGAINST:
* High rise structures. I realize all structures in Mammoth need to be two stories due to the snow falls. But why six stories? Bring on Advocates for Mammoth!
* Up-lighting. I thought the Town Dark Sky ordinance prohibited this type of lighting in new or existing structures and street lighting fixtures.
* Increased traffic on Sierra Nevada Rd. I realize some increase in traffic is a given, but it needs to be monitored somehow.

I believe if this project is done properly, it will enhance Timberline's property values. Basically the project is a good idea.
If the project is not done properly, it will not only have a negative impact on our property values, but will result in loss of quality of life - the very reason I bought in Timberline and love the mountain environment.

Respectfully yours,
John M. Brabson johnmbrab@earthlink.net

August 9, 2006

To: Pam Kobylarz, Assistant Planner

RE: CLEARWATER PROJECT

The Clearwater Project appears to be another example of a big developer thinking that they can ignore all the rules and regulations (and people) of the Town, just because they are a developer. The building codes, regulations, etc, are in effect for a reason. The Town needs to enforce those rules, not just on the single family dwellings, but, most especially, on the large developments which can negatively impact a large population.

The fact that Clearwater wants their buildings to be 1 ½ to 2+ times the height restriction is ridiculous and definitely should not be allowed! We, again, have another project suggesting that they build without enough parking. The parking codes exist for a reason. I live in a complex (built to code at that time), that does not have enough parking for todays' drivers. Since we have a lot of common area property, the management has been able to mitigate the problem. This proposed project has nowhere to expand the parking after construction. As we all know, most condos end up renting to people with a minimum of 2 carloads of people driving separately, and the affordable housing could easily have 3 cars per unit (with people needing to share rents). That could equate to far more cars than parking spaces, and the short term parking will not handle the expected patrons of the retail spaces. Surely, everyone realizes that there is no street parking for half of the year, and that there is no street parking along that section of Old Mammoth Road, period.

As anyone who spends time in Mammoth knows, the traffic problems in the area of the proposed project are already high. The lighted crosswalk signs help, but I can't count the number of times that I've almost been hit by the cars ignoring the lights. Now, the proposal exists for far more traffic exiting out only on Sierra Nevada Road., which is already a narrow street. I understand that they might provide their own shuttle, but the amount of pedestrians that would need to cross the street if they want to use the Red Line to go to the Village or Mountain would be large.

Then, there's the "uplighting" of the buildings. Another flagrant violation of the Town's codes and ordinances. Are big developers the only ones not needing to follow the rules?

No one is disputing "development", but, the building codes and town ordinances MUST be followed by everyone. This proposed project is too tall, too dense, and will impact the traffic in a very negative way. I am also concerned that the large amount of housing (and retail spaces) will end up resulting in a lot of vacancies. It isn't as though everything in

RE: CLEARWATER PROJECT

town is rented or sold. While, of course, the developers have a right to build (even if things remain unsold or empty), they do not have the right to ignore the building codes.

I am also concerned about the pace of this project. This project affects our community, yet, it seems to have been "rushed" to the exclusion of most residents. There needs to be more discussion and time for review.

The variances that the Town has allowed in the past, have NOT benefited the Town or its people. It is time for EVERYONE to follow the rules and actually pay attention the general use plan, resulting in a better environment for all.

Kathryn Knott Faris
165 Old Mammoth Rd #137
Mammoth Lakes, CA 93546

310-470-2522 (Office Phone)

Town of Mammoth Lakes
Communnity Development, Planning Comission
POB 1609
Mammoth Lakes, CA 93546
Pkobylarz@ci.mammoth-lakes.ca.us
760/934-8989 x253
Fax 934-8608
August 10, 2006

Re: Clearwater Project Environmental Impacts

Dear Ms. Pamela Kobylarz;

Please add the following comments to the Environmental Impact Report:

1) Mammoth Lakes Ambiance/General Plan.
2) Traffic Congestion
3) Noise Levels
4) Views of Mammoth Mountain
5) Town Resources
6) Property Values

1) A priority must be given to finalize the Mammoth Lake's General Plan. This is Mammoth Lakes, not downtown Los Angeles. Unrestricted and irresponsible growth will destroy the beauty and appeal of Mammoth Lakes. Consideration should be given for Mammoth Lakes identity, population density, transportation, scenic views, night sky visibility, events venues, recreation, and quality of life. Once an irresponsible precedence is set, how can it be stopped?

2) Old Mammoth Road is currently congested. It is a main artery yet only 2 lanes wide and the Clearwater project is to be constructed at it's beginning. Clearwater is only one of many projects that will be accessed and serviced by this corridor. Considerations need to be made for pedestrian crossings (wrt safety), emergency personnel, alternate routes thru town, traffic lights, and widening of Old Mammoth Road (especially in front of commerical/ retail businesses). Parking at Sierra Manors will be adversy affected both to the need to back out of Sierra Manors spaces safely, and the likelihood of Clearwater patons parking in our limited number of spaces.

3) Noise due to traffic will disturb those along all streets in the area by those trying to avoid the congestion on Old Mammoth Road. Though not specifically identified as part of the 28, 205.36 commericial square feet along Old Mammoth Road, night clubs with loud music will be distruptive, and partyers screaming once outside late at nite, will require more police responses due to increase of complaints. Other noise contributors will be an increase in snow removal needs, early in the morning.

4) Sierra Manors presently enjoys a beautiful view of Mammoth Mountain. It is unfortunate to lose some of our view due to development, but replacing all of the mountain view with a wall of buildings is unacceptable. Large set backs and limiting the height of structures, are appropriate in a mountain community.

5) Increased population density will require more police, firemen, medical aid, waste management facilities, landfills, water supplies, drainage systems, snow removal storage, power and even broadband cable. How will these be addressed, and who will pay?

6) Timeshare resale values do not appreciate as well as other means of owning property. This will adversly affect everyones' property values. Is a hotel/fractional means of ownership in the best interests of Mammoth Lakes (and if so, why?).

Thank you for taking these concerns into account in preparation of the Environmental Impact Report (EIR). I look forward to how the above issues are addressed.

Sincerely,

Robert Provost
Sierra Manors, Unit #7
POB 7786
Mammoth Lakes, CA 93546

August 2, 2006

The Meador Family
2289 Sierra Nevada Rd.
Mammoth Lakes, Ca. 93546 (J-5)

Meador's
369 Laguna Terrace
Simi Valley, Ca. 93065

To Whom It May Concern:

We are greatly opposed to any high-rise buildings being constructed in Mammoth and building codes being ignored or changed to accomplish this. We feel it will have an adverse environmental impact on the entire area, destroying the ambience of Mammoth Lakes.

Thank you for your consideration.

The Meador Family

Barbara Meador

Ron Meador

Jennifer Meador/Clark

Marvin Meador

This objection is maimly directed at the proposed development in the area of Old Mammoth Rd. and Sierra Nev. Rd.

Due by Aug 1

PUBLIC COMMENT FORM

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

Scott Coltrane A-11e Mountain Shadows
2288 Sierra Nevada Rd
Mammoth Lakes CA 93546

Telephone Number: 760 924 7156

RECEIVED
AUG 11 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to Town Staff at the Scoping Meeting or mailed by July 31, 2006 to the Town of Mammoth Lakes, Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, California, 93546, Attention: Pam Kobylarz, Assistant Planner.

As a homeowner living within a "block" of the proposed Clearwater development I have several concerns that I would like addressed in the EIR.

(1) Scale of Project - needs to fit with the surrounding development and scale of the town.

(2) Sight lines - needs to allow for existing views of the mountains + horizon

(3) Design - needs to fit with the feel of a mountain town - NOT a big city complex.

(4) Traffic + parking - needs to allow for circulation without impacting local streets

(5) Trees - preserve the pine trees on the site

(6) Housing mix needs to include different income levels + types of housing - hotel, owner-condos, rental condos, and rental housing for service workers, seniors on fixed incomes, etc. = inclusionary zoning.

Scott Coltrane

Due by Aug 11

PUBLIC COMMENT FORM

PROJECT NAME: Environmental Impact Report (EIR) for the Clearwater Specific Plan.

NAME AND ADDRESS OF COMMENTOR: (include group or public agency affiliation, as applicable)

Wendy Wheeler (Condo – Mountain Shadows)
106 Sweetwood Ct
Riverside, CA 92506

Telephone Number: 951-789-7064

RECEIVED
AUG 11 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

COMMENTS:

Please provide your comments on potential environmental issues/impacts which you feel should be addressed in further detail in the EIR. Attach additional pieces of paper, as needed.

This form and/or additional comments can be submitted to Town Staff at the Scoping Meeting or mailed by July 31, 2006 to the Town of Mammoth Lakes, Community Development Department, 437 Old Mammoth Road, Suite R, Mammoth Lakes, California, 93546, Attention: Pam Kobylarz, Assistant Planner.

I own a condo within 1 block to the proposed development - Clearwater. There are several considerations which I know others are voicing but which must be re-iterated through multiple voices. Here are my concerns

1. Architectural design needs to be considerate of the values of the area Mountain scenes, natural ambiance: low man-made skylines, all utilitarian,
2. Maintain as low a profile as possible, including scale of project in □ footage. It is way too big as proposed.
3. Traffic on residential streets — put inlets/outlets of underground garage on interior roads or driveways, not on Sierra Nevada Rd or the corner btwn S.N. and Main, northwest of the project.
4. Old trees must be preserved!

Mountain Village ambiance must be preserved!!!

From: Eddie Torres
To: Kelly Chiene
Date: 8/11/2006 10:51:37 AM
Subject: Fwd: FW: Clearwater Project Environmental Impacts

>>> "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us> 8/11/2006 10:50 AM >>>

From: John Wilson [mailto:johnboy@npgcable.com]
Sent: Friday, August 11, 2006 10:49 AM
To: Pam Kobylarz
Subject: Clearwater Project Environmental Impacts

Dear Ms. Pamela Kobylarz,

Please consider making the Clearwater Project smaller than proposed. Traffic on Old Mammoth Road is already congested. Sierra Manors Road now is being used by many, including truckers, because Old Mammoth Road is plugged. This creates safety issues with all the children of Sierra Manors going to and from school. Sixty percent of Sierra Manors is work force housing with many children. I see it every day as I have been Manager and Plow Operator at Sierra Manors for 10 years.

Snowremoval for Sierra Manors which takes day and night maintenance, has become very difficult when repeadedly having to back out on Old Mammoth Road as the traffic restricts the loader access.

And having a bar spill out onto Old Mammoth Road would be a huge mistake.

Sincerely,

John Wilson
Sierra Manors Manager
Sierra Manors, Unit 61
PO Box 615
Mammoth Lakes, CA 93546
760-934-2870

From: Eddie Torres
To: Kelly Chiene
Date: 8/15/2006 1:56:42 PM
Subject: Fwd: FW: Clearwater Project Environmental Impacts

>>> "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us> 8/15/2006 1:45 PM >>>

From: John Wilson [mailto:johnboy@npgcable.com]
Sent: Friday, August 11, 2006 11:57 AM
To: Pam Kobylarz
Subject: Clearwater Project Environmental Impacts

Dear Ms. Pamela Kobylarz,

Please add the following comments to the Environmental Impact Report concerning the loss of resources in the Clearwater Project.

The development in Mammoth should retain some of what is unique to this area:

the forest ecosystem
conifer habitat trees
the biodiversity of wildbirds
native plants

Mammoth is different than the rest of the urban world with our valuable forest ecosystem and its wildbirds. It's not right to keep striping the land here of its valuable resources for urban development that excludes our native trees and birds. We want the biodiversity and some of the grand forests to remain throughout Mammoth, please.

If you okay the land to be stripped of all its habitat, then at least do it before June so you won't be interferrring with nesting season for our many Migratory Songbirds. They migrate from thousands of miles away to raise their young in the forests here in June and July. It would be ashame to terminate the nests of young that keep their populations stable.

The 30 conifer habitat trees on the Clearwater Project have also been excellent protection for wildbirds seeking refuge in them from winter storms. It will be a sad loss of trees and birds of our area if striped without considering their value.

Please make the Clearwater development compatible with the unique resources of Mammoth.

Thank you,
Jane Kenyon
PO Box 814
Mammoth Lakes, CA 93546
760-934-0372
shaboosheba@yahoo.com

From: Eddie Torres
To: Kelly Chiene
Date: 8/11/2006 4:09:28 PM
Subject: Fwd: FW: The Clearwater Project

>>> "Pam Kobylarz" <pkobylarz@ci.mammoth-lakes.ca.us> 8/11/2006 3:56 PM >>>

From: Philip Presser [mailto:ppresser2@sbcglobal.net]
Sent: Friday, August 11, 2006 3:55 PM
To: Pam Kobylarz
Subject: The Clearwater Project

Pam,

I hope that these are not too late for inclusion ion the Environmental Study.
I made most of these comments at the Scoping meeting.
The Environmental Study should cover projects affect on existing and/or proposed wildlife corridors and Projects impact on visual environment of the Knolls. Specifically the view of the Knolls from Sierra Park Villas and Town Council meeting room should be analyzed.

Thanks

Phil Presser

18 August, 2006

Town of Mammoth Lakes: Mayor Stapp

I am enclosing a letter and map that I submitted for the Clearwater Project. I am sending this to you, because some of my proposals would require active Town Council, Staff, and Planning Commission involvement to waive current parking requirements. However, I believe that concepts presented in the letter meet the Town's vision and cannot be achieved if we continue to be directed by parking formulas derived from 1970's strip mall design.

The rough map that is an integral part of the proposal shows two future projects that are quite important in achieving Town goals: the Clearwater Project and the Shady Rest site. I have previously expressed my thoughts about the importance of not compromising the Shady Rest site as a workforce housing site. I have heard Planning Commission members encourage that proponent to add commercial and retail to the site, with the well-intentioned desire of creating a "walkable community". However, I believe that the rough visual that I am providing will illustrate that a more appropriate opportunity exists with the Clearwater Project, especially because it is well within a 5-minute walk of Shady Rest. Shady Rest is also only a few minutes walk to other commercial projects on both Main Street and Old Mammoth Road. Any retail in Shady Rest represents another lost workforce housing opportunity, which we cannot afford.

I am suggesting that there should be two different planning principles applied to these two projects, as follows:

Shady Rest: Do not encourage traffic from outside, even pedestrian, other than through bike path connectors. Make the childcare center the only exception, with 15 minute drop-off parking. Dedicate built areas to housing (including the childcare center). Landscape open spaces, with paths and play areas for resident families, not outsiders. As such, it would be a community that wouldn't compete with outside commercial opportunities at the expense of lost housing.

Clearwater Project: Encourage this project to integrate with its resident neighbors by offering ground-floor amenities in all buildings, including a full-service supermarket and other services noted in my letter (without parking!). Recognize this project as our first opportunity to achieve a true community experience within walking distance of many residents, and ask the proponent to design it as such. This project would encourage everyone to visit it by foot, bicycle, or transit only (other than its hotel/condo visitors who arrive in a car). Clearwater can help us achieve many of our goals, if we can find the will to work with the proponent to make it a truly animated integral part of our community. Creative thinking, not rigid formulas, can make this happen.

Please feel free to contact me if you have questions concerning either of these letters.

Sincerely,

/s/ *Sandy Hogan*

Enclosures: Clearwater Scoping Comments and map
Cc: Town Council, Staff, and Planning Commission
Editors, Mammoth Times and The Sheet
Mark Maldonado, Mammoth Lakes Housing, Inc.
Clearwater Project: Metric Holdings, Inc/Metric Mammoth LLC
Mammoth Stakeholders

15.3 Traffic Impact Study

TRAFFIC IMPACT ANALYSIS

MAMMOTH CLEARWATER

TOWN OF MAMMOTH LAKES, CALIFORNIA

This traffic impact analysis has been prepared
under the supervision of Leslie E. Card, PE

Signed Leslie E. Card





LSA

August 2006
Revised November 2006

TRAFFIC IMPACT ANALYSIS

MAMMOTH CLEARWATER

TOWN OF MAMMOTH LAKES, CALIFORNIA

Submitted to:

Metric Holdings, Inc.
1663 Ventura Boulevard, Suite 925
Encino, California 91436

Prepared by:

LSA Associates, Inc.
20 Executive Park, Suite 200
Irvine, California 92614-4731
(949) 553-0666

LSA Project No. MHD0601

LSA

August 2006

Revised November 2006

TABLE OF CONTENTS

INTRODUCTION 1
PROJECT DESCRIPTION 1
METHODOLOGY 1
LEVEL OF SERVICE STANDARDS 5
EXISTING (WINTER 2004) CONDITIONS 9
CUMULATIVE (EXISTING PLUS APPROVED PROJECTS) CONDITIONS 9
PROJECT TRIP GENERATION 20
CUMULATIVE PLUS PROJECT CONDITIONS 20
MITIGATION MEASURES 20
LONG-RANGE TOWN BUILD OUT CONDITIONS 25
INTERNAL CIRCULATION/PROJECT ACCESS 25
PARKING 28
MITIGATION MEASURES 29
CONCLUSIONS 29

APPENDICES

A: EXISTING LEVEL OF SERVICE WORKSHEETS
B: CUMULATIVE BASELINE LEVEL OF SERVICE WORKSHEETS
C: CUMULATIVE PLUS PROJECT LEVEL OF SERVICE WORKSHEETS
D: CUMULATIVE PLUS PROJECT LEVEL OF SERVICE WORKSHEETS AT THE PROJECT ACCESS LOCATIONS
E. LONG-RANGE TOWN GENERAL PLAN BUILD OUT LEVEL OF SERVICE WORKSHEETS AT THE PROJECT ACCESS LOCATIONS
F. RESERVOIR NEED VS. TRAFFIC INTENSITY NOMOGRAPH

FIGURES AND TABLES

FIGURES

Figure 1: Project Location 2
Figure 2a: Project Site Plan 3
Figure 2b: Project Site Plan 4
Figure 3: Study Area Intersections and Circulation System 6
Figure 4: Study Area Intersection Geometrics and Traffic Control Devices 10
Figure 5: Existing Condition Typical Winter Saturday Peak-Hour Traffic Volumes 11
Figure 6: Approved Project Locations and Typical Winter Saturday Peak-Hour Traffic Volumes 15
Figure 7: Cumulative Baseline Typical Winter Saturday Peak-Hour Traffic Volumes 16
Figure 8: Peak-Hour Traffic Signal Warrant at Old Mammoth Road/Sierra Nevada Road 18
Figure 9: Peak-Hour Traffic Signal Warrant at Azimuth Drive/Meridian Boulevard 19
Figure 10: Project Trip Distribution and Assignment 22
Figure 11: Internal Circulation and Project Access Locations 23
Figure 12: Internal Circulation and Project Access Locations 26

TABLES

Table A: Intersection LOS Descriptions 7
Table B: Level of Service Parameters 8
Table C: Existing (2003) Typical Winter Saturday Intersection LOS 12
Table D: Approved Projects Trip Generation 14
Table E: Cumulative Typical Winter Saturday Intersection Levels of Service 17
Table F: Mammoth Clearwater Trip Generation 21
Table G: Cumulative Plus Project Typical Winter Saturday Intersection LOS 24
Table H: Long-Range Typical (Existing General Plan) Winter Saturday Intersection LOS 27
Table I: Mammoth Clearwater Residential Parking Requirements 28
Table J: Mammoth Clearwater Commercial Shared Parking Requirements 28

MAMMOTH CLEARWATER TRAFFIC IMPACT ANALYSIS

INTRODUCTION

The purpose of this Traffic Impact Analysis (TIA) is to assess potential circulation and parking impacts associated with the development of the Mammoth Clearwater project on the existing circulation system of the Town of Mammoth Lakes (Town).

This report will focus on the short-range (near-term) and the long-range (General Plan build out) impacts of the Mammoth Clearwater project. The existing typical winter Saturday condition will be considered to be the baseline condition in this TIA. This analysis provides an assessment of the Mammoth Clearwater traffic impacts and the determination of traffic mitigation as required for California Environmental Quality Act (CEQA) compliance.

PROJECT DESCRIPTION

The Mammoth Clearwater project is located north of Sierra Nevada Road, and west of Old Mammoth Road, and east of Laurel Mountain Road. The existing uses on site include two restaurants with a total of 11,948 square feet and a 141-unit hotel (Rodeway Inn).

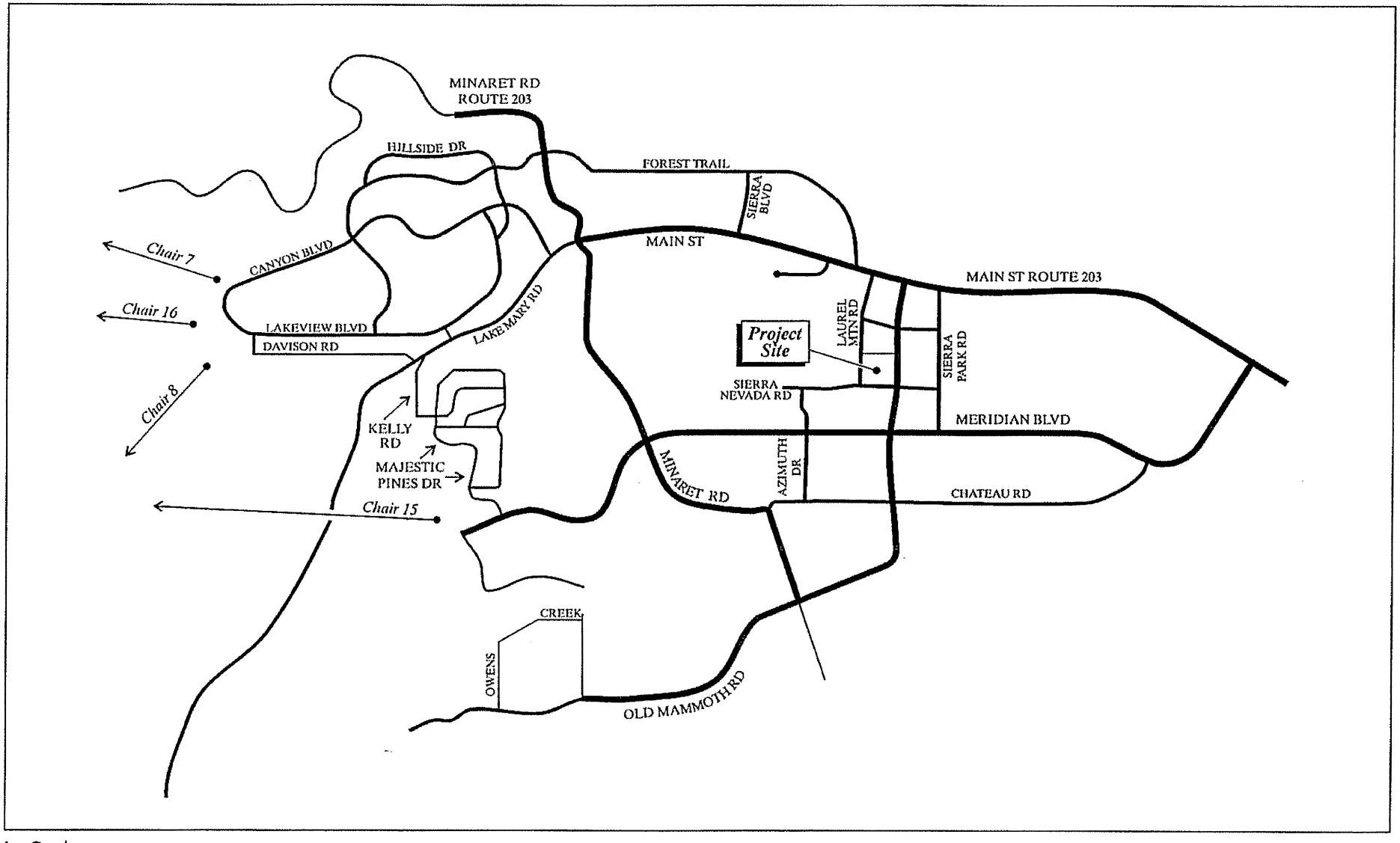
The project consists of 382 residential condominium units (i.e., 480 bedrooms and 43 work-force housing units) and 28,205 square feet of commercial (8,000 square feet of restaurant and 20,205 square feet of retail). Access to the residential portion of the project site will be provided via two full-access driveways on Old Mammoth Road and a driveway on Sierra Nevada Road. Access to the retail component of the project will be provided via two driveways on Old Mammoth Road and Sierra Nevada Road. The location of Mammoth Clearwater is shown in Figure 1. The project site plan is illustrated in Figure 2.

METHODOLOGY

The analysis of traffic impacts examines the following conditions:

1. Existing conditions (2004)
2. Cumulative baseline (existing plus approved projects) conditions
3. Cumulative plus project conditions
4. Long-Range Town Build Out: Alternative 2 – Existing General Plan

Typical winter Saturday peak-hour baseline conditions were used to analyze traffic impacts for the existing and cumulative (existing plus approved project) conditions. The design day used in this study is a typical winter Saturday, which occurs 15–20 times a year. In the context of standard engineering practice, even the typical winter Saturday represents a conservative approach to traffic planning and



LSA

FIGURE 1

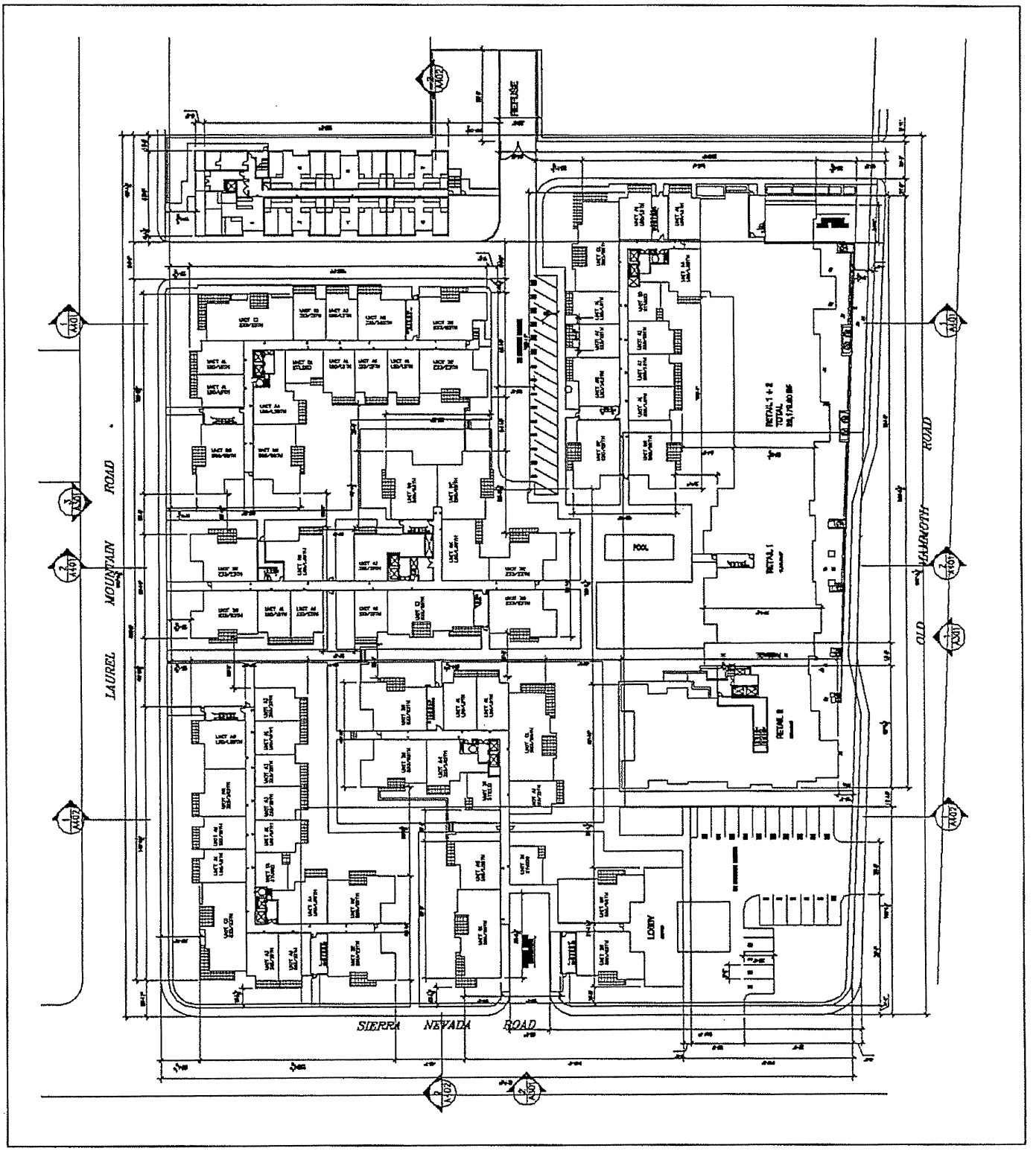
N

NOT TO SCALE

Mammoth Clearwater

Project Site Location

I:\MHD0601\G\Location.cdr (2/17/06)



LSA

FIGURE 2A

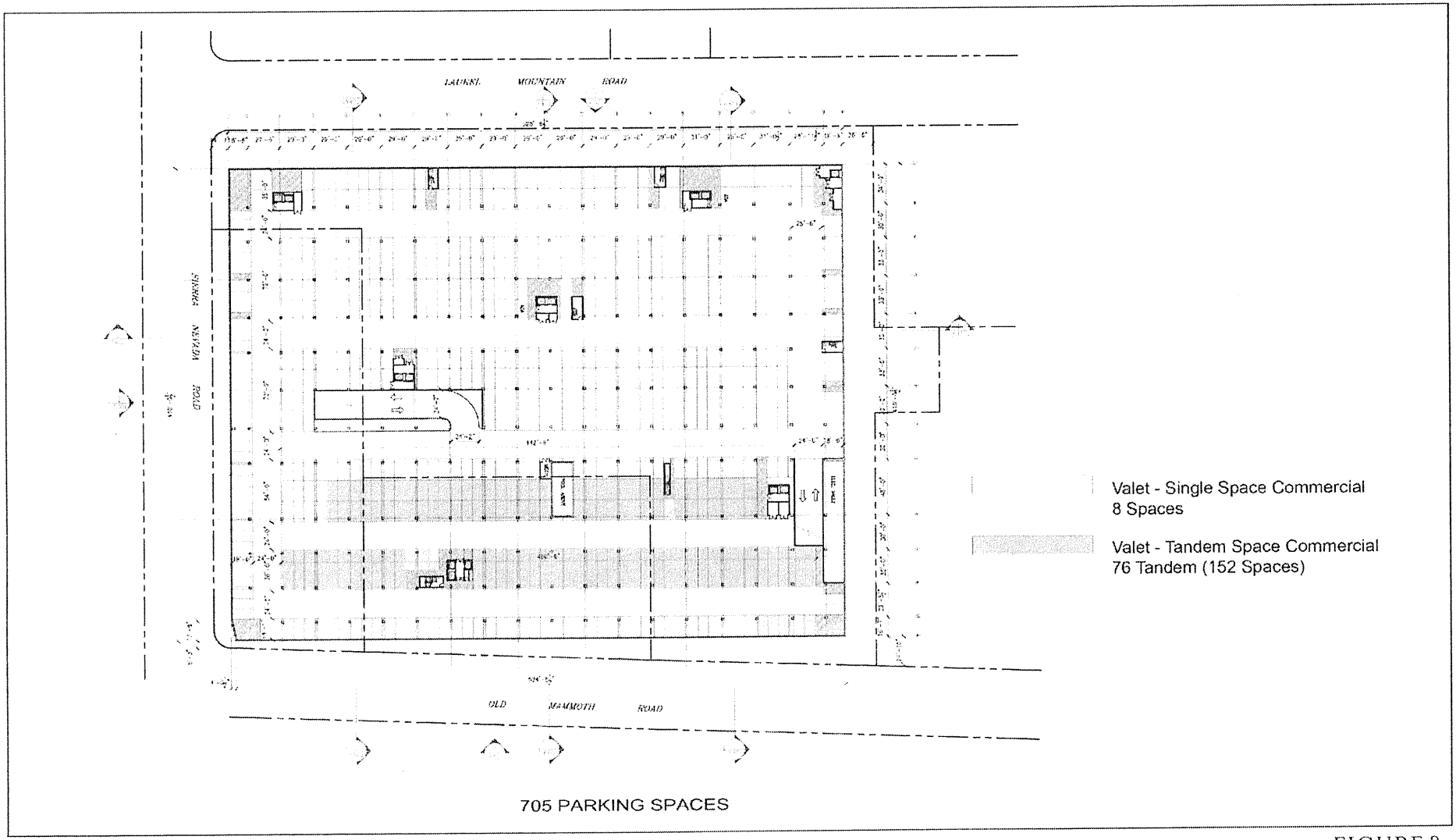
N

0 50 100
FEET

Mammoth Clearwater

Site Plan

I:\MHD0601\G\Site Plan-a.cdr (3/31/06)



LSA

FIGURE 2B

N

0 60 120
FEET

SOURCE: The Landau Partnership, Inc.

I:\MHD0601\G\Site Plan-b.cdr (8/31/06)

Mammoth Clearwater
Site Plan

mitigation. Typical winter Saturday peak-hour traffic counts previously conducted by the Town and other approved traffic studies were utilized. For intersections where existing traffic counts were not available, LSA used traffic counts from the General Plan Update Traffic Analysis (November 2004) prepared by LSC Transportation Consultants, Inc.

The study area intersections are as follows:

1. Old Mammoth Road/Main Street
2. Old Mammoth Road/Meridian Boulevard
3. Old Mammoth Road/Sierra Nevada Road
4. Main Street/Sierra Park Road
5. Azimuth Drive/Meridian Road
6. Sierra Park Road/Meridian Road

Figure 3 shows the location of the five study area intersections as well as the Town's General Plan Roadway Classifications for the surrounding circulation system.

A cumulative scenario has been included in this analysis to account for traffic from approved development projects that would be added to the existing circulation system. A list of approved projects was supplied by the Town staff. Thirty development projects have been identified by the Town as anticipated to be developed within the near future.

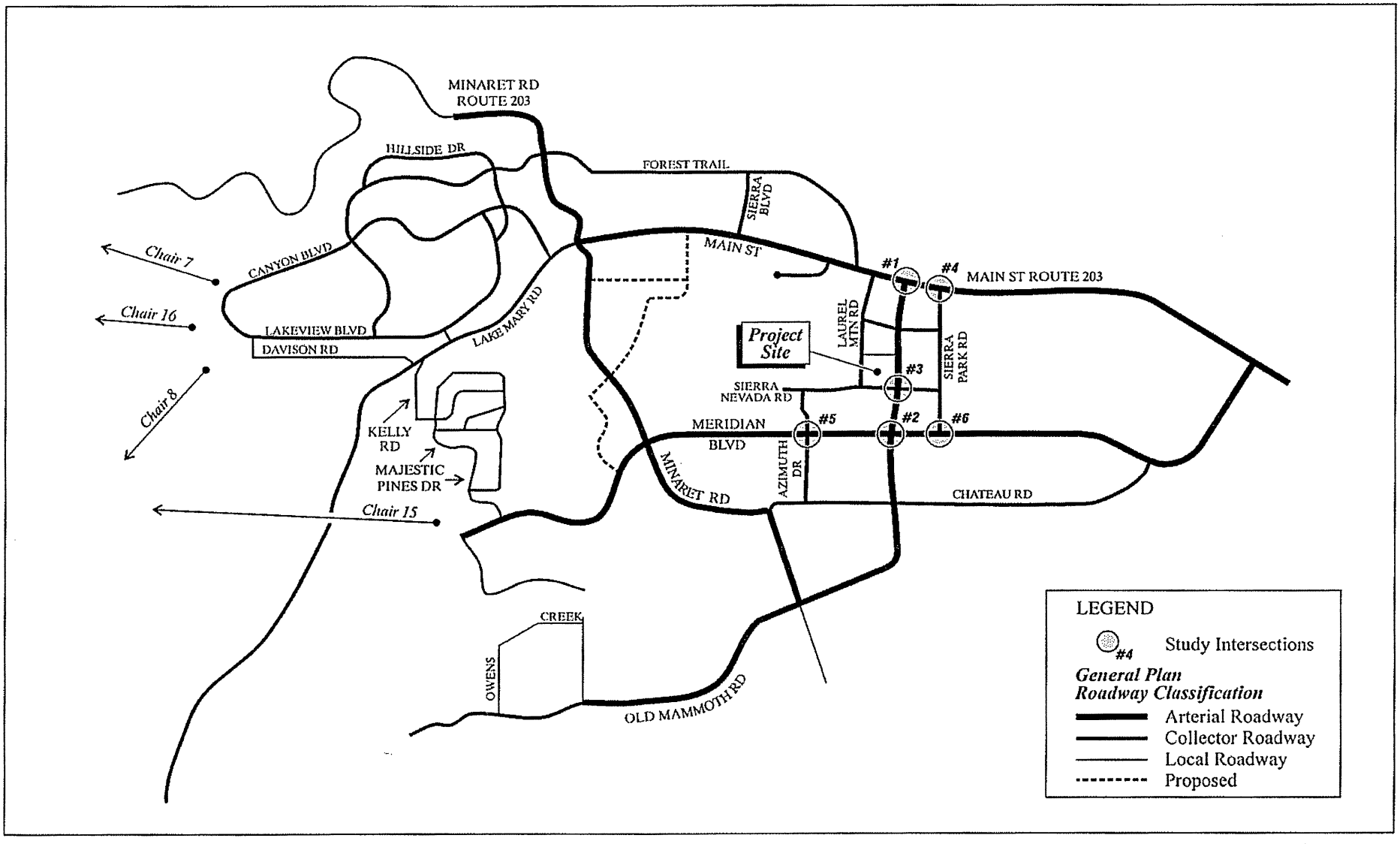
Peak winter Saturday daily and p.m. peak-hour trips were generated for the proposed Mammoth Clearwater project using standard trip rates from the Town and the Institute of Transportation Engineers (ITE), *Trip Generation Manual,* 7th Edition. Trip distribution percentages were determined based upon review of approved traffic studies for the Intrawest Master Plan and North Village Specific Plan.

LEVEL OF SERVICE STANDARDS

The Town's level of service (LOS, which is defined using letter grades A–F) standard for intersections is LOS D, which corresponds to a volume-to-capacity (v/c) ratio of 0.90 for signalized intersections. An intersection is considered satisfactory when it operates in the range of LOS A to D. An unsignalized intersection would be considered deficient 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 multilane approach, consistent with the adopted Circulation Element and General Plan Update Traffic Analysis (LSC Consultants, 2004).

Methodology

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of LOS. These levels recognize that, while an absolute limit exists regarding the amount of traffic traveling through a given intersection (the absolute capacity), the conditions that



LSA

FIGURE 3

N

NOT TO SCALE

Mammoth Clearwater
Study Area Intersections
and Circulation System

I:\MHD0601\G\Study Ints.cdr (8/31/06)

motorists experience rapidly deteriorate as traffic approaches the absolute capacity. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stalls) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled LOS E. Beyond LOS E, capacity has been exceeded, and arriving traffic will exceed the ability of the intersection to accommodate it. An upstream queue will then form and continue to expand in length until the demand volume again declines.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual*. The Manual establishes LOS A–F. Brief descriptions of the six LOS, as abstracted from the Manual, are shown in Table A. The LOS criteria for unsignalized and signalized intersections are shown in Table B.

Table A: Intersection LOS Descriptions

LOS	Description
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 service level 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 within platoons of vehicles.
C	This level 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 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 service level. 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 describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles 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.

Table B: Level of Service Parameters

Level of Service	Signalized Intersections	Unsignalized Intersections
	Delay (seconds)	Delay (seconds)[1]
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0–15.0
C	> 20.0 and ≤ 35.0	> 15.0–25.0
D	> 35.0 and ≤ 55.0	> 25.0–35.0
E	> 55.0 and ≤ 80.0	> 35.0 seconds/vehicle and > 4.0 hour cumulative delay for single lane or > 5.0 hour cumulative delay for two-lane approach
F	> 80.0	

For all study area intersections, the *2000 Highway Capacity Manual* (HCM 2000) analysis methodologies were used to determine intersection LOS. All LOS were calculated using the Traffix Version 7.7 software, which uses the HCM 2000 methodologies.

Signalized Intersections and Unsignalized Intersections

LOS for signalized and unsignalized intersections are determined using the methodology set forth in the 2000 HCM, where the calculation of LOS is dependent on the occurrence of gaps in the through traffic flow of the major street. Using data collected describing the intersection configuration and traffic volumes at the study area intersections, the delay (in seconds per vehicle) of each minor street or major street conflicting movement is estimated. These delays are used to calculate the intersection's average delay per vehicle, which is used to determine the intersection LOS. It should be noted that at two-way, stop-controlled intersections, the intersection delay refers only to the delay experienced by vehicles on the stop-controlled minor street. As a result, at locations where a higher volume of through traffic is experienced on the major street, fewer gaps will be experienced in the through traffic flow of the major street. As a result, the addition of only one or two vehicles to the stop-controlled minor street could result in the rapid deterioration of LOS at that intersection, although most vehicles at the intersection do not experience any delay.

It should be noted that the LOS threshold at unsignalized intersections can be easily exceeded when only a few vehicles experience a delay greater than 50 seconds. Furthermore, application of this threshold would substantially increase the frequency of identified failure of intersections, along with the need for intersection improvements. For these reasons, the Town has identified unsignalized intersection LOS standards that allow greater delay on low-volume approaches. These thresholds of significance identify a deficiency if the approach delay exceeds four vehicle-hours for a single-lane approach and five vehicle-hours for a multilane approach. This threshold has the advantage of being relatively easy to calculate as well as to explain to the public. For example, it could be summarized as follows: "A deficiency is only found for a side street with two approach lanes when the cumulative

[1] If the intersection exceeds the LOS D criteria, the hourly total criteria (four vehicle-hours) standard applies.

total delay exceeds five hours." Therefore, as delay exceeds the 50-second threshold, the four vehicle-hour and five vehicle-hour standard applies.

EXISTING (WINTER 2004) CONDITIONS

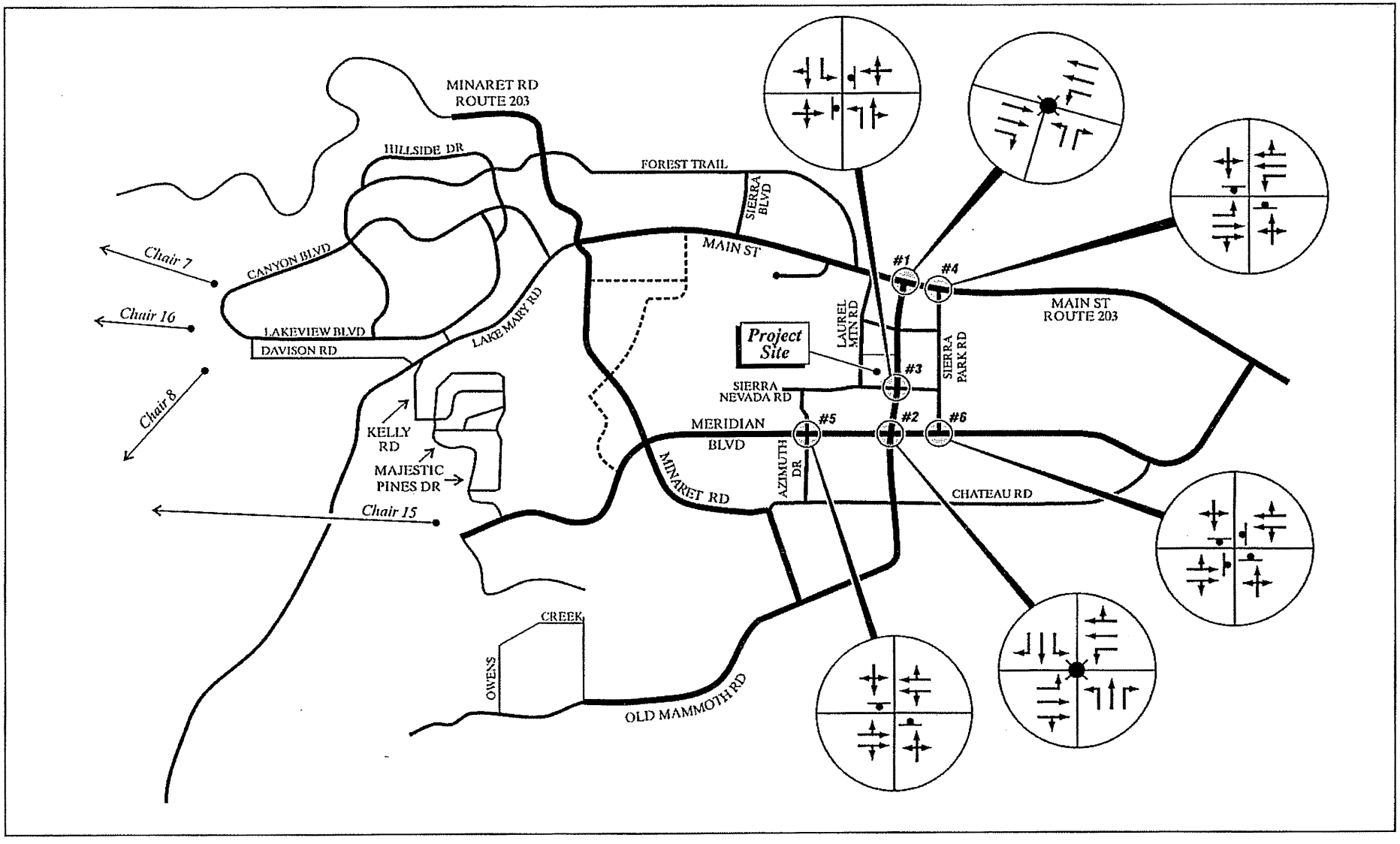
Figure 4 presents the existing number of lanes and intersection control for the study area intersections. Figure 5 shows the existing typical winter Saturday peak-hour traffic volumes at each study area intersection. Existing LOS at study area intersections are shown in Table C. Existing LOS worksheets are presented in Appendix A.

As shown in Table C, all study area intersections currently operate at satisfactory LOS (LOS D or better) in the existing condition with the exception of the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. These intersections currently operate at LOS F due to the delay conditions experienced on the minor streets (Sierra Nevada and Azimuth Drive). The major street (Old Mammoth Road and Meridian Boulevard) approach at this intersection will experience minimum delay. Based on an analysis, these intersections also exceed the four vehicle-hour criteria in the existing condition.

CUMULATIVE (EXISTING PLUS APPROVED PROJECTS) CONDITIONS

To forecast background traffic conditions, traffic volumes from approved projects in the vicinity of the Mammoth Clearwater project were added to existing traffic volumes. A list of approved projects was provided by the Town. The following projects in the vicinity of the Mammoth Clearwater project are included:

1. Tavern Road Park-N-Ride: 31 high-density dwelling units
2. The Jeffries: 14 high-density dwelling units
3. The Grove: 14 medium-density dwelling units
4. Mammoth Lakes Foundation: 75 high-density student housing units
5. Westin Hotel (The Monache): 230-room resort hotel with 4,000 square feet of restaurant use
6. 80/50 Timeshare Condominiums: 23 high-density dwelling units
7. Tallus Timeshare Condominiums: 19 high-density dwelling units
8. Mammoth Hillside: 234 resort hotel units and 37 employee units
9. Mammoth Lakes Family Housing: 24 high-density dwelling units
10. Tosco Townhomes: 13 high-density dwelling units
11. Swiss Chalet: 40 high-density dwelling units
12. Fairway 4/5 (Woodwinds): 28 high-density dwelling units
13. Sierra Star 4b Housing: 35 high-density dwelling units
14. Intrawest South Hotel: 149 high-density dwelling units



LSA

LEGEND

- Travel Lane
- Stop Sign
- Traffic Signal

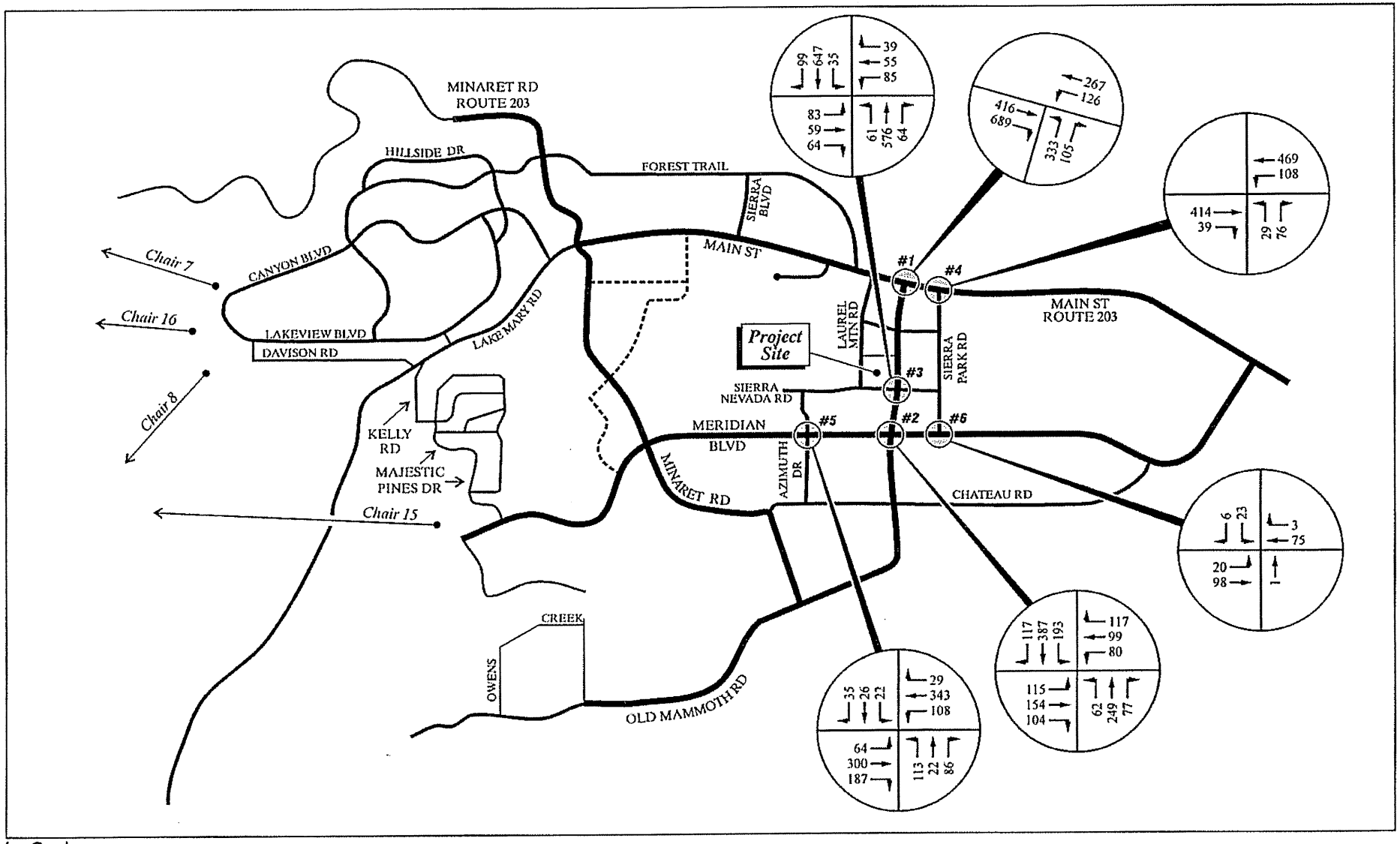
N

NOT TO SCALE

FIGURE 4

Mammoth Clearwater
Study Area Intersection Geometrics
and Control Devices

I:\MHD0601\G\Geometrics.cdr (8/31/06)



LSA

FIGURE 5

NOT TO SCALE

SOURCE: Table 2; Mammoth Lakes Transportation Model Validation Report, LSC Transportation Consultants, Inc. (November 2004)

I:\MHD0601\G\Ex Vols.cdr (8/31/06)

Mammoth Clearwater

Existing Condition Typical Winter Saturday Peak Hour Traffic Volumes

Table C: Existing (2003) Typical Winter Saturday Intersection LOS

Intersection	Delay (sec)	LOS
1. Old Mammoth Rd./Main Street	18.5	B
2. Old Mammoth Rd./Meridian Blvd.	19.3	B
3. Old Mammoth Rd./Sierra Nevada Rd.	**>35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**
4. Sierra Park/Main Street*	15.4	C
5. Azimuth Drive/Meridian Boulevard*	**>35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**
6. Sierra Park Road/Meridian Boulevard*	7.7	A

Notes: * = unsignalized intersection
Shaded and Bold = unsatisfactory LOS and exceeds four vehicle-hour criteria

15. Storied Places: 23 high-density dwelling units
16. Fairway 16 (Solstice): 66 high-density dwelling units
17. Stonegate: 14 medium-density dwelling units
18. Snowcreek VI: 120 high-density dwelling units
19. Mono County Library: 12,000 square feet
20. Mammoth Hospital: 40,000 square feet
21. Darrin Davis: 11 high-density dwelling units
22. Manzanita Apartments: 14 high-density dwelling units
23. Aspen Village Phase I: 48 affordable housing units
24. Mammoth Crossings (Lodestar): 45 condominium/hotel units
25. Aspen Village Phase II: 24 high-density dwelling units
26. Eagle Lodge: 62 condominium/hotel dwelling units, 5,000-square-foot ice skating rink, 4,000-square-foot convenience market, 8,000-square-foot day spa, 4,000-square-foot restaurant, a food court, ski school/day care, and skier commercial services
27. 3863/3905 Main Street: 54 high-density dwelling units
28. Mammoth Lakes 3789, LLC: 22 medium-density units
29. Snowcreek 7: 118 high-density dwelling units
30. Town Parking Structure: 340 space Municipal parking garage.
31. Mammoth Lakes Fire and Police Department (MFPD): demolition of old station and construction of new station.

Table D shows the trip generation of each approved project. Where available, trip generation estimates were obtained from traffic studies prepared for the approved projects. Where traffic studies were not available, trips were generated for that project using trip rates from the Mammoth Lakes Transportation Model (MTM) and the ITE *Trip Generation Manual*, 7th Edition. The location of the approved projects, along with the traffic volumes contributed to study area intersections by the approved projects, is illustrated in Figure 6.

Traffic generated by the approved projects was added to existing traffic to arrive at the cumulative baseline condition. The cumulative baseline traffic volumes at each intersection are illustrated in Figure 7. A level of service analysis at study area intersections was prepared for the cumulative baseline condition. The cumulative baseline LOS are shown in Table E and the LOS worksheets are presented in Appendix B.

As shown in Table E, all the study area intersections are forecast to operate at satisfactory LOS (LOS D or better) in the cumulative condition with the exception of the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. These intersections currently operate at LOS F due to the delay conditions experienced on the minor streets (Sierra Nevada Road and Azimuth Drive). The major street (Old Mammoth Road and Meridian Boulevard)

Table D- Approved Projects Trip Generation

		Winter Saturday Peak Hour		
Land Use	**ADT**	**In**	**Out**	**Total**
1. Tavern Road Park and Ride[1]	248	10	10	20
2. The Jeffries[1]	112	5	5	9
3. The Grove[1]	420	19	16	35
4. Mammoth Lakes Foundation[1]	600	24	24	49
5. The Monache[1]	2,473	141	100	241
6. 80/50 Timeshare Condominiums[1]	440	20	17	37
7. Tallus Timeshare Condominiums[1]	180	8	7	15
8. Mammoth Hillside[2]	2,205	106	84	265
9. Mammoth Lakes Housing[1]	240	11	9	20
10. Tosco Townhomes[1]	130	6	5	11
11. Swiss Chalet[3]	—	—	—	—
12. Fairway 4/5 (Woodwinds)[1]	280	13	11	23
13. Sierra Star 4b Housing[1]	400	18	15	33
14. Intrawest South Hotel[1]	1,490	67	57	124
15. Storied Places[1]	220	10	8	18
16. Fairway 16 (Solstice)[1]	580	26	22	48
17. Stonegate[1]	140	6	5	12
18. Snowcreek VI[1]	1,060	47	40	88
19. Mono County Library[1]	745	57	51	108
20. Mammoth Hospital[4]	671	9	28	37
21. Darrin Davis Condominiums[1]	110	5	4	9
22. Manzanita Apartments[1]	112	5	5	9
23. Aspen Village Phase I[1]	480	22	18	40
24. Mammoth Crossing (Lodestar)[1]	450	20	17	37
25. Aspen Village Phase II[1]	240	11	9	20
26. Eagle Lodge[1]	1,285	132	114	143
27. 3863/3905 Main Street[1]	540	24	21	45
28. Mammoth Lakes 3789, LLC[1]	230	10	9	19
30. Snowcreek 7[5]	1,062	46	40	86
31. Town Parking Structure[6]	-	-	-	-
32. MLFPD[7]	-	-	-	-
Total Approved Projects	**17,143**	**876**	**752**	**1,600**

Notes:

[1] Daily trip generation based on MTM. The p.m. peak-hour rates were developed based on the proportional relationship of the daily and p.m. peak-hour rates for the respective land uses as shown in the ITE Trip Generation, 7th Edition.

[2] Mammoth Hillside Traffic Impact Analysis, LSA Associates, Inc., December 2005.

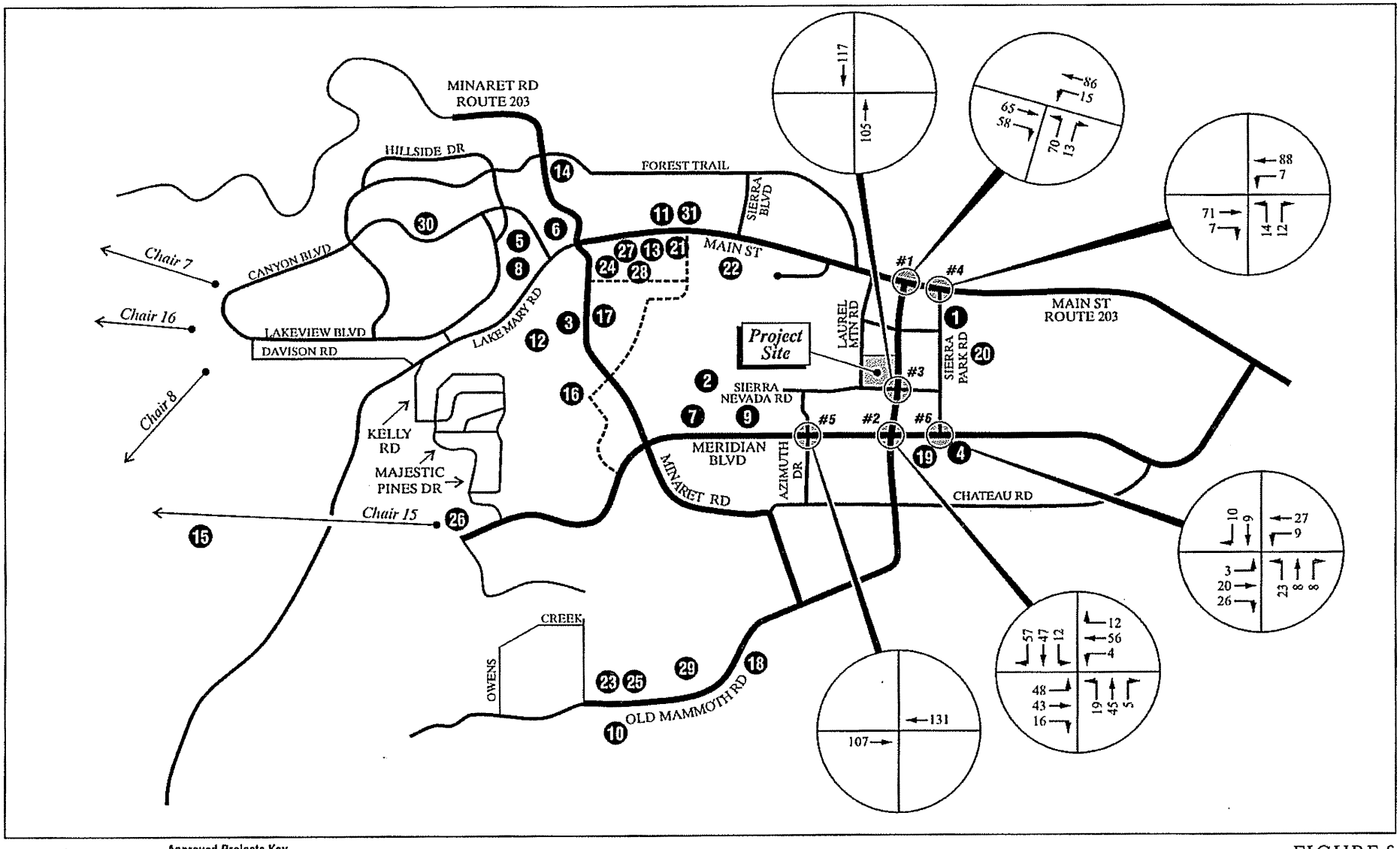
[3] This project is forecast to generate fewer vehicle trips than the existing land use, resulting in no new trip generation.

[4] Mammoth Hospital Expansion Traffic Impact Analysis, LSA Associates, Inc., April 2003.

[5] Snowcreek 7 Traffic Impact Analysis, LSA Associates, Inc., December 2005.

[6] No increase in area-wide traffic generation.

[7] This land use will generate a nominal number of trips during the Saturday peak hour.



LSA

N

NOT TO SCALE

Approved Projects Key

1. Tavern Road Park and Ride
2. The Jeffries
3. The Grove
4. Mammoth Lakes Foundation
5. Monache (Westin)
6. 80/50 Timeshare Condos
7. Tallus Timeshare Condos
8. Mammoth Hillside
9. Mammoth Lakes Family Housing
10. Tosco Townhomes
11. Swiss Chalet
12. Fairway 4/5 (Woodwinds)
13. Sierra Star 4b Housing
14. Intrawest South Hotel
15. Storied Places
16. Fairway 16 (Solstice)
17. Stonegate
18. Snowcreek VI
19. Mono County Library
20. Mammoth Hospital
21. Darrin Davis
22. Manzanita Apartments
23. Aspen Village Phase I
24. Mammoth Crossing (Lodestar)
25. Aspen Village Phase II
26. Eagle Lodge
27. 3863/3905 Main Street
28. Mammoth Lakes 3789 LLC
29. Snowcreek 7
30. Town Parking Structure
31. MLFPD

FIGURE 6

Mammoth Clearwater
Approved Project Locations and Trip Assignment

I:\MHD0601\G\Appvd Projects.cdr (11/14/06)

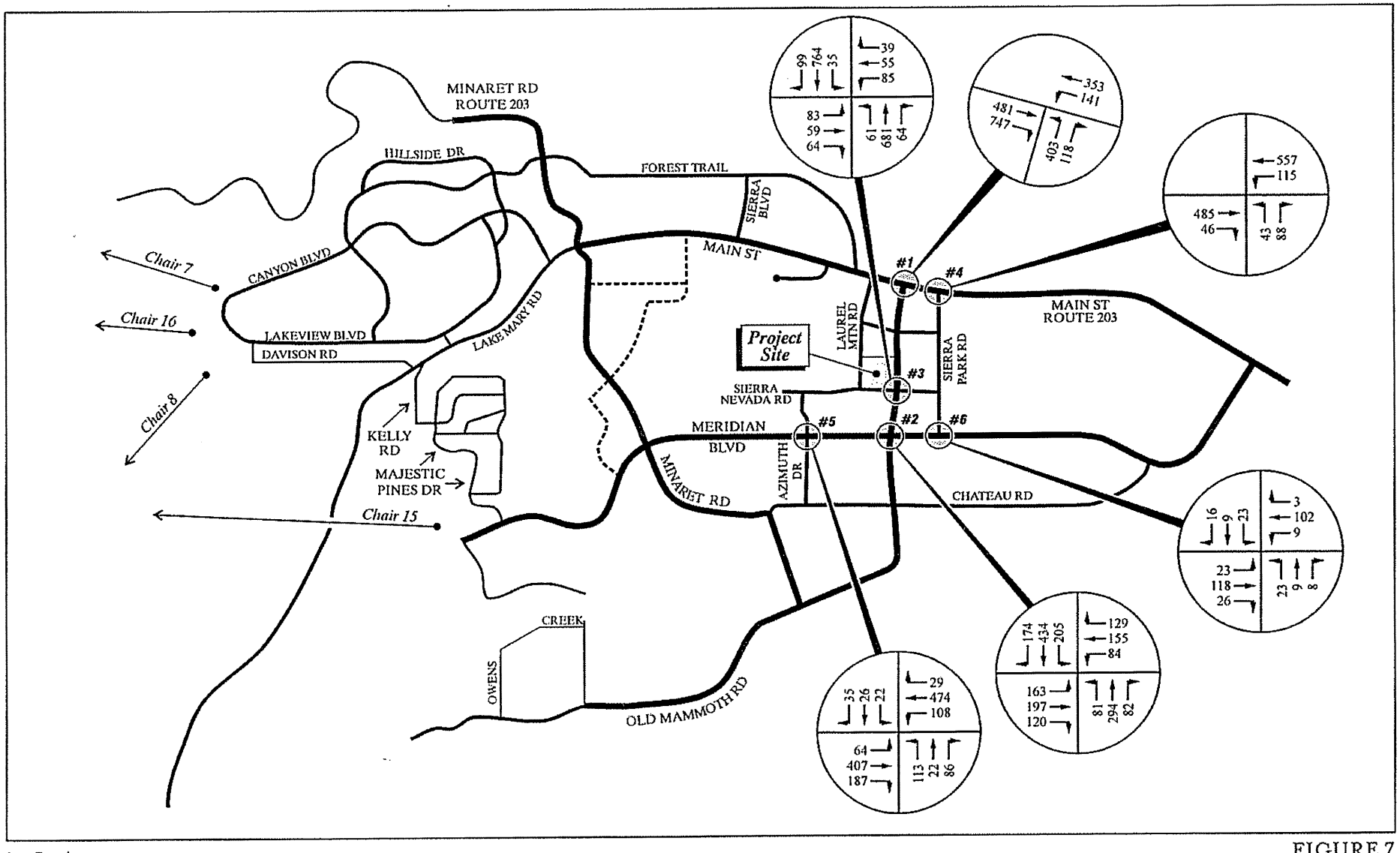


FIGURE 7

LSA

N

NOT TO SCALE

Mammoth Clearwater
Cumulative Baseline Typical Winter Saturday
Peak Hour Traffic Volumes

I:\MHD0601\G\Cumulative Baseline Vols.cdr (11/14/06)

Table E: Cumulative Typical Winter Saturday Intersection Levels of Service

Intersection	Delay (sec)	LOS
1. Old Mammoth Rd./Main St.	22.6	C
2. Old Mammoth Rd./Meridian Rd.	22.4	C
3. Old Mammoth Rd./Sierra Nevada Rd.	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**
4. Sierra Park Rd./Main St.*	21.5	C
5. Azimuth Dr./Meridian Blvd.*	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**
6. Sierra Park Rd./Meridian Blvd.*	8.1	A

Notes:
* = unsignalized intersection
Shaded and Bold = unsatisfactory LOS and exceeds four vehicle-hour criteria

approach at these intersections will experience minimum delay. Based on an analysis, these intersections also exceed the four vehicle-hour criteria.

