New Mitigation Measures

6. If there is water in Camp Evers Creek at the time of construction of the proposed access roads, then a pre-construction survey, no more than one day prior to initiation of construction, should be conducted to capture and relocate any red-legged frogs or southwestern pond turtles that could be within the construction area. Any animals retrieved would be relocated to similar habitat in non-disturbed reaches of Camp Evers or Carbonera Creeks. Project proponents for construction of the roads shall be responsible for the survey. The survey shall be conducted by a qualified biologist under direction by the city Planning Director, no more than one day prior to initiation of construction. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

7. Project proponents shall arrange for a pre-construction survey for active nests of the sharp-shinned hawk, Cooper's hawk and yellow warbler in Parcels 1-through 8 if development plans will result in the removal of woody riparian vegetation along Camp Evers or Carbonera Creeks. If any of these species nests are found in trees that would be removed for development of the site, construction activities will be limited to outside a buffer zone approximately 50 feet from the nest until the young have fledged the nest. Once the young have fledged, the buffer zone can be removed and construction activities, including removal of the nesting tree, can continue. This pre-construction survey shall be conducted by a qualified biologist, prior to issuance of a grading permit, subject to review and approval by the city Planning Director. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

2.4 Traffic and Circulation

This section was prepared based on information contained in the Gateway South Specific Plan Traffic Impact Study (Rajappan & Meyer Consulting Engineers, Inc. 1995). This report is in the technical composite under separate cover and is available for review at the City of Scotts Valley Planning Department, One Civic Center Drive, Scotts Valley, California, 95066. Tables are used extensively in this analysis and are not included within the text of this section. The reader is referred to Appendix C of this EIR to review the tables.

Setting

Existing Conditions

Mt. Hermon Road. The project site is located on the west and east side of Mt. Hermon Road and consists of Planning Areas A and B. Access to the project site is via Mt. Hermon Road, Glen Canyon Road, and La Madrona Drive. Mt. Hermon Road is the primary access road to the project site and is an east-west arterial connecting the city and San Lorenzo with State Highway 17. Presently, this
road is being improved from west of Scotts Valley Drive to Glen Canyon Road. Improvements include turning lanes, intersection signal improvements, curbs, sidewalks, and Class II bike lanes. Improvements are complete south of Glen Canyon Road, adjacent to the project site.

Based on the anticipated travel patterns associated with the Specific Plan, a total of three intersections on Mt. Hermon Road were analyzed to determine existing conditions and the potential traffic impacts on these intersections. Traffic flow is most severely restricted at intersections. Therefore, the analysis examines the operating conditions at the following intersections:

1. Mt. Hermon Road and Scotts Valley Drive,
2. Mt. Hermon Road and Glen Canyon Road; and,
3. Mt. Hermon Road and La Madrona Drive/State Highway 17 southbound off-ramp.

**Intersection Volumes.** Turning movement counts were conducted at the above referenced intersections to determine existing intersection volumes. Counts were conducted for both the A.M. and P.M. peak hours. The A.M. peak hours are 7:00 A.M. to 9:00 A.M. and the P.M. peak hours are 4:00 P.M. to 6:00 P.M. Tables 1 and 2 (see Appendix C) present the existing turning movement counts at each study intersection. Based on the existing intersection turning movement counts and traffic modeling conducted for the three intersections, a level of service (LOS) is derived. Tables 3 and 4 (see Appendix C) present the LOS for existing conditions at each study intersection for A.M. and P.M. peak hours, respectively. These tables also indicate that the LOS for the three intersections range from “C” to “D” during the A.M. and P.M. peak hours. LOS designations include the letters “A” through “F”; the letter “A” designating free-flow conditions, and the letter “F” designating significant traffic delays and backups. The letters in between “A” and “F” indicate a range of delay.

**State Highway 17.** Existing mainline vehicle traffic counts were conducted at the State Highway 17 and Mt. Hermon Road interchange for the A.M. and P.M. peak hours. The results of the traffic counts are included in Tables 5 and 6 (see Appendix C). These counts were lower than the 1991 counts indicated in the 1994 Santa Cruz County Regional Transportation Plan (RTP). Therefore, the higher report volumes were used. The LOS associated with these traffic counts for both the A.M. and P.M. peak hours are summarized in Table 7 and 8 (see Appendix C), and indicate the following:

- A.M. Peak Hour - Southbound: Vehicle flow operates at LOS “B” to “D”
- A.M. Peak Hour - Northbound: Vehicle flow operates at LOS “C” to “D”
- P.M. Peak Hour - Southbound: Vehicle flow operates at LOS “B” to “D”
- P.M. Peak Hour - Northbound: Vehicle flow operates at LOS “B” to “C”
Project Analysis

The trip generation rates used in this analysis to determine the potential impacts of buildout of the project site are based on the Institute of Transportation Engineers Trip Generation Manual (5th Edition). Traffic volumes are based on field analysis conducted by the city's public works department and the transportation consultant.

Comparison of Existing Zoning and Proposed Zoning Trip Generation

Because the Specific Plan includes land uses that would generate greater traffic trips on area roadways, the city requested that an analysis of the potential traffic impacts associated with the existing zoning be conducted and then compared to potential traffic impacts associated with proposed zoning. The results of this analysis are shown in Tables 9 and 10 (see Appendix C) for both the A.M. and P.M. peak hours, respectively.

During the A.M. peak hour, the current zoning is expected to generate 443 vehicle trips. The proposed zoning would result in 354 vehicle trips. Thus, the current zoning would result in 89 more vehicle trips. On the other hand, during the P.M. peak hour, the current zoning is expected to generate 553 vehicle trips; the proposed zoning would result in 1,136 vehicle trips. Thus, the proposed zoning would result in 583 more trips. The increase in trips due to the proposed zoning changes during the P.M. peak hour is attributed to the increase in the commercial area in Planning Area B.

Maximum Probable Development Trip Generation

The city has identified a maximum probable development trip generation rate for the project site based on a detailed statistical analysis of the city's existing commercial projects. The resulting A.M. and P.M. peak hour trip generation rates are presented in Tables 11 and 12, respectively (see Appendix C). The total trips from the maximum probable development scenario are the maximum number of trips that have been used in this analysis.

Trip Distribution

The trip distribution pattern for the Specific Plan is based on the distribution pattern developed for the Gateway South Assessment District Traffic Engineering Studies prepared in 1987 by DKS Associates. This distribution was checked for consistency with the existing conditions based on traffic counts taken for this study by the city and the transportation consultant. Figure 14 illustrates the trip distribution relating to the Specific Plan.

Approved Projects Trip Generation

The effect of previously approved projects on the street system must be taken into account when an analysis of a project's impacts on the roadway system is
made, because the existing conditions discussed above will change over the short-term period due to the implementation of the approved projects. The discussion of the approved projects provides the decision makers an opportunity to understand what the transportation conditions will be on area roadways at the time of project site buildout. The approved projects are those that have been approved by the city, but not yet constructed and/or occupied.

Trip generation associated with approved projects are shown in Table 13 and 14 (see Appendix C) for the A.M. and P.M. peak hours, respectively.

Intersection Volumes

Intersection volumes are based on the relative location of a project to the roadway system and intersections, the layout of the proposed parcels and the existing traffic counts.

Tables 15 and 16 (see Appendix C) describe the intersection volumes at intersections for the approved projects for A.M. and P.M. peak hours, respectively. Tables 17 and 18 (see Appendix C) describe the intersection volumes at the intersections for the existing plus approved projects for both A.M. and P.M. peak hours, respectively. Tables 19 and 20 (see Appendix C) describe the Specific Plan intersection volumes for both the A.M. and P.M. peak hours, respectively. Tables 21 and 22 (see Appendix C) describe intersection volumes with existing plus approved projects plus proposed project conditions.

The LOS associated with the approved, existing plus approved, and proposed project volumes are included in Tables 3 and 4 (see Appendix C). The LOS described in these tables indicate that the Specific Plan LOS will not worsen the existing plus approved projects LOS during the A.M. and P.M. peak hours, and result in no change in the A.M. peak hours (i.e., LOS “C”).

Congestion Management Plan

The applicable level of service standard for the city has been determined to be the Santa Cruz County Congestion Management Plan “D” level of service for intersections. This level of service is the designated “standard of significance” to measure the Specific Plan impacts.

Impacts and Mitigation Measures

Standard of Significance. According to CEQA, Appendix G, a project will normally have a significant effect on the environment if it will cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. For purposes of this EIR, impacts to area roadways would be considered significant is the LOS were to drop to “E” or “F”.
This side was intentionally left blank.
Impact. Based on the analysis and the evidence provided herein, the project will not cause the LOS standard to drop below “D”. Therefore, the Specific Plan will not have a significant impact on traffic and circulation. Mitigations measures are not required. However, the Specific Plan will have an incremental cumulative impact on area roadways. Cumulative impacts associated with the Specific Plan are discussed in the cumulative impacts section of this EIR.

2.5 Air Quality

Setting

Topography and Meteorology

The project site is located in the North Central Coast Air Basin (NCCAB), which comprises Monterey, Santa Cruz and San Benito Counties. The Santa Cruz Mountains are located in the northwest area of this basin. The Diablo Range marks the northeastern boundary, and together with the southern extent of the Santa Cruz Mountains, forms the Santa Clara Valley which extends into the northeastern tip of the Basin. Further south, the Santa Clara Valley evolves into the San Benito Valley which runs northwest-southeast and has the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas which extends from Salinas at the northwest end to King City at the southeast end. The western side of the Salinas Valley is formed by the Sierra de Salinas, which also forms the eastern side of the smaller Carmel Valley; the coastal Santa Lucia Range defines the western side of the valley.

The semi-permanent high pressure cell in the eastern Pacific is the basic controlling factor in the climate of the air basin. In the summer, the high pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. Air descends in the Pacific High forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean water to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement.

The generally northwest-southeast orientation of mountainous ridges tends to restrict and channel the summer onshore air currents. Surface heating in the interior portion of the Salinas and San Benito Valleys creates a weak low pressure which intensifies the onshore air flow during the afternoon and evening.

In the fall, the surface winds become weak and the marine layers grows shallow, dissipating altogether on some days. The air flow is occasionally reversed in a weak offshore movement and the relatively stationary air mass is held in place by the Pacific High pressure cell, which allows pollutants to build out over a period of a few days. It is most often during this season that the north or east winds develop to transport pollutants from either the San Francisco Bay area or the Central Valley into the NCCAB.

During the winter, the Pacific High migrates southward and has less influence on the air basin. Air frequently flows in a southeasterly direction out of the
Salinas and San Benito Valleys, especially during night and morning hours. Northwest winds are nevertheless still dominant in winter, but easterly flow is more frequent. The general absence of deep, persistent inversion and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

In Santa Cruz County, coastal mountains exert strong influence on atmospheric circulation and result in generally good air quality. Small inland valleys such as Scotts Valley with low mountains on two sides have a poorer circulation than at the City of Santa Cruz on the coastal plain. Scotts Valley is downwind of major pollutant generating centers, and these pollutants have time to form oxidants while in transit to Scotts Valley. Consequently, air pollutants tend to build up more at Scotts Valley than at Santa Cruz.

**State and Federal Air Quality Standards**

National ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS) were established for several major pollutants. These pollutants are termed "criteria" pollutants because the NAAQS are supported by specific medical evidence. The six criteria pollutants which have attracted the greatest regulatory concern are ozone, carbon monoxide (CO), total suspended particulates (TSP), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead. The primary NAAQS and CAAQS for these pollutants are presented in Table 10.

---

**TABLE 10**

**Federal and State Ambient Air Quality Standards**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Federal Standard</th>
<th>California Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ozone</td>
<td>1 hour</td>
<td>0.12 ppm</td>
<td>0.09 ppm</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>1 hour</td>
<td>35.00 ppm</td>
<td>20.00 ppm</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>9.00 ppm</td>
<td>9.00 ppm</td>
</tr>
<tr>
<td>Nitrogen Dioxide</td>
<td>1 hour annual</td>
<td>—</td>
<td>0.25 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.053 ppm</td>
<td>—</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>1 hour</td>
<td>—</td>
<td>0.25 ppm</td>
</tr>
<tr>
<td></td>
<td>24 hours annual</td>
<td>0.14 ppm</td>
<td>0.045 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.03 ppm</td>
<td>—</td>
</tr>
<tr>
<td>Particulates (PM₁₀)</td>
<td>24 hours annual</td>
<td>150.0 µg/m³</td>
<td>50.0 µg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50.0 µg/m³</td>
<td>530.0 µg/m³</td>
</tr>
</tbody>
</table>

ppm = parts per million; µg/m³ = microns per cubic meter

PM₁₀ = Particulate matter less than 10 microns in diameter

Source: California Air Resources Board
Attainment Status of the NCCAB

Under the Federal Clean Air Act, the NCCAB is designated a moderate non-attainment area for the federal ozone standard, because the EPA has not formally re-designated it to be classified as "attainment". The basin has met the federal ozone standard since 1990; however, until the EPA formally re-designates the basin, it is classified as non-attainment.

Under the California Clean Air Act, the basin is a moderate non-attainment area for the State ozone standard. The California Clean Air Act states that an ozone non-attainment becomes non-attainment-transitional if the state standard is not exceeded more than three times at any monitoring station in the air basin. Further, the NCCAB is designated a non-attainment basin for the state PM$_{10}$.

Existing Ambient Air Quality

The Monterey Bay Area Unified Air Pollution Control District (APCD) operates several permanent ambient air quality monitoring stations in the NCCAB. The closest stations to the project site are located in Scotts Valley, Davenport, and Santa Cruz.

Ozone. Based on monitoring data compiled by the APCD, ozone concentrations exceeded state standards on 16 days in 1993, 10 days in 1992, and 16 days in 1991. The majority of the violations occurred at the Pinnacles monitoring station, where the state standard was exceeded on 26 different days. The Scotts Valley monitoring station included 5 days of violations. Data for the Scotts Valley monitoring station do not exist prior to 1993. Between 1991 and 1993, ozone concentrations exceeded federal ozone standards at the Pinnacles monitoring station only.

PM$_{10}$. The NCCAB is in non-attainment for the state PM$_{10}$ standard with four violations in 1993, one violation in 1992, and one violation in 1991 recorded at the APCD monitoring stations throughout the air basin. Though the Scotts Valley monitoring station includes the monitoring of PM$_{10}$, no violations have been recorded at this station.

Carbon Monoxide. There have been no recorded violations of the federal or state carbon monoxide standards at the APCD monitoring stations. However, based on air quality modeling, violations have been predicted at heavily congested intersections within the basin. Based on the current APCD standards, the "existing" and "existing plus project" LOS at intersections studied for inclusion in this EIR, do not justify carbon monoxide modeling.

Existing Emissions from the Project Site

The project site currently contains eight single-family units, four multi-family units and two small retail businesses (one business is located in a converted single-family dwelling). Emissions (indirect) associated with the existing land uses is negligible (URBEMIS3 model run indicates a total of approximately
19 pounds per day of carbon monoxide and 2 pounds of reactive organic gases (2.2 TOG multiplied by ROG factor of 0.908). Particulate emissions associated with the existing structures is estimated at approximately 18 pounds per day. The existing emissions do not exceed the APCD's thresholds of significance levels for these pollutants.

Sensitive Receptors

The existing residences on the project site are considered sensitive receptors because they are located close to a major arterial intersection (Mt. Hermon Road and State Highway 17) where a carbon monoxide hotspot is expected to occur. However, it is anticipated that, in the future, implementation of the Specific Plan will raze existing structures and replace them with 2 single-family structures, 157 multi-family structures, 12,300 square feet of office space, and 151,000 square feet of retail space. Therefore, the analysis in this EIR will focus on what will be at the project site, not what currently exists. Because of the proximity of proposed residences adjacent to the intersection of Mt. Hermon Road and State Highway 17, there is a reasonable expectation of continuous human exposure to vehicle emissions. However, based on the transportation analysis in this EIR, the threshold for carbon monoxide analysis (LOS E and F) does not occur with this project.

Project Analysis

This EIR is a Program EIR for a Specific Plan that will eventually result in a variety of residential and commercial projects being developed on 42.15 acres. Buildout will occur over a period of approximately 5 years, commencing at the time this EIR is certified by the lead agency (i.e. approximately the year 2000). Therefore, this air quality analysis is a cumulative air quality impact analysis of future projects allowed under the proposed zoning. This air quality analysis also assumes a maximum probable development, as discussed in Section 1.3.3 of this EIR.

Short-term

The primary sources of construction-related dust include grading, excavation, building of roads, and travel on unpaved surfaces. During construction, fugitive dust is generated when wheels or blades pulverize and break down surface materials. The resulting dust, which includes PM$_{10}$, is subsequently entrained by wind erosion or vehicle tires, where it becomes a nuisance and potential health hazards to those living and working nearby. In addition, other sources such as exhaust from heavy-duty diesel-powered equipment can contribute to PM$_{10}$ levels at and around a construction site.

