GATEWAY SOUTH SPECIFIC PLAN

CERTIFIED REVISED FINAL ENVIRONMENTAL IMPACT REPORT

City of Scotts Valley
July 1995

Gateway South Specific Plan
Certified Revised Final Environmental Impact Report

State Clearinghouse Number 95013016
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GATEWAY SOUTH SPECIFIC PLAN
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ERATTA

July 25, 1995

The following revisions were made to the Gateway South Specific Plan Final Environmental Impact Report dated June 1995 by the Scotts Valley City Council on July 10, 1995. These changes have been incorporated into the revised certified final environmental impact report dated July 1995. All page numbers refer to the revised certified final environmental impact report dated July 1995.

Revisions

Page 43, para 6: References to Section 2.4, Vegetation and Wildlife has been changed to read "Section 2.3, Vegetation and Wildlife". (This change was due to a typographical error.)

Page 45, after paragraph 1: Insert the heading "Safety" (This change was due to a missing heading.)

Page 51, para 5: Reference to level of significance at the end of the first sentence has been changed to read "level of insignificance". (This change was due to a typographical error.)

Page 53, Figure 11: Santa Cruz Sandstone has been changed to read "Santa Margarita Formation". Please see attached revised figure. (This change was due to an error in preparing the graphic.)

Page 62, Table 5: Column 4, last row reference to 651,261 has been deleted. Column 5, last row reference to 893,460 has been change to 649,460. (This change was due to a calculation error.)

Page 62, para 2: First sentence has been changed to read "Based on the calculations summarized in Table 5, future development under Specific Plan zoning will result in an increase in impermeable surface from 632,620 square feet to ~~643,000~~ 649,460 square feet (approximately three percent) in comparison to maximum permitted development under the existing zoning designation." (This change was due to a calculation error.)

Page 70. The following verbiage and table have been added after Table 7:

The following table was prepared, at the request of the City Council, utilizing a different set of assumptions. These assumptions are included in Appendix I.

TABLE 7.1

Change in Impervious Area

Planning Area B Parcel #	Existing Development Option		Equivalent Square Feet	Proposed Development Option		Equivalent Square Feet	Net Change
9	4	SFR	24,980	22	MF	55,660	30,680
10	19	SFR	118,655	29	MF	104,545	(14,110)
				41,000	C	112,750	112,750
12	41	SFR	256,045	110,000	C	302,500	46,455
Total			**399,680**			**575,455**	**175,775**

SFR = Single-Family Residence
MF = Multi-Family Residence
C = Commercial Use expressed in square feet.

Source: C2G/ Civil Consultants Group

(This revised table was prepared based on comments from the City Council that the assumptions made in preparation of Table 7 underestimated the amount of impervious surfaces associated with the Specific Plan. The assumptions utilized in preparation of Table 7.1 are included in Appendix I.)

Page 87, para 6: Paragraph has been changed to read "If grading ~~will~~ proposes to encroach into the riparian forest habitat, an assessment of the extent and type of vegetation to be removed should be provided." (This change was requested by the City Council.)

Page 91, para 1: Has been changed as follows:

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. Revised 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~~ A" to "D" during the A.M. peak and from "B" to "D" in the ~~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. (This change was due to updated traffic counts.)

Page 95, para 3: The text has been changed as follows:

The LOS associated with the approved, existing plus approved, and proposed project volumes are included in revised 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").~~ These tables indicate the following changes in level of service:

Intersection	Existing Plus Approved Projects	Existing Plus Approved Projects Plus Specific Plan
Glen Canyon/ Mt. Hermon (AM)	A	B
La Madrona/ SR-17 Ramps/ Mt. Hermon (PM)	C	D

(This change was due to updated traffic counts.)

Page 107, Table 13: Title has been changed to read "Scotts Valley Students Use of School Facilities". (This change was requested by the City Council.)

Page 107, Mitigation Number 9: The first two sentences have been changed to read "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 in conjunction with the Scotts Valley Unified School District on a case by case basis, consistent with the stated goals, objectives, policies and programs under the city's general plan." (This change was requested by the school district and the City Council.)

Page 126, Figure 17 has been revised to include cumulative project number 13. See attached revised figure. (This change was due to an error in preparing the graphic.)

Appendix B, mitigation #15: Second sentence has been changed to read "Specifications for a, b, ~~d~~ c, and e d 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". (This was due to a typographical error in the Gateway South Assessment District EIR.)

Appendix B, mitigation #17: First sentence has been changed to read "As a condition of future subdivision approval, storm-drainage systems shall be designed to divert storm-water run-off to holding/recharge ~~ponds~~ means". (This change was requested by the City Council.)

Appendix B, mitigation #34: First sentence has been changed to read "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 for compliance with General Plan NSA-454". (This change was requested by the City Council.)

Appendix C: Tables 3 and 4 have been revised. See attached revised tables. (This change was due to updated traffic counts.)

Appendix F: *Response to Letter CC1*: Number 36 has been change to read "Table 5 reflects the change in impermeable surface from existing conditions to proposed build-out (~~893,460~~ 649,460 square feet), as well as the change in impermeable surface from existing zoning build-out to proposed zoning build-out (16,840 square feet). (This was due to a calculation error.)

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R.0 Response to Comments

CEQA Guidelines section 15200 indicates that the purposes of the public review process include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counter proposals. The public review period began on April 10, 1995 and ended on May 25, 1995. Public hearings were held on May 11, 1995 (Planning Commission) and May 17, 1995 (City Council).

CEQA Guidelines section 15132(c) requires that the final environmental impact report contain a list of persons, organizations, and public agencies who have commented on the draft environmental impact report. A list of the correspondence received during the public review period is presented below. The actual comments, as well as responses to those comments are included in Appendix F (Comments on DEIR and Responses).

CEQA Guidelines section 15132(b) and 15132(d) requires that the final environmental impact report contain the comments and response to comments that raise significant environmental points in the review and consultation process. Each comment that raises a significant environmental point is responded to in the above-referenced appendix. Each comment is identified by number along the left-hand side of the correspondence. The response to each comment is located immediately following the letter. Where required, revisions have been made to the text of the draft environmental impact report based on the responses to comments. Deletions to the text are shown with ~~strikethrough~~ type and additions to the text are shown with <u>underlined</u> type.

Additionally, during preparation of the Final EIR, it was discovered that the land uses and acreage's, as presented in Table 2 of the Specific Plan and subsequently in Table 2 of the Draft EIR, were slightly incorrect. The major change identifies an increase in open space and a decrease in the commercial acreage. Table 2 in the Final EIR has been revised to reflect the corrections. Appropriate changes have been made throughout the Final EIR.

These changes are minor in nature and do not significantly change the level of impacts presented in the Draft EIR. In fact, in all impact areas, with the exception of vegetation and wildlife, there is no change at all. Generally, the analysis in the Draft EIR was based on a set number of residential units (159) and a set number of commercial square footage (163,240); these numbers did not change. The impacts associated with vegetation and wildlife were analyzed based on the acreage of the project site and not the size of future development. Because there is an increase in the amount of open space (from 8.87 acres to 11.20 acres) the impacts are, in fact slightly less.

The table on the following page summarizes the significant environmental issues raised in each correspondence. The following correspondence was received during the public review period.

L1 Judy Hohman, Acting Field Supervisor, United States Department of the Interior, Fish and Wildlife Service, Ventura, California, May 15, 1995.

L2 Linda Wilshusen, Executive Director, Santa Cruz County Regional Transportation Commission, Santa Cruz, California, May 23, 1995.

L3 Nicolas Papadakis, Executive Director, Association of Monterey Bay Area Governments, Marina, California, May 10, 1995.

L4 Janet Brennan, Senior Planner, Planning and Air Monitoring Division, Monterey Bay Unified Air Pollution Control District, Monterey, California, May 1, 1995.

L5 D.O. Chavez, Land Agent, Pacific Gas and Electric Company, Salinas, California May 2, 1995.

L6 Sheryl Ainsworth, Planning Commissioner, City of Scotts Valley, Scotts Valley, California, May 14, 1995.

L7 Michael Shulman, Mayor, City of Scotts Valley, Scotts Valley, California May 22, 1995.

L8 Betty Petersen, Scotts Valley, California, May 17, 1995.

L9 Betty Petersen, Scotts Valley, California, May 24, 1995.

L10 Joe Miller, Scotts Valley City Council, Scotts Valley, California, May 25, 1995.

L11 Michael Chiriatti, Jr., Governor's Office of Planning and Research, May 22, 1995.

In addition, several comments were made during the May 11, 1995 Planning Commission public hearing and May 17, 1995 City Council public hearing. These comments are included as PC1 and CC1, respectively.

PC1 Planning Commission Public Hearing Comments, May 11, 1995.

CC1 City Council Public Hearing Comments, May 17, 1995.

TABLE

Response to Comments Summary Matrix

	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	PC1	CC1
Project Location								✔					
Project Objectives								✔	✔				
Project Characteristics		✔					✔	✔		✔		✔	✔
Plan Consistency				✔		✔	✔	✔	✔	✔			✔
EIR Uses													
Geology and Soils						✔	✔	✔	✔				✔
Hydrology			✔			✔	✔	✔		✔			✔
Vegetation & Wildlife	✔					✔	✔	✔	✔			✔	✔
Traffic and Circulation				✔		✔	✔	✔	✔			✔	✔
Air Quality				✔				✔	✔				
Public Services					✔		✔	✔	✔			✔	✔
Aesthetics								✔				✔	✔
Noise							✔	✔	✔			✔	✔
Cultural Resources													
Unavoidable Impacts													
Cumulative Impacts													✔
Growth-Inducing Impacts													✔
Alternatives				✔			✔						✔

Source: EMC Planning Group Inc.

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Summary

Project Description

The Gateway South Specific Plan (hereinafter "Specific Plan") includes a change in general plan land use designations, a change in zoning districts, a circulation plan, a municipal services plan, and a drainage plan. Each component is briefly described below.

Land Use and Zoning

The Specific Plan land use plan, illustrated in Figure 6 of Section 1.3.3, Proposed Conditions, is comprised of Planning Area A and Planning Area B and includes the planned future development of commercial, residential, and open space land uses. Figure 7 of Section 1.3.3, Proposed Conditions, illustrates the proposed zoning. Proposed land uses and acreage are presented in Table A.

~~TABLE A~~

~~**Proposed Land Uses and Acreage**~~

~~Land Use~~	~~Zoning~~	~~Planning Area A~~	~~Planning Area B~~	~~Total Acres~~	~~%~~
~~Medium Residential (Single-Family)~~	~~R-1-10~~	~~0.51~~	~~0.00~~	~~0.51~~	~~1.2~~
~~Medium-High Residential (Multi-Family)~~	~~R-M-6~~	~~0.93~~	~~3.74~~	~~4.67~~	~~11.1~~
~~High Residential (Multi-Family)~~	~~R-H~~	~~9.34~~	~~1.74~~	~~11.08~~	~~26.3~~
~~Commercial Service~~	~~C-S~~	~~0.79~~	~~16.23~~	~~17.02~~	~~40.4~~
~~Open Space~~	~~O-S~~	~~0.00~~	~~8.87~~	~~8.87~~	~~21.0~~
~~**Total Acreage**~~		~~**11.57**~~	~~**30.58**~~	~~**42.15**~~	~~**100%**~~

~~Source: Scotts Valley Planning Department~~

Planning Area A

Planning Area A land use and zoning plans include the following designations: existing service commercial designation on Parcel 1; medium-high density multiple residential land uses on Parcel 2; single-family residential land use on Parcel 3; and high density multiple residential land uses on Parcels 4 through 8. Parcel 3 will be zoned R-1-10, a single-family residential zoning which requires a 10,000 square foot minimum lot size. Parcel 2 will be zoned R-M-6, which has a

5,000 square foot minimum lot size and allows the construction of single-family residences.

TABLE A

Proposed Land Uses and Acreage

Land Use	Zoning	Planning Area A	Planning Area B	Total Acres	%
Medium Residential (Single-Family)	R-1-10	0.58	0.00	0.58	1.3
Medium-High Residential (Multi-Family)	R-M-6	1.07	3.74	4.81	11.0
High Residential (Multi-Family)	R-H	10.03	2.04	12.07	27.7
Commercial Service	C-S	1.16	13.75	14.91	34.2
Open Space	O-S	0.00	11.20	11.20	25.7
Total Acreage		**12.84**	**30.73**	**43.57**	**100%**

Source: C2G Civil Consultants Group/Scotts Valley Planning Department

Planning Area B

Planning Area B is divided into four different land use and zoning categories. The area between Altenitas Road and La Madrona Drive is proposed as residential high density (Parcel 9 and a portion of Parcel 10). The area of parcels 9, 10, and 12 between La Madrona Drive and State Highway 17 is proposed as service commercial.

The area of Parcels 10 and 12 west of La Madrona Drive and south of Altenitas Road is proposed to contain three land use and zoning categories. All areas containing steep slopes and heavy vegetation are proposed to be open space. Construction will not be allowed on this open space area and the slopes will be retained in their natural state. The area abutting the existing single-family homes in Mañana Woods is proposed to be designated R-M-6 which is a multiple residential zoning designation with density based on one unit per each 5,000 square feet of land. The less steep areas fronting La Madrona Drive and Altenitas Road are proposed to have a service commercial zoning designation.

Maximum Development Scenario

Although the city's zoning ordinance allows building coverage ratios in the C-S, C-SC and C-P zones of 45 percent, 35 percent and 35 percent, respectively, experience indicates that such ratios are seldom achievable. Due to environmental constraints on the project site, a maximum development scenario was pre-

pared by C2G Civil Consultants Group for the city for the consultant to use in analyzing environmental impacts from buildout of the project site.

Table B presents this buildout scenario and is considered realistic for the specific properties within the project site. If future development applications propose higher density development, additional environmental review will most likely be required.

Circulation Plan

Planning Area A will have vehicular access from both Mt. Hermon Road and Glen Canyon Road. Parcels 4 though 8 will have a "right turn in only" and a "right turn out only" access on Mt. Hermon Road and right and left turn access from Glen Canyon Road. Parcels 1 through 3 only have one access point and it is located on Glen Canyon Road. It will have both right and left turn access. Currently, there is no roadway connection ~~proposed~~ identified between Parcels 1 through 3 and Parcels 4 through 8, although the roadway on the project site could be extended in the future.

TABLE B

Maximum Probable Development Scenario

Land Use	Amount	Unit
Single-Family Residential	2	Dwelling Units
Multi-Family Residential	157	Dwelling Units
General Office	12,230	Square Footage
General Retail	151,000	Square Footage

Source: C2G Civil Consultants Group

Access to Planning Area B is provided by Altenitas Road and La Madrona Drive, recently completed as part of the Gateway South Assessment District improvements. Although no specific development plans have been submitted at this time, the entrances and exits are designed to minimize traffic conflicts and take advantage of the widened and improved Altenitas Road and La Madrona Drive. Specific development proposals will be evaluated and the most appropriate circulation route determined. The locations of ingress and egress may be adjusted or modified based upon site specific conditions and the design that is proposed by future developers.

Municipal Services Plan

An existing water line extends up Mt. Hermon Road and along La Madrona Drive to Silverwood Drive. Another water line extends down Glen Canyon Road, passing below State Highway 17 and connecting to Green Hills Road. The water line is proposed to be extended up Silverwood Drive to serve the 81 home Heritage Parks subdivision. Two water line connections are proposed at the south boundary of Parcel 1 and the north boundary of Parcel 8.

A major sewer trunk line is provided down Mt. Hermon Road along La Madrona Drive, extending to Silverwood Drive. The proposed sewer line will also be extended to serve the Heritage Parks subdivision. A main sewer line also proceeds down Glen Canyon Road. A sewer main also extends up the newly constructed Altenitas Road and could be extended to serves the Mañana Woods development.

Planning Area A will likely use gravity sewer lines to connect to the sewer main in Glen Canyon Road. Planning Area B will also have gravity sewer connections to the line in La Madrona Drive. Special attention will be given to the area between State Highway 17 and La Madrona Drive on Parcels 9, 10, and 12 because the elevations of the land to be developed are closer to the elevation of the sewer line.

Storm drainage pipes are provided in Mt. Hermon Road, Altenitas Road, and La Madrona Drive. The storm waters are carried to the Carbonera Creek channel. Natural overland flow is dictated by the topography. The natural drainage for all parcels is to flow by gravity to Carbonera Creek.

Specific storm water design for future development in the project site will be developed. On-site water retention areas may be required in order to avoid future erosion and slope instability. On-site detention, silt and grease trap drainage structures will be required to reduce contaminant discharge into the drainage courses.

Areas of Controversy

Areas of controversy identified by the city through preparation of an initial study and from responses to the notice of preparation of the EIR include the following issues:

- Impacts resulting from the change in zoning, and subsequent increased density, in the following areas: groundwater demand, storage and recharge; traffic, circulation, and access; air quality; public services; and land use compatibility (aesthetics and noise).
- Impacts resulting from development of the project site on vegetation and wildlife (including State- and Federally-listed and candidate species and sensitive habitats).

Each of these areas of concern are analyzed in Section 2.0, Environmental Setting, Impacts, and Mitigation Measures.

Impacts and Mitigations

Geology and Soils

Impact. Future development may be subject to ground shaking from earthquakes on regional faults that could result in structural damage. However, all structures will be designed to conform to existing uniform building codes. Therefore, this impact is considered insignificant and no mitigation measures are required.

Impact. Future development at the project site could be subject to liquefaction of soils, landsliding, lurching, lateral spreading, and settlement of soils resulting in structural damage, possibly resulting in injury to people. This is considered a significant impact. The Specific Plan does not include a policy to address this impact.

Mitigation. Mitigation Measure 4 in the *Gateway South Assessment District Final EIR* (see Appendix B of this report) requires a site specific geotechnical analysis for future development. The analysis will require future development to adhere to a specific action plan that implements common and effective construction techniques that address specific geotechnical issues. With implementation of this mitigation measure, as well as Specific Plan policies as discussed in project analysis, 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.

Impact. Project site soils have a rapid run-off rate and a high potential for erosion. This is considered a significant impact. The Specific Plan does not include policy to address this impact. However, with implementation of the following mitigation measure, this impact will be reduced to a level of insignificance.

New Mitigation Measure

1. Project proponents for future development shall prepare an erosion control plan to reduce the effects of soil erosion during initial construction activity. <u>The erosion control plan should specifically addressed proposed grading plans and include effective stabilizing methods for cut and fill slopes.</u> The plan shall include a re-vegetation plan for expanses of exposed soil after construction activities are complete. Best Management Practices shall be utilized. This plan shall be subject to review and approval by the city Public Works Director prior to issuance of a grading permit. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

Impact. Future development located on slopes in excess of 40 percent would be considered to result in a potential significant adverse environmental impact. Along with the Specific Plan policy limiting development on steep slopes, the following mitigation measure shall be added to the Specific Plan. It should be noted that the Specific Plan was to include the following limitation, but the limitation was inadvertently left out.

New Mitigation Measure

1.1. The Specific Plan shall be limited to development as presented in Table 3, Maximum Probable Development Scenario. This development scenario was to be included as a limitation in the Specific Plan, but was inadvertently left out during its preparation. This limitation shall be added to the Specific Plan, prior to adoption of the Specific Plan.

Hydrology—Surface Water

Impact. The proposed zoning change will result in only a slight increase in impermeable surfaces (16,840) over that associated with existing zoning. Specific development plans may alter actual calculated volumes, although it is unlikely that such variations will significantly alter these conclusions. However, development of the project site will result in a significant increase in impermeable surfaces over existing conditions on the project site. The increase in impermeable surfaces may result in increase erosion potential, elevation of flood potential, and a reduction in surface water quality. These are considered significant adverse environmental impacts that can be mitigated with standard engineering design.

Impact. The proposed uses for the subject properties differ only in location and density from existing uses. All development will be sewered and therefore will not contribute septic waste to the hydrologic regime. Residential and service commercial use traditionally have low impact on water quality. The primary impact from proposed development will be due to oil and grease from vehicular traffic carried in street and parking lot runoff. This particular runoff may not be of sufficient quality to be used for recharge projects. Increases in this type of contaminant will be proportional to the increase in traffic and site use. This is considered a significant adverse impact on water quality.

Mitigation. Mitigation Measure 15 and 16 in the Gateway South Assessment District Final EIR (see Appendix B of this report) address this impact. ~~This~~ Mitigation measure 15 has been rewritten as presented below. With implementation of the following mitigation measure, this impact will be reduced to a level of insignificance.

New Mitigation Measure

2. Project Proponents for individual development projects shall prepare a plan for an engineered drainage system requiring the use of best man-

agement practices (BMPs). The plan shall include, but not be limited to the following:

- Equip storm drains with sediment and grease traps and maintain them in good operating condition;
- Use of porous paving materials;
- Use of cisterns for storm water storage (perhaps for later use in irrigation);
- Minimization of directly connected impervious surfaces (e.g. roof gutter downspouts should drain onto permeable bare ground instead of impervious driveways or walkways);
- Roofing parking areas to catch storm water;
- Directing roof and sidewalk runoff to detention basins;
- Vacuum street sweeping to remove potential contaminants from the roadways that would otherwise be collected by runoff;
- Use native vegetation for landscaping to reduce the amount of pesticide and fertilizer that might otherwise be required to maintain the landscaping;
- Use approved erosion control measures and landscaping to reduce sediment load in the runoff; and
- Detention and metering of runoff to pre-development flow, as appropriate.

The plan shall be subject to review and approval by the Public Works Director, prior to issuance of a grading permit. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

Hydrology—Groundwater

Impact. The predicted increase in water consumption and decrease in recharge to groundwater due to the Specific Plan are small in comparison to total pumpage from the basin and the estimated perennial yield for the basin. It should be noted however, that the recharge potential of the project site is questionable, as discussed in the project analysis. However, cumulative impacts from continued residential and commercial development of the area served by Scotts Valley groundwater basin resources are potentially significant and discussed in Section 3.2, Cumulative Impacts.

Mitigation. The Specific Plan includes policies to maximize groundwater recharge where feasible, however specific mitigations are recommended. Mitiga-

tion Measures 16 and 17 in the Gateway South Assessment District Final EIR (see Appendix B of this report) addresses this impact. However, mitigation measure 17 has been revised as presented below. With implementation of the following mitigation measure, as well as Mitigation Measure 16 in the Gateway South Assessment District Final EIR, this impact will be reduced to a level of insignificance.

New Mitigation Measure

3. Project Proponents for individual development projects shall prepare a plan for artificial recharge of the groundwater basin in accordance with the applicable city resolution. Artificial recharge can be separated into on-site and off-site recharge projects.

   On-site artificial recharge can include percolation ponds (these can be used simultaneously as detention ponds) or underground recharge systems such as dry wells or horizontal drains. Because of the potential for contamination of runoff by urban contaminants, it may be feasible to use only runoff from roofs or other surfaces not exposed to vehicles.

   Off-site artificial recharge can be through direct participation by developers in off-site recharge projects, or by contribution to recharge project funds administrated by public agencies. The city of Scotts Valley has an ordinance in place requiring new development to mitigate increased groundwater consumption with recharge projects.

   The plan shall be subject to review and approval by the Public Works Director and the Scotts Valley Water District, prior to approval for a final map. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

3.1 Future residential development proposals shall include a phasing plan, designed so that the development does not exceed a preset amount of consumptive water as determined by the Scotts Valley Water District. Phasing plans shall be subject to review and approval by the city Planning Director and the Scotts Valley Water District prior to approval of residential tentative maps.

Impact. Development of the project site will necessitate the abandonment of existing septic systems. Abandoned septic systems which are not removed would create a significant adverse environmental impact.

Mitigation. With implementation of Mitigation Measure 20 of the *Gateway South Assessment District Final EIR* (Appendix B of this report), this impact will be reduced to a level of insignificance. These mitigation measures shall be added to the Specific Plan as policy prior to adoption of the Specific Plan.

Vegetation and Wildlife

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of wetland habitat. Portions of both the freshwater seep and the saturated area identified in Parcels 9 and 10 could meet the Army Corps of Engineers' criteria as wetlands. The freshwater seep occurs in Parcel 10, on both sides of La Madrona Drive. This seep was bisected and a portion of the area removed (0.09 acre) for the recent construction of La Madrona Drive. The habitat value of the seep was reduced when the continuity of the area was disrupted for construction of La Madrona Drive. However, water continues to flow in the small channel and wetland vegetation occurs adjacent to the channel. The saturated area north of the seep was also impacted by recent construction activities for Altenitas Road but subdrains were installed to keep water moving under the road. The freshwater seep and this saturated area could be removed through implementation of the Specific Plan.

Wetlands are considered sensitive habitats in California due to a reduction in the extent of these areas throughout the State. However, some consideration of the function and value of the wetland habitat is given when making a determination of the significance of removing or altering these areas. The freshwater seep in the project area does not appear to support a flora or fauna significantly different than the surrounding grassland or woodland communities but it does probably provide a water source for wildlife moving through the area. Because this is a natural seep providing some value for wildlife in the area, removal of this habitat would be considered a significant impact.

The saturated area to the north of the seep in Parcel 9, possibly results from leaking septic systems associated with existing residences along the northern property line of Parcels 9 and 10. Water is not at the surface much of the year and so the area does not serve as a drinking source for wildlife. Considering the water source and the proximity of this area to existing residential development, the biological value of this area is relatively low. Given this low habitat value, removal of the saturated area would not be considered a significant impact.

Mitigation Measure

4a. The freshwater seep, located on Parcel 10, shall be avoided and/or incorporated into the design of future commercial development. Project design shall be reviewed by a qualified biologist and is subject to review and approval by the city Planning Director, prior to approval of a tentative map.

If mitigation measure 4a is infeasible, then mitigation measure 4b shall be implemented.

4b. Project proponents for future development impacting the freshwater seep on Parcel 10 shall provide compensatory mitigation at a minimum 1:1 ratio for area lost. This could be accomplished in the open space area of Parcel 10 where an existing spring box could be used to create saturated

soils sufficient to support wetland plantings in an area approximately 0.4 acre in size. Additionally, design of this site should consider providing surface water, at least part of the year, to provide a drinking source for wildlife. The plan to provide compensatory mitigation shall be prepared by a qualified biologist and is subject to review and approval by the City Planning Director, prior to approval of a tentative map.

This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

4.1 Future development shall obtain a wetlands determination from the U.S. Army Corps of Engineers regarding the freshwater seep on Parcel 10 and the saturated area on Parcels 9 and 10 (although this area does not appear to be a wetland), prior to approval of tentative maps for development on those parcels.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of riparian forest habitat along Camp Evers and Carbonera Creeks. Two access roads from Glen Canyon Road into Planning Area A are proposed in the Specific Plan. Each of these roads will cross Camp Evers Creek and will likely result in the removal of some riparian forest vegetation. Development on Parcels 1, 3 and 4 may also encroach into the riparian vegetation associated with the west bank of Camp Evers Creek and result in the removal of some of this habitat. Development on Parcel 8 could result in the removal of riparian forest habitat along Carbonera Creek.

Policy 2.2 of the Specific Plan states "Maintain and enhance the habitat value of riparian corridors. Loss of riparian habitat shall be minimized and subject to approval of the California Department of Fish and Game. Any riparian woodland lost due to construction shall be mitigated through a restoration and revegetation plan." Some of the vegetation associated with the riparian forest may be removed for construction of the two access roads and for development of some of the parcels, particularly in Parcels 1, 4, and 8. Removal of typical riparian species away from the creek channel may not affect the integrity of the riparian corridor and therefore, would not result in a significant impact. However, if vegetation removal occurs close to the active channel and decreases the density of habitat in the streamzone, this could have an adverse affect on the habitat, resulting in a significant impact. Although the Specific Plan includes policies to protect riparian areas, further specific mitigation measures are recommended. With implementation of this mitigation measure, significant adverse impacts to riparian habitat will be reduced to a level of insignificance.

Mitigation Measure

5. Project proponents for future development of Parcels 1 through 8 shall include the following information regarding the development proposal and the riparian corridor:

- Grading plans should indicate where grading will occur in relation to the active channel of Camp Evers or Carbonera Creeks.

- If grading ~~will~~ proposes to encroach into the riparian forest habitat, an assessment of the extent and type of vegetation to be removed should be provided ~~by a qualified biologist~~.