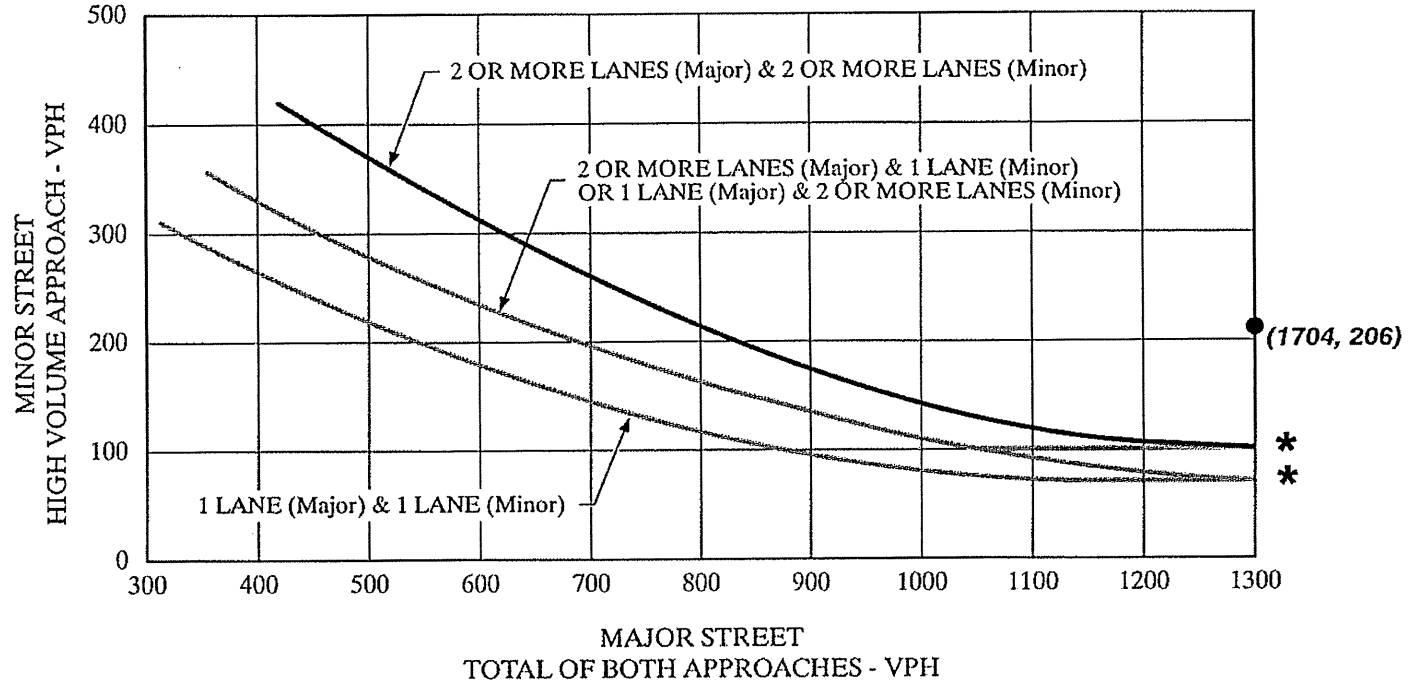
To determine whether traffic signals are appropriate at these two intersections, a peak-hour signal warrant analysis was conducted in the cumulative condition. The Caltrans Traffic Manual peak-hour volume signal warrant for rural areas (communities with a population of less than 10,000 or having a speed limit above 40 mph on the major street) was used for this analysis.

A signal warrant analysis is conducted by comparing the sum volume of the major street approaches with the highest volume approach for the minor street. Figure 8 represents the peak-hour signal warrant analysis for the intersection of Old Mammoth Road/Sierra Nevada Road in the cumulative scenario. Based on this scenario, this intersection would exceed the peak-hour threshold for a traffic signal at this intersection.

Figure 9 represents the peak-hour signal warrant analysis for the intersection of Azimuth Drive/ Meridian Boulevard in the cumulative scenario. Based on this scenario, this intersection would also exceed the peak-hour threshold for a traffic signal at this intersection. Therefore, traffic signals are warranted for both intersections in the cumulative condition.

TRANSIT SERVICE

Transit service within the vicinity of the project site is currently served by Mammoth Lakes Transit Green Line. The Green Line provides bus stops adjacent to the project site and provides service to North Village and Eagle Lodge via Lake Mary Road, Kelly Road, Majestic Pines Drive, Meridian Boulevard, Azimuth Drive, Sierra Nevada Road, and Old Mammoth Road. The Green Line day service operates from 7:00 a.m. to 5:30 p.m. every 20 minutes past the hour. The evening service operates from 6:20 p.m. to 1:20 a.m. every hour on the hour.



WARRANT SATISFIED

* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

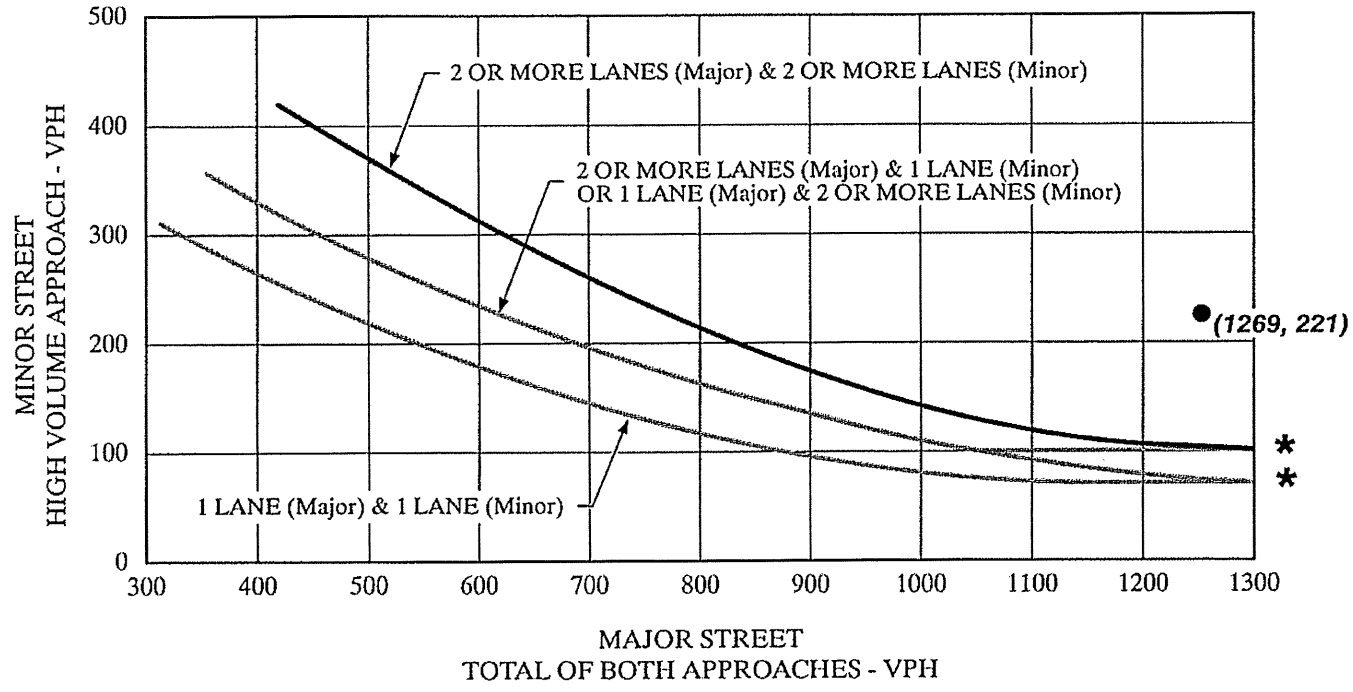
FIGURE 8

Mammoth Clearwater

Peak Hour Traffic Signal Warrant
at Old Mammoth Road/Sierra Nevada Road

SOURCE: CALTRANS TRAFFIC MANUAL, FIGURE 9-9.

I:\MHD0601\G\Warrant-Old Mammoth&Sierra Nevada.cdr (11/14/06)



WARRANT SATISFIED

* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

LSA

FIGURE 9

Mammoth Clearwater

Peak Hour Traffic Signal Warrant
at Azimuth Drive/Meridian Boulevard

SOURCE: CALTRANS TRAFFIC MANUAL, FIGURE 9-9.

I:\MHD0601\G\Warrant-Azimuth&Meridian.cdr (11/14/06)

PROJECT TRIP GENERATION

Project trips were generated based on the land uses of the proposed project. Winter Saturday daily and peak-hour trips were generated for the proposed Mammoth Clearwater project using trip rates from the MTM and the ITE *Trip Generation Manual*, 7th Edition. The MTM was developed with the specific goal of providing analyses of the interrelated issues of land use, transportation demand, and air quality. Trip rates from the MTM were used to develop daily trip forecasts. Peak-hour traffic volumes were derived from peak-to-daily ratios and in/out splits for similar land uses from the ITE *Trip Generation Manual*, 7th Edition. The project trip rates and trip generation are shown in Table F.

As shown in Table F, the proposed Mammoth Clearwater project generates approximately 5,181 daily trips and 449 peak-hour trips.

CUMULATIVE PLUS PROJECT CONDITIONS

The project trips were distributed to the surrounding circulation system based on the location of activity centers in the Town and the location of the proposed project in relation to the Town's recreational and commercial areas. The trip distribution and project trips at study area intersections are illustrated in Figure 10. As shown in Figure 10, 15 percent of the project trips are destined to Main Lodge via Minaret Road, 15 percent are destined west via Meridian Boulevard, and 10 percent destined east via Main Street and Meridian Boulevard, 15 percent destined south via Old Mammoth Road, 20 percent destined to Canyon Lodge area, and 25 percent destined to North Village area. Cumulative plus project traffic volumes are shown in Figure 11. LOS at study area intersections were analyzed and are shown in Table G. The LOS worksheets for the cumulative plus project conditions are presented in Appendix C.

As shown in Table G, all the study area intersections are forecast to operate at an satisfactory LOS (LOS D or better) in both the cumulative baseline and cumulative plus project conditions with the exception of the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. These intersections currently operate at LOS F due to the delay conditions experienced on the minor streets (Sierra Nevada Road and Azimuth Drive). The major street (Old Mammoth Road and Meridian Boulevard) approach at these intersections will experience minimum delay. Based on an analysis, these intersections also exceed the four vehicle-hour criteria in the cumulative baseline and cumulative plus project conditions. With the addition of project traffic to the cumulative scenario, the total volume increases by approximately 7.0 percent for the intersection of Old Mammoth Road/Sierra Nevada Road and 4.2 percent for the intersection of Azimuth Drive/Meridian Boulevard.

MITIGATION MEASURES

Evaluation of intersection LOS shows that the addition of the Mammoth Clearwater project traffic to the cumulative plus existing traffic will not directly significantly impact the study area intersections, according to the Town's criteria. However, the project will contribute to two cumulatively impacted locations, the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. These intersections provide inadequate LOS in 2004 in the cumulative and cumulative plus project conditions.

Table F - Mammoth Clearwater Trip Generation

			Weekend Peak Hour			
Land Use	**Size**	**Units**	**ADT[1]**	**In[2]**	**Out[2]**	**Total**
Trip Rate						
Residential Medium Density (MF) - Seasonal[1]		DU	10.000	0.448	0.382	0.830
Residential High Density (MF) - Year Round[1]		DU	8.000	0.350	0.298	0.648
Retaurant[3]		TSF	158.370	12.600	7.400	20.000
Retail[1]		TSF	78.710	2.116	2.694	4.810
Existing Trip Generation						
Residential Medium Density (MF) - Seasonal (Condominiums)	141	DU	1,410	63	54	117
Total Existing Trip Generation			1,410	63	54	117
Project Trip Generation						
Residential Medium Density (MF) - Seasonal (Condominiums)	339	DU	3,390	152	129	281
Residential Medium Density (MF) - Year Round (Employee Housing)	43	DU	344	15	13	28
Restaurant	8	TSF	1,267	101	59	160
Retail	20.205	TSF	1,590	43	54	97
Total Project Trip Generation			6,591	310	256	566
Total Net Trip Generation			**5,181**	**247**	**202**	**449**

Notes:

ADT = Average Daily Traffic

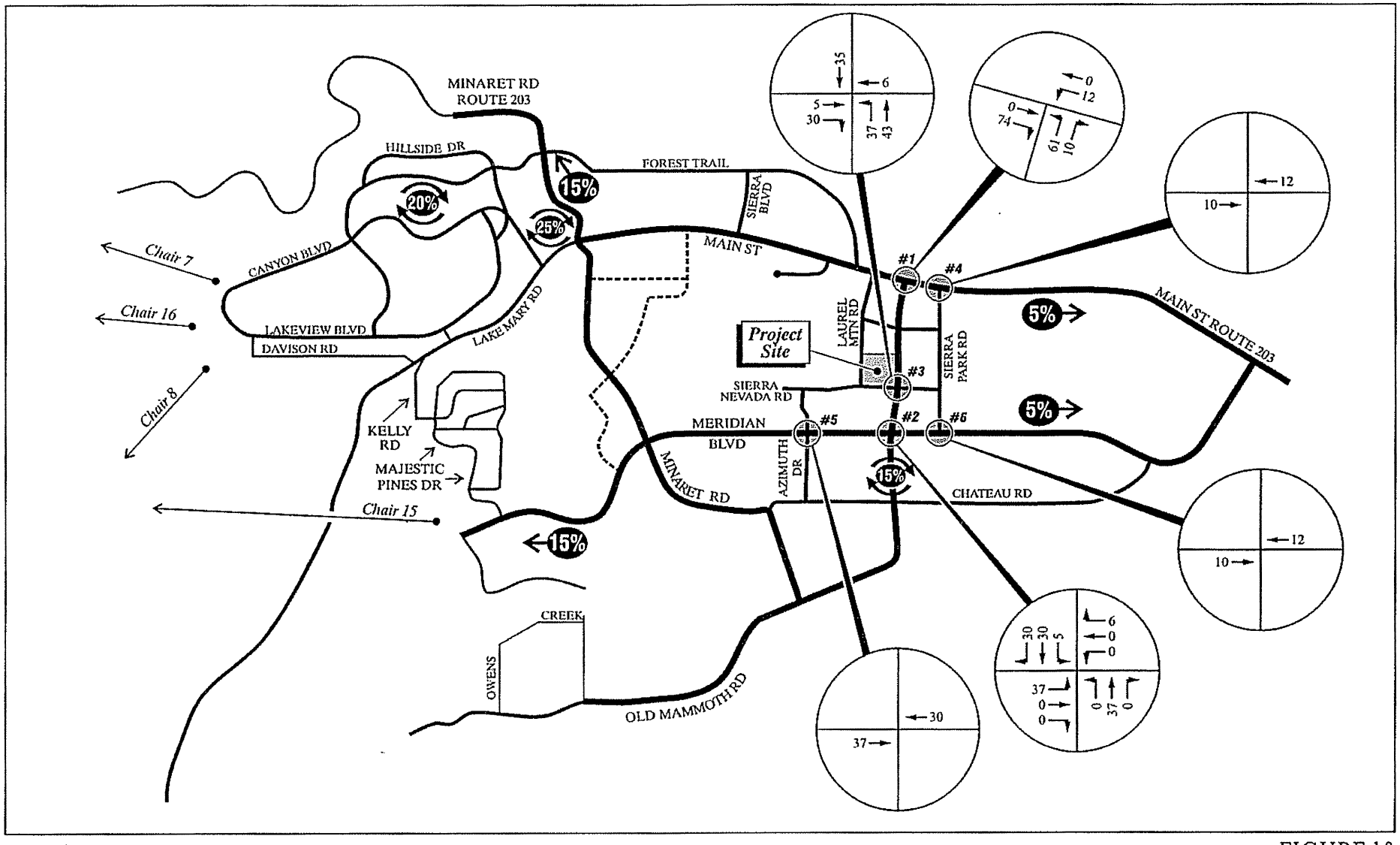
DU = Dwelling Unit

TSF = Thousand Square Feet

[1] Trip rates referenced from Table 1 of the Town of Mammoth Lakes Travel Demand Model Update by LSC Transportation Consultants, Inc. (2004).

[2] Peak-to-daily ratios and in/out splits derived from trip rates contained in the Institute of Transportation Engineers, *Trip Generation Manual*, 7th Edition (2003).

[3] Trip rate referenced from the Institute of Transportation Engineers, *Trip Generation Manual*, 7th Edition (2003) Land Use Code (932) - High-Turnover (Sit-Down) Restaurant



LSA

LEGEND:

20% - Percent Trip Distribution

15 - In This Area

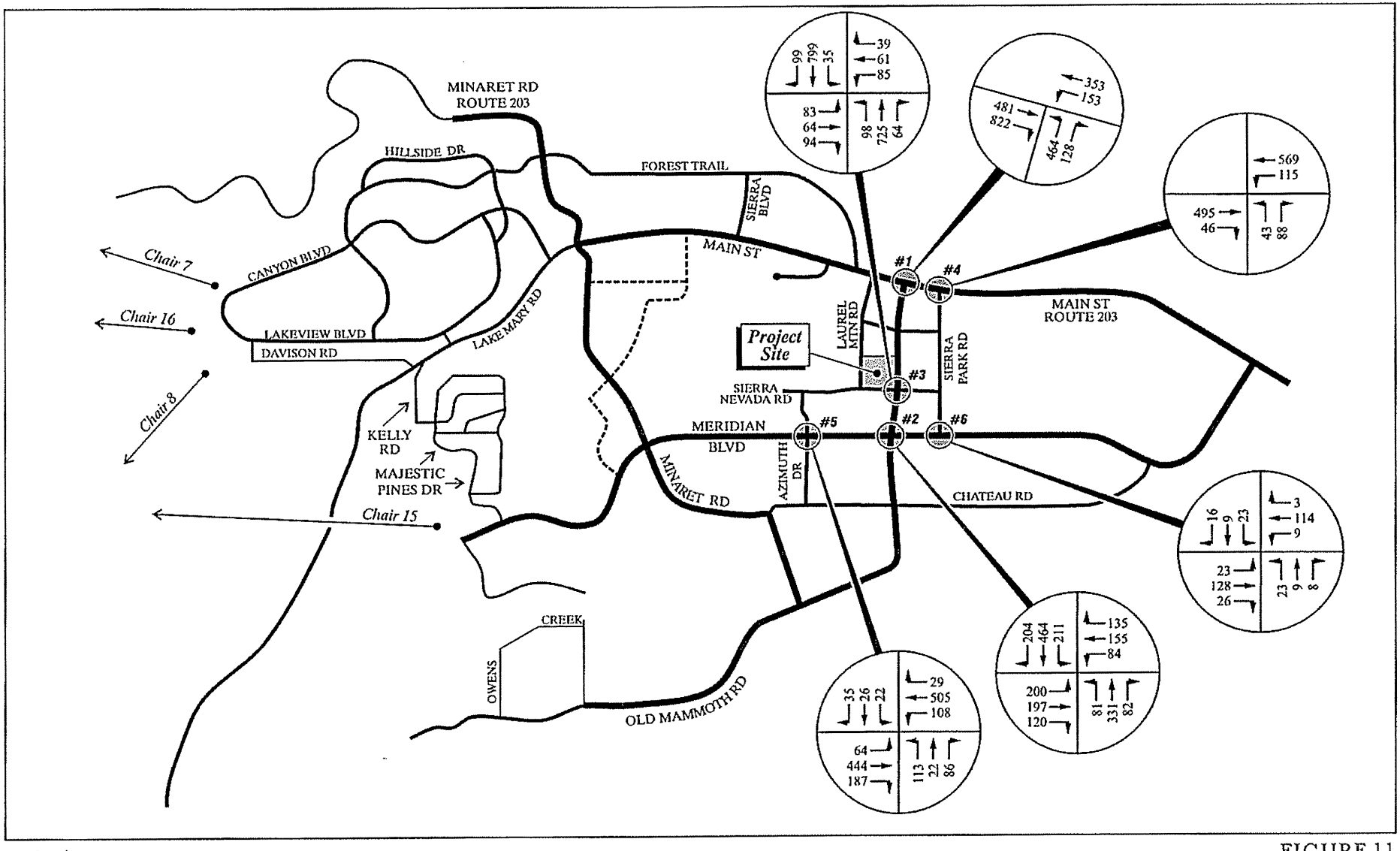
N

NOT TO SCALE

FIGURE 10

Mammoth Clearwater
Project Trip Distribution
and Assignment

I:\MHD0601\G\Trip Dist.cdr (11/14/06)



LSA

FIGURE 11

N

NOT TO SCALE

Mammoth Clearwater

Cumulative Plus Project Typical Winter Saturday Peak Hour Traffic Volumes

I:\MHD0601\G\Cumulative+Proj Vols.cdr (11/14/06)

Table G: Cumulative Plus Project Typical Winter Saturday Intersection LOS

Intersection	Cumulative + Project		With Mitigation	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Old Mammoth Rd./Main St.	32.2	C		
2. Old Mammoth Rd./Meridian Rd.	24.3	C		
3. Old Mammoth Rd./Sierra Nevada Rd.	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**	40.3	D
4. Sierra Park Rd./Main St.*	22.1	C		
5. Azimuth Dr./Meridian Blvd.*	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**	27.5	C
6. Sierra Park Rd./Meridian Blvd.*	8.1	A		

Notes: * = unsignalized intersection
Shaded and Bold = unsatisfactory LOS and exceeds four vehicle-hour criteria

For the intersection of Old Mammoth Road/Sierra Nevada Road, a traffic signal is recommended due to the volume of traffic that is expected on the eastbound and westbound approaches on Sierra Nevada Road. If a traffic signal is installed, the following improvements would be required for the cumulative condition, which would result in LOS D:

- Construct a traffic signal with permitted left-turn phasing in the eastbound and westbound directions and protected phasing in the northbound and southbound directions.

Since the project contributes to an existing and cumulative deficiency, the project would contribute a fair share of the installation of a traffic signal.

For the intersection of Azimuth Drive/Meridian Boulevard, a roundabout or traffic signal is recommended due to the volume of traffic that is expected on the northbound and southbound approaches on Azimuth Drive. If a traffic signal is installed, the following improvements would be required for the cumulative condition, which would result in LOS C:

- Construct a traffic signal with permitted left-turn phasing in the northbound and southbound directions and protected phasing in the eastbound and westbound directions.
- Construct a separate northbound left-turn lane

Alternatively, if a roundabout with a 60-foot island diameter and 20-foot circulating width is constructed, the intersection would operate at LOS B. Since the project contributes to an existing and cumulative deficiency, payment of Development Impact Fees (DIF) would provide the fair-share contribution of the installation of a traffic signal or roundabout.

LONG-RANGE TOWN BUILD OUT CONDITIONS

In the long-range Town General Plan build out scenario from the General Plan Update Traffic Analysis (November 2004) prepared by LSC Transportation Consultants, Inc., traffic projections were utilized to evaluate cumulative impacts. Study area intersection LOS and mitigated LOS for long-range conditions are summarized in Table H.

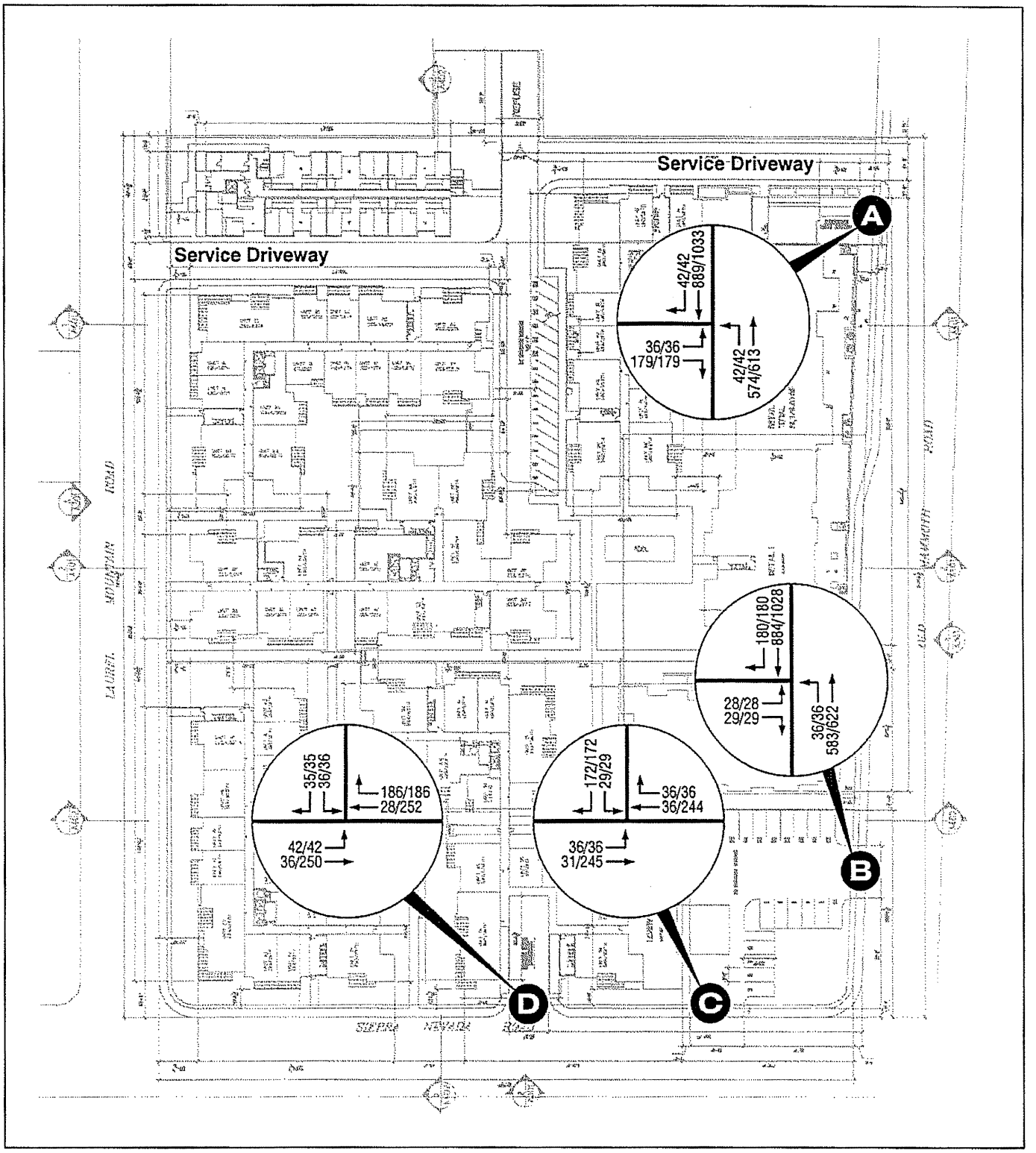
As shown in Table H, all study area intersections continue to operate at satisfactory LOS (LOS D or better) in long-range conditions with the exception of the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. While these intersections provide inadequate LOS in 2004, cumulative, and cumulative plus project conditions, they also fail under the existing General Plan Alternative 2. The mitigation measures discussed previously in the cumulative plus project scenario would result in acceptable LOS for both intersections in the long-range Town build out conditions. LOS and mitigated LOS at the study area intersections in the long-range Town build out conditions were analyzed and are shown in Table H.

INTERNAL CIRCULATION/PROJECT ACCESS

The operation of the ingress and egress locations of the project site along Old Mammoth Road and Sierra Nevada Road has also been evaluated. As illustrated in Figure 12, four access driveways (Driveway A, Driveway B, Driveway C, and Driveway D) will be provided at the project site. It should be noted that residents take access via Driveways A and D while retail/restaurant patrons take access via Driveways B and C. It should also be noted that the traffic volumes shown in Figure 10 reflect the valet operation and therefore are greater than the traffic generation in Table F.

An HCM analysis was prepared for the four unsignalized access driveways on Old Mammoth Road and Sierra Nevada Road (A, B, C, and D). Project trips were distributed equally among the four access driveways. Based on the project trip assignment of the project at these intersections, Driveway A is forecast to operate at an unacceptable LOS (LOS E, 38.5 seconds of delay), Driveway B is forecast to operate at an acceptable LOS (LOS C, 19.8 seconds of delay), Driveway C is forecast to operate at an acceptable LOS (LOS A, 9.7 seconds of delay), and Driveway D is forecast to operate at an acceptable LOS (LOS A, 9.9 seconds of delay) in the cumulative plus project condition. Although Driveway A is forecast to operate at an unacceptable LOS, it should be noted that this intersection does not exceed the four vehicle-hour criteria. The LOS worksheets for cumulative plus project access locations are presented in Appendix D.

For the long-range Town General Plan build out condition, Driveway A is forecast to operate at an unacceptable LOS (LOS F, 64.8 seconds of delay), Driveway B is forecast to operate at an acceptable LOS (LOS C, 23.5 seconds of delay), Driveway C is forecast to operate at an acceptable LOS (LOS B, 12.4 seconds of delay), and Driveway D is forecast to operate at an acceptable LOS (LOS B, 13.6 seconds of delay) in the long-range Town General Plan build out condition. Driveway A is forecast to operate at an unacceptable LOS, and it should be noted that this intersection also exceeds the four-vehicle hour criteria. The project design should be revised to include a separate left-turn lane and right-turn lane in the eastbound direction is recommended to improve the LOS at Driveway A from LOS F (64.8 seconds of delay) to LOS E (44.3 seconds of delay). Although Driveway A would continue to operate at an unacceptable LOS with the recommended improvement, it should be noted



LSA

LEGEND

C - Project Access Location

XX/YY - Cumulative Plus Project Winter Saturday Peak Hour Traffic Volumes/Existing General Plan Build Out Winter Saturday Peak Hour Traffic Volumes

0 50 100
FEET

FIGURE 12

Mammoth Clearwater
Internal Circulation and Project Access

I:\MHD0601\G\Internal Circ.cdr (11/14/06)

Table H: Long-Range Typical (Existing General Plan) Winter Saturday Intersection LOS

			With Mitigation	
Intersection	**Delay (sec)**	**LOS**	**Delay (sec)**	**LOS**
1. Old Mammoth Rd./Main St.	34.8	C		
2. Old Mammoth Rd./Meridian Rd.	32.7	C		
3. Old Mammoth Rd./Sierra Nevada Rd.	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**	36.5	D
4. Sierra Park Rd./Main St.*	20.1	C		
5. Azimuth Dr./Meridian Blvd.*	**35.0 and > 4.0 hour cumulative delay on minor street approach**	**F**	31.7	C
6. Sierra Park Rd./Meridian Blvd.*	10.3	B		

Notes:
* = unsignalized intersection
Shaded and Bold = unsatisfactory LOS and exceeds four vehicle-hour criteria

that this intersection would not exceed the four vehicle-hour criteria. The LOS worksheets for the long-range Town General Plan build out access locations are presented in Appendix E.

Additional site access analysis was conducted in order to determine any potential queues from the southbound left-turn volumes at Old Mammoth Road/Sierra Nevada Road that could block left-turn access into the project site at Driveway B. Based on this analysis, a queue of 0.2 of a vehicle (i.e., 5.0 feet) would develop in the southbound left-turn pocket. Therefore, no impacts of queues at the intersection of Old Mammoth Road/Sierra Nevada Road on the site access locations are forecast.

In both the cumulative plus project and long-range Town General Plan build out conditions, the volumes in and out of the project access driveways reflect both the project trip assignment and the operation of the valet parking plan. All retail/restaurant vehicles entering via Driveways B and C will be parked in the underground structure via valet. The valet operation will flow in a clockwise direction (vehicles exit Driveway C, enter Driveway D to the underground parking structure, exit Driveway A, and enter Driveway B). All residential vehicles entering via Driveways A and D will be required to self-park in assigned spaces in the underground structure.

Following is an operational analysis of the valet program. The entering traffic volume for the retail/restaurant component of the project is 144 vehicles in the peak hour. Adjusting for a 0.9 peak-hour factor results in a peak 15-minute volume of 40 vehicles. Applying a valet plan of 9 attendants assigned to inbound vehicles and estimating an average time to park each vehicle of 3 minutes results in an average service rate of 45 cars per 15 minutes (9 attendants x 5 vehicles/15 minutes = 45 vehicles). Applying this data to the attached *Reservoir Need vs. Traffic Intensity* nomograph (Entrance-Exit Design, Robert Crommelin, P.E., 1972) and using a 95 percent confidence level results in a reservoir need of less than 10 vehicles. This reservoir requirement is completely addressed by the recommended 9 valet attendants. With the 9 attendants, there will never be more than one vehicle waiting to be parked. No parking storage is required with a 9 attendant valet program. Therefore, a valet program of 9 attendants is recommended for the peak-hour condition.

PARKING

Parking for the Mammoth Clearwater residential units (i.e., 480 bedrooms and 43 workforce housing units) is calculated per the Town Parking Code. The evaluation of required parking is outlined in Table I.

Table I: Mammoth Clearwater Residential Parking Requirements

Quantity	Project Product	Parking Ratio	Required Parking Spaces
480	Hotel bedroom	1 space/bedroom	480
1	Manager unit	2 spaces/unit	2
480	Guest unit	1 space/20 rooms	24
43	Workforce housing	2 spaces/unit	86
		Total Residential Spaces Required	**592**

For the commercial portion of the Mammoth Clearwater project (i.e., 8,000 square feet of restaurant and 20,205 square of retail), a shared parking concept was applied using the Draft Mammoth Lakes Parking Study by LSC Transportation Consultants, Inc. (2005). The evaluation of required parking is outlined in Table J.

Based on Table J, the highest hourly parking requirement (i.e., 149 spaces) occurs during the 7:00 p.m. peak hour. Application of the shared parking requirement reduces the parking demand by 26 spaces compared to application of standard parking rates.

Table J: Mammoth Clearwater Commercial Shared Parking Requirements

	2 p.m.	3 p.m.	4 p.m.	5 p.m.	6 p.m.	7 p.m.	8 p.m.
Retail Percentage[1]	100%	100%	90%	70%	63%	68%	63%
20,205 sf @ 4/1000 sf-spaces	81	81	73	57	51	55	51
Restaurant Percentage[1]	60%	60%	50%	70%	90%	100%	100%
8,000 sf @ 1/85 sf-spaces	57	57	47	66	85	94	94
Total Peak Parking Requirement	138	138	120	123	136	**149**	145

Source: Draft Mammoth Lakes Parking Study, LSC Transportation Consultants, Inc. (2005).

The total number of parking spaces required for the Mammoth Clearwater project is 741 spaces (i.e., 592 spaces for residential units and 149 spaces for commercial uses).

To provide the required 741 parking spaces, the Mammoth Clearwater project proposes the use of some tandem parking for both the residential and retail components. In total, 239 tandem parking spaces (478 spaces) and 262 single-loaded spaces are proposed.

[1] Estimated percent of peak parking ratio by hour.

The 239 tandem spaces will be assigned to 163 residential units requiring two spaces per unit (88 two-bedroom, 32 three-bedroom, and 43 workforce housing units), and the remaining 76 tandem spaces (152 spaces) will be assigned and managed via valet parking for the retail and restaurant uses.

The 227 single-loaded spaces in the underground garage will be assigned to the 208 units requiring a single space and the remaining 19 spaces for retail users and guests/visitors. The 35 ground-level single spaces will be used for a combination of retail users, visitor check-in, retail loading, and valet storage.

The parking provided on site is according to Code; therefore, impacts to the South Park Villas' on-street parking are not anticipated.

MITIGATION MEASURES

Evaluation of intersection LOS shows that the addition of the Mammoth Clearwater project traffic to the cumulative plus existing traffic will not directly significantly impact the study area intersections, according to the Town's criteria. However, the project will contribute to two cumulatively impacted locations, the unsignalized intersections of Old Mammoth Road/Sierra Nevada Road and Azimuth Drive/Meridian Boulevard. The cumulative impacts at these unsignalized intersections also occur in the long-range General Plan build out scenario. Since the project contributes to an existing, cumulative, and long-range General Plan deficiency at the intersection of Old Mammoth Road/Sierra Nevada Road, the project would contribute a fair share of the installation of a traffic signal. Payment of Development Impact Fees (DIF) for the intersection of Azimuth Drive/Meridian Boulevard would provide the fair-share contribution of the installation of a traffic signal or roundabout. Based on the access analysis, the project design should be revised to include separate eastbound left- and right-turn lanes at Old Mammoth Road/Driveway A.

CONCLUSIONS

Based on results of this analysis, the Mammoth Clearwater development of 382 residential units and 28,205 square feet of commercial (i.e., 8,000 square feet of restaurant and 20,205 square feet of retail) with a fair-share contribution and payment of DIF fees as mitigation can be implemented without significantly impacting the surrounding roadway system.

APPENDIX A

EXISTING LEVEL OF SERVICE WORKSHEETS

Mammoth Clearwater

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #6 Old Mammoth Rd/ Main St

Cycle (sec):	80	Critical Vol./Cap. (X):	0.774
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.5
Optimal Cycle:	67	Level Of Service:	B

Street Name:	Old Mammoth Rd						Main St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	333	0	105	0	0	0	0	416	689	126	267	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	0	105	0	0	0	0	416	689	126	267	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	351	0	111	0	0	0	0	438	725	133	281	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	351	0	111	0	0	0	0	438	725	133	281	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	351	0	111	0	0	0	0	438	725	133	281	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.95	0.98	0.95	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	3610	1857	1805	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.19	0.00	0.07	0.00	0.00	0.00	0.00	0.12	0.39	0.07	0.08	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.50	0.50	0.65	0.60	0.00
Volume/Cap:	0.77	0.00	0.27	0.00	0.00	0.00	0.00	0.24	0.77	0.21	0.13	0.00
Delay/Veh:	36.0	0.0	24.5	0.0	0.0	0.0	0.0	11.3	20.2	5.7	7.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.0	0.0	24.5	0.0	0.0	0.0	0.0	11.3	20.2	5.7	7.0	0.0
HCM2kAvg:	10	0	2	0	0	0	0	3	16	2	2	0

Mammoth Clearwater

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 Old Mammoth Rd/Meridian Blvd

Cycle (sec):	50	Critical Vol./Cap. (X):	0.595
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	48	Level Of Service:	B

Street Name:	Old Mammoth Rd						Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	62	249	77	193	387	117	115	154	104	80	99	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	249	77	193	387	117	115	154	104	80	99	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	65	262	81	203	407	123	121	162	109	84	104	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	262	81	203	407	123	121	162	109	84	104	123
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	65	262	81	203	407	123	121	162	109	84	104	123
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.89	0.89	0.95	0.87	0.87
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.19	0.81	1.00	1.00	1.00
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	2026	1368	1805	1659	1659
Capacity Analysis Module:												
Vol/Sat:	0.04	0.14	0.05	0.11	0.21	0.08	0.07	0.08	0.08	0.05	0.06	0.07
Crit Moves:		****		****				****				****
Green/Cycle:	0.06	0.23	0.23	0.19	0.36	0.36	0.13	0.13	0.13	0.12	0.12	0.12
Volume/Cap:	0.60	0.60	0.22	0.60	0.60	0.21	0.50	0.60	0.60	0.37	0.50	0.60
Delay/Veh:	31.5	19.3	15.8	21.4	14.5	11.3	21.7	22.5	22.5	21.1	21.3	23.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	19.3	15.8	21.4	14.5	11.3	21.7	22.5	22.5	21.1	21.3	23.2
HCM2kAvg:	2	5	1	4	6	1	3	3	3	2	2	3

Mammoth Clearwater
Existing Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #85 Old Mammoth Road/Sierra Nevada Road

Average Delay (sec/veh): 22.6 Worst Case Level Of Service: F[131.7]

Street Name:	Old Mammoth Road									Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Lanes:	1	0 0	1 0	1	0 0	1 0	0	0 1!	0 0	0	0 1!	0 0			
Volume Module:															
Base Vol:	61	576	64	35	647	99	83	59	64	85	55	39			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	61	576	64	35	647	99	83	59	64	85	55	39			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	61	576	64	35	647	99	83	59	64	85	55	39			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
PHF Volume:	68	640	71	39	719	110	92	66	71	94	61	43			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Final Vol.:	68	640	71	39	719	110	92	66	71	94	61	43			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2			
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflict Vol:	829	xxxx	xxxxx	711	xxxx	xxxxx	1715	1698	774	1731	1718	676			
Potent Cap.:	811	xxxx	xxxxx	898	xxxx	xxxxx	72	93	402	70	91	457			
Move Cap.:	811	xxxx	xxxxx	898	xxxx	xxxxx	22	82	402	18	80	457			
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	181	260	xxxxx	134	240	xxxxx			
Volume/Cap:	0.08	xxxx	xxxx	0.04	xxxx	xxxx	0.51	0.25	0.18	0.70	0.25	0.09			
Level Of Service Module:															
2Way95thQ:	0.3	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
Control Del:	9.8	xxxx	xxxxx	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*			
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	244	xxxxx	xxxx	189	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.4	xxxxx	xxxxx	9.3	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	85.7	xxxxx	xxxxx	132	xxxxx			
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*			
ApproachDel:	xxxxxx			xxxxxx			85.7			131.7					
ApproachLOS:	*			*			F			F					

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #29 Sierra Park Rd/Main Street

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[15.4]

Street Name:	Sierra Park Rd						Main Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	29	0	76	0	0	0	0	414	39	108	469	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	0	76	0	0	0	0	414	39	108	469	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	32	0	84	0	0	0	0	460	43	120	521	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	32	0	84	0	0	0	0	460	43	120	521	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	982	xxxx	252	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	503	xxxx	xxxxx
Potent Cap.:	250	xxxx	754	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1072	xxxx	xxxxx
Move Cap.:	228	xxxx	754	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1072	xxxx	xxxxx
Volume/Cap:	0.14	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	461	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	15.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		15.4			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

Mammoth Clearwater

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

****

Intersection #71 Azimuth Drive/Meridian Boulevard

****

Average Delay (sec/veh): 37.8 Worst Case Level Of Service: F[207.6]

****

Street Name:	Azimuth Drive						Meridian Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 1 0			0 1 0 1 0		
Volume Module:												
Base Vol:	113	22	86	22	26	35	64	300	187	108	343	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	22	86	22	26	35	64	300	187	108	343	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	24	96	24	29	39	71	333	208	120	381	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	126	24	96	24	29	39	71	333	208	120	381	32
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1024	1233	271	958	1321	207	413	xxxx	xxxxx	541	xxxx	xxxxx
Potent Cap.:	192	178	733	215	158	806	1156	xxxx	xxxxx	1038	xxxx	xxxxx
Move Cap.:	129	143	733	138	127	806	1156	xxxx	xxxxx	1038	xxxx	xxxxx
Volume/Cap:	0.98	0.17	0.13	0.18	0.23	0.05	0.06	xxxx	xxxx	0.12	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.4	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	192	xxxxx	xxxx	203	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	13.5	xxxxx	xxxxx	2.2	xxxxx	0.2	xxxx	xxxxx	0.4	xxxx	xxxxx
Shrd StpDel:	xxxxx	208	xxxxx	xxxxx	36.6	xxxxx	8.3	xxxx	xxxxx	8.9	xxxx	xxxxx
Shared LOS:	*	F	*	*	E	*	A	*	*	A	*	*
ApproachDel:		207.6			36.6			xxxxxx			xxxxxx	
ApproachLOS:		F			E			*			*	

Mammoth Clearwater

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #5 Sierra Park Road/Meridian Blvd

Cycle (sec):	100	Critical Vol./Cap. (X):	0.088
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	7.7
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Sierra Park Road									Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Stop Sign Include			Stop Sign Include			Stop Sign Include			Stop Sign Include					
Rights:															
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0			
Lanes:	0 0	1 0	0	0 0	1! 0	0	0 1	0 1	0	0 1	0 1	0			
Volume Module:															
Base Vol:	0	1	0	23	0	6	20	98	0	0	75	3			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	1	0	23	0	6	20	98	0	0	75	3			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90			
PHF Volume:	0	1	0	26	0	7	22	109	0	0	83	3			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	1	0	26	0	7	22	109	0	0	83	3			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Final Vol.:	0	1	0	26	0	7	22	109	0	0	83	3			
Saturation Flow Module:															
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	0.00	1.00	0.00	0.79	0.00	0.21	0.34	1.66	0.00	0.00	1.92	0.08			
Final Sat.:	0	778	0	619	0	162	252	1263	0	0	1477	59			
Capacity Analysis Module:															
Vol/Sat:	xxxx	0.00	xxxx	0.04	xxxx	0.04	0.09	0.09	xxxx	xxxx	0.06	0.06			
Crit Moves:		****		****			****				****				
Delay/Veh:	0.0	7.4	0.0	7.6	0.0	7.6	8.0	7.8	0.0	0.0	7.6	7.6			
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	0.0	7.4	0.0	7.6	0.0	7.6	8.0	7.8	0.0	0.0	7.6	7.6			
LOS by Move:	*	A	*	A	*	A	A	A	*	*	A	A			
ApproachDel:		7.4			7.6			7.9			7.6				
Delay Adj:		1.00			1.00			1.00			1.00				
ApprAdjDel:		7.4			7.6			7.9			7.6				
LOS by Appr:		A			A			A			A				

APPENDIX B

CUMULATIVE BASELINE LEVEL OF SERVICE WORKSHEETS

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Old Mammoth Rd/ Main St

Cycle (sec):	80	Critical Vol./Cap.(X):	0.871
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.6
Optimal Cycle:	88	Level Of Service:	C

Street Name:	Old Mammoth Rd						Main St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	333	0	105	0	0	0	0	416	689	126	267	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	0	105	0	0	0	0	416	689	126	267	0
Added Vol:	70	0	13	0	0	0	0	65	58	15	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	403	0	118	0	0	0	0	481	747	141	353	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	424	0	124	0	0	0	0	506	786	148	372	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	424	0	124	0	0	0	0	506	786	148	372	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	424	0	124	0	0	0	0	506	786	148	372	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.95	0.98	0.95	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	3610	1857	1805	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.24	0.00	0.08	0.00	0.00	0.00	0.00	0.14	0.42	0.08	0.10	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.27	0.00	0.27	0.00	0.00	0.00	0.00	0.49	0.49	0.63	0.58	0.00
Volume/Cap:	0.87	0.00	0.29	0.00	0.00	0.00	0.00	0.29	0.87	0.26	0.18	0.00
Delay/Veh:	43.5	0.0	23.5	0.0	0.0	0.0	0.0	12.4	27.6	6.6	7.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.5	0.0	23.5	0.0	0.0	0.0	0.0	12.4	27.6	6.6	7.9	0.0
LOS by Move:	D	A	C	A	A	A	A	B	C	A	A	A
HCM2kAvgQ:	13	0	3	0	0	0	0	4	21	2	2	0

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Old Mammoth Rd/Meridian Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.698
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	22.4
Optimal Cycle:	54	Level Of Service:	C

Street Name:	Old Mammoth Rd						Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	62	249	77	193	387	117	115	154	104	80	99	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	249	77	193	387	117	115	154	104	80	99	117
Added Vol:	19	45	5	12	47	57	48	43	16	4	56	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	294	82	205	434	174	163	197	120	84	155	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	85	309	86	216	457	183	172	207	126	88	163	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	309	86	216	457	183	172	207	126	88	163	136
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	309	86	216	457	183	172	207	126	88	163	136
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.90	0.90	0.95	0.89	0.89
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.24	0.76	1.00	1.09	0.91
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	2116	1289	1805	1836	1528
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.05	0.12	0.24	0.11	0.10	0.10	0.10	0.05	0.09	0.09
Crit Moves:	****				****			****				****
Green/Cycle:	0.07	0.24	0.24	0.17	0.34	0.34	0.14	0.14	0.14	0.13	0.13	0.13
Volume/Cap:	0.70	0.69	0.22	0.69	0.70	0.33	0.68	0.70	0.70	0.38	0.70	0.70
Delay/Veh:	39.1	21.7	15.6	25.5	17.5	12.5	27.5	25.0	25.0	21.1	25.9	25.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.1	21.7	15.6	25.5	17.5	12.5	27.5	25.0	25.0	21.1	25.9	25.9
LOS by Move:	D	C	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	6	1	5	8	2	4	4	4	2	4	4

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #85 Old Mammoth Road/Sierra Nevada Road

****

Average Delay (sec/veh): 42.1 Worst Case Level Of Service: F[296.9]

****

Street Name:	Old Mammoth Road									Sierra Nevada Road								
Approach:	North Bound					South Bound				East Bound					West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	61	576		64		35	647		99		83	59		64		85	55		39	
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	61	576		64		35	647		99		83	59		64		85	55		39	
Added Vol:	0	105		0		0	117		0		0	0		0		0	0		0	
PasserByVol:	0	0		0		0	0		0		0	0		0		0	0		0	
Initial Fut:	61	681		64		35	764		99		83	59		64		85	55		39	
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90		0.90	0.90		0.90	
PHF Volume:	68	757		71		39	849		110		92	66		71		94	61		43	
Reduct Vol:	0	0		0		0	0		0		0	0		0		0	0		0	
Final Vol.:	68	757		71		39	849		110		92	66		71		94	61		43	
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx			4.1	xxxx	xxxxx			7.1	6.5		6.2		7.1	6.5		6.2	
FollowUpTim:	2.2	xxxx	xxxxx			2.2	xxxx	xxxxx			3.5	4.0		3.3		3.5	4.0		3.3	
Capacity Module:																				
Cnflict Vol:	959	xxxx	xxxxx			828	xxxx	xxxxx			1962	1945		904		1978	1964		792	
Potent Cap.:	726	xxxx	xxxxx			812	xxxx	xxxxx			48	66		338		47	64		392	
Move Cap.:	726	xxxx	xxxxx			812	xxxx	xxxxx			0	57		338		0	55		392	
Total Cap:	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx			140	221		xxxxx		92	200		xxxxx	
Volume/Cap:	0.09	xxxx	xxxx			0.05	xxxx	xxxx			0.66	0.30		0.21		1.03	0.31		0.11	
Level Of Service Module:																				
2Way95thQ:	0.3	xxxx	xxxxx			0.2	xxxx	xxxxx			xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx	
Control Del:	10.5	xxxx	xxxxx			9.7	xxxx	xxxxx			xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx	
LOS by Move:	B	*		*		A	*		*		*	*		*		*	*		*	
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx		xxxxx		xxxx	xxxx		xxxxx		xxxx	197		xxxxx		xxxx	137		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	11.5		xxxxx		xxxxx	13.3		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx		xxxxx	xxxx		xxxxx		xxxxx	165		xxxxx		xxxxx	297		xxxxx	
Shared LOS:	*	*		*		*	*		*		*	F		*		*	F		*	
ApproachDel:	xxxxxx					xxxxxx					164.6					296.9				
ApproachLOS:	*					*					F					F				

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Sierra Park Rd/Main Street

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: C[21.5]

Street Name:	Sierra Park Rd						Main Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	29	0	76	0	0	0	0	414	39	108	469	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	0	76	0	0	0	0	414	39	108	469	0
Added Vol:	14	0	12	0	0	0	0	71	7	7	88	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	0	88	0	0	0	0	485	46	115	557	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	48	0	98	0	0	0	0	539	51	128	619	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	48	0	98	0	0	0	0	539	51	128	619	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1129	xxxx	295	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	590	xxxx	xxxxx
Potent Cap.:	201	xxxx	707	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	995	xxxx	xxxxx
Move Cap.:	181	xxxx	707	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	995	xxxx	xxxxx
Volume/Cap:	0.26	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	362	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	21.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		21.5			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #71 Azimuth Drive/Meridian Boulevard

Average Delay (sec/veh): 76.1 Worst Case Level Of Service: F[507.1]

Street Name:	Azimuth Drive						Meridian Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 1 0			0 1 0 1 0		
Volume Module:												
Base Vol:	113	22	86	22	26	35	64	300	187	108	343	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	22	86	22	26	35	64	300	187	108	343	29
Added Vol:	0	0	0	0	0	0	0	107	0	0	131	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	22	86	22	26	35	64	407	187	108	474	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	24	96	24	29	39	71	452	208	120	527	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	126	24	96	24	29	39	71	452	208	120	527	32
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1216	1497	330	1163	1585	279	559	xxxx	xxxxx	660	xxxx	xxxxx
Potent Cap.:	139	124	672	152	109	724	1022	xxxx	xxxxx	938	xxxx	xxxxx
Move Cap.:	81	96	672	88	85	724	1022	xxxx	xxxxx	938	xxxx	xxxxx
Volume/Cap:	1.54	0.25	0.14	0.28	0.34	0.05	0.07	xxxx	xxxx	0.13	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.4	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx	9.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	127	xxxxx	xxxx	137	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	19.6	xxxxx	xxxxx	3.7	xxxxx	0.2	xxxx	xxxxx	0.4	xxxx	xxxxx
Shrd ConDel:	xxxxx	507	xxxxx	xxxxx	72.9	xxxxx	8.8	xxxx	xxxxx	9.4	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	A	*	*	A	*	*
ApproachDel:		507.1			72.9			xxxxxx			xxxxxx	
ApproachLOS:		F			F			*			*	

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Cumulative Condition

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Sierra Park Road/Meridian Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.130
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	8.1
Optimal Cycle:	0	Level Of Service:	A

Street Name:	Sierra Park Road						Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 1	0	0 1	0 1	0
Volume Module:												
Base Vol:	0	1	0	23	0	6	20	98	0	0	75	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	0	23	0	6	20	98	0	0	75	3
Added Vol:	23	8	8	0	9	10	3	20	26	9	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	9	8	23	9	16	23	118	26	9	102	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	26	10	9	26	10	18	26	131	29	10	113	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	10	9	26	10	18	26	131	29	10	113	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	26	10	9	26	10	18	26	131	29	10	113	3
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.22	0.20	0.48	0.19	0.33	0.28	1.41	0.31	0.16	1.79	0.05
Final Sat.:	420	164	146	359	140	250	196	1043	238	112	1291	38
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.07	0.07	0.07	0.13	0.13	0.12	0.09	0.09	0.09
Crit Moves:	****			****			****			****		
Delay/Veh:	7.9	7.9	7.9	7.9	7.9	7.9	8.4	8.2	7.9	8.1	8.1	8.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	7.9	7.9	7.9	7.9	7.9	8.4	8.2	7.9	8.1	8.1	8.0
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.9			7.9			8.2			8.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.9			7.9			8.2			8.1	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

APPENDIX C

CUMULATIVE PLUS PROJECT LEVEL OF SERVICE WORKSHEETS

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #6 Old Mammoth Rd/ Main St

Cycle (sec):	80	Critical Vol./Cap.(X):	0.971
Loss Time (sec):	12 (Y+R=4.0 sec)	Average Delay (sec/veh):	32.2
Optimal Cycle:	131	Level Of Service:	C

Street Name:	Old Mammoth Rd						Main St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0	0 0	0 0	0	0 2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	333	0	105	0	0	0	0	416	689	126	267	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	333	0	105	0	0	0	0	416	689	126	267	0
Added Vol:	131	0	23	0	0	0	0	65	133	27	86	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	464	0	128	0	0	0	0	481	822	153	353	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	488	0	135	0	0	0	0	506	865	161	372	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	488	0	135	0	0	0	0	506	865	161	372	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	488	0	135	0	0	0	0	506	865	161	372	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	1.00	1.00	1.00	1.00	0.95	0.98	0.95	0.95	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1805	0	1615	0	0	0	0	3610	1857	1805	3610	0
Capacity Analysis Module:												
Vol/Sat:	0.27	0.00	0.08	0.00	0.00	0.00	0.00	0.14	0.47	0.09	0.10	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.28	0.00	0.28	0.00	0.00	0.00	0.00	0.48	0.48	0.62	0.57	0.00
Volume/Cap:	0.97	0.00	0.30	0.00	0.00	0.00	0.00	0.29	0.97	0.29	0.18	0.00
Delay/Veh:	61.3	0.0	23.1	0.0	0.0	0.0	0.0	12.7	43.6	7.0	8.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.3	0.0	23.1	0.0	0.0	0.0	0.0	12.7	43.6	7.0	8.2	0.0
LOS by Move:	E	A	C	A	A	A	A	B	D	A	A	A
HCM2kAvgQ:	18	0	3	0	0	0	0	4	28	2	2	0

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Old Mammoth Rd/Meridian Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.753
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	24.3
Optimal Cycle:	58	Level Of Service:	C

Street Name:	Old Mammoth Rd						Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	62	249	77	193	387	117	115	154	104	80	99	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	249	77	193	387	117	115	154	104	80	99	117
Added Vol:	19	82	5	18	77	87	85	43	16	4	56	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	81	331	82	211	464	204	200	197	120	84	155	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	85	348	86	222	488	215	211	207	126	88	163	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	348	86	222	488	215	211	207	126	88	163	142
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	85	348	86	222	488	215	211	207	126	88	163	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.90	0.90	0.95	0.88	0.88
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.24	0.76	1.00	1.07	0.93
Final Sat.:	1805	1900	1615	1805	1900	1615	1805	2116	1289	1805	1794	1563
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.05	0.12	0.26	0.13	0.12	0.10	0.10	0.05	0.09	0.09
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.24	0.24	0.16	0.34	0.34	0.15	0.15	0.15	0.12	0.12	0.12
Volume/Cap:	0.75	0.76	0.22	0.76	0.75	0.39	0.75	0.63	0.63	0.41	0.75	0.75
Delay/Veh:	47.4	24.7	15.5	30.9	19.6	13.0	31.2	22.3	22.3	21.6	29.0	29.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	47.4	24.7	15.5	30.9	19.6	13.0	31.2	22.3	22.3	21.6	29.0	29.0
LOS by Move:	D	C	B	C	B	B	C	C	C	C	C	C
HCM2kAvgQ:	3	7	1	5	9	3	5	4	4	2	4	4

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #85 Old Mammoth Road/Sierra Nevada Road

Average Delay (sec/veh): 260.3 Worst Case Level Of Service: F[2647.5]

Street Name:	Old Mammoth Road									Sierra Nevada Road								
Approach:	North Bound			South Bound			East Bound			West Bound								
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign								
Rights:	Include			Include			Include			Include								
Lanes:	1	0	0	1	0	1	0	0	1	0	0	0	1!	0	0	0	0	1!	0	0
Volume Module:																				
Base Vol:	61	576	64	35	647	99	83	59	64	85	55	39								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	61	576	64	35	647	99	83	59	64	85	55	39								
Added Vol:	37	149	0	0	152	0	0	5	30	0	6	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	98	725	64	35	799	99	83	64	94	85	61	39								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90								
PHF Volume:	109	806	71	39	888	110	92	71	104	94	68	43								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Final Vol.:	109	806	71	39	888	110	92	71	104	94	68	43								
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.1	6.5	6.2	7.1	6.5	6.2								
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3								
Capacity Module:																				
Cnflict Vol:	998	xxxx	xxxxx	877	xxxx	xxxxx	2135	2115	943	2167	2134	841								
Potent Cap.:	702	xxxx	xxxxx	779	xxxx	xxxxx	36	51	321	34	50	368								
Move Cap.:	702	xxxx	xxxxx	779	xxxx	xxxxx	0	41	321	0	40	368								
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	94	183	xxxxx	16	155	xxxxx								
Volume/Cap:	0.16	xxxx	xxxx	0.05	xxxx	xxxx	0.98	0.39	0.33	5.79	0.44	0.12								
Level Of Service Module:																				
2Way95thQ:	0.5	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
Control Del:	11.1	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	158	xxxxx	xxxx	32	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.0	xxxxx	xxxxx	24.8	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	387	xxxxx	xxxxx	2648	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	F	*	*	F	*								
ApproachDel:	xxxxxx			xxxxxx			387.5			2647.5										
ApproachLOS:	*			*			F			F										

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Mitigation

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #85 Old Mammoth Road/Sierra Nevada Road

Cycle (sec):	100	Critical Vol./Cap.(X):	0.940
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	40.3
Optimal Cycle:	135	Level Of Service:	D

Street Name:	Old Mammoth Road						Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	61	576	64	35	647	99	83	59	64	85	55	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	61	576	64	35	647	99	83	59	64	85	55	39
Added Vol:	37	146	0	0	157	0	0	5	30	0	6	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	98	722	64	35	804	99	83	64	94	85	61	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	109	802	71	39	893	110	92	71	104	94	68	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	802	71	39	893	110	92	71	104	94	68	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	802	71	39	893	110	92	71	104	94	68	43
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.99	0.99	0.95	0.98	0.98	0.73	0.73	0.73	0.61	0.61	0.61
Lanes:	1.00	0.92	0.08	1.00	0.89	0.11	0.34	0.27	0.39	0.46	0.33	0.21
Final Sat.:	1805	1724	153	1805	1665	205	478	369	542	529	380	243
Capacity Analysis Module:												
Vol/Sat:	0.06	0.47	0.47	0.02	0.54	0.54	0.19	0.19	0.19	0.18	0.18	0.18
Crit Moves:	****				****			****				
Green/Cycle:	0.06	0.61	0.61	0.03	0.57	0.57	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.94	0.77	0.77	0.77	0.94	0.94	0.94	0.94	0.94	0.87	0.87	0.87
Delay/Veh:	111.4	17.6	17.6	98.3	35.2	35.2	76.7	76.7	76.7	65.9	65.9	65.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	111.4	17.6	17.6	98.3	35.2	35.2	76.7	76.7	76.7	65.9	65.9	65.9
LOS by Move:	F	B	B	F	D	D	E	E	E	E	E	E
HCM2kAvgQ:	6	21	21	3	34	34	12	12	12	9	9	9

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #29 Sierra Park Rd/Main Street

Average Delay (sec/veh): 2.9 Worst Case Level Of Service: C[22.1]

Street Name:	Sierra Park Rd						Main Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	1 0 1	1	0	1 0 1	1	0
Volume Module:												
Base Vol:	29	0	76	0	0	0	0	414	39	108	469	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	0	76	0	0	0	0	414	39	108	469	0
Added Vol:	14	0	12	0	0	0	0	81	7	7	100	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	43	0	88	0	0	0	0	495	46	115	569	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	48	0	98	0	0	0	0	550	51	128	632	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	48	0	98	0	0	0	0	550	51	128	632	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1147	xxxx	301	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	601	xxxx	xxxxx
Potent Cap.:	195	xxxx	702	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	986	xxxx	xxxxx
Move Cap.:	176	xxxx	702	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	986	xxxx	xxxxx
Volume/Cap:	0.27	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	354	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	22.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		22.1		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #71 Azimuth Drive/Meridian Boulevard

Average Delay (sec/veh): 92.1 Worst Case Level Of Service: F[641.6]

Street Name:	Azimuth Drive						Meridian Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 0 1! 0 0			0 1 0 1 0			0 1 0 1 0		
Volume Module:												
Base Vol:	113	22	86	22	26	35	64	300	187	108	343	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	22	86	22	26	35	64	300	187	108	343	29
Added Vol:	0	0	0	0	0	0	0	144	0	0	162	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	22	86	22	26	35	64	444	187	108	505	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	24	96	24	29	39	71	493	208	120	561	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	126	24	96	24	29	39	71	493	208	120	561	32
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1274	1573	351	1218	1661	297	593	xxxx	xxxxx	701	xxxx	xxxxx
Potent Cap.:	126	111	651	139	98	706	993	xxxx	xxxxx	905	xxxx	xxxxx
Move Cap.:	70	86	651	77	76	706	993	xxxx	xxxxx	905	xxxx	xxxxx
Volume/Cap:	1.79	0.28	0.15	0.32	0.38	0.06	0.07	xxxx	xxxx	0.13	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	0.5	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	9.6	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	110	xxxxx	xxxx	122	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	21.2	xxxxx	xxxxx	4.3	xxxxx	0.2	xxxx	xxxxx	0.5	xxxx	xxxxx
Shrd ConDel:	xxxxx	642	xxxxx	xxxxx	93.2	xxxxx	8.9	xxxx	xxxxx	9.6	xxxx	xxxxx
Shared LOS:	*	F	*	*	F	*	A	*	*	A	*	*
ApproachDel:	641.6			93.2			xxxxxx			xxxxxx		
ApproachLOS:	F			F			*			*		

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Mitigation

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #71 Azimuth Drive/Meridian Boulevard

Cycle (sec):	100	Critical Vol./Cap.(X):	0.751
Loss Time (sec):	16 (Y+R=4.0 sec)	Average Delay (sec/veh):	27.5
Optimal Cycle:	77	Level Of Service:	C

Street Name:	Azimuth Drive						Meridian Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	113	22	86	22	26	35	64	300	187	108	343	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	22	86	22	26	35	64	300	187	108	343	29
Added Vol:	0	0	0	0	0	0	0	156	0	0	153	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	113	22	86	22	26	35	64	456	187	108	496	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	126	24	96	24	29	39	71	507	208	120	551	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	24	96	24	29	39	71	507	208	120	551	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	126	24	96	24	29	39	71	507	208	120	551	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.76	0.76	0.76	0.84	0.84	0.84	0.95	0.96	0.96	0.95	0.99	0.99
Lanes:	0.51	0.10	0.39	0.27	0.31	0.42	1.00	0.71	0.29	1.00	0.94	0.06
Final Sat.:	735	143	559	423	500	672	1805	1288	528	1805	1781	104
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.06	0.06	0.06	0.04	0.39	0.39	0.07	0.31	0.31
Crit Moves:		****						****			****	
Green/Cycle:	0.23	0.23	0.23	0.23	0.23	0.23	0.07	0.52	0.52	0.09	0.54	0.54
Volume/Cap:	0.75	0.75	0.75	0.25	0.25	0.25	0.57	0.75	0.75	0.75	0.57	0.57
Delay/Veh:	45.3	45.3	45.3	32.0	32.0	32.0	51.2	22.1	22.1	62.4	15.9	15.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.3	45.3	45.3	32.0	32.0	32.0	51.2	22.1	22.1	62.4	15.9	15.9
LOS by Move:	D	D	D	C	C	C	D	C	C	E	B	B
HCM2kAvgQ:	9	9	9	2	2	2	3	18	18	5	12	12

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Cumulative plus Project Condition

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #5 Sierra Park Road/Meridian Blvd

Cycle (sec): 100 Critical Vol./Cap.(X): 0.138
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): 8.1
Optimal Cycle: 0 Level Of Service: A

Street Name:	Sierra Park Road						Meridian Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 1	0 1	0	0 1	0 1	0
Volume Module:												
Base Vol:	0	1	0	23	0	6	20	98	0	0	75	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1	0	23	0	6	20	98	0	0	75	3
Added Vol:	23	8	8	0	9	10	3	30	26	9	39	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	23	9	8	23	9	16	23	128	26	9	114	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	26	10	9	26	10	18	26	142	29	10	127	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	10	9	26	10	18	26	142	29	10	127	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	26	10	9	26	10	18	26	142	29	10	127	3
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.58	0.22	0.20	0.48	0.19	0.33	0.26	1.45	0.29	0.14	1.81	0.05
Final Sat.:	414	162	144	353	138	246	185	1064	224	102	1302	35
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.07	0.07	0.07	0.14	0.13	0.13	0.10	0.10	0.10
Crit Moves:	****			****			****			****		
Delay/Veh:	8.0	8.0	8.0	7.9	7.9	7.9	8.5	8.2	8.0	8.2	8.1	8.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.0	8.0	8.0	7.9	7.9	7.9	8.5	8.2	8.0	8.2	8.1	8.1
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		8.0			7.9			8.2			8.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.0			7.9			8.2			8.1	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

APPENDIX D

CUMULATIVE PLUS PROJECT LEVEL OF SERVICE WORKSHEETS AT THE PROJECT ACCESS LOCATIONS

Mammoth Clearwater
Access Analysis
Cumulative plus Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #1 Old Mammoth Road/Driveway A

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: E[38.5]

Street Name:	Old Mammoth Road								Driveway A							
Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign				
Rights:	Include					Include					Include					Include				
Lanes:	0	1	0	0	0	0	0	0	1	0	0	0	1!	0	0	0	0	0	0	0
Volume Module:																				
Base Vol:	42	574	0			0	889	42			36	0	179			0	0	0		
Growth Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	42	574	0			0	889	42			36	0	179			0	0	0		
Added Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
PasserByVol:	0	0	0			0	0	0			0	0	0			0	0	0		
Initial Fut:	42	574	0			0	889	42			36	0	179			0	0	0		
User Adj:	1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95			0.95	0.95	0.95		
PHF Volume:	44	604	0			0	936	44			38	0	188			0	0	0		
Reduct Vol:	0	0	0			0	0	0			0	0	0			0	0	0		
Final Vol.:	44	604	0			0	936	44			38	0	188			0	0	0		
Critical Gap Module:																				
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					6.4	xxxx		6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					3.5	xxxx		3.3	xxxxx	xxxx	xxxxx			
Capacity Module:																				
Cnflict Vol:	980	xxxx	xxxxx	xxxx	xxxx	xxxxx					1651	xxxx		958	xxxx	xxxx	xxxxx			
Potent Cap.:	712	xxxx	xxxxx	xxxx	xxxx	xxxxx					110	xxxx		315	xxxx	xxxx	xxxxx			
Move Cap.:	712	xxxx	xxxxx	xxxx	xxxx	xxxxx					104	xxxx		315	xxxx	xxxx	xxxxx			
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					370	0	xxxxx		0	0	xxxxx			
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx					0.10	xxxx		0.60	xxxx	xxxx	xxxx			
Level Of Service Module:																				
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx							
Control Del:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx							
LOS by Move:	B	*	*	*	*	*	*	*	*		*	*	*							
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	323	xxxxx		xxxx	xxxx	xxxxx							
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	5.0	xxxxx		xxxxx	xxxx	xxxxx							
Shrd ConDel:	10.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	38.5	xxxxx		xxxxx	xxxx	xxxxx							
Shared LOS:	B	*	*	*	*	*	*	E	*		*	*	*							
ApproachDel:	xxxxxx			xxxxxx			38.5			xxxxxx										
ApproachLOS:	*			*			E			*										

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
Cumulative plus Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 Old Mammoth Road/Driveway B

****

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[19.8]

****

Street Name:	Old Mammoth Road						Driveway B					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1	0	0 0	0	0 0	1 0	0 0	1! 0	0	0	0 0	0 0
Volume Module:												
Base Vol:	36	583	0	0	884	180	28	0	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	583	0	0	884	180	28	0	29	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	583	0	0	884	180	28	0	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	38	614	0	0	931	189	29	0	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	38	614	0	0	931	189	29	0	31	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1120	xxxx	xxxxx	xxxx	xxxx	xxxxx	1715	xxxx	1025	xxxx	xxxx	xxxxx
Potent Cap.:	631	xxxx	xxxxx	xxxx	xxxx	xxxxx	100	xxxx	288	xxxx	xxxx	xxxxx
Move Cap.:	631	xxxx	xxxxx	xxxx	xxxx	xxxxx	96	xxxx	288	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	321	0	xxxxx	0	0	xxxxx
Volume/Cap:	0.06	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	0.11	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	303	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	19.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.8			xxxxxx		
ApproachLOS:	*			*			C			*		

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
Cumulative plus Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Driveway C/Sierra Nevada Road

****

Average Delay (sec/veh): 6.5 Worst Case Level Of Service: A[9.7]

****

Street Name:	Driveway C						Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	29	0	172	36	31	0	0	36	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	29	0	172	36	31	0	0	36	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	29	0	172	36	31	0	0	36	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	31	0	181	38	33	0	0	38	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	31	0	181	38	33	0	0	38	38
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	165	xxxx	57	76	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	830	xxxx	1015	1536	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	814	xxxx	1015	1536	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	0.18	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	980	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.8	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.7	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.7			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
Cumulative plus Project

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 Driveway D/Sierra Nevada Road

****

Average Delay (sec/veh): 2.8 Worst Case Level Of Service: A[9.9]

****

Street Name:	Driveway D						Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	36	0	35	42	36	0	0	28	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	36	0	35	42	36	0	0	28	186
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	36	0	35	42	36	0	0	28	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	38	0	37	44	38	0	0	29	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	38	0	37	44	38	0	0	29	196
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	254	xxxx	127	225	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	739	xxxx	928	1355	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	720	xxxx	928	1355	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.05	xxxx	0.04	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	810	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	9.9	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			9.9			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

****

Note: Queue reported is the number of cars per lane.