The accurate estimation of PM$_{10}$ concentrations occurring at or adjacent to construction sites is difficult since work schedules and equipment used during specific stages of construction have not been set. Modeling of PM$_{10}$ dispersion depends critically on a large number of parameters, such as soil moisture, silt content, wind speed, area disturbed, etc. However, the APCD estimates that
grading and excavation activities generate approximately 70 pounds per day per acre of land disturbed (assumes 1.2 tons of fugitive dust per acre of construction per month of activity [EPA, AP-42, Vol. I, 1985] and working 22 days per month. \( \text{PM}_{10} \) comprises 64 percent of fugitive dust. Assumptions apply to construction operations with: 1) medium activity level, 2) moderate silt content (approximately 30 percent), and 3) semiarid climate.

Dust emissions from future development at the project site will be associated with the incremental development on the project site expected to occur within five years of approval of this EIR. However, it is expected that the future construction could reasonably result in up to one-acre of ground disturbance per day (70 pounds of emissions per acre per day) for a short period of time. Exceedences of the APCD threshold of significance (82 lbs. per day) could be avoided if acreage is controlled. However, a conservative approach shall be taken in this analysis and it is concluded that the construction activities at the project site will likely exceed meet or exceed the APCD’s threshold of significance (82 lbs. per day).

**Long-Term**

The primary source of long-term emissions associated with residential, commercial, institutional, and certain industrial land uses are motor vehicles. These land uses typically do not emit significant amounts of air pollutants directly but attract motor vehicles that do. These land uses are referred to as indirect sources.

Motor vehicle emissions associated with the buildout of the project site have been modeled using URBEMISS with updated inputs from the APCD’s CEQA Air Quality Guidelines. The results of the model are summarized in Table 11. The full print-out of the model run for both summer and winter conditions are included in Appendix D.

Table 12 indicates the current thresholds of significance for emissions that are applicable to the NCCAB. Based on these thresholds, the Specific Plan would have a significant impact relating to all emissions except for SOx.

---

**TABLE 11**

**Specific Plan Emissions(lbs./day)**

<table>
<thead>
<tr>
<th>Season</th>
<th>ROG</th>
<th>CO</th>
<th>NO(_x)</th>
<th>(\text{PM}_{10})</th>
<th>SO(_x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>273.63</td>
<td>3,322.8</td>
<td>305.3</td>
<td>88.4</td>
<td>22.2</td>
</tr>
<tr>
<td>Winter</td>
<td>350.80</td>
<td>4,914.7</td>
<td>333.7</td>
<td>88.4</td>
<td>22.2</td>
</tr>
</tbody>
</table>

Source: EMC Planning Group Inc.
TABLE 12

Thresholds of Significance (lbs./day)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>550 lbs/day</td>
</tr>
<tr>
<td>ROG</td>
<td>150 lbs/day</td>
</tr>
<tr>
<td>NO_x</td>
<td>150 lbs/day</td>
</tr>
<tr>
<td>SO_x</td>
<td>150 lbs/day</td>
</tr>
<tr>
<td>PM_{10}</td>
<td>82 lbs/day</td>
</tr>
</tbody>
</table>

Source: Monterey Bay Unified Air Pollution Control District

**Impacts and Mitigation Measures**

**Standard of Significance.** According to CEQA, Appendix G, a project will normally have a significant effect on the environment if it will violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. For the purposes of this EIR, impacts to the air basin are considered significant if they meet or exceed the thresholds of significance.

The city shall implement the following mitigations for the following short-term and long-term impacts pursuant to Gateway Specific Plan Policy OSP-355, which states “The city shall consider recommendations from the Monterey Bay Unified Air Pollution Control District (MBUAPCD) to maintain and improve regional air quality”.

**Short-term Impact.** Buildout of the property is expected to occasionally exceed the threshold criteria for PM_{10}. This is considered a significant impact. However, implementation of the following mitigations will reduce this impact to a level of insignificance.

**Mitigation Measure**

8. Because construction-related emissions of PM_{10} vary based on a number of factors (e.g. activity types, area of activity, silt content), the level of mitigation necessary to reduce impacts below significance will vary. In general, mitigation measures that address larger source of PM_{10} during construction (e.g. grading, excavation, entrained dust from unpaved roads) have the greatest potential to substantially reduce fugitive dust.

Project proponents for future development shall prepare a construction air pollution control plan to include, but not be limited to, the follow techniques:
• Sprinkling unpaved construction sites with non-potable water at least twice per day;
• Covering trucks hauling excavated materials with tarpaulins or other effective covers;
• Grading activities shall cease when winds are greater than 30 mph;
• Cover soils storage piles not to be used within one business week;
• Install wheel washers for all exiting trucks;
• Limit the area under construction;
• Sweeping streets serving the construction sites at least once per day;
• Paving and planting as soon as possible;
• Reduce unnecessary idling; and
• Use of adhesives, clean-up solvents, paint, and asphalt paving materials with a low ROG content.

This plan shall be subject to review and approval by the city Public Works Director prior to issuance of a grading permit.

Long-term Impact. Future development of the project site at buildout will exceed current APCD thresholds of significance for CO, ROG, NOx, and SOx. This is considered a significant and unavoidable impact. Regardless, CEQA allows implementation of mitigations that help to reduce a significant impact’s relative level of significance.

Mitigation Measure

9. Indirect and long-term source emissions can be reduced by implementing transportation demand management (TDM) measures that reduce vehicle travel. Project Proponents for future development shall prepare a TDM program that may include, but not be limited to, the following measures:

• Employ a transportation/rideshare coordinator for large commercial (retail and office) centers;
• Implement a rideshare program;
• Provide for preferential carpool/vanpool parking at all commercial center;
• Implement a parking surcharge for single occupant vehicles;
• Provide for shuttle/mini bus service;
• Provide incentives to employees to carpool/vanpool or take public transportation;
• Provide shower/locker facilities for employees who commute by bicycle;
• Enclose bicycle storage/parking facilities;
• Provide on-site childcare centers;
• Provide transit design features within the development that are safe, attractive, provide a source of transit information, and well lit; and,
• Develop a park-and-ride lot.

This plan shall be subject to review and approval by the city Public Works Director prior to approval of a final map.

2.6 Public Services

This section discusses the potential impacts to public services resulting from implementation of the Specific Plan. The public service concerns addressed within this section include water service infrastructure, wastewater service infrastructure, schools, police and fire protection service and utility infrastructure. A complete discussion of potential impacts associated with water supply, water demand and groundwater resources, is presented in Section 2.2, Hydrology, of this report.

2.6.1 Water Service

Setting

With recent implementation of the Gateway South Assessment District a number of water lines were installed adjacent to or within the project site including a 10-inch water main along Mt. Hermon Road from Glen Canyon Road to La Madrona Drive and a 12-inch water main along La Madrona Drive from Mt. Hermon Road to Silverwood Drive. A 12-inch main is in place along Glen Canyon Road from Mt. Hermon Road to Sunridge Court, north of Planning Area A and a 10-inch to 12-inch main is stubbed out along Silverwood Drive. A stub out is also provided for approximately 200 feet along Altenitas Road for future linkage to a private water mutual company (private well) north of the project site (Daryl Ellis, personal communication with consultant, March 31, 1995). Two water line connections are proposed in the Specific Plan at the southern boundary of Parcel 1 and the northern boundary of Parcel 8.

As described in section 2.2, Surface Water Hydrology, the city's primary water supply source is the Scotts Valley groundwater basin produced from two princi-
pal groundwater aquifers. Scotts Valley Water District will provide water service to future development on the project site. The water district obtains water from the basin through six wells. The wells have a combined pumping capacity of approximately 1,640 gallons per minute or 2,660 acre-feet per year (Daryl Ellis, personal communication with consultant, March 31, 1995).

**Project Analysis**

The Specific Plan provides policies to ensure adequate infrastructure facilities for water. Policy 5.1 states:

> Water lines shall be designed and constructed to adequately provide for water service and fire protection needs of all new planned development.

a) New water lines shall be sized to provide for adequate fire flow.

Future developers on the project site will be required to pay encroachment and hook-up fees when site plans for the future development on the project site are submitted to the city. The exact fee will be determined upon submittal of the detailed site plans.

The recently installed water lines surrounding the project site were designed to serve proposed future development on the project site. Therefore, development on the project site will not create a significant adverse impact to water infrastructure. Impacts related to water supply are discussed in Section 2.2.2, Groundwater, of this report.

### 2.6.2 Wastewater Service

**Setting**

Wastewater treatment services to the project site are provided by the Scotts Valley Wastewater Treatment Plant (hereinafter "WWTP") which is located at 700 Lundy Lane, approximately one-half mile from the project site. The current reserve capacity of the WWTP is 95,000 gallons per day (gpd). Expansion of the WWTP is currently underway and is anticipated for completion by July 1996. When completed, the expanded WWTP will have a 1.5 million gallon per day (mgd) capacity and will provide for a reserve capacity of 0.7 mgd (700,000 gallons per day). A number of outstanding sewer allocations are currently committed to proposed developments. Therefore, any future development on the project site anticipated for completion prior to July 1996 will be placed behind those committed sewer allocations (Scott Hamby, personal communication with consultant, March 29, 1995).

With recent implementation of the Gateway South Assessment District a number of sewer lines were installed adjacent to the project site including an eight-
inch sewer main along Mt. Hermon Road from Glen Canyon Road to La Madrona Drive and an eight-inch sewer main along La Madrona Drive to Silverwood Drive. A four-inch force main exists along Glen Canyon Road from Mt. Hermon Road to Sunridge Court, north of Planning Area A. As of April, 1995, there is a missing link in the lines connecting the project site to the WWTP. It is anticipated that a 10-inch line will be extended from the main line located along Mt. Hermon Road to the WWTP in June 1995. (Scott Hamby, personal communication with consultant, March 29, 1994.)

When future development occurs within the city, including development on the project site, future developers will be required to pay a hook-up fee which provides allocation of WWTP capacity.

**Project Analysis**

Peak sewage flows were calculated to determine impacts on sewer service. An average unit flow rate of 235 gpd per dwelling unit was used for residential land use based on the city's recent survey of residential sewage pump stations monitors. For commercial land uses, a unit flow rate of 0.1 gpd per square foot of floor space was utilized, based on information provided by the Universal Plumbers Code.

Utilizing the unit flow rates presented above, buildout of the project site will generate approximately 37,365 gpd of sewage for residential and 16,323 gpd of sewage for commercial, with the total estimated to be 53,688 gpd. Given the current reserve capacity at the WWTP, estimated at 95,000 gpd, buildout of the project site would significantly reduce the reserve capacity. However, with the completion of the WWTP expansion total in July 1996, the anticipated reserve capacity of 700,000 gpd will be reduced by buildout of the project site by only seven percent.

The Specific Plan provides policies to ensure adequate infrastructure facilities for sewer. Policy 5.2 states:

Sewer lines shall be designed and constructed to adequately serve new development.

a) Sewer facilities shall be designed to assure sufficient capacity to handle anticipated flows. Gravity flow shall be provided wherever possible. Sewage pump stations and force mains shall be provided if required.

The recently installed sewer lines were designed to be serve future development on the project site. Therefore, development on the project site will not create a significant adverse impact to sewer service.

It is anticipated that adequate WWTP capacity will be available in the future to accommodate sewage generated by development at the project site. However, if any individual development projects within the project site are proposed to be built prior to July 1996, they will be placed behind other projects with committed
allocations. If the project site is built out after July 1996, it will not create a significant adverse impact on the capacity of the WWTP.

Impacts related to groundwater resources and supply are discussed in Section 2.2.2, Groundwater, of this report.

2.6.3 Schools

Setting

Public school service for the city is provided by the Scotts Valley Unified School District (hereinafter "district"). The district currently has two elementary schools, and one middle school. Students from future development of the project site will attend Brook Knoll Elementary School and Scotts Valley Middle School. In an agreement established with the Santa Cruz City School District, all high school students from Scotts Valley attend Harbor and Soquel High Schools. This agreement will terminate in 1998. Table 13 below lists the district's current facilities, enrollment, and capacity. All three schools within the district currently exceed capacity and are projected to continue to exceed capacity.

<table>
<thead>
<tr>
<th>School Name</th>
<th>Usable Acres</th>
<th>Existing Permanent Capacity</th>
<th>Actual Enrollment 2/28/95</th>
<th>Projected Enrollment* (95-96)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brook Knoll Elementary</td>
<td>9.7</td>
<td>439</td>
<td>647</td>
<td>672 (10.2 acres)**</td>
</tr>
<tr>
<td>Vine Hill Elementary</td>
<td>8</td>
<td>497</td>
<td>601</td>
<td>600 (9 acres)**</td>
</tr>
<tr>
<td>Scotts Valley Middle School</td>
<td>9.5</td>
<td>407</td>
<td>547</td>
<td>549 (17.4 acres **)</td>
</tr>
<tr>
<td>Harbor High School</td>
<td></td>
<td></td>
<td>1,258 (10/12/94)</td>
<td></td>
</tr>
<tr>
<td>Soquel High School</td>
<td></td>
<td></td>
<td>1,402 (10/12/94)</td>
<td></td>
</tr>
</tbody>
</table>

Note: • Kindergarten student to classroom ratio: 1 classroom for 55 students  
• K-8 ratio: 1 classroom for 23 students  
• Special Education ratio: 1 classroom for 10 students  
• * = Assume student advance one grade, no additional growth  
• ** = State recommended acreage

Source: Scotts Valley Unified School District. March 30, 1995
After recent passage of a bond measure, the district plans to build a third elementary school and expand the middle school. The district is currently looking into a site for a high school facility (Dr. Andrew Lacouture, personal communication with consultant, March 30, 1995).

**Project Analysis**

Buildout of the project site will generate a new student population within the district. The student generation rates utilized to calculate the potential new student population for grades K—8 were provided by the district and are as follows:

- 0.71 students per household for single-family residential development; and
- 0.39 students per household for multi-family residential development.

The student generation rate utilized to calculate the potential new student population for grades 9—12 is 0.29 per household (Earth Metrics, Inc. 1992).

Based on these generation rates, buildout of the project site under Specific Plan zoning has the potential to generate approximately 63 new K—8 students and 46 new high school students, for a total anticipated new student population of approximately 109.

The existing low density residential zoning for the project site would generate approximately 51 new K—8 students and 21 new 9—12 students, for a total new student population of approximately 72. The projected new student population from Specific Plan zoning is a 66 percent increase over the existing zoning.

General plan policy PSP-541 states that “as part of the environmental review process, the city shall evaluate new residential developments for their potential impact on student enrollment in the public school system. Applicants for approval of residential development projects will be expected to demonstrate that adequate mitigation measures will be in place to offset the identified increase in student enrollment directly related to the residential development project. The adequacy of the proposed mitigation measures shall be determined on a case by case basis, consistent with the stated goals, objectives, policies and programs under the city’s general plan. Consideration of adequate mitigation measures shall include, but not be limited to, those measures set forth under California Government Code Section 65996.”

**Impacts and Mitigations**

**Significance Criteria.** CEQA Appendix G does not provide significance criteria for the evaluation of school impacts. For the purposes of this EIR, impacts to schools would be considered significant if the project would exceed a school's permanent facilities design capacity.
**Impact.** Buildout of the project site based on Specific Plan zoning will result in an approximately 66 percent increase in the student population above the existing zoning. Although the district has plans for expansion of their school facilities, the current and projected enrollment exceeds school capacity. Therefore, the Specific Plan will result in a significant adverse impact to the Scotts Valley Unified School District. The general plan, as discussed under project analysis, includes a policy to address this impact. The Specific Plan does not have a policy to address this impact. With implementation of the following mitigation measure, this impact will be reduced to a level of insignificance. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

**New Mitigation**

9. Project proponents for future residential development projects shall demonstrate that adequate mitigation measures will be in place to offset the identified increase in student enrollment directly related to their residential project. The adequacy of the proposed mitigation measures shall be determined on a case by case basis, consistent with the stated goals, objectives, policies and programs under the city's general plan. Consideration of adequate mitigations measures shall include, but not be limited to, those measures set forth under California Government Code Section 65996. Proposed mitigation measures are subject to review and approval by the city Planning Director prior to issuance of a building permit.

### 2.6.4 Police Service

**Setting**

Police protection service to the project site is provided by the Scotts Valley Police Department. The police department is located at 1 Civic Center Drive, approximately four miles north of the project site. Emergency response time averages three to five minutes to the project site. The department currently has a total of nine patrol officers and two traffic officers, with a service ratio of one officer per 1,000 population (Captain Tom Bush, personal communication with consultant, March 29, 1995).

**Project Analysis**

The Specific Plan would change the existing zoning from low density residential development to multi-family residential development and increase the square footage of commercial development. Multi-family residential development and commercial facilities inherently draw more people than low density residential development. Therefore, it is anticipated that future development of the project site would require relatively more police officer time than the existing zoning. Project proponents of future development applications will be required to pay the
appropriate impact fee to the city police department (Robert Hanna, personal communication with consultant, April 3, 1995).