- Revegetation plans, using species native to the site, should be developed ~~by a qualified biologist~~ for areas within the riparian forest habitat that are temporarily disturbed during construction activities.

- Erosion control plans specifically designating measures to protect the streamzone habitat during construction should be included in the application.

- ~~If the proposed development will result in a decrease in the density of riparian vegetation of the streamzone, then further setbacks from the creek should be required, as recommended by a qualified biologist.~~

This information will be subject to review and approval by a qualified biologist under the direction of the city Planning Director prior to approval of a tentative map. If the proposed development will result in a decrease in the density of riparian vegetation of the streamzone, then further mitigations such as increased setbacks from the creek, reduced or modified grading, elimination of a stream crossing, or reducing the amount of vegetation removed, should be required as recommended by the biologist. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

5.1. Policy 2.2a, which states "a minimum 5-foot setback area, measured from the edge of the bank shall be required in the riparian area adjacent to Glen Canyon Road", shall be removed from the Specific Plan prior to adoption of the Specific Plan.

Impact. Development or other actions anticipated under the Specific Plan could result in the degradation of streamzone habitat along Camp Evers and Carbonera Creeks. Construction activities associated with development in Parcels 1 through 8 could result in increased sediment into Camp Evers and Carbonera Creeks. Additionally, an increase in impervious surfaces in the project area could result in increased flows and accelerated erosion in these creeks. Increased impervious surfaces also could reduce the amount of water recharged into the lower Carbonera groundwater subbasin thereby decreasing stream flow in Carbonera Creek. Reduced summer flows in Carbonera Creek could affect summer rearing habitat for steelhead below the falls, downstream from the project area. Degradation of the streamzone habitat in these creeks would be considered a potentially significant impact.

Several policies in the Specific Plan address the potential degradation of streamzone habitat. As stated previously, Policy 2.2 addresses protection of habitat values in riparian corridors. Policy 2.4, to protect natural drainage and water

recharge areas, requires minimization of the use of impervious groundcover materials and on-site storm drainage retention or other water recharge improvements to mitigate loss of recharge where feasible. Policy 5.5 also requires that storm drainage systems be designed to maximize groundwater recharge and that storm drains transmit storm water to detention/retention basins and to final discharge points. The intent of these policies is to increase groundwater recharge and to maintain pre-project flows into the adjacent creeks. Implementation of these policies should protect the streamzone habitat in Camp Evers and Carbonera Creeks from accelerated erosion and reduced summer flows (in Carbonera Creek). Implementation of an erosion control plan and adhering to Best Management Practices during construction should reduce the potential for increased sediment into the creeks.

Mitigation. Although mitigation measures to prevent degradation of streamzone habitat are incorporated into the Specific Plan, further specific mitigations addressing erosion control are recommended. See Mitigation Measure 1 in Section 2.1, Geology and Soils, and Mitigation Measure 5 in this section.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of special status species. No special status species have been identified inhabiting the project site and therefore no direct impacts on any special status species are expected with implementation of the Specific Plan. However, the southwestern pond turtle and red-legged frog could occur in the reach of Carbonera Creek adjacent to Parcel 8. No direct removal of habitat in this creek is anticipated for implementation of the Specific Plan, but increased sediment loads in the creek resulting from construction activities could adversely affect the habitat for the red-legged frog.

Although the potential for red-legged frog and southwestern pond turtle to occur in Camp Evers Creek is low due to the intermittent nature of the drainage, if flows continue, even marginally, throughout the year, these species could move into the drainage. If they were to occur in Camp Evers Creek, construction of the access roads could result in the direct removal of these animals should they be within the construction zone.

Construction of the access roads over Camp Evers Creek, and development adjacent to the channel could result in the removal of trees that contain active nests of the sharp-shinned hawk, Cooper's Hawk or yellow warbler. Removal of an active nest of special status birds species would be considered a significant impact.

Mitigation. Mitigation Measure 1 Section 2.1, Geology and Soils, and Mitigation Measure 5 in this section will reduce the potential for increased sediment loads into Carbonera Creek during construction activities and therefore reduce the affect on potential red-legged frog habitat in this creek.

With implementation of the following mitigation measures, significant adverse impacts to special status species would be reduced to a level of insignificance.

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.

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.~~

Public Services

Schools

Impact. Buildout of the project site based on Specific Plan zoning will result in an approximately 66 percent increase 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.

Mitigation

~~10~~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 in conjunction with the Scotts Valley Unified School District 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.

Land Use Compatibility

Aesthetics

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), as well as the new mitigation measure presented below, potentially significant adverse visual impacts from development of Planning Area B will be reduced to a level of insignificance.

New Mitigation Measure

10. Future development at the project site shall conform to either the Mt. Hermon Road Design Guidelines or the Scotts Valley Design Guidelines, whichever is later and in effect at the time development is proposed.

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

11. 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.

Noise

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.

Mitigation Measure

12. 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.

Cultural Resources

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

13. 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.

Alternatives

Eight alternatives to the Specific Plan, including four alternative locations were reviewed. Two of the alternatives, including the four alternative locations, were considered but rejected for a variety of environmental and planning reasons. The two remaining alternatives, the No Project—No Development Alternative and the No Specific Plan Alternative were evaluated for their environmental impacts and compared to the environmental impacts of the Specific Plan project.

The No Project—No Development Alternative was identified as the environmentally superior alternative. Because the no project alternative is identified as the environmentally superior alternative, CEQA requires identification of another environmentally superior alternative.

The No Specific Plan Alternative would result in ~~two~~ one unavoidable significant impacts: traffic and circulation~~, and air quality~~. The Specific Plan would result in ~~only one~~ no 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.

1.0 Introduction

1.1 Authorization and Purpose

The City of Scotts Valley (hereinafter "city") has determined that an environmental impact report (EIR) is required to evaluate the potential environmental effects of the proposed Gateway South Specific Plan (hereinafter "Specific Plan"). This draft EIR has been prepared by EMC Planning Group Inc. (hereinafter "consultant") under contract to the city, acting as the lead agency. The consultant has prepared this EIR using information available from private and governmental sources noted herein, as well as information generated by the consultant through investigation and field analysis of the Specific Plan area (hereinafter "project site").

This EIR has been prepared in compliance with the California Environmental Quality Act (CEQA) to inform public decision makers and their constituents of the environmental effects of the Specific Plan and future development proposals within the project site. In accordance with CEQA guidelines, this EIR describes both positive and negative impacts generated by the Specific Plan.

This EIR describes and evaluates the existing environmental setting of the project site and surrounding areas, discusses the nature of the Specific Plan, and identifies potentially significant environmental impacts associated with future development projects guided by the Specific Plan as identified by the city and by responses to the Notice of Preparation (NOP). The NOP, including the initial study and responses to the NOP are contained in Appendix A. This EIR recommends feasible mitigation measures that can be implemented to reduce or avoid identified environmental impacts. Where no mitigation measures are feasible, a statement regarding this finding is made. In addition, this report evaluates reasonable alternatives to the Specific Plan. Following distribution of the draft EIR, the consultant will evaluate comments received regarding the draft EIR, discuss them with the city, and formulate written responses which will be incorporated into the final EIR for the Specific Plan.

As allowed by CEQA this EIR will serve as a Program EIR. The city will use this EIR to evaluate future individual development applications within the boundaries of the project site. It is anticipated that, when individual development applications are submitted to the city, the city will conduct an initial study with the intent of preparing a mitigated negative declaration. However, a supplemental EIR may be required if one or more of the following conditions applies to an individual project of either residential or non-residential use:

1. The project is substantially different from the mix, intensity or type of use described in the Specific Plan;
2. Significant changes to the project site or surrounding areas have occurred since the adoption of the Specific Plan;
3. Additional information about the potential impacts of the project becomes available after this EIR has been certified.

1.2 Project Location

The project site is located at the southern entrance of the city which is regionally located in the south-central Santa Cruz Mountains. It is located off of State Highway 17, north of the City of Santa Cruz and southwest of the city of San Jose. Figure 1 illustrates the regional location of the project site.

The project site is located on the east and west sides of Mt. Hermon Road at the intersection of Mt. Hermon Road and State Highway 17. The project site is divided into two areas: Planning Area A, located between Mt. Hermon Road, Glen Canyon Road, and State Highway 17; and Planning Area B, bordered by La Madrona Drive, Altenitas Road, and Silverwood Drive. Figure 2 illustrates the local vicinity of the project site.

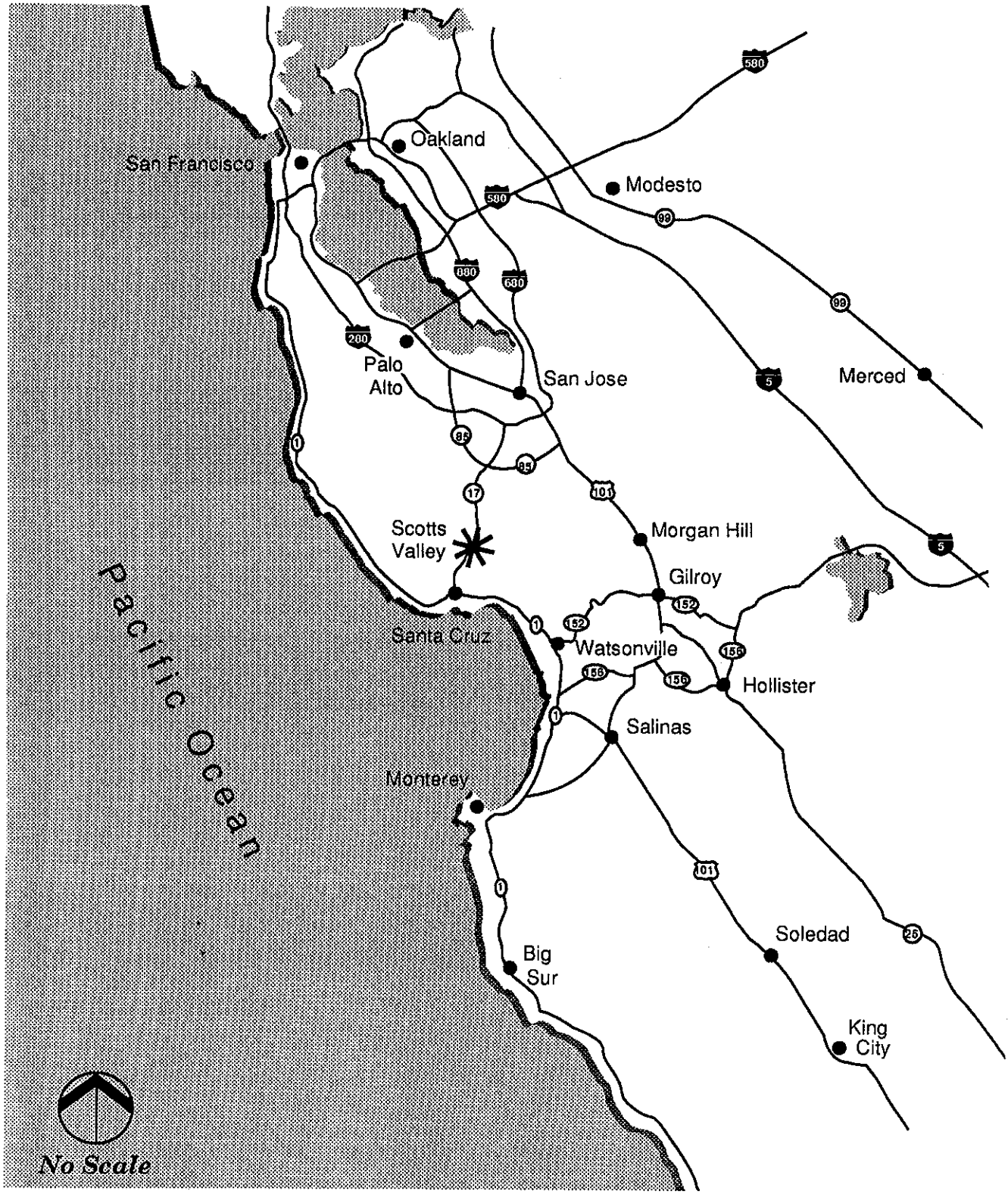
The project site is predominately surrounded by residential land uses. Planning Area A is bordered by three roadways: Mt. Hermon Road, State Highway 17, and Glen Canyon Road. Across Glen Canyon Road to the east, is the Scotts Valley Heights subdivision containing single-family homes with a rural character. Across Mt. Hermon Road to the west, are service commercial businesses, single-family homes in the Mañana Woods neighborhood, and two multiple family structures off La Cuesta Drive. The Mañana Woods development is unincorporated and under the jurisdiction of the County of Santa Cruz. The city owns a parcel east of Parcels 4 through 8, adjacent to Camp Evers Creek where Camp Evers Creek merges with Carbonero Creek. The city plans to provide a recreational fishing deck on this parcel, with rest rooms and parking off Glen Canyon Road.

Planning Area B shares a border with the Mañana Woods subdivision to the north, Silverwood Drive to the south, and Highway 17 and La Madrona Drive to the east. The approved, but not yet constructed, Heritage Park subdivision is adjacent to Planning Area B on the southwest. Surrounding land uses are presented in Figure 3.

1.3 Project Characteristics

1.3.1 Background

In 1985, the property owners along the Gateway South corridor requested the City Council form an assessment district to construct the roadway and utility improvements that would allow future consideration of alternative land uses. In November 1985, the City Council approved the resolutions to establish the Gateway South Assessment District. The City Council re-authorized the assessment district in September 1986 because ownerships had changed since the adoption of the original resolutions for the assessment district.



Source: California State Automobile Association and EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gateway South Specific Plan EIR

Regional Location

Figure **1**

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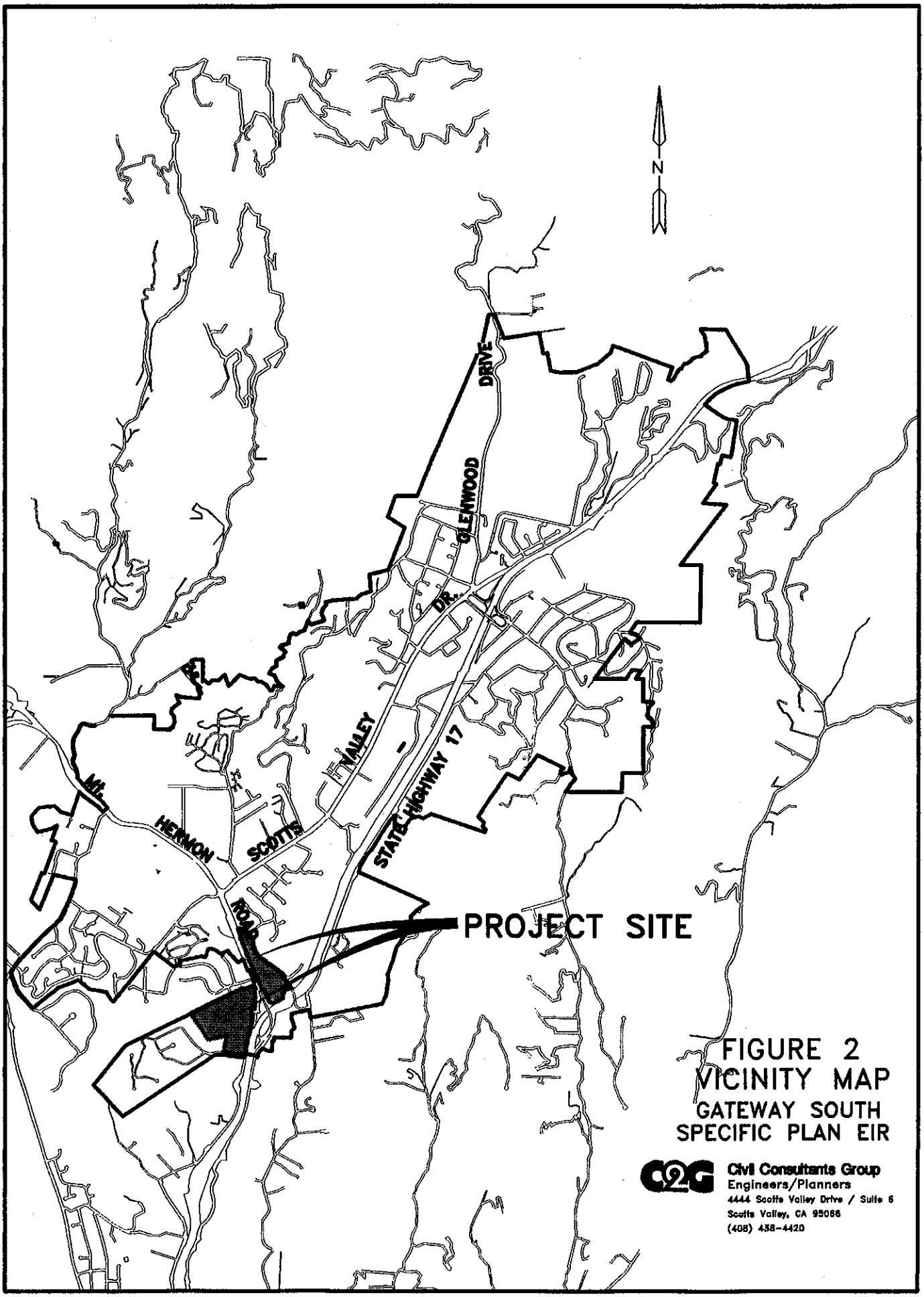

FIGURE 2
VICINITY MAP
GATEWAY SOUTH
SPECIFIC PLAN EIR

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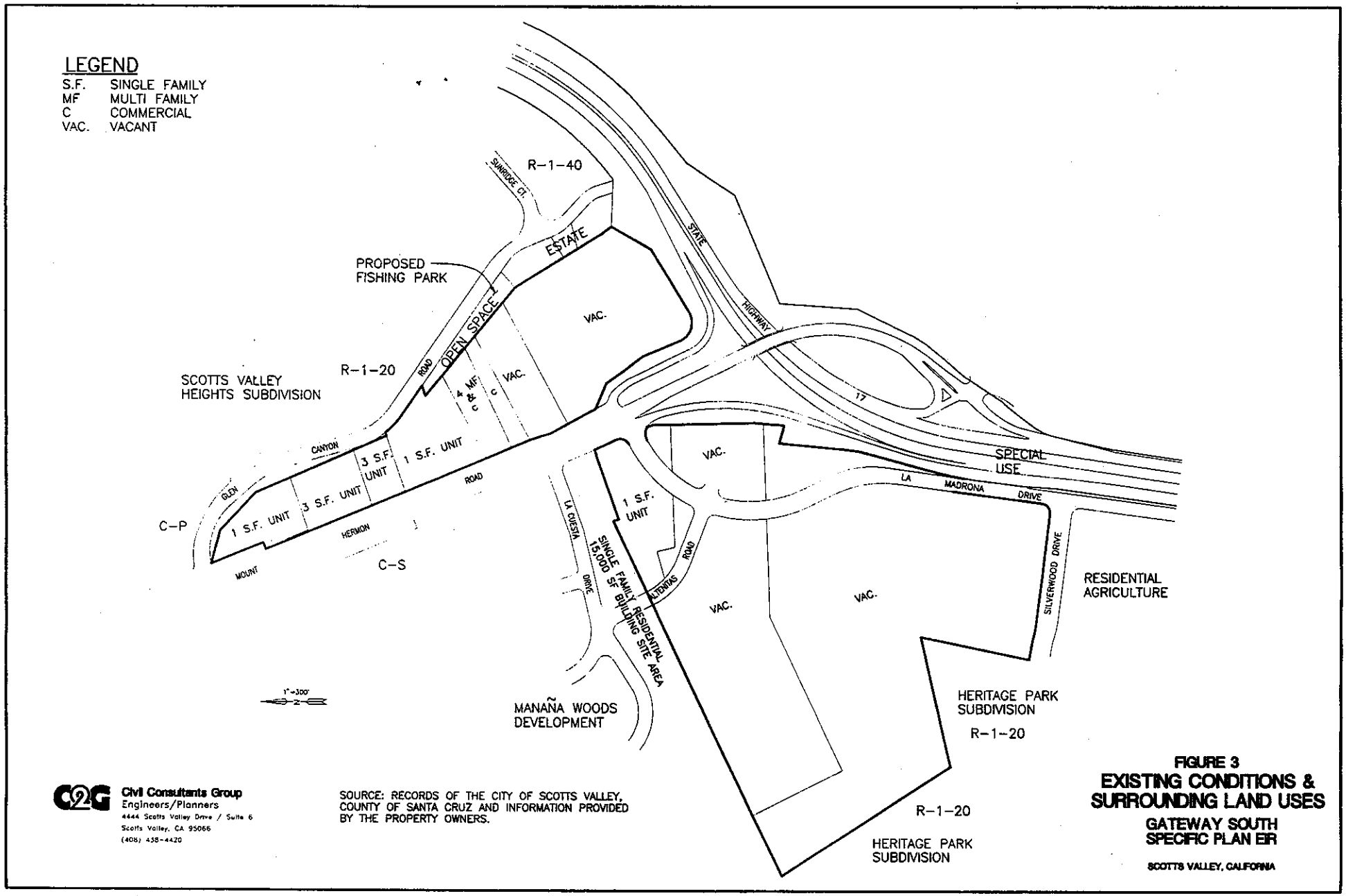

Civil Consultants Group
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SOURCE: RECORDS OF THE CITY OF SCOTTS VALLEY, COUNTY OF SANTA CRUZ AND INFORMATION PROVIDED BY THE PROPERTY OWNERS.

FIGURE 3
EXISTING CONDITIONS & SURROUNDING LAND USES
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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The city adopted a revised and updated general plan in 1986. During the public hearings for the updated general plan, the project site was the subject of discussion. Prior to 1986, the project site properties were residential, with the exception of Parcels 6, 7, and 8 which were zoned for commercial uses.

During the process of adopting the 1986 general plan, traffic circulation in the area of Mt. Hermon Road and State Highway 17 was of concern to the city. The city was reluctant to allow intense land uses in the Gateway South corridor without substantial improvements to the circulation system. The land use element of the adopted 1986 general plan identified all of the project site parcels, except Parcel 1, as low density residential.

The City Council believed the residential designation was appropriate until roadway improvements in the Gateway South corridor were assured. The City Council wanted to insure the roadway improvements could be completed prior to any consideration of more intense land use.

Planning and design for the roadway and utility improvements were completed over the next two and one-half years. The *Gateway South Assessment District EIR*, prepared by EMC Planning Group Inc., was completed in March 1989. The EIR was certified by the City Council and on May 24, 1989, the City Council confirmed the assessments on 12 properties, eleven of which are now included in the project site. Parcel 11 was approved for the construction of 81 single-family homes and is not included as part of the Specific Plan and is, therefore, not discussed in this EIR.

The *Gateway South Assessment District EIR* contains several mitigation measures applicable to future development on the project site. These mitigation measures are included herein as Appendix B and are referenced, where applicable, in Section 2.0 Environmental Setting, Impacts, and Mitigation Measures. The assessment district EIR evaluated the proposed assessment district improvements, as well as buildout of the project site under the general plan land use designations applicable at that time. Some of the analysis in the assessment district EIR is applicable to buildout of the project site under Specific Plan zoning; however, the assessment district EIR evaluated a lower density development than that allowed by proposed Specific Plan zoning. Therefore, the city determined that a new EIR would be required to address the proposed change in density.

After the assessments were confirmed, the road improvements were reviewed by the California Department of Transportation (Caltrans). Caltrans was concerned with the freeway ramps to State Highway 17. Caltrans required additional environmental analysis and modifications of the original design of the project. Final construction was delayed until January 1992, when Caltrans completed their review and modifications. Construction commenced in August 1993 and the project was completed in November 1994.

Because of the delay in construction, the estimated cost of the project increased substantially. It was necessary for the City Council to establish supplemental assessments for the properties within the assessment district to offset the additional cost.

The issue was further complicated since the zoning established in the 1986 general plan provided residential uses on the properties. The city would consider more intense land uses after the improvements were complete but the assessments must be based upon existing zoning, not future zoning. There was a potential inequity in the distribution of assessments if properties had more intense land uses in the future.

The City Council adopted Ordinance #145 in an attempt to provide adjustments in the assessments based upon rezoning applications that may occur in the future. The difficulty with Ordinance #145 is that the rezonings may occur at different times and each rezoning would change the assessments for all of the properties. The first property to be rezoned to a more intense use would be subject to an extreme increase in the assessments. As other properties were rezoned to more intense uses, they would reduce the assessments of the original rezoned parcel, but only after funds had been collected by the assessment district. The confusion resulted in lawsuits filed against the city requesting that Ordinance #145 be repealed. However, if Ordinance #145 was repealed, it may result in lawsuits from property owners affected by any change in the assessments.

The solution to the dilemma was to establish a Specific Plan for the Gateway South Assessment District area. The Specific Plan would establish the land uses that would be acceptable and zone the properties consistent with the anticipated development, based on the road improvements that were completed in 1994. If the Specific Plan is adopted, Ordinance #145 will have no effect and the properties will be assessed for the ultimate development as adopted in the Specific Plan.

1.3.2 Existing Conditions

The project site is located on the southern flanks of the Santa Cruz Mountains at elevations between 470 and 790 feet above sea level. The topography in Planning Area A varies from flat to steeply sloping with slopes in excess of 40 percent. The topography in Planning Area B gently to moderately slopes from the west, down toward La Madrona Drive.

The project site consists of 11 parcels. Parcels 1 through 8 in Planning Area A share similar topography and site constraints. The properties slope from Mt. Hermon Road down toward Glen Canyon Road. Camp Evers Creek, tributary to Carbonero Creek, runs along the eastern side of Parcels 1 though 7 and Carbonero Creek runs along the eastern side of Parcel 8. Camp Evers Creek tributary joins Carbonero Creek near the border of Parcels 7 and 8. Existing land uses in Planning Area A include single-family homes and non-conforming

commercial businesses. The vacant and developed parcels have steep slopes with dense vegetation.

Planning Area B consists of three parcels. The construction of the Gateway South Assessment District roadways improvements divide the three parcels into four sections of land. The majority of parcel 9 lies in the triangle of La Madrona Drive and Altenitas Road and borders the existing single-family homes in Mañana Woods to the west. The Mañana Woods homes have access from La Cuesta Drive and the rear yards of the homes are adjacent to Parcel 9. The assessment district sidewalk improvements on the south side of Altenitas Road, near its intersection with La Madrona Drive, have been damaged. It appears that the damage has been caused by overland flow of recent storm waters (Majid Yamin, telephone conversation with consultant, March 31, 1995). Repairs are scheduled to be made during the summer of 1995.

Parcel 10 is divided into three separate sections of land by Altenitas Road and La Madrona Drive. The result is one area between La Madrona Drive and State Highway 17, a small area to the north in the triangle of Altenitas Road and La Madrona Drive, and the remaining area south of Altenitas Road and La Madrona Drive. Parcel 10 contains steep slopes to the rear (west) portion of the parcel.

Parcel 12 is the largest single property with frontage on La Madrona Drive. A triangular portion of parcel 12 lies between La Madrona Drive and State Highway 17. Parcel 12 also has steep slopes along the rear (west) portion of the parcel.

Existing project site conditions are presented in Table 1 and illustrated in Figure 3. Existing land use and zoning designations are illustrated in Figures 4 and 5, respectively.

1.3.3 Proposed Conditions

The Specific Plan includes a land use plan, zoning plan, circulation plan, municipal services plan, and drainage plan. These plans are illustrated in Figures 6, 7, 8, 9, and 10 respectively. Each component is described below.

Land Use and Zoning

The Specific Plan land use plan, illustrated in Figure 6, includes the planned future development of open space, residential, and commercial land uses. Figure 7 illustrates the proposed zoning. These proposed changes are summarized in Table 2.