APPENDIX E

LONG-RANGE TOWN GENERAL PLAN BUILD OUT LEVEL OF SERVICE WORKSHEETS AT THE PROJECT ACCESS LOCATIONS

Mammoth Clearwater
Access Analysis
General Plan

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #1 Old Mammoth Road/Driveway A

****

Average Delay (sec/veh): 7.4 Worst Case Level Of Service: F[64.8]

****

Street Name:	Old Mammoth Road						Driveway A					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0	0	0 0 0	1	0	0 0 1!	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	42 613	0	0	1033	42		36	0	179	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	42 613	0	0	1033	42		36	0	179	0	0	0
Added Vol:	0 0	0	0	0	0		0	0	0	0	0	0
PasserByVol:	0 0	0	0	0	0		0	0	0	0	0	0
Initial Fut:	42 613	0	0	1033	42		36	0	179	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95 0.95	0.95	0.95	0.95	0.95		0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	44 645	0	0	1087	44		38	0	188	0	0	0
Reduct Vol:	0 0	0	0	0	0		0	0	0	0	0	0
Final Vol.:	44 645	0	0	1087	44		38	0	188	0	0	0
Critical Gap Module:												
Critical Gp:	4.1 xxxx	xxxxx	xxxxx	xxxx	xxxxx		6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1132 xxxx	xxxxx	xxxx	xxxx	xxxxx		1843	xxxx	1109	xxxx	xxxx	xxxxx
Potent Cap.:	625 xxxx	xxxxx	xxxx	xxxx	xxxxx		83	xxxx	257	xxxx	xxxx	xxxxx
Move Cap.:	625 xxxx	xxxxx	xxxx	xxxx	xxxxx		79	xxxx	257	xxxx	xxxx	xxxxx
Total Cap:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		315	0	xxxxx	0	0	xxxxx
Volume/Cap:	0.07 xxxx	xxxx	xxxx	xxxx	xxxx		0.12	xxxx	0.73	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2 xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	11.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B *	*	*	*	*		*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx	xxxxx	xxxx	xxxx	xxxxx		xxxx	265	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	7.1	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	11.2 xxxx	xxxxx	xxxxx	xxxx	xxxxx		xxxxx	64.8	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B *	*	*	*	*		*	F	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			64.8			xxxxxx		
ApproachLOS:	*			*			F			*		

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
General Plan

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #1 Old Mammoth Road/Driveway A

****

Average Delay (sec/veh): 5.1 Worst Case Level Of Service: E[44.3]

****

Street Name:	Old Mammoth Road									Driveway A					
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R			
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign					
Rights:	Include			Include			Include			Include					
Lanes:	0	1 0	0 0	0	0 0	0 1 0	1	0 0	0 1	0	0 0	0 0			
Volume Module:															
Base Vol:	42	613	0	0	1033	42	36	0	179	0	0	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	42	613	0	0	1033	42	36	0	179	0	0	0			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	42	613	0	0	1033	42	36	0	179	0	0	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	44	645	0	0	1087	44	38	0	188	0	0	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Final Vol.:	44	645	0	0	1087	44	38	0	188	0	0	0			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx			
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx			
Capacity Module:															
Cnflict Vol:	1132	xxxx	xxxxx	xxxx	xxxx	xxxxx	1843	xxxx	1109	xxxx	xxxx	xxxxx			
Potent Cap.:	625	xxxx	xxxxx	xxxx	xxxx	xxxxx	83	xxxx	257	xxxx	xxxx	xxxxx			
Move Cap.:	625	xxxx	xxxxx	xxxx	xxxx	xxxxx	79	xxxx	257	xxxx	xxxx	xxxxx			
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	315	0	xxxxx	0	0	xxxxx			
Volume/Cap:	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	0.73	xxxx	xxxx	xxxx			
Level Of Service Module:															
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	5.1	xxxx	xxxx	xxxxx			
Control Del:	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	18.0	xxxx	49.6	xxxxx	xxxx	xxxxx			
LOS by Move:	B	*	*	*	*	*	C	*	E	*	*	*			
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx			
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shrd ConDel:	11.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx			
Shared LOS:	B	*	*	*	*	*	*	*	*	*	*	*			
ApproachDel:	xxxxxx			xxxxxx			44.3			xxxxxx					
ApproachLOS:	*			*			E			*					

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
General Plan

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 Old Mammoth Road/Driveway B

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[23.5]

Street Name:	Old Mammoth Road						Driveway B					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 1 0	0 0		0 0 0	1 0		0 0 1!	0 0		0 0	0 0 0	
Volume Module:												
Base Vol:	36	622	0	0	1028	180	28	0	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	622	0	0	1028	180	28	0	29	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	36	622	0	0	1028	180	28	0	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	38	655	0	0	1082	189	29	0	31	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	38	655	0	0	1082	189	29	0	31	0	0	0
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	xxxxx	xxxx	xxxxx
FollowUpTim:	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1272	xxxx	xxxxx	xxxx	xxxx	xxxxx	1907	xxxx	1177	xxxx	xxxx	xxxxx
Potent Cap.:	553	xxxx	xxxxx	xxxx	xxxx	xxxxx	76	xxxx	235	xxxx	xxxx	xxxxx
Move Cap.:	553	xxxx	xxxxx	xxxx	xxxx	xxxxx	72	xxxx	235	xxxx	xxxx	xxxxx
Total Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	276	0	xxxxx	727	0	xxxxx
Volume/Cap:	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	0.11	xxxx	0.13	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	12.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	B	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	254	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	12.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	23.5	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	C	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			23.5			xxxxxx		
ApproachLOS:	*			*			C			*		

Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

Mammoth Clearwater
Access Analysis
General Plan

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 Driveway C/Sierra Nevada Road

****

Average Delay (sec/veh): 3.6 Worst Case Level Of Service: B[12.4]

****

Street Name:	Driveway C						Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	29	0	172	36	245	0	0	244	36
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	29	0	172	36	245	0	0	244	36
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	29	0	172	36	245	0	0	244	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	31	0	181	38	258	0	0	257	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	31	0	181	38	258	0	0	257	38
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	609	xxxx	276	295	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	461	xxxx	768	1278	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	451	xxxx	768	1278	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.07	xxxx	0.24	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	697	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.3	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.4	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			12.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

Mammoth Clearwater
Access Analysis
General Plan

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 Driveway D/Sierra Nevada Road

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[13.6]

Street Name:	Driveway D						Sierra Nevada Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 0			0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0		
Volume Module:												
Base Vol:	0	0	0	36	0	35	42	250	0	0	252	186
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	36	0	35	42	250	0	0	252	186
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	36	0	35	42	250	0	0	252	186
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	38	0	37	44	263	0	0	265	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	38	0	37	44	263	0	0	265	196
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	715	xxxx	363	461	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	400	xxxx	686	1111	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	388	xxxx	686	1111	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	0.05	0.04	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	494	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	13.6	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			13.6			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

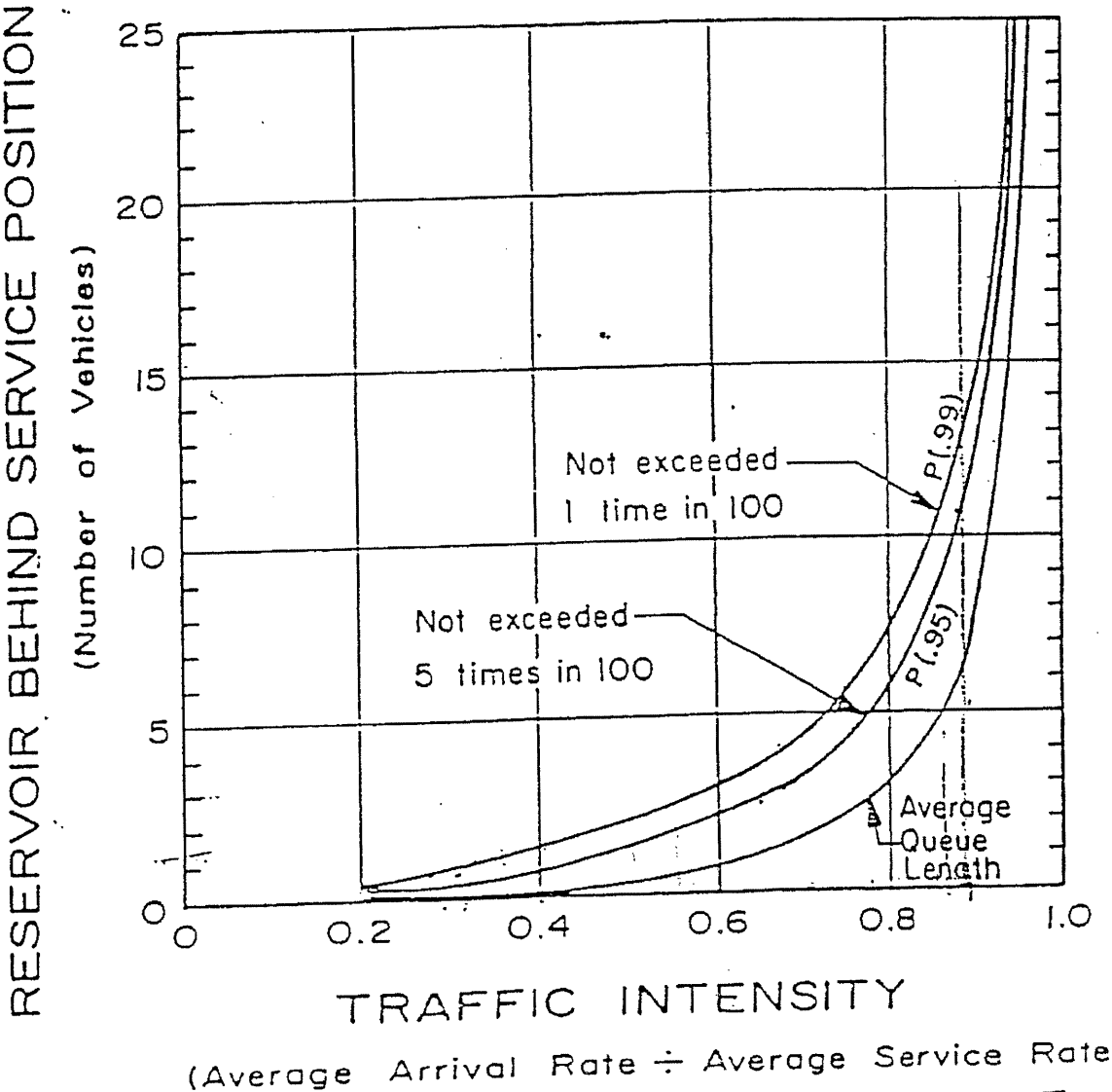
Note: Queue reported is the number of cars per lane.

Traffix 7.8.0115 (c) 2006 Dowling Assoc. Licensed to LSA ASSOC. IRVINE, CA

APPENDIX F

RESERVOIR NEED VS. TRAFFIC INTENSITY NOMOGRAPH

RESERVOIR NEEDS VS TRAFFIC INTENSITY



×22' (auto's)

×35' (service)

Assumptions:

1. Arrivals follow a Poisson Distribution
2. Service rate can be represented by an exponential probability function.
3. Flow is equally divided between each lane if more than one is available.

Note: To obtain reservoir length, use 22 feet per vehicle.

LSC TRANSPORTATION CONSULTANTS, INC.

2690 Lake Forest Road, Suite C
P. O. Box 5875
Tahoe City, CA 96145
(530) 583-4053
FAX (530) 583-5966
E-mail: lsc@lsctahoe.com
Website: www.lsctahoe.com

TRANSPORTATION
CONSULTANTS, INC.

RECEIVED
SEP 0 1 2006
RBF CONSULTING

August 28, 2006

Eddie Torres, INCE
RBF Consulting
14725 Alton Parkway
Irvine, CA 92718

RE: Mammoth Clearwater Site Circulation Analysis

Dear Mr. Torres:

The purpose of this letter is to discuss the internal site circulation of the Mammoth Clearwater project, as analyzed by LSC using vehicle turning templates and the AutoTurn Software. LSC reviewed the ability of an AASHTO design passenger car to navigate the parking garage, the ability of Mammoth Lakes Fire Truck to navigate the parking and loading areas, and the ability for larger trucks to park in the designated truck loading areas. The attached Exhibits 1A, 1B, C, D, and E depict the vehicle path analysis conducted by LSC. The following are the conclusions of the analysis.

- As shown in the attached Exhibits A1 and A2, the AASHTO passenger car design vehicle can navigate the parking lot, although it should be noted that the AASHTO design vehicle is one foot longer that the Town required parking lot length of 18 feet. Regardless, the Town standard of 18 feet is a typical length for a parking space.

- The exhibits also shows that in some cases where parking spaces are located at the end of a parking aisle, a three point turn may be required to pull into or out of a parking space (Exhibit A2). Regardless, this does not create any significant safety or circulation impact.

- Exhibit A1 shows only one area of concern in the parking garage at the central ramp. The central ramp requires vehicle to make a sharp turn in a small area. In addition, it is impossible for the design vehicles to pass each other along this curve unless one stops to turn the wheel and potentially encroaches on the curved wall shown on the plan. As drivers do not typically drive in this fashion, drivers will likely give way (or back up) to allow passage. Considering the high level of activity expected at this parking garage (on the order of one to two vehicles every ten seconds during peak times), this would cause delays and could cause minor accidents. Therefore, it is recommended that the removal of a few parking spaces (such as the

bay of three tandem spaces to the north) to provide for a wider travel path at this location be considered.

- As shown in Exhibit B, a WB-50 truck cannot drive through the truck loading area (Exhibit B) without driving over curbs. Therefore, WB-50 trucks requiring access the site will likely need to park on the street and haul deliveries from there. Typically, however, WB-50 vehicles are not used for deliveries.

- A WB-40 truck can navigate the surface parking and loading area (Exhibit C), as can a 30-foot Single Unit truck (Exhibit D).

- The Mammoth Lakes Fire Department was contacted to determine the dimensions of their fire trucks. The dimensions of there soon-to-be purchased fire truck was used in this analysis. As shown in Exhibit E, a fire truck can navigate through the parking area. It should be noted that Fire Department Staff (Brent Harper) indicated that the fire department would like to be provided access within 25 to 30 feet of all sides of the building. It should be noted that this standard cannot be met under the current site plan. We suggest submitting a copy of the site plan to the Fire Department for review.

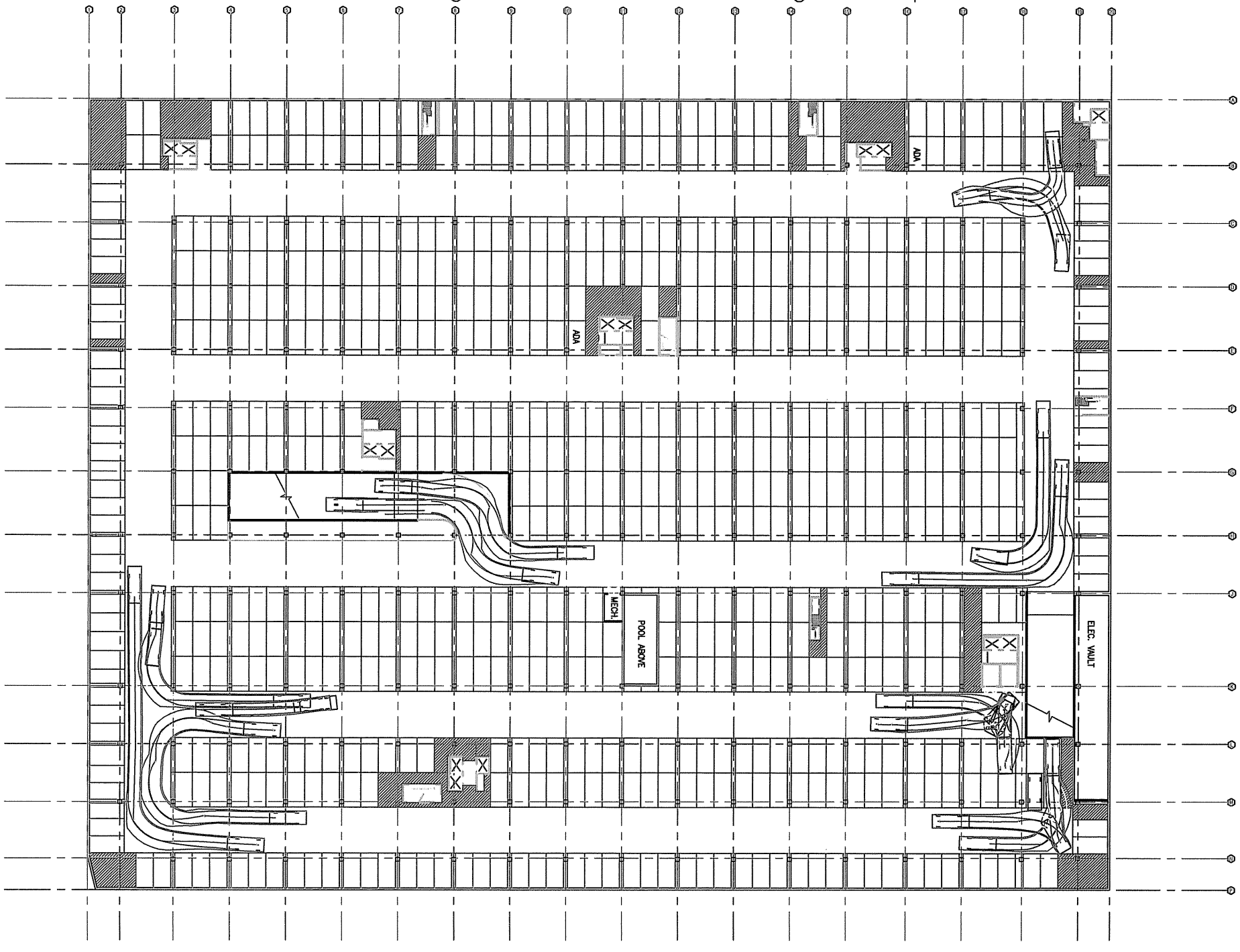
LSC suggests that you provide a copy of this analysis to the Town of Mammoth Lakes and the applicant for their review and comment. Please do not hesitate to call me at (530) 583-4053 if you have any questions.

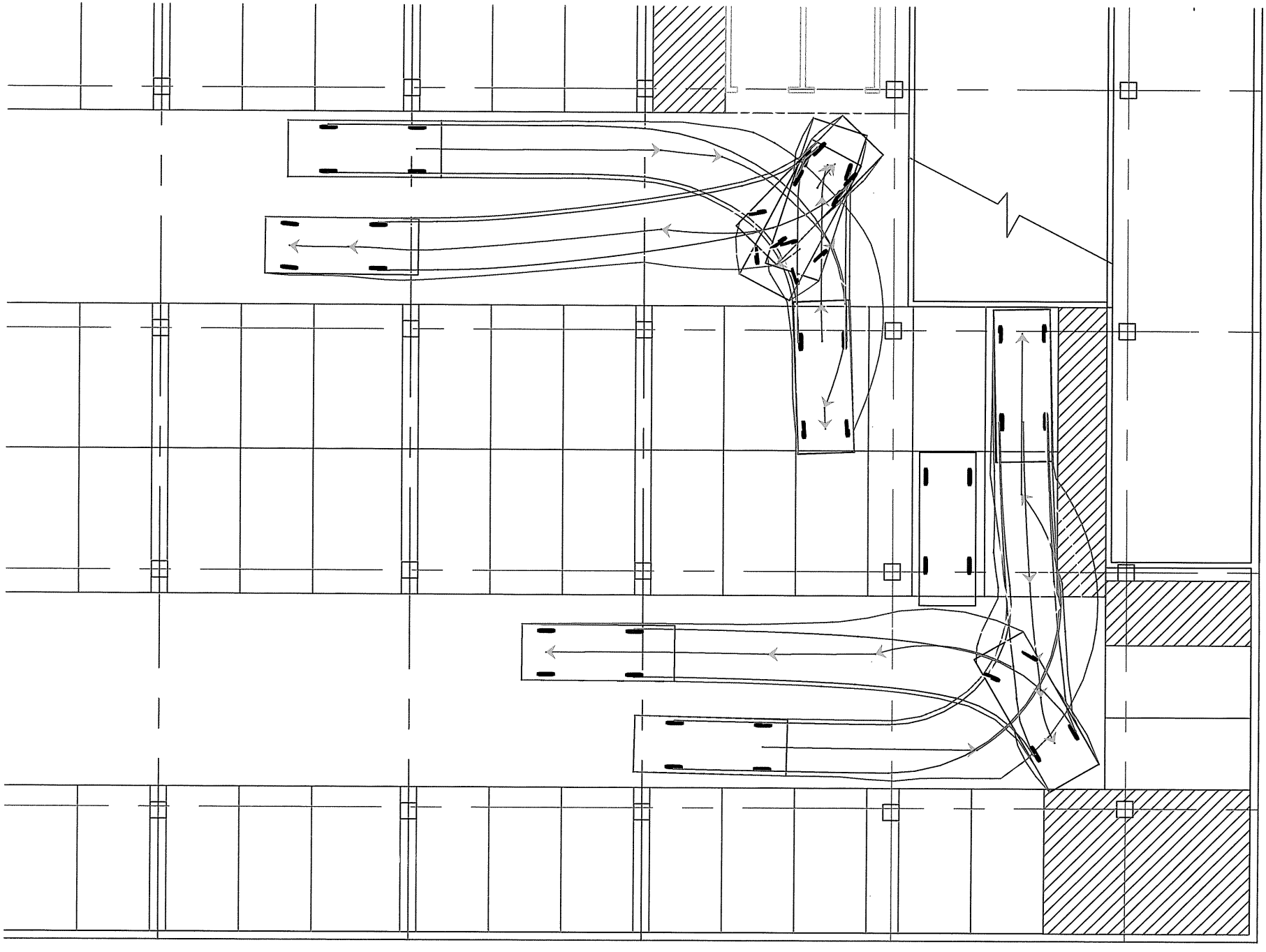
Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

by Rebecca Bucar
Rebecca L. Bucar, PE, Project Engineer

Exhibit A1: Passenger Vehicle Turning Templates





Exibit A2: Passenger Vehicle Turning Templates (zoom)

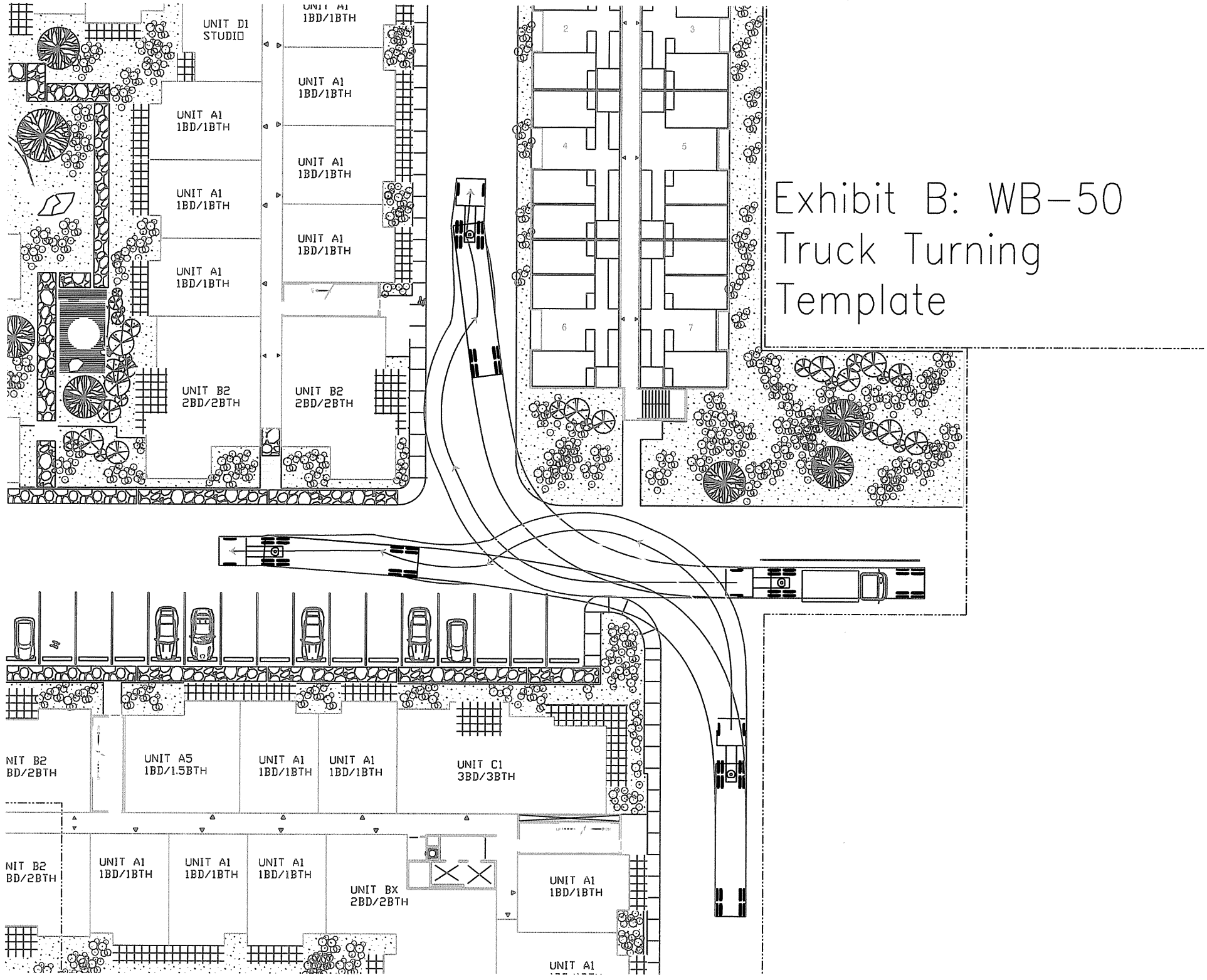
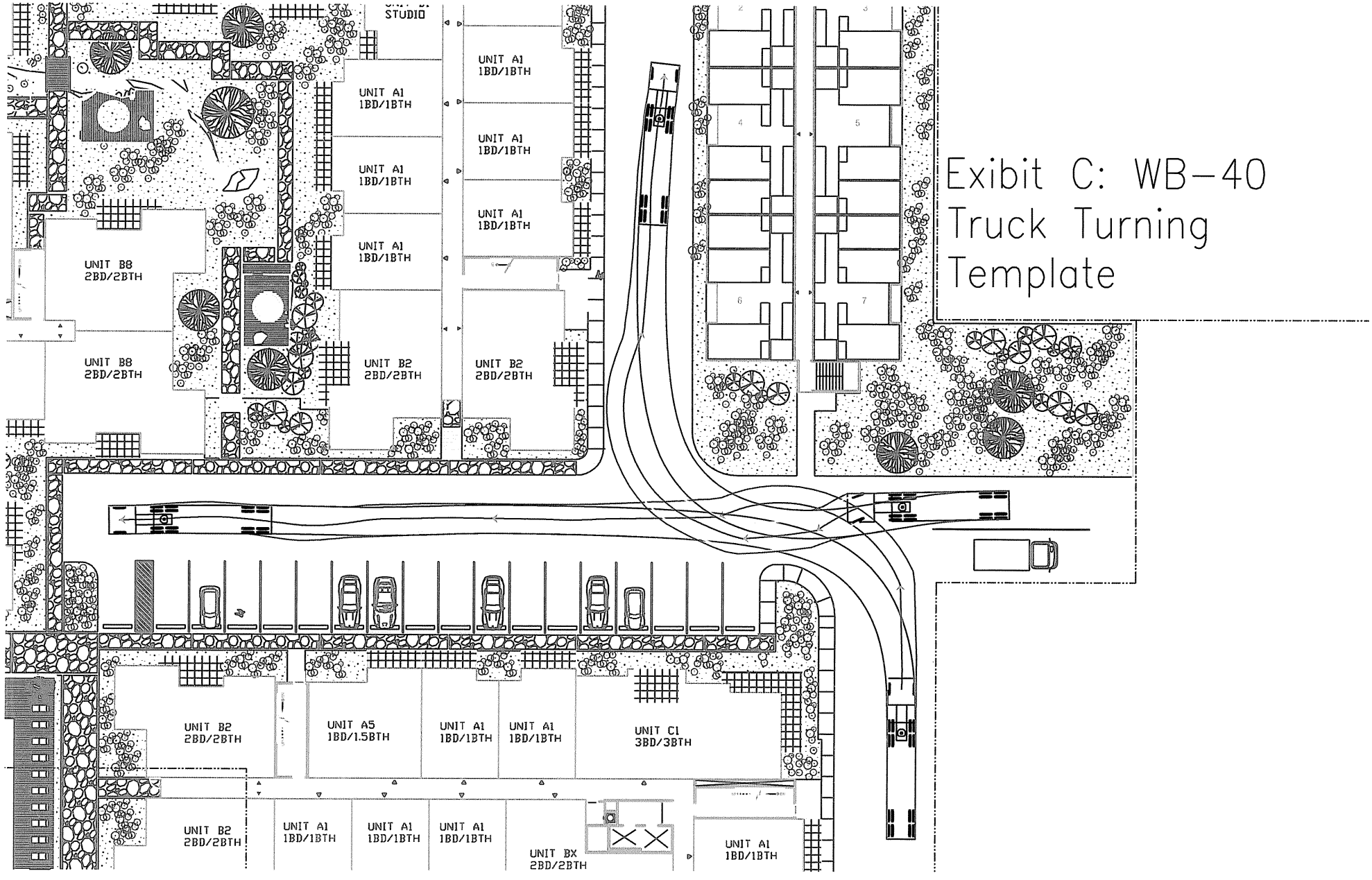


Exhibit B: WB-50 Truck Turning Template



Exibit C: WB-40 Truck Turning Template

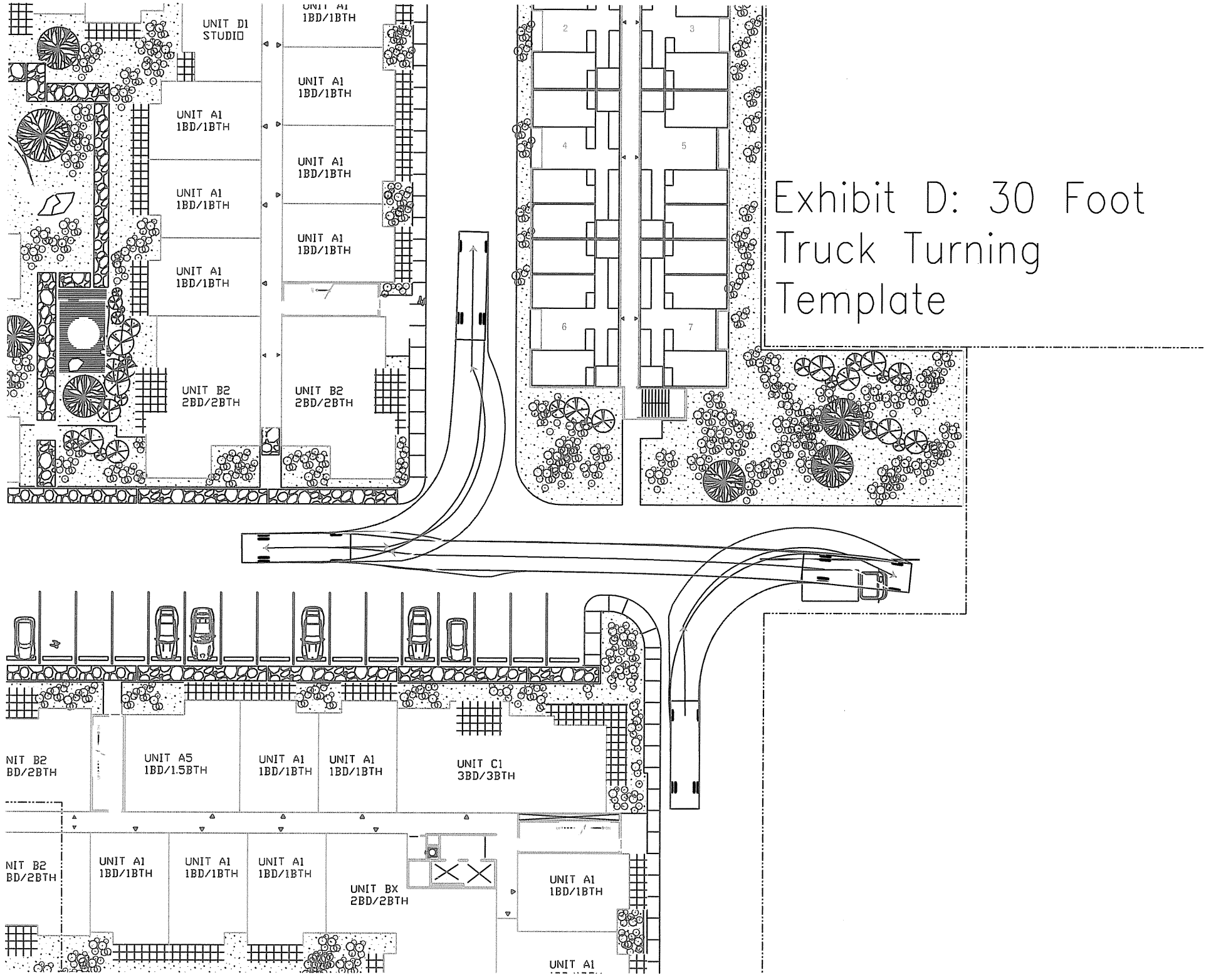


Exhibit D: 30 Foot Truck Turning Template

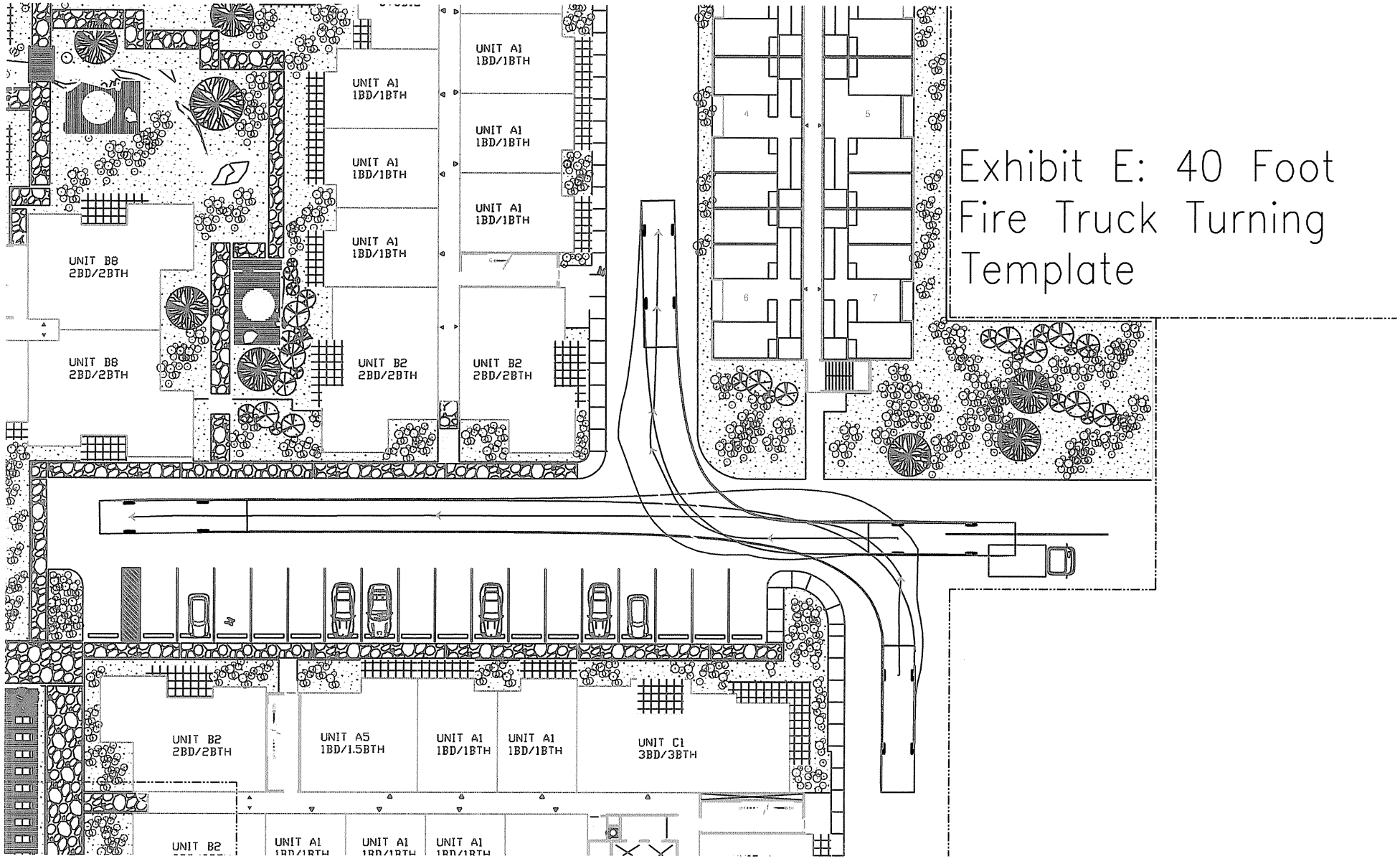


Exhibit E: 40 Foot Fire Truck Turning Template

LSC TRANSPORTATION CONSULTANTS, INC.

2690 Lake Forest Road, Suite C
P. O. Box 5875
Tahoe City, CA 96145
(530) 583-4053
FAX (530) 583-5966
E-mail: lsc@lsctahoe.com
Website: www.lsctahoe.com

TRANSPORTATION CONSULTANTS, INC.

RECEIVED
AUG 8 2006
RBF CONSULTING

August 4, 2006

Eddie Torres, INCE
RBF Consulting
14725 Alton Parkway
Irvine, CA 92718

RE: Mammoth Clearwater Traffic Impact Analysis Peer Review

Dear Mr. Torres:

With this letter, LSC Transportation Consultants, Inc. would like to present our peer review of the *Mammoth Clearwater Traffic Impact Analysis* prepared by LSA Associates, Inc. (April 2006). The goal of our work is to validate the technical analysis prepared by LSA so that it can be used to prepare the Traffic Section of the EIR.

The Mammoth Clearwater project is proposed to be located north of Sierra Nevada Road, west of Old Mammoth Road, and east of Laurel Mountain Road, providing the following land uses:

- 480 condominium/hotel rooms in 339 units
- 43 work-force housing units
- 8,000 square feet of restaurant
- 20,205 square feet of retail

According to the *Mammoth Clearwater Traffic Impact Analysis*, the existing land uses at the location of proposed project, which will be removed, consist of 11,948 square feet of restaurant and a 141-unit hotel.

REVIEW OF TRAFFIC STUDY

Our review of the *Mammoth Clearwater Traffic Impact Analysis* is summarized below.

Adequacy of Study Area Analyzed

The traffic analysis included LOS calculations at the following seven intersections:

- Old Mammoth Road/Main Street
- Old Mammoth Road/Meridian Road
- Sierra Park Road/Main Street
- Azimuth Drive/Meridian Blvd.
- Sierra Park Road/Meridian Blvd

Given the project is expected to generate approximately 159 new PM peak-hour trips after deducting the trips generated by the existing land uses, this is a reasonable study area, with the exception of the exclusion of the Old Mammoth Road/Sierra Nevada Road intersection. The project-generated traffic has the potential to impact this intersection and the potential needs for improvements at this location should be evaluated, possibly including a signal warrant analysis.

It can be expected that the project will likely have relatively small impacts to other intersections in the Town. Therefore, these traffic impacts would be mitigated by the project's payment of Development Impact Fees.

Recommendation: The traffic study should be expanded to include the Old Mammoth Road/Sierra Nevada Road intersection.

Design Volumes Analyzed

LSC reviewed the existing and cumulative design volumes used in the traffic analysis. The sources of the design volumes and the methodology used in developing the design volumes are found to be reasonable.

It should be noted that concern has been expressed by the community regarding the exclusion of the AM peak hour from the analysis. However, as shown in the attached Figure A and Table B, Saturday winter traffic volumes along Main Street (SR 203) east of Minaret Road are over twenty percent higher during the PM peak hour than traffic volumes during the AM peak hour. Therefore, it can be concluded that the analysis of PM peak-hour conditions will provide adequate analysis of potential traffic impacts generated by the project, and that evaluation of AM conditions would not result in the identification of additional impacts or mitigation measures.

Existing and Proposed Land Uses Analyzed

The traffic analysis assumes the removal of 141 seasonal condominiums and 11,948 square feet of restaurant space (including the Ocean Harvest and Igor's restaurants). However, as the Igor's

restaurant is not currently open, it may not appropriate to make a reduction for the traffic generated by it. Therefore, unless Igor's restaurant was in operation during the time that the traffic counts were collected, a trip generation "credit" should only be applied to the Ocean Harvest restaurant.

The analysis also assumes the project proposes 328 seasonal condominiums, 43 employee housing units, 8,000 square feet of restaurant, and 20,205 square feet of retail. These land uses are consistent with those contained in the Initial Study, except that the Initial Study indicates the project proposes 339 condominium/hotel units. The traffic analysis should be changed accordingly. In addition, as discussed below, lock-off units should be analyzed as separate hotel units, unless the project applicant is willing to limit the proportion of lock-off units locked off at any one time (i.e., limit the number of "keys").

Recommendation: The traffic study should be revised to assume only the Ocean Harvest restaurant is being removed as the Igor's restaurant is not currently in operation (unless Igor's restaurant was in operation when the traffic counts were conducted). In addition, the number of condo/hotel units should be revised to match the Initial Study project description.

Trip Generation

The trip generation estimates in the *Mammoth Clearwater Traffic Impact Analysis* are based upon the Mammoth Traffic Model daily rates and the *ITE Trip Generation Manual* (Institute of Transportation Engineers, 2003) peak-hour to daily trip rate ratios. This is a reasonable approach and is consistent with the methodologies typically employed for other traffic analyses within the Town, and typical traffic engineering practice. However, we have the following comments:

- It is unclear as to what trip rates were used for some land uses. Attached are the model trip rates. Note that according to the attached sheet, a multi-family year-round unit is expected to generate 8 trips per unit per day. Table F of the traffic analysis assumes the trip rate of these uses to be 9 trips per day per unit.

- The Residential Medium Density (MF) - Seasonal rate is shown to be applied to both existing and proposed units. However, the actual daily trip rate applied to one is 10, while a daily trip rate of 9 is applied to the other. The same trip rate should be applied to both uses.

- The project description states that the project proposes 480 condominium/hotel rooms in 339 units. If the 339 units can, in fact, operate as 480 hotel units (with use of lock-off units), the project trip generation should be revised to assume each lock-off unit operates as a hotel room. This will result in the analysis of a worst case scenario, as required by CEQA. Alternatively, the project applicant could consent to a limit on the proportion of lock-off units locked off at any one time (i.e., limit the number of "keys"). This limitation has been applied

to similar lodging projects with lock-off units in South Lake Tahoe. If such a limit is established, the traffic analysis should reflect the maximum allowed under the limit.

- The trip generation rates for restaurant is based on the ITE Land Use "High-Turn Over Sit-Down Restaurant" which is reasonable.

- It is unclear in the report what ITE trip rate was used to estimate the trip generation of the retail uses. This should be well documented in the report.

Recommendation: The exact source of each trip rate (which ITE land use or which traffic model category) used for each existing and proposed land uses should be fully identified. In addition, each potential lock-off unit should be analyzed as a separate hotel room. If the existing units are operated like a hotel, they should be analyzed as separate hotel units.

Trip Distribution

The traffic analysis assumes trips generated by the proposed land uses would be distributed as follows:

- 15 percent to Main Lodge via Minaret Road
- 15 percent west of the site via Meridian Boulevard
- 5 percent east of the site via Main Street
- 5 percent east of the site via Old Mammoth Road and Meridian Boulevard
- 15 percent south of the site via Old Mammoth Road
- 20 percent to the Canyon Lodge Area
- 25 percent to North Village Area

Considering the land uses in the vicinity of the proposed site, this trip distribution is reasonable.

Trip Assignment

As per Figure 10 of the report, the total number of trips going in and out of the site during the peak hour is 1,103. This does not match the total peak-hour trips (515) generated by the proposed project. However, as the report explains, arriving drivers that use valet enter at Access B and drop off the vehicle. The valet then exits Access C and enters the garage entrance (Access D) to park the car. When the customer returns for the car, the valet exits the garage at Access A and returns it after entering Access B. Finally the customer exits the site with the vehicle. In short, each round trip made to the site using valet generates 6 trips entering or exiting the site access points. This probably accounts for the difference in the trips shown to occur at the site accesses versus the trips shown to be generated by the project in Table F.

Regardless, LSC was not able to confirm the accuracy of the numbers with the information provided. For example, referring to Table F and assuming that all retail and restaurant customers use valet would suggest that 244 peak-hour trips to/from the site use valet. As discussed above, each valet-parked visit to/from the site (two one- way trips) equate six trips at the site access. Therefore, the retail and restaurant uses actually generate 732 one-way trips at the site access. Adding this figure to the 270 trips generated by the residential portion of trip generation equates 1,002 trips at the site access. However, 1,103 peak-hour trips are shown at the site access. The calculation of trips at the site access should be well documented in the report, if only provided in the appendix.

Finally, there is an inconsistency between the traffic volumes analyzed in the traffic analysis and the final project trip generation. On page 24 of the report, the use of tandem valet spaces for residential, retail, and restaurant use is discussed. However, the traffic volumes used in the analysis assume that valet is used only by retail and restaurant uses. As the use of valet parking greatly increases the traffic at the site access, this could result in an underestimation of traffic volumes at the site accesses.

Recommendation: Explain differences in site-generated traffic identified in Table F versus Figure 10. Document trip assignment calculations. Also revise analysis if necessary to account for all valet trips (retail, residential, and restaurant), and to ensure that the assumptions regarding valet parking used in the traffic analysis are consistent with the parking plan.

Approved Project Trip Generation and Traffic Distribution

Although the methodology used to estimate cumulative conditions is reasonable, the Town Planning Department should review the list of future cumulative projects and determine whether it is adequate.

Accuracy of the Level of Service (LOS) Analysis

LSC reviewed the LOS calculations for accuracy in the lane configuration, signal timing parameters, and traffic volumes and found all of these parameters to be correct. In general, the LOS analyses are accurate, although a peak-hour factor of 0.95 at the site accesses would be more appropriate than the peak-hour factor of 1.00 used in the analysis.

Recommendation: Revise peak-hour factor for site access LOS calculations to 0.95 or less.

Cumulative Analysis

The cumulative build out analysis was based upon the LOS analysis prepared by LSC for the General Plan Update. The Existing General Plan Build Out scenario was recently revised as a

part of the *Mammoth Lakes Eagle Lodge Traffic Impact Analysis* (LSC, 2006). However, this report is still in draft form and not ready for release to the public. Regardless, the revised analysis has lower land use forecasts for the Cerro Coso college site and so basing future conditions on the previous analysis provides a conservative approach. There is therefore no need to modify the traffic analysis to address this issue.

Site Access Locations

The traffic analysis provides LOS calculations for each site access and has proven them to work at adequate LOS. However, site Accesses B and C (providing access to the porte cochere) are both located very close to the existing Old Mammoth Road/Sierra Nevada Road intersection (less than 100 feet) and it is unclear whether queues forming at this intersection might interfere with adequate operation at the site accesses.

Of particular concern is the potential for the southbound left-turn queues at the Old Mammoth Road / Sierra Nevada Road intersection to form back past Access B. In this condition, northbound left-turning movements into Access B would be forced to stop in the northbound through travel lane on Old Mammoth Road, which would rapidly form substantial queues back through the Old Mammoth Road / Sierra Nevada Road intersection. If this were to occur, northbound left-turn movements into Access B would need to be prohibited, at least during peak times.

It can be expected that queues generated by the Old Mammoth Road/Sierra Nevada Road intersection would also at times block exiting movements from Access's B and C (left turns onto Sierra Nevada Road and both left and right turns onto Old Mammoth Road). While this would cause congestion in the porte cochere area, it would not impact through traffic and is not considered a significant impact.

Recommendation: As part of the recommended analysis of the Old Mammoth Road/Sierra Nevada Road intersection, evaluate and present the impacts of queues at this intersection on the site accesses. If the 95th percentile southbound left-turn queue blocks Access B, northbound left turns should be prohibited (at least during peak periods when this queuing condition occurs), and the traffic analysis modified accordingly.

It bears noting that the site plan, which requires movement on public streets to move valet cars between the porte cochere and the parking facility, substantially increases the traffic impact of the project on both Old Mammoth Road and Sierra Nevada Road.

Internal Site Circulation

It is unclear from the site plan whether adequate fire and emergency access to the site is provided. The fire department requires that emergency vehicle access be provided within 150 feet of all exterior surfaces. Assuming that a fire truck would not deploy on the Access C garage ramp, it appears that there is a portion of the site that does not meet this criteria. Verification as to whether this standard is met should be provided. If this standard is not met, the plan is subject to the approval of the Fire Department.

In addition, the proposed truck loading area in the northernmost portion of the site is far removed (more than a 500-foot-walk) from some of the retail land uses. Given this, it can be expected that many truck drivers will choose to use the drop-off zone along the west side of Old Mammoth Road (in the transit pull out), the porte cochere area, or the internal surface parking bay to make deliveries. It may be appropriate to designate several of the parking spaces in the southern portion of the internal surface parking bay for delivery vans. In addition, as the parallel bay along the east side of Old Mammoth Road is to be used as a transit stop, it will need to be signed to prohibit parking.

LSC recently received an AutoCAD version of the site plan. We will use this site plan to evaluate the internal site circulation using standard turning templates to verify adequate truck, fire truck, and passenger vehicle access. The results of this analysis will be provided in a separate letter.

Recommendation: Verify whether emergency vehicle access can be provided within 150 feet of all exterior surfaces. Provide better description of truck access, and evaluate options for truck access that addresses driver's strong desire to minimize walk distances.

Parking Analysis

LSC reviewed the parking demand tables (Table I and Table J) in the report. The parking rates presented in Table I are based on the Town of Mammoth Lakes' parking code and are generally reasonable to use. However, LSC has the following comments:

- According to the Town, a reduction in workforce housing parking rates should be requested as follows:

  - Studio and one bedroom - 1 space per unit
  - Two to three bedroom - 2 spaces per unit
  - Four or more bedrooms - 2.5 spaces per unit

  The revision to this rate may or may not change the total residential parking demand.

- In addition, the parking demand rate applied to the restaurant use was for a fast-food restaurant. The appropriateness of using this parking demand rate as compared to the eating or drinking establishment rate should be discussed. As the eating or drinking establishment rate requires knowledge of the number of seats or square feet of seating area, this information would need to be provided to apply the rate.

- For the commercial portion of this project, a shared parking methodology as outlined in the *Draft Mammoth Lake Parking Study* (LSC, 2005) or in the Urban Land Institute's *Shared Parking* is appropriate and could also reduce the overall parking requirement.

- In order to provide the required 741 parking spaces, the project proposes 478 tandem spaces that will need to be valet parked and 262 single-loaded spaces, which according to the parking demand analysis would leave a parking shortfall of only one space. Of the tandem spaces, 326 will be used for residential uses and 152 would be used for retail and restaurant uses. However, the management of these spaces is unclear. A description of the parking management should be provided.

  It is also unclear how the valet spaces will be managed with the self-park spaces. Will a certain number of spaces be designated to residents versus the retail and restaurant uses? Will the valet parking operate on a first-come first-serve basis? Is there a potential for drivers who do not wish to valet park to exceed the number of single-loaded spaces, and therefore choose to park in other nearby public or private parking areas? Does the applicant have any information on the proportion of drivers at similar developments that choose to self-park versus valet park?

- The analysis also states that the thirty-five ground-level spaces will be used for retail users, visitor check in, retail loading, and valet storage. However, as valet storage was not accounted for in the parking demand analysis, valet storage spaces should be *in addition to* the 741 identified to be needed.

- The project proposes tandem or stacked parking for both retail and residential components of the project. All parking would be managed via a valet system operated 24 hours a day, seven days a week, with up to nine valet attendants. However, as discussed above, the analysis used to derive the need for nine valet attendants assumes that only retail and restaurant trips will use valet. As the valet will be required for some residential spaces, the parking attendant analysis should be revised to account for these additional valet needs.

- The residential parking could potentially be shared with the commercial parking in order to reduce overall parking demand. The sharing of residential parking is subject to Town approval, though LSC would encourage the use of shared parking.

- LSC reviewed the proposed parking configuration and found it to be reasonable. However, there are several Town of Mammoth Lake parking requirements that the project should verify conformance with:

  - "Each parking space shall consist of a paved unobstructed rectangular area ten feet wide by twenty feet long, with an unobstructed back-up area of not less than twenty-four feet. When located within a parking structure or indoor parking facility where individual spaces are not separated by walls or other barriers, the minimum dimensions may be eighteen feet in length and nine feet in width. A single-car garage must have a minimum clear interior space of ten feet wide by twenty feet deep." *Some spaces that abut against a wall appear to be only 18 feet long.*

  - "The design of a parking lot shall be so that vehicles do not have to exit the site to get from one space to another." *If at all possible, access between the parking garage and surface parking should be provided through the site. However, as the traffic analysis will evaluate the traffic impacts of allowing an exception to this rule, the Town may allow an exception.*

- Finally, the South Park Villas condominiums are currently provided perpendicular parking spaces along the south side of Sierra Nevada Road adjacent to the site. It should be determined whether the proposed project will result in the removal of these spaces and, if so, identify methods for their replacement.

Recommendation: Revise workforce housing parking rate. Verify appropriateness of applying fast-food restaurant parking rate. Provide description of parking management. Account for valet parking storage in parking demand analysis. Revise parking attendant analysis to account for updated number of valet spaces. Provide information on valet vs. self-parking for similar projects to ensure that adequate on-site parking will be available for self-parkers. Verify conformance with parking code. Discuss impacts to South Park Villas on-street parking if any.

Potential Pedestrian Safety Impacts

It is likely that due to its central location the project will generate significant pedestrian activity. As there are currently no sidewalks along Sierra Nevada Road and the project proposes to provide sidewalks along the north side of Sierra Nevada Road, the project has a beneficial impact to pedestrian safety. In addition, Figure L of the specific plan clearly identifies pedestrian routes external and internal to the site. The project appears to provide safe and efficient pedestrian circulation.

Transit Capacity Impacts

The proposed project will generate new transit trips. However, as the current summer transit service currently operates with adequate additional capacity and because the project's payment of development impact fees will help purchase new vehicles for the Town service, the project can be considered to not have a significant impact on summer transit service.

Conversely, as the current transit system operates at capacity during busy winter days, additional transit demand may be considered a significant impact to the winter transit service. Consistent with the Eagle Lodge traffic analysis, it can be assumed that 61 percent of the residents in the development ski on a typical winter Saturday and there are 4 people residing in each unit (excluding lockoffs) for a total of 827 skiers on a typical winter Saturday (339 units X 4 people per unit X 61 percent = 827 skiers). Furthermore, a comparison of peak day skier transit ridership identified in the *Mammoth Lakes Transit Plan* (LSC, 2000) to peak day skier visits indicates that roughly 20 to 25 percent of skiers access the mountain via transit. Assuming that 20 percent of the skiers residing in the Mammoth Clearwater project will use transit, the site can be expected to generate roughly 165 skier transit round trips per day (827 skiers X 20 percent = 165 skiers). This would equate 330 transit round trips per winter day.

Assuming a bus standing capacity of 60 passengers, an additional 3 bus trips would be needed to the site during a peak day, and in the afternoon an additional 3 bus trips would be needed from the site. One additional bus would be needed to provide this capacity. If impacts to winter transit are found to be significant, potential mitigation measures might include payment of an annual operating fee to the Mammoth Mountain Ski Area or the purchase of a new transit vehicle for the Mammoth Mountain Ski Area.

Mitigation Measures

The proposed project mitigation measures are generally appropriate. However, the mitigation measures will need to be reevaluated once the analysis is revised.

CONCLUSIONS

In conclusion, LSC finds the traffic study to be reasonably accurate and valid. However, the following changes/additions should be made:

- The traffic study should be expanded to include the Old Mammoth Road/Sierra Nevada Road intersection.

- The traffic study should be revised to assume only the Ocean Harvest restaurant is being removed as the Igor's restaurant is not currently in operation (unless Igor's restaurant was in

operation during the traffic data collection). In addition, the number of condo/hotel units should be revised to match the Initial Study project description.

- The exact source of each trip rate (which ITE land use or which traffic model category) used for each existing and proposed land uses should be fully disclosed. In addition, each lock-off unit should be analyzed as a separate hotel room. If the existing units are operated like a hotel, they should be analyzed as separate hotel units.

- The differences in site-generated traffic identified in Table F versus Figure 10 should be explained.

- The trip assignment calculations should be documented.

- Revise analysis to account for all valet trips (retail, residential, and restaurant).

- Revise peak-hour factor for site access LOS calculations to 0.95 or less.

- Use analysis of the Old Mammoth Road/Sierra Nevada Road intersection to evaluate impacts of queues at this intersection on the site accesses.

- Verify whether emergency vehicle access can be provided within 150 feet of all exterior surfaces. Provide description of truck access.

- Revise workforce housing parking rate.

- Verify appropriateness of applying fast-food restaurant parking rate.

- Provide description of the management of valet and self-park spaces.

- Account for valet parking storage in parking demand analysis, and identify (either through examples from similar developments or through proposed management strategies) how the limited number of self-park spaces will not result in parking spillover to other nearby public and private parking areas.

- Revise parking attendant analysis to account for updated number of valet spaces.

- Verify conformance with parking code in terms of parking design.

- Discuss impacts to South Park Villas on-street parking, if any.

As revisions to the cumulative analysis and trip generation are recommended, the results of the traffic analysis may change. Therefore, it would be beneficial for LSC to conduct a review of the revised draft of the TIA. If you have any additional questions or comments regarding the traffic recommendations and results presented herein, please contact me.