Impacts and Mitigations

Significance Criteria. CEQA Appendix G does not provide significance criteria for the evaluation of police protection service impacts. For the purposes of this EIR, CEQA Appendix I, Environmental Checklist Form, will be utilized to construct a significance threshold for impacts to police protection service. According to Appendix I, a project will normally have a significant impact if it will have an effect upon, or result in a need for new or altered public facilities.

Impact. Buildout of the project site will result in increased police officer demand which is considered a significant impact to the Scotts Valley Police Department. However, with payment of the appropriate impact fee, this impact will be reduced to a level of insignificance. No further mitigations are necessary.

2.6.5 Fire Protection Service

Setting

Fire protection service for the project site is provided by the Scotts Valley Fire District. The district has two operational stations one on Erba Lane and the other on Simms Road. Both stations are within a four to six minute response time from the project site. The fire district is staffed by 24 full time firefighters and 11 volunteers. The district provides service to the city with an Insurance Services Office rating of five on a scale of one to ten, with ten being the least protected (Deputy Chief Mike McMurry, personal communication with consultant, March 29, 1995).

According to the Scotts Valley Water District, the water infrastructure recently installed as part of the Gateway South assessment district was designed to maintain adequate pumping capacity for fire flow.

According to the general plan, the adjacent Mañana Woods subdivision is currently within an area identified as a fire hazard area. The project site is not located within this fire hazard area.

Project Analysis

With approximately 87 additional residential units and 6.78 acres additional commercial development over and above the existing zoning, future development at the project site will increase the demand for fire protection services. Project proponents of future development applications will be required to pay a fire district capital service fee (Deputy Chief Mike McMurry, personal communication with consultant, April 3, 1995).
Impacts and Mitigations

Significance Criteria. CEQA Appendix G does not provide significance criteria for the evaluation of fire protection service impacts. For the purposes of this EIR, CEQA Appendix I, Environmental Checklist Form, will be utilized to construct a significance threshold for impacts to fire protection service. According to Appendix I, a project will normally have a significant impact if it will have an effect upon, or result in a need for new or altered public facilities.

Impact: Buildout of the proposed project will result in a need for increased fire protection services which is considered a significant impact to the Scotts Valley Fire Department. However, with payment of the required capital service fee, this impact will be reduced to a level of insignificance. No further mitigations are necessary.

2.6.6 Utilities

Setting

Upon development of the project site, electric power and natural gas will be provided by the Pacific Gas and Electric Company (PG&E). Phone service will be provided by Pacific Bell. TCI Cablevision of Santa Cruz County will provide cable television service to the project site. The proposed project is within the service areas for PG&E, Pacific Bell, and TCI Cablevision.

Project Analysis

The development of the project site will create an increased demand for utilities. Provision of these services would be an incremental addition to the level of service currently provided. However, due to the proximity of the project site to existing service areas for PG&E, Pacific Bell, and TCI Cablevision, provision of these services to the project site will not result in a significant adverse environmental impact.

The specific plan provides Policy 7.1 with regard to the need to underground utilities. Policy 7.1 states:

All new utility lines in the project area shall be placed underground.

New development within the project site will be required to comply with this policy and, therefore, no significant adverse impact is anticipated.
2.7 Land Use Compatibility

2.7.1 Aesthetics

Setting

The project site is located at the southern entrance to the city and is visible from State Highway 17 and Mt. Hermon Road. As illustrated in Figure OS-1 of the general plan, State Highway 17 is identified as a scenic road corridor, and the eastern views from Mt. Hermon Road at the southern entrance of the city are considered important vistas. This location makes the views of the project site very important to the city's image.

Planning Area A

State Highway 17. Parcel 8 in Planning Area A is visible from both northbound and southbound State Highway 17. The only characteristic of Parcel 8 visible from the highway is the dense vegetation bordering the parcel's southern side. Traveling both northbound and southbound on the highway, Parcel 8 is visible for just a few seconds. Parcel 1 though 7 in Planning Area A are not visible from the highway.

Mt. Hermon Road. Mt. Hermon Road borders Planning Area A (all parcels) to the west. As a traveler exists both northbound and southbound State Highway 17 and enters the city, Planning Area A is located to their right. Because Planning Area A is moderately to steeply sloped from Mt. Hermon Road east toward Glen Canyon Road, much of the area cannot be viewed from Mt. Hermon Road. However, the existing non-conforming commercial businesses on Parcels 5 and 6, and residential homes on Parcel 1 through 4, are visible from Mt. Hermon Road although most of the residential homes are obscured or partially obscured by vegetation. Much of Planning Area A is covered by lush vegetation, some of which is visible from Mt. Hermon Road. Planning Area A is visible along its entire frontage of Mt. Hermon Road and could last for several seconds to more than a minute if the traveler is stopped at the Mt. Hermon Road/State Highway 17 northbound off-ramp. The Specific Plan identifies portions of Planning Area A as “currently visually blighted”.

Planning Area B

State Highway 17. Planning Area B is not visible from northbound State Highway 17 for two reasons: 1) the elevation of the highway is significantly lower than the elevation of Planning Area B; and 2) there is a significant amount of vegetative buffer in the highway center divider blocking the view of the project site. Planning Area B is, however, visible from southbound State Highway 17 as vehicles pass under the Mt. Hermon Road overpass. At the Mt. Hermon Road overpass, the highway is at nearly a 90 degree angle to Planning Area B where it provides a straight-on view of Planning Area B. This location provides a view of
Caltrans right-of-way in the foreground, a short fence bordering the southbound on-ramp in the middle, and the gently sloping grassy hill and mixed conifer forest of Planning Area B in the background. This view is presented in Figure 15. This is the most visible location of the project site from the highway and is visible for only a few seconds.

**Mt. Hermon Road.** Planning Area B is visible to the southbound traveler on Mt. Hermon Road as they enter the project site on La Madrona Drive, or enter southbound State Highway 17. Planning Area B is visible for only a few seconds from Mt. Hermon Road, unless stopped at a red light at the Mt. Hermon Road/La Madrona Drive intersection.

**Project Analysis**

Future development of Planning Area A may be visible from northbound and southbound State Highway 17 if the vegetation bordering the southern side of Parcel 8 is removed. Future development will most likely be visible from both northbound and southbound Mt. Hermon Road.

Future development of Planning Area B will most likely not be visible from northbound State Highway 17; however, it will be highly visible from southbound State Highway 17, as illustrated in Figure 15.

The Specific Plan contains several policies to preserve and enhance important scenic areas and corridors:

- **Policy 3.1:** Maintain and enhance the visual quality of roadway corridors that are of scenic values to the community. a) Improve the aesthetic qualities of Mt. Hermon Road through the removal of areas that are currently visually blighted. This area serves as a major city entrance, and is an important part of the city’s visual image. b) All utilities associated with new construction shall be placed underground.

- **Policy 5.4:** Residential structures shall be integrated into the natural setting to minimize visual impact and to preserve existing native vegetation.

- **Policy 7.1:** Parking areas shall be landscaped or otherwise visually screened in a manner which contributes to the overall visual character of the area.

- **Policy 8.1:** Materials, textures, colors and details of all new construction should be an appropriate expression of the development’s design concept and function, and should be compatible with adjacent structures and functions.

- **Policy 8.2:** Commercial development fronting on Mt. Hermon Road (on-ramp to State Highway 17) should compliment adjacent uses and help to organize and unify the visual character of the area.
• Policy 8.3: Landscaping should be compatible with and compliment site and building design. a) Street trees should be provided which will serve as a unifying element. Street trees will also help to visually define the area.

• Policy 8.4: Special landscape treatments should be located along Mt. Hermon Road which will help to visually link uses and clearly define the entrance to the city.

Impacts and Mitigations

Significance Criteria. According to CEQA Appendix G, a project will normally have a significant effect on the environment if it will have a substantial, demonstrably negative aesthetic impact.

Impact. Future development in Planning Area A has the potential to beneficially impact the views of and through the planning area through carefully planned design. With implementation of the Specific Plan policies discussed in project analysis, development of Planning Area A could result in a beneficial visual impact.

Impact. Future development in Planning Area B has the potential to result in a significant adverse impact to the views of this planning area without carefully planned design.

Mitigation. With implementation of the Specific Plan policies discussed in project analysis and Mitigation Measures 35 and 36 in the Gateway South Assessment District EIR (Appendix B of this report), potentially significant adverse visual impacts from development of Planning Area B will be reduced to a level of insignificance.

Impact. Future commercial development in Planning Area B has the potential to cause significant light and glare from on-site lighting effecting the drivers of vehicles traveling southbound on State Highway 17. This would be considered a significant adverse environmental impact. The Specific Plan does not address this impact. However, with implementation of the following mitigation measure, this impact will be reduced to a level of insignificance.

New Mitigation Measure

10. Project proponents of future commercial projects shall prepare a lighting plan that, when implemented, will not produce glare for State Highway 17 travelers. This lighting plan shall be subject to review and approval by the Public Works Director, prior to issuance of a building permit.
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2.7.2 Noise

Setting

Sensitive Receptors

Noise sensitive land uses are typically given special attention to achieve protection from excessive noise. Noise sensitive land uses, as defined in the general plan, include hospitals, churches, libraries, schools, and retirement homes. There are no noise sensitive land uses in the immediate vicinity of the project site.

Noise Sources

According to the general plan, vehicular traffic along State Highway 17, Mt. Hermon Road, and Scotts Valley Drive is the single most significant source of noise in the city. The project site is bisected by Mt. Hermon Road, and is bordered by State Highway 17 to the southeast. Noise levels from these roadways, in the vicinity of the project site, are illustrated on Figure 16.

Approximately 60,000 daily auto and truck trips occur on State Highway 17. Some of these vehicles may generate from 90 to 95 dBA along and adjacent to the highway. Truck traffic and buses along Mt. Hermon Road also contribute to the noise levels.

According to the general plan, the highest ambient background noise level in 1994 was 73 dBA, occurring about eleven feet from the edge of Mt. Hermon Road near Glen Canyon Road at noon during an average week day. This intersection is at the northernmost boundary (Parcel 1) of the project site.

The general plan includes an action requiring the city to support a new mid-town interchange on State Highway 17 to reduce the Mt. Hermon Road future traffic, thereby maintaining or reducing the future traffic noise levels. This would have a beneficial impact on the existing noise levels adjacent to the project site, as illustrated in Figure 16. In addition, a new inter-modal transportation center located on Mt. Hermon Road north of the project site may reduce the number of vehicle trips per day, subsequently reducing associated noise levels.

State Highway 17 generally runs along the eastern boundary of Planning Area B and the southern boundary to Parcel 8 in Planning Area A. As it passes Planning Area B, the highway is significantly lower in elevation. Additionally, a significant amount of vegetative buffer lines the highway along its border with Planning Area B. The difference in elevation and the vegetation help reduce highway traffic noise at Planning Area B.
As the highway passes Parcel 8, the elevation levels out. There is no vegetative buffer in the highway right-of-way between the highway and Parcel 8; however, there is a substantial amount of vegetation along the southern boundary of Parcel 8.

Dissimilar land use is another source of noise problems. Where residential areas are near commercial areas, potential problems include loading dock noise, trucks cleaning businesses, and garbage trucks in the early morning hours.

Noise Standards

The U.S. Environmental Protection Agency has completed a study which demonstrates that noise in excess of seventy A-weighted decibels (70 dBA) may be damaging to a person’s hearing.

The Uniform Building Code and the noise level codes for the interior of new residential developments with all of the windows and doors closed, limits the annual average day-night noise level at 45 dBA without people present.

The general plan identified acceptable noise increase levels typically deemed acceptable based on the existing adjacent land use. They are presented in Table 13.

General plan policy NP-442 states that new developments that may increase the day-night noise level by more than the levels identified in this table shall be approved only when proper noise attenuation design measures have been incorporated to the City’s satisfaction.

General plan action NA-452 states that in areas where the annual day-night noise level exceeds 60 dBA, the city shall require an acoustical engineering study for proposed new construction. Each acoustical analysis should recommend methods to reduce the interior day-night annual average noise levels to below 45 dBA for private dwellings, motels, hotels, offices and noise sensitive uses.

General plan action NA-454 states that exterior noise levels measured at the property line of proposed new residential development shall be limited at or below an average annual day-night level of 60 dBA.
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TABLE 14
Noise Increase Standards

<table>
<thead>
<tr>
<th>Proposed New Use Location of dBA Reading</th>
<th>Max. Noise Increase in dBA Adjacent to Existing:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sensitive</td>
</tr>
<tr>
<td>Sensitive at Property Line 50' from Property Line</td>
<td>3</td>
</tr>
<tr>
<td>Residential at Property Line 50' from Property Line</td>
<td>3</td>
</tr>
<tr>
<td>Commercial at Property Line 50' from Property Line</td>
<td>3</td>
</tr>
<tr>
<td>Industrial at Property Line 50' from Property Line</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: City of Scotts Valley General Plan

Project Analysis

Specific Plan Sensitivity to Existing Noise Sources

The Specific Plan includes a change in zoning at the project site, primarily to residential and commercial uses, as well as open space. Single-family and multi-family homes, as well as commercial land uses, are not considered noise sensitive land uses.

However, the proposed land uses in the Specific Plan do allow for noise sensitive land uses such as day care centers, residential care facilities, churches, and schools. These land uses are conditionally permitted under residential zoning. At this time, no development plans have been submitted for any of these uses. General plan action NA-444 states that new developments that are considered noise sensitive shall not be located in proximity to existing noise generating uses where the existing noise level is considered incompatible with the proposed sensitive use. The city should take care if and when reviewing potential sensitive land uses at the project site.

Specific Plan Impacts on Adjacent Land Uses

Buildout of the project site will incrementally increase traffic noise on State Highway 17 and Mt. Hermon Road, as well as other roadways throughout the
Specific Plan Impacts on Adjacent Land Uses

Buildout of the project site will incrementally increase traffic noise on State Highway 17 and Mt. Hermon Road, as well as other roadways throughout the city. It is not possible to determine potential noise impacts from operations at future commercial businesses since specific development proposals have not been submitted at this time. However, careful commercial site design will be required to ensure that noisy activities associated with loading docks, truck cleaning, and garbage trucks are not sited adjacent to residences.

The Specific Plan includes the following policy associated with land use compatibility:

- Policy 1.1: All land uses within the project area should be sited and designed to be compatible with each other and with surrounding land uses.

Impacts and Mitigations

Significance Criteria. According to CEQA Appendix G, a project will normally have a significant effect on the environment if it will increase substantially the ambient noise levels for adjoining areas.

Impact. Future development on the project site will be subject to high noise levels associated with traffic on State Highway 17 and Mt. Hermon Road. This may be considered a significant adverse environmental impact. However, this impact is not a result of the Specific Plan, but it is an existing environmental nuisance that will impact future development of the project site.

Impact. Adjacent residential uses, as well as on-site residential uses, may be subject to noise levels that exceed 60 dBA at the property line of future commercial development on the project site. At this time, it is not known what the noise levels will be since no development plans have been submitted. In addition, noisy activities associated with loading docks, truck cleaning, and garbage trucks located in the commercial parcels adjacent to existing and/or future residential homes are considered significant noise impacts.

Mitigation. With implementation of the general plan policies and actions discussed in project analysis above, as well as Mitigation Measure 34 in the Gateway South Assessment District EIR (see Appendix B of this report) and the following mitigation, these impacts will be reduced to a level of insignificance. These mitigation measures shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.
New Mitigation Measure

11. Site design of future commercial projects shall be required to position noisy activities associated with loading docks, truck cleaning, garbage receptacles, etc. away from existing and future adjacent residential land uses. Site design shall be subject to review and approval by the Planning Director prior to approval of the tentative map.

2.8 Cultural Resources

This section was prepared based on information contained in the Preliminary Prehistoric Cultural Resources Reconnaissance for the Gateway South Specific Plan EIR (Archaeological Consulting 1995). The cultural resources reconnaissance is in the technical composite under separate cover and is available for review at the City of Scotts Valley Planning Department, One Civic Center Drive, Scotts Valley, California, 95066.

Setting

Project Site Description

A field reconnaissance was conducted by Archaeological Consulting on March 26, 1995. The survey consisted of a "general surface reconnaissance" of all areas which could reasonably be expected to contain visible cultural resources, and which could be viewed without major vegetation removal or excavation.

At the time of the reconnaissance, the area of Planning Area A was primarily cut and fill, with numerous structures. To the east of Planning Area A, the land sloped steeply to a narrow creek bank. Much of this area was covered with dense vegetation, but there were cuts and erosional areas where there was good soil visibility. The lower portion of Planning Area B had recently been disturbed by road construction on Altenitas Road and La Madrona Drive. The area between La Madrona Drive and Highway 17 was most heavily disturbed. The soil was mostly bare in this area, and visibility was excellent. To the west of La Madrona Drive, there was a shallow, grassy slope that had been a pasture. There were many areas of seeps or springs and the vegetation was lush. Visibility was poor except for occasional paths and rodent burrows. There were no extant structures on this section of the project area, though there were remains of one or more structures at the south edge of the parcel. Overall, ground surface visibility was considered marginal for the purposes of the reconnaissance.

