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OAKVIEW

*Master Plan
Use Permit
Vesting Tentative Map*

***Final
Environmental Impact Report***

COUNTY OF MARIN
COMMUNITY DEVELOPMENT AGENCY

State Clearinghouse No. 95063038

JUNE 2002

OAKVIEW MASTER PLAN / USE PERMIT/ VESTING TENTATIVE MAP FINAL ENVIRONMENTAL IMPACT REPORT

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1.0 INTRODUCTION

1.0 INTRODUCTION

This ~~Draft-Final~~ Environmental Impact Report (~~Draft-Final~~ EIR) has been prepared for the County of Marin in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and County environmental procedures. The lead agency is the County of Marin.

In December, 1983 the property owners submitted to the City of San Rafael an application for a General Plan Amendment to allow a mixed use residential / commercial development on the 106.0 acre Daphne / Bacciocco property. The project site is located at the northwest corner of the intersection of Highway 101 and Lucas Valley Road.

After a review of the proposed project it was determined that an Environmental Impact Report was required. An Administrative Draft EIR ¹ (1986 Administrative Draft EIR) was prepared. The EIR was not circulated for public review and comment, nor was it presented to the San Rafael Planning Commission or City Council. The proposed General Plan Amendment and EIR were put on hold by the City of San Rafael pending the outcome of its then General Plan update process. The conclusion of the *San Rafael General Plan 2000* was that a hillside / residential designation allowing 0.5 to 2.0 units per acre was the appropriate land use. This land use designation would allow a potential density range of between 53 and 212 residential units on the 106-acre site. In 1989, at the request of Marinwood residents and the County, the City of San Rafael decided annexation of this property to the City could be waived, subject to certain conditions. The conditions were set out in a joint city-county Memorandum of Understanding. ²

In response to the City of San Rafael's action, in May 1995 the property owners submitted an application to Marin County for approval of a Master Plan, Use Permit and Tentative Map for the Daphne / Bacciocco property.

The 1995 *Oakview* Master Plan proposed 71 single-family detached housing units, two office buildings (94,400 square feet of office space), 52.9 acres of open space and 9.0 acres for freeway reserve set aside for the Highway 101 / Lucas Valley Road interchange.

In September 1996 Marin County began circulation of a Draft EIR for the proposed *Oakview* project (1996 Draft EIR). ³ The public review period for the Draft EIR was from September 25, 1996 to November 8, 1996. On November 4, 1996 the Marin County Planning Commission held a public hearing regarding the Draft EIR. On November 27, 1996 the project applicants wrote to the Marin County Community Development Agency and requested that "further processing of the Draft EIR for the Oakview project be temporarily suspended at this time." The purpose of the suspension was so that the project applicants and the project design team could review the issues raised in the Draft EIR and the public comments in order to revise the application to address the pertinent issues raised.

¹ *Daphne / Bacciocco Development Plan Administrative Draft Environmental Impact Report*, prepared by Nichols • Berman for the City of San Rafael, January, 1986.

² The Memorandum of Understanding is discussed in Section 4.3 of this EIR.

³ *Oakview Master Plan, Use Permit, Tentative Map, Draft Environmental Impact Report*, prepared by Nichols • Berman for County of Marin Community Development Agency, September 25, 1996.

In response to issues raised in the 1996 Draft EIR the property owners have now submitted a new application to Marin County for approval of a Master Plan, Use Permit, and Vesting Tentative Map for the 106-acre project site.⁴ The Master Plan proposes development of the project site with 28 single-family detached housing units and 94,400 square feet of offices in two buildings.

1.1 EIR REQUIREMENT

In 1999 the project applicant submitted the Oakview Master Plan application to the Marin County Community Development Agency. After review of the proposal, the application was deemed complete on July 26, 1999. As a part of the application the applicant stipulated to preparation of an Environmental Impact Report (EIR). On the basis of the 1996 Draft EIR and the project redesign, county staff determined that an EIR covering the following topics should be prepared:

- Land Use and Planning
- Population and Housing
- Geophysical
- Water
- Air Quality
- Transportation / Circulation

⁴ The Oakview Master Plan, Use Permit, and Vesting Tentative Map application was determined to be complete by the Marin County Community Development Agency on July 26, 1999. The project description is based on that application and the following documents, on file and available for public review at the Marin County Community Development Agency, Marin County Civic Center, Room 308, San Rafael, California:

Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map, (Application Text) Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C.E., Project Representative, April, 1999, Revised July 8, 1999.

Oakview Mitigated Master Plan Drawings, ten sheets, I.L. Schwartz Associates, Inc., and others, April 23, 1999, as revised through June 28, 1999.

Letter from John Dowden, Dowling Associates to Irving Schwartz, March 26, 1999, regarding the potential traffic impacts of the revised Oakview Mitigated Master Plan.

Landslide Mitigation and Geotechnical Recommendations During Grading Proposed Roadway Construction Oakview Development Project San Rafael, California, Kleinfelder, Inc., November 18, 1999.

Delineation of Clean Water Act Jurisdiction Oakview Project Area, Marin County, California, LSA Associates, Inc., August 18, 1999.

Letter from Lyle Lewis, Kleinfelder, Inc. to Virginia Daphne and Edward Bacciocco, May 5, 1999, regarding Geotechnical Plan Review Oakview Development San Rafael, California.

Oakview A Residential & Administrative/Professional Development Revised Preliminary Drainage Analysis, I.L. Schwartz Associates, Inc., February 22, 1999.

Letter from Irving Schwartz, I.L. Schwartz Associates, Inc. to Tim Haddad, Marin County Community Development Agency, November 18, 1999, regarding Oakview EIR and Off-Site Hydraulic Analysis.

Letter from Pamela Dawson and Lyle Lewis, Kleinfelder, Inc. to Irving Schwartz, December 21, 1999 regarding Correction to Geology and Soils Section Mitigated Master Plan, Use Permit and Vesting Tentative Map, Oakview Development Plan.

- Biological Resources
- Energy and Natural Resources
- Hazards
- Noise
- Public Services
- Utilities and Service Systems
- Aesthetics / Visual Resources
- Cultural Resources
- Social and Economic Effects Related to Physical Impacts

In accordance with the *State CEQA Guidelines*, no Initial Study was prepared since the preliminary review determined that an EIR will be required.

Marin County prepared a Notice of Preparation to prepare a Draft Revised EIR for the proposed project in August 1999 and sent it to governmental agencies and other parties with an interest in, or jurisdiction over the project in order to provide early consultation on the Scope of the EIR. The comment period for the NOP was from August 3, 1999 to September 2, 1999.

On January 26, 2000, Marin County conducted a public scoping session regarding the proposed project. The purpose of the meeting was to identify environmental issues and concerns that the public may have about the proposed project so that these issues can be evaluated in this EIR. A summary of the comments provided at the scoping meeting is included in Appendix A.

Specific comments and concerns addressed by those responses to the NOP and identified at the scoping meeting were taken into account in conducting the analyses for this report. Copies of the written responses to the NOP are on file and available for public review during normal business hours at the Marin County Community Development Agency, 3501 Civic Center Drive, 308, San Rafael, California.

Marin County did receive a number of comment letters regarding the adequacy of the 1996 Draft EIR and the merits of the proposed project. These letters are on file and available for public review during normal business hours at the Marin County Community Development Agency, 3501 Civic Center Drive, 308, San Rafael, California. Comments and concerns raised in the letters received by Marin County in response to the 1996 Draft EIR were also taken into account in this EIR's analyses.

1.2 PUBLIC REVIEW AND COMMENT

Marin County ~~will~~ will circulate this Draft EIR widely for review and comment by public agencies, interested individuals, and organizations, and ~~will~~ will accept comments in writing at a public hearing held by the Marin County Planning Commission. Comments ~~should~~ will address the adequacy of the EIR and ~~should~~ will contain questions about the environmental consequences of the project. (The County will invite comments on the project itself when the EIR is complete and the County formally considers the merits of the project.)

Comments on the Draft EIR ~~which are~~ will be made in writing before the close of the 45-day public review and comment period ~~should be~~ will be submitted to the Environmental Coordinator, Marin County Community Development Agency, 3501 Civic Center Drive, Room 308, San Rafael, CA 94903.

~~A~~ This Final EIR ~~will be~~ will be prepared after the close of the public review period. The Final EIR ~~will~~ will include all comments received by the County during the public review period together with responses

to those comments. The Final EIR will be distributed to the public for review before the County considers certifying the Final EIR as complete.

No action can be taken to approve, conditionally approve, or deny the project until the Final EIR is certified. County acceptance of the EIR upon certification does not require approval of the project studied in the EIR.

1.3 INFORMATION USED TO PREPARE THE EIR

CEQA directs that EIRs incorporate previously completed reports and documents by reference to the greatest extent possible in order to avoid unnecessary repetition. This EIR incorporates the following published reports, copies of which are on file and available for inspection at the Marin County Community Development Agency.

- *Marin Countywide Plan Draft Environmental Impact Report*, Marin County Planning Department, State Clearinghouse Number 91093072, April, 1993.

This EIR identified and evaluated the potential environmental impacts of the Countywide Plan. The Countywide Plan sets policy guidelines for future growth and development for all of Marin County; however, the plan policies and implementation measures are binding in only the unincorporated portions of Marin County, which includes the project site. The EIR discussed the issues of land use, visual quality and community character, open space, geology and soils, biological resources, hydrology and drainage, cultural resources, transportation and circulation, public services and facilities, air quality, and noise.

As a part of its Master Plan Application the project applicant submitted a number of technical reports, partially to respond to the findings of the 1996 Draft EIR and partially to support the revised project. Independent peer reviews of these technical reports were conducted for this EIR. Information was not used from these technical reports without it first being determined that the information was acceptable for use in the preparation of this EIR. They are on file and available for public review at the Marin County Community Development Agency. The reports are as follows:

- Letter from John Dowden, Dowling Associates to Irving Schwartz, March 26, 1999, regarding the potential traffic impacts of the revised Oakview Mitigated Master Plan.

This letter report assessed the traffic impacts of the revised site plan.

- *Landslide Mitigation and Geotechnical Recommendations During Grading Proposed Roadway Construction Oakview Development Project San Rafael, California*, Kleinfelder, Inc., November 18, 1999.

This report presents mitigation measures and geotechnical recommendations for the proposed roadway grading and landslide repair for the revised Master Plan.

- *Delineation of Clean Water Act Jurisdiction Oakview Project Area, Marin County, California*, LSA Associates, Inc., August 18, 1999.

This report presents the results of a delineation by LSA Associates, Inc. of the potential extent of waters of the United States, including wetlands, on the Oakview project site.

- Letter from Lyle Lewis, Kleinfelder, Inc. to Virginia Daphne and Edward Bacciocco, May 5, 1999, regarding Geotechnical Plan Review Oakview Development San Rafael, California.

This letter report assessed geotechnical aspects of the Grading and Drainage plan for the revised site plan.

- Oakview A Residential & Administrative/Professional Development Revised Preliminary Drainage Analysis, I.L. Schwartz Associates, Inc., February 22, 1999.

This preliminary drainage analysis updated and revised the previous preliminary drainage analysis dated September 29, 1993 to reflect current conditions, issues raised in the 1996 Draft EIR and the revised Master Plan.

- Letter from Irving Schwartz, I.L. Schwartz Associates, Inc. to Tim Haddad, Marin County Community Development Agency, November 18, 1999, regarding Oakview EIR and Off-Site Hydraulic Analysis.

This report provided a hydraulic assessment of existing storm drain capacities in the storm drain systems of Ellen and Erin Drives.

- Letter from Pamela Dawson and Lyle Lewis, Kleinfelder, Inc. to Irving Schwartz, December 21, 1999 regarding Correction to Geology and Soils Section Mitigated Master Plan, Use Permit and Vesting Tentative Map, Oakview Development Plan.

This letter report provided corrections to the Geology and Soils section of the Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map application submitted in April 1999 and revised July 8, 1999.

1.4 EIR OBJECTIVITY

This EIR is a factual, objective public disclosure document that takes no position on the merits of the project but instead provides information on which decisions about the project can be based. Thus, the findings of this EIR do not advocate a position "for" or "against" development. The EIR has been prepared according to the professional standards and practices of the EIR participants' individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines. The preparers of this EIR are independent professionals under contract to the County and are not associated with the project or applicant.

1.5 MITIGATION MEASURES

In the Marin County planning and project review process approval (or denial) of a Master Plan is followed by approval (or denial) of a Precise Development Plan. In this two step process Master Plans do not provide the specific level of detail provided by Development Plans. For example, Master Plans are only required to provide preliminary conceptual grading plans while the Development Plan must include a final grading plan. Master Plans are required only to provide a conceptual drainage and flood control plan while the Development Plan must provide precise drainage and flood control plans. The Master Plan provides a description of the proposed development including density, building heights, major open space, sewage disposal and public utilities while the Development Plan must

provide a site plan with precise building locations, parking spaces, public areas, vehicle and pedestrian circulation.

Although the Master Plan and Development Plan can be filed concurrently, the Oakview project applicant has only filed an application to Marin County for approval of a Master Plan. One reason why project applicants often request Master Plan approval only is that they want to delay spending large sums on highly detailed engineering and other specialized studies before they have some indication about whether (or not) their development concepts will be approved and their investments in pursuing the project -- with all the attendant planning, design, and engineering costs -- will be worthwhile.

Pursuant to Section 15146 of the *State CEQA Guidelines* the degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR. Therefore, EIRs can only provide as much detail as has been defined about the projects they evaluate. As a result, in the evaluation of a Master Plan there will be instances when additional planning and design efforts are needed to define the project in sufficient detail to answer all the questions officials or members of the public have about their environmental consequences. Furthermore, while it is understandable that some information may not be available during the preparation of an EIR on a Master Plan, it also is essential for environmental review to reveal the entire scope of the project and make a reasonable projection of impacts including the secondary effects of mitigating impacts directly or indirectly attributable to the project.

In the preparation of an EIR it is often difficult to balance the fact that some projects are not defined in detail with the need for full disclosure in environmental documents. In some cases it is appropriate that some projects not be designed in detail if substantial revision or redesign would be needed to take environmental conditions into account or to mitigate significant impacts. In recent years State courts have interpreted CEQA on the issue of deferring specific studies and mitigation measures in certain situations. After the decision in *Sunstrom v. County of Mendocino* (1988) which rejected "future study" mitigation measures in a mitigated negative declaration it was often assumed that it was improper for an EIR to defer formulation or adoption of specific mitigation measures for significant impacts. In *Sacramento Old City Association v. City Council* (1991) the Court ruled that a lead agency may list alternative mitigation measures in an EIR if the agency commits to mitigating the impacts and the measures are tied to measurable performance standards.

In consideration of these legal principles, in some instances this ~~Draft-Final~~ EIR provides a range of mitigation measures giving the County a choice of which one to implement. In these instances the County may select a mitigation program that requires selecting the specific measure to be implemented after completion of further studies and evaluation of the measures.

Furthermore, all of the mitigation measures are "performance based" measures which identify the objectives to be achieved as prerequisites for any development to proceed. Specific standards which these studies and/or detailed designs must satisfy or with which they must comply are identified. Should the project be approved, it would be conditional (contingent) on meeting these standards. Thus, no project could be implemented unless the studies, designs, or plans are complete. Furthermore, the County could require supplemental environmental review if indicated after examination of the additional studies. Sections 15162 and 15163 of the *CEQA Guidelines* describe a situation where when an EIR or Negative Declaration has been prepared and circumstances require that additional environmental documents (such as a Subsequent EIR or Supplement to an EIR) must be prepared. Generally a Subsequent EIR must be prepared:

- When substantial changes are proposed in the project requiring important revisions to the EIR due to new significant impacts, or
- When substantial changes occur with respect to the circumstances under which the project is undertaken, or
- When new information of substantial importance to the project becomes available and shows:
 - That the project will have one or more significant effects not discussed previously in the EIR, or
 - Significant effects previously examined will be more severe than shown in the EIR, or
 - Mitigation measures or alternatives previously found not to be feasible would be feasible and would substantially reduce one or more significant effects of the project, or
 - Mitigation measures or alternative which were not previously considered in the EIR would substantially lessen one or more significant effects on the environment.

1.6 REPORT ORGANIZATION

In addition to this introduction, this EIR is organized as follows:

- **Chapter 2.0 -- Description of the Proposed Project** -- describes the site location, existing land uses, and zoning, all aspects of the project as proposed, and the approvals required before the project could be built, if approved.
- **Chapter 3.0 -- Summary** -- highlights the more important effects from implementing the project and summarizes the measures available to mitigate significant adverse impacts. This chapter discusses cumulative and growth-inducing impacts, effects of no significance and major EIR conclusions and issues to be resolved.
- **Chapter 4.0 -- Relationship to Public Plans and Zoning** -- describes the project's conformance with relevant *Marin Countywide Plan*, *San Rafael General Plan 2000*, Marin Local Agency Formation Commission, and Marin County zoning policies and regulations.
- **Chapter 5.0 -- Environmental Setting, Impacts, and Mitigation Measures** -- describes the existing environmental setting, identifies probable impacts from implementing the project, and recommends mitigation measures to substantially reduce or eliminate significant adverse impacts.
- **Chapter 6.0 -- Alternatives** -- describes on- and off-site alternatives to the project and assesses the outcome of different development concepts, a different project location, and the no development alternative compared with the project as proposed. This chapter also identifies an environmentally superior alternative among the alternatives.
- **Chapter 7.0 -- Comments and Responses** -- discusses some of the major issues raised about the Draft EIR and presents and responds to all comments submitted in writing or made at the public hearing on the EIR.

- **Chapter 78.0 -- References** -- identifies the people responsible for preparing the report, people consulted during preparation of the EIR and references.
- **Appendices** -- include background material to support the EIR text and a draft Mitigation Monitoring Program.

2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.0 DESCRIPTION OF THE PROPOSED PROJECT

2.1 STUDY AREA LOCATION AND EXISTING LAND USES

Project Location

The Oakview project site is located at the northwest corner of the Lucas Valley Road / Smith Ranch Road / Highway 101 interchange in unincorporated Marin County (see Exhibit 2.1-1). The 106.32-acre site is north of Lucas Valley Road and west of Highway 101 (see Exhibit 2.1-2), bordered by Miller Creek (north), Lucas Valley Road (south), Highway 101 (east), and existing residential development along Erin Drive, Lisa Court, and Elvia Court (west). Lucas Valley Road south of the site is the City of San Rafael boundary.

The site consists of one parcel (Assessor's Parcel Number 164-270-03), and the owners are Virginia Daphne and Edward J. Bacciocco. The site is undeveloped and known locally as the Daphne / Bacciocco property.

The site contains a major north-trending hill with several lateral spurs and their associated swales. Elevations along the hill top vary from approximately 250 to 307 feet above sea level. Elevations within the swales vary from approximately 50 to 150 feet. Slopes within the swales are gentle to moderate, from a 7 : 1 (horizontal : vertical ¹) to a 4 : 1 ratio. The intervening slopes between the lower hill flanks and hill top generally are moderately steep to steep (2 : 1 ratio to 1-1/2 : 1 ratio).

About two-thirds of the site has heavy tree cover, and the remainder is grassland. The upper elevations are heavily vegetated, primarily with oak trees and associated understory vegetation. The lower parts are covered with annual grasses. Miller Creek, which generally forms the northern site boundary, is the only "blue line" stream on the property.² Except for Miller Creek, no actual watercourses run through the site, but shallow swales collect and direct runoff to the site boundaries.

The site's *Countywide Plan* designation is PR (Planned Residential, one to ten units per acre) and zoning is RMP-1.38 (Residential Multi-Family Planned, 1.38 units per acre). The RMP district allows varied types of housing to be developed without the confines of specific yard requirements where the amenities resulting from the flexibility in design would benefit the public welfare or other properties in the community. Permitted uses in this district include single-family dwellings plus other uses, such as crop and tree farming, truck gardening, nurseries and greenhouses, schools, libraries, other non-commercial recreational uses, and day-care centers for six or more children. Subject to the issuance of a use permit, permitted uses also include hotels and offices.

¹ This means that for a horizontal distance of seven feet, for instance, there would be a one-foot vertical rise.

² A "blue line" stream refers to streams designated on an United States Geologic Survey topographic map by either a solid or dashed blue line.

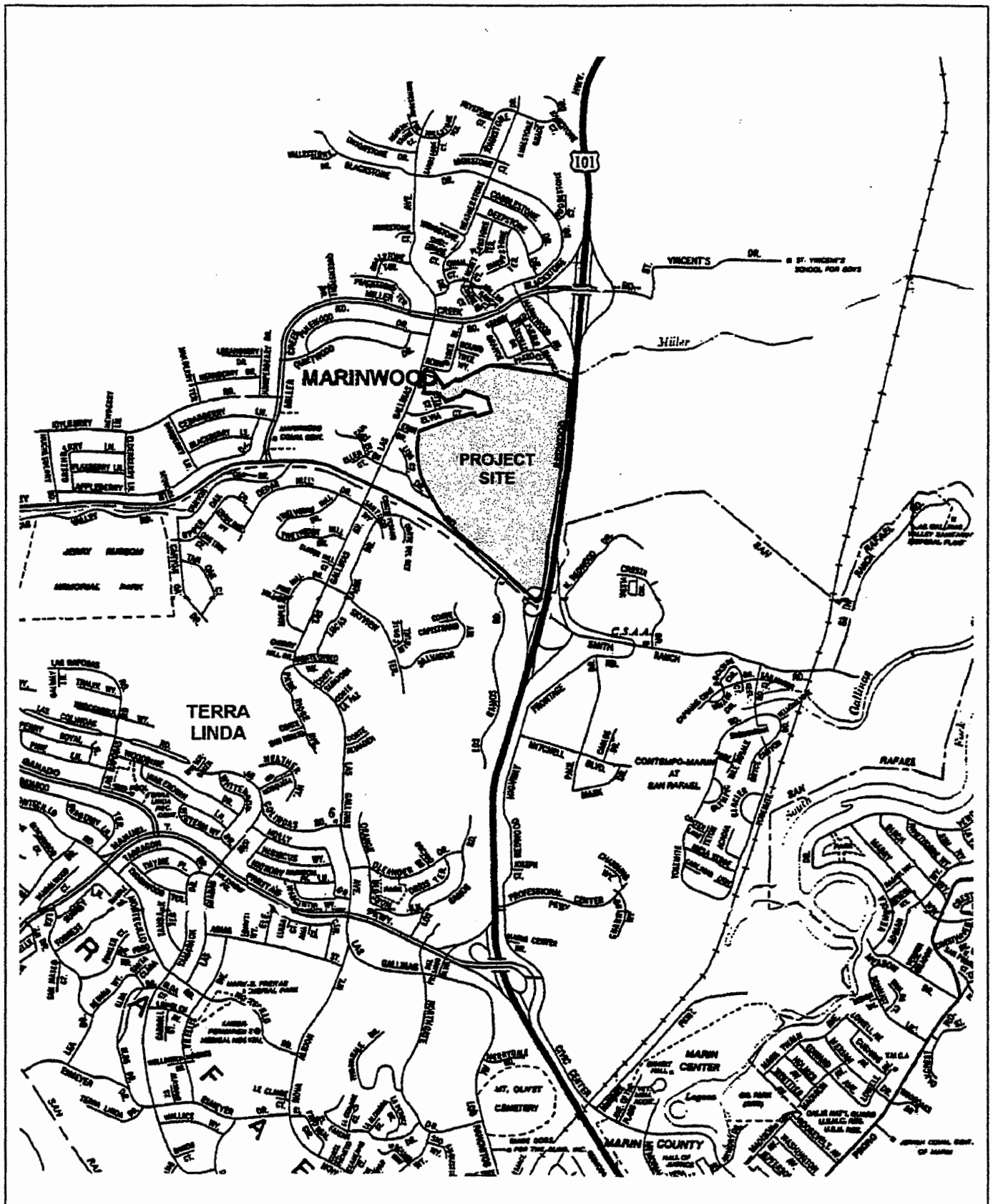


EXHIBIT 2.1-1 REGIONAL LOCATION MAP
Oakview Master Plan

↑
 North

Source: Map copyrighted by the California State Automobile Association



EXHIBIT 2.1-2 PROJECT LOCATION
Oakview Master Plan



Source: IL Schwartz Associates, Inc.

The site is within the Marinwood Community Services District, Marin Municipal Water District, Dixie School District, and San Rafael High School District.

Adjacent Land Uses

The project site is adjacent to commercial development and condominiums across Miller Creek (north), office buildings across Lucas Valley Road (south), Highway 101 (east), and residential development (west). North beyond Miller Creek are the Marinwood Plaza commercial and Casa Marinwood and Roundtree residential developments. South across Lucas Valley Road, two large office buildings are located adjacent to Highway 101. A State-operated truck scale is located east and adjacent to the site on southbound Highway 101. Adjacent to the site on the west is the unincorporated Marinwood community of single-family homes. Average lot size in this residential neighborhood is 10,223 square feet³ or a density of approximately 4.26 units per acre.

Two streets in the existing residential neighborhood (Erin Drive and Ellen Drive) dead-end at the site boundary. Marinwood Avenue also dead-ends at the site.

2.2 PROJECT DESCRIPTION

Previous Proposed Projects

As discussed in Chapter 1.0 *Introduction*, two separate applications for the project site were previously submitted, one in December 1983 and one in May 1995.

DECEMBER 1983 PROPOSED PROJECT

In December 1983, the property owners submitted an application to the City of San Rafael for a General Plan Amendment to allow a mixed-use residential / commercial development on the site. After reviewing the proposed project, the City determined that an Environmental Impact Report (EIR) was required. An Administrative Draft EIR⁴ (1986 Administrative Draft EIR) was prepared. The EIR was not circulated for public review and comment or presented to the San Rafael Planning Commission or City Council. The City of San Rafael put the proposed General Plan Amendment and EIR on hold pending the outcome of its then current General Plan update process. The *San Rafael General Plan 2000* concluded that a hillside / residential land use designation allowing 0.5 to 2.0 units per acre was appropriate for the site. This designation potentially would allow 53 to 212 housing units on the 106-acre site. In 1989, at the request of Marinwood residents and the County, the City of San

³ The average lot size was determined by subtracting the existing church site and streets from the gross area and dividing by the number of lots.

⁴ *Daphne / Bacciocco Development Plan Administrative Draft Environmental Impact Report*, prepared by Nichols • Berman for the City of San Rafael, January, 1986.

Rafael decided annexation of this property to the City could be waived, subject to certain conditions. The conditions were set out in a joint city-county Memorandum of Understanding.⁵

The December 1983 proposed project had the following general characteristics:

- 45.5 acres low density residential use -- 117 housing units -- 103 single-family and seven duplex units (the latter providing 14 affordable units)
- 18.9 acres office / commercial use -- 199,800 square feet
- 41.6 acres open space

MAY 1995 PROPOSED PROJECT

In May 1995 the property owners submitted an application to Marin County for a Master Plan, Use Permit, and Tentative Map for the Oakview project site.

The May 1995 proposed project had the following general characteristics:

- 33.3 acres of low-density residential use -- 71 single-family detached housing units
- 11.1 acres of office use -- 94,400 square feet to be constructed in two buildings
- 52.9 acres of open space
- 9.0 acres set aside for the proposed Highway 101 / Lucas Valley Road southbound ramps

In September 1996 Marin County began circulation of a Draft EIR (1996 Draft EIR) for the proposed *Oakview* project. The public review period for the Draft EIR was from September 25, 1996 to November 8, 1996. On November 4, 1996 the Marin County Planning Commission held a public hearing regarding the Draft EIR. On November 27, 1996 the project applicants wrote to the Marin County Community Development Agency and requested that "further processing of the Draft EIR for the Oakview project be temporarily suspended at this time." The purpose of the suspension was so that the project applicants and the project design team could review the issues raised in the Draft EIR and the public comments in order to revise the application to address the pertinent issues raised.

During 1997, on behalf of the project applicants, Kleinfelder, Inc. conducted additional geotechnical work on the project site in response to geologic issues raised in the 1996 Draft EIR. Snyder & Smith Associates, on behalf of Marin County, conducted a peer review of Kleinfelder's work.

⁵ The Memorandum of Understanding is discussed in Section 4.3 of this EIR.

Project Application

The property owners have now submitted a new application to Marin County for approval of a Master Plan, Use Permit, and Vesting Tentative Map⁶ for the 106-acre Daphne / Bacciocco site.⁷ The Master Plan proposes development of the project site with 28 single-family detached housing units and 94,400 square feet of offices in two buildings (see Exhibits 2.2-1 and 2.2-2). The Use Permit is to allow development of office buildings in the RMP zone, and the Tentative Map is to divide the site into two parcels to initiate the development process. One 51.9-acre parcel (Parcel 1) would consist of 15.3 acres of residential development (28 housing units), 34.8 acres of open space (Open Space Parcel A is 33.7 acres and Open Space Parcel C is 1.1 acres) and 1.8 acres of public right of way, and the other 54.4-acre parcel (Parcel 2) would be comprised of 20.1 acres of office development (Lot 29 is 2.0 acres and Lot 30 is 18.1 acres) and 34.3 acres of open space (Open Space Parcel B). Land reserved for the proposed Highway 101 / Lucas Valley Road southbound ramps is set aside in Open Space Parcel B. Land uses proposed by the Master Plan / Tentative Map are summarized in Exhibit 2.2-3.

The 1996 Draft EIR identified Alternative 4 (Mitigated Alternative) as the environmentally superior alternative among the build alternatives considered. This alternative assumed 29 residential lots on the lower elevations of Parcel 1 and two office buildings on Parcel 2. – The current Master Plan considered in this EIR builds upon the concepts expressed in the Mitigated Alternative.

The current application is for Master Plan, Use Permit, and Vesting Tentative Map approval. Following approval of the Master Plan, Use Permit, and Tentative Map the applicant would be required to submit a Precise Development Plan.

⁶ Upon approval of a Vesting Tentative Map, a subdivider has legal “vested rights” to proceed with development if it is in substantial compliance with the ordinances, policies and standards (except fees) in effect at the time a complete Vesting Tentative Map is filed.

⁷ The Oakview Master Plan, Use Permit, and Tentative Map application was determined to be complete by the Marin County Community Development Agency on July 26, 1999. The project description is based on that application and the following documents, on file and available for public review at the Marin County Community Development Agency, Marin County Civic Center, Room 308, San Rafael, California:

Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map, (Application Text) Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C.E., Project Representative, April 1999 revised July 8, 1999.

Oakview Mitigated Master Plan Drawings, ten sheets, I.L. Schwartz and others, June 28, 1999 as revised through December 30, 1999.

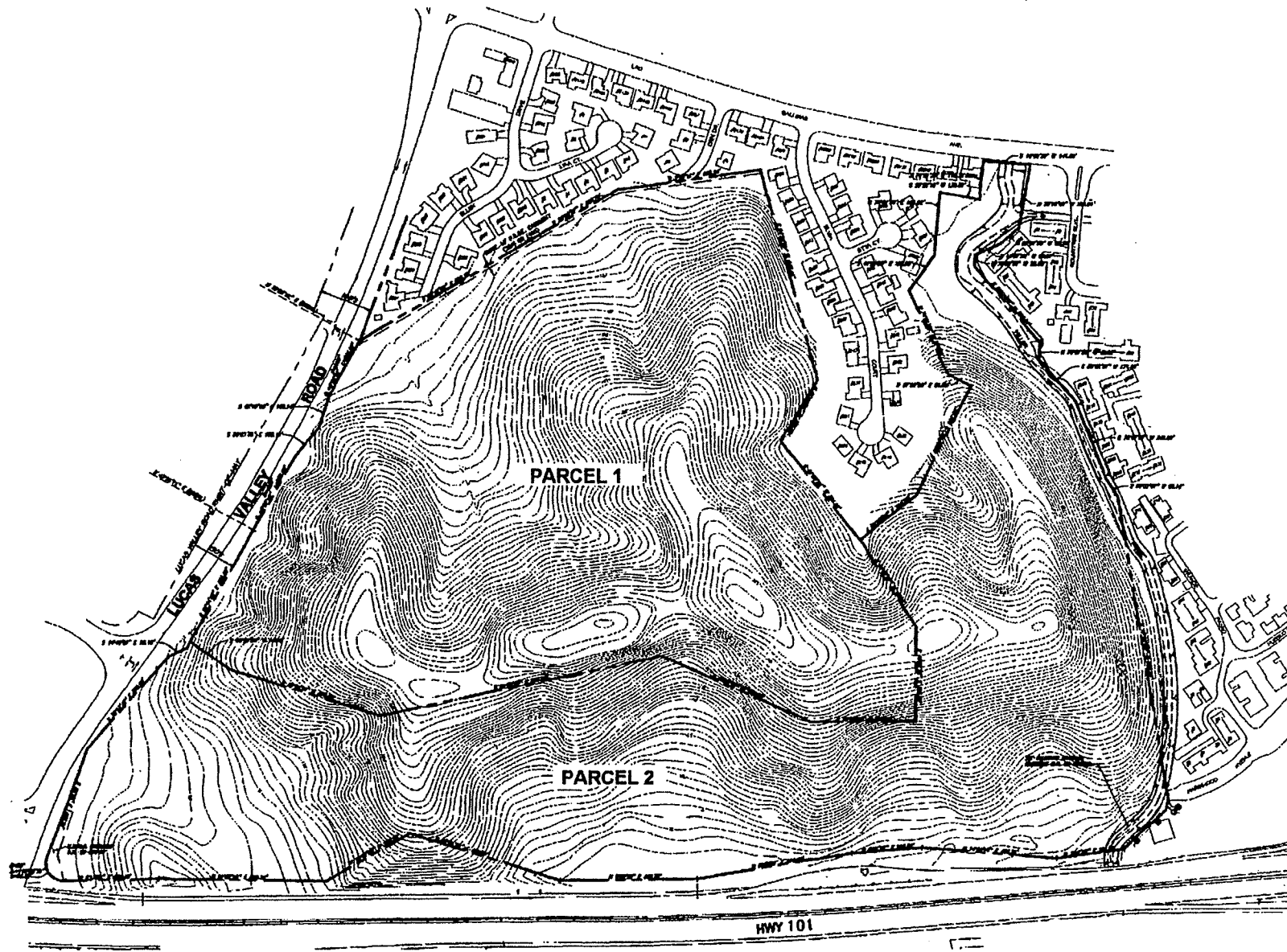
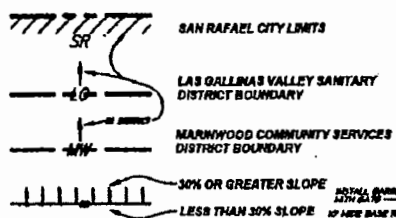


EXHIBIT 2.2-1 PROPOSED VESTING TENTATIVE MAP
Oakview Master Plan

→
North

LEGEND



AREA SCHEDULE	
LOTS 1-20	10.3 ± A.C.
LOTS 21 & 30	20.1 ± A.C.
OPEN SPACE PARCEL A	33.7 ± A.C.
OPEN SPACE PARCEL B	34.3 ± A.C.
OPEN SPACE PARCEL C	1.1 ± A.C.
PUBLIC RIGHT-OF-WAYS	1.8 ± A.C.
TOTAL	108.3 ± A.C.

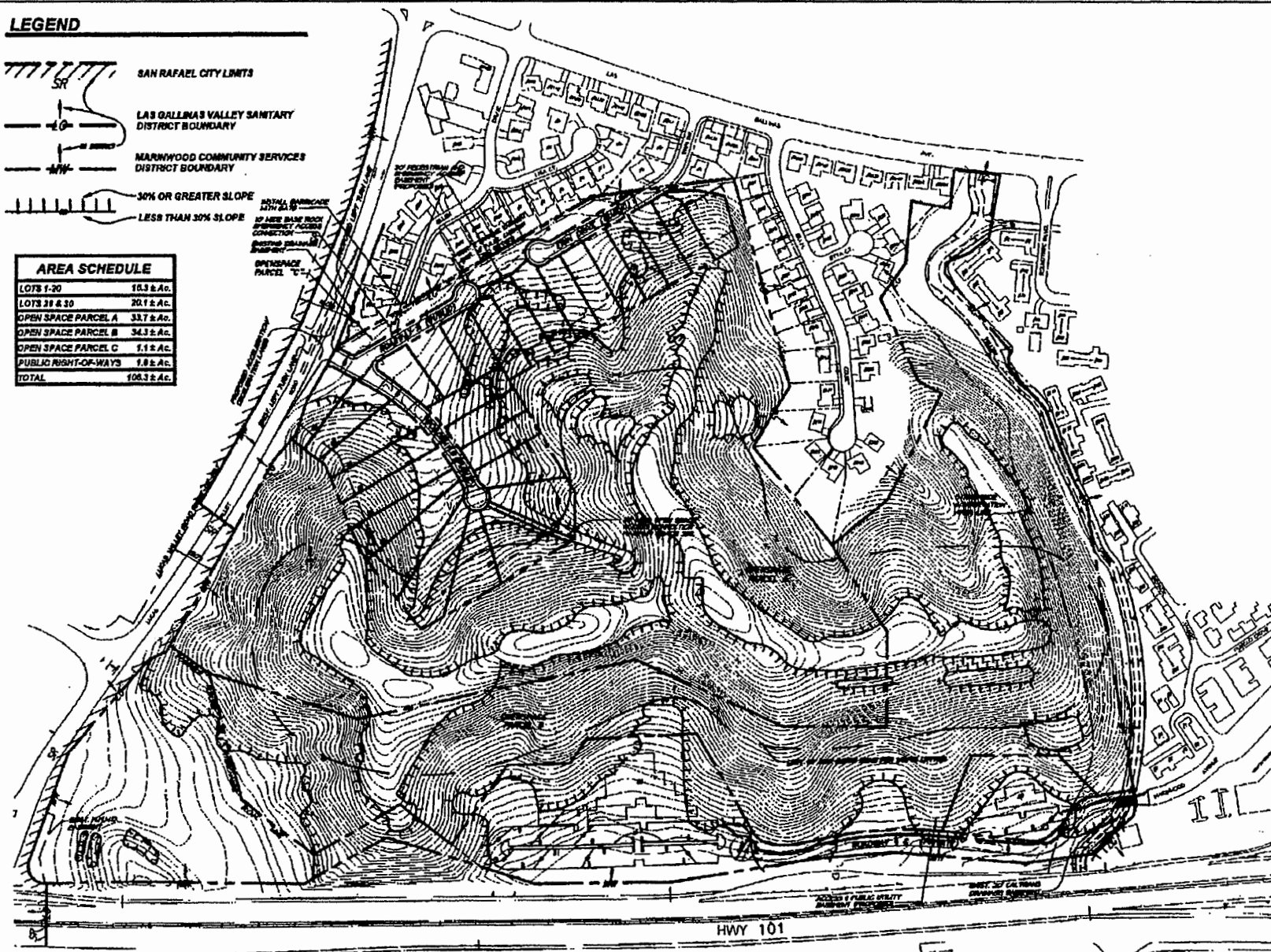


EXHIBIT 2.2-2 PROPOSED DEVELOPMENT PLAN
Oakview Master Plan

→
North

Exhibit 2.2-3
Oakview Master Plan Project Characteristics

Land Use	Acreage
Parcel 1	
Residential Area (28 units)	15.3 acres
Open Space	
Parcel A	33.7 acres
Parcel C	1.1 acres
Public Right-of-Way	1.8 acres
Subtotal	51.9 acres
Parcel 2	
Administrative / Professional Offices (total of 94,400 square feet of building)	20.1 acres
Open Space Parcel B	34.3 acres
Subtotal	54.4 acres
Total Oakview Project Site	106.3 acres

Source: *Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map*, I.L. Schwartz, C.E. Project Representative, April 1999, Revised July 8, 1999.

PROJECT APPLICANT GOALS AND OBJECTIVES

As a part of the project application the applicant has identified the following project goals and objectives: ⁸

- Divide the existing 106.3 acre site into two parcels (Parcel 1 51.9 acres; Parcel 2 54.4 acres).
- Preserve the ridge lines as undeveloped open space.
- Preserve as many healthy, mature trees as possible.
- Retain 69.1 acres of the site as permanent open space.
- Establish a development program that includes 20.1 acres of administrative/professional office space with parking and landscaping, 15.3 acres of residential development, including 28 lots with roadway access.
- Create an internal circulation system that prevents through traffic.

⁸ *Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map*, Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C.E., project representative, April 1999, revised July 8, 1999, pages 19 and 20.

- Establish a conservation easement at the rear of the residential lots.
- Develop a revegetation plan for the site that includes restoration of native grasslands and replacement of trees removed to allow development.
- Preserve, or enhance, the existing seasonal seeps and riparian forest to the maximum extent possible.
- Limit the site grading.
- Develop a residential subdivision that is visually compatible with the existing neighborhoods adjacent to the site.

PROPOSED MASTER PLAN

The Master Plan proposes dividing the project site into two parcels.

Parcel 1

The 51.9-acre Parcel 1 would contain 1.8 acres of public right-of-way, 34.8 acres of open space and 15.3 acres of residential land proposed for development with 28 single-family housing units (Lots 1-28). The project's housing units would be built at the southwest end of the site adjacent to existing residential uses. The largest residential lot would be approximately 36,240 square feet, the smallest would be about 18,080 square feet, and average lot size would be about 23,500 square feet.

Parcel 2

The 54.4-acre Parcel 2 would contain 20.1 acres of administrative / professional office development. The east side of Parcel 2 would be developed with two office buildings. Building A would contain approximately 80,000 square feet and Building B would contain approximately 14,400 square feet, for a total of 94,400 square feet of office use on-site. No specific uses for the two office buildings have been proposed.

The remaining area of Parcel 2 would consist of open space (34.3 acres). Within the open space area land is reserved for the future Highway 101 / Lucas Valley Road southbound ramps.

ACCESS AND CIRCULATION

Automobile Access

Access to 20 housing units would be from a new roadway off Lucas Valley Road. This new roadway would end in two culs-de-sac, identified as roadways A and B. Access to the remaining eight housing units would be by an extension of Erin Drive, ending in a cul-de-sac. Roadways A, B, and Erin Drive would have 50-foot rights-of-way with 28 feet of paved width and 75-foot diameter culs-de-sac.

Marinwood Avenue would be extended south from its present end north of Miller Creek along the Highway 101 frontage of the project site to provide access to the two office buildings. Marinwood Avenue would lead directly into the proposed parking lot for Building A. North of the parking lot, Marinwood Avenue would widen to provide turning space for cars, delivery trucks, and emergency

vehicles. The Marinwood extension would vary from 24 to 32 feet of paved width and is proposed to be a private street.

Land is reserved in Open Space Parcel B to allow Caltrans to construct the proposed Highway 101 / Lucas Valley Road southbound off- and on-ramps.

Emergency Access

A 20-foot wide pedestrian and emergency vehicle access easement, with a 12-foot paved section, would connect Roadway A to the Erin Drive extension. A second emergency vehicle access would be provided between Lots 19 and 20 from Roadway B to the open space above the residential area.

Pedestrian / Bicycle Access

Roadway A would have a sidewalk on both sides. Roadway B and Erin Drive would have a sidewalk along the housing unit frontage only. The extension of Marinwood Avenue would have a sidewalk along the western edge.

The project proposes to improve the existing pedestrian path along the south side of Miller Creek between the extension of Marinwood Avenue and Las Gallinas Avenue. Specific information regarding improvements to this path are not provided in the Master Plan, although it is stated that the path would be improved to current standards.

The 12-foot wide emergency vehicle access connecting Roadway A to the Erin Drive extension would also provide pedestrian access. The emergency vehicle access between Lots 19 and 20 would also allow pedestrian access from Roadway B to the open space.

Parking

Four off-street parking spaces would be provided for each housing unit. Two spaces would be in a roofed structure, and two may be located in the building setback area.

Three hundred twenty (320) parking spaces would be provided for Building A and 58 spaces for Building B, for a total of 378 parking spaces. Building A would have eight spaces reserved for handicapped access, and Building B would have two spaces reserved for handicapped access.

OPEN SPACE

The Master Plan does not state precisely how the open space would be managed and maintained. It is stated that the open space would be left in its natural condition. The open space areas delineated in the Master Plan (33.7 acres in Parcel A, 34.3 acres in Parcel B and 1.1 acres in Parcel C) is proposed to be offered for dedication in fee simple to a public agency, such as the Marinwood Community Services District (MCSD) or Marin County Open Space District (MCOSD). If dedicated to the MCSD or MCOSD, one of those agencies would be responsible for managing and maintaining the site's open space.

GRADING

The grading plan submitted with the Master Plan shows the grading required for developing site access roads and installing necessary utilities but does not illustrate grading required for individual housing units.⁹ Two types of grading are proposed:

- Grading along project site roadways in order to create sufficient roadway width to accommodate pavement, pedestrian circulation, and utilities
- Grading in the office area for roadway, building development, and parking

The goal of the grading concept is to minimize grading, balance graded material on-site, and eliminate the need to import soil from off-site locations or export excess soil for disposal elsewhere. According to the grading plan, an estimated 7,020 cubic yards of cut material and 6,320 cubic yards of fill would be required to build roads to the housing units. Estimated quantities of cut and fill for the road and parking lots serving offices would be 26,220 and 20,780 cubic yards, respectively.

The grading plans shows 2:1 and daylight cuts and fill area within the proposed roadways for both residential and commercial development. One timber retaining wall is planned upslope of the end of Roadway A (southwestern corner of proposed Lot 10). The height of this wall would vary from one to four feet.

In the commercial area 2:1 cuts are proposed along the slopes above each of the proposed commercial building lots and portions of the proposed roadway (Roadway C). Minor fill placements (2:1 slopes) are proposed along the eastern edge of the proposed roadway. Several concrete retaining walls are proposed along cut slopes for the proposed commercial buildings at Lots 29 and 30, and along a portion of the cut slope for Roadway C. Wall heights would vary from one foot (proposed parking lot) to 15 feet (portion of Roadway C). Timber retaining walls are proposed along the eastern edge of the proposed parking lot at Lot 30 (top of proposed fill slope) and top of the fill slope within the proposed parking lot at Lot 29. The timber wall heights would be three feet.

CONCEPTUAL DRAINAGE / FLOOD CONTROL

Existing drainage facilities (inlets, culverts, interceptor ditches) near the site were all constructed relatively recently (since 1958), and accepted practice dictated that these facilities were to be designed for ultimate development of the watershed. However, the County design standards for small watersheds at that time mandated a design storm with a recurrence interval of 10 to 25 years. The current standard for Marin County is the 100-year rainstorm, regardless of watershed area.

Accordingly, the hydraulic analysis recently submitted by the applicant's civil engineer¹⁰ has confirmed that some storm drain segments within the Marinwood Subdivision do not meet the existing design standard. Implementation of the proposed project would require installation of drainage

⁹ Sheet 5 of the *Oakview Master Plan Drawings* shows the proposed Drainage and Grading Plan and *Landslide Mitigation and Geotechnical Recommendations During Grading Proposed Roadway Construction Oakview Development Project San Rafael, California*, Kleinfelder, Inc., November 18, 1999. Both the Master Plan Drawings and the geotechnical report are available for review at the Marin County Community Development Agency.

¹⁰ Letter from Irving Schwartz, I.L. Schwartz, Inc. to Tim Haddad, Marin County Community Development Agency, November 18, 1999, regarding Oakview EIR and Off-Site Hydraulic Analysis.

facilities in site roadways and on some lots to accommodate building development and completion of interceptor ditches missing from the existing drainage system.

A Drainage Plan has been prepared as a part of the Master Plan.¹¹ Proposed roadways would collect stormwater and transport it via curbs and gutters to storm drains. Downstream of the storm drain systems (existing or new), stormwater would be conveyed by culverts or vegetated swales to either Miller Creek or to culverts under Highway 101.

For the current project design, all residential lots are situated upslope of roads and would drain to the roads. This would decrease the amount of water flowing to the existing interceptor ditch system behind homes on Elvia Court relative to the prior project configurations (1996 and prior).

The drainage system proposed for the project's residential area has been designed to reduce the amount of surface water flowing toward the existing residential subdivision by collecting it in new facilities to be built on the project site.

Newly constructed roadways and their associated underground drainage facilities would collect a certain amount of present stormwater flows which apparently seep underground to the existing residences below the site. More detailed soils investigations (required at subsequent phases of the planning process) may determine that a subdrainage system would be required in some parts of the site to protect both existing off-site and proposed on-site units from subsurface flows.

Drainage facilities for the office area would collect sheet-flow from hillside drainage behind the buildings, transport it to a drainage system which also collects water from the parking areas, and transport it via culverts and vegetated swales either to the existing culverts under Highway 101 or directly to Miller Creek.

UTILITIES AND SERVICES

The project is proposed to be provided with sanitary sewer service by the Las Gallinas Valley Sanitary District (LGVSD). The site is proposed to be annexed into the service boundaries of the LGVSD and connected with existing facilities.

The project is proposed to be provided with water for domestic and fire protection purposes from the Marin Municipal Water District (MMWD). The project would require an extension of existing MMWD facilities.

It is proposed that the Marinwood Community Service District (MCSD) provide fire protection, street lights, parks, and recreation services for the project. Police protection would be provided by the Marin County Sheriff's Department.

ARCHITECTURAL STANDARDS

The Master Plan proposes architectural standards for both residential and office buildings.

¹¹ Sheet 5 of the *Oakview Master Plan Drawings* shows the proposed Drainage and Grading Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

Residential Buildings

The general concept for housing units is to conform to site contours as much as possible. Structures and roof forms would be stepped up or down slopes in order to minimize the apparent size of structures and to minimize obstructing views from adjacent buildings. Houses would have hip, gable, or shed roofs, forms which would be used consistently throughout a structure. Large expanses of wall area generally would be discouraged to avoid the appearance of massive structures.

Siding materials generally would be wood, stone, or stucco, and the design concept is intended to encourage the use of earth and grey tone materials and colors while discouraging the use of overly brilliant or contrasting colors.

The maximum height of main buildings above existing grades would be 30 feet, as determined by the County's zoning ordinance Section 22.47.020 (e), unless the Community Development Agency allows an exception.

Setbacks from property lines would be:

- **Front yard** -- 20 feet
- **Side yards** -- eight feet (20 feet facing the street at corner lots)
- **Rear yard** -- 20 percent of lot depth (25 feet maximum). In addition, with the exception of Lots 11, 12, and 13, all lots would have a 50-foot wide conservation easement at the rear of the property. No structures, other than property line fences, would be allowed in this area.

Office Buildings

The general concept for the office buildings would be to build low structures (maximum 30 feet above natural grade to any point on the structure) and site each in a minor valley to reduce their visibility from Highway 101.

The larger 80,000 square foot building (office building A) would be located in the larger southernmost valley, and the smaller 14,400 square foot building (office building B) would be located in the northernmost valley, leaving an open land buffer in the intervening third valley.

LANDSCAPING

A Conceptual Landscape Plan has been prepared as a part of the Master Plan (see Exhibit 2.2-4).¹²

Parcel 1 Landscaping Street trees would be planted along residential streets in a formal thematic pattern. Street trees are planned as medium height, deep rooting, canopy trees (such as Holly or Scarlet Oak). Individual lot owners would be responsible for installing street trees as a required part of front yard landscaping.

¹² Sheet 8 of the *Oakview Master Plan Drawings* shows the proposed Conceptual Landscape Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

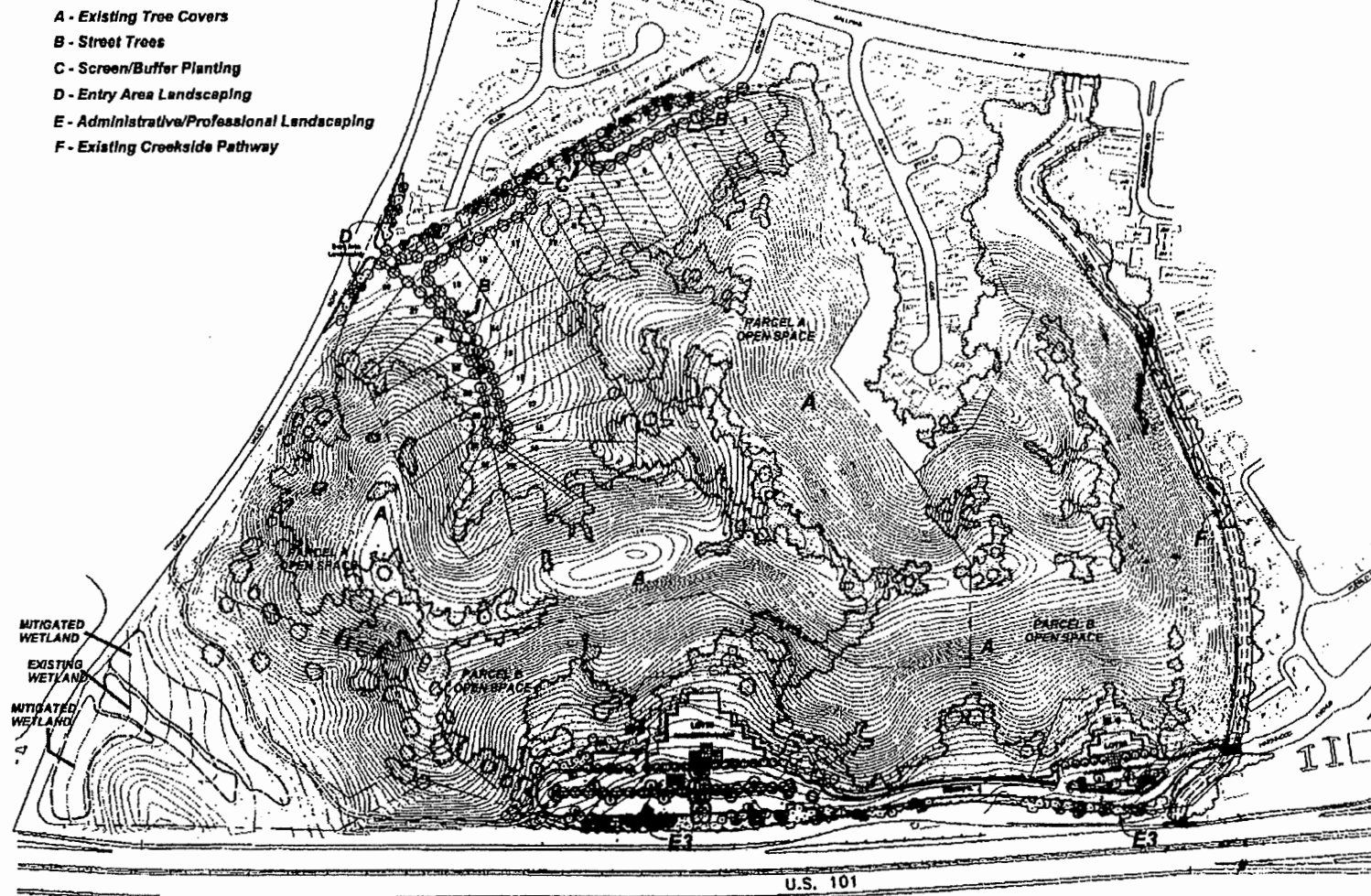


EXHIBIT 2.2-4 CONCEPTUAL LANDSCAPE PLAN
Oakview Master Plan

Source: Robert J. Luff Associates

A 50-foot landscaped buffer area would be established along the edge of the property directly adjacent to the existing neighborhood at Ellen Drive and Lisa Court. Random, informal clusters of drought-tolerant native trees and shrubs would be planted in a 20-foot wide easement in this buffer area along the fence line.

Parcel 2 Landscaping Landscaping along the Highway 101 boundary would consist of largely slope plantings for erosion control. Clusters of native oaks would provide light screening. The parking lots would be landscaped with numerous deep rooting, deciduous, canopy-type trees (such as Red Oak, European Hackberry, and Chinese Pistachio), with other trees used sparingly as accents for seasonal color.

LOW AND MODERATE INCOME HOUSING

The Marin County Zoning Code requires that new residential development of ten or more units make provisions for low and moderate income housing.¹³ In general, project applicants must provide 15 percent of the total number of residential units within projects as affordable by moderate, low, or very low income households. As an alternative to providing units on-site, project applicants, in agreement with County staff, can make an in-lieu payment.¹⁴ The Oakview project applicants propose to make an in-lieu payment to satisfy the affordable housing requirement.¹⁵

CONSTRUCTION PHASING

According to the Master Plan, the phasing of development would depend on market conditions for residential and office development. It is expected that full buildout would take place over a period of several years, with the construction of individual housing units in the earliest phases.

DEVELOPMENT ASSUMPTIONS

As a part of the Master Plan the project applicant provided information regarding potential building envelopes and maximum development potential on each of the residential lots. For each residential lot a building envelope was defined. The building envelope is that area within each lot which the Master Plan (and subsequent Precise Development Plan) would permit development to occur. Building envelopes are shown on Exhibits 2.2-5 and 2.2-6. In addition to the building envelopes the project applicant provided the following assumptions.

¹³ Marin County Code Title 22 (Zoning Ordinance), Chapter 22.97, 1988. Subsection 22.97.030 states that in applying the percentages, any decimal fraction less than or equal to 0.50 may be disregarded and any decimal fraction greater than 0.50 shall be construed as requiring one dwelling unit. In accordance with the County's current inclusionary housing ordinance, a 28-unit project would require four affordable housing units.

¹⁴ With approval of the County, the applicant also has the option to construct the affordable units in another location within the unincorporated area of the County.

¹⁵ The County determines the amount of the in-lieu fee. It is based on the difference between the ability to pay of moderate income families (earning 100 percent of median income) and the estimated cost of a market rate unit of appropriate size. The difference is then multiplied by the required number of affordable units. Marin County Code Title 22 (Zoning Ordinance) section 22.97.150.

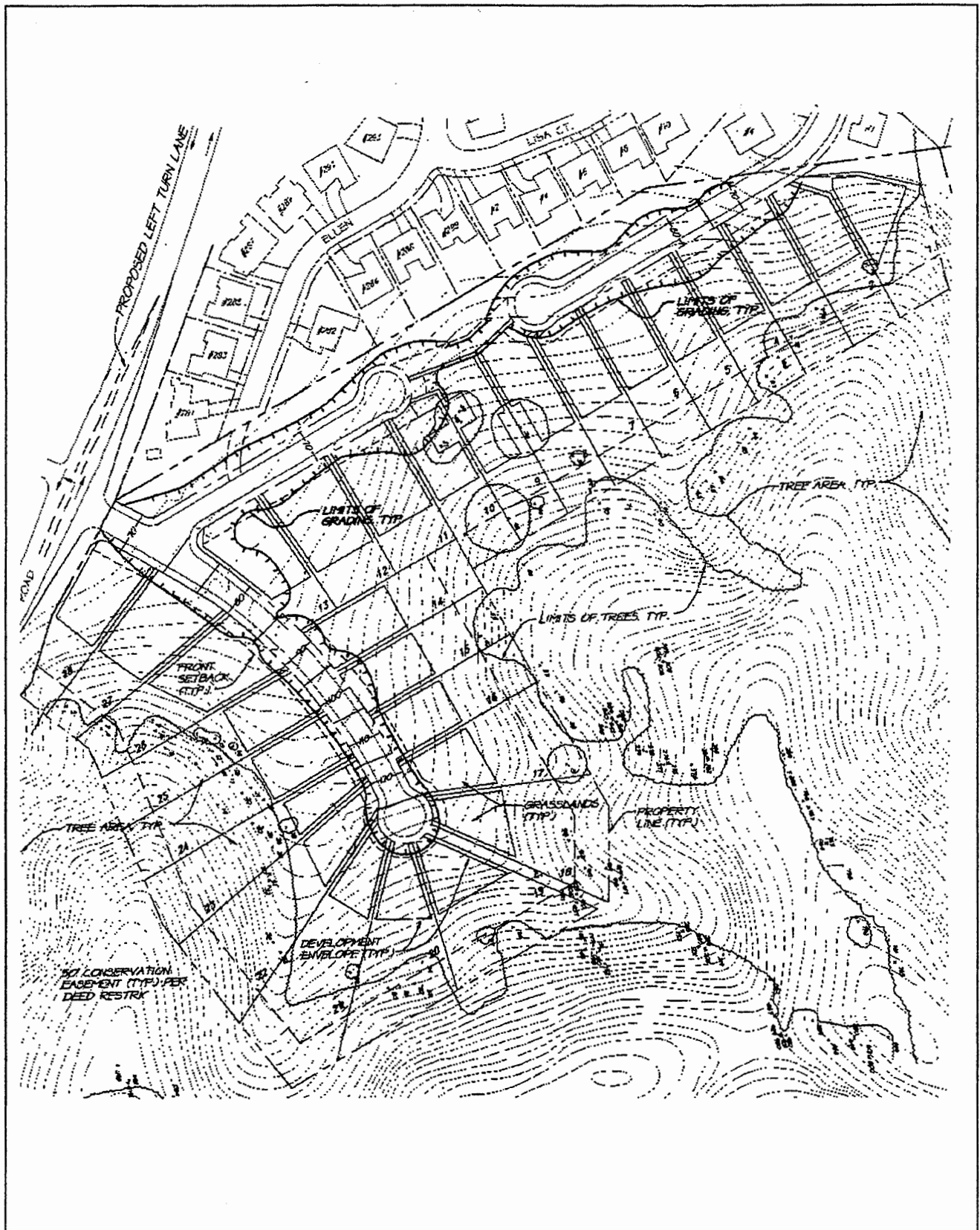


EXHIBIT 2.2-5 PROPOSED RESIDENTIAL BUILDING ENVELOPES
Oakview Master Plan

→
 North

Source: IL Schwartz Associates, Inc.

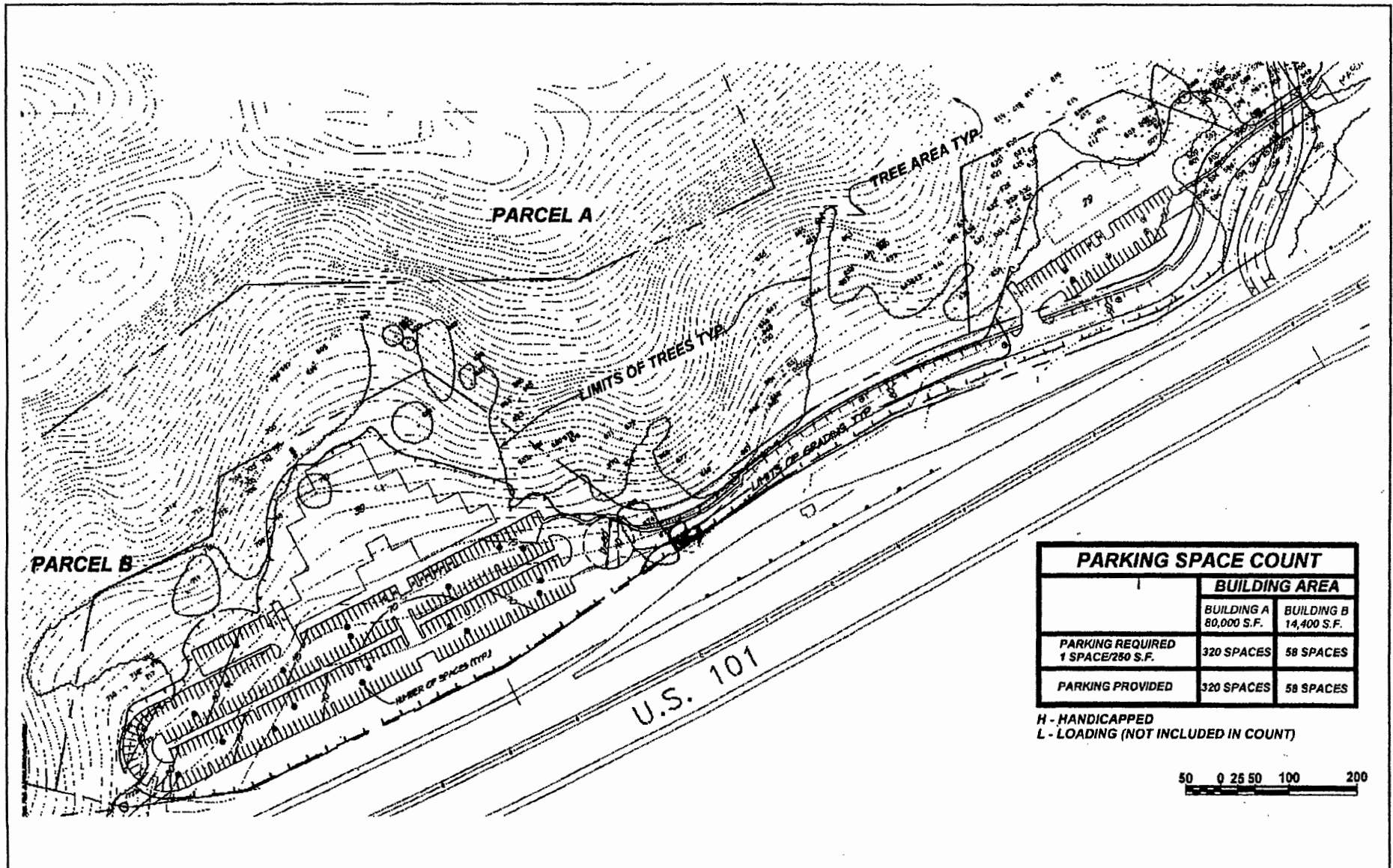


EXHIBIT 2.2-6 ADMINISTRATION/PROFESSIONAL OFFICE LAYOUT
Oakview Master Plan

North

- The maximum development within the front setback area, including all structures, paving and walkways, would be limited in area to 1,200 square feet or the area within the building envelope in front of the front setback, whichever is less.
- Maximum development including all structures, paving and walks within the building envelope behind the front setback would be limit to the percentage shown below:

Area Within Building Envelope Behind the Front Setback	Percentage of Area Within Building Envelope Behind the Front Setback Which May be Developed
Less than 3,500 square feet	100 percent
3,501 to 4,500 square feet	95 percent
4,501 to 5,500 square feet	90 percent
5,501 to 6,500 square feet	85 percent
6,501 to 7,500 square feet	80 percent
7,501 to 8,500 square feet	75 percent
Greater than 8,501 square feet	70 percent

- The maximum floor area, excluding a garage for two cars, shall not exceed 4,500 square feet.
- Lot improvements allowed outside of the development area and outside of the private open space easement would include landscaping, retaining walls up to four feet in height, walkways, and fences.

Based on the above, Exhibit 2.2-7 shows for each residential lot, the lot area in square feet, the building envelope in square feet, the development area behind the front setback in square feet and the maximum floor area in square feet. In addition, Exhibit 2.2-7 shows for each residential lot the maximum allowable square footage of development behind the front setback area, the allowable square footage of development behind the front setback line and the total maximum developable area.

Exhibit 2.2-7
Potential Development Areas

Lot Number	Lot Area (Sq. Ft.)	Development Area Behind Front Setback (Sq. Ft.)	Development Area Front of Front Setback (Sq. Ft.)	Total Developed Area (Sq. Ft.)
1	21,960	7,300	0	7,300
2	19,080	7,300	700	8,000
3	20,000	8,160	1,360	9,520
4	20,000	8,160	1,360	9,520
5	20,000	8,160	1,360	9,520
6	20,000	8,160	1,360	9,520
7	20,160	8,070	1,340	9,140
8	22,320	9,600	680	10,280
9	23,400	9,370	510	9,880
10	19,800	7,130	720	7,850
11	20,520	10,560	1,760	12,320
12	21,600	11,760	1,960	13,720
13	18,080	9,990	1,870	11,860
14	20,340	7,460	1,390	8,850
15	19,270	6,570	1,370	7,940
16	18,830	6,210	1,360	7,570
17	25,150	6,460	1,140	7,600
18	29,480	6,230	650	6,880
19	28,760	6,690	390	7,080
20	27,320	5,030	480	5,510
21	36,240	4,760	580	5,340
22	33,730	5,610	930	6,540
23	26,650	4,400	600	5,000
24	27,880	7,440	1,360	8,800
25	26,220	6,730	1,380	8,110
26	27,690	11,980	2,150	13,630
27	24,300	11,650	2,180	13,830
28	19,210	8,790	1,440	10,230

Source: *Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map*, I.L. Schwartz, C.E. Project Representative, April 1999, Revised July 8, 1999.

2.3 CUMULATIVE DEVELOPMENT ASSUMPTIONS

This EIR assesses the effects of implementing the proposed project under existing environmental conditions and under anticipated future "cumulative" conditions. Future conditions were defined for this EIR by identifying development projects in the vicinity of the project site (the "study area") with a reasonable expectation of being built during the time frame of site development. Cumulative impacts are defined by CEQA to include impacts of little or no consequence when taken alone but which when combined with expected environmental conditions would have a significant effect. The list of cumulative projects includes nine projects that are approved, under review, or under construction, or are reasonably expected to be proposed in the vicinity of the site at the time Marin County issued the Notice of Preparation to prepare a Draft Revised EIR for the proposed project. The list is presented in Exhibit 2.3-1 and the locations of cumulative projects are shown in Exhibit 2.2-2.¹⁶

In addition to the short-range cumulative projects the transportation section analyses long-range cumulative conditions. Long-range cumulative conditions are based on the *ABAG 2020 Development Projections 1998*. The long-range cumulative traffic volumes are expected to occur with the projected *San Rafael General Plan* land uses and corresponding land use increases for the general region.

Exhibit 2.3-1

Cumulative Projects in the Study Area, August 1999

Project	Land Use	Size	Status
Thorndale Office	Office	24,000 sq. ft.	Under construction
Merrydale Road	Condominiums	8 units	Under Review
Marin Lofts	Condominiums	15 units	Under construction
Merrydale Asst. Living	Sr. Assist. Living	56 units	Under Review
Northview	Residential	28 units	Under construction
Smith Ranch Court	Residential	9 units	Construction Complete
Smith Ranch Homes	Sr. Assist. Living	25 unit/60 beds	Under construction
Vista Marin	Residential	49 units	Under construction
Lucasfilm	Commercial	640,800 sq. ft.	Under construction

Source: Propdev 29, Marin County Community Development Agency, August 1999.

¹⁶ The list of cumulative projects was compiled based on Propdev 29 An Inventory of Proposed Development Projects in Marin County as of July 1999, Marin County Planning Department, August 1999. This list was augmented by input from Wilbur Smith Associates (EIR traffic analyst) and by contacting representatives of the Marin County and City of San Rafael Planning Departments.

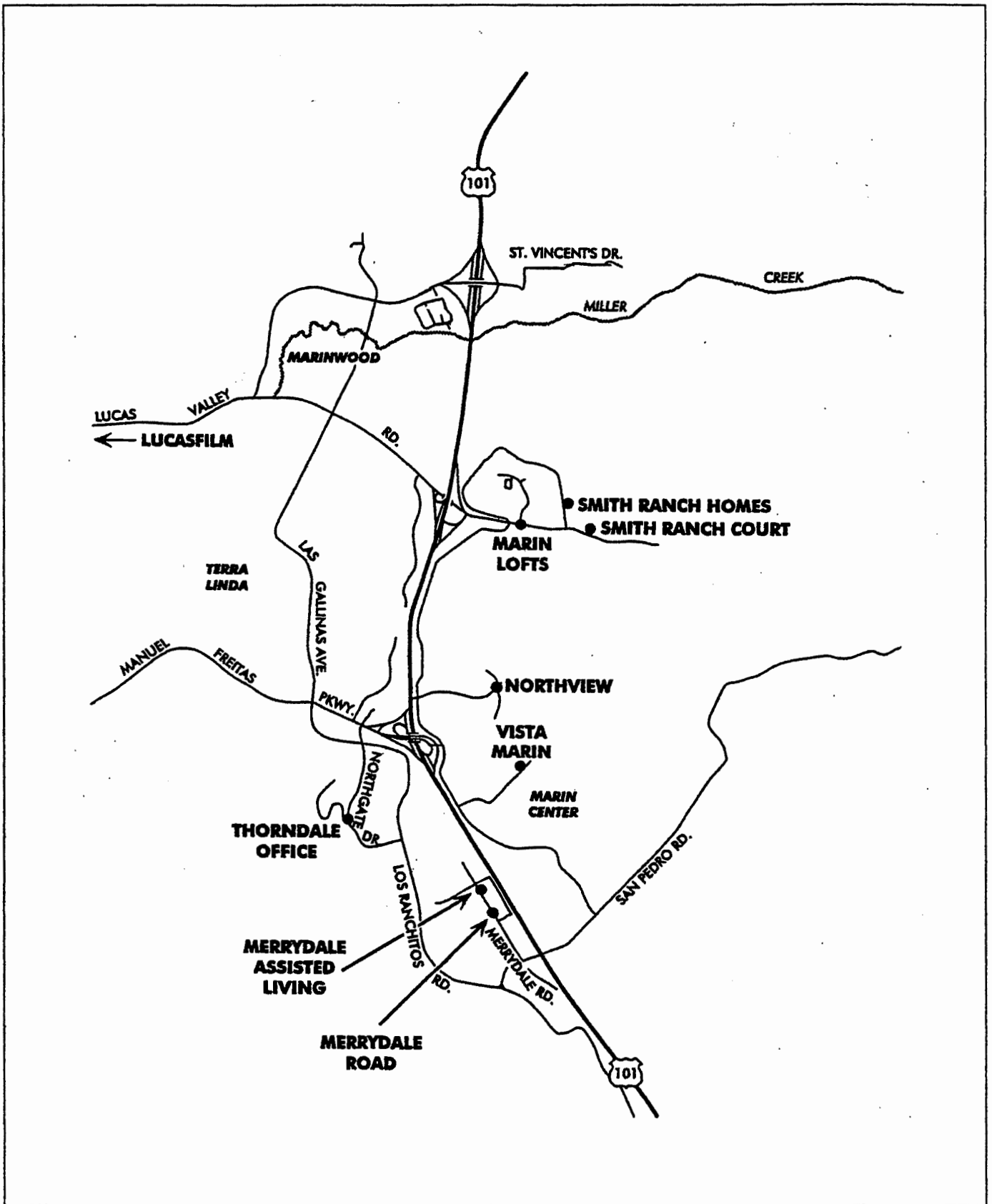


EXHIBIT 2.3-2 LOCATION OF CUMULATIVE PROJECTS IN THE STUDY AREA
Oakview Master Plan

↑
North

Source: Wilbur Smith Associates

2.4 ADMINISTRATIVE ACTIONS

Proposed Project

The project applicant has requested the following specific actions:

- Approve a Master Plan for the project site to allow residential, office, and open space uses on the property.
- Approve a Use Permit to allow office uses in the RMP zone.
- Approve a Vesting Tentative Map to divide the property into two parcels.
- Annex the property into the Las Gallinas Valley Sanitary District to obtain sanitary sewer service.
- Receive a Priority Determination from the City of San Rafael according to Priority Project Procedures.

Next Steps

Marin County's planning and project approval process consists of three main steps, and it is at specific times during these steps that the public may comment on various aspects of a project. These principal steps include (1) certification of the EIR, (2) approval (or denial) of the Master Plan and Use Permit, and (3) approval (or denial) of the Precise Development Plan. The following procedures and actions must be taken before development can begin on the project site. These steps are listed in sequence:

- This Draft EIR is being circulated publicly for review and comment.
- The Marin County Planning Commission will hold a public hearing(s) at which time individuals can comment on the adequacy of the Draft EIR.
- The Final EIR -- consisting of all comments received on the Draft EIR together with responses to those comments -- will be circulated publicly for review and comment on the Final EIR responses only.
- The Planning Commission will hold a public meeting on the adequacy (the completeness) of the Final EIR and review written comments.
- When the Planning Commission is satisfied that the Final EIR is complete, it will recommend that the Board of Supervisors "certify" the Final EIR.
- Following that recommendation, the Planning Commission will consider the merits of the proposed project. The Commission will hold a public hearing(s) when individuals can comment on the project, after which the Commission would recommend approval, conditional approval

(requiring that certain changes be made or conditions met), or denial of the Master Plan. Vesting Tentative Map, and Use Permit.

- The Marin County Board of Supervisors will hold a public meeting to certify the Final EIR before taking action on the proposed project.
- The Board then will consider the merits of the Master Plan, Vesting Tentative Map and Use Permit at which time the public can comment on the project itself. The Board will approve, give conditional approval, or deny the Master Plan, Vesting Tentative Map and/or Use Permit.
- Following Master Plan approval, no development, improvements, or building construction can begin until a Precise Development Plan and Tentative Map are approved by the County. The Precise Development Plan may cover the entire area covered by the Master Plan or separate Precise Development Plans could be submitted that cover a specific portion of the area covered by the Master Plan, such as the entire residential area and entire office area. Tentative Maps would be required to create the individual residential, office, and open space parcels identified in the Master Plan. When the Precise Development Plan(s) and Tentative Map(s) are submitted to the County, they must be approved by the Planning Commission which will hold a public hearing prior to acting to approve or deny the Plan(s) and Map(s). (The Commission's decision can be appealed to the Board of Supervisors.)
- A Final Map is filed after Precise Development Plan and Tentative Map approval. Improvement plans (such as final grading and road plans) are filed together with the Final Map. Approval of the Final Map and plans are administrative actions by County staff members.
- After Final Map approval, the issuance of grading and building permits also are an administrative action handled by County staff members. When applications are received by the County for the necessary permits, staff members review the applications for conformance with provisions (or conditions) of approved plans and with specific County Code requirements. Building permit applications are checked by the Community Development Agency and grading permits by the Department of Public Works prior to issuance of the permit. During construction specific inspections are required throughout the development process until a final inspection, whereupon the building can be occupied.

Approvals for the Master Plan and the Precise Development Plan expire after a period of two years. Thus, if no application for a Precise Development Plan is filed under a Master Plan, or if no building permit issued under a Precise Development Plan, the plan will expire two years from the date of its approval. The Planning Director may grant an extension for a maximum period of four years from the date of initial expiration. Approvals for a Tentative Map expire after a period of three years and an extension for a maximum period of three years from the date of initial expiration may be granted.

The lead agency for this EIR is Marin County. A number of other agencies will have discretionary approvals related to the proposed project. A *responsible agency* includes "all public agencies other than the lead agency which have discretionary approval power over the project." ¹⁷ A trustee agency

¹⁷ State CEQA Guidelines, Section 15381.

is a "state agency having jurisdiction by law over resources affected by a project which are held in trust for the people of the State of California." ¹⁸ Responsible and trustee agencies include:

- **Marin County Local Agency Formation Commission (Marin LAFCo)** LAFCo's have been established for each county in California. They are responsible for coordinating and approving changes in local governmental boundaries, including service district boundaries. The Marin LAFCo would be responsible for approving the proposed annexation of the project site into the Las Gallinas Valley Sanitary District. The district could not serve the site without Marin LAFCo approval. Marin LAFCo will use the EIR to assess the environmental effects of the proposed annexation.
- **Las Gallinas Valley Sanitation District (LGVSD)** The LGVSD would provide sanitary sewer service to the project site if annexed to the District, by a connection to an extension of existing facilities. Formal action by the LGVSD would be needed to extend service to the site. The project applicant must also apply for and receive an allocation of sewer capacity from the LGVSD before it can receive sewer service. The LGVSD would use the EIR to assess the environmental effects of serving the project.
- **California Department of Fish and Game (CDFG)** The CDFG (a trustee agency) is responsible for activities which would disrupt the natural flow or alter the channel, bed, or bank of streams or their tributaries under Section 1601 and 1603 of the California Fish and Game Code. A number of possible alterations may occur on Miller Creek. The project would require a Streambed Alteration agreement which would incorporate necessary mitigation to ensure no net loss of wildlife habitat values or could provide for replacement of acreage lost. The CDFG would use the EIR to assess the environmental effects of the project.

The CDFG comments under the authority of the Federal Fish and Wildlife Coordination Act for Corps of Engineers (Corps) permits. Any waterway subject to CDFG jurisdiction is also subject to Corps regulations. A Streambed Alteration Agreement would be a prerequisite for any required Corps permit.

- **San Francisco Regional Water Quality Control Board (RWQCB)** The RWQCB has jurisdiction over discharges affecting water quality. The RWQCB issues General Construction Activity Stormwater Permit (one form of the National Pollutant Discharge Elimination System [NPDES] permit). The RWQCB will use the EIR to determine the acceptability of mitigation measures before granting the permit. Formal action in compliance with this requirement may be delegated to the County by the RWQCB, in which case the County would be responsible.

In addition, the RWQCB issues the State certification if any U.S. Corps of Engineers permit is required, as described below.

- **Marin Municipal Water District (MMWD)** The MMWD would be responsible to provide water to the project site for both domestic and fire protection purposes.
- **U.S. Army Corps of Engineers (Corps)** The Corps has jurisdiction for regulation of the filling of wetlands under Section 404 of the Clean Water Act. The project would include activities which would modify river banks, stream channels, and other wetland features on the project site

¹⁸ State CEQA Guidelines, Section 15386.

and Miller Creek. If the Corps determines that the project site's wetlands are under Corps jurisdiction, a permit would be required. If a permit is required, the Corps will evaluate the need to hold a public hearing. Any person may request a public hearing be held.

- **Bay Area Air Quality Management District (BAAQMD)** The BAAQMD has jurisdiction over regional air quality issues, and could require *Authority to Construct* and *Permission to Operate* permits.
- **Marinwood Community Service District (MCSD)**–The MCSD would be responsible to provide fire protection, streets lights, parks and recreation services to the project site.
- **City of San Rafael** Although the project site would not be within the City of San Rafael, the project applicant has agreed that the proposed project would be subject to the City's Priority Projects Procedure. Based on criteria contained in the Priority Projects Procedures, which basically evaluates projects against one another and against *San Rafael General Plan 2000* goals and policies, first the San Rafael Planning Commission and second the San Rafael City Council is responsible for making priority project determinations. The City Council has the final authority to make decisions regarding priority project determinations and to allocate all or a portion of available traffic capacity in circulation impact areas based upon the determinations.

3.1 SIGNIFICANT IMPACTS AND MITIGATION MEASURES

The environmental impacts of the proposed *Oakview Master Plan* are summarized in Exhibit 3.0-1, and a detailed discussion of the impacts are found in Chapter 5.0 *Environmental Setting, Impacts, and Mitigation Measures*. The exhibit is arranged in five columns. Column one provides a brief discussion of the expected impact and column two provides an indication of the level of significance before mitigation. Column three describes the necessary mitigation measure(s). Column four indicates who the mitigation is proposed by and column five states the level of significance of the impact after implementation of the recommend mitigation measure. The symbols used in Exhibit 3.0-1 are as follows:

SBM = Significance Before Mitigation

S = Significant

PS = Potentially significant

LTS = Less than significant

B = Beneficial

BY = Mitigation Proposed By

APP = Applicant proposes the mitigation as a part of the proposed project

EIR = EIR proposes the mitigation for consideration as a condition of approval

REG = Pre-existing regulatory requirement

RS = Residual Significance After Mitigation

MLS = Mitigated to a less-than-significant level

SU = Significant and unavoidable

LS = Less than significant without mitigation

Exhibit 3.0-1
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
Geology and Soils				
5.1-1 Landsliding Several landslide deposits are present and have been identified in or near areas of proposed development. While some of the large ancient landslides were found to be stable, numerous smaller landslides are also present. These surficial landslides and debris flows could become reactivated during periods of heavy rain. Without adequate subsurface exploration and subsequent mitigation, landslide movements could potentially risk human life, damage or destroy existing structures off-site, block or damage roadways and escape routes (isolating people on-site and limiting access of emergency services), and sever utility service lines.	S	5.1-1 In order to mitigate the potential for future landslide movements, landslides and colluvial soils near proposed development areas should be repaired during grading. Standard techniques proposed to repair the landslides include removal and recompaction of loose materials, keying and benching, and installation of subdrains and surficial drainage systems. All grading should be performed in compliance with the Uniform Building Code, as well as local code and agency standards, under the observation and testing of the project geotechnical engineer and engineering geologist.	EIR	MLS
5.1-2 Grading Implementation of the proposed project would result in less-than-significant grading impacts.	LTS	No mitigation would be required.	--	LS
5.1-3 Slope Stability If not properly designed for, and/or mitigated during grading, cut, natural and fill slopes with gradients of 2:1 (horizontal : vertical) or steeper, could potentially erode or fail due to the low shear strength of some of the on-site materials.	S	5.1-3 The proposed Grading and Drainage Plan limits cut and fill slopes to an average of ten feet in height by combining cut slopes with engineered timber retaining walls. Additionally, the applicant's geologist recommends thin buttress or stability fills on slopes found to be of weak materials during grading. They also recommend both surficial and subsurface drainage provisions. Although already proposed as part of the Grading and Drainage Plan, the specifics, such as extent and location, of these measures would be determined by the applicant's geologist or geotechnical engineer in the field at the time of construction. As currently proposed, mitigation measures would consist of a combination of site-specific recommendations by the applicant's consultant and local agency and code requirements. The following measures would be feasible in mitigating site-specific conditions and producing stable natural slopes, as well as engineered slopes, where cutting and filling would occur on the site: <ul style="list-style-type: none"> Evaluate the effects of bedding orientation (information acquired during the design phase investigation required for the Precise Development Plan) on the gross stability of existing and proposed slopes in the development area to prepare the geotechnical consultant to observe and direct grading operations and make site-specific determinations (see immediately following measure). 	EIR	MLS

3.0 SUMMARY

3.0 SUMMARY

3.0 SUMMARY

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> Examine natural and cut slopes during grading to confirm their potential for long-term stability. If the geotechnical consultant determines that the exposed earth materials are weaker than expected, mitigate this condition by recompacting as an earth buttress or stability fill or by the selected use of retaining walls or other acceptable methods, as have been proposed by the applicant's geologist. Design drainage facilities to conform with agency and code standards. This should include terrace drains every 30 feet of vertical height on all <u>graded</u> slopes with grades steeper than 5:1. The terrace drains should have a minimum flowline gradient of six percent to make them self-cleaning (a minimal tenet of the Uniform Building Code). They also should be fitted with downdrains every 150 linear feet of terrace to allow for quick drainage. Plant cut and fill slopes with ground cover in order to prevent erosion, raveling, or development of rills, sloughs, and other failures which could reduce the effectiveness of stabilization methods whereas roots of newly planted vegetation would enhance stability of graded slopes by holding materials in place. 		
5.1-4 Groundwater The direct impact of proposed development on groundwater would be less-than-significant. However, due to the anticipated increase in water infiltration into area D as a result of the proposed development, there is the potential for the seepage at the base of the cut on the adjacent property to increase unless the slide is drained properly.	S	5.1-4 Drainage devices should be employed during grading to reduce the potential for seepage from area D to the adjacent residential development. This should include a subdrain system to intercept this seepage water and a surficial drainage system to reduce the ponding and infiltration of surface water into the landslide. The drainage system should be designed by the project engineer and installed under his / her supervision. With proper surficial and subsurface drainage provisions, the impact of off site seepage should be reduced to a less than significant level.	EIR	MLS
5.1-5 Soil Creep Soil creep could result in damage to structures built on moderate to steep hillsides.	S	5.1-5 The following measure would be required to mitigate soil creep impacts: <ul style="list-style-type: none"> Design any structures on sloping ground to take creep forces into account. The Master Plan and Master Plan drawings indicate that proposed residential structures would be founded on raised-floor foundations which follow the existing topography with minimal grading. As such, the foundations for such structures should be designed for creep loads. The design phase investigations for development of individual lots should determine the depth of the weathering profile and the zone affected by creep and should be used to establish specific design standards for each lot to comply with the Uniform Building Code as required to obtain site alteration and building permits from the County for construction of individual housing units or ancillary residential structures. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
5.1-6 Seismicity Strong seismic shaking is expected to occur on the site some time during the "life" of the development and could cause damage to structures and induce landsliding.	S	5.1-6 The following measure would be required to mitigate seismic impacts other than seismically-induced landsliding: <ul style="list-style-type: none"> Design and build all on-site structures, roads, and utilities in conformance with the UBC. 	EIR	MLS
5.1-7 Expansive Soils On-site soils have a low to moderate shrink-swell potential. The shrink-swell effects of expansive soils would have a less-than-significant impact on proposed development.	LTS	No mitigation would be required.	--	LS
5.1-8 Liquefaction Liquefaction of site soils would not be expected to result in significant impacts	LTS	No mitigation would be required.	--	LS
5.1-9 Rockfall Rockfall could damage structures or injure people. Bedrock outcrops and / or residual boulders are reportedly rare at the site.	S	5.1-9 The following measure would be required to mitigate potential rockfall impacts: <ul style="list-style-type: none"> Remove any unstable materials encountered adjacent to development areas. Remove the materials and place rip-rap or other engineered erosion control devices, construct rockfall entrapment trenches, or undertake selective rock bolting of remaining materials with galvanized or gray PVC-coated gabion mesh. Set development back from eroding rock faces not mitigated¹ by the above measures or in addition to implementing those measures, depending on specific situations. 	EIR	MLS
5.1-10 Artificial Fill Areas New construction on existing artificial fill, where encountered, could settle unevenly and be damaged or could stimulate or accelerate erosion.	S	5.1-10 The following measures would be required to mitigate artificial fill impacts: <ul style="list-style-type: none"> Conduct field investigations when formulating the Final Grading Plan required for the Development Plan to determine the presence and limits of such materials in the vicinity of parts of the site proposed for development. Remove and recompact artificial fill located in or adjacent to areas of proposed grading during landslide repair, grading operations for road construction, or development of individual private lots under the observation and testing of a registered engineer. 	EIR	MLS
5.1-11 Faulting and Ground Surface Rupture The possibility of surface ruptures on the site is very low.	LTS	No mitigation would be required.	--	LS
5.1-12 Aggregate and Rare Mineral Resources No aggregate resources or rare minerals are known to be present on the site.	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>SBM</i>	<i>Mitigation</i>	<i>BY</i>	<i>RS</i>
<p>5.1-13 Maintenance of Geotechnical and Hydrologic Mitigation Measures The difficult geologic conditions on-site and the mitigation measures required to stabilize landslides would involve long-term monitoring and maintenance after site development to ensure the effectiveness and success of mitigation.</p>	S	<p>5.1-13 The following measure would be required of the applicant to insure the effectiveness of long-term maintenance in mitigating the project's impacts:</p> <ul style="list-style-type: none"> The project applicant shall be responsible to establish a funding entity to insure the effectiveness of long-term maintenance in mitigating the project's geotechnical and hydrologic impacts. This entity could be a homeowners' or property owners' association, an assessment district, or a Geologic Hazard Abatement District (GHAD) for the project site. Whatever entity is established it shall provide for the technical aspects of long-term maintenance to be handled by a geotechnical consultant and reviewed by the County. The professional consultant should follow a regular maintenance schedule and should prepare and submit progress reports to the County every six months for its review. This would place a responsible professional, agreed to by the County, in the position of overseeing the site. Only site property owners would participate by paying taxes/fees into the fund.. 	EIR	MLS
<p>Impact 5.1-14 Naturally Occurring Asbestos The possibility of exposure from naturally occurring asbestos is considered very low.</p> <p>Hydrology and Drainage</p> <p>5.2-1 Stormwater Drainage Patterns Project grading, roadway construction, and storm drain installation would convert the existing intermittent drainageway in Sub-watershed 2 to a storm drain system. In addition, the watershed boundary separating Sub-watersheds 1 and 2 would be altered slightly.</p>	LTS	No mitigation would be required.	--	LS
	LTS	No mitigation would be required.	--	Ls

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.2-2 Site Peak Flow Rates Project grading, construction of impervious surfaces, and installation of a storm drain system would increase site peak flow rates from Sub-watershed 1 by 1.6 percent and from Sub-watersheds 2, 3 and 6 by a minimum of 17 to 69 percent</p>	S	<p>5.2-2 The following mitigation measure would be required to reduce peak flow impacts:</p> <ul style="list-style-type: none"> Construct a stormwater detention / treatment basins, one each in the lower reaches of Sub-watersheds 2, 3 and 6. The Sub-watershed 2 basin should be located in the vacant land paralleling the proposed Roadway A. This undeveloped land is situated on the most gently sloping portion of the site, near the southwest corner. It would also have the elongated shape that is best suited for water quality treatment ponds. If the area of the presently designated vacant land is insufficient to provide the necessary basin storage volume, the lower portion of Lot 28 should be added, with a roadway culvert connection. <p>The Sub-watershed 3 basin should be located along the eastern edge of the proposed Erin Drive extension, occupying the base of Lots 2 through 9. Because of the smaller size and peak discharges associated with Sub-watershed 3, a narrow, elongated detention basin should be sufficient to accomplish the necessary level of peak flow attenuation. Each entrance driveway would have to be culverted to allow for hydraulic connectivity between storage cells. Basin discharge would join roadway runoff and enter the proposed vegetated swale upslope of 1 Erin Drive.</p> <p>—————To maximize hydraulic efficiency and minimize the potential for maintenance problems, both basins should be equipped with dewatering pipes and emergency weir spillways. The dewatering pipes should be sized to maintain post-project peak flows at pre-project levels for the design 100-year rainstorm. Each emergency overflow weir should be designed conservatively to pass an unattenuated 100-year peak discharge, even though the prescribed basin storage would allow for full attenuation of runoff from that storm. Primary dewatering pipes and emergency weirs should be located at the downgradient ends of each basin, i.e. at the southern end for the Sub-watershed 2 basin and the northern end for the Sub-watershed 3 basin. Appropriate energy dissipation should be installed at all spillway discharge outlets.</p> <p>—————The Sub-watershed 2 and 3 basins should be designed to serve a two-fold purpose: (1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain systems, the Gallinas Creek tributary (i.e. Highway 101 box culvert), and the lower reach of Miller Creek, and (2) filter and cleanse stormwater runoff by use of an vegetated inlet swale and detention area.</p>	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<p>————— A third detention / treatment basin should be constructed in the low-lying developed lands of Sub-watershed 6, near the eastern edge of either Lot 29 or 30. Given the spatial constraints in this portion of the sub-watershed, a passive pipe or cistern-type storage underground detention structure should be constructed. Such a structure could be located beneath the Lot 30 parking lot or the northern end of Roadway C. The hydraulic design would ensure that when a particular flood stage in Miller Creek is reached (e.g. 10-year flood), backwater in the storm drain system would induce diverted storm drain system into the storage unit. Once Miller Creek flood levels had receded, the stored stormwater would re-enter the system and discharge to Miller Creek. The size of the off-system storage unit would equal the volumetric difference in the pre- and post-project stormwater hydrographs for the 100-year design rainstorm.</p> <p>————— Since the passive stormwater detention storage would be underground, cleanout stubs would be required at the upgradient ends of each storage component (e.g. cistern or pipe array). Periodic maintenance would be required to remove any debris and sediment that accumulate in these storage components.</p> <p>————— A sediment maintenance plan describing both frequency and timing of sediment removal, as well as excavation equipment and environmental precautions, should be included in the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.</p> <p>————— Following release of project performance bond, maintenance of the detention basin would be the responsibility of the funding entity established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors.</p>		

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
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Basin location shall be selected to minimize excessive topographic manipulation, even if one or more designated residential lots must be eliminated to accommodate its construction. Since stormwater quality impacts can be mitigated, in part, through the integration of water quality enhancements to normal detention basin design, the detention basin should be designed to serve a two-fold purpose: 1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain system- the Gallinas Creek tributary (i.e. Highway 101 box culvert); and (2) filter and cleanse stormwater runoff by use of a vegetated inlet swale and detention area (forebay). Other design considerations shall include:

- Structural measures for normal pond dewatering and end-of-season (e.g. April) dewatering (fully) for mosquito control.
- An emergency overflow spillway with appropriate energy dissipator at the outlet.