Respectfully Submitted,

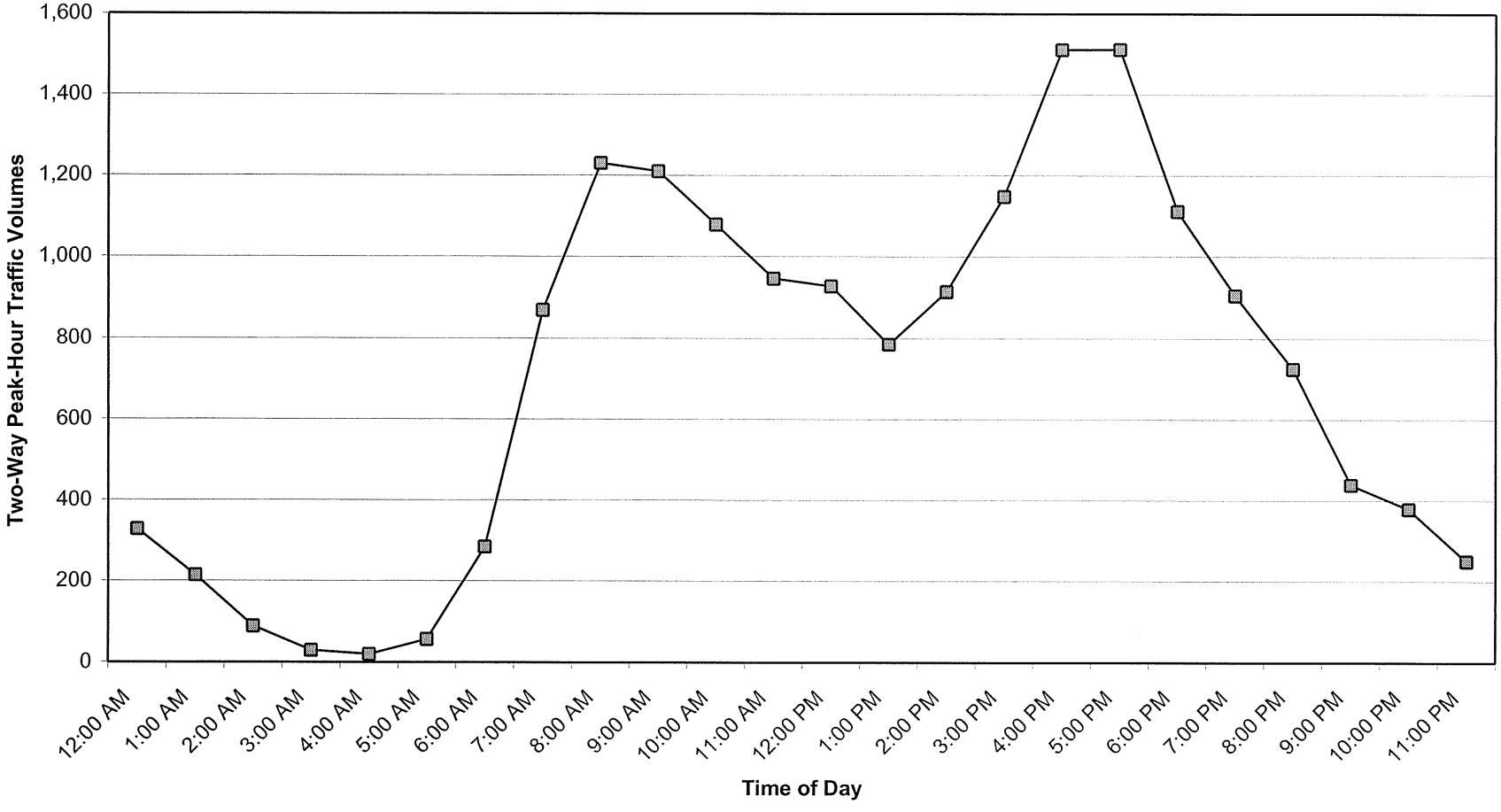
LSC TRANSPORTATION CONSULTANTS, INC.

by Rebecca Bucar
Rebecca L. Bucar, PE, Project Engineer

TABLE A: Caltrans Hourly Traffic Count Data Along State Route 203 East of Minaret Road

	Friday, February 24, 2006			Saturday, February 25, 2006		
Hour Beginning	EB	WB	Total	EB	WB	Total
12:00 AM	69	127	196	100	228	328
1:00 AM	33	61	94	83	131	214
2:00 AM	12	27	39	27	61	88
3:00 AM	9	10	19	7	22	29
4:00 AM	3	7	10	4	15	19
5:00 AM	12	27	39	21	35	56
6:00 AM	105	189	294	87	197	284
7:00 AM	269	477	746	266	602	868
8:00 AM	400	673	1,073	417	813	1,230
9:00 AM	482	604	1,086	533	677	1,210
10:00 AM	478	505	983	532	546	1,078
11:00 AM	484	520	1,004	443	503	946
12:00 PM	497	474	971	491	436	927
1:00 PM	478	372	850	414	371	785
2:00 PM	565	428	993	544	370	914
3:00 PM	796	474	1,270	732	416	1,148
4:00 PM	1,135	555	1,690	1,027	484	1,511
5:00 PM	743	592	1,335	965	547	1,512
6:00 PM	574	515	1,089	597	514	1,111
7:00 PM	354	492	846	461	444	905
8:00 PM	298	468	766	336	389	725
9:00 PM	212	394	606	186	253	439
10:00 PM	193	310	503	166	213	379
11:00 PM	147	227	374	141	109	250
Total	8,348	8,528	16,876	8,580	8,376	16,956

Figure A: Traffic Volumes Along SR 203 East of Minaret Road
(Saturday, February 25, 2006)



Mammoth Model Trip Rates

CODE	DESCRIPTION	UNITS	Daily Vehicle Trip-End Rate
1	Residential Low Density (SF) - Resident	DUs	12
2	Residential Medium Density (SF) - Resident	DUs	10
3	Residential High Density (MF) - Resident	DUs	8
4	Mobile Home Park - Resident	DUs	5
5	Residential Low Density (SF) - Visitor	DUs	10
6	Residential Medium Density (SF) - Visitor	DUs	9
7	Residential High Density (MF) - Visitor	DUs	8
10	Lodging (Hotel) - Visitor	Room	8
11	Resort Hotel - Visitor	Room	8
12	Retail/Comm'l & Town Offices	Acres	600

15.4 Air Quality Data

Mammoth Clearwater Estimated Vehicle Miles of Travel (VMT) on Study Roadway Segments

		Length	2004 (Existing)		Mammoth Clearwater		2009 (Cumulative)[1]		Additional Cumulative Projects[2]		Total[3]	
Segment	Description	(Miles)	ADT	VMT	ADT	VMT	ADT	VMT	ADT	VMT	ADT	VMT
Main Street Segment 1	Between Meridian and Sierra Park	1.03	5,983	6,163	260	268	7,906	8,143	302	311	6,545	6,741
Main Street Segment 2	Between Sierra Park and Old Mammoth	0.12	8,733	1,048	260	31	9,008	1,081	304	36	9,297	1,116
TOTAL	Between Old Mammoth and Mono	0.48	17,298	8,303	1,554	746	19,202	9,217	403	193	19,255	9,242
Main Street Segment 3	Between Mono and Minaret	0.45	15,896	7,153	3,108	1,399	16,769	7,546	460	207	19,464	8,759
Lake Mary Road (Old Main Street Segment 5)	Between Minaret and Lakeview	0.49	7,216	3,536	0	0	7,304	3,579	440	216	7,656	3,751
Lake Mary Road Segment 1	Between Lakeview and Juniper	0.46	1,789	823	0	0	2,011	925	440	202	2,229	1,025
Lake Mary Road Segment 2	South of Juniper	1.20	145	174	0	0	172	206	440	528	585	702
Meridian Boulevard Segment 1	SR 203 to Sierra Park	1.09	1,751	1,909	260	283	2,372	2,585	38	41	2,049	2,233
Meridian Boulevard Segment 2	Sierra Park to Old Mammoth	0.14	4,071	570	260	36	4,550	637	376	53	4,707	659
Meridian Boulevard Segment 3	Old Mammoth to Minaret	0.58	8,079	4,686	778	451	9,140	5,301	837	485	9,694	5,623
Meridian Boulevard Segment 4	Minaret to Majestic Pines	0.66	5,811	3,835	778	513	5,858	3,866	1,510	997	8,099	5,345
Old Mammoth Road Segment 1	Main to Meridian	0.45	12,489	5,620	1,750	788	17,080	7,686	269	121	14,508	6,529
Old Mammoth Road Segment 2	Meridian to Sherwin Creek	0.36	7,381	2,657	778	280	8,417	3,030	124	45	8,283	2,982
Old Mammoth Road Segment 3	Sherwin to Minaret	0.29	5,000	1,450	0	0	5,693	1,651	124	36	5,124	1,486
Old Mammoth Road Segment 4	Minaret to Club	0.47	4,234	1,990	0	0	5,400	2,538	0	0	4,234	1,990
Old Mammoth Road Segment 5	Club Drive to Waterford	0.26	2,465	641	0	0	2,485	646	0	0	2,465	641
Old Mammoth Road Segment 6	West of Sherwin	0.71	1,018	723	0	0	1,000	710	0	0	1,018	723
Forest Trail	Entire Length of Road	1.06	742	786	0	0	2,126	2,254	0	0	742	787
Canyon Boulevard	Lake Mary to Lakeview	0.32	4,625	1,480	0	0	5,247	1,679	56	18	4,681	1,498
Lakeview Drive	Canyon to Davison	0.93	2,469	2,296	0	0	2,638	2,453	0	0	2,469	2,296
Kelly Road and Majestic Pines	Lake Mary to Meridian	0.60	1,492	895	0	0	1,705	1,023	0	0	1,492	895
SR 203 Segment 1 (Minaret North of Main)	Lake Mary to Forest Trail	0.26	11,712	3,045	778	202	11,596	3,015	64	17	12,554	3,264
SR 203 Segment 2	Forest Trail to 1.0 Mile North	1.00	6,475	6,475	778	778	6,512	6,512	64	64	7,317	7,317
Minaret Road Segment 1	Main to Meridian	0.64	6,983	4,469	0	0	7,417	4,747	748	479	7,731	4,948
Minaret Road Segment 2	Meridian to Chateau	0.51	4,049	2,065	0	0	4,541	2,316	123	63	4,172	2,128
Minaret Road Segment 3	Chateau to Old Mammoth	0.21	4,829	1,014	0	0	5,338	1,121	123	26	4,952	1,040
Fairway Drive	Immediately South of Old Mammoth	0.13	1,885	245	0	0	1,846	240	0	0	1,885	245
TOTAL VMT				74,051		5,776		84,708		4,138		**94,622**

Source: 2004 Mammoth TranPLAN Transportation Demand Model

Notes:

[1] 2009 (Cumulative) represents an existing plus approved projects scenario as part of the Eagle Lodge EIR.

[2] Additional Cumulative Projects are projects not included in the 2009 cumulative projects list as presented in the Eagle Lodge EIR but are as part of the Clearwater TIA (projects #1, #3, #20, #22, and #23 of the Clearwater TIA).

[3] Total VMT is calculated as the sum of the VMT from the Clearwater project, the 2009 Cumulative projects, and the Additional Cumulative projects.

Town of Mammath Lakes - Clearwater Specific Plan EIR
PM_{10} Calculations

Scenario	VMT[1]	Uncontrolled Emissions[2]	Controlled Emissions[2]	Ambient PM_{10} Concentrations[2]
Existing	74,051	2,670.50	1,762.53	68.58
Cumulative No Project	88,846	3,204.05	2,114.68	82.29
Cumulative Plus Project	94,622	3,412.35	2,252.15	87.64

1. VMT numbers were obtained from the *Mammoth Lakes Traffic Impact Analysis* (August 2006 [November 2006]) prepared by LSA Associates (LSA).

2. The following equations were used per the Town of Mammoth Lakes, *Appendix I, Effectivieness Calculations for the Town of Mammoth Lakes Particulate Emissions Regulations*

- Uncontrolled Emissions = VMT/day X 36.063 grams/VMTx 1kg/1,000grams
- Controlled Emissions = Uncontrolled Emissions x 1-.34 based on a 34 percent reduction from implementation of street sweeping.
- Ambient PM_{10} Concentrations = 93 micrograms/m^3 x (Control Emissions/2,390 kg/day)

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Mammoth Lakes Parking Structure
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	10. DEGREES	TEMP=	-1.1 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link A	*	166	-94	166	-72	* AG	2144	2.9	.0	9.8
B. Link B	*	166	-72	209	-72	* AG	2144	2.9	.0	9.8
C. Link C	*	209	-72	209	-94	* AG	2144	2.9	.0	9.8
D. Link D	*	172	-76	172	-90	* AG	2144	2.9	.0	9.8
E. Link E	*	176	-76	176	-90	* AG	2144	2.9	.0	9.8
F. Link F	*	179	-76	179	-90	* AG	2144	2.9	.0	9.8
G. Link G	*	183	-76	183	-90	* AG	2144	2.9	.0	9.8
H. Link H	*	186	-76	186	-90	* AG	2144	2.9	.0	9.8
I. Link I	*	190	-76	190	-90	* AG	2144	2.9	.0	9.8
J. Link J	*	193	-76	193	-90	* AG	2144	2.9	.0	9.8
K. Link K	*	196	-76	196	-90	* AG	2144	2.9	.0	9.8
L. Link L	*	200	-76	200	-90	* AG	2144	2.9	.0	9.8
M. Link M	*	203	-76	203	-90	* AG	2144	2.9	.0	9.8

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	183	-94	1.8
2. Recpt 2	*	213	-5	1.8
3. Recpt 3	*	162	-4	1.8

□□

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Mammoth Lakes Parking Structure
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	45.	6.5	.0	.2	.0	.0	.0	.0	.0	.3
2. Recpt 2	198.	5.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	162.	5.2	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M
1. Recpt 1	.4	.3	.2	.1	.0
2. Recpt 2	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 1. Main Street and Old Mammoth Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	5. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link A	*	6284	-181	6285	-247	* AG	506	1.4	.0	25.4
B. Link B	*	6285	-247	6285	-300	* AG	353	2.9	.0	25.4
C. Link C	*	6285	-300	6280	-453	* AG	817	1.4	.0	25.4
D. Link D	*	6297	-461	6299	-378	* AG	1303	1.4	.0	25.4
E. Link E	*	6299	-378	6298	-319	* AG	1303	1.4	.0	25.4
F. Link F	*	6298	-319	6298	-177	* AG	1303	1.4	.0	25.4
G. Link G	*	6285	-266	6300	-315	* AG	153	2.9	.0	25.4
H. Link H	*	6300	-315	6462	-325	* AG	153	1.4	.0	18.5
I. Link I	*	6523	-314	6381	-311	* AG	592	1.4	.0	18.5
J. Link J	*	6381	-311	6298	-301	* AG	128	2.9	.0	18.5
K. Link K	*	6370	-310	6284	-326	* AG	464	2.9	.0	18.5

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	6326	-281	1.7
2. Recpt 2	*	6315	-340	1.7
3. Recpt 3	*	6243	-327	1.7
4. Recpt 4	*	6246	-277	1.7

JOB: 1. Main Street and Old Mammoth Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	200.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	344.	5.1	.0	.0	.0	.0	.0	.1	.0	.0
3. Recpt 3	85.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	108.	5.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K
1. Recpt 1	.0	.0	.0
2. Recpt 2	.0	.0	.0
3. Recpt 3	.0	.0	.1
4. Recpt 4	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 2. Meridian Blvd at Old Mammoth Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	20. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Y SB1	*	684	1256	711	1201	* AG	879	1.4	.0	23.9
B. Y SB2	*	711	1201	746	1134	* AG	668	2.9	.0	23.9
C. Y SB3	*	746	1134	800	1025	* AG	752	1.4	.0	23.9
D. Y SB4	*	800	1025	859	906	* AG	752	1.4	.0	23.9
E. Y NB1	*	869	911	814	1025	* AG	494	1.4	.0	23.9
F. Y NB2	*	815	1025	761	1138	* AG	413	2.9	.0	23.9
G. Y NB3	*	761	1138	729	1205	* AG	613	1.4	.0	23.9
H. Y NB4	*	729	1205	701	1264	* AG	613	1.4	.0	23.9
I. Y LT1	*	721	1198	754	1135	* AG	200	2.9	.0	23.9
J. Y LT2	*	754	1135	802	1039	* AG	84	2.9	.0	23.9
K. X EB1	*	596	1103	683	1125	* AG	517	1.4	.0	18.5
L. X EB2	*	683	1125	751	1141	* AG	317	2.9	.0	18.5
M. X EB3	*	751	1141	827	1159	* AG	528	1.4	.0	18.5
N. X EB4	*	827	1159	923	1182	* AG	528	1.4	.0	18.5
O. X WB1	*	925	1170	832	1147	* AG	374	1.4	.0	18.5
P. X WB2	*	832	1147	758	1128	* AG	290	2.9	.0	18.5
Q. X WB3	*	758	1128	688	1112	* AG	370	1.4	.0	18.5
R. X WB4	*	688	1112	599	1090	* AG	370	1.4	.0	18.5
S. X LT1	*	675	1115	754	1135	* AG	200	2.9	.0	18.5
T. X LT2	*	754	1135	842	1157	* AG	84	2.9	.0	18.5

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 2. Meridian Blvd at Old Mammoth Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	806	1100	1.8
2. Recpt 2	691	1157	1.8
3. Recpt 3	729	1094	1.8
4. Recpt 4	778	1180	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	306.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	104.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	6.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	230.	5.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 3. Sierra Nevada Road at Old Mammoth Roa
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	20. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Y SB1	*	684	1256	711	1201	* AG	933	1.4	.0	16.4
B. Y SB2	*	711	1201	746	1134	* AG	898	2.9	.0	16.4
C. Y SB3	*	746	1134	800	1025	* AG	983	1.4	.0	16.4
D. Y SB4	*	800	1025	859	906	* AG	983	1.4	.0	16.4
E. Y NB1	*	869	911	814	1025	* AG	887	1.4	.0	16.4
F. Y NB2	*	815	1025	761	1138	* AG	789	2.9	.0	16.4
G. Y NB3	*	761	1138	729	1205	* AG	872	1.4	.0	16.4
H. Y NB4	*	729	1205	701	1264	* AG	872	1.4	.0	16.4
I. Y LT1	*	721	1198	754	1135	* AG	35	2.9	.0	16.4
J. Y LT2	*	754	1135	802	1039	* AG	98	2.9	.0	16.4
K. X EB1	*	596	1103	683	1125	* AG	241	1.4	.0	18.5
L. X EB2	*	683	1125	751	1141	* AG	158	2.9	.0	18.5
M. X EB3	*	751	1141	827	1159	* AG	193	1.4	.0	18.5
N. X EB4	*	827	1159	923	1182	* AG	193	1.4	.0	18.5
O. X WB1	*	925	1170	832	1147	* AG	185	1.4	.0	18.5
P. X WB2	*	832	1147	758	1128	* AG	100	2.9	.0	18.5
Q. X WB3	*	758	1128	688	1112	* AG	198	1.4	.0	18.5
R. X WB4	*	688	1112	599	1090	* AG	198	1.4	.0	18.5
S. X LT1	*	675	1115	754	1135	* AG	83	2.9	.0	18.5
T. X LT2	*	754	1135	842	1157	* AG	85	2.9	.0	18.5

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 3. Sierra Nevada Road at Old Mammoth Roa
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	806	1100	1.8
2. Recpt 2	691	1157	1.8
3. Recpt 3	729	1094	1.8
4. Recpt 4	778	1180	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	302.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	118.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	6.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	180.	5.0	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 4. Main Street and Sierra Park Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	5. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link A	*	6284	-181	6285	-247	* AG	684	1.4	.0	25.4
B. Link B	*	6285	-247	6285	-300	* AG	569	2.9	.0	25.4
C. Link C	*	6285	-300	6280	-453	* AG	612	1.4	.0	25.4
D. Link D	*	6297	-461	6299	-378	* AG	541	1.4	.0	25.4
E. Link E	*	6299	-378	6298	-319	* AG	541	1.4	.0	25.4
F. Link F	*	6298	-319	6298	-177	* AG	541	1.4	.0	25.4
G. Link G	*	6285	-266	6300	-315	* AG	115	2.9	.0	25.4
H. Link H	*	6300	-315	6462	-325	* AG	115	1.4	.0	18.5
I. Link I	*	6523	-314	6381	-311	* AG	131	1.4	.0	18.5
J. Link J	*	6381	-311	6298	-301	* AG	88	2.9	.0	18.5
K. Link K	*	6370	-310	6284	-326	* AG	43	2.9	.0	18.5

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	6326	-281	1.7
2. Recpt 2	*	6315	-340	1.7
3. Recpt 3	*	6243	-327	1.7
4. Recpt 4	*	6246	-277	1.7

JOB: 4. Main Street and Sierra Park Road
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	200.	4.9	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	342.	5.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	84.	4.9	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	107.	4.9	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K
1. Recpt 1	.0	.0	.0
2. Recpt 2	.0	.0	.0
3. Recpt 3	.0	.0	.0
4. Recpt 4	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 5. Meridian Blvd at Azimuth Dr
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	20. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Y SB1	684	1256	711	1201	AG	83	1.4	.0	23.9
B. Y SB2	711	1201	746	1134	AG	61	2.9	.0	23.9
C. Y SB3	746	1134	800	1025	AG	169	1.4	.0	23.9
D. Y SB4	800	1025	859	906	AG	169	1.4	.0	23.9
E. Y NB1	869	911	814	1025	AG	221	1.4	.0	23.9
F. Y NB2	815	1025	761	1138	AG	108	2.9	.0	23.9
G. Y NB3	761	1138	729	1205	AG	172	1.4	.0	23.9
H. Y NB4	729	1205	701	1264	AG	172	1.4	.0	23.9
I. Y LT1	721	1198	754	1135	AG	22	2.9	.0	23.9
J. Y LT2	754	1135	802	1039	AG	113	2.9	.0	23.9
K. X EB1	596	1103	683	1125	AG	695	1.4	.0	17.9
L. X EB2	683	1125	751	1141	AG	631	2.9	.0	17.9
M. X EB3	751	1141	827	1159	AG	653	1.4	.0	17.9
N. X EB4	827	1159	923	1182	AG	653	1.4	.0	17.9
O. X WB1	925	1170	832	1147	AG	642	1.4	.0	17.9
P. X WB2	832	1147	758	1128	AG	534	2.9	.0	17.9
Q. X WB3	758	1128	688	1112	AG	647	1.4	.0	17.9
R. X WB4	688	1112	599	1090	AG	647	1.4	.0	17.9
S. X LT1	675	1115	754	1135	AG	64	2.9	.0	17.9
T. X LT2	754	1135	842	1157	AG	108	2.9	.0	17.9

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 5. Meridian Blvd at Azimuth Dr
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	806	1100	1.8
2. Recpt 2	691	1157	1.8
3. Recpt 3	729	1094	1.8
4. Recpt 4	778	1180	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	293.	4.9	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	114.	4.9	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	51.	4.9	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	228.	4.9	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: 6. Meridian Blvd at Sierra Park Rd
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	20. DEGREES	TEMP=	4.4 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Y SB1	684	1256	711	1201	AG	48	1.4	.0	23.9
B. Y SB2	711	1201	746	1134	AG	25	2.9	.0	23.9
C. Y SB3	746	1134	800	1025	AG	34	1.4	.0	23.9
D. Y SB4	800	1025	859	906	AG	34	1.4	.0	23.9
E. Y NB1	869	911	814	1025	AG	40	1.4	.0	23.9
F. Y NB2	815	1025	761	1138	AG	17	2.9	.0	23.9
G. Y NB3	761	1138	729	1205	AG	40	1.4	.0	23.9
H. Y NB4	729	1205	701	1264	AG	40	1.4	.0	23.9
I. Y LT1	721	1198	754	1135	AG	23	2.9	.0	23.9
J. Y LT2	754	1135	802	1039	AG	23	2.9	.0	23.9
K. X EB1	596	1103	683	1125	AG	177	1.4	.0	14.9
L. X EB2	683	1125	751	1141	AG	154	2.9	.0	14.9
M. X EB3	751	1141	827	1159	AG	177	1.4	.0	14.9
N. X EB4	827	1159	923	1182	AG	177	1.4	.0	14.9
O. X WB1	925	1170	832	1147	AG	129	1.4	.0	14.9
P. X WB2	832	1147	758	1128	AG	117	2.9	.0	14.9
Q. X WB3	758	1128	688	1112	AG	140	1.4	.0	14.9
R. X WB4	688	1112	599	1090	AG	140	1.4	.0	14.9
S. X LT1	675	1115	754	1135	AG	23	2.9	.0	14.9
T. X LT2	754	1135	842	1157	AG	9	2.9	.0	14.9

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: 6. Meridian Blvd at Sierra Park Rd
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. Recpt 1	806	1100	1.8
2. Recpt 2	691	1157	1.8
3. Recpt 3	729	1094	1.8
4. Recpt 4	778	1180	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	293.	4.8	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	108.	4.8	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	51.	4.8	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	230.	4.8	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. Recpt 1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. Recpt 2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. Recpt 4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Mammoth Lakes Parking Structure
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	0. (M)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	7 (G)	VS=	.0 CM/S		
MIXH=	1000. M	AMB=	4.8 PPM		
SIGTH=	10. DEGREES	TEMP=	-1.1 DEGREE (C)		

II. LINK VARIABLES

LINK DESCRIPTION	*	LINK COORDINATES (M) X1	Y1	X2	Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. Link A	*	166	-94	166	-72	* AG	2144	2.9	.0	9.8
B. Link B	*	166	-72	209	-72	* AG	2144	2.9	.0	9.8
C. Link C	*	209	-72	209	-94	* AG	2144	2.9	.0	9.8
D. Link D	*	172	-76	172	-90	* AG	2144	2.9	.0	9.8
E. Link E	*	176	-76	176	-90	* AG	2144	2.9	.0	9.8
F. Link F	*	179	-76	179	-90	* AG	2144	2.9	.0	9.8
G. Link G	*	183	-76	183	-90	* AG	2144	2.9	.0	9.8
H. Link H	*	186	-76	186	-90	* AG	2144	2.9	.0	9.8
I. Link I	*	190	-76	190	-90	* AG	2144	2.9	.0	9.8
J. Link J	*	193	-76	193	-90	* AG	2144	2.9	.0	9.8
K. Link K	*	196	-76	196	-90	* AG	2144	2.9	.0	9.8
L. Link L	*	200	-76	200	-90	* AG	2144	2.9	.0	9.8
M. Link M	*	203	-76	203	-90	* AG	2144	2.9	.0	9.8

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (M) X	Y	Z
1. Recpt 1	*	183	-94	1.8
2. Recpt 2	*	213	-5	1.8
3. Recpt 3	*	162	-4	1.8

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB: Mammoth Lakes Parking Structure
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. Recpt 1	45.	6.5	.0	.2	.0	.0	.0	.0	.0	.3
2. Recpt 2	198.	5.2	.0	.0	.0	.0	.0	.0	.0	.0
3. Recpt 3	162.	5.2	.0	.0	.0	.0	.0	.0	.0	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M
1. Recpt 1	.4	.3	.2	.1	.0
2. Recpt 2	.0	.0	.0	.0	.0
3. Recpt 3	.0	.0	.0	.0	.0

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB

****

Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 1: Running Exhaust Emissions (grams/mile)

Pollutant Name: Reactive Org Gases Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.084	0.171	0.246	0.654	2.488	4.956	0.303
35	0.013	0.028	0.043	0.165	0.419	1.963	0.077

Pollutant Name: Carbon Monoxide Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	1.252	2.252	2.714	6.805	16.887	25.930	2.946
35	0.733	1.254	1.414	1.393	3.191	16.865	1.447

Pollutant Name: Oxides of Nitrogen Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.155	0.354	0.584	2.677	9.200	1.516	0.597
35	0.087	0.192	0.341	1.681	5.088	1.392	0.359

Pollutant Name: Carbon Dioxide Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	944.137	1188.081	1709.583	2149.523	2437.140	266.027	1264.394
35	307.140	386.958	521.458	1480.862	1369.671	139.736	475.656

Pollutant Name: Sulfur Dioxide Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.009	0.011	0.016	0.021	0.024	0.003	0.012
35	0.003	0.004	0.005	0.014	0.013	0.002	0.005

Pollutant Name: PM2.5 Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.047	0.073	0.095	0.174	0.242	0.024	0.077
35	0.008	0.012	0.016	0.055	0.055	0.011	0.015

Pollutant Name: PM2.5 - Tire Wear Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.002	0.002	0.002	0.006	0.003	0.001	0.002
35	0.002	0.002	0.002	0.006	0.003	0.001	0.002

Pollutant Name: PM2.5 - Break Wear Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.005	0.005	0.005	0.005	0.005	0.005	0.005
35	0.005	0.005	0.005	0.005	0.005	0.005	0.005

Pollutant Name: Gasoline - mi/gal Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	9.359	7.417	5.107	3.496	3.439	26.209	7.939
35	28.732	22.765	16.900	17.675	17.417	49.534	24.148

Pollutant Name: Diesel - mi/gal Temperature: 50F Relative Humidity: 0%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	28.842	29.049	19.839	5.271	4.287	0.000	7.322
35	28.842	29.049	19.839	5.271	4.287	0.000	7.322

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****

Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 2: Starting Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.024	0.037	0.095	0.318	0.354	1.161	0.089
10	0.047	0.072	0.186	0.620	0.690	1.395	0.154
20	0.089	0.139	0.360	1.175	1.309	1.847	0.276
30	0.128	0.200	0.521	1.666	1.855	2.280	0.388
40	0.164	0.254	0.668	2.092	2.330	2.694	0.489
50	0.195	0.303	0.803	2.454	2.733	3.088	0.579
60	0.223	0.346	0.925	2.751	3.063	3.370	0.657
120	0.292	0.434	1.232	1.859	2.404	3.122	0.721
180	0.185	0.283	0.929	1.972	2.551	2.535	0.555
240	0.197	0.300	0.986	2.082	2.693	2.697	0.588
300	0.207	0.317	1.042	2.188	2.830	2.857	0.620
360	0.218	0.333	1.098	2.291	2.963	3.013	0.652
420	0.229	0.349	1.153	2.390	3.091	3.167	0.684
480	0.239	0.365	1.207	2.485	3.215	3.317	0.715
540	0.249	0.380	1.260	2.577	3.333	3.464	0.745
600	0.259	0.395	1.313	2.666	3.448	3.608	0.774
660	0.269	0.410	1.365	2.750	3.557	3.749	0.803
720	0.278	0.425	1.417	2.831	3.662	3.886	0.831

Pollutant Name: Carbon Monoxide Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.362	0.558	1.174	5.801	4.757	3.909	1.037
10	0.714	1.098	2.316	11.367	9.321	5.359	1.988
20	1.385	2.127	4.503	21.792	17.869	8.101	3.791
30	2.014	3.088	6.562	31.273	25.643	10.633	5.462
40	2.601	3.979	8.492	39.812	32.645	12.955	7.002
50	3.145	4.802	10.294	47.407	38.873	15.067	8.410
60	3.646	5.556	11.968	54.060	44.328	16.969	9.686
120	5.144	7.429	16.346	27.513	26.333	21.397	10.335

180	3.063	4.572	9.484	28.317	27.103	12.415	6.886
240	3.281	4.876	10.211	29.148	27.898	13.634	7.313
300	3.476	5.151	10.858	30.005	28.719	14.751	7.704
360	3.650	5.397	11.426	30.889	29.565	15.765	8.058
420	3.801	5.614	11.916	31.799	30.436	16.677	8.376
480	3.930	5.802	12.327	32.736	31.333	17.487	8.657
540	4.037	5.961	12.659	33.700	32.255	18.194	8.902
600	4.122	6.091	12.913	34.689	33.202	18.799	9.111
660	4.184	6.192	13.087	35.706	34.175	19.302	9.283
720	4.224	6.265	13.183	36.749	35.173	19.702	9.419

Pollutant Name: Oxides of Nitrogen Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.101	0.175	0.975	0.708	1.116	0.177	0.366
10	0.110	0.193	1.054	1.067	1.682	0.221	0.417
20	0.127	0.226	1.197	1.698	2.675	0.299	0.508
30	0.142	0.254	1.317	2.212	3.485	0.363	0.583
40	0.153	0.276	1.415	2.609	4.110	0.414	0.643
50	0.162	0.292	1.491	2.889	4.552	0.451	0.688
60	0.168	0.304	1.544	3.052	4.809	0.475	0.717
120	0.181	0.327	1.669	3.123	4.919	0.483	0.762
180	0.194	0.349	1.704	3.111	4.901	0.483	0.782
240	0.193	0.347	1.691	3.094	4.873	0.475	0.777
300	0.190	0.343	1.671	3.070	4.836	0.465	0.769
360	0.187	0.337	1.644	3.040	4.789	0.453	0.757
420	0.183	0.331	1.609	3.005	4.733	0.440	0.743
480	0.179	0.322	1.566	2.963	4.667	0.424	0.726
540	0.173	0.313	1.516	2.915	4.592	0.406	0.706
600	0.167	0.302	1.458	2.861	4.507	0.386	0.683
660	0.160	0.289	1.393	2.801	4.413	0.364	0.657
720	0.152	0.275	1.321	2.735	4.309	0.340	0.628

Pollutant Name: Carbon Dioxide Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	12.084	15.008	20.991	3.120	5.039	13.496	14.784
10	13.643	17.017	24.146	6.223	10.050	15.701	16.999
20	17.251	21.639	31.277	12.378	19.989	20.030	21.996
30	21.512	27.066	39.503	18.463	29.816	24.251	27.746
40	26.426	33.298	48.824	24.480	39.532	28.363	34.251
50	31.994	40.335	59.240	30.427	49.136	32.367	41.510
60	38.214	48.176	70.752	36.305	58.629	36.262	49.523
120	88.402	110.843	159.982	61.748	99.718	53.767	111.438
180	100.425	125.995	182.204	72.951	117.809	57.960	126.834
240	112.411	141.082	204.253	83.492	134.832	61.908	142.108
300	124.359	156.106	226.129	93.373	150.788	65.610	157.259
360	136.270	171.065	247.832	102.592	165.676	69.065	172.289
420	148.144	185.960	269.362	111.150	179.496	72.274	187.196
480	159.981	200.791	290.720	119.046	192.248	75.237	201.982
540	171.780	215.558	311.905	126.282	203.933	77.955	216.645
600	183.541	230.261	332.917	132.856	214.549	80.426	231.186
660	195.266	244.900	353.757	138.769	224.098	82.651	245.605

720	206.953	259.475	374.423	144.021	232.580	84.629	259.902

Pollutant Name: Sulfur Dioxide Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.001	0.001	0.000	0.000
30	0.000	0.000	0.001	0.001	0.001	0.001	0.000
40	0.000	0.000	0.001	0.001	0.001	0.001	0.000
50	0.000	0.000	0.001	0.001	0.001	0.001	0.001
60	0.000	0.001	0.001	0.001	0.001	0.001	0.001
120	0.001	0.001	0.002	0.001	0.002	0.001	0.001
180	0.001	0.001	0.002	0.001	0.002	0.001	0.001
240	0.001	0.001	0.002	0.001	0.002	0.001	0.002
300	0.001	0.002	0.002	0.001	0.002	0.001	0.002
360	0.001	0.002	0.003	0.002	0.002	0.001	0.002
420	0.001	0.002	0.003	0.002	0.002	0.001	0.002
480	0.002	0.002	0.003	0.002	0.003	0.001	0.002
540	0.002	0.002	0.003	0.002	0.003	0.001	0.002
600	0.002	0.002	0.003	0.002	0.003	0.001	0.002
660	0.002	0.002	0.004	0.002	0.003	0.001	0.003
720	0.002	0.003	0.004	0.002	0.003	0.001	0.003

Pollutant Name: PM2.5 Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.000	0.001	0.001	0.000	0.001	0.005	0.001
10	0.001	0.001	0.002	0.001	0.002	0.005	0.001
20	0.002	0.003	0.004	0.002	0.003	0.004	0.003
30	0.003	0.004	0.005	0.002	0.004	0.003	0.004
40	0.004	0.006	0.007	0.003	0.005	0.003	0.005
50	0.004	0.007	0.008	0.003	0.006	0.002	0.006
60	0.005	0.008	0.010	0.004	0.007	0.002	0.007
120	0.009	0.013	0.016	0.005	0.010	0.005	0.012
180	0.010	0.014	0.017	0.005	0.010	0.007	0.013
240	0.010	0.015	0.019	0.005	0.011	0.008	0.014
300	0.011	0.016	0.020	0.006	0.011	0.010	0.015
360	0.012	0.017	0.021	0.006	0.011	0.011	0.016
420	0.012	0.018	0.022	0.006	0.011	0.012	0.017
480	0.013	0.019	0.023	0.006	0.012	0.013	0.017
540	0.013	0.019	0.023	0.006	0.012	0.014	0.018
600	0.013	0.020	0.024	0.006	0.013	0.015	0.018
660	0.014	0.020	0.024	0.007	0.013	0.015	0.018
720	0.014	0.020	0.024	0.007	0.013	0.015	0.018

Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB

****

Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 4: Hot Soak Emissions (grams/trip)

Pollutant Name: Reactive Org Gases Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
5	0.009	0.015	0.013	0.006	0.022	0.029	0.013
10	0.018	0.029	0.025	0.011	0.041	0.057	0.025
20	0.032	0.052	0.046	0.020	0.075	0.107	0.045
30	0.044	0.072	0.064	0.027	0.102	0.152	0.062
40	0.049	0.080	0.072	0.030	0.113	0.173	0.069

Hot soak results are scaled to reflect zero emissions for trip lengths of less than 5 minutes (about 25% of in-use trips).

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB

****

Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 5a: Partial Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****
Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 5b: Multi-Day Diurnal Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
50	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****
Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 6a: Partial Day Resting Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
50	0.005	0.009	0.012	0.001	0.000	0.008	0.007

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****
Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 6b: Multi-Day Resting Loss Emissions (grams/hour)

Pollutant Name: Reactive Org Gases Temperature: ALL Relative Humidity: ALL

Temp degF	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
50	0.000	0.001	0.001	0.000	0.000	0.001	0.001

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****
Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 7: Estimated Travel Fractions

Pollutant Name: Temperature: ALL Relative Humidity: ALL

	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
%VMT	0.298	0.442	0.152	0.083	0.006	0.019	1.000
%TRIP	0.271	0.423	0.222	0.060	0.001	0.022	1.000
%VEH	0.274	0.434	0.143	0.078	0.002	0.070	1.000

Title : Great Basin Valleys Air Basin Avg 2025 Winter Default Title
Version : Emfac2002 V2.2 Sept 23 2002
Run Date : 09/12/06 09:06:07
Scen Year: 2025 -- Model Years: 1980 to 2025
Season : Winter
Area : Great Basin Valleys AB
****
*****

Year:2025 -- Model Years 1980 to 2025 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Sept 23 2002

Great Basin Valleys A Basin Average Basin Average

Table 8: Evaporative Running Loss Emissions (grams/minute)

Pollutant Name: Reactive Org Gases Temperature: 50F Relative Humidity: ALL

Time min	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
1	0.007	0.526	0.652	0.512	0.766	0.003	0.381
2	0.008	0.271	0.335	0.264	0.395	0.038	0.198
3	0.010	0.188	0.233	0.182	0.273	0.056	0.139
4	0.011	0.148	0.183	0.142	0.213	0.068	0.111
5	0.013	0.125	0.154	0.119	0.178	0.075	0.095
10	0.017	0.081	0.100	0.073	0.110	0.096	0.065
15	0.020	0.070	0.087	0.060	0.091	0.107	0.057
20	0.022	0.067	0.085	0.055	0.084	0.116	0.056
25	0.023	0.068	0.088	0.053	0.083	0.124	0.058
30	0.024	0.071	0.091	0.055	0.086	0.129	0.060
35	0.025	0.073	0.095	0.057	0.089	0.134	0.062
40	0.026	0.076	0.098	0.059	0.092	0.139	0.065
45	0.027	0.079	0.102	0.061	0.095	0.144	0.067
50	0.028	0.081	0.105	0.063	0.098	0.149	0.069
55	0.028	0.083	0.108	0.064	0.100	0.153	0.071
60	0.029	0.085	0.111	0.066	0.103	0.157	0.072

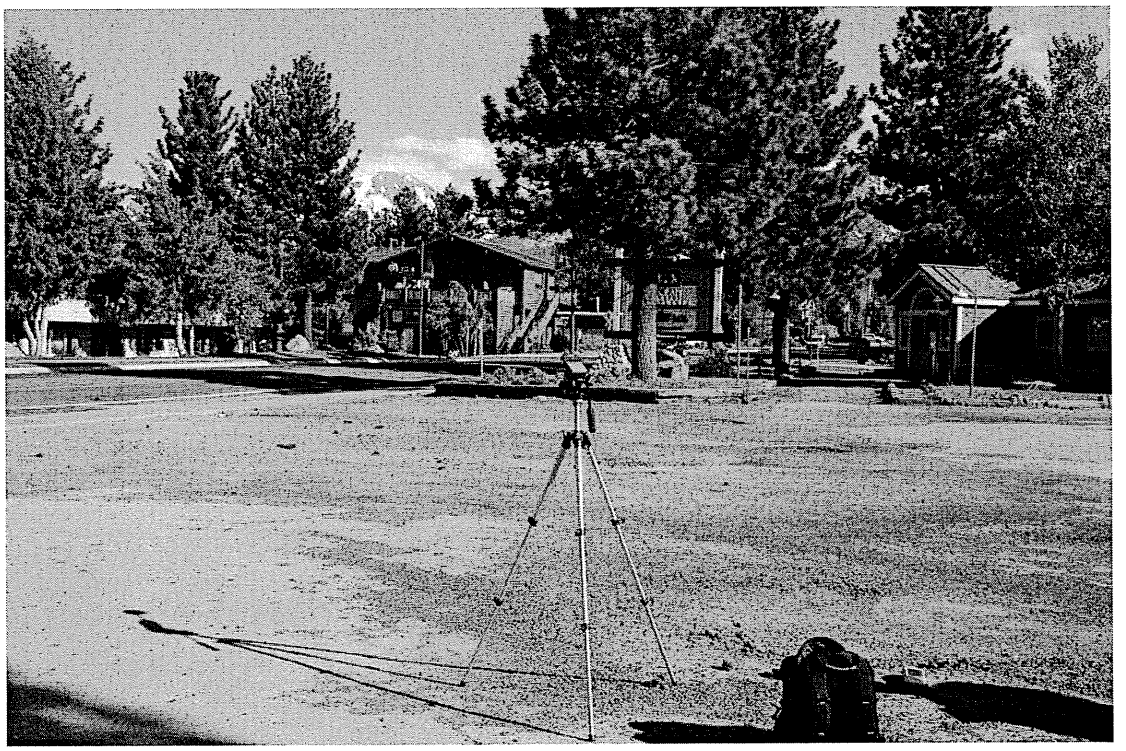
15.5 Noise Data

Site Number: 1					
Recorded By: Eddie Torres					
Job Number: 10-105084					
Date: June 12, 2006					
Time: 5:00 pm					
Location: On-Site (North of Ocean Harvest Restaurant)					
Source of Peak Noise: Mobile Sources					
Leq	**Ldn**	**CNEL**	**Lmin**	**Lmax**	**Peak**
44.7	44.7	44.7	41.7	102.4	119.0

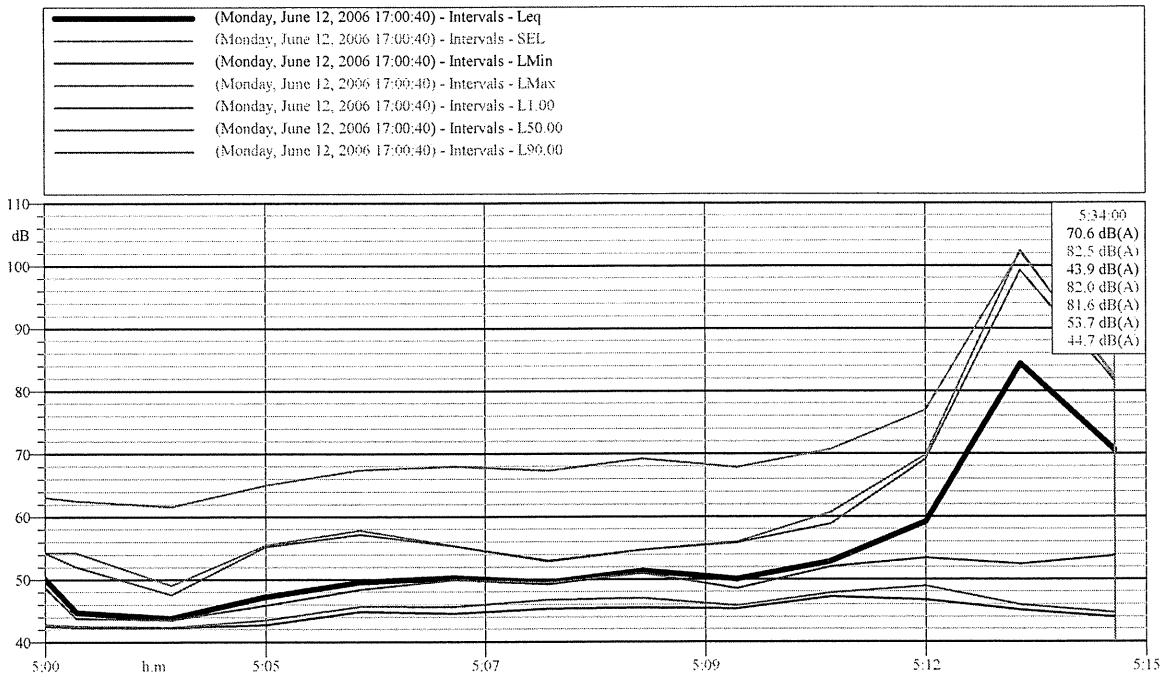
Equipment						Site #:
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**2209**	**0277/0109**	**3/10/04**	
	Microphone	**Larson Davis**	**2559**	**2504**	**2/16/04**	
	Preamp	**Larson Davis**	**827**	**0180**	**2/10/04**	
	Calibrator	**Larson Davis**	**250**	**0216**	**02/16/04**	

Weather Data				
Est.	**Duration:**	**Sky:** ☼		**Sensor Height (ft): 5 ft**
	Wind		**Note:** dBA Offset = 15.6	
	Speed (mph / m/s)	**Direction**	**Temperature**	**Humidity**
	<5			

Photo of Measurement Location



Name:	(Monday, June 12, 2006 17:00:40)	Notes:	Notes
Site:	ST1		
Date:	6/12/2006	Line1:	L-D Model 820
Time:	5:00:40 PM	Line2:	You may enter three lines of
Instrument:	Larson-Davis 812/820/870	Line3:	personalized instrument name.
Operator:	Eddie Torres	Title:	Untitled
Calibration:	Calibration		
Data type:	Intervals		
Weight:	A		
Samples:	13		

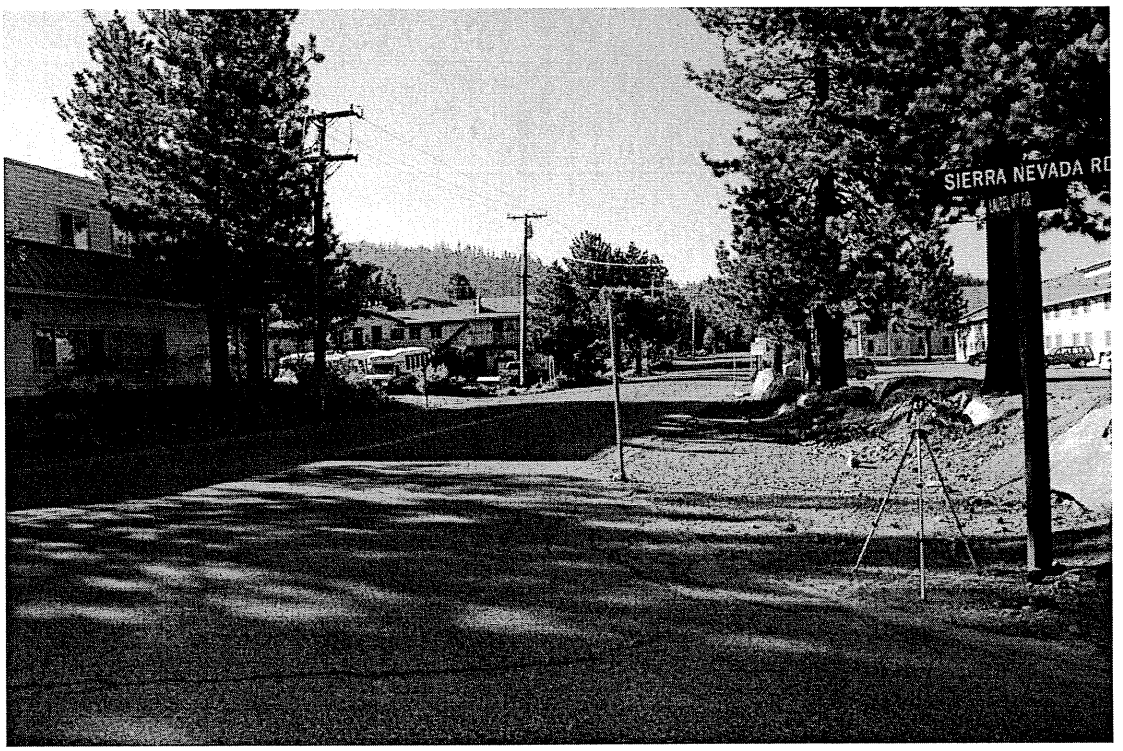


Site Number: 2					
Recorded By: Eddie Torres					
Job Number: 10-105084					
Date: June 12, 2006					
Time: 5:30 pm					
Location: On-Site (at the intersection of Sierra Nevada Rd./Laurel Mountain Rd.					
Source of Peak Noise: Mobile Sources					
Leq	**Ldn**	**CNEL**	**Lmin**	**Lmax**	**Peak**
42.4	42.4	42.4	37.9	114	144

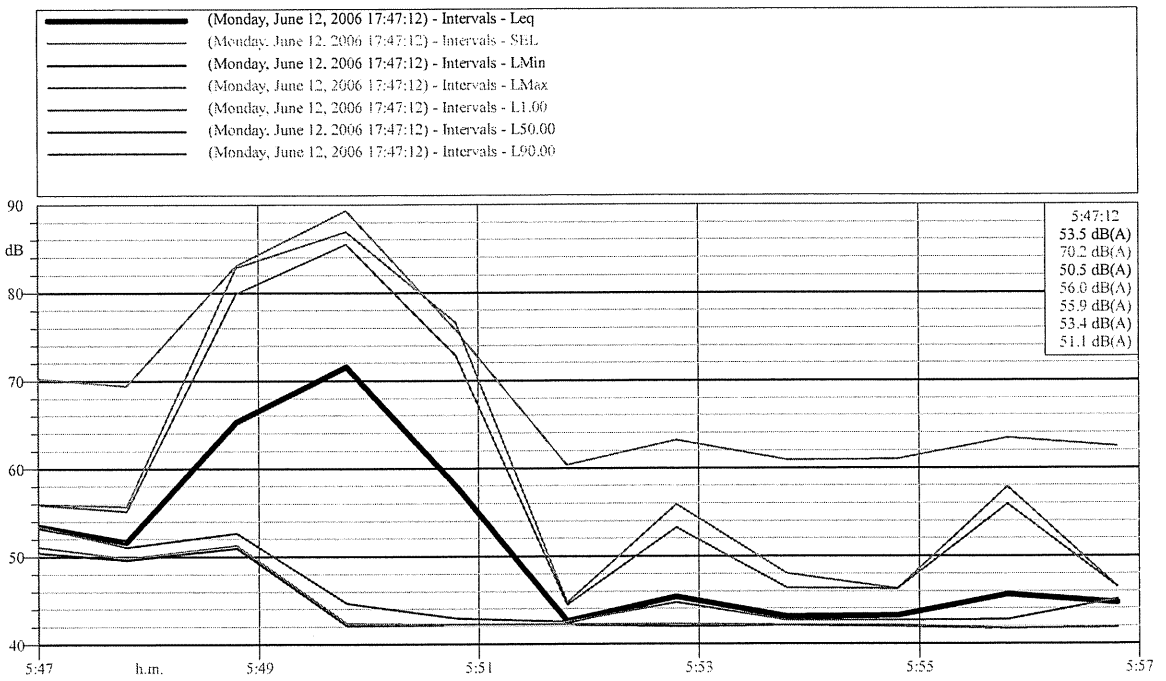
Equipment						Site #:
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**2209**	**0277/0109**	**3/10/04**	
	Microphone	**Larson Davis**	**2559**	**2504**	**2/16/04**	
	Preamp	**Larson Davis**	**827**	**0180**	**2/10/04**	
	Calibrator	**Larson Davis**	**250**	**0216**	**02/16/04**	

Weather Data				
Est.	**Duration:**	**Sky:** ☼		**Sensor Height (ft): 5 ft**
	Wind		**Note:** dBA Offset = 15.6	
	Speed (mph / m/s)	**Direction**	**Temperature**	**Humidity**
	<5			

Photo of Measurement Location



Name:	(Monday, June 12, 2006 17:47:12)	Notes:	Notes
Site:	ST2		
Date:	6/12/2006	Line1:	L-D Model 820
Time:	5:47:12 PM	Line2:	You may enter three lines of
Instrument:	Larson-Davis 812/820/870	Line3:	personalized instrument name.
Operator:	Eddie Torres	Title:	1g
Calibration:	Calibration		
Data type:	Intervals		
Weight:	A		
Samples:	11		

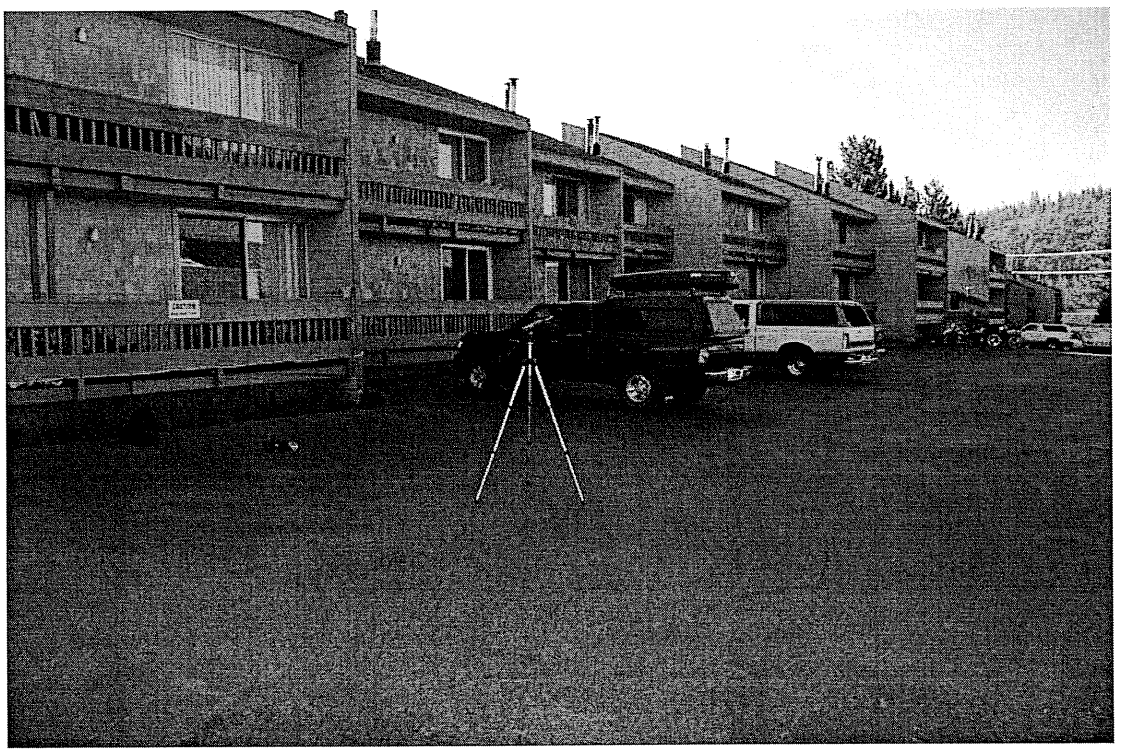


Site Number: 3					
Recorded By: Eddie Torres					
Job Number: 10-105084					
Date: June 12, 2006					
Time: 6:00 pm					
Location: North of the Sierra Nevada Inn (west of the Mammoth Mall)					
Source of Peak Noise: Mobile Sources					
Leq	**Ldn**	**CNEL**	**Lmin**	**Lmax**	**Peak**
58.8	58.8	58.8	41.6	105.9	125.3

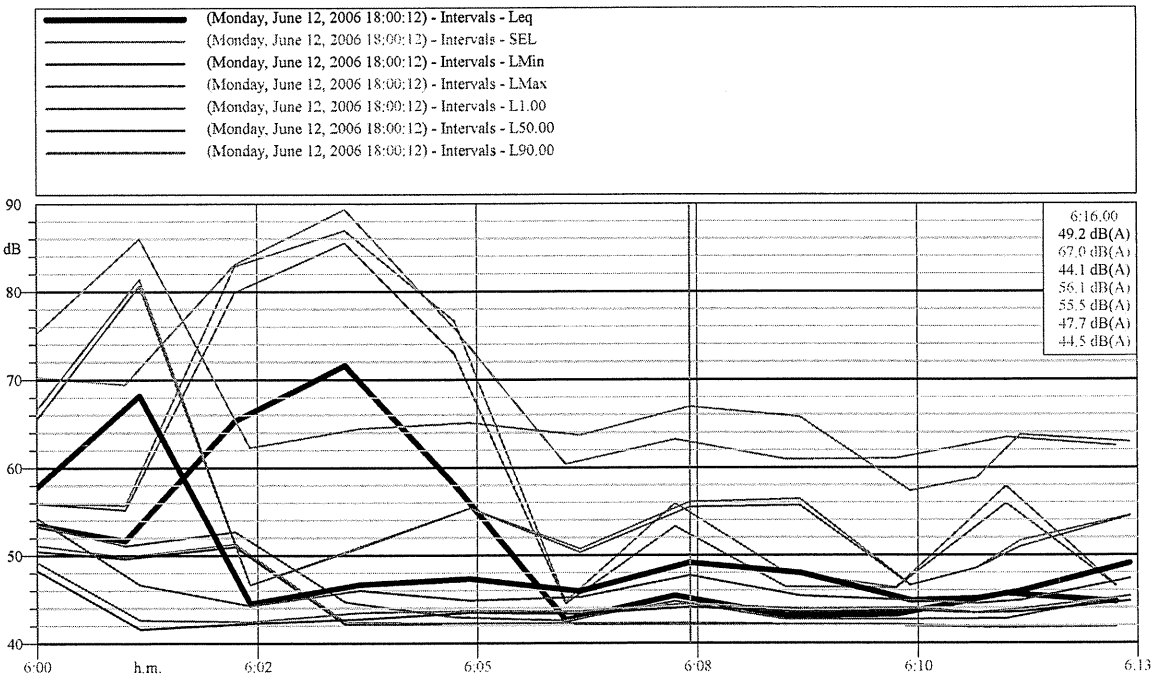
Equipment						Site #:
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**2209**	**0277/0109**	**3/10/04**	
	Microphone	**Larson Davis**	**2559**	**2504**	**2/16/04**	
	Preamp	**Larson Davis**	**827**	**0180**	**2/10/04**	
	Calibrator	**Larson Davis**	**250**	**0216**	**02/16/04**	

Weather Data				
Est.	**Duration:**	**Sky:** ☼	**Sensor Height (ft): 5 ft**	
	Wind		**Note:** dBA Offset = 15.6	
	Speed (mph / m/s)	**Direction**	**Temperature**	**Humidity**
	<5			

Photo of Measurement Location



Name:	(Monday, June 12, 2006 18:00:12)	Notes:	Notes
Site:	ST3		
Date:	6/12/2006	Line1:	L-D Model 820
Time:	6:00:12 PM	Line2:	You may enter three lines of
Instrument:	Larson-Davis 812/820/870	Line3:	personalized instrument name.
Operator:	Eddie Torres	Title:	1g
Calibration:	Calibration		
Data type:	Intervals		
Weight:	A		
Samples:	12		



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Sierra Blvd. and Old Mammoth Road		

PROJECT DATA		SITE DATA	
Centerline Dist to Barrier:	0	Road Grade:	0
Barrier (0=wall, 1= berm):	0	Average Daily Traffic:	17420
Receiver Barrier Dist:	0	Peak Hour Traffic:	**1742**
Centerline Dist. To Observer:	100	Vehicle Speed:	35
Barrier Near Lane CL Dist:	0	Centerline Separation:	30
Barrier Far lane CL Dist:	0	**NOISE INPUTS**	
Pad Elevation:	0.5	Site conditions:	**SOFT SITE**
Road Elevation:	0	**FLEET MIX**	
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View: 90	Lft View: -90		
NOISE SOURCE ELEVATIONS (Feet)			
Autos:	0		
Medium Trucks:	2.3		
Heavy Trucks:	8		

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

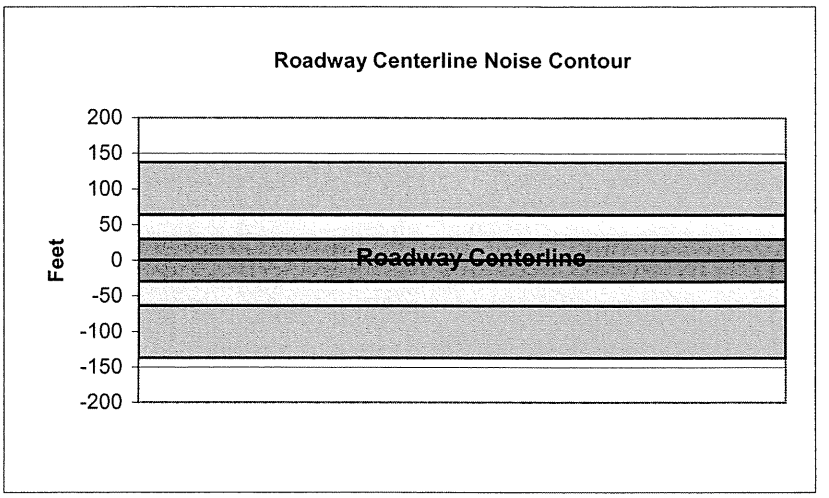
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.3	58.1	56.3	50.2	58.9	59.5
Medium Trucks:	59.1	51.0	44.6	43.0	51.5	51.8
Heavy Trucks:	64.3	52.3	43.3	44.5	54.4	54.5
Vehicle Noise:	**66.7**	**60.1**	**56.9**	**52.2**	**60.8**	**61.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	138
65 dBA	64
70 dBA	30
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	9325
Peak Hour Traffic:	**932.5**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

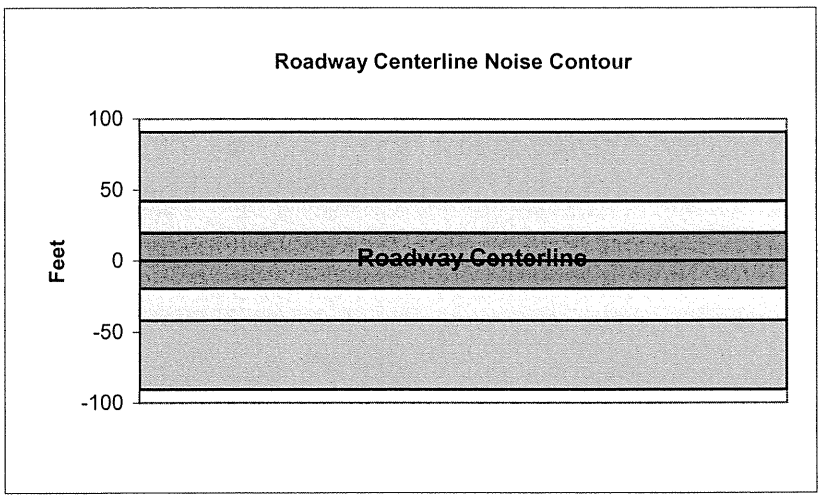
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.6	55.4	53.6	47.5	56.2	56.8
Medium Trucks:	56.3	48.3	41.9	40.3	48.8	49.0
Heavy Trucks:	61.6	49.6	40.6	41.8	51.7	51.8
Vehicle Noise:	**64.0**	**57.4**	**54.2**	**49.5**	**58.1**	**58.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	91
65 dBA	42
70 dBA	20
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	West of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	10670
Peak Hour Traffic:	1067
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

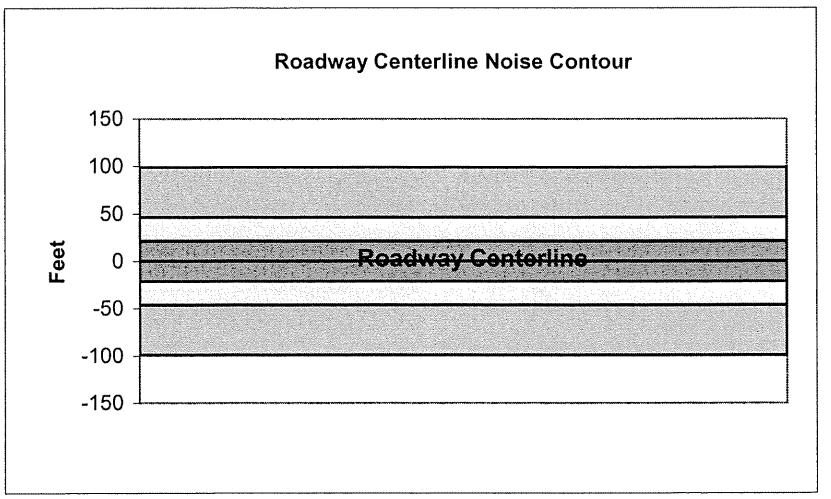
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.2	56.0	54.2	48.1	56.8	57.4
Medium Trucks:	56.9	48.9	42.5	40.9	49.4	49.6
Heavy Trucks:	62.1	50.2	41.2	42.4	52.3	52.4
Vehicle Noise:	**64.6**	**57.9**	**54.8**	**50.1**	**58.6**	**59.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	99
65 dBA	46
70 dBA	21
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Main Street and Sierra Nevada Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	12530
Peak Hour Traffic:	1253
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

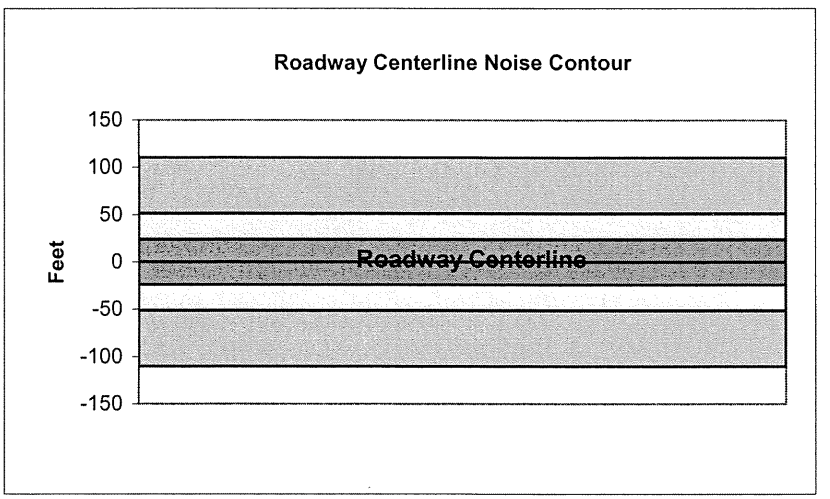
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.9	56.7	54.9	48.8	57.5	58.1
Medium Trucks:	57.6	49.6	43.2	41.6	50.1	50.3
Heavy Trucks:	62.8	50.9	41.9	43.1	53.0	53.1
Vehicle Noise:	**65.3**	**58.6**	**55.5**	**50.8**	**59.3**	**59.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	110
65 dBA	51
70 dBA	24
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Sierra Nevada Road and Meridian Boulevard		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	11,780
Peak Hour Traffic:	1178
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

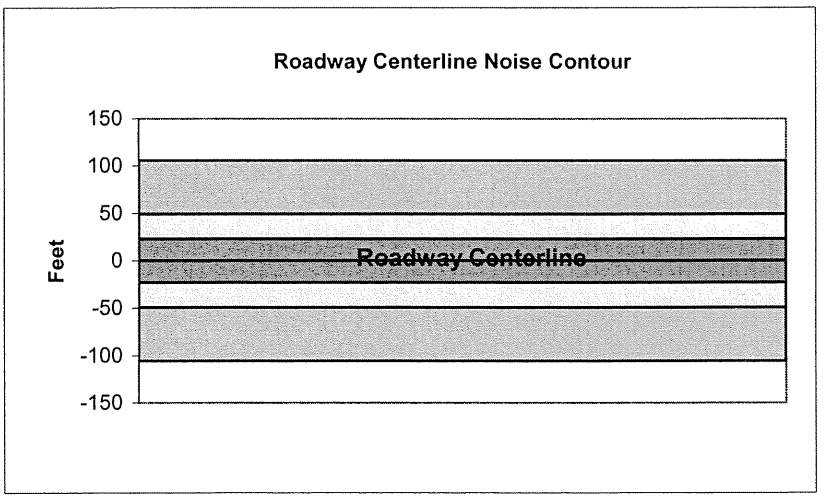
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.6	56.4	54.6	48.6	57.2	57.8
Medium Trucks:	57.4	49.3	42.9	41.3	49.8	50.1
Heavy Trucks:	62.6	50.6	41.6	42.8	52.7	52.8
Vehicle Noise:	**65.0**	**58.4**	**55.2**	**50.5**	**59.1**	**59.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	106
65 dBA	49
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	South of Meridian Boulevard		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	9,590
Peak Hour Traffic:	959
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

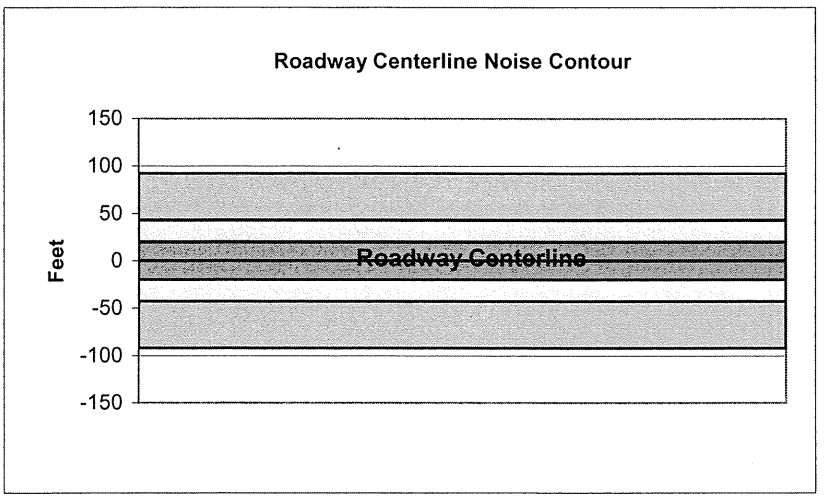
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.7	55.5	53.7	47.7	56.3	56.9
Medium Trucks:	56.5	48.4	42.0	40.4	48.9	49.2
Heavy Trucks:	61.7	49.7	40.7	41.9	51.8	51.9
Vehicle Noise:	**64.1**	**57.5**	**54.3**	**49.6**	**58.2**	**58.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	92
65 dBA	43
70 dBA	20
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	West of Azimuth		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	7,770
Peak Hour Traffic:	777
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