Background Research

Background research included an examination of the archaeological site records, maps, and project files of the Northwest Regional Information Center of the Cali-
fornia Archaeological Inventory, located at Sonoma State University, Rohnert Park, California. In addition, extensive personal files and maps at Archaeological Consulting’s office were examined for supplemental information.

The record search of the files at the Northwest Regional Information Center showed that there are two previously recorded archaeological sites within a kilometer of the project site, but none are recorded for the project site itself. There is a note of a possible site located in the vicinity of La Cuesta Drive and Mt. Hermon Road (Cartier 1993). There were two previous surveys that covered portions of Planning Area A and two that covered small areas of Planning Area B. Three of these were not accessible in time to prepare this EIR, but the fourth (Cartier 1993) was available. Cartier reported that he found “Quartzite cobbles...several had been modified and made into stone tools”. Subsequently, he recommended that the road construction be monitored. The Northwest Information Center had no record of whether this had been done. However, Dr. Cartier’s office was contacted regarding the monitoring activities. Construction activities were monitored in October and November 1993. Two “possible” manos (grinding stones) were identified near Silverwood Drive. However, there was no midden soil and therefore, it was determined that prehistoric habitation did not exist in this area. The remainder of the monitoring activities were negative. No further recommendations were suggested (Julie Wiszorek, Archaeological Resource Management. Telephone conversation with consultant. April 3, 1995.)

In addition, the California Inventory of Historical Resources (March 1976), California Historical Landmarks, and the National Register of Historic Places were checked for cultural resources which might be present in the project area, but which were not recorded with the Regional Information Center; none were discovered.

Field Research

None of the materials frequently associated with prehistoric cultural resources in this area (shell fragments, dark soil, broken or fire-altered rocks, bone or bone fragments, flaked or ground stone, etc.) were noted during the survey.

Project Analysis

Based upon the background research and the surface reconnaissance, Archaeological Consulting concluded that the project site does not contain surface evidence of potentially significant cultural resources. There was no sign of the cobblescrapers reported by Cartier, and it is possible that they were destroyed and/or covered by the road construction. Development on the project site should not be delayed for archaeological reasons.

The Specific Plan includes the following policies associated with potential archaeological resources at the project site:
• Policy 4.1: Protect potentially significant archaeological resources through subsurface excavation and testing within any archaeologically sensitive areas prior to commencement of construction activities.

• Policy 4.2: Develop appropriate mitigation measures to avoid or substantially reduce significant adverse effects associated with construction activities in archaeologically sensitive areas.

Impacts and Mitigations

Significance Criteria. According to CEQA Appendix G, projects will normally have a significant impact on the environment if it will disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site.

Impact. The possibility exists that unidentified cultural resources may be found during construction. Destruction of cultural resources is considered a significant adverse environmental impact. However, with implementation of the following mitigation measure, this potential adverse impact will be reduced to a level of insignificance.

New Mitigation Measure

12. The following standard language, or the equivalent, shall be included in any permits issued for the project site. “If archaeological resources or human remains are accidentally discovered during construction, work shall be halted within 50 meters (150 feet) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.” This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.
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3.0 Environmental Evaluation

3.1 Unavoidable Adverse Significant Environmental Impacts

An unavoidable significant adverse environmental impact is an impact that cannot be reduced to an insignificant level through mitigation. CEQA guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project. The Specific Plan will result in one unavoidable significant adverse environmental impacts in the area of air quality.

3.2 Cumulative Impacts

CEQA guidelines, section 15130, requires a discussion of cumulative impacts to reflect the severity of the impacts and their likelihood of occurrence; however, the discussion need not provide as great detail as is provided of the effects attributable to the Specific Plan alone. CEQA requires the discussion to be guided by the standards of practicality and reasonableness. Table 13 presents a list of past, present, and reasonably anticipated future projects, within the city, with the potential to produce related or cumulative impacts. Cumulative projects locations are illustrated in Figure 17.

In addition, the County of Santa Cruz Housing and Population Estimates, states that the Carbonera and San Lorenzo Valley planning areas are planned to have a total of 27,724 residential units at buildout. This is approximately a 200 percent increase over 1990 conditions in these planning areas.

Groundwater

The predicted increase in water consumption and decrease in recharge to groundwater due to the proposed project are small in comparison to total pumpage from the basin and the estimated perennial yield for the basin. However, cumulative impacts from continued development of the area served by Scotts Valley groundwater basin resources are potentially significant and must be addressed. While it is outside the scope of this study to evaluate perennial, safe or optimal yields for the aquifer, it is clear that groundwater extraction from the basin over the last five to seven years has produced significant negative impacts on the groundwater basin. These impacts include excessive draw down and loss of pumping efficiency in areas where primary producing wells operate, the drying up of some of the shallower wells, and reduction in surface water flows out of the basin. Furthermore, modeling studies of the aquifer suggest that buildout in the basin, in conjunction with any significant periods of below normal precipitation, will severely stress the existing water production system and limit surface water flows.
<table>
<thead>
<tr>
<th>Project</th>
<th>Residential/Commercial</th>
<th>Dwelling Units or Square Footage</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Bluebonnet Lane</td>
<td>Residential</td>
<td>4 units</td>
<td>a.</td>
</tr>
<tr>
<td>3. Scotts Valley Auto Center</td>
<td>Commercial</td>
<td>7,283 sq. ft.</td>
<td>a.</td>
</tr>
<tr>
<td>4. Valley Gardens Golf Course</td>
<td>Commercial</td>
<td>1,500 sq. ft.</td>
<td>a.</td>
</tr>
<tr>
<td>5. Ridgecrest</td>
<td>Residential</td>
<td>12 units</td>
<td>b.</td>
</tr>
<tr>
<td>6. Heritage Park</td>
<td>Residential</td>
<td>81 units</td>
<td>b.</td>
</tr>
<tr>
<td>7. Creekside Estates</td>
<td>Residential</td>
<td>17 units</td>
<td>b.</td>
</tr>
<tr>
<td>8. Woodhill Village</td>
<td>Residential</td>
<td>34 units</td>
<td>b.</td>
</tr>
<tr>
<td>9. Anderson-Berry/Oak Creek</td>
<td>Commercial</td>
<td>12,000 sq. ft.</td>
<td>b.</td>
</tr>
<tr>
<td>10. Scotts Valley Drive (Rest.)</td>
<td>Commercial</td>
<td>5,180 sq. ft.</td>
<td>b.</td>
</tr>
<tr>
<td>11. Skypark Site “A”</td>
<td>Residential</td>
<td>190 units</td>
<td>c.</td>
</tr>
<tr>
<td>12. Cathy Lane/Scotts Valley Dr.</td>
<td>Residential</td>
<td>10 units</td>
<td>d.</td>
</tr>
<tr>
<td>13. La Cuesta/Mt. Hermon Rd.</td>
<td>Residential</td>
<td>17 units</td>
<td>d.</td>
</tr>
</tbody>
</table>

**Total Units/Square Footage**

- 415 Units
- 25,963 Sq. Ft.

a. Under Construction  
b. Approved—Awaiting Building Permit  
c. Approved—Awaiting Final Map  
d. Submitted—Not Approved

**Source:** Scotts Valley Planning Department, February 1995

Potential impact mitigations include artificial recharge to groundwater, incorporation of water conservation measures in any site development, and minimizing the use of impervious ground covering materials. The general plan includes the following policy and actions designed to recharge the groundwater basin:

**Policy OSP-337.** The city shall maintain a storm drainage system which provides optimal flood protection and maximum groundwater recharge.

**Action OSA-341.** The city shall require the updated storm drainage master plan to map significant recharge areas and natural drainage channels. The master plan shall include methods to combine recharge facilities into storm drainage plans.
This side was intentionally left blank.
**Action OSA-342.** A percentage of storm drainage fees will be put into a fund to acquire recharge areas and construct improvements thereto when the need arises. These lands shall be maintained as open space and/or neighborhood parks.

**Action OSA-343.** As part of the environmental review process the city shall, in cooperation with the water district, require developers to study and mitigate any loss of recharge. Mitigations may take the form of on-site recharge, construction of recharge improvements, contributions to the program cited above, or a combination of any or all of these.

**Action OSA-344.** Any construction proposed in zones designated high protection or high management in the 1988 Todd Report and shown on Figure OS-5 shall provide a detailed hydrological evaluation to mitigate loss of recharge.

Other policies and actions of the general plan include implementation of water conservation programs and high quality wastewater recharge into appropriate basins. Implementation of these policies and actions will help to recharge the groundwater basin and ideally, reduce this cumulative impact to a level of insignificance.

**Traffic and Circulation**

The future year 2005 roadway volumes were developed based on information obtained from the Santa Cruz County Regional Transportation Commission staff. According to the Transportation Commission, an average annual growth rate of 1.84 percent is a reasonable rate that can be used in this study. The rate is 1.5 times the average annual population growth rate of this area and is based on a growth rate between the years 1990 and 2005. This rate was used to convert the existing turning movement volumes at the study intersections to the year 2005 base conditions. The Specific Plan trips were then added to the year 2005 base conditions to develop the 2005 base plus project conditions scenario. These tasks were done for A.M. and P.M. peak hours. The analysis was completed for the following conditions:

- Year 2005 Base Condition without Specific Plan Development
- Year 2005 Base with Specific Plan Development

Tables 23 and 24 (see Appendix C) describe the year 2005 base condition turning movement volumes for A.M. and P.M. peak hours, respectively. Tables 25 and 26 (see Appendix C) describe the year 2005 base condition plus Specific Plan volumes for the A.M. and P.M. peak hours, respectively. Tables 3 and 4 (see Appendix C) describe the LOS for the year 2005 with the Specific Plan for A.M. and P.M. peak hour periods. Table 3 indicates that the Specific Plan would not cause the LOS to drop below LOS “D”. Table 4 indicates that the year 2005 base conditions will be at LOS “E” and “F” with or without implementation of the
Specific Plan. Therefore, the Specific Plan’s impacts on roadway conditions for the year 2005 are indiscernible.

Air Quality

CEQA Guidelines (Section 15125(b) requires that an EIR discuss consistency between the proposed project and applicable regional plans, including the Air Quality Management Plan (AQMP). Consistency determination with the AQMP is used by the Monterey Bay Unified Air Pollution Control District to address a project’s cumulative impacts on regional air quality.

A consistency determination is based on the proposed residential project’s residential population added to the cumulative population of the city (i.e., existing population plus population from approved and unconstructed projects). To be consistent with the AQMP, the total population shall not exceed the AMBAG population forecasts for the City of Scotts Valley for the next five-year increment (i.e., year 2000).

Based on the two single-family units and the 157 multi-family units there will be a total of 159 residential units associated with the Specific Plan. This number, multiplied by the city’s general plan per unit population figure of 2.53, results in a total Specific Plan population of 402 residents. Approved projects and projects for which the city has received applications for 415 units (as presented in Table 15) will result in a population of 1,050 residents. Based on the most current State Department of Finance population figures (January 1994), the current population of the city is 9,449. Combined population to determine consistency with the AQMP is 10,901; compared to the year 2000 AMBAG population forecast (11,704) the project is considered to be consistent with the AQMP.

Consistency of indirect emissions associated with commercial projects intended to meet the needs of the population of the city, as forecast in the AQMP, is determined by comparing the estimated current population of Santa Cruz County with the applicable population forecast in the AQMP. If the estimated current population does not exceed the forecasts, indirect emissions associated with the commercial aspects of the Specific Plan are determined to be consistent with the AQMP. The current population of the county is 248,779 (AMBAG, Regional Population and Employment Forecast, May, 1994). The AQMP population forecast for the year 2000 is 259,905. Therefore, the commercial project is consistent with the AQMP.

3.3 Growth-Inducing Impacts

CEQA Section 15126(g), requires a discussion of the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Increases in population may further tax existing community service facilities so consideration must be given to this impact. It must not be assumed that growth
in any area is necessarily beneficial, detrimental, or of little significance to the environment.

The Specific Plan is an infill project. The project site is nearly surrounded by existing commercial development and existing and/or approval residential development, as discussed in Section 1.2, Project Location. Therefore, the Specific Plan will not foster growth by expanding community service facilities into a new area.

The Specific Plan does include zone changes that will increase the planned residential density from 72 units to 159 units (difference of 87 units) and the planned commercial square footage from 154,310 sq. ft. to 163,230 sq. ft. (difference of 8,920 sq. ft.). This increase in residential units and commercial square footage may be interpreted as growth-inducing.

The increase in residential units and commercial square footage should not necessarily be considered adverse. On the contrary, mixed use projects such as the Specific Plan are generally more beneficial to the environment because of the very nature of mixed-use developments. Residential and commercial uses within the same area encourage fewer automobile trips, assuming the commercial uses are residential-serving businesses. In addition, the increased residential density helps to minimize or eliminate urban sprawl and provide for an increase in planned open space. Both of these beneficial environmental components are included in the Specific Plan.

3.4 Alternatives

CEQA guidelines section 15126(d) requires the analysis of a range of reasonable alternatives to the proposed project which could feasibly attain the basic objective of the proposed project. The "no project" alternative is also required to be addressed. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Two no project alternative scenarios are discussed:

1. No Development; and

2. No Specific Plan—development proceeds under existing zoning.

In addition, there is a discussion of several alternatives that the city considered but rejected.

3.4.1 No Project Alternative—No Development

This alternative assumes that the project site will remain in its existing physical conditions and development will not proceed under any scenario. Although this alternative is highly improbable, because the project site is within the city limits
and is planned by the city to accommodate future growth, a brief analysis is provided for the purposes of CEQA.

All adverse and potentially adverse environmental impacts in the areas of geology and soils, surface water and groundwater hydrology, vegetation and wildlife, traffic and circulation, air quality, public services, aesthetics, noise, and cultural resources will not exist with this alternative. However, without appropriate future development in Planning Area A (a portion of which has been identified by the city as blighted) the city would not be able to obtain its goal of redevelopment of this area, thereby improving the visual image at the city's southern entrance. Subsequently, the beneficial visual impacts identified in Section 2.7.1, Aesthetics, will not exist with this alternative.

Overall, this alternative has significant fewer environmental impacts and therefore, may be considered the environmentally superior alternative.

3.4.2 No Project Alternative—No Specific Plan

This alternative assumes that development will proceed in the future under existing zoning. Existing zoning for the project site is a combination of low-density residential (81.6 percent) and service commercial (18.4 percent). Maximum allowable residential units under this scenario is 72 (a 55 percent reduction from Specific Plan zoning). Maximum allowable commercial square footage is 154,310 (a 5 percent reduction from Specific Plan zoning. This alternative could also be considered a reduced density alternative. Refer to Figure 4, Existing Land Use Designations, and Figure 5, Existing Zoning, in Section 1.0.

Although it is not an environmental issue, this alternative, No Specific Plan, does not provide a solution for the inequity in the distribution of assessments as discussed in Section 1.3.1.

This alternative is analyzed for each environmental concern as identified in Section 2.0, Environmental Setting, Impact, and Mitigation Measures, and compared to the impacts of the Specific Plan.

Geology and Soils

This alternative would result in generally the same level of geologic and soils impacts in the areas of ground shaking, liquefaction, landsliding, lateral spreading, settlement of soils, and erosion. Erosion potential may be reduced because of less grading due to decreased density. However, with implementation of mitigation measures for either the Specific Plan or this alternative, these impacts would be reduced to a level of insignificance.

Hydrology

Surface Water. This alternative could result in the creation of fewer impermeable surfaces due to the increase in commercial density and higher impermeable
surfaces due to the change from single-family to multi-family uses. Overall, the total impermeable surfaces would be slightly less resulting in less runoff impacting drainages and water quality. However, with implementation of mitigation measures for either the Specific Plan or this alternative, these impacts would be reduced to a level of insignificance.

**Groundwater.** This alternative would result in a slight decrease in groundwater demand due to the decrease in density. However, with implementation of mitigation measures for either the Specific Plan or this alternative, these impacts would be reduced to a level of insignificance.

**Vegetation and Wildlife**

This alternative would result in no change in impacts to vegetation and wildlife.

**Traffic and Circulation**

The alternative would result in fewer vehicle trips due to a reduction in the commercial and residential density. However, the existing locations of commercial parcels in Planning Area A (Parcels 7 and 8), along Mt. Hermon Road near the Mt. Hermon Road/State Highway 17 interchange, could result in significant volumes of traffic associated with commercial development (as opposed to residential development). This would be considered a significant adverse impact and no feasible mitigation measures are apparent due to the location of Parcels 7 and 8 at the highway interchange. It would not be practical to route this commercial traffic down Mt. Hermon Road and up Glen Canyon Road to access the parcels from the east. Therefore, this alternative would result in significant adverse traffic impacts which may not be able to be reduced to a level of insignificance. This would be considered an unavoidable significant adverse environmental impact that would require a statement of overriding considerations from the city council if they decided to approve this alternative.

**Air Quality**

This alternative would result in slightly fewer impacts to air quality. However, this alternative would still result in pollutant levels above the threshold identified by the Monterey Bay Unified Air Pollution Control District. As discussed in Section 2.5, Air Quality, this would be considered an unavoidable significant adverse environmental impact that would require a statement of overriding considerations from the city council if they decided to approve this alternative.