TABLE 1

Existing Conditions

Parcel Number	Acreage	General Plan Land Use Map*	Zoning	Existing Use
1	~~0.79~~ 1.16	C-S	C-S	1 Single-Family Home
2	~~0.93~~ 1.07	Low	R-1-20	3 Single-Family Homes
3	~~0.51~~ 0.58	Low	R-1-20	2 Single-Family Homes
4	~~1.27~~ 1.72	Low	R-1-20	1 Single-Family Home
5	~~0.65~~ 0.82	Low	R-1-20	4 Multi-Family Homes and 1Commercial Business
6	~~0.45~~ 0.52	Low	R-1-20	1 Commercial Business
7	1.42	C-S	C-S	Vacant
8	5.55	C-S	C-S	Vacant
9	~~1.95~~ 2.04	Low	R-1-20	1 Single-Family Home
10	~~9.66~~ 9.59	Low	R-1-20	Vacant
12**	~~18.97~~ 10.11	Low	R-1-20	Vacant
Total	~~**42.15**~~ **43.57**			

* Parcels 1 Through 8 include a Special Treatment Area Overlay

** There is no parcel 11 in the Specific Plan. Parcel 11 has been approved for development as a different project.

C-S Commercial Service

Low Low Density Residential

R-1-20 Low-Density Residential

Source: City of Scotts Valley Planning Department/C2G Civil Consultants Group

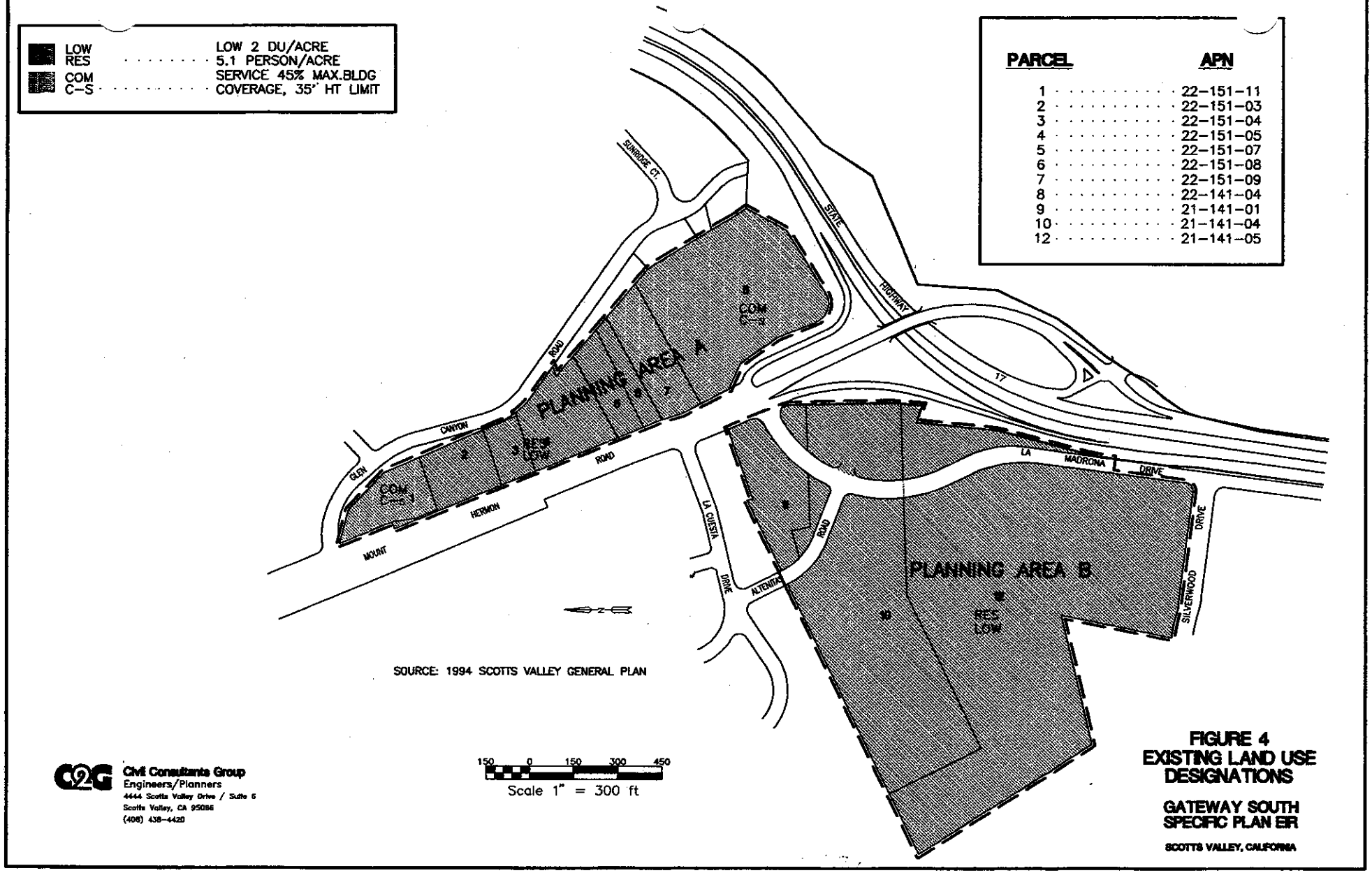

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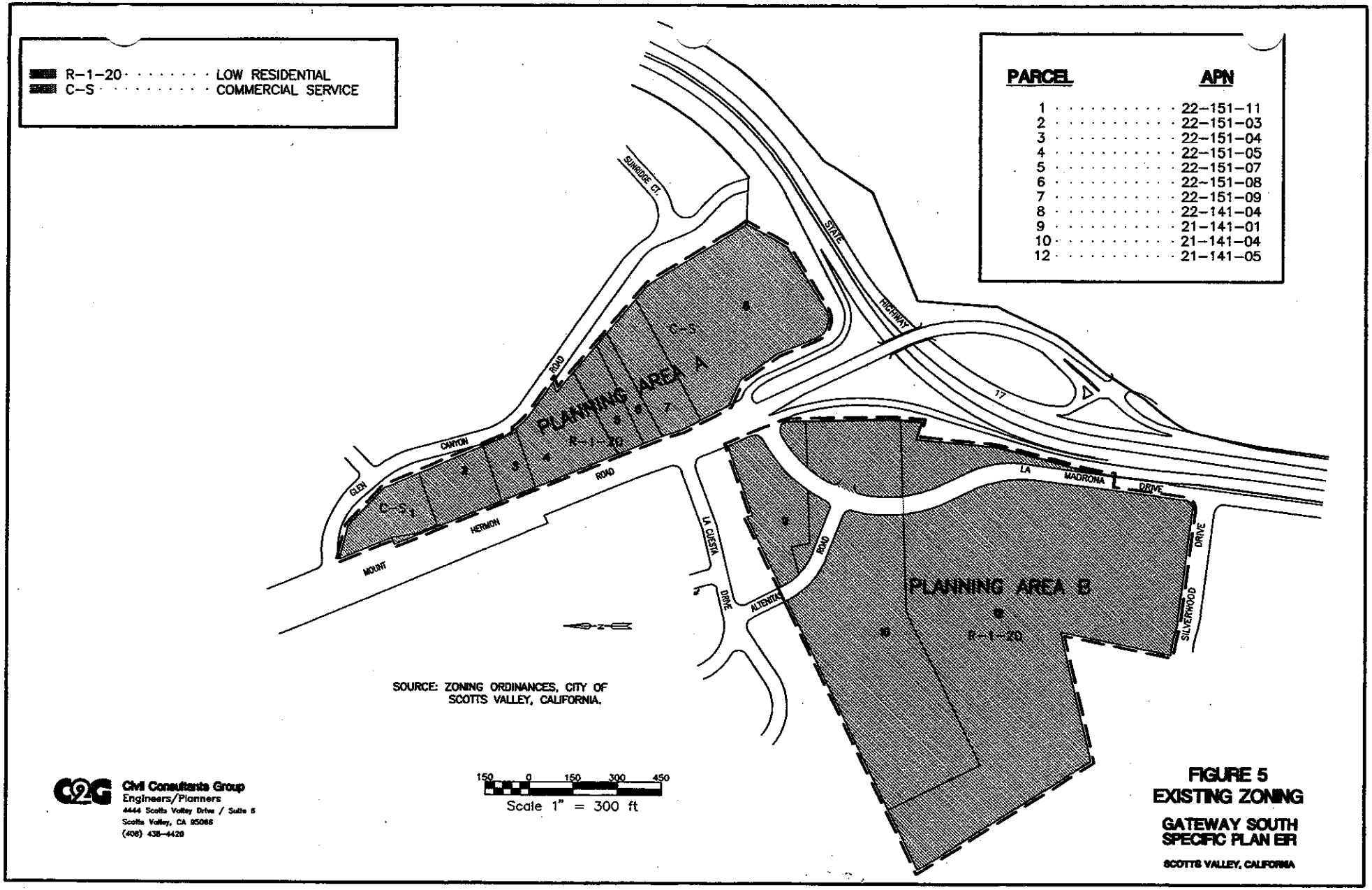
FIGURE 4
EXISTING LAND USE DESIGNATIONS

GATEWAY SOUTH SPECIFIC PLAN EIR

SCOTTS VALLEY, CALIFORNIA



SOURCE: ZONING ORDINANCES, CITY OF SCOTTS VALLEY, CALIFORNIA.

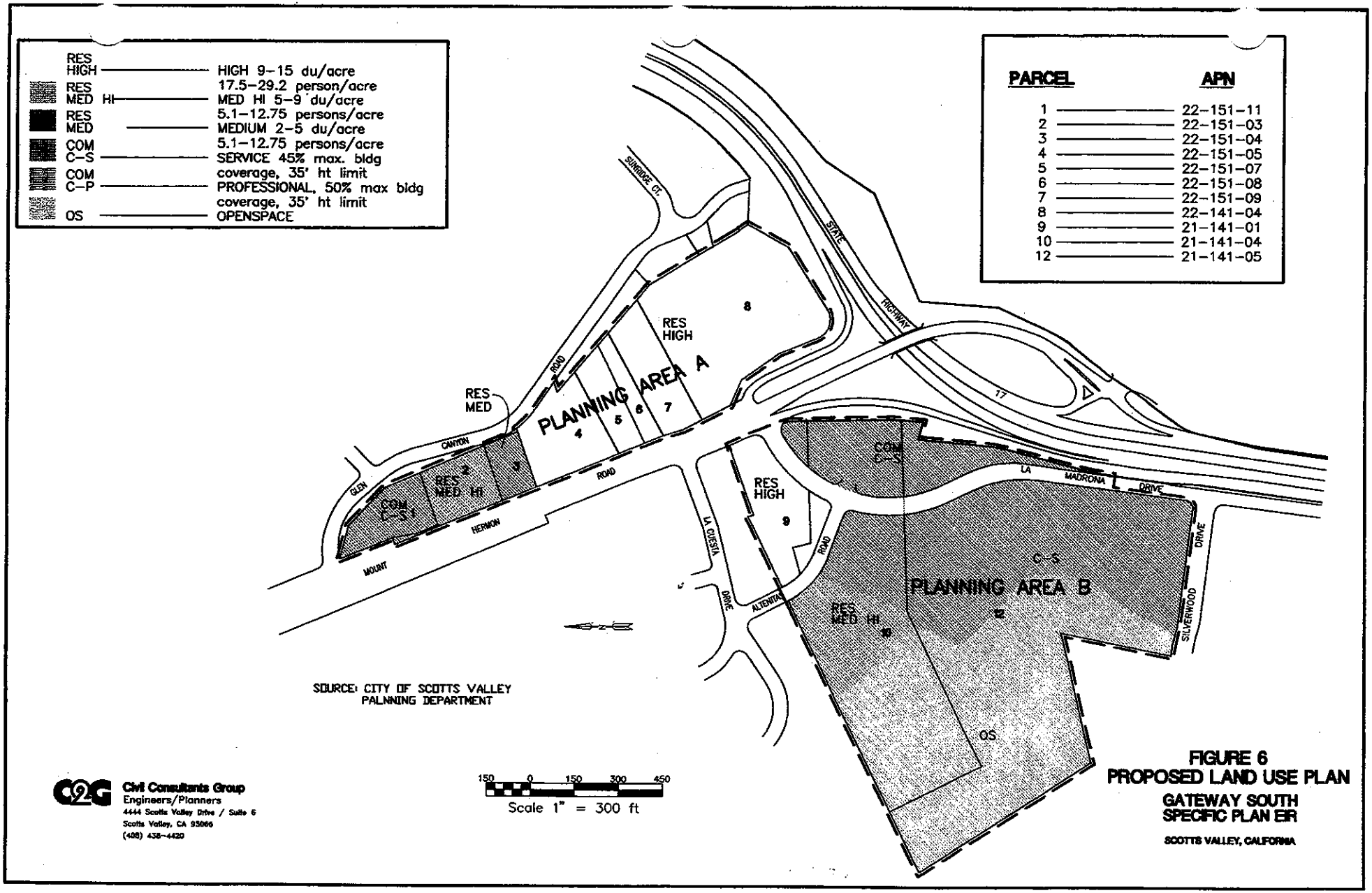
150 0 150 300 450
Scale 1" = 300 ft

Civil Consultants Group
Engineers/Planners
4444 Scotts Valley Drive / Suite 5
Scotts Valley, CA 95066
(408) 438-4420

FIGURE 5
EXISTING ZONING

GATEWAY SOUTH SPECIFIC PLAN EIR

SCOTTS VALLEY, CALIFORNIA



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Engineers/Planners
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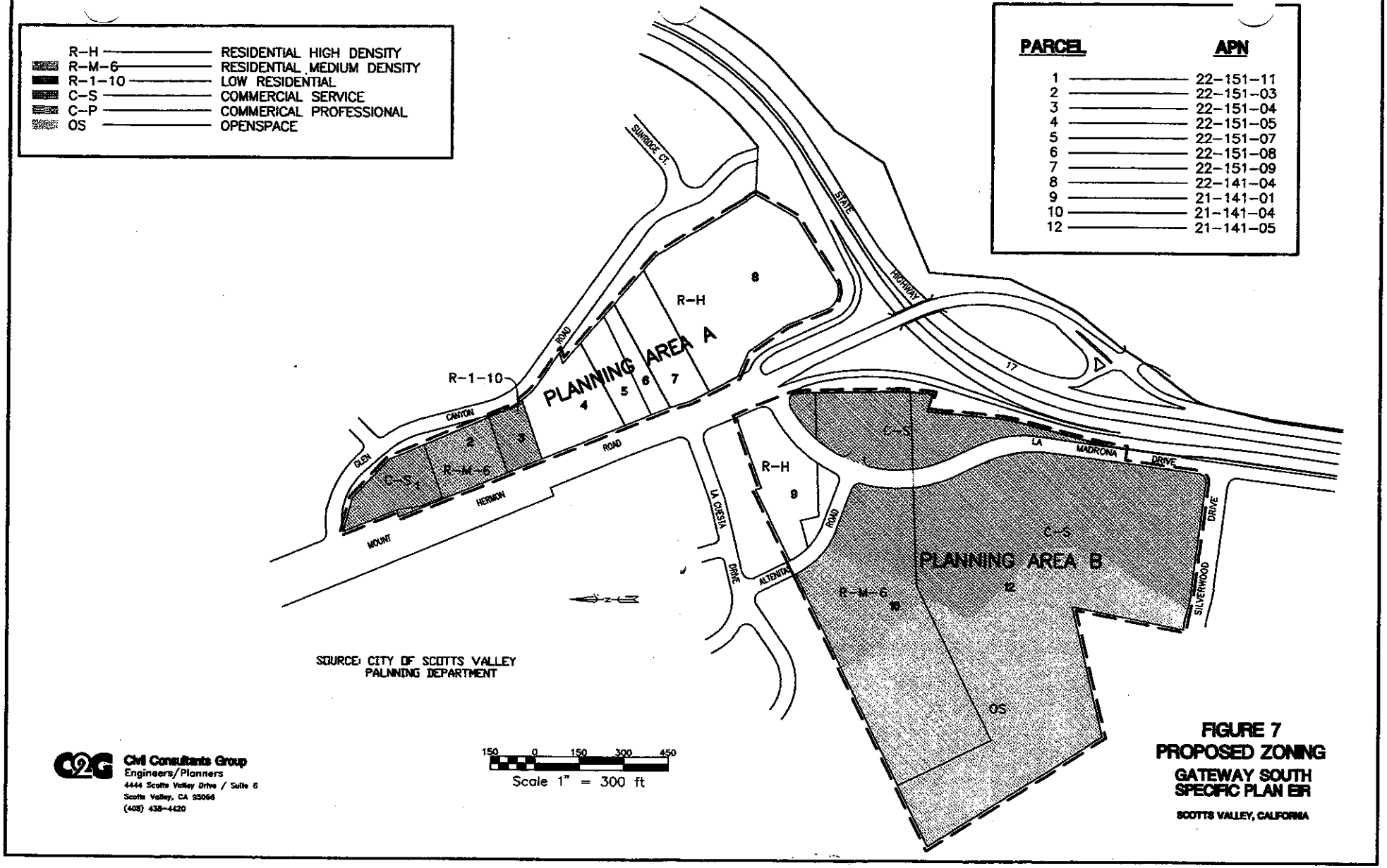
Scotts Valley, CA 95066
(408) 438–4420

FIGURE 6
PROPOSED LAND USE PLAN
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA



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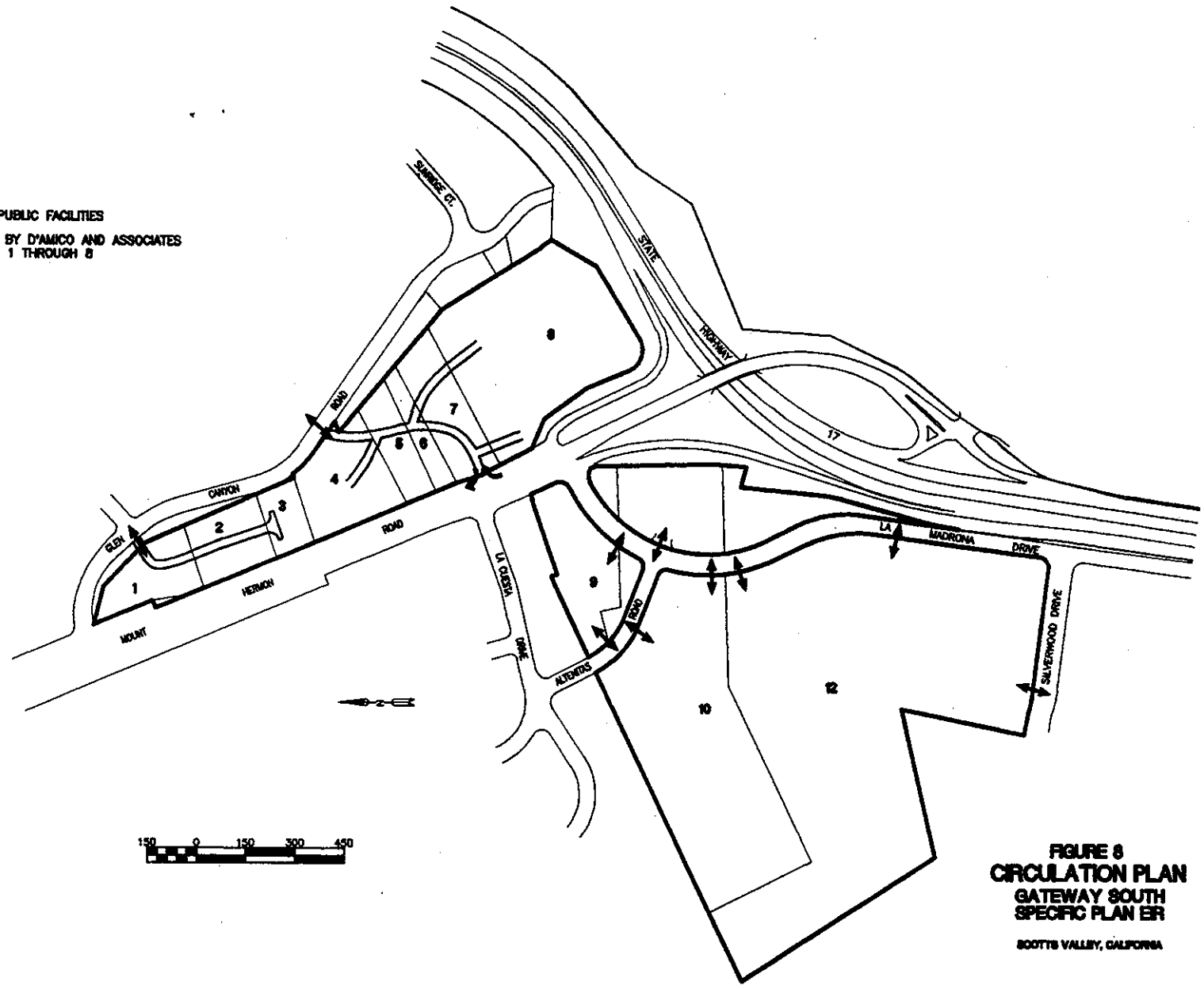
Scotts Valley, CA 95066
(408) 438-4420

FIGURE 7
PROPOSED ZONING
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

SOURCE: . EXISTING PUBLIC FACILITIES

. PLANNING BY D'AMICO AND ASSOCIATES FOR LOTS 1 THROUGH 8



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Scotts Valley, CA 95066
(408) 438-4420

FIGURE 6
CIRCULATION PLAN
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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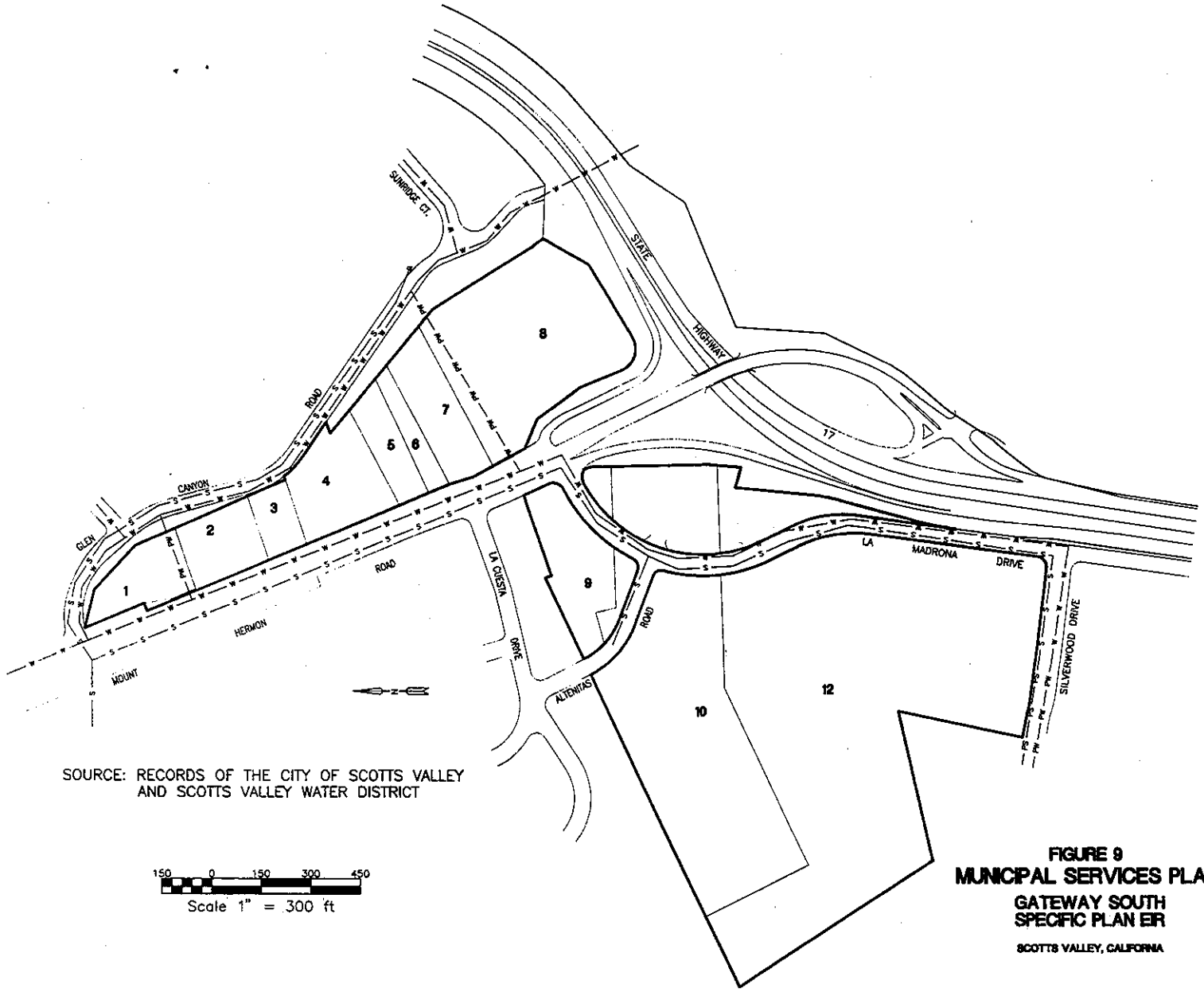
LEGEND

— S — S — EXISTING SEWER LINE
— PS — PS — PROPOSED SEWER LINE
— W — W — EXISTING WATER LINE
— PW — PW — PROPOSED WATER LINE

NOTE:
THE UTILITY LINES SHOWN ON THIS MAP ARE SCHEMATIC AND DO NOT REFLECT THEIR EXACT LOCATION. EXISTING ELECTRIC, GAS, CABLE TV AND TELEPHONE FACILITIES ARE LOCATED WITHIN THE ADJACENT ROADWAYS.