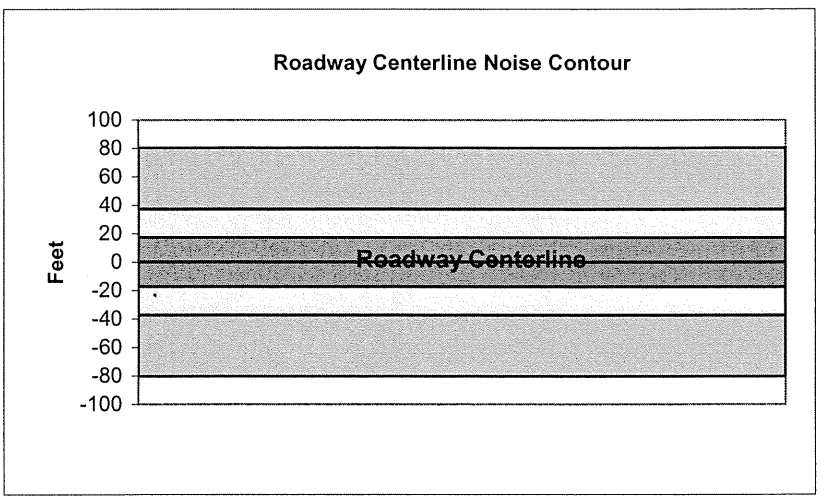
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	45.8	54.6	52.8	46.7	55.4	56.0
Medium Trucks:	55.6	47.5	41.1	39.5	48.0	48.3
Heavy Trucks:	60.8	48.8	39.8	41.0	50.9	51.0
Vehicle Noise:	**63.2**	**56.6**	**53.4**	**48.7**	**57.3**	**57.7**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	80
65 dBA	37
70 dBA	17
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Azimuth Drive and Old Mammoth Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	6,510
Peak Hour Traffic:	651
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

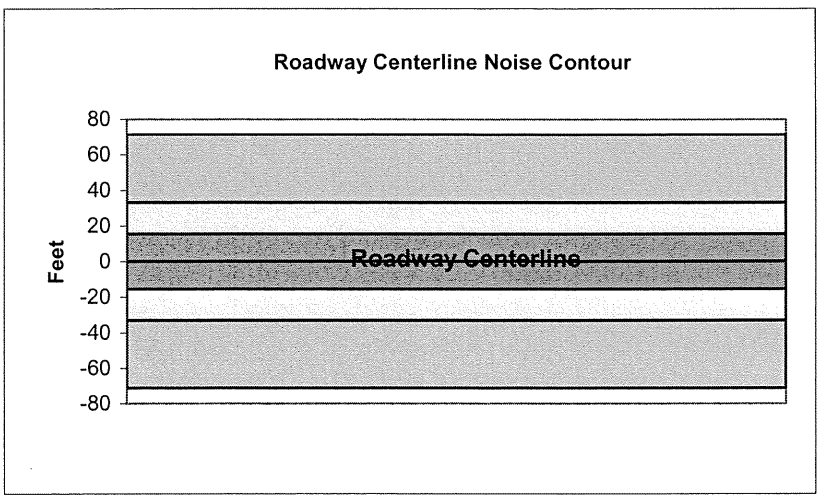
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	45.1	53.8	52.1	46.0	54.6	55.2
Medium Trucks:	54.8	46.7	40.3	38.8	47.2	47.5
Heavy Trucks:	60.0	48.1	39.0	40.2	50.1	50.3
Vehicle Noise:	**62.4**	**55.8**	**52.6**	**47.9**	**56.5**	**57.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	71
65 dBA	33
70 dBA	15
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	4,595
Peak Hour Traffic:	**459.5**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

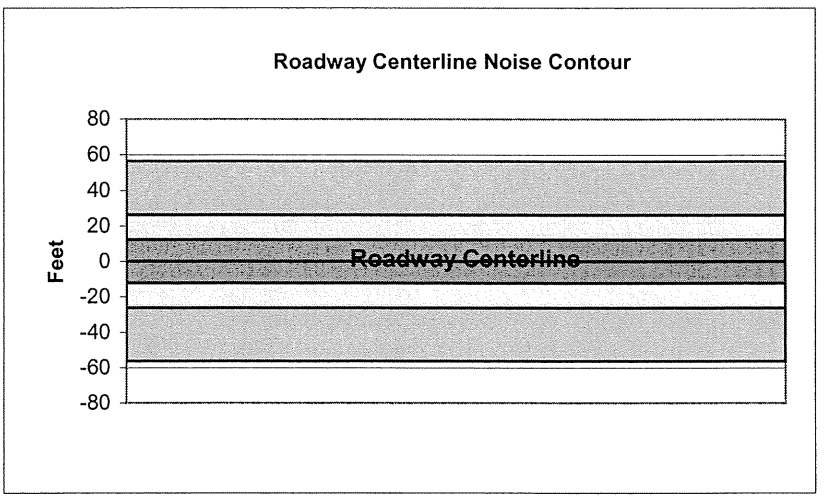
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	43.6	52.3	50.5	44.5	53.1	53.7
Medium Trucks:	53.3	45.2	38.8	37.2	45.7	46.0
Heavy Trucks:	58.5	46.6	37.5	38.7	48.6	48.7
Vehicle Noise:	**60.9**	**54.3**	**51.1**	**46.4**	**55.0**	**55.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	57
65 dBA	26
70 dBA	12
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Existing
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	East of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	1,990
Peak Hour Traffic:	199
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

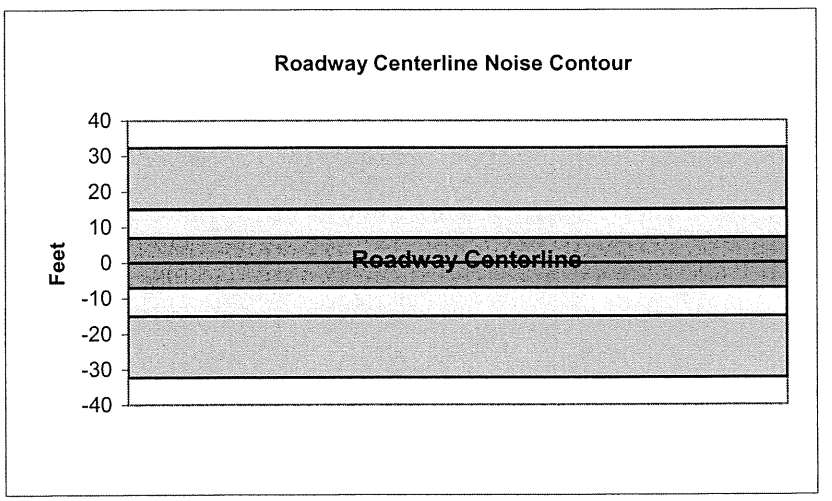
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	39.9	48.7	46.9	40.8	49.5	50.1
Medium Trucks:	49.6	41.6	35.2	33.6	42.1	42.3
Heavy Trucks:	54.9	42.9	33.9	35.1	45.0	45.1
Vehicle Noise:	**57.3**	**50.7**	**47.5**	**42.8**	**51.3**	**51.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	32
65 dBA	15
70 dBA	7
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Sierra Blvd. and Old Mammoth Road		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	20631
Peak Hour Traffic:	2063.1
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

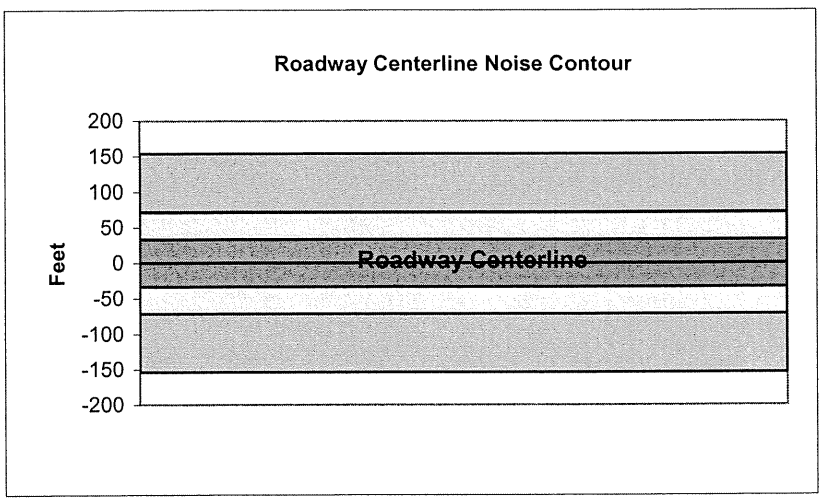
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.1	58.9	57.1	51.0	59.6	60.2
Medium Trucks:	59.8	51.7	45.3	43.8	52.3	52.5
Heavy Trucks:	65.0	53.1	44.0	45.2	55.1	55.3
Vehicle Noise:	**67.4**	**60.8**	**57.6**	**52.9**	**61.5**	**62.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	154
65 dBA	71
70 dBA	33
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	11429
Peak Hour Traffic:	1142.9
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: SOFT SITE

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

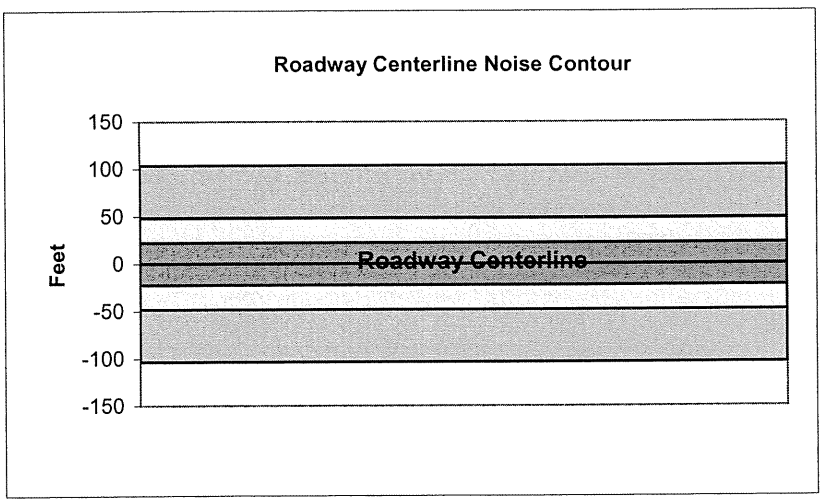
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.5	56.3	54.5	48.4	57.1	57.7
Medium Trucks:	57.2	49.2	42.8	41.2	49.7	49.9
Heavy Trucks:	62.4	50.5	41.5	42.7	52.6	52.7
Vehicle Noise:	**64.9**	**58.2**	**55.1**	**50.4**	**58.9**	**59.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	104
65 dBA	48
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	West of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	12752
Peak Hour Traffic:	**1275.2**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

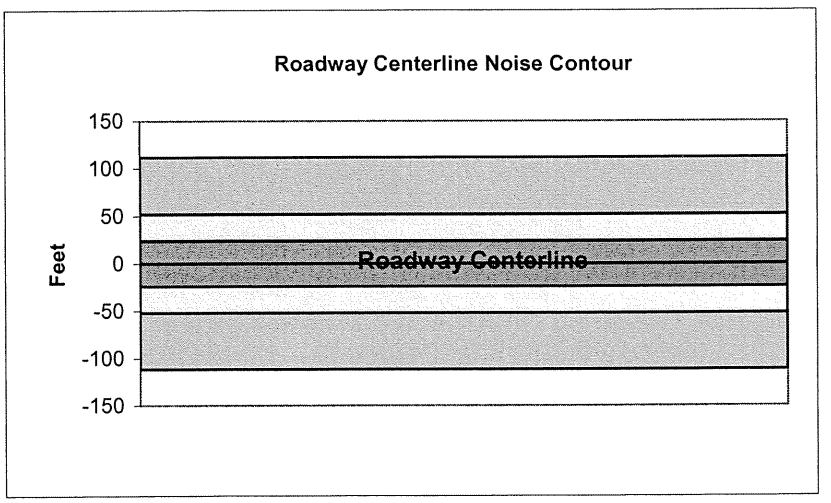
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.0	56.8	55.0	48.9	57.5	58.2
Medium Trucks:	57.7	49.6	43.3	41.7	50.2	50.4
Heavy Trucks:	62.9	51.0	41.9	43.1	53.1	53.2
Vehicle Noise:	**65.4**	**58.7**	**55.5**	**50.8**	**59.4**	**59.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	112
65 dBA	52
70 dBA	24
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Main Street and Sierra Nevada Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	14371
Peak Hour Traffic:	1437.1
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

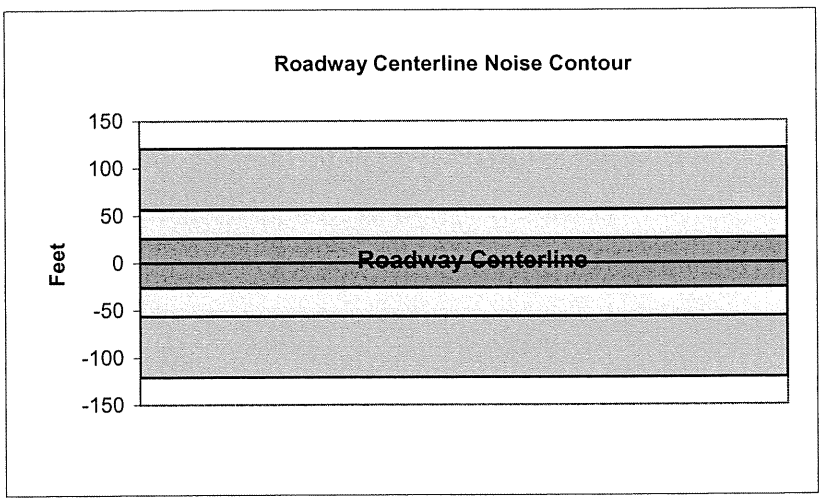
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.5	57.3	55.5	49.4	58.1	58.7
Medium Trucks:	58.2	50.2	43.8	42.2	50.7	50.9
Heavy Trucks:	63.4	51.5	42.4	43.7	53.6	53.7
Vehicle Noise:	**65.9**	**59.2**	**56.1**	**51.4**	**59.9**	**60.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	121
65 dBA	56
70 dBA	26
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Sierra Nevada Road and Meridian Boulevard		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	14,076
Peak Hour Traffic:	**1407.6**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

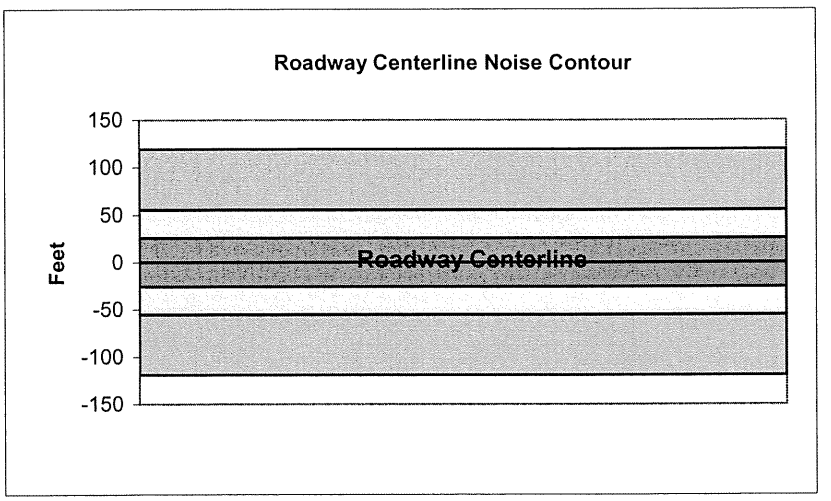
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.4	57.2	55.4	49.3	58.0	58.6
Medium Trucks:	58.1	50.1	43.7	42.1	50.6	50.8
Heavy Trucks:	63.4	51.4	42.4	43.6	53.5	53.6
Vehicle Noise:	**65.8**	**59.2**	**56.0**	**51.3**	**59.8**	**60.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	119
65 dBA	55
70 dBA	26
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	South of Meridian Boulevard		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	11,137
Peak Hour Traffic:	1113.7
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

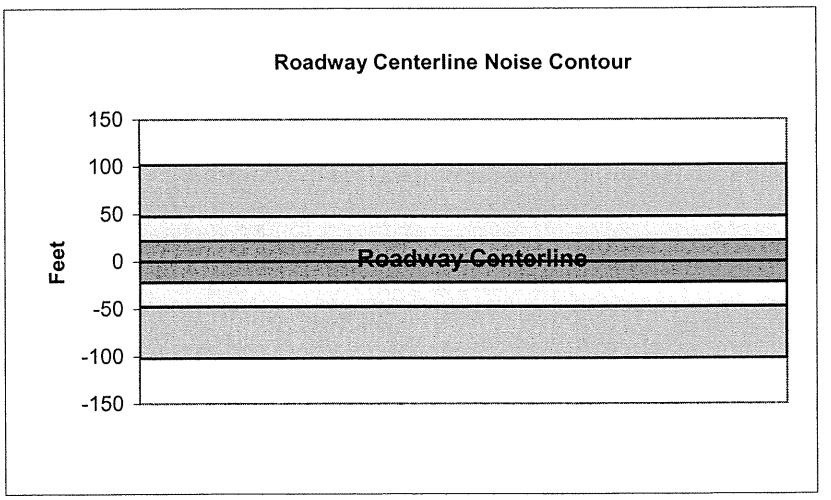
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.4	56.2	54.4	48.3	57.0	57.6
Medium Trucks:	57.1	49.0	42.7	41.1	49.6	49.8
Heavy Trucks:	62.3	50.4	41.3	42.6	52.5	52.6
Vehicle Noise:	**64.8**	**58.1**	**55.0**	**50.3**	**58.8**	**59.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	102
65 dBA	47
70 dBA	22
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	West of Azimuth		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	9,928
Peak Hour Traffic:	992.8
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

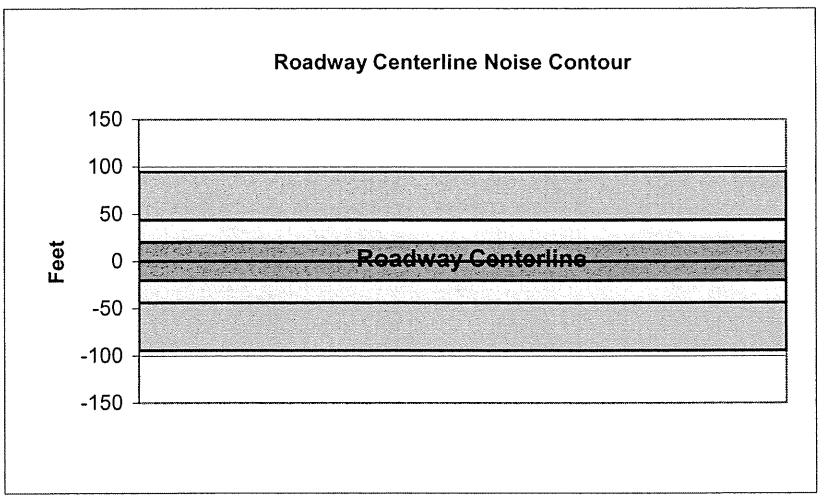
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.9	55.7	53.9	47.8	56.5	57.1
Medium Trucks:	56.6	48.5	42.2	40.6	49.1	49.3
Heavy Trucks:	61.8	49.9	40.8	42.1	52.0	52.1
Vehicle Noise:	**64.3**	**57.6**	**54.5**	**49.8**	**58.3**	**58.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	95
65 dBA	44
70 dBA	20
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Azimuth Drive and Old Mammoth Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	8,668
Peak Hour Traffic:	866.8
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

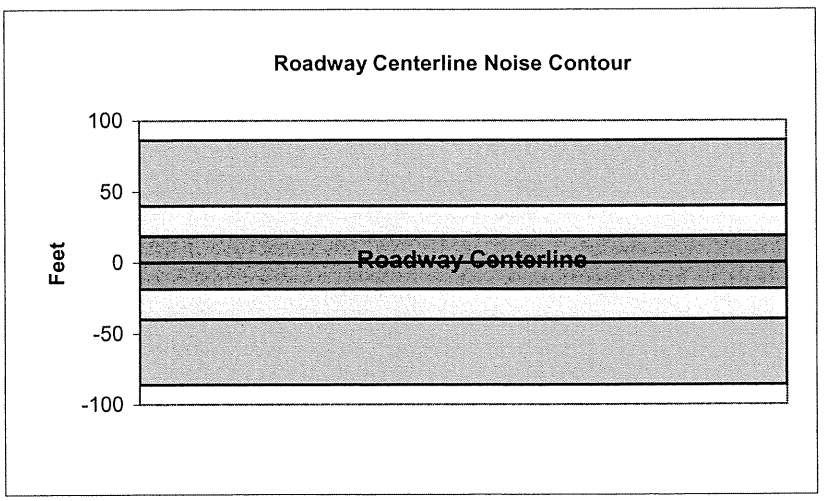
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.3	55.1	53.3	47.2	55.9	56.5
Medium Trucks:	56.0	48.0	41.6	40.0	48.5	48.7
Heavy Trucks:	61.2	49.3	40.3	41.5	51.4	51.5
Vehicle Noise:	**63.7**	**57.0**	**53.9**	**49.2**	**57.7**	**58.2**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	86
65 dBA	40
70 dBA	19
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	5,793
Peak Hour Traffic:	579.3
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

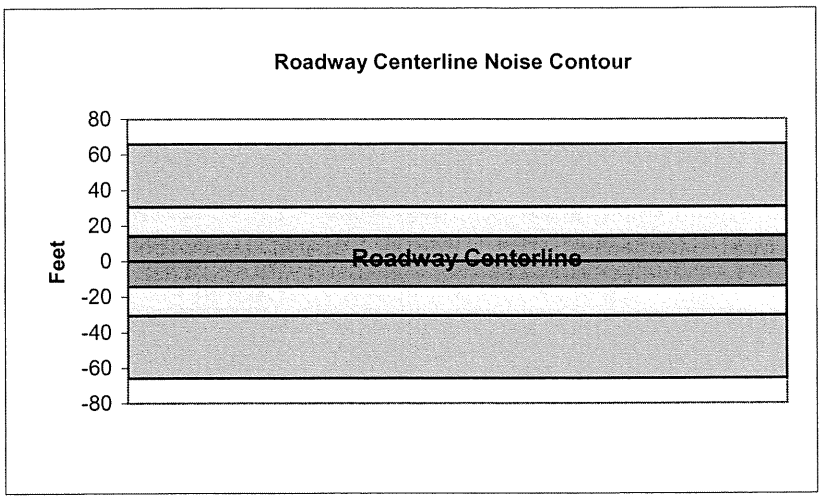
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	44.6	53.3	51.6	45.5	54.1	54.7
Medium Trucks:	54.3	46.2	39.8	38.3	46.7	47.0
Heavy Trucks:	59.5	47.6	38.5	39.7	49.6	49.8
Vehicle Noise:	**61.9**	**55.3**	**52.1**	**47.4**	**56.0**	**56.4**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	66
65 dBA	31
70 dBA	14
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	East of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	2,667
Peak Hour Traffic:	**266.7**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

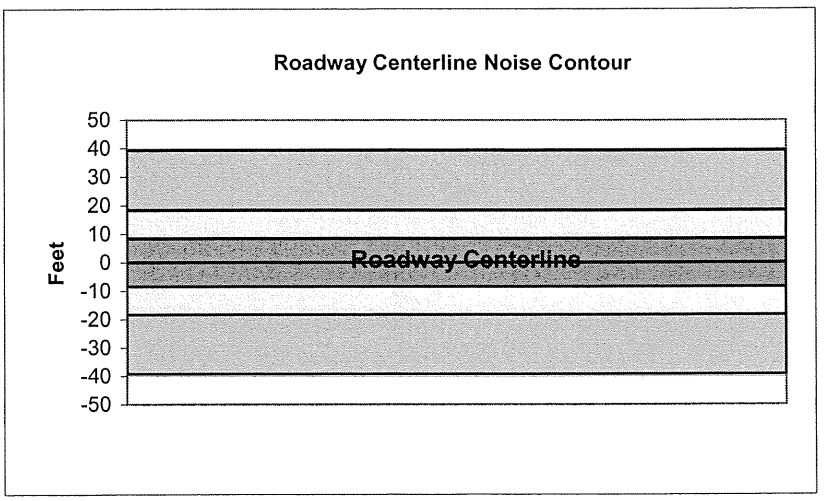
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	41.2	50.0	48.2	42.1	50.7	51.4
Medium Trucks:	50.9	42.8	36.5	34.9	43.4	43.6
Heavy Trucks:	56.1	44.2	35.1	36.4	46.3	46.4
Vehicle Noise:	**58.6**	**51.9**	**48.7**	**44.1**	**52.6**	**53.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	39
65 dBA	18
70 dBA	8
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Sierra Blvd. and Old Mammoth Road		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	22185
Peak Hour Traffic:	2218.5
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

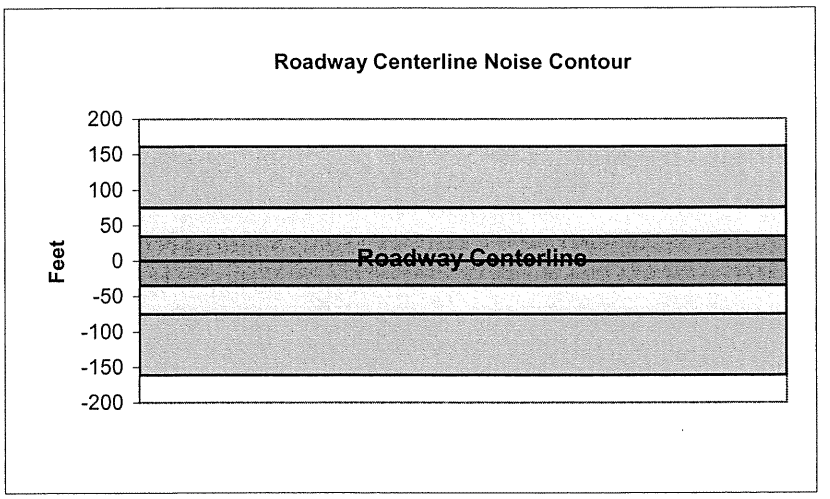
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	50.4	59.2	57.4	51.3	59.9	60.6
Medium Trucks:	60.1	52.0	45.7	44.1	52.6	52.8
Heavy Trucks:	65.3	53.4	44.3	45.6	55.5	55.6
Vehicle Noise:	**67.8**	**61.1**	**57.9**	**53.3**	**61.8**	**62.3**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	162
65 dBA	75
70 dBA	35
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	11689
Peak Hour Traffic:	1168.9
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

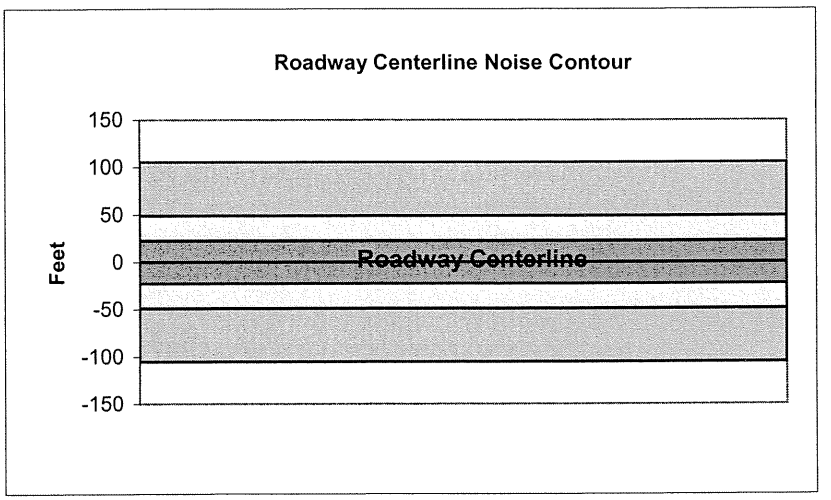
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.6	56.4	54.6	48.5	57.2	57.8
Medium Trucks:	57.3	49.3	42.9	41.3	49.8	50.0
Heavy Trucks:	62.5	50.6	41.6	42.8	52.7	52.8
Vehicle Noise:	**65.0**	**58.3**	**55.2**	**50.5**	**59.0**	**59.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	105
65 dBA	49
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Main Street		
Road Segment:	West of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	13012
Peak Hour Traffic:	1301.2
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

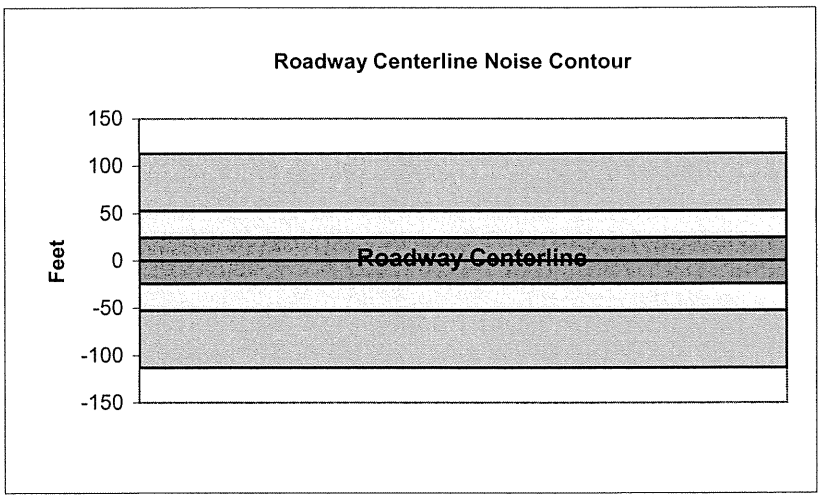
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.1	56.9	55.1	49.0	57.6	58.2
Medium Trucks:	57.8	49.7	43.3	41.8	50.3	50.5
Heavy Trucks:	63.0	51.1	42.0	43.2	53.1	53.3
Vehicle Noise:	**65.4**	**58.8**	**55.6**	**50.9**	**59.5**	**60.0**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	113
65 dBA	53
70 dBA	24
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Main Street and Sierra Nevada Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	16185
Peak Hour Traffic:	1618.5
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

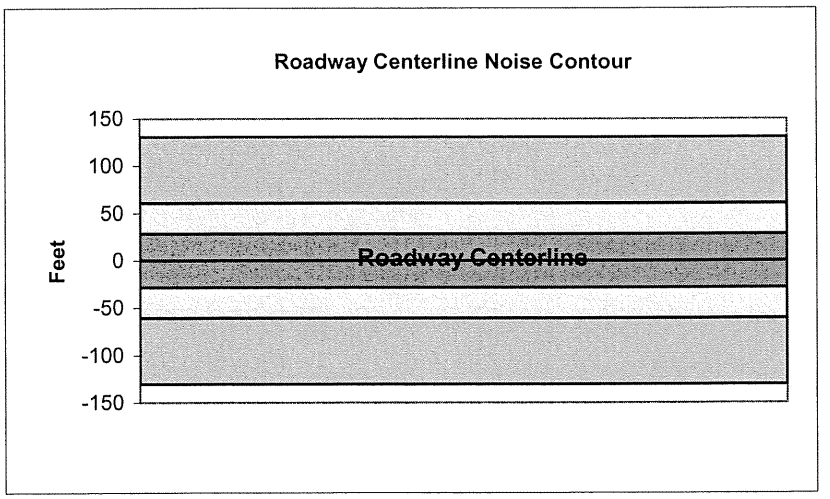
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	49.0	57.8	56.0	49.9	58.6	59.2
Medium Trucks:	58.7	50.7	44.3	42.7	51.2	51.4
Heavy Trucks:	64.0	52.0	43.0	44.2	54.1	54.2
Vehicle Noise:	**66.4**	**59.8**	**56.6**	**51.9**	**60.5**	**60.9**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	131
65 dBA	61
70 dBA	28
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	Between Sierra Nevada Road and Meridian Boulevard		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	15,761
Peak Hour Traffic:	**1576.1**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

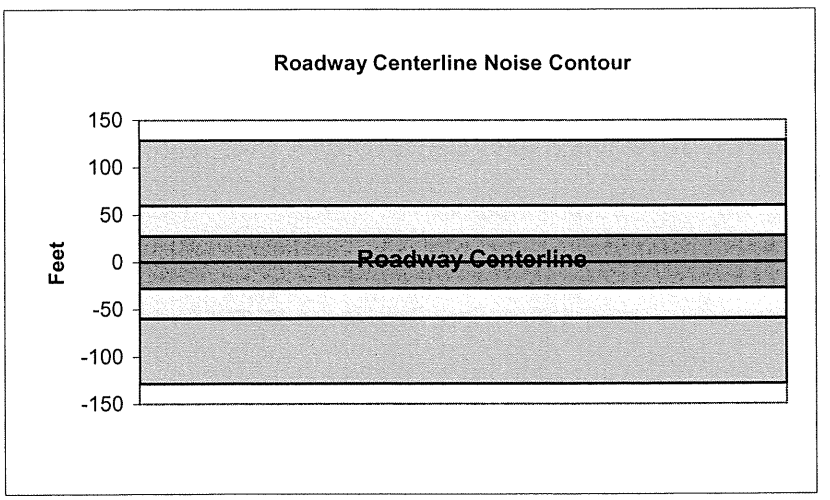
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	48.9	57.7	55.9	49.8	58.5	59.1
Medium Trucks:	58.6	50.6	44.2	42.6	51.1	51.3
Heavy Trucks:	63.8	51.9	42.8	44.1	54.0	54.1
Vehicle Noise:	**66.3**	**59.6**	**56.5**	**51.8**	**60.3**	**60.8**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	129
65 dBA	60
70 dBA	28
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Old Mammoth Road		
Road Segment:	South of Meridian Boulevard		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	11,915
Peak Hour Traffic:	1191.5
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

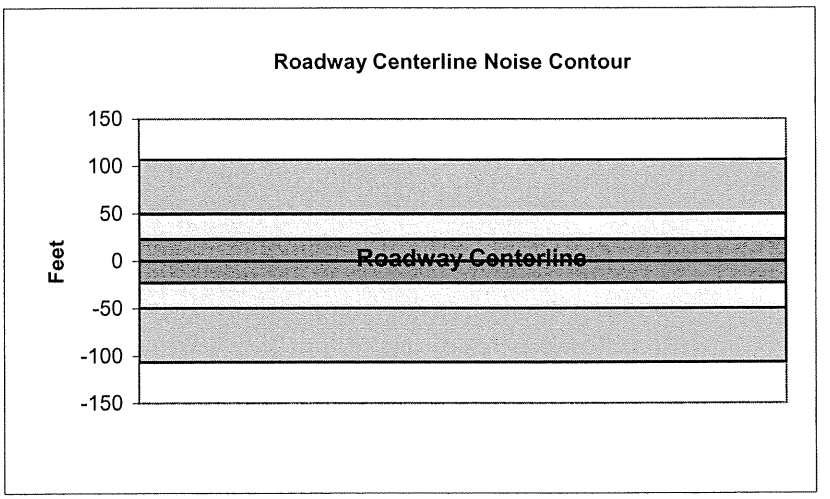
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.7	56.5	54.7	48.6	57.2	57.9
Medium Trucks:	57.4	49.3	43.0	41.4	49.9	50.1
Heavy Trucks:	62.6	50.7	41.6	42.9	52.8	52.9
Vehicle Noise:	**65.1**	**58.4**	**55.2**	**50.6**	**59.1**	**59.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	107
65 dBA	50
70 dBA	23
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	West of Azimuth		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	10,706
Peak Hour Traffic:	**1070.6**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

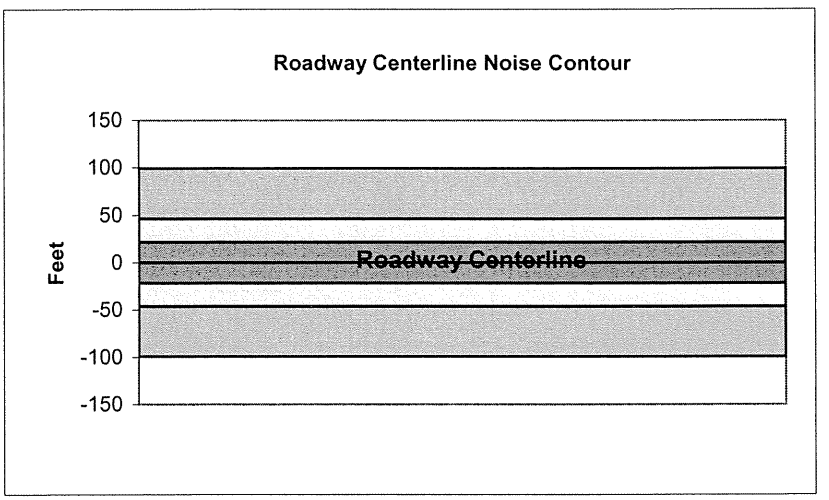
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	47.2	56.0	54.2	48.1	56.8	57.4
Medium Trucks:	56.9	48.9	42.5	40.9	49.4	49.6
Heavy Trucks:	62.2	50.2	41.2	42.4	52.3	52.4
Vehicle Noise:	**64.6**	**58.0**	**54.8**	**50.1**	**58.7**	**59.1**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	99
65 dBA	46
70 dBA	21
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Azimuth Drive and Old Mammoth Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	9,446
Peak Hour Traffic:	**944.6**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

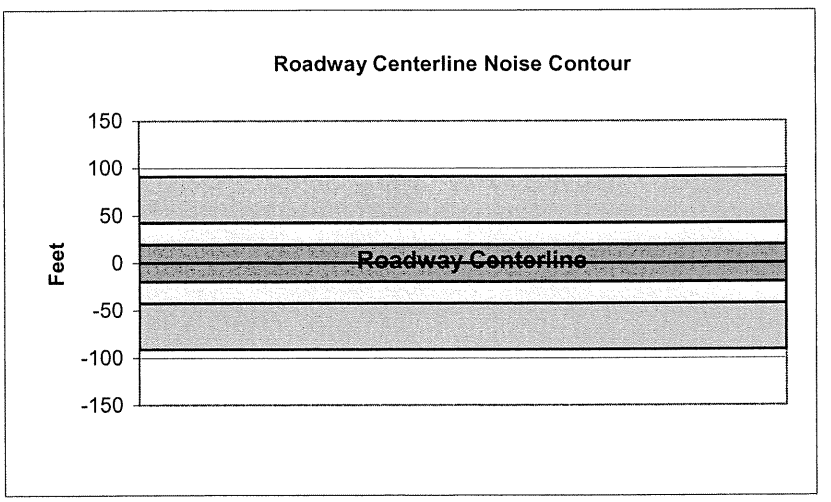
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	46.7	55.5	53.7	47.6	56.2	56.8
Medium Trucks:	56.4	48.3	42.0	40.4	48.9	49.1
Heavy Trucks:	61.6	49.7	40.6	41.8	51.8	51.9
Vehicle Noise:	**64.1**	**57.4**	**54.2**	**49.5**	**58.1**	**58.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	91
65 dBA	42
70 dBA	20
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	Between Old Mammoth Road and Sierra Park Road		

PROJECT DATA			
Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)	
Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA	
Road Grade:	0
Average Daily Traffic:	6,053
Peak Hour Traffic:	605.3
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

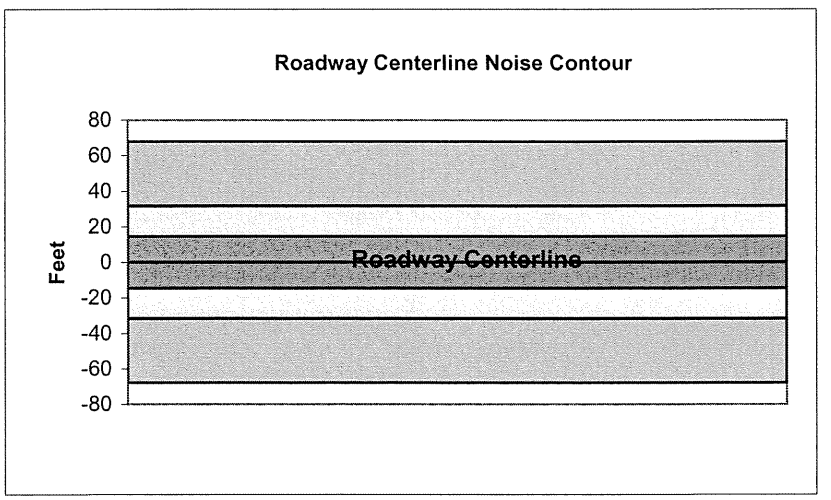
UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	44.7	53.5	51.7	45.7	54.3	54.9
Medium Trucks:	54.5	46.4	40.0	38.4	46.9	47.2
Heavy Trucks:	59.7	47.7	38.7	39.9	49.8	49.9
Vehicle Noise:	**62.1**	**55.5**	**52.3**	**47.6**	**56.2**	**56.6**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR	
Unmitigated	
60 dBA	68
65 dBA	32
70 dBA	15
Mitigated	
60 dBA	
65 dBA	
70 dBA	



Federal Highway Administration RD-77-108
Traffic Noise Prediction Model (CALVENO)

Project Name:	Mammoth Clearwater	Scenario:	Future Plus Project
Analyst:	Achilles Malisos	Job #:	10-105084
Roadway:	Meridian Boulevard		
Road Segment:	East of Sierra Park Road		

PROJECT DATA

Centerline Dist to Barrier:	0		
Barrier (0=wall, 1= berm):	0		
Receiver Barrier Dist:	0		
Centerline Dist. To Observer:	100		
Barrier Near Lane CL Dist:	0		
Barrier Far lane CL Dist:	0		
Pad Elevation:	0.5		
Road Elevation:	0		
Observer Height (above grade):	5.5		
Barrier Height:	0		
Rt View:	90	Lft View:	-90

NOISE SOURCE ELEVATIONS (Feet)

Autos:	0
Medium Trucks:	2.3
Heavy Trucks:	8

SITE DATA

Road Grade:	0
Average Daily Traffic:	2,927
Peak Hour Traffic:	**292.7**
Vehicle Speed:	35
Centerline Separation:	30

NOISE INPUTS

Site conditions: **SOFT SITE**

FLEET MIX

Type	Day	Evening	Night	Daily
Auto	0.775	0.129	0.096	0.9742
Med. Truck	0.848	0.049	0.103	0.0184
Heavy Truck	0.865	0.027	0.108	0.0074

UNMITIGATED NOISE LEVELS (No topographic or barrier attenuation)

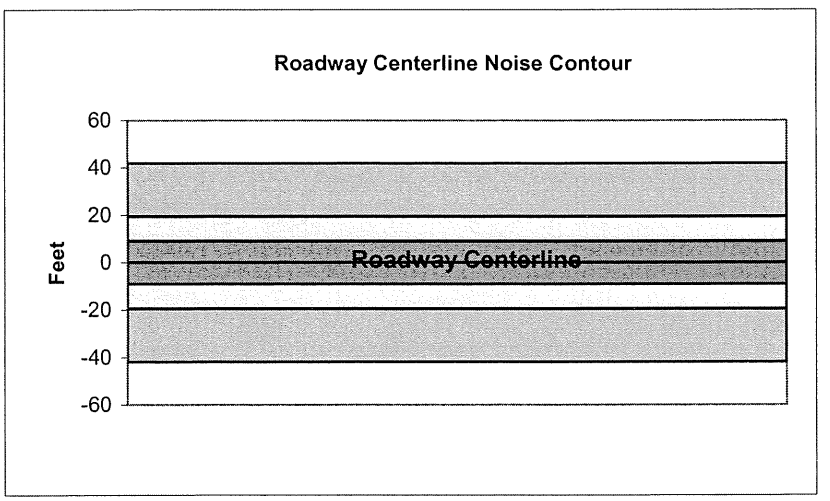
Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:	41.6	50.4	48.6	42.5	51.2	51.8
Medium Trucks:	51.3	43.2	36.9	35.3	43.8	44.0
Heavy Trucks:	56.5	44.6	35.5	36.8	46.7	46.8
Vehicle Noise:	**59.0**	**52.3**	**49.1**	**44.5**	**53.0**	**53.5**

MITIGATED NOISE LEVELS (With topographic or barrier attenuation)

Vehicle Type	Peak Leq	Leq Day	Leq Evening	Leq Night	Ldn	CNEL
Autos:						
Medium Trucks:						
Heavy Trucks:						
Vehicle Noise:						

CENTERLINE NOISE CONTOUR

Unmitigated	
60 dBA	42
65 dBA	19
70 dBA	9
Mitigated	
60 dBA	
65 dBA	
70 dBA	



15.6 Utility Correspondence

RBF CONSULTING

August 14, 2006 JN 10-105084

Mammoth Community Water District
Attn: Ericka Hegeman
P.O. Box 597
Mammoth Lakes, CA 93546

Subject: Environmental Impact Report for the Clearwater Specific Plan

Ms. Hegeman:

RBF Consulting (RBF) is in the process of preparing an Environmental Impact Report (EIR) for the Clearwater Specific Plan. RBF is seeking a response from your agency, to be incorporated into the EIR, with regard to the services provided by your agency. Two questionnaires (attached) identify the relevant issues to be addressed in the EIR document for both water and wastewater.

Project Description

The proposed Clearwater Specific Plan (project) is located in eastern portion of the Sierra Nevada Range, in southwestern Mono County, California. The 6.09-acre project site is adjacent to the east of Old Mammoth Road and is surrounded on the remaining three sides by Sierra Nevada Road to the south, Laurel Mountain Road to the west, and the Mammoth Mall and Krystal Villa East condominiums to the north.

The existing uses on-site include two restaurants (Igors and Ocean Harvest) with a total of 11,948 square feet and the Sierra Nevada Inn. The Sierra Nevada Inn has 159 bedrooms, consisting of 16 studio-like one-bedroom units with kitchens, 116 hotel-style one-bedroom units, and eight condominium-type three-bedroom units with kitchens. There are also three bedroom areas above the existing office which have been utilized as employee housing for the Maintenance Manager, Relief Manager, and Shift Manager. As part of the proposed project, all existing commercial and restaurant uses would be removed.

The Clearwater Specific Plan proposes Condominium Hotel units, work-force housing, retail and restaurant facilities, and internal courtyard and landscape areas; refer to Table 1, *Proposed Land Uses*, for the total number of units and square footage proposed for the project. The Condominium Hotel would include 480 rooms in 339 units, resulting in a density of 78.75 rooms per acre. In addition to the Condominium Hotel, the project would have 43 units of work-force housing with three bedrooms in each unit. The proposed project would include a subterranean parking structure extending over the majority of the site. The parking configuration would result in 705 subterranean and 35 surface parking spaces, for a total of 740 spaces.

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ Fax 949.472.8373
Offices located throughout California, Arizona & Nevada ■ www.RBF.com

Table 1-1
Proposed Land Uses

Land Use	Size
Condominium Hotel	339 Units[1]
Work-force Housing	43 Units
Restaurant	8,000 s.f.
Retail	20,205 s.f.
1 – The Condominium Hotel would include 480 rooms in 339 units.	
Source: *The Clearwater Specific Plan*, June 2006	

To assist in your review of the project components, we have attached the following exhibits from the Clearwater Specific Plan:

- Figure D, *Site Plan*;
- Figure M, *Site Grading and Drainage*; and
- Figure N, *Utilities*.

We would greatly appreciate your assistance and cooperation in helping us determine the water demand and wastewater generation, and providing a response to the attached questionnaires. Please provide your written response on agency letterhead. In order for the consultant team to maintain our projected schedule, we would appreciate your written response as soon as possible, or by September 4, 2006.

For your convenience, you may also FAX your response to (949) 837-4122. Please note that this questionnaire is not a request for service but simply an inquiry of current operations and conditions to evaluate impacts on services, utilities, and other related areas.

If you have any questions or require information, please do not hesitate to contact me at (949) 855-5772. Again, thank you for your cooperation.

Sincerely,

Eddie Torres
Environmental Impact Report Project Manager

Attachments include:
2 Questionnaires (Water & Wastewater)
Exhibits

WATER SERVICE QUESTIONNAIRE
THE CLEARWATER SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Please respond to the following questions on your agency letterhead and provide maps to illustrate facility locations (where applicable).

1. What are the size and location of major water lines (i.e. main lines) currently serving the Specific Plan area?

2. Are there currently any deficiencies in the water system in the Specific Plan area?

3. From what sources does the Specific Plan area currently obtain its water supply? What is the method of water treatment and the quality of water levels available to the community?

4. What is the current rate of local groundwater extraction and existing groundwater quality? Will buildout of the Clearwater Specific Plan have an impact on groundwater quality?

5. What is the average amount of water the Town obtains per year?

6. What are the District's average water demand factors for the land uses proposed by the project?

7. Are any new facilities, such as sizing requirements, new lines or treatment facilities, currently planned for the Specific Plan area?

8. Do you have any required assessment fees or other required or recommended mitigation measures that would apply to the project?

9. Does your agency have sufficient water supplies available to serve the Specific Plan area at buildout of the Clearwater Specific Plan based on existing entitlement and resources, or are new or expanded entitlements needed?

10. Is there any other relevant information regarding potential significant effects of the Clearwater Specific Plan?

12. Will buildout of the Clearwater Specific Plan require new facilities or additions to existing facilities? If so, please list/summarize any changes.

SEWER SERVICE QUESTIONNAIRE
THE CLEARWATER SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Please respond to the following questions on your agency letterhead and provide maps to illustrate facility locations.

1. What are the size and location of main sewer lines currently serving the Specific Plan? Also, please indicate the location of the treatment plant.

2. Are there currently any deficiencies in the sewage system within the Specific Plan area?

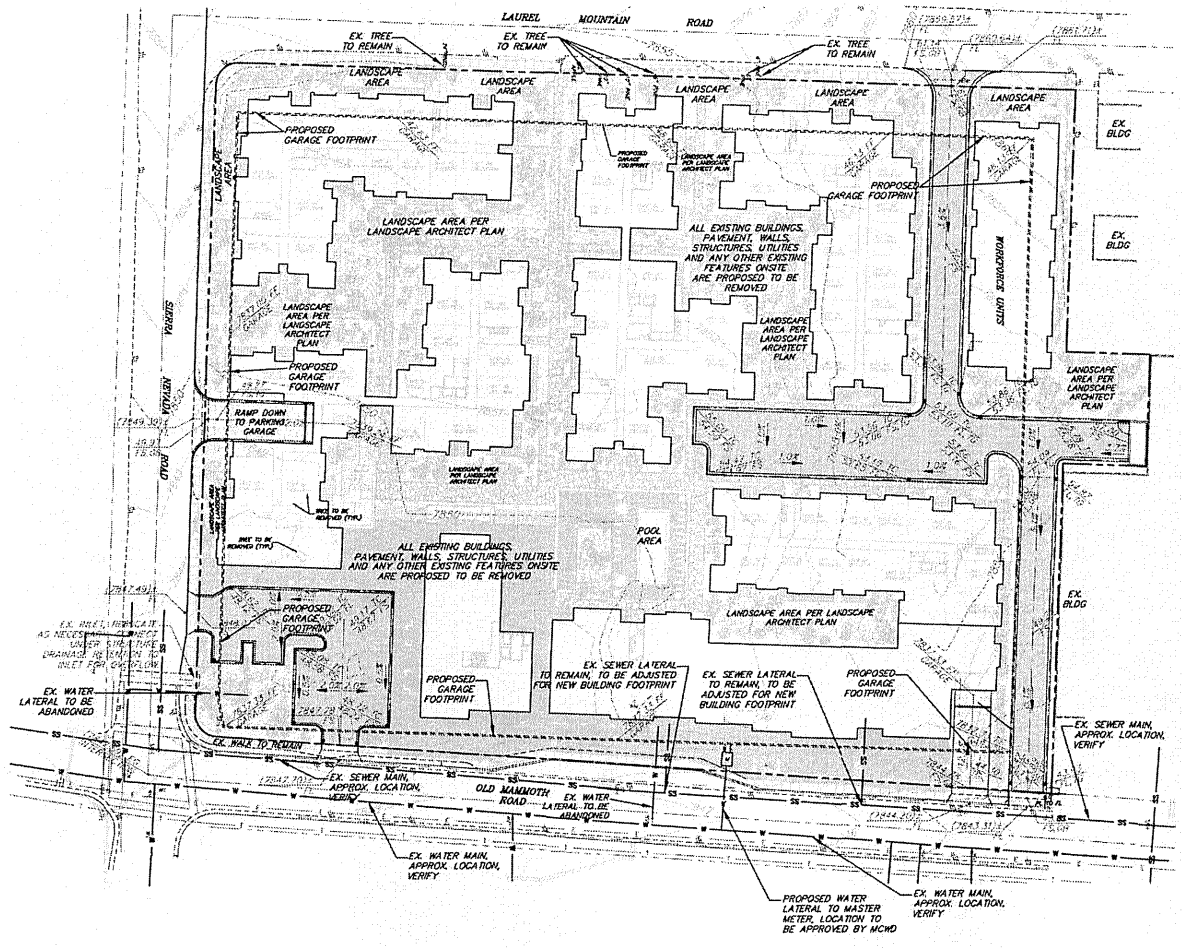
3. What are the average sewage generation factors for various land uses in the Specific Plan area?

4. Are any new facilities, such as sizing requirements, new lines or treatment facilities, currently planned for the Specific Plan area?

5. Is there any other relevant information regarding significant Clearwater Specific Plan impacts?

7. Do you have any required assessment fees or other required or recommended mitigation measures?

8. Does the existing sewer collection system have adequate capacity to support the proposed project?

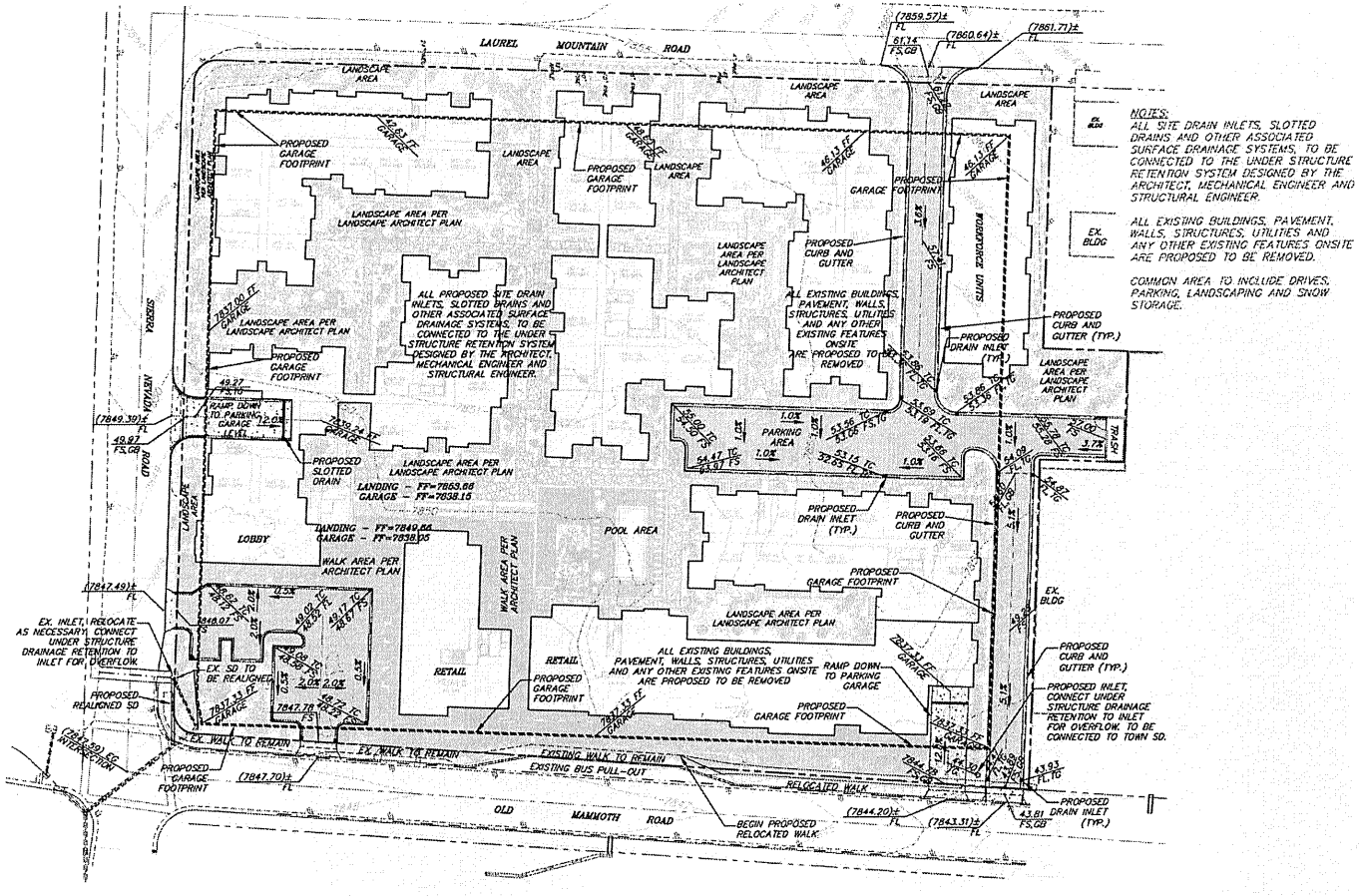


The Clearwater **Specific Plan**

June 7, 2006

Figure N
Utilities

Draft Submittal

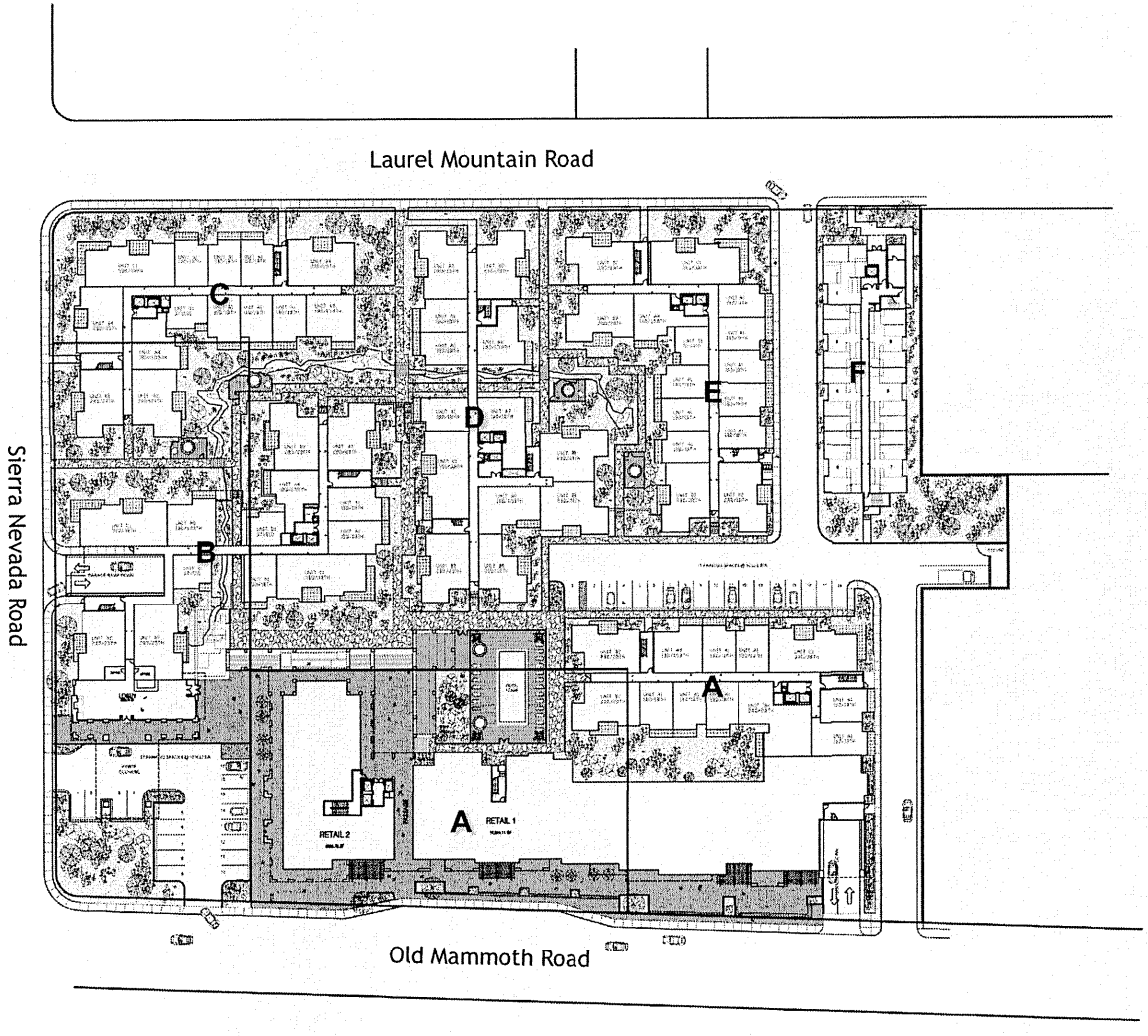


The Clearwater **Specific Plan**

June 7, 2006

Figure M
Site Grading & Drainage

Draft Submittal



0 40 80 160

The Clearwater **Specific Plan**

June 7, 2006

Figure D
Site Plan

Draft Submittal

MAMMOTH COMMUNITY WATER DISTRICT
Post Office Box 597
Mammoth Lakes, CA 93546
(760) 934-2596
FAX: (760) 934-2143

DATE: Sept. 14, 2006

TO: Leah Price

FAX NO.: 949 887-4122

FROM: Ericka Hegeman

5 Pages Should Follow This Cover Sheet.

Please call (760) 934-2596, if there is any problem with this transmission.

Leah –

Sorry the email did not work. Hopefully, I can send a final with sewer information next week.

– Erika

Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546
(760) 934-2596; fax (760) 934-2143

September 12, 2006

RE: Environmental Impact Report for the Clearwater Specific Plan

Eddie Torres
RBF Consulting
P.O. Box 57057
Irvine, CA 92619-7057

Mr. Torres:

The District has prepared the following responses to your request for information in your letter dated August 14, 2006. These responses summarize information from multiple sources such as raw groundwater and surface water data, information from the District's 2005 Urban Water Management Plan, and data obtained from the District's engineering water flow model. Please note that responses to questions regarding wastewater demands will be completed by next week (September 18, 2006) and a final letter will be sent to you at that time.

Water Service

1. The size and location of water main lines serving the Specific Plan area are noted in the attached map. Please note that the District would prefer project connection to the water distribution system at the 6 inch lateral on Laurel Mountain Road.

2. There are currently no deficiencies in the water delivery system serving the Specific Plan area. The distribution system surrounding the specific plan area consists of 8" ductile iron pipe on Old Mammoth Road, Sierra Nevada Road, and Laurel Mountain Road. The existing design of the water distribution system is sufficient to handle the current demands. System pressures range from 50 to 150 pounds per square inch (psi).

3. The Specific Plan area currently receives its water supply from well water that is treated at Groundwater Treatment Plant 1 located on Old Mammoth Road next to the Snowcreek Athletic Club. Depending on the use period, treated surface water from Lake Mary may also make its way through the distribution system and feed the project area. Water supplied to the community is chlorinated and consistently meets or exceeds EPA and State drinking water health standards.

4. In 2005, groundwater extractions by the District totaled 2110 acre-feet. Since 198, when the District began extracting groundwater, extractions have averaged 1259 acre-feet with a maximum extraction in 2002 of 2717 acre-feet. Groundwater extractions are currently

projected to not exceed a maximum of 4,000 acre-feet per year. It is not anticipated that the Clearwater Specific Plan will have an impact on groundwater quality.

5. In 2005, the District supplied 1669 acre-feet of surface water and 2110 acre-feet of groundwater to the community, which totals 3151 acre-feet. Since 1983, the average amount of water supplied to the community averaged 2678 acre-feet with a maximum of 3183 acre-feet supplied in 2002.

6. Please see the attached table which summarizes water demand factors for various billing classifications.

7. No new facilities, lines, or sizing requirements for the District's water distribution infrastructure are planned regarding this specific plan area. Additional local facilities for the project may be necessary; these include backflow prevention requirements, fire flow requirements, additional water meters, or other appurtenances.

8. Applications, plans, and pre-application fees must be submitted to the District Permit Office prior to determining any connection, construction, or landscaping permit fees. Additional facilities and lines may be required based on the State and District Codes and the water demand determined for this individual project. When site plans are ready to be submitted, contact the MCWD Permit Office to receive instructions and applications required for plan check. The permit office telephone number is (760)934-2596, extension 223.

9. At the expected project completion date of 2011, the District anticipates that it will be able to accommodate the proposed project's demand for water service with existing water supplies. Water supply may still be limited during periods of drought or supply interruption. However, the District does anticipate a shortfall in supply as the Town approaches build out in 2025 in multiple dry-year scenarios based on the current rate of development. If development within the District occurs at a faster rate than anticipated, the demand generated by this project would be supplied by the first water supply option for the District, an additional well within Mammoth Basin, which would require additional monitoring and a detailed environmental review.

10. The District does not anticipate any additional impacts on water supplies or service beyond what has already been discussed. The system pressure range is from 50 to 150 psi. Fire pumps may be required per the Mammoth Lakes Fire Protection District to meet fire flow requirements for taller structures. Fire protection requirements will be determined by the Mammoth Lakes Fire Protection District.

11. Specific local facilities required for the project cannot be determined at this time without reviewing the Clearwater Specific Plan final design. Such additional facilities and lines may include backflow prevention requirements, fire flow requirements, additional water meters, larger lateral diameter, larger main line diameter, or other appurtenances. In addition, additional water treatment facilities may be required to handle the increased demand in 2011.

Please feel free to contact me if you have any questions or comments regarding the information contained in this letter.

Sincerely,

Ericka Hegeman
Environmental Specialist
Mammoth Community Water District

Enclosures

Billing Classification	Water Usage (gal/day)	
	Average Day[1]	Peak Day[2]
Multi-family/Apt	135	200
Condo	170	295
SFR	250	455
Mobile Home	210	265
Hotel/Motel	80	120
Condo Hotel	100	105
Conference Center (per 1,000 ft^2)	125	230
Restaurant (per 1,000 ft^2)	580	685
General Commerical (per 1,000 ft^2)	150	280

Billing Classification	Wastewater Generation (gal/day)	
	Average Day[1]	Peak Day[2]
Multi-family/Apt	170	195
Condo	110	150
SFR	135	180
Mobile Home	145	210
Hotel/Motel	75	110
Condo Hotel	60	100
Conference Center (per 1,000 ft^2)	70	90
Restaurant (per 1,000 ft^2)	510	560
General Commercial (per 1,000 ft^2)	150	280

1. Average Day is calculated from the average of 36 months of usage. Wastewater average day is based on the average of winter months water usage (November, December, January, February, and March).
2. Peak Day is the daily average of the peak month water usage over 36 months. Wastewater peak day is based on the peak winter month water usage.