The project applicant shall prepare a monitoring and maintenance plan for the detention basin to ensure proper long-term basin functioning. The monitoring and maintenance plan would include provisions for sediment removal and basin repair, as well as associated conditions governing the use of heavy mechanical equipment (e.g. backhoes, excavators) and environmental safeguards and procedures. This information shall be incorporated into the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.

Prior to release of the project performance bond, maintenance of the detention basin by a funding entity shall be established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13.)

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.2-3 Downstream Hydraulic Structures and Flooding Project-induced increases in peak flow rates and / or runoff volumes for Sub-watersheds 2 and 3 would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods. <u>In addition, gaps have been noted in existing cross-slope interceptor ditches. If unrepaired, these caps would create avenues for off-site, downslope diversion of concentrated ditch flows.</u></p>	S	<p>5.2-3 The following measures would be required to reduce project impacts on downstream flooding due to inadequate storm drain system capacities:</p> <ul style="list-style-type: none"> • Replace the existing 18-inch storm drainpipe along the rear of 281 Ellen Drive with a 30-inch RCP, as indicated in the project Schematic Grading Plan. • <u>Repair the gaps in the existing concrete, cross-slope interceptor ditch network and any other defects that could result in the diversion of ditch/hillslope runoff onto adjacent lots in the Marinwood Subdivision.</u> 	EIR	MLS
<p>5.2-4 Downstream Hydraulic Structures and Flooding Project-induced increases in peak flow rates for Sub-watersheds 1 and 2 would worsen flooding at the three- by six-foot box culvert under Highway 101. No corrective measures have been agreed upon to remedy this flooding condition and no funding currently exists for such action.</p>	S	<p>5.2-4 Either of the following measures should be implemented to reduce project impacts on downstream flooding at the three- by six-foot box culvert under Highway 101:</p> <p>Implement Mitigation Measure 5.2-2.</p> <p>The applicant should participate with the City of San Rafael and Caltrans in funding an upgrade of the existing Highway 101 box culvert. If a drainage fee is required by Marin County, the applicant should at a minimum contribute funding for replacement and / or expansion of the Highway 101 facilities in proportion to the site's development area. For example, if the development area (not open space) draining to the Gallinas tributary at Highway 101 equaled 41.7 acres and the total developed area for that watershed was 500 acres, the project's share of the cost would be 8.3 percent.</p>	EIR	MLS
<p>5.2-5 Off-Site / Downstream Flooding on Miller Creek Project-induced increases in peak flow rates for Sub-watersheds 3 and 6 would <u>marginally increase the 100-year peak discharge add, however imperceptibly, to the surcharge of floodwaters that create significant backwater flooding at the SPRR bridge on Silveira Ranch. Since this structure lacks adequate capacity to pass the existing 100-year flood discharge without significant inundation of the adjoining ranchlands, the project impact on downstream flooding would be significant impact</u> <u>minor increase in the flood discharge due to the project . would not produce a detectable increase in either local flood elevations or the spatial extent of the 100-year floodplain. Thus, the project impact on flooding along Miller Creek would be less-than-significant.</u></p>	SLTS	<p>5.2-5 To reduce project impacts on flooding along the on-site and downstream reaches of Miller Creek, either of the following mitigation measures should be implemented:</p> <ul style="list-style-type: none"> • Implement Mitigation Measure 5.2-2. <p>Pay a drainage fee to Marin County with the stipulation that the fee be applied to the eventual channel modification and bridge removal / replacement on Silveira Ranch. The fee total would be negotiated between the applicant and the County.</p> <p><u>No mitigation would be required.</u></p>	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.2-6 Off-Site / Downstream Flooding in Marinwood Subdivision Project grading and impervious surface construction along the western boundary of Sub-watershed 2 would result in the continued interception of upslope surface runoff by an existing concrete interceptor drain. A structural gap in the surface drain promotes diversion of this runoff onto the properties at 282 and 284 Ellen Drive. Given the upslope interception of a significant portion of the hillslope runoff by proposed interceptor drains to the rear of Oakview Lots 10-13 and construction of the curbed Roadway A and its storm drain system, continuance of this minor nuisance flooding would be a less-than-significant impact.</p>	LTS	No mitigation would be required.	--	LS
<p>5.2-7 Site Erosion and Downstream Sedimentation and Flooding Hillslope grading activities associated with construction of residential and commercial structures, roadways, and driveways would result in large areas of bare soils which would be subject to erosion by rainfall and hillslope runoff. Eroded sediments would eventually be discharged to off-site drainage channels, including Miller Creek, where sedimentation could reduce flood conveyance or impair water quality.</p>	S	<p>5.2-7 To reduce project impacts of on-site erosion and downstream sedimentation it would be necessary to:</p> <ul style="list-style-type: none"> • Prepare and implement a comprehensive Stormwater Pollution Prevention Plan (SWPPP), which is submitted as part of the NPDES General Construction Activity Stormwater Permit (General Permit) filing with the State Water Resources Control Board. The NPDES General Permit is required for all developments which would disturb more than five acres of land. The SWPPP describes on-site measures for erosion control and stormwater treatment to be implemented during and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater. BMPs incorporated in the project SWPPP would likely include <i>in-situ</i> protection, seeding and mulching of bare ground, planting of trees and shrubbery in both disturbed upland and riparian areas, and installation of other forms of biotechnical slope stabilization, such as appropriately staked straw bale perimeters, silt fences, or staked plant wattles on the slope contour. No grading should occur <u>within the Miller Creek Stream Conservation Area</u> during the winter season, thus restricting grading activities <u>at the proposed Miller Creek bridge crossing</u> to the period between May 1 and October 15. <u>Grading in site areas outside of the SCA can occur during the winter season, as long as erosion control measures approved as a part of the Stormwater Pollution Plan (SWPPP) are installed and properly maintained during this period.</u> 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.2-8 Site Erosion and Downstream Sedimentation and Flooding Construction of the proposed Marinwood Avenue bridge would disturb the banks of Miller Creek significantly in the vicinity of the construction area. Subsequent bank erosion and downstream sedimentation could exacerbate flooding downstream of the Highway 101 bridge.</p>	S	<p>Mitigation Measure 5.2-8 To reduce project impacts of on-site erosion and downstream sedimentation due to construction of the Marinwood Avenue Bridge on Miller Creek, it would be necessary to:</p> <p>Implement Mitigation 5.2-7.</p> <ul style="list-style-type: none"> Acquire a 1603 Stream Alteration Agreement from the California Department of Fish and Game (CDFG). In addition to measures outlined in the project SWPPP for graded or exposed soil surfaces, the applicant's construction contractor(s) and field engineer should implement temporary measures, where required, to minimize channel sedimentation during bridge construction. Due to the good quality stream habitat and culverting impacts to aquatic life, a bypass pipe through the work area is not recommended. Some form of cofferdam segregating the work areas from the active channel are would be preferable. All such measures would be described in the Stream Alteration Agreement submittal and would be subject to approval CDFG. <p>Submit an application or letter of notification, as appropriate, to the U.S. Army Corps of Engineers for an Army Fill Permit, in accordance with provisions of the Nationwide Permit Program.</p> <p>Acquire a Waiver of Water Quality Certification from the RWQCB.</p>	EIR	MLS
<p>5.2-9 Groundwater Seepage Construction of storm drain systems and subsurface drainage measures associated with residential construction in Sub-watersheds 2, 3, and 6 should have a beneficial impact on ongoing seepage problems experienced by homeowners in the Marinwood Subdivision.</p>	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.2-10 Water Quality- Violation of Water Quality Standards</p> <p>Proposed residential development in Sub-watersheds 2 and 3 and commercial development in Sub-watershed 6 would increase the stormwater contaminant loading for some heavy metals, including copper, lead and zinc to levels exceeding those listed by regulatory agencies for the protection of aquatic habitats. Oil and grease concentrations in the site runoff reaching Miller Creek and the Gallinas Creek tributary would not exceed regulatory agency thresholds, however, even small concentrations are considered significant by the RWQCB. Establishment of irrigated landscaping and its associated herbicide and pesticide inputs could potentially result in the downstream migration of nutrient and contaminant residues in stormwater drainage channels leading to the recently constructed wetland pond in the industrial park area east of Highway 101, and potentially to Gallinas Creek Marsh.</p>	S	<p>5.2-10 The following measures would be required to minimize impacts on-site and downstream water quality to less-than-significant levels:</p> <ul style="list-style-type: none"> • Implement Mitigation Measure 5.2-2 (Peak Flows). • The stormwater detention basins recommended for construction as part of the program for peak flow mitigation should be designed to maximize their water quality treatment function. Proper configuration, sizing and inlet / outlet characteristics would maximize deposition of particulates in incoming stormwater and would favor the growth of emergent vegetation to facilitate filtering opportunities. Specific design characteristics for wet ponds are listed in the California Storm Water Best Management Practices Handbook for Construction Activity. • Implement Mitigation Measure 5.2-7 (Site Erosion and Downstream Sedimentation and Flooding). • Due to the close proximity to the sensitive wetland and aquatic habitats in the receiving waters of Miller Creek and lower Gallinas Creek, the following BMPs are considered a minimum for Oakview stormwater treatment to comply with the requirements of the NPDES General Permit and provisions of Title 24 of the Marin County Code (24.04.625), citing erosion control requirements associated with site grading. • Installation of oil / grease traps or similar in-line filtration systems for storm drain systems. Such traps or separators should be accompanied by a cleanout / maintenance program that ensures acceptable trap efficiencies, specifies appropriate disposal procedures, and reduces the risk that the traps become sinks for pollutants. • Institute a regular schedule of street and parking lot sweeping. The frequency of cleaning should be higher (e.g. twice monthly) during the winter rainy season, yet maintained year-round. Regular cleaning of paved surfaces reduce the “first flush” phenomenon wherein the highest concentration of contaminants are flushed off the surfaces during the early portion of a runoff event. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> • Incorporate grass-lined swales to convey stormwater from paved surfaces to creek channels or wetlands. Grass-lined swales filter particulates from stormwater and, as a result, reduce the entry of heavy metals and contaminated sediments to drainageways. The current development plan includes one grass-lined (i.e. vegetated) swale each toward the lower end of Sub-watersheds 2 and 3, although the one proposed for Sub-watershed 2 would not provide significant water quality benefits. Two additional swale locations could be integrated into the project design for Sub-watershed 6 stormwater drainage. The first swale would extend downslope from the eastern edge of the Lot 30 parking lot to the top of the existing cut-slope, at the freeway interface. The second swale would extend from the northernmost storm drain inlet along Roadway C (Marinwood Avenue extension), parallel to the freeway, to the southern bank of Miller Creek. To forestall excessive rilling within such swales, it may be necessary to install biodegradable fabric along the swale flowline. Initially, the swale may need to be irrigated along with the landscaping. • Revegetate all disturbed areas prior to the onset of each winter rainy season during and for 2-3 years following completion of construction. Use of an erosion control grass and forb mixture, favoring native species, would be best suited to this task. In addition, some type of surface erosion protection (e.g. jute netting, erosion control blankets, punched straw) should be installed to reduce the erosive energy of incoming raindrops for the first couple of winter seasons. • Prepare and implement an irrigation scheduling and chemical management plan governing the application of irrigation water and chemical amendments to landscaped areas adjacent to buildings and within or adjacent to parking lot facilities. Components of such a plan would likely include an irrigation schedule linked to soil moisture levels or related variables such as temperature, humidity and wind speed. Specific chemical inputs proposed for application to vegetation should be among those tested and cleared for use by the USEPA. Frequency and scheduling of these chemical inputs should also be indicated, based on-site-specific characteristics (e.g. soil and vegetative cover and rates of uptake) and the acknowledged sensitivity of downstream receiving waters. • Implement Mitigation Measure 5.2-8 (Site Erosion and Downstream Sedimentation and Flooding). 		

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
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5.2-11 Cumulative Water Quality Impacts Contaminants in stormwater discharges from the site would contribute to the contaminant loading of the waters of Miller Creek (a spawning stream), the Gallinas Creek tributary, and eventually Gallinas Creek.

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5.2-11 The following measures would be required to reduce cumulative water quality impacts:

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- Implement Mitigation Measure 5.2-10.

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
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Biological Resources

5.3-1 General Vegetation Removal and Landscaping Impacts

Grading associated with project implementation would remove existing vegetation in areas proposed for development, primarily involving non-native grassland but also affecting oak woodland, native grasslands, and freshwater seeps. Landscape plantings would replace much of the vegetative cover disturbed by project implementation, raising concerns about the appropriateness of proposed plant materials, compatibility with sensitive plant communities, and need for long-term management to ensure successful establishment.

S		<p>5.3-1(a) A qualified landscape architect should prepare a detailed Landscape and Vegetation Management Plan in consultation with a plant ecologist experienced in management of native species. This Landscape and Vegetation Management Plan should be incorporated into the Final Landscape Plan prepared as a part of the Precise Development Plan. The plan should: 1) provide for re-establishment of native vegetation on graded slopes around the fringe of proposed development; 2) provide details on native plantings associated with proposed restoration, enhancement, and mitigation.; 3) establish a program to salvage suitable native plants for use in landscaping and revegetation; 4) identify unsuitable species which should not be used in landscaping; 5) control the establishment and spread of introduced broom; and 6) specify long-term management provisions to ensure re-establishment of landscape improvements. Aspects of the plan should include the following:</p> <ul style="list-style-type: none"> Landscaping and revegetation should emphasize the use of native plant species along the fringe of proposed structures and grading. Plant lists should be expanded to include valley oak (<i>Quercus lobata</i>), California buckeye (<i>Aesculus californica</i>), California rose (<i>Rosa californica</i>), common rush (<i>Juncus patens</i>), creeping wildrye (<i>Leymus triticoides</i>), purple needlegrass (<i>Nassella pulchra</i>), iris-leaved rush (<i>Juncus xiphioides</i>), and slender rush (<i>Juncus tenuis</i>). Suitable tufts of native grasses to be removed by the project should be salvaged before grading and used in landscaping and revegetation, providing a source of mature plants and re-establishing much of the desirable local cover which otherwise would be lost with development. The anticipated limits of grading should be flagged, and plant material suitable for use in the salvage program should be marked, carefully removed, and stored. The salvage material should be transplanted to selected mitigation areas at the appropriate time of the year before grading (generally in October and November), with maintenance provided as necessary to ensure re-establishment. 	EIR	MLS
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Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> • Non-native ornamental species used in landscape plantings should be restricted to the immediate vicinity of streets and development areas on residential lots on Parcel 1 and the parking lots and buildings on Parcel 2. The landscape plan should prohibit use of invasive non-native species which may spread into adjacent undeveloped areas. Unsuitable species include blue gum eucalyptus (<i>Eucalyptus globulus</i>), acacia (<i>Acacia</i> spp.), pampas grass (<i>Cortaderia selloana</i>), broom (<i>Cytisus</i> and <i>Genista</i> spp.), gorse (<i>Ulex europaeus</i>), bamboo (<i>Bambusa</i> spp.), giant reed (<i>Arundo donax</i>), English ivy (<i>Hedera helix</i>), German ivy (<i>Senecio milanioides</i>), and periwinkle (<i>Vinca</i> sp.), among others. • Species planted adjacent to retained woodlands should be native to the site, and "other trees offering seasonal color" should be eliminated from the Conceptual Landscape Plan. • Graded slopes and areas disturbed as part of the project should be monitored to prevent establishment and spread of French and Scotch broom. Removal and monitoring should include annual late winter removal of any rooted plants when soils are saturated and cutting back of any remaining flowering plants in the spring before seed begins to set in late April. • The landscape plan should specify provisions to maintain landscaping and graded slope revegetation with replacement plantings and seeding for a minimum of five years to ensure re-establishment of cover. <p>5.3-1(b) Vehicles and motorcycles should not be allowed to travel off designated roadways to prevent further disturbance to grassland cover and other vegetation. Barriers should be provided where vehicular access to open space areas may be possible.</p>		

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.3-2 Tree Removal and Woodland Impacts Proposed development has generally been sited to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed. Additional trees could be adversely affected by grading and construction unless protective measures are implemented. Although anticipated tree removal represents only a small percentage of the total number of trees on the site, their loss would still be considered significant due to their age and length of time needed to replace them</p>	S	<p>5.3-2(a) The development envelope shown on the Master Plan's Residential Area Layout should be revised to indicate building envelope areas which are intended to minimize tree removal. Deed restrictions or some other mechanism should be established over individual lots to prevent possible tree removal and disturbance of other native vegetation outside the identified building envelopes. Trees adjacent to building envelopes on Lots 8, 9, and 10 should be thinned or pruned under the guidance of a certified arborist rather than removed during house construction and yard landscaping.</p> <p>5.3-2(b) Where feasible from an engineering and geotechnical standpoint and warranted based on the good to excellent health and structure of the tree, trees near the limits of anticipated grading should be preserved and protected. Individual specimen-sized trees should be preserved by retaining walls, short over-steepened slopes, and other methods. Protection of larger native trees with trunk diameters exceeding 24 inches should take precedence over smaller live oaks and California bay which are abundant in the woodland habitat.</p> <p>5.3-2(c) A certified arborist should prepare detailed guidelines to protect trees to be preserved from possible damage. Trees to be retained should be identified in the field with flags or other obvious marking method before any grading. Standards contained in the preservation guidelines should include the following:</p> <ul style="list-style-type: none"> • Grade changes should be avoided within 1.5 times the width of the tree dripline, and any encroachment should be prohibited closer than one-third the distance from the dripline to the trunk. Restrictions on the limits of grading, adjustments to the final grade of cut and fill slopes, and use of retaining walls should all be used to protect individual trees worthy of preservation. • Temporary fencing should be provided along the outermost edge of the dripline of each tree or group of trees to be retained in the vicinity of grading to avoid compaction of the root zone and mechanical damage to trunks and limbs. • Paving within the tree dripline should be prohibited or stringently minimized by using porous materials such as gravel, loose boulders, cobbles, wood chips, or bark mulch where hardscape improvements are necessary for access in the vicinity of trees. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> Trenching within the tree dripline should be prohibited, and any required utility line within the dripline should be installed by boring or drilling through the soil. The amount of landscape irrigation within the tree dripline should be minimized by prohibiting turf or any landscaping with high water requirements and by limiting permanent irrigation improvements to bubbler, drip, or subterranean systems. Storage of construction equipment, materials, and stockpiled soils should be prohibited within the tree driplines. <p>5.3-2(d) A tree replacement program should be prepared to provide for replacement of native trees removed by proposed development. The tree replacement program should be included as a component of the project's Landscape and Vegetation Management Plan (required by Mitigation Measure 5.3-1[a]) and implemented as part of site revegetation and landscaping. Provisions of the tree replacement program should include the following:</p> <ul style="list-style-type: none"> Oaks <u>and other native trees</u> generally should be replaced at a ratio of <u>2:1</u> 5:1 (ratio of replacement trees to number of trees removed). All other native tree species should be replaced at a 3:1 ratio. Species composition of plantings in the tree replacement program should generally be consistent with the percentage of each tree species removed. If off-site nursery stock is used for replacement plantings, plants preferably should be seedlings with a container size of one-gallon or smaller. Younger plant material tends to have a higher survival rate than older nursery stock which has become established under ideal growing conditions provided at most nurseries. A program to collect seed and grow seedlings for use in the tree replacement program should be considered as part of the tree replacement program. Seed should be collected on-site in the fall months, planted in temporary containers, and maintained for a period of one or more years until seedlings are ready for planting. Oak seedlings grown from an on-site seed source would be preferable to use of off-site nursery stock, and this program should be encouraged, by reducing the required replacement ratio from 5:1 to 3:1 where seedlings from on-site collection are used as replacement plantings. 		

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
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- If trees proposed for removal are successfully salvaged and transplanted, no additional replacement mitigation should be required for those trees.
- Tree replacement plantings should be monitored as part of the Landscape and Vegetation Management Plan (required for the project by Mitigation Measure 5.3-1(a)) for a minimum of five years. If mature salvaged trees die within this time period, replacement plantings should be made at the 2:1 ~~respective 5:1 or 3:1~~ ratios. Any on-site salvage, locally-collected and grown seedlings, or nursery stock plantings lost within this monitoring period should be replaced at a 1:1 ratio on an annual basis.

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.3-3 Disturbance to Native Grasslands Proposed development would affect an estimated minimum of 1.6 acres of native grasslands on the site with a coverage classification of ten percent or greater. Native grassland species present consist mainly of purple needlegrass and California oatgrass. Because the CNDDDB considers this natural community sensitive due to its rarity, any future loss of native grasslands would "substantially" diminish habitat for plants.</p>	S	<p>5.3-3 A grassland restoration and enhancement program should be required to mitigate the loss of native grasslands disturbed by proposed development which provides for replacement of native grasslands at a 1:1 ratio, meets or exceeds the cover class lost, and emphasizes the use of purple needlegrass and California oatgrass. A qualified plant ecologist experienced in grassland restoration using native grasses should prepare the program. The grassland program should be included as a component of the Landscape and Vegetation Management Plan required for the project by Mitigation Measure 5.3-1(a) and should be implemented as part of site revegetation and landscaping. Provisions of the grassland program should include:</p> <ul style="list-style-type: none"> • Deed restrictions or some other mechanism should be established over individual lots to prevent removal of native grasslands outside the building envelopes, particularly on Lots 2 to 7, 17 to 20, 27, and 28. • Native grasslands disturbed by proposed development should be restored and replaced at a minimum 1:1 ratio with replacement provided on a per acre basis for each cover class lost. Success criteria for replacement should provide for establishment of native grasslands which meet or exceed the cover class of the existing stands lost as a result of development. • Replacement grasslands should be consolidated to the degree feasible to improve the value of the currently scattered stands, expanding the extent of native grasslands in the proposed open space in the southern part of the site, and used to revegetate the graded slopes above the proposed office area and recommended wetland mitigation area. • Prior to construction, the boundary of proposed grading within or adjacent to stands of native grasslands to be preserved should be clearly staked with color-coded flags set at 50-foot intervals, and disturbance from construction equipment operation, storage, or other activities should be prohibited inside the delineated "no disturbance zone." Native grasslands within the limits of grading should be considered as possible salvage material to be used in the replacement program. • Tree plantings shown in the Conceptual Landscape Plan and replacement plantings required for anticipated tree removal should be restricted to outside the existing and restored native grasslands. • The program should identify the on-site mitigation areas and acreage, specify performance criteria, maintenance, and long-term management responsibilities, monitoring requirements, and contingency measures, and define site preparation, revegetation procedures, and an implementation schedule. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.3-4 Disturbance to Freshwater Seeps and Wetlands Proposed development would affect a minimum estimated 1.4 acres of scattered freshwater seep wetlands and a limited area of unvegetated other waters.</p>	S	<p>5.3-4(a) A qualified wetland consultant should prepare a detailed wetland protection, replacement, and restoration program which satisfies adopted standards and criteria of the County, Corps, CDFG, and RWQCB. The program should be prepared as a component of the recommended Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a) at the Precise Development Plan stage of the County's planning and project approval process and should be implemented as part of site revegetation and landscaping. The wetland plan should clearly identify the total wetland and other jurisdictional area affected by the project, replace wetland habitat at a minimum 2:1 ratio (consistent with County policy), and provide for re-establishment, enhancement, and / or replacement of wetland vegetation. Details of the plan should include the following:</p> <ul style="list-style-type: none"> Identify the location(s) of mitigation areas. Mitigation for loss of existing wetlands should be provided at a minimum replacement ratio of 2:1, consistent with <i>The Marin Countywide Plan</i>, and should result in created or restored wetlands with a higher habitat value than that of the lost wetland areas. Replacement wetlands should preferably be located on-site, but could include consideration of both on-site and an off-site location in the general vicinity. Use of the southeastern portion of the site for wetland mitigation would be unacceptable given that this area will most likely be developed with freeway interchange improvements in the future. Specify performance criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures. Monitoring should be provided for a minimum of five years and continue until the success criteria are met. Define site preparation and revegetation procedures, an implementation schedule, and funding sources to ensure long-term management of the overall wetland mitigation plan. <p>5.3-4(b) A detailed erosion and sedimentation control plan should be prepared and implemented during construction on the site. The plan should contain detailed measures to control erosion of stockpiled earth and exposed soil, provide for revegetation of graded slopes before the first rainy season following construction, and specify procedures for monitoring the plan's effectiveness. The revegetation component of the plan should be consistent with the Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a).</p>	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.3-5 Disturbance to Stream Conservation Areas and Riparian Habitat. Development as proposed would conform with the intent of <i>The Marin Countywide Plan</i> policies on Stream Conservation Areas with disturbance limited to the proposed roadway crossing over Miller Creek.</p> <p>5.3-6 Disruption of Fish and Wildlife Habitat Site development would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along the Miller Creek corridor.</p>	LTS	<p>5.3-4(c) The bridge or arched culvert proposed for the Marinwood Avenue crossing of Miller Creek should minimize disturbance to jurisdictional waters and riparian vegetation by designing it to conform with the County's minimum roadway width standards and restricting abutments to the upper channel banks. Construction should be performed during the low flow period in the creek (from June through October), and construction debris should be kept outside of the creek channel by using silt fencing or other effective methods. Replacement planting with native trees and shrubs should be provided adjacent to the structure as part of mitigation following completion of bridge construction.</p> <p>No mitigation is required.</p>	--	LS
	S	<p>5.3-6 The following measure would be required to mitigate impacts on wildlife resources:</p> <p>Disturbance within the Miller Creek corridor on the site should be minimized to protect its function for fish and wildlife movement. The proposed bridge or arched culvert crossing should be designed to avoid impeding movement of fish and wildlife along the creek channel, and drop structures under the bridge should be prohibited. Improvements to the existing creekside path should be limited to stabilizing and possibly surfacing, and lighting should be prohibited along the path to minimize disrupting creek use by wildlife at night.</p>	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>Impact 5.3-7 Impacts on Special-Status Plant and Animal Species No special-status species would be affected directly. However, the Miller Creek bridge could affect possible dispersal habitat of special-status turtle, frog, steelhead, and shrimp species, but would not affect other on-site habitat, and would not require confirmation surveys for those species. A possibility remains that raptors not presently occupying the site could establish nests between now and when development occurs which construction activities could destroy or induce raptors to abandon. This would be a potentially significant impact which only can be determined through supplemental field surveys before construction.</p>	S	<p>5.3-7 The following measures would be required to mitigate impacts on special-status species. If any active raptor nests are established within the vicinity of proposed grading in the future, they should be avoided until young birds are able to leave the nest (fledge) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-nesting period (August 15 through January 14) or, if this is not feasible, by conducting a pre-grading survey for raptor nests. Provisions of the pre-grading survey effort, if necessary, should include the following:</p> <ul style="list-style-type: none"> • If grading is scheduled during the sensitive nesting period (January 15 through August 14), a qualified wildlife biologist, chosen by the County and paid for by the applicant, should conduct a pre-grading raptor survey to confirm the presence or absence of active nests in the vicinity of proposed construction activities. • If active nests are encountered, the biologist should prepare and implement species-specific measures to prevent abandonment of the active nest(s). At a minimum, grading in the vicinity of a nest's tree should be deferred until the young birds have fledged, and a construction-disturbance setback of at least 300 feet should be provided. Grading or other disturbance in the vicinity of the nest should not be permitted until the biologist confirms that the young raptors have fledged. The biologist should submit a survey report to the County verifying that the young have fledged before grading in the construction-disturbance setback area is initiated. • As necessary, representatives of the CDFG and USFWS should be consulted about appropriate construction restrictions, building setbacks, landscape screening, and other methods to ensure compliance with the Migratory Bird Treaty Act and provisions of the State Fish and Game Code. 	EIR	MLS
<p>5.3-8 Cumulative Development Potential impacts on biological resources tend to be site specific, with sensitive resources protected as part of environmental review. Restoration proposed or required as mitigation for the project and the extent of habitat which would be preserved as open space on the site would adequately mitigate any project-related contribution to an incremental loss of wildlife habitat.</p>	LTS	No mitigation is required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
Visual and Aesthetic Quality				
5.4-1 View from Proposed Lucas Valley Road Entrance From this viewpoint development on the lower parts of the site would dominate the view and contrast with the surrounding grassland area.	S	5.4-1 Implement the applicant's proposed project landscaping (which includes street trees, a 20-foot wide landscaped area between existing homes on Ellen Drive and Lisa Court and the project site and entry landscaping along Lucas Valley Road at the entrance to the project site) as shown in the Conceptual Landscape Plan. This would break up the form and lines of project site development.	APP/ EIR	MLS
5.4-2 View from Proposed Lucas Valley Road Entrance Nighttime Nighttime lighting could dominate the view from this viewpoint.	S	5.4-2 The following measures would be required to be incorporated into the Precise Development Plan as a condition of Master Plan approval to mitigation visual impacts: <ul style="list-style-type: none"> • Shield or focus outdoor night lighting downward and select roadway and pavement surfaces to minimize upward reflected light. • Recess lighting elements within fixtures to prevent glare. • Conceal lights to avoid glare and avoid placing lights too close to objects to prevent reflected glare. • Avoid high-angle high-candela distribution. • Select lighting fixtures which can be shielded after installation, if a problem is identified. • Because light trespass effects are subjective and site-specific, quantifiable criteria (such as controlling the amount of luminescence or restricting certain angles of lighting) usually cannot be identified. For this reason, the applicant should consult a lighting design specialist to determine light source locations, light intensities, and types of light sources for the office buildings. A lighting plan for site roadways and public areas (such as office building parking lots) should be incorporated in the Precise Development Plan as a condition of Master Plan approval. 	EIR	MLS
5.4-3 View from the End of Erin Drive When viewed from this location, development would appear to dominate.	S	5.4-3 Same as Mitigation 5.4-1.	APP/ EIR	MLS
5.4-4 View from Ellen Drive Development would dominate the surrounding grassland area.	S	5.4-4 Same as Mitigation Measure 5.4-1.	APP/ EIR	MLS
5.4-5 View Looking Northwest from Highway 101 Northbound The form of Office Building A visible from this viewpoint would dominate the surrounding environment.	S	5.4-5 Implement the applicant's proposed project landscaping (which includes landscaping around the office area) as shown in the Conceptual Landscape Plan. This would break up the form and lines of project site development.	APP/ EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
5.4-6 View Looking West from Highway 101 Northbound Office Building B's form would dominate the surrounding environment.	S	5.4-6 Same as Mitigation 5.4-5	APP/ EIR	MLS
Transportation and Circulation				
5.5-1 Existing Plus Project AM and PM Peak Hour Conditions The proposed project and in conjunction with existing traffic conditions would create significant AM peak hour impacts for the Lucas Valley Road / Los Gamos Road, Miller Creek Road / Marinwood Avenue, and Highway 101 Southbound Ramps / Miller Creek Road intersections. Significant PM peak hour impacts would be created for the Lucas Valley Road / Los Gamos Road intersection.	S	5.5-1 The following mitigations would be required to reduce existing plus project AM and PM peak hour conditions to a less-than-significant level. 5.5-1(a) Miller Creek Road / Marinwood Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should fund this improvement. 5.5-1(b) Lucas Valley Road / Los Gamos Road The recommended mitigation measure at this intersection is the installation of a traffic signal. <u>The applicant should pay its fair share toward this improvement.</u> The applicant should fund this improvement. 5.5-1(c) Highway 101 Southbound Ramps / Miller Creek Road Signalization is the recommended mitigation measure at this intersection. The applicant should pay its fair share toward this improvement.	EIR	MLS
5.5-2 Short-Range Cumulative AM and PM Peak Hour Conditions Short Range cumulative conditions would create significant peak hour impacts for the Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road intersections.	S	5.5-2(a) through 5.5-2(c) The recommended improvements for Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road are the same as recommended for Impact 5.5-1.	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.5-3 Long-Range Cumulative AM and PM Peak Hour Conditions Long-range cumulative conditions would create significant peak hour impacts for all of the unsignalized study intersections.</p>	S	<p>5.5-3 The following mitigations would be required to reduce long-range cumulative AM and PM peak hour conditions to a less-than-significant level. The applicant would also pay Northgate Activity Center Plan traffic mitigation fees based on 56 PM peak hour project generated trips that would travel through the Highway 101 / Lucas Valley Road / Smith Ranch Road intersection. The amount of this fee would be offset by 55 percent of the cost of other area-wide improvements financed by the applicant, pursuant to the Board of Supervisors Resolution 84-501.</p> <p>5.5-3(a) Miller Creek Road / Marinwood Avenue Same mitigation measure as 5.5-1(a).</p> <p>5.5-3(b) Lucas Valley Road / Los Gatos Road - Same mitigation measure as 5.5-1(b).</p> <p>5.5-3(c) Highway 101 Southbound Ramps / Miller Creek Road – Same mitigation measure as 5.5-1 (c).</p> <p>5.5-3(d) Miller Creek Road / Las Gallinas Avenue The recommended mitigation measure at this intersection is the installation of a traffic signal.</p> <p>5.5-3(e) Highway 101 Northbound Ramps / Miller Creek Road The recommended mitigation measure at this intersection is the installation of a traffic signal.</p>	EIR	MLS
<p>5.5-4 Transit Impacts The proposed project would generate a moderate number of transit trips and would not be expected to impact transit.</p>	LTS	No mitigation would be required.	--	LS
<p>5.5-5 Pedestrian Impacts The proposed project's impact on pedestrian circulation would be less-than-significant.</p>	LTS	No mitigation would be required.	--	LS
<p>5.5-6 Parking Impacts The project would have no significant impacts on parking conditions.</p>	LTS	No mitigation would be required.	--	LS
<p>5.5-7 Project Access Impacts The Lucas Valley Road access intersection would have operational problems.</p>	S	<p>5.5-7 The project applicant has proposed the following roadway improvements at the Lucas Valley Road access driveway:</p> <ul style="list-style-type: none"> • Construction of an eastbound left-turn lane on Lucas Valley Road at the project entrance. • Construction of an eastbound acceleration lane on Lucas Valley Road. • Construction of a westbound deceleration lane on Lucas Valley Road. 	APP	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>SBM</i>	<i>Mitigation</i>	<i>BY</i>	<i>RS</i>
5.5-8 Stopping Sight Distance The proposed Lucas Valley Road access would provide adequate sight-stopping-sight distance.	LTS	No mitigation would be required.	--	LS
Air Quality				
5.6-1 Air Quality Standards Traffic generated by buildout of the proposed project would not cause or contribute to carbon monoxide violations.	LTS	No mitigation would be required.	--	LS
5.6-2 Cumulative Net Increase in Non-Attainment Pollutants Buildout of the proposed project would generate new air pollutant emissions that would affect long-term air quality throughout the region.	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.6-3 Impacts to Sensitive Receptors Dust generation from short-term construction activities associated with development of the project components would cause potential health and nuisance air quality impacts to adjacent land uses.</p>	S	<p>5.6-3 Master Plan approval should be conditioned to require contractors to incorporate measures to reduce dust and equipment exhaust emissions into construction plans.</p> <p>Emissions from construction activities can be greatly reduced by implementing dust control measures. The significance of construction impacts to air quality is typically determined based on the control measures that will be implemented. Implementation of the measures listed below would reduce the dust impacts associated with grading and new construction to a less-than-significant level:</p> <ul style="list-style-type: none"> • All active construction areas shall be watered at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times. • All hauling trucks shall be covered or at least two feet of freeboard shall be maintained. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas that are inactive for 10 days or more). • Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles. • Limit traffic speeds on any unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible. • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. • Install wind breaks, or plant trees / vegetative wind breaks on the windward side(s) of construction areas. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph cause dust clouds to extend beyond the construction site and affect nearby land uses. Limit the area subject to excavation, grading, and other construction activity at any one time. Properly maintain construction equipment and avoid unnecessary idling near residences. Designate a disturbance coordinator that would respond to complaints regarding construction-related air quality issues. The phone number for this disturbance coordinator shall be clearly posted at the construction sites. 		
5.6-4 Odors Proposed residential and office uses are not anticipated to generate odors or be exposed to substantial odors from neighboring sources.	LTS	No mitigation would be required.	--	LS
5.6-5 Cumulative Impacts Buildout of the project site under cumulative-plus-project conditions would result in less-than-significant impacts on carbon monoxide emissions and on regional (ozone precursor) emissions.	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
Noise				
<p>5.7-1 Land Use Compatibility Impact Noise levels on some proposed residential lots and in the proposed office area would exceed the Noise and Land Use Compatibility criteria set forth by the Noise Element of the <i>Marin Countywide Plan</i>. While indoor noise levels in office structures would conform to County criteria through normal building design, exterior sound levels could result in a potentially significant impact on residents' use of their lots' yards, and interior levels with residents' windows open could conflict with the criteria.</p>	S	<p>5.7-1 No measures would be required to mitigate noise exposure of proposed office buildings. The following measure would be required to reduce the impact of noise exposure on future residential use of proposed Lots 27 and 28:</p> <ul style="list-style-type: none"> Design property-line privacy fences to shield the backyards of Lots 27 and 28. Fences should be six feet high and of solid construction so that there are no cracks or gaps either in the fence itself or at the bottom. A double-sided wooden fence or board-on-board construction consisting of a minimum of three-quarter-inch thick wood would provide the necessary sound attenuation. A masonry sound wall of the type discouraged by County policy would not be required. Lot-by-lot site plans submitted to the County during design review should show the noise reduction solution selected. Depending on proposed site orientation and noise shielding (in response to the immediately preceding measure), design and build (or require the future homeowners to build) second floors of housing units on Lots 27 and 28 with mechanical ventilation so that windows can be closed to achieve interior noise criteria. 	EIR	MLS
<p>5.7-2 Traffic Noise Traffic noise levels on the streets serving the project site would increase by less than three decibels (3 dBA), even under cumulative traffic conditions.</p>	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.7-3 Construction Noise During construction, noise levels would be elevated outside and inside existing homes immediately adjacent to the project site boundary.</p>	S	<p>5.7-3 Countywide Plan Policy N-2.4 requires that measures should be taken during all phases of construction to minimize exposure of neighboring properties to excessive noise levels from construction-related activity. Further, the Noise Element states that the Community Development Agency reserves the right to set hours for construction-related activities involving the use of machinery, power tools, or hammering. The type of construction, site location, and noise sensitivity of nearby land uses would determine the hours of construction. The conditions of approval would specify hours for staging and type of construction activities. In order to implement these policies, the following measures would be required to mitigate the project's short-term construction noise impacts:</p> <ul style="list-style-type: none"> • Adequately muffle and maintain all equipment used on the project site. All internal combustion engine-driven equipment should be fitted with intake and exhaust mufflers which are in good condition. Good mufflers with quieted compressors should result in all non-impact tools generating a maximum noise level of 85 dB when measured at a distance of 50 feet. • Powered construction equipment should be turned off when not in use. • Assign a disturbance coordinator to be available on-site during construction. • Clearly post the name and telephone number of the disturbance coordinator so that neighbors have a contact person at the project site with whom to discuss problems and who can facilitate resolution of these problems. • Confine residential construction to 8:00 AM to 5:00 PM on weekdays, at least during periods when construction is taking place within 1,000 feet of the nearest existing homes. Construction hours for activity in other parts of the site could be lengthened as appropriate, including commercial construction on Parcel 2. 	EIR	MLS
<p>Public Services</p> <p>5.8-1 Fire and Emergency Medical Service Impacts Site development would create the potential for more fire incidents and emergency medical calls. However, this would affect the MFD minimally and, therefore, would not lead to adverse physical changes in the environment.</p>	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
<p>5.8-2 Wildland-Building Fire Exposure Impacts New building construction adjacent to wildland areas on the project site would be exposed to fire hazards under severe weather and wind conditions.</p>	S	<p>Mitigation Measure 5.8-2 The following measures would be required to reduce the potential impacts of wildland fires:</p> <ul style="list-style-type: none"> • The Fire Management Plan should include both a Vegetation Modification Plan (to ensure that a minimum defensible space -- 30 to 100 feet depending on specific site conditions -- would be provided by reducing flammable vegetation and fuel load) and a Vegetation Maintenance Plan (to describe the on-going annual vegetative maintenance program). The annual Vegetation Maintenance Plan reports would address the site's fire hazards based on fuel load, slope, aspect, topography, and other factors and should determine priority problem areas on the site where fire safety measures should be emphasized. Approval of the Fire Management Plan by the MFD would be required before construction, and implementation would be required prior to framing. Because the Master Plan does not yet describe long-term site maintenance aspects of the project (such as establishment of a homeowners' association or equivalent organization composed of all the site's residential, office, and open space landowners), the Vegetation Maintenance Plan should establish a mechanism and identify who would be responsible for implementing all elements of the Plan. <p>The MFD has materials and guidelines to prepare mitigation plans for defensible space. New plantings of trees and vegetation with a high fire risk (such as Bishop Pine [<i>Pinus muricata</i>], Tan Oak [<i>Lithocarpus densiflorus</i>], California Bay [<i>Umbellularia californica</i>], and Coyote Brush [<i>Bacharis pilularis</i>]) should be prohibited within the defensible space zone of buildings. Existing trees with a high fire risk within the defensible space zone of buildings (such as California Bay) could be retained with permission of the MFD and would require special consideration in the Vegetation Management Plans, as described below. Resistant plantings should be encouraged (such as Coast Live Oak (<i>Quercus agrifolia</i>), Pacific Wax Myrtle (<i>Myrica californica</i>), California Lilac (<i>Ceanothus</i> spp.) and Toyon (<i>Heteromeles arbutifolia</i>)), all of which are included in the Conceptual Landscape Plan.</p> <ul style="list-style-type: none"> • Implement fire prevention measures during construction. The applicant and individual residential or office developers should be responsible for implementing the measures which should include (but not be limited to) the following: <ul style="list-style-type: none"> ▫ Installing all project roadway and water requirements before any residential sidewall construction on the site, consistent with Section 10.502 of the <i>Uniform Fire Code</i>. 	EIR	MLS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
		<ul style="list-style-type: none"> ▫ Clearing brush and other potential fire fuel around construction areas. ▫ Maintaining and clearly marking on-site fire response equipment (such as fire extinguishers, fire retardant blankets, shovels, buckets, etc.) at each construction area. ▫ Ensuring that all construction workers are trained to use on-site fire response equipment and workplace safety measures. ▫ Locating and clearly identifying a cellular phone or other communication device on-site at all times during construction. 		
5.8-3 Roadway Impacts The proposed roadway system would meet County requirements.	LTS	No mitigation would be required.	--	LS
5.8-4 Cumulative Fire and Emergency Medical Service Impacts Cumulative development projects would add to the demands of the MFD. These increased demands would not lower current levels of service of these districts.	LTS	No mitigation would be required.	--	LS
5.8-5 Police Protection Service Impacts The Marin County Sheriff's Department would be responsible for providing police protection services to the new on-site population. In addition, the California Highway Patrol is responsible for vehicle-related incidents on Lucas Valley Road. The proposed project is not expected to result in an adverse physical change in the environment.	LTS	No mitigation would be required.	--	LS
5.8-6 Cumulative Police Protection Service Impacts Cumulative development projects would add to demands on the Marin County Sheriff's Department and CHP. However, these increased demands would not lower current levels of service.	LTS	No mitigation would be required.	--	LS
5.8-7 Water Service Impacts No new water facilities would be necessary.	LTS	No mitigation would be required.	--	LS
5.8-8 Increased Water Demands Project development would increase water demands on the MMWD. However, the MMWD has sufficient capacity to serve the project.	LTS	No mitigation would be required.	--	LS
5.8-9 Cumulative Water Service Impacts The proposed project would not add to cumulative water service impacts.	LTS	No mitigation would be required.	--	LS
5.8-10 Sanitary Sewer Service Impacts The LGVSD wastewater plant has sufficient existing capacity to serve the project.	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
5.8-11 Cumulative Sanitary Sewer Service Impacts The LGVSD wastewater plant has sufficient existing capacity to serve cumulative development.	LTS	No mitigation would be required.	--	LS
5.8-12 Public School Impacts -- Dixie Elementary School District Project implementation would generate approximately 14 students who would attend Dixie Elementary School District schools.	LTS	No mitigation would be required.	--	LS
5.8-13 Public School Impacts -- San Rafael High School District Project implementation would generate approximately six students who would attend Terra Linda High School.	LTS	No mitigation would be required.	--	LS
5.8-14 New Open Space Maintenance The project could provide additional open space for the Marinwood CSD. Although dedication of this open space to the Marinwood CSD would add to the District's maintenance requirements it would not result in an adverse physical effect on the environment.	LTS	No mitigation would be required.	--	LS
5.8-15 Increased Use of Recreational Existing Facilities Project implementation would not result in substantial physical deterioration of existing facilities or require the construction or expansion of recreation facilities which would result in significant impacts.	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

Impact	SBM	Mitigation	BY	RS
Costs and Revenues				
5.9-1 Economic Impact to the County of Marin General Fund As revenues from the project would greatly exceed costs, no impact to the General Fund would be created.	LTS	No mitigation would be required.	--	LS
5.9-2 Economic Impact to the Marinwood Community Service District The project would result in a less-than-significant impact on the Marinwood Community Service District because no significant physical change would occur in order for the CSD to provide services.	LTS	No mitigation would be required.	--	LS
5.9-3 Economic Impact to the Dixie Elementary School District The project would result in a less-than-significant impact on the Dixie Elementary School District because no significant physical change would occur in order to provide school services.	LTS	No mitigation would be required.	--	LS
5.9-4 Economic Impact to the San Rafael High School District The project would result in a less-than-significant impact on the San Rafael High School District because no significant physical change would occur in order to provide school services.	LTS	No mitigation would be required.	--	LS
5.9-5 Economic Impact to Marin Municipal Water District The project would result in a less-than-significant impact on the Marin Municipal Water District because no significant physical change would occur in order to provide water service.	LTS	No mitigation would be required.	--	LS
5.9-6 Economic Impact to Las Gallinas Valley Sanitation District The project would result in a less-than-significant impact on the LGVSD because no significant physical change would occur in order to provide sanitary sewer service	LTS	No mitigation would be required.	--	LS

Exhibit 3.0-1 (Continued)
Summary of Impacts and Mitigation Measures

<i>Impact</i>	<i>SBM</i>	<i>Mitigation</i>	<i>BY</i>	<i>RS</i>
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Key:

SBM = Significance Before Mitigation

S = Significant

PS = Potentially significant

LTS = Less than significant

BY = Mitigation Proposed By

APP = Applicant proposes the mitigation as a part of the proposed project

EIR = EIR proposes the mitigation for consideration as a condition of approval

REG = Pre-existing regulatory requirement

RS = Residual Significance After Mitigation

MLS = Mitigated to a less-than-significant level

SU = Significant and unavoidable

LS = Less than significant without mitigation

3.2 EVALUATION OF ALTERNATIVES

This EIR analyzes five on-site alternatives to the proposed project as well as the feasibility of using another site for the proposed project. The 1996 Draft EIR evaluated four on-site development alternatives to the then proposed project which have been carried forward in this EIR. These included the "no development" and "existing zoning" alternatives (the mandatory "no project" alternatives), a "no office development" alternative, and a "mitigated" alternative. In order to maintain consistency with the 1996 Draft EIR, this Draft EIR evaluates the previous proposed project as an alternative. The analysis of the previously considered alternatives has been updated to reflect current conditions.

The alternatives evaluation is in Chapter 6.0. In the discussion of the alternatives, the currently proposed project is referred to simply as the "proposed project" or "project," while the five on-site alternatives are identified according to their numeric sequence in this section. The previously proposed project analyzed in the 1996 Draft EIR is referred to as the "1995 plan". The alternatives evaluated in the EIR are as follows:

Alternative 1 -- No Development Alternative

This alternative assumes that no development would be built on the project site at this time and that there would be no changes to the existing conditions. Other growth in the area as projected by *The Marin Countywide Plan* would continue to occur with Alternative 1, but this alternative would not contribute to such cumulative development. Alternative 1 does not foreclose any site development at a later time but assumes maintenance of the *status quo* for the foreseeable future for comparison with the project and other EIR alternatives.

Alternative 2 -- Countywide Plan Designation Alternative

Alternative 2 assumes that the entire 106-acre site would be developed with housing units consistent with its *Countywide Plan* designation, which would allow development of a maximum of 106 units. No specific plan has been prepared to show where 106 housing units could be built on the site. Therefore, the analysis of this alternative is conceptual. In addition, this alternative makes no assumptions about housing type, such as single-family detached (as with the project) or single-family attached townhouse or duplex units (permitted by RMP zoning), which would influence total site development area.

Alternative 3 -- 71 Housing Units and No Office Development Alternative

Alternative 3 examines development of 71 housing units on the site. It assumes the same residential site plan as considered in the 1996 Draft EIR and would confine site development to the project's Parcel 1. However, this alternative assumes no development on the project's Parcel 2, thus differing from the project by not dividing the site and by omitting 94,400 square feet of commercial and associated development (such as roadways and utility extensions).

This alternative would be consistent with the *San Rafael General Plan 2000* Hillside Residential land use designation for the project site.

Alternative 4 – 29-Lot Subdivision Alternative

Alternative 4 was previously formulated to illustrate a site plan designed to mitigate the adverse impacts identified in the 1996 Draft EIR from proposed development of 71 residential lots on Parcel 1. This alternative assumes 29 residential lots on the lower elevations of Parcel 1, and a similar office development on Parcel 2. Major aspects of this alternative are described in relation to the 1995 plan and include:

- Elimination of upslope lots to reduce visual impacts, eliminate the need to build a water tank on the highest site elevation to provide water service to upper elevation lots, and make site development consistent with *The Marin Countywide Plan* by eliminating ridgeline development.
- Elimination of the site entrance on Lucas Valley Road to reduce traffic impacts and extensions of Ellen and Erin Drives into the site instead. This alternative assumes that these extended roadways would connect on-site and form a loop to facilitate access in an emergency.
- Preservation of the existing on-site spring and associated seep by eliminating Roadway B.
- ~~Preservation of an area east and northeast of the spring with no development due to the potential presence of a large ancient landslide in this area. Repair of this landslide would require an extensive amount of earthmoving, not only in this area but also at high elevations of the site.~~
- About 400 square feet of parking lot proposed for the northern office building on Parcel 2 would be removed or relocated outside the Stream Conservation Area of Miller Creek for consistency with *The Marin Countywide Plan*.

Alternative 5 -- Previous Proposed Project alternative

This alternative assumes that the project site would be developed as the May 1995 proposed project. The 1995 plan had the following general characteristics:

- 33.3 acres of low-density residential use – 71 single-family detached housing units.
- 11.1 acres of office use – 94,400 square feet to be constructed in two buildings.
- 52.9 acres of open space.
- 9.0 acres set aside for the proposed Highway 101 / Lucas Valley Road southbound ramps.

Alternative Site Analysis

Both potentially feasibly off-site alternatives and alternative sites considered infeasible were evaluated. Potentially feasibly off-site alternatives include Hamilton Air Force Base, St. Vincent's / Silveira, Grady Ranch, and South Luiz Ranch.

Environmentally Superior Alternative

Based on the analysis of the project and on-site alternatives, the EIR finds that Alternative 1 (No Development Alternative) would be the environmentally superior alternative because it would avoid the environmental impacts expected from building and operating the proposed project.

Section 15126[d] of the *State CEQA Guidelines* states that, if the environmentally superior alternative is the No Project Alternative, the EIR also shall identify an environmentally superior alternative among the other alternatives. Based on a comparison of the significant environmental impacts of all the build alternatives, Alternative 4 (29-Lot Subdivision Alternative) would be slightly superior to the Proposed Project and therefore would be the environmentally superior alternative. The primary advantage of Alternative 4 is that it assumes no site access from Lucas Valley Road. In terms of access, safety, and traffic operations, Alternative 4 (29-Lot Subdivision Alternative) would be superior to the Proposed Project, which would provide primary residential access from Lucas Valley Road.

3.3 PLAN AND POLICY CONSISTENCY

This EIR evaluates the consistency of the *Oakview Master Plan* with the relevant policies of *The Marin Countywide Plan*. As discussed in Chapter 4.0 *Relationship to Public Plans and Zoning*, the determination of policy consistency represents the EIR author's best judgment based on an interpretation of policies. However, policy consistency must ultimately be determined by Marin County decision-makers.

The *Oakview Master Plan*, as proposed by the project applicant, is consistent with the majority of *The Marin Countywide Plan* policies. Without mitigation measures the proposed project may, however, be inconsistent with several Countywide Plan policies related to Environmental Quality (EQ), Community Development (CD), Transportation (T), Noise (N), and Environmental Hazards (EH).

The policies of *The Marin Countywide Plan* with which the *Oakview Master Plan* appears to be inconsistent or potentially inconsistent are:

- EQ-2.8 Retention of the Natural Vegetation
- EQ-2.9 Minimal Disturbance of Vegetation
- EQ-2.10 Tree and Shrub Plantings
- EQ-2.11 Modification of Natural Channels
- EQ-2.19 Surface Runoff
- EQ-2.20 Retention of Sediment
- EQ-2.22 Altering Stream Flow, Bed, or Banks
- EQ-2.23 Seasonal Development Factors
- EQ-2.26 Restoration of Damaged Portions of Stream Conservation Areas
- EQ-2.31 Water Quality

- EQ-2.88 Protection of Special Status Species
- EQ-3.2 Air, Water, and Noise
- EQ-3.5 Protection of Unique Geologic, Ecologic, Archaeologic, and Historic Sites
- EQ-3.6 Wildlife, Vegetation and Habitats
- EQ-3.9 Adverse Impacts on Services, Circulation, Economic and Social Environment
- EQ-3.11 Visual Quality and Views
- EQ-3.27 Identification of Wetland Outside the BFC Zone
- CD-2.4 Location of Commercial and Higher Intensity Residential Development
- CD-2.7 Discouraging Development in Natural Resources or Hazard Areas
- CD-4.1 Energy Conservation and Commercial Development
- T-1.1 Level of Service Standards
- N-1.1 Use Noise Level Guidelines- New Development
- N-2.4 Minimize Impacts From Excessive Noise Levels Due to Construction Activity
- EH-5.1 Mitigation of Risk
- EH-8.6 Flood Runoff
- CF-1.1 Zoning Within Urban Services Areas

Mitigation measures are proposed in the EIR to make the *Oakview Master Plan* consistent with the each of the policies listed above for which the project is inconsistent. Implementation of these measures would reduce the inconsistency with the specific policy to a less-than-significant level. Mitigation measures for policies for which the project is potentially inconsistent must await a determination of consistency by the Planning Commission and Board of Supervisors.

Chapter 4.0 also evaluates consistency of the *Oakview Master Plan* with the Marin County Zoning Ordinance, the *City of San Rafael General Plan 2000*, and the Marin Local Agency Formation Commission policies.

The *Oakview Master Plan's* proposed land uses are consistent with the County's zoning designations for the project site, although the proposed office use would require issuance of a use permit. With the implementation of specific mitigation measures recommended in the EIR (such as Mitigation 5.2-3 that requires preparation of a Stormwater Pollution Prevention Plan, Mitigation 5.3-2(a) that states that the residential building envelopes should be revised to indicate that the envelope areas are intended to minimize tree removal and Mitigation 5.3-1(a) that requires preparation of a Landscape and Vegetation Management Plan) the *Oakview Master Plan* would be consistent with the design requirements set forth in the County zoning requirements. The *Oakview Master Plan* is consistent with the zoning requirement to site buildings in the most accessible, least visually prominent, and most geologically stable portions of the site. Furthermore, the *Oakview Master Plan* is consistent with the zoning requirement to prohibit development on top or within 300 feet horizontally, or within 100 feet vertically on visually prominent ridgelines.

Finally, since the project site is within the City of San Rafael's Planning Area and Sphere of Influence this EIR discusses the relationship of the *Oakview Master Plan* with certain policies of the *San Rafael General Plan 2000*. In 1989 the County of Marin and the City of San Rafael signed an agreement regarding the future development of the project site. Among the points of agreement, the City of San Rafael agreed to formally refuse annexation of the project site and refer future development of the site to the County. Consistent with the agreement the applicant has not proposed to annex the project site to the City. This analysis, therefore, is provided for general information only, since the project is to be developed in the unincorporated portion of Marin County and the City of San Rafael would have no direct land use authority regarding the proposed *Oakview Master Plan*. However, the project applicant has agreed to participate in the City's Priority Projects Procedure. The City's procedures for

priority project determination state that all applications must be consistent with the *San Rafael General Plan 2000*. The *San Rafael General Plan* designation for the site is Hillside Residential (one-half to two housing units per acre). The proposed 28 housing units would be consistent with this designation; the office buildings would not be consistent.

3.4 AREAS OF CONTROVERSY

In December 1983 the property owners submitted to the City of San Rafael an application for a General Plan Amendment to allow a mixed use residential / commercial development on the project site. After a review of the proposed project it was determined that an Environmental Impact Report was required. An Administrative Draft EIR¹ (1986 Administrative Draft EIR) was prepared. The EIR was not circulated for public review and comment, nor was it presented to the San Rafael Planning Commission or City Council. The proposed General Plan Amendment and EIR were put on hold by the City of San Rafael pending the outcome of its then General Plan update process. The conclusion of the *San Rafael General Plan 2000* was that a hillside / residential designation allowing 0.5 to 2.0 units per acre was the appropriate land use. However, at the request of the Marinwood residents and the County, the City of San Rafael determined that annexation of this property to the City could be waived, subject to certain conditions.

In response to the City of San Rafael's action, in May 1995 the property owners submitted an application to Marin County for approval of a Master Plan, Use Permit and Tentative Map for the Daphne / Bacciocco property. The 1995 *Oakview Master Plan* proposed 71 single-family detached housing units and two office buildings (94,400 square feet of office space).

In September 1996 Marin County began circulation of a Draft EIR for the proposed *Oakview* project (1996 Draft EIR).² The 1996 Draft EIR identified a number of significant unavoidable adverse environmental impacts associated with the 1995 Master Plan. These impacts included potential geologic hazards to development on the site due to landsliding, significant loss of existing trees, and significant visual impacts due to development on the upper elevations of the project site. Alternative 4 (Mitigated Alternative) was identified as the environmentally superior alternative among the build alternatives considered.

In response to issues raised in the 1996 Draft EIR the property owners have now submitted a new application to Marin County for approval of a Master Plan, Use Permit, and Vesting Tentative Map for the project site.³ The revised *Oakview Master Plan* proposes development of the project site with

¹ *Daphne / Bacciocco Development Plan Administrative Draft Environmental Impact Report*, prepared by Nichols • Berman for the City of San Rafael, January, 1986.

² *Oakview Master Plan, Use Permit, Tentative Map, Draft Environmental Impact Report*, prepared by Nichols • Berman for County of Marin Community Development Agency, September 25, 1996.

³ The *Oakview Master Plan, Use Permit, and Vesting Tentative Map* application was determined to be complete by the Marin County Community Development Agency on July 26, 1999. The project description is based on that application and the following documents, on file and available for public review at the Marin County Community Development Agency, Marin County Civic Center, Room 308, San Rafael, California:

28 single-family detached housing units and 94,400 square feet of offices in two buildings. The revised *Oakview Master Plan* considered in this EIR builds upon the concepts expressed in the Mitigated Alternative of the 1996 Draft EIR.

In August 1999 the County Community Development Agency staff issued a Notice of Preparation to prepare a revised EIR for the proposed project. As a result of the 1986 Administrative Draft EIR, the 1996 Draft EIR, the comment letters received regarding the adequacy of the 1996 Draft EIR, the Notice of Preparation, and the subsequent scoping process the following issues or areas of controversy were identified for the revised Draft EIR. All issues have been addressed in the EIR:

- Impact of project on geologic conditions, including impacts from slope stabilization and restoration, site grading, and geologic hazards.
- Impact on hydrologic conditions including impacts to existing hydrology and drainage on the site and impacts on existing subsurface seepage.
- Impact of project on biotic conditions including impacts on wetlands and watercourses, special-status plant and animal species, and tree loss.
- Consistency of the proposed project with *The Marin Countywide Plan*.
- Impact on views of the project site from the surrounding area, including Highway 101, Lucas Valley Road and the adjacent residential neighborhood. Concern about visual impact of ridgeline development.

Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map, (Application Text) Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C.E., Project Representative, April, 1999, Revised July 8, 1999.

Oakview Mitigated Master Plan Drawings, ten sheets, I.L. Schwartz Associates, Inc., and others, April 23, 1999, as revised through June 28, 1999.

Letter from John Dowden, Dowling Associates to Irving Schwartz, March 26, 1999, regarding the potential traffic impacts of the revised Oakview Mitigated Master Plan.

Landslide Mitigation and Geotechnical Recommendations During Grading Proposed Roadway Construction Oakview Development Project San Rafael, California, Kleinfelder, Inc., November 18, 1999.

Delineation of Clean Water Act Jurisdiction Oakview Project Area, Marin County, California, LSA Associates, Inc., August 18, 1999.

Letter from Lyle Lewis, Kleinfelder, Inc. to Virginia Daphne and Edward Bacciocco, May 5, 1999, regarding Geotechnical Plan Review Oakview Development San Rafael, California.

Oakview A Residential & Administrative/Professional Development Revised Preliminary Drainage Analysis, I.L. Schwartz Associates, Inc., February 22, 1999.

Letter from Irving Schwartz, I.L. Schwartz Associates, Inc. to Tim Haddad, Marin County Community Development Agency, November 18, 1999, regarding Oakview EIR and Off-Site Hydraulic Analysis.

Letter from Pamela Dawson and Lyle Lewis, Kleinfelder, Inc. to Irving Schwartz, December 21, 1999 regarding Correction to Geology and Soils Section Mitigated Master Plan, Use Permit and Vesting Tentative Map, Oakview Development Plan.

- Impact on the local circulation system, including the Highway 101 / Lucas Valley Road / Smith Ranch Road intersection, Highway 101 / Miller Creek Road intersection, various Lucas Valley Road intersections, and consistency with the City of San Rafael Level of Service standards.
- Adequacy of public services (including police and fire protection, water supply, sewage treatment, and schools) to serve the proposed project.

3.5 GROWTH INDUCING IMPACTS

A proposed project can have a growth inducing impact if development of that project removes obstacles to future development. One type of growth-inducing impact is purely physical, by creating and making available an infrastructure that can lead to easier future development. This type of impact can include the construction of roadways, water, sewer, and other urban services into previously difficult-to-access areas. A second type of impact can be the setting of precedents that might allow similar development to occur in the future. Examples include a development that allows growth into an area previously closed to development (such as in an agricultural preserve), or development allowed in an area that was previously closed to that particular type of growth (such as rezoning a residential area to allow commercial development).

The *Oakview Master Plan* could not be regarded as setting a growth-inducing precedent, as the amount and type of growth proposed for the project has already been foreseen by both *The Marin Countywide Plan* and the *City of San Rafael General Plan*. The project site is located in the City-Centered Corridor, which is where *The Marin Countywide Plan* directs that urban development be concentrated. Zoning on the site is classified as RMP-1.38 (Residential Multi-Family Planned, 1.38 units per acre). This zoning would allow a maximum of 146 housing units on the project site and permits office uses with the issuance of a use permit. The *Oakview Master Plan* calls for 28 housing units and 94,400 square feet of office buildings. Public planning documents foresee the development of the project site and implementation of the *Oakview Master Plan* would "build out" the project site within its planned limits.⁴

Physical infrastructure would not be extended to any area outside of the project site. The site is already within the Marinwood Community Services District and the Marin Municipal Water District (MMWD) but would require annexation to the Las Gallinas Valley Sanitation District (LGVSD). Existing MMWD facilities would need to be extended to the project site as would LGVSD facilities. Since the project site is surrounded by urban development the extension of water and sewer facilities to the site would not result in making such facilities available to previously undeveloped areas and lead to easier future development.

Development of the Oakview project site would not have growth-inducing impacts on service agencies. The MMWD has sufficient capacity to serve the project and the LGVSD wastewater plant has existing sufficient capacity to serve the project. Neither the Dixie Elementary School District nor the San Rafael High School District would need to expand their facilities to serve the project. The

⁴ It should be noted that the site's RMP-1.38 zoning designation is inconsistent with the *Countywide Plan's* land use designation. The *Countywide Plan* designation (0.01 to 1 unit per acre) would allow a maximum of 106 units on the site. Development of the site with more than 106 units would be growth inducing.

Marin County Sheriff's Department and the Marinwood Fire Department do not anticipate expanding their personnel or improving their equipment as a result of the proposed project.

In conclusion, for the reasons stated above, the proposed project is not expected to induce growth on adjacent lands and, therefore, would not have significant growth inducing impacts.

3.6 CUMULATIVE IMPACTS

This EIR assesses the effects of implementing the proposed project under existing environmental conditions and under anticipated future conditions. Future conditions were defined for this EIR by identifying development projects in the vicinity of the project site (the "study area") with a reasonable expectation of being built during the time frame of site development. Traffic was determined to present the greatest potential for causing cumulative impacts due to existing conditions on Lucas Valley Road, especially at the Lucas Valley Road / Highway 101 interchange. Thus the study area was defined to cover the geographical area where project generated traffic impacts could result in significant cumulative impacts. The study area includes projects both west and east of Highway 101 in the City of San Rafael as well as in unincorporated Marin County. A total of nine projects have been identified as short-range cumulative development projects with a bearing on the proposed Oakview project. The list of cumulative projects is presented in Exhibit 2.3-1 and the locations of cumulative projects are shown in Exhibit 2.3-2.

In addition to the short-range cumulative projects the transportation section analyzes long-range cumulative conditions. Long-range cumulative conditions are based on the *ABAG 2020 Development Projections 1998*. The long-range cumulative traffic volumes are expected to occur with the projected *San Rafael General Plan* land uses and corresponding land use increases for the general region.

The cumulative effects of project implementation, in conjunction with other planned development in the study area, are discussed in each individual section of this EIR.

The following are significant cumulative impacts which can be reduced to less-than-significant impacts.

- Of the nine cumulative development projects examined in this EIR only the Lucasfilm project would contribute to cumulative water quality impacts in the Miller Creek Watershed. The remaining eight projects drain to either Gallinas Creek or South Fork Gallinas Creek. Unmitigated post-project contaminant concentrations would exceed the stringent water quality objectives set forth in the Regional Water Quality Control Board's 1995 Basin Plan. The cumulative impacts on contaminants in stormwater discharges from these projects would result in a significant contaminant loading of the waters of Miller Creek (a spawning stream), the Gallinas Creek tributary, and eventually Gallinas Creek. Mitigation measures are available to lessen this impact (see Impact 5.2-10) to a less-than-significant impact.
- Short-range cumulative conditions would create significant peak hour impacts for the Highway 101 Southbound Ramps / Miller Creek Road, Miller Creek Road / Marinwood Avenue, and Lucas Valley Road / Los Gamos Road intersections.

Specific intersection improvements are recommended to mitigate each of these impacts to a less-than-significant level.

- Long-range cumulative conditions would create significant peak hour impacts for the Highway 101 Northbound Ramp / Miller Creek Road, Highway 101 Southbound Ramp / Miller Creek Road, Miller Creek / Marinwood Avenue and Miller Creek Road / Las Gallinas Avenue intersections.

Specific intersection improvements are recommended to mitigate each of these impacts to a less-than-significant level.

The project's cumulative effect would be less-than-significant for the following topics:

- Nearby developments would encounter geologic and seismic risks based on their individual site characteristics. The geologic impacts of developing each of these surrounding projects would be specific to each site and would not combine to cause cumulative impacts. For instance, landslide areas requiring repair are not contiguous, and the development of the project and a nearby project would not combine to cause cumulative risks greater than each site's individual risks. Consequently, geologic impacts resulting from nearby development would not combine to create cumulative environmental consequences.
- The potential impacts of development on biotic resources tends to be site specific, and the overall cumulative effect depends on the degree to which significant vegetation and wildlife resources are protected on each site. This includes preservation of specimen-sized trees, well-developed native vegetation (such as woodland, forest, and native grasslands), populations of special-status plant or animal species, and wetland features. Further environmental review of specific development proposals in the vicinity of the Oakview site should ensure that important biotic resources are protected and managed properly and prevent any significant adverse development-related impacts.

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance would be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. Protection of Miller Creek on the site should preserve its function as a movement corridor for fish and wildlife.

- Cumulative development projects would add to the demands of the Marinwood Fire Department. These increased demands would not lower current levels of service of the district and thus would result in less-than-significant impacts.
- Cumulative development projects would add to demands on the Marin County Sheriff's Department and California Highway Patrol. However, these increased demands would not lower current levels of service and thus would result in less-than-significant impacts.
- The Las Gallinas Valley Sanitation District wastewater plant has sufficient existing capacity to serve cumulative development, thus this would be a less-than-significant impact.

3.7 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The 1996 Draft EIR identified a number of significant unavoidable adverse impacts resulting from the implementation of the 1995 plan. With the revised *Oakview Master Plan* each of these significant unavoidable adverse impacts has been reduced to a less-than-significant level. The unavoidable impacts identified for the 1995 plan impacts are summarized below:

GEOLOGY

A number of unavoidable adverse impacts were identified for the 1995 plan due to the identification of four areas potentially representing large ancient bedrock landslides. Impacts related to landslide repair, grading, slope stability and the secondary impacts relating to these activities, such as vegetation removal, visual exposure, dust and erosion generation were identified as unavoidable impacts. Groundwater impacts were identified as unavoidable because the effectiveness of the recommended mitigation measures could not be determined with absolute certainty

As discussed in Section 5.1 of this EIR the possible large ancient bedrock landslides near the areas of proposed development have been investigated thoroughly and found to be stable in their current positions. As a result the previously identified unavoidable impacts related to geology and soils for the 1995 plan have been reduced to less-than-significant either through the revised development plan or recommended mitigation measures.

BIOLOGICAL RESOURCES

Tree removal and impacts to the woodland / forest cover of the 1995 plan was identified as an unavoidable impact.

Proposed development has generally been sited in the revised *Oakview Master Plan* to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed. Mitigation is, however, available to reduce this impact to a less-than-significant level.

VISUAL AND AESTHETIC QUALITY

In the 1995 plan visual impacts of residential development on the upper elevations of the project site was identified as an unavoidable impact.

In the revised *Oakview Master Plan* residential development is now confined to the lower elevations of the project site. Mitigation is available to reduced the identified significant visual impacts associated with development in the grassland area to a less-than-significant level.

PUBLIC SERVICES

The proposed roadway system in the 1995 plan would be inconsistent with Marin County policies concerning road widths and grades and this was identified as an unavoidable impact. In addition, the 1995 plan included development above the 210 foot elevation which would have required expansion of the Marin Municipal Water District facilities. Expansion would have been by either a connection to the existing Skyview Tank or by construction of an on-site water delivery system.

With the revised *Oakview Master Plan* neither of the identified impacts would occur. In the revised *Oakview Master Plan* the proposed roadway would meet County requirements and since all development would be below an elevation of 210 feet no new Marin Municipal Water District facilities would be required, except for tie-ins to the existing water distribution system in the area.

3.8 EFFECTS OF NO SIGNIFICANCE

The 1996 Draft EIR identified a number of potential impacts of the *Oakview Master Plan* to be not significant. With the revised *Oakview Master Plan* these issues continue to have no significant environmental impacts. As discussed in the 1996 Draft EIR these issues are as follows:

Energy & Natural Resources

ON-SITE ENERGY CONSUMPTION

Project implementation would require a one-time energy expenditure to construct housing units, office space and related facilities and would represent a long-term energy commitment to operate new development. The amount of energy used by the project is considered to be less than significant.

Construction of 28 housing units and 94,400 square feet of office development would require an unknown amount of energy. Fabrication and transportation of building materials, worker transportation, site development, and building construction would all require gasoline, diesel fuel, natural gas, and electricity, but the amount is not known.

During site development, energy would be consumed to excavate (cut) and deposit (fill) material on the site. For example, grading for the street improvements for the residential units would involve 7,020 cubic yards of cut and 6,320 cubic yards of fill. Additional cut and fill would be involved in lot-by-lot development of individual housing units. Approximately 26,220 cubic yards of cut and 20,780 cubic yards of fill would be required for the office development. Although off-site fill material is not anticipated at this time, such building materials are found throughout Marin County and would not deplete the quantity of these resources.

The project would be required to comply with Title 24 of the California Administrative Code for energy conservation. The standards establish "energy budgets" for different types of residential and non-residential buildings with which all new buildings must comply. The energy budget has a space conditioning (heating, cooling, ventilating) component and a water heating component that are expressed in terms of energy consumed per year. The Code allows for trade-offs within and between the components to meet the overall budget. The applicant would be required to demonstrate compliance with the Title 24 standards before receiving a building permit.

While the project does not propose any specific energy conservation measures it does not appear that development of the site as proposed would consume more energy than similar developments in Marin County.

OFF-SITE ENERGY CONSUMPTION

Project-related automobile transportation would be the primary cause of off-site energy consumption. The project's off-site energy impacts are considered to be less than significant.

Off-site energy use for transportation would include worker's commutes to and from work and construction trips generated during project implementation, such as to import fill and building materials. Off-site energy use would be measured as the number of gallons of gasoline consumed as a result of the project, and the impact would be based on daily vehicle miles traveled.

Vehicle miles traveled (VMT) is based on the number of trips per use and the destination of those trips in relation to the site. The site's location in Marinwood, near employment and large retail center would increase opportunities to reduce trips, and thus decrease VMT and gallons of gasoline consumed. Project implementation could be expected to save energy used for transportation since there would be opportunities for the site's residents to use alternative modes of transportation. The project is not expected to result in a proportionally greater VMT than other similar development in Marin County. In fact, with the implementation of an aggressive Transportation Demand Management plan for the office use could result in less VMT than would be expected from similar development.

Archaeological and Historic Resources⁵

As a part of the preparation of the 1986 Administrative Draft EIR maps and records which indicate the general location of known cultural resources in the vicinity of the project site were reviewed, including official records and maps for archaeological sites and historic sites which are maintained at the California Archaeological Inventory Northwest Information Center at Sonoma State University. In addition, the National Register of Historic Places and the California Inventory of Historic Resources also were consulted. Based on the records' search it was determined that no known cultural resources were recorded within the boundaries of the project site. The records' search did indicate the existence of several known archaeological resources which are clustered around Miller Creek, north, northwest, and northeast of the site. In addition, a National Register property, the Dixie Schoolhouse Building, is located near the project site on Las Gallinas Avenue.

As a part of the 1986 Administrative Draft EIR an archaeological field survey of the project site was also conducted. No visible surface evidence of archaeological or historical resources were found in the project site.

It is concluded, therefore, that development in the project site would have no adverse impacts on known archaeological or historical resources. It further is noted that all of the recorded archaeological sites in the vicinity of the project site are located at sufficient distances so as not to be affected adversely by development of the project site. The Dixie Schoolhouse historic structure is similarly located at a safe distance.

⁵ The principal reference used for this section was a report prepared by David Chavez & Associates, *Cultural Resources Evaluations for the Daphne/Bacciocco EIR, San Rafael California*, October 17, 1985.

3.9 MAJOR EIR CONCLUSIONS AND ISSUES TO BE RESOLVED

Major EIR Conclusions

The EIR reaches the following major conclusions:

- Chapter 5.0 *Environmental Setting, Impacts, and Mitigation Measures* identifies 76 impacts associated with the *Oakview Master Plan*. Of this total, 3536 have been identified as either a significant or potentially significant impact, and 4140 have been identified as a less-than-significant impact. Of the 3536 significant or potentially significant impacts mitigation measures have been identified to reduce each of these impacts to a less-than-significant level. Implementation of the revised *Oakview Master Plan* would result in no significant unavoidable impacts.
- Chapter 4.0 *Relationship to Public Plans and Zoning* evaluates consistency and inconsistency of the *Oakview Master Plan* with policies of the *Marin Countywide Plan*. The *Oakview Master Plan* is consistent with Map 2.2 (Marinwood Land Use Policy Map) of the *Countywide Plan* and the project site's Planned Residential Countywide Plan designation. The Draft EIR identifies 71 policies of *The Countywide Plan* directly applicable to the *Oakview Master Plan*. Of this total, the EIR has identified 26 policies of *The Countywide Plan* with which the proposed *Oakview Master Plan* is inconsistent or potentially inconsistent. Specific mitigation measures to eliminate the inconsistencies between the *Oakview Master Plan* and the *Countywide Plan* are listed in Chapter 4.0.
- The 1996 Draft EIR identified four areas as potentially representing large ancient bedrock landslides. These areas were labeled areas A, B, C and D. Since area A is located in the southeast corner of the site within the right-of-way for the proposed Highway 101 / Lucas Valley Road interchange, it was determined that it would not impact the proposed development and would be investigated and repaired at a later date by Caltrans. Area B was mapped near the southern edge of the property, also well outside the limits of proposed development, and similarly was determined not to represent a significant impact to the planned development. Area C (located on the slope above proposed Roadway B; lots 19 and 20) was explored through the use of both a continuous backhoe trench and deep core boring. Based upon this additional work, it was concluded that area C did not represent an ancient landslide. Area D, the largest mapped feature (lots 6 through 17 and Roadway A) was similarly explored through the use of continuous trenching and four deep core borings. Area D was defined as a dormant, ancient bedrock landslide deposit. Based upon the information derived from the supplemental subsurface investigations, the stability of this old landslide was determined to be stable in its current configuration and therefore not a significant impact to the proposed development.
- A study prepared for the City of San Rafael and Caltrans on the stormwater drainage conditions at the Lucas Valley Road / Highway 101 interchange concluded that the three- by six-foot culvert was undersized and did not meet Caltrans drainage criteria. To date no corrective measures have been agreed upon to remedy this flooding condition and no funding currently exists for such action. Project-induced increases in peak flow rates from the project site would worsen flooding at this location. Project impacts on the downstream flooding can be mitigated with the construction of stormwater detention / treatment basins as recommended in mitigation measure 5.2-2.

- Construction of storm drain systems and subsurface drainage measures associated with residential construction in Subwatersheds 2, 3, and 6 should have a beneficial impact on ongoing seepage problems experienced by homeowners in the Marinwood Subdivision.
- The 1996 Draft EIR stated that development of the project site as proposed by the 1995 plan would require removal of numerous trees. Trees would be removed to grade roadways, stabilize slopes, build the Miller Creek bridge, and develop some individual lots. Collectively, this would affect a minimum of 5.7 acres of woodland and forest cover. It was estimated that 822 trees would be removed to develop residential streets and lots in the 1995 plan. The amount of tree removal for the revised *Oakview Master Plan* is significantly reduced over the 1995 plan. An estimated 35 trees would be removed to accommodate the proposed crossing of Miller Creek and to accommodate roadway and other improvements in the vicinity of the office areas. No trees occur within the anticipated limits of grading in the residential area.
- Implementation of the *Oakview Master Plan* would result in changes of the visual scene from Highway 101, however, mitigation is available to reduce these impacts to less-than-significant. Implementation of the *Oakview Master Plan* would also result in changes of the visual scene from the surrounding area including Lucas Valley Road, Erin Drive, and Ellen Drive. Development, however, is now only proposed in the lower grassland area of the project site not on the upper elevations of the project site in the woodlands. Mitigation is recommended to reduce the impacts of residential development on the lower elevations to a less-than-significant level.
- Implementation of the proposed project and in conjunction with existing traffic conditions would create significant AM peak hour impacts for the Highway 101 Southbound Ramps / Miller Creek Road, Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Miller Creek Road, and Lucas Valley Road / Los Gamos Road intersections. Significant PM peak hour impacts would be created for the Lucas Valley Road / Los Gamos Road intersection. Mitigation is available to reduce these impacts to less-than-significant.
- Implementation of the proposed project and in conjunction with cumulative conditions would result in less-than-significant peak hour impacts for the three Highway 101 segments studied (south of Lucas Valley Road, north of Lucas Valley Road and north of Miller Creek Road). The project would not require mitigation.

Issues To Be Resolved

The 1996 Draft EIR identified a number of issues that remained to be resolved with the 1995 plan. A summary of these issues, and how the revised *Oakview Master Plan* responds to these issues is provided below:

- As applied to the project site the zoning requirements require that buildings be clustered or sited in the most accessible, least visually prominent, and most geologically stable portion of the site. The zoning requirements also require that there shall be no construction permitted on top or within three hundred feet horizontally, or within one hundred feet vertically of visually prominent ridgelines, whichever is more restrictive, if other suitable locations are available. As stated in the 1996 Draft EIR the 1995 plan would result in some development on the visually prominent upper elevations of the site. The revised *Oakview Master Plan* limits development to

the lower portion of the project site and no development is proposed along the visually prominent ridgeline. Therefore, this is no longer an issue to be resolved.

- The 1996 Draft EIR identified four areas (A, B, C, and D) as potentially representing large ancient bedrock landslides. The project applicant has complied with the suggested scope of subsurface investigation of the previously identified potential landslide features as described in Section 5.1 of the 1996 Draft EIR. Area C was found not to be a landslide and area D was found to be a dormant and currently stable landslide deposit.⁶ Therefore, this is no longer an issue to be resolved.
- The 1996 Draft EIR required the temporary signalization of the Highway 101 Southbound Ramps / Lucas Valley road intersection. The City of San Rafael has now completed the signalization of the southbound off-ramp (north side of Lucas Valley Road) at Highway 101/Lucas Valley Road. This is an interim improvement until the complete planned improvements and redesign of the interchange is completed. Therefore, this is no longer an issue to be resolved.
- The 1996 Draft EIR stated that the proposed roadway system would be inconsistent with Marin County policies concerning road widths and grades. The proposed roadway system in the revised *Oakview Master Plan* would meet County requirements. Therefore, this is no longer an issue to be resolved.

There does, however, remain an issue to be resolved by the Planning Commission and Board of Supervisors. As discussed in Exhibit 4.1-1, the Planning Commission and Board of Supervisors will make the determination of consistency with *Countywide Plan* Policy CD-2.4 (Location of Commercial and Higher Intensity Residential Development Policy) and CF-1.1 (Zoning Within Urban Service Areas) at the time of the consideration of the merits of the proposed project.

3.10 MITIGATION MONITORING PROGRAM

In conformance with California Resources Code Section 21081.6, a Mitigation Monitoring and Report Program has been prepared for the project, if approved. The purpose of the program would be to ensure compliance with (and to assess the effectiveness of) mitigation measures incorporated into the project by the applicant and set forth in the EIR. The Mitigation Monitoring and Report Program is presented in Appendix C.

⁶ It was determined that areas A and B are outside of the limits of proposed development and do not to represent a significant impact to the planned development and therefore it was not necessary to further analyze these areas.

4.0 RELATIONSHIP TO PUBLIC PLANS AND ZONING

4.0 RELATIONSHIP TO PUBLIC PLANS AND ZONING

INTRODUCTION

This section discusses the *Oakview Master Plan* in relation to applicable public planning policies and the site's zoning in order to determine the extent to which the proposed project would conform with planning policies and zoning provisions or to document specific inconsistencies. This section examines the project's conformance with the:

- *The Marin Countywide Plan*
- Marin County Zoning Ordinance
- *San Rafael General Plan 2000*
- Marin Local Agency Formation Commission Policies

In assessing public plans and zoning requirements it should be noted that not every policy and / or requirement will apply to a specific project. Section 4.1 assesses the conformance of the *Oakview Master Plan* with the relevant policies of *The Marin Countywide Plan* and Section 4.2 assesses the conformance of the proposed project with the relevant portions of the Marin County Zoning Ordinance. Section 4.3 discusses the conformance of the proposed project with the relevant policies of the *San Rafael General Plan 2000*, and Section 4.4 assesses the conformance of the proposed project with the relevant policies of the Marin Local Agency Formation Commission policies. The policies and / or requirements not discussed in these exhibits and / or sections were found not applicable to the proposed project.

Relationship to Public Plans and Zoning -- Significance Criteria

According to the *State CEQA Guidelines* a project would normally have a significant effect on the environment if it would:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

According to the *Marin County Environmental Impact Review Guidelines and Procedures* a project would normally have a significant effect on the environment if it would:

- Conflict with County land use goals or policies.
- Include land uses that would conflict with existing or proposed uses at the periphery of the project area or with other local land use plans.
- Conflict with local zoning.

On the basis of these significance criteria, in Exhibits 4.1-1 and 4.2-1 a determination of policy consistency and environmental impact has been made for each relevant policy or regulation. For the most part, the areas of conformance or potential conflict are based on the findings in the impact analyses. The determination of policy consistency is designated by the terms "consistent", or "inconsistent." "Consistent" is used when the proposed project complies with all the requirements of the relevant policy or regulation. "Inconsistent" is used when the proposed project clearly conflicts with or does not comply with the relevant policy or regulation. Impacts are designated by either significant (S) or less-than-significant (LTS). These codes follow each paragraph that evaluates consistency. Mitigations are recommended for each policy that raises a significant impact issue and the level of impact after mitigation (significant unavoidable [S/U] or less-than-significant [LTS]) is noted.

The determination of policy consistency represents the EIR author's best judgment based on a strict interpretation of policies. However, the Marin County Planning Commission and Board of Supervisors must ultimately determine policy consistency.

4.1 The Marin Countywide Plan

*The Marin Countywide Plan*¹ (*Countywide Plan*) sets forth policy guidelines for decision making on issues related to conservation and development in Marin County. The *Countywide Plan's* policies and implementation measures are, however, binding in only the unincorporated portions of Marin County. The *Countywide Plan* identifies objectives, policies and implementation programs in eleven areas:

- Environmental Quality
- Community Development
- Transportation
- Housing
- Noise
- Environmental Hazards
- Agriculture
- Community Facilities
- Parks and Recreation
- Trails
- Economic Development

Each of these topics is discussed in a separate element of the *Countywide Plan*.

The county has been divided into three environmental corridors for policy purposes. These corridors are: (1) the City-Centered Corridor; (2) the Inland Rural Corridor; and (3) the Coastal Recreation Corridor. The Oakview project site is in the City Centered Corridor.

The *Countywide Plan* establishes seven planning areas in the county in order to further define specific area and parcel policies. The Oakview project site is within the Las Gallinas Valley Planning Area.

¹ *The Marin Countywide Plan*, Marin County Planning Department, adopted by the Marin Board of Supervisors, January 18, 1994.

The *Countywide Plan* land use designation for the Oakview project site is Planned Residential. This designation provides for a density range of one to ten acres per unit with a floor area ratio (FAR) of 0.1 to 0.9 for non-residential uses.

ENVIRONMENTAL QUALITY ELEMENT

The Environmental Quality Element presents a comprehensive package of policies and programs that protect Marin County's natural resources. These resources include land, water, and air, as well as aesthetics and wildlife habitat.

COMMUNITY DEVELOPMENT ELEMENT

The Community Development Element provides direction for land use in Marin County, general direction countywide for location and types of development, and specific designations for land in unincorporated areas under County jurisdiction. The *Countywide Plan* designates seven planning areas, including both cities and unincorporated areas. The Oakview project site is in the Las Gallinas Valley Planning Area. The Community Development Element does state that there is residential development potential at the western edge of the Las Gallinas Valley Planning Area including "at the Daphne-Baccoccio property on Lucas Valley Road at the Highway 101 interchange."²

TRANSPORTATION ELEMENT

The Transportation Element describes existing and projected conditions of the transportation system and County policy concerning transportation.

HOUSING ELEMENT

The Housing Element identifies current and projected housing needs within unincorporated areas in Marin and sets forth specific implementation programs necessary to address these needs.

NOISE ELEMENT

The Noise Element identifies current and projected future noise levels from major sources in the County. Based on the levels of noise from these sources and from construction activity and other sources, the Noise Element identifies programs to help mitigate significant noise problems in the community.

ENVIRONMENTAL HAZARDS ELEMENT

The Environmental Hazards Element provides policies and programs regarding geologic, seismic, flood, and fire hazards in Marin County.

² *Ibid.*, page CD-42.

AGRICULTURE ELEMENT

The primary objectives of the Agriculture Element are preserving agricultural lands and preventing subdivision of lands under agricultural production.

The County has three agricultural zoning districts: the A (Agricultural) district; the ARP (Agricultural Residential Planned) district, and the APZ (Agricultural Production Zone) district. The Oakview project site is not within an agricultural zoning district.

COMMUNITY FACILITIES ELEMENT

The Community Facilities Element presents information about County provisions of four major community services and facilities: police, fire, water, and sewer. Other community facilities and services are discussed, including schools, child care, waste management, and telecommunications.

PARKS AND RECREATION ELEMENT

The Parks and Recreation Element serves two important functions: 1) establishing priorities in a time of scarce resources; and 2) helping the County increase its inventory of park land through satisfying the requirements of two State laws, the Quimby Act and the Naylor Act.

TRAILS ELEMENT

The Trails Element identifies trails of city or countywide significance to be preserved and made available for public use, and establishes policies for developing and maintaining trails once they are acquired for public use. The Countywide Trails Plan does not designate any trails on the project site.

ECONOMIC ELEMENT

An Economic Element is an optional general plan element for local governments in California. The *Countywide Plan* was amended in November 1994 by adoption of an Economic Element. The major objective of the Economic Element is to promote a sustainable local economy which will benefit present and future generations without detrimentally affecting resources or biological systems and which will result in balanced communities where residents have opportunities to enjoy the components of a high quality of life: employment, housing which is affordable, transportation, services, and physical environment.

Exhibit 4.1-1 assesses the conformance of the *Oakview Master Plan* with the relevant policies of *The Marin Countywide Plan*.

Exhibit 4.1-1**Oakview Master Plan Conformance With The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Environmental Quality Element Policies EQ-1.1 and CD-1.1 Land Use of the City-Centered Corridor. Urban development will be concentrated in the City-Centered Corridor where infrastructure and facilities can be made available to serve urban development. Although urban development is generally concentrated within this corridor, areas within the corridor are designated for resource protection. These areas include the Ridge and Upland Greenbelt Area, the Streamside Conservation Area, and the Bayfront Conservation Zone.	Consistent. The project site is within the City-Centered Corridor. No portion of the project site is designated either Ridge and Upland Greenbelt Area or Bayfront Conservation Zone. A portion of the project site is within the Streamside Conservation Area of Miller Creek. No urban development, however, is proposed within the Streamside Conservation Area. (LTS)	No mitigation is required.