SOURCE: RECORDS OF THE CITY OF SCOTTS VALLEY AND SCOTTS VALLEY WATER DISTRICT

150 0 150 300 450
Scale 1" = 300 ft

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Scotts Valley, CA 95066
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FIGURE 9
MUNICIPAL SERVICES PLAN
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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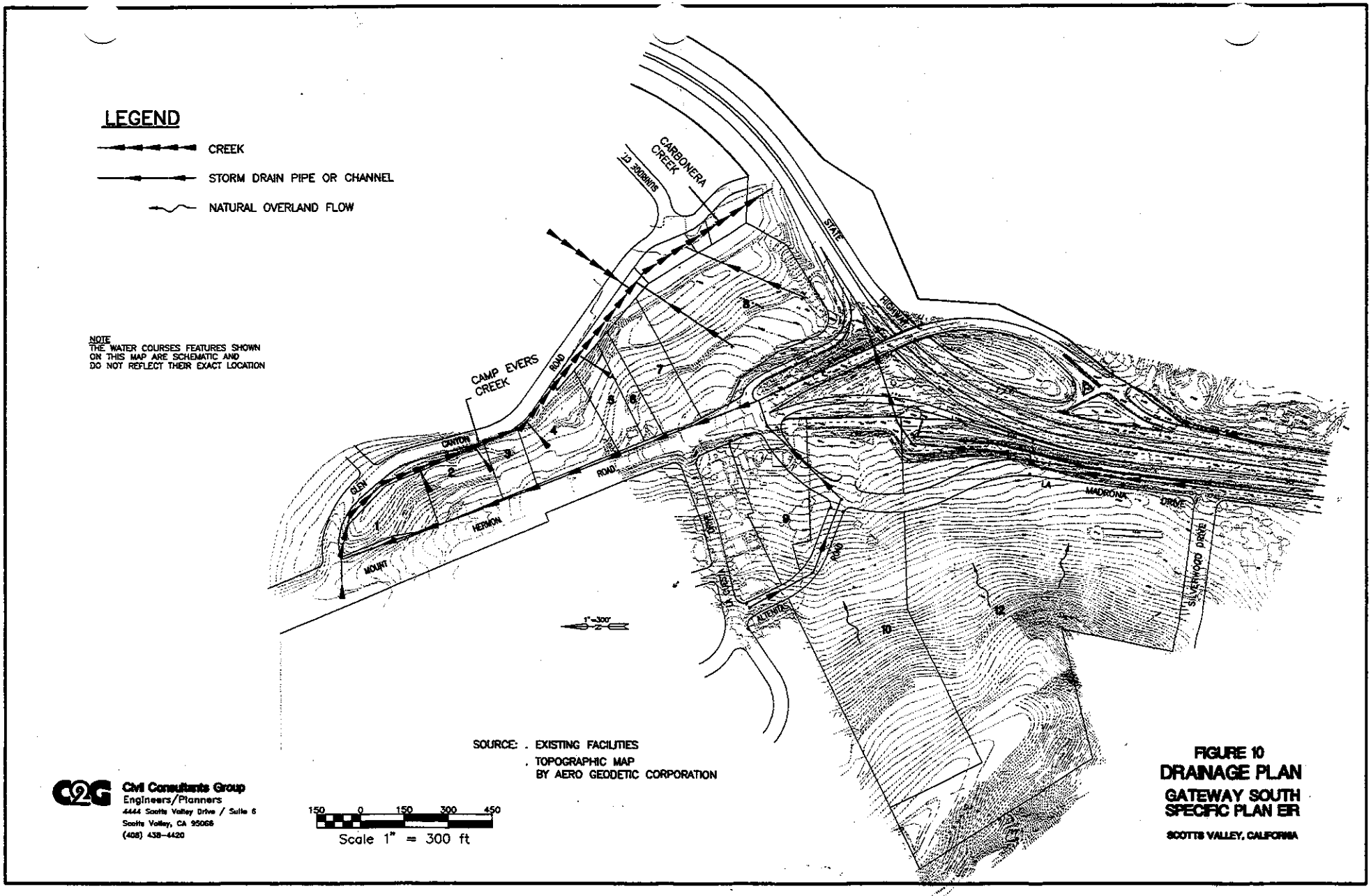
LEGEND
CREEK
STORM DRAIN PIPE OR CHANNEL
NATURAL OVERLAND FLOW
NOTE
THE WATER COURSES FEATURES SHOWN ON THIS MAP ARE SCHEMATIC AND DO NOT REFLECT THEIR EXACT LOCATION
CARBONERA CREEK
CAMP EVERS CREEK
STATE HIGHWAY
GLEN CANYON ROAD
MOUNT HERMON ROAD
LA MADRONA DRIVE
SILVERWOOD DRIVE
ALEMITE
1" = 300'
SOURCE: . EXISTING FACILITIES
. TOPOGRAPHIC MAP BY AERO GEODETIC CORPORATION
Civil Consultants Group
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
(408) 438-4420
150 0 150 300 450
Scale 1" = 300 ft
FIGURE 10
DRAINAGE PLAN
GATEWAY SOUTH
SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

~~TABLE 2~~

~~**Proposed Land Uses and Acreage**~~

~~Land Use~~	~~Zoning~~	~~Planning Area A~~	~~Planning Area B~~	~~Total Acres~~	~~%~~
~~Medium Residential (Single-Family)~~	~~R-1-10~~	~~0.51~~	~~0.00~~	~~0.51~~	~~1.2~~
~~Medium-High Residential (Multi-Family)~~	~~R-M-6~~	~~0.93~~	~~3.74~~	~~4.67~~	~~11.1~~
~~High Residential (Multi-Family)~~	~~R-H~~	~~9.34~~	~~1.74~~	~~11.08~~	~~26.3~~
~~Commercial Service~~	~~C-S~~	~~0.79~~	~~16.23~~	~~17.02~~	~~40.4~~
~~Open Space~~	~~O-S~~	~~0.00~~	~~8.87~~	~~8.87~~	~~21.0~~
~~**Total Acreage**~~		~~**11.57**~~	~~**30.58**~~	~~**42.15**~~	~~**100%**~~

~~Source: Scotts Valley Planning Department~~

TABLE 2

Proposed Land Uses and Acreage

Land Use	Zoning	Planning Area A	Planning Area B	Total Acres	%
Medium Residential (Single-Family)	R-1-10	0.58	0.00	0.58	1.3
Medium-High Residential (Multi-Family)	R-M-6	1.07	3.74	4.81	11.0
High Residential (Multi-Family)	R-H	10.03	2.04	12.07	27.7
Commercial Service	C-S	1.16	13.75	14.91	34.2
Open Space	O-S	0.00	11.20	11.20	25.7
Total Acreage		**12.84**	**30.73**	**43.57**	**100%**

Source: C2G Civil Consultants Group/Scotts Valley Planning Department

Planning Area A

Planning Area A land use and zoning plans include the following designations: existing service commercial designation on Parcel 1; medium-high density multiple residential land uses on Parcel 2; single-family residential land use on Parcel 3; and high density multiple residential land uses on Parcels 4 through 8. Parcel 3 will be zoned R-1-10, a single-family residential zoning which requires a 10,000 square foot minimum lot size. Parcel 2 will be zoned R-M-6, which has a 5,000 square foot minimum lot size and allows the construction of single-family residences.

Planning Area B

Planning Area B is divided into four different land use and zoning categories. The area between Altenitas Road and La Madrona Drive is proposed as residential high density (Parcel 9 and a portion of Parcel 10). The area of parcels 9, 10, and 12 between La Madrona Drive and State Highway 17 is proposed as service commercial.

The area of Parcels 10 and 12 west of La Madrona Drive and south of Altenitas Road is proposed to contain three land use and zoning categories. All areas containing steep slopes and heavy vegetation are proposed to be open space. Construction will not be allowed on this open space area and the slopes will be retained in their natural state. The area abutting the existing single-family homes in Mañana Woods is proposed to be designated R-M-6 which is a multiple residential zoning designation with density based on one unit per each 5,000 square feet of land. The less steep areas fronting La Madrona Drive and Altenitas Road are proposed to have a service commercial zoning designation.

Maximum Development Scenario

Although the city's zoning ordinance allows building coverage ratios in the C-S, C-SC and C-P. zones of 45 percent, 35 percent and 35 percent, respectively, experience indicates that such ratios are seldom achievable. While there are undoubtedly a variety of reasons for this, the two principal factors contributing to lower coverage are parking requirements and topographic limitations.

A detailed statistical analysis of the city's existing commercial projects, conducted by C2G Civil Consultants Group, suggests that the limitations of the city's parking requirements is a predominant factor. The actual building coverage in the city's four largest shopping centers averages 23 percent or about only 65 percent of that permitted in the code. The achievable coverage for office commercial averages 35 percent or approximately 79 percent of the maximum permitted in the code (Gene Scothorn, personal communication with consultant, March 16, 1995).

Site-specific architectural and engineering studies conducted on various properties within the project site indicate that coverage ratios will be somewhat less than those in other areas of the city. This is due to less favorable topography (slopes exceeding 40 percent) which poses additional site development constraints. The additional grading and retaining walls needed in steeper terrain increases cost and limits the economic viability of using some portions of the available land.

Over a period of years, some level of design investigation has been conducted for most all of the properties in the project site. Several parcels have had more than one project evaluated by the city and final plans were prepared for a professional office building previously proposed for Parcel 1. Parcel 9 is the only property for which no design studies are known to have been performed.

As a result of these investigations, a maximum probable development scenario has been developed by the city for analysis in this EIR. The figures, presented in Table 3, are only slightly less than that experienced on comparable projects elsewhere in the community, and is considered realistic for the specific properties within the project site. If future development applications propose higher density development, additional environmental review will most likely be required. The background data for developing this maximum probable development scenario is included in Appendix G. This scenario represents from 54 percent to 91 percent less dense than the maximum allowed under proposed zoning districts. Table 3.1 presents the maximum allowed under proposed zoning districts, although the maximum allowed for in the Specific Plan is identified in Table 3.

TABLE 3

Maximum Probable Development Scenario*

Land Use	Amount	Unit
Single-Family Residential	2	Dwelling Units
Multi-Family Residential	157	Dwelling Units
General Office	12,230	Square Footage
General Retail	151,000	Square Footage

* As allowed for in the Specific Plan

Source: C2G Civil Consultants Group

TABLE 3.1

Maximum Development*

Land Use	Amount	Unit
Single-Family Residential	2	Dwelling Units
Multi-Family Residential	212	Dwelling Units
General Office	211,440	Square Footage
General Retail	80,900	Square Footage

* As allowed for by the zoning districts proposed in the Specific Plan

Source: C2G Civil Consultants Group

Circulation Plan

Planning Area A will have vehicular access from both Mt. Hermon Road and Glen Canyon Road, as illustrated in Figure 8. Parcels 4 though 8 will have a "right turn in only" and a "right turn out only" access on Mt. Hermon Road and right and left turn access from Glen Canyon Road. Parcels 1 through 3 only have one access point and it is located on Glen Canyon Road. It will have both right and left turn access. There is no roadway connection proposed between Parcels 1 through 3 and Parcels 4 through 8, although the roadway on the project site could be extended in the future.

Access to Planning Area B is provided by Altenitas Road and La Madrona Drive, recently completed as part of the Gateway South Assessment District improvements. Although no specific development plans have been submitted at this time, the entrances and exits are designed to minimize traffic conflicts and take advantage of the widened and improved Altenitas Road and La Madrona Drive. Specific development proposals will be evaluated and the most appropriate circulation route determined. The locations of ingress and egress may be adjusted or modified based upon site specific conditions and the design that is proposed by future developers.

Municipal Services Plan

As illustrated in Figure 9, an existing water line extends up Mt. Hermon Road and along La Madrona Drive to Silverwood Drive. Another water line extends down Glen Canyon Road, passing below State Highway 17 and connecting to Green Hills Road. The water line is proposed to be extended up Silverwood Drive to serve the 81 home Heritage Parks subdivision. Two water line connections are proposed at the south boundary of Parcel 1 and the north boundary of Parcel 8.

A major sewer trunk line is provided down Mt. Hermon Road along La Madrona Drive, extending to Silverwood Drive. The proposed sewer line will also be extended to serve the Heritage Parks subdivision. A main sewer line also proceeds down Glen Canyon Road. A sewer main also extends up the newly constructed Altenitas Road and could be extended to serves the Mañana Woods development.

Planning Area A will likely use gravity sewer lines to connect to the sewer main in Glen Canyon Road. Planning Area B will also have gravity sewer connections to the line in La Madrona Drive. Special attention will be given to the area between State Highway 17 and La Madrona Drive on Parcels 9, 10, and 12 because the elevations of the land to be developed are closer to the elevation of the sewer line.

As illustrated in Figure 10, storm drainage pipes are provided in Mt. Hermon Road, Altenitas Road, and La Madrona Drive. The storm waters are carried to the Carbonero Creek channel. Natural overland flow is dictated by the topography. The natural drainage for all parcels is to flow by gravity to Carbonero Creek.

Specific storm water design for future development in the project site will be developed. On-site water retention areas may be required in order to avoid future erosion and slope instability. On-site detention, silt and grease trap drainage structures will be required to reduce contaminant discharge into the drainage courses.

1.4 Specific Plan Objectives

The objectives of the Specific Plan are to develop specific regulations, programs and legislation to implement the general plan within the project site. The Specific Plan translates the broad community policies, goals, and objectives as set forth in the general plan into a mechanism for guiding actual development.

1.5 Consistency with Local and Regional Plans

Section 15125 of the California Environmental Quality Act (CEQA) guidelines requires an EIR to identify any inconsistencies between a proposed project and applicable local and regional plans. This section of the EIR analyzes consistency of the Specific Plan with the *City of Scotts Valley 1994 General Plan* (City of Scotts Valley 1994), *Title 17,* (Zoning Ordinance) (City of Scotts Valley 1992), and the *Proposed Scotts Valley Redevelopment Project* (Burns & Watry, Inc. 1990). Only those policies which are applicable to the Specific Plan are analyzed in the following discussion.

1.5.1 General Plan

The City of Scotts Valley 1994 General Plan (hereinafter "general plan") was adopted by the city on April 20, 1994. It is the official document used by decision makers and citizens to guide and interpret the city's long range plans for development of land and conservation of resources. There are eight elements of the general plan: (1) land use, (2) circulation, (3) housing, (4) open space and conservation, (5) noise, (6) safety, (7) public services and facilities, and (8) parks and recreation.

The following discussion is an analysis of the Specific Plan's consistency with the general plan land use plan and applicable policies and corresponding actions.

Land Use

> **Land Use Plan.** The project site's existing land use designations are low density residential and service commercial. Planning Area A includes a Special Treatment Area (STA) overlay designation. The STA overlay designation is established for areas where planned developments or some form of special treatment is required to allow future development. The STA for Planning Area A is referred to in the general plan as Mt. Hermon Road near Highway 17 (MHRSTA). The purpose for the MHRSTA is to develop a plan coordinating circulation and land uses for all the properties to limit ingress and egress along Mt. Hermon Road. The plan should consider construction of an access road to reduce vehicular conflict; the plan should provide rear access across a bridge from Glen Canyon Road to provide properties in the MHRSTA with access to Glen Canyon Road.

Consistency Analysis. The Specific Plan includes changing the general plan land use designations to a combination of open space, service commercial, medium density residential, medium-high density residential, and high density residential. It also includes a circulation plan, to address the STA overlay designation, which includes the following components: limits ingress and egress on Mt. Hermon Road to one location; limits ingress and egress at that location to right-turn in and right-turn out only; and includes access at two locations along Glen Canyon Road.

Although the Specific Plan addresses the concerns surrounding the STA overlay designation, the proposed land use designation are currently inconsistent with the general plan land use plan designation. However, adoption of the Specific Plan will amend the general plan. When that happens, the general plan land use plan will be amended to reflect the changes in land use designation, and the Specific Plan will be **consistent** with the land use plan.

> **Policy LP-3.** The city shall promote the availability of adequate sites for a variety of housing types and densities consistent with Housing Element goals and environmental constraints.

Action LA-8. Zone highest densities along transportation corridors.

Consistency Analysis. The project site is located adjacent to State Highway 17 (a type I freeway) and Mt. Hermon Road (a principal arterial). Both are considered transportation corridors. The majority of Planning Area A (fronting on Mt. Hermon Road) is proposed to be zoned high density residential; the remainder is proposed as commercial service, medium density residential, and low density residential. The portions of Planning Area B (adjacent to State Highway 17) are proposed to be zoned service commercial. Therefore, the Specific Plan is **consistent** with this policy and action.

Policy LP-17. Land Use densities should decrease with increasing land slope.

Action LA-18. The City shall amend the zoning ordinance to encourage construction on the flat or gently sloped areas of a parcel and discourage construction on steeper slopes.

Consistency Analysis. The Specific Plan does include a policy limiting development on steeply sloped lands. Policy 2.3a states "areas where natural topography is sloped at 40 percent or more should be designated as open space or dedicated as scenic easements."

Planning Area A has approximately 2.02 acres with slopes in excess of 40 percent; Planning Area B has approximately 3.62 acres with slopes in excess of 40 percent (Orvin Lambert, telephone conversation with consultant, June 6, 1995). Because of these steep slopes, the residential density allowed by the Specific Plan is less than that which is allowed by Specific Plan zoning. Refer to Table 3 for the maximum probable development scenario.

(It should be noted that the density identified in the maximum probable development scenario in Table 3 was to be included in the Specific Plan as a limitation on the density of future proposals within the project site. This maximum density was inadvertently left out of the Specific Plan circulated for public review. A new mitigation measure in Section 2.1, Geology and Soils, has been included to add this density maximum as a limitation in the Specific Plan.)

The maximum probable development scenario was developed by C2G Civil Consultants Group, under contract with the City of Scotts Valley. The intent was to identified the maximum probable development based on environmental constraints, such as topography, as well as actual densities of other recent commercial projects within the city. The analysis prepared by C2G Civil Consultants Group is included as Appendix G.

Under the city zoning designations proposed by the Specific Plan (without the maximum probable development scenario), a total of 214 dwelling units (2 single-family and 212 multi-family) is allowed. The maximum probable development scenario limits Specific Plan dwellings units to 159 (2 single-family and 157 multi-family). These figures can be broken down further within Planning

Areas A and B. Planning Area A is limited to 108 dwelling units (2 of which are single-family). The number of multi-family units ranges from 67 percent to 73 percent of the maximum allowed under proposed zoning. Planning Area B is limited to 51 dwelling units (all multi-family) and ranges from 76 percent to 91 percent of the maximum allowed under proposed zoning.

The commercial land use maximums allowed for in the Specific Plan range from 54 percent to 75 percent of the maximum allowed for by Specific Plan zoning.

To summarize, the land use densities provided for in the Specific Plan do decrease with increasing land slope. The overall percent of maximum allowed under proposed zoning ranges from 54 percent to 91 percent (not including the 100 percent coverage for the 2 single-family dwelling units). Therefore, with implementation of the new mitigation measure in Section 2.1, Geology and Soils, the Specific Plan will be **consistent** with this policy and action.

> **Action LA-34.** Tree covered slopes, no matter what the percent of slopes, should be preserved to the maximum extent possible.

Consistency Analysis. Planning Area B includes approximately 9.5 acres of tree covered (mixed coniferous forest) slopes. The Specific Plan proposes for this area to remain in open space. Therefore, the Specific Plan is **consistent** with this action.

> **Action LA-41.** During the environmental and development review process, identify potential impacts that commercial developments will have on other community land uses. Require mitigation of such impacts.

Consistency Analysis. Land use compatibility issues are addressed in Section 2.7, Land Use Compatibility, of this EIR. Potential incompatibility could result from poor site design of commercial properties adjacent to residential properties. However, the Specific Plan includes a policy stating that land uses within the project area should be sited and designed to be compatible with each other and with surrounding land uses. In addition, mitigation measures are included in both this EIR and the *Gateway South Assessment District EIR* to ensure land use compatibility between future commercial uses and existing and future residential uses. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this action.

> **Action LA-43.** Lighting of commercial areas shall be carefully controlled to the extent necessary for security, safety and identification without interfering with adjoining land uses. Lighting shall be directed away from public right-of-way and adjacent residential land uses. Include these requirements in the Design Review Guidelines.

Consistency Analysis. As discussed in Section 2.7.1, Aesthetics, proposed commercial areas are located adjacent to, and visible from, State Highway 17 and Mt. Hermon Road. Proposed commercial areas are also located adjacent to

proposed residential land uses. A mitigation measure in Section 2.7.1, Aesthetics, adds a policy to the Specific Plan requiring future commercial development proposals to prepare lighting plans addressing the concerns presented in Action LA-43. With implementation of this mitigation measure, the Specific Plan will be **consistent** with this action.

> **Action LA-44.** New commercial developments shall be required to provide to the city a trip generation and distribution analysis as a part of the project plans. The city should review and evaluate this analysis for impacts to residential zones.

Consistency Analysis. Section 2.4, Traffic and Circulation, discusses anticipated trip generation for build out of the project site, including the commercial portions. Future development at the project site will not create a significant impact upon residential zones. Therefore, the Specific Plan is **consistent** with this action.

> **Policy LP-72.** Preserve open space areas for protection of public health and safety, provision of recreational opportunities, and protection of natural resources.
>
> **Action LA-73.** The City shall require new residential developments to dedicate park land and/or to contribute park in-lieu fees to the City that enable the purchase of additional park land, or to provide recreational facilities, or to maintain existing parks consistent with the Parks Master Plan.
>
> **Action LA-76 (abbreviated).** During the environmental review and permit process, the city shall identify potential open space and recreation resource demands created by new commercial and industrial developments and require such developments to provide on-site open space and/or landscaped areas to satisfy that demand.

Consistency Analysis. Approximately ~~8.87~~ 11.20 acres (~~21~~ 25.7 percent) of the ~~42.15~~ 43.57-acre project site is proposed as open space. This area consists of sensitive habitat on steeper slopes. Therefore, the Specific Plan is **consistent** with ~~this~~ policy LP-72 and action LA-76.

Future residential development on the project site will be required to contribute park in-lieu fees to the city as required by Action LA-73. Therefore, the Specific Plan is **consistent** with this action.

> **Action LA-77.** Maintain riparian corridors as open space.
>
> **Action LA-78.** During development review, consider habitat migration paths and corridors and provide protection as appropriate.

Consistency Analysis. Planning Area A contains riparian corridors along Camp Evers and Carbonero Creeks. The riparian corridor serves as a migration

path and corridor for wildlife. The Specific Plan contains a policy to maintain and enhance the habitat value of the riparian corridor including requiring California Department of Fish and Game approval for loss of habitat, and specific instructions construction activities in and around the habitat. In addition, Section 2.3, Vegetation and Wildlife, contains additional measures to help ensure protection of the riparian corridor. With implementation of the Specific Plan policies and the additional mitigation measures, the Specific Plan will be **consistent** with this action.

> **Action LA-79.** As part of the environmental review process for new developments, identify native plant communities or rare or endangered species habitat that would be significantly adversely impacted. Where appropriate, designate those areas as open space.

Consistency Analysis. A biological survey was conducted and the project site vegetation mapped, as presented in Section 2.3, Vegetation and Wildlife. Native plant communities were identified and significant adverse impacts discussed. Approximately nine acres of mixed coniferous forest and some of the annual grassland in Planning Area B will be preserved as open space by the Specific Plan. This forest habitat was found to support the greatest diversity of wildlife on the project site. In addition, mitigation measures are presented in Section 2.3 to reduce significant adverse impacts to a level of insignificance. Preserving the open space, as identified in the Specific Plan, along with implementation of the mitigation measures, will make the Specific Plan **consistent** with this action.

Circulation

> **Policy CP-109.** The integrated transportation system shall be designed, constructed, and maintained to minimize adverse impacts on the Planning Area, particularly on adjoining uses of land.

> **Action CA-111.** Through the environmental review process consider mitigations for traffic impacts which encourage the use of public transit, and non-motorized vehicles.

Consistency Analysis. ~~Mitigations~~ Transportation demand measures are provided in the air quality analysis that respond to this policy. The Specific Plan will be **consistent** with this policy upon implementation of the ~~mitigation~~ transportation demand measures.

> **Action CA-113.** Through the environmental review process, proposed developments shall determine the need, if any, for mitigations beyond those identified in the MSI study and the timing of construction for needed improvements.

Consistency Analysis. Through the transportation analysis prepared for the Specific Plan, no mitigations were determined to be required.

Action CA-140. Prior to development of any property in the Mt. Hermon Road Special Treatment Area, a circulation plan shall be developed to minimize access points on Mt. Hermon Road described in the land use element of the general plan.

Consistency Analysis. The Specific Plan includes a conceptual circulation plan which limits access to Mount Hermon Road. It includes one ingress and egress point, restricted to right-turn only movements. A final circulation plan will be required when actual development plans are proposed. Therefore, the Specific Plan is **consistent** with this policy and action.

Action CA-150. Require that all intersections maintain a Level of Service "C", or better, except as noted in this plan.

Consistency Analysis. The traffic analysis, presented in Section 2.5, Traffic and Circulation, concluded that buildout of the project site will not worsen the intersection level of service during the A.M. and P.M. peak hours. Although cumulative development projects will reduced the existing levels of service, build-out of the Specific Plan area, in and of itself, will not worsen the level of service. Future development will be required to pay the appropriate traffic impacts fees. Therefore, the Specific Plan is **consistent** with this action.

Policy CP-165. The city shall plan for sidewalk construction as part of new development and improvement projects in appropriate areas.

Action CA-166. As part of the capital improvement program and new public or private roadway improvement projects, identify the need for and require the installation of sidewalks.

Consistency Analysis. The Specific Plan includes policies to ensure the provision of facilities for safe and pleasant pedestrian travel. Therefore, it is **consistent** with this policy and action.

Policy CP-171. The city shall require the undergrounding of utilities along roadways.

Action CA-172 (abbreviated). Require developers to pay for undergrounding utilities adjacent to the project, or pay a fair share amount towards a future undergrounding project incorporating their project site.

Consistency Analysis. The Specific Plan includes a policy requiring all new utility lines at the project site to be placed underground. Therefore, the Specific Plan is **consistent** with this policy and action.

Policy CP-173. The city shall require appropriate landscaping and/or barrier screening in all new projects to screen off objectionable views along road, streets and highways.

Action CA-174. Require landscape plans for all new and major structural rehabilitation construction projects. Landscape plans shall be reviewed and approved by the Design Review Board.

Consistency Analysis. The Specific Plan includes building and landscape policies designed to develop and maintain high standards throughout all development, as well as general landscape standards for design and maintenance. Therefore, the Specific Plan is **consistent** with this policy and action.

Policy CP-183. The city shall employ a cooperative planning effort among public and private interests to implement appropriate land use controls and architectural techniques for improving and enhancing the scenic beauty and aesthetic qualities of Mt. Hermon Road.

Action CA-186. The city shall assist property owners on Mt. Hermon Road, where feasible, with procedures to expedite project approval processing, assistance in the planning and design of rehabilitation projects, obtaining rehabilitation grants, and similar innovative programs.

Action CA-187. The city shall establish and maintain standards and guidelines to be used by the Design Review Board and Planning Commission in evaluating both new construction and rehabilitation projects. The purpose of such standards shall be directed to achievement of desirable levels of aesthetic quality, rather than to dictate a given style of architecture.

Consistency Analysis. The Specific Plan addresses the concerns regarding the aesthetic quality of Mt. Hermon Road as it serves as a major city entrance. The Specific Plan includes building and landscape policies designed to develop and maintain high standards throughout all development, as well as general landscape standards for design and maintenance. Therefore, the Specific Plan is **consistent** with this policy and action.

Policy CP-193. The city shall require existing and new developments adjacent to Highway 17 to screen their parking, roof-top equipment, storage and loading areas to improve and enhance the views from the highway.

Action CA-194. Implement enhancement programs contained herein for existing properties and require new developments to berm and landscape parking, storage, and loading areas to screen these improvements from State Highway 17.

Consistency Analysis. The Specific Plan includes two policies designed protect the views from State Highway 17: (1) to maintain and enhance the visual quality of roadway corridors that are of scenic value to the community; and (2) require parking areas to be landscaped or otherwise visually screened in a man-

ner which contributes to the overall visual character of the area. Therefore, the Specific Plan is **consistent** with this policy and action.

> **Policy CP-201.** The city shall encourage new developments to provide for and promote transit use, where feasible.
>
> **Action CA-202.** New development should be required to provide fixed transit facilities such as bus shelters and pull-outs, consistent with anticipated demand. As a part of environmental and permit processing, submit development plans to the Santa Cruz Transit District for review and incorporate transit facilities, as appropriate, per district standards.

Consistency Analysis. The Specific Plan includes a policy requiring, as needed, provision of facilities for transit use such as bus shelters and pullouts. The policy also states that development plans shall be reviewed by the Santa Cruz Transit District. In addition, the transportation demand management measures required in Section 2.5, Air Quality, address the transit issue. Therefore, the Specific Plan is **consistent** with this policy and action.

> **Policy CP-212.** The city shall require new developments located along designated bicycle routes to provide an appropriate bicycle path, including rights-of-way and construction.
>
> **Action CA-213.** As a part of permit processing, require developments to provide right-of-way and install bicycle route improvements, per the Parks Master Plan adopted by the City Council on May 1, 1991.

Consistency Analysis. The Specific Plan includes a policy which requires bicycle paths be provided for transportation and recreational purposes, consistent with the city's comprehensive bicycle path system plan. Therefore, the Specific Plan is **consistent** with this policy and action.

Housing

> **Policy HP-262.** The city shall annually evaluate the adequacy of it's supply of land suitable for residential development and strive to maintain a supply of land sufficient to meet the city's fair share need as identified by the Association of Monterey Bay Area Governments and the City of Scotts Valley through 1996.
>
> **Action HA-263.** As outlined in the Housing Element, adequate sites exist in the city to meet the housing need through 1996. The city will strive to provide sufficient land in each land use category to allow the market to freely create all types of housing needed through 1996. Vacant sites or property suitable for residential development should be made available to enable the development of at least 416 very low-income housing units, 126 low-income units,

281 moderate-income units, and 564 above moderate-income units through 1996.

Consistency Analysis. The Specific Plan includes zoning the project site for the probable maximum development of 2 single-family homes and 157 multi-family homes. This will help the city to meet its housing demand through 1996. Future development within the Specific Plan area will be required to comply with the City Housing Action Program and provide deed-restricted, affordable housing. Therefore, the Specific Plan is **consistent** with this policy and action.

Policy HP-270. The city shall encourage the production of affordable rental and ownership housing for low and moderate-income households.

Consistency Analysis. The Specific Plan includes a policy to encourage a range of housing types which may include smaller, more affordable units. Future development within the Specific Plan area will be required to comply with the City Housing Action Program and provide deed-restricted, affordable housing. Therefore, the Specific Plan is **consistent** with this policy.

Policy HP-279. The city shall encourage and promote innovative housing development programs that will help to increase the number of affordable housing units.