These tables are based on actual metered data from September 2002 through August 2005, and are intended to be used for estimation purposes only. The District shall assume no liability for any decisions made or actions taken or not taken by the user of the information contained in these tables. The District shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. The District makes no representation or warranties of any kind, expressed or implied, with respect to the contents of these data.

The data contained in these tables are valid from July 2006 through December 2007.

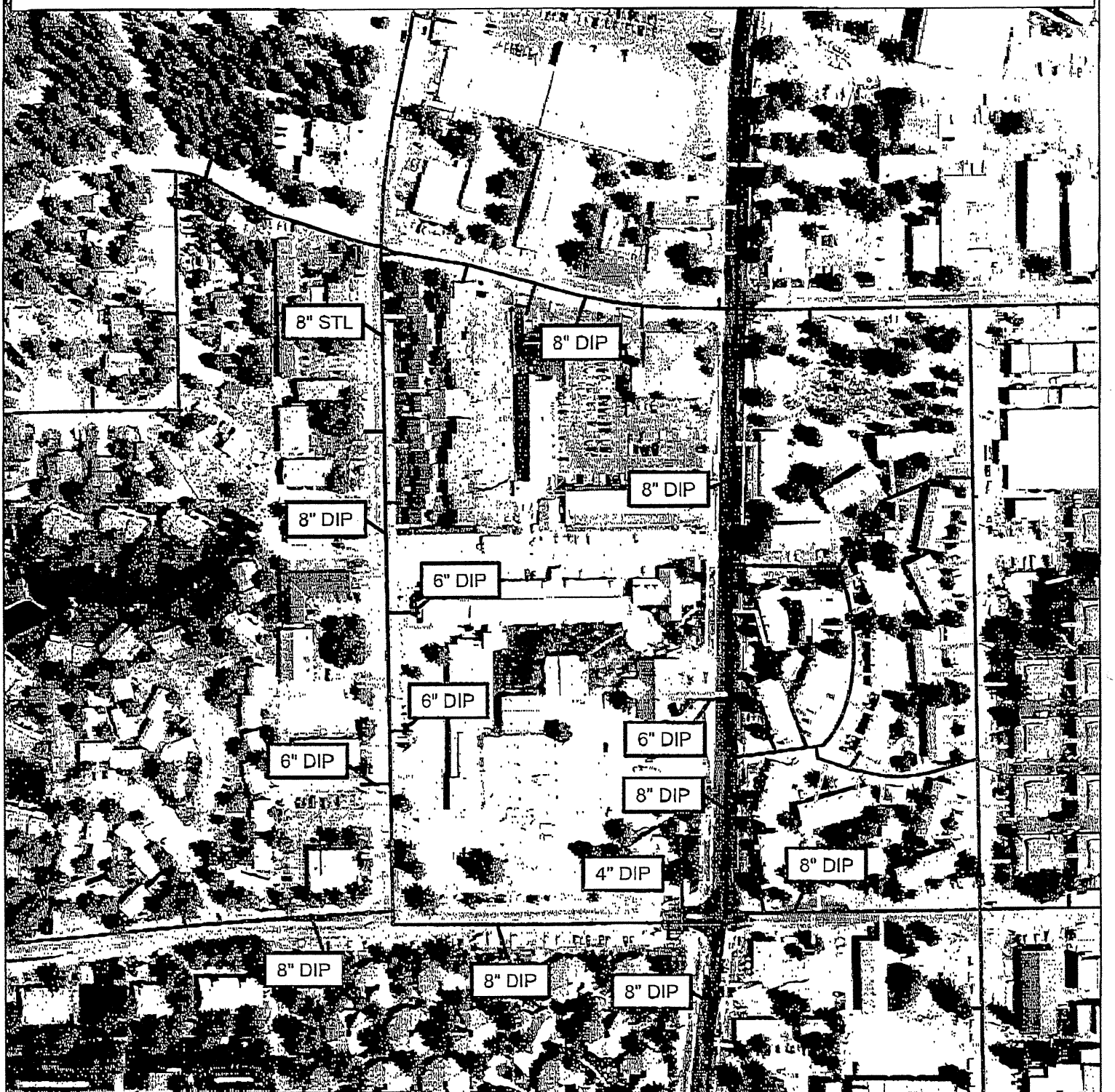
Mammoth Community Water District
PO Box 597
Mammoth Lakes, CA 93546
(760) 934-2596
Copyright 2006 Mammoth Community Water District

Rodeway Inn Expansion Project
Figure #1 - Water

0 50 100 200 300 400 Feet

N W E S

Map Legend
- Existing Water Line Main
- Existing Water Line Lateral
- STL - Steel Pipe
- DIP - Ductile Iron Pipe



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 individual and aggregate uses of the information.

The user of the maps or datasets should not rely on them for any reason. The District shall assume no liability for any decisions made or actions taken or not taken by the user of the information contained on the maps or in the datasets furnished hereunder. The District shall assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused. The District makes no representation or warranties of any kind, expressed or implied, with respect to the contents of the maps or datasets and specifically DISCLAIMS ANY IMPLIED WARRANTIES OF

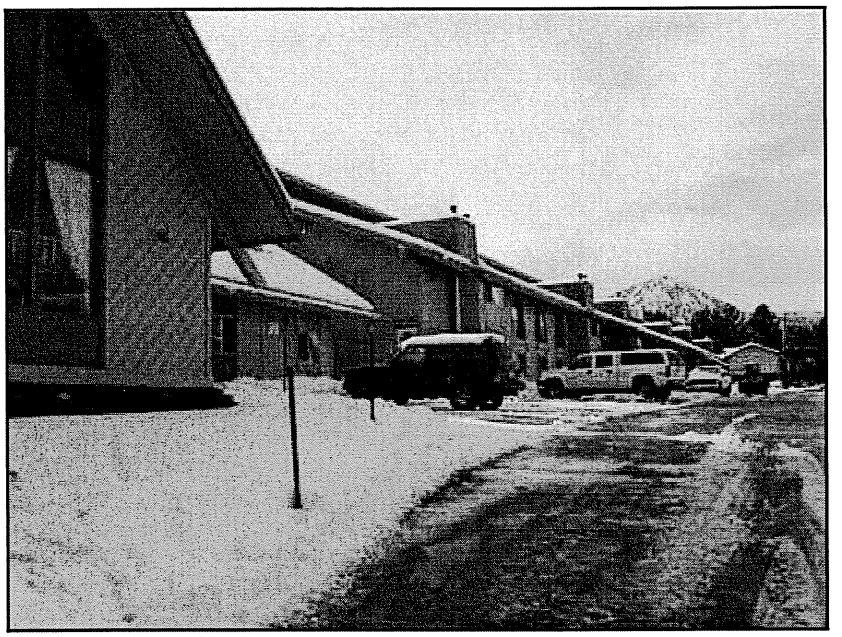
15.7 Phase I Environmental Assessment

Phase I Environmental Site Assessment Report

Prepared for:

Hall Mammoth Lakes, LLC
6801 Gaylord Parkway
Suite 100
Frisco, Texas 75034

Metric Holdings
16633 Ventura Boulevard,
Suite 925
Encino, CA 91436



The Clearwater

164, 202, 248 Old Mammoth Road
Mammoth Lakes, California

EBI Project No. 11054856

February 3, 2006

EBI CONSULTING
Creating Value for Your Business

EBI CONSULTING
FOUR A STREET
BURLINGTON, MA 01803
800-786-2346
PROJECT #11054856

PHASE I ENVIRONMENTAL SITE ASSESSMENT

The Clearwater
164, 202, 248 Old Mammoth Road
Mammoth Lakes, California 93546

Prepared for:

Hall Mammoth Lakes, LLC
6801 Gaylord Parkway
Suite 100
Frisco, Texas 75034

Metric Holdings
16633 Ventura Boulevard, Suite 925
Encino, CA 91436

EBI CONSULTING
www.ebiconsulting.com

Four A Street
Burlington, MA 01803
Tel: 781.273.2500
Fax: 781.273.3311

February 3, 2006

Mr. Donald Braun
Hall Mammoth Lakes, LLC
6801 Gaylord Parkway
Suite 100
Frisco, Texas 75034

Mr. Richard Rosenberg
Metric Holdings
16633 Ventura Boulevard, Suite 925
Encino, CA 91436

Subject: **Phase I Environmental Site Assessment Report, The Clearwater**
164, 202, 248 Old Mammoth Road, Mammoth Lakes, California
EBI Project #11054856

Dear Mr. Braun and Mr. Rosenberg:

Attached please find our *Phase I Environmental Site Assessment Report* (the *Report*) for the above-mentioned asset (the Subject Property). During the survey and research, our surveyor met with agents representing the Subject Property, or agents of the owner, and reviewed the Subject Property and its history. The *Report* was completed according to the terms and conditions authorized by you. This *Report* has been completed in general conformance with the ASTM Standard E 1527-00.

The purpose of this *Report* is to assist Hall Mammoth Lakes, LLC in its underwriting of a proposed mortgage loan on the Subject Property described herein.

This *Report:*

- May be relied upon by *Hall Mammoth Lakes, LLC* in determining whether to make a loan evidenced by a note (the "Property Note") secured by the Property.
- May be relied upon by any purchaser in determining whether to purchase the Property Note for this transaction from the undersigned.
- May be relied upon by any Rating Agency in rating securities issued by the undersigned and representing an interest in the Mortgage Note
- May be included with and referred to in materials offering the Property Note or an interest in the Property Note for sale.

There are no intended or unintended third party beneficiaries to this *Report*, except as expressly stated herein.

EBI is an independent contractor, not an employee of either the issuer or the borrower, and its compensation was not based on the findings or recommendations made in the *Report* or on the closing of any business transaction.

Thank you for the opportunity to prepare this *Report*, and assist you with this project. Please call us if you have questions or if we may be of further assistance.

Respectfully Submitted,

Tiffany Grant
Author/Environmental Scientist

Richard B. McKinney (661) 871-2281
Reviewer/Senior Program Director

Daniel Spinogatti
Regional Vice President

TABLE OF CONTENTS

EXECUTIVE SUMMARY 1
1.0 PURPOSE & LIMITATIONS 3
2.0 SUBJECT PROPERTY CHARACTERISTICS 5
2.1 Ownership and Location 5
2.2 Description and Operations 5
2.3 Municipal Services & Utilities 5
3.0 SUBJECT PROPERTY RECONNAISSANCE 7
3.1 Interior Survey 7
3.2 Usage, Handling and Disposal of Petroleum Products and/or Hazardous Substances 7
3.3 Aboveground/Underground Storage Tanks (ASTs/USTs) 7
3.4 Asbestos-Containing Material (ACM) 7
3.5 Radon 9
3.6 Lead-Based Paint (LBP) 9
3.7 Lead in Drinking Water 10
3.8 Exterior Survey 10
3.9 Solid Waste Disposal 10
3.10 Polychlorinated Biphenyls (PCBs) Equipment 10
3.11 Physical Setting 11
3.12 Adjacent Properties 11
4.0 SUBJECT PROPERTY AND VICINITY HISTORY 13
4.1 Previous Environmental Reports 13
4.2 Fire Insurance Maps 13
4.3 Historic Aerial Photographs 13
4.4 City Directories 14
4.5 Interviews 14
5.0 REGULATORY INFORMATION 15
5.1 Procedure 15
5.2 Federal Office Records 15
5.3 State Office Records 16
5.4 Local Office Records 17
6.0 FINDINGS AND OPINIONS 18
7.0 RECOMMENDATIONS 19
8.0 REFERENCES 20
8.1 References Contacted 20
APPENDIX A – PHOTOGRAPHS
APPENDIX B – FIGURES, DRAWINGS AND MAPS
APPENDIX C – OTHER RELEVANT DOCUMENTS
APPENDIX D – PROFESSIONAL QUALIFICATIONS
APPENDIX E – REGULATORY DATABASE REPORT
APPENDIX F – HISTORICAL DOCUMENTATION
APPENDIX G – ANALYTICAL RESULTS
APPENDIX H – PORTIONS OF PREVIOUS REPORT

EXECUTIVE SUMMARY

The Subject Property, known as The Clearwater, includes three parcels, each owned separately. The parcels were occupied by a Roadway Inn, Igor's Restaurant, and Ocean Harvest Restaurant. The structures total approximately 83,000± gross square feet, on three parcels totaling 6.095 acres. The dates of construction appear to be late 1960s early 1970s. Significant renovation of the Igor's and Ocean Harvest Restaurant structures reportedly occurred in the middle to late 1990s.

The Subject Property is located in Mammoth Lakes, California at 164, 202, 248 Old Mammoth Road. Mammoth Lakes is located in the Eastern Sierra's of California, and the Subject Property is located in downtown Mammoth Lakes. The current tenancy is restaurant and hotel use.

Ms. Tiffany Grant of EBI surveyed the Subject Property on December 2, 2005. She was accompanied by and interviewed Mr. Paul Payne, the property hotel owner. At the time of the survey, the weather was partly cloudy and approximately 32° Fahrenheit. During the survey, representative tenant spaces offices, mechanical spaces and/or equipment components were observed. Due to snow on the ground during the time of the survey, not all areas of the ground of the Subject Property were visible. A Pre-Survey Questionnaire was forwarded to the designated Subject Property contact and has not been received as of this review. Completed copies of the questionnaire should be obtained prior to closing for your internal review. The information requested in the questionnaire assists in our research of the Subject Property to obtain pertinent property data and discover evidence of *recognized environmental conditions.*

Below is the Assessment Summary presenting our recommended actions for the Subject Property. Additional detail regarding each recommended action is provided in *Section 7.0.*

ASSESSMENT SUMMARY TABLE

REPORT COMPONENT	SECTION (S)	CONCERN NOTED OR REPORTED	RECOMMENDED ACTIONS	ESTIMATED COST
Current Tenant or Property Use Concerns	3.2		No Further Action	
ASTs/USTs	3.3		No Further Action	
Suspect Asbestos Containing Material	3.4	✔	Trace amounts of asbestos were reported in floor tile mastic located in the Hotel. Visible suspect ACM was not observed at the remaining two restaurant structures. EBI prepared an asbestos O&M Plan for the hotel structure, EBI Project #11060309	
Radon	3.5		No Further Action	
Lead-based Paint	3.6		No Further Action	
Lead in Water	3.7		No Further Action	
Suspect PCB-containing Equipment	3.10		No Further Action	
Historical Use of Subject Property	4.0		No Further Action	

ASSESSMENT SUMMARY TABLE				
REPORT COMPONENT	SECTION (S)	CONCERN NOTED OR REPORTED	RECOMMENDED ACTIONS	ESTIMATED COST
Potential Off-site Sources	3.12, 5.0		No Further Action	
Federal, State and Local Agency Concerns	5.2, 5.3, 5.4		No Further Action	

1.0 PURPOSE & LIMITATIONS

The purpose of this *Phase I Environmental Site Assessment Report* (the *Report*) is to assist *Hall Mammoth Lakes, LLC* in its underwriting of a proposed mortgage loan on the Subject Property. This *Report* can be relied upon by only the parties stated in the transmittal letter at the front of this *Report*. EBI's liability to a purchaser wishing to use this *Report* is limited to the cost of the *Report*. Amendments to EBI's limitations as stated herein that may occur after issuance of the *Report* are considered to be included in this *Report*. Payment for the *Report* is made by, and EBI's contract and *Report* extends to *Hall Mammoth Lakes, LLC* only, in accordance with our *Standard Conditions For Engagement* and, *Authorization Letter* and *Agreement for Environmental Services*.

The additional purpose of this *Report* is to assess a parcel of *real estate* with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and *petroleum products*. As such, this practice is intended to permit *Hall Mammoth Lakes, LLC* to satisfy one of the requirements to qualify for the *innocent landowner defense* to CERCLA liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the Subject Property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B).

In defining a standard of good commercial and customary practice for conducting an *environmental site assessment* of a parcel of *property*, the goal of the processes established by this practice is to identify *recognized environmental conditions*. The term *recognized environmental conditions (RECs)* means the presence or likely presence of any *hazardous substances* or *petroleum products* on a *property* under conditions that indicate an existing release, a past release, or a material threat of a release of any *hazardous substances* or *petroleum products* into structures on the *property* or into the ground, ground water, or surface water of the *property*. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not *RECs*.

EBI has performed this *Phase I Environmental Site Assessment* in conformance with the scope and limitations of ASTM Standard E 1527-00. This *Report* was prepared with no exceptions or deletions from ASTM Standard E 1527-00.

SCOPE OF WORK

This *Report* was prepared for the use of *Hall Mammoth Lakes, LLC*. This *Report* has been prepared in accordance with our *Standard Conditions For Engagement* and *Authorization Letter* and *Agreement for Environmental Services* approved and signed by *Hall Mammoth Lakes, LLC*, and with the limitations described below, all of which are integral parts of this *Report*. A copy of the signed *Standard Conditions For Engagement* and *Authorization Letter* and *Agreement for Environmental Services* is maintained at the EBI Consulting office in Burlington, Massachusetts.

The information reported was obtained through sources deemed reasonably ascertainable, as defined in ASTM Standard E 1527-00; a visual site survey of areas readily observable, easily accessible or made accessible by the Subject Property contact and interviews with owners, agents, occupants, or other appropriate persons involved with the Subject Property. Municipal information was obtained through file reviews of reasonably ascertainable standard government record sources, and interviews with the authorities having jurisdiction over the Subject Property. Findings, conclusions and recommendations included in the *Report* are based on our visual observations in the field, the municipal information reasonably obtained, information provided by the Client, and/or a review of readily available and supplied drawings and documents. EBI relies completely on the information, whether written, graphic or verbal, provided by the Subject Property contact or as shown on any documents reviewed or received from the Subject Property contact, owner or agent, or municipal source, and assumes that information to be true and correct. Although there may have been some degree of overlap in the information provided by these various sources, EBI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of these *Environmental Services*.

The observations in this *Report* are valid on the date of the investigation. Where access to portions of the Subject Property or to structures on the Subject Property was unavailable or limited, EBI renders no opinion as to the presence of petroleum products or hazardous substances in that portion of the Subject Property or structure. Inaccessible portions of the Subject Property are described below. In addition, EBI renders no opinion as to the

presence of, or indirect evidence relating to, petroleum products or hazardous substances where direct observation of the interior walls, floor, or ceiling of a structure was obstructed by objects or coverings on or over these surfaces.

It is acknowledged that EBI judgments shall not be based on scientific or technical tests or procedures beyond the scope of the Services or beyond the time and budgetary constraints imposed by the Client. It is acknowledged further that EBI conclusions shall not rest on pure science but on such considerations as economic feasibility and available alternatives. Client also acknowledges that, because geologic and soil formations are inherently random, variable, and indeterminate in nature, the Services and opinions provided under this Agreement with respect to such Services, are not guaranteed to be a representation of actual conditions on the Subject Property, which are also subject to change with time as a result of natural or man-made processes, including water permeation. In performing the Services, EBI shall use that degree of care and skill ordinarily exercised by environmental consultants or engineers performing similar services in the same or similar locality. The standard of care shall be determined solely at the time the Services are rendered and not according to standards utilized at a later date. The Services shall be rendered without any other warranty, expressed or implied, including, without limitation, the warranty of merchantability and the warranty of fitness for a particular purpose.

Client and EBI agree that to the fullest extent permitted by law, EBI shall not be liable to Client for any special, indirect or consequential damages whatsoever, whether caused by EBI's negligence, errors, omissions, strict liability, breach of contract, breach of warranty or other cause or causes whatsoever.

The ASTM Standard E 1527-00 does not encompass analytical testing to evaluate asbestos containing materials, radon, lead-based paint, drinking water quality, indoor air quality, stored chemicals, debris, fill materials, surface water, or subsurface samples (soil and groundwater) as part of a Phase I ESA. EBI performed testing at the Subject Property in accordance with the *Standard Conditions For Engagement* and, *Authorization Letter* and *Agreement for Environmental Services* and the client-specific *Scope of Work*. Unless otherwise specified herein, such testing involves screening methods intended to provide a broad and approximate evaluation of conditions at readily accessible portions of the Subject Property, limited by project constraints, and should not be construed as a comprehensive program designed to comply with a specific regulatory program. If a thorough and regulatory-compliant study is warranted based on the findings of the Phase I ESA, EBI will recommend the appropriate further investigation. In certain cases, quantitative laboratory testing is performed as part of the assessment and analyses have been conducted by an outside laboratory. EBI relies upon the data provided by the outside laboratory, and has not conducted an independent evaluation of the reliability of this data.

The assessment was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession, and in accordance with generally accepted practices of other consultants currently practicing in the same locality under similar conditions. No other representation, expressed or implied, and no warranty or guarantee is included or intended. The *Report* speaks only as of its date, in the absence of a specific written update of the *Report*, signed and delivered by EBI.

Additional information that becomes available after our survey and draft submission concerning the Subject Property should be provided to EBI so that our conclusions may be revised and modified if necessary, at additional cost. This *Report* has been prepared in accordance with our Standard Conditions for Engagement, which is an integral part of this *Report.*

INACCESSIBLE OR UN-SURVEYED PORTIONS OF SUBJECT PROPERTY

There were no notable portions of the Subject Property excluded from this survey.

ABBREVIATIONS

EBI may use various abbreviations to describe various site, building or system components or legal descriptions. Not all abbreviations may be applicable to all reports. The abbreviations most often utilized are defined below.

ACM	Asbestos-containing material	HVAC	Heating, ventilating and air conditioning
AST	Aboveground storage tank	MSDS	Material Safety Data Sheet(s)
CMU	Concrete masonry unit	REC	Recognized environmental condition
EIFS	Exterior insulating finishing system	RTU	Rooftop (HVAC) unit
FOIA	Freedom of Information Act	UST	Underground storage tank
LBP	Lead-based paint	VCT	Vinyl composition tile

2.0 SUBJECT PROPERTY CHARACTERISTICS

2.1 OWNERSHIP AND LOCATION

The Subject Property consists of three parcels owned separately that are proposed to be combined to develop a condo/apartment residential development. The three parcels are numbered 35-230-05, 06 and 07. According to the Mono County Assessor's Office, the parcels ownership was as follows: 35-230-05 (the Roadway Inn Hotel at 164) by Sierra Nevada Associates, LP with Paul Payne as the principle; 35-230-06 (Igor's Restaurant at 202) by Aronin Egor (et al), and 35-230-07 (Ocean Harvest Restaurant at 248) by Benjamin Louie. One building structure occupies each of the three parcels.

The Subject Property is located in Mammoth Lakes, California at 164, 202, 248 Old Mammoth Road. The Subject Property is adjacent to Old Mammoth Road and Nevada Road. *Figure 1, Location Map* attached to this *Report* depicts the Subject Property on a street map of the vicinity.

Figure 2, Topographic Map attached to this *Report* depicts the Subject Property on a portion of the *Old Mammoth, California* United States Geological Survey (USGS) Topographic Quadrangle. *Figure 3, Site Plan* attached to this *Report* depicts the immediate vicinity of the Subject Property.

2.2 DESCRIPTION AND OPERATIONS

LAND AND BUILDING AREAS
The Subject Property consists of three parcels of land, each occupied by one building structure, including a Roadway Inn Hotel, Igor's Restaurant, and Ocean Harvest Restaurant. The three parcels form a continuous, rectangular shaped, land area that comprises over half of a city block (Figure 3).

CURRENT TENANTS AND USE OF THE SUBJECT PROPERTY
The Subject Property is currently occupied by a hotel and two restaurants. The hotel was reportedly constructed circa 1970, Igor's and the Ocean Harvest restaurant were reportedly constructed circa late 1960s-1970s. Major renovations of the two restaurant structures reportedly occurred during the 1990s. The hotel property includes a swimming pool, hot tub, dry sauna and three laundry facilities.

The current uses of the Subject Property do not represent a potential environmental concern.

2.3 MUNICIPAL SERVICES & UTILITIES

2.3.1 Water & Sewer
Domestic drinking water is provided by the *Mammoth Lakes, California Community Water Department.* The drinking water source is reportedly surface and groundwater.

The Mammoth Lakes Sewer Authority provides sewer service to the Subject Property site.

2.3.2 Gas/Oil
Turner Propane provides propane gas service to the Subject Property. No oil service is provided to the Subject Property.

2.3.3 Electrical

Pacific Gas and Electric (PG&E) supplies electrical service to the Subject Property. Several pad-mounted transformers, owned by the utility, were noted throughout the Subject Property. The transformers are discussed in *Section 3.10* of this *Report*.

3.0 SUBJECT PROPERTY RECONNAISSANCE

3.1 INTERIOR SURVEY

The following table summarizes issues on which the survey of interior areas of the Subject Property focused:

INTERIOR SURVEY		
ITEM	NOTED	LOCATION AND DESCRIPTION
Processes that generate petroleum products or hazardous substances		N/A
Unusual odors		N/A
Pools of liquid		N/A
Containers not attributed to current use of the Subject Property		N/A
Stains or corrosion		N/A
Drains and Sumps		N/A
Oil-containing equipment		N/A

3.2 USAGE, HANDLING AND DISPOSAL OF PETROLEUM PRODUCTS AND/OR HAZARDOUS SUBSTANCES

Routine quantities of hazardous chemicals, oils, lubricants and pool chemicals are used to maintain the Subject Property. These materials include cleaning compounds, paints, thinners, gasoline and joint compounds. These materials are stored in the maintenance room of the hotel. Materials observed at the Subject Property are utilized during routine operations and do not result in the generation of regulated waste. No evidence of significant leaks or spills was noted during EBI's site visit.

3.3 ABOVEGROUND/UNDERGROUND STORAGE TANKS (ASTS/USTS)

Based on observations, interviews and a review of state and local records, there are no indications of USTs or ASTs located at the Subject Property.

3.4 ASBESTOS-CONTAINING MATERIAL (ACM)

ACM represents a concern when it is subject to damage that results in the release of fibers. Friable ACM, which can be crumbled by hand pressure and is therefore susceptible to damage, is of particular concern. Non-friable ACM is a potential concern if it is damaged by maintenance work, demolition or other activities.

The use of asbestos in many building products was banned by the U.S. Environmental Protection Agency (EPA) by the late 1970s. In 1989, EPA issued a ruling prohibiting the manufacturing, importation, processing, and distribution of most asbestos containing products. This rule, known as the Ban & Phase-Out Rule, would have effectively banned the use of nearly 95% of all asbestos products used in the United States. However, the U.S. 5th Circuit Court of Appeals vacated and remanded most of the Ban and Phase Out Rule in October 1991. Due to this court decision, many asbestos containing product

categories not previously banned (prior to 1989) may still be in use today. Among these common material types found in buildings are floor tile and roofing materials.

EBI observed friable suspect ACM in the form of textured ceiling surfacing, and non-friable suspect ACM in the form of drywall, vinyl floor tile, roofing materials, and construction mastics at the Roadway Inn structure. Where observed, the suspect ACM is intact and in good condition. It should be noted that additional suspect ACM may be present in portions of the Roadway Inn structure that are not accessible, such as behind walls and above ceilings. Suspect ACM was not observed at the Igor's or Ocean Harvest Restaurants; therefore, no sampling and analyses for ACM were conducted by EBI at these locations. In addition, significant tenant improvements/renovations were reportedly conducted at both restaurants during the 1990s; therefore, ACM is not likely present within the construction materials installed during the 1990s.

As directed by the scope of work for this ESA, EBI collected from the Roadway Inn three representative samples of suspect ACM (split into a fourth sample by the laboratory) in the form of vinyl floor tile and mastic, ceiling surfacing material and drywall. Suspect ACM samples were submitted to Environmental Hazards Laboratory in Richmond, VA to be tested for the presence of asbestos by polarized light microscopy (PLM). The following table below presents the results of the testing.

ASBESTOS SAMPLING RESULTS						
SAMPLE ID	LOCATION	MATERIAL	% ASBESTOS	FRIABILITY	CONDITION	ESTIMATED AMOUNT
11054856 -01	Roadway Inn Maintenance Room	Drywall	No asbestos detected (NAD)	Non-Friable	Good	Throughout
11054856 -02a	Roadway Inn Maintenance Room	Orange Vinyl Floor Tile	NAD	Non-Friable	Good	200 square feet
11054856 -02b	Roadway Inn Maintenance Room	Orange Vinyl Floor Tile Mastic	<1% chrysotile asbestos	Non-Friable	Good	200 square feet
11054856 -03	Roadway Inn Maintenance Room	Acoustic Ceiling Spray (ASC)	NAD	Friable	Good	Throughout

As noted, floor tile mastic was found to contain <1% asbestos (see discussion below concerning Cal/OSHA asbestos regulations). The analytical data report is attached to this *Report*.

The PLM method has a detection limit of 1 percent. In EBI's experience, quantification of asbestos in bulk samples at levels <1 percent is not possible with a high degree of confidence when PLM is used. Therefore, asbestos fibers observed (if less than 1%) using the PLM method are reported as trace or <1 concentrations, and are assumed to contain >0.1% asbestos fibers by weight unless further analyses are used.

Cal/OSHA's Asbestos Standard for Construction (Construction Standard) Standard, Title 8 (Title 8, CCR, Section 1529) regulates asbestos exposure in the workplace. Cal/OSHA defines asbestos containing construction material (ACCM) as any building material that contains more than 0.1 percent (one-tenth of one percent) asbestos by weight. In addition, those building materials presumed or known to contain at least trace amounts (less than 1 percent) of asbestos should be considered as ACCM, and should be managed according to Cal/OSHA regulations. Based on the analytical results of the materials samples, the adherence to the Construction Standard would be required for the proposed demolition

activities at the site. Based on this information, EBI prepared an Asbestos O&M Plan for the Roadway Inn, EBI Project #11060309.

It should be noted that the visual asbestos screening survey conducted under the scope of this investigation does not constitute a full asbestos inspection, in which all areas of the buildings would have been thoroughly surveyed and sampled. The possibility exists for ACM to be present in areas of the buildings not accessed or sampled by EBI personnel.

Due to the continued distribution of a wide variety of asbestos-containing building materials, asbestos may be present in some of the roofing, flooring, caulking/putties, adhesives, spackling compounds, and/or non-accessible insulation materials at the Subject Property. Sampling of these types of materials requires techniques that may be destructive to subject facilities and in the case of roofing material may void warranties. It is recommended that all such possible asbestos-containing materials be tested prior to renovation or demolition activities that could disturb the materials. Any testing, removal, or disturbance of ACM should be handled in compliance with federal, state, and local regulations. Licensed, qualified asbestos abatement personnel should be retained prior to demolition or renovation of subject facilities.

3.5 RADON

Radon is a naturally-occurring, colorless and odorless radioactive gas that is generated primarily in granitic rocks. The United States Surgeon General has published information that radon is a cause of lung cancer. Radon usually enters a building through openings in the foundation, and therefore is a potential health concern to residents of the lowest level of a building with inadequate ventilation.

The EPA Map of Radon Zones indicates Mono County is in a Zone 2 radon area. Zone 2 is defined as areas that have a moderate potential for radon gas, with a predicted average indoor radon screening level between 2.0 picocuries per liter (pCi/L) and 4.0 pCi/L. The EPA guideline for radon is 4.0 pCi/L. In accordance with the scope of work for this ESA, a limited radon screening was not performed at the Subject Property.

3.6 LEAD-BASED PAINT (LBP)

Use of lead in household paint was banned by the Environmental Protection Agency (EPA) effective January 1, 1978. The EPA considers paint containing greater than 0.5% lead by weight to be "lead-based." Federal regulations specify that lead paint hazards must be abated in residential buildings occupied by children under the age six.

The painted surfaces observed at the Subject Property were in good condition. No areas of cracked or poor condition were noted at the Subject Property. EBI was unable to test for lead based paint by lead swab method based on the lack of chipping or pealing paint and the recent painting of the Subject Property interior within the last year.

Lead based paint testing and removal of any lead paint should be conducted prior to demolition of the Subject Property building and in accordance with applicable regulations.

3.7 LEAD IN DRINKING WATER

Lead has historically been used in pipes, solder, and brass fixtures used in water distribution systems and plumbing material. In 1986, EPA banned the use of lead at concentrations exceeding 0.2% lead in solder and 8% lead in other plumbing material. The Mammoth Lakes, California Water Department provides domestic water. According to personnel at this agency, potable drinking water is obtained from ground and surface water, and the most recent analytical testing data indicates compliance with Safe Drinking Water Act (SDWA) requirements.

3.8 EXTERIOR SURVEY

The following table summarizes issues on which the survey of exterior areas of the Subject Property focused:

EXTERIOR SURVEY		
ITEM	NOTED	LOCATION AND DESCRIPTION
Storage tanks		N/A
Unusual odors		N/A
Areas of asphalt patch or surface depressions		N/A
Containers not attributed to current use of the Subject Property		N/A
Oil-containing equipment	✔	Two pad-mounted transformers are located on the Subject Property (see *Section 3.10*).
Stained soil or pavement		N/A
Stressed vegetation		N/A
Fill material of questionable origin/ Piles		N/A
Wastewater		N/A
Monitoring Wells		N/A
Catch basins or dry wells		N/A
Septic systems		N/A

3.9 SOLID WASTE DISPOSAL

Solid waste generated at the Subject Property is typical domestic waste consisting of paper, plastics, and food refuse. Solid waste is collected in dumpsters located in enclosures throughout the Subject Property. No evidence of illicit dumping of solid waste was observed during EBI's site visit.

3.10 POLYCHLORINATED BIPHENYLS (PCBS) EQUIPMENT

PCBs were used in the dielectric fluid of some transformers and capacitors manufactured prior to 1979. The EPA banned the use of PCBs in 1978.

The electric transformers were installed in 1995 during renovations at the Subject Property. Based on the date of installation of the transformers, PCBs are not likely present in the transformer fluid. No other potential PCB-containing equipment was observed during the survey of the Subject Property.

3.11 PHYSICAL SETTING

TOPOGRAPHY
The Subject Property is at an elevation of approximately 7,841 feet above mean sea level (msl). The Subject Property is flat and sloped down gently to the north. The Subject Property is in a relatively hilly area (see *Figure 2-Subject Locus Map,* which is a portion of the *Old Mammoth, California* USGS Quadrangle). The overall slope of the surrounding area is down to the east.

GEOLOGY
Information concerning the geology of the Subject Property was obtained from the USGS Ground Water Atlas of the United States, California region (1995) and the Salem (MA) State College, Department of Geological Sciences website. The Subject Property is located within the Sierra Nevada physiographic province, which consists of rugged, glaciated, mountainous topography formed by large westward tilting fault blocks composed predominantly of large granitic batholiths/laccoliths that once lay beneath giant volcanic complexes.

HYDROLOGY/HYDROGEOLOGY
No surface water bodies are present on the Subject Property. The nearest surface water is Mammoth Creek, located approximately one mile south of the Subject Property. The Subject Property is located in a 500-Year flood zone.

Local groundwater gradient is expected to follow surface topography; therefore, groundwater flow near the Subject Property is expected to flow to the northeast. Groundwater depths and flow gradients are best evaluated by a subsurface investigation involving the installation of at least three groundwater monitoring wells and precise measurements of hydrostatic pressure. Monitoring wells were not observed on the Subject Property.

3.12 ADJACENT PROPERTIES

NORTH
The northern boundary of the Subject Property is adjacent to a retail mall named Mammoth Mall. No evidence of adverse environmental conditions was observed during the survey of the northern boundary of the Subject Property.

SOUTH
The Subject Property is bordered on the south by Condo's. No evidence of adverse environmental conditions was observed during the survey of the southern boundary of the Subject Property.

EAST
The Subject Property is bordered on the east by commercial retail properties. No evidence of adverse environmental conditions was observed during the survey of the eastern boundary of the Subject Property.

WEST

The Subject Property is bordered on the west by commercial properties and apartments and condominiums. No evidence of adverse environmental conditions was observed during the survey of the western boundary of the Subject Property.

4.0 SUBJECT PROPERTY AND VICINITY HISTORY

EBI attempted to determine the history of the Subject Property dating back to 1940 or first developed use. However, a *data failure* occurred per 7.3.2.3 of ASTM Standard E 1527-00. Specifically, EBI attempted to review previous reports, historic aerial photographs, city directories, fire insurance maps, and land title records; and conducted interviews. It should be noted that EBI could only identify records back to 1972. Regardless, based on the information obtained, it appears that the Subject Property was undeveloped prior to construction of the existing development. The discussion of the reviewed historical resources is provided below.

4.1 PREVIOUS ENVIRONMENTAL REPORTS

EBI was provided with a previous environmental site assessment performed for the Subject Property:

***Phase I Environmental Site Assessment*, Aspen Grill, 202 Old Mammoth Road, Mammoth Lakes, CA, performed by IVI, Inc. (IVI) of White Plains, NY dated October, 1997.** The IVI report available to EBI did not include appendix documentation. The ESA assessed 202 Old Mammoth Road, occupied by the Aspen Grill restaurant (*currently Igor's*), which is a portion of the current Subject Property. The ESA findings included the following:

- The oldest historic record was a topographic map from 1949, which indicated vacant land. The Site was reportedly unimproved land prior to the construction of the existing building, reportedly in 1968.
- No prior environmental reports were identified.
- No environmental sampling was performed.
- The building was reportedly constructed in 1968 and completely renovated in 1996; however, the source of these dates was not identified in the report by EBI.
- Based on the absence of visible friable suspect ACM and date of renovation, 1996, no suspect ACM was reported and no sampling and analyses for asbestos was conducted.
- No offsite or onsite environmental concerns were reported and no recognized environmental concerns were noted on the Subject Property. No further actions were recommended.

Portions of the previous report are included as an Appendix to this *Report*.

4.2 FIRE INSURANCE MAPS

No fire insurance maps were available for the Subject Property area. EBI examined fire insurance maps at the Los Angeles County Library. No map sets were available for the Subject Property area.

4.3 HISTORIC AERIAL PHOTOGRAPHS

EBI obtained historical aerial photographs from EDR, Inc for years 1972, 1988, and 1998. The historical aerial review depicted the Subject Property as being occupied by the current Subject Property hotel buildings in all photos. The 1972 photo did not include the Subject Property restaurants. The restaurant parcels were vacant land in 1972. The Subject Property vicinity was largely undeveloped in 1972 and primarily developed in 1988. No indications of environmental concerns were noted in the historical aerial review.

4.4 CITY DIRECTORIES

EBI attempted to obtain historical city directories at the Mono County Library and the Mono County Historical Society. Neither library had historical city directories for the Subject Property area.

4.5 INTERVIEWS

The following information was provided by individuals contacted by EBI in connection with the Subject Property.

INTERVIEW COMMENTS		
CONTACT	RELATION TO SUBJECT PROPERTY	DETAILS OF CONVERSATION
Mr. Paul Payne	Roadway Inn Principle	Mr. Payne stated that the Subject Property was vacant land prior to the construction of the current Subject Property buildings in 1970. Mr. Payne also stated that the Subject Property was historically utilized as a storage yard for above ground propane tanks for a short period of time prior to the current Subject Property construction. He stated that no UST were utilized at the Subject Property. Based on this information, the prior storage of propane tanks at the Subject Property is not suspected to pose and adverse environmental impact to the Subject Property.
Mr. Byron Pulman	Town of Mammoth Lakes Building Department	Mr. Pulman stated that the Subject Property was vacant land prior to the current development in 1970. Mr. Pulman also stated that there were no historical UST's at the Subject Property.

5.0 REGULATORY INFORMATION

5.1 PROCEDURE

A review of databases maintained by state and federal offices was completed through Environmental FirstSearch. The databases were searched for properties with reported environmental issues within radii specified by ASTM Standard E 1527-00, by using geocoding information that identified the coordinates of the properties in the databases or by checking the street addresses of practically reviewable non-geocoded "orphan" properties within the same zip code. The database report is included as an appendix to this *Report.*

The database report identified 24 "orphan sites." Orphan sites are those facilities which could not be automatically mapped or geocoded due to inadequate location information. EBI attempted to locate these facilities via vehicular reconnaissance and interviews with personnel familiar with the area. Based on this research, EBI did not identify listed orphan sites within the specified radii.

It should be noted that plotted locations of listed properties are not always accurate. With regard to listings that are determined or suspected to be inaccurate, based on information from other sources such as direct observation or consultation with individuals familiar with the property, EBI uses the best available data when evaluating the location of listed properties discussed below.

5.2 FEDERAL OFFICE RECORDS

NATIONAL PRIORITY LIST (NPL) FACILITIES

The NPL Report, also known as the Superfund List, is an EPA listing of the nation's worst uncontrolled or abandoned hazardous waste facilities. Listing as a Superfund Site is primarily based on a score that the facility receives from the EPA's Hazard Ranking System. These facilities are targeted for possible long-term remedial action under the Superfund Act. The NPL indicated that no NPL facilities are located within one mile of the Subject Property.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM (CERCLIS) AND NO FURTHER REMEDIAL ACTION PLANNED (CERCLIS-NFRAP) FACILITIES

CERCLIS is a compilation of the facilities EPA has investigated or is currently investigating for a release or threatened release of hazardous substances. The updated EPA Superfund Program CERCLIS List indicates that no CERCLIS facilities are located within ½-mile of the Subject Property. No CERCLIS-NFRAP facilities were identified on or adjacent to the Subject Property.

CORRECTIVE ACTION TRACKING SYSTEM (CORRACTS)

CORRACTS is a list of facilities that are found to have had hazardous waste releases and require Resource Conservation and Recovery Act (RCRA) corrective action activity, which can range from site investigations to remediation. According to the CORRACTS list, no CORRACTS facilities are located within one mile of the Subject Property.

RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM (RCRIS)

The RCRIS report of hazardous waste generators and treatment, storage, and disposal (TSD) facilities contains information pertaining to facilities that are required to register their hazardous waste activity under RCRA. According to the RCRIS list, no RCRA TSD facilities are located within ½-mile of the Subject Property.

RCRA hazardous waste generators are identified as Large Quantity Generators (LQGs), Small Quantity Generators (SQGs), or Conditionally Exempt Small Quantity Generators (CESQG). RCRA LQGs are identified as those facilities which generate at least 1,000 kilograms (2,200 pounds) of non-acutely hazardous waste (or 1 kilogram of acutely hazardous waste) monthly. RCRA SQGs are identified as those facilities that generate less than 1,000 kilograms of non-acutely hazardous waste monthly. According to the RCRIS list, **no** RCRA facilities were identified on or adjacent to the Subject Property.

EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)
The ERNS is a national database used to collect information on reported releases of petroleum products or hazardous substances. The database contains information from spill reports made to federal authorities including the EPA, the U.S. Coast Guard, the National Response Center and the U.S. Department of Transportation. A review of this database was made in order to determine if any spills or incidents involving releases of petroleum products or hazardous substances have occurred at the Subject Property. According to this updated ERNS database, the Subject Property is **not** on file as being a release site.

5.3 STATE OFFICE RECORDS

STATE HAZARDOUS WASTE FACILITIES
The state list of hazardous waste disposal facilities indicates that **no** state hazardous waste facilities are located within ½-mile of the Subject Property.

LEAKING UNDERGROUND STORAGE TANKS (LUSTS)
According to the state LUST site list, **one** LUST site is located within ½-mile of the Subject Property. The following table presents the listed facility:

LEAKING UNDERGROUND STORAGE TANK FACILITIES			
NAME / ADDRESS	DISTANCE / DIRECTION / GRADIENT	REPORT DATE / SUBSTANCE / MEDIA AFFECTED	STATUS
Mammoth Shell Station Hwy 203 and Mammoth Road	0.32 mile / northeast / downgradient	1991 / Gasoline / Soil Only	Case "Closed"

The LUST listings identified in the database is not suspected to have an adverse environmental impact on the Subject Property based on one or more of the following rationale: a) the distance from the Subject Property; b) the down-gradient location with respect to the assumed groundwater flow direction; c) the nature of the reported release (e.g., soil only); and/or d) the regulatory status (e.g., case closed).

STATE REGISTERED UNDERGROUND STORAGE TANKS (USTS)
According to the state UST database, **no** active UST facilities are located on or adjacent to the Subject Property.

SOLID WASTE LANDFILLS
According to the State Active List of Solid Waste Landfill facilities, **no** reported landfills are located within ½-mile of the Subject Property.

5.4 LOCAL OFFICE RECORDS

Local offices consulted during the preparation of this *Report* included the Mammoth Building, Planning, Engineering, and Fire Departments. No documented adverse environmental conditions or complaints were reported at the Subject Property and readily on file at these offices. The local offices did not contain records of spills or releases having occurred at the Subject Property.

EBI obtained a Preliminary Title Report from Coldwell Banker realty for the hotel property at 164 Old Mammoth Road. Item number 16 in the preliminary title report indicates: "The effect of a 'Hazardous Substance Certificate and Indemnity Agreement" executed by Sierra Nevada Association, LP and Marina Village, LLC executed on March 1, 2000 and recorded on March 7, 2000 in book 894 page 531 of official Mono County Records. According to Mr. Payne, the principle of the Subject Property owner, this document was executed to relieve Marina Village from liability for potential environmental concerns on the Subject Property when Marina Village acquired an interest in the Subject Property. According to Mr. Payne, the document was executed for the purpose of not requiring a Phase I ESA on the Subject Property at that time. Mr. Payne also stated that a previous Phase I ESA was conducted in 2000 which revealed no evidence of environmental concern. However, he was unable to locate the document. Based on Mr. Payne's statements, the tax assessor's record of a Hazardous Substance and Indemnity Agreement is not indicative of previous contamination suspected to pose and adverse environmental impact to the Subject Property. No further action is recommended at this time.

EBI submitted a FOIA request to the Mono County Assessors Office for information regarding above Hazardous Substance Certificate. As of the date of this *Report* EBI has not received a response to this inquiry. Upon receipt of the agency response, if the provided information has a material affect on the findings of this *Report*, EBI will forward the new information, together with revised findings, as an addendum to this *Report*. If no response is received or no material violations are noted, our *Report* will not be modified.

6.0 FINDINGS AND OPINIONS

EBI has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard E 1527-00 of the Subject Property. Any exceptions to, or deletions from, this practice are described in *Section 1.0* of this *Report*. This assessment has revealed no evidence of recognized environmental conditions in connection with the Subject Property.

The following non-ASTM condition was evaluated:

- Suspect ACM was not observed at the Igor's or Ocean Harvest Restaurants; therefore, no sampling and analyses for ACM were conducted by EBI at these locations. In addition, significant tenant improvements/renovations were reportedly conducted at both restaurants during the 1990s; therefore, ACM is not likely present within the construction materials installed during the 1990s.
- Suspect ACM in the form of Acoustic Ceiling Spray (ASC), drywall, vinyl floor tile and roofing materials were identified in the Roadway Inn building. These materials were observed to be in generally good condition. Based on the construction date (1970), EBI collected representative samples of these materials for laboratory analysis. The samples were submitted to Environmental Hazards Services LLC for analysis of asbestos content by polarized light microscopy (PLM). As a result of the analysis, floor tile mastic was found to contain <1% asbestos.
- Cal/OSHA defines asbestos containing construction material (ACCM) as any building material that contains more than 0.1 percent (one-tenth of one percent) asbestos by weight. In addition, those building materials presumed or known to contain at least trace amounts (less than 1 percent) of asbestos should be considered as ACCM, and should be managed according to Cal/OSHA regulations. Based on the analytical results of the materials samples, the adherence to the Construction Standard would be required for the proposed demolition activities at the site. Based on this information, EBI prepared an Asbestos O&M Plan for the Roadway Inn, EBI Project #11060309. No further actions are recommended at this time.

7.0 RECOMMENDATIONS

No further action or investigation is recommended.

8.0 REFERENCES

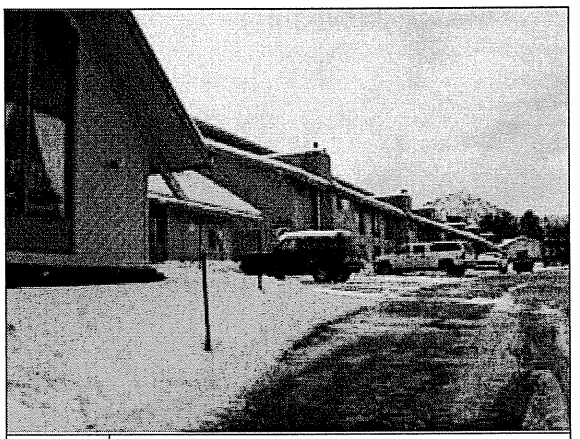
8.1 REFERENCES CONTACTED

A number of sources were contacted during the preparation of this *Report*. The following individuals were interviewed, and state, county or local municipal departments consulted. Documentation applicable to the Subject Property in those departments was requested and reviewed when and where reasonably ascertainable, as detailed in ASTM Standard E 1527-00. Individuals listed without phone numbers were contacted in person or by e-mail.

PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT REFERENCES					
RESOURCE	ADDRESS	CONTACT	INFORMATION PROVIDED	PHONE OR WEB	DATE
Mammoth Lakes, California Building Inspection Office	Mammoth Lakes, California	Mr. Byron Pulman	Code compliance & violations, Certificates of Occupancy	760.934.8989	11/30/05
Mammoth Lakes, California Planning & Zoning Office	Mammoth Lakes, California	Mr. Byron Pulman	Zoning information	760.934.8989	11/30/05
Mammoth Lakes, California Tax Assessors Office	270 N. See Vee Lane Bishop, CA	Email	Subject Property ownership & size information	760.872.6111	11/30/05
Mammoth Lakes, California Fire Department	Mammoth Lakes, California		Fire history & code violations	760.934.8989	11/30/05
EPA Radon Zones Map	http://www.epa.gov/iaq/radon/zonemap.html	Website	Radon Zones Map	Website	11/30/05
National Wetlands Inventory	http://wetlandsfws.er.usgs.gov/	Website	National Wetlands Inventory Maps	Website	11/30/05
Flood Insights, Transamerica Flood Hazard Certification	http://Floodinsights.com	Website	Flood maps	Website	11/30/05
Topozone.Com	In office program	EBI Consulting	USGS Topographic Map	In Office	11/30/05
Los Angeles Public Library	630 W. 5th St., Los Angeles, CA 90071	www.lapl.com	Sanborn Fire Insurance Maps	www.lapl.com	11/30/05
Mono County Environmental Health Department	Bishop, CA	Mr. Martin Schlich	Hazardous Material's/ UST's / AST's	760.924.1830	11/30/05

APPENDIX A

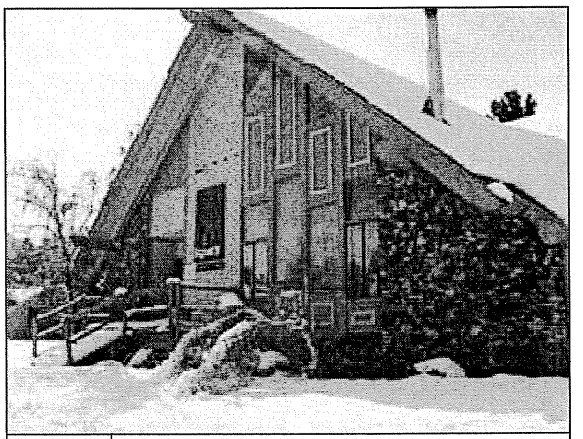
PHOTOGRAPHS



1.	Hotel Subject Property viewed from Street in front of the property.



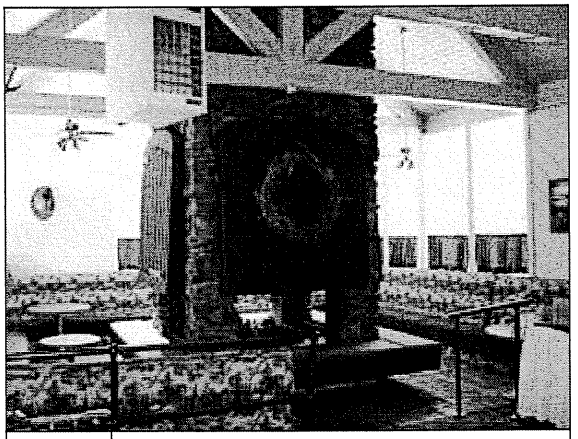
2.	Restaurant Subject Property viewed from in front of the property.



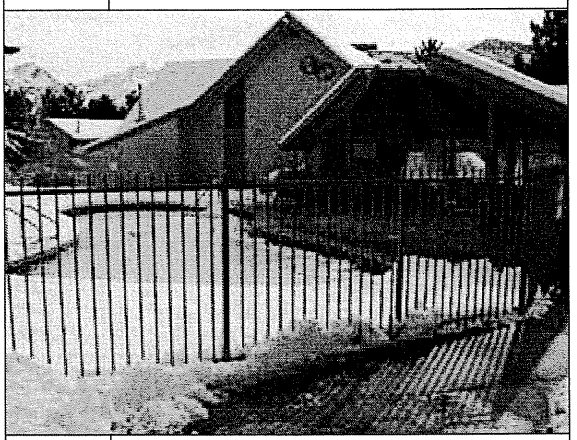
3.	Restaurant Subject Property viewed from in front of the property.



4.	Hotel interior.



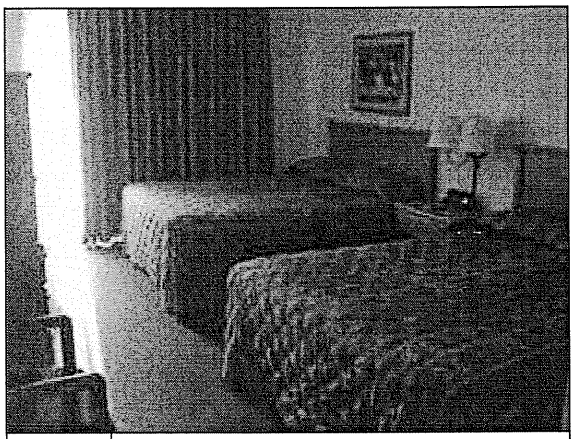
5.	Subject Property interior.



6.	Pool area of hotel.



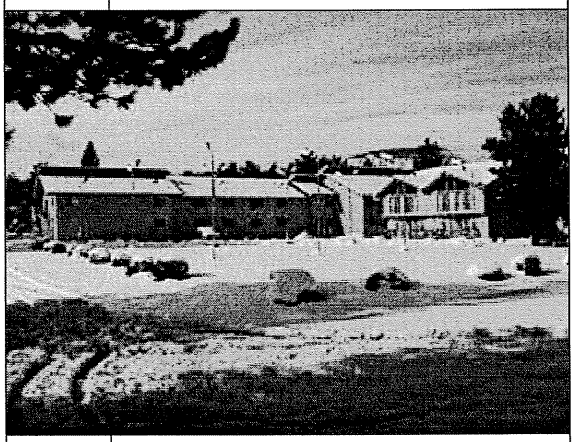
7.	Hotel interior.



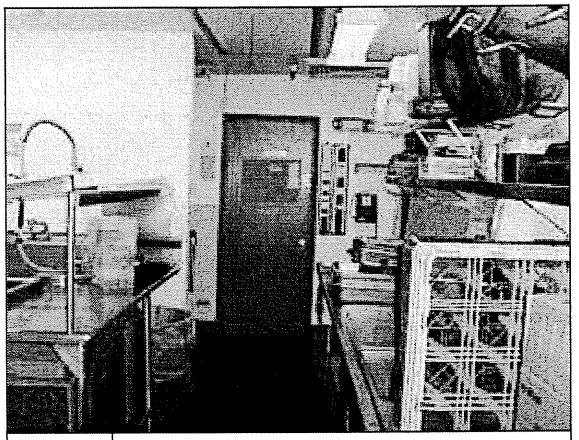
8.	Hotel interior.



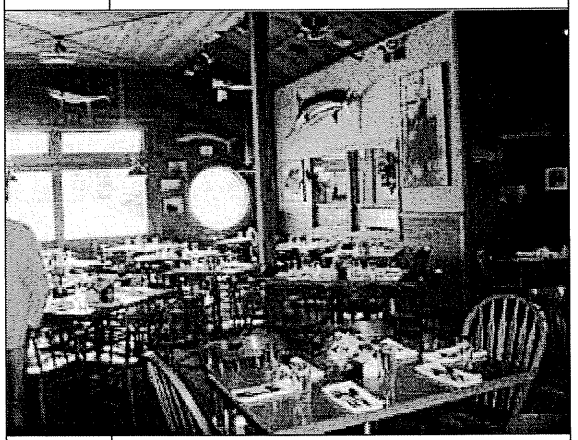
9.	Hotel interior.



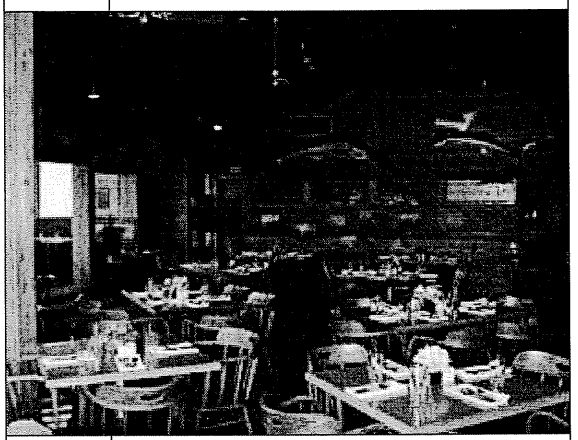
10.	Hotel exterior.



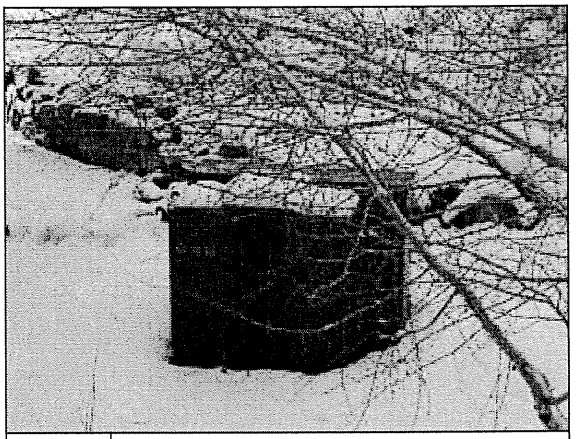
11.	Restaurant interior.



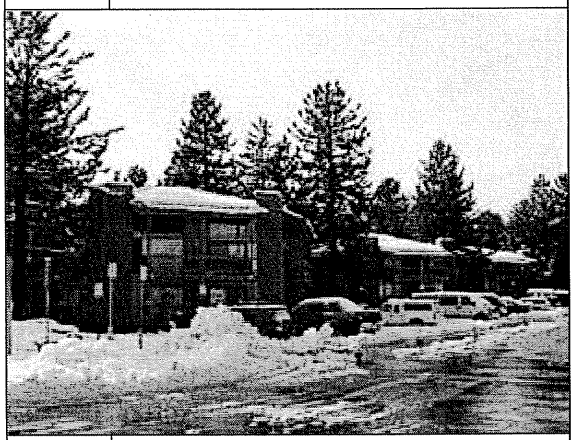
12.	Restaurant interior.



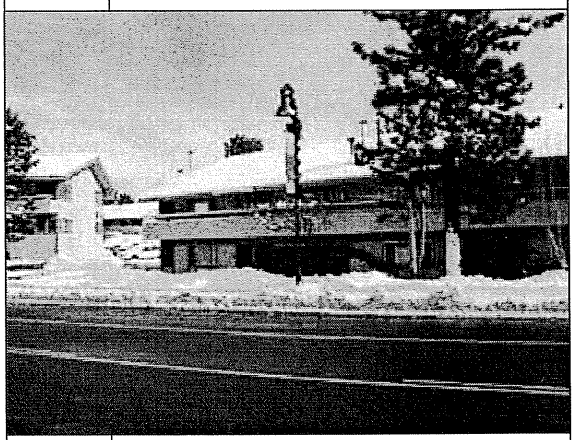
13.	Restaurant interior.



14.	Transformer.



15.	Southern view from the Subject Property.



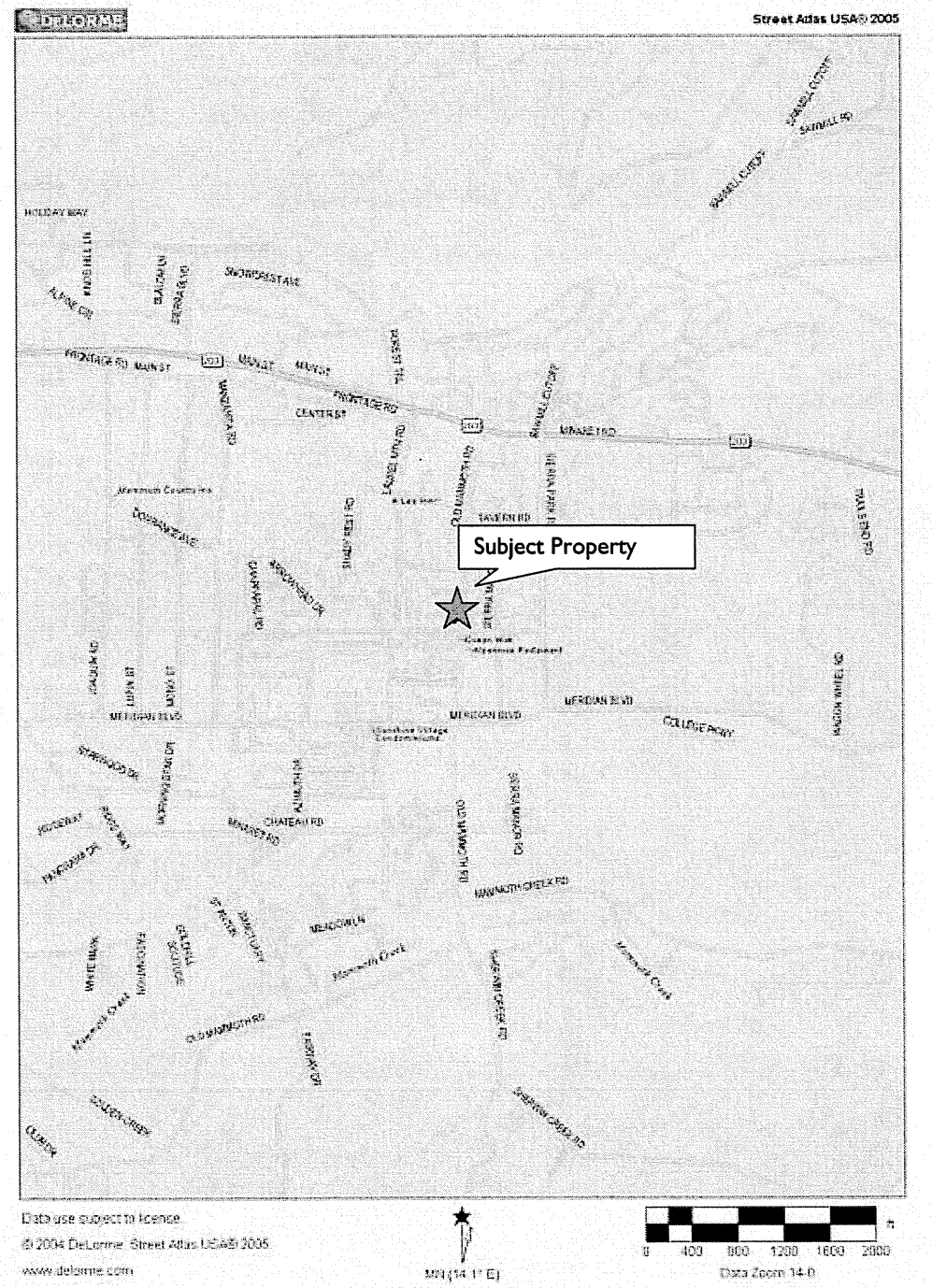
16.	Eastern view from the Subject Property.