**Public Services**

This alternative would result in an incremental increase in the impacts associated with water service, wastewater service, schools, police service, fire protection service, and utilities. However, with implementation of mitigation measures for either the Specific Plan or this alternative, these impacts would be reduced to a level of insignificance.
Land Use Compatibility

Aesthetics. This alternative would result in no discernible change in impacts to aesthetics.

Noise. This alternative may have a slight decrease in noise associated with traffic generated by this alternative. However, this decrease would likely be indiscernible. Additionally, this alternative includes residential land uses only in Planning Area B which would eliminate potential noise impacts of the proposed commercial uses to adjacent residential homes.

Cultural Resources

This alternative would result in no change in impacts to cultural resources.

3.4.3 Alternative Considered and Rejected

Two other alternative project plans and four alternative locations were considered by the city and rejected. Following is a brief discussion of each alternative and the reasons for rejection.

Planning Area A (Parcel 1 through 8) Commercial Uses

This alternative would include commercial uses in Parcels 1 through 8 (Planning Area A) rather than high-density residential. It was rejected for two reasons: 1) traffic generation of commercial uses in Planning Area A would be of a greater intensity than residential uses and therefore, be in conflict with the goal of reducing traffic impacts at this location on Mt. Hermon Road; and 2) commercial uses would require substantially more parking areas, disrupting the topography (slopes in excess of 40 percent) to a greater extent than would residential uses.

Planning Area B (Parcels 9, 10, and 12) High Density Residential Uses

This alternative would include all high-density residential uses rather than commercial, residential, and open space. It was rejected for three reasons: 1) visibility from State Highway 17 and easy access to Planning Area B is more consistent with commercial uses than with residential uses; 2) residential uses are more sensitive to highway noise than is commercial; and 3) upper elevations are best reserved as open space by consolidating intense activity in the area close to the highway.

Alternative Location—Skypark Residential Area A

The alternative location does not have freeway access for commercial uses. This site was considered for multi-family residential uses; the city approved a plan for single family homes on small lots.


**Alternative Location—Green Hills Road Adjacent to Green Hills Estates**

This alternative location is located next to the highway, however, there is no immediate highway access which makes it difficult for commercial uses. Vehicular access is provided from the intersection of Mt. Hermon Road and Glen Canyon Road.

**Alternative Location—Former Polo Ranch Residential Site**

Although it has potential for high density residential on flatter portions of the site, this alternative location has limited opportunities for commercial activities. It requires access through the existing Borland facility.

**Alternative Location—Kaiser Sand and Gravel Quarry Site**

This alternative location is currently outside of the city limits and would require annexation. Reclamation of the site is required within the next ten years; therefore it is not available at the present time for development. In addition, access is from Mt. Hermon Road and is far removed from State Highway 17.

**3.4.4 Environmentally Superior Alternative**

CEQA guidelines section 15126 requires a determination of the environmentally superior alternative. In general, the No Project—No Development Alternative has significantly fewer environmental impacts than the Specific Plan and the No Project—No Specific Plan Alternative and therefore, may be considered the environmentally superior alternative. However, CEQA also requires identification of another environmentally superior alternative if the No Project Alternative—No Development Alternative is identified as environmentally superior.

The No Project—No Specific Plan Alternative would result in two unavoidable significant impacts: traffic and circulation, and air quality. The Specific Plan would result in only one unavoidable significant impact: air quality. All other impacts for both the No Project—No Specific Plan Alternative and the Specific Plan can be reduced to a level of insignificance with the implementation of mitigation measures. Therefore, the Specific Plan, which is the preferred project, is the environmentally superior alternative after the No Project—No Development Alternative.
This side intentionally left blank
4.0 Literature Cited and Report Preparers

4.1 Literature Cited and Persons Contacted


Bush, Tom, Captain, Scotts Valley Police Department. Personal communication with consultant, March 29, 1995.


Ellis, Daryl, Operations Manager, Scotts Valley Water District. Personal communication with consultant, March 31, 1995.


Hamby, Scott, Environmental Program Manager, Scotts Valley Wastewater Treatment Plan. Personal communication with consultant, March 29, 1995.


Lacouture, Dr. Andrew, Superintendent, Scotts Valley Unified School District. Personal communication with consultant, March 30, 1995.

McMurry, Mike, Deputy Chief, Scotts Valley Fire Department. Personal communication with consultant. March 29, and April 3, 1995.


Resources Investigations 81-6, April 1981.


Scotts Valley, City of. City of Scotts Valley 1994 General Plan. City of Scotts Valley, California. 1994


Yamin, Majid, Associate Civil Engineer, City of Scotts Valley Public Works Department. Telephone conversation with consultant. March 31, 1995


4.2 Project Team

EMC Planning Group Inc.
Michael J. Groves, AICP, President
Project Advisor

Teri Wissler, Project Manager
Project Manager and Report Preparation

Matthew Sundt, Associate Planner
Report Preparation

Elaine Hansen, Associate Planner
Report Preparation

Noelle Nimallah and Kimla Scheiter
Production

Subconsultants

Rajappan & Meyer Consulting Engineers, Inc.
Traffic and Circulation

Zander Associates
Biological Resources

Weber, Hayes, and Associates
Hydrological Resources

Archaeological Consulting
Cultural Resources

C2G Civil Consultants Group
Graphics
Appendix A

Initial Study, Notice of Preparation and Responses to the Notice of Preparation
NOTICE OF PREPARATION

To:

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

LEAD AGENCY: City of Scotts Valley
One Civic Center Drive
Scotts Valley, CA 95066

PHONE: (408) 438-2324

CONTACT: Robert J. Hanna

CONSULTING FIRM: To be Determined

CONTACT: To be Determined

The City of Scotts Valley will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the view's of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study is attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date by not later than 30 days after receipt of this notice.

Please send your response to Robert Hanna at the address shown above. We will need the name for a contact person in your agency.

PROJECT TITLE: Gateway South Specific Plan, General Plan Amendment and Rezoning.

PROJECT LOCATION: East and West sides of Mount Hermaon Road between La Madrona Road, HWY 17 off ramp and Glen Canyon Road.

DESCRIPTION: SEE ATTACHED

Date: December 28, 1994 Name: Robert Hanna

nop
PROJECT DESCRIPTION

The City of Scotts Valley Will prepare a Specific Plan, amend the General Plan, and change the zoning for properties identified on the attached map (parcels 1 through 10 and 12)

The properties are identified in the General Plan in the following manner:

| Parcel 1 | CS Service Commercial |
| Parcel 2, 3, 4, & 5 | Low Density Residential |
| Parcel 6, 7, & 8 | Service Commercial |
| Parcel 9, 10, 12 | Low Density Residential |

(Parcel 11 is not identified on the map.)

Parcels 1 through 8 were identified in the 1994 General Plan as a "special treatment area." The special treatment area was intended to minimize access points on Mt. Hermon Road with the development of a circulation plan for the parcels. The Specific Plan and rezonings are intended to be consistent with the General Plan policies and objectives for parcels 1 through 8.

Parcels 9, 10, and 12 will be redesignated from the original low density residential to the categories of high density residential, multiple residential, and service commercial. The steeper elevations on Parcels 10 and 12 will be preserved as open space.

The Environmental Impact Report to be prepared will be a focused EIR. The EIR is intended to address:

1. The traffic impacts of the change in density in the Specific Plan area.
2. The increase in water service demand as a result of the increased density.
3. Impact on wildlife and/or vegetation as the result of future development.

The Environmental Impact Report will use as a basis the Environmental Impact Report prepared for the Gateway South Assessment District in March of 1989. The Environmental Impact Report analyzes, among other things, traffic impacts as a result of increased development on the parcels. The 1989 Environmental Impact Report analyzed maximum traffic impacts in the area. The proposed amendments are not projected to exceed the previous traffic impacts that were analyzed. However, the Environmental Impact Consultant will confirm the traffic information to ensure adequate mitigation measures have been or will be applied.
PROJECT LIMITS
PROPOSED GENERAL PLAN AMENDMENT
AND ZONE CHANGE
IN THE
GATEWAY SOUTH ASSESSMENT DISTRICT AREA

CITY OF SCOTTS VALLEY
SANTA CRUZ COUNTY, CALIFORNIA
ENIRONMENTAL CHECK LIST
(To be completed by City of Scotts Valley Planning Staff)

I. BACKGROUND
Name of Proponent: City of Scotts Valley

Address and Phone Number of Proponent:
One Civic Center Drive
Scotts Valley, Ca. 95066
(408) 438-2324

Date of Environmental Checklist Submitted:
December 27, 1994

Name of Proposal:
Gateway South Specific Plan, General Plan Amendment and Rezoning

Proposal Address/APN: On the East and West sides of Mt. Hermon Road between La Madrona Road, HWY 17 off ramp and Glen Canyon Road. APN's 22-151-03,04,05,07,08,09,11 and 21-141-01,04,05 and 22-141-04 and 22-191-01

General Plan Designation: Low Density Residential and Service Com- mercial Zone Designation: R-1-20 (Single Family Residential, 20,000 sq. ft. lot size) and C-S (Service Commercial)

II ENVIRONMENTAL IMPACTS (Explanations of all "YES" and "MAYBE" answers are required on attached sheet under III, Discussion of Environmental Evaluation)

YES MAYBE NO

1. Earth: Will the proposal result in:
   a. Unstable earth conditions or changes in geological substructures? ___ ___ x ___
   b. Disruptions, displacement, compaction or overcovering of the soil? x ___ ___
   c. Change in topography, ground surface relief features, or land contours? x ___ ___
   d. The destruction, covering or modification of any unique geological or physical features? ___ ___ x ___
   e. Any increase in wind or water erosion of soils, either on or off the site? ___ ___ x ___
   f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream on the bed of the ocean or any bay, inlet or lake? ___ ___ x ___
   g. Exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards? ___ x ___
2. **Air:** Will the proposal result in:
   a. Substantial air emission or deterioration of ambient air quality?  
      [ ] [ ] [X]
   b. The creation of objectionable odors, dust, fumes, or smoke during or after construction?  
      [X] [ ]
   c. Alteration of air movement, moisture or temperature, or any change in climate either locally or regionally?  
      [ ] [X]

3. **Water:** Will the proposal result in:
   a. Change in currents, or the course or direction of water movements, in either marine or fresh water?  
      [ ] [ ] [X]
   b. Change in absorption rates, drainage patterns, or the rate and amount of surface water runoff?  
      [X] [ ]
   c. Alterations to the course or flow of flood waters?  
      [ ] [X]
   d. Change in the amount of surface water in any water body?  
      [ ] [X]
   e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to, temperature, dissolved oxygen turbidity?  
      [X] [ ]
   f. Substantial reduction in the amount of water otherwise available for public water supplies?  
      [X] [ ]
   g. Exposure of people or property to water related hazards such as flooding or tidal waves?  
      [X] [ ]
   h. Change in quantity of ground waters, whether through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?  
      [ ] [X]
   i. Alteration of the direction or rate of ground water?  
      [X] [ ]

4. **Plant Life:** Will the proposal result in:
   a. Change in the diversity of species or number of any species of plants (including trees, shrubs, grass, crops, microflora and aquatic plants)?  
      [X] [ ]
   b. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species?  
      [X] [ ]
   c. Reduction of the number of any unique, rare or endangered species of plants?  
      [X] [ ]
5. **Animal Life:** Will the proposal result in:
   a. Change in the diversity of species, or number of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects or microfauna)? ___ ___ x___
   b. Reduction of the number of any unique, rare, or endangered species of animals? ___ ___ x___
   c. Introduction of new species of animals into an area, or result in a barrier to migration or movement of animals? ___ ___ x___
   d. Deterioration to existing fish or wildlife habitat? ___ ___ x___

6. **Noise:** Will the proposal result in:
   a. Increases in existing noise levels during or after construction? x___ ___ ___
   b. Exposure of people to severe noise levels? ___ ___ x___

7. **Light and Glare:** Will the proposal produce new light or glare? x___ ___ ___

8. **Land Use:** Will the proposal result in:
   a. Substantial alteration of the present or planned use of an area? ___ ___ x___

9. **NATURAL RESOURCES:** Will the proposal result in:
   a. Increase in the rate of use of any natural resource? ___ ___ x___

10. **Risk of Upset:** Will the proposal result in:
    a. A risk of hazardous substances (including but not limited to: oil, pesticides, chemicals, or radiation) in the event of an accident or of upset conditions? ___ ___ x___
    b. Possible interference with an emergency response plan or an emergency evacuation plan. ___ ___ x___

11. **Population:**
    a. Will the proposal result in alteration of the location, distribution, density, or growth rate of the human population of an area? x___ ___ ___
12. Housing:
   a. Will the proposal affect existing housing or create a demand for additional housing?  __x__ ___

13. Transportation/Circulation: Will the proposal result in:
   a. Generation of substantial additional vehicular movement?  ___ x ___
   b. Effects on existing parking facilities, or demand for new parking?  ___ x ___
   c. Substantial impact upon existing transportation systems?  ___ x ___
   d. Alterations to present patterns of circulation or movement of people and/or goods?  ___ x ___
   e. Alterations to waterborn, rail or air traffic?  ___ x ___
   f. Increase in traffic hazards to motor vehicles, bicyclists, pedestrians, or equestrians?  ___ x ___

14. Public Service: Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:
   a. Fire Protection  ___ x ___
   b. Police Protection  ___ x ___
   c. Schools  ___ x ___
   d. Parks and other recreational facilities  ___ x ___
   e. Maintenance of public facilities, including roads  ___ x ___
   f. Other governmental service  ___ x ___

15. Energy: Will the proposal result in:
   a. Use of substantial amounts of energy or fuel?  ___ x ___

16. Utilities: Will the proposal result in a need for new systems or substantial alterations to the following utilities:
   a. Power or natural gas  ___ x ___
b. Communications systems  
   ___ ___ x__

c. Water  
   ___ x__ ___

d. Sewer or septic tanks  
   ___ ___ x__

e. Storm water drainage  
   ___ ___ x__

f. Solid waste disposal  
   ___ ___ x__

17. Human Health: Will the proposal result in:
   a. Creation of any health hazard or potential health hazard (excluding mental health)?  
      ___ ___ x__

   b. Exposure of people to potential health hazards?  
      ___ ___ x__

18. Aesthetics: Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of any aesthetically offensive site open to public view?  
   ___ x__ ___

19. Recreation: Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?  
   ___ ___ x__

20. Cultural Resources:
   a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?  
      ___ x__ ___

   b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?  
      ___ ___ x__

   c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?  
      ___ ___ x__

   d. Will the proposal restrict existing religious or sacred uses within the potential impact area?  
      ___ ___ x__

21. Mandatory findings of Significance:
   a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of 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?  
      ___ ___ x__
b. Does the project have the potential to achieve short-term, to the disadvantage of long term, environmental goals? (A short term impact on the environment in is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future)? ___ x ___

c. Does the project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environment is significant)? ___ x ___

d. Does the project have the environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ___ x ___
ENVIRONMENTAL CHECKLIST RESPONSE

1. EARTH:

The proposed changes would allow multiple residential development in the Specific Plan area. Construction of residential units would result in disruption of the soil and change in the topography. All grading and excavation would be done in conformance with accepted engineering practices and be reviewed and approved by the City Engineer. The construction of new residential units could expose people to the possibility of future earthquakes. Such earthquakes are an accepted risk in California. The dwellings will be designed to meet the latest earthquake and seismic regulations and no other hazards should result from the construction.

2. AIR:

Odors, dust and fumes may be created during construction in the Specific Plan area. After construction has ceased, there should be no objectionable after effects.

3. WATER:

Any construction on the properties in the Specific Plan area could modify the absorption rate or drainage patterns. All engineering calculations for surface water run-off will be reviewed and approved by the City Engineer. Single family dwellings and/or commercial structures will require water service. The Water District has recently prepared a study of groundwater availability and future improvements for water service in the District. While the Water District concludes there is an adequate underground water supply, new construction will incrementally withdraw water from the underground aquifer.

4. PLANT LIFE:

Construction of dwellings or commercial buildings in the Specific Plan area will result in the removal of some plant life, however no significant effects are anticipated.

5. ANIMAL LIFE:

The construction of structures will have an affect on the habitat of animals. The eastern boundary of the Specific Plan area is near Carbonero Creek. There are no known rare or endangered species in the area, and the physical construction will respect the setbacks and criteria of the Department of Fish and Game.
6. **NOISE:**

Noise levels are expected to increase during construction, but will return to a normal range at the conclusion of construction. Some of the properties within the Specific Plan area are located within or near the seventy and sixty-five DBA noise contours. Construction in areas with noise levels of sixty-five DBA and above will require special consideration to ensure adequate noise mitigation measures are applied.

7. **LIGHT AND GLARE:**

The new dwellings and/or commercial buildings will require adequate light levels for safety. Any lighting will be down shining and directed away from existing uses. Light levels will be the minimum necessary to provide safety.

8. **LAND USE:**

The Specific Plan anticipates changes in land use from low density residential to high density residential and/or commercial land uses. The modification is not considered substantial, but will alter the present land uses proposed for the area.