Action HA-282 (abbreviated). To the degree consistent with general plan policies, the city will favorably consider applications for rezoning and requests for special consideration under the Planned Development ordinance for the development of high-density (15—30 units per net acre) residential development within the city. In addition, mixed-use projects combining commercial and residential uses will be encouraged.

Consistency Analysis. The Specific Plan includes zoning approximately ~~11~~ 12-acres as high-density residential. It also includes a policy to encourage a range of housing type which may include smaller, more affordable units, thereby providing the opportunity for development of high-density residential and affordable units within the city. The Specific Plan also includes commercial land uses to provide, in conjunction with the residential land uses, an overall mixed-use project. Therefore, the Specific Plan is **consistent** with this policy and action.

Open Space and Conservation

Policy OSP-318. New development proposed in, or adjacent to, areas containing native plant communities shall be carefully planned and provide for the conservation and maintenance of those plants.

Action OSA-320. The city shall utilize the environmental review process to identify and mitigate impacts of development on native plant communities and valuable habitat areas.

Action OSA-321. Through the permit process, the city shall require that proposed development located in or adjacent to native plant communities or valuable habitat areas be planned to maximize protection of the resource.

Action OSA-322. Development of vacant land located within valuable habitats shall be limited to low densities, cluster developments, and/or passive recreational uses.

Action OSA-323. Riparian corridors shall be retained and protected.

Policy OSA-325. Environmentally sensitive habitat areas and rare or endangered animal species shall be preserved.

Action OSA-326. As a part of the environmental review process, the city shall require new development proposed within areas of rare or endangered wildlife habitat to prepare a site-specific survey which identifies the location and type of species present. The development shall be required to mitigate any potential impacts to such species.

Consistency Analysis. A biological survey was conducted and the project site vegetation mapped, as presented in Section 2.4, Vegetation and Wildlife. Native plant communities were identified and significant adverse impacts discussed. Approximately nine acres of mixed coniferous forest and some of the annual grassland in Planning Area B will be preserved as open space by the Specific Plan. This forest habitat was found to support the greatest diversity of wildlife on the project site. The Specific Plan includes policies to ensure preservation of wildlife habitat. In addition, mitigation measures are presented in Section 2.4 to reduce significant adverse impacts to a level of insignificance. With implementation of Specific Plan policies and the mitigation measures presented in Section 2.4, the Specific Plan will be **consistent** with these policies and actions.

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.

Consistency Analysis. Nearly the entire project site (all but approximately one half of Parcel 8) is located in a high protection/recharge area as identified in Figure OS-5 of the general plan. The remaining portion of Parcel 8 is located in a high management/recharge area. The Specific Plan includes a policy to protect natural drainage and water recharge. The policy requires on-site storm drainage retention areas, or other water recharge improvements to be integrated into the site designs for individual development proposals to mitigate loss of recharge where feasible. Therefore, the Specific Plan is **consistent** with these actions.

> **Policy OSP-351.** The city shall protect the planning area streams, creeks, ponds, and aquifers from pollution due to toxic substances, and erosive forces.
>
> **Action OSA-353.** The city shall continue to require siltation ponds and erosion control measures which mitigate adverse impacts to surface water bodies and groundwater basins during and after construction.

Consistency Analysis. Future development at the project site may result in adverse impacts resulting from polluted surface water runoff affecting both creeks and groundwater. The Specific Plan includes a policy to minimize the use of impervious groundcover materials. In addition, mitigation measures are presented in Section 2.2, Hydrology, to reduce impacts to a level of insignificance. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this policy and action.

> **Policy OSP-355.** The city shall consider recommendations from the Monterey Bay Unified Air Pollution Control District (MBUAPCD) to maintain and improve regional air quality.

Consistency Analysis. Through implementation of mitigations in this EIR, the city will be implementing the MBUAPCD's TDM measures. Therefore, the Specific Plan is **consistent** with this policy.

> **Policy OSP-381.** Encourage infilling on vacant land within existing developed areas; infilling development shall be compatible with surrounding existing development. Where infilling is not feasible, new development should occur adjacent to existing urban areas where services are available or can be easily extended.

Consistency Analysis. As discussed in Section 1.2, Project Location, the project site is surrounded by residential (existing homes and/or approved projects) and commercial development. Therefore, the Specific Plan qualifies as an infill development. Section 2.7, Land Use Compatibility, includes a discussing regarding the compatibility of proposed land uses with existing adjacent land uses. Potential incompatibilities exist between proposed commercial uses and existing and proposed residential uses. With implementation of Specific Plan policies and mitigation measures identified in Section 2.7, Land Use Compatibility, the Specific Plan will be **consistent** with this policy.

Policy OSP-398. The archaeological sensitivity zones map shall be used, along with other appropriate data, to evaluate whether archaeological resources are threatened by proposed development projects.

Action OSA-399. All proposed development within high and moderate sensitivity zones shall be required to produce an archaeological field reconnaissance and report for approval by the Cultural Resource Preservation Commission.

Consistency Analysis. As illustrated in general plan figure OS-2, Planning Area B and a portion of Planning Area A are located within a high and moderate archaeological sensitivity zone. The balance of Planning Area A is located within a low archaeological sensitivity zone. A preliminary archaeological reconnaissance was prepared in conjunction with preparation of this EIR. As discussed in Section 2.8, Cultural Resources, the reconnaissance concluded that the project site does not contain surface evidence of potentially significant cultural resources. However, due to the possibility of uncovering significant resources during construction activities, a mitigation measure requiring standard language protecting these potential resources shall be included in grading and construction permits. With implementation of this mitigation measure, the Specific Plan will be **consistent** with this policy and action.

Policy OSP-415. Because of their open space and aesthetic value, creeks shall be preserved as nearly as possible in their natural state, and consistent with protection of adjacent properties.

Action OSA-417. The city will continue to require a minimum 25 foot setback from the top of the bank for all projects constructed along a creek.

Consistency Analysis. The Specific Plan includes the following policies regarding the creek area: to conserve the area's native vegetation and plant communities where possible; to maintain and enhance the habitat value of riparian corridors; and to minimize the loss of riparian habitat. The Specific Plan also includes a policy requiring a 5-foot setback along the creek. The city did determine however, during preparation of the Draft EIR, that this policy would be removed from the Specific Plan because of its inconsistency with the General Plan. The policy was inadvertently left in the Specific Plan which was circulated for public review. A mitigation measure has been added to Section 2.4.3, Vegetation and Wildlife, in the Final EIR requiring removal of the 5-foot setback policy. Section 2.4.3, Vegetation and Wildlife, includes a discussion regarding the potential impacts to the creeks and riparian vegetation and mitigation measures to reduce the potential impacts to a level of insignificance. With implementation of the Specific Plan policies and the mitigation measures, the Specific Plan will be **consistent** with this policy and action.

Noise

Policy NP-445. New developments shall include measures to minimize increases in local ambient noise levels.

Action NA-448. Through the environmental review process, identify and require noise level mitigation of potentially significant noise impacts. Deny new developments which cannot mitigate significant adverse noise level impacts on neighboring land uses.

Consistency Analysis. The general plan identifies vehicular traffic along State Highway 17, Mt. Hermon Road, and Scotts Valley Drive as the single most significant source of noise in the city. Section 2.7.2, Noise, includes both a discussion of potential noise impacts related to buildout of the project site and mitigation measures to reduce the impacts to a level of insignificance. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this policy and action.

Action NA-450. The city may require an acoustical engineering analysis to show that the new commercial or industrial planned use will not increase the local ambient noise levels by more than the values set forth in the noise element of the general plan.

Consistency Analysis. Section 2.7.2, Noise, includes both a discussion of potential noise impacts related to future commercial development at the project site and mitigation measures to reduce the impacts to a level of insignificance. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this action.

Policy NP-451. New developments shall include noise attenuation measures to reduce the effects of existing noise to an acceptable level.

Action NA-452. In areas where the annual day-night noise level exceeds 60 dBA, the city shall require an acoustical engineering study for proposed new construction or renovation of structure(s). Each acoustical analysis should recommend methods to reduce the interior day-night annual average nose levels to below 45 dBA for private dwellings, motels, hotels, offices and noise sensitive uses.

Consistency Analysis. Portions of the project site are located in areas where the annual day-night noise level exceeds 60 dBA. Section 2.7.2, Noise, includes both a discussion of potential noise impacts related to future commercial development at the project site and mitigation measures to reduce the impacts to a level of insignificance. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this action.

Action NA-454. Exterior noise levels measured at the property line of proposed new residential developments shall be limited at or below an average annual day-night level of 60 dBA.

Consistency Analysis. According to the planning department, this policy was not intended to exclude residential development in areas identified at or below an average annual day-night level of 60 dBA, as evidenced by NA-457 "new residential development should not be allowed in regions where the annual day-night noise level exceeds 75 dBA". The noise element, prepared for the general plan, by James A. Mills, Acoustical Consultant in March and April of 1993, identified areas of concern where average annual day-night levels could present a challenge to development. That survey was not prepared on a project-specific level and therefore, did not include specific mitigation measures. The mitigation measure required in the assessment district EIR, and referenced in this EIR (Specific Plan), requires a noise survey be performed to determine necessary building setbacks *and* noise reduction measures. Common noise reductions measures include, but are not limited to, sound walls, earth berms and vegetation for exterior noise levels, and specific construction techniques for interior noise levels. Therefore, the potential noise impacts identified in the Draft EIR, should be mitigated through further noise studies when specific development projects are proposed. The noise study prepared for the general plan, along with the general plan policies and actions, should be utilized by developers when siting future development on the project site. Then, when the developers make an application to the city, the planning department will require a noise survey be performed to analyze siting of the proposed development. With implementation of this mitigation measure, the Specific Plan will be **consistent** with this action.

Safety

Policy SP-484. Development of new or expansion of existing flood control facilities to protect individual properties shall be permitted only when it can be determined that such measures do not substantially increase the flood or erosion hazards to other properties.

Action SA-485. The city shall require a geotechnical or hydrological analysis to assess potential impacts of new development on adjacent and downstream properties and on the designated floodplain to determine needed flood control measures.

Consistency Analysis. A hydrology report was prepared in conjunction with this EIR and is presented in Section 2.1, Hydrology. Future development at the project site will increase impermeable surfaces resulting in additional surface water runoff. Mitigation measures are presented to maintain surface water runoff at its pre-development rate. With implementation of these mitigation measures, the Specific Plan will be **consistent** with this policy and action.

Policy SP-489. In a geologic hazard area, development shall be approved only after a detailed geotechnical evaluation is completed by a registered geologist, and only if adequate measures are provided to avoid or substantially reduce any identified hazard.

Action SA-490. Where new development proposed for areas of known or suspected geologic hazards, as identified in Figures S-3 or S-4 or where other information obtained by the city indicates geologic hazards exist in an area proposed for development, a detailed geotechnical and/or geologic report shall be prepared and submitted

to the city as a part of the application or environmental review process.

Consistency Analysis. The eastern portion of Planning Area A, along the Camp Evers Creek, is located in an area of moderate potential for liquefaction, as illustrated in Figure S-3 of the general plan. Implementation of Mitigation Measure 4 in the *Gateway South Assessment District Final EIR* (see Appendix B) requires a site specific geotechnical analysis for future development at the project site. The analysis will require future development to adhere to a specific action plan that implements common and effective construction techniques that address specific geotechnical issues. With implementation of this mitigation measure, and the subsequent recommendations of site specific geotechnical and/or geologic reports, the Specific Plan will be **consistent** with this policy and action.

Public Services and Facilities

Policy PSP-541. 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.

Action PSA-542. The city should assess the impact of proposed residential development on public school facilities and resources. Impact assessment shall include, but not be limited to, data submitted by the Scotts Valley Union School District addressing student enrollment projections and the capacity of existing public school facilities.

Consistency Analysis. Implementation of the Specific Plan will result in an increase in student enrollment at the school district. Section 2.6.3, Schools, includes a discussion of this increase and presents a mitigation measure consistent with Policy PSP-541. With implementation of this mitigation measure, the Specific Plan will be **consistent** with this policy and action.

Action PRA-608. Condition development to provide for the orderly completion of the City's comprehensive park system, including bicycle paths and hiking and equestrian trails.

Consistency Analysis. The city trail map identifies a multi-use trail along the northern boundary of parcels 9 and 10. The Specific Plan does not address this trail. The city should determine the most appropriate location for this trail along the northern boundary of parcels 9 and 10 and provide for its implementation in the Specific Plan. With implementation of this recommendation, the Specific Plan will be **consistent** with this action.

1.5.2 Title 17 Zoning Ordinance

The city's zoning ordinance is the precise, detailed plan for land use in the city based upon the goals and policies in the general plan. Its purpose is to encourage the most appropriate use of land and the harmonious relationship among land uses; to promote a safe and efficient traffic circulation system; to provide adequate open space; to prevent overcrowding of land; to facilitate the approval of and encourage the adequate provision of needed community facilities; to conserve and stabilize the value of property; and to conserve the city's natural beauty.

Existing zoning designations for the project site are as follows:

- ~~34.39~~ 35.44 acres R-1-20 (Low Density, Single-Family Residential)
- ~~7.76~~ 8.13 acres C-S (Service Commercial)

~~42.15~~ 43.57 Total Acres

A Special Treatment (ST) combining district also applies to the project site. Special development standards apply to this combining district. They are summarized as follows:

- A specific plan shall accompany development proposals which shall include existing and proposed land uses;
- General design criteria shall apply to all development;
- Architectural standards shall apply to all buildings;
- Special site planning standards shall apply to all parcels; and
- Landscape standards shall apply to all parcels.

The Specific Plan includes all of the components as required by the ST combining district including existing and proposed land uses, general design criteria, architectural standards, site planning standards, and landscape standards. Proposed zoning is as follows:

- ~~0.51~~ 0.58 acres R-1-10 (Residential Low Density)
- ~~4.67~~ 4.81 acres R-M-6 (Residential Medium Density)
- ~~11.08~~ 12.07 acres R-H (Residential High Density)
- ~~17.02~~ 14.91 acres C-S (Commercial Service)
- ~~8.87~~ 11.20 acres O-S (Open Space)

~~42.15~~ 43.57 Total Acres

Proposed zoning is not consistent with existing zoning. However, the Specific Plan is consistent with the ST combining designation and, with adoption of the Specific Plan, the Specific Plan will be consistent with the zoning ordinance. As discussed in the Specific Plan itself, whenever the provisions of a Specific Plan conflict with the provisions of the zoning ordinance or whenever the provisions of the zoning ordinance reflect an internal conflict, the Specific Plan shall govern.

1.5.3 Redevelopment Plan

The city's redevelopment plan, adopted in October, 1990, includes 15 improvement projects within the city. The following is a discussion of the Specific Plan's consistency with applicable Redevelopment Plan improvement projects.

- **Project 3. Mt. Hermon Road Interchange Widening and Mt. Hermon Road Reconstruction.** During peak hours, Mt. Hermon Road experiences substantial congestion originating from the east and westbound traffic existing from State Highway 17. These problems, which can only be mitigated by widening the Mt. Hermon Road Interchange and reconstructing portions of Mt. Hermon Road, impact the intersections all along Mt. Hermon Road (October 1990.)

  The infrastructure improvements, associated with the Gateway South Assessment District and completed in November 1994, included ~~both widening the Mt. Hermon Road/State Highway 17 interchange and improvements along Planning Area A Mt. Hermon Road frontage~~ widening portions of Mt. Hermon Road and moved the Highway 17 on-ramps to improve access to the area. The more extensive widening is still an active project of the RDA. ~~Because the improvements in Project 3 have been completed in the vicinity of the project site, this project is not applicable to the Specific Plan.~~

None of the other improvement projects are applicable to the Specific Plan.

1.6 EIR Uses

This section contains two lists which are mandated by section 15124 of the CEQA guidelines. The first list identifies the agencies that are expected to use the report in their decision making and the second list identifies the approvals for which the report will be used. These lists are based on information available city.

1.6.1 List of Agencies

City of Scotts Valley

City Council
Planning Commission
Planning Department
Public Works Department
Fire Department
Police Department

Regional Agencies

Association of Monterey Bay Area Governments
Monterey Bay Area Unified Air Pollution Control District
Regional Water Quality Control Board

State Agencies

State Office of Planning and Research
California Department of Fish and Game
California Department of Transportation

1.6.2 List of Approvals

Certification of the Environmental Impact Report
Adoption of the Specific Plan
General Plan Amendment
Zone Change
Future Specific Development Projects
Mitigation Monitoring Program

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2.0 Environmental Setting, Impacts, and Mitigation Measures

This section includes an evaluation of the concerns of the city (lead agency) and other responsible agencies. The format for the evaluation of each concern includes a discussion of the existing setting, an analysis of how the Specific Plan or buildout of the project site will change the setting, identification of significant impacts as defined by CEQA, and presentation of mitigation measures, if required.

If a significant impact was identified, the following methodology was used to reduce the impact to a level of insignificance:

1. Identify significant impact;

2. Determine if a Specific Plan policy adequately addresses the impact. If a Specific Plan policy will reduce the identified impact to a level of insignificance, a conclusion is made that, with implementation of the Specific Plan policy, the identified impacts will be reduced to a level of insignificance. If the Specific Plan does not contain a policy that reduces the identified impact to a level of insignificance then;

3. Determine if a mitigation measure in the *Gateway South Assessment District EIR*(EMC Planning Group Inc. 1989) is applicable to the Specific Plan that will reduce the impact to a level of insignificance. If the assessment district EIR includes such a mitigation measure, the reader is referred to Appendix B which includes a list of applicable mitigation measures. A conclusion is then made that, with implementation of these mitigation measures, the identified impacts will be reduced to a level of insignificance. If the assessment district EIR does not contain a mitigation measure applicable to the Specific Plan that reduces the identified impact to a level of insignificance then;

4. Present a new mitigation measure to reduce the identified impact to a level of insignificance.

A mitigation monitoring program, as required by the California Public Resources Code Section 21081.6, will be prepared to include both the applicable assessment district EIR mitigation measures and the new mitigation measures as presented in this report.

2.1 Geology and Soils

Setting

Geology

A portion of the setting is based on a geotechnical investigation prepared for the parcel west of, and adjacent to, the project site (Cooper Engineers, Inc. 1987).

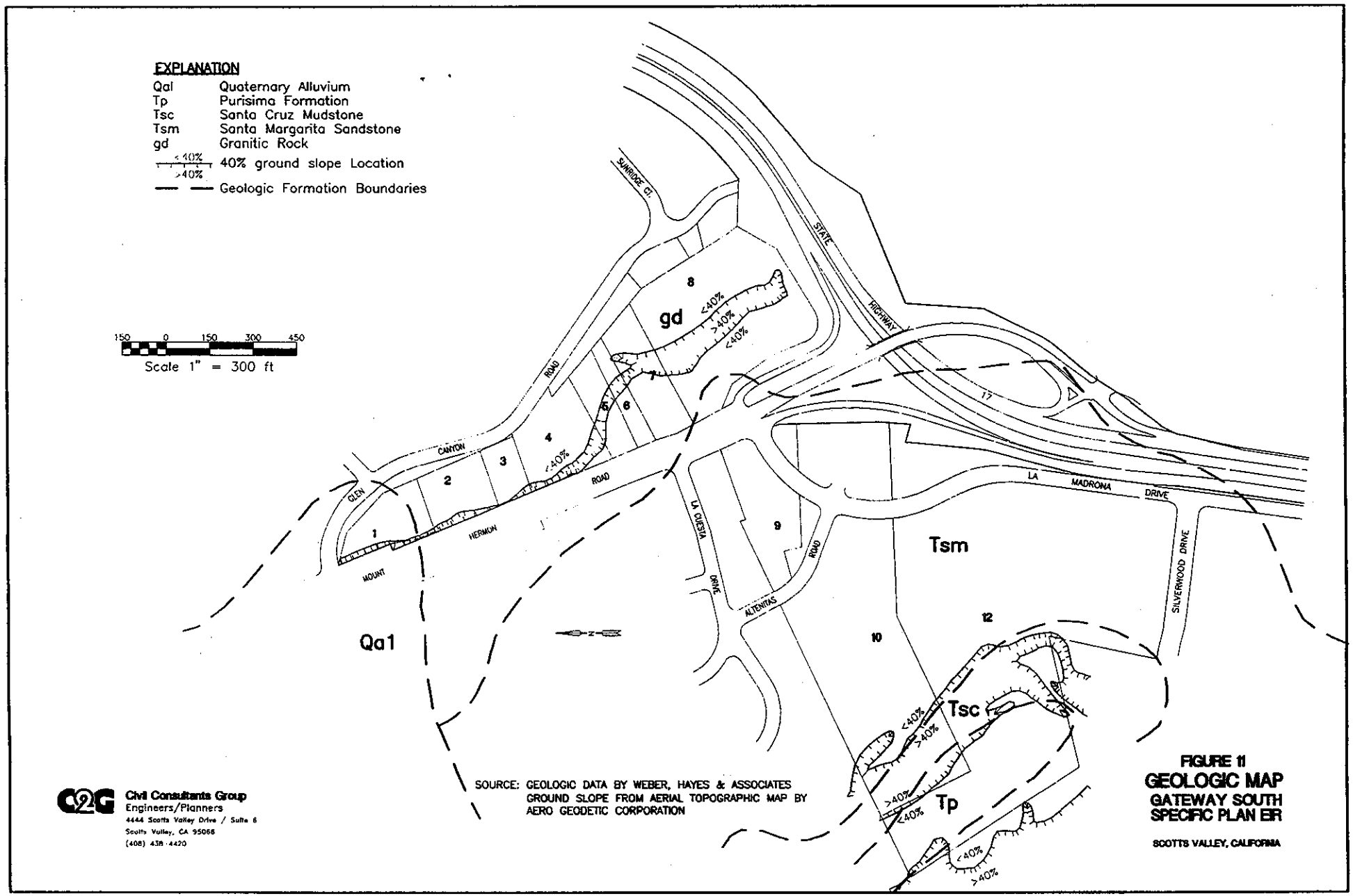
The project site is located on the southern flanks of the Santa Cruz Mountains at elevations between 470 and 790 feet above sea level. The topography in Planning Area A varies from flat to steeply sloping with slopes in excess of 40 percent. The topography in Planning Area B gently to moderately slopes from the west, down toward La Madrona Drive.

Development at the project site may be subject to ground shaking during an earthquake. Ground shaking can induce liquefaction of soils, landsliding, lurching, lateral spreading, and settlement if soils are subject to such phenomena.

There are no mapped faults in the vicinity of the project site and a 1987 geologic reconnaissance found no evidence of faulting. Therefore, the potential hazard from fault offset on the project site is considered to be non-existent; however, the project site is subject to strong ground shaking from earthquakes on regional faults (Cooper Engineers, Inc. 1987). The largest potential for ground shaking is posed by the San Andreas Fault located about eight miles northeast of the project site.

As illustrated in Figure 11, the basement rock in this area of the Santa Cruz Mountains is the Santa Margarita Sandstone (Planning Area B) and granitic rocks of probable Cretaceous age (Planning Area A), with shallow Quaternary Alluvium underlying a portion of Parcel-1. At the project site, this unit is composed of a moderately consolidated, light colored, fine-grained sandstone. Published geologic maps indicate the Santa Cruz Mudstone and the Purisima Formation successively lie on top of the Santa Margarita Sandstone, forming the hills on the valley sides. The three formations are believed to be sequential formations of late Miocene to early Plicoene age.

According to the general plan, a portion of Planning Area A is located in an area with a moderate potential for liquefaction. Soils most susceptible to liquefaction are loose, clean sands that are below the water table or otherwise saturated. At the project site, the sandy soils are generally either very dense or contain significant amounts of fines which tend to inhibit liquefaction from occurring. Should liquefaction develop within isolated sand and silty land layers, resulting ground surface failures are anticipated to be minor (Cooper Engineers, Inc. 1987).



SOURCE: GEOLOGIC DATA BY WEBER, HAYES & ASSOCIATES
GROUND SLOPE FROM AERIAL TOPOGRAPHIC MAP BY AERO GEODETIC CORPORATION

C2G Civil Consultants Group
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
(408) 438-4420

FIGURE 11
GEOLOGIC MAP
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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Exploratory borings performed in 1987 adjacent to the project site (Cooper Engineers, Inc. 1987) indicate that the area is underlain by dense sands of the Santa Margarita Sandstone Formation at depth, with relatively loose silty, sandy, and occasionally clayey soils near the ground surface. The loose surface soils likely contain saturated zones of seepage that were generally about two to four feet below the ground surface. Seepage zones are believed to be caused by infiltrated rain water that becomes perched on underlying relatively impervious soils and flow through the pervious and loose surface soils. Seepage and groundwater conditions are expected to change significantly from season to season, and from year to year.

Soils

The project site is overlain by the Watsonville-Elkhorn-Pinto and the Zayante soils associations (U.S. Department of Agriculture, Soil Conservation Service 1976). The Watsonville-Elkhorn-Pinto soils association at the project site includes the following soil types:

- Pfeiffer gravelly sandy loam, 15 to 30 percent slopes;
- Pfeiffer gravelly sandy loam, 30 to 50 percent slopes; and
- Elkhorn sandy loam, 15 to 30 percent slopes.

The Zayante soils association at the project site includes the following soil type:

- Ben Lomand-Felton complex, 50 to 75 percent slopes.

Figure 12 illustrates the soil type locations and Table 4 presents the soil characteristics.

TABLE 4

Project Site Soils

Soil Type	Runoff Rate	Erosion Potential	Shrink-Swell Potential
Pfeiffer, 15 to 30%	Rapid	High	Low
Pfeiffer, 30 to 50%	Rapid	High	Low
Elkhorn	Rapid	High	Low—Moderate
Ben Lomand	Rapid	High	Low—Moderate

Source: U.S. Department of Agriculture Soil Conservation Service

Slopes

The project site contain approximately 5.65 acres of slopes in excess of 40 percent. The location of these slopes is presented in Figure 11. The area in excess of 40 percent by parcel is as follows:

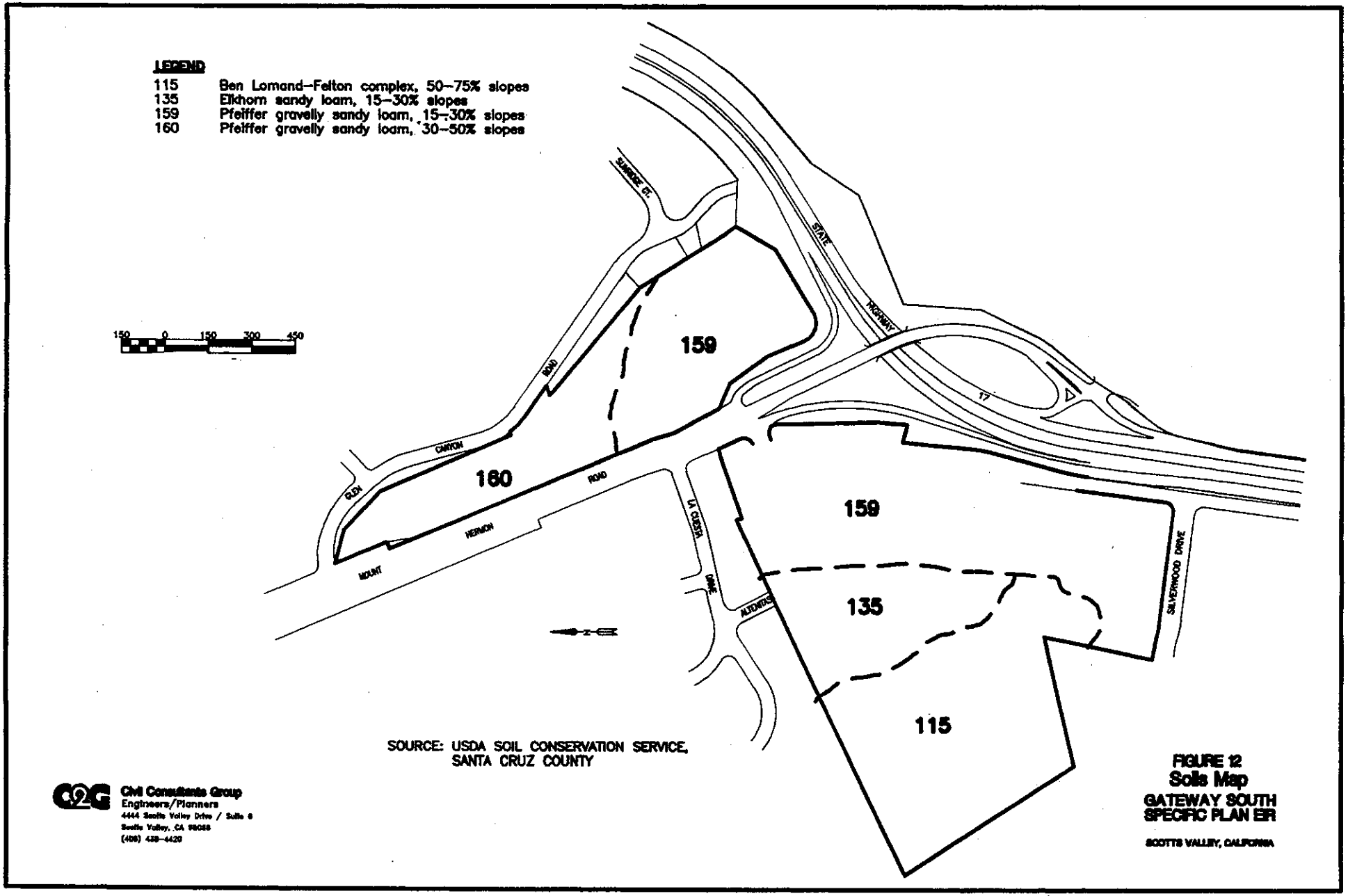
Parcel Number	>40% Slope Area Square Feet (Acres)
1	6,222
2	4,960
3	1,624
4	10,963
5	5,601
6	2,862
7	11,219
8	44,583
Subtotal Planning Area A	**88,034 (2.02)**
9	0
10	69,481
12	88,397
Subtotal Planning Area B	**157,878 (3.62)**
Total	**245,912 (5.65)**

Project Analysis

Development at the project site is most likely feasible from a geologic and geotechnical viewpoint, provided preventive measures are taken to lessen major hazards. The potential conditions at the project site that will have the largest impact on the development are the loose surface soils which contain numerous saturated zones of active water seepage.