Exhibit 4.1-1 (Continued)
Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-2.3 Definition of Stream Conservation Areas. A Stream Conservation Area (SCA) should be designated along all natural watercourses shown as a solid or dashed blue line on the most recent appropriate USGS quad sheet, or along all watercourses supporting riparian vegetation for a length of 100 feet or more. The zones consist of the watercourse itself between the tops of the banks and a strip of land extending laterally outward from the top of both banks, to a width of 100 feet on each side in the Coastal Recreation and Inland Rural Corridors and to a width of 50 feet on each side in the City-Centered Corridor on smaller infill lots. Where large tracts of land in the City-Centered Corridor are proposed for development, the 100-foot buffer should be applied, where consistent with legal requirements, and other planning and environmental goals. In the Coastal Recreation and Inland Rural Corridors, the zone should be extended if necessary to include an area 50 feet landward from the edge of riparian vegetation.</p>	<p>Consistent. A stream conservation area consisting of 100-feet has been established on the project site for Miller Creek. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-2.4 Land Uses in Stream Conservation Area (SCAs). The following uses are permitted in the SCA by development permits, provided these uses are allowed by the underlying zoning: all currently existing structures and uses including reconstruction and repairs; necessary water supply projects; flood control projects; projects to improve fish and wildlife habitat; grazing of livestock and other agricultural uses; maintenance of water channels for erosion control and other purposes; road and utility line crossings; water monitoring installations; trails.</p>	<p>Consistent. Disturbance within the SCA would be limited to the proposed roadway crossing over Miller Creek.(LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-2.5 Prohibited Land Uses in Stream Conservation Areas. The following new uses are prohibited in the SCA: roads and utility lines, except at crossings; confinement of livestock; dumping or disposal of refuse; use of motorized recreational vehicles and any structural improvement (excluding repairs) other than those identified in Policy EQ-2.4, including residences, barns, and storage buildings, unless allowed by a development permit in Policy EQ-2.6.</p>	<p>Consistent. Prohibited land uses would be sited outside the SCA, and improvements would be limited to the extension of Marinwood Avenue across Miller Creek. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-2.8 Retention of the Natural Vegetation. The retention of the natural vegetation in an SCA should be encouraged in order to realize many benefits, such as soil erosion prevention, stream, shade, etc. When vegetation must be removed and soil disturbed within the SCA, or when vegetation has been destroyed or eliminated, the area should be reseeded or replanted with native plants of the habitat as soon as possible. Broom and other aggressive exotic plants should be removed and replaced with native plants.</p>	<p>Inconsistent. Disturbance within the SCA would be limited to the Marinwood Avenue extension across Miller Creek affecting an area approximately 50 feet wide and 50 feet across the channel. However, no provisions have been included in the Master Plan specifically addressing the loss of riparian vegetation within the SCA associated with the Miller Creek crossing. (S)</p>	<p>Mitigation 5.3-1(a) requires preparation of a Landscape and Vegetation Management Plan. Mitigation 5.3-4(c) requires that the bridge or arched culvert proposed for the Marinwood Avenue crossing of Miller Creek should minimize disturbance to riparian vegetation. (LTS)</p>
<p>Policy EQ-2.9 Minimal Disturbance of Vegetation. Disturbance of vegetation within the SCA should be minimized or avoided whenever possible. Minimizing or avoiding disturbance of streamside vegetation is particularly important for trees and shrubs which provide shade, stability for the streambank, and wildlife habitat. Vegetation may partially block streams creating a ponding effect which may be beneficial for fish habitat. Tree growth may be cleared from the stream channel when it unduly restricts flood flows, to protect health, safety, and welfare.</p>	<p>Inconsistent. Disturbance within the SCA would be limited to the Marinwood Avenue extension across Miller Creek affecting an area approximately 50 feet wide and 50 feet across the channel. However, no provisions have been included in the Master Plan specifically addressing the loss of riparian vegetation within the SCA associated with the Miller Creek crossing. (S)</p>	<p>Mitigation 5.3-1(a) requires preparation of a Landscape and Vegetation Management Plan. Mitigation 5.3-4(c) requires that the bridge or arched culvert proposed for the Marinwood Avenue crossing of Miller Creek should minimize disturbance to riparian vegetation. (LTS)</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-2.10 Tree and Shrub Plantings. Trees and shrubs to be planted along watercourses should include a variety of species that would naturally grow in or near the creek. In general, the planting of exotic trees should be avoided. When removal of riparian vegetation is unavoidable, and mitigation is required, replacement should be at a 2:1 ratio, whenever feasible. Enhancement and restoration of culverted streams is encouraged, whenever feasible.	Inconsistent. No provisions have been included in the Master Plan specifically addressing the loss of riparian vegetation within the SCA associated with the Miller Creek crossing. However, bridge crossings are permitted in the SCA. (S)	Mitigation 5.3-1(a) requires preparation of a Landscape and Vegetation Management Plan. Mitigation 5.3-2(d) requires preparation of a tree replacement program for replacement of native trees removed by proposed development. Oaks should be replaced at a ratio of 5:1 and all other native tree species should be replaced at a ratio of 3:1. (LTS)
Policy EQ-2.11 Modification of Natural Channels. Modification of natural channels within SCAs for flood control, etc., should be done in a manner that retains and protects the vegetation forming ground cover and shade. Special attention should be given to the protection of riparian vegetation.	Inconsistent. Specific provisions to minimize disturbance to the Miller Creek channel during bridge construction have not been included in the Master Plan. (S)	Mitigation 5.3-4(c) requires that the proposed bridge for the Marinwood Avenue crossing over Miller Creek minimize disturbance to the channel. (LTS)
Policy EQ-2.18 Soil Disturbance. Soil disturbance should be discouraged within the SCA. Where absolutely necessary it should be limited to the smallest surface area and volume of soil practical and for the shortest practical length of time.	Consistent. Proposed work within the SCA generally limits work to the smallest surface area and volume of soil practical and for the shortest practical length of time. (LTS)	No mitigation is required.
Policy EQ-2.19 Surface Runoff. Surface runoff rates in excess of pre-development levels should not be allowed where a new problem will be created or where the runoff will exacerbate an existing problem.	Inconsistent. Project grading, construction of impervious surfaces, and installation of a storm drain system would increase site peak flow rates from sub-watershed 1 by 1.6 percent and from sub-watersheds 2, 3, and 6 by a minimum of 17 to 69 percent. (S)	Mitigation Measure 5.2-2 which would include the construction of stormwater detention/treatment basins in the lower reaches of sub-watersheds 2, 3, and 6 would reduce peak flow impacts to a less-than-significant level. (LTS)

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-2.20 Retention of Sediment. On-site facilities for the retention of sediments or contribution toward regional sediment control measures produced by development should be provided during construction and, if necessary, upon project completion. Continued maintenance of these facilities should be required.	Inconsistent. Hillslope grading activities associated with construction of residential and office structures, roadways and driveways would result in areas of bare soils which would be subject to erosion by rainfall and hillslope runoff.(S)	Mitigation 5.2-7 would require preparation and implementation of a comprehensive Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would include specific measures or erosion control to be implemented during and following project construction. (LTS)
Policy EQ-2.21 Roads, Road Spoils, and Road Fill Slopes. New roads and road fill slopes should be located outside the SCA, except at stream crossings. No spoil from road construction should be deposited within the SCA. At road crossings in the SCAs, special effort should be taken to stabilize soil surfaces.	Consistent. Within the SCA roads would be limited to the stream crossing of the extension of Marinwood Avenue. (LTS)	No mitigation is required.
Policy EQ-2.22 Altering Stream Flow, Bed, or Banks. Filling, grading, excavating, obstructing flow, or altering the bed or banks of the stream channel and riparian system shall be discouraged. Such activity will only be allowed after completion of environmental review, identification of appropriate mitigation measures, and issuance of a permit by the Department of Public Works.	Inconsistent. Specific provisions to minimize disturbance to the Miller Creek channel during bridge construction have not been included in the Master Plan (S).	Mitigation 5.3-4(c) requires that the proposed bridge for the Marinwood Avenue crossing over Miller Creek minimize disturbance to jurisdictional waters and riparian vegetation.
Policy EQ-2.23 Seasonal Development Factors. Development work adjacent to and affecting SCAs should be done during the dry season only, except for emergency repairs. Disturbed surfaces should be stabilized and replanted, and areas where woody vegetation has been removed should be replanted with suitable species before the beginning of the rainy season.	Inconsistent. The Master Plan does not define the project implementation in this detail at this stage. Incorporation of this policy and EIR's mitigation measures in the project's Development Plan would fulfill the intent of the CWP. (S)	A construction staging program that ensures that work would not occur within the SCA during wet weather, and that disturbed areas would be stabilized before the rainy season shall be included in the Development Plan. (LTS)

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-2.24 Enhancement of Stream Conservation Areas. Uses and development within SCAs should enhance the appearance of the streamside environment and protect native vegetation. Through careful site analysis and development, views should be preserved and the integrity of the streamside environment should be protected. The County should work in close cooperation with the flood control districts, water districts and wildlife agencies in the design and choice of materials for the construction and alterations within the SCAs.	Consistent. Impacts to the SCA are generally limited to the Marinwood Avenue extension over Miller Creek, which is permitted in the SCA. (LTS)	No mitigation is required.
Policy EQ-2.26 Restoration of Damaged Portions of Stream Conservation Areas. Damaged portions of SCAs should, wherever possible, be restored to their natural state. When it is not possible to return the SCA to a natural state, the portions of the channels that have been significantly altered for flood control should be improved for urban open space uses such as landscaped areas and paths. These improvements should enhance habitat values.	Inconsistent. Specific provisions to minimize disturbance to the Miller Creek channel during bridge construction have not been included in the Master Plan. (S)	Mitigation 5.3-4(c) requires that the proposed bridge for the Marinwood Avenue crossing over Miller Creek minimize disturbance to jurisdictional waters and riparian habitat. (LTS)
Policy EQ-2.27 Water Resource Management. Water resources should be managed in a systematic manner that is sensitive to natural capacities, ecological impacts, and equitable consideration of the many water-related needs of the County.	Consistent. The Marin Municipal Water District would supply water to the project. There is sufficient water supply to meet water demands from the project. (LTS).	No mitigation is required.
Policy EQ-2.28 Protection of Watersheds, Aquifer Recharge Areas, and Natural Drainage Systems. High priority should be given to the protection of watersheds, aquifer-recharge areas, and natural drainage systems in any consideration of land use.	Consistent. Although project would convert an existing intermittent drainageway in sub-watershed 2 to a storm drain system the project would not result in substantial alterations to the natural drainage system. (LTS)	No mitigation is required.

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-2.29 Upstream Development Impacts. The effect of upstream development on downstream land uses should be examined during public review. The following issues should be considered; increase in surface runoff; potential for erosion; corresponding increases in downstream sedimentation; decrease in water quality.	Consistent. This EIR (Section 5.2 Hydrology and Drainage) examines these issues. (LTS)	No mitigation is required.
Policy EQ-2.31 Water Quality. Water quality should be maintained or enhanced in order to promote the continued environmental health of natural waterway habitats. A Surface Runoff Pollution Control Program should be developed for the County.	Inconsistent. Implementation of the Proposed Project would contribute to the incremental increase in non-point stormwater contaminant loading on receiving waters in Miller and Gallinas Creeks. (S)	Mitigation 5.2-2 includes construction of stormwater detention / treatment basins, one each in the lower reaches of sub-watersheds 2, 3, and 6. Mitigation 5.2-7 requires preparation of a Stormwater Pollution Prevention Plan including in-situ protection, seeding and mulching of bare ground, planting of trees and shrubbery in both disturbed upland and riparian areas, and installing other forms of biotechnical slope stabilization. (LTS)
Policy EQ-2.33 Streams in Development Plans. Streams which are part of lands to be developed are a resource for their aesthetic and wildlife values. Vegetated buffer areas of native plants should be included in plans in order to protect the habitat for wildlife, to preserve and focus views, and to assure public safety. Vegetated buffer areas, rather than fencing, should be utilized except where safety issues or specific environmental concerns need to be addressed.	Consistent. With the exception of the Marinwood Avenue extension over the creek, the entire Miller Creek corridor would be preserved as open space. (LTS)	No mitigation is required.
Policy EQ-2.75 County's Air Quality Standards. The County shall adhere to the Federal or State air quality standards, whichever are more stringent, for management of locally generated pollutants.	Consistent. This EIR (Section 5.6 Air Quality) uses the most stringent Federal or State air quality standard to evaluate significance of impact. (LTS)	No mitigation is required.

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-2.78 Air Quality Impacts of Proposed Projects. As part of its Environmental Review Process, the County shall review proposed projects for their potential impact on air quality conditions.	Consistent. This EIR (Section 5.6 Air Quality) provides a detailed evaluation of the project's short-term and long-term air quality impacts. (LTS)	No mitigation is required.
Policy EQ-2.87 Species Preservation in the Environmental Review Process. Environmental review of development applications shall consider the impact of the proposed development on species and habitat diversity. Environmental review documents should propose mitigation measures for ensuring the protection of the habitat and species therein.	Consistent. This EIR (Section 5.3 Biotic Resources) provides a detailed evaluation of the potential impacts of the Master Plan on species and habitat diversity and includes specific measures to provide adequate mitigation for impacts to plant and animal habitat, wildlife corridors, and special-status species. (LTS)	No mitigation is required.
Policy EQ-2.88 Protection of Special Status Species. Development shall be restricted or modified in areas which contain special status species and migratory species of the Pacific Flyway and/or significant natural areas, wetlands, riparian habitats, and freshwater habitats, to ensure the continued health and survival of these species and areas.	Potentially Inconsistent. No special-status species would be affected directly. A possibility remains that raptors not presently occupying the site could establish nests between now and when development occurs which construction activity could destroy or induce raptors to abandon their nests. (PS)	Mitigation 5.3-7 requires that if any active raptor nests are established within the vicinity of proposed grading in the future, they should be avoided until young birds are able to leave the nest and forage on their own. (LTS)
Policy EQ-3.2 Air, Water, and Noise Pollution. Air, water, and noise pollution shall be prevented or minimized.	Inconsistent. This EIR evaluates air (Section 5.6), water (Section 5.2) and noise pollution (Section 5.7). Examples of air, water, and noise pollution generated by the Proposed Project are as follows. During construction of the site residential areas east of the site would be intermittently impacted by construction dust. Water quality could be effected by increased on-site erosion. Outdoor noise levels on some proposed residential lots would exceed the Noise and Land Use Compatibility criteria in the Countywide Plan. (S)	Mitigation 5.6-4 requires applicant to incorporate into grading plans and contracts measures that would require contractors to reduce dust generation. Mitigation 5.2-7 requires the preparation and implementation of a comprehensive Stormwater Pollution Prevention Plan. Mitigation 5.7-1 requires site design measures (such as the construction of property-line privacy fences to shield backyards) to reduce noise exposure on future residential use of Lots 27 and 28. (LTS)

Exhibit 4.1-1 (Continued)
Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-3.4 Changes to Hydrological and Biological Processes. No operation shall cause irreversible damage or more than minimum reversible change to natural hydrological and biological processes.</p>	<p>Consistent. No component of the Master Plan would cause irreversible damage to hydrological or biological processes. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-3.5 Protection of Unique Geologic, Ecologic, Archaeologic, and Historic Sites. Unique geological, ecological, archaeological, and historic sites shall be protected. Significant natural features shall be included for preservation in their natural state and in an appropriate setting in any design or plan.</p>	<p>Inconsistent. No unique geologic, archaeologic, or historic sites would be impacted by Proposed Project. Areas of native grasslands and freshwater seeps and wetlands would, however, be removed by the project. (S)</p>	<p>Mitigation 5.3-3 requires preparation of a grassland restoration and enhancement program that would require that native grasslands disturbed by proposed development be restored and replaced at a minimum 1 to 1 ratio, with replacement provided on a per acre basis for each cover class lost. Mitigation 5.3-4(a) requires preparation of a detailed wetlands protection, replacement, and restoration program. Mitigation for loss of existing wetlands should be provided at a minimum replacement ratio of 2 to 1. (LTS)</p>
<p>Policy EQ-3.6 Wildlife, Vegetation and Habitats. A diversity and abundance of wildlife and marine life shall be maintained. Vegetation and animal habitats shall be preserved wherever possible.</p>	<p>Inconsistent. Site development would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along the Miller Creek corridor. (S)</p>	<p>Mitigation 5.3-6 states that disturbance within the Miller Creek corridor should be minimized to protect its function for fish and wildlife movement. The proposed bridge crossing should be designed to avoid impeding movement of fish and wildlife along the creek channel, and drop structures under the bridge should be prohibited. (LTS)</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-3.7 Avoidance of Hazards from Earthquake, Erosion, Landslide, Floods, and Fires. Construction and operations shall be located and designed to avoid or minimize the hazards from earthquake, erosion, landslides, floods, fire, and accidents consistent with policies and programs in the Environmental Hazards Element.</p>	<p>Consistent. The 1996 Draft EIR identified four areas (A, B, C, and D) as potentially representing large ancient bedrock landslides. Two of the areas (A and B) would not impact development as proposed and have not been further investigated. Two of the areas that could impact proposed development (C and D) were investigated. It was concluded that area C did not represent an ancient landslide and area D was defined as a dormant, ancient bedrock landslide deposit. The stability of this old landslide was determined to be stable in its current configuration and not a significant impact to the proposed development. Development as proposed in the Master Plan would avoid hazards. (LTS).</p>	<p>No mitigation is required.</p>
<p>Policy EQ-3.8 Built Environments. Built environments where people spend most of their time shall be healthful, safe, quiet, and of good design both functionally and aesthetically. Policies designed to maintain the character of existing neighborhoods should be included in individual community plans.</p>	<p>Consistent. Based on the analyses conducted, and mitigations provided, in this EIR the Proposed Project would provide an environment that is healthful, safe, quiet, and of good design both functionally and aesthetically for on-site residents and employees. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-3.9 Adverse impacts on services, circulation, economic, and social environment. Projects shall not cause significant adverse impacts on water supply, fire protection, waste disposal, schools, traffic and circulation, or other services and facilities, or on the financial or social environment of the community.</p>	<p>Inconsistent. Section 5.8 (Public Services) indicates that the Proposed Project would not have a significant impact on public services (fire and emergency medical services, police protection, water service and sanitary sewer). Section 5.5 (Transportation and Circulation), however, indicates that under each impact scenario (existing plus project, short-range cumulative and long-range cumulative) the Proposed Project would create significant AM and PM peak hour impacts at several intersections. (S)</p>	<p>Mitigations 5.5-1, 5.5-2, and 5.5-3 require the project applicant to fund certain traffic improvements and to pay its fair share for other improvements, plus Northgate Activity Center Plan traffic mitigation fees, to complete recommended mitigation measure at the affected intersections. (LTS).</p>

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-3.10 Coordination of Public Services. Water supply, flood control, wastewater and solid waste disposal, soil conservation, open space preservation, and natural resource extraction shall be coordinated to create the greatest public benefit and the least degree of environmental damage.</p>	<p>Consistent. The Proposed Project is consistent with the coordination of public services. Public services would be provided by the Marinwood Community Services District (parks and recreation and fire protection), Marin County (police protection), Marin Municipal Water District (water) and Las Gallinas Valley Sanitary District (sewer). (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-3.11 Visual Qualities and Views. Visual qualities and the view potential of the natural and built environment shall be considered in any project or operation review. Tree cutting and damage shall be avoided wherever possible.</p>	<p>Inconsistent. Although development has generally been sited to avoid areas of woodland vegetation, an estimated 35 trees would still be removed. (S)</p>	<p>Mitigation 5.3-1(a) requires the preparation of a detailed Landscape and Vegetation Management Plan. Mitigation 5.3-2(a) states that the proposed residential use should be revised to indicate building envelop areas which are intended to minimize tree removal. (LTS)</p>
<p>Policy EQ-3.13 Aggressive Exotic Plants. The planting of aggressive exotic plants such as boom and pampas grass should be avoided in any development over which the County has review authority.</p>	<p>Consistent. The Conceptual Landscape Plan states that certain undesirable, non-native plants will be discouraged and/or prohibited. (LTS)</p>	<p>No mitigation is required; however, mitigation 5.3-1(a) requires the preparation of a detailed Landscape and Vegetation Management Plan. One provision of the plan is to control the establishment and spread of introduced broom.</p>
<p>Policy EQ-3.16 Minimize Evacuating, Grading, and Filling. New development in the County shall adhere to the standards of the Department of Public Works in order to minimize excavating, grading, and filling, while allowing for adequate access.</p>	<p>Consistent. Grading on the project site would be limited to what is necessary to provide building sites, access roads and to remove and recompact the loose soils on and immediately adjacent to those areas of proposed development. Grading would be required to meet County Department of Public Works rules, regulations, and standards. Much of the grading is necessary for remediation of on site landslides to remove geotechnical hazards, so it must be performed. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-3.21 Creekside Development. Along creeks, development must retain the natural vegetation, prevent water pollution, and minimize flood hazards from runoff (see Figure EQ-13).</p>	<p>Consistent. Development would be restricted away from Miller Creek. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EQ-3.25 Scale of Development. The development of residential structures should be in scale with environmental constraints such as steep slopes and the design character of the existing neighborhood.	Consistent. Although the housing units have not been designed, the intent of the Master Plan is that the structural form of the housing units is to conform to site contours. Structures and roof forms shall be stepped up or down with the slope in order to minimize the apparent size of the structure. (LTS)	No mitigation is required.
Policy EQ-3.27 Identification of Wetlands Outside the BFC Zone. At the time of a site specific development application, the County shall require the applicant to identify seasonal and year-round wetlands which may be located outside the BFC zone. Development shall be situated so that wetlands are protected and preserved to the maximum extent feasible. Policy EQ-2.43 shall apply to wetlands outside the BFC zone. Policy EQ-2.43 states that development shall not encroach into sensitive wildlife habitats, limit normal range areas, create barriers which cut off access to food, water, or shelter, or cause damage to fisheries or fish habitats. Buffer zones between development and identified or potential wetland areas shall be provided. Program EQ-2.43a states that for each acre of wetland lost, two acres shall be restored and should be of the same type of wetland habitat as the wetland which was lost.	Inconsistent. Implementation of the Master Plan would affect an estimated 1.4 acres of scattered freshwater seep wetlands and a limited area of unvegetated other waters. (S)	Mitigation 5.3-4(a) requires preparation of a detailed wetland protection, replacement, and restoration program. Mitigation for loss of existing wetlands should be provided at a minimum replacement ratio of 2 to 1. (LTS)

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EQ-3.30 Evaluate Presence of Site. Development sites identified as having a potential for the presence of archeological resources (through review of the sensitivity map or other available sources) shall be further evaluated to ascertain if an archeological site is actually present. This evaluation shall be the responsibility of the applicant and may be undertaken by conducting a records search at the Northwest Information Center of the California Archeological Inventory to determine if the project area has been previously surveyed and if resources have been identified. If the records search reveals that no survey has been undertaken, the applicant may be required to undertake a survey of the site, depending upon the sensitivity of the site.</p>	<p>Consistent. A previously prepared records search and archaeological field survey determined that no cultural resources exist within the project site. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy EQ-4.1 Provision of Facilities. Adequate parks, recreation facilities, and open space shall be provided. Appropriate public access shall be established.</p>	<p>Consistent. The Master Plan proposes a total of 69.1 acres of open space. The Master Plan also proposes to improve the existing trail along Miller Creek. (LTS)</p>	<p>No mitigation is required.</p>
<p>Community Development Element</p>		
<p>Policy CD-2.1 Jobs and Housing Mix. The mix of housing size and price in new development should meet the needs of workers employed in Marin County. This equates to a need for housing, including rental housing, affordable to workers at the lower end of the salary range in the county. A full range of types of sales price or rent level of affordable housing should be encouraged to meet the needs of families, retired residents and employees. Zoning and density changes required to accomplish this should be encouraged at appropriate locations in cities and the unincorporated county.</p>	<p>Consistent. The Master Plan proposes construction of 28 housing units on site. It is assumed that houses would be for sale and that the sale price would be above what would be considered affordable housing. Consistent with Housing Program H-1.1a the project applicants propose to make an in-lieu payment comparable to the value of providing 15 percent of the project's housing units as affordable units to satisfy the County's requirement of affordable housing. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy CD-2.2 Location of Housing and Jobs. In order to discourage long commutes and lessen traffic congestion, housing should be located near jobs, whenever feasible. Economic development which provides jobs for Marin County residents at all income levels should be encouraged, especially in areas of the county with the lowest ratio of jobs to housing, if feasible. Businesses and industries which provide benefits to the county as identified in Policy CD-3.2 should be encouraged to locate, relocate, or expand in these areas. Housing should be located near job centers with changes in local zoning and densities where appropriate.</p>	<p>Consistent. The Master Plan proposes construction of 94,400 square feet of office space on site which would provide for some new job opportunities. Furthermore, the project is adjacent to the City of San Rafael's Northgate Activity Center which contains a significant number of jobs. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy CD-2.3 Location of Development In Coordination with the Transportation System. The location and density of all development should be mutually coordinated with the transportation network and transit systems in order to foster energy conservation and to minimize the circulation impacts of new development.</p>	<p>Consistent. The project site is convenient to both intercounty transit service and local bus service provided by Golden Gate Transit. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy CD-2.4 Location of Commercial and Higher Intensity Residential Development. Commercial and higher intensity residential development should be located in nodes where there is high transit accessibility and service capacity, such as in or near the central business district of cities and towns. Sprawl or continuous strip development along freeway corridors should be discouraged. Zoning and density changes required to accomplish this end should be encouraged at appropriate locations in cities and the unincorporated county.</p>	<p>Potentially Inconsistent. Office development would occur in an area with high transit accessibility. Although office development is a permitted use, with a use permit, in the RMP zone, the development of two office buildings along Highway 101 could be considered "continuous strip development along freeway corridors" and thus contributing to sprawl along Highway 101.</p> <p>The Planning Commission and Board of Supervisors will make the determination of consistency with this policy at the time of the consideration of the merits of the proposed project. (PS)</p>	<p>If at the time of the consideration of the merits of the project the proposed project is found to be inconsistent with this policy this may require a change in the project, such as elimination of the proposed office use.</p>

Exhibit 4.1-1 (Continued)
Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy CD-2.7 Discouraging Development in Natural Resources or Hazard Areas. Development should be discouraged in areas which have high natural resource value or which pose significant hazards to life or property. Where development is permitted in such areas, the development density should be low and structures should be sited in order to minimize adverse impacts. This policy is consistent with the policies in the Environmental Quality and Environmental Hazards Elements. Transfer of development rights (TDRs) from high resource areas to appropriate receiver sites could be used to protect resource values.</p>	<p>Inconsistent. Some incursion into sensitive habitat such as woodland habitat, native grasslands, freshwater seeps and wetlands would occur with implementation of the Master Plan. Mitigation has been recommended. (S)</p>	<p>Mitigation 5.3-2(a) requires that the residential building envelopes be revised to minimize tree removal. Mitigation 5.3-3 requires preparation of a grassland restoration and enhancement program. Mitigation 5.3-4(a) requires preparation of a detailed wetland protection, replacement, and restoration program. (LTS)</p>
<p>Policy CD-3.5 Location of Employment Opportunities. Employment should be encouraged to locate in areas with high transit accessibility, public services, housing to meet employee needs, and complementary retail and commercial uses, consistent with Policies CD-2.2 and CD-2.4.</p>	<p>Consistent. The Master Plan does propose development on the project site that would result in new jobs in Marin County. The project site is in an area with high transit accessibility, housing to meet employee needs and complementary retail and commercial uses. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy CD-4.1 Energy Conservation and Commercial Development. Commercial development should be located, sized, and designed to minimize energy consumption on site and to reduce energy used in traveling to and from other designations. Commercial centers should provide a variety of services (including park-and-ride facilities for commuters and travelers to regional shopping facilities) and allow energy-efficient and multiple-purpose trips.</p>	<p>Potentially Inconsistent. Proposed buildings have not been designed in sufficient detail in the Master Plan stage of the planning process to assess whether or not they would be designed to minimize energy consumption. (PS)</p>	<p>The final project design would be required to comply with Title 24 of the California Administrative Code for energy conservation on site.</p>

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy CD-7.3 Growth Management and Financial Responsibility. New development should pay its fair share of the cost of public facilities, services and infrastructure, including but not limited to transportation, water, sewer, solid waste, flood control and drainage, schools, fire and police protection, and parks and recreation.</p>	<p>Consistent. Based on cost-revenues analysis prepared as a part of this EIR, the Proposed Project would pay its fair share of the cost of public services. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy CD-10.2 Marinwood. Land use designations for Marinwood shall include <i>single-family residential</i> at 7 units per acre to 1 unit per 5 acres; <i>multi-family residential</i> at 5 to 30 units per acre; <i>planned residential</i> at 1 unit per acre to 1 unit per 10 acres; <i>office commercial</i> at an FAR of .1 to .2; and, <i>retail commercial</i> at an FAR of .1 to .4. Land shall be designated for <i>open space</i> and <i>public facilities</i> or <i>single-family residential</i> at 4 to 7 units per acre.</p> <p>Land use for Marinwood is shown on Land Use Policy Map 2.2. The land use designation for the project site is Planned Residential (one to ten acres per unit).</p> <p>Based on Policy CD-8.5 the non-residential floor area ratio (FAR) is .01 to .09 and the consistent zoning is RMP.</p>	<p>Consistent. The project site is 106 acres. The land use designation of Planned Residential would permit five to 52 housing units on proposed parcel 1 and five to 54 housing units on proposed parcel 2 for a total of 10 to 106 housing units on this project site. The Master Plan proposes construction of 28 housing units on Parcel 1. The number of housing units, therefore, is consistent with the Planned Residential designation.</p> <p>The site's FAR would permit between 46,174 and 415,562 square feet of non-residential uses. Parcel 2 is 54.4 acres, the use of ten acres for the Highway 101 interchange reduces Parcel 2 to 44.4 acres. The site's FAR would permit between 19,340 and 174,066 square feet of non-residential uses on parcel 2. The Master Plan proposes a total of 94,400 square feet of office space on Parcel 2. The proposed amount of office use, therefore, is consistent with the site's FAR range. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Transportation Element</p> <p>Policy T-1.1 Level of Service Standards. The County shall adopt Level of Service D as the goal for all unincorporated streets, except as noted below, and for State highways including: U.S. Highway 101, I-580, SR 1, SR 37, and SR 131. The full implementation of the transportation improvements recommended in this plan will assure that streets and highways will operate as service level D or better at the time of plan buildout.</p> <p>Other provisions of this policy include <i>Measurement and Application of the Level of Service Standard</i>. The Level of Service for streets in the unincorporated areas of the County shall be measured at major intersections for peak hour traffic using the methods of TRB Circular 212, the Highway Capacity Manual (HCM), or comparable procedures which may be adopted by the County.</p> <p>The level of service performance standard on U.S. Highway 101 shall be E with the following exceptions: from Sir Francis Drake Boulevard in Greenbrae to North San Pedro Road in San Rafael and from Atherton Avenue in Novato to the Sonoma County line. These excepted road segments are permitted to operate at level of service F as provided for in the Congestion Management Plan until recommended improvements are in place.</p>	<p>Inconsistent. The methodology used to analyze service levels is consistent with the policy requirements (TRB, Circular 212, the Highway Capacity Manual). The project adheres to a stricter mid-D service level (volume-to-capacity ratio of 0.85 or less) at intersections in order to remain consistent with City of San Rafael requirements for the Northgate Activity Center.</p> <p>In the existing plus project, short-range cumulative, and long-range cumulative implementation of the Master Plan the project would result in significant peak hour impacts at the intersections studied. For example, short-range cumulative conditions would create significant peak hour impacts for the Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road intersections. (S)</p> <p>Impacts to the three Highway 101 segments studied, south of Lucas Valley Road, north of Lucas Valley Road, and north of Miller Creek Road are less-than-significant.</p>	<p>Mitigations 5.5-1, 5.5-2, and 5.5-3 state that the Master Plan approval would be conditioned upon the applicant either fully funding or paying its fair share prior to issuance of a building permit for specific transportation improvements. These improvements include:</p> <p>Miller Creek Road / Marinwood Avenue – The applicant should fully fund the installation of a traffic signal at this intersection.</p> <p>Los Gamos Road / Lucas Valley Road – The applicant should fully fund the installation of a traffic signal at this intersection.</p> <p>Highway 101 Southbound Ramps / Miller Creek Road – The applicant should pay its fair share of the installation of a traffic signal at this intersection.</p> <p>The full implementation of improvements recommended in the EIR will result in Level of Service D or better within the study area (LTS)</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy T-1.3 Fair Share For Transportation System Improvements. New development should pay a fair share of the costs for providing local and regional transportation system improvements necessary to serve new development.	Consistent. Section 5.5 (Transportation and Circulation) identifies project related impacts and states that Master Plan approval would be contingent upon the applicant paying its fair share of the proposed mitigation. (LTS)	No mitigation is required.
Housing Element		
Program H-1.1a. Inclusionary Units. The County requires that 15 percent of the total number of all new developments containing 10 or more units shall be affordable by households of low or moderate income. The County's primary intent is the construction of units on site. If that is not practical, the County will allow other alternatives of equal value such as in-lieu fees and construction of units off site.	Inconsistent. Rather than constructing affordable units on site, the applicant proposes to make an in-lieu payment to satisfy the requirement of affordable housing. The applicant, however, has not shown that it is "not practical" to construct the units on site.(S)	The Master Plan should be conditioned so that 15 percent of the housing units on site be affordable to moderate, low, or very low income households. (LTS)
Policy H-1.14 Density Ranges. Density ranges shown on the land use policy maps in the Community Development Element of the Countywide Plan establish upper and lower limits for residential zoning density consistent with those land use designations.	Consistent. Master Plan is consistent with Countywide Plan designation of PR and zoning of RMP-1.38. (LTS)	No mitigation is required.

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Noise Element</p>		
<p>Policy N-1.1 Use Noise Level Guidelines-New Development. The County shall use noise level guidelines contained in this element to direct the siting, design, and insulation of new commercial and residential development.</p> <p>For single-family residential, an Ldn or CNEL of 60 dB or less is "normally acceptable," 60 to 70 db "conditionally acceptable" and 70 dB or above is "normally unacceptable."</p> <p>For office buildings, business commercial and professional land uses, an Ldn or CNEL of 65 dB or less is "normally acceptable," 65 to 75 db "conditionally acceptable" and 75 dB or above is "normally unacceptable."</p> <p>An acoustical analysis shall be performed for new residential development in areas with 60 dBA or greater existing outdoor Ldn and for new office development in areas with 65 dBA or greater existing outdoor Ldn. The acoustic analysis shall determine ambient noise level conditions and mitigation measures necessary to minimize the exposure of residents and / or workers to excessive levels of noise.</p>	<p>Inconsistent. Section 5.7 (Noise) uses Table N-2 in the Countywide Plan to determine the significance of the project's noise impacts.</p> <p>Exterior sound levels could result in a potentially significant impact on residents' use of their lots' yards, and interior levels with residents' windows open could conflict with the Noise and Land Use Compatibility criteria. Indoor noise levels in commercial structures would conform to County criteria. (S)</p>	<p>Mitigation 5.7-1 would require the design of property-line privacy fences to shield the backyards of Lots 27 and 28. Fences should be six feet high and of solid construction so that there are no cracks or gaps either in the fence itself or at the bottom. (LTS)</p>
<p>Policy N-2.1 Use Noise Level Guidelines-Existing Development. The County shall use noise level guidelines contained in this element to protect existing land uses from noise generated by new development.</p>	<p>Consistent. Section 5.7 (Noise) uses noise level guidelines in the Countywide Plan to assess project's noise impacts on existing land uses. No adverse noise impact would occur to existing land uses with the implementation of the proposed project.(LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy N-2.4 Minimize Impacts From Excessive Noise Levels Due to Construction Activity. During all phases of construction, measures should be taken to minimize the exposure of neighboring properties to excess noise levels from construction-related activity.</p>	<p>Inconsistent. During construction noise levels would be elevated outside and inside existing homes immediately adjacent to the project site boundary. (S)</p>	<p>Mitigation 5.7-3 would require that all equipment used on the project site be adequately muffled and maintained and residential construction hours be confined to 7:30 AM to 5:00 PM on weekdays and 9:00 AM to 4:00 PM on Saturdays at least when construction is taking place within 500 feet of the nearest existing homes. Construction hours for activity in other parts of the site could be lengthened as appropriate, including office construction on Parcel 2. (LTS)</p>
<p>Environmental Hazards Element</p>		
<p>Policy EH-3.1 Location of Future Development. New development shall be sited in a manner which avoids or minimizes the potential of hazards from earthquake, erosion, landslides, floods and fire. Development should not be endangered by nor contribute to hazardous conditions on the site or on adjoining properties.</p>	<p>Consistent. The 1996 Draft EIR identified four areas (A, B, C, and D) as potentially representing large ancient bedrock landslides. Two of the areas (A and B) would not impact development as proposed and have not been further investigated. Two of the areas that could impact proposed development (C and D) were investigated. It was concluded that area C did not represent an ancient landslide and area D was defined as a dormant, ancient bedrock landslide deposit. The stability of this old landslide was determined to be stable in its current configuration and not a significant impact to the proposed development. Development as proposed in the Master Plan would avoid hazards. (LTS).</p>	<p>No mitigation is required. (LTS)</p>
<p>Policy EH-3.2 New Development Approval. New development will be approved in identified geologic hazard areas only if the hazards can be reduced to acceptable levels through mitigation measures which are appropriate to the site, and consistent with other policies in the Countywide Plan.</p>	<p>Consistent. Identified geologic impacts can be mitigated to a less-than-significant level using established engineering methods. Seismic impacts can be reduced to levels generally acceptable by other Bay Area communities in proximity to major active faults. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Policy EH-5.1 Mitigation of Risk. Construction of all new habitable structures, including those for residential, commercial and industrial use, shall employ engineering measures which mitigate against life safety risks from ground shaking. At minimum, new structures shall meet standards specified in Title 19, Marin County Code.</p>	<p>Potentially Inconsistent. Since proposed buildings have not been designed in sufficient detail during the Master Plan stage of the planning process it is not possible to assess their structural engineering features and performance when subjected to seismic shaking. (PS)</p>	<p>Mitigation 5.1-6 requires that the applicant design and build all on-site structures, roads, and utilities in conformance with the Uniform Building Code. (LTS)</p>
<p>Policy EH-5.4 Location and Design of High-Occupancy Structures. The design and siting of structures occupied by a large number of people, such as restaurants and hotels, shall consider site constraints. Site constraints and appropriate safety measures for design and siting shall be determined by the engineering geologist and civil engineer conducting the site investigation.</p>	<p>Consistent. Since proposed buildings have not been designed in sufficient detail during the Master Plan stage of the planning process it is not possible to assess their structural engineering features and performance when subjected to seismic shaking. However, the EIR recommends that earthquake forces should be considered during the design of structure, cut slopes, and landslide repairs. All structure should conform to the applicable earthquake design standards such as the Uniform Building Code. (LTS).</p>	<p>No mitigation is required.</p>
<p>Policy EH-6.1 Evaluate Projects in Stability Zones 3 or 4. Prior to consideration of site design or use, the Department of Public Works shall evaluate projects proposed in zones 3 or 4 (see EH II.B.1) in stability and landslide potential according to the California Division of Mines and Geology Classification 9. Project proposals shall be accompanied by a report prepared by a civil engineer with soils engineering expertise or a soils certified engineering geologist. The soils evaluation should address the structural foundation engineering of the actual site, the impact of the project on adjacent lands, and impacts of off-site conditions on the site. Project applicants may need to consult with a soils engineer to determine whether their parcel falls within Stability Zones 3 or 4.</p>	<p>Consistent. The applicant's geotechnical engineer prepared a geotechnical feasibility study of the project site. That report was submitted to the County with the Master Plan application, and it has been reviewed independently for this EIR. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EH-6.3 Projects on Known Landslides and Landslide-Prone Deposits. New development should not occur on known landslides and landslide-prone deposits on steep slopes, except where an engineering geologic site investigation indicates that such sites are stable or can be made stable through appropriate mitigating measures. In such cases, it must be shown to the satisfaction of the County that the risk to persons or property or public liability can be minimized to a degree acceptable to the County.	Consistent. It has been determined that the two areas identified in the 1996 Draft EIR as potentially representing large ancient bedrocks landslides and affecting development as proposed on the project site would not pose a significant impact to the proposed development. (LTS)	No mitigation is required.
Policy EH-8.6 Flood Runoff. The County should ensure that capacity is maintained in stream channels. The preferred measures for maintaining capacity are: regulating development; and whenever feasible, storing, ponding, or maintenance dredging. The County should control filling, grading, dredging, and other development which may increase flood damage by increasing sedimentation in streams and watercourses and increasing the amount of impervious surface in an area.	Inconsistent. Project induced increases in peak flow rates would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods. Also, project-induced increases in peak flow rates would worsen flooding at the culvert under Highway 101. (S)	Mitigation 5.2-2 recommends the construction of stormwater detention / treatment basins, one each in the lower reaches of Sub-Watersheds 2,3, and 6. This would reduce on-site peak flows. (LTS)

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Policy EH-11.3 Mitigate Risk in New Land Divisions. Development in areas identified as having extreme fire hazard should only be allowed where adequate water for fire suppression is or can be made available. If feasible, access for residential subdivisions should be provided by more than one source. Fire trails and fuel breaks should be required when necessary. If development is to occur in extreme fire hazard areas, fire-resistant materials, clearance from structures, and landscaping with fire-resistant plants should be required. The County welcomes and encourages the Fire Department's strong recommendations regarding fire protection mitigation measures for sites and structures on all development.	Consistent. Adequate water for fire protection would be available from MMWD facilities. (LTS)	No mitigation is required.

Exhibit 4.1-1 (Continued)

Oakview Master Plan Conformance with The Marin Countywide Plan

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Community Facilities Element		
<p>Policy CF-1.1 Zoning Within Urban Service Areas. In order to encourage annexation, the County's zoning of unincorporated lands in urban service areas should permit less intensive development than is permitted by the city, unless otherwise mutually agreed upon or specified in an adopted community plan.</p>	<p>Potentially Inconsistent. Although the County's RMP zoning allows a maximum residential density of 1.38 units per acre, compared with two units per acre by the City, the County's zoning also allows for commercial development with a floor area ratio range between 0.01 to 0.09 (based on Countywide Plan's PR land use designation), while the City's zoning only allows residential uses consistent with the Hillside zoning district. Based on this it may be concluded that the RMP zoning allows for more intensive development than the City's zoning and an inconsistency exists.</p> <p>The Planning Commission and Board of Supervisors will make the determination of consistency with this policy at the time of the consideration of the merits of the proposed project. (PS)</p>	<p>If at the time of the consideration of the merits of the project the proposed project is found to be inconsistent with this policy this may require a change in the project, such as elimination of the proposed office use.</p>
<p>Policy CF-1.4 Development of Unincorporated Land. Prior to development of vacant unincorporated lands within an urban service area, the unincorporated territory should seek annexation to the city, unless the city signifies that it does not desire to annex the lands at that time.</p>	<p>Consistent. In the 1989 Memorandum of Understanding between the City of San Rafael and the County of Marin, the City has agreed to request the Marin Local Agency Formation Commission to waive the dual annexation policy that would require the project site to annex to the City as well as the Las Gallinas Valley Sanitary District. (LTS)</p>	<p>No mitigation is required.</p>
<p>Policy CF-5.2 Cost of Facilities. New development should pay the cost of the infrastructure it requires and the public services it receives.</p>	<p>Consistent. Based on Section 5.9 (Costs and Revenues) the Proposed Project would pay its fair share of the cost of public services. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.1-1 (Continued)**Oakview Master Plan Conformance with The Marin Countywide Plan**

POLICY - MARIN COUNTYWIDE PLAN	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Trails Element		
Policy TR-1.3 Acquisition of Trails. Through various means the County should acquire a network of trails that will serve a specific public purpose of access to or between public lands.	Consistent. The Countywide Trails Plan does not designate any trails on the project site. Therefore, this policy is not applicable to the project site. The Master Plan does, however, propose to improve the existing informal pathway / trail along Miller Creek. This trail would not be a part of the Countywide Trails network. (LTS)	No mitigation is required.

4.2 Marin County Zoning Ordinance

The Oakview project site is zoned RMP-1.38, residential multiple planned district with a maximum allowable density of 1.38 dwelling units per gross acre.

The purpose of the RMP zoning is "to allow residential development consisting of varied types of housing to be designed without the confines of specific yard requirements where the amenities resulting from the flexibility in design will benefit the public welfare or other properties in the community." ³ Uses permitted in the RMP zone subject to approval by a master plan include:

- One-family dwellings
- Day-care centers
- Accessory buildings and accessory uses
- Two-family dwellings, multiple dwellings and dwelling groups

Uses permitted in the RMP zone subject to the securing of a use permit include:

- Hotels
- Offices

The specific uses proposed for the Oakview project site (single-family residential and offices) would be permitted uses in the RMP district, subject to Master Plan and Use Permit approval.

The County's use permit procedures ⁴ state that the zoning administrator has the power to issue use permits. If the zoning administrator finds that significant policy questions are at issue, the zoning administrator may refer the application to the planning commission for initial action. The planning commission shall also act as the appeal body in all use permit actions taken by the zoning administrator. The board of supervisors shall act as the appeal body in all use permit actions taken by the planning commission.

In order for a use permit to be issued the following finding must be made:

- The establishment, maintenance or conducting of the use for which a use permit is sought will not, under the particular case, be detrimental to the health, safety, morals, comfort, convenience, or welfare of persons residing or working in the neighborhood of such use and will not, under the circumstances of the particular case, be detrimental to the public welfare or injurious to property or improvement in the neighborhood.

³ Marin County Code, Title 22, Zoning, Section 22.47.020.

⁴ Marin County Code, Title 22, Zoning, Chapter 22.88.

DESIGN REQUIREMENTS

The RMP zone sets forth design requirements for site preparation, design, and use of the project site to be imposed as necessary to implement the goals and policies for the *Countywide Plan*.⁵ Exhibit 4.2-1 provides a summary of conformance of the *Oakview Master Plan* with the design requirements set forth in the County zoning requirements.

⁵ Marin County Code, Title 22, Zoning, Section 22.47.024.

Exhibit 4.2-1

Oakview Master Plan Conformance with Zoning

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Site Preparation		
<p>Grading. Grading shall be held to a minimum. Every reasonable effort shall be made to retain the natural features of the land: skylines and ridgetops, rolling land forms, knolls, native vegetation, trees, rock outcroppings, and watercourses. When grading is required, it shall be done in such a manner as to eliminate flat planes and sharp angles of intersection with natural terrain. Slopes shall be rounded and contoured to blend with existing topography.</p>	<p>Consistent. Section 5.1 (Geology and Soils) evaluates the proposed on-site grading. As discussed in Section 5.1, proposed grading would involve 7,020 cubic yards of cut and 6,320 cubic yards of fill for the grading of street improvements and residential development in Parcel 1. This is substantially less grading than would have been required for the previous Proposed Project. This change in approach is based on the increased understanding of landslide features due to extensive additional work performed by the applicant's geotechnical consultant since circulation of the 1996 Draft EIR. (LTS)</p>	<p>No mitigation is required.</p>
<p>Roads No new roads shall be developed where the required grade is more than 15 percent unless convincing evidence is presented that such roads can be built without environmental damage and used without public inconveniences.</p>	<p>Consistent. Although Roadway B would have a maximum grade of 16.7 percent it would be within the 18 percent standard for a <i>Minor Residential Road</i> with Section 24.04.120 of the <i>Marin County Code</i> and based on the analyses in this EIR can be built without environmental damage and used without public inconveniences. (LTS)</p>	<p>No mitigation is required.</p>
<p>Erosion Control. Grading plans shall include erosion control and revegetation programs.</p>	<p>Inconsistent. Section 5.2 (Hydrology and Drainage) evaluates erosion and sedimentation impacts of the Master Plan. It is stated that project implementation could have significant downstream sedimentation impacts. (S)</p>	<p>Mitigation 5.2-7 includes preparation and implementation of a Stormwater Pollution Prevention Plan including in-situ protection, seeding and mulching of bare ground, planting of trees and shrubbery, and installation of other forms of biotechnical slope stabilization. (LTS)</p>

Exhibit 4.2-1 (Continued)
Oakview Master Plan Conformance with Zoning

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Drainage. The areas adjacent to creeks shall be kept as much as possible in their natural state. All construction shall assure drainage into the natural watershed in a manner that will avoid significant erosion or damage to adjacent properties. To reduce runoff, impervious surfaces shall be minimized.</p>	<p>Consistent. Section 5.2 (Hydrology and Drainage) and Section 5.3 (Biotic Resources) evaluates the impacts of the Master Plan on Miller Creek. With the exception of the extension of Marinwood Avenue across Miller Creek, development would be kept away from the creek. Although increased site runoff volumes and peak flows would result from the construction of impervious surface (such as buildings, roadways, and driveways), the amount of impervious surface does not appear excessive. (LTS)</p>	<p>No mitigation is required.</p>
<p>Trees and Vegetation. Every effort shall be made to avoid removal, changes or construction which would cause the death of trees or rare plant communities and wildlife habitats.</p>	<p>Inconsistent. Section 5.3 (Biotic Resources) evaluates impact of the Master Plan on trees and vegetation. Proposed development has generally been sited to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed. (S)</p>	<p>Mitigation 5.3-2(a) states that the residential use on the project site should be revised to indicate building envelope areas which are intended to minimize tree removal. Mitigation 5.3-2(d) states that a tree replacement program should be prepared to provide for replacement of native trees removed by development. (LTS)</p>
<p>Fire Hazards. Development shall be permitted in areas of extreme wildfire hazard only where there are good access roads, adequate water supply, a reliable fire warning system, and fire protection service.</p>	<p>Consistent. The project site would receive water from Marin Municipal Water District and fire protection from the Marinwood Fire Department. (LTS)</p>	<p>No mitigation is required.</p>

Exhibit 4.2-1 (Continued)**Oakview Master Plan Conformance with Zoning**

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Geologic Hazards. Construction shall not be permitted on identified seismic or geologic hazard areas such as on slides, on natural springs, on identified fault zones, or on bay mud without approval from the department of public works, based on acceptable soils and geologic reports.	Consistent. The 1996 Draft EIR identified four areas as potentially representing large ancient bedrock landslides. These areas were labeled areas A, B, C and D. Since area A is located in the southeast corner of the site within the right-of-way for the proposed Highway 101 / Lucas Valley Road interchange, it was determined that it would not impact the proposed development and would be investigated and repaired at a later date by Caltrans. Area B was mapped near the southern edge of the property, also well outside the limits of proposed development, and similarly was determined not to represent a significant impact to the planned development. Area C (located on the slope above proposed Roadway B; Lots 19 and 20) was explored through the use of both a continuous backhoe trench and deep core boring. Based upon this additional work, it was concluded that area C did not represent an ancient landslide. Area D, the largest mapped feature (Lots 6 through 17 and Roadway A) was similarly explored through the use of continuous trenching and four deep core borings. Area D was defined as a dormant, ancient bedrock landslide deposit. Based upon the information derived from the supplemental subsurface investigations, the stability of this old landslide was determined to be stable in its current configuration and therefore, not a significant impact to the proposed development. (LTS)	No mitigation is required.
Watershed Areas. All projects within water district watershed areas shall be referred to that district for review and comment. In such areas, damaging impoundments of water shall be avoided.	Consistent. The project development plans and Notice of Preparation were sent to the Marin Municipal Water District. (LTS)	No mitigation is required.

Exhibit 4.2-1 (Continued)
Oakview Master Plan Conformance with Zoning

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Project Design		
<p>Clustering. Generally, buildings should be clustered or sited in the most accessible, least visually prominent, and most geologically stable portion or portions of the site consistent with the need for privacy to minimize visual and aural intrusion into each unit's indoor and outdoor living area from other living areas. Clustering is especially important on open grassy hillsides. A greater scattering of buildings may be preferable on wooded hillsides to save trees.</p>	<p>Consistent. The Master Plan proposes to locate 28 housing units on approximately 15 acres of the site and the office development on approximately 20 acres of the 106-acre site. Buildings are, therefore generally clustered on the site. As discussed in Section 5.4 (Visual and Aesthetic Quality) buildings would be visible as viewed from offsite locations. The Master Plan does, however, avoid development on the site's prominent ridgeline. (LTS)</p>	<p>No mitigation is required.</p>
<p>Ridgelines. There shall be no construction permitted on top or within 300 feet horizontally, or within 100 feet vertically on visually prominent ridgelines, whichever is more restrictive, if other suitable locations are available on the site. If structures must be place within this restricted area because of site size or similar constraints, they shall be on locations that are least visible from nearby highways and developed areas.</p>	<p>Consistent. Section 5.4 (Visual and Aesthetic Quality) evaluates the visual impacts of the Proposed Project in conjunction with County policies. The area of the project site affected by this zoning requirement is shown on Exhibit 5.4-2. No development is proposed along the visually prominent ridgeline, however, portions of six lots (Lots 18 to 23) would intrude into the 300 foot setback. The residential development envelopes proposed for the project would, however, ensure that construction would not occur within the 300 foot setback. (LTS)</p>	<p>No mitigation is required.</p>
<p>Landscaping. Landscaping shall minimally disturb natural areas, including open areas, and additional landscaping in a natural or seminatural area shall be compatible with the native plant setting. Fire protection and minimal water use shall be considered in landscaping plans.</p>	<p>Inconsistent. Section 5.3 (Biotic Resources) evaluates the Master Plan's Conceptual Landscape Plan. Landscape improvements would replace much of the vegetative cover disturbed by project, raising concerns over the appropriateness of proposed plant materials, compatibility with sensitive plant communities, and the need for long-term management to ensure successful establishment. (S)</p>	<p>Mitigation 5.3-1(a) requires preparation of a Landscape and Vegetation Management Plan. The plan should: a) provide for re-establishment of native vegetation on graded slopes; b) provide details on native plantings associated with proposed restoration, enhancement, and mitigation; c) establish a program to salvage suitable native plants; d) identify unsuitable species which should not be used; f) control establishment and spread of broom; and g) specify long-term management provisions to ensure re-establishment of landscape improvements. (LTS)</p>

Exhibit 4.2-1 (Continued)
Oakview Master Plan Conformance with Zoning

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
Utilities. In ridge land areas designated by the countywide plan, roads shall be designed to rural standards.	Consistent. The project site is not designated a Ridge and Upland Greenbelt Policy Area by the <i>Countywide Plan</i> . Therefore, this policy is not applicable to the project site. (LTS)	No mitigation is required.
Building Height. With some exceptions, no part of a building shall exceed 30 feet in height above natural grade, and no accessory building shall exceed 15 feet in height above natural grade.	Consistent. According to the Master Plan the main residential structures would be limited to 30 feet in height, as determined by the County's zoning ordinance Section 22.47.020(e), unless an exception is allowed by the Community Development Agency. For the office buildings the maximum height shall be 30 feet above natural grade. (LTS)	No mitigation is required.
Materials. Materials and colors shall blend into the natural environment unobtrusively, to the greatest extent possible.	Consistent. As proposed by the Master Plan the color of the houses (medium-dark to medium-light, earth or grey tones) would generally blend in well to the existing environment. The exterior of the office buildings would include non-reflective materials with integral finish, such as masonry, prefabricated panels, metal panels or integrally colored concrete or plaster. Reflective, mirror-like window glazing would not be allowed. Such materials would generally blend in well to the existing environment. (LTS)	No mitigation is required.
Noise. Noise impacts on residents and persons in nearby areas shall be minimized through placement of buildings, recreation areas, roads, and landscaping.	Consistent. There would not be a significant increase in noise levels on residents and persons in nearby areas as a result of the proposed project. (LTS)	No mitigation is required.
Facilities. This section states that where possible, facilities and design features called for in the countywide plan shall be provided on the site.	Consistent. The <i>Countywide Plan</i> does not designate any specific facilities or design features to be provided on the project site. Therefore, this policy is not applicable to the project site. (LTS)	No mitigation is required.

Exhibit 4.2-1 (Continued)
Oakview Master Plan Conformance with Zoning

ZONING REQUIREMENT	CONSISTENT/INCONSISTENT	MITIGATION RECOMMENDED
<p>Open Space Dedication. Land to be preserved as open space may be dedicated by fee title to the Marin County Open Space District prior to issuance of any construction permit, or may remain in private ownership with appropriate scenic and/or open space easements in perpetuity, and the county may require reasonable public access across those lands remaining in private ownership.</p>	<p>Consistent. The project site is within the boundaries of the Marinwood Community Services District (Marinwood CSD). The Master Plan proposes that 69.1 acres of the site (34.8 acres in Parcel 1 and 34.3 acres in Parcel 2) be left as open space. The Master Plan does not state precisely how the open space would be managed and maintained. It is stated that the open space would be left in its natural condition. The Master Plan states that open space areas will be offered for dedication in fee simple to a public agency, such as the Marinwood CSD or the Marin County Open Space District. (LTS)</p>	<p>No mitigation is required.</p>
<p>Open Space Maintenance. Marin County or other designated public jurisdiction will maintain all open space lands accepted in fee title. Where open space lands remain in private ownership with scenic easements, these lands shall be maintained in accordance with the adopted policies of the Marin County Open Space District and may require the creation of a homeowners' association or other organization for the maintenance of these private open space lands where appropriate.</p>	<p>Consistent. As discussed above, it is proposed to offer the open space areas in fee simple to a public agency. It would then become the responsibility of the public agency to maintain the open space. If the public agency does not accept the land as open space, the parcels would be retained as permanent open space under an agreement with a Home Owners Association. (LTS)</p>	<p>No mitigation is required.</p>
<p>Open Space Uses. Uses in open space areas shall be in accordance with policies of the Marin County open space district.</p>	<p>Consistent. Incorporation of this requirement in the project's Precise Development Plan would fulfill the intent of this zoning requirement. (LTS)</p>	<p>No mitigation is required.</p>

4.3 City of San Rafael Policies

The *City of San Rafael General Plan 2000*⁶ (San Rafael General Plan) sets forth the intent for the future of the City and development, both public and private, in the San Rafael Planning Area. The San Rafael General Plan sets forth goals, policies and programs for the planning area in the areas of land use, circulation, housing, parks and recreation, natural environment, health and safety, and noise.

The San Rafael General Plan designates the Planning Area as having a direct physical and social influence on San Rafael's planning but not being subject to annexation. The San Rafael Sphere of Influence is the probable ultimate boundary and service area for the City. It coincides with the City's Planning Area boundary. Within this Sphere of Influence, the Urban Service Area defines a short-term (five year) City service area. Annexation policies further distinguish where logical, near-term, orderly expansion of urban development can occur and not adversely impact City services.

The Oakview project site lies within the City of San Rafael's Planning Area and Sphere of Influence Boundary and the Urban Service Boundary.

The San Rafael General Plan land use designation for the Oakview project site is Hillside Residential. This designation provides for a density range of one-half to two housing units per acre. A portion of the project site is also designated as a visually significant hillside, ridge and landform.⁷

The *San Rafael General Plan 2000* supersedes all previous General Plan documents and related plans, although existing neighborhood plans are still used to provide detailed policies and standards for those neighbors.⁸ One such plan is the *Northgate Activity Center Plan*.

NORTHGATE ACTIVITY CENTER PLAN

The *Northgate Activity Center Plan*⁹ planning area contains approximately 1,290 acres in the northern sector of the San Rafael city limits. Although not within the planning area, the Oakview project site is adjacent to the northwest corner of the planning area. The *Northgate Activity Center Plan* includes a list of roadway improvements necessary to maintain the Level of Service D operation standard of the plan. Two of the roadway improvements would directly affect the project site, they are as follows:

⁶ *City of San Rafael General Plan 2000*, City of San Rafael, adopted July 18, 1988 as amended through July 12, 1994.

⁷ *Ibid.*, Community Design Map A.

⁸ *Ibid.*, page I-3.

⁹ *City of San Rafael Northgate Activity Center Plan*, City of San Rafael, adopted October 18, 1982.

- Lucas Valley Road / Los Gamos Road / Highway 101. A direct southbound 101 off-ramp intersection with Lucas Valley Road at Los Gamos Road and a loop southbound on-ramp for westbound Lucas Valley Road traffic.
- Traffic signal at Lucas Valley Road / Los Gamos Road / Highway 101 southbound off-ramp.

MEMORANDUM OF UNDERSTANDING

The County of Marin and the City of San Rafael have signed an agreement regarding the future development of the project site.¹⁰ The Memorandum of Understanding (MOU) included agreement on the following items.

Lucas Valley Road / Highway 101 Interchange

The importance of the Highway 101 southbound Lucas Valley Road off-ramp was acknowledged and the County agreed that initiation should begin at the earliest possible date. The County agreed that any land use approvals granted to the project site by the County will include provisions for the implementation of the off-ramp project.

Traffic Mitigation Fee

Both the City and County agreed that the Lucas Valley Road / Los Gamos Drive / Highway 101 interchange improvement should be funded with traffic mitigation fees charged as part of land use development approvals. The County agreed to charge at a minimum the full traffic mitigation fee set in the *San Rafael General Plan* for the project site based on the approval of the project.

Fire Services

The MOU acknowledged that the City and the Marinwood County Services District (Marinwood CSD) have entered into a Joint Powers Agreement to provide for the mutual fire protection of certain areas of both the City and the Marinwood CSD. In order to reduce the risk of structural fire damage on the project site the County agreed to require sprinkler systems for all new residential structures approved for construction on the project site.

Timing of Development

Both the City and County agreed to the goal of maintaining a traffic level of service at the mid-point of the D range at the Lucas Valley / Highway 101 interchange.¹¹ The City agreed to meet this standard through implementation of its Priority Projects Procedure. The County agreed that it will coordinate development approvals with the City to assure that LOS mid-D is not exceeded at this interchange. The County also agreed that it will issue no building permits that will result in less than LOS mid-D at the Lucas Valley Road / Highway 101 interchange.

¹⁰ Memorandum of Understanding between the City of San Rafael and the County of Marin.

¹¹ See Section 5.5 Traffic and Circulation for a definition of Level of Service.

Public Improvements

The County also agreed that it will require all public improvements (such as streets, curbs, gutters, sidewalks, drainage facilities, and signalization) to be designed and built to the City's public improvement standards or to a standard mutually agreed upon by the City and County.

In return for the above commitment by the County, the City agreed to:

- Request the Marin Local Agency Formation Commission (LAFCo) to waive the dual annexation policy that would require the project site to annex to the City as well as the Las Gallinas Valley Sanitary District.
- Formally refuse annexation of the project site and refer the project to the County.
- Indicate to the property owners and to LAFCo that it would be appropriate to annex the project site only if annexation of the Marinwood community is approved by a majority of the residents.
- Amend General Plan Land Use Policies LU-5 and LU-6 to state that the project site shall be annexed only if annexation by the Marinwood community is approved by a majority of the residents.
- Refer applicants for development of the project site to the Marin Community Development Agency for permit processing.

PRIORITY PROJECTS PROCEDURE

Policy C-3 of the San Rafael General Plan states in part "for health, safety and general welfare reasons, new development is to be constructed only after needed circulation project funding has been guaranteed, circulation project environmental review has been completed, and findings have been made that the time frame for completion of the needed circulation improvements will not cause Level of Service D to be exceeded." ¹²

Policy C-7 of the San Rafael General Plan states in part "where there is a limited circulation capacity for which projects are competing, projects which shall receive priority City-wide include projects providing significant amounts of affordable housing, high tax-generating uses, or needed neighborhood serving uses." ¹³ This policy includes projects that affect the Lucas Valley Road / Smith Ranch Road / Highway 101 interchange.

In order to implement these General Plan policies, as well as Program C-b, the City of San Rafael has instituted the Priority Projects Procedure. ¹⁴ One purpose of the procedure is to assure that any future adverse traffic impacts resulting from new development are avoided or minimized by relating the

¹² City of San Rafael General Plan 2000, *op. cit.* page 39.

¹³ *Ibid.*, page 40.

¹⁴ City of San Rafael Resolution 10476, adopted August 2, 1999. Resolution 10476 amends City of San Rafael resolutions 7853, 8071, 8313, 9331, 9418 and 10162.

timing of construction of new development to the timing of construction of necessary circulation improvements associated with new development and to the maintenance of General Plan mandated levels of service. The Oakview project site is within the Priority Projects Procedure circulation impacted area for the Highway 101 / Lucas Valley Road interchange.¹⁵

Based on criteria contained in the Priority Projects Procedures, which basically evaluates projects against one another and against *San Rafael General Plan 2000* goals and policies, first the San Rafael Planning Commission and second the San Rafael City Council is responsible for making priority project determinations. The City Council has the final authority to make decisions regarding priority project determinations and to allocate all or a portion of available traffic capacity in circulation impact areas based upon the determinations.

The project applicant has agreed to participate in the City's Priority Projects Procedure and in June, 1995 submitted to the City of San Rafael an Application for Priority Project Determination.¹⁶ Since Marin County had not yet acted on the project application in March 1996 the Oakview project applicants requested "that the City of San Rafael grant a continuance of the Priority Project Procedures until such time as the County has approved our current application."¹⁷

At the time the County issued the Notice of Preparation for the revised Oakview project the project applicant had not filed an application with the City of San Rafael for a Priority Project Determination.

GENERAL PLAN CONSISTENCY

As discussed above, the Oakview project site lies within the City of San Rafael's Planning Area and Sphere of Influence Boundary and the Urban Service Boundary. Consistent with the Memorandum of Understanding the project is not, however, proposed to annex the project site to the City of San Rafael, rather it is proposed that the project site be developed in unincorporated Marin County. Therefore, the City of San Rafael would have no direct land use authority regarding the proposed Master Plan. However, as discussed above, the project applicant has agreed to participate in the City's Priority Projects Procedure. The City's procedures for priority project determination state that all applications must be consistent with the *San Rafael General Plan 2000*. The following, therefore, provides a discussion of the relationship of the *Oakview Master Plan* with the *San Rafael General Plan 2000*.

General Plan Policy Analysis

Policy LU-1. Timing of Development. For health, safety and general welfare reasons, new development is to be constructed consistent with the following policies:

¹⁵ City of San Rafael Resolution 10476, Exhibit A.

¹⁶ *Oakview Priority Projects Application* submitted by Larry A. Kennings, LSA Associates, Inc. on behalf of the Oakview project, June 5, 1995.

¹⁷ Letter to Ms. Jean Hasser, Principal Planner, City of San Rafael from Larry A. Kennings, Principal, LSA, March 20, 1996.

a. Circulation: New development may be constructed only after needed circulation project funding has been guaranteed, circulation project environmental review has been completed, and findings have been made that the time frame for completion of the needed circulation improvements will not cause LOS D to be exceeded.

b. Other: Sewer, water, and other infrastructure improvements must be available to serve new development by the time the development is constructed.

The project applicant has agreed to participate in the City of San Rafael's Priority Projects Procedure. Participation in this procedure will ensure that the proposed project would not proceed ahead until it can be demonstrated that LOS D would not be exceeded at the Highway 101 / Lucas Valley Road / Smith Ranch Road interchange.

The Master Plan does not set aside a specific area for the Highway 101 / Lucas Valley Road interchange, the application does state that "land reserved for the future development of an interchange is included in Open Space Parcel B." ¹⁸

Section 5.8 (Public Services) of this EIR discusses the availability of public services and concludes that public services would be available to serve the proposed project by the time the development is constructed.

Policy LU-5. Annexation. Prior to urban development, areas which can reasonably be served through extension of the existing service area of the City should be annexed. Sites over five acres shall require master plan zoning approvals prior to or concurrent with subdivision or other development approvals. Some of these specific areas include: St. Vincents-Silveira, San Rafael Rock Quarry, Sun Valley Cemetery, Daphne-Bacciocco.

Although this policy calls for the annexation of the project site to the City of San Rafael, in the 1989 Memorandum of Understanding the City agreed to request the Marin Local Agency Formation Commission to waive the dual annexation policy that would require the project site to annex to the City as well as the Las Gallinas Valley Sanitary District. Furthermore, the City agreed to formally refuse annexation of the project site. Therefore, although this policy calls for annexation of the project site to the City, development of the project site in the unincorporated County area would be consistent with more recent City policy.

Policy LU-9. Residential Land Use Categories. Residential land use categories may include residential uses; open space and conservation areas; parks and playgrounds; schools; churches; plant nurseries; group care and large day-care facilities; hotels, motels, and clubs in multi-family residential zones and other similar uses... Hillside Residential: 0.5 to 2 units per gross acre characterized by moderate to steep slopes; often unstable geology; may have local visual significance. Typical of developed hillside residential areas in the Planning Area.

In addition to the 28 housing units, the Master Plan proposes construction of two office buildings on the project site. While the number of housing units would be consistent with this land use categories, the office buildings would not be consistent with this policy.

¹⁸ Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map, Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C. E., project representative, April 1999, revised July 8, 1999, page 11.

Policy LU-12. Master Plan Zoning. Except for construction of a single-family residence, hillside sites and residential lots over five acres in size shall require a master plan for development of the site.

The project applicant has submitted a Master Plan application to Marin County as a part of the development application process.

Policy LU-19. Design Approach. Agencies responsible for design review shall be proactive to insure that excellence of design shall be required of all new development. Project design shall enhance important community entryways, major travel corridors, major linkages and waterways. New development and redevelopment shall harmonize style, intensity and type of new residential, commercial or industrial construction with the natural environment and respect the unique needs and features of each area. Projects should also be designed in relation to the surrounding area.

The Master Plan incorporates architectural (for both the residential and office uses) and landscape standards. The Marin County development review process (for example, the submittal of a Master Plan to be followed by a Precise Development Plan) incorporates the various aspects of design review discussed in this policy.

Policy LU-22. Bay and Hillside Views. Views of the Bay and Bay wetlands and hills from public streets and parks shall be preserved and enhanced where possible.

Section 5.4 (Visual and Aesthetic Quality) of this EIR discusses the views of the project site from surrounding streets, including Lucas Valley Road, Erin Drive, Ellen Drive and Highway 101. Impacts on the project site's grasslands would be significant but can be reduced to a less-than-significant level with the implementation of recommended mitigation measures.

Policy LU-24. Entryways to the City. Require excellence of design in new projects, particularly in those areas visible from Highways 101 and I-580, the primary entrances to San Rafael.

Section 5.4 (Visual and Aesthetic Quality) of this EIR discusses the views of the project site from Highway 101. The office buildings would dominate the surrounding environment and mitigation measures are recommended to reduce this impact to a less-than-significant level.

Policy LU-29. Tree Preservation. Large trees should be preserved, with particular emphasis on significant Eucalyptus, Oak and Redwood tree groves and specimen oak and redwood trees. When new development occurs, require a vegetation management plan and evaluate fire/falling hazards. Require setbacks where necessary.

Section 5.3 (Biotic Resources) evaluates the project's impacts on trees. Proposed development has generally been sited to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed (it is estimated that the site contains approximately 6,250 trees). Recommended mitigation measures include preparation of a tree replacement program. Among the provisions of the tree replacement program is that oaks should generally be replaced at a ratio of 5:1.

Policy LU-48. Fire and Police Services. Maintain adequate fire protection, paramedic and police services as the City grows. Minimize increase in service needs from new development through continued fire and crime prevention programs.

The Marinwood Fire Department would provide fire protection to the project and paramedic service would be provided by the San Rafael Fire Department. The Marin County Sheriff's Department would provide police protection to the project site. Section 5.8 (Public Services) of this EIR states that the impact to these service providers would be less-than-significant.

Policy LU-51. Water and Sewer Facilities. Insure provision of adequate water and sewer facilities to meet the needs of existing and new development. Future development should be coordinated with responsible districts and agencies to assure that facility expansion and/or improvement meets Federal and State standards and occurs in a timely fashion.

The Marin Municipal Water District (MMWD) would supply water to the project site. The MMWD has sufficient capacity to serve the project, and no new water facilities would be required, except for tie-ins to the existing water distribution system in the area. Upon annexation into the Las Gallinas Valley Sanitation District (LGVSD) adequate sewer capacity would be available to service the project site.

Policy C-3. Timing of Development with Transportation Improvements. For health, safety, and general welfare reasons, new development is to be constructed only after needed circulation project funding has been guaranteed, circulation project environmental review has been completed, and findings have been made that the time frame for completion of the needed circulation improvements will not cause LOS D to be exceeded. Major needed circulation improvements in specific areas affected by this policy are listed below (Lucas Valley Road/Smith Ranch Road/101 interchange improvements and Marinwood Overcrossing improvements). Other circulation improvements identified in Policy C-8 may also be necessary to maintain LOS standards (improve the Lucas Valley Road/Smith Ranch intersection with Highway 101 and widen the Marinwood overpass over Highway 101).

The project applicant has agreed to participate in the City of San Rafael's Priority Projects Procedure. Participation in this procedure will ensure that the proposed project would not proceed ahead until it can be demonstrated that LOS D would not be exceeded at the critical intersections.

Policy H-19. Below Market Rate Housing in Market Rate Residential Projects. Residential projects of ten or more lots / units shall be required to provide at least ten percent of their units to affordable to moderate income households at 80 to 100 percent of median income for at least 40 years. The City's primary intent is the construction of units on site. If this is not practical, the City will allow other alternatives of equal value, such as in-lieu fees, construction of units off-site, etc.

The Master Plan proposes construction of 28 housing units on site. It is assumed that the houses would be for sale and that the sale price would be above what would be considered affordable housing. Project applicants propose to make an in-lieu payment to satisfy the County's requirement of affordable housing.

Policy NE-17. Creek / Drainage Setbacks. Creeks are defined as permanent and intermittent watercourses identified on Map GP-16c, which is based on information from the latest USGS and Fish and Wildlife Service maps. Drainageways are defined as open hillside drainage swales which collect and concentrate stormwater and open improved drainage channels. Major drainageways are identified on Map 16c and are based on information from the latest USGS and Fish and Wildlife Service Maps.

Setbacks from creeks and drainageways shall be established in new development for the following reasons: safety factors including adequate maintenance and emergency vehicle access in difficult terrain and adequate debris flow avalanche corridors; reserve areas for flood control transition areas between inhabited structures and waterways to protect properties from damage due to stream bank undercutting; environmental factors including preservation of riparian habitat and wildlife corridors; recreation factors including opportunities for public recreation and view corridors; and aesthetic factors such as provision of landscaping.

Generally, a minimum 25-foot setback from the high top of creekbanks shall be maintained for structures. Wider creek setbacks (up to 100 feet) will be required on larger parcels (two or more acres in size) where individual project review concludes a wider setback is needed. Drainageway setbacks shall be established through individual project review based on the above factors.

In accordance with *The Marin Countywide Plan*, a stream conservation zone consisting of 100 feet has been established on the project site for Miller Creek. Development as proposed would conform with *The Marin Countywide Plan* policies on Stream Conservation Areas with disturbance limited to the proposed roadway crossing over Miller Creek.

Policy NE-20. Preservation of Hillsides. Encourage preservation of hillsides to provide visual backdrops to urban development.

Consistent with this policy, the Master Plan proposes that 69 acres of the 106 acre project site be preserved as open space. Nevertheless, as discussed in Section 5.4 (Visual and Aesthetic Quality) of this EIR, from certain viewpoints, such as from Ellen Drive, development on the lower portion of the site would dominate the surrounding grasslands. To comply with this policy may require additional development along the ridgeline, which would be contrary to County policies to protect ridgelines. In addition, from Highway 101 the two office buildings would be highly visible and would dominate the adjacent woodland and grassland areas.

Policy RES-1. Development in Residential Neighborhoods. The City will protect and conserve existing neighborhoods in terms of density, intensity and design. New development will be required to respect site features and avoid highly visible hillsides or steep or unstable slopes.

The project site is adjacent to existing development in the Marinwood area and would result in the extension of Erin Drive into the project site. Although the residential development would be similar in terms of density and design to the adjacent existing development, as discussed in Section 5.4 (Visual and Aesthetic Quality) of this EIR, development would occur on highly visible hillsides.

Policy NG-3. Development Timing. Timing of Northgate development projects shall occur in conjunction with needed road improvements as described in Circulation Policy C-3 and specific site recommendations. Development which has provided assessment district funding for Merrydale Overcrossing improvements may proceed.

The project applicant has agreed to participate in the City of San Rafael's Priority Projects Procedure. Participation in this procedure will ensure that the proposed project would not proceed ahead until it can be demonstrated that LOS D would not be exceeded at the critical intersections.

Policy NG-12. Daphne. The Daphne parcel has long been zoned and designated for limited residential development. The parcel contains key land needed for planned highway interchange

improvements. Proposed development shall provide noise setbacks consistent with City standards, retention of community wide visual resources, ridgeline protection and creekside setbacks. Residential development shall also be compatible with existing area development. It is expected that the maximum development potential previously proposed for the site would be very difficult to achieve.

The previously proposed Master Plan submitted to the City of San Rafael in 1983, and apparently referenced in this policy, proposed the development of 117 housing units plus 199,800 square feet of office development. The Master Plan now under consideration by Marin County reduces the number of housing units to 28 and reduces the amount of office space to 94,400 square feet. The Master Plan also reserves land to allow Caltrans to construct new Highway 101 / Lucas Valley Road southbound on- and off-ramps. The Master Plan takes into account the concerns regarding noise setbacks, retention of community wide visual resources, ridgeline protection and creekside setbacks and each of these issues is evaluated in this EIR.

City staff has stated that the proposed office use is inconsistent with the City General Plan designation of Hillside Residential and General Plan policy NG-12.¹⁹

4.4 Marin Local Agency Formation Commission Policies

The Marin Local Agency Formation Commission (LAFCo) is responsible for coordinating logical and timely changes in local governmental boundaries. LAFCo's efforts are directed to seeing that services are provided efficiently and economically while agricultural and open space lands are protected. In evaluating boundary changes LAFCo must consider the effect that the proposal will produce on existing agricultural lands. By guiding development towards vacant urban land and away from agricultural preserves, LAFCo assists with the preservation of agricultural resources. LAFCo also evaluates proposals to discourage urban sprawl. By discouraging urban sprawl, LAFCo discourages the misuse of land resources and promotes a more efficient system of local governmental agencies. In order to assist in evaluating proposed changes in local governmental boundaries LAFCo adopted policy guidelines.²⁰

Consistent with the City-County Memorandum of Understanding (discussed above) it is not proposed to annex the project site to the City of San Rafael. The site is, however, proposed to be annexed to the Las Gallinas Valley Sanitation District for sanitary sewer service. The Marin LAFCo would be responsible for approving the proposed annexation of the project site into the Las Gallinas Valley Sanitation District.

¹⁹ Letter to Mr. Dean R. Powell, Marin County Community Development Agency from Chantry Bell, Associate Planner, City of San Rafael, June 4, 1999.

²⁰ The majority of the policies were adopted July 13, 1977. Additional policies and revised policies have been adopted since 1977 with the majority of additional policies and revisions adopted January 13, 1983.

Marin LAFCo Policy Analysis

Service Hierarchy Policy. New or consolidated service should be provided by one of the following governmental agencies in the descending order of preference: Annexation to an existing city, annexation to an existing district of which the Board of Supervisors is the governing body, annexation to an existing multiple-purpose special district, annexation to another existing district ...

The project site is within both the Marinwood Community Service District and the Marin Municipal Water District and the site is proposed to be annexed to the Las Gallinas Valley Sanitation District (for sewage treatment). Consistent with the Memorandum of Understanding the site is not proposed to be annexed to the City of San Rafael.

Annexation Program Policy. Cities should annex unincorporated lands located within their LAFCo adopted municipal urban service area or sphere of influence boundary. LAFCo recognizes that costs for serving some developed unincorporated areas, when studied independently, may exceed revenues. In other cases, revenues will exceed service costs. To the fullest extent possible, cities should develop programs that propose annexation of several areas which, if combined, achieve a net balance in city costs and revenues.

The project site is located within the City of San Rafael's Sphere of Influence and Urban Service Boundary. This policy, therefore, would require annexation to the City of San Rafael. In response to concerns expressed by Marinwood community residents the City has indicated that it would refuse annexation of the project site.

A. Land Contiguous to Municipal Limits. Annexations of unincorporated land to special districts which provide service necessary for urban development shall require concurrent annexation to a city if the land is located within the city's sphere of influence boundary.²¹

With annexation to the Las Gallinas Sanitation District this policy would require annexation to the City of San Rafael. In the Memorandum of Understanding, however, the City has agreed to request the Marin LAFCo to waive the dual annexation policy.

Sphere of Influence Policy 1. The fundamental policy of the Commission in considering the development status of land located in or adjacent to an established city sphere of influence boundary shall be that the extension of urban-type services promotes urban development and that such development belongs in cities. This policy is predicated on the fact that cities exist to provide a broader range of municipal services which generally includes police and fire protection, sanitation, parks and recreation, and street lighting and maintenance services.

The Master Plan proposes to extend urban type services to the project site. While the site is located in the City of San Rafael's Urban Service Boundary urban services would be provided by special districts (fire, water service and water supply) and the County (police protection). The site is not proposed to be annexed to the City and annexation would conflict with the City-County Memorandum of Understanding.

²¹ This policy is often referred to as LAFCo's dual annexation policy.

Sphere of Influence Policy 3. Urban development which could conflict with subsequent city annexation efforts should not be permitted to occur outside a city.

It is not proposed to annex the project site to the City of San Rafael at this time. Consistent with City of San Rafael General Plan Policy LU-6 subsequent annexation of the project site to the City of San Rafael would be dependent on resident interest. Furthermore, the City-County Memorandum of Understanding states that the City agrees that it would be appropriate to annex the project site only if annexation of the Marinwood community is approved by a majority vote of the residents.

Sphere of Influence Policy 4. Staged urban development contributes to the orderly growth of urban areas, a primary goal of the Marin Local Agency Formation Commission. LAFCo promotes the timely conversion of land to urban uses and will effectuate this goal through encouraging urban development to occur in incorporated vacant lands located adjacent to already existing developed areas. Conversely, LAFCo discourages conversion of undeveloped unincorporated territory located on the periphery of a city boundary to urban uses prior to utilization of vacant lands located within the city area.

The project site is surrounded by existing developed areas and thus development of the site would be consistent with the orderly growth of urban areas.

Urban Services Policy. A significant measure of a change from a rural to urban land use is the existence of or need for urban services. Urban services include police, fire protection, water, and sewer.

Although the project site is currently vacant, since it is surrounded by existing urban development it would not be considered to be rural. The proposed project would change the site from vacant to urban land uses.

City Centered Corridor Policy. All land uses planned for unincorporated land located within the "City-Centered Corridor" as delineated in the 1972 *Marin Countywide Plan*²² should be less urbanized than potential land uses permitted in cities. LAFCo recognizes that effectuation of this policy is likely to necessitate county revision of zoning standards and subdivision ordinance requirements.

The City's General Plan designation would permit development of a range of 53 to 213 housing units on the project site. The Master Plan proposes development of 28 housing units and 94,400 square feet of office space. It is unclear whether or not the level of development proposed by the Master Plan is "less urbanized than potential land uses permitted in cities."

County Service Area (CSA) Policy Unincorporated lands located within a municipal sphere of influence boundary should not be eligible to receive extended urban-type services from the county in the form of a County Service Area except when (a) evaluation on a case-by-case basis justifies creation and (b) the affected city, by letter, expresses approval of such action.

The project site is already within the boundaries of the Marinwood Community Services District and the Marin Municipal Water District. The site is proposed to be annexed to the Las Gallinas Valley

²² It is assumed that when this policy was adopted the 1972 *Marin Countywide Plan* was the current General Plan. Although this policy has not been amended it is assumed that the intent of this policy is to use the most current General Plan (adopted in January, 1994) to measure consistency with this policy.

Sanitation District. The Las Gallinas Valley Sanitation District currently serves the northern area of the City of San Rafael plus the unincorporated neighborhoods of Lucas Valley, Marinwood, and Santa Venetia. Annexation of the project site to the Las Gallinas Valley Sanitation District, therefore, is a logical extension of the District's boundaries.

Outside Service Area Agreement Policy Special districts providing urban services, including water, sewer, or fire, shall not provide service outside their jurisdictional limits without LAFCo approval.

It is not proposed to have any special districts provide urban services outside their jurisdictional limits.

5.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

5.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter contains an analysis of the environmental topics identified by Marin County's scoping process for the EIR described in *Chapter 1.0, Introduction*. Environmental topics addressed in this chapter include

- 5.1 Geology and Soils
- 5.2 Hydrology and Drainage
- 5.3 Biological Resources
- 5.4 Visual and Aesthetic Quality
- 5.5 Transportation and Circulation
- 5.6 Air Quality
- 5.7 Noise
- 5.8 Public Services
- 5.9 Costs and Revenues

Sections 5.1 through 5.9 of this chapter describe existing environmental conditions as they relate to each specific topic, identify potential impacts from implementing the proposed project, and present mitigation measures required to reduce significant adverse impacts to a less-than-significant level. Where relevant, cumulative impacts of project buildout combined with other growth elsewhere in the study area are described in Sections 5.1 through 5.9, as discussed in *Section 2.3 Cumulative Development Assumptions*. Cumulative impacts are further discussed in *Section 3.6 Cumulative Impacts*.

FORMAT OF TOPICAL ANALYSES

Existing conditions are described in the respective "setting" sections. These descriptions summarize information compiled during the study process to prepare the EIR. Background materials used in the EIR are referenced in footnotes and listed in the Section 7.3 *Bibliography*.

Standards used to evaluate the magnitude of impacts are listed in the "significant criteria" subsections for each topic analyzed. Under CEQA, a significant effect is defined as a substantial or potentially substantial adverse change in the environment -- namely, in any of the "physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." The *State CEQA Guidelines* direct that the significance of impact be determined on the basis of scientific and factual data. The significance criteria were derived primarily from the following main sources -- the *State CEQA Guidelines* and Appendix N of the *Marin County Environmental Impact Guidelines and Procedures*.

The "impacts and mitigation" subsections identify three types of environmental effects from implementing the project:

- **Significant Unavoidable Impact** A significant (or potentially significant) impact which cannot be avoided with mitigation. These include impacts which could be partly mitigated but could not be reduced to a less-than-significant level. (A potentially significant impact is identified when not enough information is known to determine if the impact would be significant.)
- **Significant Impact** A significant (or potentially significant) impact which can be mitigated to a less-than-significant level.

- **Less-than-Significant Impact** A change or effect directly or indirectly attributable to the project which would not exceed the threshold(s) of significance.

All impacts are numbered consecutively by topic. Significant impacts are followed by measures required to reduce the magnitude of impact. No mitigation measures are required for less-than-significant impacts. Mitigation measures also are numbered to correspond to the respective impacts.

For each significant unavoidable impact identified in the Final EIR, Marin County would be required to adopt findings and a Statement of Overriding Considerations explaining the reasons for approving the project (if approved) despite the impacts identified.

5.1 GEOLOGY AND SOILS

Geology and Soils -- The Setting

The Oakview site is located in eastern Marin County, California, at the northwest corner of the Highway 101 / Lucas Valley Road interchange. The 106-acre site is bounded by Miller Creek (north), Lucas Valley Road (south), Highway 101 (east), and a developed residential neighborhood (west).

PREVIOUS GEOLOGIC WORK

Geologic conditions in the area are relatively complex and there is variability over the project site. A number of geologists have mapped and studied the vicinity of the Oakview site in various levels of detail. Reconnaissance mapping of Marin and Sonoma Counties has been performed by the United States Geological Survey (USGS) ¹ and the California Division of Mines and Geology (CDMG), ² detailing general geologic terrain, slope stability, and landsliding of the region.

Several published reports also cover the site vicinity. A CDMG report describes the region's stability, seismicity, and geologic units, ³ and the Soil Conservation Service (SCS) publishes surveys of soil conditions for most counties in the state, including Marin. ⁴

A site-specific preliminary geotechnical investigation was performed for the site in 1983. ⁵ This investigation focused on understanding site geology to plan proposed development. The scope of the investigation included preliminary reconnaissance geologic mapping, excavation of 25 test pits with a backhoe, bulk sampling of the materials encountered, and logging of the test pits. Updating of the 1983 study in 1994 indicated that the site conditions were essentially unchanged from those present

¹ *Areas Susceptible to Landsliding, Marin and Sonoma Counties, California*, Ellen, Peterson, and Reid, U.S. Geological Survey, Map MF-1406, 1975.

² *An Analysis of Slope Failures in Eastern Marin County, California, Resulting from the January 3 and 4, 1982 Storm*, C.W. Davenport, California Division of Mines and Geology, Open File Report 84-22SF, 1984.

³ *Geology for Planning, Central and Southwest Marin County, California*, S.J. Rice, et. al., California Division of Mines and Geology, 1976.

⁴ *Soil Survey of Marin County, California*, Soil Conservation Service, U.S. Department of Agriculture, 1977. The SCS subsequently has been renamed the Natural Resources Conservation Service.

⁵ *Preliminary Geotechnical Investigation Bacciocco / Daphne Property, San Rafael, California*, Donald Herzog & Associates, March 21, 1983.

during the prior investigation.⁶ The revised report indicated that the project appeared feasible but that more detailed investigation for design purposes and landslide mitigation would be needed.

In response to this report, additional field reconnaissance and geomorphic landslide mapping was performed by the reviewing consultant as part of the 1996 Draft EIR's preparation. This was performed to provide an independent review of the site's geologic conditions and verify the mapped extent of any potential geologic hazards, such as landslides. That work performed for the 1996 Draft EIR identified some features on the site not previously mapped by others which could represent ancient bedrock landslides that have long been dormant.⁷ These four potential landslide areas were labeled A through D. Area A is located in the southeast corner of the site within the right-of-way for the proposed Highway 101 / Lucas Valley Road interchange and will be investigated and mitigated in the future by Caltrans. Area B is also located in the southeastern portion of the site. It is in an area of designated open space and at least 200 feet outside the limits of proposed development. Therefore, it was determined that no further investigation of this feature was necessary for the currently proposed plan. The applicant's geotechnical consultant Kleinfelder, under review from the EIR's geologic consultant, Snyder & Smith Associates, performed an additional detailed subsurface investigation of areas C and D. Based upon this additional information, and subsequent field mapping, Kleinfelder revised the geologic map previously submitted as a part of the Master Plan application.

TOPOGRAPHY

Elevations range from a low of 25 feet at the southeast corner to a high point of 307 feet on a ridge in the north-central part of the site, for a maximum change in site elevation (or relief) of approximately 282 feet. A ridge generally trending north-south and flanked by east-west trending spur ridges and associated swales dominates the site. Elevations along the ridge vary from approximately 250 to 307 feet. Elevations within the lower swales vary from approximately 50 to 150 feet. Slopes within the swales are gentle to moderate, from 7:1 to 4:1 (horizontal : vertical). The steeper slopes on the flanks of the ridge generally have 2:1 to 1-1/2:1 grades.

⁶ *Geotechnical Update and Plan Review (Revised)*, Oakview, Marin County, California, Huntingdon Herzog Associates, Inc., letter report to Daphne / Bacciocco, March 25, 1994.

⁷ It should be recognized that, in any kind of reconnaissance-level engineering geologic mapping, there exists a large degree of subjective interpretation. The factors shaping interpretation usually are professional training, experience (such as with landslides), and availability and quality of baseline data (such as aerial photos and topographic maps). Because of these differences in local experience and exposure to various types of subsurface information, engineering geologists seldom agree on the extent and number of landslides in a given area. This does not mean that one geologist is "right" and another is "wrong" but that interpretive differences depend on the area experience of the geologists.

REGIONAL GEOLOGY

The site is located in the Coast Ranges geomorphic province of California. This province is characterized by elongated northwest trending narrow ranges and valleys which are approximately parallel to the coast and are controlled by several dominant northwest trending faults. A dominant bedrock assemblage in this province is the Franciscan "assemblage" (or complex) of Jurassic to Cretaceous age. It generally consists of sandstone with lesser amounts of shale, conglomerate, chert, greenstone, and graywacke. Parts of the assemblage are highly fragmented, brecciated, and mixed and are termed "melange". It is believed that the Franciscan rocks were deposited along an ancient subduction zone on the continental margin and subsequently were drawn into the subduction zone where they were subjected to high pressure, intense shearing and fracturing, and low-grade metamorphism. Thus, the Franciscan essentially is the remnant of an ancient fault zone formed as the continental crustal plate overrode the thinner subducting Pacific plate. The result is a disrupted mass of hard rock types embedded in a fine-grained matrix which has been sheared and crushed. This melange unit is found throughout Marin County. Other sequences in the assemblage are not as crushed and disjointed as the melange, such as the bedrock sequence mapped as underlying the project site.⁸ However, even among these latter bedrock assemblages, intense fracturing, deep weathering, and variable bedding orientations are common. This intense fracturing and weathering have tended to render much of the Franciscan assemblage prone to both deep-seated and surficial landsliding.