9. **NATURAL RESOURCES:**

The construction of new structures will require water service. Water, a natural resource, has been the subject of recent studies by the Scotts Valley Water District. The Water District concludes that adequate water supply exists, but new development will create a greater demand for water services.

10. **RISK OF UPSET:**

It is not anticipated that residential construction will increase any risk of hazardous substances or interfere with any emergency response plan.

11. **POPULATION:**

The Specific Plan proposes high density residential development in an area previously identified for low density residential development. In addition, commercial uses could be introduced in an area previously identified as residential. The impacts of the modifications should not be substantial, but the proposal will result in a modification from the previously identified land uses in the General Plan.

12. **HOUSING:**

The Specific Plan and General Plan change will create additional housing opportunities by increasing the number of dwelling units that could be constructed in the area.

13. **TRANSPORTATION/CIRCULATION:**

The change from low density residential to high density residential and commercial will create additional vehicular traffic. A previous Environmental Impact Report prepared for the Gateway South Assessment District analyzed the impact of additional vehicular traffic as a result of activities within the Gateway South Assessment District. The change in density is within the original anticipated traffic impacts in the EIR. Although the traffic impacts will not exceed the previously studied impacts, confirmation of the traffic analysis will be done. The Specific Plan anticipates one access point on Mt. Hermon Road for entry to properties
between Mt. Hermon Road and Glen Canyon, and one or two exits on Glen Canyon Road. This traffic circulation pattern was considered in the previous EIR, but will be more thoroughly analyzed. Any increase in vehicular traffic poses a potential increase in hazards to bicyclists, pedestrians, or equestrians. The configuration and location of the roadways will comply with the safety standards of the Public Works Department.

14. PUBLIC SERVICE:

The increase in residential units and/or commercial activities will result in an increased demand on fire and police protection. There will be an increase in the number of children attending local schools and recreational facilities could be impacted.

15. ENERGY:

It is not anticipated that any substantial amounts of energy or fuel will be used as a result of this development.

16. UTILITIES:

There will be an increased demand on water service which affects the underground water supply. The Water District indicates the water supply is adequate, however any increase demand for water service will incrementally reduce the water available in the underground aquifer.

17. HUMAN HEALTH:

No substantial impact on human health is anticipated.

18. AESTHETICS:

The result of the Specific Plan and General Plan modifications will be the development of structures on a roadway that serves as an entrance to the City of Scotts Valley. Specific attention will be given to the aesthetics of any development that occurs on the site to ensure it is consistent with the visual goals and policies of the City of Scotts Valley.

19. RECREATION:

The construction of residential units that use recreation areas could have an affect on existing recreational opportunities. The impact is not considered significant and development impact fees to provide additional recreational activities are required with the issuance of any building permit.

20. CULTURAL RESOURCES:

There are no known prehistoric or historic archaeological resources in the project area. Should construction uncover any unknown prehistoric or historic archaeological information, the construction will be halted and a qualified archaeologist consulted as to proper disposition of the site.
21. MANDATORY FINDINGS OF SIGNIFICANCE:

The following areas will be considered as to their environmental impact as a result of the Specific Plan, amended General Plan, and zoning regulations:

(1) Traffic impacts due to increased density. A traffic analysis will be done based on the previous trip generation information prepared for the Gateway South Assessment District. The figures will be reconfirmed and comments on mitigations, if any, shall be included in the focused Environmental Impact Report for this project.

(2) Consideration of the effect on water supply based on the additional density will be considered. The Scotts Valley Water District will be consulted as to the effect of the additional dwellings on the water supply.

(3) The impact of the construction on the creek bank and vegetated areas and wetlands, if any exist, will be considered as part of the environmental analysis for the project.
IV. DETERMINATION

On the basis of this initial evaluation:

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

___ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION WILL BE PREPARED.

x  I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

 DEC.29, 1994
 DATE

 [Sign]
 SIGNATURE

 [Title]
 TITLE
February 9, 1995

Robert Hanna
City of Scotts Valley
One Civic Center Drive
Scotts Valley, California 95066

RE: MCH #029504 Notice of Preparation - Draft EIR for Gateway South Specific Plan, General Plan Amendment and Rezoning

Dear Mr. Hanna:

AMBAG's Regional Clearinghouse circulated a summary notice of your environmental document to our member agencies and interested parties for review and comment.

The AMBAG Board of Directors considered the project on February 8, 1995 and has no comments at this time. However, we are forwarding the enclosed comments on this project that we have received from other agencies or interested parties.

Thank you for complying with the Clearinghouse process.

Sincerely,

[Signature]

Nicolas Papadakis
Executive Director

Enclosures

NP:dis
Robert J. Hanna  
City of Scotts Valley  
One Civic Center Drive  
Scotts Valley, CA 95066  

January 4, 1995  

Dear Mr. Hanna:  

CLEARINGHOUSE ITEM #029504  

Staff has received the NOP for the Gateway South Specific Plan, which would allow higher density residential and commercial uses along Mount Hermon Road, and has the following comments:

1. Project consistency with the Air Quality Management Plan for the Monterey Bay Region should be addressed in accordance with Chapter 13 of the Plan.

2. Direct and other indirect source emissions from all proposed activities should be quantified and their impact on air quality assessed. If the project would significantly affect an intersection at LOS D or below, modeling should be done to determine if carbon monoxide standards would be violated.

3. Mitigation measures should be identified if the project would have a significant impact on air quality. The EIR should quantify the emission reduction effectiveness of these measures, identify agencies responsible for implementation and monitoring, and conclude whether mitigation measures would reduce air quality impacts below significance levels.

Enclosed is a copy of the District’s Guidelines for the Assessment of Environmental Impact Documents to assist you in preparing the air quality section of the draft EIR. If you have any questions, please call Douglas Kim of our planning staff.

Sincerely,

Douglas Kim for  

Janet Brennan  
Senior Planner, Planning and Air Monitoring Division
GUIDELINES FOR THE ASSESSMENT OF
ENVIRONMENTAL IMPACT DOCUMENTS

I. ENVIRONMENTAL SETTING

Description of ambient air quality conditions prior to the proposed action. The description should provide sufficient information to permit independent evaluation by reviewers. The following information should be included in the discussion of the environmental setting:

A. Local climate and topography

B. State and local air quality standards

C. Summary of ambient air quality data for the previous three years including data from the closest monitoring stations as well as basinwide data

II. IMPACT OF PROJECT PROPOSAL AND ALTERNATIVES

All phases of a project and project alternatives must be considered when evaluating air quality impacts. Impact assessments should be calculated using "worst case" meteorological conditions and the most current emission factors available. Pollutants of particular concern are nitrogen oxides, sulfur oxides, particulate matter, ozone, reactive hydrocarbons, carbon monoxide, NESHAPS (National Emission Standards for Hazardous Air Pollutants), and toxic pollutants identified in Appendix A. Several types of emission computations may be needed for the air quality analysis. All results may be presented in units of tons per year, pounds per day, or parts per million (ppm). The ARB EMFAC7D composite vehicle emission factors or the most current approved method may be used in calculations where more specific regional factors are not available.

A. Short Term Emission - Short term emissions generated during the site preparation and construction phase of a project include fugitive dust resulting from grading and materials handling, construction workers vehicular traffic, and the exhaust from heavy-duty gasoline and diesel powered vehicles. Emission factor data for emissions generated during construction activities can be found in Compilation of Air Pollutant Emissions Factors, AP-42. Once the appropriate emission factors have been determined, computations would be similar to
D. **Hazardous Pollutants** - Airborne hazardous or toxic pollutants (referenced but not limited to Appendix A) expected to be generated by the project must be identified. The types of pollutants, quantities emitted and potential impact on public health must be addressed. In addition, it must be identified if a project is to be located in an area which may be impacted by existing or planned facilities with the potential to emit toxic or hazardous pollutants, the impact on project residents or employees must be evaluated.

E. **Cumulative Impacts** - The impact on the ambient air environment which results from the incremental impact of a proposed project when added to other past, present, and reasonable foreseeable future development activities should be identified. The State CEQA Guidelines (Section 15023.5) presents the following criteria for an adequate discussion of cumulative impacts:

1. A list of projects in the vicinity of the proposed project producing related or cumulative impacts, including those projects outside the control of the agency.

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

3. A reasonable analysis of the cumulative impact of the relevant projects.

III. **CONFORMITY WITH AIR QUALITY PLAN**

Section 15142(b) of the State EIR Guidelines and Sections 176 and 316 of the Federal Clean Air Act contain specific references on the need to evaluate local plans, programs and projects for conformity with Air Quality Plans (i.e., Air Quality Management Plan (AQMP)/State Implementation Plan (SIP)).
2. **Employer Sponsored-Transportation-Measures** - 
   (For job sites.) General Measures listed above and:
   - Employer-sponsored ridesharing programs
   - Employer-provided transit passes
   - Carpool/vanpool preferential parking
   - Employer subsidy to employees using carpools/vanpools
   - Employer-charged parking fees for single occupant motor vehicles
   - Onsite fuel for carpool/vanpool vehicles
   - Modified work schedules (flextime) for meeting carpooling, vanpooling, or transit schedules
   - Provision of employee services within walking distances, including banking, child care, food service, recreation and other facilities
   - Shuttle services for employees for shopping and to public transportation access points
   - Fleet management to reduce trips and improve vehicle maintenance

3. **Residential Projects**
   General Measures listed above and:
   - Provision for transit access in street design
   - Neighborhood shopping and day-to-day personal service needs within residential projects, without additional parking for such service uses
   - Major open space and recreational facilities within residential projects

4. **Land-Use-Development-Measures**
   - Mixed land/use balanced communities
   - Optimum insulation standards
   - Solar access siting
   - Solar space heating/hot water systems/pool heating
January 11, 1995

Robert Hana
Planning Director
City of Scott's Valley
One Civic Center Drive
Scotts Valley, California 95066

RE: "Specific Plan" Input for Scott Property, Gateway South

Dear Mr. Hana:

I am writing this letter to confirm WTA Development's interest in acquiring and developing the Scott property for mixed retail/residential use. WTA is currently performing due diligence investigations under a purchase agreement with the Mount Hermon-La Madrona Partnership.

As you may recall, we have met with you to discuss our approach and preliminary design concepts. Our plan calls for: 1) Two large retail Users with shops/food services (+/-9.0 acres), 2) Restaurant/fast food Users (+/-1.2 acres, the teardrop space), and 3) Open space for the balance of the site (+/-8.8 acres) with consideration for entry level housing at 15-18 units per acre for 3.0 of the 8.8 acres. We are currently conducting preliminary architectural and civil engineering design studies to confirm our approach and useful site areas.

WTA recommends that your office consider C-S and OS zoning for this property based on the results of our studies. It is our understanding that C-S zoning for retail/housing and OS zoning for non-buildable open space will satisfy our requirements.

I would be happy to answer any questions regarding this matter.

Very truly yours,

Richard D. Thompson
General Partner

cc: Howard J. White, III
    Stewart E. Adams
    John Scott
January 24, 1995
CITY OF SCOTTS VALLEY

Mr. Robert Hanna
City of Scotts Valley
1 Civic Center Drive
Scotts Valley, California 95066

Dear Mr. Hanna:

Gateway South Specific Plan, Santa Cruz County
Notice of Preparation (NOP)

Department of Fish and Game personnel have reviewed the NOP of a Draft Environmental Impact Report (DEIR) for the proposed Gateway South Specific Plan. The project would allow mixed residential and commercial development on a site near Highway 17 and Mt. Hermon Road in Scotts Valley. We believe the following issues need to be addressed in the DEIR.

The DEIR should address potential impacts to biotic resources and water quality, as well as alternatives which would avoid impacts and mitigation measures for unavoidable impacts. Particular attention needs to be paid to State- and Federally-listed and candidate species and sensitive habitats such as wetlands. The following species may occur in the project area:

- Mt. Hermon June beetle (Polyphylla barbata)
  Federal candidate category 2
- Santa Cruz tarplant (Holocarpha macradenia)
  Federal candidate category 1, State endangered
- San Francisco popcornflower (Plagiobothrys diffusus)
  Federal candidate category 2, State endangered
- Santa Cruz wallflower (Erysimum teretifolium)
  Federal endangered, State endangered
- Ben Lomond spineflower (Chorizanthe pungens hartwegiana)
  Federal endangered
- Scotts Valley spineflower (Chorizanthe robusta hartwegii)
  Federal endangered
- Robust spineflower (Chorizanthe robusta robusta)
  Federal endangered

A qualified biologist should be retained to conduct in-season surveys for these species to determine whether they are present on the site and would be affected by the project. Impacts to any of these species would be significant under the California Environmental Quality Act. We request that subsequent documents related to this project be submitted for our review.
Specific measures to adequately mitigate unavoidable impacts need to be incorporated into project design prior to certification of the EIR. The Department recommends the following overall measures to lessen or minimize impacts.

1. Avoidance or minimization of impacts to important plant and wildlife habitats.

2. Revegetation using native species.

3. Conformance with the Department Wetland Policy of no net loss of either wetland acreage or habitat value for unavoidable impacts.

4. Require a 50-foot setback from the edge of riparian vegetation to protect riparian habitat.

The Department has direct jurisdiction under Fish and Game Code sections 1601-03 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any stream. We recommend early consultation since modification of the proposed project may be required to avoid impacts to fish and wildlife resources. Formal notification under Fish and Game Code Section 1603 should be made after all other permits and certifications have been obtained. Work cannot be initiated until a streambed alteration agreement is executed.

The U. S. Army Corps of Engineers also has jurisdiction over the discharge of fill to streams and wetlands under Section 404 of the Clean Water Act. We recommend that the Corps be contacted to determine if they have jurisdiction and require a permit.

If you have any questions regarding our comments, please contact Jeannine M. DeWald, Associate Wildlife Biologist, at (408) 429-9252; or Carl Wilcox, Environmental Services Supervisor, at (707) 944-5525.

Sincerely,

Rick Parmer
Acting Regional Manager
Region 3

cc: U. S. Fish and Wildlife Service
Ventura
January 25, 1995

Mr. Bob Hanna, Planning Director  
City of Scotts Valley  
One Civic Center Drive  
Scotts Valley, CA 95066

Dear Mr. Hanna:

The Santa Cruz County Flood Control and Water Conservation District has concerns about the state of groundwater conditions in the Camp Evers wellfield area which is in close proximity to the Gateway South proposal. Several private water using interests in the unincorporated area of the County are already impacted by declining groundwater levels and deteriorating water quality in this area of the Santa Margarita groundwater basin. County water resource staff would like to commend the City for including the evaluation of new water demand in the focused EIR for the Gateway South specific plan, General Plan amendment, and accompanying zoning changes. Our staff specifically request that the following concerns be addressed in the focused EIR.

1) Quantify new demand.

2) Identify which specific well will service the proposed development.

3) Identify the static depth to groundwater at the designated well and discuss the trends of the aquifer in this regard, including perennial yield and changes in groundwater storage.

4) Identify the perforated interval of the designated well and the saturated thickness of the aquifer, at this location, under static conditions.

5) Identify the pumping water level of the designated well during dry season use.

6) Quantify the number of meters allocated to the designated well, the number of new meters accompanying this proposal, and the remaining meters available to be allocated from the designated well.

The focused EIR's discussion should also address the proposal as it influences recharge lands surrounding the Camp Evers area. Lastly, County staff would like the City to consider requesting the future developer to contract with the Scotts Valley Water District to run the Santa Margarita groundwa-
ter model to evaluate any changes to local groundwater conditions associated with new demand from the proposal and/or the impact of new impervious surface to annual recharge of the Camp Evers wellfield area.

We appreciate the opportunity to provide input into water resource factors analyzed in the focused EIR. Staff considers these to be salient points, given the present condition of the groundwater basin, and pertinent to the evaluation of new demands associated with this proposal. Your cooperation with this request is greatly appreciated.

Respectfully submitted,

[Bruce Laclergue]
Bruce Laclergue
Hydrologist
Robert Hanna, Planning Director  
City of Scotts Valley  
One Civic Center Drive  
Scotts Valley, CA 95066

SUBJECT: NOP FOR THE GATEWAY SOUTH SPECIFIC PLAN

Dear Mr. Hanna,

Thank you for providing County staff with a Notice of Preparation for the City’s Gateway South Specific Plan EIR. Location of the Specific Plan area within close proximity of the unincorporated portion of the County creates a potential for project impacts to affect areas within the County’s jurisdiction as well as the City’s. In addition, there are some issues, as discussed below, that may generate impacts to portions of the County far removed from the specific plan area. The specific comments of Planning staff are provided below.

CIRCULATION
Mt. Hermon Road: Mt. Hermon Road is a major arterial serving as the principal access connecting San Lorenzo Valley to Highway 17 and much of the remainder of the County. The roadway is identified as a principal arterial in the County’s Congestion Management Program and carries in excess of 15,000 vehicles a day. The EIR should evaluate the cumulative impact of the projected development of this plan together with additional trips generated by expected growth in San Lorenzo Valley on the capacity of the roadway. Chapter 4 of the 1994 County General Plan is a useful source of information for potential growth in the San Lorenzo Valley (and Carbonera) planning area(s). The General Plan EIR also contains useful information in this regard. A summary table of potential build out of each planning area is enclosed for your information.