Saturated zones represent weak and compressible zones that could lead to slumping and sliding particularly during seismic activity, and large uneven settlements for structures placed directly above them. The potential for these hazards could be lessened considerably by a combination of subsurface drainage from developed areas and re-working the loose soils.

In accordance with general plan Action SA-487, Policy SP-489, and Action SA-490, future development will be required to submit a detailed geotechnical and/or geologic report to the city as a part of the application or environmental review process. In addition, general plan action OSA-353 requires erosion control measures for new development.



SOURCE: USDA SOIL CONSERVATION SERVICE, SANTA CRUZ COUNTY

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Scotts Valley, CA 95066
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FIGURE 12
Soils Map
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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The Specific Plan includes the following policies associated with geologic concerns:

- Policy 2.3: Limit development on steeply sloped lands. a) Areas where natural topography is sloped at 40 percent or more should be designated as open space or dedicated as scenic easements.

Impacts and Mitigation Measures

Significance Criteria. According to CEQA Appendix G, projects will normally have a significant impact on the environment if it will cause substantial erosion or siltation, or expose people or structures to major geologic hazards.

Impact. Future development may be subject to ground shaking from earthquakes on regional faults that could result in structural damage. However, all structures will be designed to conform to existing uniform building codes. Therefore, this impact is considered insignificant and no mitigation measures are required.

Impact. Future development at the project site could be subject to liquefaction of soils, landsliding, lurching, lateral spreading, and settlement of soils resulting in structural damage, possibly resulting in injury to people. This is considered a significant impact. The Specific Plan does not include a policy to address this impact.

Mitigation. Mitigation Measure 4 in the *Gateway South Assessment District Final EIR* (see Appendix B of this report) requires a site specific geotechnical analysis for future development. The analysis will require future development to adhere to a specific action plan that implements common and effective construction techniques that address specific geotechnical issues. With implementation of this mitigation measure, as well as Specific Plan policies as discussed in project analysis, 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.

Impact. Project site soils have a rapid run-off rate and a high potential for erosion. This is considered a significant impact. The Specific Plan does not include policy to address this impact. However, with implementation of the following mitigation measure, this impact will be reduced to a level of insignificance.

New Mitigation Measure

1. Project proponents for future development shall prepare an erosion control plan to reduce the effects of soil erosion during initial construction activity. <u>The erosion control plan should specifically addressed proposed grading plans and include effective stabilizing methods for cut and fill slopes.</u> The plan shall include a re-vegetation plan for expanses of exposed soil after construction activities are complete. Best Management Practices shall be utilized. This plan shall be subject to review and approval by the

city Public Works Director prior to issuance of a grading permit. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

Impact. Future development located on slopes in excess of 40 percent would be considered to result in a potential significant adverse environmental impact. Along with the Specific Plan policy limiting development on steep slopes, the following mitigation measure shall be added to the Specific Plan. It should be noted that the Specific Plan was to include the following limitation, but the limitation was inadvertently left out.

New Mitigation Measure

1.1. The Specific Plan shall be limited to development as presented in Table 3, Maximum Probable Development Scenario. This development scenario was to be included as a limitation in the Specific Plan, but was inadvertently left out during its preparation. This limitation shall be added to the Specific Plan, prior to adoption of the Specific Plan.

2.2 Hydrology

This section was prepared based on information contained in the *Groundwater and Hydrologic Evaluation for the Gateway South Specific Plan EIR* (Weber Hayes & Associates 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.

2.2.1 Surface Water

Setting

The project is located within the Carbonera Creek drainage basin, a 7.4 square mile area drained by the perennial, south flowing Carbonera Creek. This area is subject to an annual rainfall varying between 30 and 42 inches per year, increasing towards northern (upstream) end of the basin. The vicinity of the project site is subject to an average rainfall of 33 to 34 inches of rain per year (Muir 1981).

The project site is underlain principally by sedimentary rocks of the Tertiary age Santa Margarita Sandstone (Planning Area B) and granitic rocks of probable Cretaceous age (Planning Area A), with shallow Quaternary Alluvium underlying a portion of Parcel 1. The Santa Margarita Sandstone and Quaternary alluvium are relatively pervious and are subject to significant infiltration of precipitation. The granitic rocks are less pervious.

Planning Area A is bounded to the northeast by the Camp Evers tributary to Carbonera Creek and drains towards the Camp Evers drainage, principally by

overland flow. Runoff from Planning Area B is collected by swales draining eastward, directly into Carbonera Creek.

Project Analysis

Potential hydrologic impacts analyzed include the following:

1. Increase in erosion potential due to increased velocity of runoff from impermeable surfaces;
2. Elevation of flooding potential in receiving waters due to increased volume of runoff from impermeable surfaces;
3. A reduction in surface water quality due to contaminants carried in surface water runoff;
4. Increased sediment load in runoff due to grading/site development; and
5. Disruption of natural drainages due to diversion of surface waters.

This analysis compares existing zoning water use with proposed zoning water use. The maximum probable development scenario, prepared by the city for the Specific Plan, is presented in Table 3, Section 1.

Since there are no specific development plans available at this time, impacts are evaluated based on assumption of average or reasonable values for future development, as follows:

Impermeable Area Associated with Proposed Residential Use

Detached single-family residence

roof area	2500 sq. ft.
driveway area (16 ft x 100 ft)	1600 sq. ft.
appurtenances (sidewalks, etc.)	400 sq. ft.
Total Impermeable Area	4500 sq. ft.

Multi-Family (Condominium / Townhouse)

roof area	1400 sq. ft.
driveway area (16 ft x 30 ft)	480 sq. ft.
appurtenances	120 sq. ft.
Total Impermeable Area	2000 sq. ft.

Impermeable Area Associated with Proposed Commercial Use

Building area = floor area + 20% for eaves and appurtenances

Parking area = one 8x25ft parking space and associated roadway per 250 sq.ft. of floor area

Impermeable surface = floor area + (floor area x 0.20) + (floor area/250sq.ft.) x 200 sq.ft. = FLOOR AREA x 2

The change in impermeable areas is presented in Table 5.

TABLE 5

Change in Impermeable Areas

Zoning Class	Existing Development Option	Equivalent Impermeable Surface (square feet)	Specific Plan Option (Maximum Probable Development)	Equivalent Impermeable Surface (Square feet)	Net Change
R-1-20	72 SFR	324,000	0	0	-324,000
R-1-10	0	0	2 SFR	9,000	9,000
RM-6	0	0	35 MF	70,000	70,000
RH	0	0	122 MF	244,000	244,000
C-S	154,310C	308,620	163,230 C	326,460	17,840
OS	0	0	11 OS	0	0
Total Surface		**632,620**	**~~651,261~~**	**~~893,460~~ 649,460**	**16,840**

SFR = Single-Family Residence
MF = Multi-Family Residence
OS = Open Space expressed in acres
C = Commercial

Source: Weber, Hayes & Associates

Based on the calculations summarized in Table 5, future development under Specific Plan zoning will result in an increase in impermeable surface from 632,620 square feet to ~~643,000~~ 649,460 square feet (approximately three percent) in comparison to maximum permitted development under the existing zoning designation. Assuming a runoff coefficient of 0.2 for undeveloped terrain, 0.9 for the impermeable surface area, and an average annual rainfall of 34 inches, this increase in impermeable area will result in additional runoff of about 0.77 acre feet annually into Camp Evers and Carbonera Creeks.

The proposed storm drain system, as illustrated in Figure 10, conveys runoff into natural drainages adjacent to the project site. Runoff from parking lots and streets will contribute some amount of oil and grease residue from vehicular traf-

fic to surface waters and could impact the quality of surface waters. An engineered drainage system should not substantially alter the surface water drainage system. Given the scale of anticipated development associated with the Specific Plan, any problem associated with diversion of the natural drainage system is highly unlikely.

The Specific Plan includes the following policy addressing surface water run off:

- Policy 5.5: Storm drainage systems shall be designed to maximize groundwater recharge where feasible. a) On-site storm water detention ponds and/or other recharge methods shall be provided to mitigate loss of recharge areas. Storm water retention and groundwater recharge through percolation ponds may be recommended pursuant to further investigations by a hydrogeologist. b) Storm drains shall be constructed to transmit stormwater to detention/retention basins and to final discharge points.

- Policy 5.6: All storm drainage facilities shall conform to the City of Scotts Valley Standard Details.

The U.S. Environmental Protection Agency requires NPDES (National Pollutant Discharge Elimination System) permitting of stormwater discharge from large construction sites. This is intended to help control erosion related non-point source pollution, which is recognized as a significant source of water pollution. These regulations are implemented in California by the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB). Any construction project affecting five acres or more is required to comply with the SWRCB General Permit conditions for stormwater runoff from construction activities. These permit conditions include taking measures, or best management practices (BMPs), to reduce or eliminate erosion and downstream sedimentation from construction site.

Impacts and Mitigation Measures

Significance Criteria. According to CEQA Appendix G, a project may be considered to have a significant impact if the project would substantially degrade water quality, or cause substantial flooding, erosion, or siltation.

Impact. The proposed zoning change will result in only a slight increase in impermeable surfaces (16,840) over that associated with existing zoning. Specific development plans may alter actual calculated volumes, although it is unlikely that such variations will significantly alter these conclusions. However, development of the project site will result in a significant increase in impermeable surfaces over existing conditions on the project site. The increase in impermeable surfaces may result in increase erosion potential, elevation of flood potential, and a reduction in surface water quality. These are considered significant adverse environmental impacts that can be mitigated with standard engineering design.

Impact. The proposed uses for the subject properties differ only in location and density from existing uses. All development will be sewered and therefore will not contribute septic waste to the hydrologic regime. Residential and service commercial use traditionally have low impact on water quality. The primary impact from proposed development will be due to oil and grease from vehicular traffic carried in street and parking lot runoff. This particular runoff may not be of sufficient quality to be used for recharge projects. Increases in this type of contaminant will be proportional to the increase in traffic and site use. This is considered a significant adverse impact on water quality.

Mitigation. Mitigation Measure 15 and 16 in the *Gateway South Assessment District Final EIR* (see Appendix B of this report) address this impact. ~~This~~ Mitigation measure 15 has been rewritten as presented below. With implementation of the following mitigation measure, this impact will be reduced to a level of insignificance.

New Mitigation Measure

2. Project Proponents for individual development projects shall prepare a plan for an engineered drainage system requiring the use of best management practices (BMPs). The plan shall include, but not be limited to the following:

   - Equip storm drains with sediment and grease traps and maintain them in good operating condition;
   - Use of porous paving materials;
   - Use of cisterns for storm water storage (perhaps for later use in irrigation);
   - Minimization of directly connected impervious surfaces (e.g. roof gutter downspouts should drain onto permeable bare ground instead of impervious driveways or walkways);
   - Roofing parking areas to catch storm water;
   - Directing roof and sidewalk runoff to detention basins;
   - Vacuum street sweeping to remove potential contaminants from the roadways that would otherwise be collected by runoff;
   - Use native vegetation for landscaping to reduce the amount of pesticide and fertilizer that might otherwise be required to maintain the landscaping;
   - Use approved erosion control measures and landscaping to reduce sediment load in the runoff; and

- Detention and metering of runoff to pre-development flow, as appropriate.

The plan shall be subject to review and approval by the Public Works Director, prior to issuance of a grading permit. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

2.2.2 Groundwater

Setting

Groundwater Resources

The water supply for the project site and vicinity is drawn entirely from the Scotts Valley groundwater basin and is produced from two principal groundwater aquifers. These aquifers consist of the Santa Margarita Sandstone, an unconfined aquifer underlying the Scotts Valley area, and the Lompico Sandstone, a semi–confined aquifer separated from the overlying Santa Margarita Sandstone by shales of the Monterey Formation. Both of these aquifers are gently folded about the axis of the northwest trending Scotts Valley Syncline and generally thicken towards the axis of the syncline, north of the project site. The Santa Margarita aquifer varies from zero to about 350 feet in thickness and is recharged directly by precipitation and by infiltration along streams. The Lompico Sandstone ranges up to 800 feet or more in thickness and is recharged by precipitation in its limited outcrops in the northern portion of the groundwater basin and by flow from the overlying units.

Estimated perennial yield from the Scotts Valley groundwater basin is 4200 acre feet per year (Todd Engineers 1987; 1994b). Estimated total pumpage from the basin as of 1994 was approximately 3,460 acre feet per year. This figure is approximate since not all wells are metered.

Of the total volume pumped, a percentage is returned to the aquifer due to infiltration of irrigation water, domestic flow to septic systems, etc. Subtracting the estimated amount of return flow to the aquifer, Todd Engineers (1994b) has estimated a total consumptive use of groundwater from the basin to be on the order of 2,000 to 2,800 acre feet per year. This figure is 50 to 65 percent of their estimated perennial yield.

This portion of California suffered drought conditions for the years from 1987 to 1992. During that time, a significant decline in groundwater levels was observed at primary production well sites. This drop in groundwater levels corresponded to a decline in groundwater storage of 500 to 600 acre feet per year. It led to some shallow wells drying up, a significant loss of well efficiency due to a corresponding shift of water production to deeper and less permeable aquifers, and substantially reduced flows to surface streams. Water levels in the Santa Mar-

garita had been relatively stable under more average rainfall conditions at pre–1987 pumping rates.

Watkins–Johnson Environmental (1993) prepared a basin management plan for the Scotts Valley groundwater basin that included a mathematical model of the aquifer. They used the model to simulate various development/rainfall situations to assess potential impacts on groundwater resources. Their simulations suggest that water production at 1992 levels in combination with normal rainfall is sustainable. Their only long term simulation included projected Scotts Valley population growth through the year 2015 and continued aquifer stress, with rainfall at 80 percent of normal. This simulation showed severe stress on the aquifer water levels and a significant decrease in surface water flows.

As part of its groundwater management efforts, the Scotts Valley Water District had its consultants prepare a study that includes an evaluation of projects designed to recharge groundwater in the basin (Todd Engineers 1994b). These projects include reclamation of wastewater that would normally be exported from the basin, development of artificial recharge ponds or recharge wells, and check dams in creeks to induce greater streambed recharge. Implementation of some of these mitigation schemes is under way. The city and the Scotts Valley Water District are currently negotiating construction of a tertiary sewage treatment system that will provide at least 500,000 gallons per day of reclaimed waste water for irrigation/recharge projects. The city council has recently passed an ordinance requiring new developments to sponsor recharge projects.

Groundwater quality is of major concern in the Scotts Valley groundwater basin, particularly because the principal water producing aquifer is unconfined and directly underlies the most developed portions of the basin. Potentially, any surface or near surface chemical releases have a direct pathway into the public water supply. Four chemical plumes have been identified in the Santa Margarita aquifer. Two of these plumes consist of TCE. The first is located at a Watkins–Johnson industrial facility which is being aggressively cleaned up. The second is located in the El Pueblo well field, has not been detected since 1991. Prior to 1991, it was only detected intermittently. A third plume consisting of Chlorobenzene and Dichlorobenzene has been detected near the El Pueblo well field. This contamination problem is being overseen by the California Environmental Protection Agency. No source for this contamination has been identified. The fourth contamination site includes a benzene plume extending northwesterly from the intersection of Scotts Valley Drive and Mt. Hermon Road. This plume has been linked to fuel releases from gas stations at or near the intersection in addition to several other suspected or potential sources. This plume is being closely monitored and remediation is presently being planned.

In the past, contamination of water supplies by septic system leachate has been a problem. This contamination has affected surface waters more significantly than groundwaters. However, as more areas in the basin have been sewered, nitrate contamination from septic systems has abated. With several existing residences present on the project site, there is a likelihood that existing septic systems are present. These systems will be removed from the project site.

These contamination incidents demonstrate the susceptibility of the groundwater resources in the basin to contamination. Because the Santa Margarita aquifer is open to surface contamination, runoff from urban development such as parking lots and roads has a potential to impact the aquifer. In sufficient quantities, such contamination could represent a hazard to human health. Contamination of the groundwater would limit the amount of groundwater available for consumption.

Existing Water Use

There are currently eight single-family residences, four multi-family residences, and two small commercial businesses located on the project site. The water used by these homes and businesses is minimal compared to buildout under both existing or proposed zoning.

Project Analysis

The proposed changes in use density may have three impacts on groundwater resources:

1. Increased densities will increase consumptive use of groundwater;
2. Increase in impermeable surface will result in reduced recharge to the groundwater table; and
3. Hazardous substances related either to activities being conducted on the project site or contained in runoff from site development may find their way into groundwater.

Table 6 presents the increased consumption of water for the Specific Plan density in relation to existing permitted use. Table 6.1 presents the increased consumption of water for Specific Plan density in relation to existing use. These calculations make use of standard use rates provided by Scotts Valley Water District (Jon Sansing, personal communication, 1995). The use rates for residential households was 288 gallons per day. This figure was used for both detached single-family homes and for multi-family residences (condominiums, townhomes, etc). Approximately 50 percent of domestic water use is commonly considered to go to irrigation of landscape. Since the amount of landscaping typically associated with multifamily residences is less per residence than for detached single-family homes, it is reasonable to assume that water use by multi-family projects will be less. However, statistical relations showing a difference in use could not be developed. Therefore, the recommended daily use figure for all dwelling units was utilized. Since the increased residential density will be due to an increase in multi–family residences at the expense of single-family residences, the calculated increase in water use is considered to be conservative. A use rate of 576 gallons per day per acre (0.4 gallons/minute/acre) was utilized for commercially zoned land in the Scotts Valley Water District. As presented in Table 6, the Specific Plan zoning is expected to result in an increased water demand, over existing zoning development option, of 32.43 acre feet per year. As presented in

Table 6.1, the Specific Plan zoning is expected to result in an increased water demand, over existing conditions, of 56.39 acre feet per year.

TABLE 6

Projected Increase in Water Demand
Existing Zoning Versus Specific Plan Zoning

Existing Zoning	Specific Plan Zoning	Net Change	Projected Increase (AF/Y)
72 Residential Units	159 Residential Units	+87 Units	28.06
8.13 Commercial Acres	14.91 Commercial Acres	+6.78 acres	4.37
		Total	**32.43**

Source: Weber, Hayes & Associates

TABLE 6.1

Projected Increase in Water Demand
Existing Conditions Versus Specific Plan Zoning

Existing Use	Specific Plan Zoning	Net Change	Projected Increase (AF/Y)
12 Residential Units	159 Residential Units	+147 Units	47.42
1 Commercial Acre	14.91 Commercial Acres	+13.91 acres	8.97
		Total	**56.39**

Source: Weber, Hayes & Associates/EMC Planning Group Inc.

Only a portion of the project site overlies the Santa Margarita aquifer. Planning Area-A lies principally on granitic bedrock; runoff from these properties flows to the portion of Carbonera Creek directly underlain by granitic rocks. Consequently, precipitation falling on these parcels does not contribute significantly to groundwater recharge in the basin. A portion of Parcel 1 is underlain by alluvium. However, inspection of the geologic map for the vicinity (Clark 1981) suggests that the alluvium at this location is underlain by granite and that this lot drains toward Carbonera Creek. Therefore, precipitation on this lot is not expected to contribute significantly to groundwater recharge.

Planning Area B directly overlies the Santa Margarita Sandstone and therefore may contribute to recharge of the aquifer. Since the aquifer thins to zero thickness under these parcels, and the base of the aquifer is irregular, it is possible that percolating precipitation on these parcels may flow out towards Carbonera Creek rather than recharging groundwater within the Scotts Valley groundwater basin. However, in order to support a conservative impact assessment and, barring information to the contrary, it is assumed that water falling on these parcels ordinarily contributes to groundwater recharge.

Table 7 summarizes the change in impermeable surface calculated for Planning Area B. The estimated impermeable surface values presented in Table 5, Section 2.2.1, Surface Water Hydrology, were used in these calculations. Subsequently, the proposed use and density changes will result in an additional impermeable surface area of approximately 2.66 acres, an increase of about 40 percent and the overall change in existing conditions would result in an additional impermeable surface area of approximately 9.3 acres. Todd Engineers (1987) has estimated an average recharge rate of 12 inches of water per unit surface area over the Scotts Valley groundwater basin. Since the average precipitation at the project site is lower than the basin wide average of about 40 inches per year, this recharge rate is a conservative estimation. The resulting reduction in annual recharge to the Santa Margarita aquifer due to increase in impermeable surface is therefore, estimated to be about 2.66 acre feet per year (about 0.06% of the estimated perennial yield of the aquifer).

TABLE 7

Change in Recharge Area

Planning Area B Parcel #	Existing Development Option		Equivalent Square Feet	Proposed Development Option		Equivalent Square Feet	Net Change
9	4	SFR	18,000	22	MF	44,000	26,000
10	19	SFR	85,500	29	MF	58,000	(27,500)
				41,000	C	82,000	82,000
12	41	SFR	184,500	110,000	C	220,000	35,500
Total			**288,000**			**404,000**	**116,000**

SFR = Single-Family Residence
MF = Multi-Family Residence
C = Commercial Use expressed in square feet.

Source: Weber, Hayes & Associates

The following table was prepared, at the request of the City Council, utilizing a different set of assumptions. These assumptions are included in Appendix I.

TABLE 7.1

Change in Impervious Area

Planning Area B Parcel #	Existing Development Option		Equivalent Square Feet	Proposed Development Option		Equivalent Square Feet	Net Change
9	4	SFR	24,980	22	MF	55,660	30,680
10	19	SFR	118,655	29	MF	104,545	(14,110)
				41,000	C	112,750	112,750
12	41	SFR	256,045	110,000	C	302,500	46,455
Total			**399,680**			**575,455**	**175,775**

SFR = Single-Family Residence
MF = Multi-Family Residence
C = Commercial Use expressed in square feet.

Source: C2G Civil Consultants Group

The Specific Plan includes the following policies associated with groundwater recharge:

- Policy 2.4: Protect natural drainage and water recharge areas.

  a. Minimize the use of impervious groundcover materials, especially in residential areas.

  b. On site storm drainage retention areas, or other water recharge improvements, shall be integrated into the site designs for individual development proposals to mitigate loss of recharge where feasible.

In addition, the general plan contains the following policy actions regarding groundwater recharge:

> **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.

It appears that the project site does not provide substantial recharge to the Santa Margarita aquifer. Therefore, on site recharge may not be realistic, nor appropriate. Due to the limitations of the scope of work for this EIR, specific characteristics of recharge cannot be determined which could be used to make a definitive recommendation to recharge on site. Therefore, additional analysis may be appropriate to verify recharge characteristics of the project site.

Impacts and Mitigations

Significance Criteria. According to CEQA Appendix G, projects will normally have a significant impact on the environment if it will substantially degrade water quality, substantially degrade or deplete groundwater resources, or substantially interfere with groundwater recharge.

Impact. The predicted increase in water consumption and decrease in recharge to groundwater due to the Specific Plan are small in comparison to total pumpage from the basin and the estimated perennial yield for the basin. However, cumulative impacts from continued residential and commercial development of the area served by Scotts Valley groundwater basin resources are potentially significant and discussed in Section 3.2, Cumulative Impacts.

Mitigation. The Specific Plan includes policies to maximize groundwater recharge where feasible, however specific mitigations are recommended. Mitigation Measures 16 and 17 in the Gateway South Assessment District Final EIR (see Appendix B of this report) addresses this impact. However, mitigation measure 17 has been revised as presented below. With implementation of the following mitigation measure, as well as Mitigation Measure 16 in the Gateway South Assessment District Final EIR, this impact will be reduced to a level of insignificance.

New Mitigation Measure

3. Project Proponents for individual development projects shall prepare a plan for artificial recharge of the groundwater basin in accordance with the applicable city resolution. Artificial recharge can be separated into on-site and off-site recharge projects.

   On-site artificial recharge can include percolation ponds (these can be used simultaneously as detention ponds) or underground recharge systems such as dry wells or horizontal drains. Because of the potential for contamination of runoff by urban contaminants, it may be feasible to use only runoff from roofs or other surfaces not exposed to vehicles.

   Off-site artificial recharge can be through direct participation by developers in off-site recharge projects, or by contribution to recharge project funds administrated by public agencies. The city of Scotts Valley has an ordinance in place requiring new development to mitigate increased groundwater consumption with recharge projects.

The plan shall be subject to review and approval by the Public Works Director and the Scotts Valley Water District, prior to approval for a final map. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

3.1 Future residential development proposals shall include a phasing plan, designed so that the development does not exceed a preset amount of consumptive water as determined by the Scotts Valley Water District. Phasing plans shall be subject to review and approval by the city Planning Director and the Scotts Valley Water District prior to approval of residential tentative maps.

Impact. Development of the project site will necessitate the abandonment of existing septic systems. Abandoned septic systems which are not removed would create a significant adverse environmental impact.

Mitigation. With implementation of Mitigation Measure 20 of the *Gateway South Assessment District Final EIR* (Appendix B of this report), this impact will be reduced to a level of insignificance. These mitigation measures shall be added to the Specific Plan as policy prior to adoption of the Specific Plan.

2.3 Vegetation and Wildlife

This section was prepared based on information contained in the *Biological Assessment for the Gateway South Specific Plan EIR* (Zander Associates 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.

The biological resources within the project site have been documented in previous reports conducted for the *Gateway South Assessment District EIR* (EMC Planning Group Inc. 1989) and in various studies conducted for project site landowners. The description of biological resources provided in this EIR relies on previous data collected and on reconnaissance-level surveys conducted in March and April 1995 by Zander Associates, to verify the description and delineation of habitat types.

Setting

The project site is located in the south-central Santa Cruz Mountains, about three miles north of Monterey Bay. The Scotts Valley area is characterized by a series of creek valleys and hillsides with the majority of the urban areas located in the alluvial valleys of the creeks. Riparian woodland habitat occurs along several of the perennial creeks and the hillsides support redwood forest communities and maritime chaparral and ponderosa pine on the sandy Zayante soils formed over Santa Margarita Sandstone. Several sensitive plants and animals are associated with the Zayante soils in the Scotts Valley area.