A relatively common feature of the Franciscan assemblage is the presence of intermittent springs. These springs are the result of open fractures in large rock masses located near the crests of ridges. These collect and hold rainwater. Because the bedrock matrix often is relatively impermeable, little deep infiltration takes place, and the water is discharged soon after recharge. As a result, springs are commonly found at or near ridgelines in Marin County.

GEOLOGIC STRUCTURE

Site Geology

Maps indicate that the site is underlain primarily by unnamed sandstone and shale bedrock of Jurassic to Cretaceous age Franciscan complex.⁹

Geology for Planning describes the following site features:¹⁰

Bedrock underlying the site as "massive or thickly bedded, medium to coarse grained arkosic sandstone (ss), massive to well bedded mudstone or siltstone (sh), and thinly interbedded sandstone and shale (ssh). Sandstone typically [is] gray to pale greenish gray where fresh, but pale brown to brown in a weathered zone. Mudstone is dark gray where fresh, weathers pale gray".

⁸ *Geologic Map of the Santa Rosa Quadrangle*, D.L. Wagner and E.J. Bortugno, California Division of Mines and Geology, Regional Geologic Map Series, Map No. 2A, 1982.

⁹ *Geologic Map of the Santa Rosa Quadrangle*, *op. cit.*, *Areas Susceptible to Landsliding, Marin and Sonoma Counties, California*, *op. cit.*, and *Geology for Planning, Central and Southwest Marin County, California*, *op. cit.*

¹⁰ *Geology for Planning, Central and Southwest Marin County, California*, *op. cit.*

Soil development on this bedrock unit as "weather[ing] easily to sandy or silty, non-swelling, easily erodible soils. [The bedrock is] covered with thick soil and deeply weathered rock on surfaces of low relief but [is] stripped essentially bare of soil on many of the steep slopes flanking Big Rock Ridge, San Pedro Ridge, and Corte Madera Ridge".

Permeability of this unit as having "little or no intergranular permeability, thus permeability [is] determined by joint or fracture density and spacing. Sandstone commonly [is] moderately permeable because of abundant open fractures. Shale, mudstone, and siltstone mostly [are] relatively impermeable because of lack of open fractures".

Slope stability as "highly stable on natural slopes. Fresh arkosic sandstone (ss) will stand in vertical cuts except where blocks slip along outward dipping joints, bedding planes, or minor fault surfaces. Soils and colluvium derived from these rocks are subject to liquefaction and, during rare intense rain storms, yield soil debris avalanches from steep canyons, such as those flanking Big Rock Ridge".

Earthquake stability of the site's bedrock unit is described as high.

The USGS describes the bedrock underlying the site as consisting of "sandstone and interbedded shale, with minor conglomerate [which] occurs in ... sequences of largely medium- to very-thick sandstone beds with generally minor interbedded shale [alternating with] predominantly shale with interbedded thin- to medium-thick sandstone beds".¹¹ Rock is locally severely sheared or brecciated. Bedding is mapped as being variable at the site. A bedding orientation in the southern part of the site is mapped as striking northeast and dipping vertically. A bedding orientation mapped along the southeastern part of the ridge strikes west northwest and dips 30 degrees to the south. In the northern part of the site near Miller Creek, bedding is mapped as striking north-south with steep dips to the east (50 degrees and 70 degrees are shown). An elliptical-shaped outcrop of volcanic bedrock is mapped on the north flank of the ridge, near Miller Creek, and is identified as "Sonoma Volcanics, undifferentiated".

The limited 1983 site investigation involved excavating 25 test pits to expose subsurface deposits but no exploratory borings.¹² Thus, depths of soil units or landslide deposits present beyond the limited range of a backhoe were not examined. Depth to bedrock in the areas explored varied between one-half- to one-foot along the ridge top to more than 14 feet in lower drainage swales. Colluvial soils were encountered over the bedrock and reportedly were "well developed throughout the lower elevations and typically consist of organic-rich, loose silty sand topsoil (from one-and-one-half to two-and-one-half feet thick) and stiff colluvial silts and sands". Laboratory testing indicated that the soils encountered were not expansive. However, they were reported to be loose, subject to creep and settlement, and generally unsuitable for fills or foundations for structures (also see Soils Characteristics below).

The 1983 report states that bedrock exposures on the site are rare but that, during the investigation, "bedrock encountered consisted of a medium-to-fine-grained yellow brown sandstone. Minor amounts of interbedded gray brown siltstone and gray shale also were found. These rocks varied from friable

¹¹ *Preliminary Geologic Map of Marin and San Francisco Counties and Parts of Alameda, Contra Costa and Sonoma Counties, California*, Blake et. al., U.S. Geological Survey, Map MF-574, 1974.

¹² *Preliminary Geotechnical Investigation Bacciocco / Daphne Property, San Rafael, California*, op. cit.

to moderately strong, intensely to closely fractured, and deeply weathered. Where bedding planes were evident, the general trend appeared to strike approximately north-south. Dips varied from near vertical to North 35 degrees West". The report indicates that meta-sandstone and sheared shale were encountered along a spur ridge in the southeast part of the site.

The 1983 field work was performed during the rainy season. Ground conditions reportedly were "very wet and poorly drained". The report indicates that groundwater was encountered in virtually every test pit between one and four feet below the ground surface. Water generally appeared to be flowing along the contact between loose upper soils and denser colluvium or bedrock. In addition, several areas of surface seepage were reported, including an apparent spring in the southwest part of the site.

Additional subsurface exploration was performed in 1996 and 1997 by Kleinfelder to explore potential landslide areas C and D.¹³ This work included the excavation of seven backhoe pits and the drilling of six continuous core borings.¹⁴ The bedrock encountered consisted of dark yellowish brown sandstone with occasional dark grayish brown siltstone interbeds. The material was found to be locally fractured and sheared and in a very dense condition.

Geomorphology and Landsliding

Landslides typically occur as a result of natural on-going erosional processes on steep or undermined slopes with weak slope materials or unfavorable geologic structural conditions. They vary in type, rate of movement, areal extent, thickness, and other features.¹⁵ Some landslides are related directly to intense rainfall and over-saturation of unstable soils. Landslides can occur naturally and also are man-induced. They result from the often complex interaction of the underlying rock units, soil-water relationships, construction of fire access roads, and other activities, such as alterations in drainage patterns.

Landslides can be caused by:

- Adding weight (driving force) to the top of a potential slide area
- Removing mass (toe support) from the base of a potential slide area
- Increasing the volume of water to heighten pore water pressures
- Vibrations from earthquakes which also can increase pore pressures
- ~~Removing mass (toe support) from the base of a potential slide area~~

¹³ *Geotechnical and Geological Review, Oakview Draft Environmental Impact Report, San Rafael, California*, Kleinfelder, Inc., October 14, 1996.

¹⁴ *Current Status of Phase 2 Drilling Program, Additional Geotechnical Services, Oakview Development Project, San Rafael, California*, Kleinfelder, Inc., July 10, 1997; *Draft Landslide Investigation and Slope stability Analysis, Possible Landslide Areas C and D, Oakview Development Project, San Rafael, California*, September 17, 1997; and *Final Report, Landslide Investigation and Slope stability Analysis, Possible Landslide Areas C and D, Oakview Development Project, San Rafael, California*, Kleinfelder, Inc., November 14, 1997.

¹⁵ "Landslide Hazards in California", Clifton Gray, *California Geology*, California Division of Mines and Geology, August 1984.

A landslide can take many forms. A *slump* landslide often can be distinguished by topographic depressions with scarps (terrace-like benches). Failure occurs along a concave upward slip surface. A *rotational* landslide is a slump landslide in which part of the slope has rotated backwards, and the landslide is curved (concave up). A *transitional* landslide is a slump landslide with a relatively flat surface, and slip surfaces usually are parallel to the ground surface. Bedrock landslides created by flat fractures are a common type of transitional landslide. An *earthflow* is a type of transitional failure that generally is confined to surface soils and weathered bedrock. It is characterized by a relative lack of rotation. *Coalescing earthflows* are earthflows which overlap. A *debris flow* is a moving mass of rock fragments, soil, and mud with more than half of the particles larger than sand size. A spoon-like indentation is common after a debris flow has occurred. A *mudflow* is similar to a debris flow but with predominately fine-grained earth materials and water. It is similar to an earthflow but with more fluidity.

A qualified engineering geologist identifies potential landslide areas based on an evaluation of site geology, geomorphology (land shape), and topography (land surface). Engineered Grading of a site before building (through removal of unstable material, keyway construction and recompaction), installing drains, retaining walls, or caissons are examples of standard landslide mitigation methods. These methods can eliminate or minimize the potential for damage to man-made structures when properly implemented.

The 1983 report indicated that there are "numerous topographic features within the steeper slopes that suggest the presence of old, shallow debris flows." ¹⁶ Colluvial soils of the type exposed at the site have "low" slope stability and are "prone to severe gullyng." ¹⁷









Site-specific mapping, aerial photographic review and additional subsurface investigation for the 1996 Draft EIR indicated that several landslide deposits are present in addition to the colluvial soils which are susceptible to erosion and debris flow. The most plentiful of the landslide types present on the site are shallow coalescing earth and debris flows, a fewer number of rotational and translational slump landslides, and at least one large deep-seated ancient bedrock landslide (Area D) was identified. This large ancient bedrock slide has subsequently been modified by smaller, near-surface erosional processes, such as colluvium production, earthflows, and simple erosion. These smaller features represent more geologically youthful events, more typical of those physical processes dominating the area over the past 11,000 years (Holocene epoch, the present interglacial warm period in which we are living). Most of these landslides on the site appear to have occurred within unstable colluvial deposits and the highly-weathered and jointed sandstone and shale bedrock of the Franciscan assemblage. The locations of the various landslides and surficial soil deposit types likely present on the project site are shown on Exhibit 5.1-1.

The Franciscan assemblage and associated bedrock materials are generally moderately to highly fractured. These fractures (or joints) in the bedrock can affect slope stability in several ways. The presence of joints under low confining pressure tends to reduce bedrock cohesion. Joints also can serve as conduits for the infiltration and migration of groundwater. Joints generally occur in roughly parallel sets. Depending on the orientation of joint sets with respect to slopes, they can have an adverse effect on slope stability in a manner similar to that of bedding planes in sedimentary rocks if they dip out of the slope in an unsupported manner. Thus, even if bedding plane orientations are

¹⁶ Preliminary Geotechnical Investigation Bacciocco / Daphne Property, San Rafael, California, op. cit.






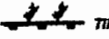
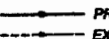
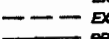


¹⁷ Geology for Planning, Central and Southwest Marin County, California, op. cit.

GEOTECHNICAL LEGEND

	COLLUVIAL SOILS		DEBRIS FLOW
	LANDSLIDE DEPOSIT (KLEINFELDER)		POTENTIAL BEDROCK LANDSLIDE AREA C (KLEINFELDER)
	CRETACEOUS SEDIMENTS		POTENTIAL BEDROCK LANDSLIDE AREA D (KLEINFELDER)
	ZONE OF SURFACE SEEPAGE (HERZOG)		
	GULLEY EROSION		

NOTE: GEOLOGIC FEATURES AS DESCRIBED IN GEOTECHNICAL REPORT BY DONALD HERZOG & ASSOC. DATED MARCH 21, 1983; IN GEOTECHNICAL REPORT BY KLEINFELDER INC., RECONNAISSANCE CONDUCTED ON DECEMBER 17, 1999

LEGEND

	2:1 CUT SLOPE		DAYLIGHT CUT SLOPE
	2:1 FULL SLOPE		DAYLIGHT FULL SLOPE
	CONCRETE OR CONC. BLOCK RETAINING WALL AND HEIGHTS		
	TIMBER RETAINING WALL AND HEIGHTS		
	PROPOSED STORM DRAIN WITH CATCH BASIN		
	EXISTING STORM DRAIN WITH CATCH BASIN		
	EXISTING INTERCEPTOR DITCH		
	PROPOSED INTERCEPTOR DITCH		

EARTHWORK ESTIMATION (RESIDENTIAL)

TOTAL EXCAVATION	7,020 CU. YDS
TOTAL FILL	6,320 CU. YDS.

EARTHWORK ESTIMATION (ADMIN/PROF)

TOTAL EXCAVATION	26,220 CU. YDS
TOTAL FILL	20,780 CU. YDS.

favorable with respect to a given slope, the joint sets and systems may not be. Slope stability problems due to jointing and fracturing is common in Franciscan assemblage bedrock.

The colluvial deposits of varying thickness found on steeper slopes and in swales appear to be composed of soil, decomposed bedrock, and debris flow detritus whose physical properties are degraded to those of a residual soil cover and exhibit the ability to periodically mobilize on slopes as gentle as six degrees (a 10.5 percent grade).¹⁸

Artificial Fill

The site is undeveloped, and, thus, minimal artificial fill is present. It is anticipated that the only measurable fill present would be adjacent to previous development, access roads, and utilities.

Groundwater and Water Resources

Because of the numerous landslides on the site, much of the groundwater probably is perched in or adjacent to them. The 1983 site reconnaissance and subsequent work by Kleinfelder indicates that active springs are present on the site.¹⁹ These seeps or springs have been observed in the area of proposed Roadway B and along the eastern margin of the site adjacent to Highway 101. These may be from shallow groundwater percolating through a colluvial deposit, within the weathered bedrock horizon, or along (or within) landslide material. Several homeowners in the area have reported that a year-round spring exists in the southwest part of the site and that many other intermittent springs are present during (and for several months following) the rainy season. Many have also reported flooding and runoff generated from the subject property. The Hydrology and Drainage section of this EIR describes the perennial spring and seepage zones on the site in more detail (see *Groundwater and Sensitive Habitats*).

The engineering solutions to stabilize site slopes may include the placement of subdrains and surface water diversions before building housing units. Subdrains are used to de-water slopes to reduce the potential for landsliding, and surface water diversions commonly are used to prevent localized concentrations of stormwater infiltration.

There are no plans to install water supply wells on-site. An additional phase of investigation may be necessary to evaluate the extent, quality, and production capacity of on-site water-bearing materials to be used for any sort of auxiliary water supply.

SEISMICITY

The entire San Francisco Bay Area, including the Las Gallinas Valley, is located in the seismically active region where the Pacific and North American tectonic plates meet. The Pacific Plate consists of most of the Pacific Ocean floor and California coastline, and the North American Plate includes the

¹⁸ *Landslide Processes of the East Bay Hills*, J.D. Rogers, Association of Engineering Geologists Guidebook, 29th Annual Meeting, 1986, and Kesseli, 1943.

¹⁹ *Preliminary Geotechnical Investigation Bacciocco / Daphne Property, San Rafael, California*, op. cit.

North American continent and parts of the Atlantic Ocean floor.²⁰ The San Andreas fault forms the primary boundary between the plates, and many smaller faults, including the Hayward, Calaveras, Concord-Green Valley and Greenville faults, branch from and join the northwest trending San Andreas fault zone.²¹ The faults are fractures where movement occurs as the Pacific Plate grinds northwest past the North American Plate. Stress can accumulate along the plate boundary and cause earthquakes when released. Faults are distinguished by abrupt changes in rock structure or composition. Historically, some of the most damaging earthquakes in California have occurred along the San Andreas fault zone, and damaging earthquakes also have occurred on other active faults in the region which belong to the San Andreas fault system.²²⁻

Seismic hazards include surface rupture along a fault, ground shaking, and earthquake-related ground failures, including seismically induced landslides, liquefaction, lateral spreading, and differential settlement.

Ground Shaking Earthquake magnitude, epicenter distance, and local soil and groundwater conditions all influence ground shaking intensity. Intensity of ground shaking at a specific location is a function of the distance from the earthquake epicenter and the way seismic waves propagate through different kinds of subsurface materials.²³ At a given distance from the epicenter, ground motion will be strongest in poorly consolidated deposits or artificial fill, somewhat less strong in alluvium, and of minimal strength in bedrock. Local topography can also increase the severity of ground shaking. The severity of damage depends on both magnitude and frequency of ground acceleration and on the design of structures. Because neither the location nor the magnitude of earthquakes can be controlled, potential damage from ground shaking can only be mitigated by tailoring structural designs and land use to the local geologic setting.

Landslides Seismic events can initiate new landslides and reactivate older landslides, particularly if earthquakes coincide with rainy periods when soils are saturated.²⁴ The shaking processes associated with earthquakes apply horizontal and vertical loads to hillsides in ways which can activate landslides in both unstable areas and areas where none would occur under static conditions.

Liquefaction Liquefaction is the loss of shear strength and bearing capacity of shallow, saturated, loose, cohesionless, fine sands subjected to intense shaking. Fine grained well sorted sands within about 30 feet of the surface are most susceptible to liquefaction (due to relatively low confining pressures). Loose sandy fill, alluvial, coastal and lacustrine deposits are the most susceptible to

²⁰ "What Causes Earthquakes", *California Geology*, California Division of Mines and Geology, December 1991.

²¹ *Ibid.*, and "California Has Its Faults", *California Geology*, California Division of Mines and Geology, January / February 1992.

²² The written history of damaging earthquakes (of about magnitude (M) 7 or greater) in California began in 1800 with reports of damage to Mission San Juan Bautista. Newspaper coverage began in 1849 but concentrated on population centers of San Francisco and Sacramento in the 1850s to 1870s. "Earthquake History of California", Tousson Topozada *et al*, *California Geology*, California Division of Mines and Geology, February 1986.

²³ "Effects of the Loma Prieta Earthquake, October 17, 1989, San Francisco Bay Area", David Montgomery, *California Geology*, California Division of Mines and Geology, January 1990.

²⁴ *Ibid.*

liquefaction. This is because seismic shaking settles saturated loosely packed sand, reducing the pore space, increasing pore pressures, and reducing the effective stress.²⁵ Structures built on areas which liquefy may collapse as a result of the ground failure and movement.

Other Hazards Lateral spreading and flow sliding, differential (uneven) settlement, and lurch cracking also constitute potential seismic hazards. Lateral spreading and differential settlement occur when severe ground motions cause rapid compaction and settlement of underlying soil, and lurch cracking refers to irregular ground surface ruptures which form during an earthquake. These phenomena can result in local subsidence and can damage buildings, infrastructure, and other improvements.

Seismic risk to the site can be attributed to ground shaking from potential events on active faults in the region. No active faults are known to be present on the site, and the site is not located within a State of California Alquist-Priolo Special Studies Zone for active faults. However, known active faults in the vicinity -- with the potential for producing the highest ground accelerations at the site -- include the San Andreas (about 11 miles west), Healdsburg-Rogers Creek (about 12 miles northeast), Concord/Green Valley (about 24 miles northeast), West Napa (about 20 miles northeast), Hayward (about 8 miles east), and Calaveras faults (about 30 miles southeast of the site), as shown on Exhibit 5.1-2.

The epicenter of the 1906 San Francisco earthquake, the largest historic earthquake recorded on the San Andreas fault, with an estimated Richter magnitude of 8.3, was located about 11 miles from the site. The seismicity map of California shows earthquake epicenters greater than magnitude 3.0 for the years 1808-1987 and indicates no epicenters on the site or along Miller Creek in Las Gallinas Valley.²⁶

Due to the proximity of the site to major active faults, moderate to strong ground shaking should be expected during the lifetime of any proposed development and could produce high bedrock accelerations and damaging ground shaking. The most serious seismic hazard at the site is potential landsliding triggered by a high intensity earthquake. In the absence of fault traces on-site, the potential for surface rupture is considered to be very low. The Working Group on California Earthquake Probabilities estimates that the probability of one or more large magnitude earthquakes (greater than magnitude M7) in the Bay Area during the next 30 years is about 67 percent.²⁷

²⁵ *Ibid.*

²⁶ *Seismicity Map of California 1808-1987*, S. K. Gotter, 1988.

²⁷ *Probabilities of Large Earthquakes in the San Francisco Bay Region, California*, Working Group on California Earthquake Probabilities, U.S. Geological Survey Circular 1053, 1990.

Exhibit 5.1-2
Active Faults of Concern to the Project Site

Potential Causative Fault	Fault to Site Distance(kilometers / miles)	Maximum Probable ^a Earthquake(Moment Magnitude)	Peak ^b / Repeatable ^c Maximum Ground Acceleration
Calaveras	48 / 30	6.3	0.06g / 0.04g
West Napa	32 / 20	6.5	0.07g / 0.05g
Hayward	13 / 8	7.1	0.40g / 0.26g
San Andreas	18 / 11	7.8	0.45g / 0.30g
Concord / Green Valley	38 / 24	6.9	0.08g / 0.05g
Rodgers Creek	18 / 11	6.9	0.09g / 0.06g

- a "Earthquakes, Quaternary Faults and Seismic Hazard in California", S.G. Wesnousky, *Journal of Geophysical Research*, 1986. Note that the "Maximum Probable" magnitude is not the same as the "Maximum Credible" magnitude, which is often such higher. However, maximum credible earthquakes are not probable during the life of the project.
- b "Prediction of Strong Ground Motions", *Workshop on Future Directions in Evaluating Earthquake Hazards of California*, D.M. Boore, United States Geological Survey Open File Report 86-401, 1986.
- c "Repeatable High Ground Acceleration from Earthquakes", J.E. Slosson and M.R. Ploessel, *California Geology*, California Division of Mines and Geology, September 1974.

SOILS CHARACTERISTICS

Two characteristics of soils classified by the SCS are *shrink-swell* and *erosion* potential.

Shrink-swell potential measures the change in volume a soil undergoes as a result of seasonal changes in moisture content. During expansion and contraction, soil can distort buildings and crack foundations and pavements. Special engineering methods can be used to reduce the stresses caused by these expansive soils.

Erosion is caused when soils have heavy runoff from rain storms. Soil units on steep slopes are more susceptible to erosion, as runoff is usually greater as is water velocity.

The SCS identifies three different soil mapping unit types on-site, as shown on Exhibit 5.1-3 (numbers in parentheses (105, 184, 204) refer to the soil mapping unit code):

Bucher-Cole Complex (105) This soil mapping unit is located in basins and on alluvial fans and is found along Miller Creek. Runoff is slow, and the erosion potential is slight. The shrink-swell potential of Cole soils is moderate to high. Drainage is needed if roads and building foundations are constructed.

Tocahoma-Saurin Association (184) This soil mapping unit also is found in basins and on alluvial fans. Runoff is rapid, and erosion hazard is high, and a hazard in steeper areas. The main limitations of this soil to development are susceptibility subsidence and highly variable properties. On-site

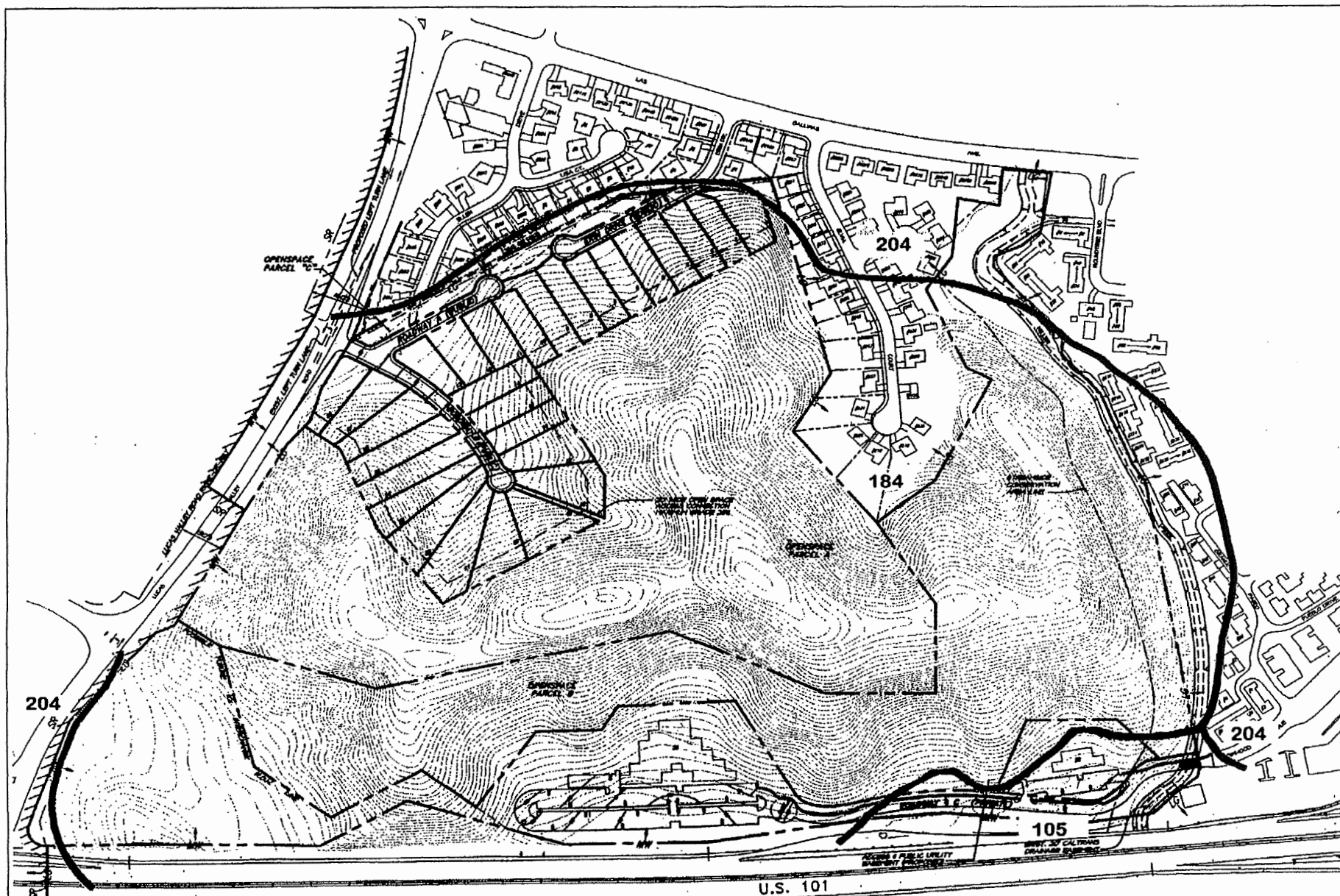


EXHIBIT 5.1-3 SOIL MAPPING UNITS
Oakview Master Plan

Source: Soil Conservation Service Soil Survey of Marin County (1985)

Legend:

- 105** Blucher-Cole Complex-2 to 5 percent slopes
- 184** Tocahoma-Suarin Association, 30 to 50 percent slopes
- 204** Xerorthents-Urban Land Complex, 0 to 9 percent slopes

Note:

Slope gradients indicated in explanation are typical of slope where these soils are commonly found. However, these soils may be found on slope gradients that vary from those used above.

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North

investigation is necessary. The soil needs to be compacted for the base of structures to minimize subsidence.

Xerorthents-Urban Land Complex (204) This soil mapping unit generally is found on valley floors, at cut slope toes, and in Bay areas covered with fill. Soil properties vary highly because of the kinds and amounts of fill material in the profile or because of the amount of cutting and grading which has occurred. The main limitations on use are a general susceptibility to subsidence and erosion if not engineered properly during construction. On-site investigation is necessary because of the variability of fill material.

AGGREGATE RESOURCES

The CDMG classifies urban lands according to the presence or absence of sand, gravel, or stone deposits which would be suitable as potential sources of commercial aggregate. Lands where adequate information exists and are known to contain no significant mineral resources are classified MRZ-1 (Mineral Resource Zone). If a deposit contains more than \$5,000,000 (1978 dollars) worth of material suitable for at least sub-base aggregate, the deposit is classified MRZ-2. MRZ-3 areas contain mineral resources, but the significance of these resources could not be evaluated from data available at the time of the CDMG study. Areas are classified MRZ-4 where available information is inadequate to assign to any other MRZ category. MRZ-2 areas located within land use zones compatible with mining qualify as sectors.

The *Mineral Classification Map for the North San Francisco Bay Production / Consumption Region* classifies the site as containing both MRZ-1 and MRZ-3(c) areas (see Exhibit 5.1-4). Most of the periphery of the site underlain by alluvial or colluvial soils is classified MRZ-1. The MRZ-3(c) classification of the majority of the site is based on the presence of Franciscan assemblage and Sonoma Volcanics which may contain rock suitable for use as aggregate, but, because no previous reported studies have investigated the location or size of suitable rock zones, the potential value of material has not been estimated.²⁸

²⁸ *Mineral Land Classification: Aggregate materials in the San Francisco-Monterey Bay Area*, J.F. Davis, et. al., California Division of Mines and Geology, Special Report 146 (Part I), 1983, and *Mineral Land Classification: Aggregate Materials in the San Francisco - Monterey Bay Area, Part III, Classification of Aggregate Resource Areas, North San Francisco Bay Production - Consumption Region*, J.F. Davis, et. al., California Division of Mines and Geology, Special Report 146 (Part III), 1983.

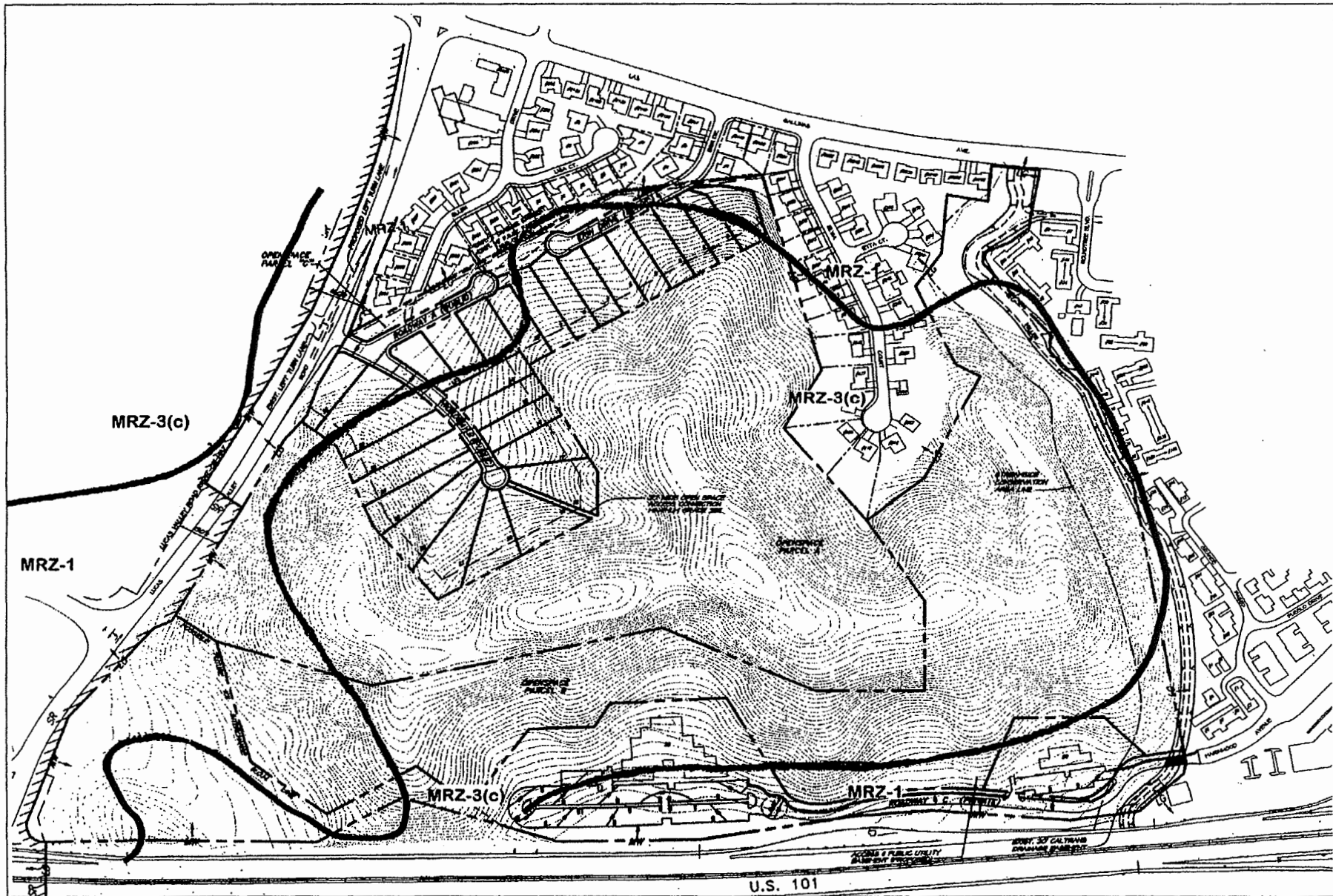


EXHIBIT 5.1-4 AGGREGATE RESOURCES
Oakview Master Plan

Source: Rogers/Pacific

Legend:

MRZ-1 Areas where information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists of their presence

MRZ-3(C) Areas containing mineral deposits. The significance of which cannot be evaluated from available data.

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North

Geology and Soils – Significance Criteria

The *State CEQA Guidelines*, Appendix N of the *Marin County Environmental Impact Review Guidelines and Procedures*, and professional practices identify potentially significant geologic impacts if a project:

- Exposed people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
 - Strong seismic ground shaking.
 - Seismic-related ground failure, including liquefaction.
 - Landslides.
- Is located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in on- or off-site landsliding, lateral spreading, subsidence, liquefaction, or collapse.
- Resulted in substantial soil erosion or the loss of topsoil.
- Is located on expansive soil, as defined in Table 18-1 of the Uniform Building Code, creating substantial risks to life or property.
- Had soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Had a potential to damage or disrupt critical infrastructure (such as water storage, utilities, entry road).
- Is located in a Mineral Resource Zone identified by the CDMG.

Geology and Soils -- Impacts and Mitigation Measures

Proposed grading for the project would involve 7,020 cubic yards of cut and 6,320 cubic yards of fill for the grading of street improvements and residential development in Parcel 1. This is substantially less grading than would have been required for the previous Proposed Project. This change in approach is based on the increased understanding of landslide features due to extensive additional work performed by the applicant's geotechnical consultant, Kleinfelder, Inc., since circulation of the 1996 Draft EIR. Approximately 26,220 cubic yards of cut and 20,780 cubic yards of fill would be required for office development in Parcel 2.

Impact 5.1-1 Landsliding

Several landslide deposits are present and have been identified in or near areas of proposed development. While some of the large ancient landslides were found to be stable, numerous smaller landslides are also present. These surficial landslides and debris flows could become reactivated during periods of heavy rain. Without adequate subsurface exploration and subsequent mitigation, landslide movements could potentially risk human life, damage or destroy existing structures off-site, block or damage roadways and escape routes (isolating people on-site and limiting access of emergency services), and sever utility service lines. This would be a significant impact.

The most significant potential geologic hazard to development on the site is landsliding. Landslides of various types blanket much of the site, both in and adjacent to areas proposed for development (see Exhibit 5.1-1). These include the four areas previously identified in the 1996 Draft EIR as potentially representing large ancient bedrock landslides, labeled areas A, B, C and D for the benefit of further study. Since area A is located in the southeast corner of the site within the right-of-way for the proposed Highway 101 / Lucas Valley Road interchange, it was determined that it would not impact the proposed development and would be investigated and repaired at a later date by Caltrans. Area B was mapped near the southern edge of the property, also well outside the limits of proposed development, and similarly was determined not to represent a significant impact to the planned development. Area C (located on the slope above proposed Roadway B; Lots 19 and 20) was explored through the use of both a continuous backhoe trench and deep core boring. Based upon this additional work, it was the conclusion of both the applicant's and County's respective geotechnical consultants that area C did not represent an ancient landslide. Area D, the largest mapped feature (Lots 6 through 17 and Roadway A) was similarly explored through the use of continuous trenching and four deep core borings. Area D was defined as a dormant, ancient bedrock landslide deposit. Based upon the information derived from the supplemental subsurface investigations, the stability of this old landslide was evaluated by the applicant's geotechnical consultant (under second party review by the County's consultant) and determined to be stable in its current configuration and therefore not a significant impact to the proposed development.

In order to comply with existing County requirements for Precise Development Plans, the project applicant has complied with the suggested scope of subsurface investigation of the previously identified potential landslide features as described in Section 5.1 of the 1996 Draft EIR. The applicant's geotechnical consultant has performed additional continuous trenching and deep continuous core borings. This has resulted in a determination and accurate definition of multiple slide plane characteristics, geologic structural orientation, the in-place lithology, and the physical limits and geometry of the large potential landslide areas C and D. As discussed above area C was found not to be a landslide and area D was found to be a dormant and currently stable landslide deposit. Therefore, the potential impact of these features on the proposed development has been adequately evaluated through this additional geotechnical exploration and engineering analysis. This additional work was reviewed and found to be acceptable through second-party professional peer review. The material and data obtained from the trenches and borings was used to analyze the stability of the slopes and to design appropriate mitigation measures.

In addition to the landslide features described above, several smaller bedrock landslides and apparent debris flows have also been mapped. These include:

- A relatively large debris flow deposit in a swale on Lots 5 and 6.
- A bedrock slide and debris flow in the southeast corner near the freeway reserve area.
- Several debris flows and slide scarps in the office parcel on the eastern flank of the site.

Colluvial deposits are mapped as being present to various extents on all proposed residential and commercial lots. However, because of the generally shallow nature of these soil deposits, it is anticipated that they may be mitigated during grading through traditional grading techniques such as removal and recompaction of loose materials encountered. It appears that more grading than shown on the Grading and Drainage Plan²⁹ may be necessary in order to develop the site, including the removal and recompaction of loose colluvial soils, debris flows and shallow landslides, even within the proposed minimal grading approach. Minimal grading responds to the design requirements for development in RMP districts as enumerated by the *Marin County Zoning*.³⁰ However, it must be based on a thorough understanding of the site geology and slope stability. Otherwise such grading might not mitigate the long-term risks of developing adjacent to hillsides, even if housing units are constructed on relatively level areas.

Mitigation Measure 5.1-1 In order to mitigate the potential for future landslide movements, landslides and colluvial soils near proposed development areas should be repaired during grading. Standard techniques proposed to repair the landslides include removal and recompaction of loose materials, keying and benching, and installation of subdrains and surficial drainage systems. All grading should be performed in compliance with the Uniform Building Code, as well as local code and agency standards, under the observation and testing of the project geotechnical engineer and engineering geologist.

Significance after Mitigation Through extensive additional subsurface exploration and engineering analyses, the applicant's geotechnical consultant has adequately characterized the extent and stability of these deposits. Landslide repair often is technically feasible from a geotechnical engineering standpoint and can produce stable building sites. Because a comprehensive grading and landslide repair program has been formulated as a part of the *Oakview Master Plan* (and subjected to a second-party professional peer review), it has been demonstrated that the landslides can be repaired using the standard geotechnical techniques proposed by the applicant's geotechnical consultant (removal, recompaction, retaining structures and surficial and subsurface drainage measures), in such a way that the significant impacts would be reduced to less-than-significant levels.

Implementation of Mitigation. The applicant would be responsible for implementing the mitigation measures proposed by their geotechnical consultant. The applicant also would be responsible for grading and repairing landslides identified by the plan.

Impact 5.1-2 Grading

Implementation of the proposed project would result in less-than-significant grading impacts.

Because the possible large ancient bedrock landslides near the areas of proposed development have been investigated thoroughly and found to be stable in their current positions, the need for mass grading has been eliminated. Grading in the current plan would, therefore, be limited to what is necessary to provide building sites, access roads and to remove and recompact the loose soils on and immediately adjacent to these areas of proposed development. Grading would be required to meet County Department of Public Works rules, regulations, and standards. Section 19.06.020 of the

²⁹ Sheet 5 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Grading and Drainage Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

³⁰ Section 22.47.024(1)(a), Grading, *Title 22 of the Marin County Code, Zoning*.

County Code requires that grading associated with all construction shall be performed in accordance with the applicable provisions of Chapter 70, Excavation and Grading, of the Uniform Building Code. Because Uniform Building Code compliance is a requirement of all construction in Marin County grading impacts would be less-than-significant and no mitigation measures would be required.

Mitigation Measure 5.1-2 No mitigation would be required.

Impact 5.1-3 Slope Stability

If not properly designed for, and / or mitigated during grading, cut, natural and fill slopes with gradients of 2:1 (horizontal:vertical) or steeper, could potentially erode or fail due to the low shear strength of some of the on-site materials. This would be a significant impact.

The applicant's geologists recommend cutting and filling slopes at a gradient of 2:1 (horizontal:vertical) or less. While this gradient has worked fairly effectively in Marin County for fill slopes less than 30 feet high, cut slopes at 2:1 gradients in melange areas (where the bedrock is highly weathered) have not performed as well. This is because, while many of the Franciscan and related bedrock units have moderate to high strengths when fresh, their relative strengths often decrease to lower levels once exposed to the elements for a few years and allowed to swell. It is particularly important to control water in landslide areas where concentrated runoff could lower stability of the existing landslides. These areas also are prone to increased erosion and surficial instability because of their low long-term strength when saturated. Thus, there is a significant possibility of erosion on graded slopes if proper drainage facilities are not provided.

Because of the low shear strength of some of the bedrock materials, if not properly evaluated, slopes cut at 2:1 gradients substantially higher than ten feet high would be likely to erode and experience localized failure until they reach equilibrium.

Mitigation Measure 5.1-3 The proposed Grading and Drainage Plan limits cut and fill slopes to an average of ten feet in height by combining cut slopes with engineered timber retaining walls. Additionally, the applicant's geologist recommends thin buttress or stability fills on slopes found to be of weak materials during grading. Both surficial and subsurface drainage provisions are also recommended. Although already proposed as part of the Grading and Drainage Plan, the specifics, such as extent and location, of these measures would be determined by the applicant's geologist or geotechnical engineer in the field at the time of construction. As currently proposed, mitigation measures would consist of a combination of site-specific recommendations by the applicant's consultant and local agency and code requirements. The following measures would be feasible in mitigating site-specific conditions and producing stable natural slopes, as well as engineered slopes, where cutting and filling would occur on the site:

- Evaluate the effects of bedding orientation (information acquired during the design phase investigation required for the Precise Development Plan) on the gross stability of existing and proposed slopes in the development area to prepare the geotechnical consultant to observe and direct grading operations and make site-specific determinations (see immediately following measure).
- Examine natural and cut slopes during grading to confirm their potential for long-term stability. If the geotechnical consultant determines that the exposed earth materials are weaker than expected, mitigate this condition by recompacting as an earth buttress or stability fill or by the selected use of retaining walls or other acceptable methods, as have been proposed by the applicant's geologist.

- Design drainage facilities to conform with agency and code standards. This should include terrace drains every 30 feet of vertical height on all graded slopes with grades steeper than 5:1. The terrace drains should have a minimum flowline gradient of six percent to make them self-cleaning (a minimal tenet of the Uniform Building Code). They also should be fitted with downdrains every 150 linear feet of terrace to allow for quick drainage.
- Plant cut and fill slopes with ground cover in order to prevent erosion, raveling, or development of rills, sloughs, and other failures which could reduce the effectiveness of stabilization methods whereas roots of newly planted vegetation would enhance stability of graded slopes by holding materials in place.

Significance after Mitigation Implementation of Mitigation Measure 5.1-3 would reduce the potential for slope instability to a less-than-significant level.

Implementation of Mitigation The applicant and applicant's geotechnical consultant would be responsible for selecting the appropriate measures from among those listed above to be used during site preparation for recompaction of loose materials encountered, landslide repair and road construction and, through deed restrictions and Codes, Covenants, and Restrictions (CC&Rs), for requiring individual lot-owners to implement the measures when developing their lots. Specific measures should be selected based on subsurface conditions which only would be fully apparent during construction.

Impact 5.1-4 Groundwater³¹

The direct impact of proposed development on groundwater would be less-than-significant. However, due to the anticipated increase in water infiltration into area D as a result of the proposed development, there is the potential for the seepage at the base of the cut on the adjacent property to increase unless the slide is drained properly. This would be a significant impact.

The project site would be connected to Marin Municipal Water District (MMWD) facilities for domestic and fire supply and no wells are proposed as a part of the project. It is also understood that no wells would be drilled to augment public water supplies for landscape irrigation or to provide water during construction. Such water would be obtained from the MMWD's reclaimed waste water supply hydrant, located on the south side of Lucas Valley Road. Due to the limited extent of proposed grading and relative depth of the groundwater table (at least 34 feet below ground surface), the potential direct impacts to the groundwater table would be less-than-significant. However, seepage has been reported emanating from the base of the cut slope of the adjacent development near Roadway A. This is a preexisting condition caused by grading for the adjacent tract. The cut slope exposed a zone of perched water that flows along the slide plane of landslide area D. Due to the anticipated increase in water infiltration into area D as a result of the proposed development, there is the potential for the seepage at the base of the cut on the adjacent property to increase unless the slide is drained properly.

Mitigation Measure 5.1-4 Drainage devices should be employed during grading to reduce the potential for seepage from area D to the adjacent residential development. This should include a subdrain system to intercept this seepage water and a surficial drainage system to reduce the ponding and infiltration of surface water into the landslide. The drainage system should be designed by the

³¹ Groundwater issues are further discussed in Section 5.2 *Hydrology and Drainage*.

project engineer and installed under his/her supervision. With proper surficial and subsurface drainage provisions, the impact of off-site seepage should be reduced to a less-than-significant level.

Significance after Mitigation Implementation of Mitigation Measure 5.1-4 would reduce the potential for seepage on the adjacent property to a less-than-significant level.

Implementation of Mitigation The applicant and applicant's geotechnical consultant would be responsible for selecting the appropriate measures from among those listed above to be used during grading to properly drain landslide feature D. Specific measures should be selected based on subsurface conditions which only would be fully apparent during construction.

Impact 5.1-5 Soil Creep

Soil creep could result in damage to structures built on moderate to steep hillsides. The would be a significant impact.

The applicant's geologist reported evidence of soil creep in 1983 and again following the 1997 / 1998 El Nino winter and recent wet winters. Creep is the gradual downhill movement of surficial soils due to the pull of gravity, commonly aided by the shrink and swell of clayey soils. If structures are placed on moderate to steep hillsides and not designed for creep loads, damage could result.

The 1983 report indicates that

Where the depth to bedrock on steep hillsides is excessive, the lateral forces caused by downhill creep would become so great that the use of deep foundations designed to resist creep forces may not be economically feasible. Construction should be avoided in these areas, the depth to rock should be reduced by site grading, or the creep forces should be eliminated by rebuilding these slopes as compacted earth buttresses with subsurface drainage facilities.

It should be noted that the proposed lots are mainly to be on gently sloping terrain, not generally prone to excessive creep forces. Through removal and recompaction of loose creep-prone materials in building areas, the potential for soils creep would be reduced to a less-than-significant impact.

Mitigation Measure 5.1-5 The following measure would be required to mitigate soil creep impacts:

- Design any structures on sloping ground to take creep forces into account. The Master Plan and Master Plan drawings indicate that proposed residential structures would be founded on raised-floor foundations which follow the existing topography with minimal grading. As such, the foundations for such structures should be designed for creep loads. The design phase investigations for development of individual lots should determine the depth of the weathering profile and the zone affected by creep and should be used to establish specific design standards for each lot to comply with the Uniform Building Code as required to obtain site alteration and building permits from the County for construction of individual housing units or ancillary residential structures.

Significance After Mitigation This measure would reduce soil creep impacts to less-than-significant levels.

Implementation of Mitigation The applicant should submit CC&Rs for County review and approval with the Precise Development Plan which incorporates Mitigation Measure 5.1-5 and which would require developers of individual lots to implement Mitigation Measure 5.1-5.

Impact 5.1-6 Seismicity

Strong seismic shaking is expected to occur on the site some time during the "life" of the development and could cause damage to structures and induce landsliding. This would be a significant impact.

Because of the proximity of the site to the San Andreas, Hayward, Rodgers Creek, and other active faults, there is a high probability that the site will experience strong ground shaking during the lifetime of any proposed structures. Peak ground shaking of 0.040g to 0.45g is possible from the nearby Hayward and San Andreas faults, respectively, during the life of the proposed development.

Actual effects would depend on the characteristics of the fault system where the earthquake occurs, the distance to the epicenter, magnitude of the earthquake, and specific on-site geologic conditions. The greatest potential hazard would involve areas of slope instability where known active or dormant landslides could be activated or reactivated and areas of new landsliding could occur, including localized failures of cut and filled slopes created by the project, although such sliding would not be likely to spawn catastrophic movements due to the competency of local bedrock material and the site's relatively shallow soils.³² However, the applicant's geological consultant has performed a seismic analysis of the potential stability of the dormant landslide feature D and has determined that it would be stable even during a large earthquake.

Ground settlement also could occur as a result of ground shaking. The magnitude of these potential impacts, thus the severity of exposing people and property to seismic hazards, would be greatly intensified should strong ground shaking occur during or after periods of wet weather when soils are saturated. Because construction in conformance with UBC building and construction standards would reduce the risks to human life and property at the site to levels ordinarily considered acceptable according to engineering standards in the Bay Areas, these other seismic impacts would therefore be considered less-than-significant.

Mitigation Measure 5.1-6 The following measure would be required to mitigate seismic impacts other than seismically-induced landsliding:

- Design and build all on-site structures, roads, and utilities in conformance with the UBC.

Because UBC compliance is a requirement of all residential construction in the County and Bay Area, no additional mitigation would be needed except for seismically induced landsliding which is addressed separately from Impact and Mitigation Measure 5.1-6 by Mitigation Measure 5.1-1 (above).

³² *Rationalizing the Seismic Coefficient Method*, Mary Hynes and Arley Franklin, Waterways Experiment Station, U.S. Army Corps of Engineers, Miscellaneous Paper GL-84,13, 1984, and "Considerations in the Earthquake-Resistant Design of Earth and Rockfill Dams", H.B. Seed, *Geotechnique*, 1979.

Significance after Mitigation UBC compliance would reduce seismic impacts to less-than-significant levels.

Implementation of Mitigation Developers of individual lots would be responsible for complying with UBC requirements when designing structures or site-specific improvements, and the Marin County Department of Public Works would monitor compliance during routine plan checking, permit granting, and site inspections.

Impact 5.1-7 Expansive Soils

On-site soils have a low to moderate shrink-swell potential. The shrink-swell effects of expansive soils would have a less-than-significant impact on proposed development.

Laboratory testing by the applicant's geotechnical consultant indicates that on-site soils are not expansive. Published information from the *Soil Survey of Marin County* indicates that the on-site soils have a low to moderate shrink-swell potential. Based on these sources, it is concluded that the shrink-swell effects of expansive soils would not have a significant impact on proposed development. With the use of standard geotechnical engineering grading and design techniques the affects of expansive soils should not pose a significant impact.

Mitigation Measure 5.1-7 No mitigation would be required.

Impact 5.1-8 Liquefaction

Liquefaction of site soils would not be expected to result in significant impacts.

Liquefaction is a process by which a cohesionless soil, such as sand, coarse silt, or fine gravel, becomes "liquefied" upon losing its shear strength through intense shaking. This phenomenon is common in loosely compacted sandy fills near large sources of water or with a high water table.

Most of the Oakview site is underlain by bedrock with a thin soil cover. Relatively thin and loose colluvial soils on the west slope of the ridge are expected to be recompacted during grading and, thus, not prone to liquefaction. Therefore, the potential impacts from liquefaction are less-than-significant.

Mitigation Measure 5.1-8 No mitigation would be required.

Impact 5.1-9 Rockfall

Rockfall could damage structures or injure people. Bedrock outcrops and / or residual boulders are reportedly rare at the site. This would be a potentially significant impact.

Development activities could reveal, uncover, isolate, or destabilize rocks not previously identified by the Master Plan level geologic reconnaissance or by published or unpublished source materials. Based on the evidence compiled and reviewed to date, identification of such features at a future time would not affect the feasibility of site development both because few large rock outcrops are known to be present on the site and because it technically is possible to mitigate this potential impact. Rather than dismissing the small possibility of this potential hazard as speculative, it is addressed in order to provide mitigation in the event such measures are needed.

Mitigation Measure 5.1-9 The following measure would be required to mitigate potential rockfall impacts:

- Remove any unstable materials encountered adjacent to development areas.
- Remove the materials and place rip-rap or other engineered erosion control devices, construct rockfall entrapment trenches, or undertake selective rock bolting of remaining materials with galvanized or gray PVC-coated gabion mesh.
- Set development back from eroding rock faces not mitigated by the above measures or in addition to implementing those measures, depending on specific situations.

Significance after Mitigation Mitigation Measure 5.1-9 would reduce potential rockfall impacts to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval would be conditioned upon incorporation of this mitigation. The Precise Development Plan should indicate which type(s) of mitigation have been identified for each potential rockfall. The applicant's CC&Rs should require future developers to implement the measures on a lot-by-lot basis.

Impact 5.1-10 Artificial Fill Areas

New construction on existing artificial fill, where encountered, could settle unevenly and be damaged or could stimulate or accelerate erosion. This would be a significant impact.

The areas of artificial fill appear to be limited to the periphery of the site. It is expected that these fill materials were placed during development which has occurred adjacent to the site, such as to build roads (including Highway 101) and construct residential subdivisions (streets, utilities, and housing units). If these materials are in the vicinity of proposed grading, they could settle non-uniformly, or be subject to erosion. However, these materials would not affect the feasibility of the site development.

Mitigation Measure 5.1-10 The following measures would be required to mitigate artificial fill impacts:

- Conduct field investigations when formulating the Final Grading Plan required for the Precise Development Plan to determine the presence and limits of such materials in the vicinity of parts of the site proposed for development.
- Remove and recompact artificial fill located in or adjacent to areas of proposed grading during landslide repair, grading operations for road construction, or development of individual private lots under the observation and testing of a registered engineer.

Significance after Mitigation Mitigation Measure 5.1-10 would reduce potential impacts to less-than-significant levels. Removal and recompaction of existing fill materials potentially could result in secondary impacts which could include short-term visual, noise, traffic, airborne dust, and water use impacts during construction. However, due to the limited area that would be involved to mitigate artificial fill deposits such impacts would be less-than-significant.

Implementation of Mitigation The Precise Development Plan should identify the locations and limits of artificial fill in relation to proposed roadway alignments, utility corridors, and development areas and also should be accompanied by CC&Rs which incorporate Mitigation Measure 5.1-10 and require developers of individual lots to implement Mitigation Measure 5.1-10. Approval of the Precise Development Plan should be conditioned on the applicant's implementation of Mitigation Measure 5.1-10 when constructing on-site roads and installing utilities.

Impact 5.1-11 Faulting and Ground Surface Rupture

The possibility of surface ruptures on the site is very low. This would be a less-than-significant impact.

The project site is not located in a State-mandated Earthquake Fault Zone (formally Alquist-Priolo Special Studies Zone) for active surface fault rupture. Therefore, the possibility for on-site surface rupture is considered to be very low.

Mitigation Measure 5.1-11 No mitigation would be required.

Impact 5.1-12 Aggregate and Rare Mineral Resources

No aggregate resources or rare minerals are known to be present on the site. This would be a less-than-significant impact.

There are no areas of known aggregate resources within the site boundaries. The friable nature of much of the site's bedrock prohibits its usefulness as a commercial aggregate material. In addition, other more proven sources of aggregate resources are available.

The on-site bedrock materials are composed chiefly of detrital sand, silt, and clay, with a mapped zone of volcanic bedrock on the eastern side. No deposits of rare minerals in commercial quantities have been reported as underlying the site.

Mitigation Measure 5.1-12 No mitigation would be required.

Impact 5.1-13 Maintenance of Geotechnical and Hydrologic Mitigation Measures

The difficult geologic conditions on-site and the mitigation measures required to stabilize landslides would involve long-term monitoring and maintenance after site development to ensure the effectiveness and success of mitigation.

Many of the geotechnical and hydrologic mitigation measures (such as drainage collection, erosion control, and landslide repairs) would require periodic inspections and maintenance during the life of the development. If such facilities are not maintained properly, long-term drainage or slope stability problems could occur on individual lots or in common open space areas and could have off-site as well as on-site impacts.

A Geologic Hazard Abatement District (GHAD) established for the project would provide a mechanism to ensure proper inspection and monitoring of the effectiveness of mitigation measures

incorporated into the project and to undertake routine maintenance of facilities required to minimize the project's environmental impacts.³³ The GHAD could be staffed by a geologist who would answer to a project site homeowners association and office building owner(s) and, ultimately, the County. The geologist's duties would be to:

- Perform periodic geologic inspections.
- Monitor mitigation measures to assure effectiveness.
- Schedule routine cleaning and maintenance of drainage devices.
- Provide recommendations for additional erosion control or mitigation of any unforeseen hazards which develop in the future

This type of system allows for a consistent organized cooperative effort to maintain the condition of the hydrologic, geologic, and engineering mitigation measures in both the developed and open space parts of the site and to reduce the potential for future hazards. The project's GHAD should be set up primarily as a preventive and maintenance program rather than solely as a mechanism for making repairs. Landslides and other potential geologic and hydrologic hazards should be mitigated during the grading phase of work.

GHADs essentially call for the formation of assessment districts to tax affected property owners to provide funding for the program. GHADs can be administered in several ways. Most commonly, homeowners' associations hire a consultant who specializes in GHAD monitoring to provide the technical expertise necessary and act as liaison between the homeowners and County engineer. This usually is a geotechnical company which is approved by the County. Once there is agreement on the necessary scope, an assessment district is formed to fund the consultant's work and the cost of County review. Generally, a fund or contingency for a fund is established by the homeowners' association to pay for unexpected repairs or required geologic or hydrologic hazard mitigation (such as flooding or mudslides from a heavy storm event).

In the case of the proposed project, the Master Plan does not indicate yet whether or not the applicant would establish a homeowners' or property owners' association as part of project implementation. Furthermore, division of the site into Parcel 1 for residential development and Parcel 2 for office development would split long-term responsibility for overseeing maintenance of the entire project site. A GHAD for this project could be organized to administer the entire site.

Mitigation Measure 5.1-13 The following measure would be required of the applicant to insure the effectiveness of long-term maintenance in mitigating the project's impacts:

- The project applicant shall be responsible to establish a funding entity to insure the effectiveness

³³ Geologic Hazard Abatement Districts have been established and have worked well in other communities, including Clayton, Blackhawk, San Ramon, Moraga, Orinda, and Palos Verdes.

of long-term maintenance in mitigating the project's geotechnical and hydrologic impacts. This entity could be a homeowners' or property owners' association, an assessment district, or a Geologic Hazard Abatement District (GHAD) for the project site. Whatever entity is established it shall provide for the technical aspects of long-term maintenance to be handled by a geotechnical consultant and reviewed by the County. The professional consultant should follow a regular maintenance schedule and should prepare and submit progress reports to the County every six months for its review. This would place a responsible professional, agreed to by the County, in the position of overseeing the site. Only site property owners would participate by paying taxes/fees into the fund.

Significance after Mitigation Establishment and operation of such a funding mechanism for the project site would prevent and, through ongoing maintenance, reduce the magnitude of long-term geologic and hydrologic impacts to less-than-significant levels.

Implementation of Mitigation The applicant should establish the funding entity (homeowners' or property owners' association, assessment district, or GHAD) to cover the entire site (both proposed Parcels 1 and 2). A draft of the funding entity should be submitted with the Precise Development Plan, and the entity's formal establishment should be a condition of filing the Final Subdivision Map.

Impact 5.1-14 Naturally Occurring Asbestos

The possibility of exposure from naturally occurring asbestos is considered very low. This would be a less-than-significant impact.

Some types of serpentine rock contains naturally occurring asbestos. Disturbance of thickly concentrated asbestos ore during deep cutting and/or blasting during grading could potentially release asbestos particles into the environment and permit human contact. However, there are no known substantial concentrated deposits of asbestos in the vicinity of the subject project. Additionally, grading at the site is anticipated to be minimal and therefore, deep ripping and blasting will not be performed. Therefore, the possibility of exposure from naturally occurring asbestos is considered to be very low.

Mitigation Measure 5.1-14 No mitigation would be required.

5.2 HYDROLOGY AND DRAINAGE

Hydrology and Drainage -- The Setting

REGIONAL HYDROLOGY

The project site occupies 106 acres of moderate to steep hillslopes and gently sloping colluvial deposits located northwest of the Lucas Valley Road / Highway 101 interchange in eastern Marin County (see Exhibit 5.2-1). Approximately 40.4 acres of the site drain to the south-southeast and ultimately discharge into the partly leveed and dredged upper reach of Gallinas Creek via a tributary channel parallel to Lucas Valley Road and ultimately into San Pablo Bay. The remaining 65.6 acres drain north-northwest to Miller Creek which forms the northern site boundary. The Miller Creek Watershed encompasses 5,133 acres at its local outlet under Highway 101. East of Highway 101, Miller Creek traverses the Silveira Ranch and St. Vincent Academy (primarily agricultural lands) en route to the marshlands and mudflats of San Pablo Bay.

Site elevations range from 300 feet along the prominent north-south ridgeline to roughly 25 feet adjacent to both the Lucas Valley Road / Highway 101 and Miller Creek Road / Highway 101 undercrossings. Oak woodland is the prevailing habitat on mid- to upper-elevation hillsides while grassland dominates lower colluvial slopes.

Land uses in the vicinity of the site include single-family residential (north and west), offices (south), agriculture / cattle grazing (east of Highway 101, the eastern site boundary), and commercial (north of Miller Creek just south of Marinwood Avenue).

Rainfall in the site vicinity occurs primarily during the winter rainy season which normally extends from November through March. Mean annual rainfall at the site as mapped by the U.S. Geological Survey (USGS) is 30 inches.¹

Major floods in the site vicinity typically result from long duration winter storms which develop over the Pacific Ocean. Moderate to intense cloudbursts nested in a two- to three-day storm can generate high magnitude pulses of stormwater runoff from saturated watershed soils. Recent examples of significant floods in Marin County include the January 1982, February 1986, and January 1995 rainstorms. These storms each occurred as parts of longer duration events which exhibited maximum short-duration intensities in the ten- to 50-year recurrence interval range.

¹ *Mean Annual Precipitation Depth-Duration Frequency Data for the San Francisco Bay Region, California*, S.E. Rantz, U.S. Geological Survey Open-File Report, 1971.

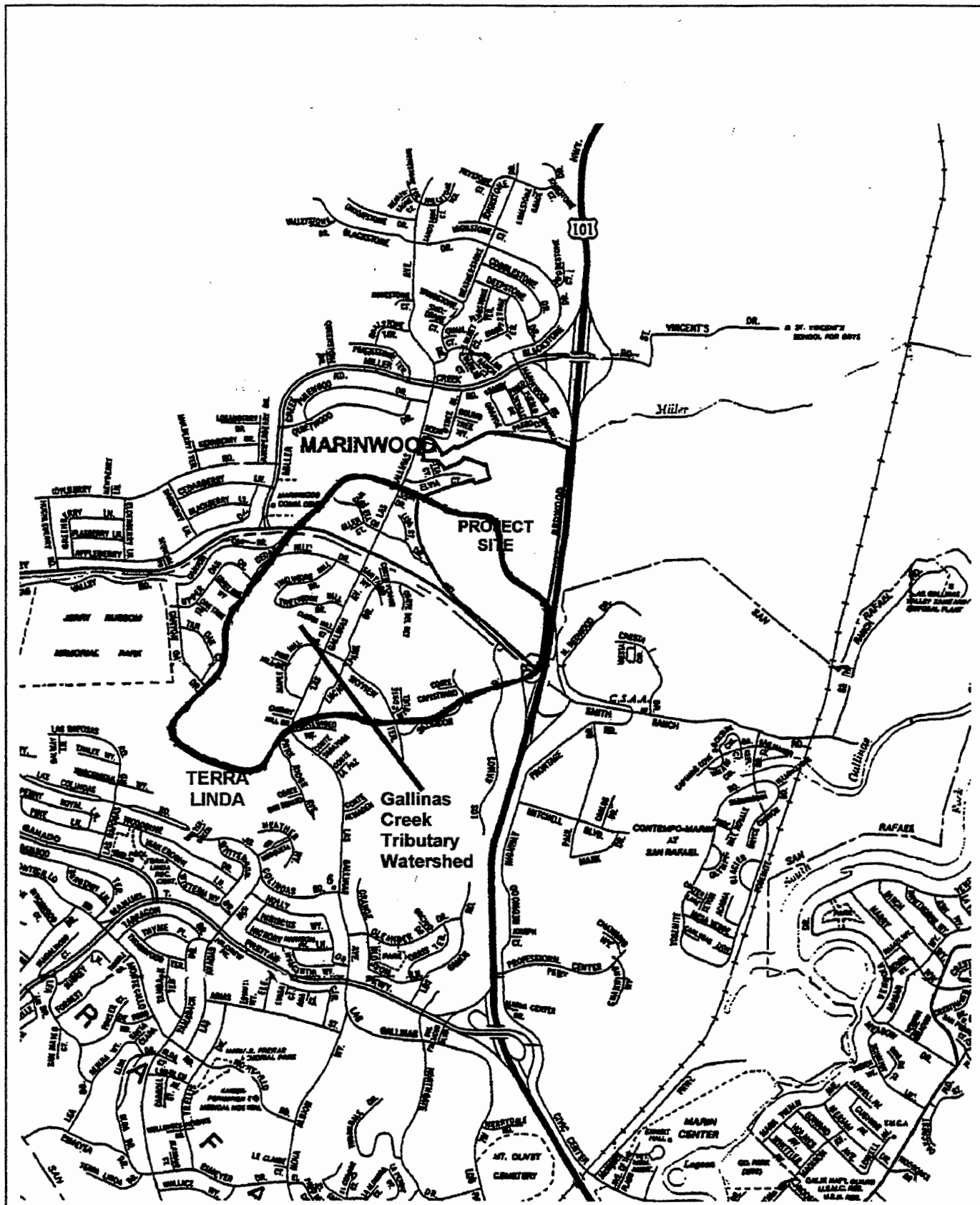


EXHIBIT 5.2-1 REGIONAL HYDROLOGY
Oakview Master Plan

↑
 North

Source: Clearwater Hydrology / USGS

Exhibit 5.2-2 presents the flood insurance rate map (FIRM) published for Miller Creek by the Federal Emergency Management Agency (FEMA).² The reach of the 100-year flood boundary only extends outside the main creek channel in the vicinity of Paseo Grande and Seville Drive in the adjacent Casa Marinwood neighborhood. Backwater flooding which can occur in this low-lying area of the Miller Creek floodplain is influenced by the reduced channel capacity east of the Highway 101 crossing. In this low-gradient downstream reach, sediment deposition, creekside levees, and dense in-channel vegetation combine to produce heightened upstream flood water surface elevations during severe rainstorms.³ According to hydraulic information obtained from Caltrans engineers, the capacity of the Highway 101 bridge over Miller Creek is sufficient to pass the 100-year flood with adequate freeboard.⁴

In 1992, the City of San Rafael commissioned a hydraulic analysis of the lower reach of Miller Creek, downstream of Highway 101.⁵ The FEMA flood hazard zone through this reach was reduced as the result of the updated flood modeling. Since the targeted study did not encompass the reach of Miller Creek upstream of the Highway 101 bridge, the actual extent to which the slightly adjusted flood hazard zone would reduce the extent or severity of flooding in the Casa Mainwood neighborhood is unknown. However, with the slight reduction in the area of 100-year flooding predicted for the lower reach, it is likely that the Casa Marinwood flooding is somewhat less severe than indicated by the original FEMA flood assessment.

Flooding on the small Gallinas Creek tributary along Lucas Valley Road (the Lucas Valley Road tributary channel) can occur in the vicinity of the box culvert due to lack of hydraulic capacity and obstruction by debris.⁶ Backwater accumulating upstream of the box culvert inlet floods the west shoulder of Highway 101, south of the culvert entrance.

No water quality data are available for Miller Creek or the Lucas Valley Road tributary channel. Development and continued grazing in parts of the Miller Creek Watershed suggest the likelihood of elevated levels of nitrate and ammonia, fecal coliform bacteria, petrochemical residues, heavy metals, and fertilizer and pesticide constituents in Miller Creek flows. Contaminant concentrations in stormwater runoff typically are greatest during the first significant storms of the winter and during the early phases of succeeding runoff events.

² *Flood Insurance Study for Unincorporated Areas of Marin County California*, Federal Emergency Management Agency (FEMA), 1982 (including March 2, 1982 FIRM Map).

³ "Hydrology and Drainage", *Daphne / Bacciocco Development Plan ADEIR (1986 Administrative Draft EIR)*, Philip Williams & Associates, 1986.

⁴ Clearwater Hydrology conversation with Charlotte Cashin, Caltrans staff engineer, February 1996, and *Preliminary Report: Miller Creek Bridge (Widening)- Bridge No. 27-04*, California Department of Transportation, Office of Structures Design, 1983.

⁵ *Letter Report on the FEMA Limited Map Maintenance Program (LMMP) Flood Insurance Study for Miller Creek*, Ensing & Buckley, May 1993.

⁶ Clearwater Hydrology conversation with Andy Preston, staff engineer, Department of Public Works, City of San Rafael, February 1996.

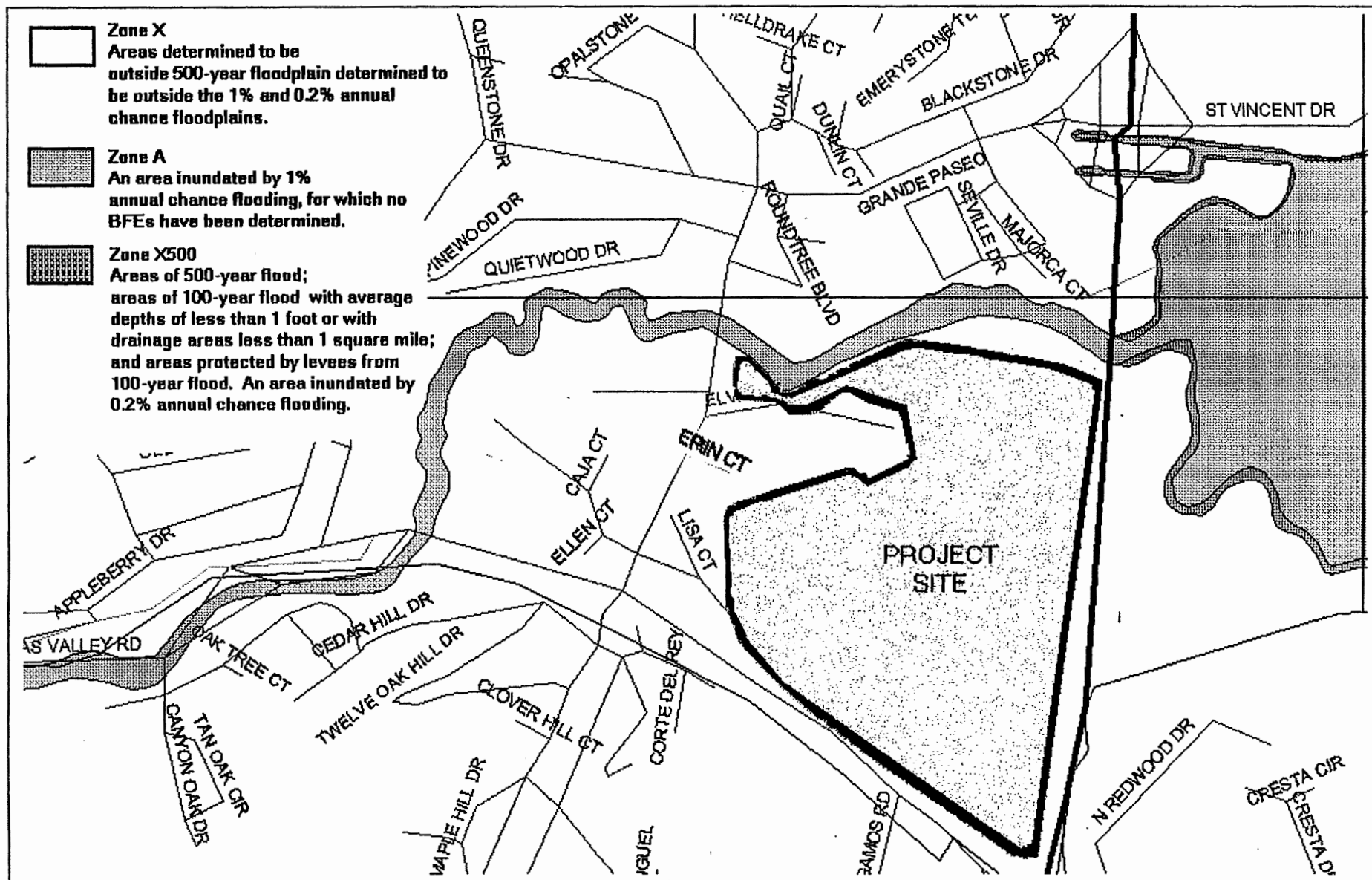


EXHIBIT 5.2-2 FLOOD INSURANCE RATE MAP
Oakview Master Plan

↑
North

LOCAL HYDROLOGY

Surface Water

The project site contains six sub-watersheds (see Exhibit 5.2-3). Sub-watersheds 1 and 2 comprise 19.7 and 20.7 acres, respectively, and drain to Lucas Valley Road. Sub-watershed 3 and 4 (8.6 and 14.8 acres) drain west and eventually enter linked storm drain inlets on Erin Drive and a single headwalled inlet at the northwest corner of the site. This combined runoff flows north along Etta Court to the system outlet in Miller Creek. Sub-watershed 5 (11.8 acres) drains entirely overland to Miller Creek. Sub-watershed 6 (30.4 acres) overlooks Highway 101, and all runoff is directed north along the western shoulder of the freeway to Miller Creek.

Exhibit 5.2-3 shows drainage patterns and storm drain system alignments. Runoff from Sub-watershed 2 flows west-southwest to an 18-inch culvert with concrete headwall at the edge of the property at 281 Ellen Drive. From here, runoff is conveyed in the existing storm drain system underneath Lucas Valley Road to the channel south of and parallel to the roadway. Runoff continues east under Los Gamos Drive and part of the Marin Technology Center parking lot before daylighting a couple of hundred feet downstream in another earthen channel segment. Before entering a three- by six-foot box culvert under Highway 101, runoff in the channel is joined by stormwater runoff from Sub-watershed 1, which is routed via storm drains from the northern shoulder of Lucas Valley Road at the Highway 101 underpass. The box culvert ends on the east side of the freeway, and, after a short earthen reach, the channel reenters a box culvert, emerging east of the northbound exit ramp in an earthen channel which winds through the industrial park and discharges into the tidal reach of Gallinas Creek.

A study prepared for the City of San Rafael and Caltrans on the stormwater drainage conditions at the Lucas Valley Road / Highway 101 interchange concluded that the three- by six-foot culvert was undersized and did not meet Caltrans drainage criteria.⁷ Not only was the culvert found to be incapable of handling the ten-year discharge without backwater conditions, but, during the design 100-year rainstorm, it also was shown to create undesirable conditions at two additional freeway culvert crossings farther south along the western shoulder. These 24- and 30-inch freeway culverts meet Caltrans drainage criteria as long as there is no upstream diversion at the three- by six-foot box culvert. The study concluded that a second parallel culvert would need to be constructed at the Lucas Valley Road / Highway 101 interchange to accommodate increased flows generated by proposed interchange construction. While there is a consensus regarding the necessary construction of a second parallel culvert under Highway 101, it would be expensive, and to date, neither the City nor Caltrans has expressed an intention to fund the project.⁸

Site runoff emanating from Sub-watersheds 3 and 4 flows downslope and overland and either directly enters the existing Marinwood storm drain system along the western site boundary or is intercepted upslope by cross-slope concrete-lined ditches. These concrete-lined ditch segments transport hillslope runoff to the storm drain inlets at the ends of Ellen Drive and Erin Drive and to the off-street inlet at the northwest corner of the site.

⁷ *Final Drainage Report: Lucas Valley Road / U.S. 101 Interchange*, CH2M Hill, September 1995.

⁸ Clearwater Hydrology conversation with Andy Preston, City of San Rafael, April 2000.

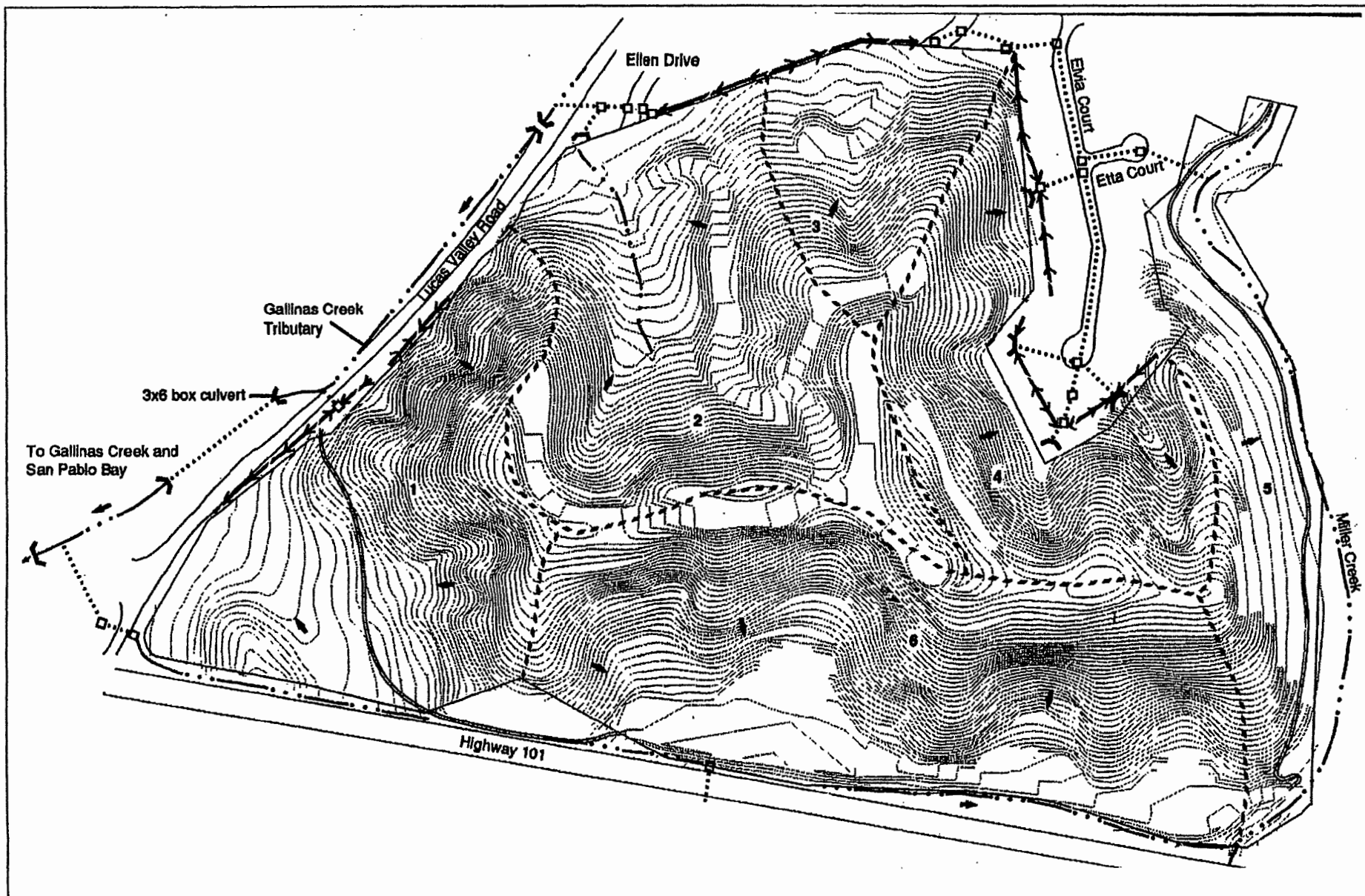


EXHIBIT 5.2-3 SITE HYDROLOGY
Oakview Master Plan

Source: Clearwater Hydrology

Legend:

— · — · — Creek/Roadside Ditch

← Concrete Interceptor Ditch
 (Arrow Direction=Flow Direction)

□ Storm Drain Inlet

····· Storm Drain

--- Sub-watershed Boundary

2 Sub-watershed

↘ Culvert/Storm Drain Headwall Inlet

→
 North

Two gaps exist in the perimeter interceptor ditch system. The first gap is located on the northern half of the property at 282 Ellen Drive, roughly along the boundary between site Sub-watersheds 1 and 2. The second gap is located at the northwest corner of the site. Here, local slope runoff merges in a topographic depression adjacent to 1 Erin Drive and 291 Elvia Court. There are no interceptors along the eastern boundary of 1 Erin Drive or southern boundary of 291 Elvia Court. Either the ditch ends 20-30 feet upslope, or it is buried under sediment which has slid or otherwise eroded from the adjacent hillslope. The 24-inch reinforced concrete pipe (RCP) culvert and headwall accepts local runoff and conveys it to the Etta Drive storm drain system but is nearly 50 percent obstructed with sediment. Local stormwater runoff ponds in the adjacent-depression before draining via the culvert.

Written testimony from Elvia Court property owners has stressed that subsurface seepage occurs along the cut face of the hillslope. Subsurface seepage along Lisa Court and Ellen Drive appears to occur in conjunction with some surface overflows. The applicant's civil engineer has suggested that gopher / rodent holes could be partly responsible for creating nuisance flooding and subsurface drainage conditions. While animal burrows can produce local subsurface routes for stormwater, their existence does not fully explain the widespread problems reported by area property owners.

Groundwater and Sensitive Habitats

The *Marin County Soil Survey* maps two soil units on the site.⁹ Tocaloma-Saurin association-very steep is mapped on the ridgeline and steeper parts of the site. Tocaloma-Saurin soils are primarily loams and clay loams, 20-40 inches deep, overlying fractured bedrock. Soil permeability is described as moderate to moderately rapid, and both runoff potential and erosion hazard are high. Xerorthents-Urban land complex soil unit -- 0 to 9 percent slopes -- is located on adjacent toe slopes and the valley floor. Past cutting of the toes of hillsides to build existing off-site homes produced a mixture of soil and crushed and broken rock. Soil properties vary highly, depending on the extent of cut and fill grading activities which occurred during the development process. Erosion hazard can be high where soils are left exposed and unvegetated following construction.

According to the EIR geologist, a significant portion of the soils on the middle and lower colluvial slopes are remnant features of ancient and more recent landslides and slumps (see **5.1 Geology and Soils** Exhibit 5.1-1). The generalized aerial photographic interpretation used by the *Soil Survey* does not investigate such features. These landslide deposits sit on the upper zone of fractured bedrock, and the interface between the two units functions as a pathway for the downslope movement of groundwater. This shallow groundwater originates as infiltrated rainfall and spring discharge from the bedrock fractures.

Under intense rainfall conditions, small slump failures can occur in these large landslide deposits. Development of the Marinwood neighborhood in the 1960s involved cutting of slopes along the base of these deposits which created local seepage problems for properties along the site boundary.

Seeped soil conditions were observed at two principle locations and additional sites during December 1995 and January 1996 site inspections. The locations of these seeped soils are shown on Exhibit 5.3-1. There is a strong correlation between the landslide deposits mapped on Exhibit 5.1-1 and the seeped soils mapped on Exhibit 5.3-1. A perennial spring exists at the head of the main drainageway

⁹ *Marin County Soil Survey*, Soil Conservation Service, U.S. Department of Agriculture (USDA), 1985.

associated with Sub-watershed 2. A larger zone of seeped soil fans out downslope of the spring which keeps the grass green during the dry season.

A second, principle seeped zone occurs in and adjacent to a broad swale, located between the main hillslope and the lower knoll immediately northwest of the Lucas Valley Road / Highway 101 interchange. During the January 1996 site inspection, the surface soils were saturated and exhibited ponding in the vicinity of the swale outlet just above Lucas Valley Road. The saturated conditions followed a one- to two-week period of clear weather. Thus, seepage was not related to recent runoff.

Additional zones of seeped soils were mapped along the toe of the east-facing slope, parallel to Highway 101. These seeped zones are associated with the toes of colluvial and landslide deposits which fill small ravines. While saturated or ponded conditions were not always observed in these areas during the site inspections, the soils were moist to wet, and the survey conducted by the EIR biologists noted the presence of wetland indicator plants.

The zones of seeped soils that were verified as jurisdictional wetlands by the Corps of Engineers are shown in Exhibit 5.3-1. The off-site occurrence of seepage affecting the properties fronting Ellen Drive, Lisa Court, Erin Drive and Etta Drive has required many homeowners to install subsurface drainage systems and, in some cases, to reconstruct building foundations.

Miller Creek

Miller Creek, a USGS blue-line stream, forms the northern site boundary. *The Marin Countywide Plan* (Policy EQ-2.3) establishes a Stream Conservation Area (SCA) along all blue line watercourses shown on the most recent United States Geological Survey quad sheets. According to Policy EQ-2.3, where large tracts of land in the City-Centered Corridor are proposed for development, a 100-foot buffer should be applied, where consistent with legal requirements, and other planning and environmental goals. The riparian corridor lining Miller Creek is healthy and largely undisturbed. Exhibit 2.2-2. shows the 100-foot SCA associated with the on-site reach of Miller Creek.

The south bank of Miller Creek, just upstream of the Highway 101 bridge, has been disturbed biologically. Quarter-ton pieces of riprap have been installed to prevent low bank erosion around the bend approaching the bridge and to train flows through the bridge undercrossing. Extensive bedrock outcrops are visible in the bed and on the creekbanks through this lower reach and extending farther upstream past the Marinwood Avenue extension. Although the bedrock is relatively soft, the outcrops have stabilized the creekbed against downcutting.

Water Quality

No data exist on water quality indicator constituents for any of the site drainageways, including Miller Creek. In the absence of grazing, the site does not generate any pollutant loading to Miller Creek or the Gallinas Creek tributary parallel to Lucas Valley Road. However, detectable levels of stormwater pollutants are likely in both of these drainageways due to existing residential and agricultural uses upstream of the site. Stormwater contaminants associated with vehicular traffic, including oil, grease, and heavy metals, affect background water quality. It also is likely that contaminants associated with cattle grazing and equestrian facilities are detectable in Miller Creek flows. Elevated levels of ammonia, nitrates, fecal coliform bacteria, turbidity, and oxygen-demanding substances typically are measured in stormwater runoff from grazed lands and from older equestrian facilities. Irrigation runoff from residential land typically contains high concentrations of nutrients, including nitrate-nitrogen, phosphorous, and herbicides.

NPDES Stormwater Permit Requirement

The Regional Water Quality Control Board (RWQCB) has permit authority over "non-point source" discharges to natural receiving waters. Any construction project of five acres or larger requires a National Pollutant Discharge Elimination System (NPDES) General Construction Activity stormwater permit. Such permits must meet all applicable provisions of Sections 301 and 402 of the Clean Water Act. This means that permitted entities must employ Best Management Practices (BMPs) for stormwater pollutant control. Site pollutant source identification and plans for reducing contaminant migration off-site are critical to any Stormwater Pollution Prevention Plan (SWPPP). In most cases, sediment management is a critical part of the SWPPP. Constructed wetlands can also be used to filter contaminant-laden sediments and floatables from developed site stormwater.

The U.S. Environmental Protection Agency (USEPA) through the auspices of the National Urban Runoff Program (NURP) has compiled data on representative contaminant concentrations in urban stormwater. The NURP was initiated in 1978 to clarify the extent and nature of pollution of receiving waters due to urban stormwater runoff in the United States. Further research led to the amended water quality criteria that have been adopted by the California Regional Water Quality Control Board. These criteria are published in the "Water Quality Control Plan for the San Francisco Bay Region (2)", referred to as the "Basin Plan".¹⁰

USEPA's list of standard pollutants of concern in typical urban stormwater for which set threshold criteria are available includes the following:

Nitrite	Nitrite (as N)
Nitrate	Nitrate (as N)
Cu	Total Copper
Pb	Total Lead
Zn	Total Zinc

Oil and Grease

In its assessment of water quality data from a large number of municipalities, the USEPA assumed baseline conditions representative of mixed commercial, residential, and open space urban land uses.¹¹ The USEPA found that 90 percent of all urban runoff contaminants are removed by the first 0.5 inches of runoff. For comparative estimates of pre- and post-project contaminant loading from site watersheds, see ~~Impact~~ Exhibit 5.2-6, below.

¹⁰ *Water Quality Plan for the San Francisco Bay Region (2)*, California Regional Water Quality Control Board, 1995.

¹¹ *Results of the National Urban Runoff Program, Volume I, Final Report*, Water Planning Division, U.S. Environmental Protection Agency, 1983. Heavy industrial land use was not included in the data base.

Hydrology and Drainage -- Significance Criteria

The project would result in a significant impact if it:

Water Quality

- Violated any water quality standards or waste discharge requirements.
- Otherwise substantially degraded water quality.

Ground Water

- Substantially depleted groundwater supplies or interfered substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Drainage

- Substantially altered the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.
- Substantially altered the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increased the rate or amount of surface runoff in a manner which would result in flooding on or off-site.
- Created or contributed runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Required or resulted in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Flooding

- Placed housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
- Placed within a 100-year flood hazard area structures which would impede or redirect flood flows.
- Exposed people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Seiche, Tsunami, and Mudflow

- Was inundated by seiche, tsunami, or mudflow.

Hydrology and Drainage -- Impacts and Mitigation Measures

This analysis focuses on the potential project impacts on the following characteristics:

- On-site drainage patterns, erosion, and channel stability
- Site peak flows
- On-site and downstream sedimentation, hydraulic structure capacity, and flooding
- On-site and off-site groundwater seepage and sensitive habitats
- Water quality in on-site and downstream receiving waters due to non-point stormwater contaminants derived from vehicular traffic and site grading and construction
- Cumulative impacts of projects proposed within the Miller Creek and the Gallinas Creek tributary watersheds

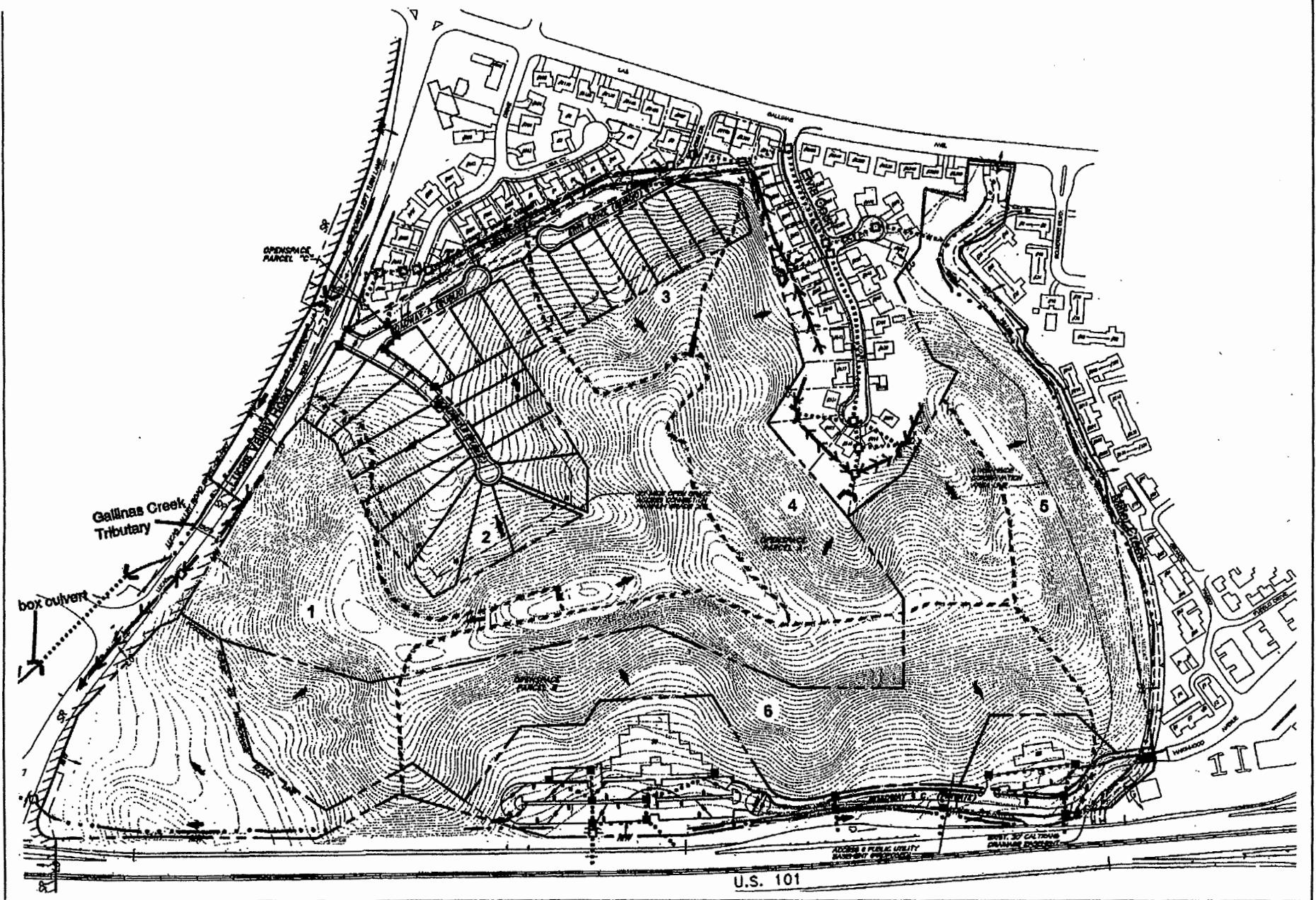
The *Oakview Master Plan* includes a technical site plan residential area layout, administrative / professional layout (showing office building footprints and residential building envelopes but no housing unit footprints on individual lots) and a Grading and Drainage plan.¹² The applicant's civil engineer, I.L. Schwartz Associates, also prepared sub-watershed peak flow computations¹³ and a hydraulic model assessment of the adjacent subdivision storm drain system,¹⁴ both of which were reviewed independently by the EIR hydrologist (see Impact 5.2-2). However, detailed design of culvert / storm drain sizes and capacities and detailed geotechnical engineering plans (groundwater seepage controls) have not been defined yet and will not be known until later in the planning process.