The adequacy of the planning and projected financing for installation of improvements on Mt. Hermon Road to accommodate the projected levels of traffic serving both the City and the surrounding unincorporated portions of the County should also be included in this discussion. The planning, financing and implementation of improvements for transit, bicycle and pedestrian facilities and their integration into the County-wide system should also be evaluated.

Highway 17: The Regional Transportation Plan and the County General Plan propose the addition of HOV lanes to Highway 17 from Granite Creek Road to the intersection with Highway 1. The EIR should include an evaluation of whether development of the proposed Specific Plan will reserve or otherwise
accommodate adequate State right-of-way to allow for this projected expansion of Highway 17.

La Madrona Drive: La Madrona Dr. is an important collector road providing access to properties adjacent to Highway 17 including the residential communities in the Sims Road neighborhood and Pasatiempo. The EIR should include an evaluation of the impacts of the development on the circulation capacity of this roadway and its ability to function as an important access to these areas of development. Additionally the provision of transit, bicycle and pedestrian facilities to complement those planned in the adjacent County area should be included.

SCENIC RESOURCE PROTECTION
The County has designated Highway 17 as a scenic highway, with the policy that the public vistas from these roads are to be afforded the highest level of protection. The County policies call for development to be sited, designed and landscaped to improve the visual quality of the road corridors in urban areas, and to minimize visibility of development in rural areas. The Scotts Valley General Plan also contains several policies that direct that the scenic characteristics of roadways be protected and enhanced. The EIR should evaluate the impacts of the projected development on this scenic roadway, and the adequacy of the Specific Plan to guide development to accomplish the protection and enhancement of the scenic quality of the public vistas in the corridor.

RIPARIAN HABITATS
Portions of the Specific Plan area either drain to, or include the riparian corridor of Carbonera Creek. The EIR should evaluate the potential for developments to be allowed by the Plan to cause siltation or other water quality problems downstream in the portion of Carbonera Creek within the County's jurisdiction. The policies of the County General Plan provide for the protection and enhancement of the riparian resources through the siting of development and the design of drainage systems. The EIR needs to evaluate the potential impacts of the projected development on the riparian resources and the adequacy of the Specific Plan to regulate such impacts in order to protect this resource.

GROUNDWATER
Our concerns regarding the Specific Plan's effect on area groundwater are identical to those described in the NOP response letter from the County Flood Control and Water Conservation District dated January 25.
Again, thank you for providing us with this opportunity to comment on the NOP. Please contact me if you have any questions regarding these comments or how the City can obtain a copy of the County General Plan and its EIR. I can be reached at 454-3170.

Sincerely,

Kim Tschantz
Deputy Environmental Coordinator

For: Pete Parkinson
Environmental Coordinator/
Principal Planner

enclosure: 1

svplan/pln453
RURAL AREA BUILDOUT POTENTIAL

Table 6.1 summarizes the build-out potential within the Urban Services Line, assuming existing (1980) General Plan and zoning designations. The Urban Services Line defines where urban services may be provided, guiding the extension of public services and the subsequent creation of urban densities, and coordinating new residential development with the provision of public services and facilities. Areas outside of the Urban Services Line are considered rural and are designated for lower density development. According to information developed by the County Planning Department, there is a potential for up to 6,699 additional units in the rural areas of the County, given existing General Plan designations. This number excludes the potential for construction of new accessory dwellings on existing legal lots of record in the rural area that could result under the newly adopted Accessory Dwelling Ordinance. The rural buildout analysis was developed in mid-1990 and is based on a January 1, 1990 count of 24,737 existing units in rural areas, with a projected total of 31,436 units at rural "build-out". As in urban areas, build-out potential includes both vacant and underdeveloped parcels. Estimated additional rural dwelling units at build-out are shown in Table 6.2.

The buildout analysis used in preparing the General Plan Environmental Impact Report did not address the potential addition of affordable housing in the County's rural area. An inventory of existing parcels in the rural area that could potentially accommodate an accessory unit, under the County's new accessory unit regulations, revealed that there was an accessory unit potential of 11,398

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Total Existing Housing Units</th>
<th>New Units at Buildout</th>
<th>Total Units at Buildout (2)</th>
<th>Potential Accessory Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aptos Hills</td>
<td>1,812</td>
<td>531</td>
<td>2,343</td>
<td>798</td>
</tr>
<tr>
<td>Bonny Doon</td>
<td>1,099</td>
<td>348</td>
<td>1,447</td>
<td>569</td>
</tr>
<tr>
<td>Carbonara (1)</td>
<td>2,441</td>
<td>729</td>
<td>3,170</td>
<td>1,140</td>
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<tr>
<td>Eureka Canyonb</td>
<td>1,509</td>
<td>740</td>
<td>2,249</td>
<td>798</td>
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<tr>
<td>La Selva Beach</td>
<td>1,071</td>
<td>634</td>
<td>1,705</td>
<td>570</td>
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<tr>
<td>North Coast</td>
<td>250</td>
<td>324</td>
<td>574</td>
<td>228</td>
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<tr>
<td>Pajaro Valley (1)</td>
<td>754</td>
<td>187</td>
<td>941</td>
<td>342</td>
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<tr>
<td>San Andreas</td>
<td>1,407</td>
<td>207</td>
<td>1,614</td>
<td>570</td>
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<td>Skyline</td>
<td>1,135</td>
<td>721</td>
<td>1,856</td>
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<td>San Lorenzo Valley</td>
<td>11,055</td>
<td>1,222</td>
<td>12,277</td>
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<td>Salsipuedes</td>
<td>224</td>
<td>265</td>
<td>489</td>
<td>228</td>
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<tr>
<td>Summit</td>
<td>1,980</td>
<td>791</td>
<td>2,771</td>
<td>1,026</td>
</tr>
<tr>
<td><strong>Total Rural Area</strong></td>
<td><strong>24,737</strong></td>
<td><strong>6,699</strong></td>
<td><strong>31,436</strong></td>
<td><strong>11,398</strong></td>
</tr>
</tbody>
</table>

(1) Portions of the planning area outside of the Urban Services Line only
(2) Total units at buildout does not include units produced under the bonus density program, accessory dwellings, units recognized under the illegal construction amnesty program or residential units produced in commercial development.
Source: "Housing and Population Estimates," County of Santa Cruz Planning Department, August 1990

Page 4-68
January 18, 1995

Mr. Robert Hanna
Planning Director
City of Scotts Valley
One Civic Center Drive
Scotts Valley, CA 95066

Re: Notice of Preparation (NOP) of Draft Environmental Impact Report (DEIR): Gateway South Specific Plan, General Plan Amendment and Rezoning. Project proposes to prepare a Specific Plan, amend the General Plan and change the zoning for various properties.

Dear Mr. Hanna:

Thank you for including the California State Department of Transportation (Caltrans) in the environmental review process. We have reviewed the above referenced NOP and wish to forward the following comments:

1. We recommend that a complete traffic study be conducted for this project, to determine impacts on State Route 17 and all affected streets, crossroads and controlling intersections. Traffic impacts should be analyzed in terms of:

   a. Trip generation, distribution and assignment. Data needs to be current.

   b. Average Daily Traffic, and AM and PM peak hour volumes for the following traffic conditions: existing, existing plus project and cumulative for all facilities examined.

   c. All mitigation proposed should be fully discussed in the environmental document. These discussions should include but not be limited to the following area:

      • financing
      • scheduling
      • implementation responsibilities
      • lead agency monitoring
2. All work performed within the State right-of-way will require an encroachment permit from Caltrans. A completed application, environmental documentation and five sets of maps should be submitted to the following address:

G. J. Battaglini, District Office Chief
Caltrans District 4
Maintenance Services & Permits
P. O. Box 23660
Oakland, CA 94623-0660

We appreciate the opportunity to work with you on this project and wish to continue close correspondence on any new developments. Should you have any questions regarding these comments, please contact Salimah As-Sabur of my staff at (510) 286-5583.

Sincerely,

JOE BROWNE
District Director

PHILLIP BADAL
District Branch Chief
IGR/CEQA

cc: Mike Chiriatti, SCH
Linda Wilshusen, SCCTC
Nicolas Papadakis, AMBAG
January 16, 1995

Robert Hanna
Planning Director
City of Scotts Valley
1 Civic Center Drive
Scotts Valley, CA 95066

Re: Gateway South Specific Plan; General Plan Amendment and Rezoning

Dear Mr. Hanna:

The EIR should show, for any new construction, that an adequate water supply and distribution system exists or will be installed for fire flow requirements.

Any changes to the existing circulation pattern should be required to meet access and egress standards and requirements of both the City and Fire District. If any traffic signal lights are added in the project area, the Fire District would require the installation of a traffic signal control system for each signal light.

There is one facility (furniture refinishing) in the project area that holds a hazardous materials storage permit. I do not believe this facility would have any significant environmental impact to the project area.

Please call me with any questions you may have regarding this project.

Sincerely,

Melvin Angel
Fire Chief

by:

John Justice
Hazardous Materials Officer

c: file
SCOTT'S VALLEY POLICE DEPARTMENT

MEMORANDUM

DATE: January 20, 1995
TO: Robert Hanna
FROM: Capt. Tom Bush

DEPARTMENT: Planning
DEPARTMENT: Police

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT - Gateway South Specific Plan, General Plan Amendment and Rezoning.

In reviewing the project description and redesignated zoning for the Gateway South Specific Plan the Police Department has relatively little concern for the rezoning for parcels 9, 10 & 12. With respects to parcels 1 through 8 and our previous conversation, the Department's concerns are as follows:

1) It is our understanding from our previous phone conversation that parcels 1 through 8 could be developed for high or medium residential zoning with the possibility of 120 to 140 residential units on the parcels. Should this be the case, the Department would obviously need further study for input for possible economic impact to the operations of the Police Department itself.

2) Further, consideration would only be given to this type of zoning and only agreeable provided a secondary ingress and egress to the combined parcels be made off of Glen Canyon Road. A free right-hand in and a free right-hand out can be accommodated onto Mt. Hermon Road. However, no left turns to and from Mt. Hermon Road to these combined parcels must be prohibited due to the safety issues with respects to the cross traffic involved.

If you have any further questions or concerns regarding these comments, please don't hesitate to contact me.

TCB:jlr
January 18, 1995

Robert Hanna
City of Scotts Valley
One Civic Center Drive
Scotts Valley, CA 95066

RE: Gateway South Specific Plan Notice of Preparation

Dear Mr. Hanna:

The Santa Cruz County Regional Transportation Commission staff have reviewed the Notice of Preparation for the Gateway South Specific Plan and have the following general comments. Please see specific comments attached.

1. The project to improve the Mt. Hermon Road intersection with Highway 17 includes the development of a Park and Ride lot as listed in the 1994 Regional Transportation Plan and as required by the Congestion Management Program (CMP). As recommended by the Regional Transportation Commission, this Park-and-Ride lot is included in the State FY 95-96 Transportation Systems Management Program for funding in the amount of $145,000. There is no mention of this Park-and-Ride lot development in the NOP for this project. It is our understanding that the Park-and-Ride lot will be located on parcels 9, 10 and 12 as described in the NOP. Please see specific comments attached.

2. Section 13 of the Initial Study mentions the original EIR for this project. Please send a copy of this document to us for our review since traffic impacts for this project are going to be based on that EIR.

We appreciate the opportunity to review this document at this time. We look forward to working with the City to develop the much-needed park-and-ride facility as part of this project and would appreciate a direct response on this issue at your earliest convenience. If you have any questions regarding these comments, please feel free to contact Teresa Buika of my staff at 454-3073.

Sincerely,

Linda Wilshusen
Executive Director

tb:gateway

Attachment: Specific Comments
Regarding the Park-and-Ride lot portion of this Gateway South Specific Plan, we have the following comments:

1. On page 2, the NOP states that Parcels 9, 10 & 12 will be designated as high density residential, multiple residential, and service commercial. Does a park-and-ride facility fit into the service commercial category?

2. Items 13b and 13c of the Initial Study checklist does not indicate any effects on existing parking facilities or demand for new parking. Given the development of a new park-and-ride facility, we suggest that the project will effect such facilities.

3. In order for the park-and-ride lot to be more effective and intermodal, secure, bike locker facilities should be included in the development of the parking facility.

4. For additional security at the park-and-ride lot, the City should consider working with the Santa Cruz Service Authority for Freeway Emergencies (SAFE) to install a callbox at the parking facility. This emergency phone can be either linked directly to the Scotts Valley police department or to the California Highway Patrol for driver assistance.

5. A new transit center is planned to be developed on Mt. Hermon Road by Kings Village. The EIR should describe these projects in detail and should discuss the relationship between these two transportation facilities.
Appendix B

Gateway South Assessment District Final EIR Mitigation Measures
4. Environmental review shall be required for any future development project located within area 1 (Planning Area B) or 2 (Planning Area A). Said environmental review for areas 1 (Planning Area B) and 2 (Planning Area A) shall include a site-specific geotechnical analysis and mitigations for potential erosion and sliding hazards. Development in the ridged portions of area 1 (Planning Area B) shall conform with policies of the general plan regarding slope stability. This mitigation measure is the responsibility of the city community development director.

15. At a minimum, the following design criteria should be incorporated into development within the Gateway South Assessment District to maximize ground-water recharge. Specifications for a, b, d, and e shall be incorporated into building permit plans and into covenants, codes, and restrictions and shall be verified by the city building official prior to issuance of a building permit.

   a. Require design review of landscape plans to ensure that residential paving design (driveways, walkways, etc.) include features that maximize ground-water re-charge and minimize run-off. Such design features could include the use of interlocking pavers with open joints, turf blocks, integrating paved surfaces with natural ground cover, etc.

   b. Prohibit direct roof run-off to storm-drainage systems.

   c. If a soil/geologic hazard or flood hazard will not result, encourage the use of retention sumps in storm drainage systems. This shall be incorporated into the drainage plan prior to final map approval. The public works director shall be responsible for enforcing this mitigation measure.

   d. Require design review of landscape plans to ensure that landscaping does not result in unnecessary drainage of irrigation water to streets.

16. As a condition of future subdivision approvals within the assessment district, a model home shall be constructed that includes landscaping features that demonstrate drought-tolerant landscaping and methods to enhance ground-water recharge.

17. As a condition of future subdivision approval, storm-drainage systems shall be designed to divert storm-water run-off to holding/recharge ponds. A maintenance agreement shall also be developed as a condition of subdivision approval to ensure that percolation run-off will not contribute to a degradation of ground-water resources or air quality, or to nuisances (e.g., insects), over time. The city public works director shall
be responsible for approval of the maintenance agreement and for overseeing the maintenance program.

34. Prior to approval of any new construction in area 2 (Planning Area A), a noise survey shall be performed to determine necessary building setbacks and noise reduction measures. The community development director shall ensure compliance within this mitigation measure prior to any site plan approval.

35. A vegetative buffer shall be planted along the east side of the La Madrona Drive and Altenitas Road extensions to screen the roadways from Highway 17. The type of vegetation shall not compete with adjoining vegetative communities. The plans for landscaping shall be incorporated into or accompany the grading plans for the assessment district improvements and shall be reviewed and approved by the community development director.

36. Future development in area 1 (Planning Area B) shall be designed/sited to minimize visual impacts for motorists on Highway 17. This issue shall be evaluated in future environmental reports for specific projects. The community development director is responsible for ensuring that necessary environmental review is performed and that appropriate mitigation measures are incorporated into the project design.

20. As a condition of approval for redevelopment/expansion projects (more than 25 percent of floor area) to existing structures in area 2 (Planning Area A), the applicant shall be required to connect to the city’s wastewater treatment system and abandon the septic tank. The city community development director shall be responsible for enforcing this mitigation measure.