17.	Northern view from the Subject Property.

APPENDIX B

FIGURES, DRAWINGS AND MAPS

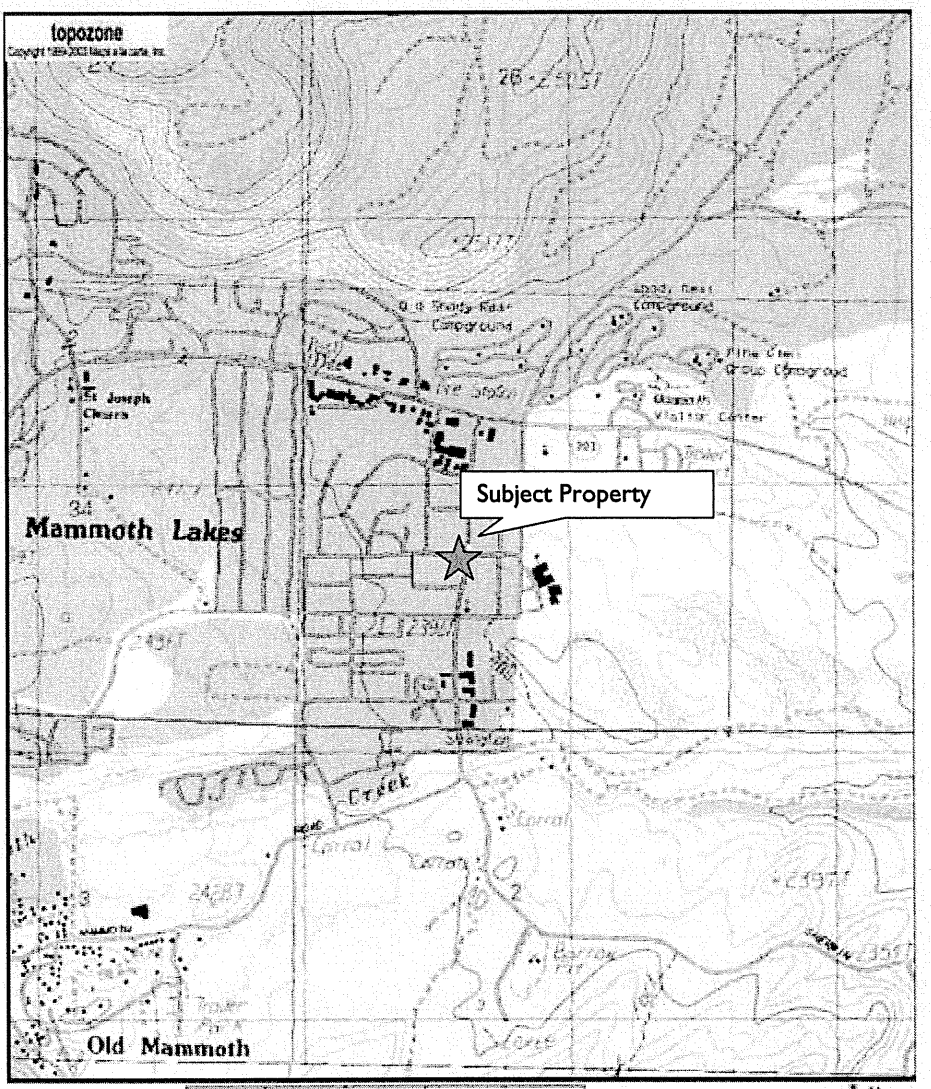


EBI CONSULTING

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA

N

Figure 1: Location Map



http://www.topozone.com/print.asp?z=11&n=4167969.43849652&e=326512.842201377&s... 2/8/2006

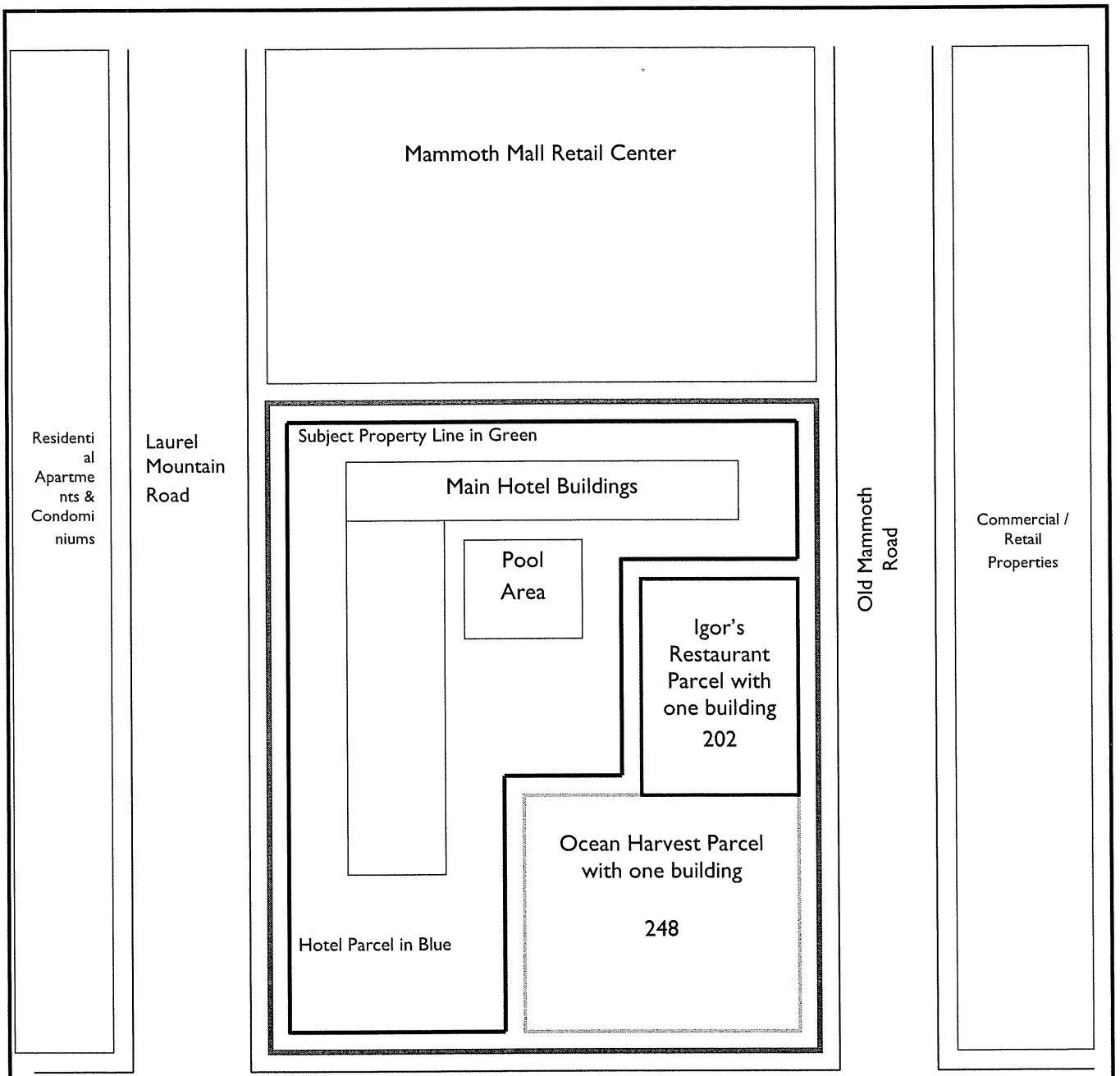
EBI CONSULTING

Figure 2: Locus Map

A portion of the Old Nannoth
GS 7.5x15 Minute Quadrangle Scale 1:24,000

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA

N



EBI CONSULTING

FIGURE 3: SITE PLAN

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA
EBI PROJECT #11054856

N

NOT TO SCALE

APPENDIX C

OTHER RELEVANT DOCUMENTS

Flood Insights test results for :

Latitude: 37.642405 Longitude: -118.966402
Geocoding Accuracy: Not Available

Flood Zone Determinations

Test Description

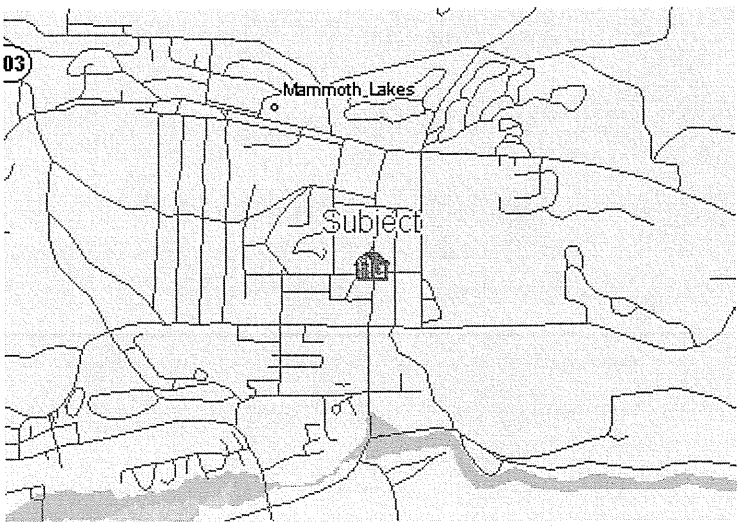
SFHA (Flood Zone) Within 250 feet of multiple flood zones?

Out No

Community	Community Name	Zone	Panel	Panel Date	Cobra
060724	MAMMOTH LAKES, TOWN OF	X	0002B	September 30, 1992	OUT

FIPS Code	Census Tract
06051	0002.00

Copyright 2000, First American Flood Data Services. All rights reserved.



FloodMap Legend

Flood Zones

- Areas inundated by 500-year flooding
- Areas outside of the 100- and 500-year floodplains
- Areas inundated by 100-year flooding
- Areas inundated by 100-year flooding with velocity haza
- Floodway areas
- Floodway areas with velocity hazard
- Areas of undetermined but possible flood hazards
- Areas not mapped on any published FIRM

powered by
RiskMeter.com
617 737 4444
www.cdys.com

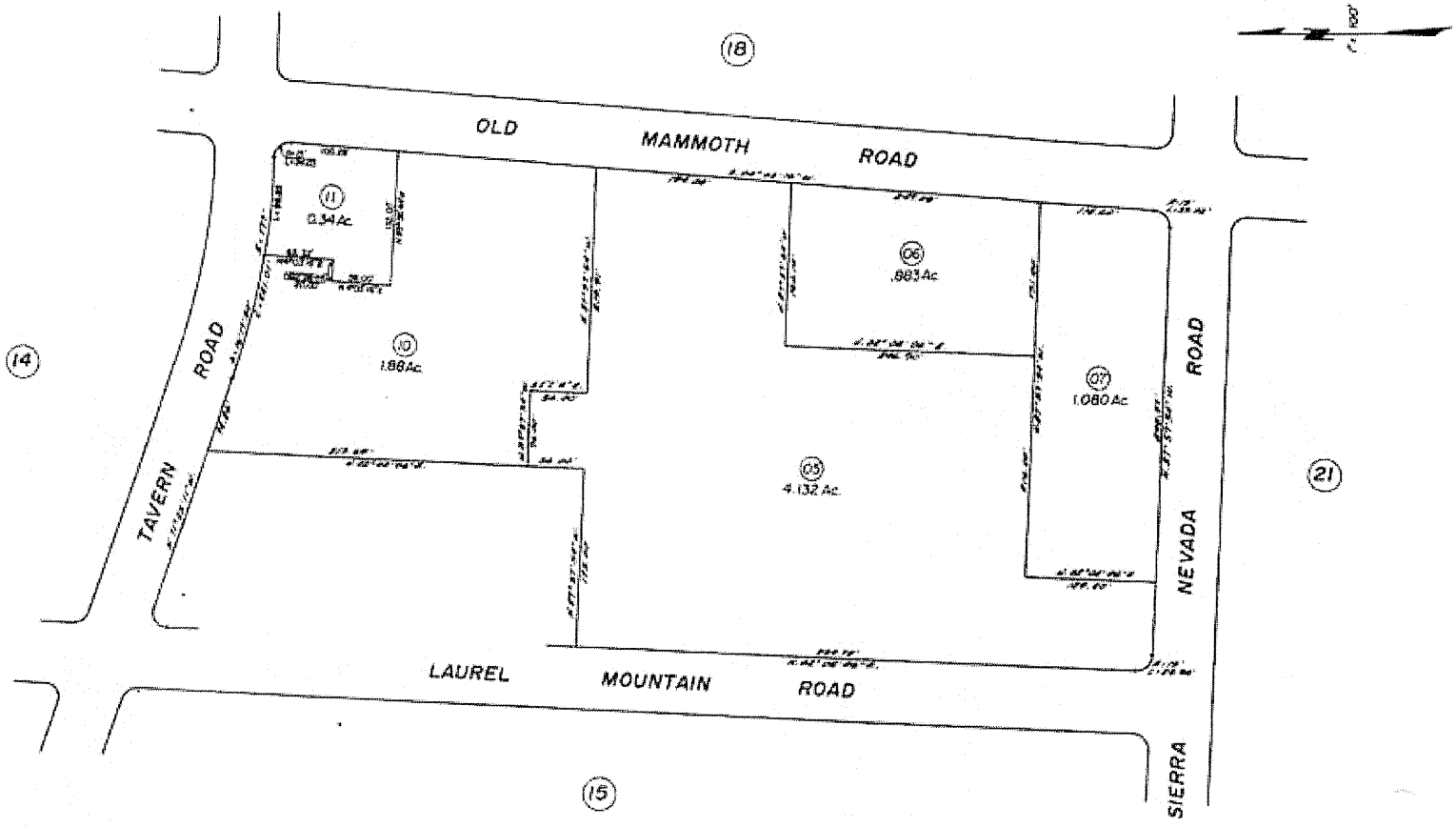
This report was generated by: ebi on 11-21-2005

This Report is for the sole benefit of the Customer that ordered and paid for the Report and is based on the property information provided by that Customer. That Customer's use of this Report is subject to the terms agreed to by that Customer when accessing this product. No third party is authorized to use or rely on this Report for any purpose. NEITHER FIRST AMERICAN FLOOD DATA SERVICES NOR THE SELLER OF THIS REPORT MAKES ANY REPRESENTATIONS OR WARRANTIES TO ANY PARTY CONCERNING THE CONTENT, ACCURACY OR COMPLETENESS OF THIS REPORT, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Neither TFHC nor the seller of this Report shall have any liability to any third party for any use or misuse of this Report.

POR. NW¼ & SW¼ SEC. 35 T.3S., R.27E., M.D.B.&M.

Tax Area Code
10-17

35-23



M.O.R. - P/M 36-47, Bk.2 Pg.5, 5A

Assessor's Map Bk. 35 – Pg. 23
County of Mono, Calif.

NOTE - Assessor's Block Numbers Shown in Ellipses.
Assessor's Parcel Numbers Shown in Circles.

THE BENEFICIAL INTEREST OF RECORD UNDER SAID DEED OF TRUST WAS ASSIGNED
TO : SALOMON BROTHERS REALTY CORP.
BY ASSIGNMENT DATED : JANUARY 27, 1998
RECORDED : FEBRUARY 11, 1998, IN BOOK 0789, PAGE 349, OF OFFICIAL RECORDS

AN "ASSIGNMENT OF ASSIGNMENT OF LEASE AND RENTS"
RECORDED : FEBRUARY 11, 1998 IN BOOK 789 PAGE 354 OF OFFICIAL RECORDS
EXECUTED BY : SUBURBAN CAPITAL MARKETS, INC.
IN FAVOR OF : SALOMON BROTHERS REALTY CORP.
DATED : JANUARY 27, 1998

AN ASSIGNMENT OF DEED OF TRUST AND ASSIGNMENT OF LEASES AND RENTS
RECORDED : OCTOBER 16, 2002 AS INSTRUMENT NO. 2002008559 OF OFFICIAL RECORDS
EXECUTED BY : SALOMON BROTHERS REALITY CORP.
TO : BEAL BANK, S.S.B.
DATED : JUNE 25, 2002

AN ASSIGNMENT OF ASSIGNMENT OF LEASES AND RENTS
EXECUTED BY : BEAL BANK S.S.B.
IN FAVOR OF : BEAL BANK SAVINGS BANK
DATED : SEPTEMBER 7, 2004
RECORDED : NOVEMBER 2, 2004 AS INSTRUMENT NO. 2004009889 OF OFFICIAL RECORDS

AN ASSIGNMENT OF DEED OF TRUST, ASSIGNMENT OF RENTS, SECURITY AGREEMENT AN FIXTURE FINANCING STATEMENT
DATED : SEPTEMBER 7, 2004
EXECUTED BY : BEAL BANK S.S.B.
IN FAVOR OF : BEAL SAVINGS BANK
RECORDED : NOVEMBER 2, 2004 AS INSTRUMENT NO. 2004009890 OF OFFICIAL RECORDS

15. A DEED OF TRUST TO SECURE AN INDEBTEDNESS OF THE ORIGINAL AMOUNT SHOWN BELOW
DATED : MARCH 1, 2000
AMOUNT : $4,600,000.00
TRUSTOR : SIERRA NEVADA ASSOCIATES, L.P., A CALIFORNIA LIMITED PARTNERSHIP
TRUSTEE : FIRST AMERICAN TITLE INSURANCE COMPANY
BENEFICIARY : FIRST NATIONAL BANK OF NEVADA
RECORDED : MARCH 7, 2000, IN BOOK 0894, PAGE 522, OF OFFICIAL RECORDS

AN INSTRUMENT PURPORTS TO MODIFY THE TERMS OF SAID DEED OF TRUST AS THEREIN PROVIDED
EXECUTED BY : FIRST NATIONAL BANK OF NEVADA, RENO, NEVADA
DATED : APRIL 30, 2002
RECORDED : MAY 2, 2002, AS INSTRUMENT NO. 2002003334, OF OFFICIAL RECORDS.

16. THE EFFECT OF A "HAZARDOUS SUBSTANCE CERTIFICATE AND INDEMNITY AGREEMENT"
EXECUTED BY: SIERRA NEVADA ASSOCIATION, L.P. A CALIFORNIA LIMITED PARTNERSHIP AND MARINA VILLAGE, LLC, A NEVADA CORPORATION
DATED : MARCH 1, 2000
RECORDED : MARCH 7, 2000 IN BOOK 894 PAGE 531 OF OFFICIAL RECORDS

17. A DEED OF TRUST TO SECURE AN INDEBTEDNESS OF THE ORIGINAL AMOUNT SHOWN BELOW
DATED : MARCH 2, 2000
AMOUNT : NOT SHOWN
TRUSTOR : SIERRA NEVADA ASSOCIATES, L.P., A CALIFORNIA LIMITED PARTNERSHIP
TRUSTEE : FIRST AMERICAN TITLE COMPANY, A CALIFORNIA CORPORATION
BENEFICIARY : WARREN I-80, LLC, A NEVADA LIMITED LIABILITY COMPANY
RECORDED : MARCH 7, 2000, IN BOOK 0894, PAGE 537, OF OFFICIAL RECORDS

SAID DEED OF TRUST IS SUBJECT TO THE DEED OF TRUST SHOWN AS EXCEPTION NO. 14 ABOVE.

APPENDIX D

PROFESSIONAL QUALIFICATIONS

EBI CONSULTING

Tiffany L. Grant REA, CAC, CLP
Environmental Scientist

SUMMARY OF EXPERIENCE

Ms. Grant has three years of experience in conducting environmental due diligence assessments. Over the last five years, Ms. Grant has conducted Industrial Hygiene Surveys, Asbestos, Lead and Mold inspections, indoor air quality surveys, and hearing conservation studies.

RELEVANT PROJECTS AND EXPERIENCE

- Ms. Grant was formerly an Associate Industrial Hygienist and Project Manager with an Environmental firm in Southern California. During this time, Ms. Grant organized engineers, scientists, industrial hygienists, and administrative staff in completing large scale and complex projects for School District renovations.

- Ms. Grant conducted many large AHERA Asbestos inspections and re-inspections. She conducted and managed Lead Surveys, Hearing Conservation Studies, hazardous materials identification, disposal, and assessment of soil and water contamination. Ms. Grant provided risk reduction of many environmental factors including mold, fiberglass, and many chemicals and biological toxins and viruses in various industries from Cotton and DNA Manufacturing Plants to Tuberculosis Clinics.

- Ms. Grant managed projects assessing Indoor Air Quality (IAQ) including CO, CO2, Humidity, Temperature, and Bioaerosols. She managed large scale Mold Projects including sampling inspection design, risk assessment and risk reduction.

EDUCATION

Bachelors of Science in Earth Systems Science & Policy, California State University of the Monterey Bay.

Graduate Studies in Marine Scientific Research Methods, Moss Landing Marine Laboratories, California

Juris Doctorate in Progress, Chapman University School of Law, California

CERTIFICATIONS/ PROFESSIONAL AFFILIATIONS

Registered Environmental Assessor (REA) - # 07796
Certified Asbestos Consultant (CAC)– #91-2941
Certified Lead Professional (CLP) – # 9584
Trimble™ GPS/GIS Certified
American Industrial Hygiene Association (AIHA) – Member
Environmental Section of the California Bar - Member

SUMMARY OF EXPERIENCE

Project Manager – Terra Vac Corp
On-site project manager responsible for groundwater monitoring and Remediation Action Operations (RAO) at the Marine Corp Air Station (MCAS) Yuma, Arizona (CERCLIS Site). Supervise all work performed at the Site. Responsibilities include project planning, scheduling, staffing, executing tasks and subcontracts, and managing deliverables.

Project Manager – Terra Vac Corp
On-site project manager responsible for groundwater monitoring and Remediation Action Operations (RAO) at an active oil refinery. On-site RAO include O&M and performance monitoring/modifications of: air sparge wells, 21,000 SCFM vapor extraction unit, vapor extraction wells, dual phase vapor extraction (free product recovery). In addition, project manager responsibilities include: personnel management and safety training, data QA/QC and analysis, quarterly groundwater monitoring report and RAO report preparation.

Project Manager – Emg
Consulting services, Conduct Phase I Environmental Site Assessments (ESAs); conduct Phase II ESAs including: subsurface investigations to identify potential soil and/or ground water contamination; geophysical methods to determine presence of underground storage tanks. Project management of remediation of contaminated soil (VOCs, hydrocarbons, metals) by removal, coordinate site closure with regulatory authorities and prepare closure documentation; perform third party environmental assessment report reviews; perform government agency file reviews; report writing. Conduct comprehensive and limited asbestos surveys; conduct limited screening for lead and radon.

Project Geologist - Wzi, Inc
Prepare permit applications for Class III landfill, mine and cogeneration facilities. Permit application preparation includes: Report of Waste Discharge, Report of Disposal Site Information, Conditional Use Permit, Closure/Post Closure Plan and Authority to Construct. Perform Phase I/II ESA's, prepare reports and perform computer data reduction and data interpretation.

Project Geologist - Virogroup - Ete Division
Project management for certification of closure of Class I landfill units; perform Phase I ESA's, conduct business development and proposal preparation; geologic mapping; boring construction and sampling for hazardous waste landfills in California; vadose zone assessments; data reduction, and report preparation.

Senior Field Engineer - Schlumberger Well Service
Responsible for well site wireline data acquisition (electric, radioactive, and acoustic wireline tools), data processing, and interpretation for hydrocarbon assessments; manage field crew and conduct personnel safety training.

EDUCATION

Master of Science, Geophysics, North Carolina State University, Raleigh, North Carolina
Bachelor of Science, Geology, University Of Washington, Seattle, Washington

REGISTRATIONS/CERTIFICATIONS

RG-6183	Registered Geologist, California
PG-2103	Registered Geologist, Florida
REA-04421	Registered Environmental Assessor (1), California
40 Hour	Health & Safety training

EBI CONSULTING

Daniel Spinogatti Jr.
Vice President, Western Operations

SUMMARY OF EXPERIENCE

Mr. Spinogatti manages EBI's western regional operations. He manages assessment projects for EBI's financial and real estate clients throughout the southwest. He has over twelve years of environmental and property condition assessment experience, and is a registered Professional Geologist and a Registered Environmental Manager.

Mr. Spinogatti's specialty is with multifamily environmental and engineering assessments, including Fannie Mae, Freddie Mac, and HUD scopes of work. His technical expertise also includes hydrology, water treatment, soil/groundwater remediation, and use of constructed wetlands for water quality improvement.

Mr. Spinogatti earned his M.S. in Hydrology/Hydrogeology from the University of Nevada, and a B.S. in Environmental Studies from Richard Stockton College of New Jersey. He has additional technical and professional training in: HUD 3rd Party Multifamily Accelerated Processing (MAP), Property Condition Assessments, AHERA Asbestos Building Inspector, and Strategies for Conducting Indoor Air Quality Investigations.

RELEVANT PROJECT EXPERIENCE

Various Property Owners/Purchasers and Commercial Real Estate Lenders
Performed site investigations and remedial actions at over 500 sites across the country, including Phase I Environmental Site Assessments, Phase II subsurface investigations, and Property Condition Assessments at commercial properties in Alabama, Arizona, California, Florida, Georgia, Hawaii, Indiana, New Mexico, New Jersey, New York, Nevada, North Carolina, Oklahoma, Oregon, Pennsylvania, Puerto Rico, Texas, and Washington.

HUD Project Experience
Between 1999 and 2002, Mr. Spinogatti has served as project manager for Environmental Site Assessments and Physical Needs Assessments on multi-family apartment complexes, nursing homes, and proposed development projects on over fifty HUD projects, including:

- I-90 Pleasant Hill Village Apartments, 1714 N. 7th Street, Rapid City, SD / ESA & PNA
- Stonegate Villas Apartments, 2501 Oak Hill Circle, Fort Worth, TX / ESA & PNA
- Gainesville Convalescent Center, 1900 ONeal Street, Odessa, TX / ESA & PNA
- Mountain Paradise Village Apartments, 5800 Meikle Lane, Las Vegas, NV / PNA
- Falcon Point Apartments, 3806 Marietta Drive, Indianapolis, IN / ESA & PNA
- Seabrook Apartments, 6730 Everhart Road, Corpus Christi, TX / ESA
- Proposed Assisted Living Facility, 403 E. Sample Road, Pompano Beach, FL / ESA
- Proposed Shaker Point Apartments, New Haven Road, Harrison, OH / ESA
- Marina Landing Resort, 7302 Heards Lane, Galveston, TX / ESA & PNA
- Plantation Apartments, 5555 E. 47th Place, Tulsa, OK / PNA

- Lake Chateau Apartments, 2005 Pine Tree Boulevard, Thomasville, GA / ESA & PNA
- Chasco Woods Apartments, 8225 Chasco Boulevard, Port Richey, FL / PNA
- Proposed Sycamore Woods Apartments, 1441 Lebannon Pike, Nashville, TN / ESA

Additionally, Mr. Spinogatti's consulting experience includes the following:

Environmental Consultant for Fannie Mae Legal Department
Has conducted reviews and provided expert opinions on over 300 residential properties located nationwide since mid-1999. Properties are being considered for forclosure and/or re-sale and have various environmental issues that need to be resolved, including: underground storage tanks, mold contamination, drug-lab contamination (cleanup of former methamphetamine labs), asbestos issues, lead-paint issues. Mr. Spinogatti provides opinions and options based on the regulatory requirements in the specific state and will work to coordinate subcontractors to oversee cleanup, when requested. Mr. Spinogatti conducted multiple seminars at the 2000 Fannie Mae Vendors conference in Dallas, Texas, which consisted of a session entitled "Spills, Spores, and Other Environmental Concerns".

U.S. Army Corps of Engineers, Philadelphia District
Program manager for a Superfund remediation project ($1.8 mil/yr, 12 employees) involving cleanup of jet fuel contaminated groundwater at the Federal Aviation Administration's William J. Hughes Technical Center in Pomona, New Jersey. Developed and revised the operations & maintenance manual for the Area D site.

Pyramid Lake Paiute Tribe, Numana Hatchery, Pyramid Lake, Nevada
Researched, designed, and constructed a free water surface (FWS) wetlands system during 1993-96 to improve effluent water quality of the Numana Hatchery, Nevada. The total project cost was $400,000. Presented scientific research results at national conferences of several professional organizations including the Geological Society of America and the American Society of Civil Engineers.

Battle Mountain Wastewater Treatment Plant, Lander County, Nevada
Conducted a constructed wetlands feasibility study ($30K cost) in 1997, including hydrogeologic assessment and construction cost analysis. Demonstrated that the constructed wetland option was the least-costly option for achieving project wastewater treatment goals. Evaluated the impact of a proposed WWTP discharge to the Humboldt River by conducting computer water quality modeling using QUAL2E. Concluded that only negligible impact would occur. Presented findings to the Nevada Division of Environmental Protection (NDEP) and obtained regulatory permitting approval for the project. Served as a consultant to the County Engineer (Shaw Engineering Inc.), Lander County Commissioners, and the Town of Battle Mountain to implement subsequent $5M renovation project.

U.S. Army Corps Of Engineers, Mobile District
Implemented an Environmental Compliance Assessment System (ECAS) at 31 Puerto Rico Army National Guard facilities in 1993, consisting of UST/AST investigations and hazardous waste inventories. Directly responsible for UST/AST field inventories, reporting, compliance status, and presentation to USACE and PRANG officials. The ECAS portion of the contract amounted to approximately $300,000. Set up a satellite office in Puerto Rico; required 3 months of travel to urban and remote locations.

Exxon Company, USA, NJ, & Privately-Owned Petroleum Service Stations
Supervised remedial actions including groundwater pump-and-treat systems and soil vapor extraction (SVE). Responsible for a wide range of underground storage tank (UST) management services. Obtained closure permits and coordinated with construction sub-contractors and laboratories. Supervised and directed site construction activities. Conducted hydrogeologic investigations. Drafted groundwater contour maps and contaminant isopleth maps. Prepared technical Site Assessment Reports and Remedial Investigation Reports.

Lahontan Project, Truckee, California
Managed surface water issues at 740 acre residential subdivision and golf course site. Modeled surface water quality and conducted quarterly sampling and flow measurements of streams and runoff to demonstrate minimal impacts. Conducted erosion control planning and construction monitoring. Supervised and directed construction crews during method installation. Obtained water quality certification (Section 404) for the project from the Army Corps of Engineeers, Sacramento District. Conducted monitoring during a 100-year storm event and demonstrated erosion control proficiency.

Various Property Owners in Nevada and California
Managed multiple environmental projects involving regulatory permitting for water quality and stormwater issues, wetland delineations, and constructed wetland projects at multiple riparian areas and development sites in northern Nevada and California. Provided expertise in technical and regulatory report writing, PC-based computer applications, and hydrological modeling. Developed methodoloy to ascertain the presence of wetland hydrologic conditions by modeling the vadose and saturated zones using a hydrogeologic computer model (HYDRUS-2D). Interacted with regulatory agencies including the State of California Water Quality Control Board (Lahontan Region), Nevada Division of Environmental Protection, and the U.S. Army Corps of Engineers.

EDUCATION

M.S. Hydrology/ Hydrogeology — University of Nevada, Reno
B.S Environmental Studies — Richard Stockton College of New Jersey, Pomona, New Jersey

PROFESSIONAL TRAINING AND REGISTRATIONS

- Property Condition Assessment: "ASTM Technical Professional Training, Property Condition Assessment", December 2000, American Society for Testing and Materials
- Indoor Air Quality: "Strategies for Conducting Meaningful Microbial IAQ Investigations", November 2000, American Indoor Air Quality Association
- National Registry of Environmental Professionals (NREP), Registered Environmental Manager, REM 10709
- EPA/AHERA Asbestos Building Inspector, C5073
- Professional Geologist, State of Tennessee, Department of Commerce and Insurance, TN4227
- New Jersey Department of Environmental Protection, Certified Subsurface Evaluator (#17918)

APPENDIX E

REGULATORY DATABASE REPORT

FirstSearch Technology Corporation

Environmental FirstSearch™ Report

TARGET PROPERTY:

202 OLD MAMMOTH ROAD

MAMMOTH LAKES CA 93546

Job Number: 11054856

PREPARED FOR:

EBI Consulting

4 A Street

Burlington, MA 01803

11-21-05

Tel: (781) 551-0470 *Fax: (781) 551-0471*

Environmental FirstSearch is a registered trademark of FirstSearch Technology Corporation. All rights reserved.

Environmental FirstSearch
Search Summary Report

Target Site: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

Search Summary

Database	Sel	Updated	Radius	Site	1/8	1/4	1/2	1/2>	ZIP	TOTALS
NPL	Y	10-07-05	1.00	0	0	0	0	0	0	0
CERCLIS	Y	10-07-05	0.50	0	0	0	0	-	0	0
NFRAP	Y	08-01-05	0.25	0	0	0	-	-	0	0
RCRA TSD	Y	09-22-05	1.00	0	0	0	0	0	0	0
RCRA COR	Y	09-22-05	1.00	0	0	0	0	0	0	0
RCRA GEN	Y	06-13-05	0.25	0	0	1	-	-	0	1
ERNS	Y	12-31-04	0.25	0	0	0	-	-	1	1
State Sites	Y	05-04-05	1.00	0	0	0	0	0	0	0
Spills-1990	Y	07-01-03	0.25	0	0	0	-	-	0	0
SWL	Y	09-07-05	0.50	0	0	0	0	-	0	0
Permits	Y	02-11-04	0.25	0	0	0	-	-	0	0
Other	Y	09-06-05	0.25	0	0	0	-	-	0	0
REG UST/AST	Y	10-10-05	0.25	0	0	0	-	-	13	13
Leaking UST	Y	10-25-05	0.50	0	0	0	1	-	10	11
State Wells	Y	NA	0.50	0	0	0	0	-	0	0
Wetlands	Y	11-20-00	0.12	0	0	-	-	-	0	0
Floodplains	Y	09-01-98	0.12	0	0	-	-	-	0	0
HMIRS	Y	03-15-05	0.50	0	0	0	0	-	0	0
Soils	Y	03-18-97	0.15	2	0	0	-	-	0	2
- TOTALS -				2	0	1	1	0	24	28

Notice of Disclaimer

Due to the limitations, constraints, inaccuracies and incompleteness of government information and computer mapping data currently available to FirstSearch Technology Corp., certain conventions have been utilized in preparing the locations of all federal, state and local agency sites residing in FirstSearch Technology Corp.'s databases. All EPA NPL and state landfill sites are depicted by a rectangle approximating their location and size. The boundaries of the rectangles represent the eastern and western most longitudes; the northern and southern most latitudes. As such, the mapped areas may exceed the actual areas and do not represent the actual boundaries of these properties. All other sites are depicted by a point representing their approximate address location and make no attempt to represent the actual areas of the associated property. Actual boundaries and locations of individual properties can be found in the files residing at the agency responsible for such information.

Waiver of Liability

Although FirstSearch Technology Corp. uses its best efforts to research the actual location of each site, FirstSearch Technology Corp. does not and can not warrant the accuracy of these sites with regard to exact location and size. All authorized users of FirstSearch Technology Corp.'s services proceeding are signifying an understanding of FirstSearch Technology Corp.'s searching and mapping conventions, and agree to waive any and all liability claims associated with search and map results showing incomplete and or inaccurate site locations.

Environmental FirstSearch
Site Information Report

Request Date:	11-21-05	**Search Type:**	COORD
Requestor Name:	victoria houmairy	**Job Number:**	11054856
Standard:	ASTM		**EBI Standard**

TARGET ADDRESS: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

Demographics

Sites:	28	**Non-Geocoded:**	24	**Population:**	NA
Radon:	NA				

Site Location

	Degrees (Decimal)	**Degrees (Min/Sec)**		**UTMs**
Longitude:	-118.966402	-118:57:59	**Easting:**	326507.166
Latitude:	37.642405	37:38:33	**Northing:**	4167754.159
			Zone:	11

Comment

Comment:

Additional Requests/Services

Adjacent ZIP Codes: 0 Mile(s)

ZIP Code	City Name	ST	Dist/Dir	Sel

Services:

	Requested?	Date
Sanborns	No	
Aerial Photographs	No	
Historical Topos	No	
City Directories	No	
Title Search	No	
Municipal Reports	No	
Online Topos	No	

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

TOTAL: 28 **GEOCODED:** 4 **NON GEOCODED:** 24 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
1	RCRAGN	MAMMOTH UNIFIED SCHOOL DISTRICT CAD982498370/SGN	365 MERIDIAN MAMMOTH LAKES CA 93546	0.22 SW	1
2	LUST	MAMMOTH SHELL STATION T0605100008/CASE CLOSED	HWY 203 & MAMMOTH RD MAMMOTH LAKES CA 93546	0.32 NE	2
3	SOILS	USGS-DIGITAL DATA SERIES-11 DDS-USGS-12405	US	0.00 --	3
4	SOILS	USSOILS DATA CASO-18-2391	CA	0.00 --	4

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

TOTAL: 28 **GEOCODED:** 4 **NON GEOCODED:** 24 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	UST	SIERRA CENTRE MALL TISID-STATE31226/ACTIVE	460452 OLD MAMMOTH MAMMOTH LAKES CA 93546	NON GC	N/A
	ERNS	UNKNOWN 175841/UNKNOWN (NRC)	CARLS, JR.-OLD MAMMOTH RD M MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	CENTINELA MAMMOTH HOSPITAL TISID-STATE31246/ACTIVE	85 SIERRA PARK MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	CENTURY CONSTRUCTORS TISID-STATE6888/INACTIVE	0 MAMMOTH TAVERN RD MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	FRANK S PLUMBING TISID-STATE6878/INACTIVE	0 LAUREL MT RD MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	LODESTAR TISID-STATE31248/ACTIVE	0 MERIDIAN BLVD MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	MAMMOTH COUNTY WATER DISTRICT TISID-STATE31235/ACTIVE	0 MERIDIAN P.O. BOX 597 BLV MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	MAMMOTH DISPOSAL INC TISID-STATE31249/ACTIVE	460254 SIERRA MANOR MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	MAMMOTH HIGH SCHOOL TISID-STATE31229/ACTIVE	0 SIERRA PARK RD MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	PEREA GARAGE TISID-STATE6889/INACTIVE	0 MAMMOTH TAVERN RD MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	THE VILLAGE AT MAMMOTH T0605130574/CASE CLOSED	MINARET RD MAMMATH LAKES CA 93546	NON GC	N/A
	UST	SNOWCREEK CONSTRUCTION STORAGE TISID-STATE31224/ACTIVE	0 OLD MAMMOTH RD SNOWC PL MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	UNION OIL SS# 5749 TISID-STATE31198/ACTIVE	0 SW HWY 203 & LAUREL MTN MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	UNKNOWN TISID-STATE6897/INACTIVE	0 HWY 203 & OLD MAMMOT MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	CHEVRON #9-1861, 3236 MAIN ST., MA T0605100018/REMEDIAL ACTION	3236 MAIN STREET MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	EXXON MINI-MART (FORMER) T0605100011/CASE CLOSED	3280 MAIN ST MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	MAMMOTH MO MART T0605100033/POST REMEDIAL ACTION	3275 MAIN ST MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	MAMMOTH MOBILE T0605100023/LEAK BEING CONFIRMED	CENTER ST MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	MINARET MAINT FACILITY T0605100036/CASE CLOSED	HWY 203 MINARET RD MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	MMSA MAINTENANCE GARAGE T0605100031/REMEDIAL ACTION	MINARET RD MAMMOTH LAKES CA 93546	NON GC	N/A

Environmental FirstSearch
Sites Summary Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

TOTAL: 28 **GEOCODED:** 4 **NON GEOCODED:** 24 **SELECTED:** 0

Map ID	DB Type	Site Name/ID/Status	Address	Dist/Dir	Page No.
	LUST	MMSA MAINTENANCE GARAGE T0605100032/CASE CLOSED	MINARET ROAD MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	NORCO SERVICE CENTER T0605100027/CASE CLOSED	3670 MAIN ST MAMMOTH LAKES CA 93546	NON GC	N/A
	LUST	SCE MAMMOTH SERVICE CENTER T0605100003/CASE CLOSED	453001 CHATEAU RD MAMMOTH LAKES CA 93546	NON GC	N/A
	UST	MAMMOTH LAKES BUILDING MATERIA TISID-STATE6890/INACTIVE	460217 SIERRA MANOR MAMMOTH LAKES CA 93546	NON GC	N/A

Environmental FirstSearch
Site Detail Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

RCRA GENERATOR SITE

SEARCH ID: 1 **DIST/DIR:** 0.22 SW **MAP ID:** 1

NAME: MAMMOTH UNIFIED SCHOOL DISTRICT
ADDRESS: 365 MERIDIAN
MAMMOTH LAKES CA 93546
MONO
CONTACT: ENVIRONMENTAL MANAGER

REV: 9/22/05
ID1: CAD982498370
ID2:
STATUS: SGN
PHONE: 6199346802

SITE INFORMATION

CONTACT INFORMATION: ENVIRONMENTAL MANAGER
365 MERIDIAN
MAMMOTH LAKES CA 93546

PHONE: 6199346802

UNIVERSE INFORMATION:

SUBJCA NON TSD: N - NO
CA WRKLD: N - NO
GEN STATUS: SQG - SMALL QUANTITY GENERATOR: GENERATES 100 - 1000 KG/MONTH OF HAZARDOUS WASTE

PREM WRKLD: -----
CLOSURE WRKLD: -----
P C WRKLD: -----
SUBJCA: N - NO
SUBJCA TSD 3004: N - NO

NAIC INFORMATION

ENFORCEMENT INFORMATION:

VIOLATION INFORMATION:

Environmental FirstSearch
Site Detail Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

LEAKING UNDERGROUND STORAGE TANKS

SEARCH ID: 2 **DIST/DIR:** 0.32 NE **MAP ID:** 2

NAME: MAMMOTH SHELL STATION
ADDRESS: HWY 203 & MAMMOTH RD
MAMMOTH LAKES CA 93546
MONO
CONTACT:

REV: 10/25/05
ID1: T0605100008
ID2:
STATUS: CASE CLOSED
PHONE:

RELEASE DATA FROM THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD LUSTIS DATABASE

Please note that some data previously provided by the State Water Resources Control Board in the LUSTIS database is not currently being provided by the agency in the most recent edition. Incidents that occurred after the year 2000 may not have much information. Field headers with blank information following after should be interpreted as unreported by the agency.

LEAD AGENCY: *LOCAL AGENCY*
REGIONAL BOARD: *6V*
LOCAL CASE NUMBER:
RESPONSIBLE PARTY: *KEN SAMPLE*
ADDRESS OF RESPONSIBLE PARTY:
SITE OPERATOR: *KEN SAMPLE*
WATER SYSTEM:

CASE NUMBER: *6B2600247T*
CASE TYPE: *SOIL ONLY*
SUBSTANCE LEAKED: *GASOLINE*
SUBSTANCE QUANTITY:
LEAK CAUSE: *UNKNOWN*
LEAK SOURCE: *UNKNOWN*
HOW LEAK WAS DISCOVERED: *TANK CLOSURE*
DATE DISCOVERED (blank if not reported): *1990-10-01 00:00:00*
HOW LEAK WAS STOPPED:
STOP DATE (blank if not reported):
STATUS: *CASE CLOSED*
ABATEMENT METHOD (please note that not all code translations have been provided by the reporting agency):
ENFORCEMENT TYPE (please note that not all code translations have been provided by the reporting agency): *SEL*
DATE OF ENFORCEMENT (blank if not reported):

ENTER DATE (blank if not reported): *1991-01-08 00:00:00*
REVIEW DATE (blank if not reported): *1991-01-08 00:00:00*
DATE OF LEAK CONFIRMATION (blank if not reported):
DATE PRELIMINARY SITE ASSESSMENT PLAN WAS SUBMITTED (blank if not reported):
DATE PRELIMINARY SITE ASSESSMENT PLAN BEGAN (blank if not reported):
DATE POLLUTION CHARACTERIZATION PLAN BEGAN (blank if not reported): *1990-11-01 00:00:00*
DATE REMEDIATION PLAN WAS SUBMITTED (blank if not reported):
DATE REMEDIAL ACTION UNDERWAY (blank if not reported):
DATE POST REMEDIAL ACTION MONITORING BEGAN (blank if not reported):
DATE CLOSURE LETTER ISSUED (SITE CLOSED) (blank if not reported): *2003-10-01 00:00:00*
REPORT DATE (blank if not reported): *1990-11-01 00:00:00*

MTBE DATA FROM THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD LUSTIS DATABASE
MTBE DATE(Date of historical maximum MTBE concentration):
MTBE GROUNDWATER CONCENTRATION:
MTBE SOIL CONCENTRATION:
MTBE CNTS: *0*
MTBE FUEL: *1*
MTBE TESTED: *SITE NOT TESTED FOR MTBE. INCLUDES UNKNOWN AND NOT ANALYZED*
MTBE CLASS: *

Environmental FirstSearch
Site Detail Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

SOILS

SEARCH ID: 3 **DIST/DIR:** 0.00 -- **MAP ID:** 3

NAME: USGS-DIGITAL DATA SERIES-11
ADDRESS:
US
CONTACT:

REV: 1/19/99
ID1: DDS-USGS-12405
ID2:
STATUS:
PHONE:

SITE INFORMATION

AREA:	0.0625436
PERIMETER:	1.22463
ROCK DESCRIPTION:	Quaternary felsic volcanic rocks
METAMORPHOSIS:	No Metamorphism
STRATIGRAPHIC ORDER:	6 - Stratigraphic order from youngest (1) to oldest (162)

Environmental FirstSearch
Site Detail Report

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

SOILS

SEARCH ID: 4 **DIST/DIR:** 0.00 -- **MAP ID:** 4

NAME: USSOILS DATA
ADDRESS:
CA
CONTACT:

REV: 3/18/97
ID1: CASO-18-2391
ID2: CA854
STATUS:
PHONE:

SITE INFORMATION

The National Resource Conservation Service recommends that the data not be used to describe soil characteristics for regions smaller than a multi-county area.

WATER CAPACITY (INCHES PER INCH):	0.09
PERCENT CLAY (PERCENT < 2mm):	18.9
K FACTOR:	0.27
ORGANIC MATERIAL (PERCENT BY WEIGHT):	0.5
SOIL PERMEABILITY (INCHES PER HOUR):	2.33
CUMULATIVE LAYER THICKNESS (INCHES):	61.2
HYDROLOGIC CHARACTERISTICS:	2.2
SOIL DRAINAGE:	3.2
SUFACE SLOPE (PERCENT):	6.9
LIQUID LIMIT (PERCENT MOISTURE BY WEIGHT):	28.8
HYDRIC COMPONENT SHARE (1=ALL COMPONENTS):	0.1
ANNUAL FLOOD FREQUENCY:	3.7

LEGEND

HYDROLOGIC CHARACTERISTICS:	1 = HIGH INFILTRATION 2 = MODERATE INFILTRATION 3 = SLOW INFILTRATION 4 = VERY SLOW INFILTRATION
SOIL DRAINAGE:	1 = EXCESS 2 = MODERATE EXCESS 3 = WELL 4 = MODERATELY WELL 5 = MODERATELY POOR 6 = POOR 7 = VERY POOR
ANNUAL FLOOD FREQUENCY:	1 = GREATER THAN 50 PERCENT 2 = 5 TO 50 PERCENT 3 = 0 TO 5 PERCENT 4 = NONE

Environmental FirstSearch
Street Name Report for Streets within .25 Mile(s) of Target Property

TARGET SITE: 202 OLD MAMMOTH ROAD
MAMMOTH LAKES CA 93546

JOB: 11054856

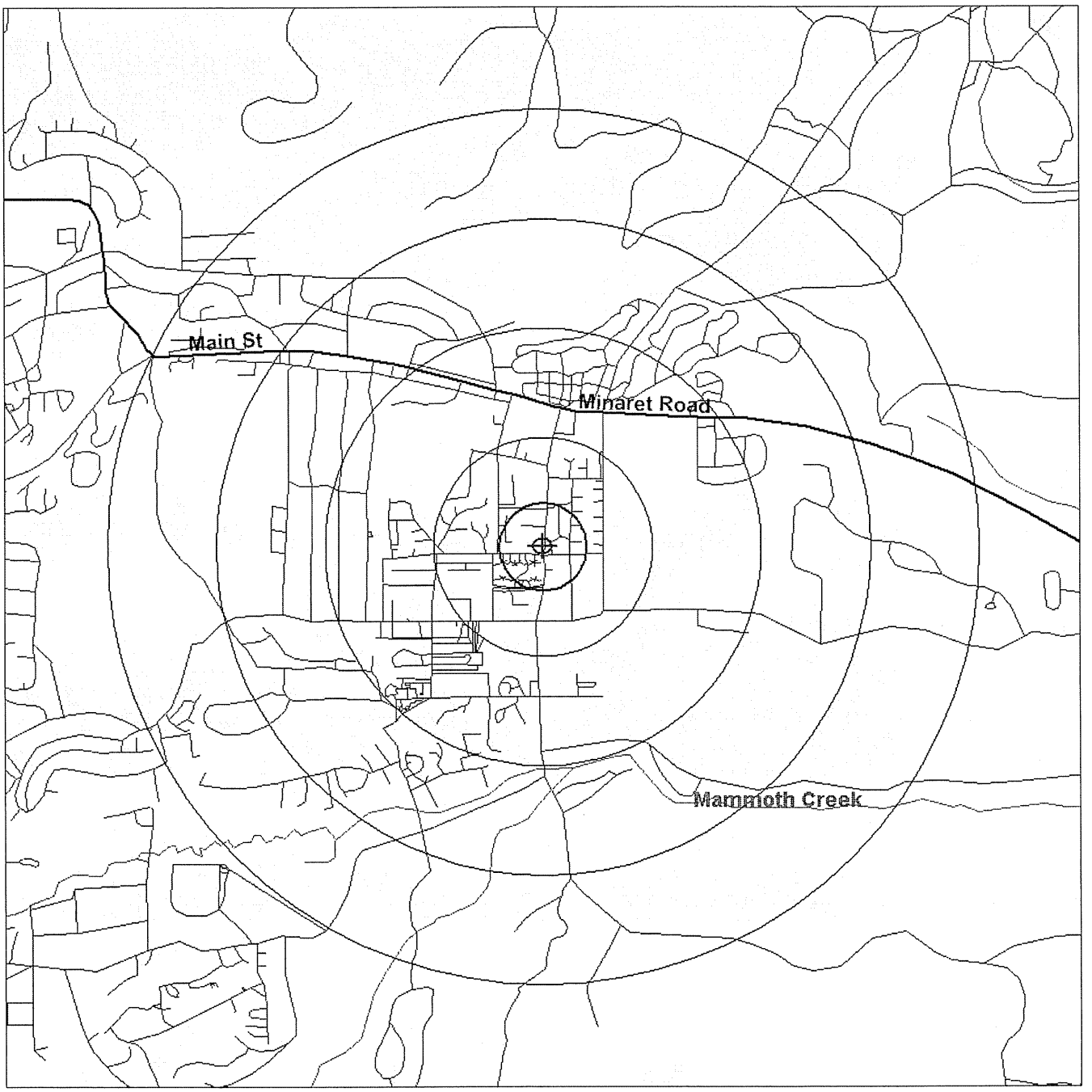
Street Name	Dist/Dir	Street Name	Dist/Dir
Arrowhead Dr	0.22 SW		
Azimuth Dr	0.24 SW		
Laurel Mtn Rd	0.10 NW		
Meridian Blvd	0.17 SW		
Old Mammoth Rd	0.01 NE		
Shady Rest Rd	0.24 NW		
Sierra Manor Rd	0.06 SE		
Sierra Nevada Rd	0.02 SE		
Sierra Park Rd	0.14 -E		
Tavern Rd	0.16 NE		

Environmental FirstSearch

1 Mile Radius

ASTM Map: NPL, RCRACOR, STATE Sites

202 OLD MAMMOTH ROAD , MAMMOTH LAKES CA 93546



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 37.642405 Longitude: -118.966402) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM Map: CERCLIS, RCRATSD, LUST, SWL

202 OLD MAMMOTH ROAD , MAMMOTH LAKES CA 93546



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 37.642405 Longitude: -118.966402) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

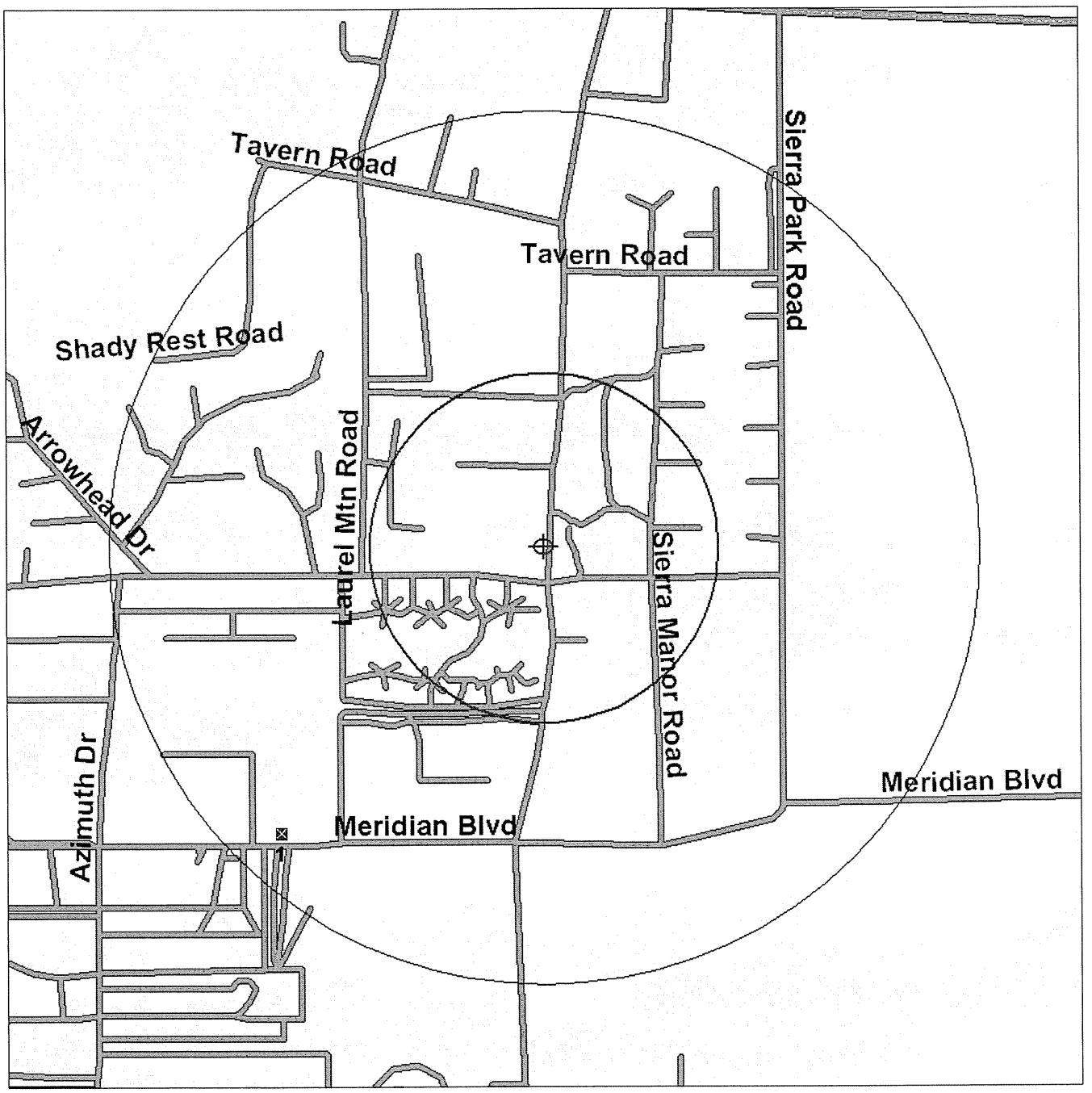
Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.25 Mile Radius

ASTM Map: RCRAGEN, ERNS, UST

202 OLD MAMMOTH ROAD , MAMMOTH LAKES CA 93546



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 37.642405 Longitude: -118.966402) .....

Identified Site, Multiple Sites, Receptor .....

NPL, Brownfield, Solid Waste Landfill (SWL) or Hazardous Waste

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Brownfield

202 OLD MAMMOTH ROAD , MAMMOTH LAKES CA 93546



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 37.642405 Longitude: -118.966402) .....

Brownfield.....

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

Environmental FirstSearch

.5 Mile Radius

ASTM AAI Map: Federal Land Use Sites

202 OLD MAMMOTH ROAD , MAMMOTH LAKES CA 93546



Source: 2002 U.S. Census TIGER Files

Target Site (Latitude: 37.642405 Longitude: -118.966402) .....

Fed. Land Use: Wilderness Areas, Wildlife Preserves .....

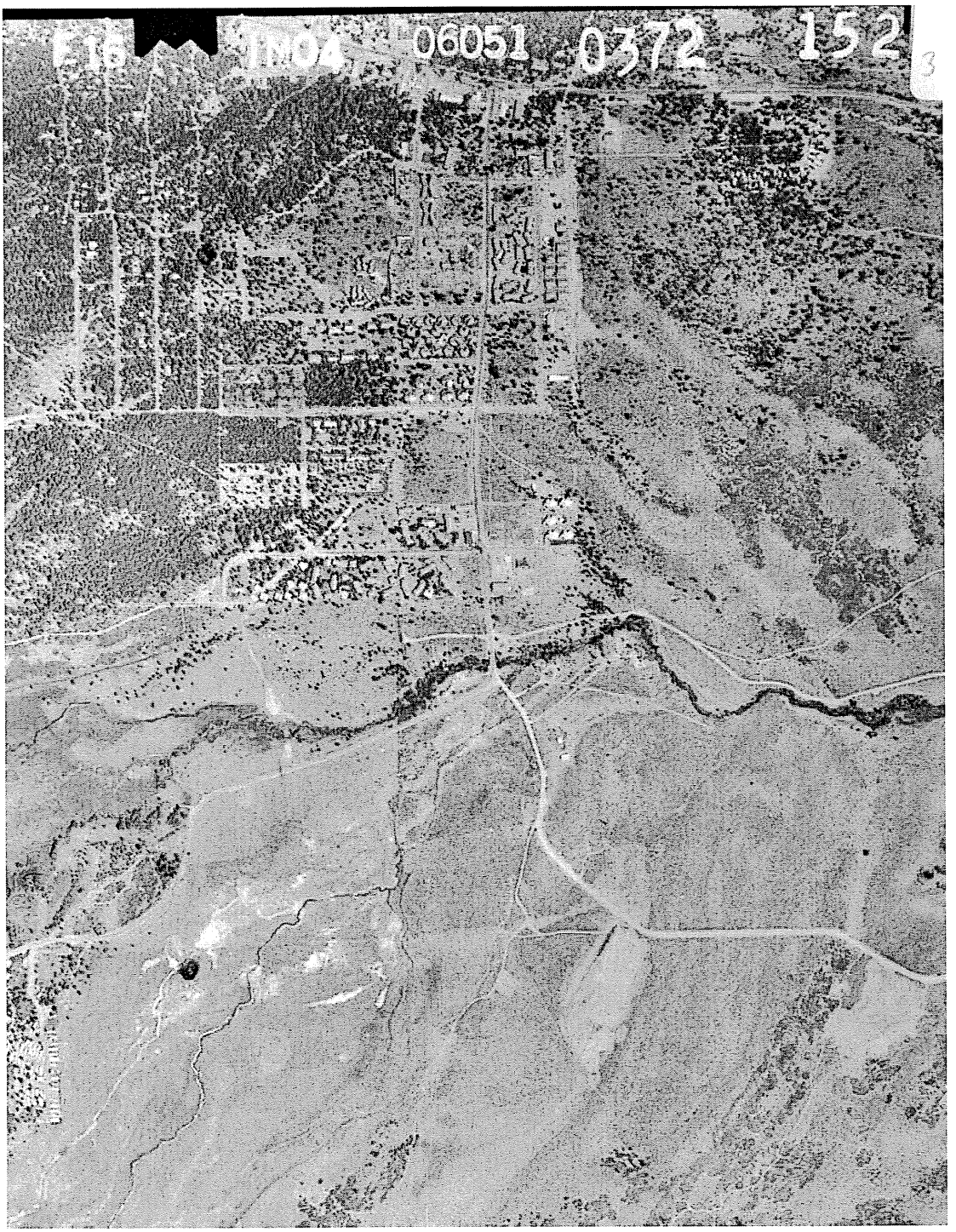
Fed. Land Use: Amer. Indian Sacred Sites, End. Species' Habitats...

Railroads .....

Black Rings Represent 1/4 Mile Radius; Red Ring Represents 500 ft. Radius

APPENDIX F

HISTORICAL DOCUMENTATION



EBI CONSULTING

Aerial Photograph

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA
1972

N



EBI CONSULTING

Aerial Photograph

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA
1988

N



EBI CONSULTING

Aerial Photograph

THE CLEARWATER
164, 202, 248 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA
1998

N

APPENDIX G

ANALYTICAL RESULTS

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

7469 WHITE PINE ROAD - RICHMOND, VA 23237
804-275-4788 FAX 804-275-4907

BULK ASBESTOS SAMPLE ANALYSIS SUMMARY

CLIENT: EnviroBusiness, Inc.
Four A Street
Burlington, MA 01803

DATE OF RECEIPT: 12 DEC 2005
DATE OF ANALYSIS: 13 DEC 2005
DATE OF REPORT: 14 DEC 2005

CLIENT NUMBER: 22-4564 S
EHS PROJECT #: 2005-12-1500
PROJECT: 11054856

EHS SAMPLE #	CLIENT SAMPLE #/ LABORATORY GROSS DESCRIPTION	% ASBESTOS	OTHER MATERIALS
01	01/ White Chalky; Brown Fib.	NAD	70% Cellulose 30% Non-Fibrous
02A	02(a)-Tile/ Beige Vinyl	NAD	100% Non-Fibrous
02B	02(b)-Mastic/ Yellow Adhes.; Tan Fib.	Trace, <1% Chrysotile ★ <1% Total Asbestos ★Possible contamination in tan fibrous debris.	100% Non-Fibrous
03	03/ White Chalky; Brown Fib.	NAD	20% Cellulose 80% Non-Fibrous

QC SAMPLE: M2-1999-3

QC BLANK: SRM 1866 Fiberglass

REPORTING LIMIT: 1% Asbestos

METHOD: Polarized Light Microscopy, EPA Method 600/R-93/116 *

ANALYST: Melissa Boggs Steiniger

Reviewed By Authorized Signatory: Michael A. Mueller

Michael A. Mueller, MPH, Laboratory Director
Howard Varner, General Manager
Irma Faszewski, Quality Assurance Coordinator
Feng Jiang, MS, Technical Director

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.

CLIENT NUMBER: 22-4564 S
EHS PROJECT #: 2005-12-1500
PROJECT: 11054856

The condition of the samples analyzed was acceptable upon receipt per laboratory protocol unless otherwise noted on this report. Results represent the analysis of samples submitted by the client. Sample location, description, area, volume, etc., was provided by the client. This report cannot be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full, without the written consent of Environmental Hazards Services, L.L.C. California Certification #2319 NY ELAP #11714. All information concerning sampling location, date, and time can be found on Chain-of-Custody. Environmental Hazards Services, L.L.C. does not perform any sample collection.

Environmental Hazards Services, L.L.C. recommends reanalysis by point count (for more accurate quantification) or Transmission Electron Microscopy (TEM), for enhanced detection capabilities) for materials regulated by the EPA NESHAP (National Emission Standards for Hazardous Air Pollutants) and found to contain less than ten percent (<10%) asbestos by polarized light microscopy (PLM). Both services are available for an additional fee.

* All California samples analyzed by Polarized Light Microscopy, EPA Method 600/M4-82-020, Dec. 1982.

LEGEND NAD = no asbestos detected
SCF = suspected ceramic fibers

plm1.dot/07MAR2005/REV1/ MR

EHS **2005-12-1500**

ENVIRONMENTAL HAZARDS SERVICES, L.L.C.
7469 Whitepine Road Richmond, Virginia 23237 Phone (804) 275-4788 Fax (804) 275-4907

CHAIN OF CUSTODY FORM

3 PLM

Company Name: EBI Consulting
Address: Four A Street
City, State, Zip: Burlington, MA 01803
EHS Client Acct #: 22-4564 A
Subject Property Address: Mammoth

Date:
Contact Name:
Sampler Name: Tiffany Grant
EBI Project #: 11054856
Sampler's Phone #: 909-821-4647 **Sampler's Fax #:**

Email all sampling results to **dakerblom@ebiconsultants.com** and **kcurran@ebiconsultants.com.** Sampling results no longer need to be faxed.

Sample Number *	Sample Date & Time *	Asbestos: Bulk ID by PLM *	Asbestos: (PCM) Fiber Count	Asbestos: PLM Point Count	Asbestos: PLM Gravimetrick	Asbestos: TEM AHERA (Air)	Asbestos: TEM Chatfield (Bulk)	Lead: Air	Lead: Paint (%) *	Lead: Paint (PPM)	Lead: Paint (mg/cm2)	Lead: Soil	Lead: Wipe	Lead: TCLP (Pb)	Lead: Waste Water	Other Metals: TCLP RCRA 8	Other Metals: Welding Fume	Other Metals: Toxic Metal Profile	Other Metals	Other Metals	Comments * (color & type of material)
* 11054856-01	12/05/05	X																			Drywall Vinyl FT AC's
02	↓	X																			
03	↓	X																			
		X																			
		X																			
		X																			
		X																			
		X																			
		X																			
		X																			

SAMPLE CONDITION
Acceptable ✓
Unacceptable

* **Must be filled out**

Released by: T Grant — **Signature:** T. Grant — **Date/Time:** 12/5/05
Received by: — **Signature:** — **Date/Time:**
Released by — **Signature:** — Date/Time:
Received by: Amy Costin — **Signature:** — **Date/Time:** 12/12/5 AM

★ Prefix no. labels with 1

APPENDIX H

PORTIONS OF PREVIOUS REPORTS

IVI
ENVIRONMENTAL, INC.
Environmental Engineers

October 17, 1997

Mr. David Dahl
President
Mono County Resorts
502 South Bay Front
Balboa Island, California 92662
(714) 673-0186 (tel.)
(714) 723-0269 (fax)

Re: IVI Project No.: E7102272
Aspen Grill
202 Old Mammoth Road
Mammoth Lakes, California 93546

Dear Mr. Dahl:

IVI Environmental, Inc. ("IVI") is pleased to submit the original and one (1) color copy of our Phase I Environmental Site Assessment on the above-referenced property. This report outlines the findings of our site reconnaissance, historical land use research, review of governmental records, interviews, and our pre-survey questionnaire.

Please call should you have any questions.

Sincerely,

IVI Environmental, Inc.

Raymond H. Hutchison
Project Manager

Reviewed by:
Jonathan P. Bass, Ph.D.
Senior Project Manager

RHH/mar

TABLE OF CONTENTS

Cover Sheet
Transmittal Letter
Project Environmental Overview

Page

1.0 Executive Summary 1

2.0 Introduction 2

2.1 General 2
2.2 Purpose and Scope 2

3.0 Project Description 5

3.1 Overview 5
3.2 Property Location 5
3.3 Size and Shape of Parcel 5
3.4 Topography 6
3.5 Surface Waters 6
3.6 Soils, Geology and Groundwater 6
3.7 Surrounding Land Use 7
3.8 Utilities 7
3.9 Building Description 8
3.10 Current Property Use 8
3.11 Environmental Permits 8
3.12 Previous Reports 8
3.13 Plans and Specifications 8

4.0 Site History 9

4.1 Historical Use Summary 9
4.2 Historical Maps 9
4.3 Topographic Maps 9
4.4 Aerial Photographs 10
4.5 Chain-of-Ownership 10
4.6 Municipal File Review 10
4.7 Interviews 10

TABLE OF CONTENTS - continued

		Page
5.0	**Regulatory Review**	11
5.1	Federal Databases	12
5.2	California Environmental Protection Agency (Cal/EPA) Databases	13
5.3	Local Regulatory Agency Interviews and File Review	14
6.0	**Site Reconnaissance**	16
6.1	Site Visit Background Information	16
6.2	Chemical Storage and Usage	16
6.3	Bulk Storage Tanks	16
6.4	Site Waste and Wastewater	17
6.5	Stained Soil or Stressed Vegetation	17
6.6	Liquid Discharges	18
6.7	Pools of Liquid	18
6.8	Pits, Ponds or Lagoons	18
6.9	Wells	18
6.10	On-Site Fill	18
6.11	Drums and Containers for Storing Waste	18
6.12	Floor Drains and Sumps	18
6.13	Odors..	19
6.14	Air Emissions	19
6.15	Polychlorinated Biphenyls (PCBs)	19
6.16	Asbestos-Containing Material (ACM)	19
6.17	Radon	19
7.0	**Findings and Conclusions**	20
8.0	**Limiting Conditions**	21

APPENDICES

Photographs	A
Pre-Survey Questionnaire	B
Maps and Historical Aerial Photographs	C
Computerized Environmental Report	D
Correspondence	E

1.0 EXECUTIVE SUMMARY

This report documents IVI's findings from our Phase I Environmental Site Assessment on the Aspen Grill (the "Subject"), located at 202 Old Mammoth Road, Mammoth Lakes, California. The property, which is situated in a suburban area characterized by commercial retail and residential development, consists of a 0.8-acre parcel improved with a single-story restaurant which was constructed in 1968. Prior to the construction of the existing improvements, the site was vacant land.

The purpose of this Phase I Environmental Site Assessment (ESA) was to assess current site conditions and render an opinion as to the presence of Recognized Environmental Conditions in connection with the property within scope and limitations of ASTM Standard Practice E1527-97. Any exceptions, or deletions from the ASTM practice are described in Section 2.2.2 of this report.

This assessment has revealed no evidence of recognized environmental conditions in connection with the Subject; however, the following item of environmental concern was identified that warrants mention:

Polychlorinated Biphenyls (PCBs)

Although unlikely due to its age, the site's utility-owned electrical transformer may contain PCBs. Of importance, the transformer appeared to be in good condition, free of leakage, and is not likely to be damaged. In accordance with Section 761 of the Toxic Substance Control Act, the transformer's owner, Southern California Edison, is responsible for its maintenance and remediation in the event of a leak.

2.0 INTRODUCTION

2.1 General

IVI was retained by Mono County Resorts ("Mono") to prepare a Phase I Environmental Site Assessment, in compliance with ASTM Standard Practice E1527-97, on the Subject in accordance with our agreement dated October 13, 1997. This assessment was prepared on behalf of and for the exclusive use of Mono.