Habitat Types

There are five broad habitat types in the project site: disturbed/developed, annual grassland, mixed coniferous forest, riparian forest, and freshwater seep. Floristic surveys and reconnaissance-level wildlife surveys of the area were conducted by Harvey and Stanley Associates in 1988. Basic characteristics of the habitat types identified by Harvey and Stanley and verified in a March 1995 reconnaissance-level survey by Zander Associates are described below. Each habitat type is delineated in Figure 13.

Disturbed / Developed. This habitat type is found primarily in Planning Area A but is also in Planning Area B between the realigned and abandoned portions of La Madrona Drive. The developed portions of the parcels in Planning Area A consist of residences and business that front Mt. Hermon Road. Non-native landscape plantings are found around the buildings interspersed with some of the remaining native species. Clearing of sites on Parcel 8 has allowed for the establishment of invasive weedy species such as acacia (*Acacia* sp.) and scotch broom (*Cytisus scoparius*) over much of the area. The area between the realigned and abandoned portions of La Madrona Drive was graded and cleared during construction activities and now has very little vegetation other than that associated with the seep that bisects the area. A description of the freshwater seep habitat type is provided later in this section.

Wildlife species that potentially use this habitat include mule deer (*Odocoileus hemionus*), western gray squirrel (*Sciurus griseus*), house mouse (*Mus musculus*), and raccoon (*Procyon lotor*). The presence of humans, dogs, and cats in Planning Area A likely prohibits many species from using this habitat, even though it is adjacent to the riparian corridor of Camp Evers and Carbonera Creeks.

Annual grassland. Annual grassland occurs on the lower slopes of Planning Area B. Portions of this grassland appear to have been disced or disturbed during recent construction activities for the realignment of La Madrona Drive and Altenitas Road. Dominant grasses include Italian ryegrass (*Lolium perenne*), ripgut brome (*Bromus diandrus*), wild oats (*Avena barbata*), and soft chess (*Bromus mollis*). Annual herbs common in this habitat are broad-leaf filaree (*Erodium botrys*), sky lupine (*Lupinus nanus*), common vetch (*Vicia benghalensis*), smooth owl's clover (*Orthocarpus faucibarbatus*) and bur-clover (*Medicago polymorpha).*

A number of different animal species utilize annual grassland. Species with relatively large home ranges, such as mule deer, forage in the grassland while rodents and other small mammals with less extensive home ranges remain primarily within this area. The presence of these small mammals provide a prey source for bobcat (*Lynx rufus*), gopher snakes (*Pituophis melanoleucus*) and raptors such as red-tailed hawk (*Buteo jamaicensis*). Bird species that have been observed in this habitat include red-tailed hawk, American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), scrub jay (*Aphelocoma coerulescens*), northern mockingbird (*Mimus polyglottos*), brown towhee (*Pipilo fuscus*), house finch (*Carpodacus mexicanus*), western meadowlark (*Sturnella*

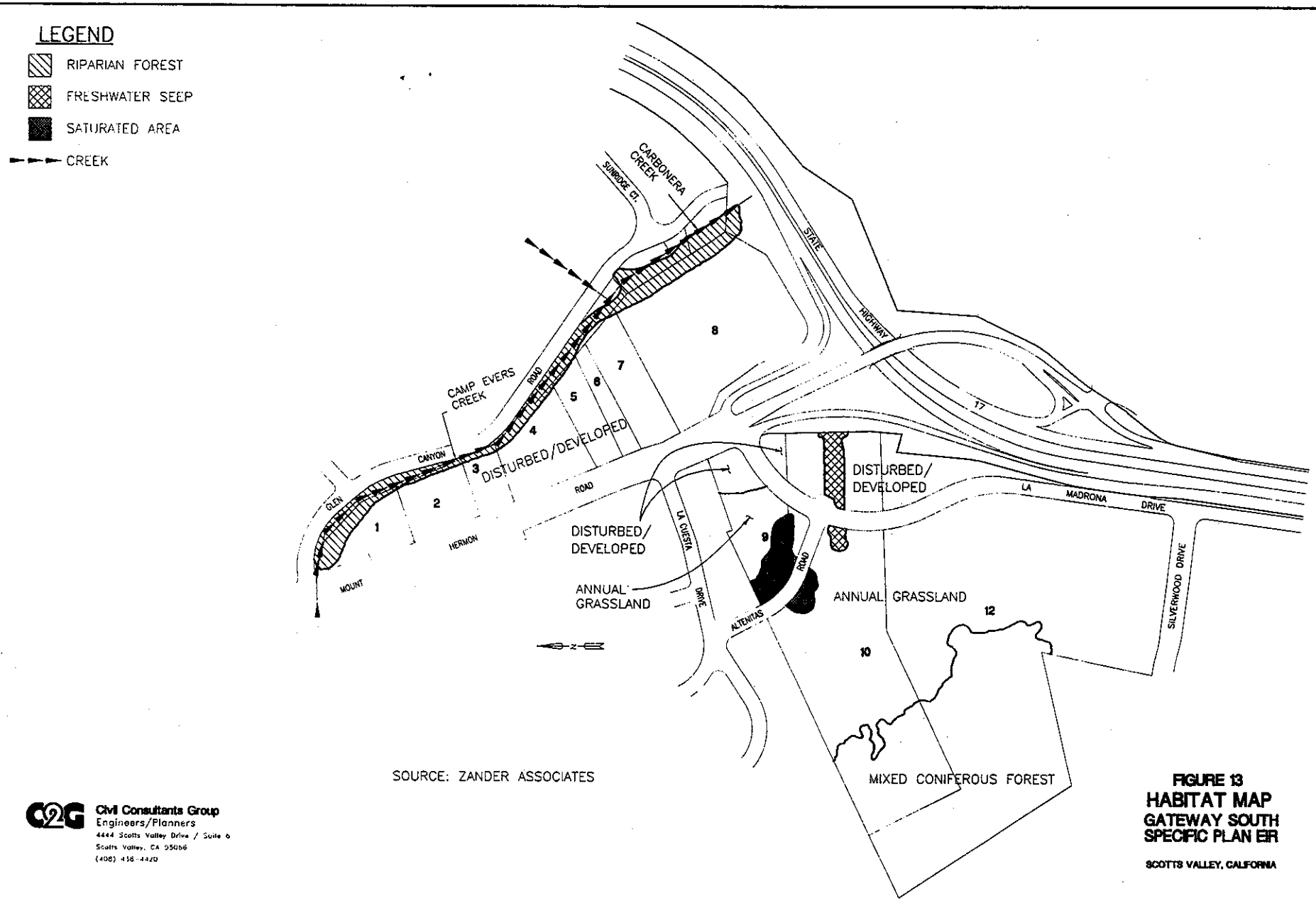
neglecta), lesser goldfinch (*Carduelis psaltria*) and barn, cliff, and violet-green swallows (*Hirundo rustica, H. pyrrhonota, Tachycineta thalassina*).

Mixed Coniferous Forest. Mixed coniferous forest occupies the ridge top in Planning Area B. In the Scotts Valley area, this habitat type is typically found where sites are too dry to support redwood forest. The dominant tree in this habitat is Douglas fir (*Pseudotsuga menziesii*), but coast live oak (*Quercus agrifolia*), coast redwood (*Sequoia sempervirens*), and California bay (*Umbellularia californica*) are also common. The understory vegetation is relatively dense and consists of California blackberry (*Rubus ursinus*), poison oak (*Toxicodendron diversilobum*), pacific sanicle (*Sanicula crassicaulis*), forget-me-not (*Myosotis latifolia*), and sweet cicely (*Osmorhiza chilensis*). Several unorganized trails have been worn through this habitat and are used by nearby residents.

The greatest diversity of wildlife at the project site is found in this habitat type. Several bird species have been observed in this habitat including dark-eyed junco (*Junco hyemalis*), hairy woodpecker (*Picoides villosus*), chestnut-backed chickadee (*Parus rufescens*), brown creeper (*Certhia americana*), western wood pewee (*Contopus sordidulus*), bushtit (*Psaltriparus minimus*), Stellar's jay (*Cyanocitta stelleri*), American robin (*Turdus migratorius*), hermit thrush (*Catharus guttatus*), great horned owl (*Bubo virginianus*), red-breasted sapsucker (*Sphyrapicus ruber*) and olive-sided flycatcher (*Contopus borealis*). Several mammal species, including striped skunk (*Mephitis mephitis*), long-tailed weasel (*Mustela frenata*), raccoon, bobcat and coyote (*Canis latrans*), as well as a variety of smaller mammals, such as different species of mice and shrews, may also be found in this habitat. California slender salamander (*Batrachoseps attenuatus*), western fence lizard (*Sceloporus occidentalis*) and southern alligator lizard (*Gerrhonorus multicarinatus*) were observed in this habitat during 1988 surveys of the site.

Riparian Forest. Riparian forest habitat occurs on the banks of Camp Evers Creek that runs along the eastern boundary of Planning Area A, and in Carbonera Creek which is at the eastern boundary of Parcel 8. The riparian forest habitat associated with Camp Evers Creek contains some non-native vegetation intermixed with native willow (*Salix* spp), box elder (*Acer negundo*), and dogwood (*Cornus stolonifera ssp. occidentalis*). White alder (*Alnus rhombifolia*) is also found in this habitat and is more dominant in the lower reaches of the creek, along Parcels 3 through 7. The understory vegetation is composed of stinging nettle (*Urtica holosericea*), poison oak, California blackberry and lady fern (*Anthyrium filix-femina*).

Riparian trees are very important to many bird species, both for foraging and as nesting sites. The varying canopy heights and foliage structure typical of riparian woodlands create a complex environment which supports a great diversity of insects and other arthropods. Larval insects are a preferred food type of many bird species and are abundant in this habitat. Many bird species would be expected to use this habitat. Some of the birds that have been observed here are bushtit, brown towhee and rufous-sided towhee (*Pipilo erythropthalmus*), orange-crowned warbler (*Vermivora celata*), scrub jay, American robin, Bewick's wren (*Thryomanes bewickii*), brown-headed cowbird (*Molothrus ater*), Anna's



SOURCE: ZANDER ASSOCIATES

Civil Consultants Group
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FIGURE 13
HABITAT MAP
GATEWAY SOUTH SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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hummingbird (*Calypte anna*), house finch, song sparrow (*Melospiza melodia*) and European starling (*Sturnus vulgaris*).

Amphibians would be expected to use the creek bed when flows in the creek are low. Surveys of the creek bed conducted in 1988 identified only one adult amphibian, a bullfrog (*Rana catesbeiana*) in the channel. No fisheries resources are expected to occur in Camp Evers Creek because it is an intermittent drainage (Alley, personal communication, 1995). Several species of fish have been documented in Carbonera Creek. Downstream from the project area, below the falls near the Moose Lodge, Carbonera Creek supports an anadromous fishery.

Freshwater Seep. One freshwater seep and another saturated area that could be fed by leaking septic systems occur in Planning Area B near Altenitas Road and La Madrona Drive. The freshwater seep upslope of La Madrona Drive appears to be fed by a spring that supplies water much of the year. This seep was recently bisected by the realignment of La Madrona Drive but subdrains were installed under the roadway to maintain the flow of water into the seep area below. The water from the spring flows downslope and supports water-tolerant vegetation in an area approximately 40 feet in width. The seep habitat ends where the water flows into a culvert under the abandoned portion of La Madrona Road. A few coast live oak trees occur in the seep habitat, but the wetter areas support willow, blackberry, rush (*Juncus* spp.), common spikerush (*Eleocharis macrostachya*), and cattail (*Typha* sp.). The seep is approximately 0.4 acre in extent.

The saturated area above and below Altenitas Road does not appear to be fed by a seep but may be caused by leaking septic systems from the adjacent residences. This area does not have an abundance of water-tolerant species but a few willow, sedge (*Carex* sp), and knotweed (*Polygonum* sp) have been observed here. Subsurface water flows downslope into an area that is dominated by upland vegetation, including, coast live oak, coyote brush (*Baccharis pilularis* ssp *consanguinea*) and acacia. No surface or subsurface water is evident downslope of this area.

Wildlife may use the freshwater seep as a water source and may forage on the shrubs and trees. Harvey and Stanley Associates (1988) did not find any amphibians in the small pools of water within the seep. Because water is not prevalent at the surface in the saturated area, and the source of the water is questionable, wildlife would not be expected to use this area for a drinking source. Additionally, since the vegetation in the saturated area is not significantly different than the surrounding grasslands, there is no additional value for wildlife provided by this habitat.

Special Status Species

For purposes of this report, special status species are those listed or proposed for listing as threatened or endangered by the U.S. Fish and Wildlife Service

(USFWS) or candidates for listing (Category 1 and 2); species listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Game (CDFG); plants occurring on lists 1B, and 2 of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (1994); animals designated as "Species of Special Concern" by CDFG; and animals protected under state law and the Federal Migratory Bird Act. A list of species in the above categories which could potentially occur in the Specific Plan Area are found in Table 8, Special Status Plant Species Potentially Occurring on the Project Site, and Table 9, Special Status Animal Species Potentially Occurring on the Project Site.

Floristic and reconnaissance-level wildlife surveys of the project area were conducted by Harvey and Stanley Associates in 1988. Additional surveys for special status species were conducted for the entire project site in May and July, 1988 by Harvey & Stanley Associates; and on Parcel 12 in March, April, June, July and October, 1988, and April and July, 1989 by Harding Lawson Associates. No special status plant or animal species were observed in the project area during these surveys. The California Natural Diversity Database (CNDDB) was recently searched for new occurrences of special status species that may have been reported on or in the vicinity of the project site. No new occurrences of special status species have been reported from the project area. However, since the time the previous surveys of the project area were completed, five additional special status taxa have been identified on sites within Scotts Valley: Mt. Hermon June beetle, San Francisco popcorn flower, Ben Lomond spineflower, Scotts Valley spineflower, and Robust spineflower. Following is a discussion of these species and an assessment of their potential to occur in the project area.

Mt. Hermon June Beetle (*Polyphylla barbata*). The Mt. Hermon June beetle is restricted to the sandy soils of Zayante sand hills habitat (USFWS 1995). This habitat has scattered ponderosa pine and open or patchy stands of silverleafed manzanita and mixed chaparral often present. The Zayante sand hills habitat does not occur in the project area. According to Jonathan Hoekstra of the USFWS, the Mt. Hermon June beetle would not be expected to occur in the project area (personal communications, March 1995).

San Francisco Popcorn flower (*Plagiobothrys diffusus*). This popcornflower is found in moist grassland habitats along the coast from San Francisco to Monterey County (Kelch, personal communications 1995). The closest known location of San Francisco popcorn-flower to the project site is along Graham Hill Road west of its intersection with Simms Road. On April 4, 1995 Zander Associates conducted a specific survey for the San Francisco popcorn-flower of the entire project site with the assistance of Dean Kelch from the University of California, Davis. The known location of the species on Graham Hill Road was surveyed concurrently to confirm that the plant was in bloom and identifiable at this time. The project site was surveyed systematically by two botanists walking transects, approximately 20 feet apart, covering the entire site. The San Francisco popcorn-flower was in bloom and identifiable on the Graham Hill Road site at the time of this survey. No individuals of San Francisco popcorn-flower were observed in the project area during the survey. Four plants of another popcorn-

flower, *Plagiobothrys chorisianus* var. *hickmanii,* were found in the slop above the recently constructed portion of La Madrona Drive.

Ben Lomond spineflower (*Chorizanthe pungens var. hartwegiana*). This species is found on sandy soils that are the basis for the Ben Lomond sand hills communities in the Santa Cruz Mountains (Department of the Interior 1994). The plants as confined to outcrops of sandstone soils and are typically found associated with ponderosa pine. Habitat for this species does not occur in the project area. Floristic surveys conducted in 1988 did not identify any species of *Chorizanthe* in the project area. Because there is no habitat for the species and no Chorizanthe have previously been observed on the site, the Ben Lomond spineflower would not be expected to occur here. Additionally, no *Chorizanthe* species were observed during the April 4, 1995 survey of the project site.

Scotts Valley spineflower (*Chorizanthe robusta var. hartwegii*). The Scotts Valley spineflower is endemic to Purisima sandstone and Santa Cruz mudstone habitats in Scotts Valley. Where the plant occurs in Purisima sandstone, the bedrock is overlain with a thin soil layer that supports a meadow community comprised of herbs and low-growing grasses. Where the plant occurs on Santa Cruz mudstone, the bedrock is variously mixed with scree or a thin soil layer that also supports a meadow community. No Purisima sandstone or Santa Cruz mudstone habitats occur in the project area and no Chorizanthe species have been previously reported from the project site. Consequently, Scotts Valley spineflower would not be expected to occur in the project area. Additionally, no *Chorizanthe* species were observed during the April 4, 1995 survey of the project site.

Robust spineflower (*Chorizanthe robusta var. robusta*). This species of spineflower is also endemic to sandy soils and occurs in coastal dune and coastal scrub habitats along and adjacent to the coast of Santa Cruz County. No coastal dune, coastal strand, or other sandy habitats that could support the robust spineflower occur in the project area. Additionally, no *Chorizanthe* species were observed during the April 4, 1995 survey of the project site.

Although none of the animals listed in Table 9 were observed in the project area during previous surveys, there is a potential that the red-legged frog and southwestern pond turtle could inhabit areas of Carbonera Creek adjacent to Planning Area A. The potential for these species to occur in Camp Evers Creek is low due to the intermittent nature of this drainage. The sharp-shinned hawk, Cooper's hawk and yellow warbler may nest in the riparian forest habitat associated with Camp Evers and Carbonera Creeks.

Project Analysis

Implementation of the Specific Plan will result in the removal of portions of the existing habitat types through the construction of buildings, roads and other associated infrastructure. Most of the areas that could be removed contain disturbed or non-native vegetation and annual grassland. Approximately nine acres of mixed coniferous forest and some of the annual grassland in Planning

TABLE 8

Special Status Plant Species Potentially Occurring on the Project Site

Common and Scientific Name	Legal Status Federal/State/CNPS	Habitat	Occurrence in Project Area
Santa Cruz tarweed *Holocarpha macradenia*	C1/SE/1B	Grazed hillsides	Not observed on site
Ben Lomond wallflower *Erysimum teretifolium*	FE/SE/1B	Sandy soils on the Santa Margarita sandstone formation	Not observed on site
Silverleaf manzanita *Arctostaphylos silvicola*	C2/none/1B	Sandy soils on the Santa Margarita sandstone formation	Not observed on site
Swamp harebell *Campanula californica*	C2/none/1B	Coastal marshes from Marin County to Mendocino County	Not observed on site
Swamp sandwort *Arenaria paludicola*	FE/SE/1B	Coastal marshes from Marin County to Mendocino County	Not observed on site
San Francisco popcorn flower *Plagiobothrys diffusus*	SE/C2/1B	Moist grasslands, coastal prairie	
Ben Lomond spineflower *Chorizanthe pungens hartwegiana*	FE/none/1B	Sandy soils of Ben Lomond sand hills communities	No suitable habitat on site
Scotts Valley spineflower *Chorizanthe robusta hartwegii*	FE/none/1B	Endemic to Purisima sandstone and Santa Cruz mudstone habitats	No suitable habitat on site
Robust spineflower *Chorizanthe robusta robusta*	FE	Sandy soils, coastal strand and coast scrub habitats	No suitable habitat on site

Definitions

FE = listed as endangered under the federal Endangered Species Act
FT = listed as threatened under the federal Endangered Species Act
FPE, FPT = proposed for listing as endangered or threatened by the federal government
LP = listing package being reviewed by U.S, Fish and Wildlife Service
SE = listed as endangered under the California Endangered Species Act
ST = listed as threatened under the California Endangered Species Act
C1 = Category 1 Candidate for federal listing. Category 1 includes species for which USFWS has on file enough substantial information on biological vulnerability and threat to support proposals to list them.
C2 = Category 2 Candidate for federal listing. Category 2 includes species for which USFWS has some biological information indicating that listing may be appropriate but for which further biological research and field study are usually needed to clarify the most appropriate status. Category 2 species are not necessarily less rare, threatened, or endangered than Category 1 species or listed species; the distinction relates to the amount of data available and is therefore administrative, not biological.
CSC = California Department of Fish and Game species of special concern.
1B = CNPS List 1B species: Rare, threatened, or endangered in California or elsewhere.
4 = CNPS List 4 species: Plants of limited distribution -- a watch list.

Source: Zander Associates

TABLE 9

Special Status Animal Species Potentially Occurring on the Project Site

Common and Scientific Name	Legal Status Federal/State	Habitat	Occurrence in Project Area
Mount Hermon june beetle *Polyphylla barbata*	FPE	Sandy soils of Zayante sand hills habitat	No suitable habitat on site
Red-legged frog *Rana aurora draytoni*	FPE/CSC	Quiet pools in perennial streams and ponds	Potential, Carbonera Creek, not observed on site
Sharp-tailed snake *Contia tenuis*	CSC	Variety of habitats, optimum habitat found in riparian deciduous and mountain meadow types	Not observed on project iste
Southwestern pond turtle *Clemmys marmorata pallida*	C2/CSC	Creeks, rivers, reservoirs and lakes	Potential, Carbonera Creek, not observed on site
Yellow warbler *Dendroica petechia*	CSC	Inhabits riparian corridors of large rivers, nests in riparian woodland	Not observed on project site
Sharp-shinned hawk *Accipeter striatus*	CSC	Nests in dense forest	Not observed on project site
Cooper's hawk *Accipeter cooperii*	CSC	Prefers dense stands of live oak or riparian woodland habitats	Not observed on project site
Townsend's big-eared bat *Plecotus townsendii*	C2/CSC	Humid, broad-leafed forests, roosts in caves, mines, buildings and culverts	Unlikely, may use habitats within the area to forage over.
Santa Cruz kangaroo rat *Dipodomys venustus venustus*	(locally unique by Santa Cruz County Planning Commission)	Areas supporting loose, sandy soils in association with stands of ponderosa pine or chaparral	Not observed on project site

Definitions

FE = listed as endangered under the federal Endangered Species Act
FT = listed as threatened under the federal Endangered Species Act
FPE, FPT = proposed for listing as endangered or threatened by the federal government
LP = listing package being reviewed by U.S. Fish and Wildlife Service
SE = listed as endangered under the California Endangered Species Act
ST = listed as threatened under the California Endangered Species Act
C1 = Category 1 Candidate for federal listing. Category 1 includes species for which USFWS has on file enough substantial information on biological vulnerability and threat to support proposals to list them.
C2 = Category 2 Candidate for federal listing. Category 2 includes species for which USFWS has some biological information indicating that listing may be appropriate but for which further biological research and field study are usually needed to clarify the most appropriate status. Category 2 species are not necessarily less rare, threatened, or endangered than Category 1 species or listed species; the distinction relates to the amount of data available and is therefore administrative, not biological.
CSC = California Department of Fish and Game species of special concern.
1B = CNPS List 1B species: Rare, threatened, or endangered in California or elsewhere.
4 = CNPS List 4 species: Plants of limited distribution -- a watch list.

Source: Zander Associates

Area B will be preserved as open space by the Specific Plan. This forest habitat was found to support the greatest diversity of wildlife on the project site.

The development of Planning Area A will abut the riparian forest habitat along Camp Evers and Carbonera Creeks and could alter the nature of that area as it currently exists. Although this habitat lies adjacent to Glen Canyon Road and just below Mt. Hermon Road, the steepness of the slope up to the developed portions of the parcels in this area provides some buffer from the activity along Mt. Hermon Road. The Specific Plan includes several policies to protect the riparian corridors and limits development on steeply sloped lands. These policies will help to maintain the nature of the riparian areas.

The location of and existing uses in Planning Area A reduce the value of this area for wildlife, except along Camp Evers and Carbonera Creeks. Wildlife use in Planning Area B is greater due to the diversity of habitats and larger open space areas. Implementation of the Specific Plan will reduce wildlife use of the area primarily due to the conversion of open space. The Specific Plan includes a policy requiring only a 5-foot setback from the creek. However, the two habitat types identified as containing the greatest diversity of wildlife in the project area, mixed evergreen forest and riparian forest, will be preserved as open space or protected through other policies incorporated in the Specific Plan.

Impacts and Mitigation Measures

Significance Criteria. According to CEQA Appendix G, a project will normally have a significant effect on the environment if it will substantially affect a rare or endangered species of animal or plant or the habitat of the species; interfere substantially with the movement of any resident or migratory fish or wildlife species; or substantially diminish habitat for fish, wildlife or plants.

For the purposes of this EIR, impacts on biological resources resulting from implementation of the Specific Plan would be considered significant if they meet any of the following criteria:

- Substantially affect significant natural communities including maritime chaparral, coast live oak woodland, and perennial grassland;
- Substantially affect plants listed as threatened or endangered by the USFWS, plants listed as rare, threatened or endangered by CDFG; plants occurring on Lists 1B and 2 of the California Native Plant Society's Inventory of Rare and Endangered Plants in California;
- Substantially affect special status animal species as defined earlier in this section;
- Result in the removal of active nests of resident or migratory special status birds; or

- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of disturbed/developed habitat. The disturbed/developed habitat would be removed for development of residential and commercial areas in Planning Area A and for commercial development along La Madrona Drive in Planning Area B. Because of the proximity to Mt. Hermon Road, and the existing development in these areas, this habitat provides little value for wildlife. The isolated nature of this habitat in Planning Area A also contributes in reducing its value for wildlife. Due to the disturbed nature of the vegetation and the low value for wildlife, the loss of the disturbed/developed habitat from implementation of the Specific Plan would not be considered a significant impact and no mitigation would be required.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of annual grassland habitat. Annual grasslands occur in Parcels 9, 10 and 12 in Planning Area B. These areas are proposed for high density and medium density residential and commercial development, and a portion of the grasslands in Parcel 10 and Parcel 12 will be included in open space. All of the annual grassland within the proposed developed areas could be removed for construction of buildings and associated infrastructure.

Annual grasslands are common in California and, as such, loss of this habitat is not considered significant unless the area to be removed is known to support special status species. The annual grasslands in the project area do not support any special status species. These grasslands do provide habitat for several rodents which are prey for raptors, snakes and some larger mammals and removal of this habitat will at least temporarily displace these rodents to the adjacent open space. Once development is complete, the rodents could return to inhabit landscaped areas within the building envelope. Additionally, other small mammals (such as domestic cats) are likely to be introduced with development of the area and will provide a prey source for species inhabiting the adjacent forests. Because this habitat in the project area does not support any special status species and the primary prey species it supports could move into adjacent habitats or return following construction, removal of the annual grassland habitat for implementation of the Specific Plan would not be considered a significant impact.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of wetland habitat. Portions of both the freshwater seep and the saturated area identified in Parcels 9 and 10 could meet the Army Corps of Engineers' criteria as wetlands. The freshwater seep occurs in Parcel 10, on both sides of La Madrona Drive. This seep was bisected and a portion of the area removed (0.09 acre) for the recent construction of La Madrona Drive. The habitat value of the seep was reduced when the continuity of the area was disrupted for construction of La Madrona Drive. However, water continues to flow in the small channel and wetland vegetation occurs adjacent to the channel. The saturated area north of the seep was also impacted by recent construction activities for Altenitas Road but subdrains were installed to keep water moving under

the road. The freshwater seep and this saturated area could be removed through implementation of the Specific Plan.

Wetlands are considered sensitive habitats in California due to a reduction in the extent of these areas throughout the State. However, some consideration of the function and value of the wetland habitat is given when making a determination of the significance of removing or altering these areas. The freshwater seep in the project area does not appear to support a flora or fauna significantly different than the surrounding grassland or woodland communities but it does probably provide a water source for wildlife moving through the area. Because this is a natural seep providing some value for wildlife in the area, removal of this habitat would be considered a significant impact.

The saturated area to the north of the seep in Parcel 9, possibly results from leaking septic systems associated with existing residences along the northern property line of Parcels 9 and 10. Water is not at the surface much of the year and so the area does not serve as a drinking source for wildlife. Considering the water source and the proximity of this area to existing residential development, the biological value of this area is relatively low. Given this low habitat value, removal of the saturated area would not be considered a significant impact.