These mitigations will be incorporated into the Gateway South Specific Plan EIR mitigation monitoring program.
Appendix C
Traffic Tables
### TABLE 1  
**Existing Intersection Volumes**  
**A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th>East Approach</th>
<th>South Approach</th>
<th>West Approach</th>
</tr>
</thead>
<tbody>
<tr>
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<td>R  T  L</td>
<td>R  T  L</td>
<td>R  T  L</td>
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<td>601 555 122</td>
<td>193 97 41</td>
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<td>173 1128 16</td>
<td>1 1 5</td>
<td>63 430 421</td>
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<td>- 1023 5</td>
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### TABLE 2  
**Existing Intersection Volumes**  
**P.M. Peak Hour**

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<td>R  T  L</td>
<td>R  T  L</td>
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<td>- 751 37</td>
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<td>28 1160 -</td>
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**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 3
Intersection Performance Summary
A.M. Peak Hour

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Existing</th>
<th>Existing + Approved Without Project</th>
<th>Existing + Approved WITH PROJECT</th>
<th>Year 2005 Model Base Without Project</th>
<th>Year 2005 Model WITH PROJECT</th>
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<td>25.7</td>
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### TABLE 4
Intersection Performance Summary
P.M. Peak Hour

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<th>Existing + Approved WITH PROJECT</th>
<th>Year 2005 Model Base Without Project</th>
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(1)-Delay is in seconds per vehicle
(2)-Level of Service as defined by PASSER II analysis

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**Gateway South Specific Plan**
**Traffic Impact Study**
Rajappan & Meyer Consulting Engineers, Inc.
23-Mar-95
# TABLE 5

**Freeway Mainline Volumes**  
A.M. Peak Hour

<table>
<thead>
<tr>
<th>Freeway Section</th>
<th>Existing</th>
<th>Approved</th>
<th>Existing Plus Approved</th>
<th>Project</th>
<th>Existing Plus Approved Project</th>
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<th>2005 Project</th>
<th>2005 Base Plus Project</th>
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<tr>
<td><strong>Southbound SR-17</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
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**Gateway South Specific Plan**  
Traffic Impact Study  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
## TABLE 6
Freeway Mainline Volumes  
P.M. Peak Hour

<table>
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<th>Freeway Section</th>
<th>Existing</th>
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<td><strong>Southbound SR-17</strong></td>
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### Gateway South Specific Plan
Traffic Impact Study  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 7
Freeway Performance Summary
A.M. Peak Hour

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<thead>
<tr>
<th>Freeway Section</th>
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<th>Existing + Approved</th>
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Gateway South Specific Plan
Traffic Impact Study
Rajappan & Meyer Consulting Engineers, Inc.
23-Mar-95
<table>
<thead>
<tr>
<th>Freeway Section</th>
<th>Existing</th>
<th>Existing + Approved</th>
<th>Existing + Approved + Project</th>
<th>2005 Base</th>
<th>2005 Base + Project</th>
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<tbody>
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<td>V/C</td>
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<td><strong>Southbound SR-17</strong></td>
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# TABLE 9

## Project Zoning Comparison for A.M. Peak Hour

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Description</th>
<th>Number of Units</th>
<th>Rate In</th>
<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
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<tr>
<td>Original Zoning (Data from the 1987 traffic study)</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>1 (Area A)</td>
<td>Single Family Residential</td>
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<td>3</td>
<td>4</td>
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<td>88</td>
<td>9</td>
<td>97</td>
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## Proposed Zoning

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<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
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## Net Difference

| Net Difference | -115 | 26 | -89 |

---

**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
## TABLE 10
Project Zoning Comparison for P.M. Peak Hour

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Description</th>
<th>Number of Units</th>
<th>Rate In</th>
<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
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<td>106</td>
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<td>66</td>
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<td>7</td>
<td>33</td>
<td>40</td>
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<td>General Retail</td>
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<td>495</td>
<td>991</td>
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**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 13

**Trip Generation for A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Description</th>
<th>Number of Units</th>
<th>Rate In</th>
<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
</tr>
</thead>
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<td>22</td>
<td>30</td>
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<td>37</td>
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<td>4 DU</td>
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<td>1.00</td>
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**Subtotal** 170 286 456

### Study Project

#### TABLE 11

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<td>47</td>
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<tr>
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<td>0.35</td>
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**Subtotal** 200 154 354

**TOTAL** 370 440 810

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**Gateway South Specific Plan**

**Traffic Impact Study**

Rajappan & Meyer Consulting Engineers, Inc.

23-Mar-95
TABLE 14
Trip Generation for P.M. Peak Hour

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Description</th>
<th>Number of Units</th>
<th>Rate In</th>
<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Restaurant</td>
<td>5180 SQF</td>
<td>8.69</td>
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<td>45</td>
<td>39</td>
<td>84</td>
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<td>25</td>
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<td>32</td>
<td>39</td>
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<tr>
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<td>0.50</td>
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<td>0.47</td>
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<td>22</td>
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<tr>
<td>7</td>
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<td>0.40</td>
<td>57</td>
<td>32</td>
<td>89</td>
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Subtotal 333 235 568

Study Project

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<th>Project Number</th>
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<th>Rate In</th>
<th>Rate Out</th>
<th>Trips In</th>
<th>Trips Out</th>
<th>Total Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Area A)</td>
<td>Single Family Residential</td>
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<td>Multi-Family Residential</td>
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<td>0.42</td>
<td>0.21</td>
<td>44</td>
<td>22</td>
<td>66</td>
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<tr>
<td></td>
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<td>33</td>
<td>40</td>
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<tr>
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Subtotal 574 562 1136

TOTAL 907 797 1704

Gateway South Specific Plan
Traffic Impact Study
Rajappan & Meyer Consulting Engineers, Inc.
23-Mar-95
### TABLE 15
Approved Projects Intersection Volumes
A.M. Peak Hour

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th></th>
<th>East Approach</th>
<th></th>
<th>South Approach</th>
<th></th>
<th>West Approach</th>
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<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
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<td>45</td>
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<td>70</td>
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<td>0</td>
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<td>64</td>
<td>0</td>
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</table>

### TABLE 16
Approved Projects Intersection Volumes
P.M. Peak Hour

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<th>East Approach</th>
<th></th>
<th>South Approach</th>
<th></th>
<th>West Approach</th>
<th></th>
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Gateway South Specific Plan
Traffic Impact Study
Rajappan & Meyer Consulting Engineers, Inc.
23-Mar-95
# TABLE 17

**Existing + Approved Projects Intersection Volumes**  
**A.M. Peak Hour**

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<th>North Approach</th>
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<td>R</td>
<td>T</td>
<td>L</td>
<td>R</td>
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<td>Scotts Valley Drive and Mt. Hermon Road</td>
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<td>182</td>
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<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>243</td>
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<td>12</td>
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# TABLE 18

**Existing + Approved Projects Intersection Volumes**  
**P.M. Peak Hour**

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<th>North Approach</th>
<th>East Approach</th>
<th>South Approach</th>
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<td>R</td>
<td>T</td>
<td>L</td>
<td>R</td>
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<td>18</td>
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</tbody>
</table>

**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 19
**Project Intersection Volumes**
**A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th>East Approach</th>
<th>South Approach</th>
<th>West Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>T</td>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>0</td>
<td>0</td>
<td>2</td>
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</tr>
</tbody>
</table>

### TABLE 20
**Project Intersection Volumes**
**P.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th>East Approach</th>
<th>South Approach</th>
<th>West Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>T</td>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
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<td>0</td>
<td>11</td>
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<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
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<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>0</td>
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</tbody>
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**Gateway South Specific Plan**

**Traffic Impact Study**

Rajappan & Meyer Consulting Engineers, Inc.

23-Mar-95
### TABLE 21

**Existing + Approved Projects + Project Intersection Volumes**  
**A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th></th>
<th></th>
<th></th>
<th>East Approach</th>
<th></th>
<th></th>
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<th>South Approach</th>
<th></th>
<th></th>
<th></th>
<th>West Approach</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>206</td>
<td>239</td>
<td>221</td>
<td></td>
<td>646</td>
<td>619</td>
<td>131</td>
<td></td>
<td>198</td>
<td>99</td>
<td>71</td>
<td></td>
<td>86</td>
<td>859</td>
<td>418</td>
<td></td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>83</td>
<td>1</td>
<td>107</td>
<td></td>
<td>182</td>
<td>1253</td>
<td>33</td>
<td></td>
<td>17</td>
<td>1</td>
<td>38</td>
<td></td>
<td>65</td>
<td>572</td>
<td>428</td>
<td></td>
</tr>
<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>243</td>
<td>2</td>
<td>14</td>
<td></td>
<td>-</td>
<td>1187</td>
<td>6</td>
<td>109</td>
<td>-</td>
<td>104</td>
<td>14</td>
<td>1573</td>
<td>-</td>
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</table>

### TABLE 22

**Existing + Approved Projects + Project Intersection Volumes**  
**P.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th></th>
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<th>East Approach</th>
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<th></th>
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<th></th>
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<th></th>
<th>West Approach</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>460</td>
<td>462</td>
<td>259</td>
<td></td>
<td>258</td>
<td>1133</td>
<td>171</td>
<td></td>
<td>131</td>
<td>62</td>
<td>164</td>
<td></td>
<td>72</td>
<td>683</td>
<td>294</td>
<td></td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>86</td>
<td>2</td>
<td>155</td>
<td></td>
<td>113</td>
<td>1517</td>
<td>46</td>
<td></td>
<td>28</td>
<td>3</td>
<td>72</td>
<td></td>
<td>94</td>
<td>933</td>
<td>476</td>
<td></td>
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<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>600</td>
<td>14</td>
<td>23</td>
<td></td>
<td>-</td>
<td>1222</td>
<td>43</td>
<td>138</td>
<td>-</td>
<td>41</td>
<td>30</td>
<td>1514</td>
<td>-</td>
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</table>

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**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 23
**Year 2005 Base Intersection Volumes**  
**A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th></th>
<th>East Approach</th>
<th></th>
<th>South Approach</th>
<th></th>
<th>West Approach</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>225</td>
<td>300</td>
<td>215</td>
<td>765</td>
<td>705</td>
<td>155</td>
<td>245</td>
<td>125</td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>95</td>
<td>5</td>
<td>140</td>
<td>220</td>
<td>1433</td>
<td>20</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>295</td>
<td>5</td>
<td>15</td>
<td>-</td>
<td>1300</td>
<td>5</td>
<td>85</td>
<td>-</td>
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</tbody>
</table>

### TABLE 24
**Year 2005 Base Intersection Volumes**  
**P.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>North Approach</th>
<th></th>
<th>East Approach</th>
<th></th>
<th>South Approach</th>
<th></th>
<th>West Approach</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>520</td>
<td>585</td>
<td>245</td>
<td>275</td>
<td>1215</td>
<td>210</td>
<td>155</td>
<td>75</td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>105</td>
<td>5</td>
<td>190</td>
<td>110</td>
<td>840</td>
<td>585</td>
<td>15</td>
<td>5</td>
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<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>720</td>
<td>20</td>
<td>25</td>
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<td>955</td>
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</table>

**Gateway South Specific Plan**  
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
### TABLE 25
**Year 2005 Base + Project Volumes**  
**A.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>225</td>
<td>300</td>
<td>219</td>
<td>765</td>
<td>743</td>
<td>155</td>
<td>245</td>
<td>125</td>
<td>78</td>
<td>86</td>
<td>985</td>
<td>467</td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>95</td>
<td>5</td>
<td>140</td>
<td>220</td>
<td>148</td>
<td>35</td>
<td>21</td>
<td>5</td>
<td>42</td>
<td>81</td>
<td>582</td>
<td>535</td>
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<tr>
<td>La Madrona Drive/SR-17 Ramps and Mt. Hermon Road</td>
<td>295</td>
<td>5</td>
<td>17</td>
<td>-</td>
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<td>-</td>
<td>130</td>
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<td>1811</td>
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### TABLE 26
**Year 2005 Base + Project Volumes**  
**P.M. Peak Hour**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
<th>R</th>
<th>T</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scotts Valley Drive and Mt. Hermon Road</td>
<td>520</td>
<td>585</td>
<td>256</td>
<td>275</td>
<td>1325</td>
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<td>155</td>
<td>75</td>
<td>185</td>
<td>78</td>
<td>748</td>
<td>315</td>
</tr>
<tr>
<td>Glen Canyon Road and Mt. Hermon Road</td>
<td>105</td>
<td>5</td>
<td>190</td>
<td>110</td>
<td>1022</td>
<td>604</td>
<td>34</td>
<td>5</td>
<td>81</td>
<td>116</td>
<td>1721</td>
<td>35</td>
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<tr>
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<td>30</td>
<td>-</td>
<td>1316</td>
<td>50</td>
<td>146</td>
<td>-</td>
<td>55</td>
<td>35</td>
<td>1722</td>
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</tr>
</tbody>
</table>

### Gateway South Specific Plan
**Traffic Impact Study**  
Rajappan & Meyer Consulting Engineers, Inc.  
23-Mar-95
Appendix D
Modified URBEMIS3
Project Name: Gateway South EIR  Date: 04-04-1995
Analysis Year = 2000  Temperature = 75
EMFAC7 VERSION : EMFAC7D ...11/88

Unit Type          Trip Rate   Size   Tot Trips Days Op.
Single Family Housing  10.0/Unit  2      20
Apartment < 10 Du./Acre  6.1/Unit  157    958
Neighborhood Shopping Center  117.0/1000 Sqf  151  17667    1
Commercial Office  22.7/1000 Sqf  12    272    1

<table>
<thead>
<tr>
<th></th>
<th>Residential</th>
<th></th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Home-Work</td>
<td>Home-Shop</td>
<td>Home-Other</td>
</tr>
<tr>
<td>Trip Length</td>
<td>6.6</td>
<td>6.6</td>
<td>6.6</td>
</tr>
<tr>
<td>% Started Cold</td>
<td>40.0</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Trip Speed</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Percent Trip</td>
<td>27.3</td>
<td>21.2</td>
<td>51.5</td>
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</table>

Vehicle Fleetmix

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Percent Type</th>
<th>Lead</th>
<th>Unleaded</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty Autos</td>
<td>70.2</td>
<td>2.4</td>
<td>97.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Light Duty Trucks</td>
<td>17.7</td>
<td>0.4</td>
<td>99.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Medium Duty Trucks</td>
<td>5.8</td>
<td>2.8</td>
<td>97.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Heavy Duty Trucks</td>
<td>2.5</td>
<td>31.1</td>
<td>68.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Heavy Duty Trucks</td>
<td>0.3</td>
<td>N/A</td>
<td>N/A</td>
<td>100.0</td>
</tr>
<tr>
<td>Motorcycles</td>
<td>3.0</td>
<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
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</table>

Project Emissions Report in Lb/Day

<table>
<thead>
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<th>Unit Type</th>
<th>TDS</th>
<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Housing</td>
<td>0.3</td>
<td>3.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Apartment &lt; 10 Du./Acre</td>
<td>15.2</td>
<td>168.2</td>
<td>15.5</td>
</tr>
<tr>
<td>Neighborhood Shopping Center</td>
<td>280.9</td>
<td>3103.3</td>
<td>285.1</td>
</tr>
<tr>
<td>Commercial Office</td>
<td>4.3</td>
<td>47.8</td>
<td>4.4</td>
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</table>

Project Emissions Report in Lb/Day

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>FUEL USE</th>
<th>PM10</th>
<th>SOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Housing</td>
<td>5.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Apartment &lt; 10 Du./Acre</td>
<td>254.1</td>
<td>1.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Neighborhood Shopping Center</td>
<td>4687.0</td>
<td>77.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Commercial Office</td>
<td>72.3</td>
<td>9.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Project Name: Gateway South EIR/1995  
Date: 04-04-1995

Analysis Year = 2000  
Temperature = 60
EMFAC7 VERSION: EMFAC7D ...11/88

Unit Type          Trip Rate     Size     Tot Trips Days Op.
Single Family Housing  10.0/Unit    2       20
Apartment < 10 Du./Acre  6.1/Unit    157      958
Neighborhood Shopping Center  117.0/1000 Sqf  151  17667     1
Commercial Office        22.7/1000 Sqf  12       272     1

Residential
Trip Length 6.6  6.6  6.6  6.6  6.6
% Started Cold 40.0 40.0 40.0 40.0 40.0
Trip Speed 25  25  25  25  25
Percent Trip 27.3  21.2  51.5

Commercial

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>Percent Type</th>
<th>Lead</th>
<th>Unlead</th>
<th>Diesel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Duty Autos</td>
<td>70.2</td>
<td>2.4</td>
<td>97.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Light Duty Trucks</td>
<td>17.7</td>
<td>0.4</td>
<td>99.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Medium Duty Trucks</td>
<td>5.8</td>
<td>2.8</td>
<td>97.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Heavy Duty Trucks</td>
<td>2.5</td>
<td>31.1</td>
<td>68.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Heavy Duty Trucks</td>
<td>0.8</td>
<td>N/A</td>
<td>N/A</td>
<td>100.0</td>
</tr>
<tr>
<td>Motorcycles</td>
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<td>100.0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Project Emissions Report in Lb/Day

<table>
<thead>
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<th>Unit Type</th>
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<th>CO</th>
<th>NOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Housing</td>
<td>0.4</td>
<td>5.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Apartment &lt; 10 Du./Acre</td>
<td>19.5</td>
<td>248.8</td>
<td>16.9</td>
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<td>Neighborhood Shopping Center</td>
<td>360.0</td>
<td>4589.9</td>
<td>311.6</td>
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<tr>
<td>Commercial Office</td>
<td>5.6</td>
<td>70.8</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Project Emissions Report in Lb/Day

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>FUEL USE</th>
<th>PM10</th>
<th>SOx</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Housing</td>
<td>5.3</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Apartment &lt; 10 Du./Acre</td>
<td>254.1</td>
<td>1.4</td>
<td>1.1</td>
</tr>
<tr>
<td>Neighborhood Shopping Center</td>
<td>4687.0</td>
<td>77.5</td>
<td>20.8</td>
</tr>
<tr>
<td>Commercial Office</td>
<td>72.3</td>
<td>0.5</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Appendix E

Mitigation Monitoring Program (Final EIR)