Site improvements envisaged by the *Oakview Master Plan* includes some hillslope grading, retaining wall construction, landslide repair, residential development, roadway and driveway construction, storm drain system installation, and bridge construction. Site grading would shift existing sub-watershed boundaries slightly and result in minor alterations to surface drainage patterns. Exhibit 5.2-4 shows the post-project watershed boundaries and stormwater drainage patterns. Stormwater runoff from most of Parcel 2 would be conveyed in a new storm drain system to Miller Creek whereas runoff from the remaining sub-watersheds ultimately would enter existing storm drain systems along the southern and western site boundaries. Stormwater runoff from Sub-watersheds 1 and 2 would drain to the Ellen Drive storm drain system, which conveys runoff to the three foot by six foot culvert under Highway 101. Sub-watershed 3 and 4 runoff would enter the Erin Drive storm drain system,

¹² Sheet 6 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Residential Area Layout, sheet 7 the proposed Administrative / Professional Layout and sheet 5 the Grading and Drainage Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

¹³ Revised Preliminary Drainage Analysis, Oakview: A Residential & Administrative / Professional Development, Marin County, California, A.P.N. 164-270-03, February 22, 1999.

¹⁴ I.L. Schwartz Associates, Inc. letter to Tim Haddad, Marin County Environmental Coordinator, dated Nov. 18, 1999, with attached "Hydraulic Analysis: Oakview- Erin Drive" and "Hydraulic Analysis: Oakview- Ellen Drive".



**EXHIBIT 5.2-4 POST PROJECT
WATERSHEDS AND DRAINAGE
Oakview Master Plan**

LEGEND:

- | | | |
|--|-------------------------------------|--------------------------------------|
| — · — · — Creek/Roadside Ditch | □ · □ Storm Drain Inlets (Existing) | — · — · — Sub-Watershed Boundary |
| ← Concrete Interceptor Ditch
(Arrow Direction=Flow Direction) | ■ · ■ Project Storm Drain Inlets | 2 Sub-Watershed |
| | · · · · Storm Drain Alignment | ↘ Culvert/Storm Drain Headwall Inlet |

North

which discharges to Miller Creek roughly 400 feet downstream of the Las Gallinas Bridge. Sub-watershed 4 would retain its existing drainage pattern, as no development is proposed therein. The proposed Marinwood Avenue Bridge would extend Marinwood Avenue south across Miller Creek to the Parcel 2 offices (Lots 29 and 30). No bridge design details or construction plans have been prepared at this time.

Impact 5.2-1 Stormwater Drainage Patterns

Project grading, roadway construction, and storm drain installation would convert the existing intermittent drainageway in Sub-watershed 2 to a storm drain system. In addition, the watershed boundary separating Sub-watersheds 1 and 2 would be altered slightly. In combination, this would be a less-than-significant impact.

Other than Miller Creek, the drainageway in Sub-watershed 2 is the only significant channel on the site. It begins as a perennial spring at a notch in the west-facing hillslope and has incised the colluvial fan deposits en route to the storm drain inlet at the rear of 281 Ellen Drive. Proposed roadway and home construction in this bowl area and the fan deposits below would require culverting the channel throughout its existing length. This intermittent drainageway is not a blue-line stream and is not subject to *The Marin Countywide Plan* policies governing Stream Conservation Areas (SCAs). Consequently, no measures would be required to mitigate the impact on stormwater drainage patterns from converting the drainageway. However, measures to mitigate groundwater and sensitive habitat impacts and cumulative water quality impacts would address these *and* stormwater drainage effects of implementing the project.

A slight de facto diversion of runoff from Sub-watershed 2 to Sub-watershed 1 would occur as the result of the construction of the contour interceptor drain near the common ridgeline. The resulting drainage area for Sub-watershed 1 would increase by 0.3 acres, at the expense of Sub-watershed 2. See Impact 5.2-2 (Site Peak Flows) for further discussion of the impact of this diversion on-site runoff.

Mitigation Measure 5.2-1 No mitigation would be required.

Impact 5.2-2 Site Peak Flow Rates

Project grading, construction of impervious surfaces, and installation of a storm drain system would increase site peak flow rates from Sub-watershed 1 by 1.6 percent and from Sub-watersheds 2, 3 and 6 by a minimum of 17 to 69 percent (see discussion of peak flow rates, including the independent EIR hydrologist estimates, in the Appendix). This would be a significant impact.

The EIR hydrologist conducted a peer review of the peak flow computations prepared by the applicant's civil engineer. The computations were based on the Caltrans / Los Angeles County Flood Control District Method, the standard method used by the Marin County Public Services Agency, and refinements to this method (also known as the Rational Method) published by the U.S. Geological Survey. The Grading and Drainage Plan and Revised Preliminary Drainage Analysis ¹⁵ provided the general site development characteristics analyzed in this EIR, including Sub-watershed boundaries, lot coverage areas, probable building envelopes, and storm drain and roadway alignments. Typical impervious surface coverage associated with the proposed types of land uses -- hill residential (less

¹⁵ *Ibid.* and Sheet 5 of the *Oakview Mitigated Master Plan Drawings* which shows the Grading and Drainage Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

than two units / acre) and commercial -- was derived from U.S. Geological Survey storm drain design criteria.

Exhibit 5.2-5 compares existing and post-project peak flow rates for site Sub-watersheds 1, 2, 3 and 6 for the 100-year rainstorm. The remaining site sub-watersheds are not proposed for development, so they were not included in the current peak flow assessment. Computed discharges differ from those estimated by the applicant's civil engineer, but not substantially. The EIR estimates suggest probable increases in post-project peak flows approximately 58 to 62 percent lower than estimated by the applicant's engineer for Sub-watersheds 2 and 3. The EIR estimates for Sub-watershed 6 peak flows were higher than the applicant's engineering analysis, by 61 percent. The divergences in the estimates are due primarily to the use of a more physically-based method for estimating time of concentration for runoff, and to the lower estimates attributed to existing condition runoff coefficient "C" values in the EIR analysis. Regardless of which estimates are deemed more accurate, the project impact on-site peak flow rates remains significant due to the absence of any proposed on-site stormwater detention capacity and the presence of inadequate, downstream hydraulic structures in both destination drainages. Both the three-foot by six-foot box culvert under Highway 101 (Gallinas Creek Watershed) and the Southern Pacific Rail Road (SPRR) bridge on Miller Creek, downstream of the Highway 101 crossing, lack sufficient capacity to convey the 100-year flood discharge. The Marin County Department of Public Works requires that all development projects mitigate fully for increases in peak flows on drainageways that could negatively affect downstream hydraulic structures or the extent of flooding in natural channels.¹⁶ For further discussion of the potential box culvert and Miller Creek flooding impacts, see Impacts 5.2-4 and 5.2-5.

Exhibit 5.2-5

Peak Flow Rates for Design 100-Year Rainstorm

Existing versus Post-Project Conditions

Sub-Watershed	Drainage Area (acres)		100-Year Peak Discharge (cubic feet / second)		
	Existing	Post-Project	Existing	Post Project	Change (percent)
1	19.7	20.0	18.5	18.8	1.6
2	20.7	20.4	17.0	20.0	17.6
3	8.6	8.6	7.9	9.3	17.7
4	14.8	14.8	23.6	23.6	0
5	11.8	11.8	28.2	28.2	0
6	30.4	30.4	25.5	43.2	69.4

Source: Clearwater Hydrology

On-site discharge from Sub-watersheds 1, 2, 3, and 4 under post-project conditions would be delivered to the existing subdivision storm drain system. Runoff from Sub-watersheds 1 and 2 would enter the Ellen Drive storm drain system, while runoff from Sub-watersheds 3 and 4 would enter the Erin Drive storm drain system. Discharge conveyed by the Ellen Drive storm drain system would eventually reach the three- by six-foot box culvert under Highway 101, and then the lower Gallinas Creek flood control channel. Erin Drive stormwater would be discharged to Miller Creek, just

¹⁶ Clearwater Hydrology conversation with Pat Baldarama, Director, Land Development Division, Marin County Department of Public Works, April 2000.

downstream of the Las Gallinas Road bridge crossing. As noted above, no development is proposed for Sub-watershed 4 under the *Oakview Master Plan*.

Mitigation Measure 5.2-2 The following mitigation measure would be required to reduce peak flow impacts:

- Construct a stormwater detention / treatment basins, ~~one each in the lower reaches of Sub-watersheds 2, 3 and 6. The Sub-watershed 2 basin should be located in the vacant land paralleling the proposed Roadway A. This undeveloped land is situated on the most gently sloping portion of the site, near the southwest corner. It would also have the elongated shape that is best suited for water quality treatment ponds. If the area of the presently designated vacant land is insufficient to provide the necessary basin storage volume, the lower portion of Lot 28 should be added, with a roadway culvert connection.~~
- ~~— The Sub-watershed 3 basin should be located along the eastern edge of the proposed Erin Drive extension, occupying the base of Lots 2 through 9. Because of the smaller size and peak discharges associated with Sub-watershed 3, a narrow, elongated detention basin should be sufficient to accomplish the necessary level of peak flow attenuation. Each entrance driveway would have to be culverted to allow for hydraulic connectivity between storage cells. Basin discharge would join roadway runoff and enter the proposed vegetated swale upslope of 1 Erin Drive.~~
- ~~— To maximize hydraulic efficiency and minimize the potential for maintenance problems, both basins should be equipped with dewatering pipes and emergency weir spillways. The dewatering pipes should be sized to maintain post-project peak flows at pre-project levels for the design 100-year rainstorm. Each emergency overflow weir should be designed conservatively to pass an unattenuated 100 year peak discharge, even though the prescribed basin storage would allow for full attenuation of runoff from that storm. Primary dewatering pipes and emergency weirs should be located at the downgradient ends of each basin, i.e. at the southern end for the Sub-watershed 2 basin and the northern end for the Sub-watershed 3 basin. Appropriate energy dissipation should be installed at all spillway discharge outlets.~~
- ~~— The Sub-watershed 2 and 3 basins should be designed to serve a two fold purpose: (1) fully attenuate 100 year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain systems, the Gallinas Creek tributary (i.e. Highway 101 box culvert); and the lower reach of Miller Creek, and (2) filter and cleanse stormwater runoff by use of an vegetated inlet swale and detention area.~~
- ~~— A third detention / treatment basin should be constructed in the low-lying developed lands of Sub-watershed 6, near the eastern edge of either Lot 29 or 30. Given the spatial constraints in this portion of the sub-watershed, a passive pipe or cistern-type storage underground detention structure should be constructed. Such a structure could be located beneath the Lot 30 parking lot or the northern end of Roadway C. The hydraulic design would ensure that when a particular flood stage in Miller Creek is reached (e.g. 10 year flood), backwater in the storm drain system would induce diverted storm water into the storage unit. Once Miller Creek flood levels had receded, the stored stormwater would re-enter the system and discharge to Miller Creek. The size of the off system storage unit would equal the volumetric difference in the pre- and post-project stormwater hydrographs for the 100 year design rainstorm.~~

~~Since the passive stormwater detention storage would be underground, cleanout stubs would be required at the upgradient ends of each storage component (e.g. cistern or pipe array). Periodic maintenance would be required to remove any debris and sediment that accumulate in these storage components.~~

~~A sediment maintenance plan describing both frequency and timing of sediment removal, as well as excavation equipment and environmental precautions, should be included in the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.~~

~~Following release of project performance bond, maintenance of the detention basin would be the responsibility of the funding entity established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13)~~

Basin location shall be selected to minimize excessive topographic manipulation, even if one or more designated residential lots must be eliminated to accommodate its construction. Since stormwater quality impacts can be mitigated, in part, through the integration of water quality enhancements to normal detention basin design, the detention basin should be designed to serve a two-fold purpose: 1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain system- the Gallinas Creek tributary (i.e. Highway 101 box culvert); and (2) filter and cleanse stormwater runoff by use of a vegetated inlet swale and detention area (forebay). Other design considerations shall include:

- Structural measures for normal pond dewatering and end-of-season (e.g. April) dewatering (fully) for mosquito control.
- An emergency overflow spillway with appropriate energy dissipator at the outlet.

The project applicant shall prepare a monitoring and maintenance plan for the detention basin to ensure proper long-term basin functioning. The monitoring and maintenance plan would include provisions for sediment removal and basin repair, as well as associated conditions governing the use of heavy mechanical equipment (e.g. backhoes, excavators) and environmental safeguards and procedures. This information shall be incorporated into the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.

Prior to release of the project performance bond, maintenance of the detention basin by a funding entity shall be established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13.)

Significance after Mitigation Implementation of Mitigation Measure 5.2-2 would reduce the adverse impact of the project on-site peak flows to a less-than-significant level.

Implementation of Mitigation Hydraulic design and construction of the stormwater detention / treatment basin should be reviewed and approved by the Marin County Department of Public Works. Preliminary designs should be submitted with the Precise Development Plan, detailed designs should be approved as a condition of filing the Final Map; site alteration permits to build Parcel 1 roadways and install infrastructure should cover construction of the stormwater detention / treatment basins; and

granting of individual building permits would be subject to completion and full operation of the stormwater detention / treatment basins.

Impact 5.2-3 Downstream Hydraulic Structures and Flooding

Project-induced increases in peak flow rates and / or runoff volumes for Sub-watersheds 2 and 3 would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods. In addition, gaps have been noted in existing cross-slope interceptor ditches. If unrepaired, these gaps would create avenues for off-site, downslope-diversion of concentrated ditch flows. This would be a significant impact.

Two storm drain systems comprise the stormwater drainage network for the subdivision. The southern system drains the hillslopes of Sub-watershed 2, as well as the lowland areas of the subdivision along Ellen Drive and Lisa Court. Stormwater conveyed in this system moves in a south-southeasterly direction, then under Lucas Valley Road, before discharging into an open earthen ditch on the south side of the roadway. Here surface water flows toward Highway 101 and eventually enters the three- by six-foot box culvert, which lacks sufficient capacity to convey high magnitude flood discharges without peripheral surface flooding.

The northern storm drain system drains the hillslopes of Sub-watershed 3 and the subdivision lands along Erin Drive and Elvia and Etta Courts. Stormwater conveyed in this system flows in a northwesterly direction to an outlet on the banks of Miller Creek.

Peer Review of Subdivision Drainage System Capacities

The EIR hydrologist conducted a peer review of the hydraulic analysis performed by the applicant's civil engineer, I.L. Schwartz Assoc., for the storm drain systems in the adjacent Marinwood Subdivision.^{17 18} The applicant's hydraulic analysis was conducted for the design 100-year rainstorm using a computer routine for backwater profiles in gravity-flow pipe systems. Pipe diameters, slopes and elevations were defined for each component in the system and water surface profiles were computed assuming a starting (i.e. control) water surface elevation at the system outlet. For the preliminary analyses, a normal depth assumption was made for the condition of flow at the system outlets. Normal depth is the depth that would occur in a pipe unaffected by backwater (i.e. near or total submergence of the pipe outlet). This simplifying assumption was later deemed inappropriate, due to probable high tailwater stages in Miller Creek during the design 100-year rainstorm. Thus, the control water surface elevation used in the final April 2000 version of the Erin Drive storm drain system modeling was 45.0 feet.¹⁹ This matches the flood water surface elevation identified on the FIRM map published for this reach of Miller Creek by FEMA. The revised, final modeling assessment included both the existing and post-project land use conditions.

¹⁷ I.L. Schwartz Associates, Inc. letter to Tim Haddad, Marin County Environmental Coordinator, dated Nov. 18, 1999, with attached "Hydraulic Analysis: Oakview- Erin Drive" and "Hydraulic Analysis: Oakview- Ellen Drive".

¹⁸ I.L. Schwartz Associates, Inc. April 26, 2000 letter to Nichols Berman, with revisions to original 11/99 pipe system modeling for the Ellen and Erin Drive storm drain systems, Marinwood Subdivision.

¹⁹ National Geodetic Vertical Datum (NGVD), equivalent to mean sea level (MSL).

For the Ellen Drive storm drain system analysis, the normal depth assumption was deemed acceptable for purposes of system capacity assessment. The final analysis reviewed by the EIR hydrologist indicated that one of the existing storm drain segments, an 18-inch reinforced concrete pipe (RCP) linking model inlets I-4 and I-5, was undersized. Post-project modeling of this system, assuming a 30-inch RCP replacement for the 18-inch RCP, indicated that Marin County hydraulic criteria would be satisfied throughout the Ellen Drive system.

For the Erin Drive storm drain system analysis, the EIR hydrologist found the normal depth assumption unacceptable due to extant high floodwater stages in Miller Creek during the 100-year storm. Following revisions to the modeling assumptions for the existing land use conditions, model runs indicated that street or yard flooding would occur at four storm drain inlet locations, labeled I-15, J-12, J-11 and I-10 in the Grading and Drainage Plan, during the design 100-year rainstorm. Based on the existing condition hydraulic analyses, the Erin Drive storm drain system would not meet current hydraulic design / performance criteria applied by the Marin County Department of Public Works (i.e. Title 24 of County Code).

Departing from the approach used in the Ellen Drive analyses, the post-project model run for Erin Drive did not include an upgrading of any of the system pipe segments which could have reduced or eliminated the existing condition lot / street flooding. Instead, the post-project condition analysis indicated only that modeled water surface elevations increased at two points in the system, inlets I-13 and I-15. At inlet I-13, the existing condition flood depth (e.g. hydraulic grade line [HGL]) was modeled at an elevation of 52.81 feet, compared to the local ground surface elevation of 52.80 feet. For the post-project condition, the HGL was computed at 53.77 feet NGVD, an increase of 0.85 feet over the existing condition HGL. This represents a significant increase in local flooding depths on the lot at 1 Erin Drive. Adjacent lots at 2180 Gallinas Avenue and 297, 291 Elvia Court could also be affected by this increased flooding during the 100-year design rainstorm.

The increase in the post-project flood elevation at inlet I-15, located at the intersection of Etta Drive and Elvia Court, was 0.4 feet, resulting in a local HGL elevation of 49.83 feet. With an adjacent ground surface elevation of 48.55 feet, this represents a flooding depth of 1.3 feet. It is unlikely that either condition would satisfy hydraulic design criteria. The existing condition flooding documented at inlets J-12, J-11 and I-10 improved slightly, due to local storm drain diversions. However, nuisance flooding would continue at these locations as under existing conditions.

Mitigation Measure 5.2-3 The following measures would be required to reduce project impacts on downstream flooding due to inadequate storm drain system capacities:

- Replace the existing 18-inch storm drainpipe along the rear of 281 Ellen Drive with a 30-inch RCP, as indicated in the proposed Grading and Drainage Plan.
- Implement Mitigation Measure 5.2-2 (Peak Flow Rates).
- Repair the gaps in the existing concrete, cross-slope interceptor ditch network and any other defects that could result in the diversion of ditch/hillslope runoff onto adjacent lots in the Marinwood Subdivision.

Significance after Mitigation Implementation of all of the component measures under Mitigation Measure 5.2-3 would potentially reduce the project impact on the Ellen Drive storm drain system to a less-than-significant level. However, since on-site detention basins would be subject to interruptions in service due to clogging of outlet pipes and other maintenance problems, the project could continue,

albeit infrequently, to exacerbate flooding at points in the Erin Drive storm drain system during severe rainstorms. Thus, to fully ameliorate the downstream flooding problem and any potential project impacts on this flooding, the project would have to participate to some extent in the funding of storm drain system improvements for the Erin Drive system. Implementation of the interceptor ditch repair program would eliminate the risk of hillslope runoff diversion onto adjacent properties in the Marinwood Subdivision.

Implementation of Mitigation For a discussion of detention basin design / construction requirements, see Mitigation Measure 5.2-2. Hydraulic-design and construction of any replacement piping in the Ellen Drive and Erin Drive storm drain systems and repairs to the existing cross-slope interceptor ditches should be reviewed and approved by the Marin County Department of Public Works. Preliminary design should be submitted with the Precise Development Plan; detailed design should be approved as a condition of filing the Final Map; site alteration permits to build Parcel 1 roadways and install infrastructure should cover existing storm drain segment replacements; and granting of individual building permits would be subject to completion of the off-site storm drain system upgrades.

Impact 5.2-4 Downstream Hydraulic Structures and Flooding

Project-induced increases in peak flow rates for Sub-watersheds 1 and 2 would worsen flooding at the three- by six- foot box culvert under Highway 101. Since no corrective measures have been agreed upon to remedy this flooding condition and no funding currently exists for such action, this would be a significant impact

The Gallinas Creek tributary flood assessment conducted for the City of San Rafael concluded that the Highway 101 culvert had inadequate capacity even under existing conditions. No decision has been made yet by the City or Caltrans on the ultimate course of action required to rectify the problem. The surcharge peak flow generated by the project (3.3 cfs) would have to be accommodated by any new cross-freeway drainage facilities. Moreover, exposed hillslope soils, such as those belonging to the Tocaloma-Saurin association, are highly erodible and are subject to rill and gully development. Higher sediment yields and occasional entrained debris can obstruct both local and downstream (i.e. off-site) culverts and storm drains and increase the downstream flood hazard.

Mitigation Measure 5.2-4 Either of the following measures should be implemented to reduce project impacts on downstream flooding at the three- by six-foot box culvert under Highway 101:

- Implement Mitigation Measure 5.2-2.
- The applicant should participate with the City of San Rafael and Caltrans in funding an upgrade of the existing Highway 101 box culvert. If a drainage fee is required by Marin County, the applicant should at a minimum contribute funding for replacement and / or expansion of the Highway 101 facilities in proportion to the site's development area. For example, if the development area (not open space) draining to the Gallinas tributary at Highway 101 equaled 41.7 acres and the total developed area for that watershed was 500 acres, the project's share of the cost would be 8.3 percent.

Significance after Mitigation Implementation of the first measure cited above would decrease the project impact on flooding at the Highway 101 box culvert to a less-than-significant level. Implementation of the second above-cited measure alone would reduce project impacts on downstream flooding to a less-than-significant level, but not until a new Highway 101 culvert or an equivalent freeway drainage structure was constructed.

Implementation of Mitigation The applicant would be responsible for implementing all of the provisions cited above for Mitigation Measure 5.2-2. The Marin County Department of Public Works would review all aspects of hydraulic design and construction related to detention / treatment basins. Alternatively, the applicant would be responsible for reaching agreement with the City of San Rafael Department of Public Works over an appropriate drainage fee assessment, if this is the course of action preferred by the City.

Mitigation 5.2-2 shall be implemented concurrently with project construction, but the detention basin may be removed once the Highway 101 box culvert upgrade is completed. If and when the detention basin is removed, the proper grading permit shall be obtained from Marin County DPW, Land Development Division. Furthermore, site erosion controls consistent with the provisions of the mitigation measures outlined in this EIR shall be applied to all exposed soil surfaces immediately upon completion of the grading (i.e. basin removal).

Impact 5.2-5 Off-site / Downstream Flooding on Miller Creek

Project-induced increases in peak flow rates for Sub-watersheds 3 and 6 would marginally increase the 100-year peak discharge add, however imperceptibly, to the surcharge of floodwaters that create significant backwater flooding at the SPRR bridge on Silveira Ranch. Since this structure lacks adequate capacity to pass the existing 100-year flood discharge without significant inundation of the adjoining ranchlands, the project impact on downstream flooding would be a significant impact. minor increase in the flood discharge due to the project would not produce a detectable increase in either local flood elevations or the spatial extent of the 100-year floodplain. Thus, the project impact on flooding along Miller Creek would be less-than-significant.

Ensign and Buckley, Consulting Engineers for the City of San Rafael prepared an updated 100-year flood analysis for Miller Creek.²⁰ The results cited an estimated 100-year peak discharge of 2,870 cfs at the Highway 101 bridge crossing. Under the post-project condition, the increase in peak flows entering Miller Creek from the project watersheds would total 19.1 cfs, or 0.7 percent. Peak flow rates are a function of both impervious surface coverage and the time of concentration for runoff. Since the project site is located toward the far downstream end of the watershed, its development in the manner proposed would not produce a calculable increase in the 100-year peak flow through the project reach or downstream. As noted in the setting section, Caltrans engineers have confirmed that the Highway 101 bridge undercrossing is sufficient to convey the 100-year peak flow with adequate freeboard.

Downstream of the Highway 101 bridge crossing, Miller Creek enters the Silveira Ranch property. A SPRR bridge crossing forces significant backwater flooding upstream of the bridge during severe flood events (e.g. 100-year flood), as evidenced on the FEMA FIRM map reproduced in Exhibit 5.2-2. Since a free flow condition with adequate freeboard to pass the design 100-year flood does not exist at this crossing, the Marin County guidelines regarding peak flow impacts on inadequate downstream structures would be applicable. A Master Plan for development of the property is currently in the early stages of preparation. It is anticipated that some degree of channel / floodplain modification will be required along the lower reaches of Miller Creek in order to accommodate future land uses. However, given the minor proportion (0.7 percent) of the 100-year flood discharge that would be

²⁰ Letter Report on the FEMA Limited Map Maintenance Program (LMMP) Flood Insurance Study for Miller Creek, Ensign & Buckley, May 1993.

generated by the project, no detectable increase in the 100-year flood elevation would result. Therefore, the project impact on downstream flooding along Miller Creek would not be significant.

Mitigation Measure 5.2-5 ~~No mitigation would be required. To reduce project impacts on flooding along the on-site and downstream reaches of Miller Creek, either of the following mitigation measures should be implemented:~~

~~• Implement Mitigation Measure 5.2-2.~~

~~□ Pay a drainage fee to Marin County with the stipulation that the fee be applied to the eventual channel modification and bridge removal / replacement on Silveira Ranch. The fee total would be negotiated between the applicant and the County.~~

~~**Significance after Mitigation** Implementation of the first mitigation measure cited under Mitigation Measure 5.2-5 would reduce project impacts on flooding along Miller Creek to a less than significant level. Implementation of the second measure would not reduce the impact to a less than significant level until the downstream channel modification and bridge removal / replacement projects were completed. If Mitigation Measure 5.2-2 is not implemented, the project impact on flooding along Miller Creek would remain significant based on the current County criteria.~~

~~**Implementation of Mitigation** Same as for Mitigation Measure 5.2-2.~~

Impact 5.2-6 Off-site / Downstream Flooding in Marinwood Subdivision

Project grading and impervious surface construction along the western boundary of Sub-watershed 2 would result in the continued interception of upslope surface runoff by an existing concrete interceptor drain. A structural gap in the surface drain promotes diversion of this runoff onto the properties at 282 and 284 Ellen Drive. Given the upslope interception of a significant portion of the hillslope runoff by proposed interceptor drains to the rear of Oakview Lots 10-13 and construction of the curbed Roadway A and its storm drain system, continuance of this minor nuisance flooding would be a less-than-significant impact.

Upslope of 282 and 284 Ellen Drive, a gap was observed in the existing concrete interceptor drain during a field inspection by the EIR hydrologist. The gap allows intercepted upslope surface drainage to be diverted onto the adjacent subdivision properties, rather than to proceed south toward the existing storm drain system inlet at the southeastern corner of 282 Ellen Drive. Some historical flooding has been reported along the Marinwood subdivision properties contiguous to the western site boundaries. Comment letters submitted to Marin County during the public review period of the 1996 Draft EIR attributed at least part of observed flooding to the improper functioning of cross-slope interceptor drains.

Localized increases in site runoff volumes and concentrated flows would result from the construction of impervious surfaces such as buildings, roadways, and driveways, as well as adjacent highly compacted ground. However, installation of the project's storm drain system and an additional concrete interceptor drain upslope of Lots 10 through 13 would divert much of the upslope runoff which formerly reached the downslope interceptor drain.

Mitigation Measure 5.2-6 No mitigation would be required.

Impact 5.2-7 Site Erosion and Downstream Sedimentation and Flooding

Hillslope grading activities associated with construction of residential and commercial structures, roadways, and driveways would result in large areas of bare soils which would be subject to erosion by rainfall and hillslope runoff. Eroded sediments would eventually be discharged to off-site drainage channels, including Miller Creek, where sedimentation could reduce flood conveyance or impair water quality. This would be a significant impact.

The majority of the site that is proposed for development is situated on moderate to steeply sloping terrain. Yard and landscaped areas adjacent to the residential and commercial structures and associated driveways would initially be graded in conformance with the proposed Grading and Drainage Plan. Exposed soils in these areas would be subject to rill and gully erosion due to rainfall impact and surface runoff during rainstorms. Eroded sediments would eventually enter street gutters and storm drain system inlets. These sediments would be discharged downstream of the project, either into Miller Creek or into the roadside (i.e., Lucas Valley Road) drainage ditch that conveys Gallinas Creek Watershed runoff to the three- by six-foot box culvert under Highway 101. Sedimentation in these receiving channels could reduce flood conveyance in the roadside drainage ditch and the lower reaches of Miller Creek (for example on Silveira Ranch), or locally degrade water quality in Miller Creek.

Mitigation 5.2-7 To reduce project impacts of on-site erosion and downstream sedimentation it would be necessary to:

- Prepare and implement a comprehensive Stormwater Pollution Prevention Plan (SWPPP), which is submitted as part of the NPDES General Construction Activity Stormwater Permit (General Permit) filing with the State Water Resources Control Board. The NPDES General Permit is required for all developments which would disturb more than five acres of land. The SWPPP describes on-site measures for erosion control and stormwater treatment to be implemented during and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater. BMPs incorporated in the project SWPPP would likely include *in-situ* protection, seeding and mulching of bare ground, planting of trees and shrubbery in both disturbed upland and riparian areas, and installation of other forms of biotechnical slope stabilization, such as appropriately staked straw bale perimeters, silt fences, or staked plant wattles on the slope contour. No grading should occur within the Miller Creek Stream Conservation Area during the winter season, thus restricting grading activities at the proposed Miller Creek bridge crossing to the period between May 1 and October 15. Grading in site areas outside of the SCA can occur during the winter season, as long as erosion control measures approved as a part of the Stormwater Pollution Plan (SWPPP) are installed and properly maintained through this period.

Significance after Mitigation Implementation of Mitigation Measure 5.2-7 would reduce project impacts on erosion and downstream sedimentation to a less-than-significant level, as long as the additional measures cited under Mitigation Measure 5.2-8 were concurrently implemented.

Implementation of Mitigation As part of the NPDES General Permit acquisition process, the applicant would be required to file a Notice of Intent with the State Water Resources Control Board, Division of Water Quality. The filing would include a description of erosion control and stormwater treatment measures (BMPs) to be implemented during and following project construction, as well as a schedule for monitoring of performance. These measures constitute the SWPPP, which the applicant would be required to submit to the Marin County Department of Public Works for review. Following approval of the SWPPP, the applicant and its contractors would be responsible for implementing all

erosion control and water quality protection measures described therein. The State Water Resources Board would be responsible for reviewing the filing of the Notice of Intent and for delegating monitoring authority to the San Francisco Bay Regional Water Quality Control Board staff.

Impact 5.2-8 Site Erosion and Downstream Sedimentation and Flooding

Construction of the proposed Marinwood Avenue bridge would disturb the banks of Miller Creek significantly in the vicinity of the construction area. Subsequent bank erosion and downstream sedimentation could exacerbate flooding downstream of the Highway 101 bridge. This would be a significant impact.

Bridge construction would involve the use of heavy equipment for land clearing, bank and overbank grading, abutment construction and installation of bank stabilization measures. In the absence of an erosion protection and revegetation program, the exposed and compacted soils would be vulnerable to erosion from raindrop impact and surface runoff. Sediments mobilized from ground surfaces would be entrained in local surface runoff and enter Miller Creek. Such sediment discharge would impair water quality in Miller Creek and increase the potential for downstream sedimentation on the Silveira Ranch property, east of Highway 101.

Because bridge construction would require disturbance of the bed and banks of Miller Creek, the project would impact jurisdictional Waters of the United States, as defined in Section 404 of the Clean Water Act. Thus, a Department of the Army Fill Permit from the U.S. Army Corps of Engineers would be required prior to beginning construction. If the extent of disturbance below the Ordinary High Water (OHW) stage in Miller Creek involved less than 500 lineal feet of disturbance and fill / excavation of less than one cubic yard of soils / sediments per lineal foot of disturbance at OHW, the project could fall under the provisions of the Nationwide Permit Program for bridge crossings. Under these provisions, the project would potentially require only written notification of the intent to undertake construction, as long as Corps staff successfully verified the project's satisfaction of the aforementioned criteria.

In addition to the Department of Army Fill Permit, the project would require a Waiver of Water Quality Certification from the San Francisco Bay Regional Water Quality Control Board (RWQCB) and a Stream Alteration Agreement from the California Department of Fish and Game (CDFG). The RWQCB typically requires submittal of project plans, Army Fill Permit or, if appropriate, a letter of notification to the Corps documenting compliance with Corps Nationwide Permit criteria, as well as a copy of the CDFG Stream Alteration Agreement. Issuance of the Agreement by CDFG would be conditioned upon the implementation of stream habitat protection measures during and following construction.

Mitigation Measure 5.2-8 To reduce project impacts of on-site erosion and downstream sedimentation due to construction of the Marinwood Avenue Bridge on Miller Creek, it would be necessary to:

- Implement Mitigation 5.2-7.
- Acquire a 1603 Stream Alteration Agreement from the California Department of Fish and Game (CDFG). In addition to measures outlined in the project SWPPP for graded or exposed soil surfaces, the applicant's construction contractor(s) and field engineer should implement temporary measures, where required, to minimize channel sedimentation during bridge construction. Due to the good quality stream habitat and culverting impacts to aquatic life, a bypass pipe through the work area is not recommended. Some form of cofferdam segregating the work areas from the

active channel area would be preferable. All such measures would be described in the Stream Alteration Agreement submittal and would be subject to approval CDFG.

- Submit an application or letter of notification, as appropriate, to the U.S. Army Corps of Engineers for an Army Fill Permit, in accordance with provisions of the Nationwide Permit Program.
- Acquire a Waiver of Water Quality Certification from the RWQCB.

Significance after Mitigation Implementation of Mitigation Measures 5.2-7 and 5.2-8 would reduce project impacts on downstream sedimentation and flooding to a less-than-significant level.

Implementation of Mitigation The applicant would be responsible for filing the Notice of Intent with the State Water Resources Control Board, Division of Water Quality (see Mitigation 5.2-7) and for acquiring a Waiver of Water Quality Certification from the RWQCB. In addition, the applicant would be responsible for submitting an application and fee to the CDFG for a 1603 Streambed Alteration Agreement. During and following construction, the applicant and his contractors / consultants would be responsible for implementing all of the field erosion control, stream habitat protection and stormwater treatment measures described in both the approved SWPPP and the Stream Alteration Agreement. Assigned staff with the San Francisco Bay Regional Water Quality Control Board would be responsible for reviewing project design plans and for issuing the Waiver of Water Quality Certification. RWQCB staff would also be responsible for inspecting the construction sites for compliance with the SWPPP. The designated warden overseeing the project for the CDFG would be responsible for ensuring that the applicant and his agents implement the habitat protection measures outlined in the Stream Alteration Agreement. Before construction of the Marinwood Avenue bridge across Miller Creek, an approved CDFG 1603 Stream Alteration Agreement and Corps Fill Permits should be filed with the Marin County Department of Public Works and Community Development Agency. The Marin County Department of Public Works would be responsible for ensuring that any bank stabilization measures associated with bridge construction (e.g. riprap revetments) are installed in accordance with approved project plans.

Impact 5.2-9 Groundwater Seepage

Construction of storm drain systems and subsurface drainage measures associated with residential construction in Sub-watersheds 2, 3, and 6 should have a beneficial impact on ongoing seepage problems experienced by homeowners in the Marinwood Subdivision. This would be a beneficial impact.

Construction of residential structures and surface and subsurface drainage measures associated with hillslope grading and retaining wall construction in Sub-watersheds 2 and 3 would intercept a significant portion of the historical shallow groundwater discharge. This would constitute a beneficial impact of the project. The existing seepage problems were triggered by previous excavations into the toes of landslide and colluvial deposits that have accumulated on shallow bedrock. These deposits extend from the edges of Marinwood subdivision properties upslope and onto the project site. Similar cuts made in the hillslope for housing unit and roadway construction in Sub-watersheds 2 and 3 would intercept much of the shallow groundwater which formerly moved along the face of the underlying bedrock. However, since residential roadways are all situated downslope of hillslope cuts and retaining walls, intercepted subsurface drainage from the lots would enter the roadway gutter system or would discharge directly to the storm drain system. Thus, as long as the standard design and construction procedures proposed in the project geotechnical report are competently implemented, these measures would be adequate to mitigate any potential problems with on-site seepage.

Mitigation Measure 5.2-9 No mitigation measure would be required.

Impact 5.2-10 Water Quality -- Violation of Water Quality Standards

Proposed residential development in Sub-watersheds 2 and 3 and commercial development in Sub-watershed 6 would increase the stormwater contaminant loading for some heavy metals, including copper, lead and zinc to levels exceeding those listed by regulatory agencies for the protection of aquatic habitats. Oil and grease concentrations in the site runoff reaching Miller Creek and the Gallinas Creek tributary would not exceed regulatory agency thresholds, however, even small concentrations are considered significant by the RWQCB. Establishment of irrigated landscaping and its associated herbicide and pesticide inputs could potentially result in the downstream migration of nutrient and contaminant residues in stormwater drainage channels leading to the recently constructed wetland pond in the industrial park area east of Highway 101, and potentially to Gallinas Creek Marsh. This would be a significant impact.

A water quality assessment was performed by the EIR hydrologist for the existing and post-project conditions in the developed sub-watersheds draining to Miller Creek (Sub-watersheds 3 and 6) and to the Gallinas Creek tributary (Sub-watershed 2). Based on the development of the planned residential and commercial uses, the concentrations of heavy metals in stormwater runoff entering these waterways would exceed concentrations specified in the Water Quality Control Plan for San Francisco Bay²¹ for protection of aquatic habitat (see Exhibit 5.2-6 below). Post-project concentrations for Cu, Pb and Zn could range from two to thirty-three times the current water quality criteria. Note that the more lenient USEPA criteria from 1986 have been dramatically reduced in the more current RWQCB objectives. Oil and grease concentrations estimated for post-project conditions were below the cited threshold for point dischargers to San Francisco Bay, which is the only published criterion for these contaminants. However, the RWQCB considers any visible residues of these substances on the water surface as harmful to beneficial uses.

²¹ *Water Quality Plan for the San Francisco Bay Region (2)*, California Regional Water Quality Control Board, 1995.

While some of the aforementioned contaminants can be transported in dissolved form, the bulk of heavy metals are conveyed in particulate form. Metals can also be adsorbed onto sediment particles that become entrained in stormwater runoff. Thus, on-site control or treatment of particulate-laden runoff is critical in minimizing the contaminant loading of stormwaters discharging from the project area.

Ornamental landscaping in the vicinity of buildings and parking lots is normally maintained with significant amounts of irrigation water and chemical inputs, such as fertilizer, herbicides and pesticides. Overwatering of chemically maintained turf and shrubs could result in transport of chemical residues in surface runoff, which can reach site drainageways. While no ready means is available for quantifying the potential for this downstream migration of contaminants, the affect on the receiving waters of Miller Creek and lower Gallinas Creek, including the wetland pond east of Highway 101, could be locally significant.

Exhibit 5.2-6

Annual Contaminant Loading from Project Site Watersheds^a

Contaminant	Loading Rate			Criteria ^b	
	Existing Conditions	Post Project Conditions		USEPA	RWQCB ^c
	pounds / acre / year	Pounds / acre / year	mg / l ^c	Mg / l	mg/l
Miller Creek					
NO ₃ N	0	58.5	0.47	45	45
Total Cu	0	2.89	0.02	12	0.006
Total Pb	0	12.3	0.10	3.2	0.003
Total Zn	0	13.8	0.11	4.7	0.023
Oil and Grease	0	—	2.5	5.3	—
Gallinas Creek Tributary					
NO ₃ N	0	21.7	0.4	45	45
Total Cu	0	1.0	0.02	12	0.006
Total Pb	0	4.6	0.07	3.2	0.003
Total Zn	0	5.2	0.1	4.7	0.023
Oil and Grease	0	-	1.2	5.3	---

a Assumptions:

- 1) Mean annual rainfall for site= 29.8 inches (San Rafael Civic Center) vs. USEPA reference site= 40 inches.
- 2) Loading Rates for residential and commercial land uses based on Table 6-25 "Annual Urban Runoff Loads," *Results of the Nationwide Urban Runoff Program*, U.S. Environmental Protection Agency, December 1983.

b Toxicity thresholds for selected contaminants from *Quality Criteria for Water*, U.S. Environmental Protection Agency, May 1986, *Journal of Environmental Engineering*, Stenstrom et al, February 1984, and SF Bay Water Quality Control Plan (RWQCB 1995): Table 3-4: Water Quality Objectives for Toxic Pollutants for Surface Waters with Salinities Less Than 5 ppt. - 4-day average concentrations.

c NO₃-N objective not available for freshwater / habitat, therefore, objective for municipal supply is cited; objectives for Pb and Zn are based on a hardness value of 100 mg/l as CaCO₃.

Mitigation Measure 5.2-10 The following measures would be required to minimize impacts on-site and downstream water quality to less-than-significant levels:

- Implement Mitigation Measure 5.2-2 (Peak Flows).

- The stormwater detention basins recommended for construction as part of the program for peak flow mitigation should be designed to maximize their water quality treatment function. Proper configuration, sizing and inlet / outlet characteristics would maximize deposition of particulates in incoming stormwater and would favor the growth of emergent vegetation to facilitate filtering opportunities. Specific design characteristics for wet ponds are listed in the California Storm Water Best Management Practices Handbook for Construction Activity.²²
- Implement Mitigation Measure 5.2-7 (Site Erosion and Downstream Sedimentation and Flooding).
- Due to the close proximity to the sensitive wetland and aquatic habitats in the receiving waters of Miller Creek and lower Gallinas Creek, the following BMPs are considered a minimum for Oakview stormwater treatment to comply with the requirements of the NPDES General Permit and provisions of Title 24 of the Marin County Code (24.04.625), citing erosion control requirements associated with site grading.²³
- ~~• Installation of oil / grease traps or similar in-line filtration systems for storm drain systems. Such traps or separators should be accompanied by a cleanout / maintenance program that ensures acceptable trap efficiencies, specifies appropriate disposal procedures, and reduces the risk that the traps become sinks for pollutants.~~
- Institute a regular schedule of street and parking lot sweeping. The frequency of cleaning should be higher (e.g. twice monthly) during the winter rainy season, yet maintained year-round. Regular cleaning of paved surfaces reduce the “first flush” phenomenon wherein the highest concentration of contaminants are flushed off the surfaces during the early portion of a runoff event.
- Incorporate grass-lined swales to convey stormwater from paved surfaces to creek channels or wetlands. Grass-lined swales filter particulates from stormwater and, as a result, reduce the entry of heavy metals and contaminated sediments to drainageways. The current development plan includes one grass-lined (i.e. vegetated) swale each toward the lower end of Sub-watersheds 2 and 3, although the one proposed for Sub-watershed 2 would not provide significant water quality benefits. Two additional swale locations could be integrated into the project design for Sub-watershed 6 stormwater drainage. The first swale would extend downslope from the eastern edge of the Lot 30 parking lot to the top of the existing cut-slope, at the freeway interface. The second swale would extend from the northernmost storm drain inlet along Roadway C (Marinwood Avenue extension), parallel to Highway 101, to the southern bank of Miller Creek. To forestall excessive rilling within such swales, it may be necessary to install biodegradable fabric along the swale flowline. Initially, the swale may need to be irrigated along with the landscaping.
- Revegetate all disturbed areas prior to the onset of each winter rainy season during and for 2-3 years following completion of construction. Use of an erosion control grass and forb mixture,

²² CA. Storm Water Best Management Practices Handbook for Construction Activity. Stormwater Quality Task Force 1993

²³ The erosion control requirements adhered to by Marin County are those published by the Association of Bay Area Governments (ABAG).

favoring native species, would be best suited to this task. In addition, some type of surface erosion protection (e.g. jute netting, erosion control blankets, punched straw) should be installed to reduce the erosive energy of incoming raindrops for the first couple of winter seasons.

- Prepare and implement an irrigation scheduling and chemical management plan governing the application of irrigation water and chemical amendments to landscaped areas adjacent to buildings and within or adjacent to parking lot facilities. Components of such a plan would likely include an irrigation schedule linked to soil moisture levels or related variables such as temperature, humidity and wind speed. Specific-chemical inputs proposed for application to vegetation should be among those tested and cleared for use by the USEPA. Frequency and scheduling of these chemical inputs should also be indicated, based on site-specific characteristics (for example soil and vegetative cover and rates of uptake) and the acknowledged sensitivity of downstream receiving waters.
- Implement Mitigation Measure 5.2-8 (Site Erosion and Downstream Sedimentation and Flooding).

Significance After Mitigation Implementation of Mitigation Measure 5.2-10 would significantly improve the prospects for minimizing on-site and downstream water quality impacts. It would also represent the best available, practical technology for addressing water quality impacts associated with urbanization and therefore reduce this impact to a less-than-significant level. It should be noted, however, that due to the stringent water quality criteria in force for heavy metals, it remains uncertain as to whether the BMPs that could be implemented within the site and developmental constraints of the project would reduce contaminant concentrations in runoff to levels below the thresholds cited in the Basin Plan.

Implementation of Mitigation See same section under Mitigation Measures 5.2-7 and 5.2-8. In addition, hydraulic design and construction of vegetated swales and the irrigation / chemical management plan should be reviewed and approved by the Marin County Department of Public Works. Preliminary design for vegetated swales should be submitted with the Precise Development Plan, and detailed design should be approved as a condition of filing the Final Map. Site alteration permits to build the office complex and its roadway and drainage systems should cover construction of the vegetated swales.

Impact 5.2-11 Cumulative Water Quality Impacts

Contaminants in stormwater discharges from the site would contribute to the contaminant loading of the waters of Miller Creek (a spawning stream), the Gallinas Creek tributary, and eventually Gallinas Creek. This would be a significant impact.

Exhibit 2.3-1 lists the cumulative projects and their status in the planning and development process. Of the nine projects listed only the Lucasfilm project would contribute to cumulative water quality impacts in the Miller Creek Watershed. The remaining eight projects drain to either Gallinas Creek or South Fork Gallinas Creek.

The Lucasfilm (Grady Ranch) project includes construction of 640,800 square feet of commercial uses. Within the Gallinas Creek and South Fork Gallinas Creek Watersheds, cumulative project development would include 190 units of residential and 24,000 square feet of commercial / office use.

The density of the *Oakview Master Plan* would represent ten percent of the total cumulative residential development in the Gallinas Creek Watershed and about 100 percent of the residential

development proposed within the Miller Creek Watershed. Conversely, Oakview commercial development impacts within the Gallinas Creek Watershed would be nil, while it would comprise 12.8 percent of that land use in the Miller Creek Watershed. In this cumulative context, the project would contribute significantly to the incremental increases in non-point stormwater contaminant loading on receiving waters in Miller and Gallinas Creeks.

As indicated above under Impact 5.2-10, unmitigated post-project contaminant concentrations would exceed the stringent water quality objectives set forth in the RWQCB's 1995 Basin Plan. Thus, in the context of cumulative watershed development in the Miller Creek and Las Gallinas Creek Watersheds, the water quality impact of the project would remain potentially significant.

Mitigation Measure 5.2-11 The following measures would be required to reduce cumulative water quality impacts:

- Implement Mitigation Measure 5.2-10.

Significance after Mitigation Mitigation Measure 5.2-12 would reduce the project's incremental contribution to cumulative water quality impacts to less-than-significant levels.

Implementation of Mitigation Same as Mitigation Measures 5.2-7, 5.2-8 and 5.2-11.

5.3 BIOLOGICAL RESOURCES

Biological Resources -- The Setting

INTRODUCTION AND METHODS

The biological resources of the project site were determined by reviewing available information on resources in the site vicinity, including the Vegetation and Wildlife section of the 1986 Administrative Draft EIR, the Biological Resources section of the 1996 Draft EIR, additional investigations conducted by the applicant's wetland consultant and a follow-up filed reconnaissance survey. Available documentation was again reviewed to provide an update on information on general resources in the area, the presence of sensitive natural communities, and distribution and habitat requirements of special-status species which have been recorded from or are suspected to occur in the site vicinity. Information reviewed included the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*¹ and other references on California flora,² the *Guide to California Wildlife Habitat Relationships System* and Volumes I, II, and III of *California's Wildlife*,³ the *Notice of Review* for federally-listed and candidate animals,⁴ the California Department of Fish and Game's (CDFG) list of special animals and plants,⁵ and a records' search conducted by the California Natural Diversity Data Base (CNDDB) of information on file with the CDFG.⁶

The Vegetation and Wildlife section of the 1986 Administrative Draft EIR provided a general description of vegetation, wildlife, and the potential presence of special-status species. The report indicates that field surveys were conducted in September, October, and November 1985 but does not describe the scope and duration of each survey effort. The report also includes conclusions about the

¹ *Inventory of Rare and Endangered Vascular Plants of California*, Special Publication No. 1 (5th Edition), California Native Plant Society, 1994.

² *A California Flora and Supplement*, P. Munz and D. Keck, 1973, and *Marin Flora*, T. Howell, 1970.

³ *Guide to the California Wildlife Habitat Relationship Systems*, California Department of Fish and Game, prepared by Jones & Stokes Associates, 1988, and *Volume I Amphibians and Reptiles*, 1988, *Volume II Birds*, 1990, and *Volume III Mammals*, 1990.

⁴ *Endangered and Threatened Wildlife and Plants, Animal Notice of Review*, U.S. Fish and Wildlife Service, Federal Register 50 CFR Part 17, 1993.

⁵ *Special Plants and Animals Lists*, California Natural Diversity Data Base, California Department of Fish and Game, 1994.

⁶ Natural Diversity Data Base, record search of the Novato and San Geronimo 7.5-minute USGS quadrangles, California Department of Fish and Game.

significance of potential impacts on identified resources and makes general recommendations to mitigate adverse effects.

Site surveys were conducted for the 1996 Draft EIR on August 28, 1995, September 11, 1995, March 23, 24, and 30, 1996, April 24, 1996, and July 1, 1996. They were performed to confirm and update the vegetation and wildlife habitat descriptions in the 1986 Administrative Draft EIR, independently review maps of trees prepared by the applicant's engineer, determine the extent of sensitive natural communities and possible jurisdictional wetlands not addressed in the 1986 Administrative Draft EIR, and provide a conclusive determination on the presence or absence of populations of special-status species.

A field reconnaissance was conducted on March 15, 2000 by the EIR biologist to confirm the extent of biological resources on the site. The preliminary wetland delineation prepared by the applicant's wetland consultant was also reviewed in the field during the reconnaissance. A delineation has been verified by representatives of the U.S. Army Corps of Engineers to provide an accurate mapping of jurisdictional habitat on the site. No additional detailed surveys have been conducted on the site.

VEGETATION

Site vegetation consists of a mosaic of woodland, grassland, freshwater seeps, scrub, and riparian forest. Woodland vegetation grows on the upper elevations and north-facing slopes above Miller Creek. Riparian forest occurs along Miller Creek, intergrading with species characteristic of the adjacent woodland. The woodland opens to a savanna of scattered trees and grassland along the crest of the site's main ridgeline. Grasslands dominate the valley floors and lower slopes below the woodland. Scattered freshwater seeps occur in the grasslands and support perennial species indicative of wetlands. Scrub occurs on the east-facing slopes in areas with an open woodland canopy with several distinct stands growing on the south-facing slope above Lucas Valley Road. Exhibit 5.3-1 shows the extent of the various vegetation types on the site.

Woodland vegetation forms a dense to open canopy on hillside slopes. The woodland is dominated by coast live oak (*Quercus agrifolia*) and California bay (*Umbellularia californica*) of mixed ages, with coast live oak and valley oak (*Quercus lobata*) occurring with higher frequency where the woodland gives way to an open savannah. California bay is particularly abundant on the north-facing slope above Miller Creek, forming stands characteristic of California bay forest. California buckeye (*Aesculus californica*), big-leaf maple (*Acer macrophyllum*), black oak (*Quercus kelloggii*), and madrone (*Arbutus menziesii*) also occur in the woodland but only sporadically.

The applicant's engineer mapped trees in the vicinity of proposed site alterations and recorded information on tree species and trunk diameter (measured at waist height) as part of the tree inventory in 1994 and 1995.⁷ The applicant's inventory of mapped tree locations does not consistently distinguish the three on-site species of oak, sometimes identifying trees as "live oak" and others simply as "oak". The applicant's tree map and inventory also were limited to areas encompassed by

⁷ Sheet 6 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Development Areas for Residential Lots, and Sheet 7 of the *Oakview Mitigated Master Plan Drawings* shows Tree Location Plan for Administrative / Professional Area, April 23, 1999. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

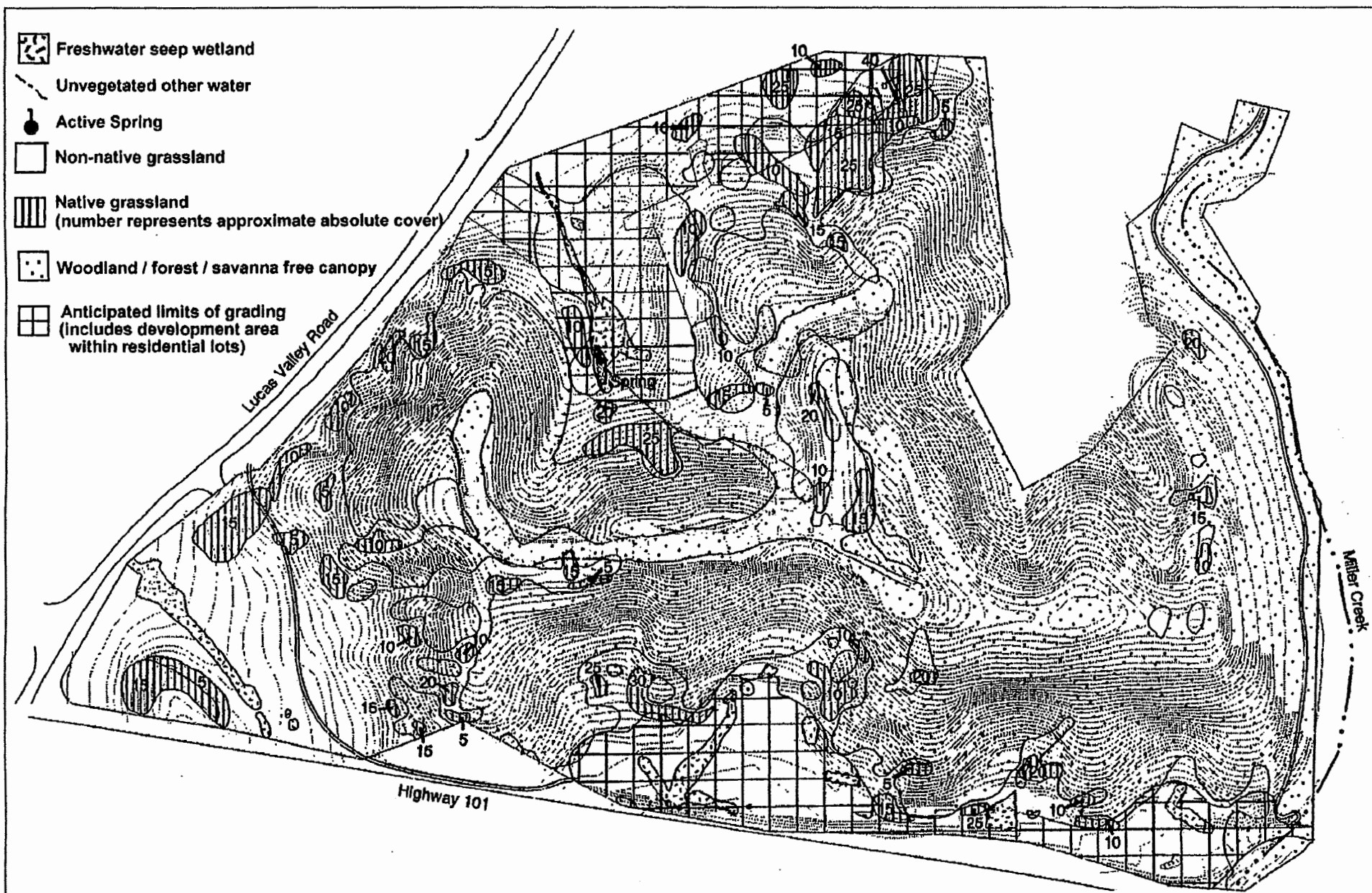
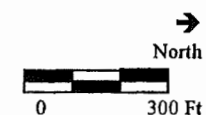


EXHIBIT 5.3-1 VEGETATION FEATURES OF THE PROJECT SITE
Oakview Master Plan

Source: Environmental Collaborative, Army Corps (2000)



proposed roadway and other initial improvements and did not extend throughout the development areas identified on proposed residential lots at the time of the previous application. Although trees

have continued to grow over the past five years, the inventory still provides a fairly accurate mapping of trees in the vicinity of the proposed improvements.

Understory vegetation in the woodland generally is sparse, composed primarily of scattered shrubs and vines, including poison oak (*Toxicodendron diversilobum*), honeysuckle (*Lonicera hispidula vacillans*), common snowberry (*Symphoricarpos rivularis*), toyon (*Heteromeles arbutifolia*), and goldenback fern (*Pityrogramma triangularis*). Where the canopy is open, species common to the non-native grassland are abundant, together with miner's lettuce (*Montia perfoliata*) and bedstraw (*Galium* sp.).

The riparian forest along Miller Creek intergrades with the dense woodland and forest on the slopes to the south of the creek and is bordered by existing development to the north. Willow (*Salix lasiolepis*), white alder (*Alnus rhombifolia*), Oregon ash (*Fraxinus oregonus*), and California bay form the dominant tree cover along the creek banks. Understory vegetation generally is sparse, with cream bush (*Holodiscus discolor*), wood rose (*Rosa gymnocarpa*), and blackberry (*Rubus ursinus*) forming dense thickets on some segments of the creek banks. High water volumes and velocities associated with severe storms have contributed to active erosion and downcutting of the channel banks, creating large vertical banks of ten feet or more at some locations and undercutting the root systems of trees and other vegetation along the stream. Parts of the northern creek bank have been covered with sandbags, cement, and riprap to control erosion and bank sloughing.

Small stands of coastal sage scrub, dominated by California sage (*Artimisia californica*), are scattered in a number of openings in the woodland and intergrade with grassland and woodland habitat on the south-facing slope above Lucas Valley Road. Species diversity in the scrub is low, generally limited to California sage and grassland species. Due to the poorly defined limits of its occurrence on the site, this vegetation type is not mapped on Exhibit 5.3-1.

Grassland vegetation throughout most of the site is composed primarily of introduced annual grasses and forbs, forming a cover of non-native grassland. Common species include wild oat (*Avena* spp.), foxtail fescue (*Vulpia myuros*), hedgehog dogtail (*Cynosorus echinatus*), perennial ryegrass (*Lolium perenne*), big quaking grass (*Briza maxima*), and soft chess (*Bromus hordeaceus*). Native species in these portions of the grasslands generally are limited to scattered perennials such as blue-eyed grass (*Sisyrinchium bellum*), wild iris (*Iris douglasiana*), California poppy (*Eschscholzia californica*), and soap plant (*Chlorogalum pomeridianum*). Where heavy grazing or other disturbance has occurred, ruderal species are more prevalent and include yellow star thistle (*Centaurea solstitialis*), purple star thistle (*Centaurea calcitrapa*), bristly ox-tongue (*Picris echioides*), and wild radish (*Raphanus sativus*).

Although much of the grasslands have been disturbed by intensive cattle grazing, stands of native perennial bunchgrass remain on parts of the site, dominated by purple needlegrass (*Nassella pulchra*) and California oatgrass (*Danthonia californica*). Most of the native grasslands throughout the state have been eliminated during the past 100 years by over-grazing, agricultural practices, and other factors. This has led the CNDDB to recognize native grasslands as a sensitive resource with a high inventory priority. The CNDDB considers grasslands containing ten percent or greater cover by native grass species to represent a natural grassland community. This ten percent threshold is a

loosely applied standard which the State has used for many years and generally refers to "relative" rather than "absolute" cover of native species.⁸ Another parameter the State uses in evaluating whether a stand specifically of purple needlegrass is to be included in the data base inventory and monitored as a priority for preservation is a general minimum size of 50 acres. This is due to the rather abundant distribution and density of purple needlegrass in coastal areas. Because most remaining grasslands in the state have been highly modified by past and on-going disturbance, the remaining native grassland communities generally form a mosaic of different cover classes, sometimes interspersed with areas dominated by non-native species. The CNDDB typically averages cover classes over a larger area to determine the overall percent of cover and value of the native grasslands.

Exhibit 5.3-1 shows the extent of native grassland stands observed during the spring 1996 field surveys and confirmed during the March 15, 2000 field reconnaissance. Stands were categorized into general cover class percentages, based on a visual estimate of absolute cover. Mapped cover classes range from absent (where little or no native species occur) to as high as 40 percent native species in one area. High quality stands of native grasslands with a diverse assemblage of native grasses and forbs generally are absent from the site. Most are composed of fairly small patches of purple needlegrass smaller than a few thousand square feet in size. Collectively, stands of native grassland with a cover class of ten percent or greater total approximately 4.8 acres of the site. One large stand of about 1.8 acres occurs on the slopes above Erin Drive, but most of this stand just barely meets the ten percent threshold the State uses to identify the presence of this sensitive natural community.

Freshwater seeps also occur within the grasslands. This natural community type occurs in areas with perennial or seasonally wet soil supporting a dense cover of perennial herbs and making an abrupt transition to the surrounding grasslands. Most of the seeps are dominated by iris-leaved rush (*Juncus xiphioides*), although others are dominated by slender rush (*Juncus tenuis*), creeping spike-rush (*Eleocharis macrostachya*), and sedge (*Carex sp.*). Pennyroyal (*Mentha pulegium*), harding grass (*Phalaris aquatica*), and rabbitfoot grass (*Polypogon monspeliensis*) also are present at some seep areas. The largest of these seeps occurs in the swale in the southwest corner of the site where surface water was present in an excavated trench which appears to have served as a watering location for livestock when the property was still used for grazing.

⁸ "Absolute" and "relative" cover are statistical methods of quantifying the areal extent of vegetative cover within a sampling area. Absolute cover considers all components of the sampling area, including the percentage of barren unvegetated ground. Relative cover factors out the amount of unvegetated ground in the sampling area, and the percentage of the component species is adjusted accordingly, depending on the density of the cover in a particular location. Where plant cover basically is 100 percent, as throughout much of the site's grasslands, there virtually is no difference between absolute and relative cover values. However, in areas with sparser cover, the difference between the two methods is substantial. The following hypothetical example shows the contrast between relative and absolute cover values. In an area where unvegetated ground comprises 50 percent of a total sample area, native grasses comprise five percent of the absolute cover, and non-native grasses comprise the remaining 45 percent of the absolute cover. The relative cover of this same sample area would be ten percent cover of native grasses and 90 percent cover with non-native grasses. To some degree, the issue of absolute and relative cover is irrelevant to the project's potential impacts because all of the native grasslands in the vicinity of proposed alterations generally have 100 percent plant cover, and the absolute and relative cover values are the same in these areas.

WETLANDS AND WATERCOURSES

Although definitions vary to some degree, wetlands generally are considered to be areas which are periodically or permanently inundated by surface or ground water and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and floodwaters, and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the U.S. Army Corps of Engineers (Corps) and the U.S. Fish & Wildlife Service (USFWS) which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.⁹

Based on the verified wetland delineation, a total of 2.62 acres of jurisdictional waters of the U.S. occur on-site. Exhibit 5.3-2 summarizes the jurisdictional waters which consist of approximately 0.33 acre of "other waters" associated with Miller Creek, 0.026 acre of primarily "other waters" associated with the ditch which drains the active spring in the southwest corner of the site, and collectively about 2.26 acres of potential wetlands composed of the scattered freshwater seeps. The largely isolated freshwater seeps are dominated by wetland indicator species such as iris-leaved rush, slender rush, creeping spike-rush, pennyroyal, and rabbitfoot grass.

⁹ The CDFG and U.S. Army Corps of Engineers (Corps) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Corps jurisdiction is established by the provisions of Section 404 of the Clean Water Act which prohibits the discharge of dredged or fill material into "waters of the United States" without a permit, including wetlands and unvegetated "other waters of the U.S." The Corps uses three mandatory technical criteria (hydrophytic vegetation, hydric soils, and wetland hydrology) to determine whether an area is a jurisdictional wetland. All three of the identified technical criteria must be met for an area to be identified as a wetland under Corps jurisdiction, unless the area has been modified by human activity.

Jurisdictional authority of the CDFG over wetland areas is established under Sections 1601-1606 of the Fish and Game Code which pertain to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code stipulates that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. The CDFG's Wetlands Resources Policy states that the Fish and Game Commission will "strongly discourage development in or conversion of wetlands ... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage." The Department also is responsible for commenting on projects requiring Corps' permits under the Fish and Wildlife Coordination Act of 1958.

Exhibit 5.3-2
Acreage of Jurisdictional Wetlands and Unvegetated Other Waters

<i>Feature</i>	<i>Total Acreage</i>
<i>Scattered Freshwater Seep Wetlands</i>	
Freeway Reserve Parcel	0.64
All Other Wetland Areas	1.62
<i>Total Jurisdictional Wetlands</i>	<i>2.26</i>
<i>Unvegetated Other Waters of the U.S.</i>	
Miller Creek Channel	0.33
Spring Associated Other Waters	0.026
<i>Total Other Waters of the U.S.</i>	<i>0.356</i>
<i>Total Wetlands and Other Waters</i>	<i>2.62</i>

WILDLIFE

The project site provides a mosaic of wildlife habitat types, consisting of woodland, forest, open grassland, and the Miller Creek riparian corridor. The varied vegetation, available surface water, and limited human activity contribute to the site's relatively high wildlife habitat value. However, existing development (northwest and south) and Highway 101 (east) limit the site's use by large mammalian predators, such as mountain lion, bobcat, and coyote, sensitive to human disturbance.

The woodland provides important cover for wildlife, and the complex vertical distribution of canopy and understory vegetation provides for a greater diversity of wildlife than often found in the adjacent grasslands. Wildlife commonly associated with forest and woodland habitat includes dusky-footed woodrat, deer mouse, western flycatcher, chestnut-backed chickadee, plain titmouse, Hutton vireo, Wilson warbler, orange-crowned kinglet, rufous-sided towhee, fox sparrow, bushtit, ringneck snake, California newt, and California slender salamander. Dead limbs and cavities in older trees often are used for nesting or denning. The abundant seed crops produced by oak, bay, madrone, poison oak, and toyon are important food sources for black-tailed deer, scrub and Steller jays, woodpeckers, and other wildlife species.

Grasslands support numerous small mammals and birds and provide important foraging habitat for raptors. Many species use the grassland for only part of their habitat requirements, foraging in the grassland and seeking cover in adjacent tree and scrub cover. Species common in the grassland include California vole, Botta pocket gopher, black-tailed jackrabbit, common garter snake, western fence lizard, northern alligator lizard, and gopher snake. Grassland vegetation provides food, nesting material, and nesting substrate for numerous species of birds, including mourning dove, American goldfinch, song sparrow, red-winged blackbird, and western meadowlark. The smaller mammals, reptiles, and birds are important prey for several species of raptors which frequent the grasslands of the site and surrounding area, such as red-tailed hawk, great horned owl, American kestrel, and turkey vulture. No raptor nests were detected during field surveys, although it is possible that new nests could be established on the site in the future.

The freshwater seeps and stands of native grasses contribute to the complexity of the grasslands, but no unique wildlife species endemic to these natural community types are expected to occur on the site. Garter snake, tree frog, western toad, and other species generally associated with emergent

wetland habitat may use seeps with abundant surface water. The spring in the southwest part of the site most likely serves as an important source of surface water for numerous birds and mammals during the dry summer months.

The Miller Creek riparian corridor contributes to the value of the site's adjacent woodlands and provides an important source of surface water for wildlife. The stream channel serves as a movement corridor for fish and wildlife, particularly larger species such as black-tailed deer, raccoon, opossum, and, possibly, grey fox. Evidence indicates that the culvert under Las Gallinas Avenue is used as a link to the undeveloped lands to the northwest. The stream provides aquatic habitat for fish, amphibians, and large populations of invertebrates. Miller Creek historically supported runs of steelhead trout (*Oncorhynchus mykiss*),¹⁰ and steelhead have been observed in the creek during recent fish surveys.

SPECIAL-STATUS PLANT AND ANIMAL SPECIES

A record search conducted by the CNDDDB¹¹ and the other relevant information identified above indicate that historical occurrences of several plant and animal species with special status have been recorded from or are suspected in the west-central Marin County area. Special-status species¹² are plants and animals which are legally protected by the State and / or Federal Endangered Species Acts¹³ or other regulations and other species which the scientific community and trustee agencies have identified as rare enough to warrant special consideration, particularly the protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Species protected by the Endangered Species Acts often represent major constraints to development,

¹⁰ Grady & Luiz Ranches - Lucas Valley Final Environmental Impact Report, James A. Roberts Associates, Inc., September 20, 1974.

¹¹ Novato and San Geronimo Quadrangles, Natural Diversity Data Base, California Department of Fish and Game, *op. cit.*

¹² Special-status species include:

- Officially designated (rare, threatened, or endangered) and candidate species for listing by the CDFG.
- Officially designated (threatened or endangered) and candidate species for listing by the USFWS.
- Species considered to be rare or endangered under the conditions of Section 15380 of the California Environmental Quality Act (CEQA) Guidelines, such as those identified on lists 1A, 1B, and 2 in the *Inventory of Rare and Endangered Vascular Plants of California* (Special Publication No. 1, 5th Edition, California Native Plant Society, 1994).
- And possibly other species which are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for state or federal status, such as those included on lists 3 and 4 in the CNPS *Inventory* or identified as animal "Species of Special Concern" by the CDFG. Species of Special Concern have no legal protective status under the state Endangered Species Act but are of concern to the CDFG because of severe decline in breeding populations in California.

¹³ The Federal Endangered Species Act (FESA) of 1973 declares that all Federal departments and agencies shall use their authority to conserve endangered and threatened plant and animal taxa. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

particularly when they are wide ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" ¹⁴ of these species.

According to CNDDB records, no special-status plant or animal species have been reported on the project site or immediate vicinity. However, suitable habitat for numerous special-status species occurs on and in the vicinity of the site. Occurrence information may not be recorded with the CNDDB due to the lack of detailed survey work to detect existing populations or because the CNDDB does not closely monitor species of concern without legal status. Detailed field surveys generally are necessary to provide a conclusive determination on presence or absence of species of concern.

As discussed above (*Introduction and Methods*), detailed surveys were performed as part of the 1996 Draft EIR to determine whether any species of concern occur on the site. These included a habitat suitability analysis, field surveys for essential habitat features of numerous mammals, amphibians, and bird species, and systematic surveys for plant species of concern initiated in March and continuing through the 1996 flowering period.

Information on animal and plant species of concern suspected to have a reasonable likelihood of occurrence on the site is summarized in Exhibits 5.3-3 and 5.3-4, respectively. These exhibits identify the common and scientific names of each species, current status, preferred habitat, and other life history or distribution information. Numerous other special-status species have been reported in parts of Marin County and the San Francisco Bay Area, but the lack of unique habitat conditions, such as serpentine derived soils or salt marsh habitat, precludes occurrence of any of these species on the site. These include many of the 75 species identified in 1994 by the USFWS ¹⁵ in a general list of species which may be affected by projects in Marin County, such as California brown pelican (*Pelecanus occidentalis californicus*), California clapper rail (*Rallus longirostris obsoletus*), marbled murrelet (*Brachyramphus marmoratus*), northern spotted owl (*Strix occidentalis caurina*), salt marsh harvest mouse (*Reithrodontomys raviventris*), and Suisun ornate shrew (*Sorex ornatus sinuosus*).

Suitable habitat for most of the animal species of concern identified in Exhibit 5.3-3 was absent from the site during a habitat suitability analysis conducted in August 1995. Systematic surveys were not considered necessary for any of these species due to the absence of essential habitat features, such as nests, dens, or suitable breeding habitat. Steelhead are known from Miller Creek which passes through the northern edge of the project site. A slight potential remains that western pond turtle,

¹⁴ The FESA defines "take" as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" a threatened or endangered species. The USFWS further defines "harm" as including the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. The CDFG also considers the loss of listed species habitat as "take", although this policy lacks statutory authority and case law support under the CESA.

Two sections of FESA contain provisions which allow or permit "incidental take". Section 10(a) provides a method by which a state or private action which may result in "take" may be permitted. An applicant must provide the USFWS with an acceptable conservation plan and publish notification for a permit in the *Federal Register*. Section 7 pertains to a Federal agency which proposes to conduct an action that may result in "take", requiring consultation with USFWS and possible issuance of a jeopardy decision. Under the CESA, "take" can be permitted under Section 2081 of the Fish and Game Code. An applicant must enter into a habitat management agreement with the CDFG which defines the permitted activities and provides adequate mitigation.

¹⁵ *Marin County Species List for Proposed Oakview Residential Development Master Plan*, letter to Dean Powell, Principal Planner, from Joel A. Medlin, U.S. Fish and Wildlife Service, July 20, 1994.

Exhibit 5.3-3

Special-Status Animals Considered to Potentially Occur in Project Vicinity

Taxa Name	Status Federal/State	Habitat characteristics (potential for occurrence on site)
Invertebrates		
<i>Syncaris pacifica</i> California freshwater shrimp	FE/SE	Occurs in tree-lined, freshwater streams with underwater vegetation and exposed tree root (suitable habitat occurs in other locations along Miller Creek, but species has not been detected in this or any other nearby drainages).
Amphibians/Reptiles/Fish		
<i>Ambystoma tigrinum californiense</i> California tiger salamander	C/CSC	Grassland and open woodlands with temporary or permanent water (suitable breeding and upland retreat habitat absent).
<i>Clemmys marmorata</i> Western pond turtle	-/CSC	Ponds, marshes, rivers, and streams (suitable breeding habitat absent, but Miller Creek may serve as dispersal corridor).
<i>Oncorhynchus Mykiss</i> Steelhead – Central California Coast ESU	FT/-	Andromus species spawning in freshwater rivers and streams and migrates to ocean (known to migrate up Miller Creek).
<i>Rana aurora draytoni</i> California red-legged frog	FT/CSC	Permanent ponds, pools, and streams (suitable breeding habitat absent, but Miller Creek may serve as dispersal corridor).
<i>Rana boylei</i> Foothill yellow-legged frog	-/CSC	Perennial streams in grassland, woodland, and forest (intermittent nature of Miller Creek most likely precludes occurrence).
Birds		
<i>Accipiter cooperii</i> Cooper's hawk	-/CSC	Riparian woodlands and open forest (marginal foraging and nesting habitat present, but no nests detected during surveys).
<i>Accipiter striatus</i> Sharp-shinned hawk	-/CSC	Riparian woodlands and dense forest (marginal foraging and nesting habitat present, but no nests detected during surveys).
<i>Aquila chrysaetos</i> Golden eagle	-/CSC, CP	Open mountains, foothills, and canyons (suitable foraging habitat present, but nesting habitat absent).
<i>Athene cunicularia</i> Burrowing owl	-/CSC	Open grassland and fields, farms, and ruderal areas (marginal foraging habitat present, but ground nesting habitat absent and not detected during surveys).
<i>Elanus caeruleus</i> White-tailed kite	-/CP	Open foothills, marshes, and grassland (suitable foraging habitat present, but nesting activity not detected during surveys).
<i>Eremophila alpestris actia</i> California horned lark	-/CSC	Open habitat with sparse cover (suitable foraging habitat present, but nesting activity not detected during surveys).
<i>Falco mexicanus</i> Prairie falcon	-/CSC	Canyons, mountains, open grassland (suitable foraging habitat present, but nesting habitat absent).
<i>Falco peregrinus</i> Peregrine falcon	FE/SE, CP	Canyons, mountains, open grassland (suitable foraging habitat present, but nesting habitat absent).
<i>Lanius ludovicianus</i> Loggerhead shrike	-/CSC	Open habitat with scattered trees, shrubs, and other perches (suitable foraging habitat present, but not detected during surveys).

Exhibit 5.3-3 Continued on Following Page

Exhibit 5.3-3 (continued)

Special-Status Animals Considered to Potentially Occur in Project Vicinity

Taxa Name	Status Federal/State	Habitat characteristics (potential for occurrence on site)
Mammals		
<i>Antrozous pallidus</i> Pallid bat	-/CSC	Roosts in caves, crevices, unused structures (suitable maternity roost habitat absent, not detected during surveys).
<i>Eumops perotis californicus</i> California mastiff bat	-/CSC	Caves and crevices in arid areas with high cliffs (roosting habitat absent, not detected during surveys).
<i>Plecotus townsendi townsendi</i> Townsend western big-eared bat	-/CSC	Cave, mines, and abandoned buildings (marginal roosting habitat present, but not detected during surveys).
<i>Taxidea taxus</i> American badger	-/CSC	Grassland, oak savanna, and woodland (suitable foraging habitat present, but no signs of foraging activity or dens detected during surveys).

Status Designations:

Federal:

- FE = Listed as Endangered under the federal Endangered Species Act.
- FT = Listed as Threatened under the federal Endangered Species Act.
- PE = Proposed for federal listing as Endangered.
- C = A candidate species under review for federal listing. Category taxa include those for which the USFWS has sufficient biological information to support a proposal to list as endangered or threatened.
- R1 = Recommended for Category 1 candidate status.
- R2 = Recommended for Category 2 candidate status.

State:

- SE = Listed as Endangered under the California Endangered Species Act.
- ST = Listed as Threatened under the California Endangered Species Act.
- CP = California fully protected species; individual may not be possessed or taken at any time.
- CSC = Considered a species of special concern by the California Department of Fish and Game; taxa have no formal legal protection but nest sites and communal roosts are generally recognized as significant biotic features.

Exhibit 5.3-4

Special-Status Plant Species -- Potential Occurrence in Project Site Vicinity

Taxon Name	Status Fed/State/ CNPS	Habitat Characteristics	Distribution	Flowering Period
<i>Amsinckia lunaris</i> Bent-flowered fiddleneck	-/-/4	Valley grassland	Contra Costa, Lake, Marin, Santa Cruz, Shasta, Siskiyou, Alameda	May-June
<i>Arabis blepharophylla</i> Coast rock cress	-/-/4	Rocky places, coastal scrub, coastal prairie, and mixed evergreen forest	Marin, Santa Cruz, San Francisco, San Mateo, Sonoma, Colusa, Mendocino	Feb.-April
<i>Arctostaphylos virgata</i> Marin manzanita	-/-/1B	Forests and chaparral	Marin	Jan.-March
<i>Astragalus breweri</i> Brewer milk vetch	-/-/4	Meadows and grassy hillsides, often on serpentine and in chaparral or woodland	Lake, Marin, Napa, Sonoma, Yolo	April-May
<i>A. tener</i> var. <i>t.</i> Alkali milk-vetch	-/-/1B	Grasslands and vernal pools	Alameda, Contra Costa, Merced, Napa, Santa Barbara, Santa Clara, San Francisco	March-Jun.
<i>Castilleja affinis</i> ssp. <i>neglecta</i> Tiburon indian paintbrush	E/T/1B	Grasslands, often on serpentine	Marin, Napa, Santa Clara, San Joaquin, Solano, Sonoma, Stanislaus, Yolo	April-June
<i>Cirsium andrewsii</i> Franciscan thistle	-/-/4	Moist places, coastal scrub and mixed evergreen forest	Marin, San Francisco, San Mateo, Sonoma	June-July
<i>Delphinium bakeri</i> Baker larkspur	PE/R/1B	Coastal scrub and valley grassland	Marin, Sonoma	March-May
<i>D. luteum</i> Yellow larkspur	PE/R/1B	Open places in coastal scrub and bluffs	Marin, Sonoma	March-May
<i>Dichondra occidentalis</i> Western dichondra	-/-/4	Dry sandy banks in brush or under trees, chaparral, coastal scrub and woodland	Los Angeles, Marin, Orange, Santa Barbara, Santa Catalina Island, San Diego, San Miguel Island, Sonoma, Ventura, Baja California	March-May
<i>Elymus californicus</i> California bottle-brush	-/-/4	Woods and shade	Marin, Monterey, Santa Cruz, San Mateo, Sonoma	June-August
<i>Eriogonum luteolum</i> var. <i>caninum</i> Tiburon buckwheat	-/-/3	Dry rocky slopes	Alameda, Lake, Marin, Napa, Santa Clara, San Mateo, Sonoma, Colusa	June-Sept.
<i>Erysimum franciscanum</i> San Francisco wallflower	-/-/4	Open, woody, or brushy places in rocky to sandy soil, often on serpentine	Marin, Santa Cruz, San Francisco, San Mateo, Sonoma	March-June
<i>Fritillaria liliacea</i> Fragrant fritillary	*-/1B	Heavy soils, open hills and fields, often on serpentine	Alameda, Contra Costa, Marin, Monterey, San Benito, Santa Clara, San Francisco, San Mateo, Solano, Sonoma	Feb.-April
<i>Hemizonia congesta</i> ssp. <i>leucocephala</i> Hayfield tarplant	-/-/3	Coastal scrub, grassland	Marin, Mendocino, Sonoma	April-Oct.
<i>Hesperolinon congestum</i> Marin western flax	T/T/1B	Chaparral and grasslands	Marin, San Francisco, San Mateo	May-July
<i>Holocarpha macradenia</i> Santa Cruz tarplant	PT/E/1B	Heavy soils on grassy flats, coastal scrub	Alameda, Contra Costa, Marin, Monterey, Santa Cruz	June-Oct.

Exhibit 5.3-4 Continued on Following Page

Exhibit 5.3-4 (continued)
Special-Status Plant Species -- Potential Occurrence in Project Site Vicinity

Taxa Name	Status Fed/State/ CNPS	Habitat Characteristics	Distribution	Flowering Period
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Wedge-leaved horkelia	-/-1B	Sandy and gravelly places	Alameda, Marin, Monterey, Santa Barbara, Santa Cruz, San Francisco, San Luis Obispo, San Mateo	April-Sept.
<i>H. tenuiloba</i> Thin-lobed horkelia	-/-1B	Sandy or silty meadows, chaparral and mixed evergreen forest	Marin, Mendocino, Sonoma	May-July
<i>Lilium maritimum</i> Coast lily	*/-1B	Brush and woods, sandy soil, or bog hummocks	Marin, Mendocino, San Francisco, San Mateo, Sonoma	May-July
<i>Lessingia hololeuca</i> Woolly-headed lessingia	-/-3	Coastal scrub and grasslands	Alameda, Marin, Monterey, Napa, Yolo, Santa Clara, San Mateo, Solano, Sonoma	June-October
<i>Micropus amphibola</i> Mt. Diablo cottonweed	-/-4	Shallow soil in rocky places	Alameda, Contra Costa, Lake, Marin, Napa, Sonoma, Santa Cruz, Monterey	April-May
<i>Monardella undulata</i> var. <i>u.</i> Curly-leaved monardella	-/-4	Sandy places below 500 feet	Marin, Monterey, Santa Barbara, Santa Cruz, San Luis Obispo, San Mateo, Sonoma	May-July
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	-/-1B	Forests, meadows, and grasslands	Marin, Mendocino, Sonoma	May-Aug.
<i>Pentachaeta bellidiflora</i> White-rayed pentachaeta	E/E/1B	Open dry rocky slopes, coastal prairie and scrub	Marin, Santa Cruz, San Mateo	March-May
<i>Perideridia gairdneri</i> ssp. <i>g.</i> Gairdner yampah	*/-4	Wet places below 11,000 feet	Kern, Los Angeles, Marin, Monterey, Napa, Orange, Santa Clara, Santa Cruz, San Diego, San Luis Obispo, San Mateo, Solano, Sonoma	June-Oct.
<i>Piperia michaelii</i> Michael's rein orchid	-/-4	Dry hills below 8,000 feet	Alameda, Humboldt, Marin, Monterey, Santa Cruz, San Francisco, San Luis Obispo, San Mateo, Contra Costa	May-Aug.
<i>Plagiobothrys mollis</i> var. <i>vestitus</i> Petaluma popcorn-flower	*/-1A	Coastal salt marsh, wet meadows	Sonoma	June-July
<i>Pleuropogon hooverianus</i> North coast semaphore grass	*R/1B	Meadows, mixed evergreen forest	Marin, Mendocino, Sonoma	May-Aug.
<i>P. refractus</i> Nodding semaphore grass	-/-4	Meadows and mountain streams	Del Norte, Humboldt, Marin, Mendocino, Oregon, Washington	May-Aug.
<i>Ribes victoris</i> Victor gooseberry	-/-4	Wooded slopes in shaded canyons	Marin, Mendocino, Napa, Solano, Sonoma	March-April
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	*/-1B	Coastal prairie and valley grassland	Marin, Monterey, Santa Cruz	April-May

Exhibit 5.3-4 Continued on Following Page

Exhibit 5.3-4 (continued)

Special-Status Plant Species -- Potential Occurrence in Project Site Vicinity

Taxa Name	Status Fed/State/ CNPS	Habitat Characteristics	Distribution	Flowering Period
<i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i> Mt. Tamalpais jewelflower	-/-1B	Chaparral, serpentine ridges	Marin	May-July
<i>Trifolium amoenum</i> Showy Indian clover	E/-1B	Low rich fields, swales, etc.	Alameda, Marin, Mendocino, Napa, Santa Clara, Solano, Sonoma	April-June
<i>Triphysaria floribundus</i> San Francisco owl's-clover	*/-1B	Open places, coastal prairie and valley grassland	Marin, San Francisco, San Mateo	April-May

Status Designations:

Federal:

E = Listed as "endangered" under the federal Endangered Species Act.

C = A "candidate" species under review for federal listing. Includes taxa for which the USFWS has sufficient biological information to support listing as endangered or threatened species.

PE = Petitioned for listing as "endangered".

PT = Petitioned for listing as "threatened".

* = Species of Concern

State:

E = An "endangered" species. Serious danger of becoming extinct throughout all or significant portion of range due to varying factors.

T = A "threatened" species. Likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

R = A "rare" species. Although not presently threatened with extinction, may become endangered if present environmental factors worsen.

CNPS:

1A = Plants of highest priority; plants presumed extinct in California.

1B = Plants of highest priority; plants rare and endangered in California and elsewhere.

3 = Plants requiring additional information; a review list.

4 = Plants of limited distribution; a watch list.

California red-legged frog, foothill yellow-legged frog, and, to a lesser extent, California freshwater shrimp may use the aquatic habitat of Miller Creek. At most, this likely would be limited to occasional dispersal along the channel by individuals of these species because characteristic breeding habitat is absent along this reach of the creek. Most of the raptors and other bird species of concern occasionally may forage in the grasslands and open woodlands of the site, but individual nests or suitable nesting habitat were not detected during the field surveys.

Systematic surveys for special-status plant species were conducted in March, April, and July 1996. No plant populations with any legal protective status were detected during the spring and summer field effort. Seven occurrences of Mt. Diablo cottonweed (*Micropus amphibola*) were detected in scattered locations on the site. This species has no legal protective status but is maintained on the CNPS List 4 because of uncertainties about its distribution and abundance. It is a small inconspicuous composite which appears to have contributed to concerns about its status. List 4 plants are considered to be of limited distribution in California, and their vulnerability or susceptibility to threat appears low at this time. It has no legal protective status under the provisions of CEQA or the State or Federal Endangered Species Acts.

As described above, valley oaks grow in the site's woodlands and open savanna. This species once was included on List 4 of the CNPS Inventory but is now considered too abundant for continued listing. Although the Inventory notes that this species of oak is widespread and relatively abundant, it is threatened by loss of habitat from urbanization and agricultural development in the Central Valley, and regeneration needs monitoring in many areas.

Biological Resources -- Criteria for Significance

The *State CEQA Guidelines* and Appendix N of the *Marin County Environmental Review Guidelines and Procedures* identify potentially significant environmental effects on biological resources if a project:

- Had a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Had a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Had a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfered substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites.
- Conflicted with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

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

According to CEQA, if the following condition occurs the lead agency (in this case Marin County) shall find that the project may have a significant effect on the environment:¹⁶

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

Biological Resources -- Impacts and Mitigation Measures

Impact 5.3-1 General Vegetation Removal and Landscaping Impacts

Grading associated with project implementation would remove existing vegetation in areas proposed for development, primarily involving non-native grassland but also affecting oak woodland, native grasslands, and freshwater seeps. Landscape plantings would replace much of the vegetative cover disturbed by project implementation, raising concerns about the appropriateness of proposed plant materials, compatibility with sensitive plant communities, and need for long-term management to ensure successful establishment. This would be a significant impact.

Proposed development would require removal of existing vegetation to accommodate new structures, roadways, parking lots, landscaping, and other improvements. The general impacts on vegetation resources, loss of non-native grasslands, and appropriateness of landscape improvements proposed as part of the project are evaluated below. Development also would encroach into woodland, native grassland, and freshwater seep communities, each of which is considered a sensitive biological resource. Impacts on sensitive natural communities are evaluated as separate impact items following this assessment of general vegetation resources.

Based on the anticipated limits of grading indicated in the proposed Grading and Drainage Plan,¹⁷ development would affect primarily non-native grassland cover. Much of this cover would be re-established at least temporarily as part of reseeding and erosion control on graded slopes. Due to the abundance of this plant community throughout the state and the fact that it is characterized primarily by introduced species, loss of the non-native grasslands would be considered a less-than-significant impact.

¹⁶ Under *State CEQA Guidelines* Section 15065.

¹⁷ Sheet 5 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Grading and Drainage Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

The Conceptual Landscape Plan¹⁸ describes project landscaping, including street trees, screening, entry area landscaping, and landscaping around the office area. Species identified in the Conceptual Landscape Plan are predominantly non-native ornamentals, such as holly oak (*Quercus ilex*), scarlet oak (*Quercus coccinea*), Bishop pine (*Pinus muricata*), Carolina laurel cherry (*Prunus caroliniana*), European hackberry (*Celtis australis*), and Chinese pistachio (*Pistache chinensis*). Native species, such as live oak, tan bark oak, and toyon, would be used in transitional areas between development and retained woodlands, such as the slope below Erin Drive and above the proposed office buildings.

The Conceptual Landscape Plan does not address salvage of on-site plant material as a possible source of landscape plants. With careful planning and implementation, much of the native grass tufts within the limits of grading could be salvaged and used in project landscaping. This approach to revegetation would provide a local source of plant material and limit the net loss of vegetative cover on the site. Several other native shrubs and grasses not identified in the Conceptual Landscape Plan would be suitable for revegetation and landscaping, such as California rose, creeping wildrye, and purple needlegrass.

Project-related grading would create suitable conditions for establishment of broom (*Cytisus* and *Genista* spp.) which could result in the introduction and spread of this highly invasive species on the site. Broom tends to develop into dense thickets which out-compete and eventually replace grassland and herbaceous cover. While broom currently is not a problem on the site it does occur along parts of the Lucas Valley Road corridor. Seeds from broom often become lodged in the tires of grading equipment and are transported to new locations during construction. A detailed management program would be required to ensure that broom does not become established on graded slopes and other parts of the site. The Conceptual Landscape Plan mentions the need for an eradication plan, but provides no details. Roads through the site could provide improved vehicle access to the proposed open space which may result in secondary disturbance to grassland cover and damage to other vegetation at higher site elevations. However, the restricted access to the site would limit the potential for substantial disturbance in open space areas, with the highest risk perhaps during the construction phase when the development area could be less intensively monitored than by residents and workers after buildout.