2.2 Purpose and Scope

2.2.1 Purpose

The purpose of this assessment is to determine whether there are "recognized environmental conditions" on the property which may have an impact on the purchase, use or future sales of the property and liability of the client from a governmental agency or private party. Evidence for recognized environmental conditions were sought through environmental and historical records searches, interviews, and a site reconnaissance.

This report is the culmination of an investigation whose purpose was to identify recognized environmental conditions on the property, using the methodology recommended by The American Society for Testing Materials (ASTM). Specifically, this methodology is referred to as ASTM Standard Practice E1527-97.

2.2.2 Scope

In general, the scope of this assessment consisted of reviewing readily available information and environmental data relating to the property; interviewing persons knowledgeable about the site; reviewing readily available historical maps and aerial photographs; reviewing readily available records maintained in federal, state, and local regulatory agencies; and conducting a site visit.

2.0 INTRODUCTION - continued

The specific scope of this assignment included, the following:

2.2.2.1 A site reconnaissance to characterize on-site conditions and assess the site's location with respect to surrounding property uses and natural surface features. In addition, reconnaissance of the surrounding roads and readily accessible properties to identify obvious potential environmental conditions on neighboring properties was conducted. Photographs taken as part of the site reconnaissance are provided in Appendix A. IVI was provided access to a representative areas of the site and the site grounds.

2.2.2.2 Interviews with persons familiar with the property to obtain information on present and previous on-site activities potentially resulting in the environmental degradation of the site or adjoining properties. A Pre-Survey Questionnaire to be filled out and returned to IVI by someone knowledgeable about the site was provided David Dahl, the contact. A completed copy of the Pre-Survey Questionnaire is provided in Appendix B.

The following table presents a summary of the individuals contacted as part of IVI's assessment of the Subject:

Name	Title	Agency or Department	Telephone No.
David Dahl	Site Contact	Aspen Grill	(714) 673-0127
Ron Rigsbey	Engineer	Southern California Edison Company	(760) 873-6308
Marty Larson	Fire Marshal	Mammoth Lakes Fire Department	(760) 934-2300
Louis Molina	Clerk	Mammoth Lakes Health Department	(760) 924-5454
Garry Sisson	Laboratory Director	Mammoth Lake Water Department	(760) 934-2596
Roxanne Osterman	Records Clerk	Turner Propane	(760) 934-6811

2.2.2.3 A review and interpretation of readily available historical documents, historical and topographic maps, and/or aerial photographs to identify previous activities on and in the vicinity of the Subject.

2.0 INTRODUCTION - continued

2.2.2.4 If provided by the site representative, a review of information such as the Subject's chain-of-title, previously prepared building condition survey reports, appraisals, building plans and specifications, and Phase I or II Environmental Assessment Reports.

2.2.2.5 A review of readily available environmental databases maintained by the USEPA, state, and local agencies within the approximate minimum search distance described within the Regulatory Review Section of this report provided by Environmental Data Resources, Inc. (EDR). A copy of the Computerized Environmental Report (CER), prepared by EDR has been provided in Appendix D.

2.2.2.6 A survey of the readily accessible common areas to identify suspect asbestos-containing materials in basic accordance with EPA document *Guidance for Controlling Asbestos-Containing Materials in Buildings*, EPA 560/5-85-024, dated June 1985, was conducted.

2.2.2.7 IVI reviewed published radon occurrence maps to determine if the subject site is located in an area with a propensity for elevated radon levels.

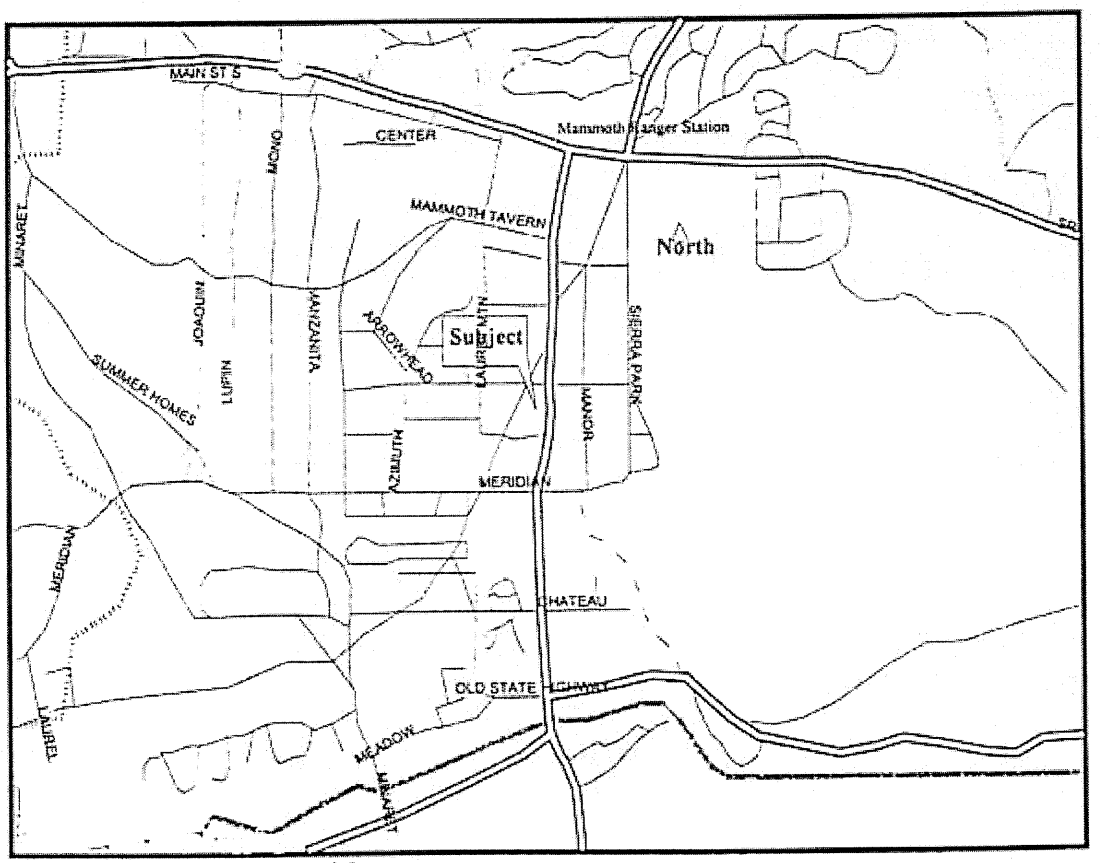
3.0 PROJECT DESCRIPTION

3.1 Overview

The Subject consists of a 0.8-acre parcel improved with a single-story restaurant which was constructed in 1968 located in Mammoth Lakes, California. Surrounding properties are characterized by residential and commercial retail development. Prior to the construction of the existing improvements, the subject site was vacant land.

3.2 Property Location

As shown in the Site Location Map below, the site is located at 202 Old Mammoth Road in Mammoth Lakes, Mono County, California. More specifically, the property is located on the west side of Old Mammoth Road approximately 1,450 feet south of Highway 203. The approximate geographic coordinates of the property are N37° 39' 36" latitude and W118° 58' 58" longitude.



Site Location Map (not to scale)

3.3 Size and Shape of Parcel

The property is irregular in shape and 0.8-acres in size.

3.0 PROJECT DESCRIPTION- continued

3.4 Topography

The site generally level and is at the same grade as Old Mammoth Road. The topography of the area is best described as a terrace area of Mammoth Mountain. According to the United States Geological Survey (USGS) *Old Mammoth, California* 7.5 Minute Series topographic map, the Subject's elevation is approximately 7,880' above mean sea level (msl).

3.5 Surface Waters

There are no surface water bodies or streams on the Subject. The closest open body of water to the Subject is Mammoth Creek, located approximately ¼-mile to the west.

3.6 Soils, Geology and Groundwater

Soils

Although requested, Mark Davis of the Mono County Bishop Field Office, the *Mono County Soil Survey* was not available for our review.

Geology

There are no predominant geological surface features such as rock outcroppings on the Subject.

Groundwater

Under natural, undisturbed conditions, shallow groundwater flow generally follows the topography of the land surface and on this basis, the topography suggests that groundwater flow across the site is in a eastern direction. However, localized conditions can alter flow directions and thus the expected flow may not coincide with actual groundwater flow in the subject area.

3.0 PROJECT DESCRIPTION- continued

3.7 Surrounding Land Use

The property is located in a suburban setting which is characterized by residential and commercial retail development. The following is a tabulation of surrounding property usage:

Direction	Adjacent Property	Surrounding Property
North	The northern adjacent area is improved with the Sierra Nevada Rodeway Inn, a commercial shopping center and a garden apartment center.	The northern surrounding area consists of commercial retail and residential development and the Inyo National Forest.
South	The southern adjacent area is improved with the Ocean Harvest restaurant and a garden apartment complex.	The southern surrounding area consists of commercial retail and residential development and vacant land.
East	The eastern adjacent area beyond Old Mammoth Road is improved with a garden apartment complex.	The eastern surrounding area consists of residential development and vacant land.
West	The western adjacent area consists of a garden apartment complex.	The western adjacent area consists of a commercial retail and residential development and vacant land.

None of the adjacent and surrounding properties are suspected to represent an impact to the Subject.

3.8 Utilities

The Subject is served with the following utilities:

Water: City of Mammoth Lakes

Sanitary Sewer: City of Mammoth Lakes

Storm Sewer: City of Mammoth Lakes

Electric: Southern California Edison

Propane: Turner Propane

According to Garry Sisson of City of Mammoth Lakes, Water Department, the local water authority, the water supplied to the Subject meets all federal and state water quality standards.

3.0 PROJECT DESCRIPTION- continued

Approximately 95% of the property is covered with impervious surfaces such as buildings and asphalt-surfaced parking areas and roadways. Sheet runoff flows topographically to the municipal stormwater system within Old Mammoth Road.

Visual observation of the stormwater system did not identify any abnormal accumulation of petroleum run-off or foreign material. No oily sheens or foul odors were identified in the stormwater management system.

3.9 Building Description

The subject property consists of a single-story restaurant which was constructed in 1968 and was completely rehabilitated in 1996. The building is of slab-on-grade construction. The superstructure is of conventional wood framing. The exterior walls consists of painted T1-11 plywood. The gabled roofs are covered with cedar shingles.

Interior finishes include floor coverings of carpet and resilient floor tile. The walls are of painted gypsumboard and ceilings typically consist of exposed wooden rafters.

Heating is provided by a propane-fired furnace. There is no conditioned air provided to the subject property. There is no vertical transportation provided at the subject property.

3.10 Current Property Use

The subject property is developed with a single-story restaurant. The on-site generation of hazardous waste was not observed and is not suspected.

3.11 Environmental Permits

Based on our research, no environmental permits such as wastewater discharge permits, National Pollutant Discharge Elimination System (NPDES), air emissions permits, or petroleum bulk storage (PBS) tank registrations are required at the Subject.

3.12 Previous Reports

Although requested, no previously prepared Phase I or II Environmental Assessments or asbestos surveys were provided for IVI's review.

3.13 Plans and Specifications

As-built, renovation, site plans, plans, and specifications were not available for review.

4.0 HISTORICAL USE

4.1 Historical Use Summary

Based on our review, the property was vacant land prior to the construction of the existing improvements. No previous site uses or surrounding properties were identified with historical recognized environmental conditions which are suspected to impact the Subject.

Of note, as a result of a Data Failure, as described under Section 7.3.2.3 of ASTM Standard E1527-97, IVI's historical land use review was conducted back to 1949 not 1940, but was nonetheless researched back to a time when the Subject was vacant land.

4.2 Historical Maps

Sanborn Fire Insurance Maps (Sanborn Maps)

Sanborn Maps constitute a database of prior site uses of real property for many cities and towns in the United States. The maps were originally created to assist insurance underwriters in understanding the potential fire risk of structures requiring insurance; however, they are also useful for determining the previous uses of a property. Sanborn Maps often contain a wealth of information relating to uses of individual structures, location of fuel storage tanks, chemical storage tanks, or both, and storage of other potentially toxic substances. Sanborn Maps begin their coverage in 1867 and continue through the present.

IVI had a search of Sanborn Maps conducted. This search did not identify any Sanborn Maps for the Subject. Searching a database such as Sanborn Maps constitutes part of the due-diligence necessary for an Environmental Site Assessment. The lack of Sanborn Mapping suggests that there likely was no historical industrial activity on or in the immediate vicinity of the site.

4.3 Topographic Maps

Historical topographic maps provide visual documentation of site conditions at the time the maps were drawn or revised. Activities such as past manufacturing use of a site can be discerned through the examination of historical topographic maps. IVI reviewed the USGS 1:24,000 scale *Old Mammoth, California* topographic map and the 1:62,500 scale *Mount Morrison, California* topographic map of the Subject area. The 1:62,500 scale topographic map is based aerial photographs taken in 1949. The 1:24,000 scale topographic maps are based on aerial photographs taken in 1976, last photorevised in 1983. These historical topographic maps were provided by the UCLA Research Library, Maps and Governmental Information section. Refer to Appendix C for copies of same.

4.0 HISTORICAL USE - continued

These maps have been summarized below:

Year	Subject	Adjacent and Surrounding Properties
Aerial: 1949	The subject property is vacant land.	The adjacent area is vacant land with the exception of an unimproved road located to the eastern adjacent area. The surrounding area to the north consists of the Mammoth Ranger station and a few single-family homes.
Aerial: 1976 Photorevised: 1983	There is no specific structure identified on the subject property. However, due to the concentration of structures in this area, the subject area is in pink denoting urbanized land use.	There are no specific structures identified on the adjacent on the surrounding properties. However, due to the concentration of structures in this area, the subject area is in pink denoting urbanized land use, and identifies only landmarks as distinct structures.

4.4 Aerial Photographs

Inasmuch as the Subject has been sufficiently covered by topographic maps, since 1949, aerial photographs were not consulted in this assessment.

4.5 Chain-of-Ownership

A copy of the Subject's Chain-of-Title has not been provided for review.

4.6 Municipal File Review

Building Department

Building department documentation reviewed did not reveal information which is suspected to represent an impact to the environmental integrity of the Subject. No permits for previous site uses were identified in the Subject's file. This suggests no official development of the Subject took place prior to construction of the existing improvements.

4.7 Interviews

According to Ms. Roxanne Osterman, of Turner Propane, a 10-year resident of the area, the subject site was formerly vacant land.

According to Mr. Robert Baudouin, the site contact, who has been involved with the property for the past year, the Subject was vacant land prior to construction of the existing improvements.

5.0 REGULATORY REVIEW

A copy of regulatory databases contained within a Computerized Environmental Report (CER) supplied by Environmental Data Resources, Inc. (EDR) is provided in Appendix D. The CER is a listing of sites identified on select federal and state standard source environmental databases within the approximate search distance specified by ASTM Practice for Environmental Site Assessments E1527-97. IVI reviewed each environmental database on a site-by-site basis to determine if any of the sites identified in the CER are suspected to represent a negative impact to the Subject.

The following table lists the number of sites by database within the prescribed search radius appearing in the CER:

Databases Reviewed	Minimum Search Area	Number of Sites Within Area
Federal National Priorities List (NPL)	One-Mile Radius	0
Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)	One-Half Mile Radius	0
Federal Resource Conservation and Recovery Act (RCRA) Treatment, Storage, and Disposal (TSD) Facilities List (including TSD CORRACTS facilities)	One-Mile Radius	0
Federal RCRA Generators List	On-Site and Adjoining Properties	0
Federal Emergency Response Notification System (ERNS) List	On-Site	0
Cal-Sites Annual Workplan Sites (AWP Sites)	One-Mile Radius	0
Landfills or Solid Waste Facilities	One-Half Mile Radius	0
Underground Storage Tank and Facility Inventory Database Sites	On-Site and Adjoining Properties	0
Leaking Underground Storage Tanks (LUSTs)	One-Half Mile Radius	0

The CER identified 18 "Orphan Sites." These are sites which could not be mapped or "geocoded" due to inadequate address information. Refer to the CER for a list of these Orphan Sites. IVI attempted to locate these sites via vehicular reconnaissance and interviews with personnel familiar with the area. Based on this research, IVI did not identify any Orphan Sites within the specified radii.

5.0 REGULATORY REVIEW - continued

A description of the databases reviewed by IVI and an analysis of sites identified within the prescribed search area are presented below:

5.1 Federal Databases

NPL

This is a list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or "Superfund"). A site must be on the NPL to receive money from the Trust Fund for Remedial Action.

Analysis/Comment: The CER did not identify any NPL sites within a one-mile radius of the Subject.

CERCLIS

CERCLIS is the USEPA's system for tracking potential hazardous waste sites within the Superfund program. A site's presence in CERCLIS does not imply a level of federal activity or progress at a site, nor does it indicate that hazardous conditions necessarily exist at the location. Within one year of being entered into CERCLIS, the USEPA performs a preliminary assessment of a site. Based upon the results of the preliminary assessment, the USEPA may conduct additional investigations which could lead to a site being listed on the NPL.

Analysis/Comment: The CER did not identify any CERCLIS sites within the prescribed radius.

RCRA TSD Facility Report (including TSD CORRACTS facilities)

The RCRA TSD Facility Report contains information pertaining to those facilities that either treat, store, or dispose of hazardous waste. While these facilities represent some form of hazardous waste activity, they are most significant if determined to be out of compliance or to have violations. CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Analysis/Comment: The CER did not identify any RCRA TSD and TSD CORRACTS facilities within a one-mile radius of the Subject.

5.0 REGULATORY REVIEW - continued

RCRA Generators

IVI reviewed the list of sites which have filed notification with the USEPA in accordance with RCRA requirements. These sites include generators of hazardous waste regulated under RCRA. Under RCRA, Generators are classified by the weight of hazardous waste generated in a calendar month into the following categories: Large Quantity Generator, 1,000 kilograms (kgs) or more; Small Quantity Generator, 100 to 1,000 kgs; and Conditionally-Exempt Small Quantity Generator, less than 100 kgs. RCRA Generators, while they represent some form of hazardous waste activity, are most significant if they are determined to have Class I Violations or to be non-compliant.

Analysis/Comment: The CER did not identify RCRA Generators located on or adjacent to the Subject.

ERNS

The Emergency Response Notification System (ERNS) is a database used to store information on notifications of oil discharges and hazardous substance releases. The primary purpose of ERNS is to standardize and collect notifications made to the Federal government of releases of oil and hazardous substances. These notifications are used by "On-Scene Coordinators" to determine an emergency response and release prevention. When a call is made to the NRC or one of the ten EPA Regions, a report is created containing all of the release information that the caller provided. This report is transferred to an appropriate agency to evaluate the need for a response, and the records are electronically transferred to the ERNS databases.

As such, if a reported release of oil or a hazardous substance is deemed to require a response, it should be listed in the appropriate federal or state level environmental database such as CERCLIS, state equivalent CERCLIS, or state leaking underground storage tank or spills.

Analysis/Comment: The CER did not identify the Subject on the ERNS database.

5.2 California Environmental Protection Agency (Cal/EPA) Databases

Cal-Sites (AWP)

The AWP is a list of facilities subject to investigation concerning likely or threatened releases of hazardous substances. These sites are either being actively remediated, or are currently under evaluation for further action, if necessary. The AWP list is the Cal/EPA's equivalent to the USEPA's CERCLIS List.

5.0 REGULATORY REVIEW - continued

Analysis/Comment: The CER did not identify AWP sites within a one-mile radius of the Subject.

Solid Waste Facilities (SWF)

The SWF list is an inventory of landfills, incinerators, transfer stations, and other sites that manage solid wastes.

Analysis/Comment: The CER did not identify SWF facilities within a one-half mile radius of the Subject.

State Registered Storage Tanks (RST) Facility List

The RST facility list is an inventory of registered petroleum storage facilities. Inclusion of a site on the RST list does not necessarily constitute an environmental condition but instead merely indicates the presence of registered underground storage tanks (USTs).

Analysis/Comment: The CER did not identify RST facility sites within the specified radius.

State Leaking Underground Storage Tanks (LUSTs)

The LUST list is an inventory of reported spills and leaks, both active and inactive. It includes stationary and non-stationary source spills reported to state and federal agencies, including remediated and unremediated leaking USTs.

Analysis/Comment: The CER did not identify LUST sites within the specified one-half mile radius of the Subject.

5.3 Local Regulatory Agency, Interviews and File Review

Fire Department

IVI has sent a request to the City of Mammoth Lakes, Fire Department for environmental information pertaining to the subject property. As of this writing, the Fire Department has not responded to our request. Should receipt of a response from the Fire Department change the conclusions of this report, Mono will be notified in writing by IVI.

6.0 SITE RECONNAISSANCE

6.1 Site Visit Background Information

Site Visit Conducted By:	Raymond H. Hutchison, Project Manager
Date of Site Visit:	October 4, 1997
Site Representative:	Colleen Ferris and Robert Baudouin
Weather:	65°F; Sunny

6.2 Chemical Storage and Usage

With the exception of chemicals customarily used for routine building cleaning, IVI did not observe any chemicals stored on-site. For the most part, the cleaning chemicals are stored in a store room. No floor drains or sumps were observed in the vicinity of the chemical storage areas. In addition, housekeeping was generally considered satisfactory. The chemicals, which are stored in their original containers, do not appear to represent an impact to the environmental quality of the site provided that they are used as intended, properly handled, and the regulations pertaining to their usage are followed.

6.3 Bulk Storage Tanks

Underground Storage Tanks (USTs)

No USTs were identified on the subject property and no common indicators of USTs such as vent pipes, fill ports, manways, pavement cuts, fuel gauges or dispensers were observed. In addition, according to Colleen Ferris and Robert Baudouin, the site contacts, there are no USTs on-site. In addition, the subject site was not identified on the Cal/EPA list of registered UST facilities.

According to Ms. Roxanne Osterman of Turner Propane, the subject property has always been connected to the Turner Propane system which consists of several large cooperative tanks located throughout the City of Mammoth Lakes. Similar to a natural gas supply company the site is simply billed for the amount of gas that it uses. Ms. Osterman further stated that the closest Turner Propane tank to the subject property is located approximately 2-miles to the north.

6.0 SITE RECONNAISSANCE - continued

Aboveground Storage Tanks (ASTs)

No ASTs were observed and IVI did not identify any equipment within the building which should require such tanks. Furthermore, according to Colleen Ferris and Robert Baudouin, the site contacts, there are no ASTs on-site. Visual indicators of past ASTs, such as tank cradles, secondary containment structures, pedestals, etc., were not observed.

6.4 Site Waste and Wastewater

Solid Waste

Non-hazardous solid waste is disposed of in dumpsters and is removed from the Subject on a regular basis by a private carting firm. Potential sources of contamination, such as waste oil and automotive batteries, were not observed in the vicinity of the dumpsters.

No areas that were apparently filled with non-natural material, or with material of unknown origin, were observed. In addition, no mounds or depressions indicative of trash or solid waste disposal were observed.

Sanitary Sewage

Sanitary sewage disposal is provided by the municipality. IVI did not observe any sources of wastewater or liquid discharge into the sewer other than sanitary sewage.

Hazardous Waste

No hazardous waste was observed or reported to be generated on the Subject. Furthermore, IVI's review of the USEPA's database of sites regulated under RCRA did not identify the Subject as a generator of hazardous waste.

6.5 Stained Soil, Stained Pavement, or Stressed Vegetation

There was no evidence of soil staining, stained pavement, or stressed vegetation observed on-site.

6.0 SITE RECONNAISSANCE - continued

6.6 Liquid Discharges

No visible evidence of liquid discharges, suspected to represent an environmental concern into or from the Subject were observed during our survey.

6.7 Pools of Liquid

IVI did not observe significant standing surface water or pools containing liquids likely to be hazardous substances or petroleum products.

6.8 Pits, Ponds, or Lagoons

IVI did not observe pits, ponds, or lagoons suspected of containing hazardous substances or petroleum products on the Subject.

6.9 Wells

IVI did not identify on-site dry wells, irrigation wells, injection wells, observation wells, monitoring wells, potable water wells, recovery wells or abandoned wells.

6.10 On-Site Fill

Based on our observations, it does not appear that fill has been imported onto the subject property.

6.11 Drums and Containers for Storing Waste

With the exception of non-hazardous solid waste containers, IVI did not identify containers suspected of storing waste. With respect to the non-hazardous solid waste containers, no significant environmental concerns were noted.

6.12 Floor Drains and Sumps

IVI did not observe floor drains or sumps that were stained, emitting foul odors, located adjacent to chemical storage areas, or connected to an on-site disposal system.

6.0 SITE RECONNAISSANCE - continued

6.13 Odors

IVI identified strong, pungent, or noxious odors suspected to represent any environmental concerns.

6.14 Air Emissions

IVI did not identify processes or equipment which emit noticeable vapors or fumes.

6.15 Polychlorinated Biphenyls (PCBs)

IVI observed one (1) utility-owned pad-mounted electrical transformer on-site. According to Mr. Robert Baudouin, the site contact and the contractor who oversaw the site's renovations last year, this pad mounted transformer is new and was installed last year. As such, based upon its age, it is unlikely the site's utility-owned transformer contains PCBs.

According to the Toxic Substances Control Act (TSCA), Section 761, the owner of the transformers, Southern California Edison is responsible for the transformer's maintenance and remediation in the event of a leak.

6.16 Asbestos-Containing Material (ACM)

No friable materials were identified on-site which were suspected to contain asbestos. In addition, since the site was completely renovated in 1996, it is unlikely the resilient floor finishes contains asbestos. This non-friable material is in good condition and not likely to be disturbed.

6.17 Radon

According to the California Department of Health radon concentrations in Mammoth Lakes, California average 1.85 pCi/l which is below the 4 pCi/l action level established by the USEPA. As such, was not suspected that a radon hazard condition exists on the subject property.

7.0 FINDINGS AND CONCLUSIONS

IVI has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E1527-97 of Aspen Grill, located at 202 Old Mammoth Road, Mammoth Lakes, California. The Subject consists of a 0.8-acre parcel improved with a single-story restaurant which was constructed in 1968. Any exceptions to, or deletions from, the standard practice are described in-depth within the body of this report. This assessment has revealed no evidence of Recognized Environmental Conditions in connection with the Subject; however, the following condition was noted which warrants mention:

Polychlorinated Biphenyls (PCBs)

Although unlikely due to its age, the site's utility-owned electrical transformer may contain PCBs. Of importance, the transformer appeared to be in good condition, free of leakage, and is not likely to be damaged. In accordance with Section 761 of the Toxic Substance Control Act, the transformer's owner, Southern California Edison, is responsible for its maintenance and remediation in the event of a leak.

8.0 LIMITING CONDITIONS

8.1 This report has been prepared in accordance with generally accepted practices for conducting a Phase I Environmental Site Assessment in compliance with the ASTM standard entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process". The purpose of this assessment was to determine the presence of hazardous substances or petroleum product conditions on the Subject, if any; and to render an opinion.

8.2 The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services in the time and budgetary constraints imposed by the client. The work described in this report was carried out in accordance with the Terms and Conditions in the contract.

8.3 In preparing this report, IVI has relied on certain information provided by federal, state, and local officials and other parties referenced therein, and on information contained in the files of state agencies, local agencies, or both, available to IVI at the time of this site assessment. Although there may have been some degree of overlap in the information provided by these various sources, IVI did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment. Observations were made of the site and of the structures on the site as indicated in this report. Where access to portions of the site or to structures on the site was unavailable or limited, IVI renders no opinion as to the presence of indirect evidence relating to petroleum substances, hazardous substances, or both, in that portion of the site and structure. In addition, IVI renders no opinion as to the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floors, ceiling or a structure is obstructed by objects covering on or over these surfaces.

8.4 This report was prepared on behalf of and for the exclusive use of Mono County Resorts and may not be relied upon by any other person or entity. The contents of this report may not be quoted in whole or in part or distributed to any other person or entity other than Mono County Resorts without, in each individual case, the advanced written consent of an officer of IVI.

8.5 IVI does not represent that the site referred to herein contains no petroleum or hazardous or toxic substances or other conditions beyond those observed by IVI during the site assessment.

8.6 As part of this assessment, IVI submitted requests for information via the Freedom of Information Act (FOIA) to various governmental agencies. As of the preparation of this report these requests may not have been fulfilled. The conclusions of this report are subject to change upon receipt of a response from these FOIA requests.

15.8 Preliminary Drainage Study

Preliminary Drainage Study

FOR

Clearwater Lodge

Mailing Address:

Metric Mammoth, LLC
ATTN: Rick Rosenberg
16633 Ventura Boulevard, Suite 925
Encino, CA 91436

Construction Project Address:

164, 202 and 248 Old Mammoth Road
APNs: 35-230-05, 35-230-06 and 35-230-07
Mammoth Lakes, CA 93546

Date of Report: June 2006

Job No. 2740

Engineer:
triad/holmes associates

Post Office Box 1570
Mammoth Lakes, Ca 93546
Phone: (760) 934-7588
Fax: (760) 934-5619
triad@THAinc.com
David Laverty, LS, Principal
Tom Platz, RCE, Principal

Thomas A. Platz, P.E. C41039, President

Preliminary Drainage Study
Clearwater Lodge

Table of Contents

Project Description 1
Report Scope and Objective 2
Design Methods and Assumptions 2
Existing Hydrologic Conditions 3
Post-Development Hydrologic Conditions 4
Proposed Drainage Facilities 4
Erosion Protection Plan 5
Summary and Conclusion 5

APPENDIX

Figures ..... A
Hydrologic Calculations ..... B
Retention / Infiltration Basin Calculations C

1. Mammoth Lakes Storm Drainage Master Plan, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering, Plate 5 and portion of Table 6-1
2. Design Manual, Mammoth Lakes Storm Drainage and Erosion Control, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering, excerpts as referenced
3. 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, Chapter 4.8

PRELIMINARY DRAINAGE STUDY – Clearwater Lodge

Project Description

a. General Project Scope and Location

The subject site, "Clearwater Lodge" is a condo-hotel project located at Parcels 1, 2 and 3 of Parcel Map 36-47 per Parcel Map Book 2 Page 5, in the town of Mammoth Lakes, Mono County, California. The site is currently developed and has street frontage on three sides, Old Mammoth Road is to the east, Sierra Nevada Road is to the south of the property and Laurel Mountain Road is to the west. Currently the site can be accessed via any of these three roads. Parcel 1 is currently developed with the Sierra Nevada Inn, Parcel 2 with Igor's Restaurant, and Parcel 3 with Ocean Harvest Restaurant. For project location, please refer to the attached Vicinity Maps, Figures 1 and 2 of Appendix A.

The project is zoned CG (commercial general), and has a land use designation of "C2". North and east of the site are zoned CG as well, and to the south and west are RMF zoning. The site is approximately 265,355 square feet, or approximately 6.09 acres. See Figure 3 of Appendix A for a plan view of the existing site.

The proposed development is to consist of a 339 unit condo-hotel project. The units are within several buildings onsite and are to contain 480 sleeping rooms. There is to be an additional building on the site that is to contain workforce housing units. There is to be commercial properties in some of the buildings fronting Old Mammoth Road. There is an underground parking structure under the majority of the site, that is to provide parking for all housing and commercial units. The site is to be accessed via Old Mammoth Road and Laurel Canyon Road. See Figure 4 of Appendix A for a plan view of the proposed project.

The project proposes approximately 225,800 square feet of impervious surfaces consisting of the garage structure footprint and portions of the buildings that overhang the parking structure, and approximately 18,760 square feet consisting of drives and sidewalks not over the parking structure. An additional 20,795 square feet of the site is to be landscaped/slope graded or left natural.

Construction activities for this project include excavation for the underground parking structure, construction of the buildings over the structure, and construction / installation of associated utilities, drainage facilities, paving, grading and landscaping. The project is to be developed by Metric Mammoth, LLC.

b. General Topography, Vegetation and Soils

The site generally slopes from the west to the east. Site elevations range between 7,863 feet at the northwest corner to 7,844 at the northeast of the site. The slope of the site varies, with an average of approximately 2-3%. The site is almost totally developed with buildings and/or paving. Due to this, there are few trees, mostly along the perimeter, with some within the site.

This site is not located in a flood plain. There are no wetland or blue-line streams on, or running through this property. Soils are granular, typical of SCS Type "B."

Report Scope and Objective

The objective of this drainage report is to identify sources of storm water runoff, and estimate quantities of storm water runoff for both pre- and post-development conditions for 20 and 100-year intensity storm events. The report presents preliminary design requirements for storm drainage facilities to collect, convey and retain storm water runoff, generated from both off-site and on-site, at required levels. The intention of the storm water facilities design is for the project to have minimal effect on existing drainage conditions.

Design Methods and Assumptions

The hydrology calculations for this drainage report are based on "Procedure A" of the Town of Mammoth Lakes Design Manual[1]. Procedure A of the Town Design Manual is an SCS rational method variation which takes into account the effect of rain on snow, the effect of snow on overland times of concentration, and the effect of soils type and slope over natural and landscaped areas.

For the on-site tributary area, storm water runoff rate and time of concentration is calculated for both pre- and post-development conditions. Pre-development conditions determine historic "background" runoff rates. Post-development conditions calculate run-off quantities for the site at full proposed build-out. Undeveloped natural and landscaped areas are assumed as type "B" soils.

Hydraulic Calculations and subsequent design of storm water collection, transport and retention facilities are based on Manning's, Darcy-Weisbech, and Bernoulli's equations. LANDesk programs are used for most hydraulic calculations, with remaining hydraulic equations and hydrologic calculations written to Excel Spreadsheet programs.

Consistent with requirements of the Town of Mammoth Lakes, retention / infiltration systems are designed to retain storm water runoff from the site for 1 hour of a 20-year intensity storm as defined by the Water Quality Control Plan for the Lahontan Region[2] (1 inch / hour).

Retention / infiltration basin calculations are presented in Appendix C.

Existing Hydrologic Conditions

a. Watershed and Offsite Storm Water Runoff

This site is located Tributary Sub-area III-3 of the Mammoth Lakes Storm Drainage Master Plan. The Town of Mammoth Lakes Storm Drainage System (TMLSDS) is made up of underground and surface storm drainage facilities.

Drainage from this Sub-area is isolated from direct discharge to Mammoth Creek, as the area is located on the north side of an easterly trending ridge. Due to the ridge, the naturally occurring drainage pattern from the area is to the northeast toward an existing drainage channel known as Murphy Gulch. The ridge separates the Murphy Gulch and the Mammoth Creek drainage systems.

The upper reach of the Murphy Gulch drainage channel is slightly north of Highway 203 at the intersection of Highway 203 and Meridian Boulevard. Currently, the runoff from the site enters the TMLSDS that is in Old Mammoth Road, which continues northeasterly and crosses under Highway 203 and ends up in Murphy Gulch. Murphy Gulch is eventually tributary to Mammoth Creek (after crossing Highway 203 again in culverts). Mammoth Creek is listed for metals in the State Water Resources Control Board 303 (d) list. Mammoth Creek is listed for metals with a Low TMDL (Total

Maximum Daily Limit) priority in the 2002 CWA Section 303(d) State Water Resources Control Board list, which notes that it needs monitoring to determine the need for TMDL.

The Mammoth Lakes Storm Drainage Master Plan, estimated the 100-year storm flow for drainage from the watershed area that will be collected and conveyed in the proposed storm drain down Old Mammoth Road to Tavern Road. The 100-year storm was estimated to be 62 cfs in the drain along Tavern Road between Old Mammoth Road and Sierra Park Road.

Offsite storm water runoff currently enters the project site in sheet flow, generally from the west and northwest. The tributary area to this site consists of runoff from the northwest and appears to be minimal. As the areas surrounding the site are all developed, most runoff in the area is routed to the TMLSDS.

b. On Site Storm Water Runoff

Currently, storm water runoff from the site and its tributary area flows by sheet flow or through piping, through the property to enter the TMLSDS. Supporting hydrology spreadsheet calculations are presented in Appendix B.

Post-Development Hydrologic Conditions

a. Offsite Hydrologic Conditions

Any offsite runoff from Laurel Mountain Road will be allowed to enter the site where it will be directed via the gutters to inlets. The amount of offsite runoff is minimal, as the majority continues down Laurel Mountain Road where it enters the TMLSDS.

b. Onsite Hydrologic Conditions

Hydrologic calculations have been prepared for both the pre- and post-development conditions for the site. For a storm of 20-year intensity, the pre-development runoff generated onsite is 11.26 cfs (14.42 cfs for a 100-year). Post-development runoff rate for a 20-year intensity storm is 13.11 cfs (16.61 cfs for a 100-year).

Proposed Drainage Facilities

a. Collection / Conveyance Systems

Onsite drainage facilities collect and transport the onsite runoff through the site to the retention facilities located under the parking structure. The conveyance systems are to be designed per the mechanical engineer plans.

Storm water runoff generated onsite will be collected in gutters and inlets and carried by the gutters and piping to a proposed retention facility. The facility is to be located underneath the parking garage and it to be designed by the mechanical engineer, structural engineer, and the architect. The retention facility should be designed to retain storm water runoff generated from the site for a Lahontan 20-year intensity storm. Overflow from the facility is proposed to be directed to one of two drop inlets located at the lower ends of the site, one at the southeast and one at the northeast of the site. The overflow will have to be pumped, as the finished floor of the garage is 7838.83. It should also be designed to ensure that that water from the facility does not back up into the garage.

Runoff in excess of what is collected by the onsite retentions system will be conveyed to the storm drain in Old Mammoth Road.

b. Retention / Infiltration Systems

As required by the Lahontan Basin Plan, a retention / infiltration system collects and infiltrates the 20-year, one-hour storm flow generated from the project paving, roofs, landscaping and natural areas. Total runoff storage volume required for the site is estimated at 19,976 cubic feet. Total storage volume provided by the retention facilities are to be provided by the structural and mechanical plans. Calculations are shown in Appendix C.

Erosion Protection Plan

A Storm Water Pollution Prevention Plan (SWPPP) will be prepared for this site during the grading permit stage. This is in compliance with Town of Mammoth Lakes and State Water Quality Control Board – Lahontan Region requirements for site disturbance greater than 1 acre. Graded areas shall be protected against erosion once they are

brought to final grade. No graded areas are to be left unstabilized between October 15th and April 15th.

Summary and Conclusion

Existing flow patterns are generally maintained and permanent conditions are erosion resistant. Runoff in excess of what is collected by the onsite retentions system will be conveyed to the storm drain in Old Mammoth Road.

Retention is to be per Lahontan requirements. The drainage facilities must be maintained to continue to work as designed. Particular items requiring maintenance include, but are not limited to, cleaning of the grates, removal of foreign materials from storm drainage pipes, maintenance as necessary to outlet facilities and retention basins, and repairs as necessary to damaged facilities.

As indicated above, this project must have a SWPPP prepared in conformance with the NPDES CAS 000002 per the Clean Water Act.

---

[1]Mammoth Lakes Storm Drainage Master Plan, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering

[2]Design Manual, Mammoth Lakes Storm Drainage and Erosion Control, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering

[3]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

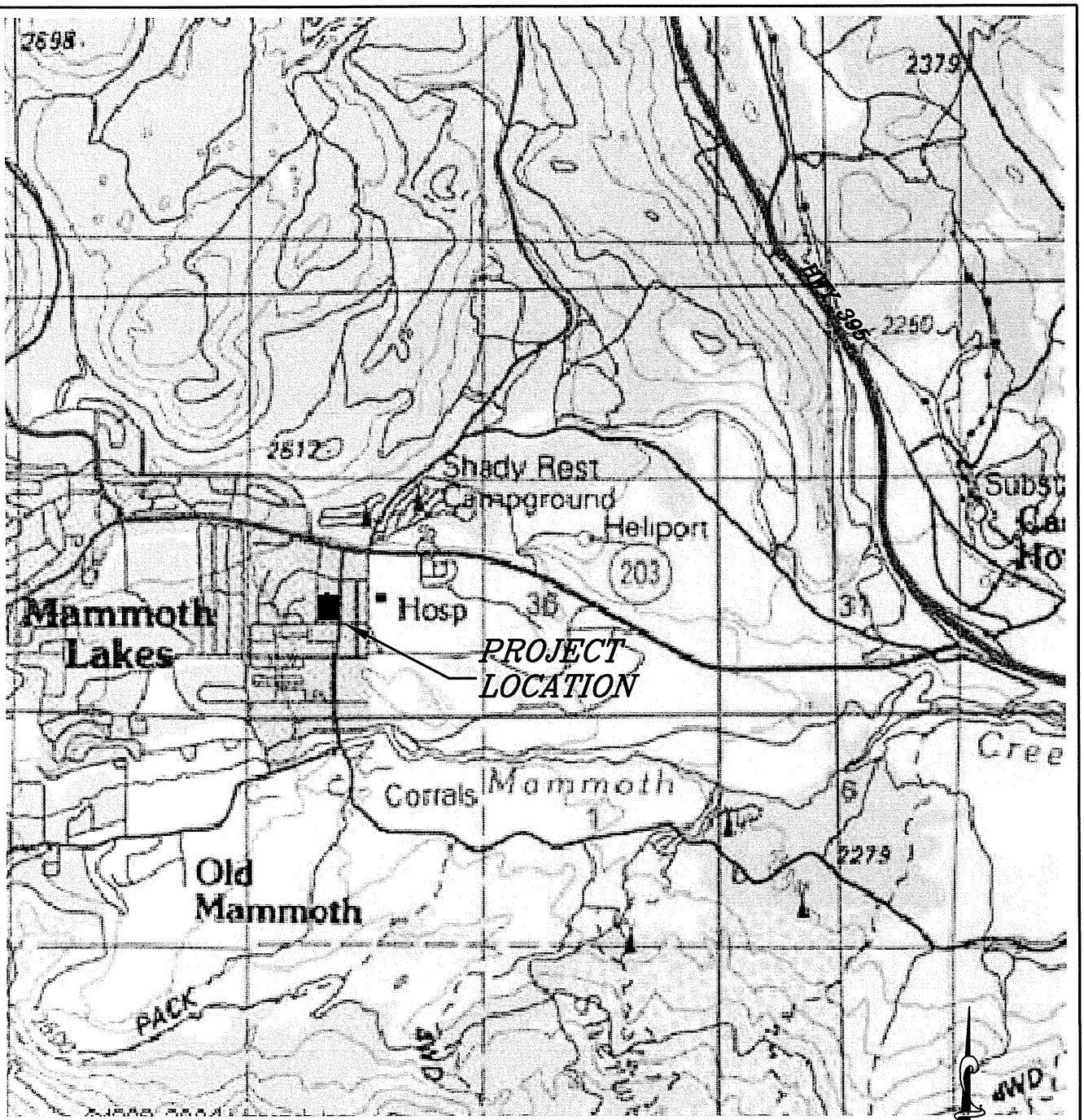
Drainage Study

FOR

Clearwater Lodge

APPENDIX A

FIGURES



triad/holmes associates

THE CLEARWATER

OVERALL
VICINITY MAP

Figure A.1

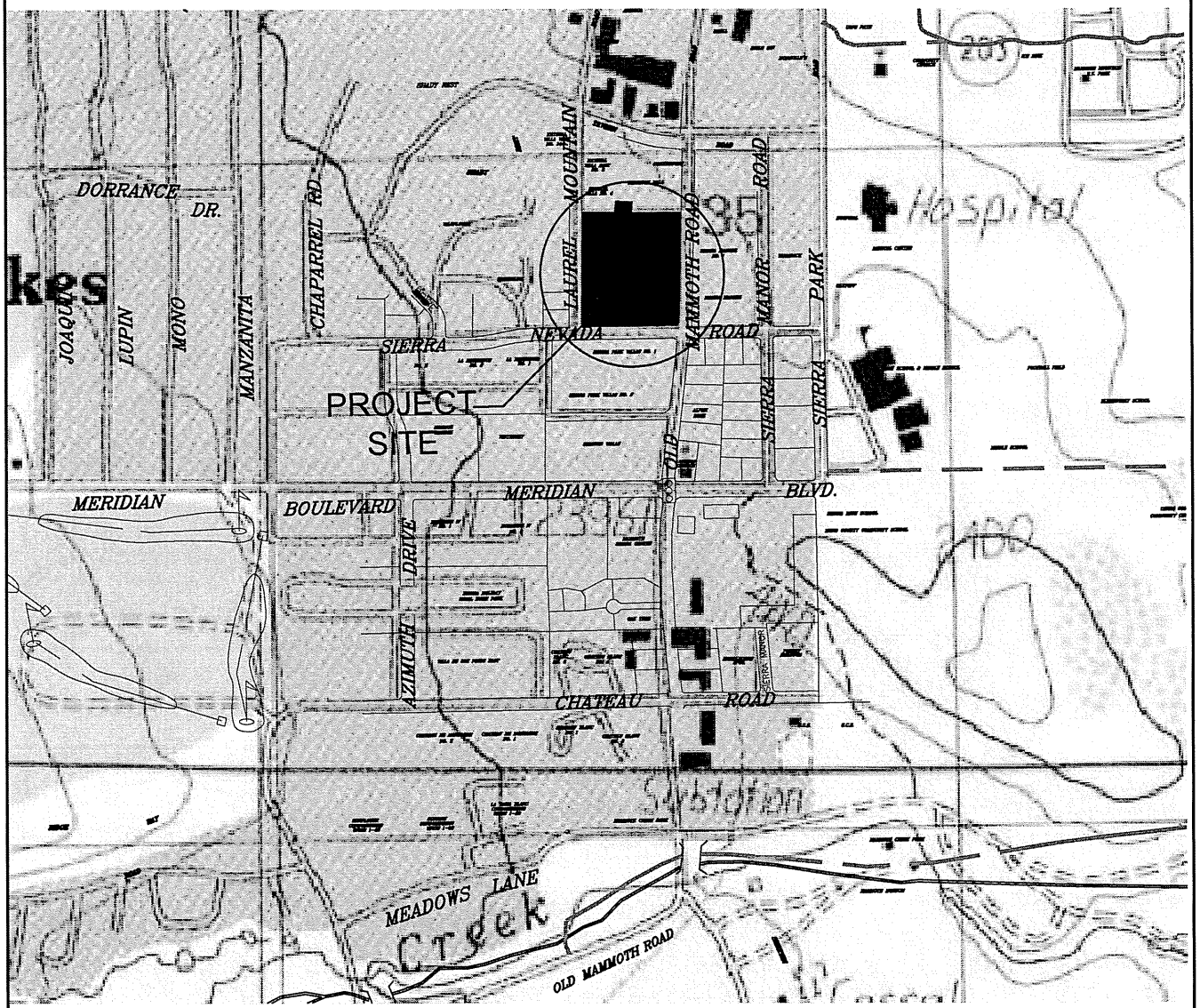
PROJECT NO. 2740

DATE 12/22/2005

DRAWING NAME: 2740-PDSfigs.dwg

SCALE: N. T. S.

\\Thachat\01_Mammoth\2740\ACAD\Tentative\Documents\Drainage Study\Version R0\Drawings\2740-PDSfigs.dwg Dec 22,2005 - 3:36pm, tseiter



SCALE: 1"=800'

triad/holmes associates

THE CLEARWATER

LOCAL VICINITY AND TOPOGRAPHIC MAP

Figure A.2

PROJECT NO. 2740

DATE 12/22/2005

DRAWING NAME: 2740-PDSfigs.dwg

SCALE: 1"=800'

\\Thachat\01_Mammoth\2740\ACAD\Tentative\Documents\Drainage Study\Version R0\Drawings\2740-PDSfigs.dwg Dec 22,2005 - 3:38pm, tseiter

Drainage Study

FOR

Clearwater Lodge

APPENDIX B

HYDROLOGY

Clearwater Lodge

Hydrology Calculations - 20 Year Summary

Area	Design Q	Exceedence Interval for Design	Winter Q at Exceedence Interval	Winter Intensity	Winter Average Cfactor	Summer Q at Exceedence Interval	Summer Intensity	Summer Average Cfactor	Acres	Calc Page	Comments
Pre-development	**11.26**	Q20	9.4	1.9	0.8	11.3	2.4	0.8	6.09	3	
Post-development	**13.11**	Q20	10.6	1.9	0.9	13.1	2.4	0.9	6.09	5	

Clearwater Lodge

Hydrology Calculations - 100 Year Summary

Area	Design Q	Exceedence Interval for Design	Winter Q at Exceedence Interval	Winter Intensity	Winter Average Cfactor	Summer Q at Exceedence Interval	Summer Intensity	Summer Average Cfactor	Acres	Calc Page	Comments
Pre-development	**14.42**	Q100	13.1	2.6	0.8	14.4	3.0	0.8	6.09	3	
Post-development	**16.61**	Q100	14.5	2.6	0.9	16.6	3.0	0.9	6.09	5	

Area Description:	Pre-development	1

Q=1.008CIA	Q2	Q5	Q10	Q20	Q50	Q100
Winter	1.7	5.6	7.1	9.4	11.3	13.1
Summer	4.4	8.0	9.2	11.3	13.0	14.4

C Weighted C Factor

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Roofs	0.18	0.18	0.18	0.18	0.18	0.18
Paving	0.55	0.55	0.55	0.55	0.55	0.55
Agg drives & walks	0.00	0.00	0.00	0.00	0.00	0.00
unpaved corp yards	0.00	0.00	0.00	0.00	0.00	0.00
Winter "B" Soils	0.03	0.04	0.06	0.07	0.08	0.09
Winter "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "B" Soils	0.01	0.02	0.03	0.03	0.04	0.04
Summer "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter Coefficient	0.76	0.77	0.79	0.80	0.81	0.82
Summer Coefficient	0.74	0.75	0.75	0.76	0.77	0.77

I Intensity

Winter Precipitation Design Curve (Figure 1-4)				(tc = .1)		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.04	0.12	0.15	0.20	0.24	0.27
Intensity	0.38	1.19	1.47	1.91	2.27	2.61
Winter Precipitation Design Curve (Figure 1-4)				**(tc = 1.)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.38	0.60	0.78	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Summer Precipitation Design Curve (Figure 1-5)				**(tc = .104)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.10	0.18	0.21	0.25	0.29	0.32
Intensity	0.97	1.75	2.00	2.41	2.75	3.04
Summer Precipitation Design Curve (Figure 1-5)				**(tc = 1.)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.36	0.58	0.71	0.86	1.03	1.20
Intensity	0.36	0.58	0.71	0.86	1.03	1.20

A Areas

type of area	Coefficient Winter, C	% of area	Acreage	Weighted C
Roofs	0.95	**19%**	1.17	0.18
Paving	0.90	**61%**	3.69	0.55
Agg drives & walks	0.80	**0%**	0.00	0.00
unpaved corp yards	0.75	**0%**	0.00	0.00
"B" Soils (RF*RR*NF)	varies	**20%**	1.23	varies
"C" Soils (RF*RR*NF)	varies	**0%**	0.00	
"D" Soils (RF*RR*NF)	varies	**0%**	0.00	
Total		100%	**6.09**	

Area Description: Pre-development 1

Time of Concentration

Overland Flow tc Component, tco (Figure 1-2) Winter

Overland Condition	Length, feet	slope	Lo/So	tco, hours
Unpaved and Unplowed in Winter	0	0	0	0.00
Paved and never Plowed in Winter	0	0	0	0.00
unpaved and plowed in winter	0	0	0	0.00
paved and plowed winter	575	0.03	19166.66667	0.10
			tco winter	**0.10**
			tcc	**0.00**
			Total time of concentration winter, tc (minimum of 0.1)	**0.10**

Overland Flow tc Component, tco (Figure 1-2) Summer

Unpaved Summer	0	0	0	0.00
paved summer	575	0.03	19166.66667	0.10
			tco summer	**0.10**
			tcc	**0.00**
			Total time of concentration summer, tc (minimum of 0.1)	**0.10**

Channel Flow tc Component, tcc (Figure 1-3)

Channel Description			Length, feet	slope	tcc, hours
Unimproved Channel			0	0.0	0.00
Riprap-Lined Channel			0	0.0	0.00
Pipe or Concrete-Lined Channel			0	0.0	0.00
				Total Time of Concentration, Channel, tcc	**0.00**

Natural Area Runoff Factor, RF (Figure 1-6)

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Winter Storm "B" Soils, RF	0.19	0.30	0.39	0.46	0.57	0.63
Cn=RF*RR*NF	0.14	0.22	0.28	0.34	0.42	0.46
Winter Storm "C" Soils, RF	0.34	0.53	0.65	0.73	0.80	0.84
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.84	0.85	0.87	0.89	0.90
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Summer Storm "B" Soils, RF	0.08	0.14	0.17	0.22	0.27	0.30
Cn=RF*RR*NF	0.06	0.10	0.13	0.16	0.20	0.22
Summer Storm "C" Soils, RF	0.18	0.29	0.35	0.43	0.51	0.59
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.83	0.85	0.86	0.88	0.89
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Reduction Ratio, RR (Figure 1-6)

Soil Type	Overland Slope	Slope Reduction Ration, RR
"B"	0%	0.73
"C"	0%	0.73
"D"	0%	0.73

Natural Area Size Factor, NF (Figure 1-8)

Soil Type	Tributary Area	Natural Area Reduction Factor, NF
"B"	1.2	1.00
"C"	0.0	0
"D"	0.0	0

Area Description:	Post-development	2

Q=1.008CIA	Q2	Q5	Q10	Q20	Q50	Q100
Winter	2.0	6.5	8.1	10.6	12.6	14.5
Summer	5.2	9.4	10.8	13.1	15.0	16.6

C Weighted C Factor

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Roofs	0.81	0.81	0.81	0.81	0.81	0.81
Paving	0.06	0.06	0.06	0.06	0.06	0.06
Agg drives & walks	0.00	0.00	0.00	0.00	0.00	0.00
unpaved corp yards	0.00	0.00	0.00	0.00	0.00	0.00
Winter "B" Soils	0.01	0.02	0.02	0.03	0.03	0.04
Winter "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "B" Soils	0.00	0.01	0.01	0.01	0.02	0.02
Summer "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter Coefficient	**0.88**	**0.89**	**0.89**	**0.90**	**0.90**	**0.91**
Summer Coefficient	**0.88**	**0.88**	**0.88**	**0.88**	**0.89**	**0.89**

I Intensity

Winter Precipitation Design Curve (Figure 1-4)				(tcc = .1)		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.04	0.12	0.15	0.20	0.24	0.27
Intensity	0.38	1.19	1.47	1.91	2.27	2.61
Winter Precipitation Design Curve (Figure 1-4)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.38	0.60	0.78	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = .1)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.10	0.18	0.21	0.25	0.29	0.32
Intensity	0.97	1.75	2.00	2.41	2.75	3.04
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.36	0.58	0.71	0.86	1.03	1.20
Intensity	0.36	0.58	0.71	0.86	1.03	1.20

A Areas

type of area	Coefficient Winter, C	% of area	Acreage	Weighted C
Roofs	0.95	**85%**	5.18	0.81
Paving	0.90	**7%**	0.43	0.06
Agg drives & walks	0.80	**0%**	0.00	0.00
unpaved corp yards	0.75	**0%**	0.00	0.00
"B" Soils (RF*RR*NF)	varies	**8%**	0.48	varies
"C" Soils (RF*RR*NF)	varies	**0%**	0.00	
"D" Soils (RF*RR*NF)	varies	**0%**	0.00	
Total		100%	**6.09**	

Area Description: Post-development 2

Time of Concentration

Overland Flow tc Component, tco (Figure 1-2) Winter				
Overland Condition	Length, feet	slope	Lo/So	tco, hours
Unpaved and Unplowed in Winter	0	0	0	0.00
Paved and never Plowed in Winter	0	0	0	0.00
unpaved and plowed in winter	0	0	0	0.00
paved and plowed winter	575	0.03	19166.66667	0.10
			tco winter	**0.10**
			tcc	**0.00**
			Total time of concentration winter, tc (minimum of 0.1)	**0.10**

Overland Flow tc Component, tco (Figure 1-2) Summer				
Unpaved Summer	0	0	0	0.00
paved summer	575	0.03	19166.66667	0.10
			tco summer	**0.10**
			tcc	**0.00**
			Total time of concentration summer, tc (minimum of 0.1)	**0.10**

Channel Flow tc Component, tcc (Figure 1-3)					
Channel Description			Length, feet	slope	tcc, hours
Unimproved Channel			0	0.00	0.00
Riprap-Lined Channel			0	0.00	0.00
Pipe or Concrete-Lined Channel			0	0.00	0.00
				Total Time of Concentration, Channel, tcc	**0.00**

Natural Area Runoff Factor, RF (Figure 1-6)

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Winter Storm "B" Soils, RF	0.19	0.30	0.39	0.46	0.57	0.63
Cn=RF*RR*NF	0.14	0.22	0.28	0.34	0.42	0.46
Winter Storm "C" Soils, RF	0.34	0.53	0.65	0.73	0.80	0.84
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.84	0.85	0.87	0.89	0.90
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Summer Storm "B" Soils, RF	0.08	0.14	0.17	0.22	0.27	0.30
Cn=RF*RR*NF	0.06	0.10	0.13	0.16	0.20	0.22
Summer Storm "C" Soils, RF	0.18	0.29	0.35	0.43	0.51	0.59
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.83	0.85	0.86	0.88	0.89
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Reduction Ratio, RR (Figure 1-6)

Soil Type	Overland Slope	Slope Reduction Ration, RR
"B"	0%	0.73
"C"	0%	0.73
"D"	0%	0.73

Natural Area Size Factor, NF (Figure 1-8)

Soil Type	Tributary Area	Natural Area Reduction Factor, NF
"B"	0.5	1.00
"C"	0.0	0
"D"	0.0	0

Drainage Study

FOR

Clearwater Lodge

APPENDIX C

RETENTION / INFILTRATION BASIN

Triad/Holmes Associates

Calc'd By: KP
Job No.: 2740
Date: 6/2/2006

Bishop	760 873-4273	Napa	707 251-9170
Mammoth Lakes	760 934-7588	Redwood City	650 366-0216
San Luis Obispo	805 544-8908	Lompoc	805 742-0032
		Pleasanton	925 485-1080

Runoff Volume and Drywell Sizing Calulation

based on Lahontan RWQCB Design Parameters

Clearwater Lodge

Site Retention

Input:

Rainfall Intensity

1 in/hr = 0.083 ft/hr

Percolation Rate

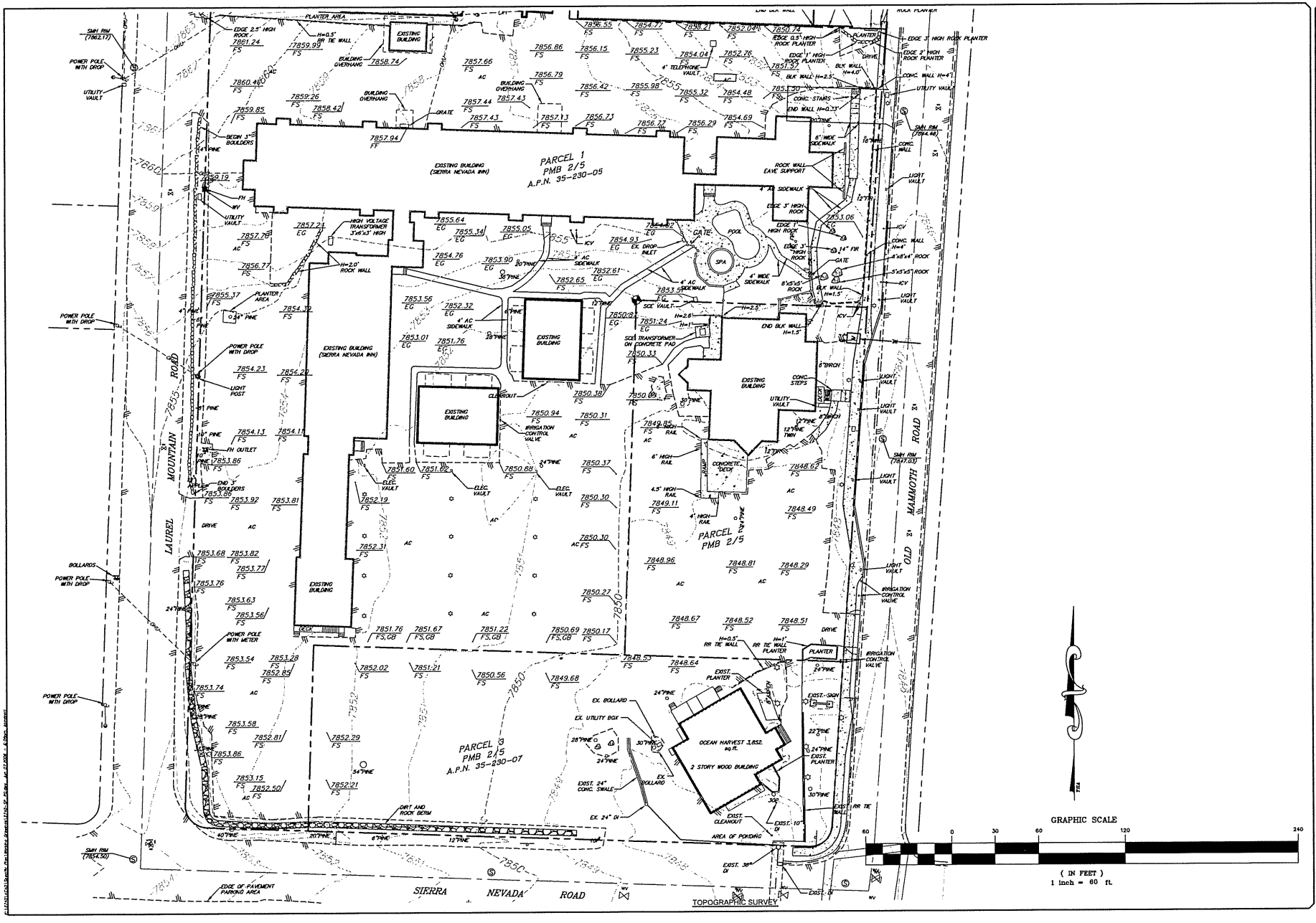
0 in/hr = 0.00 ft/hr

Tributary Area:

				Runoff Coefficient	
Roof Area	225800	SF	85%	0.95	Roof Area
Pavement Area	18760	SF	7%	0.90	Pavement Area
Gravel/Aggregate Area	0	SF	0%	0.80	Gravel/Aggregate Area
Concrete	0	SF	0%	0.90	Unpaved Industrial Area
Landscaping Area	20795	SF	8%	0.40	Landscaping Area
Total Area	**265355**	**SF**		**0.90**	**Average Runoff Coefficient**

Average Runoff Volume = Total Area * Average Runoff Coefficient * Rainfall Intensity * 1 Hour

Average Runoff Volume = 19976 CF



TOPOGRAPHIC SURVEY

EXISTING SITE

THE CLEARWATER

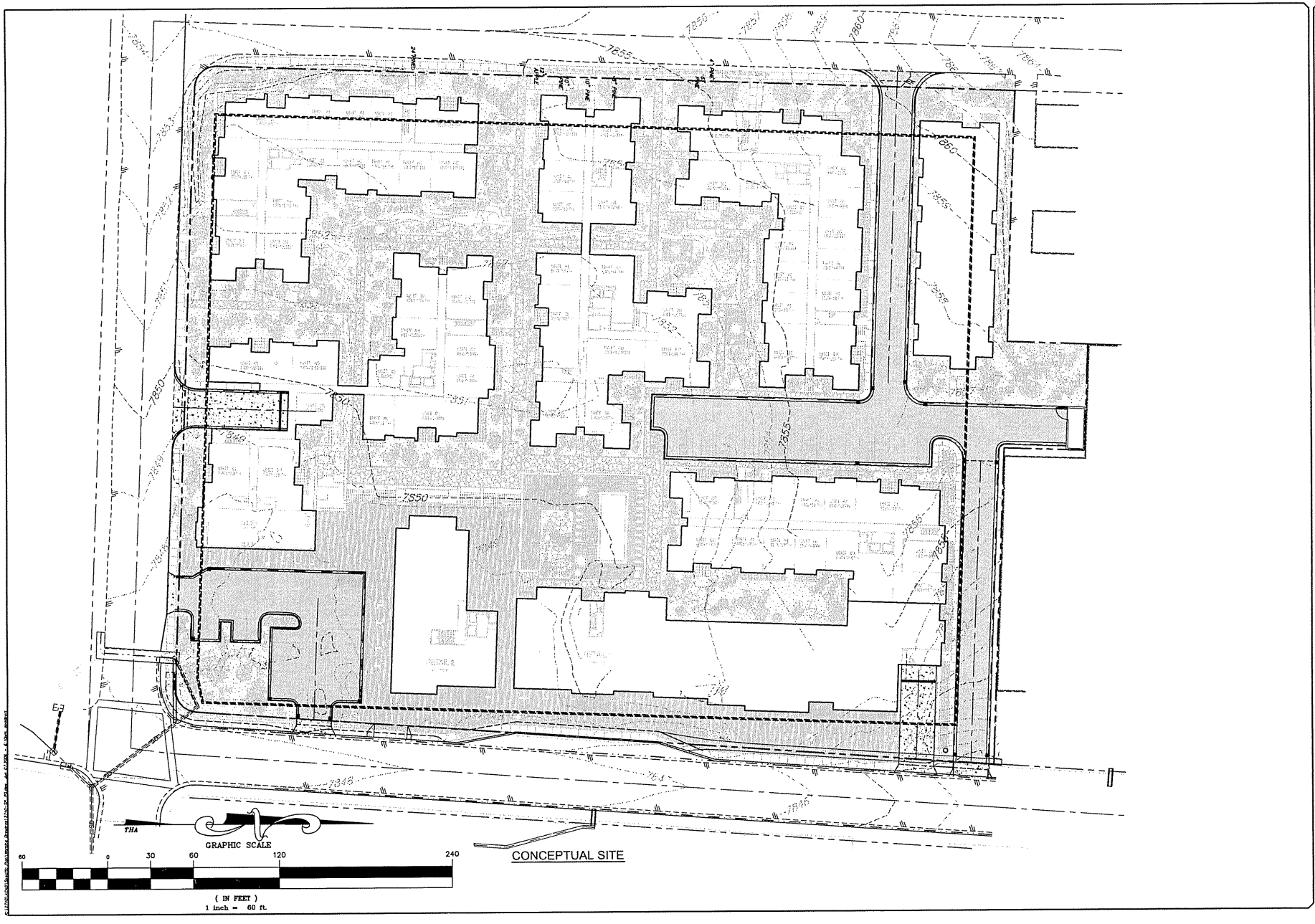
PREPARED FOR: METRIC MAMMOTH, LLC

thha
thkd/holmes assoc.
civil engineering
land surveying

Copyright (c) 2003 by thkd/Holmes Associates
All Rights Reserved. This Document is Intended Only for Use on the Project Specified in the Title Block. Any Reproduction of this Document or Portions of this Document Without Prior Written Consent of thkd/Holmes Associates Prohibited.

REVISIONS	BY

DATE JUNE 2006
SCALE 1"=60'
DRAWN DL/KP
JOB NO. 2740
DWG 2740-SP_R0.dwg
SHEET Fig 3
OF SHEETS


7850
7855
7860
7865
7870
7875
7880
7885
7890
7895
7900
7905
7910
7915
7920
7925
7930
7935
7940
7945
7950
7955
7960
7965
7970
7975
7980
7985
7990
7995
8000
8005
8010
8015
8020
8025
8030
8035
8040
8045
8050