New Mitigation Measures

4a. The freshwater seep, located on Parcel 10, shall be avoided and/or incorporated into the design of future commercial development. Project design shall be reviewed by a qualified biologist and is subject to review and approval by the city Planning Director, prior to approval of a tentative map.

If mitigation measure 4a is infeasible, then mitigation measure 4b shall be implemented.

4b. Project proponents for future development impacting the freshwater seep on Parcel 10 shall provide compensatory mitigation at a minimum 1:1 ratio for area lost. This could be accomplished in the open space area of Parcel 10 where an existing spring box could be used to create saturated soils sufficient to support wetland plantings in an area approximately 0.4 acre in size. Additionally, design of this site should consider providing surface water, at least part of the year, to provide a drinking source for wildlife. The plan to provide compensatory mitigation shall be prepared by a qualified biologist and is subject to review and approval by the city Planning Director, prior to approval of a tentative map.

This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

<u>4.1 Future development shall obtain a wetlands determination from the U.S. Army Corps of Engineers regarding the freshwater seep on Parcel 10 and the saturated area on Parcels 9 and 10 (although this area does not</u>

appear to be a wetland), prior to approval of tentative maps for development on those parcels.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of riparian forest habitat along Camp Evers and Carbonera Creeks. Two access roads from Glen Canyon Road into Planning Area A are proposed in the Specific Plan. Each of these roads will cross Camp Evers Creek and will likely result in the removal of some riparian forest vegetation. Development on Parcels 1, 3 and 4 may also encroach into the riparian vegetation associated with the west bank of Camp Evers Creek and result in the removal of some of this habitat. Development on Parcel 8 could result in the removal of riparian forest habitat along Carbonera Creek.

Policy 2.2 of the Specific Plan states "Maintain and enhance the habitat value of riparian corridors. Loss of riparian habitat shall be minimized and subject to approval of the California Department of Fish and Game. Any riparian woodland lost due to construction shall be mitigated through a restoration and revegetation plan." Some of the vegetation associated with the riparian forest may be removed for construction of the two access roads and for development of some of the parcels, particularly in Parcels 1, 4, and 8. Removal of typical riparian species away from the creek channel may not affect the integrity of the riparian corridor and therefore, would not result in a significant impact. However, if vegetation removal occurs close to the active channel and decreases the density of habitat in the streamzone, this could have an adverse affect on the habitat, resulting in a significant impact. Although the Specific Plan includes policies to protect riparian areas, further specific mitigation measures are recommended. With implementation of this mitigation measure, significant adverse impacts to riparian habitat will be reduced to a level of insignificance.

New Mitigation Measure

5. Project proponents for future development of Parcels 1 through 8 shall include the following information regarding the development proposal and the riparian corridor:

   - Grading plans should indicate where grading will occur in relation to the active channel of Camp Evers or Carbonera Creeks.

   - If grading ~~will~~ proposes to encroach into the riparian forest habitat, an assessment of the extent and type of vegetation to be removed should be provided ~~by a qualified biologist~~.

   - Revegetation plans, using species native to the site, should be developed ~~by a qualified biologist~~ for areas within the riparian forest habitat that are temporarily disturbed during construction activities.

   - Erosion control plans specifically designating measures to protect the streamzone habitat during construction should be included in the application.

- ~~If the proposed development will result in a decrease in the density of riparian vegetation of the streamzone, then further setbacks from the creek should be required, as recommended by a qualified biologist.~~

This information will be subject to review and approval by a qualified biologist under the direction of the city Planning Director prior to approval of a tentative map. If the proposed development will result in a decrease in the density of riparian vegetation of the streamzone, then further mitigations such as increased setbacks from the creek, reduced or modified grading, elimination of a stream crossing, or reducing the amount of vegetation removed, should be required as recommended by the biologist. This mitigation measure shall be added to the Specific Plan as a policy prior to adoption of the Specific Plan.

5.1. Policy 2.2a, which states "a minimum 5-foot setback area, measured from the edge of the bank shall be required in the riparian area adjacent to Glen Canyon Road", shall be removed from the Specific Plan prior to adoption of the Specific Plan.

Impact. Development or other actions anticipated under the Specific Plan could result in the degradation of streamzone habitat along Camp Evers and Carbonera Creeks.

Construction activities associated with development in Parcels 1 through 8 could result in increased sediment into Camp Evers and Carbonera Creeks. Additionally, an increase in impervious surfaces in the project area could result in increased flows and accelerated erosion in these creeks. Increased impervious surfaces also could reduce the amount of water recharged into the lower Carbonera groundwater subbasin thereby decreasing stream flow in Carbonera Creek. Reduced summer flows in Carbonera Creek could affect summer rearing habitat for steelhead below the falls, downstream from the project area. Degradation of the streamzone habitat in these creeks would be considered a potentially significant impact.

Several policies in the Specific Plan address the potential degradation of streamzone habitat. As stated previously, Policy 2.2 addresses protection of habitat values in riparian corridors. Policy 2.4, to protect natural drainage and water recharge areas, requires minimization of the use of impervious groundcover materials and on-site storm drainage retention or other water recharge improvements to mitigate loss of recharge where feasible. Policy 5.5 also requires that storm drainage systems be designed to maximize groundwater recharge and that storm drains transmit storm water to detention/retention basins and to final discharge points. The intent of these policies is to increase groundwater recharge and to maintain pre-project flows into the adjacent creeks. Implementation of these policies should protect the streamzone habitat in Camp Evers and Carbonera Creeks from accelerated erosion and reduced summer flows (in Carbonera Creek). Implementation of an erosion control plan and adhering to Best Management Practices during construction should reduce the potential for increased sediment into the creeks.

Mitigation. Although mitigation measures to prevent degradation of stream-zone habitat are incorporated into the Specific Plan, further specific mitigations addressing erosion control are recommended. See Mitigation Measure 1 in Section 2.1, Geology and Soils, and Mitigation Measure 5 in this section.

Impact. Development or other actions anticipated under the Specific Plan could result in the removal of special status species.

No special status species have been identified inhabiting the project site and therefore no direct impacts on any special status species are expected with implementation of the Specific Plan. However, the southwestern pond turtle and red-legged frog could occur in the reach of Carbonera Creek adjacent to Parcel 8. No direct removal of habitat in this creek is anticipated for implementation of the Specific Plan, but increased sediment loads in the creek resulting from construction activities could adversely affect the habitat for the red-legged frog.

Although the potential for red-legged frog and southwestern pond turtle to occur in Camp Evers Creek is low due to the intermittent nature of the drainage, if flows continue, even marginally, throughout the year, these species could move into the drainage. If they were to occur in Camp Evers Creek, construction of the access roads could result in the direct removal of these animals should they be within the construction zone.

Construction of the access roads over Camp Evers Creek, and development adjacent to the channel could result in the removal of trees that contain active nests of the sharp-shinned hawk, Cooper's Hawk or yellow warbler. Removal of an active nest of special status birds species would be considered a significant impact.

Mitigation. Mitigation Measure 1 Section 2.1, Geology and Soils, and Mitigation Measure 5 in this section will reduce the potential for increased sediment loads into Carbonera Creek during construction activities and therefore reduce the affect on potential red-legged frog habitat in this creek.

With implementation of the following mitigation measures, significant adverse impacts to special status species would be reduced to a level of insignificance.

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. Revised 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 A" to "D" during the A.M. peak and from "B" to "D" in the ~~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.

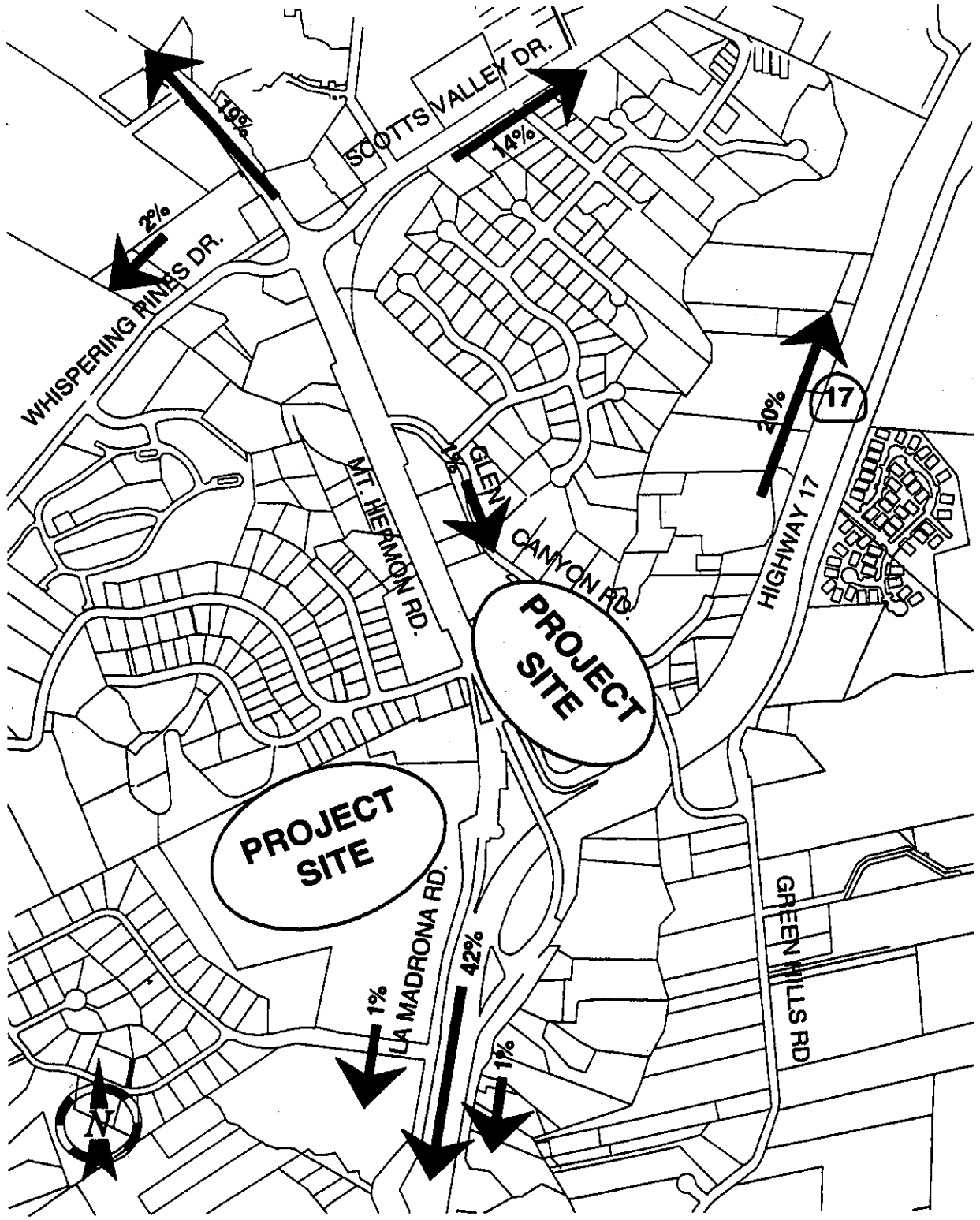
Approved Projects Trip Generation

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.



Source: Rajappan & Meyer Consulting Engineers, Inc.

No Scale

EMC Planning Group Inc.

A Land Use Planning and Design Firm

Gateway South Specific Plan EIR

Project Trip Distribution

Figure **14**

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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").

The LOS associated with the approved, existing plus approved, and proposed project volumes are included in revised 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").~~ These tables indicate the following changes in level of service:

Intersection	Existing Plus Approved Projects	Existing Plus Approved Projects Plus Specific Plan
Glen Canyon/ Mt. Hermon (AM)	A	B
La Madrona/ SR-17 Ramps/ Mt. Hermon (PM)	C	D

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".

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 mea-

sures 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 (NO_2), sulfur dioxide (SO_2), and lead. The primary NAAQS and CAAQS for these pollutants are presented in Table 10.

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.

TABLE 10

Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standard	California Standard
Ozone	1 hour	0.12 ppm	0.09 ppm
Carbon Monoxide	1 hour 8 hour	35.00 ppm 9.00 ppm	20.00 ppm 9.00 ppm
Nitrogen Dioxide	1 hour annual	— 0.053 ppm	0.25 ppm —
Sulfur Dioxide	1 hour 24 hours annual	— 0.14 ppm 0.03 ppm	0.25 ppm 0.045 ppm —
Particulates (PM_{10})	24 hours annual	150.0 $\mu g/m_3$ 50.0 $\mu g/m^3$	50.0 $\mu g/m^3$ 530.0 $\mu g/m^3$

ppm = parts per million; $\mu g/m^3$ = microns per cubic meter
PM_{10} = Particulate matter less than 10 microns in diameter

Source: California Air Resources Board

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. 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

Due to volume to capacity ratio (v/c) and delay time thresholds being exceeded at Mt. Hermon Rd./Glen Canyon Rd. intersection and the Highway 17 on- and off-ramps, for the year 2005 base year plus proposed project conditions, a carbon monoxide model was prepared. The results of the model indicate that the predicted concentrations do not exceed the state and federal ambient air quality standards. See Appendix H (Donald Ballanti Certified Consulting Meterologist, letter to consultant, May 30, 1995.) Regardless, the project is subject to transportation demand measures (TDM) which include, but may not be limited to:

- 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.

~~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 URBEMIS3 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)**~~

~~Season~~	~~ROG~~	~~CO~~	~~NOx~~	~~PM10~~	~~SOx~~
~~Summer~~	~~273.63~~	~~3,322.8~~	~~305.3~~	~~88.4~~	~~22.2~~
~~Winter~~	~~350.80~~	~~4,914.7~~	~~333.7~~	~~88.4~~	~~22.2~~

~~Source: EMC Planning Group Inc.~~

~~TABLE 12~~

~~**Thresholds of Significance (lbs./day)**~~

~~Pollutant~~	~~Threshold~~
~~CO~~	~~550 lbs/day~~
~~ROG~~	~~150 lbs/day~~
~~NO_x~~	~~150 lbs/day~~
~~SO_x~~	~~150 lbs/day~~
~~PM_{10}~~	~~82 lbs/day~~

~~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".

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 infrastruc-

ture. 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). Although the private mutual water company (Mañana Woods) had not requested this stub out, it was provided for future potential use. 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 principal 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, 19945.)

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.

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).

TABLE 13

~~Scotts Valley Unified School District Facilities~~
Scotts Valley Students Use of School Facilities

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

Note:
- Kindergarten student to classroom ratio: 1 classroom for 55 students
- K-8 ratio: 1 classroom for 29 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

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 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

~~10~~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 <u>in conjunction with the Scotts Valley Unified School District</u> 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), as well as the new mitigation measure presented below, potentially significant adverse visual impacts from development of Planning Area B will be reduced to a level of insignificance.

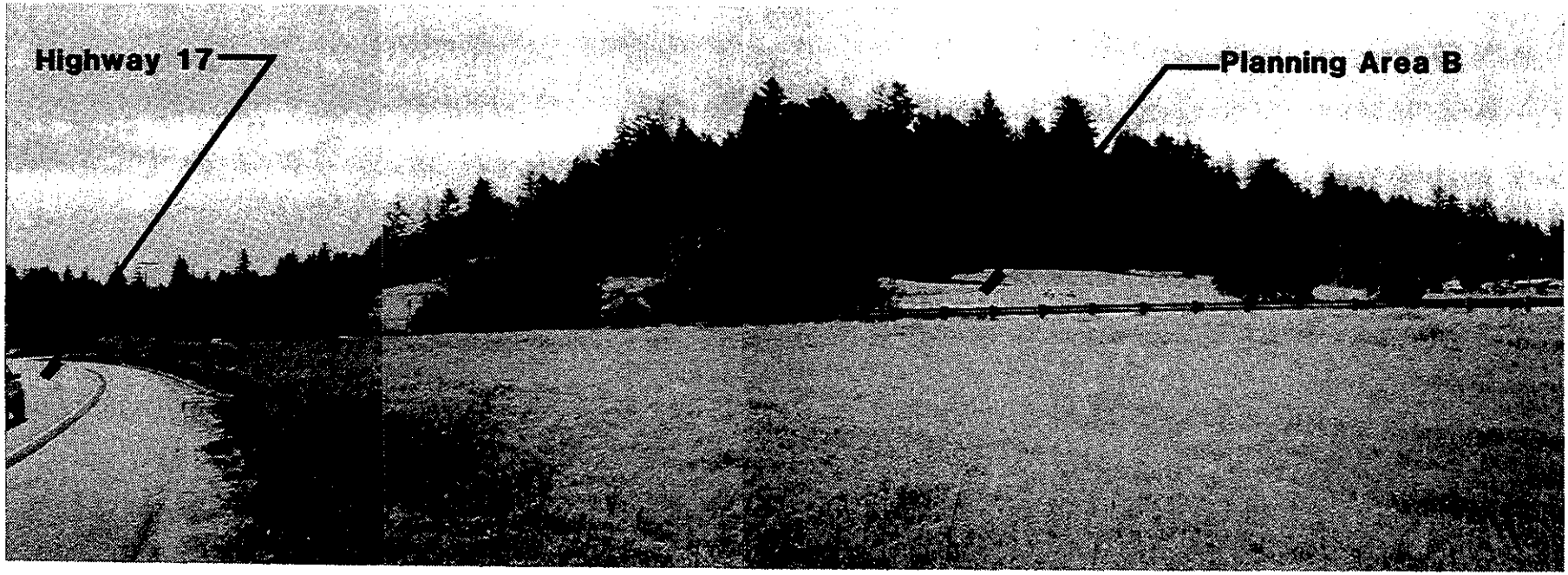
New Mitigation Measure

10. Future development at the project site shall conform to either the Mt. Hermon Road Design Guidelines or the Scotts Valley Design Guidelines, whichever is later and in effect at the time development is proposed.

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

11. 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.



Source: EMC Planning Group Inc.

No Scale

EMC Planning Group Inc.

A Land Use Planning and Design Firm

Gateway South Specific Plan EIR

View of Planning Area B from Southbound State Highway 17

Figure **15**

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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-nigh noise level at 45 dBA without people present.

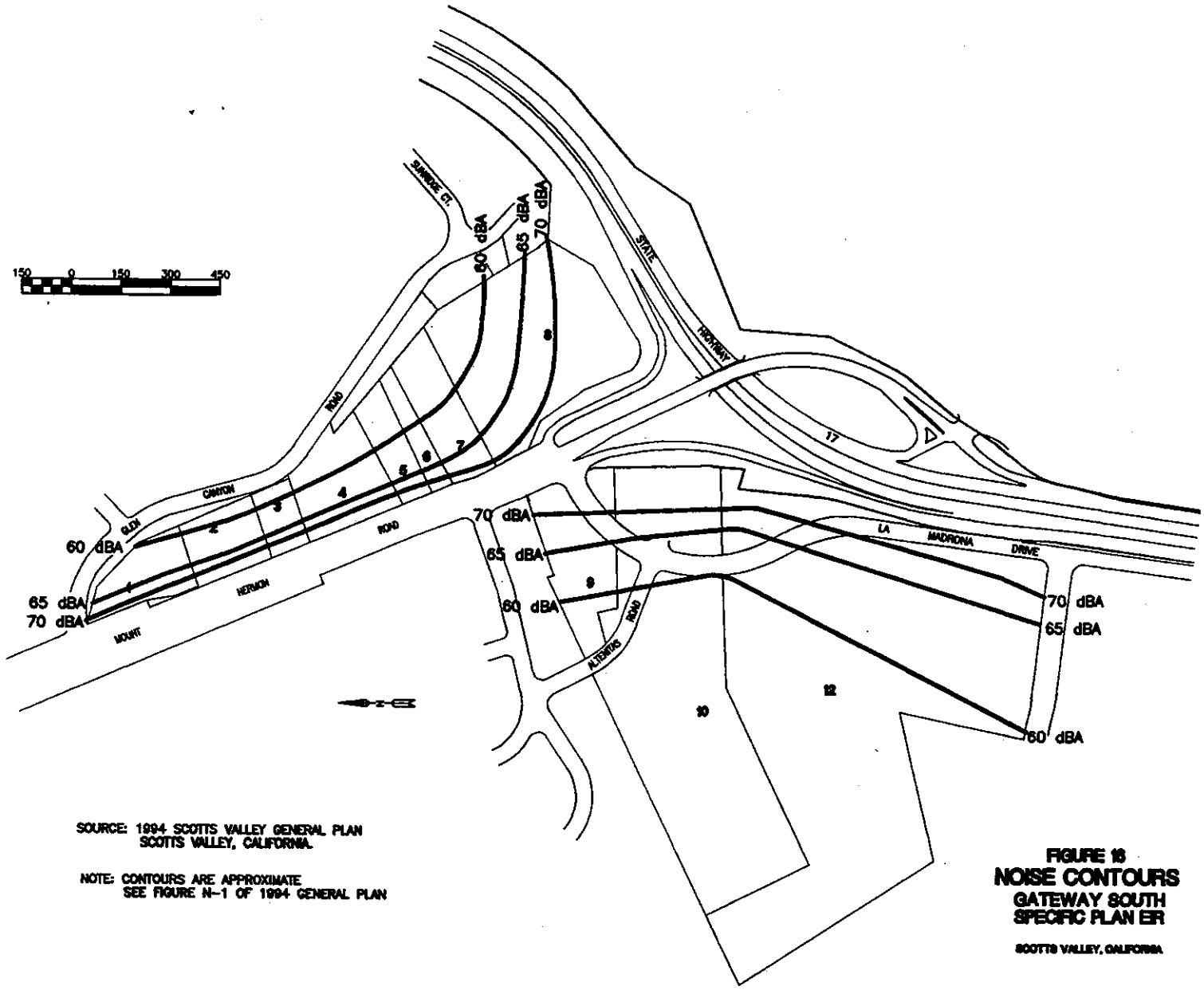
The general plan identified acceptable noise increase levels typically deemed acceptable based on the existing adjacent land use. They are presented in Table 14.

TABLE 14

Noise Increase Standards

	Max. Noise Increase in dBA Adjacent to Existing:			
Proposed New Use Location of dBA Reading	Sensitive	Residential	Commercial	Industrial
Sensitive at Property Line	3	5	5	5
50' from Property Line	3	3	–	–
Residential at Property Line	3	5	5	5
50' from Property Line	3	3	–	–
Commercial at Property Line	3	5	5	5
50' from Property Line	3	3	–	–
Industrial at Property Line	3	5	5	7
50' from Property Line	3	3	–	–

Source: City of Scotts Valley General Plan



SOURCE: 1994 SCOTTS VALLEY GENERAL PLAN
SCOTTS VALLEY, CALIFORNIA

NOTE: CONTOURS ARE APPROXIMATE
SEE FIGURE N-1 OF 1994 GENERAL PLAN

C2G Civil Consultants Group
Engineers/Planners
4444 Scotts Valley Drive / Suite B
Scotts Valley, CA 95066
(408) 438-4420

FIGURE 16
NOISE CONTOURS
GATEWAY SOUTH
SPECIFIC PLAN EIR
SCOTTS VALLEY, CALIFORNIA

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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.

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 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

12. 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 California 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 cobble scrapers 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

13. 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.

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 not result in ~~one~~ any 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 15

Cumulative Projects

Project	Residential/ Commercial	Dwelling Units or Square Footage	Status
1. Green Hills Estates	Residential	50 units	a.
2. Bluebonnet Lane	Residential	4 units	a.
3. Scotts Valley Auto Center	Commercial	7,283 sq. ft.	a.
4. Valley Gardens Golf Course	Commercial	1,500 sq. ft.	a.
5. Ridgecrest	Residential	12 units	b.
6. Heritage Park	Residential	81 units	b.
7. Creekside Estates	Residential	17 units	b.
8. Woodhill Village	Residential	34 units	b.
9. Anderson-Berry/Oak Creek	Commercial	12,000 sq. ft.	b.
10. Scotts Valley Drive (Rest.)	Commercial	5,180 sq. ft.	b.
11. Skypark Site "A"	Residential	190 units	c.
12. Cathy Lane/Scotts Valley Dr.	Residential	10 units	d.
13. La Cuesta /Mt. Hermon Rd.	Residential	17 units	d.
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.

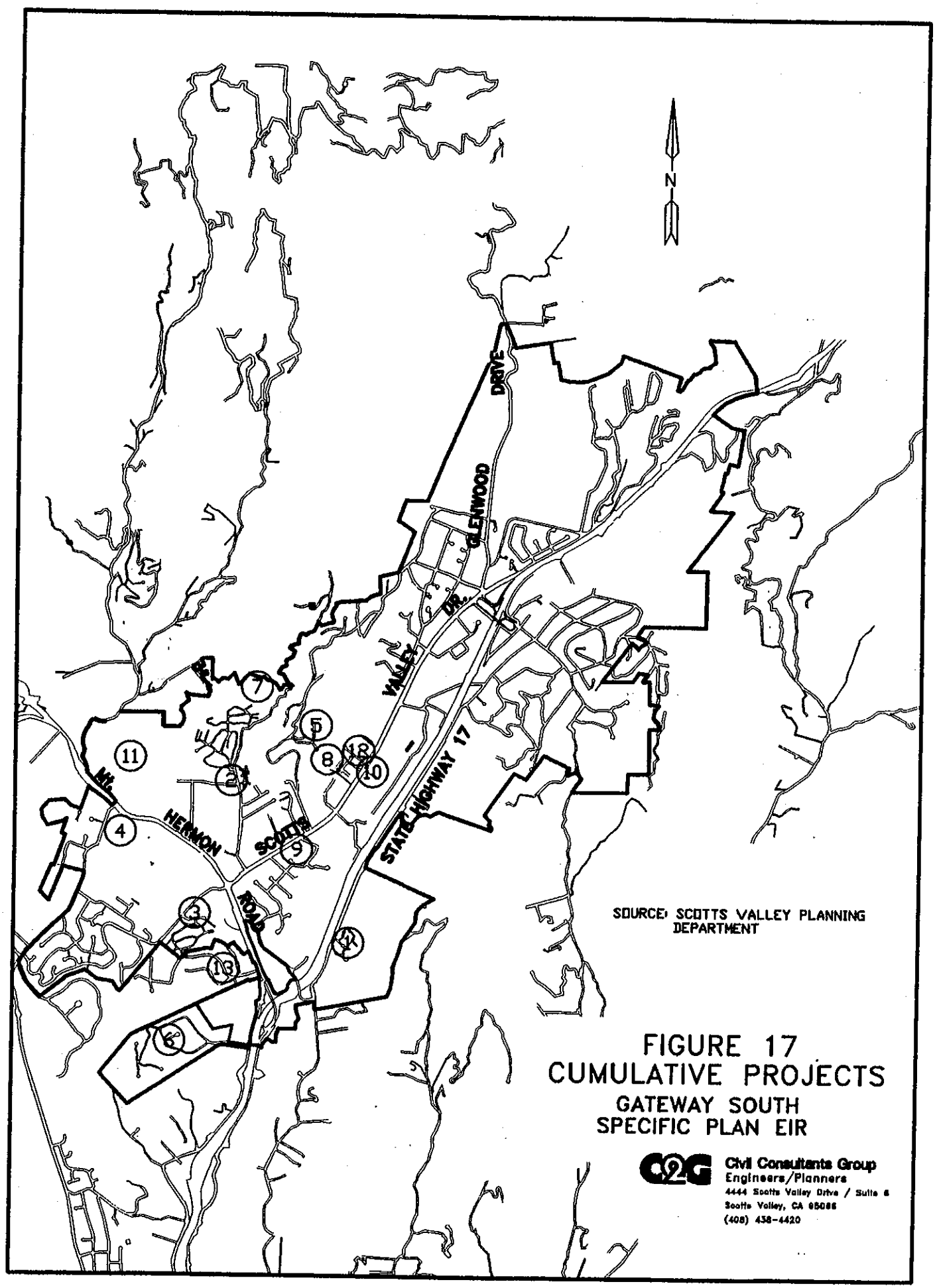

FIGURE 17
CUMULATIVE PROJECTS
GATEWAY SOUTH SPECIFIC PLAN EIR

Civil Consultants Group
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
(408) 438-4420

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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 243,779 (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 includes 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 5.5 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 Alternatives 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 though 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~~ one unavoidable significant impacts: traffic and circulation~~, and air quality~~. The Specific Plan would result in ~~only one~~ no 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.

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