Mitigation 5.3-1 The following measures would be required to mitigate landscape compatibility and management impacts:

Mitigation Measure 5.3-1(a) A qualified landscape architect should prepare a detailed Landscape and Vegetation Management Plan in consultation with a plant ecologist experienced in management of native species. This Landscape and Vegetation Management Plan should be incorporated into the Final Landscape Plan prepared as a part of the Precise Development Plan. The plan should; 1) provide for re-establishment of native vegetation on graded slopes around the fringe of proposed development; 2) provide details on native plantings associated with proposed restoration, enhancement, and mitigation; 3) establish a program to salvage suitable native plants for use in landscaping and revegetation; 4) identify unsuitable species which should not be used in landscaping; 5) control the establishment and spread of introduced broom; and 6) specify long-term management provisions to ensure re-establishment of landscape improvements. Aspects of the plan should include the following:

¹⁸ Sheet 8 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Conceptual Landscape Plan. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

- Landscaping and revegetation should emphasize the use of native plant species along the fringe of proposed structures and grading. Plant lists should be expanded to include valley oak (*Quercus lobata*), California buckeye (*Aesculus californica*), California rose (*Rosa californica*), common rush (*Juncus patens*), creeping wildrye (*Leymus triticoides*), purple needlegrass (*Nassella pulchra*), iris-leaved rush (*Juncus xiphioides*), and slender rush (*Juncus tenuis*).
- Suitable tufts of native grasses to be removed by the project should be salvaged before grading and used in landscaping and revegetation, providing a source of mature plants and re-establishing much of the desirable local cover which otherwise would be lost with development. The anticipated limits of grading should be flagged, and plant material suitable for use in the salvage program should be marked, carefully removed, and stored. The salvage material should be transplanted to selected mitigation areas at the appropriate time of the year before grading (generally in October and November), with maintenance provided as necessary to ensure re-establishment.
- Non-native ornamental species used in landscape plantings should be restricted to the immediate vicinity of streets and development areas on residential lots on Parcel 1 and the parking lots and buildings on Parcel 2. The landscape plan should prohibit use of invasive non-native species which may spread into adjacent undeveloped areas. Unsuitable species include blue gum eucalyptus (*Eucalyptus globulus*), acacia (*Acacia* spp.), pampas grass (*Cortaderia selloana*), broom (*Cytisus* and *Genista* spp.), gorse (*Ulex europaeus*), bamboo (*Bambusa* spp.), giant reed (*Arundo donax*), English ivy (*Hedera helix*), German ivy (*Senecio milanioides*), and periwinkle (*Vinca* sp.), among others.
- Species planted adjacent to retained woodlands should be native to the site, and "other trees offering seasonal color" should be eliminated from the Conceptual Landscape Plan.
- Graded slopes and areas disturbed as part of the project should be monitored to prevent establishment and spread of French and Scotch broom. Removal and monitoring should include annual late winter removal of any rooted plants when soils are saturated and cutting back of any remaining flowering plants in the spring before seed begins to set in late April.
- The landscape plan should specify provisions to maintain landscaping and graded slope revegetation with replacement plantings and seeding for a minimum of five years to ensure re-establishment of cover.

Mitigation Measure 5.3-1(b) Vehicles and motorcycles should not be allowed to travel off designated roadways to prevent further disturbance to grassland cover and other vegetation. Barriers should be provided where vehicular access to open space areas may be possible.

Significance after Mitigation Implementation of Mitigation Measures 5.3-1(a) and 5.3-1(b) would ensure successful re-establishment of vegetative cover and landscape improvements and would provide for replacement and enhancement with native species, thus reducing impacts on general vegetation resources to less-than-significant levels.

Implementation of Mitigation Development Plan approval should be conditioned on incorporation of Mitigation Measures 5.3-1(a) and 5.3-1(b) in the project. These mitigation measures should be completed during preparation of the Final Landscape Plan or implemented as part of landscape monitoring.

Impact 5.3-2 Tree Removal and Woodland Impacts

Proposed development has generally been sited to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed. Additional trees could be adversely affected by grading and construction unless protective measures are implemented. Although anticipated tree removal represents only a small percentage of the total number of trees on the site, their loss would still be considered significant due to their age and length of time needed to replace them.

An estimated 35 trees would be removed to accommodate the proposed crossing of Miller Creek and to accommodate roadway and other improvements in the vicinity of the office area. These consist of oaks, bays, buckeye, and a few ornamental trees. No trees occur within the anticipated limits of grading in the residential area, although numerous trees occur on proposed individual lots outside the designated building envelope area. These include numerous trees in the woodland above Lots 1 to 4 and Lots 19 to 27, and individual trees bordered by the proposed building envelopes on Lots 8, 9, and 10. Additional trees occur along the fringe of proposed development and could also be affected by grading, in both the proposed office and residential areas.

Trees not directly removed by grading or other development activities may be damaged or adversely affected during construction or as a result of long-term changes to drainage patterns, irrigation, and other conditions. Mature oaks and other trees are sensitive to changes in drainage patterns, soil compaction, trenching, landscape irrigation, and other modifications within the root zone. Considerable care is necessary to protect trees in the vicinity of grading, building and roadway construction, and landscaping. Wounding of trunks and major roots during construction is a common problem which results in the invasion of harmful organisms and can contribute to structural decay of the tree. Root loss and a reduction in potential rooting area often contribute to long-term tree decline. In general, any disturbance within the dripline should be avoided to prevent adverse changes which may affect the long-term health and condition of trees to be preserved. Monitoring by a certified arborist would ensure that vulnerable trees are treated appropriately during construction.

The County's Tree Preservation and Protection Ordinance (Ordinance #3291) serves to control removal of protected trees. Protected trees under the ordinance are generally native species with trunk diameters of either six or ten inches, depending on species. All of the trees to be removed as part of the project would meet the County's definition as protected trees. A separate tree removal permit would not be required for the project because the potential affects of development have been considered as part of this EIR, and measures have been recommended to minimize tree removal, provide for protection of trees to be preserved, and replace trees lost as a result of proposed development. Based on the tree inventory, the applicant's engineer estimates that the site contains approximately 6,250 trees and that the minimum anticipated tree removal would affect less than one percent of the total number of trees on the site. While this represents only a very small percentage of the trees on the site, any loss would be considered significant because of the age and length of time needed to replace mature trees. Detailed measures to minimize removal, protect retained trees from damage due to construction activities and long-term changes, and provide for replacement plantings would be necessary to fully mitigate impacts on tree resources.

Mitigation 5.3-2 The following measures would be required to mitigate the impacts of tree loss:

Mitigation Measure 5.3-2(a) The development envelope shown on the Master Plan's Residential Area Layout¹⁹ should be revised to indicate building envelope areas which are intended to minimize tree removal. Deed restrictions or some other mechanism should be established over individual lots to prevent possible tree removal and disturbance of other native vegetation outside the identified building envelopes. Trees adjacent to building envelopes on Lots 8, 9, and 10 should be thinned or pruned under the guidance of a certified arborist rather than removed during house construction and yard landscaping.

Mitigation Measure 5.3-2(b) Where feasible from an engineering and geotechnical standpoint and warranted based on the good to excellent health and structure of the tree, trees near the limits of anticipated grading should be preserved and protected. Individual specimen-sized trees should be preserved by retaining walls, short over-steepened slopes, and other methods. Protection of larger native trees with trunk diameters exceeding 24 inches should take precedence over smaller live oaks and California bay which are abundant in the woodland habitat.

Mitigation Measure 5.3-2(c) A certified arborist should prepare detailed guidelines to protect trees to be preserved from possible damage. Trees to be retained should be identified in the field with flags or other obvious marking method before any grading. Standards contained in the preservation guidelines should include the following:

- Grade changes should be avoided within 1.5 times the width of the tree dripline, and any encroachment should be prohibited closer than one-third the distance from the dripline to the trunk. Restrictions on the limits of grading, adjustments to the final grade of cut and fill slopes, and use of retaining walls should all be used to protect individual trees worthy of preservation.
- Temporary fencing should be provided along the outermost edge of the dripline of each tree or group of trees to be retained in the vicinity of grading to avoid compaction of the root zone and mechanical damage to trunks and limbs.
- Paving within the tree dripline should be prohibited or stringently minimized by using porous materials such as gravel, loose boulders, cobbles, wood chips, or bark mulch where hardscape improvements are necessary for access in the vicinity of trees.
- Trenching within the tree dripline should be prohibited, and any required utility line within the dripline should be installed by boring or drilling through the soil.
- The amount of landscape irrigation within the tree dripline should be minimized by prohibiting turf or any landscaping with high water requirements and by limiting permanent irrigation improvements to bubbler, drip, or subterranean systems.
- Storage of construction equipment, materials, and stockpiled soils should be prohibited within the tree driplines.

Mitigation Measure 5.3-2(d) A tree replacement program should be prepared to provide for replacement of native trees removed by proposed development. The tree replacement program should be included as a component of the project's Landscape and Vegetation Management Plan (required by

¹⁹ Sheet 6 of the *Oakview Mitigated Master Plan Drawings* shows the proposed Residential Area Layout. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

Mitigation Measure 5.3-1[a]) and implemented as part of site revegetation and landscaping. Provisions of the tree replacement program should include the following:

- Oaks ~~and other native trees generally~~ should be replaced at a ratio of 2:1 ~~5:1~~ (ratio of replacement trees to number of trees removed).
- ~~All other native tree species should be replaced at a 3:1 ratio.~~
- Species composition of plantings in the tree replacement program should generally be consistent with the percentage of each tree species removed. If off-site nursery stock is used for replacement plantings, plants preferably should be seedlings with a container size of one-gallon or smaller. Younger plant material tends to have a higher survival rate than older nursery stock which has become established under ideal growing conditions provided at most nurseries.
- A program to collect seed and grow seedlings for use in the tree replacement program should be considered as part of the tree replacement program. Seed should be collected on-site in the fall months, planted in temporary containers, and maintained for a period of one or more years until seedlings are ready for planting. Oak seedlings grown from an on-site seed source would be preferable to use of off-site nursery stock, and this program should be encouraged, ~~by reducing the required replacement ratio from 5:1 to 3:1 where seedlings from on-site collection are used as replacement plantings.~~
- If trees proposed for removal are successfully salvaged and transplanted, no additional replacement mitigation should be required for those trees.
- Tree replacement plantings should be monitored as part of the Landscape and Vegetation Management Plan (required for the project by Mitigation Measure 5.3-1[a]) for a minimum of five years. If mature salvaged trees die within this time period, replacement plantings should be made at the 2:1 ~~respective 5:1 or 3:1~~ ratios. Any on-site salvage, locally collected and grown seedlings, or nursery stock plantings lost within this monitoring period should be replaced at a 1:1 ratio on an annual basis.

Significance after Mitigation Implementation of Mitigation Measures 5.3-2(a), 5.3-2(b), 5.3-2(c), and 5.3-2(d) to minimize removal of existing trees and provide extensive tree plantings as part of the tree replacement program would reduce significant impacts on trees to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measures 5.3-2(a), 5.3-2(b), 5.3-2(c), and 5.3-2(d) in the project. Recommended refinement of Grading Plans to protect existing trees should be completed before preparation of the Precise Development Plan. Tree preservation guidelines should be completed before preparation of the Precise Development Plan, with details incorporated into the Final Landscape Plan and with preservation methods followed during grading and construction. Tree replacement planting should be performed as part of landscape improvements with monitoring conducted as specified in the Landscape and Vegetation Management Plan.

Impact 5.3-3 Disturbance to Native Grasslands

Proposed development would affect an estimated minimum of 1.6 acres of native grasslands on the site with a coverage classification of ten percent or greater. Native grassland species presently consist mainly of purple needlegrass and California oatgrass. Because the CNDDDB considers this natural community sensitive due to its rarity, any future loss of native grasslands would "substantially" diminish habitat for plants. This would be a significant impact.

Scattered stands of native grassland would be disturbed and eliminated by site grading, primarily in the residential area. Individual residential lots encompass an estimated 1.5 acres of native grasslands with a cover classification of ten percent or greater. Although the proposed building envelopes generally avoid most of the native grassland stands, such as the large stand above Lots 2 to 7, landscape improvements and other modifications by future lot owners could result in the eventual elimination of the native grasslands on these lots. Several smaller stands of native grasslands would also be affected by grading and development in the office area, consisting of an estimated 0.1 acres of native grasslands. The possible wetland mitigation improvements could also affect stands of native grasslands in the southeastern portion of the site. The project would not directly affect the scattered stands of native grasslands on the slopes above Lucas Valley Road and at higher elevations on the property. The *State CEQA Guidelines* do not clearly define the sensitivity of native grasslands and other natural communities or the threshold for which mitigation must be required. Unlike potential impacts on a special-status species covered by a CEQA criterion and protected by the State and / or Federal Endangered Species acts, the significance of potential impacts on a sensitive natural community is only addressed indirectly on the basis of rarity. It can be inferred from criteria on diminishment of habitat for fish, wildlife, or plants that, because of this natural community's rarity, any further loss of native grasslands would "substantially" diminish habitat for plants. Appropriate mitigation would depend on the diversity of native species, cover class, and extent of the particular grasslands, as well as opportunities for and feasibility of successful restoration.

Using the CNDDDB standard, any loss of grasslands with a native cover of ten percent or greater would constitute an impact to a sensitive natural community and should be considered significant. None of the grasslands affected by proposed site development forms densely tufted stands with a cover class of 50 percent or greater, and the diversity of native species tends to be low, generally limited to purple needlegrass or California oatgrass.

Purple needlegrass has survived successfully in grassland restoration and revegetation projects using transplanted tufts, plug plantings, and seeding. The loss of on-site grasslands could be mitigated adequately by a combination of protection and restoration of remaining undisturbed areas of native grasslands on the southeast part of the site and by establishment of replacement stands on graded slopes as a component of the Landscape and Vegetation Management Plan required for the project by Mitigation Measure 5.3-1(a). Complete avoidance of the stands of native grasslands on the site would be unwarranted.

The text of the proposed Master Plan and the Conceptual Landscape Plan proposes to replace native grasslands lost as a result of development. Native grasslands would be replaced at a 1:1 ratio (ratio of acreage lost to acreage replaced) in the remaining open space areas. Although this replacement ratio would be appropriate, no details on the location of proposed replacement plantings, methods for implementation, and maintenance or monitoring details have been provided as part of the application.

Mitigation Measure 5.3-3 A grassland restoration and enhancement program should be required to mitigate the loss of native grasslands disturbed by proposed development which provides for replacement of native grasslands at a 1:1 ratio, meets or exceeds the cover class lost, and emphasizes the use of purple needlegrass and California oatgrass. A qualified plant ecologist experienced in

grassland restoration using native grasses should prepare the program. The grassland program should be included as a component of the Landscape and Vegetation Management Plan required for the project by Mitigation Measure 5.3-1(a) and should be implemented as part of site revegetation and landscaping. Provisions of the grassland program should include the following:

- Deed restrictions or some other mechanism should be established over individual lots to prevent possible removal of native grasslands outside the identified building envelopes, particularly on Lots 2 to 7, 17 to 20, 27, and 28.
- Native grasslands disturbed by proposed development should be restored and replaced at a minimum 1:1 ratio with replacement provided on a per acre basis for each cover class lost. Success criteria for replacement should provide for establishment of native grasslands which meet or exceed the cover class of the existing stands lost as a result of development.
- Replacement grasslands should be consolidated to the degree feasible to improve the value of the currently scattered stands, expanding the extent of native grasslands in the proposed open space in the southern part of the site, and used to revegetate the graded slopes above the proposed office area and recommended wetland mitigation area.
- Prior to construction, the boundary of proposed grading within or adjacent to stands of native grasslands to be preserved should be clearly staked with color-coded flags set at 50-foot intervals, and disturbance from construction equipment operation, storage, or other activities should be prohibited inside the delineated "no disturbance zone". Native grasslands within the limits of grading should be considered as possible salvage material to be used in the replacement program.
- Tree plantings shown in the Conceptual Landscape Plan and replacement plantings required for anticipated tree removal should be restricted to outside the existing and restored native grasslands.
- The program should identify the on-site mitigation areas and acreage, specify performance criteria, maintenance, and long-term management responsibilities, monitoring requirements, and contingency measures, and define site preparation, revegetation procedures, and an implementation schedule.

Significance after Mitigation Implementation of Mitigation Measure 5.3-3 would provide for protection and replacement of native grasslands disturbed by the project, thus reducing impacts on sensitive grassland resources to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.3-3 in the project. The grassland restoration and enhancement program should be completed before preparation of the Precise Development Plan with details incorporated into the Final Landscape Plan and with restoration methods followed during grading and construction. Salvage and restoration associated with the grassland mitigation should be implemented as part site revegetation and landscaping with monitoring conducted as specified in the Landscape and Vegetation Management Plan.

Impact 5.3-4 Disturbance to Freshwater Seeps and Wetlands

Proposed development would affect a minimum estimated 1.4 acres of scattered freshwater seep wetlands and a limited area of unvegetated other waters. This would be a significant impact.

Potential impacts to wetlands would include loss of much of the scattered freshwater seep habitat, possible modifications to accommodate the Miller Creek crossing, and indirect changes associated with the increased potential for erosion and water quality degradation. Potential erosion and degradation of the wetland and riparian habitat may result from increased urban runoff volumes and degraded water quality associated with proposed development. Soils exposed during grading and construction would contribute to increased sediment loads in the creek if adequate erosion control measures are not implemented. Increased urban pollutants, such as petroleum products from automobiles, and fertilizers, herbicides, and pesticides associated with landscape maintenance may contribute to long-term degradation of water quality.

Anticipated grading would affect a minimum of 1.4 acres of the scattered freshwater seep wetlands and 0.03 acres of unvegetated drainage ditches. This would include the active spring and an estimated 0.62 acre of associated freshwater seep habitat in the southwest part of the site and most of the seep habitat in the vicinity of the proposed office area. Although 0.23 acre of seep habitat in the office area would be located outside the anticipated limits of grading, these areas could be inadvertently affected during construction. The 0.64 acres of freshwater seep on the freeway reserve area in the southeast part of the site would not be directly affected by the project but eventually could be affected by proposed wetland mitigation or could be eliminated by future Highway 101 / Lucas Valley Road interchange improvements.

Impacts to the unvegetated "other waters" associated with Miller Creek would result from bridge construction and affect an area approximately 50 feet wide and 50 feet across the channel. The applicant's engineer indicates that a bridge or arched culvert would be built across the creek, thus minimizing possible fill and creek disturbance. Through careful design and construction, fill within the creek channel could be largely avoided, and significant disturbance to the corridor minimized. Improvements to the existing path along the southern edge of the creek corridor would not be expected to affect any jurisdictional waters or wetlands.

Modifications to the Miller Creek channel would be subject to jurisdictional review and approval by the CDFG, and the elimination or "filling" of the scattered wetlands would require approval by the Corps and Regional Water Quality Control Board (RWQCB). Further review by representatives of these agencies would focus on the adequacy of replacement and enhancement efforts to mitigate disturbance to existing wetlands, with new wetlands and native plantings provided as necessary to achieve adequate mitigation. The objective of these agencies is to ensure no net loss of either habitat acreage or value. Depending on the extent of proposed disturbance and quality of affected habitat, required mitigation ratios may vary from simple in-kind replacement to as high as 3:1 wetland replacement.

The Master Plan proposes to replace wetlands lost as a result of development by creating new wetlands in the area reserved for future improvements to the Highway 101 / Lucas Valley Road interchange in the southeastern corner of the site. No details on wetland mitigation have been proposed by the applicant, although the land area for wetland mitigation shown in the Conceptual Landscape Plan indicates replacement at an approximately 1:1 ratio. The freshwater seep habitat and the active spring to be removed represent significant wetland resources, which are difficult to recreate without an artificial water source. Providing a 1:1 replacement for wetlands lost as a result of development would be

inadequate, considering the sensitivity of this habitat type. Use of the future Highway 101 interchange area to create replacement wetland habitat would also be inappropriate given the likelihood that they would be eliminated in the future. Any replacement habitat should be located in an area which is preserved in perpetuity as a wetland mitigation area.

Mitigation 5.3-4 The following measures would be required to mitigate impacts on jurisdictional waters:

Mitigation Measure 5.3-4(a) A qualified wetland consultant should prepare a detailed wetland protection, replacement, and restoration program which satisfies adopted standards and criteria of the County, Corps, CDFG, and RWQCB. The program should be prepared as a component of the recommended Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a) at the Precise Development Plan stage of the County's planning and project approval process and should be implemented as part of site revegetation and landscaping. The wetland plan should clearly identify the total wetland and other jurisdictional area affected by the project, replace wetland habitat at a minimum 2:1 ratio (consistent with County policy), and provide for re-establishment, enhancement, and / or replacement of wetland vegetation. Details of the plan should include the following:

- Identify the location(s) of mitigation areas. Mitigation for loss of existing wetlands should be provided at a minimum replacement ratio of 2:1, consistent with *The Marin Countywide Plan*, and should result in created or restored wetlands with a higher habitat value than that of the lost wetland areas.
- Replacement wetlands should preferably be located on-site, but could include consideration of both on-site and an off-site location in the general vicinity. Use of the southeastern portion of the site for wetland mitigation would be unacceptable given that this area will most likely be developed with Highway 101 / Lucas Valley Road interchange improvements in the future.
- Specify performance criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures. Monitoring should be provided for a minimum of five years and continue until the success criteria are met.
- Define site preparation and revegetation procedures, an implementation schedule, and funding sources to ensure long-term management of the overall wetland mitigation plan.

Mitigation Measure 5.3-4(b) A detailed erosion and sedimentation control plan should be prepared and implemented during construction on the site. The plan should contain detailed measures to control erosion of stockpiled earth and exposed soil, provide for revegetation of graded slopes before the first rainy season following construction, and specify procedures for monitoring the plan's effectiveness. The revegetation component of the plan should be consistent with the Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a).

Implement Mitigation Measures 5.2-7 and 5.2-8 (Site Erosion and Downstream Sedimentation and Flooding.)

Mitigation Measure 5.3-4(c) The bridge or arched culvert proposed for the Marinwood Avenue crossing of Miller Creek should minimize disturbance to jurisdictional waters and riparian vegetation by designing it to conform with the County's minimum roadway width standards and restricting abutments to the upper channel banks. Construction should be performed during the low flow period

in the creek (from June through October), and construction debris should be kept outside of the creek channel by using silt fencing or other effective methods. Replacement planting with native trees and shrubs should be provided adjacent to the structure as part of mitigation following completion of bridge construction.

Significance after Mitigation Implementation of Mitigation Measures 5.3-4(a), 5.3-4(b), and 5.3-4(c) would reduce impacts on wetland and surface water resources to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measures 5.3-4(a), 5.3-4(b), and 5.3-4(c) in the project. The wetland restoration and enhancement program should be completed before preparation of the Precise Development Plan. Restoration associated with the wetlands plan should be implemented as part of site revegetation and landscaping with monitoring conducted as specified in the Landscape and Vegetation Management Plan. Coordination and approval by jurisdictional agencies must be completed prior to any disturbance which would affect jurisdictional waters on the site.

Impact 5.3-5 Disturbance to Stream Conservation Areas and Riparian Habitat.

Development as proposed would conform with the intent of The Marin Countywide Plan policies on Stream Conservation Areas with disturbance limited to the proposed roadway crossing over Miller Creek. This would be a less-than-significant impact.

The Stream Conservation Area (SCA) policies of *The Marin Countywide Plan* require provision of setbacks from the tops of stream banks and restoration and enhancement as part of development.²⁰ Proposed residential and office development would be located outside of and would not affect the SCA designated along the Miller Creek corridor. The Marinwood Avenue extension would involve construction of a new Miller Creek crossing which would affect a limited area of riparian vegetation. New stream crossings are allowed within SCAs, and mitigation would be provided under Mitigation Measures 5.3-4(c) and 5.3-6 to alleviate impacts to the riparian and wetland habitat of Miller Creek.

Mitigation Measure 5.3-5 No mitigation would be required.

Impact 5.3-6 Disruption of Fish and Wildlife Habitat

Site development would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along the Miller Creek corridor. This would be a significant impact.

The project would alter existing patterns of wildlife use on parts of the site proposed for development by replacing grassland, freshwater seeps, and the fringe of woodland habitat with new buildings, roadways and other paved surfaces, and landscaping. Small resident mammals, amphibians, and reptiles would be eliminated from areas encompassed by proposed grading, and larger wildlife species would avoid using disturbed areas during construction. Residential development would infringe into the woodland habitat in the southern part of the site and destroy the active spring which provides an important source of surface water for wildlife.

²⁰ Streams subject to the SCA policies include all creeks identified with solid or dashed blue-lines on USGS topographic maps or smaller creeks with at least 100 feet of riparian vegetation along their banks. On the project site, this definition only applies to Miller Creek.

However, Miller Creek would continue to provide a perennial source of drinking water to wildlife and improvements would not restrict access to the creek corridor. Other than the proposed bridge crossing, development would generally be restricted away from the Miller Creek corridor, including avoidance of the dense woodland on the north-facing slope and woodlands throughout most of the site. Due to the amount of land to be preserved as open space, proximity of proposed residential use to existing development, and separation of the site from other open space lands, the general impact on wildlife in the Miller Creek corridor is considered to be less-than-significant.

Proposed modifications in the vicinity of Miller Creek would involve the Marinwood Avenue extension bridge, northern office building and parking area, and improvements to the existing creekside path. The office development area would be located outside the creek corridor, along the heavily traveled Highway 101, and would not have a significant effect on the habitat value of the creek. The possible use of night-lighting along the path, substantial tree removal to build the proposed bridge, and construction of a drop structure or other impediment under the bridge could have a significant effect on the habitat value of creek, if included as part of project plans. Careful bridge design and construction could largely avoid disturbance at the crossing and avoid significantly disturbing the corridor.

After completion of construction and establishment of landscaping, developed areas eventually would be frequented by birds and smaller wildlife and also may support species common to suburban areas, such as deer, raccoon, Norway rat, English sparrow, American robin, rock dove, and house finch. Deer could become a nuisance on the site, as they have in other parts of the County, by damaging and destroying ornamental landscaping.

Mitigation Measure 5.3-6 The following measure would be required to mitigate impacts on wildlife resources:

- Disturbance within the Miller Creek corridor on the site should be minimized to protect its function for fish and wildlife movement. The proposed bridge or arched culvert crossing should be designed to avoid impeding movement of fish and wildlife along the creek channel, and drop structures under the bridge should be prohibited. Improvements to the existing creekside path should be limited to stabilizing and possibly surfacing, and lighting should be prohibited along the path to minimize disrupting creek use by wildlife at night.

Significance After Mitigation Implementation of Mitigation Measure 5.3-6 would reduce impacts on wildlife resources to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.3-6 in the project.

Impact 5.3-7 Impacts on Special-Status Plant and Animal Species

No special-status species would be affected directly. However, the Miller Creek bridge could affect possible dispersal habitat of special-status turtle, frog, steelhead, and shrimp species, but would not affect other on-site habitat, and would not require confirmation surveys for those species. A possibility remains that raptors not presently occupying the site could establish nests between now and when development occurs which construction activities could destroy or induce raptors to abandon. This would be a potentially significant impact which only can be determined through supplemental field surveys before construction.

No special-status animal species were encountered during surveys of the site, and essential habitat, such as dens and nests, was absent. Proposed development would reduce the extent of foraging habitat available for raptors and other bird species of concern, but no direct impacts on essential habitat features are anticipated. Due to the extent of suitable foraging habitat which would be preserved in the surrounding open space areas, potential impacts on bird species of concern are considered to be less-than-significant. However, because grading and construction would not occur until some future year (if approved), a slight possibility remains that one or more species of raptor may establish a nest in the vicinity of proposed development which could be destroyed or abandoned as a result of construction activities. Destruction of a raptor nest in active use would be a violation of the Migratory Bird Treaty Act and provisions of the State Fish and Game Code. A pre-construction survey would be required to confirm absence of any raptor nesting activity if one or more nesting seasons pass before construction is initiated.

Construction of the Miller Creek bridge crossing could affect possible dispersal habitat for western pond turtle, California red-legged frog, foothill yellow-legged frog, steelhead, and California freshwater shrimp. Detailed confirmation surveys for these species do not appear to be necessary, assuming sensitive construction practices are used to alleviate any adverse impacts on the habitat of the creek corridor. Implementation of Mitigation Measures 5.3-4(c) and 5.3-6 would minimize impacts on jurisdictional "other waters" and wildlife of the creek, and would alleviate possible adverse impacts on these species of concern as well. Further consultation with jurisdictional agencies may be required as part of the wetland permitting process, which would further ensure adequate mitigation and protective measures.

The scattered occurrences of Mt. Diablo cottonweed would be avoided by both the initial grading and residential and office development. Two of the occurrences are located at the upper elevations of proposed Lots 20 and 26, and a third occurrence is located just upslope from the limits of grading for the southern office building. Grading and other improvements are not proposed near these three occurrences of Mt. Diablo cottonweed, and no direct impacts are anticipated. Due to the relative abundance of this species, lack of legal protective status, and direct avoidance, impacts on this species would not be considered significant.

Valley oak is no longer considered a special-status plant species. Although this species has no legal protective status and the County currently does not have a tree preservation ordinance, mature oaks and other native trees should be preserved or replaced as defined in Mitigation Measure 5.3-2. With incorporation of mitigation measures required above to minimize the loss of mature trees and provide for the re-establishment of native vegetation using locally available plant materials, removal of individual valley oaks would be considered less-than-significant.

Mitigation Measure 5.3-7 The following measures would be required to mitigate impacts on special-status species. If any active raptor nests are established within the vicinity of proposed grading in the future, they should be avoided until young birds are able to leave the nest (fledge) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-

nesting period (August 15 through January 14) or, if this is not feasible, by conducting a pre-grading survey for raptor nests. Provisions of the pre-grading survey effort, if necessary, should include the following:

- If grading is scheduled during the sensitive nesting period (January 15 through August 14), a qualified wildlife biologist, chosen by the County and paid for by the applicant, should conduct a pre-grading raptor survey to confirm the presence or absence of active nests in the vicinity of proposed construction activities.
- If active nests are encountered, the biologist should prepare and implement species-specific measures to prevent abandonment of the active nest(s). At a minimum, grading in the vicinity of a nest's tree should be deferred until the young birds have fledged, and a construction-disturbance setback of at least 300 feet should be provided. Grading or other disturbance in the vicinity of the nest should not be permitted until the biologist confirms that the young raptors have fledged. The biologist should submit a survey report to the County verifying that the young have fledged before grading in the construction-disturbance setback area is initiated.
- As necessary, representatives of the CDFG and USFWS should be consulted about appropriate construction restrictions, building setbacks, landscape screening, and other methods to ensure compliance with the Migratory Bird Treaty Act and provisions of the State Fish and Game Code.

Significance after Mitigation Implementation of Mitigation Measure 5.3-7 would reduce potential impacts on special-status species to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.3-7 in the project.

Impact 5.3-8 Cumulative Development

Potential impacts on biological resources tend to be site specific, with sensitive resources protected as part of environmental review. Restoration proposed or required as mitigation for the project and the extent of habitat which would be preserved as open space on the site would adequately mitigate any project-related contribution to an incremental loss of wildlife habitat. This would be a less-than-significant impact.

The potential impacts of development on biotic resources tends to be site specific, and the overall cumulative effect depends on the degree to which significant vegetation and wildlife resources are protected on each site. This includes preservation of specimen-sized trees, well-developed native vegetation (such as woodland, forest, and native grasslands), populations of special-status plant or animal species, and wetland features. Further environmental review of specific development proposals in the vicinity of the Oakview site should ensure that important biotic resources are protected and managed properly and prevent any significant adverse development-related impacts.

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance would be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. Protection of Miller Creek on the site should preserve its function as a movement corridor for fish and wildlife. The extent of surrounding development, including the freeway to the east and residential and office/commercial development to the north, west, and south, limits the possible connectivity of the site to the other undeveloped lands.

Mitigation Measure 5.3-8 No additional mitigation would be required.

5.4 VISUAL AND AESTHETIC QUALITY ¹

Visual and Aesthetic Quality -- Significance Criteria

CEQA GUIDELINES CRITERIA

According to the *State CEQA Guidelines* a project would result in a significant aesthetic impact if it:

- Had a substantial adverse effect on a scenic vista.
- Substantially damaged scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway.
- Created a new source of substantial light or glare which would adversely affect day or nighttime views in the area.
- Substantially degraded the existing visual character or quality of the site and its surroundings.

For the last criterion ("substantially degrade the existing visual character of the site") visual analysis is used, as described below.

CONFORMANCE WITH COUNTY PLANS AND POLICIES

A project usually has significant visual impacts if it conflicts with adopted plans or policies relating to visual quality. Chapter 4.0 of this EIR presents a detailed analysis of each policy of *The Marin Countywide Plan* and Zoning Ordinance applicable to the project. *The Marin Countywide Plan* enumerates numerous policies which relate to new development, ² including an environmental checklist: ³

¹ The organization of this section differs slightly from the other sections in Chapter 5.0. Rather than provide the entire setting information in one discrete subsection at the beginning of this section existing conditions for each viewpoint are described immediately preceding the analysis of each view.

² Objective EQ-3, "The Built Environment", *The Marin Countywide Plan*.

³ "Suggested Development Review Checklist for Environmental Zones", Table EQ 7, *The Marin Countywide Plan*, page EQ-54.

Environmental Zone	Important Should Be Required	Desirable Negotiate with Incentives
Open Grassy Hillside	<ul style="list-style-type: none"> Rural roads and minimal lighting Replant graded cuts and fills with fire resistant plants 	<ul style="list-style-type: none"> Buildings clustered in pockets below ridge line Grazing or management plan for retaining grassy hillside character Planting program with native growth predominant
Wooded Hillside	<ul style="list-style-type: none"> Retain trees in natural setting Leave substantial area where natural litter and soils buildup can occur 	<ul style="list-style-type: none"> Buildings set apart (scattered acceptable) Buildings grouped naturally in tree area, no detrimental grading or runoff Ridge line not developed

Various additional *Countywide Plan* policies and Zoning Ordinance requirements also relate to the project. They are analyzed thoroughly in Chapter 4.0 and include *Countywide Plan* Policies EQ-3.11 (avoid tree cutting and damage), EQ-3.11-b (minimize visual impacts of public facilities), EQ-3.19 and 3.20 (Ridge and Upland Greenbelt policies), EQ-3.21 (creekside development), and EQ-3.26 (rural character and lighting). While the project's conformance with some *Countywide Plan* policies is straightforward, the analysis of other policies is more subjective. In this case, the EIR turns to visual analysis.

According to Appendix N of the *Marin County Environmental Impact Review Guidelines and Procedures*, a project normally would have a significant effect on the environment if it:

- Conflicted with County goals and policies related to visual quality
- Significantly altered existing natural viewsheds, including changing natural terrain or vegetation
- Significantly changed existing visual quality of the region or eliminated significant visual resources
- Significantly increased light and glare in the vicinity
- Significantly reduced sunlight or introduced shadows in areas used extensively by the public

VISUAL ANALYSIS

This EIR uses a visual analysis to describe how the existing site would change with project implementation (how the project would substantially degrade the existing visual character of the site). The EIR presents exhibits which show existing visual conditions and photomontages which illustrate the project from a number of different viewpoints. Using these exhibits, the visual conditions are described using four visual elements: ⁴

⁴ The elements listed in the text combine and refine, for CEQA purposes, definitions originally identified by the U.S. Forest Service and BLM to assess large-scale resource use and land management programs. While this EIR uses elements originally defined by the U.S. Forest Service and BLM (form, line, color, and texture), the system for determining visual significance was developed separately for CEQA.

Form The shape or structure of something as opposed to the material which composes it. Important subelements of form include *geometry* (the shape of the form), *complexity* (the simplicity of the form), and *orientation*.

Line The path, real or imagined, the eye follows when perceiving abrupt differences in form, color, or texture. The most common line in the landscape is the edge of shapes or masses. Important subelements of line include *boldness* (the strength of the line), *complexity* (the simplicity of the line), and *orientation*.

Color The property of reflecting light. Color is composed of *hue* (the aspect of color we know by name, such as blue or green), *value* (the degree of darkness from black to white), and *chroma* (the degree of color saturation or grayness, ranging from pure (high chroma) to dull (low chroma)).

Texture The visual or tactile surface characteristics of something. Texture consists of *grain* (the relative dimensions of surface variation, from fine to coarse), *density* (the spacing of surface variation), and *regularity* (the amount of evenness and randomness).

These elements are used to describe the difference between existing pre-project and post-development views. Existing views have variations in form, line, color, and texture. These views are changed by the addition of structures and alterations to the natural site.

First Step – Determine Visual Sensitivity of the Project Location

The first step in the visual analysis is to determine the visual sensitivity of each viewpoint location. This is determined using both County policies and viewer sensitivity. Visual sensitivity is defined below:

Exhibit 5.4-1 Sensitivity Level

Sensitivity Level	Definition
Low	The sensitivity of the site is low. The <i>form, line, color, and texture</i> of the Project can be completely different (or contrast) with existing elements.
Moderate	The sensitivity of the site is moderate. The <i>form, line, color, and texture</i> of the Project must have similarities to (or borrow from) the existing elements so that visual characteristics are compatible with their surroundings.
High	The sensitivity of the site is high. The <i>form, line, color, and texture</i> of the Project generally must repeat the existing elements.
Maximum	The sensitivity of the site is maximum. The <i>form, line, color, and texture</i> of the Project should not be evident. No changes in the characteristics of size, amount, intensity, pattern, etc. should be noticeable. This usually is applied to protected scenic areas such as ridgelines or vistas.

The Marin Countywide Plan and Zoning Ordinance allow development on the site, thus providing an expectation that the site could change visually. Taking this into consideration, the EIR analysis determined that the lower part of the site has a *moderate* visual sensitivity. However, the proposed

development should borrow from the existing form, line, color, and texture of the site to be compatible with the natural environment.

Development on the site's upper slopes would be subject to different standards, as required by the County Zoning Ordinance. According to Section 22.47.024(2)(b) (Design Requirements of Planned District Zoning):

There shall be no construction permitted on top or within three hundred feet horizontally, or within one hundred feet vertically of visually prominent ridgelines, whichever is more restrictive, if other suitable locations are available on the site. If structures must be placed within this restricted area because of site size or similar constraints, they shall be on locations that are least visible from nearby highways and developed areas.

Exhibit 5.4-2 shows the part of the site affected by this zoning provision. According to this provision, if other suitable locations are available on a site, development would not be allowed, thus defining the maximum visual sensitivity of this area and indicating that no development should be evident. The sensitivity of this area is considered to be *maximum*.

No development is proposed along the visually prominent ridgeline, however, portions of six lots (Lots 18 to 23) would intrude into the 300 foot setback. The residential development envelopes proposed for the project⁵ would, however, ensure that construction would not occur within the 300 foot setback. Therefore, this analysis will use the visual sensitivity of the lower elevations, which is *moderate*.

⁵ Sheet 6 of the *Oakview Master Plan Drawings* show the proposed Residential Area Layout and development envelopes. The Master Plan Drawings are available for review at the Marin County Community Development Agency.

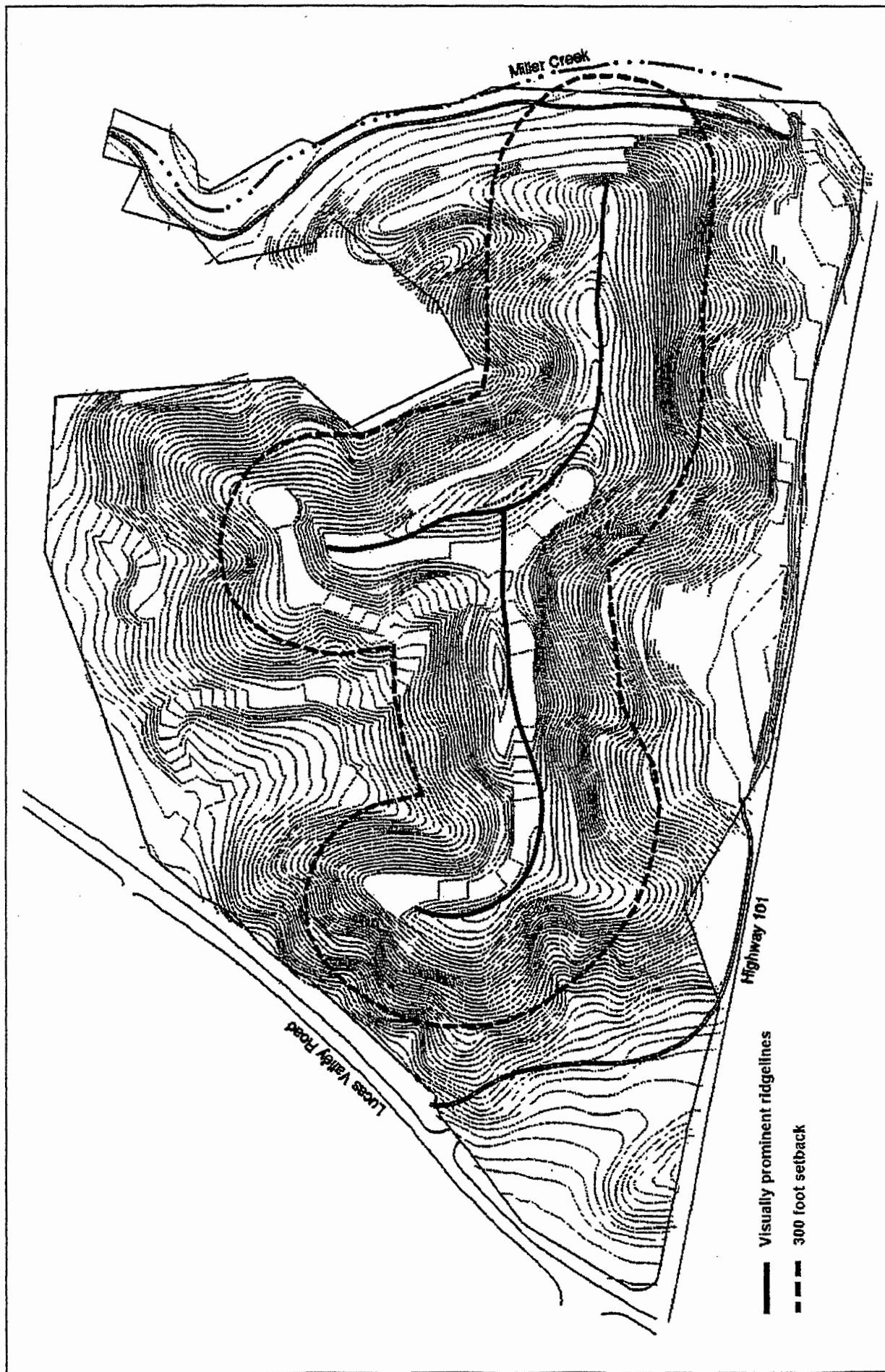


EXHIBIT 5.4-2 VISUALLY PROMINENT RIDGELINES AND SETBACKS
Oakview Master Plan

Second Step – Determine the Visual Dominance of the Project

Visual dominance measures how the form, line, color, and texture of structures added to a view interact with the natural surroundings where the project would be built. Definitions of visual dominance are described below:

Exhibit 5.4-3 Visual Dominance

Dominance Level	Definition
Dominant	Project dominates the landscape. Project elements are strong -- they stand out against the setting and attract attention away from the surrounding landscape. <i>Form, line, color, and texture</i> contrast with existing elements.
Co-Dominant	Project co-dominates. Project elements are moderate -- they are prominent within the setting and attract attention equally with other landscape features.
Subordinate	Project is visibly subordinate. Element contrasts are weak -- they can be seen but do not attract attention.
Inevident	Project is generally not visually evident. Element contrasts are not visible or perceived.

Whether structures adopt existing elements or create new ones determines the level of *visual dominance* of a project. For example, if the existing view is composed of natural colors or earth tones, a structure could adopt those colors and have a lower visual dominance or could be painted or plastered with completely different contrasting colors and create a high level of visual dominance. The visual dominance of the project was determined by EIR preparers, using site visits and visual analysis techniques.

Third Step – Determine the Visual Significance of the Project

The level of visual significance is determined by placing the project site's *sensitivity* in a matrix with the project's *visual dominance*.⁶ An impact is considered significant if its visual dominance exceeds what is appropriate for the site's sensitivity level. A change might be significant in one setting and not significant in another. The resulting matrix is shown below.

⁶ A more detailed description of the visual dominance appropriate for each sensitivity level is given in Exhibit 4.4-2.

Exhibit 5.4-4
Visual Significance Matrix

Sensitivity Level	Visual Dominance			
	<i>Dominant</i>	<i>Co-dominant</i>	<i>Subordinate</i>	<i>Inevident</i>
Maximum	significant	Significant	Significant	less-than-significant
High	significant	Significant	less-than-significant	less-than-significant
Moderate	significant	Less-than-significant	less-than-significant	less-than-significant
Low	less-than-significant	Less-than-significant	less-than-significant	less-than-significant

Steps used in Visual Analysis

To reduce subjectivity, the following steps were taken to prepare this visual analysis:

Determine viewpoints Five viewpoints were selected for illustration in this EIR (including an additional nighttime view from one of the viewpoints). (CEQA does not, and could not, require a visual analysis of the site from "every imaginable" view.) Exhibit 5.4-5 shows the location of these viewpoints, and Exhibits 5.4-6, 5.4-8, 5.4-10, 5.4-12, 5.4-14, and 5.4-16 show existing conditions from the viewpoints.

Prepare photosimulations Photosimulations were prepared to illustrate the project at completion as seen from each viewpoint (Exhibits 5.4-7, 5.4-9, 5.4-11, 5.4-13, 5.4-15 and 5.4-17). The solid model simulations assumed project elements discussed in Chapter 2.0 **Description of the Proposed Project** to determine the approximate location, height, and scale of residential and office development (see **Visual Changes Created by the Project**, below). A typical Caltrans light standard (similar to the ones used in the adjacent neighborhood) was used to develop the night time simulation. Because specific grading information is not available for individual lots building pad elevations were determined by approximately balancing the cut and fill on each lot. The solid model simulations are designed to illustrate the potential visibility, scale and mass of the project.

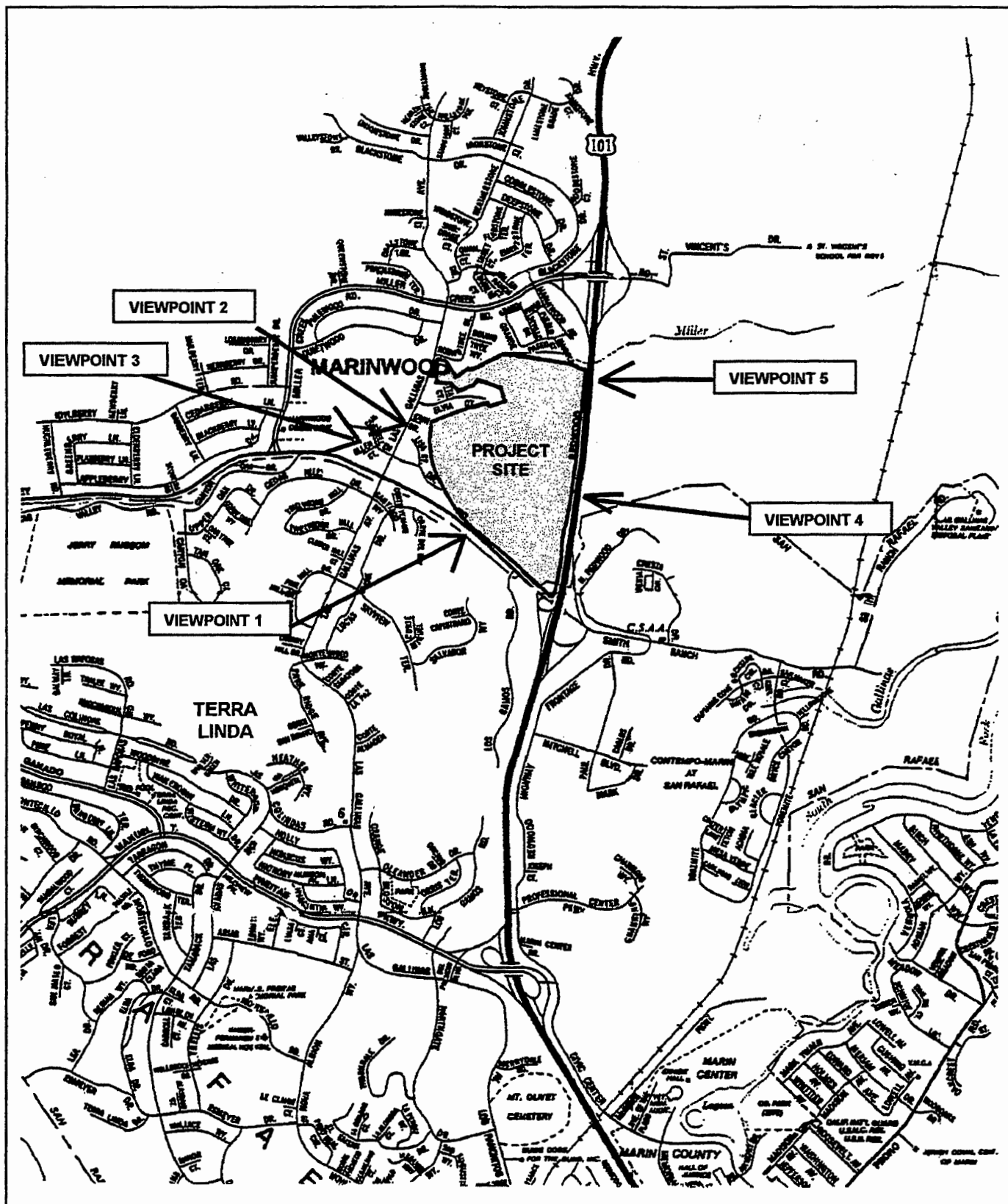


EXHIBIT 5.4-5 LOCATION OF VIEWPOINTS
Oakview Development

↑
 North

Source: Nichols-Berman

Visual and Aesthetic Quality -- Impacts and Mitigation Measures

VISUAL CHANGES CREATED BY THE PROJECT

Chapter 2.0 *Description of the Proposed Project* presents the aspects of the proposed project defined by the Master Plan, the most relevant visual characteristics of which are described below, including key design assumptions used to prepare the photosimulations.

The principal components of the project which potentially could influence ground-level views include the following:

- Residential buildings
- Office buildings
- Roadways
- Landscaping

The Master Plan does not contain detailed designs of proposed housing units or office buildings but describes general design elements. The Precise Development Plan would define those elements. Conditions of Master Plan and Precise Development Plan approval (if approved by the County) would provide parameters and / or function as detailed design guidelines for subsequent site development.

Residential Buildings According to the Master Plan, the structural form of buildings would conform to site contours. Stepped foundations would be used as necessary. Site grading would be limited to the amount required to construct the internal streets, curbs, gutters, and sidewalks. All residential building would be located below the existing tree line.

Buildings would have hip, gable, or shed roofs. Truncated roofs would be discouraged, but semi-flat hip roofs would be allowed.

Large expanses of wall area would be discouraged to avoid the appearance of massive structures. Walls would be articulated by four- to five-foot offset parallel planes.

The main residential structures would be limited to 30 feet in height.

Siding materials generally would be wood, stone, or stucco. Earth and grey-tone materials and medium-dark to medium-light colors would be used. Overly brilliant colors, colors with high contrast, reflective, or mirror glazing materials would not be allowed. Wall and trim colors with high contrast, clear anodized aluminum frames, and bright, shiny or reflective elements would be discouraged.

Roof materials would conform to fire standards, but natural appearing materials would be used, with dark- to medium-light earth tones. Light-colored composition shingles or tiles, tar or gravel or mineral surface sheet roofing would be discouraged.

Street lighting would conform to standards of the Marinwood Community Services District. Exterior lighting would be shielded to mask the light source. The cutoff angle for exterior lighting would be 30 degrees upward or downward from horizontal.

Office Buildings Maximum office building height would be 30 feet above the natural grade. Office parking would be located between the buildings and freeway, and a landscaped earth berm along the eastern side of the parking lots would face the freeway.

Building materials would have non-reflective finishes, such as masonry, prefabricated panels, metal panels, or integrally colored concrete or plaster. Windows would not have a mirror-like reflective finish.

Parcel 1 Landscaping Street trees would be planted along residential streets in a formal thematic pattern. Street trees are planned as medium height, deep rooting, canopy trees (such as Holly or Scarlet Oak). Individual lot owners would be responsible for installing street trees as a required part of front yard landscaping.

A 50 foot landscaped buffer area would be established along the edge of the property directly adjacent to the existing neighborhood at Ellen Drive and Lisa Court. Random, informal clusters of drought-tolerant native trees and shrubs would be planted in a 20-foot wide easement in this buffer area along the fence line.

Parcel 2 Landscaping Landscaping along the Highway 101 boundary would consist largely of slope plantings for erosion control. Clusters of native oaks would provide light screening. The parking lots would be landscaped with numerous deep rooting, deciduous, canopy-type trees (such as Red Oak, European Hackberry, and Chinese Pistachio), with other trees used sparingly as accents for seasonal color.

VISUAL IMPACTS AND MITIGATION MEASURES

Impact 5.4-1 View from Proposed Lucas Valley Road Entrance

From this viewpoint development on the lower parts of the site would dominate the view and contrast with the surrounding grassland area. This would be a significant impact.

Existing Conditions Exhibit 5.4-6 shows the site from a parking lot on the south side of Lucas Valley Road, looking northeast onto the site (Viewpoint 1 in Exhibit 5.4-5). This viewpoint shows a bowl-shaped grassland area in the southern part of the site. The bowl slopes upwards to ridges on the north and east which are covered with trees (mainly oaks).

The landscape *form* consists of two distinct areas -- the unified mass of trees on the upper ridge and the contrasting area of grassland just below. The area between the grassland and treeline (including the area of the trees' morning shadow) forms a somewhat jagged but discrete *line*. This line is emphasized by the *color* and *texture* of the contrast, with the darker value and medium texture of the trees next to the lighter colored and finer textured grassland. The dark tree masses and shadows tend to attract the eye. The contrast between the trees and sky is more pronounced, with the treetops forming a simpler flowing line.

The mass of trees appears larger in the morning and afternoon when the position of the sun creates more shadows than at mid-day. During much of the day the site is frontlit from this viewpoint, thus decreasing contrasts among various parts of the view. This is because colors become paler, forms tend to be flatter, and line strength is reduced.

Visual Sensitivity From this viewpoint, the lower site elevations are considered to be an area of moderate visual sensitivity and the uplands areas along the ridgelines an area of maximum sensitivity, as described above (see Exhibit 5.4-1).

Visual Impact of Proposed Project Exhibit 5.4-7 shows the project site immediately after construction.⁷ From this viewpoint, Roadway A would turn left, and Roadway B would proceed right.

The most prominent change would be the box-like *form* and series of straight *lines* of structures which would contrast with the undulating character of the existing landscape.

Roofs would break the simple natural *line* where trees and grassland meet, and the resulting demarcation would become more complex. The medium-dark to medium-light, earth, or gray tone *colors* of houses would blend with the existing environment, but the uniform fine grain *texture* of the existing grassland would change with the introduction of coarser structures.

Roads would be very noticeable from this viewpoint, although the *texture* and *color* of on-site roads would be similar to Lucas Valley Road.

From this viewing location, development on lower site grassland elevations would *dominate* the landscape, specifically the *form* and *line* of proposed housing units. Because of the *moderate* visual sensitivity of lower site elevations, this would be a significant impact.

The *color* of development would be *co-dominant* in the lower areas, since earth tones and hues would borrow from the existing environment, and, thus, would constitute a less-than-significant impact. The *texture* of housing units using wood or stucco siding materials also would be similar to the surroundings, resulting in a less-than-significant impact.

Short-term impacts would remain until landscaping is somewhat mature, but this is not considered to be a significant visual impact.

Mitigation Measure 5.4-1 The following measure proposed by the applicant would reduce visual impacts from this viewpoint:

- Implement the applicant's proposed project landscaping (which includes street trees, a 20-foot wide landscaped area between existing homes on Ellen Drive, Lisa Court and the project site, and landscaping along Lucas Valley Road at the entrance to the project site) as shown in the Conceptual Landscape Plan.⁸ This would break up the form and lines of project site development.

⁷ Mitigation Measure 5.7-1 would require property-line fences to shield the backyards of Lots 27 and 28. As discussed in Section 5.7 the potential secondary visual impact of building fences around the yards of Lots 27 and 28 was considered but dismissed as insignificant.

⁸ Mitigation Measure 5.3-1(a) requires the preparation of a detailed Landscape and Vegetation Management Plan which would be reflected in the Final Landscape Plan to be submitted with the Precise Development Plan. The changes required by Mitigation Measure 5.3-1(a) would not reduce the effectiveness of the Landscape Plan to reduce the identified visual impacts to a less-than-significant impact.

Significance after Mitigation Implementation of Mitigation Measure 5.4-1 would reduce the visual impacts of project implementation. Visual dominance of the line and form of the housing would be reduced from *dominate* to *co-dominate*, and therefore be reduced to a less-than-significant impact.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-1 in the project.

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*Exhibit 5.4-6
View from Proposed Lucas Valley Road Entrance -- Existing Conditions*



Source: Matt Brockway

Photograph Date: January 28, 2000

*Exhibit 5.4-7
View from Proposed Lucas Valley Road Entrance -- Proposed Project*



Source: Matt Brockway

Impact 5.4-2 View from Proposed Lucas Valley Road Entrance, Nighttime

Nighttime lighting could dominate the view from this viewpoint. This would be a significant impact.

Existing Conditions Exhibit 5.4-8 shows the same view as Exhibit 5.4-6 at night. The silhouette of the ridgeline against the night sky is the prominent visual feature.

Visual Sensitivity From this viewpoint, development is proposed in an area of moderate visual sensitivity.

Visual Impact of Proposed Project Exhibit 5.4-9 shows the same view as Exhibit 5.4-7 but at night. At this location, both streetlights and interior lights would be visible.

Landforms generally cannot be seen at night. Rather, the location, type, and quantity of light sources become the important visual factors. Nighttime sources of light can include vehicle headlamps, streetlights, decorative outdoor landscape or safety lighting, and interior lighting. Highly visible lights at night can disrupt views by interrupting the viewshed and have the potential to be seen for miles if geography and landscaping do not intervene. Moving sources of light and glare (such as vehicles) easily catch the eye and are difficult to ignore. Complaints about night lighting usually relate to "light trespass" and include light shining into windows, light shining onto adjacent property, and excessive brightness (glare).⁹

The strong *line* of the ridgeline -- backlit against the night sky -- dominates the view from this viewpoint. *Colors* would be washed out because the human eye cannot differentiate colors at low light levels. Lack of *texture* and visual cues also decrease the ability to differentiate scale and distance.

Streetlights and interior lighting would be the primary sources of the project's nighttime light. Headlights from traffic would be visible both off- and on-site. Nighttime lighting effects could *dominate* the scene. This would be a significant impact.

Mitigation Measure 5.4-2 The following measures would be required to be incorporated into the Precise Development Plan as a condition of Master Plan approval to mitigate visual impacts:

- Shield or focus outdoor night lighting downward and select roadway and pavement surfaces to minimize upward reflected light.
- Recess lighting elements within fixtures to prevent glare.
- Conceal lights to avoid glare and avoid placing lights too close to reflective objects to prevent glare.
- Avoid high-angle high-candela distribution.
- Select lighting fixtures which can be shielded after installation, if a problem is identified.

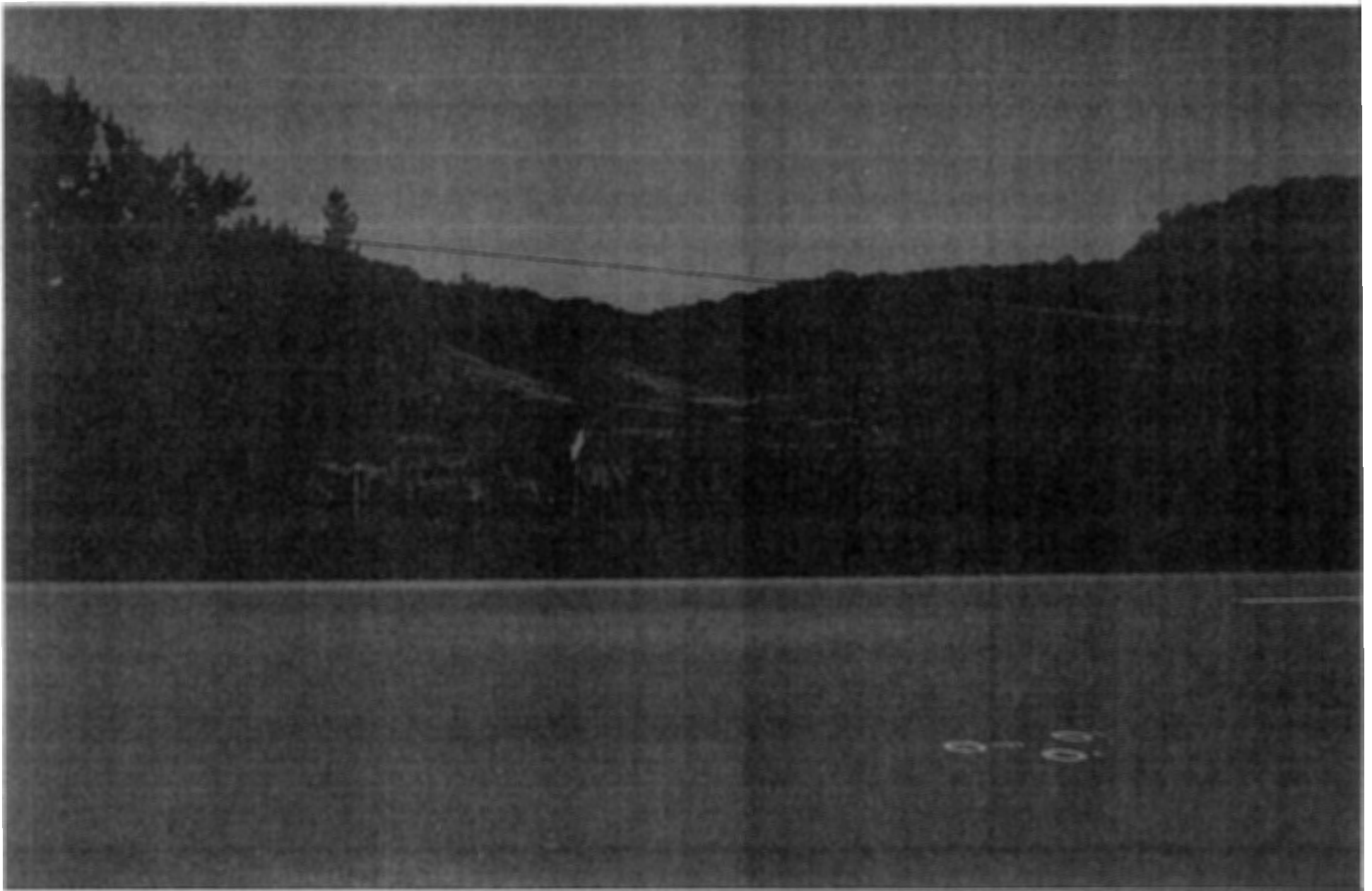
⁹ *Lighting Handbook Reference & Application*, Illuminating Engineering Society of North America, 1993.

- Because light trespass effects are subjective and site-specific, quantifiable criteria (such as controlling the amount of luminescence or restricting certain angles of lighting) usually cannot be identified. For this reason, the applicant should consult a lighting design specialist to determine light source locations, light intensities, and types of light sources for the office buildings. A lighting plan for site roadways and public areas (such as office building parking lots) should be incorporated in the Precise Development Plan as a condition of Master Plan approval.

Significance after Mitigation Implementation of Mitigation Measure 5.4-2 would reduce impacts to a less-than-significant level.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-2 in the project.

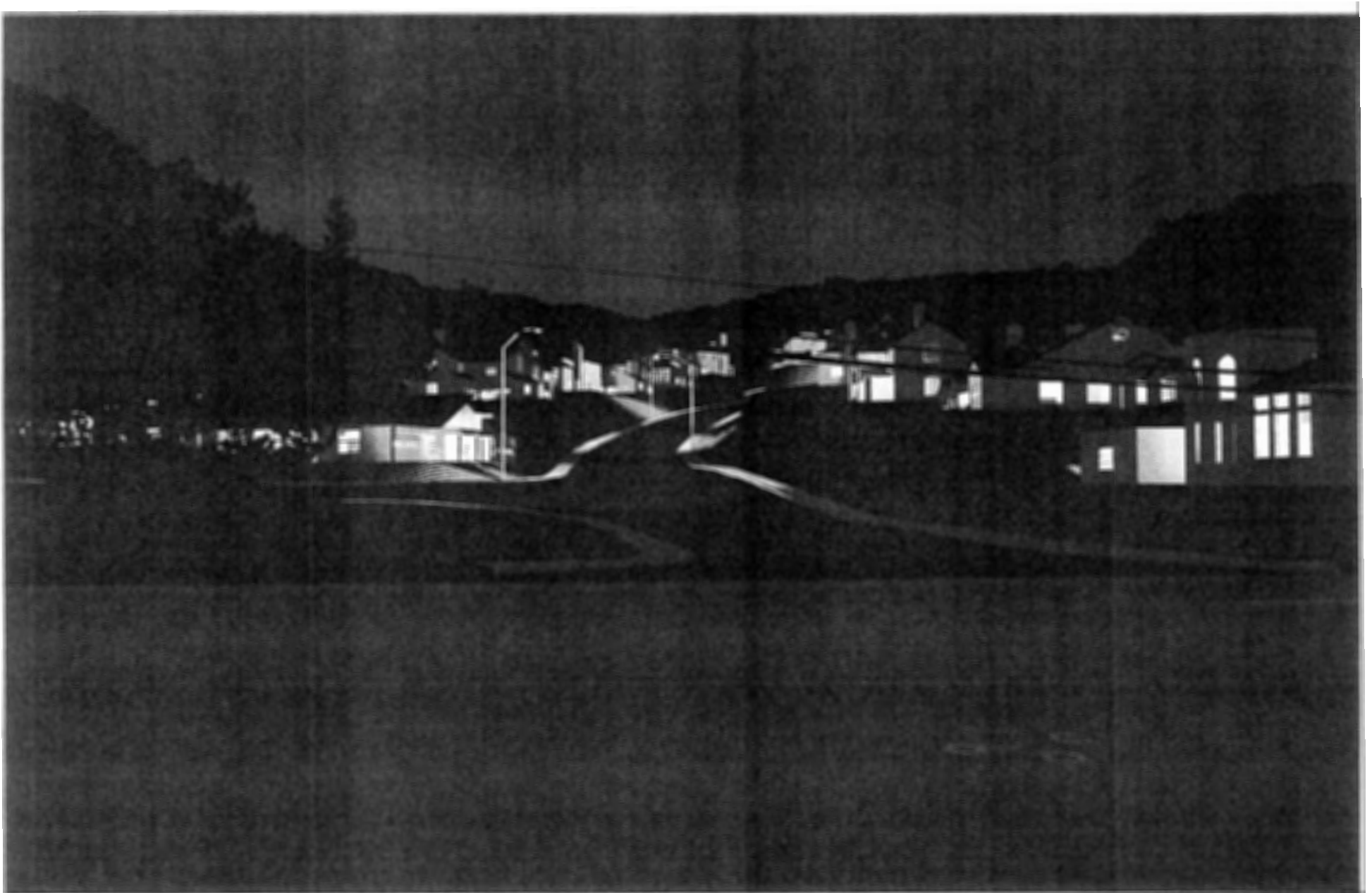
*Exhibit 5.4-8
View from Proposed Lucas Valley Road Entrance (Nighttime View) -- Existing Conditions*



Source: Matt Brockway

Photograph Date: January 28, 2000

*Exhibit 5.4-9
View from Proposed Lucas Valley Road Entrance (Nighttime View) -- Proposed Project*



Source: Matt Brockway

Impact 5.4-3 View from the End of Erin Drive

When viewed from this location, development would appear dominant. This would be a significant impact.

Existing Conditions Exhibit 5.4-10 shows the site from the end of Erin Drive looking southeast (Viewpoint 2 in Exhibit 5.4-5). Erin Drive curves to the right in this exhibit and stubs out at the site boundary. The site appears as a sloping ridge, ascending from right to left, and continues uphill left of the utility pole but is hidden by vegetation. Grasslands cover most of the site shown from this location, with trees growing on upper ridge elevations.

The site can be seen from this location as an enclosed grassland area bounded by trees. The *form* of the grassland is the dominant visual element from this viewpoint. The edge of the grassland forms a distinct *line* which is somewhat complex due to scattered lower elevation trees. The line of the ridgetop is similarly complex in this view, due to the scattering of trees on the lower on-site elevations and developed off-site areas of Erin Drive. Darker value trees stand out and contrast against lighter value grasslands.

Visual Sensitivity From this viewpoint, development is proposed in an area of moderate visual sensitivity.

Visual Impact of Proposed Project

From this viewpoint, the houses *form* and *line* of the houses would stand out against the setting and attract attention away from the surrounding landscape. The bulk and mass of the houses would appear even larger as they would be seen from an inferior (lower elevation) viewpoint, which tends to increase the visual perception of bulk. The impacts of development would be muted somewhat due to the clustering of structures below the ridgeline. However, the *form* and *line* would still be considered *dominant*, and therefore a significant impact.

The *color* of development would be *co-dominant* in this view, since the earth-tones and hues of the units would borrow from the existing environment, and thus would constitute a less-than-significant impact. The *texture* of housing units using wood or stucco siding materials also would be similar to the surroundings, particularly the nearby existing houses, resulting in a less-than-significant impact.

Mitigation Measure 5.4-3 Same as Mitigation Measure 5.4-1.

Significance after Mitigation Implementation of Mitigation Measure 5.4-3 (screening trees and other vegetation) would reduce impacts to a less-than-significant impact by breaking up the form and line of the structures.

Implementation of Mitigation Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-3 in the project.

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Exhibit 5.4-10
View from Erin Drive -- Existing Conditions



Source: Matt Brockway

Photograph Date: January 28, 2000

*Exhibit 5.4-11
View from Erin Drive -- Proposed Project*



Source: Matt Brockway

Impact 5.4-4 View from Ellen Drive

Development would dominate the surrounding grassland area. This would be a significant impact.

Existing Conditions Exhibit 5.4-12 shows the site from the western end of Ellen Drive looking east (Viewpoint 3 in Exhibit 5.4-5). Most of the western part of the site is visible in the middle of this exhibit. The wooded north-south ridgeline, the site's most prominent feature, extends across this exhibit. It abruptly descends towards Lucas Valley Road near the right side of the exhibit. On-site grasslands are visible below the wooded ridgeline.

From this location, the project site's two major *forms* -- lower grasslands and upper woodlands -- are clearly visible. The most prominent *line* is the ridgetop which contrasts against the sky. The distance from this viewpoint makes *colors* paler. The site's *texture* is fine-grained grassland and medium-grained dense tree cover.

Visual Sensitivity From this viewpoint, development is proposed in an area of moderate visual sensitivity.

Visual Impacts of Proposed Project As with other viewpoints, the form of structures would be very noticeable from this location. The siting of development along proposed roads also is visible.

The *color* and *texture* of development would be *co-dominant*, a less-than-significant impact, as with Impact 5.4-1.

The *form* and *line* of structures similarly would *dominate* the lower elevations, as they would attract attention away from the surrounding landscape. This would be a significant impact.

Mitigation Measure 5.4-4 Same as Mitigation Measure 5.4-1.

Significance after Mitigation Implementation of Mitigation Measure 5.4-1 would reduce the impacts of development on lower site elevations to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-4 in the project.

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Exhibit 5.4-12
View from Ellen Drive -- Existing Conditions



Photograph Date: January 28, 2000



Impact 5.4-5 View Looking Northwest from Highway 101 Northbound

The form of Office Building A, visible from this viewpoint, would dominate the surrounding environment. This would be a significant impact.

Existing Conditions Exhibit 5.4-14 shows the site from northbound Highway 101 looking northwest (Viewpoint 4 in Exhibit 5.4-5). The site is visible across Highway 101 in this exhibit. The wooded north-south ridgeline shown in Exhibit 5.4-12 from the western side is visible in this exhibit from the eastern side. The tree mass is less compact and linear on this side, and the scattered trees are more distinguishable with no sharp line dividing the trees and grasslands near the freeway.

The major *forms* in this view are Highway 101 and the scattered trees and denser ridgeline vegetation on the project site. *Lines* are irregular and complex, except for the comparably simple ridgeline and very simple straight line of Highway 101. The woodland-grassland edge is transitional in this location which creates a soft and diffuse line. The *color* and *texture* of the woodlands and grasslands, described above, are seasonal. The *color* of Highway 101 ranges from dark (the roadway itself) to light and bright (such as the center dividers and roadway signs). The *texture* ranges from very fine-grained (as in the roadway surface), to somewhat coarse (with the clustering of various signs).

Visual Sensitivity From this viewpoint, development is proposed in an area of *moderate* visual sensitivity.

Visual Impacts of Proposed Project The form of proposed office development (Building A) would be prominent and would attract attention. Building form would be similar to many other nearby office buildings adjacent to Highway 101 but would be dominant (until landscape screening is planted) which only would be appropriate in low sensitivity areas. This would be a potentially significant impact.

The berm proposed between the on-site parking lot and Highway 101 also would be noticeable. The series of straight *lines* of development would borrow from the natural contours of the surrounding hillside. This would be a less-than-significant impact. Office building *color* and *texture* is not known but would borrow from many of the varied element of Highway 101, such as the roadway itself, road signs, and roadway dividers. The presence of Highway 101 allows for brighter colors and smoother surfaces than would be allowed in the residential areas, where these elements could contrast with the residential and woodland colors and textures.

Mitigation Measure 5.4-5 The following measure proposed by the applicant would reduce visual impacts from this viewpoint:

- Implement the applicant's proposed project landscaping (which includes landscaping around the office area) as shown in the Conceptual Landscape Plan. This would break up the form and lines of project site development.

Significance after Mitigation Implementation of Mitigation Measure 5.4-5 would reduce visual impacts from this viewpoint to less-than-significant levels.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-5 in the project. Granting of site alteration permits should be conditioned on implementation of the landscape screening plan.

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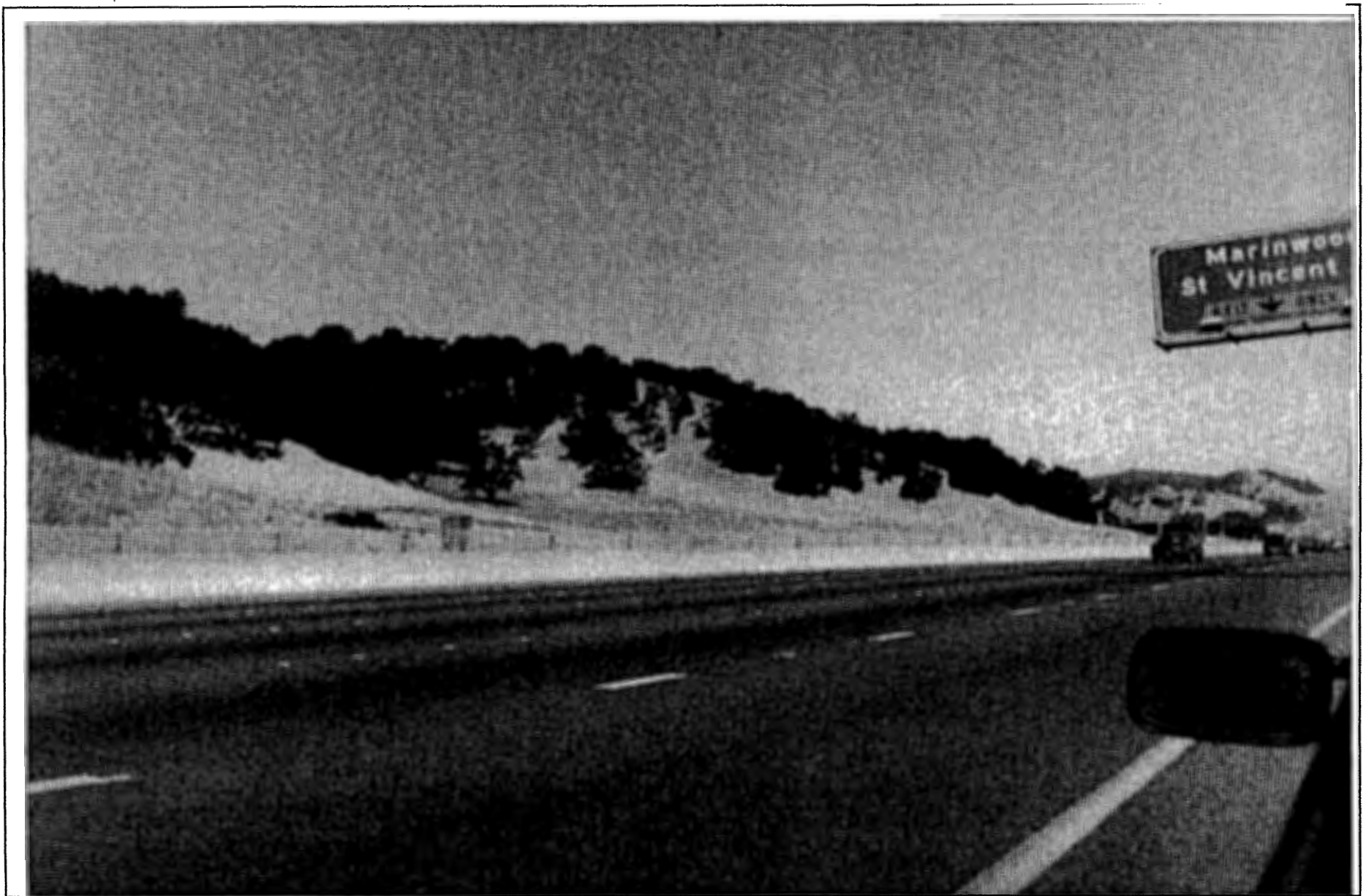


EXHIBIT 5.4-14 VIEW LOOKING NORTHWEST FROM HWY 101 NORTHBOUND – EXISTING CONDITIONS
Oakview Master Plan

Source: Michael Reardon

Photograph Date: 1996



EXHIBIT 5.4-15 VIEW LOOKING NORTHWEST FROM HWY 101 NORTHBOUND – PROPOSED PROJECT
Oakview Master Plan

Source: Michael Reardon

Impact 5.4-6 View Looking West from Highway 101 Northbound

Office Building B's form would dominate the surrounding environment. This would be a significant impact.

Existing Conditions Exhibit 5.4-16 shows the site from northbound Highway 101 looking west (Viewpoint 5 in Exhibit 5.4-5). This exhibit shows the northeast corner of the site. The vegetation visible along Miller Creek (left of the van driving on the freeway) marks the northern site property line.

Visual Sensitivity From this viewpoint, development (Building B) is proposed in an area of moderate visual sensitivity, a view very similar to that analyzed in Impact 5.4-5. However, the tree cover is more coherent, and the transition between the trees and grassland is more distinct from this viewpoint.

Visual Impact of Proposed Project Impacts would be similar to those identified in Impact 5.4-5.

Mitigation Measure 5.4-6 Same as Mitigation Measure 5.4-5.

Significance Mitigation Same as Mitigation 5.4-5.

Implementation of Mitigation Development Plan approval should be conditioned on incorporation of Mitigation Measure 5.4-6 in the project.

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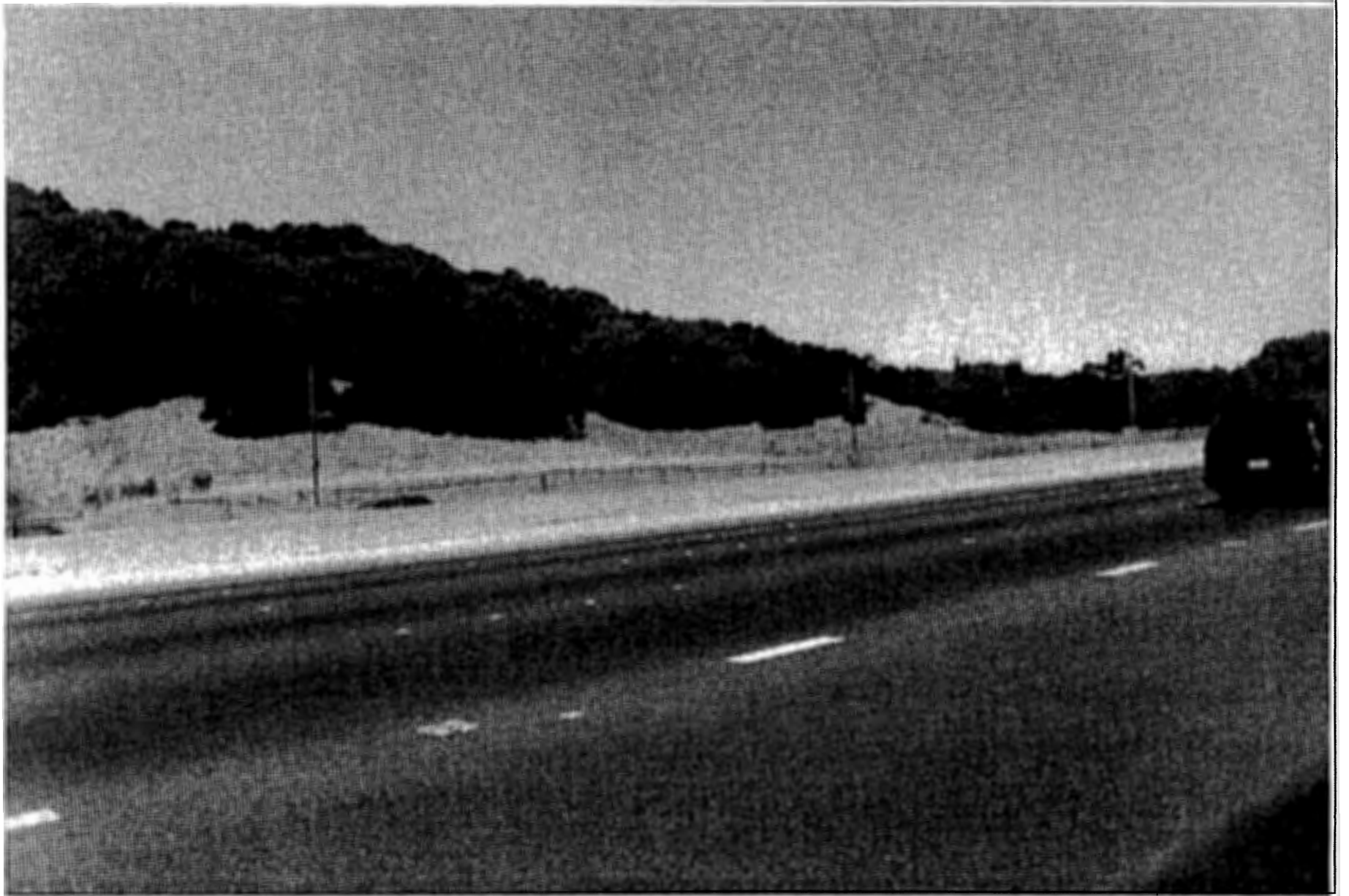


EXHIBIT 5.4-16 VIEW LOOKING WEST FROM HWY 101 NORTHBOUND – EXISTING CONDITIONS
Oakview Master Plan

Source: Michael Reardon

Photograph Date: 1996



EXHIBIT 5.4-17 VIEW LOOKING WEST FROM HWY 101 NORTHBOUND – PROPOSED PROJECT
Oakview Master Plan

Source: Michael Reardon

5.5 TRANSPORTATION AND CIRCULATION

Transportation and Circulation -- The Setting

STREET NETWORK

The proposed Oakview project site is located at the northwest corner of the intersection of Highway 101 and Lucas Valley Road in central Marin County. Access to the site is proposed at three locations which include Lucas Valley Road, Erin Drive and Marinwood Avenue. The major streets and intersections in the vicinity of the project site are shown in Exhibit 5.5-1. Regional highway access is provided by the Highway 101 interchanges at Lucas Valley Road and Miller Creek Road. A brief description of the primary traffic network expected to carry the majority of project-related traffic to and from the project site follows:

Highway 101 is a major north-south freeway providing eight travel lanes (four in each direction) within the study area. The Annual Average Daily Traffic (AADT) for a peak month for Highway 101 at the Lucas Valley Road Interchange is approximately 168,000 vehicles and 155,000 vehicles at the Miller Creek Road Interchange.¹ Caltrans defines the peak month ADT as the ADT for the month of heaviest traffic flow. This data is obtained because high traffic volumes which occur during a certain season of the year are more representative of traffic conditions than the annual ADT, for most routes. Approximate peak hour volumes on Highway 101 at the Lucas Valley Road Interchange are 13,000 vehicles and 12,100 at the Miller Creek Road Interchange.²

Lucas Valley Road is an east-west arterial roadway providing an interchange with Highway 101 and two travel-lanes (one in each direction). From its interchange with Highway 101 west to Miller Creek Road the road follows a generally straight alignment and is relatively wide.

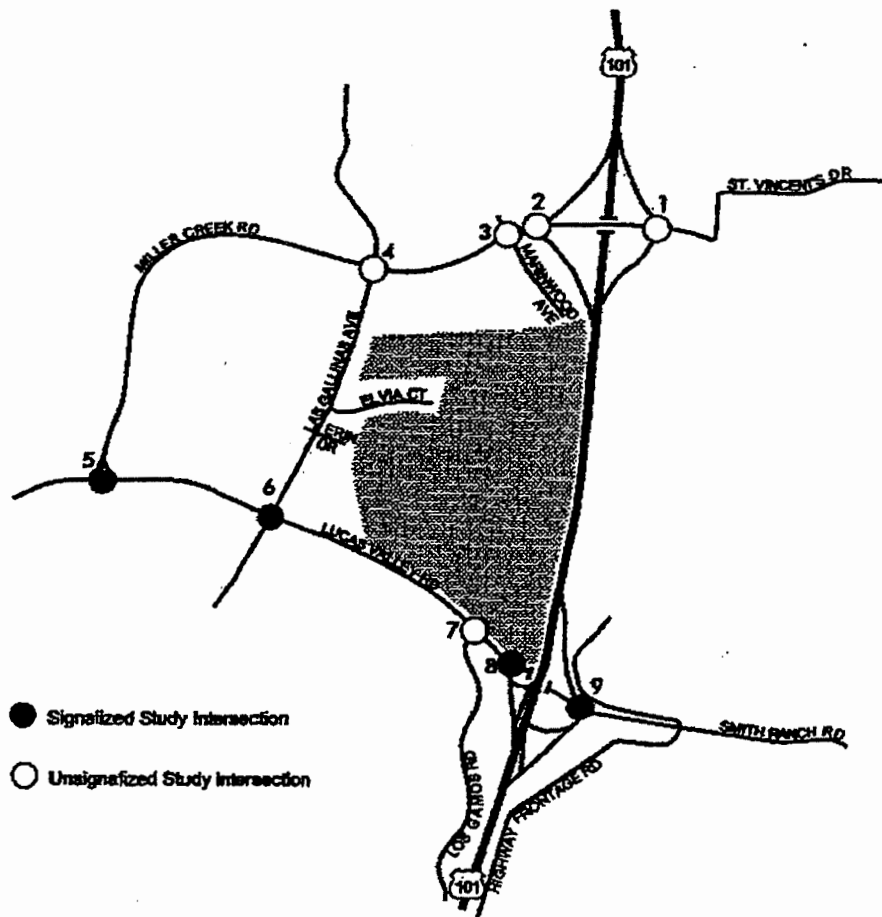
Las Gallinas Avenue is a north-south arterial which provides between four (two in each direction) and two (one in each direction) travel lanes. It provides access to residential communities of Marinwood to the north, and Terra Linda to the south.

Los Gamos Road is a north-south roadway which parallels Highway 101 to the west, between Lucas Valley Road and the Manuel T. Freitas Parkway. This road provides two travel lanes (one in each direction). Los Gamos Road does not, however, provide vehicular access between Lucas Valley Road and Manuel T. Freitas Parkway. Removable barriers prevent through traffic while providing emergency through access.

Miller Creek Road is an arterial road which provides access through the residential area of Marinwood. This road provides an interchange with Highway 101 approximately one mile north of the Lucas Valley / Highway 101 interchange.

¹ ~~1998-2000~~ Traffic Volumes on California State Highways, Caltrans, June ~~1999~~2000.

² *Ibid.*



↑
North

5.5 - 2

Marinwood Avenue is a north-south collector road which provides access to an area of residential development off Miller Creek Road. An extension of this road is proposed as access to the project office development.

TRAFFIC ANALYSIS METHODOLOGIES

Peak hour level of service (LOS) analysis is conducted for all study area intersections and for three segments of Highway 101. Level of service is a qualitative measure used to describe operational conditions within a traffic stream. Six levels of service are defined for both intersection and freeway operations. They are given letter designations from A to F, with A representing the best operating conditions and LOS F the worst. The County of Marin has designated LOS D as the lowest (worst) acceptable LOS category for intersection operations. The City of San Rafael considers an LOS mid-D standard for signalized intersections within the Northgate Activity Center Plan Area. The County of Marin has conditionally adopted the mid-D LOS standard for the Lucas Valley / Highway 101 interchange. This is the only signalized study area intersection within the Northgate Activity Center Area.

All intersections were evaluated using the 1994 Highway Capacity Manual (HCM) operations methodology for intersection delay, outlined in Chapter 9 of the HCM. This method determines the capacity for each lane group approaching an intersection. The average delay is first calculated for each intersection approach. Then the weighted average of the delays for each approach is calculated to determine the average delay for the intersection as a whole, which is used to determine the LOS for the overall intersection.

The HCM procedure for calculating delay employs a numerical figure of 0.1 (or one tenth of one second) as the smallest quantified change in vehicle delay. Vehicle delay is characterized as seconds of delay per vehicle, per peak 15 minutes. A change in delay of less than 0.1 seconds would be undetectable and would have no impact on intersection operations.

The three study area Highway 101 segments are analyzed using the methodology described in the 1994-2000 Highway Capacity Manual (HCM), Chapter 323. The concept of density is used to define LOS. In order to provide a means of measuring the Proposed Project's peak hour contribution to freeway traffic a volume-to-capacity (V/C) ratio is also used. This HCM methodology assumes that the ideal highway capacities are 2,200 passenger cars per hour per lane (pcphpl). ~~The threshold for highway segment levels of service are defined based on the maximum volume-to-capacity (V/C) ratio.~~ (See Appendix A_B for a detailed description of intersection and freeway segment LOS concepts and methodologies).

The HCM procedure for calculating volume to capacity (V/C) ratio usually employs a numerical figure of 0.01 (or one percent) as the smallest quantified change in the V/C ratio. However, in view of the small vehicle contributions anticipated for the Proposed Project, the V/C analysis quantifies the change in the V/C ratio from project contributions in increments of 0.001 (or 1/10 of one percent). This is done in order to show as accurately as possible the smallest measurable contributions of the project to the V/C ratio for segments of Highway 101.

EXISTING TRAFFIC OPERATIONS

Nine intersections were analyzed in this study during the AM and PM peak hours. Existing turning movement counts used in analyzing the intersections were taken in January 2000. Existing peak hour volumes at the study intersections are shown on Exhibit 5.5-2. The nine study area intersections include:

1. Highway 101 Northbound Ramp / Miller Creek Road
2. Highway 101 Southbound Ramp / Miller Creek Road
3. Miller Creek Road / Marinwood Avenue
4. Miller Creek Road / Las Gallinas Avenue
5. Lucas Valley Road / Miller Creek Road
6. Lucas Valley Road / Las Gallinas Avenue
7. Lucas Valley Road / Los Gatos Road
8. Highway 101 Southbound Ramp / Lucas Valley Road
9. Highway 101 Northbound Ramp / Smith Ranch Road

The peak hour volumes for four of the study intersections were compared to peak hour counts taken in March 2001 by Marin County. The four intersections included:

Highway 101 Southbound Ramp / Miller Creek Road

Miller Creek Road / Marinwood Avenue

Miller Creek Road / Las Gallinas Avenue

Lucas Valley Road / Miller Creek Road

The Highway 101 Southbound Ramp / Miller Creek Road intersection showed an increase in morning commute hour traffic of 2.7 percent over the 14 month period. The increase represented a total of 55 intersection vehicles. Morning peak hour traffic volumes at the other three intersections were all lower than the 2000 counts. The decrease in total peak hour traffic at these locations ranged from just under one percent at Miller Creek Road/Las Gallinas Avenue to four percent at Miller Creek Road / Marinwood Avenue . These differences were not significant in terms of the numbers of peak hour vehicles and indicated that traffic in the area had neither improved or worsened in the 14 months between the intersection counts.

In March of 2002, Wilbur Smith Associates (WSA) conducted 15 minute spot check counts of PM peak hour traffic at the Highway 101/Lucas Valley Road Ramps. These observations indicated that traffic was lower than counts collected in January 2000 at both the northbound and southbound locations by approximately three percent. Again, a difference of three percent is not significant. Studies of traffic flow characteristics have found a potential for wide variability (up to 10 percent) in peak hour volumes on a daily basis at the same locations. What the comparisons do suggest is that peak hour traffic has not increased significantly over the past two year period in this area.

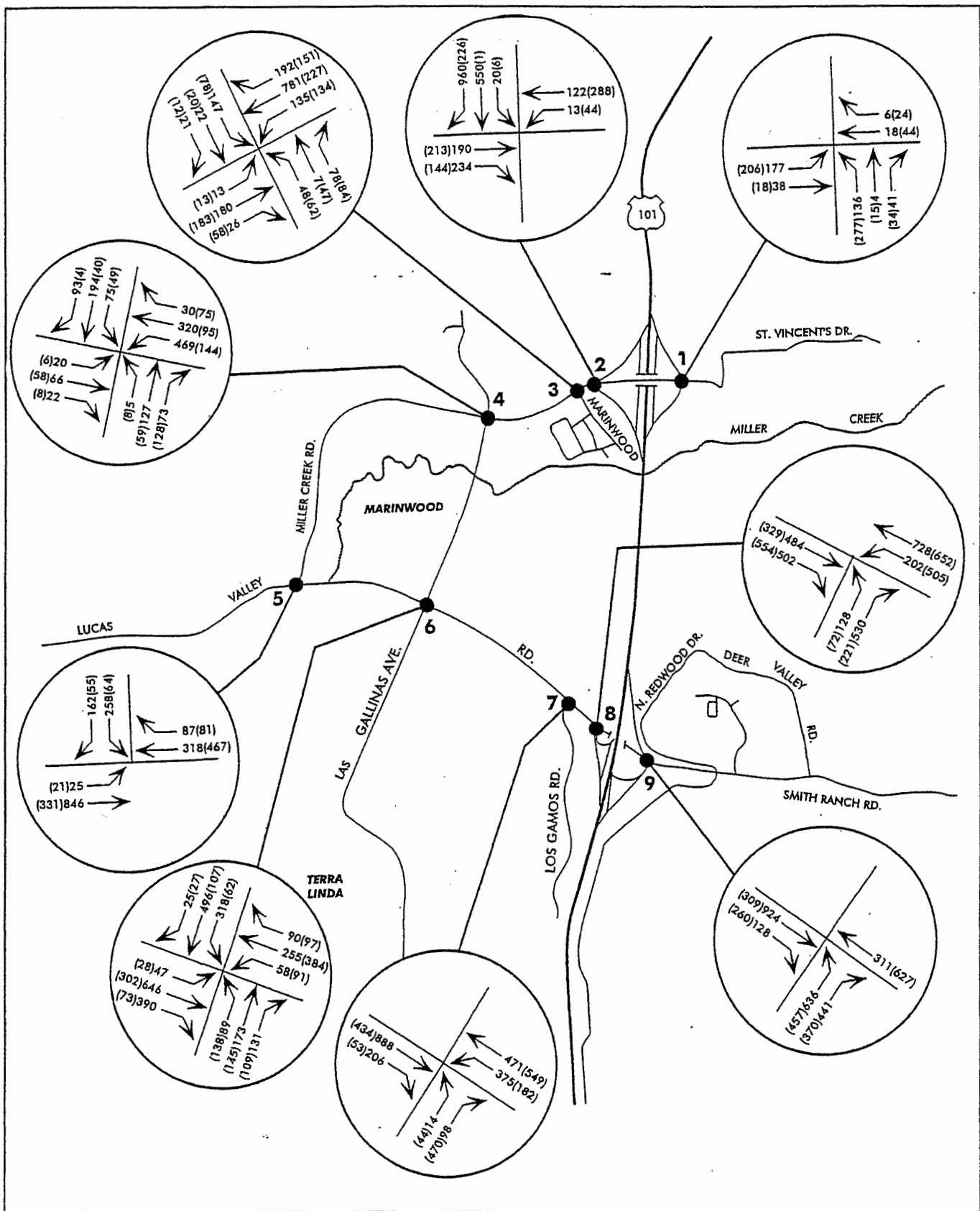


EXHIBIT 5.5-2 EXISTING PEAK HOUR VOLUMES
Oakview Master Plan

Legend:
 175 AM Peak Hour
 (178) PM Peak Hour

Source: Wilbur Smith Associates

The January 2000 study area intersection volumes were increased by 1.5 percent per year (3 percent total) and used to provide the base case analysis for both the existing and short-range cumulative analysis. The January 2000 intersection volumes were increased to ensure a conservative approach to the analysis of traffic impacts.

INTERSECTION OPERATIONS SUMMARY

During the AM peak hour, the unsignalized intersections of Highway 101 Southbound Ramps / Miller Creek Road, Miller Creek Road / Marinwood Avenue, ~~Lucas Valley Road / Miller Creek Road and Lucas Valley Road / Los Gamos Road~~ experience heavy congestion. The unsignalized intersection at Lucas Valley Road / Miller Creek Road will be signalized in May 2002.³ For that reason, this intersection is analyzed with a signal in the setting section. At the Highway 101 Southbound Ramps / Miller Creek Road intersection, the southbound left and through movements from Highway 101 fail (LOS F). At Miller Creek Road / Marinwood Avenue, the intersection operates at an unacceptable LOS E. ~~At the Lucas Valley Road / Miller Creek Road intersection, the southbound left turn movement from Miller Creek Road onto Lucas Valley Road operates at LOS F. At the Lucas Valley Road / Los Gamos Road intersection, the northbound left turn movement from Los Gamos Road onto Miller Creek Road/Lucas Valley Road operates at LOS F and the westbound left turn from Miller Creek Road/Lucas Valley Road onto Los Gamos Road operates at LOS E. At the Highway 101 Southbound Ramps / Miller Creek Road, the southbound left turn movement from the freeway off-ramp onto westbound Miller Creek Road operates at LOS F.~~ The remaining two ~~six~~ study intersections operate at acceptable service levels during the AM peak hour.

During the afternoon PM peak hour, all signalized and unsignalized intersections and intersection movements operate at LOS D-C or better with the exception of the northbound left-turn movement at the unsignalized intersection of Lucas Valley Road/Los Gamos Road which operates at LOS E.

Existing Levels of Service and corresponding intersection delays for the study area signalized and unsignalized intersections ⁴ are shown in Exhibit 5.5-3. The results of the Level of Service analysis are summarized below.

Highway 101 Northbound Ramp / Miller Creek Road This is an unsignalized intersection where the Highway 101 northbound on-ramp forms the northbound leg of the intersection. The northbound left-turning movement functions at LOS B (6.8-9 seconds of delay per vehicle) and LOS C (11.8-4 seconds of delay per vehicle) during the AM and PM peak hours respectively. The remaining movements operate at LOS A during both the AM and PM peak hours.

Highway 101 Southbound Ramp / Miller Creek Road This is a four leg unsignalized intersection where the Highway 101 southbound on-ramp forms the southbound leg of the intersection. The southbound left-turning movements function at LOS F (over 60.0 seconds of delay per vehicle) and LOS B (7.8 seconds of delay per vehicle) during the AM and PM peak hours respectively. In the AM peak hour, a large number of vehicles exit southbound Highway 101 at Miller Creek and re-enter Highway 101 by passing through the Miller Creek Road intersection. Drivers use the freeway on- and

³ Mr. Jason Nutt, Traffic Operations Engineer, Marin County Department of Public Works, February 2002.

⁴ Level of service calculations are available for review at the Marin County Community Development Agency.

Exhibit 5.5-3
Existing AM/PM Peak hour Levels of Service

Intersection	Existing			
	AM		PM	
<i>Signalized Intersections</i>	LOS	Delay	LOS	Delay
Lucas Valley/Miller Creek	B	8.1	A	3.9
Lucas Valley/Las Gallinas	B	14.7	B	9.8
US101 SB Ramps/Lucas Valley Road	C	17.9	C	16.1
US101 NB Ramps/Smith Ranch Road	C	22.0	B	9.8
<i>Unsignalized Intersections</i>				
<i>All-Way STOP</i>	LOS	Delay	LOS	Delay
Miller Creek/Marinwood	E	40.7	B	7.7
Miller Creek/Las Gallinas	D	21.3	A	3.7
<i>2-Way STOP/T-Intersections</i>	LOS	Delay	LOS	Delay
US 101 NB Ramps/Miller Creek				
NBL	B	6.9	C	11.4
EBL	A	2.4	A	2.6
<i>Intersection Average</i>	A	3.6	C	6.4
US 101 SB Ramps/Miller Creek				
SBL	F	>60	B	7.8
WBL	A	3.5	A	3.3
<i>Intersection Average</i>	F	>60	B	1.5
Lucas Valley/Los Gamos				
NBL	F	>60	E	31.2
NBR	B	9.9	C	11.2
WBL	E	37.3	A	4.6
<i>Intersection Average</i>	D	23.1	A	4.6
<i>Highway Segments¹</i>	LOS	V/C	LOS	V/C
South of Lucas Valley Road	F	0.97	E	0.92
North of Lucas Valley Road	F	0.96	E	0.91
North of Miller Creek Road	F	0.96	E	0.90

1 - AM peak hour = southbound commute, PM peak hour = northbound commute;

Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.

(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

off-ramps to temporarily bypass congestion along the freeway mainline. Since southbound left-turning vehicles share a lane with through traffic, left turn delay is affected by the vehicles bypassing the freeway mainline.

Miller Creek Road / Marinwood Avenue This is a four leg All-Way Stop unsignalized intersection. The south leg would provide access to the project office use driveway. During the morning peak hour the intersection operates overall at LOS E (40.7 seconds of delay per vehicle) and LOS B (7.2-7 seconds of delay per vehicle) during the afternoon peak hour.

Miller Creek Road / Las Gallinas Avenue This is a four leg All-Way Stop unsignalized intersection which operates at overall LOS D (21.4-3 seconds of delay per vehicle) during the AM peak hour. During the PM peak hour the intersection operates at overall LOS A (3.5-7 seconds of delay per vehicle).

Lucas Valley Road / Miller Creek Road This is a three leg unsignalized intersection that is approved and scheduled for signalization by May 2002. With signalization this intersection operates at LOS B (8.1 seconds of delay per vehicle) and LOS A (3.9 seconds of delay per vehicle) The southbound left-turn movements function at LOS F (>60 seconds of delay per vehicle) and LOS C (14.5 seconds of delay per vehicle) during the AM and PM peak hours respectively. The remaining movements all operate at LOS A during both the AM and PM peak hours.

Lucas Valley Road / Las Gallinas Avenue This is a four leg signalized three-phase intersection. Free, right-turn lanes are provided in the northbound, southbound, and westbound directions. A free, right-lane is a right-turn lane which is not controlled by a signal and does not have opposing movements at the intersection. This intersection functions at LOS C-B (15.14.7 seconds of delay per vehicle) during the AM peak hour, and at LOS B (10.49.8 seconds of delay per vehicle) during the PM peak hour.

Lucas Valley Road / Los Gamos Road This is an unsignalized T-intersection. The northbound leg (Los Gamos Road) is controlled by a stop sign. Traffic on Los Gamos Road experiences considerable delay during the AM peak period. The northbound left-turn movements function at LOS F (> 60 seconds of delay per vehicle) during the AM peak hour, and at LOS D-E (29.531.2 seconds of delay per vehicle) during the PM peak hour.

Highway 101 Southbound Ramp / Lucas Valley Road This is a signalized T-intersection. The Highway 101 off-ramp forms the northbound leg of this intersection and is signal controlled. This intersection functions at acceptable LOS B-C (8.717.9 seconds of delay per vehicle) during the AM peak hour. During the PM peak hour, this intersection functions at LOS B-C (8.716.1 seconds of delay per vehicle).

Highway 101 Northbound Ramp / Smith Ranch Road This is a signalized intersection where the Highway 101 northbound off ramp forms the northbound leg of the intersection. There are two sets of northbound on-ramps near this intersection which are considered part of the intersection in this analysis. There is a loop on-ramp from eastbound Smith Ranch Road and a diamond on-ramp from westbound Smith Ranch Road. Both of these on-ramps are provided with exclusive right-turn lanes and neither is controlled making them free movements. Because they are free, they do not impact the intersection. In addition to these free movements, the northbound right-turn movements from the off-ramp to eastbound Smith Ranch Road is also free. The only conflicting movement at this intersection is the northbound left-turn movement which conflicts with the eastbound and westbound through movements. This intersection functions at acceptable LOS C (19.022.0 seconds of delay per vehicle)

during the AM peak hour. During the PM peak hour, this intersection functions at LOS B (9.9-8 seconds of delay per vehicle).

FREEWAY OPERATIONS

Three segments of Highway 101 were analyzed in this study during the AM and PM peak hours. The segments include:

North of the Miller Creek Road Interchange;

Between Miller Creek Road and Lucas Valley Road; and

South of the Lucas Valley Road Interchange.

Highway 101 data was obtained from the Marin County Department of Public Works.⁵ The peak hour highway volumes were developed from the Marin County Congestion Management Agency (CMA) traffic model forecasts for Base Year 1999 and Year 2020. CMA Base Year 1999 peak hour volumes are used in this study to provide existing conditions freeway analysis. Current estimates of existing freeway traffic in the study area were not available, with the exception of the 1998-2000 Caltrans peak month daily estimates referenced in this report.

Using CMA Base Year 1999 model forecasts, volumes for freeway segment capacity analysis shows congested LOS F conditions on all three segments during the produces-acceptable-AM peak hour and acceptable PM peak hour level of service (LOS E) operations at all segments. Exhibit 5.5-3 shows the results of the Highway 101 segment LOS analysis.

The freeway segment LOS analysis is based on Highway Capacity Manual (HCM) 2000 methodology (Chapter 23). This updated method was used in order to approximate the current approach and findings of the Marin County CMA freeway segment forecast LOS. This method determines segment LOS based primarily on density (passenger car/per mile/per lane) and not volume-to-capacity (V/C) ratio. A freeway segment V/C ratio is provided however, based on the 1994 HCM "ideal conditions" of 2,200 vehicles per lane. The V/C ratio is provided for purposes of comparison only and is not directly tied to the LOS value of a given segment. Use of the V/C ratio provides continuity to previous analysis and provides a direct measure of the Proposed Project's peak hour vehicle contribution to the highway. The freeway segment LOS analysis methodology (see Appendix A) is based on "ideal conditions" in which the capacity of a freeway lane is 2,200 passenger cars per lane, per hour, under design speeds of 70 and 60 miles per hour (mph). This analysis provides a volume-to-capacity (V/C) ratio (the number of vehicles divided by the number of lanes) and is related to the estimated speed of the traffic flows. The segment LOS is derived from the V/C ratio. The segment analysis does not account for the effects of traffic stream constraints such as bottlenecks or traffic incidents which further degrade highway operations. The HCM Freeway Segment Analysis is used in this report to provide a method of quantifying the project's contribution of traffic per highway segment to the overall base traffic forecasts.

⁵ Tho X. Do, Assistant Civil Engineer, Marin County Department of Public Works. February 2002. Wilbur Smith Associates conversation with Art Brook, Transportation Engineer, Marin County Department of Public Works, April 2000.

Existing AM and PM peak hour Highway 101 operations within the study area are affected by a number of variables which include traffic flows, lane capacity, lane utilization (basic through lane, high occupancy vehicle (HOV) lane, auxiliary lane) travel speed, terrain and others. Prevailing peak hour freeway operations within the study area are often characterized by reduced speeds and heavy congestion which approximate unacceptable LOS F conditions rather than the HCM calculated LOS E during the evening peak hour. Morning peak hour flows on the study area highway segments are impacted by downstream bottlenecks. The planned Highway 101 Gap Closure Project will provide auxiliary lanes southbound from the Lucas Valley Road interchange to Mission Avenue in San Rafael. The project will also construct a reversible HOV lane between N. San Pedro Road to Lucky Drive. When complete this construction ~~will~~ should improve peak hour traffic flows in the study area.

TRANSIT SERVICE

Golden Gate Transit provides intercounty transit service as well as local bus service within the study area at the Miller Creek Drive and Lucas Valley Road bus pads located along Highway 101. The project site area is well served by a number of transit routes described below:

- **Route 1** The 1 is a local bus route providing weekday and limited weekend service throughout Marin County. The route serves Miller Creek Road and Las Gallinas Avenue in the study area. Buses operate on intervals of 30 to 60 minutes depending on the time of day.
- **Route 39** The 39 is a local supplemental bus route providing limited service on school days in the Lower Lucas Valley. The route serves the Dixie School and the Miller Creek Middle School in the study area.
- **Route 40** The 40 is a basic bus route providing service between San Rafael and the East Bay (Richmond and El Cerrito). The western terminus for this route is located at the Lucas Valley Road bus pad. Buses operate throughout the day and evening on intervals of 30 to 60 minutes.
- **Route 41 and 51** These commute services are ferry feeder bus routes. The 41 route makes stops on Lucas Valley Road, and travels along Highway 101 south to the Larkspur Ferry Terminal. The 51 provides peak hour service between San Marin and the Larkspur Ferry Terminal where a ferry provides service to San Francisco's Ferry Building. Golden Gate Transit runs two southbound buses in the AM and three northbound buses during the PM peak periods on both routes. These routes provide no off-peak service.
- **Route 44** The 44 is a commute services bus route linking Lucas Valley with San Francisco. The 44 route makes stops on Lucas Valley Road and Miller Creek Road within the study area. The route travels along Highway 101 south to San Francisco and runs two southbound buses in the AM and three northbound buses during the PM peak periods. There is no off-peak service.
- **Routes 48, 54 and 56** These commute bus routes link north Marin County (Novato and San Marin) to San Francisco. All of these routes make stops at the Marinwood and Lucas Valley Road bus pads along Highway 101. Golden Gate Transit runs two southbound buses in the AM and three northbound buses during the PM peak periods on these routes. These routes provide no off-peak service.
- **Routes 50, 70, 80, and 90** These basic bus routes provide daily service between Marin, San Francisco, Sonoma and Contra Costa Counties. Buses operate on intervals of 30 to 60 minutes

throughout the day and evening. These routes all make stops at the Marinwood and Lucas Valley Road bus pads along Highway 101.

- **Routes 71, 72, 74, 75, 76 and 78** These commute bus routes link Santa Rosa and Rohnert Park to Marin County and San Francisco. All of these routes make stops at the Marinwood and Lucas Valley Road bus pads along Highway 101. Golden Gate Transit runs southbound buses in the AM and northbound buses during the PM peak periods on these routes. These routes provide no off-peak service.

PEDESTRIAN CIRCULATION

The study area was observed on several occasions during both the AM and PM peak hours. Overall, the background peak hour level of pedestrian and bicycle activity in this area is low/moderate. There was ~~minimal~~ activity observed in the area between Las Gallinas Avenue and the Highway 101 interchange along Lucas Valley Road. The pedestrian activity which was observed here was concentrated in the area of the Caltrans park-and-ride facility (northeast quadrant of the highway interchange) and the Golden Gate Transit bus pads.

Pedestrian activity, which is characterized as low to moderate, was observed along Las Gallinas Avenue between Lucas Valley Road and Miller Creek Road. This area exhibited the most walking, jogging and bicycle activity observed in the site area. The location of the Miller Creek School on Las Gallinas Avenue near Elvia Court contributed to the activity during the AM peak hour; however, the majority of pedestrians observed were older and did not appear to be associated with the school. As observed, the background peak hour level of pedestrian activity on the major streets of Lucas Valley Road, Las Gallinas Avenue and Miller Creek in the study area was less than moderate.

TRANSPORTATION AND CIRCULATION -- SIGNIFICANCE CRITERIA

The County of Marin ~~Marin County~~ currently considers an intersection impact to be significant if it causes the intersection, or a movement of the intersection, to fall below LOS D. Causing further delay at an intersection at or below LOS E is also considered to be a significant impact.

The City of San Rafael employs a LOS mid-D standard (32.5 seconds delay) for signalized intersections as part of the Northgate Activity Center Plan. If a signalized intersection deteriorates below LOS D as a result of a project, the impact is considered significant. If an intersection is already operating below LOS mid-D and the project results in increased delay, regardless of whether the Level of Service changes, the impact is considered significant. The signalized intersections at Highway 101 Northbound and Southbound Ramps / Lucas Valley Road are the only study area intersections within the Northgate Activity Center.

The County of Marin has conditionally adopted the mid-D LOS standard for the Lucas Valley / Highway 101 interchange. The remaining study area intersections are within the jurisdiction of Marin County and the LOS D threshold is used to determine significant environmental impacts at these intersections.

Unsignalized intersections are considered to be significantly impacted if a movement of the intersection falls below LOS D. Causing an increase in delay at an intersection at or below LOS E is also considered to be a significant impact.

HIGHWAY SEGMENTS

The County considers highway segments to be significantly impacted if traffic operations operating at LOS E or better deteriorate to LOS F. If a highway segment is already operating at LOS F then the addition of traffic which results in the deterioration of the V/C ratio by one percent (0.01) is considered to be significant. The significance criteria applied to the highway segment analysis uses the Marin County Plan and related Congestion Management Program (CMP) standards as the criteria of significance because these set the adopted performance standards accepted by all jurisdictions in the County for levels of service on the mainline of Highway 101.

The current *Marin County Congestion Management Program*⁶ indicates that the Highway 101 segments from North San Pablo Road to Atherton Avenue are "grandfathered" into a list of highway segments designated to operate at the interim performance standard of LOS F until recommended improvements are in place. The three segments studied in this EIR (north of the Miller Creek Road Interchange, between Miller Creek Road and Lucas Valley Road, and south of the Lucas Valley Road Interchange) all fall within the Countywide Plan and related CMP implementing standards. While the HCM analysis of the highway segments in this report indicate existing LOS E PM peak hour operations on all three segments, it is noted that actual and observable peak hour operations often approximate LOS F conditions. For this reason the study area highway segments are included in the CMP "grandfathered" list of interim performance standard segments. The *Marin Countywide Plan* and the CMP provides that the adopted level of service interim performance standard is LOS F for

⁶ Marin County Congestion Management Agency, *Marin County Congestion Management Program*, DKS Associates, October 1999.

each of the segments of Highway 101 studied in this EIR. Therefore, the long-range LOS F conditions of the segment studied (with or without the project) north of Miller Creek Road would not represent a significant impact. The change in V/C ratio for the studied segment (less than eight-tenths of one percent) would be undetectable at LOS F. This is considered a de minimus effect well below the level of significance.

Transportation and Circulation -- Impacts and Mitigation Measures

IMPACT ANALYSIS SCENARIOS

Peak hour project impacts are analyzed under the following scenarios:

- Existing plus Project
- Short-range Cumulative plus Project
- Long-range Cumulative plus Project

In addition to these scenarios, analysis of alternatives include the following:

- Short-range Cumulative Base ("No Project")
- Long-range Cumulative Base ("No Project")

TRAFFIC ANALYSIS CONDITIONS

The proposed project is evaluated under existing, short-range cumulative, and long-range cumulative (2015) conditions. Short-range cumulative conditions are based on a manual assignment of vehicle trips generated from approved projects within the study area as listed in the *Marin County PROPDEV 2934, Semi-Annual Proposed Development Survey, August 1999/February 2002*. These forecasts represent the short-range cumulative traffic volumes that would be generated by existing plus project, plus approved projects in the general area. The distribution of short-range trips is based on previous traffic studies including the *Merrydale Assisted Living Facility Transportation Study*, May 1998, *Lucasfilm Grady Ranch / Big Rock Ranch Master Plan EIR*, October 1995 and the Marin County CMA Traffic Model outputs for Year 1999. Model generated origin and destination tables were used for Traffic Analysis Zone (TAZ) 170 (proposed project location) as well as TAZ's in the vicinity of the proposed project.

Long-range cumulative traffic conditions are based on the *ABAG 2020 Development Projections 1998 most recent Marin County CMA Travel Demand model forecasts*. The long-range cumulative traffic volumes are expected to occur with the projected *General Plan* land uses for San Rafael and corresponding land use increases for the general region.

A number of steps were taken to develop long-range, intersection peak hour turning movement volume estimates. The CMA highway mainline forecasts were used to develop an average peak hour background traffic growth percentage between 1999 and 2020 highway volumes. The peak hour average growth for the three studied highway sections was 17 percent (AM peak hour) and 23 percent

(PM peak hour) when adjusted for 2015 conditions. CMA Traffic Model network peak hour link volumes (1999 and 2020) were compared to the estimates of background traffic growth in the study area. Peak hour growth percentages were applied to existing peak hour intersection turning movement volumes.

Peak hour traffic from two potential long-range projects was added to the 2015 network to insure a conservative analysis of cumulative impacts. Vehicle trips associated with the Lucasfilm Grady Ranch project (340 employees) located west of the project site and development of the St. Vincent Silveria property CMA designated Scenario 5 (800 residential units and 150,000 square feet of commercial use) located east of the project site were added to the long-range network for analysis. The approach of using both a growth factor and project based trip generation undoubtedly results in some double counting of vehicle trips in the area. The approach was warranted however based on the comparisons (1999 to 2020) of network link volumes and results in a conservatively high estimate of cumulative traffic.

SHORT-RANGE CUMULATIVE CONDITIONS

~~Exhibit 2.3-2 provides a~~ The list of approved and under review projects used to develop the short-range forecasts and the peak hour vehicle trips generated by each project is provided in Appendix B.

The short-range forecast network includes the signalization of the Lucas Valley Road / Miller Creek Road intersection. ~~This intersection will likely be signalized by the summer of 2001, which is scheduled for signalization in May 2002.~~ The intersection will be signalized as a condition of approval for the Lucasfilm Grady Ranch development. Lucasfilm will pay for construction of the signal. The City of San Rafael proposes that the current traffic signal at Highway 101 Southbound Ramp / Lucas Valley Road serve as an interim improvement until the complete planned improvements and redesign of the interchange is constructed.

LONG-RANGE CUMULATIVE CONDITIONS

Long-range cumulative conditions approximate potential buildout of the City of San Rafael's General Plan. The CMA Traffic Model assumes several improvements to transportation facilities in the area including:

- The Highway 101 Gap Closure Project will be completed, providing a reversible HOV lane -from N. San Pedro Road to Lucky Drive, and one auxiliary lane southbound from Lucas Valley Road to Mission Avenue, San Rafael.
- Highway 101 / Lucas Valley Road southbound ramp improvements. The programmed improvements to the Highway 101 southbound ramps are illustrated in Exhibit 5.5-4. Improvements to the southbound ramps will include the following:
 - The existing southbound loop off-ramp would be removed and replaced with a direct off-ramp which will align with Los Gamos Road creating a north (southbound) approach at this intersection. This intersection would be signalized.

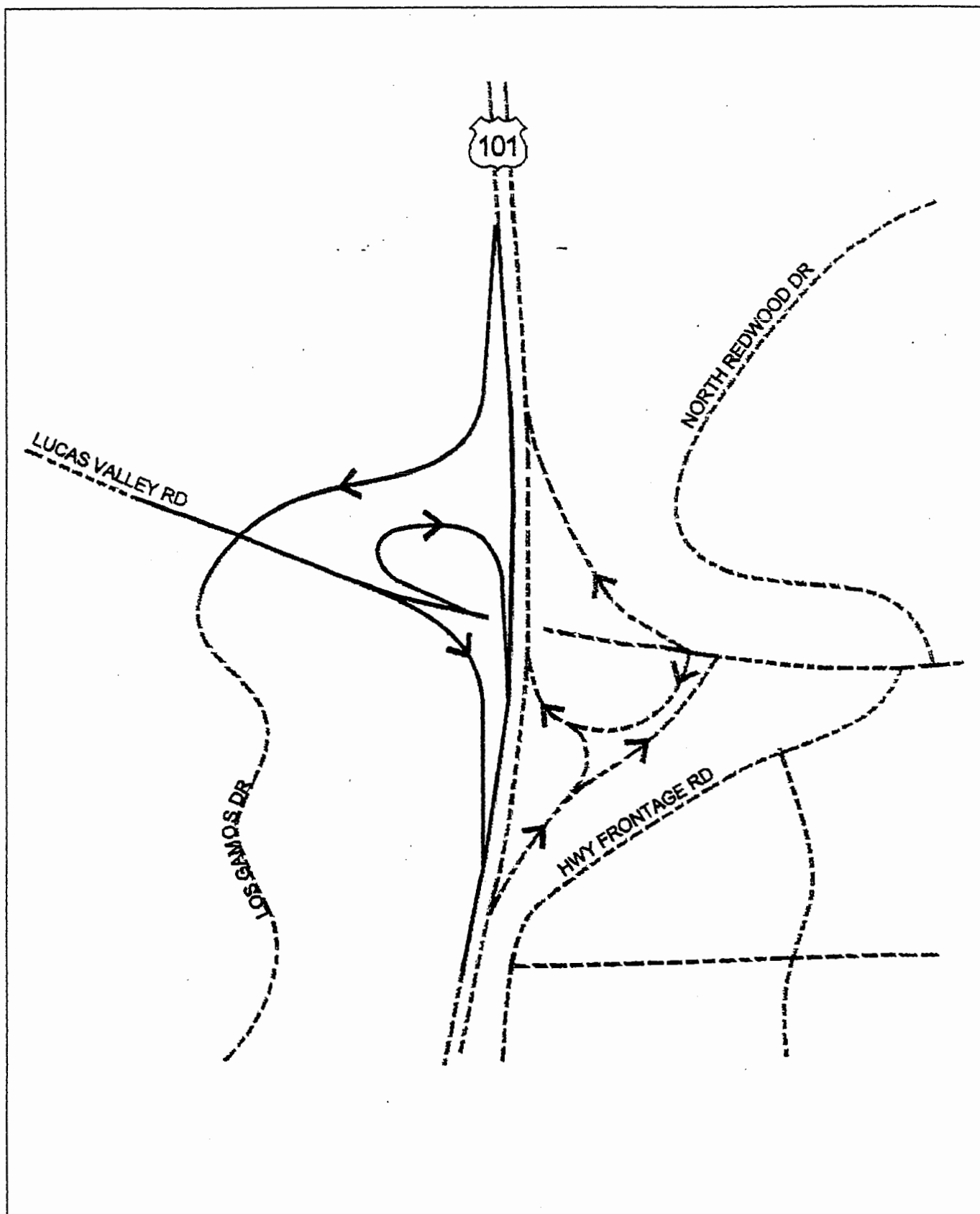


EXHIBIT 5.5-4 PLANNED HIGHWAY 101 INTERCHANGE IMPROVEMENTS
Oakview Master Plan

Source: Wilbur Smith Associates

..... Existing Conditions
 ————— Planned Improvements

↑
 North

- A new loop on-ramp would be constructed on the north side of Lucas Valley Road. This ramp would eliminate the need for a left-turn lane for westbound Lucas Valley Road traffic headed southbound on Highway 101. A free right-turn lane would be provided for westbound traffic headed south on Highway 101.
- The existing westbound left-turn lane at the Highway 101 southbound on-ramp, which extends under the underpass, would be converted to a through lane. That additional through lane would be carried through the intersection with Los Gatos Road and would merge back to a single westbound through lane west of this intersection.
- An additional eastbound through lane would be constructed from just west of Los Gatos Road to just prior to the Highway 101 underpass. At the intersection of Los Gatos Road, the additional through lane would occupy what is currently an exclusive right-turn lane.
- The existing southbound on-ramp from eastbound Lucas Valley Road would be reconstructed and would provide two on-ramp lanes and an HOV lane. The HOV lane would begin on the on-ramp.

Because free right-turn lanes would be provided for each of the southbound on-ramps, the intersection of Highway 101 Southbound Ramps / Lucas Valley Road would cease to exist. No movements at this location would be controlled. For this reason the intersection is not analyzed under long-range cumulative conditions.

The Lucas Valley Road / Highway 101 southbound ramp improvement project ~~is currently continues as an~~ under review ~~project~~ by Caltrans, ~~in a revised Project Study Report (PSR).~~⁷ The project is identified by Caltrans as locally funded and currently there are not sufficient local funds available to construct the project in the near-term. Both Marin County and the City of San Rafael have expressed a commitment to building this project in a Memorandum of Understanding (MOU).⁸ The MOU identifies the need for the project, for funding and for a portion of the Oakview Proposed Project parcel (approximately 10 acres) in order to construct new ramps. ~~Caltrans and County staff have indicated that within the next two years efforts will be made to secure project funding at both the state and federal level. The project is recognized as an important improvement for the area by Caltrans; however, the current Novato Narrows project and the upcoming proposed Highway 101 Gap Closer, as well as the Reversible HOV Lane project are Caltrans priorities in the Highway 101 corridor.~~

This EIR analyzes 2015 traffic conditions with the Lucas Valley Road southbound ramp improvements in place. This is a reasonable approach based on discussions with state and local agencies concerning the recognized necessity of the ramp improvement project.

~~The Oakview project~~Proposed Project ~~would be required to pay a fair share toward the ramp improvements based on the percent of the project's traffic contribution to the interchange.~~

⁷ Wilbur Smith Associates conversation with Jason Nutt, Traffic Operations Engineer, Marin County, Department of Public Works, February 2002 ~~Ben Chuck, Transportation Engineer, Caltrans, August 2000.~~

⁸ San Rafael City Council Resolution Number 8055, October 2, 1989.

- The 2015 network studied in this EIR does not include the extension of McInnis Parkway from the Civic Center area to St. Vincent Drive. If this parkway were to be constructed it would likely improve peak hour operations at both the Lucas Valley and Miller Creek Road Highway 101 interchanges. The McInnis Parkway extension project is unfunded and a reasonable timeframe for when it may be constructed and what the extent of the project would be is not available. Not including the McInnis Parkway extension in the analysis of 2015 conditions results in a conservative analysis approach of project impacts.

PROJECT TRIP GENERATION

Trip generation rates for the proposed project were taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual.⁹ Exhibit 5.5-5 presents the ITE trip rates and the project's estimated trip generation. The single-family detached housing trip rates (ITE Land Use Code 210) were increased by 20 percent over the standard published rates in order to provide a conservative analysis for the larger homes (2,000 plus square feet) proposed by the project.

Project Trip Generation The ~~Oakview project~~ Proposed Project would generate approximately 1,587 daily vehicle trips based on the development of 94,000 square feet of office space and 28 single-family homes. Each project generated vehicle trip is counted individually. A vehicle departing the project in the morning and returning in the evening would account for two discrete (though related) vehicle trips.

AM Peak Hour Generation During the AM peak hour, the project would generate an estimated 207 vehicle trips. The 28 housing units would account for 29 trips of which 7 would be inbound and 22 would be outbound. The proposed office development would generate 178 vehicles trips of which 157 would be inbound and 21 would be outbound. The total project would generate 164 inbound and 43 outbound vehicle trips.

PM Peak Hour Generation During the PM peak hour, the project would generate an estimated 219 vehicles trips, of which 53 would be inbound and 166 would be outbound. The 28 housing units would generate 34 peak hour vehicles trips of which 22 would be inbound and 12 outbound. The office use would generate 185 peak hour trips with 31 inbound and 154 outbound trips.

⁹ Institute of Transportation Engineers, Trip Generation, 6th Edition, 1997.

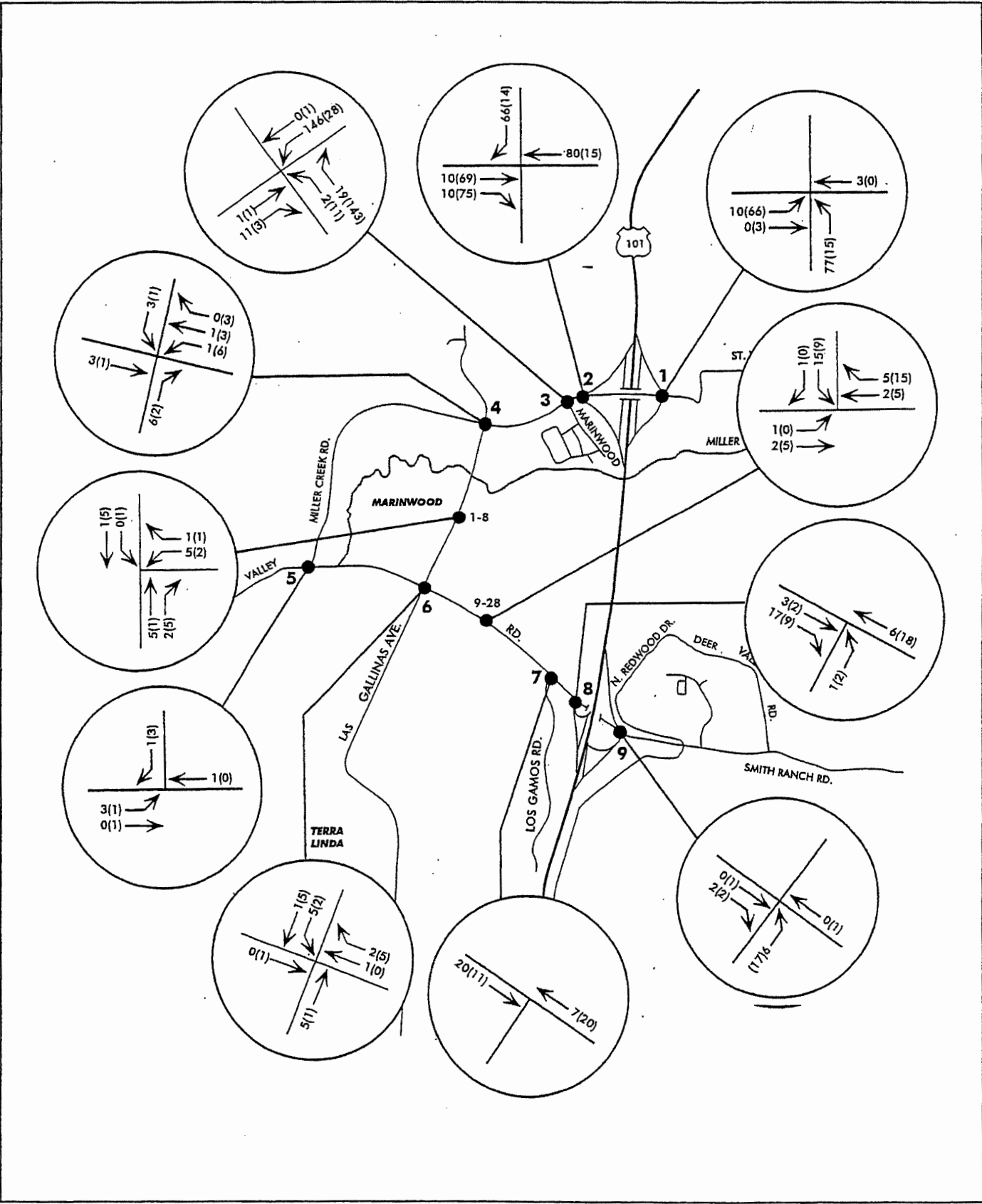


EXHIBIT 5.5-7 AM & PM PROJECT TURNING MOVEMENTS
Oakview Master Plan

Legend:
 AM Peak Hour
 (178) PM Peak Hour

Source: Wilbur Smith Associates

IMPACTS AND MITIGATION MEASURES

Impact 5.5-1 Existing Plus Project AM and PM Peak Hour Conditions

The proposed project alone and in conjunction with existing traffic conditions would create significant AM peak hour impacts for the Lucas Valley Road / Los Gamos Road, Miller Creek Road / Marinwood Avenue, and Highway 101 Southbound Ramps / Miller Creek Road intersections. Significant PM peak hour impacts would be created for the Lucas Valley Road / Los Gamos Road intersection.

Exhibit 5.5-8 illustrates the existing plus project peak hour turning volumes. Exhibit 5.5-9 shows the impact of project trips on study area intersection and highway segment levels of service in the AM and PM peak hours under existing plus project conditions.

During the AM peak hour, the addition of project traffic to existing conditions would result in deteriorated LOS E and F conditions at the unsignalized intersections of Lucas Valley Road / Los Gamos Road, Highway 101 Southbound Ramps / Miller Creek Road, and Miller Creek Road / Marinwood Avenue.

During the PM peak hour, the unsignalized intersection at Lucas Valley Road / Los Gamos Road ~~would fall one full service level to operate at unacceptable LOS E at the northbound left turning movement from LOS D to unacceptable LOS E.~~

Each intersection is discussed in further detail below:

Highway 101 Northbound Ramps / Miller Creek Road The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase slightly for AM and PM peak hour traffic however these impacts are considered to be less-than-significant.

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, this unsignalized intersection experiences LOS F operations at the southbound left-turn / through movement under existing conditions. The addition of project traffic would result in further deterioration. The intersection operates acceptably in the PM peak hour. The AM peak hour impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour project traffic would result in a change in level of service from LOS E to LOS F as a result of the inbound, (westbound) left-turning project traffic accessing the office use. The AM peak hour impact is considered to be significant.

During the PM peak hour, the intersection would deteriorate from existing LOS B to LOS C. This impact is considered to be less-than-significant.

Miller Creek Road / Las Gallinas Avenue The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase slightly for AM and PM peak hour traffic however these impacts are considered to be less-than-significant.

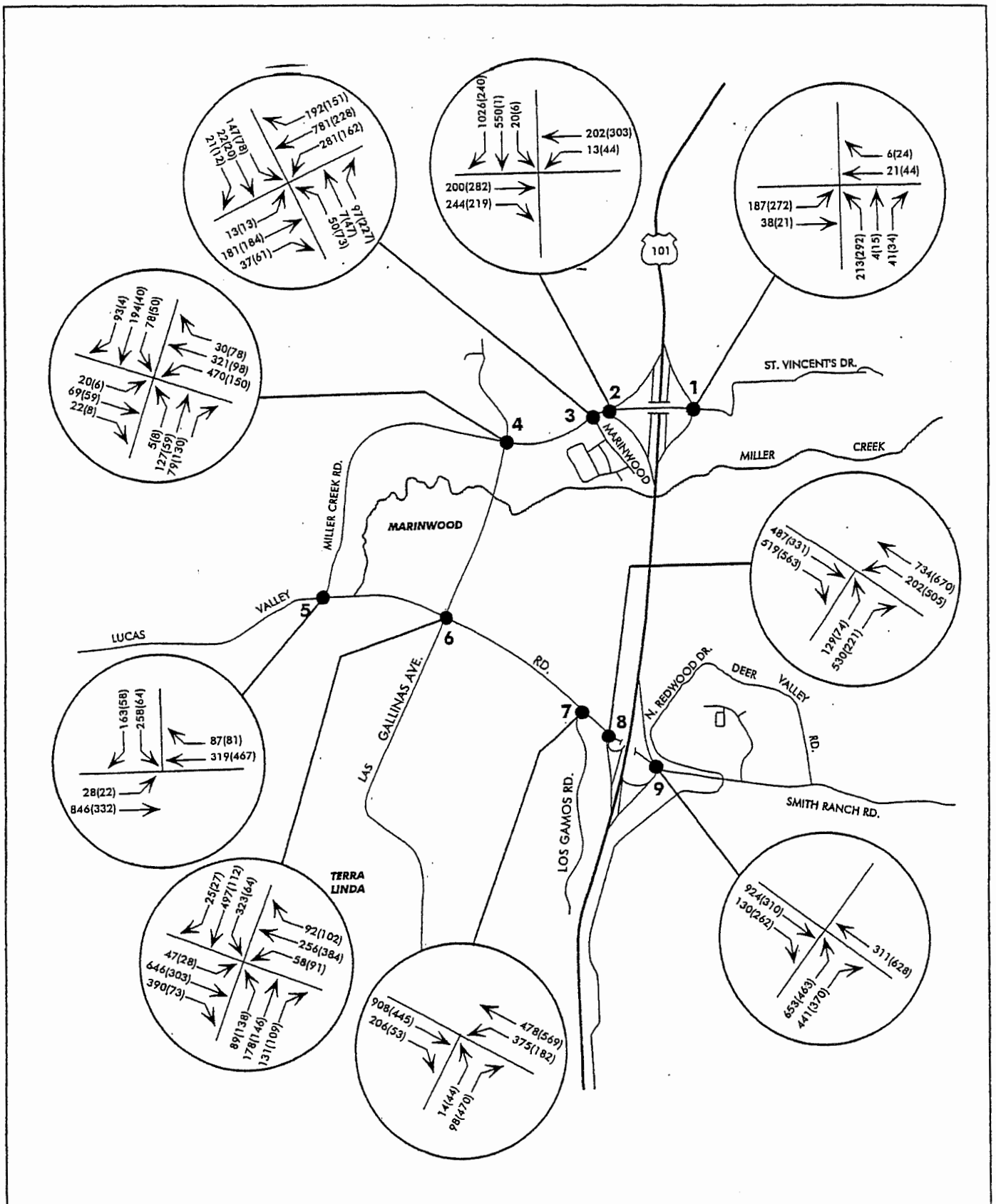


EXHIBIT 5.5-8 EXISTING PLUS PROJECT PEAK HOUR VOLUMES
Oakview Master Plan

Legend:

175 AM Peak Hour
 178 PM Peak Hour

Source: Wilbur Smith Associates

Exhibit 5.5-9
Existing Plus Project AM/PM Peak Hour Levels of Service

Intersection	Existing AM		Existing Plus Project AM		Existing PM		Existing Plus Project PM	
Signalized Intersections	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Lucas Valley/Miller Creek	B	8.1	B	8.1	A	3.9	A	4.0
Lucas Valley/Las Gallinas	B	14.7	B	14.9	B	9.8	B	9.9
US101 SB Ramps/Lucas Valley Road	C	17.9	C	18.3	C	16.1	C	16.3
US101 NB Ramps/Smith Ranch Road	C	22.0	C	23.3	B	9.8	B	9.9
Unsignalized Intersections								
All-Way STOP	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Miller Creek/Marinwood	E	40.7	F	>60	B	7.7	C	15.7
Miller Creek/Las Gallinas	D	21.3	D	21.3	A	3.7	A	3.7
2-Way STOP/T-Intersections	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
US 101 NB Ramps/St. Vincent's Drive								
NBL	B	6.9	B	8.5	C	11.4	C	16.9
EBL	A	2.4	A	2.5	A	2.6	A	2.8
Intersection Average	A	3.6	A	4.8	B	6.4	B	8.5
US 101 SB Ramps/Miller Creek								
SBL	F	>60	F	>60	B	7.8	B	9.0
WBL	A	3.5	A	3.6	A	3.3	A	3.9
Intersection Average	F	>60	F	>60	A	1.5	A	1.4
Lucas Valley/Los Gamos								
NBL	F	>60	F	>60	E	31.2	E	33.3
NBR	B	9.9	C	10.3	C	11.2	C	11.6
WBL	E	37.3	E	41.7	A	4.6	A	4.7
Intersection Average	D	23.1	E	31.3	A	4.6	A	4.7
Highway Segments²	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
South of Lucas Valley Road	F	0.97	F	0.98	E	0.92	E	0.92
North of Lucas Valley Road	F	0.96	F	0.96	E	0.91	E	0.91
North of Miller Creek Road	F	0.96	F	0.96	E	0.90	E	0.91

1 - Plus project LOS reflects planned traffic signal installation at SB off-ramp, October 2000.

2 - AM peak hour = southbound commute, PM peak hour = northbound commute;
Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.

(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

Lucas Valley Road / Miller Creek Road The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase for the PM peak hour; however, this impact is considered to be less-than-significant.

Lucas Valley Road / Las Gallinas Avenue The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase for the AM and PM peak hours; however, these impacts are considered to be less-than-significant.

Lucas Valley Road / Los Gamos Road During the respective AM and PM peak hours, this unsignalized intersection experiences LOS F and ~~D~~ and LOS E operations respectively at the northbound left-turn movement under existing conditions. The addition of project traffic would result in further deterioration in the AM and PM peak hours and a drop from LOS D to an unacceptable LOS E in the PM peak hour. ~~Northbound right turn degrades from LOS B to LOS C.~~ Both AM and PM peak hour impacts are considered to be significant.

Highway 101 Southbound Ramps / Lucas Valley Road The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase for the AM peak hour; however, this impact is considered to be less-than-significant.

Highway 101 Northbound Ramps / Smith Ranch Road The project would increase traffic volumes at this intersection during the AM and PM peak hours. The additional traffic would not result in a change to level of service. The vehicle delay would increase for the AM and PM peak hours; however, these impacts are considered to be less-than-significant.

HIGHWAY SEGMENT ANALYSIS

In general it should be noted that the proposed project would add vehicle trips to Highway 101 during both the AM and PM peak hours. The increase in traffic levels due to the project however, would have an imperceptible effect on highway operations. For instance, the project is estimated to add 68 PM peak hour vehicle trips to the highway segment north of Miller Creek Road. Under existing conditions this segment carries approximately 8,100,950 vehicles during the PM peak hour. An increase of 68 vehicles to the existing level of background highway traffic would be undetectable to drivers already on the highway and would have no measurable impact on existing operations. In general, traffic volumes on highways have been observed to fluctuate as much as ten percent on a daily basis. The reasons for day to day shifts are numerous and include such things as weather conditions, seasonal changes, accidents, and roadway construction activities. Therefore the project's contribution to peak hour highway volumes would be insignificant. At all highway study segments the project would affect less than a 0.008 (eight-tenths of a percent) change to the V/C ratio (see Appendix B).

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment operates at LOS E-F ($V/C = 0.940.97$) under base year conditions. With the addition of project traffic (27 vehicles) the segment would continue to operate at LOS E-F ($V/C = 0.950.98$). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E (V/C = ~~0.960.92~~) under base year conditions. With the addition of project trips (32 vehicles) the segment would continue to operate at LOS E (V/C = ~~0.960.92~~). This impact is considered to be less-than-significant.

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment operates at LOS ~~E-F~~ (V/C = ~~0.930.96~~) under base year conditions. With the addition of project traffic (11 vehicles) the segment would continue to operate at LOS ~~E-F~~ (V/C = ~~0.930.96~~). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E (V/C = ~~0.930.91~~) under base year conditions. With the addition of project trips (17 vehicles) this segment would continue to operate at LOS E (V/C = ~~0.930.91~~). This impact is considered to be less-than-significant.

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment operates at LOS ~~E-F~~ (V/C = ~~0.940.96~~) under base year conditions. With the addition of project traffic (67 vehicles) the segment would continue to operate at LOS ~~E-F~~ (V/C = ~~0.940.96~~). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E (V/C = ~~0.920.90~~) under base year conditions. With the addition of project trips (~~68 vehicles~~)trips this segment would continue to operate at LOS E (V/C = ~~0.930.91~~). This impact is considered to be less-than-significant.

Mitigation Measure 5.5-1 The following mitigations would be required to reduce existing plus project AM and PM peak hour conditions to a less-than-significant level.

Mitigation Measure 5.5-1(a) Miller Creek Road / Marinwood Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should fund this improvement.

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (~~5.88.85.8~~ seconds of delay per vehicle) under existing plus project conditions. Implementation of this measure would reduce this impact to less-than-significant.

Mitigation Measure 5.5-1(b) Lucas Valley Road / Los Gatos Road - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement. ~~The project applicant should fund this improvement.~~

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (~~14.313.010.6~~ seconds of delay per vehicle) under existing plus project conditions. During the PM peak hour, signalization would result in LOS B (~~11.211.8~~ seconds of delay per vehicle) operations. Implementation of this measure would reduce this impact to less-than-significant.

As stated, this intersection would be signalized with the programmed improvements to the southbound Highway 101 ramps. If signalized prior to the reconstruction of the ramps, the signal controller and other infrastructure should allow for the later addition of a southbound leg at this intersection as well as for exclusive left-turn phases on the westbound approach and for a north-south split phase.

Mitigation Measure 5.5-1(c) Highway 101 Southbound Ramps / Miller Creek Road - Signalization is the recommended mitigation measure at this intersection. The applicant should pay its fair share toward this improvement.

Significance After Mitigation If this intersection were signalized, it would function at LOS C-A-B (~~5.012-215.4~~ seconds of delay per vehicle) under existing plus project AM peak hour. Implementation of this measure would reduce this impact to less-than-significant.

Implementation of Mitigation . Master Plan approval should be conditioned upon the applicant funding Mitigation 5.5-1(a) and 5.5-1(b) and paying its fair share of Mitigation 5.5-1(c) prior to issuance of a building permit.

Impact 5.5-2 Short-Range Cumulative AM and PM Peak Hour Conditions

Short-Range cumulative conditions would create significant peak hour impacts for the Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road intersections.

Exhibit 5.5-10 illustrates the short-range cumulative with project peak hour intersection volumes. LOS peak hour intersection operations under short-range cumulative conditions (no project and project scenarios) are shown in Exhibit 5.5-11.¹⁰

During the AM peak hour, the unsignalized intersections of Miller Creek Road / Marinwood Avenue, Highway 101 Southbound Ramps / Miller Creek Road and Lucas Valley Road / Los Gamos Road deteriorate from existing conditions under short-range cumulative (no project) conditions.

The three Highway 101 study segments deteriorate from base year conditions but remain at LOS E-F under short-range cumulative conditions during the AM peak hour.

During the PM peak hour, under short-range cumulative conditions, the left turn movement from Los Gamos Road at the unsignalized intersection of Lucas Valley Road / Los Gamos Road would continue to operate at LOS E-F with the addition of project traffic, with slightly increased delays.

All Highway 101 study segments deteriorate from base year conditions but remain at LOS F-E under short-range cumulative conditions during the PM-AM peak hour and LOS E during the PM peak hour.

Each intersection and highway section is discussed in further detail below:

Highway 101 Northbound Ramps / Miller Creek Road This unsignalized intersection would experience some deterioration as a result of short-range cumulative development. During both the AM and PM peak hours this intersection would operate at acceptable LOS C or better under the no project and project short-range cumulative scenarios. These cumulative impacts are considered to be less-than-significant.

¹⁰ Level of service calculations prepared as a part of this EIR analysis, are available for review at the Marin County Planning Department.

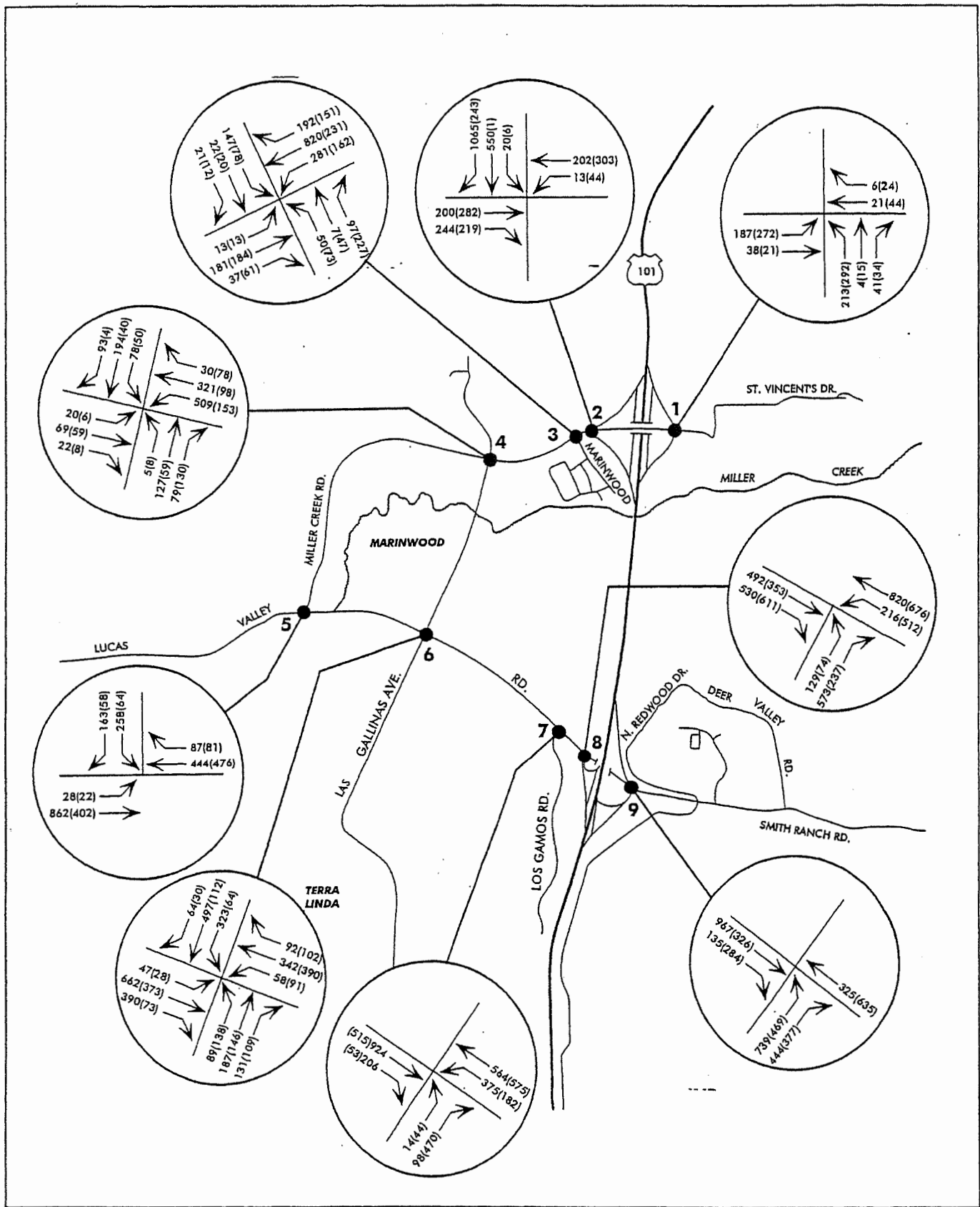


EXHIBIT 5.5-10 SHORT RANGE PEAK HOUR VOLUMES (WITH PROJECT)
Oakview Master Plan

Legend:

175 AM Peak Hour
 (178) PM Peak Hour

Exhibit 5.5-11
Short-Range Cumulative AM/PM Peak Hour Levels of Service

Intersection	AM Peak Hour				PM Peak Hour			
	Short Range - No Project		Short Range - Project		Short Range - No Project		Short Range - Project	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Signalized Intersections								
Lucas Valley/Miller Creek	B	7.9	B	7.9	A	3.7	A	3.8
Lucas Valley/Las Gallinas	B	14.4	B	14.6	B	9.9	B	9.9
US 101 SB Ramps/Lucas Valley	C	17.6	C	20.3	B	13.3	C	19.8
US 101 NB Ramps/Smith Ranch Road	D	35.3	D	37.8	B	9.9	B	10.0
Unsignalized Intersections								
All-Way STOP	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Miller Creek/Marinwood	E	42.8	F	>60	B	7.3	C	15.7
Miller Creek/Las Gallinas	D	22.0	D	22.2	A	3.5	A	3.7
2-Way STOP/T-Intersections	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
US 101 NB Ramps/St. Vincent's Drive								
NBL	B	6.9	B	8.5	C	11.4	C	16.9
EBL	A	2.4	A	2.5	A	2.6	A	2.8
Intersection Average	A	3.6	A	4.8	B	6.4	B	8.5
US 101 SB Ramps/Miller Creek								
SBL	F	>60	F	>60	B	7.8	B	9.0
WBL	A	3.5	A	3.6	A	3.3	A	3.9
Intersection Average	F	>60	F	>60	A	1.5	A	1.5
Lucas Valley/Los Gatos								
NBL	F	>60	F	>60	E	37.6	E	40.3
NBR	C	10.2	C	10.5	C	14.2	C	14.7
WBL	E	40.8	F	45.9	B	5.1	B	5.2
Intersection Average	E	31.9	F	45.1	B	5.4	B	5.6
Highway Segments¹	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
South of Lucas Valley Road	F	0.98	F	0.98	E	0.92	E	0.93
North of Lucas Valley Road	F	0.97	F	0.97	E	0.92	E	0.92
North of Miller Creek Road	F	0.97	F	0.98	E	0.91	E	0.91

1 - AM peak hour = southbound commute, PM peak hour = northbound commute;
Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.
(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the short-range cumulative base (no project) would result in an increase of delay at the southbound left-turn / through movement. This movement currently operates at LOS F under existing conditions. This cumulative impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour, project generated traffic added to the short-range cumulative base (no project) would result in a worsening in level of service at this intersection from existing conditions LOS E (42.8 sec/veh) to an unacceptable LOS F (>60.0 sec/veh). This cumulative impact is considered to be significant.

During the PM peak hour, project generated traffic added to the short-range cumulative base (no project) would result in a worsening in level of service from existing conditions LOS B (7.2-7.3 sec/veh) to LOS C (45.8-15.7 sec/veh). This cumulative impact is considered to be less-than-significant.

Miller Creek Road / Las Gallinas Avenue This unsignalized intersection would experience some deterioration as a result of short-range cumulative development. During both the AM and PM peak hours this intersection would operate at acceptable LOS D or better under the no project and project short-range cumulative scenarios. These cumulative impacts are considered to be less-than-significant.

Lucas Valley Road / Miller Creek Road This intersection would continue to operate at LOS B or better under the no project and project short-range cumulative scenarios during both the AM and PM peak hours. The project impacts are considered to be less-than-significant.

Lucas Valley Road / Las Gallinas Avenue This intersection would continue to operate at LOS C-B or better under the no project and project short-range cumulative scenarios during both the AM and PM peak hours. The project impacts are considered to be less-than-significant.

Lucas Valley Road / Los Gamos Road During the AM peak hour, the addition of project traffic to short-range cumulative (no project) base traffic would result in further deterioration of this unsignalized intersection. The northbound left-turn and right-turn movements would function at LOS F (>60.0 sec/veh) and LOS C (10.2 sec/veh), respectively. The westbound left-turn movement would deteriorate to LOS F (48.4-45.1 sec/veh). These cumulative impacts are considered to be significant.

During the PM peak hour, the project would add additional traffic to this intersection and the northbound left-turn movement at this intersection would increase vehicle delay but would deteriorate continue to operate at LOS E. from existing LOS E (33.2 sec/veh) to LOS E (35.9 sec/veh) and continue to operate at LOS F (>60 sec/veh), the northbound right turn movement would continue deteriorate from LOS C (10.2 sec/veh) of the short range no project scenario to LOS C (10.5 sec/veh) to operate at LOS C (14.7 sec/veh) with project traffic added to short range cumulative (no project) conditions. The northbound right turn movement would deteriorate from existing LOS E (40.8 sec/veh) to LOS F (45.9 sec/veh). These cumulative impacts are considered to be significant.

Highway 101 Southbound Ramps / Lucas Valley Road This intersection would continue to operate at LOS C and LOS B during the AM and PM peak hours, respectively. These cumulative impacts are considered to be less-than-significant.

Highway 101 Northbound Ramps / Smith Ranch Road This signalized intersection would experience some deterioration as a result of short-range cumulative development. However, during

both the AM and PM peak hours this intersection would operate at acceptable LOS C-D or better under the no project and project short-range cumulative scenarios. These cumulative impacts are considered to be less-than-significant.

HIGHWAY SEGMENT ANALYSIS

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS E-F ($V/C = 0.950.98$) with and without project traffic. The project would add 27 trips which would further deteriorate the short-range cumulative LOS F ($V/C = 0.978$) to LOS F ($V/C = 0.981$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (three-tenths of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E without project traffic ($V/C = 0.960.92$). When project traffic is added, this highway segment would operate at LOS E ($V/C = 0.93$) with and without project traffic. This impact is considered to be less-than-significant.

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS E-F ($V/C = 0.930.97$) with and without project traffic. The project would add 11 trips to this segment which would further deteriorate the short-range cumulative LOS F ($V/C = 0.966$) to LOS F ($V/C = 0.967$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (one-tenth of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E ($V/C = 0.930.92$) with and without project traffic. This impact is considered to be less-than-significant.

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS E-F ($V/C = 0.940.97$) without project traffic and LOS E-F ($V/C = 0.950.98$) with project traffic. The project would add 67 trips to this segment which would further deteriorate the short-range cumulative LOS F ($V/C = 0.969$) to LOS F ($V/C = 0.976$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (seven-tenths of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E ($V/C = 0.920.91$) with and without project traffic and LOS E ($V/C = 0.93$). This impact is considered to be less-than-significant.

Mitigation Measures 5.5-2 The following mitigations would be required to reduce short-range cumulative AM and PM peak hour conditions to a less-than-significant level.

Mitigation Measure 5.5-2(a) Miller Creek Road / Marinwood Avenue - Same mitigation measure as 5.5-1(a).

Significance After Mitigation If this intersection were signalized, as recommended under existing plus project conditions, it would function at LOS B (5.8 sec/veh) under short-range AM peak hour conditions. Implementation of this measure would reduce this impact to less-than-significant. The

project's percentage share of short-range traffic growth would be 95 percent during the AM peak hour. During the PM peak hour, the project's percentage share of short-range growth would be 97 percent.

Mitigation Measure 5.5-2(b) Lucas Valley Road / Los Gamos Road - Same mitigation measure as 5.5-1(b).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (~~14.1~~10.4 sec/veh) under short-range cumulative plus project conditions. During the PM peak hour, signalization would result in LOS B (~~11.6~~12.1 sec/veh) operations. Implementation of this measure would reduce this impact to less-than-significant. The project's percentage share of short-range traffic growth would be 24 percent during the AM peak hour. During the PM peak hour, the project's percentage share of short-range growth would be 38 percent.

Mitigation Measure 5.5-2(c) Highway 101 Southbound Ramps / Miller Creek Road - Same mitigation measure as 5.5-1(c).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS ~~A-C~~ (~~5.0~~17.5 sec/veh) under short-range cumulative plus project conditions. Implementation of this measure would reduce this impact to less-than-significant. The project's percentage share of short-range traffic growth would be 95 percent during the AM peak hour. During the PM peak hour, the project's percentage share of short-range growth would be 83 percent.

Implementation of Mitigation Master Plan approval should be conditioned upon the applicant funding Mitigation 5.5-2(a) and 5.5-2(b) and paying its fair share of Mitigation 5.5-2(c) prior to issuance of a building permit.

Impact 5.5-3 Long-Range Cumulative AM and PM Peak Hour Conditions

Long-range cumulative conditions would create significant peak hour impacts for all of the unsignalized study intersections.

Exhibit 5.5-12 illustrates long-range cumulative peak hour intersection volumes. The peak hour LOS for long-range cumulative conditions at study area intersections and highway segments ¹¹ is shown in Exhibit 5.5-13. Under long-range cumulative conditions programmed improvements to the Highway 101 southbound ramp system would result in improved operations of the Highway 101 Southbound Ramps / Lucas Valley Road.

During the AM peak hour, all of the unsignalized intersections would operate at unacceptable operating conditions (LOS E and F conditions).

Under PM peak hour conditions, the two unsignalized intersections of Highway 101 Northbound Ramps / Miller Creek Road and Highway 101 Southbound Ramps / Miller Creek Road would operate at LOS F conditions.

¹¹ Level of service calculations prepared as a part of this EIR analysis, are available for review at the Marin County Planning Department.

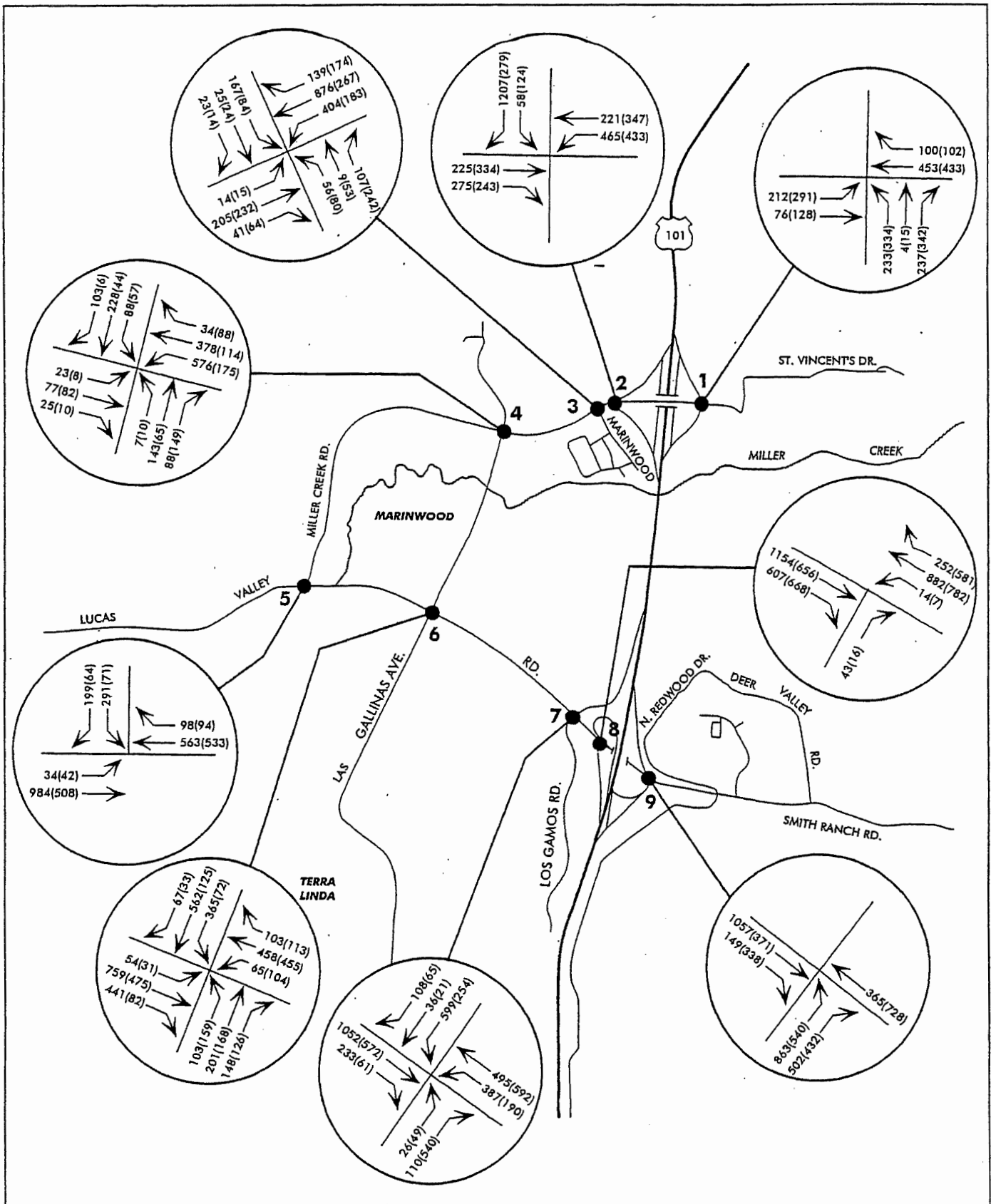


EXHIBIT 5.5-12 2015 BASE PLUS PROJECT PEAK HOUR VOLUMES
Oakview Master Plan

Legend:

175 AM Peak Hour
 (178) PM Peak Hour

Source: Wilbur Smith Associates

Exhibit 5.5-13
Long-Range Cumulative AM/PM Peak Hour Levels of Service

Intersection	AM Peak Hour				PM Peak Hour			
	Long Range - No Project		Long Range - Project		Long Range - No Project		Long Range - Project	
<i>Signalized Intersections</i>	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Lucas Valley/Miller Creek	B	9.4	B	9.5	A	4.1	A	4.1
Lucas Valley/Las Gallinas	C	22.8	D	25.3	B	10.3	B	10.3
Lucas Valley/Los Gatos	D	33.6	D	35.3	C	24.7	C	24.9
US101 NB Ramps/Smith Ranch Road	B	14.1	B	14.1	B	10.7	B	10.7
<i>Unsignalized Intersections</i>								
<i>All-Way STOP</i>	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Miller Creek/Marinwood	F	>60	F	>60	B	9.8	D	21.6
Miller Creek/Las Gallinas	E	34.4	E	34.5	A	4.3	A	4.4
<i>2-Way STOP/T-Intersections</i>	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
US 101 NB Ramps/St. Vincent's Drive								
NBL	E	36.1	F	>60	F	>60	F	>60
EBL	B	5.2	B	5.3	B	5.2	B	5.8
<i>Intersection Average</i>	B	6.4	E	31.3	F	>60	F	>60
US 101 SB Ramps/Miller Creek								
SBL	E	38.9	F	51.2	F	>60	F	>60
SBR	F	>60	F	>60	B	5.6	B	8.4
WBL	B	7.2	B	7.6	B	6.1	B	8.4
<i>Intersection Average</i>	F	57.3	F	>60	D	23.0	F	>60
<i>Highway Segments¹</i>	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
South of Lucas Valley Road	E	0.90	E	0.90	F	0.99	F	0.99
North of Lucas Valley Road	E	0.89	E	0.89	F	0.96	F	0.96
North of Miller Creek Road	E	0.89	E	0.89	F	0.98	F	0.99

1 - AM peak hour = southbound commute, PM peak hour = northbound commute;
Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.
(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

Each of these intersections and highway segments is discussed in further detail below:

Highway 101 Northbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the long-range cumulative base would result in increased delay at the northbound left-turn movement. The northbound left-turn movement is projected to operate at LOS E without project traffic. With the addition of project traffic, the movement would operate at LOS F. This cumulative impact is considered to be significant.

During the PM peak hour, the northbound left-turn would operate at LOS F under long-range cumulative conditions, with or without project traffic. This cumulative impact is considered to be significant.

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the long-range cumulative base would result in increased delay at the southbound left-turn and right-turn movements. The southbound left-turn movement is projected to operate at LOS E without project traffic. With the addition of project traffic, the movement would operate at LOS F. The southbound right-turn movement would operate at LOS F with or without the addition of project traffic. These cumulative impacts are considered to be significant.

During the PM peak hour, the southbound left-turn would operate at LOS F under long-range cumulative conditions, with or without project traffic. This cumulative impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour, this intersection would operate at LOS F conditions, with or without the addition of project traffic. This cumulative impact is considered to be significant.

During the PM peak hour, project generated traffic added to the long-range cumulative base (no project) would result in a worsening in level of service at this intersection from no project conditions LOS B (9.8 sec/veh) to LOS D (21.6 sec/veh). This cumulative impact is considered to be less-than-significant.

Miller Creek Road / Las Gallinas Avenue During the AM peak hour, this unsignalized all-way-stop intersection would experience minor deterioration as a result of project trips added to long-range cumulative development. The intersection would operate at unacceptable LOS E (35.534.4 sec/veh) without the project, under no project long-range cumulative both project, and at LOS E (3534.5 sec/veh) under no with the project long-range cumulative conditions. This cumulative impact is considered to be significant.

During the PM peak hour this intersection would operate at acceptable LOS A under the no project and project long-range cumulative conditions. These cumulative impacts are considered to be less-than-significant.

Lucas Valley Road / Miller Creek Road During the AM peak hour, this signalized intersection would operate at acceptable LOS B under long-range cumulative no project and project conditions. This cumulative impact is considered to be less-than-significant.

During the PM peak hour, this intersection would operate at acceptable LOS A under long-range cumulative plus project conditions. The cumulative impacts are considered to be less-than-significant.

Lucas Valley Road / Las Gallinas Avenue During the AM peak hour, this signalized intersection would operate at acceptable LOS C and D under long-range cumulative no project and project conditions, respectively. This cumulative impact is considered to be less-than-significant.

During the PM peak hour, this intersection would operate at acceptable LOS B under long-range cumulative plus project conditions. The cumulative impacts are considered to be less-than-significant.

Lucas Valley Road / Los Gamos Road During the AM peak hour, this signalized intersection would operate at acceptable LOS D under long-range cumulative no project and project conditions. This cumulative impact is considered to be less-than-significant.

During the PM peak hour, this intersection would operate at acceptable LOS C under long-range cumulative plus project conditions. The cumulative impacts are considered to be less-than-significant.

Highway 101 Southbound Ramps / Lucas Valley Road As stated, this location would cease to function as an intersection and is not analyzed for that reason.

Highway 101 Northbound Ramps / Smith Ranch Road During the AM and PM peak hours, this signalized intersection would operate at acceptable LOS B conditions under long-range cumulative no project and project conditions. This cumulative impact is considered to be less-than-significant.

HIGHWAY SEGMENTS

The Marin County CMA 2020 forecasts for the Highway 101 study segments includes the addition of a reversible, high occupancy vehicle (HOV) lane. This project is approved and funded and will provide additional capacity to the Highway 101 corridor. The CMA model estimates of peak hour traffic include a portion of that traffic assigned to the HOV lanes. The EIR long-range freeway analysis accounts for the HOV lane traffic (1,360 AM peak hour southbound vehicles, and 1,285 PM peak hour northbound vehicles) in the long-range without and with project scenarios.

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would operate at LOS E ($V/C = 0.970.90$) as a result of long-range cumulative development. With the addition of project traffic the segment would continue to operate at LOS E-F ($V/C = 0.970.99$)E ($V/C = 0.90$). The AM peak hour cumulative impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment would operate at LOS E-F ($V/C = 0.990.900.99$) under the no project long-range cumulative development scenario. With the addition of project trips this segment would continue to operate at LOS E-F ($V/C = 0.99$). The project would add 32 trips to this segment which would further deteriorate the long-range cumulative LOS F ($V/C = 0.991$) to LOS F ($V/C = 0.994$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (three-tenths of one percent). This deterioration is considered to be less-than-significant.

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would operate at LOS E ($V/C = 0.960.89$) as a result of long-range cumulative development with and without the project. ~~With the addition of project traffic the segment~~

~~would continue to operate at LOS E-F (V/C = 0.96). The AM peak hour cumulative impact is considered to be less-than-significant.~~

~~During the PM peak hour (northbound direction) this highway segment would operate at LOS E-F (V/C = 0.960.890.96) under the no project and with project long-range cumulative development scenario. The project would add 17 trips to this segment which would further deteriorate the long-range cumulative LOS F (V/C = 0.962) to LOS F (V/C = 0.964). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (two-tenths of one percent). The addition of project trips would further deteriorate this segment to LOS E-F (V/C = 0.970.96). This deterioration is considered to be less than significant.~~

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment would operate at LOS F-E (V/C = 1.0190.89) as a result of long-range cumulative development. With the addition of project traffic the segment would further deteriorate to LOS F-E (V/C = 1.0270.980.90). The AM peak hour cumulative impact is considered to be less-than-significant, because the V/C shift from without project traffic to with traffic is less than one percent (eight tenths of one percent).

During the PM peak hour (northbound direction) this highway segment would operate at LOS F-E (V/C = 1.0480.990.978) under long-range cumulative conditions. The addition of 68 project trips would further deteriorate to LOS F (V/C = 1.0550.9859). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (seven tenths of one percent).

Mitigation Measure 5.5-3 The following mitigations would be required to reduce long-range cumulative AM and PM peak hour conditions to a less-than-significant level. The applicant would also pay Northgate Activity Center Plan traffic mitigation fees based on 56-31 PM peak hour project generated trips that would travel through the Highway 101 / Lucas Valley Road / Smith Ranch Road intersection. The amount of this fee would be offset by 55 percent of the cost of other area-wide improvements financed by the applicant, pursuant to the Board of Supervisors Resolution 84-501.

Mitigation Measure 5.5-3(a) Miller Creek Road / Marinwood Avenue - Same mitigation measure as 5.5-1(a).

Significance After Mitigation If this intersection were signalized, it would function at LOS B (6.56.7 sec/veh) under long-range AM peak hour conditions. Implementation of this measure would reduce this impact to less-than-significant. The project's percentage share of long-range traffic growth would be 49 percent during the AM peak hour. During the PM peak hour, the project's percentage share of long-range growth would be 54 percent.

Mitigation Measure 5.5-3(b) Lucas Valley Road / Los Gatos Road - Same mitigation measure as 5.5-1(b).

Significance After Mitigation It was assumed in the analysis that this location would be signalized as part of the Highway 101 / Lucas Valley interchange improvement under long-term cumulative conditions. During the AM peak hour, this signalized intersection would function at LOS D-C (31.320.3 sec/veh) under long-range cumulative plus project conditions. During the PM peak hour, the intersection would operate at LOS C (15.717.5 sec/veh).

Mitigation Measure 5.5-3(c) Highway 101 Southbound Ramps / Miller Creek Road - Same mitigation measure as 5.5-1(c).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (~~7.89.1~~ sec/veh) under long-range cumulative plus project conditions. The intersection would operate at LOS B (~~7.113.2~~ sec/veh) during the PM peak hour. Implementation of this measure would reduce these impacts to less-than-significant. The project's percentage share of long-range traffic growth would be 53 percent during the AM peak hour. During the PM peak hour, the project's percentage share of long-range growth would be 22 percent.

Mitigation Measure 5.5-3(d) Miller Creek Road / Las Gallinas Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.

Significance After Mitigation If this intersection were signalized, it would function during the AM peak hour at LOS B (~~7.98.1~~ sec/veh). Implementation of this measure would reduce this impact to less-than-significant. The project's percentage share of long-range traffic growth would be six percent during the AM peak hour. During the PM peak hour the project's percentage share of long-range growth would be 13 percent.

Mitigation Measure 5.5-3(e) Highway 101 Northbound Ramps / Miller Creek Road - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (~~14.212.2~~ sec/veh) under long-range cumulative plus project conditions. The intersection would operate at LOS D (~~31.6-25.6~~ sec/veh) in the PM peak hour. Implementation of this measure would reduce these impacts to less-than-significant. The project's percentage share of long-range traffic growth would be ten percent during the AM peak hour. During the PM peak hour the project's percentage share of long-range growth would be seven percent.

Implementation of Mitigation Master Plan approval should be conditioned upon the applicant funding Mitigation 5.5-3(a) and 5.5-3(b) and paying its fair share of Mitigation 5.5-2(c), 5.5-2(d), 5.5-2(e) prior to issuance of a building permit.

Impact 5.5-4 Transit Impacts

The proposed project would generate a moderate number of transit trips and would not be expected to impact transit. This impact is considered to be less-than-significant.

Mitigation Measure 5.5-4 No mitigation would be required.

Impact 5.5-5 Pedestrian Impacts

The proposed project's impact on pedestrian circulation would be less-than-significant.

The proposed project would not be expected to generate a significant number of peak hour pedestrian trips in the study area. As noted in the Setting Section, although characterized as low, Las Gallinas Avenue exhibited the most pedestrian activity in the study area. The proposed residential development with access off of Las Gallinas Avenue on Erin Drive would consist of 8 dwelling units. This number of units would not generate a meaningful increase in peak hour pedestrian trips given the prevailing low level of activity. Neither the proposed office use located off of Miller Creek Road nor the 20 residential units located off of Lucas Valley Road would increase the pedestrian peak hour background activity beyond moderate levels. The proposed project's impact on pedestrian circulation would be less-than-significant.

Mitigation Measure 5.5-5 No mitigation would be required.

Impact 5.5-6 Parking Impacts

The project would have no significant impacts on parking conditions.

The project proposes the development of 378 on-site office parking spaces to be located on the freeway side of the buildings. The ratio of parking spaces to total office building square footage is four cars per 1,000 square feet (one space per 250 square feet). The proposed supply of 378 parking spaces is sufficient to meet the demand generated by an office use of 94,400 square feet. The project would have no significant impacts on parking conditions.

Mitigation Measure 5.5-6 No mitigation would be required.

Impact 5.5-7 Project Access Impacts

The Lucas Valley Road access intersection would have operational problems. This would be a significant impact.

There are three points of access that would serve the proposed project site. The office use component would be accessed off of Miller Creek Road via Marinwood Avenue. The significant impacts at this intersection under all project conditions are documented in this report. Signalization is the proposed mitigation measure at this intersection.

The residential element of the project would consist of a total of 28 dwelling units with 20 units accessed directly off of Lucas Valley Road and the remaining 8 units accessed from Las Gallinas Avenue via Erin Drive.

The stop sign controlled project access at Erin Drive would operate at acceptable LOS C or better under all project scenarios during both the AM and PM peak hours. Existing AM peak hour traffic

along Las Gallinas Avenue is very congested; however, the 8 residential units would not generate a sufficient number of vehicle trips to create significant operational problems.

The southbound left-turn movement of the stop sign controlled project access at Lucas Valley Road would operate at unacceptable LOS F under existing, short-range cumulative conditions, and long-range cumulative conditions during the AM peak hour. The project generated impacts are considered to be significant.

Mitigation Measure 5.5-7 The project applicant has proposed the following roadway improvements at the Lucas Valley Road access driveway:

- Construction of an eastbound left-turn lane on Lucas Valley Road at the project entrance.
- Construction of an eastbound acceleration lane on Lucas Valley Road.
- Construction of a westbound deceleration lane on Lucas Valley Road.

Significance After Mitigation - The construction of the above improvements on Lucas Valley Road at the access driveway would result in acceptable LOS C or better operations for the southbound left-turn movement. The improvements would require a widening of Lucas Valley Road in the vicinity of the access driveway. Implementation of this measure would reduce this impact to less-than-significant.

Impact 5.5-8 Stopping Sight Distance

The proposed Lucas Valley Road access would provide adequate stopping-sight distance. This would be a less-than-significant impact.

The proposed Lucas Valley Road access would provide adequate stopping-sight distance (SSD) for east-west traveling vehicles under prevailing vehicle speeds (45-50 mph) in the area. The proposed development plan shows the proposed access drive positioned with an excess of 600 feet of SSD in either direction on Lucas Valley Road. Under conditions based on the 85th percentile speed of 50 mph the AASHTO design guidelines require a SSD of 400-475 feet on wet pavement.

Mitigation Measure 5.5-8 No mitigation would be required.

5.6 AIR QUALITY

Air Quality -- The Setting

This section describes project local and regional air quality impacts. It was prepared using methodologies and assumptions recommended within the air quality impact assessment guidelines of the Bay Area Air Quality Management District (BAAQMD).¹ In accordance with BAAQMD guidelines, this section describes existing air quality, construction period impacts, emissions associated with project occupancy and operation, the impacts of project emissions on local and regional air quality, and mitigation measures to reduce or avoid identified significant impacts.

CLIMATE AND AIR QUALITY CONDITIONS

The project site is located just north of San Rafael. The area is sheltered somewhat from the flow of marine air by mountains to the west and south. During warm summer afternoons, the prevailing wind flows from the northwest and can be gusty. During the morning, especially in winter, wind flow is off of the bay. Wind speeds in the area are generally low, with average speeds of five miles per hour or less occurring almost half the time at Hamilton Field. Average maximum summer temperatures are in the low 80's. Average maximum winter temperatures are in the high 50's to low 60's, while the minimum temperatures are in the high 30's.

Pollution potential is not that high due to the lack of sufficient sources of air contaminants nearby. Traffic in the eastern portion of Marin County is the primary source of air pollutants affecting the project area. Winds during the summer and fall can transport and trap ozone precursors from the more urbanized portions of the Bay Area. Light winds and stable conditions during the late fall and winter contribute to the buildup of particulate matter from motor vehicles, agriculture, and wood burning in fireplaces and stoves.

REGULATORY BACKGROUND

The Federal and California Clean Air Acts have established ambient air quality standards for different pollutants. National Ambient Air Quality Standards (NAAQS) were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants. These criteria pollutants include carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), particulate (since changed to inhalable particulate matter--PM₁₀), sulfur dioxide (SO₂), and lead (Pb). In 1997, USEPA established an eight-hour standard for ozone and annual and 24-hour standards for very fine particulate matter (PM_{2.5}). These new standards were challenged in court, and at this time their status is uncertain. The air pollutants for which standards have been established are considered the most prevalent air pollutants known to be hazardous to human health. California established ambient air quality standards as early as 1969 through the Mulford-Carroll Act. Pollutants regulated under the California Clean Air Act are similar to those regulated under the Federal Clean Air Act. In many cases,

¹ BAAQMD CEQA Guidelines, Bay Area Air Quality Management District, April 1996, revised December 1999.

California standards are more stringent than the national ambient air quality standards. The six criteria air pollutants are described briefly below:

Ozone Ground-level ozone is the principal component of smog. It is not directly emitted into the atmosphere, but is formed by the photochemical reaction of reactive organic gases and nitrogen oxides (known as ozone precursors) in the presence of sunlight. Ozone levels are highest during late spring through early summer when precursor emissions are high and meteorological conditions are favorable for the complex photochemical reactions to occur. Approximately half of the reactive organic gas and nitrogen oxide emissions in the Bay Area are from motor vehicles. Adverse health effects of ground-level ozone include respiratory impairment and eye irritation. High ozone concentrations are also a potential problem to sensitive crops such as wine grapes.

Carbon Monoxide Carbon monoxide (CO) is a non-reactive pollutant that is highly toxic, invisible, and odorless. It is formed by the incomplete combustion of fuels. The largest source of carbon monoxide emissions is motor vehicles. Wood stoves and fireplaces also contribute to high levels of carbon monoxide. Unlike ozone, carbon monoxide is directly emitted to the atmosphere. The highest carbon monoxide concentrations occur during the nighttime and early mornings in late fall and winter. Carbon monoxide levels are strongly influenced by meteorological factors such as wind speed and atmospheric stability. Adverse health effects of carbon monoxide include the impairment of oxygen transport in the bloodstream, increase of carboxyhemoglobin, aggravation of cardiovascular disease, impairment of central nervous system function, plus fatigue, headache, confusion, and dizziness. Exposure to carbon monoxide can be fatal in the case of very high concentrations in enclosed places.

Nitrogen Dioxide Nitrogen dioxide (NO₂) is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the primary sources of nitrogen dioxides. Nitrogen dioxide contributes to ozone formation. Adverse health effects associated with exposure to high levels of nitrogen dioxide include the risk of acute and chronic respiratory illness.

Sulfur Dioxide Sulfur dioxide (SO₂) is a colorless gas with a strong odor and potential to damage materials. It is produced by the combustion of fuels containing sulfur such as oil and coal. Refineries and chemical plants are the primary sources of sulfur dioxide emissions in the Bay Area. Sulfur dioxide concentrations in the North Bay Area are well below the ambient standards. Adverse health effects associated with exposure to high levels of sulfur dioxide include aggravation of chronic obstruction lung disease and increased risk of acute and chronic respiratory illness.

Inhalable Particulates Inhalable particulate or PM₁₀ (particulate matter 10 microns or less in diameter) and PM_{2.5} (particulate matter 2.5 microns or less in diameter) refers to a wide variety of solid or liquid particles in the atmosphere. These include smoke, dust, aerosols, and metallic oxides. Some of these particulates are considered toxic. Although particulates are found naturally in the air, most particulate matter found in the Bay Area is emitted either directly or indirectly by motor vehicles, industry, construction, agricultural activities, and wind erosion of disturbed areas. Most PM_{2.5} is comprised of combustion products (i.e., soot). Small particulate matter may be inhaled, and possibly lodge in and / or irritate the lungs. Exposure to small particulate matter can also increase the risk of chronic respiratory illness with long-term exposure and altered lung function in children.

Lead Lead occurs in the atmosphere as particulate matter. It is primarily emitted by gasoline-powered motor vehicles, although the use of lead in fuel has been virtually eliminated. As a result of lead being eliminated from fuels, levels in the Bay Area have dropped dramatically. Lead concentrations in the Bay Area are well below the ambient standards.

Toxic Air Contaminants Besides the "criteria" air pollutants, there is another group of substances found in ambient air referred to as Toxic Air Contaminants. These contaminants tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods of time. They are regulated at the local, State, and Federal level.

Federal Air Quality Regulations

Under the Federal Clean Air Act, specific levels for each pollutant are called the National Ambient Air Quality Standards (NAAQS). If an area does not meet the NAAQS over a set period of time, the U.S. Environmental Protection Agency (USEPA) designates it as a "nonattainment" area for that particular pollutant. Before 1995, the Bay Area was designated as a "moderate nonattainment" area for ozone, since some air pollutant monitors in the area routinely exceeded the NAAQS. The USEPA designated the Bay Area as a "maintenance" area after the region had not violated the NAAQS for more than three years. However, ozone NAAQS violations occurred during the summers of 1995 and 1996. As a result, in 1997 USEPA redesignated the area as an "unclassified nonattainment" area for ozone. The Bay Area was a "moderate nonattainment" area for carbon monoxide due to localized NAAQS exceedances in downtown San Jose and Vallejo but the NAAQS has not been exceeded since 1991. Therefore, the USEPA has reclassified the region as a carbon monoxide "maintenance" area in 1997 and that status remains. Bay Area counties, including Marin County, do not exceed any NAAQS for other air pollutants.

The USEPA requires states that are not in compliance with the Federal standards to prepare and submit air quality plans showing how the standards would be met. If the states cannot show how the standards would be met, they must show progress toward meeting the standards. These plans are referred to as the State Implementation Plan (SIP). Under severe cases, the USEPA may impose a Federal plan to show progress in meeting the Federal standards. In 1999, the Bay Area prepared and submitted the ozone attainment plan or ozone SIP to the California Air Resources Board (CARB), which submitted it to the USEPA. This plan demonstrates how the region will attain the Federal ozone standard during the summer of the year 2000 and thereafter. The Bay Area co-lead agencies (BAAQMD, Metropolitan Transportation Commission, and Association of Bay Area Governments) were responsible for preparing the revision to the State Implementation Plan. This plan is a compilation of plans and regulations that govern how the region complies with the Federal Clean Air Act requirements.

California Air Quality Regulations

The CARB is the State air pollution control agency. The California Clean Air Act sets more stringent concentrations for all of the pollutants covered under Federal law, and regulates levels of vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates as well. The specific levels for each pollutant are called the California Ambient Air Quality Standards (CAAQS). If an area does not meet the CAAQS, the CARB designates the area as a nonattainment area. Under California standards, the Bay Area is a serious nonattainment area for ozone (since the area cannot forecast attainment of the standard in the foreseeable future). It is also a nonattainment area for particulate matter ten microns or less in size. The Bay Area has met the CAAQS for all other air pollutants. The CARB requires regions that do not meet the ozone CAAQS to submit clean air plans that describe plans to attain the standard.

Regional Air Quality Regulations and Planning

Regional air quality is regulated by the BAAQMD. The BAAQMD regulates stationary sources (with respect to Federal, State, and local regulations), monitors regional air pollutant levels (including measurement of toxic air contaminants), develops air quality control strategies and conducts public awareness programs. The BAAQMD has also developed CEQA guidelines that establish significance thresholds for evaluating new projects and plans and provide guidance for evaluating air quality impacts of projects and plans.

The BAAQMD has prepared the *Bay Area Clean Air Plan*. This plan includes a comprehensive strategy to reduce emissions from stationary, area, and mobile sources. Its objective is to indicate how the region would attain the stricter State air quality standards, as mandated by the California Clean Air Act. The plan is designed to achieve a region-wide reduction of ozone precursor pollutants through the expeditious implementation of all feasible measures. Air quality plans are developed on a triennial basis, with the latest plan developed in 1997 (i.e., '97 CAP).

The *State CEQA Guidelines* states that an EIR shall discuss "any inconsistencies between a proposed project and applicable general plans and regional plans. Such regional plans include, but are not limited to, the applicable Air Quality Management Plan (or State Implementation Plan)..." The *Bay Area Clean Air Plan* serves as the applicable air quality management plan.

Marin Countywide Plan Policies

Policy EQ-3.2 (Air, Water, and Noise Pollution) of the Environmental Quality Element of *The Marin Countywide Plan* contains the following policy pertaining to air quality: Air, water, and noise pollution shall be prevented or minimized.

EXISTING AIR QUALITY CONDITIONS

Air quality is affected by the rate of pollutant emissions and by meteorological conditions such as wind speed, atmospheric stability, and mixing height, all of which affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in air pollutant emissions, while short-term variations result from changes in atmospheric conditions.

The San Francisco Bay Area generally is considered one of the cleanest major metropolitan areas in the country with respect to air quality. The air pollutants of greatest concern in Marin County are ground-level ozone and very small particulate matter (referred to as PM₁₀), because the San Francisco Bay region as a whole does not comply with air quality standards for either pollutant. The San Francisco Bay region annually exceeds the California Ambient Air Quality Standard for one-hour ozone and 24-hour PM₁₀ levels. Throughout the Bay Area, the national one-hour ozone standard was exceeded at one or more stations from zero to eight (0 to 8) days annually over the last three years and the new eight-hour ozone standard was exceeded from zero to 16 (0 to 16) days annually. The number of days annually that the more stringent one-hour State ozone standard was exceeded at one or more stations in the Bay Area ranged from eight to 34 days over the last five years. The NAAQS for PM₁₀ is not exceeded anywhere in the Bay Area, but the more stringent State standard is routinely exceeded in the Bay Area, as well as most other parts of the State. No other air quality standards are exceeded in the Bay Area. As a result, the San Francisco Bay region is considered nonattainment for ground-level ozone at both the State and Federal level, and nonattainment for PM₁₀ at the State level. The San Francisco Bay region currently complies with State and Federal standards for all other air pollutants (CO, NO₂, SO₂ and lead).

The Bay Area Air Quality Management District monitors air pollutant levels continuously throughout the Bay Area. The station closest to the project site is in San Rafael. Air pollutant levels are expected to be slightly higher at the San Rafael station than at the project site. Exhibit 5.6-1 shows the highest air pollutant levels measured in San Rafael during the past five years (1995-99). Both State and Federal air quality standards are also shown in Exhibit 5.6-1. Based on the data reported by the BAAQMD, maximum one-hour ozone levels exceeded the State standards of 0.09 parts per million (ppm) on two days in 1996, one day in 1997, and two days in 1999. The 24-hour PM₁₀ levels also exceeded the State standard of 50 ug/m³ on about six days in 1995, 12 days in 1997, six days in 1998 and 12 days in 1999. Federal standards were not exceeded for any criteria air pollutants at this station. The maximum levels for all other criteria air pollutants were below standards (both CAAQS and NAAQS).

SOURCES OF AIR POLLUTION

Sources of air pollution in and around the project site are primarily vehicular traffic. The largest source of air pollutant emissions is traffic on Highway 101. The combustion of fuel for space and water heating is another source of air pollutant emissions. Wood burning and other outdoor burning is a major source of air pollutants (primarily particulates and carbon monoxide) during late fall and winter. There are no major industrial sources of air pollution in the project area.

Wood burning from residential fireplaces and wood stoves is a substantial source of particulate matter emissions in wintertime. These emissions occur intermittently, generally at times when meteorological conditions are conducive to localized build up of particulate air pollution (i.e., cold calm nights with strong surface-base inversions).

Carbon monoxide emissions from traffic near the project site would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high-localized concentrations of carbon monoxide. The roadway segments with the greatest traffic congestion near the project site are Lucas Valley Road / Smith Ranch Road and Highway 101 on-and off-ramps.

Exhibit 5.6-1
Measured Air Pollutant Concentrations in San Rafael

Pollutant	Average Time	National Ambient Air Quality Standard	California Ambient Air Quality Standard	Levels Measured in San Rafael				
				1995	1996	1997	1998	1999
Ozone (O ₃)	1-Hour	0.12 ppm	0.09 ppm	0.09 ppm	0.11 ppm	0.11 ppm	0.07 ppm	0.10 ppm
	8-Hour	0.08 ppm	--	0.07 ppm	0.08 ppm	0.07 ppm	0.06 ppm	0.08 ppm
Carbon Monoxide (CO)	1-Hour	35 ppm	20 ppm		7 ppm	6 ppm	NA	NA
	8-Hour	9 ppm	9.0 ppm	3.2 ppm	4.0 ppm	2.6 ppm	3.3 ppm	2.9 ppm
Nitrogen Dioxide (NO ₂)	1-Hour	--	0.25 ppm	0.06 ppm	0.07 ppm	0.07 ppm	0.06 ppm	0.09 ppm
	Annual	0.053 ppm	--	0.018 ppm	0.018 ppm	0.016 ppm	0.017 ppm	0.018 ppm
Fine Particulate Matter (PM _{2.5})	1-Hour	65 ug/m ³	--	NA	NA	NA	NA	NA
	Annual	15 ug/m ³	--	NA	NA	NA	NA	NA
Respirable Particulate Matter (PM ₁₀)	24-Hour	150 ug/m ³	50 ug/m ³	74 ug/m ³	50 ug/m ³	72 ug/m ³	52 ug/m ³	76 ug/m ³
	Annual	50 ug/m ³	30 ug/m ³	21 ug/m ³	22 ug/m ³	22 ug/m ³	20 ug/m ³	22 ug/m ³

Note: ppm = parts per million
 Values reported in bold exceed ambient air quality standard
 NA = data not available.

Air Quality – Significance Criteria

The project would result in a significant impact if it:

- Conflicted with or obstruct implementation of the applicable air quality plan.
- Violated any air quality standard or contribute substantially to an existing or projected air quality violation. *This EIR defines a significant impact to local air quality as increased carbon monoxide concentrations at the closest sensitive receptors that cause a violation of the most stringent ambient standard for carbon monoxide (20 ppm for the one-hour averaging period, 9.0 ppm for the eight-hour averaging period).*
- Resulted in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). *A significant impact on regional air quality is defined in this analysis as: an increase in emissions of an ozone precursor or PM₁₀ exceeding the BAAQMD recommended thresholds of significance. The latest guidelines issued by the BAAQMD for the evaluation of project air quality impacts consider emission increases to be significant if they exceed 80 pounds per day (or 15 tons / year) for ozone precursors or PM₁₀. Any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact.*
- Exposed sensitive receptors to substantial pollutant concentrations.
- Created objectionable odors affecting a substantial number of people.

Air Quality – Impacts and Mitigation Measures

Impact 5.6-1 Air Quality Standards

Traffic generated by buildout of the proposed project would not cause or contribute to carbon monoxide violations. This would be a less-than-significant impact.

Carbon monoxide emissions from traffic generated by buildout of the proposed project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high localized concentrations of CO. This carbon monoxide analysis focused on intersections affected by this project. Carbon monoxide concentrations were modeled at these intersections to assess project impacts to local air quality.

Carbon monoxide concentrations were modeled using the screening procedure established by the BAAQMD.² This procedure is based on the use of the Caline4 Line-Source dispersion model, using traffic volumes, emissions (based on the use of EMFAC7G emission factors), meteorology, and the

² BAAQMD CEQA Guidelines, Bay Area Air Quality Management District, April 1996, revised December 1999.

roadway/receptor geometry. Concentrations of carbon monoxide are predicted at the edge of the roadway, regardless of the land use. Modeled concentrations were added to background levels to calculate total carbon monoxide concentrations. There are one- and eight-hour standards for carbon monoxide, to which predicted carbon monoxide levels were compared to evaluate the significance of carbon monoxide exposure.

Exhibit 5.6-2 shows carbon monoxide concentrations associated with future conditions are predicted to remain below California and national ambient air quality standards. Future carbon monoxide concentrations are predicted to be lower, even with increased traffic conditions. The predicted decrease in future levels would be due to vehicle fleet turnover, where newer (less polluting) vehicles replace older (more polluting) vehicles. Newer vehicles emit about up to 100 times less carbon monoxide than older vehicles. As a result, the project impact on local air quality would be less-than-significant.

Exhibit 5.6-2
Predicted Carbon Monoxide Concentrations at the Busiest Intersections Near the Oakview Project (in parts per million)

Scenario	Existing 2000		Short-Term No Project 2005		Short-Term W/Project 2005		Future W/Project 2015	
	1- Hour	8- Hour	1- Hour	8- Hour	1- Hour	8- Hour	1- Hour	8- Hour
Lucas Valley Rd/Las Gallinas Rd	7	4.3	6	3.8	6	3.8	6	3.8
Lucas Valley Rd/US 101 Ramps	7	4.5	6	4.0	6	4.0	6	3.8
Smith Ranch Road/US 101 Ramps	7	4.5	6	3.9	6	3.9	6	3.8
Air Quality Standards							20	9.0

Source: Illingworth & Rodkin, Inc.

Mitigation Measure 5.6-1 No mitigation would be required.

Impact 5.6-2 Cumulative Net Increase in Non-Attainment Pollutants

Buildout of the proposed project would generate new air pollutant emissions that would affect long-term air quality throughout the region. This would be a less-than-significant impact.

Emissions of ozone precursor pollutants – reactive organic gases (ROG) and nitrogen oxides (NO_x) – and small particulate matter (PM₁₀) can affect air quality throughout the Bay Area. It is virtually impossible to predict the effect of emissions from this project to concentrations of ozone and PM₁₀ in the region. However, the significance of project air pollutant emissions are evaluated against emission thresholds established by the BAAQMD.

In order to evaluate the project effects on regional air quality, emissions of ozone precursor pollutants and PM₁₀ were predicted. The URBEMIS7G Model was used to predict air pollutant emissions associated with buildout of the project. The model combines assumptions for automobile activity (number of trips, vehicle miles traveled, etc.) with vehicle emission factors. Project trip generation data provided by the EIR's traffic analyst was used as input to the URBEMIS7G model. Emissions

factors utilized by URBEMIS7G are based on the EMFAC7G emission factor model, which is the most recent set of emission factors available for evaluating air quality impacts of projects in California. Emission rates are dependent on the year and decrease in the future. Such factors as fleet turnover (from older high polluting vehicles to newer and cleaner vehicles), future vehicle emission standards and cleaner fuels affect the rate of pollutants emitted by motor vehicles. The URBEMIS7G model also calculates emissions associated with area sources, such as energy usage from new homes.

Residential fireplaces are a source of particulate emissions during cold, calm winter nights. New fireplaces that are U.S. EPA approved would not result in substantial emissions of particulates.

Daily emissions of regional air pollutants from the proposed project are shown in Exhibit 5.6-3. Buildout of the project was assumed to occur by 2005. As shown in Exhibit 5.6-3, emissions of all air pollutants would not exceed the significance thresholds established by the BAAQMD. This would be a less-than-significant impact.

Exhibit 5.6-3
Daily Air Pollutant Emissions Resulting from the Proposed Project

Scenario	Daily Emissions in Pounds Per Day			
	ROG	Nox	CO	PM10
Proposed Project – Area Sources	1.6	0.6	94	5.9
Proposed Project – Mobile Sources	19.6	34.7	262	13.5
Total	21.2	35.3	376	44
BAAQMD Significance Thresholds	80	80	550^A	80

A If project also causes or contributes to CO concentrations that exceed ambient air quality standards.

Note: Emissions for ROG and NOx calculated for summer conditions. CO and PM10 emissions calculated for winter conditions and include wood smoke.

Source: Illingworth & Rodkin, Inc.

Mitigation Measure 5.6-2 No mitigation would be required.

Impact 5.6-3 Impacts to Sensitive Receptors

Dust generation from short-term construction activities associated with development of the project components would cause potential health and nuisance air quality impacts to adjacent land uses. Although temporary, this would be a potentially significant impact.

Construction activities are a source of particulate matter and gaseous emissions during much of the construction period. The most substantial air pollutant emissions would be dust generated from site grading and other disturbance of soil. Minor sources of construction related emissions include exhaust emissions from gasoline or diesel powered construction equipment, solvents in construction materials, and gases emitted from asphalt for a short period of time after paving occurs.

Construction activities would include grading and earthmoving, paving of roadways, and building construction. Disturbance of dry soils by graders and other mobile construction equipment could

generate substantial amounts of fugitive dust. Wind and disturbance of exposed areas would also be sources of dust emissions. USEPA studies have estimated uncontrolled construction related particulate matter emissions at about 1.2 tons per acre per month (or 51 pounds per acre per day). These emissions can be reduced greatly through appropriate control measures.

Construction activities may occur over several years. Emissions from construction activities would vary considerably over the period and would be greatest during late spring through fall when ground disturbances occur. The closest residences are located upwind of the project site (the site is usually exposed to westerly winds). However, uncontrolled dust emissions could lead to both health and nuisance impacts at adjacent land uses. There are reasonable and feasible dust control measures that would substantially reduce these emissions. To ensure that these emissions are less-than-significant, visible dust clouds should be prevented from extending beyond construction sites.

Mitigation Measure 5.6-3 Master Plan approval should be conditioned to require contractors to incorporate measures to reduce dust and equipment exhaust emissions into construction plans.

Emissions from construction activities can be greatly reduced by implementing dust control measures. The significance of construction impacts to air quality is typically determined based on the control measures that will be implemented. Implementation of the measures listed below would reduce the dust impacts associated with grading and new construction to a less-than-significant level:

- All active construction areas shall be watered at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times.
- All hauling trucks shall be covered or at least two feet of freeboard shall be maintained.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas that are inactive for 10 days or more).
- Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles.
- Limit traffic speeds on any unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- Install wind breaks, or plant trees/vegetative wind breaks on the windward side(s) of construction areas.

- Suspend excavation and grading activity when winds ~~(instantaneous gusts) exceed 25 mph~~ cause dust clouds to extend beyond the construction site and affect nearby land uses.
- Limit the area subject to excavation, grading, and other construction activity at any one time.
- Properly maintain construction equipment and avoid unnecessary idling near residences.
- Designate a disturbance coordinator that would respond to complaints regarding construction-related air quality issues. The phone number for this disturbance coordinator shall be clearly posted at the construction sites.

Significance After Mitigation Implementation of Mitigation Measure 5.6-3 would reduce construction dust emissions to a less-than-significant level.

Implementation of Mitigation Measure Master Plan approval shall be conditioned on incorporation of Mitigation Measure 5.6-3 into contracts of all subsequent contractors involved in site preparation and development activities on the project site.

Impact 5.6-4 Odors

Proposed residential and office uses are not anticipated to generate odors or be exposed to substantial odors from neighboring sources. There would be no impact.

The proposed project is not anticipated to generate odors that would be considered offensive by neighboring residential land uses. The project site is located in an area that has no known sources of offensive odors that could affect the proposed uses.

Mitigation Measure 5.6-4 No mitigation would be required.

Impact 5.6-5 Cumulative Impacts

Buildout of the project site under cumulative-plus-project conditions would result in less-than-significant impacts on carbon monoxide emissions and on regional (ozone precursor) emissions. The project would have a less-than-significant cumulative impact.

Cumulative air quality impacts are evaluated based on both a quantification of the project-related air quality impacts and the consistency of the project with local and regional air quality plans (*The Marin Countywide Plan* and the '97 Bay Area Clean Air Plan). At the local level, future cumulative traffic conditions would not result in any violation of the carbon monoxide standard (see Exhibit 5.6-2). As a result, there would not be a cumulative impact to local air quality. Project-related emissions associated with the project are predicted to be below significance levels established by the BAAQMD for all air pollutants (see Exhibit 5.6-3). *The Marin Countywide Plan* land use designation for the Oakview project site is Planned Residential. This designation provides for a density range of one to ten acres per unit with a floor area ratio (FAR) of 0.1 to 0.9 for non-residential uses. As discussed in Exhibit 4.1-1 the proposed project is consistent with the site's Planned Residential designation and with the site's FAR range. Since the proposed land use is consistent with *The Marin Countywide Plan* land use designation and with the BAAQMD CEQA Guidelines, the proposed project would not have a significant cumulative air quality impact.

Mitigation Measure 5.6-5 No mitigation would be required.

Noise -- The Setting

FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL ACOUSTICS

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels usually are measured and expressed in decibels (dB) with zero decibels (0 dB) roughly corresponding to the threshold of hearing. Decibels and other technical terms are defined in Exhibit 5.7-1.

Most sounds heard in the environment do not consist of a single frequency but, rather, a broad band of frequencies with each frequency differing in sound level. The intensities of each frequency combine to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all of the frequencies of a sound in accordance with a weighting which reflects the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called "A" weighting, and the decibel level so measured is called the A-weighted sound level (dBA). In practice, the level of a sound source is conveniently measured using a sound level meter which includes an electrical filter corresponding to the A-weighting curve. Typical A-levels measured in the environment and in industry for different types of noise are shown in Exhibit 5.7-2.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources which creates a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors L_{10} , L_{50} , and L_{90} are commonly used. They are the A-weighted noise levels equaled or exceeded during ten, 50, and 90 percent of a stated time period. A single-number descriptor called the L_{eq} is also widely used. The L_{eq} is the average A-weighted noise level during a stated period of time.

In determining the daily level of environmental noise, it is important to account for the different responses of people to daytime and nighttime noises. At night, exterior background noises generally are lower than the daytime levels. However, most household noise also decreases at night, and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, L_{dn} (day / night average sound level), was developed. The L_{dn} divides the 24-hour day into daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) periods. The nighttime noise level is weighted ten decibels (10 dB) higher than the daytime noise level. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes both an evening and nighttime weighting.

Exhibit 5.7-1
Definitions of Acoustical Terms

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound pressure, which is 20 micropascals (20 micronewtons per square meter).
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
L_{01} , L_{10} , L_{50} , L_{90}	The A-weighted noise levels which are exceeded one (1), ten (10), 50, and 90 percent of the time during the measurement period.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of five decibels (5 dB) in the evening from 7:00 PM to 10:00 PM and after addition of ten decibels (10 dB) to sound levels in the night between 10:00 PM and 7:00 AM.
Day / Night Noise Level, L_{dn}	The average A-weighted noise level during a 24-hour day, obtained after addition of ten decibels (10 dB) to levels measured in the night between 10:00 PM and 7:00 AM.
L_{max} , L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Illingworth & Rodkin, Inc., Acoustical Engineers

Exhibit 5.7-2
Typical Sound Levels Measured in the Environment and Industry

<i>At a Given Distance from Noise Source</i>	<i>A-Weighted Sound Level in Decibels</i>	<i>Noise Environments</i>	<i>Subjective Impression</i>
	140		
Civil Defense Siren (100 feet)	130	—	
Jet Takeoff (200 feet)	120		Pain Threshold
	110	Rock Music Concert	
Pile Driver (50 feet)	100		Very Loud
Ambulance Siren (100 feet)			
	90	Boiler Room	
Freight Cars (50 feet)		Printing Press Plant	
Pneumatic Drill (50 feet)	80	In Kitchen With Garbage Disposal Running	
Freeway (100 feet)			
	70		Moderately Loud
Vacuum Cleaner (10 feet)	60	Data Processing Center	
Department Store			
Light Traffic (100 feet)	50	Private Business Office	
Large Transformer (200 feet)			
	40		Quiet
Soft Whisper (5 feet)	30	Quiet Bedroom	
	20	Recording Studio	
	10		Threshold of Hearing
	0		

Source: Illingworth & Rodkin, Inc., Acoustical Engineers

There are three general categories of noise effects on people:

- Subjective effects of annoyance, nuisance, dissatisfaction
- Interference with activities, such as speech, sleep, learning
- Physiological effects, such as startling, hearing loss

Environmental noise levels mostly produce effects in only the first two categories.¹ However, there currently is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. This primarily is because of the wide variation in individual thresholds of annoyance and because of habituation to noise due to differing individual past experiences with noise.

An important way of determining a person's subjective reaction to a new noise, therefore, is to compare it with the existing environment to which one has adapted – the so-called "ambient". In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the hearers.

In considering increases in A-weighted noise level, knowledge of the following relationships is helpful in understanding this report:

- Except in carefully controlled laboratory experiments, a one-decibel (1 dB) change cannot be perceived
- Outside a laboratory, a three-decibel (3 dB) change is considered a just-perceivable difference
- A change of at least five decibels (5 dB) is required before any noticeable community response would be expected
- A ten-decibel (10 dB) change is heard subjectively as approximately a doubling in loudness and would almost certainly cause an adverse community response

REGULATORY BACKGROUND

The following State and local guidelines would apply to the noise impact assessment for this project.

State

The California Environmental Quality Act (CEQA) requires that projects be evaluated for their potential to create a noise impact. Under CEQA, a noise impact occurs if the project would result in:

- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?
- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

¹ Workers in industrial plants can experience noise in the last category.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Local

The *Marin Countywide Plan* includes an adopted Noise Element. The Noise Element contains local goals and standards for evaluating noise impacts. The following Objectives, Policies, and Programs are applicable to the Oakview project:

- **Objective N-1 Protection from Excessive Noise Levels** To site and design new development projects in a manner that minimizes the exposure of residents and workers to excessive levels of noise.
- **Policy N-1.1 Use Noise Level Guidelines-New Development** The County shall use noise level guidelines contained in this element to direct the siting, design, and insulation of new commercial and residential development.
- **Program N-1.1a Use the CEQA Process and Discretionary Review to Minimize Exposure to Excessive Noise Levels** Both CEQA and discretionary review of new development shall ensure that new development is protected from excessive noise levels. Potential noise impacts and mitigation measures shall be evaluated through discretionary review procedures such as environmental view, master plans, design review, and use permits.
- **Program N-1.1b Noise Guidelines for New Projects Exposed to Transportation-Generated Noise** An acoustical analysis shall be performed for new residential development in areas with greater than 60 dBA outdoor L_{dn} to determine the appropriate mitigation measures for meeting an exterior noise level of 60 dBA, measured at the property line, and an interior noise level of 45 dBA. The threshold for performing an acoustical analysis shall be 65 dBA existing outdoor L_{dn} for office and retail commercial development and 70 dBA existing outdoor L_{dn} for industrial commercial development. The acoustic analysis shall determine ambient noise level conditions and mitigation measures necessary to minimize the exposure of residents and / or workers to excessive levels of noise.
- **Objective N-2 Prevent Significant Noise Impacts from New Development in Existing Developed Areas** To ensure that new development does not significantly increase noise levels within existing residential, commercial, industrial, and agricultural areas and to ensure that noise from new development does not exceed County guidelines.
- **Program N-2.1a Use the CEQA Process and Discretionary Review to Protect Existing Land Uses from Significant Noise Impacts Due to New Development** Both CEQA and discretionary review of new development shall determine the noise impacts of new development. Potential

noise impacts and mitigation measures shall be evaluated through environmental review, master plans, design review, use permits, and other discretionary permits in cases of significant increases in noise levels.

- **Program N-2.1b Noise Guidelines to Protect Existing Land Uses from Transportation-Generated Noise Due to New Development** Table N-2 (see Exhibit 5.7-3) shall be used as a guide to establish allowable noise levels. Where the existing noise level is rated "Normally Acceptable", if new development raises the L_{dn} by more than 5 dBA but the noise level still remains in the "Normally Acceptable" category, it is considered a significant impact. In areas where the existing noise level is "Normally Acceptable", if new development raises the L_{dn} by more than 3 dBA and the noise level exceeds the "Normally Acceptable" standard, it is considered a significant impact. In areas that already exceed the "Normally Acceptable" noise level; if new development raises the L_{dn} by more than 3 dBA, it is considered a significant impact. When a significant impact occurs, mitigation measures shall be required.
- **Program N-2.1c Noise Guidelines to Protect Existing Land Uses from Stationary-Source Noise Generated by New Development** Table N-3 (see Exhibit 5.7-4) shall be used as a guide to establish allowable noise levels. New noise-generating development proposed near existing residential or other noise-sensitive land uses shall have an acoustical analysis performed to determine the appropriate mitigation necessary to conform to the standards in Table N-3 (see Exhibit 5.7-4). Effective mitigation measures shall be incorporated into the new development to reduce exposure to noise levels at or below the standards shown in Table N-3 (Exhibit 5.7-4).

Table N-2 (see Exhibit 5.7-3) shall be used to determine allowable noise levels for commercial, industrial, agricultural or other less noise-sensitive land uses exposed to stationary source noise generated by new development.

- **Policy N-2.4 Minimize Impacts from Excessive Noise Levels Due to Construction Activity** During all phases of construction, measures should be taken to minimize the exposure of neighboring properties to excessive noise levels from construction-related activity.
- **Program N-2.4a Limit Construction Hours** The Planning Department reserves the right to set hours for construction-related activities involving the use of machinery, power tools, or hammering. The type of construction, site location, and noise-sensitivity of nearby land uses will determine the hours of construction. The conditions of approval will specify hours for staging and type of construction activities. Special consideration shall be given to homeowners who perform their own work.

The noise thresholds discussed above will be used as the criteria for assessing significance in this EIR.

Exhibit 5.7-3
Land Use Compatibility for Community Noise Environments

Land Use Category	Community Noise Exposure ^a					
	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes						
Residential - Multi-Family						
Transient Lodging - Motels, Hotels/						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Recreation, Cemeteries						
Office Buildings, Business Commercial and Professional						
Industrial, Manufacturing, Utilities, Agriculture						

Source: *The Marin Countywide Plan Noise Element*, Table N-2

^a Decibels (dBA)

Normally Acceptable

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements

Conditionally Acceptable

New construction should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply, will normally suffice.

Normally Unacceptable

New construction of development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Exhibit 5.7-4
Benchmarks for Allowable Noise Exposure From Stationary Noise Sources

	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq} dB	50	45
Maximum Level, dB	70	65
Maximum Level, dB (impulsive noise)	65	60

Source: *The Marin Countywide Plan* Noise Element, Table N-3

Guidelines for Use of Table N-3

- 1 The measurements are made at the property line of the receiving land use. The effectiveness of noise mitigation measures should be determined by applying the standards on the receptor side of noise barriers or other property line noise mitigation measures.
- 2 The nighttime standards apply only when the receiving land use operates or is occupied during nighttime hours.
- 3 Sound level measurements to determine maximum level noise shall be made with "slow" meter response.
- 4 Sound level measurements for impulsive noise sources shall be made with "fast" meter response. Impulsive noises are defined as those which may have sharp, loud peaks in decibel levels but which quickly disappear. Examples include a dog's bark, a hammer's bang, and noise with speech or music content.
- 5 The allowable noise level standard shall be raised to the ambient noise level in areas where the ambient level already exceeds the standards shown in this table. For example, if the neighborhood already experiences daytime hourly noise levels of 60 dBA as an ambient condition, the noise level standard shall be raised to 60 dBA.
- 6 The allowable noise level shall be reduced 5 dB if the ambient hourly L_{eq} is at least 10 dB lower than the noise level standard shown in this table. For example, if the neighborhood experiences daytime hourly noise levels of 40 dBA as an ambient condition, the noise level standard shall be lowered to 45 dBA.

EXISTING NOISE ENVIRONMENT

The noise environment at the project site is dominated primarily by vehicular traffic on Highway 101 and to a lesser extent by automobile traffic on Lucas Valley Road and Las Gallinas Avenue. The 1996 Draft EIR contained the results of a noise measurement survey done to describe the noise environment on the site. Since these noise measurements are now four years old, the EIR noise consultants revisited the site and updated the noise measurements to reflect current conditions. Exhibit 5.7-5 shows the location of the noise measurements and the corresponding L_{dn} at each location. Noise levels measured along Highway 101 have not changed measurably. Noise levels along Lucas Valley Road have increased slightly. Based on these measurements, the topography of the site, and projected traffic volumes, the future L_{dn} noise exposure contours on the site were plotted (see Exhibit 5.7-5).

Noise -- Impacts and Mitigation Measures

SIGNIFICANCE CRITERIA

Based on the *State CEQA Guidelines* this analysis uses the following criteria to determine the significance of the project's noise impacts. The project would be deemed to have a "significant noise impact" if:

- It would conflict with the policies contained in the Noise Element of *The Marin Countywide Plan*.
- An activity generated by the project would raise the L_{dn} in an existing residential area by more than five decibels (5 dBA) but would remain below an L_{dn} of 60 dBA.
- An activity generated by the project would raise the L_{dn} in an existing residential area by more than three decibels (3 dBA) if the noise level currently exceeds 60 dBA or would exceed 60 dBA as a result of project implementation.

A project impact would be deemed a "significant short-term noise impact" if:

- The average noise level outdoors generated by construction activities is estimated to be 60 dBA or greater or if maximum instantaneous noise levels would exceed 80 dBA.

EXHIBIT 5.7-5 SITE NOISE EXPOSURE
Oakview Master Plan

Source: Illingsworth and Rodkin, Inc.

Legend:

..... LDN Noise Contour

①

Noise Measurement Location and Corresponding LDN

→
North

IMPACTS AND MITIGATION MEASURES

Impact 5.7-1 Land Use Compatibility Impact

Noise levels on some proposed residential lots and in the proposed office area would exceed the Noise and Land Use Compatibility criteria set forth by the Noise Element of The Marin Countywide Plan. While indoor noise levels in office structures would conform to County criteria through normal building design, exterior sound levels could result in a potentially significant impact on residents' use of their lots' yards, and interior levels with residents' windows open could conflict with the criteria.

The Noise Element of *The Marin Countywide Plan* requires that an acoustical analysis be performed for new residential development proposed in areas with outdoor noise levels greater than an outdoor L_{dn} of 60 dBA. The purpose of the analysis is to determine the appropriate mitigation measures for meeting an exterior noise level of 60 dBA measured at the property line and an interior noise level of 45 dBA. The threshold for performing an acoustical analysis for office and retail commercial development is an outdoor L_{dn} of 65 dBA. An acoustical analysis must determine ambient noise level conditions and mitigation measures necessary to minimize the exposure of residents and / or workers to excessive noise levels. The noise contour map (see Exhibit 5.7-5) shows that the proposed office development would be exposed to an L_{dn} in excess of 65 dBA and that the L_{dn} would exceed 60 dBA at proposed Lots 27 and 28. The Master Plan does not propose office building outdoor areas next to the Highway 101, and normal new office building construction would reduce interior noise levels to an acceptable level for an office environment. Exterior noise levels in the outdoor living areas of residential Lots 27 and 28 would exceed the standard without mitigation. Interior noise levels with windows closed would meet the 45 dBA standard, although the standard could be exceeded indoors with windows open.

Mitigation Measure 5.7-1 No measures would be required to mitigate noise exposure of proposed office buildings. The following measure would be required to reduce the impact of noise exposure on future residential use of proposed Lots 27 and 28:

- Design property-line privacy fences to shield the backyards of Lots 27 and 28. Fences should be six feet high and of solid construction so that there are no cracks or gaps either in the fence itself or at the bottom. A double-sided wooden fence or board-on-board construction consisting of a minimum of three-quarter-inch thick wood would provide the necessary sound attenuation. A masonry sound wall of the type discouraged by County policy would not be required. Lot-by-lot site plans submitted to the County during design review should show the noise reduction solution selected.
- Depending on proposed site orientation and noise shielding (in response to the immediately preceding measure), design and build (or require the future homeowners to build) second floors of housing units on Lots 27 and 28 with mechanical ventilation so that windows can be closed to achieve interior noise criteria.

Significance after Mitigation Implementation of Mitigation Measure 5.7-1 would reduce the impact of noise exposure on Lots 27 and 28 to a less-than-significant level. The alternative -- relocating lots or eliminating residential use from the area proposed for Lots 27 and 28 -- was considered but dismissed as unnecessary. This is because Mitigation Measure 5.7-1 would be a feasible measure to mitigate acoustical exposure in conformance with County policy. The potential secondary visual impact of building fences around the yards of Lots 27 and 28 also was considered but dismissed as insignificant. This was because a masonry sound wall would not be required (as could be necessary,

for example, along a major highway) and because it is expected that fences would be built for privacy. The difference between a hypothetical five- and recommended six-foot high fence would not be expected to result in visual impacts. However, a six-foot fence would be expected to reduce noise attenuation more effectively than a five-foot fence because a six-foot fence would reach the ear-height of more people than would a five-foot fence.

Implementation of Mitigation The applicant should submit draft deed restrictions with the Precise Development Plan which incorporate Mitigation Measure 5.7-1 for any future residential development in the areas of currently proposed Lots 27 and 28 and should file final deed restrictions with the Final Map. Individual lot owners ultimately would submit their detailed site plans to the County during design review to obtain building permits.

Impact 5.7-2 Traffic Noise

Traffic noise levels on the streets serving the project site would increase by less than three decibels (3 dBA), even under cumulative traffic conditions. This would be a less-than-significant impact.

The Noise Element of *The Marin Countywide Plan* defines a traffic noise impact to be an increase of 3 dBA (if the resulting noise level would exceed the "normally acceptable" standard for the impacted land uses) or an increase of 5 dBA (if the noise level would not exceed the "normally acceptable" standard). An evaluation of the traffic analysis prepared for this EIR indicates that noise levels, even under cumulative conditions with the project, would not increase by more than 3 dBA. The project itself would result in a less than 2 dBA increase along any of the streets. Since noise levels would not exceed the criteria, even for buildout conditions, this would be a less-than-significant impact.

Mitigation Measure 5.7-2 No mitigation would be required.

Impact 5.7-3 Construction Noise

During construction, noise levels would be elevated outside and inside existing homes immediately adjacent to the project site boundary. This would be a significant short-term impact.

Homes located along Ellen and Lisa Courts and at the end of Erin Drive which share a common property boundary with the project site would experience noise levels that, at times, could reach 85 dBA. Grading on other project site lots would take place farther away, and resulting noise levels would be substantially lower. During the framing of proposed housing units, noise levels would be lower. Maximum noise levels of 75-80 dBA could be expected on occasion outside the existing adjacent homes. Average noise levels during a typical hour of construction would be 5-10 dBA lower than the maximum noise levels. Nevertheless, average noise levels occasionally would exceed an L_{eq} of 60 dBA behind existing off-site homes. At this level, construction noise would interfere with outdoor activities and could be annoying to existing residents.

Mitigation Measure 5.7-3 *Countywide Plan* Policy N-2.4 requires that measures should be taken during all phases of construction to minimize exposure of neighboring properties to excessive noise levels from construction-related activity. Further, the Noise Element states that the Community Development Agency reserves the right to set hours for construction-related activities involving the use of machinery, power tools, or hammering. The type of construction, site location, and noise sensitivity of nearby land uses would determine the hours of construction. The conditions of approval would specify hours for staging and type of construction activities. In order to implement these

policies, the following measures would be required to mitigate the project's short-term construction noise impacts:

- Adequately muffle and maintain all equipment used on the project site. All internal combustion engine-driven equipment should be fitted with intake and exhaust mufflers which are in good condition. Good mufflers with quieted compressors should result in all non-impact tools generating a maximum noise level of 85 dB when measured at a distance of 50 feet.
- Powered construction equipment should be turned off when not in use.
- Assign a disturbance coordinator to be available on-site during construction.
- Clearly post the name and telephone number of the disturbance coordinator so that neighbors have a contact person at the project site with whom to discuss problems and who can facilitate resolution of these problems.
- Confine residential construction to 8:00 AM to 5:00 PM on weekdays at least during periods when construction is taking place within 1,000 feet of the nearest existing homes. Construction hours for activity on other parts of the site could be lengthened as appropriate, including commercial construction on Parcel 2.

Significance after Mitigation Implementation of Mitigation Measure 5.7-3 would reduce construction noise impacts to less-than-significant levels.

Although Marin County often allows construction between 7:30 AM and 6:00 PM Monday through Saturday in residential areas, confining such activity to weekdays would address anticipated adverse response from nearby residents about construction noise on Saturdays, especially use of heavy equipment for site preparation, grading, road building, and installing utilities. Even when the Parcel 1 residential development concept is better defined by the Precise Development Plan, it may not be known whether residential construction would proceed on a lot-by-lot "custom home" basis or as a single developer-implemented phase. If the former were to be approved some flexibility in hours (but not days) might be appropriate during framing and finishing tasks but would not be recommended for lot preparation, grading, and foundation construction tasks. This is because custom home construction would not occur simultaneously on all lots. Thus, construction noise generated by home building activities on individual lots would be less intrusive for existing off- and on-site residents than development of 28 units as a single project.

Implementation of Mitigation Precise Development Plan approval should be conditioned on incorporation of Mitigation 5.7-3 in contracts of all subsequent contractors involved in site preparation and development activities on Parcels 1 or 2, and all future site alteration and building permits should be granted contingent on full compliance with the measures.

5.8 PUBLIC SERVICES

A variety of agencies would provide public services to the proposed project.

It is proposed that the Marinwood Community Service District (Marinwood CSD) provide fire protection, street lights, and parks and recreation services for the project. Police protection would be provided by the Marin County Sheriff's Department. –

The project is proposed to be provided with sanitary sewer service by the Las Gallinas Valley Sanitary District (LGVSD). The site is proposed to be annexed into the service boundaries of the LGVSD and connected with existing facilities.

The project is proposed to be provided with water for domestic and fire protection purposes from the Marin Municipal Water District (MMWD). The project would require an extension of existing MMWD facilities.

The project site is in the jurisdictions of the Dixie Elementary School District (DESD) and San Rafael High School District (SRHSD).

The impact analyses of the following public service and facility topics are presented in this section:

- Fire and emergency medical services
- Police services
- Water supply
- Sanitary sewer
- Schools
- Parks and Recreation

Fire and Emergency Medical Services

FIRE AND EMERGENCY MEDICAL SERVICES -- THE SETTING ¹

The Marinwood Fire Department currently provides fire protection to the site. Paramedic service is provided by the San Rafael Fire Department.

In the event of a medical emergency, the Kaiser Hospital in Terra Linda is the nearest medical facility.

¹ Nichols • Berman conversation with Jay Neuhaus, Fire Chief, Marinwood Community Services District, February and April 2000.

Marinwood Fire Department (MFD)

The Marinwood Fire Department (MFD) operates from a single station located at Miller Creek Road near Lucas Valley Road. The MFD is responsible for fire protection services in the Marinwood Community Service District (which currently does not include any of the project site.)

MFD staffing consists of one fire chief, three captains, seven firefighters, and 25 volunteer on-call firefighters. Minimum MFD staffing is three people on duty at all times. In addition, one volunteer firefighter is on duty from 8:00 AM to 6:00 PM, seven days a week, when scheduling permits.

The MFD has two Type-1 engines (designed for structural protection) and one Type-3 engine (designed for wildland fires). The Type-1 engines can produce 1,500 and 1,000 gallons per minute (gpm) while the Type-3 engine can produce 250 gpm.

The MFD's longest ground ladder is a 30-foot extension ladder. However, a truck company -- capable of reaching higher than 30 feet -- is included in the first alarm assignment to structural fires through an Automatic Aid Agreement with the City of San Rafael, as described below.

MFD Emergency Medical Technicians respond to emergency calls and provide paramedic service by contractual arrangement with the City of San Rafael, as described below.

San Rafael Fire Department (SRFD)

The San Rafael Fire Department (SRFD) provides dispatch services for the MFD and also has an Automatic Aid agreement with the MFD. This means the SRFD responds to all structural fire calls in the Marinwood Community Service District with one Engine Company, one Truck Company, one Paramedic Rescue Ambulance, and one Chief Officer. For wildland fires, an additional Engine is substituted for the Truck Company. The SRFD also has a Mutual Aid Agreement with the Marin County Fire Department (MCFD) and responds to incidents as requested.

The SRFD also provides paramedic service to Marinwood for medical emergency calls. Most emergency calls (approximately 80 percent) are for emergency medical service. The SRFD operates two paramedic ambulances.

FIRE AND EMERGENCY MEDICAL SERVICES -- SIGNIFICANCE CRITERIA

According to the *State CEQA Guidelines*, a significant impact would be created if:

- The project would "result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives" for fire service.

Additional issue-specific thresholds of significance are discussed in Appendix N of the *Marin County Environmental Impact Review Guidelines and Procedures* which asks "would the project require additional fire staff, facilities, or equipment to maintain an acceptable level of service (e.g. response time, rating, other)?"

FIRE AND EMERGENCY MEDICAL SERVICES -- IMPACTS AND MITIGATION

Impact 5.8-1 Fire and Emergency Medical Service Impacts

Site development would create the potential for more fire incidents and emergency medical calls. However, this would affect the MFD minimally and, therefore, would not lead to adverse physical changes in the environment. This would be a less-than-significant impact.

The Marinwood Fire Department (MFD) would have primary responsibility for the project site.

MFD Response Times Estimated response time to the Lucas Valley and Erin Drive entrances (both 0.6 mile from the MFD station) is one minute 15 seconds. Estimated response time to the Marinwood Avenue entrance (1.2 miles) is three minutes 15 seconds.

MFD Service Calls The MFD estimates that the number of project-generated calls would affect the Department minimally. No additional staff or equipment would be required. This would be a less-than-significant impact.

SRFD Paramedic Response Times The closest ambulance would respond from San Rafael Fire District Station 6 (at 650 Del Ganado Road). Response times are estimated to be four minutes 40 seconds to the Lucas Valley or Erin Drive entrances and six minutes ten seconds to the Marinwood Avenue entrance. Response times would be longer if the closest ambulance is unavailable.

Travel time from the site to Kaiser Hospital (the nearest medical facility) at 99 Montecillo Road are estimated to be four minutes 22 seconds from the Lucas Valley Road entrance, four minutes 35 seconds from the Erin Drive entrance, and six minutes 15 seconds from the Marinwood Avenue entrance.

Mitigation Measure 5.8-1 No mitigation would be required.

Impact 5.8-2 Wildland-Building Fire Exposure Impacts

New building construction adjacent to wildland areas on the project site would be exposed to fire hazards under severe weather and wind conditions. This would be a significant impact.

Open space fires could spread unchecked to buildings and, under extreme weather conditions, threaten people's safety or lives. In addition, fire could spread from buildings to open space and threaten other property. There have been a few wildland fires over the years on the project site. A fire occurred on the project site on September 29, 1994 and consumed ten acres. A fire also occurred on the project site in the summer of 2000. The fire started at the end of Erin Drive and burned toward the ridgetop.

Vegetation in the area provides a natural fuel source for fire. The amount of vegetation present is known as the "fuel load". Heavy fuels include wood, trees, timber, and heavy large brush. Small to medium fuels include grass, weeds, brush, shrubs, and small trees. Small (light) fuel loads ignite more easily, burn faster, generate less heat, and are easier to extinguish than heavy fuel loads. Slope affects the rate fire can spread. Fire burns faster uphill than on flat lands because a fire burning upslope can preheat fuels located even farther upslope and cause them to ignite easily.

Proposed development would occur in a variety of locations on the site, some more at risk for wildfires than others. Areas most at risk would be those immediately upslope of wooded areas. No high risk areas are proposed for development with this project. All development would occur

downslope of wooded areas in grassy flatlands or slopes. However, some homes would be constructed near woodland, primarily along Roadway B. This would be a significant impact.

Site landscaping could affect wildland interface conditions adversely. While the County does not require a specific landscaping and vegetative management plan for a Master Plan, the applicant has prepared a Conceptual Landscape Plan. Some plants proposed by the Conceptual Landscape Plan are considered to present a very high fire risk (such as Bishop Pine [*Pinus muricata*], Tan Oak [*Lithocarpus densiflorus*], California Bay [*Umbellularia californica*], and Coyote Brush [*Bacharis pilularis*]). Plantings can increase the risk of a wildland-fire in various ways, including increasing the fuel load of the site. In addition, some of the species proposed for screening could create extreme fire conditions due to site topography. Much of the site is located on open southern slopes which create hot dry conditions in summer months.

The Conceptual Landscape Plan states that a Fire Management Plan would be prepared as a part of the Precise Development Plan. It is stated that the Fire Management Plan would address the potential fire hazards of the site by considering fuel load, slope, aspect, topography, and other factors designed to minimize vegetative fuel load.

Construction activities could result in accidental wildfires before water delivery and communications systems are in place. Emergency vehicle access to the site would be limited before construction of the on-site roadway system is complete.

Mitigation Measure 5.8-2 The following measures would be required to reduce the potential impacts of wildland fires:

- The Fire Management Plan should include both a Vegetation Modification Plan (to ensure that a minimum defensible space -- 30 to 100 feet depending on specific site conditions -- would be provided by reducing flammable vegetation and fuel load) and a Vegetation Maintenance Plan (to describe the on-going annual vegetative maintenance program). The annual Vegetation Maintenance Plan reports would address the site's fire hazards based on fuel load, slope, aspect, topography, and other factors and should determine priority problem areas on the site where fire safety measures should be emphasized. Approval of the Fire Management Plan by the MFD would be required before construction, and implementation would be required prior to framing. Because the Master Plan does not yet describe long-term site maintenance aspects of the project (such as establishment of a homeowners' association or equivalent organization composed of all the site's residential, office, and open space landowners), the Vegetation Maintenance Plan should establish a mechanism and identify who would be responsible for implementing all elements of the Plan.²

The MFD has materials and guidelines to prepare mitigation plans for defensible space. New plantings of trees and vegetation with a high fire risk (such as Bishop Pine [*Pinus muricata*], Tan Oak [*Lithocarpus densiflorus*], California Bay [*Umbellularia californica*], and Coyote Brush [*Bacharis pilularis*]) should be prohibited within the defensible space zone of buildings. Existing trees with a high fire risk within the defensible space zone of buildings (such as California Bay) could be retained with permission of the MFD and would require special

² Note that the Vegetation Maintenance and Modification Plans deal with fire exposure impacts. These plans should not be confused with biological "Landscape and Vegetation Management Plans" such as discussed in Impact 5.3-1.

consideration in the Vegetation Management Plans, as described below. Resistant plantings should be encouraged (such as Coast Live Oak [*Quercus agrifolia*], Pacific Wax Myrtle [*Myrica californica*], California Lilac [*Ceanothus* spp.], and Toyon [*Heteromeles arbutifolia*]), all of which are included in the Conceptual Landscape Plan.

- Implement fire prevention measures during construction. The applicant and individual residential or office developers should be responsible for implementing the measures which should include (but not be limited to) the following:
 - Installing all project roadway and water requirements before any residential sidewall construction on the site, consistent with Section 10.502 of the *Uniform Fire Code*.
 - Clearing brush and other potential fire fuel around construction areas.
 - Maintaining and clearly marking on-site fire response equipment (such as fire extinguishers, fire retardant blankets, shovels, buckets, etc.) at each construction area.
 - Ensuring that all construction workers are trained to use on-site fire response equipment and workplace safety measures.
 - Locating and clearly identifying a cellular phone or other communication device on-site at all times during construction.

Significance after Mitigation Implementation of Mitigation Measure 5.8-2 would reduce wildland-building fire exposure impacts to less-than-significant levels.

Implementation of Mitigation Master Plan approval should be conditioned on incorporation of these mitigation measures in the Precise Development Plan.

Impact 5.8-3 Roadway Impacts

The proposed roadway system would meet County requirements. This would be a less-than-significant impact.

New development projects are required to provide internal roadway systems which can accommodate traffic emergency situations. Emergency vehicles (such as fire trucks) are large and sometimes difficult to maneuver. They require internal circulation systems which allow easy access, including adequate road widths and slopes for safe maneuvering in different weather conditions.

Marin County Design Guidelines Marin County defines a *Residential Road* as a roadway providing access to 20 or more housing units and with a maximum Average Daily Trip (ADT) rate of 1,000. A *Minor Residential Road* is a roadway serving from seven to 19 housing units and with a maximum ADT of 500.³

A *Residential Road* requires a minimum paved width of 36 feet⁴ not exceeding a 12 percent grade.

³ *Marin County Code*, Sections 24.04.030 (road classifications), 24.04.110 (road width), and 24.04.120 (grades).

⁴ Measured from "Face of Curb to Face of Curb" ("F/C to F/C").

A *Minor Residential Road* requires a minimum paved width of 28 feet not exceeding an 18 percent grade.

The County intends that the "minimum standards are to be used as design guidelines, recognizing that it will not always be possible or reasonable to adhere to them rigidly".⁵

Proposed Roadway System The proposed on-site roadway system would consist of Roadways A and B and an extension of the existing Erin Drive to residential development on Parcel 1. Roadway C would serve commercial development on Parcel 2. Roadways are shown on Exhibit 2.2-2.

- Roadway B would be 36 feet wide between the entrance at Lucas Valley Road and the intersection with Roadway A. It would be 28 feet wide for the remainder of its length. This roadway would be considered a *Residential Road* at the entrance (it would serve 20 units), and a *Minor Residential Road* for the remainder of its length (it would serve up to 14 units). This roadway would meet width requirements. The maximum grade for this roadway would be 16.7 percent, which is within the 18 percent standard for a *Minor Residential Road*.
- Roadway A would be 28 feet wide. Roadway A would serve up to five housing units classifying it as a *Minor Residential Road*. Width requirements would be met, and the roadway would not have an excessive slope.
- Erin Drive would be 28 feet wide and serve an additional eight housing units on the site. This would meet the minimum width of 28 feet required of *Minor Residential Roads*. This would be a less-than-significant impact.
- Roadway C (a private roadway) would vary between 24 and 32 feet wide. The minimum width of commercial streets is determined by the Marin County Department of Public Works (DPW) on a case-by-case basis. This would be a less-than-significant impact.

Mitigation Measure 5.8-3 No mitigation would be required.

Impact 5.8-4 Cumulative Fire and Emergency Medical Service Impacts

Cumulative development projects would add to the demands of the MFD and the SRFD. These increased demands would not lower current levels of service of these departments. This would be a less-than-significant impact.

Marinwood Fire Department

In addition to the Oakview project, the MFD would respond to new development in the Smith Ranch area under contract to the City of San Rafael (Smith Ranch Homes, Smith Ranch Court, and Marin Lofts).⁶ (The SRFD paramedic units would respond to new development in unincorporated Marin County in the vicinity of the project site.

⁵ Marin County Code, Section 24.15.010.

⁶ Exhibit 2.3-1 describes these cumulative development projects, and Exhibit 2.3-2 shows where these projects are located.

The low number of new residential units expected would not create any substantial increase in fire or paramedic calls. This would be a less-than-significant impact.

Mitigation 5.8-4 No mitigation would be required.

Police Protection

POLICE PROTECTION -- THE SETTING ⁷

The Marin County Sheriff's Department provides police protection services to all unincorporated areas of the County. Beat 32, out of San Rafael, has primary responsibility for the project site, but the closest officer responds regardless of geographic beat. In the vicinity of the site, this could include another two beats out of San Rafael. In the past, San Rafael beats have responded first to emergencies in the area.

The project site also is within Line Beat 44 of the California Highway Patrol (CHP) which covers Lucas Valley Road to State Highway 1 in West Marin. There is no set patrol, but officers respond when needed. In an emergency (such as an accident on Lucas Valley Road), Marin County Sheriff's Department units usually respond first.

POLICE PROTECTION -- SIGNIFICANCE CRITERIA

According to the *State CEQA Guidelines*, a significant impact would be created if:

- The project would "result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives" for police service.

The *Marin County Environmental Impact Review Guidelines and Procedures* also asks "would the project require additional police / sheriff staffing, facilities, or equipment to maintain acceptable service ratios"?

⁷ Information in this section is from a Nichols • Berman interview with Lt. Dan Payne, Marin County Sheriff's Department, April 1995; and Mark Sooy, CHP, April and August 21, 1995.

POLICE AND PROTECTION -- IMPACTS AND MITIGATION

Impact 5.8-5 Police Protection Service Impacts

The Marin County Sheriff's Department would be responsible for providing police protection services to the new on-site population. In addition, the California Highway Patrol is responsible for vehicle-related incidents on Lucas Valley Road. The proposed project is not expected to result in an adverse physical change in the environment. This would be a less-than-significant impact.

The Marin County Sheriff's Department does not expect the proposed project to affect service. This would be a less-than-significant impact.

The CHP expects that the project would have some impact by resulting in more traffic and, thus, potentially more accidents. However, the CHP cannot estimate the exact amount of increased service expected. Since the degree of impact would be speculative to determine and it is unclear what physical environmental effect would result if the project affects service, this would be a less-than-significant impact.

Mitigation Measure 5.8-5 No mitigation would be required.

Impact 5.8-6 Cumulative Police Protection Service Impacts

Cumulative development projects would add to demands on the Marin County Sheriff's Department and CHP. However, these increased demands would not lower current levels of service. This would be a less-than-significant impact.

The Marin County Sheriff's Department responds to service calls from unincorporated areas of the County. The project combined with other projects under review, approved, or proposed in the area have the potential to cumulatively affect the Marin County Sheriff's Department. The Marin County Sheriff's Department indicates that cumulative development listed in Exhibit 2.3-1 would not cause impacts.

The CHP expects that the project and cumulative development would result in more traffic, potentially more accidents, and thus some impact. However, similar to Impact 5.8-5, the CHP cannot estimate the exact amount of increased service expected. Because the degree of impact is too speculative to determine and it is unclear what physical environmental effect would result if the project affected service, this would be a less-than-significant impact.

Mitigation Measure 5.8-6 No mitigation would be required.

Water Service

WATER SERVICE -- THE SETTING ⁸

The Marin Municipal Water District (MMWD) would supply water to the project site. MMWD facilities include six area reservoirs, two water treatment plants, and various storage tanks, pumps, and water mains. Water sources include rainfall and some water from the Russian River, purchased from the Sonoma County Water Agency.

Existing MMWD facilities near the site include water lines terminating at the ends of Ellen and Erin Drives adjacent to the site. In addition, the site also abuts MMWD facilities in Lucas Valley Road, consisting of a 12-inch recycled water main and an eight-inch potable water pipeline. These lines can serve the project site to an elevation of 210 feet.

MMWD Water Conservation Ordinance 326.385 requires new development to install low-flow toilets, shower heads, and faucets and plant drought-tolerant landscaping.

WATER SERVICE -- SIGNIFICANCE CRITERIA

According to *State CEQA Guidelines*, would the project:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The *Marin County Environmental Impact Review Guidelines and Procedures* further states that a project would "constitute a significant impact on local water supply, distribution system, and treatment facilities if it ... 'involve[d] a significant increase in the consumption of potable water' or 'require[d] substantial expansion of water supply or distribution facilities'".

WATER SERVICE -- IMPACTS AND MITIGATION

Impact 5.8-7 Water Service Impacts

No new water facilities would be necessary. This would be a less-than-significant impact.

The existing water system would need to be expanded to serve proposed development at the project site. Existing MMWD facilities near the site would be able to serve to an elevation of 210 feet. No homes or fixtures within homes are expected above this level. No new water facilities would be required, except for tie-ins to the existing water distribution system in the area. Overall, this would be a less-than-significant impact.

⁸ Nichols • Berman conversation with Jim Mistrion, MMWD, April 2000.

Mitigation Measure 5.8-7 No mitigation would be required.

Impact 5.8-8 Increased Water Demands

Project development would increase water demands on the MMWD. However, the MMWD has sufficient capacity to serve the project. This would be a less-than-significant impact.

The project is estimated to result in an increased demand of about 20 acre-feet⁹ of water per year.¹⁰ This estimate does not include water used for landscape irrigation as well as for non-potable uses in the commercial buildings. The MMWD ~~may~~ will require use of recycled water (available from the main running adjacent to the site under Lucas Valley Road) for irrigation. Irrigation consumption cannot be determined until submittal of landscaping plans which would occur after Master Plan review.

The MMWD has an involved process to determine water availability for a specific site. MMWD developed its overall water supply plan based on current zoning throughout its service area and, to be conservative, assumed maximum buildout of all parcels in the district. MMWD then estimated water demand for the year 2025, developed a water supply plan based on the expected demand, and obtained a firm water supply for the water demand through 2025. This process assumed project site development. MMWD water supplies are adequate to serve the project. Therefore, project-generated water demand would be a less-than-significant impact.

Mitigation Measure 5.8-8 No mitigation would be required.

Impact 5.8-9 Cumulative Water Service Impacts

The proposed project would not add to cumulative water service impacts. This would be a less-than-significant impact.

The only cumulative water impact would be the increased use of the MMWD's limited water supply. A mandatory water cutback and building moratorium were imposed in March 1989 as a result of drought conditions which affected water supply to existing customers and prohibited new water connections. Those restrictions were lifted in March 1993 as a result of a bond issue which funded the transfer of water from the Russian River. Because MMWD has obtained a committed water supply for current water demand (including cumulative development) through the year 2025, as described in Impact 5.8-8, this would be a less-than-significant impact.

Mitigation Measure 5.8-9 No mitigation would be required.

⁹ One acre-foot of water is equal to ~~325,829~~ 325,851 gallons of water. This measurement refers to the amount of water covering one acre to a depth of one foot.

¹⁰ The MMWD estimated that the 28 housing units would use approximately 0.38 acre-foot a year each for a total of 10.64 acre-feet a year. Commercial development would use approximately 0.10 acre-foot per 1,000 square feet of building area or about 9.4 acre-feet a year for the 94,400 square feet of commercial space proposed.

Sanitary Sewer Service

SANITARY SEWER SERVICE -- THE SETTING ¹¹

The Las Gallinas Valley Sanitation District (LGVSD) provides sanitary sewer service to northern parts of the City of San Rafael and the unincorporated areas of Lucas Valley, Marinwood, and Santa Venetia. The project site is not currently within the LGVSD.

Wastewater Treatment Plant

The LGVSD operates a treatment plant located at 300 Smith Ranch Road. In 1978, plant capacity was estimated to serve growth projected for 20 years. However, these growth projections did not account for the amount of new development proposed on the St. Vincent / Silveira properties and in the Northgate area. The 1988 *City of San Rafael General Plan* estimated that wastewater flows generated by new development would exceed the plant's design capacity by 1992.¹² However, this did not turn out to be the case, and capacity has not yet been exceeded. Currently, the district believes that buildout of the service area would bring the plant up to but not over capacity, although this largely depends on the ultimate buildout of the St. Vincents/Silveria Property, the largest underutilized parcel remaining in the district.

The dry weather design capacity of the treatment plant is 2.92 million gallons per day (mgd). The dry weather flow in 1999 was 2.34 mgd, leaving a capacity of 0.58 mgd.

This district does not currently plan any major expansions of the treatment plant, although NPDES permit requirements will require some new equipment to reduce concentrations of certain metals.

Collector System

The LGVSD operates a number of collection lines in the site vicinity. The wastewater system around the site generally consists of two major areas.

The area south of the site drains into a series of mains which ultimately cross Highway 101 approximately 900 feet south of the Lucas Valley-Smith Ranch Road / Highway 101 interchange. This system consists of a six-inch line which runs east under Lucas Valley Road and turns south onto Los Gamos Drive. It then connects to an eight-inch line under the AMEX Life Assurance Company Building (1650 Los Gamos Drive). The line expands to ten inches under the Marin Tech Center (1600 Los Gamos Drive) where it then crosses Highway 101.

The area west of the site includes six-inch lines under Ellen Drive, Lisa Court, Erin Drive, and Elvia Court which drain into a ten-inch line under Las Gallinas Avenue. This line continues under Round Tree Boulevard and Grande Paseo north of the site and connects to a ten-inch line located under Marinwood Avenue. This line ultimately connects to an 18-inch line under Miller Creek Road and crosses Highway 101.

¹¹ Nichols • Berman conversations with Al Petrie, District Manager, LGVSD, February 2000.

¹² *City of San Rafael General Plan 2000*, City of San Rafael, July 1988.

SANITARY SEWER SERVICE -- SIGNIFICANCE CRITERIA

According to the *State CEQA Guidelines*, would the project:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Result in the determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

In addition, the *Marin County Environmental Impact Review Guidelines and Procedures* states that a project would "constitute a significant impact on local sanitary sewer service if it ... 'require[d] substantial expansion of treatment facilities'".

SANITARY SEWER SERVICE -- IMPACTS AND MITIGATION

The project would require annexation of the site to the LGVSD and the construction of a sanitary sewer system to serve development.

Impact 5.8-10 Sanitary Sewer Service Impacts

The LGVSD wastewater plant has sufficient existing capacity to serve the project. This would be a less-than-significant impact.

The LGVSD would provide sanitary service to the site, and the site's development area is proposed to be annexed to the LGVSD.

Project buildout would generate about 16,900 gallons per day (gpd) of wastewater (equivalent to about 0.017 million gallons per day [mgd]). Twenty-eight housing units would generate about 5,600 gpd,¹³ and commercial development would generate about 11,328 gpd.¹⁴

To receive sanitary service, the applicant would need to apply for a wastewater allocation from the LGVSD's treatment plant. As described above, current plant capacity is 0.58 mgd. As the plant has enough excess capacity for the project, no impact is expected. No impact is expected for any of the wastewater lines serving the site. Overall, this would be a less-than-significant impact.

The County would not issue building permits without LGVSD approval of a wastewater allocation for the project.

¹³ The LGVSD uses the same wastewater generation rates as the City of San Rafael, 200 gpd per unit for residential development.

¹⁴ The LGVSD generation rate for commercial development is 120 gallons per day per 1,000 square feet of development.

Mitigation Measure 5.8-10 No mitigation would be required.

Impact 5.8-11 Cumulative Sanitary Sewer Service Impacts

The LGVSD wastewater plant has sufficient existing capacity to serve cumulative development. This would be a less-than-significant impact.

This project would create less demand than currently assumed in planning documents of the LGVSD. The LGVSD currently assumes that development of the project would create a demand of 128 “Equivalent Dwelling Units” or EDUs, while the project as proposed would create a demand of 96 EDUs. In addition, the LGVSD currently estimates that the wastewater plant has sufficient capacity for buildout of the service area. Therefore, cumulative demand in the service area (including the proposed project) would not result in the expansion of the wastewater plant (or any wastewater lines). This would be a less-than-significant impact.

Mitigation Measure 5.8-11 No mitigation would be required.

Schools

PUBLIC SCHOOLS – THE SETTING ¹⁵

The project site is in the jurisdictions of the Dixie Elementary School District (DESD) and San Rafael High School District (SRHSD).

Dixie Elementary School District

The DESD operates four schools:

- Dixie Elementary School (grades K-5) has a capacity of about 450 students. Enrollment as of February 18, 2000 is 437, leaving a residual capacity of about 13 students.
- Vallecito Elementary School (grades K-5) has a capacity of about 450 students, enrollment of 424, and remaining capacity of 26.
- Mary Silveira Elementary School (grades K-5) has a current capacity of about 450 students, current enrollment of 411, and remaining capacity of about 39 students.
- Miller Creek Miller Middle School (grades 6-8) has a capacity of about 750, enrollment of 624, for a remaining capacity of 126.

Total enrollment is 1,896, while remaining capacity is about 204 students.

¹⁵ Nichols • Berman conversation with Caryl Callsen, Business Manager, Dixie School District, February and April 2000.

DESD enrollment dropped slightly for the 1999-2000 school year, but is expected to increase again next year. The district does not expect enrollment to exceed available capacity for another ten years at least, unless the St. Vincent's / Silveria property builds out with residential uses.

The DESD also owns four closed schools -- Don Timoteo, Santa Margarita, Lucas Valley, and Nova Albion Schools. Nova Albion School has been converted to DESD offices.

The DESD service area is in the San Rafael High School District and includes Lucas Valley and adjoining canyon areas.

San Rafael High School District

The SRHSD operates two schools:

- Terra Linda High School has a capacity of 2,250 students. May 2000 enrollment was 1,080, leaving a remaining capacity of 1,170.
- San Rafael High School has a capacity of 2000 students. May 2000 enrollment was 950, leaving a remaining capacity of 1,173.

SRHSD enrollments are increasing and should continue to do so. With the current surplus capacity, the SRHSD has no plans for future facilities or expansions. Some unused space currently is being rented. Apart from its excess capacity, the SRHSD has expressed a need to modernize facilities.

The SRHSD extends south from Hamilton Air Force Base to Larkspur Landing, including Terra Linda, Santa Venetia, and the City of San Rafael.

PUBLIC SCHOOLS -- SIGNIFICANCE CRITERIA

According to the *State CEQA Guidelines*, a significant impact would be created if:

- The project would "result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives" for school service.

PUBLIC SCHOOLS -- IMPACTS AND MITIGATION MEASURES

Impact 5.8-12 Public School Impacts -- Dixie Elementary School District

Project implementation would generate approximately 14 students who would attend Dixie Elementary School District schools. This would be a less-than-significant impact.

The DESD estimates its current student generation rate is about 0.5 for each residential household (excluding senior housing). Given this rate, the project would generate about 14 total students (for K-8). The district has adequate capacity for these new students. This would be a less-than-significant impact.

Cumulative development is not expected to significantly affect the district. A total of 117 new residential units are expected with cumulative development for a total of about 59 new students. This is far below the remaining capacity of about 204 students. No cumulative impacts are expected.

Mitigation 5.8-12 No mitigation would be required.

Impact 5.8-13 Public School Impacts -- San Rafael High School District

Project implementation would generate approximately six students who would attend Terra Linda High School. This would be a less-than-significant impact.

The SRHSD uses a generation rate of 0.2 student per new single-family housing unit which would result in approximately six new students from the project site upon buildout. With a remaining capacity of more than 2,000 students in existing facilities, the SRHSD has adequate capacity to accommodate students both now and in the foreseeable future. Existing and cumulative impacts of the project are considered less-than-significant.

Mitigation 5.8-13 No mitigation would be required

Parks and Recreation

PARKS AND RECREATION – THE SETTING ¹⁶

The Marinwood Community Service District (Marinwood CSD) is responsible for the development, maintenance and operation of their 700 acres of parks, open space and recreation facilities. The district maintains a 17.8-acre community park which includes tennis courts, a playground, a community center and a community pool and 760.74 acres of permanent open space.

The open space land, which was either purchased or dedicated to the district since 1973, is mainly located in the hills on the northern side of the district. Known as the Marinwood Open Space, the open space is accessible to the public via trails maintained by the Marinwood CSD. Open space of varying size is found sporadically throughout the Marinwood area as well as in the Lucas Valley Estates to the west of Marinwood.

The community center and pool are located at 775 Miller Creek Road. Classrooms in the community center are rented out to various groups such as a traffic school, dance, and yoga instructors, while other community groups such as the boy scouts use the facilities for free. Both the community center and pool are very near capacity; certain days the pool limits use to members only. Though there are no plans for expansion of the community center, there is a tentative plan to add a youth pool sometime in the far future.

The Marinwood CSD has 20 full time employees, ten of which are associated with park and recreation facilities. (The other ten work for the Marinwood Fire Department, also a part of the Marinwood CSD).

¹⁶ Nichols • Berman conversation with Tom Horne, Marinwood CSD District Manager, August, 2000.

PARKS AND RECREATION – SIGNIFICANCE CRITERIA

According to the *State CEQA Guidelines*, a significant impact would be created if:

- The project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- The project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse effect on the environment.

PARKS AND RECREATION – IMPACTS AND MITIGATION MEASURES

Impact 5.8-14 New Open Space Maintenance

The project could provide additional open space for the Marinwood CSD. Although dedication of this open space to the Marinwood CSD would add to the District's maintenance requirements it would not result in an adverse physical effect on the environment. This would be a less-than-significant effect.

The project applicant proposes to dedicate 69.1 acres of the project site as permanent open space to either the Marinwood CSD or the Marin County Open Space District.¹⁷ The open space encompasses the ridge between the housing and office developments, as well as parts of Miller Creek. Acquisition of this open space potentially would increase maintenance costs, particularly concerning Miller Creek which may require regular clearing of debris. Although the dedication of this area for open space would not directly result in an adverse physical effect on the environment the Marinwood CSD anticipates the need for additional funding for operations and maintenance before the District would accept the open space.

Mitigation Measure 5.8-14 No mitigation would be required.

Impact 5.8-15 Increased Use of Existing Recreational Facilities.

Project implementation would not result in substantial physical deterioration of existing recreational facilities or require the construction or expansion of recreation facilities which would result in significant impacts.

Because the Marinwood CSD does not have standards to determine adequate ratios of recreational facilities and park acreage to population size, this EIRs uses the standards contained in *The Marin Countywide Plan*. According to *The Marin Countywide Plan*, community parks should be comprised of 2.5 acres per 1,000 people.¹⁸ The Marinwood CSD estimates a population of 6,000 people,¹⁹

¹⁷ The 69.1 acres includes ten acres that may be necessary for the Highway 101 / Lucas Valley Road interchange, so the actual number of acres dedicated to open space is likely to be less than 69.1.

¹⁸ *The Marin Countywide Plan*, page PR-5.

which would require 15 acres of community park. Because the district already has 17.8 acres of community park, the Marinwood CSD would have sufficient community park land to accommodate the population increase from an additional 28 housing units.

The Marin Countywide Plan only sets a minimum population for recreational center and pool facilities, 25,000 people and 10,000 people respectively. Both far exceed the existing Marinwood population, so would not require additional facilities be constructed. It is anticipated that the existing facilities can accommodate the additional demand created by the project.²⁰

Mitigation 5.8-15 No mitigation would be required

¹⁹ Nichols • Berman conversation with Tom Horne, Marinwood CSD District Manager, August 2000. This is the figure the District uses, based upon 2.5 to 3.5 people per each of the District's approximately 1,750 housing units.

²⁰ *Ibid.*

5.9 COSTS AND REVENUES

Costs and Revenues -- The Setting

This section analyzes the project's fiscal impact on the County and various public service providers. The analyses examine the potential short-term and long-term fiscal impacts, looking at both revenue and cost factors.

ONE-TIME REVENUES AND COSTS

One-time costs would include funds needed for capital improvements needed because of increased demand created by the project.

Marin Municipal Water District fees The Marin Municipal Water District (MMWD) charges a connection fee based on the amount of water expected to be used. Single-family housing units in the project would use an estimated 0.38 acre-foot of water a year, as discussed in Impact 5.8-8.¹ The 28-lot project would use approximately 11 acre-feet a year. The commercial property would use about nine acre feet annually. The MMWD charges a connection fee of \$23,650 for every acre-foot expected to be used per year. At this rate, connection fees should be approximately \$473,000.²

Dixie Elementary School District fees The Dixie Elementary School District (DESD) charges an impact fee of \$1.27 per square foot of new residential building space and \$0.21 per square foot of new commercial building space. Impact fees would total \$412,254. (This fee is discussed in more detail in Impact 5.9.3.)

San Rafael High School District fees The San Rafael High School District (SRHSD) charges an impact fee of \$0.59 per square foot of new residential building space and \$0.10 per square foot of new commercial building space. Impact fees would total approximately \$184,600. (This fee is discussed in more detail in Impact 5.9-4.)

Las Gallinas Valley Sanitation District fees The Las Gallinas Valley Sanitation District (LGVSD) charges an annexation fee of \$450 per acre (exclusive of dedicated open space). The LGVSD also charges a connection fee of \$1,300 per acre (exclusive of dedicated open space) plus \$3,600 per dwelling or "equivalent dwelling unit" (\$5,400 if a pump is required).

County planning and building fees The project would contribute revenue to the County with payment of one-time fees collected during the planning process. Fees would completely reimburse the County for the costs of the project application.

¹ One acre-foot is the amount of water which covers one acre to a depth of one foot and equals 325,829 gallons.

² Water use is estimated. Because specific development details for each lot are not known, more specific figures cannot be determined at this time. The actual connection fee would be calculated on a lot-by-lot basis and would be based on more specific details not yet available, such as the type of landscaping.

Local Agency Formation (LAFCO) fees LAFCO is the public agency responsible for coordinating changes in local governmental boundaries. Boundary changes proposed by other agencies or individuals would be reviewed by LAFCO for approval. LAFCO imposes a boundary change fee which would be determined at the time of a boundary change application. This fee would fully reimburse LAFCO for its cost.

ANNUAL REVENUES AND COSTS

Annual costs of the project would include the expense of increasing public services to adequately serve the project. These public service impacts are covered in more detail in Section 5.8 **Public Services**.

Property taxes Annual revenue would be collected almost entirely through property taxes, based on the assessed value of the proposed project. The total estimated assessed value of the project at buildout would be \$44.0 million, based upon the estimated value of each of the 28 housing units at \$900,000³ (for \$25.2 million) and the office uses at \$18.8 million.⁴ Property taxes currently are levied at one percent of the total assets valued which would result in annual property taxes of \$440,000.

The County divides and allocates this revenue to different funds according to the Tax Rate Area where property is located. The current Tax Rate Area (TRA) of the project site is 60-005. Upon annexation to the LGVSD, the site's TRA would change. Through negotiations between LAFCO and the special districts, a tax disbursement percentage would be established for each fund. Exhibit 5.9-1 estimates how these taxes would be dispersed, using the TRA of the adjacent Marinwood neighborhood (TRA 60-004). This table describes how the County allocated taxes among different agencies during 1999. It also estimates the reduction in this allocation, as County funds are shifted to the Educational Revenue Augmentation Fund (ERAF), to offset State educational shortfalls.

Note that this table is an estimate by the County of Marin Auditor-Controllers office based on 1999 tax rates and ERAF amounts, given the assumption that the Tax Rate Area would change to that of the adjacent Marinwood neighborhood, and given estimates of the future assessed value of the project. Actual revenue from the project would in all likelihood be different.

School district parcel taxes The SRHSD currently levies a flat parcel tax of \$73.84. This would result in the 28 residential parcels generating \$2,067.52 per year. In addition, the office development would also generate a parcel tax revenue, although it is uncertain how many parcels are planned.

³ Based on a value of \$200 per square foot and a maximum floor area of 4,500 square feet. Nichols • Berman conversation with Brad MacLane, Property Diligence and Valuation, May 2000.

⁴ Based on a value of \$200 per square foot of commercial office space. Recent sales in the San Rafael areas have ranges from \$146 per square foot to \$329 per square foot. Nichols • Berman conversation with Brad MacLane, Property Diligence and Valuation, May 2000.

Exhibit 5.9-1
Estimated Post-Project Tax Allocation Factors ^a

Taxing Agency	Allocation Percentage	Estimated ERAF Reduction ^b	Adjusted Factors ^c	Estimated Revenue ^d
Marin County General Fund	.24458629	-.08511061	.15947568	\$70,200
Marin County Library	.03036556	-.00843068	.02193487	\$9,700
Marin County Open Space	.00959892	-.00098344	.00861548	\$3,800
Marin-Sonoma Mosquito Vector Control	.00286535	.00000000	.00286535	\$1,300
Bay Area Air Quality Management District	.00183382	.00000000	.00183382	\$800
Marin County Transit	.00560176	-.00074833	.00485343	\$2,100
Marinwood Community Services District	.18849705	-.03241462	.15608243	\$68,700
Las Gallinas Valley Sanitary District	.02217781	-.00887198	.01330583	\$5,900
Dixie Elementary School District	.26443599	.00000000	.26443599	\$116,400
San Rafael High School District	.14139786	.00000000	.14139786	\$62,200
Marin Community College District	.06599617	.00000000	.06599617	\$29,100
Marin County Office of Education	.02264343	.00000000	.02264343	\$10,000
Educational Revenue Augmentation Fund (ERAF)	.00000000	.13655966	.13655966	\$60,100
Total	1.00000000		1.00000000	\$440,300

Source: County of Marin Auditor-Controller provided estimated disbursement percentages and information on ERAF reductions (columns a through c). Nichols • Berman calculated estimated revenue based on estimated valuation of the project (column d).

- ^a Allocation of basic one percent (of assessed property value) property tax rate. This analysis assumes that after annexation, the site would have similar property tax disbursements as adjoining Marinwood neighborhood parcels (Tax Rate Area 60-004).
- ^b This column estimates how the property tax disbursements (from column a) would be changed as County funds are shifted to the Educational Revenue Augmentation Fund (ERAF), to offset State educational shortfalls.
- ^c This column estimates property tax disbursements after ERAF reductions (from column b) are applied. Note that educational funds are not reduced.
- ^d This column shows the estimated revenue to be generated by the project, rounded to the nearest hundred.

Marinwood Community Service District Fees The Marinwood Community Services District (Marinwood CSD) provides fire protection services, park and recreation facilities, and street lighting.

Paramedic Fees Paramedic services are supported by a housing charge that accrues directly to the City of San Rafael.

Costs And Revenues -- Significance Criteria

According to the California Environmental Quality Act (CEQA), a economic impact itself is not considered to be significant effect on the environment. Section 21068 of CEQA states that an effect is significant if it results in a "substantial, or potential[ly] substantial, adverse change in the environment". Section 15131(a) of the *State CEQA Guidelines* states that "economic or social effects shall not be treated as significant effects on the environment". However, economic impacts can be significant if they result in a physical effect on the environment. For example, a proposed suburban shopping center might cause an adverse economic effect on the downtown shopping area. While the loss of downtown income would not directly cause any physical effects, it might result in a significant effect if it indirectly caused the downtown area to deteriorate physically.

Therefore, the proposed project is considered to result in a significant impact if:

- The project's economic impacts would result in an adverse physical change in the environment.

Even if economic effects clearly would not result in direct or indirect physical impacts, such information often is included in an EIR to facilitate later stages of the planning process. Section 15131(c) of the *State CEQA Guidelines* states that:

Economic, social, and particularly housing factors shall be considered by public agencies together with technological and environmental factors in deciding whether changes in a project are feasible to reduce or avoid the significant effects on the environment identified in the EIR.

Costs And Revenues -- Impacts and Mitigation Measures

The goal of these analyses is to determine if the project would cause a fiscal impact to various public services, such as police, fire, and schools. These analyses are based on a number of assumptions.

The first assumption concerns the amount of revenue the project would generate which is based on the assessed value of each improved lot. The EIR estimates that the assessed project as a whole would be worth \$44.0 million dollars. Once collected, property tax would be distributed to various programs according to the percentages shown in Exhibit 5.9-1.

Property tax theoretically is dispersed in exactly the percentage stated, but in reality the percentages drop as the State takes out funds for particular programs, resulting in shortfalls which the County must make up by reducing County funding to other programs. Some of these State decisions are not made until after property taxes have been collected, making an accurate prediction of disbursement percentages impossible.

Second, when possible, this report uses a "marginal cost by service calls" analysis. This type of analysis determines the cost of a project by first dividing the total budget of a public service by the total amount of service calls received, to identify the average cost of one service call. Then, the number of service calls the project would generate is estimated. The total cost of the project to the service provider then can be determined. However, this type of analysis assumes that each service call costs the same to the provider. In actuality, a call to the Marinwood Fire Department (MFD), for example, which turns out to be a false alarm is much less costly than a major structural fire.

Impact 5.9-1 Economic Impact to the County of Marin General Fund

As revenues from the project would greatly exceed costs, no impact to the General Fund would be created. This would be a less-than-significant impact.

One-time costs and revenues The County General Fund would receive planning and approval fees. As these fees are collected to recover the costs of reviewing and processing a development application, these revenues would be off-set by the one-time costs. This would be a less-than-significant economic impact.

Annual costs and revenues As described in Exhibit 5.9-1, the County General Fund would receive approximately \$70,200 annually from property taxes collected from the project.

The two major expenses of the County General Fund would be roadway maintenance and police protection.

- The Marin County Department of Public Works (DPW) would be responsible for maintaining new public roadways constructed as part of the project. Because new streets generally are maintenance free for approximately 20 years, maintenance of internal project roadways would not represent a significant cost to the County.
- The Marin County Sheriff's Department would be responsible for police protection for the project. It would be speculative to determine the annual number of calls received by the proposed development, and so it is impossible to estimate how much police protection would cost. However, new office and residential development such as proposed would generate a very low number of calls, and take up a very small amount of an officer's time. As the annual cost per officer is approximately \$80,000 a year, even a half-time officer assigned to the project would not represent a significant impact.

As annual revenues would greatly exceed annual costs, no economic impact to the general fund would be created.

Mitigation Measure 5.9-1 No mitigation would be required.

Impact 5.9-2 Economic Impact to the Marinwood Community Service District

The project would result in a less-than-significant impact on the Marinwood Community Service District because no significant physical change would occur in order for the CSD to provide services.

One-time costs and revenues A one-time fee for developing new parcels would be collected for fire protection review. This fee would be assessed at \$40 an acre, for a total of \$1,416.00.⁵

Annual costs and revenues -- park and recreation facilities and streetlight services⁶ Annual parcel fees include \$11 for streetlight fees, and \$75 for park maintenance fees. For the office/professional offices, parcel fees were calculated based upon how many residential units could be accommodated in the 11.1 acres of office use. Given the site's current zoning of 1.38 units per acre, 11 acres could support eight residential units. Therefore, total annual parcel fees are estimated at \$3,100 for 36 units (28 residential units, counting the office development as eight units). The Marinwood CSD would also receive an estimated 15.6 percent of the total property tax revenue generated from the project, as shown in Exhibit 5.9-1. This would total an estimated \$68,700. It is assumed that annual fees cover the cost of annual services, and thus fees and revenues are equal.

Annual costs and revenues -- fire services The MFD charges a fire fee at \$0.12 per square foot of residential and commercial space. Total square footage would be 220,400 (126,000 square feet of residential and 94,400 of commercial), for annual fire fees of \$26,448. In addition, 26 percent of the Marinwood CSD's share of the tax revenue generated by the project would accrue to the MFD, or approximately \$17,900. In total, annual revenues are estimated at \$44,300.

As it is unrealistic to estimate the number of calls generated by this project, a marginal cost analysis based on service calls is infeasible.⁷ Therefore, this report does not include the project's fire protection costs. However, the impacts of the project on the MFD would be "minimal". Therefore, the marginal cost is estimated to be zero.

The total annual financial impact to the MFD is calculated by subtracting the total costs of the project from the total revenues of the project which results in a net gain of approximately \$44,300 a year.

⁵ This is based on 35.4 acres (residential area of 15.3 acres and office area of 20.1 acres) of the 106.3 acre site begin developed.

⁶ During the scoping process for this EIR the Marinwood CSD raised a concern that existing parks and recreational facilities have been developed and maintained in part with parcel charges levied on developed properties since 1980 and since new development would place new demands on these facilities Marin County should assess mitigation fees for parks and recreation, and pass the fees to Marinwood CSD. See letter to Mr. Tim Haddad, Marin County Community Development Agency from Thomas D. Home, Marinwood Community Services District, RE: Oakview Master Plan – Issues to be addressed in Draft Revised EIR, August 27, 1999. Since this issue appears to be addressing a existing fiscal concern of the Marinwood CSD and not related to a physical impact on the environment of the proposed project its discussion and resolution is beyond the scope of this EIR.

⁷ A marginal cost analysis based on population or housing unit was also considered. In this type of analysis, the average number of annual calls received by the MFD would be divided by the population or number of housing units in the service area to obtain the average number of calls per person. Given the estimated site population, the average number of calls the project would generate then could be extrapolated. It was concluded that this method was infeasible because the MFD also responds to commercial users, which would not be represented in either district population or housing units numbers.

This is not expected to lead to a significant physical environmental impact, and therefore is a less-than-significant impact.

Mitigation Measure 5.9-2 No mitigation would be required.

Impact 5.9-3 Economic Impact to the Dixie Elementary School District

The project would result in a less-than-significant impact on the Dixie Elementary School District because no significant physical change would occur in order to provide school services.

The project at buildout could result in an increase of approximately 14 students of grades K-8.

One-time revenue The DESD assesses an impact fee on new development. The DESD charges \$1.27 per square foot for new residential building space. As described in the Project Description, each of the 28 homes would have a maximum floor area of 4,500 square feet, for a total of 126,000 square feet. Residential impact fees would total \$160,020.

The DESD has a commercial impact fee of \$0.21 per square foot. The proposed 94,400 square feet of office space would generate \$19,824.

One-time revenue would be \$179,844.

One-time Costs The DESD estimates a one-time, capitol improvement cost of \$10,960 per elementary student and \$11,592 per middle school student in order to upgrade and expand facilities. For the 14 new students, depending on their distribution by grade level, the project could generate \$153,440 to \$162,288 in one-time costs. The approximately \$179,844 dollars to be collected in impact fees would cover one-time costs generated by new students.

Annual costs The average cost per student is approximately \$6,048 per year. Therefore, the project's annual cost to the DESD would be \$84,672.

Annual revenue The project would generate approximately \$116,400 in annual property taxes for the District, as shown in Exhibit 5.9-1. However, this revenue would not accrue to the district, as state funds would be withdrawn to match any increase in revenue, leaving the District's annual revenue about the same. Therefore, as this would not create any significant physical impact, this is considered a less-than-significant impact.

Mitigation Measure 5.9-3 No mitigation would be required.

Impact 5.9-4 Economic Impact to the San Rafael High School District

The project would result in a less-than-significant impact on the San Rafael High School District because no significant physical change would occur in order to provide school services.

The project at buildout could result in an increase of approximately six students. The SRHSD has more than enough capacity, as discussed in Impact 5.8-13.

One-time revenue The SRHSD assesses an impact fee on new development. The SRHSD charges \$0.59 per square foot for new residential building space. As described in the Project Description, each of the 28 homes would have a maximum floor area of 4,500 square feet, for a total of 126,000 square feet. Residential impact fees would total \$74,340.

The SRHSD has recently implemented a commercial impact fee of \$0.10 per square foot. The proposed 94,400 square feet of commercial development would generate \$9,440.

One-time revenue would be approximately \$83,780.

One-time Costs The SRHSD has estimated that each new student would cost the district \$14,510 in capital improvements in order to upgrade existing facilities. For the six new students expected by the project, this would total \$87,060. The approximately \$83,780 to be collected by impact fees would not completely cover this cost, and the SRHSD would suffer a one-time loss. The district has stated that this would require expenses to be cut in other programs or to provide facilities that would not completely meet current needs. However, as this would not result in a physical environmental impact, this is considered less-than-significant.

Annual costs The SRHSD does not have a current estimate for the annual average cost per student, however, in 1995 the cost was approximately \$6,000 per year. Therefore, the project's annual cost to the SRHSD could be \$36,000.

Annual revenue The project would generate approximately \$62,200 in annual property taxes for the District, as shown in Exhibit 5.9-1. In addition, the district charges a parcel assessment fee of \$73.84 per parcel, which would result in approximately \$2,000, for a total of \$64,200.

Mitigation Measure 5.9-4 No mitigation would be required.

Impact 5.9-5 Economic Impact to Marin Municipal Water District

The project would result in a less-than-significant impact on the Marin Municipal Water District because no significant physical change would occur in order to provide water service.

The MMWD would provide water service to the site.

One-time costs and revenue The MMWD charges a one-time fee of \$23,650 per acre-foot of water consumed per year. As described above, site development is estimated to use an average of 20 acre-feet of water per year, resulting in a fee of approximately \$473,000. This fee would not be collected all at once. Rather, each lot would be charged separately. This fee would fully reimburse the MMWD.

Annual costs and revenue Ongoing water charges would be based on use which fully reimburses the MMWD.

Mitigation Measure 5.9-5 No mitigation would be required.

Impact 5.9-6 Economic Impact to Las Gallinas Valley Sanitation District

The project would result in a less-than-significant impact on the LGVSD because no significant physical change would occur in order to provide sanitary sewer service.

The LGVSD would provide sanitary sewer service to the site.

One-time costs and revenue The site currently is outside of the District. The LGVSD charges an annexation fee of \$450 per acre (exclusive of dedicated open space). The LGVSD also charges a connection fee of \$1,300 per acre (exclusive of dedicated open space) plus \$3,600 per dwelling or

"equivalent dwelling unit" (\$5,400 if a pump is required). As it is unknown if pumps would be required at this time, the exact amount of revenue is unknown. However, as the developer is required to pay for all improvements needed to the system, no one-time costs would accrue to the district. Therefore, this would be a less-than-significant impact.

Annual costs and revenue Property taxes would generate approximately \$5,900 annually for the LGVSD. Taxes and sewage charges would fully reimburse the LGVSD for the project's annual costs.

Mitigation Measure 5.9-6 No mitigation would be required.

6.0 ALTERNATIVES

6.0 ALTERNATIVES

This section analyzes five on-site alternatives to the proposed project as well as the feasibility of using another site for the proposed project. The 1996 Draft EIR evaluated four on-site development alternatives to the then proposed project which have been carried forward in this EIR. These included the "no development" and "existing zoning" alternatives (the mandatory "no project" alternatives), a "no office development" alternative, and a "mitigated" alternative. In order to maintain consistency with the 1996 Draft EIR, this Draft EIR evaluates the previous proposed project as an alternative. The analysis of the previously considered alternatives has been updated to reflect current conditions.

The alternatives were formulated to provide a realistic and representative range of potential use and development concepts for the site. The principal criterion for selecting the alternatives was to ensure that the range of concepts evaluated would be sufficient to provide information to the public and public officials to make decisions about the project. A chief objective was to test a variety of site planning and other approaches to site development to compare the outcome with the effects of the proposed project.

An EIR conceivably can analyze an infinite number of alternatives or variations on alternatives. However, CEQA directs EIRs to analyze a reasonable range of alternatives to the project or project location which could feasibly attain basic project objectives. The analysis of a range of alternatives is governed by a "rule of reason." In order for the analyses to be meaningful for readers, the alternatives also must be distinctly different and readily discernible in order to distinguish between their effects and determine the environmentally preferred alternative.

As noted above, the range of alternatives to be included in an EIR should focus on those which are feasible and capable of attaining basic project objectives. In order to satisfy the applicant's goals and objectives identified for the project, the alternatives would need to meet the following specific development objectives:¹

- Divide the existing 106.3 acre site into two parcels (Parcel 1 51.9 acres; Parcel 2 54.4 acres).
- Preserve the ridgelines as undeveloped open space.
- Preserve as many healthy, mature trees as possible.
- Retain 69.1 acres of the site as permanent open space.
- Establish a development program that includes 20.1 acres of administrative / professional office space with parking and landscaping, and 15.3 acres of residential development, including 28 lots with roadway access.

¹ *Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map*, (Application Text), Virginia Daphne and Edward J. Bacciocco, I.L. Schwartz, C.E., Project Representative, April 1999, Revised July 8, 1999, The objectives are presented verbatim.

- Create an internal circulation system that prevents through traffic.
- Establish a conservation easement at the rear of the residential lots.
- Develop a revegetation plan for the site that includes restoration of native grasslands and replacement of trees removed to allow development.
- Preserve, or enhance, the existing seasonal seeps and riparian forest to the maximum extent possible.
- Limit the site grading.
- Develop a residential subdivision that is visually compatible with the existing neighborhood adjacent to the site.

During the discussion of the alternatives, the currently proposed project will be referred to simply as the "proposed project" or "project," while the five on-site alternatives are identified according to their numeric sequence in this section. The previously proposed project analyzed in the 1996 Draft EIR will be referred to as the "1995 plan".

6.1 ALTERNATIVE 1 -- NO DEVELOPMENT ALTERNATIVE

Section 15126.6(e) of the *State CEQA Guidelines* requires every EIR to evaluate a "no project" alternative. This alternative assumes that no development would be built on the project site at this time and that there would be no changes to the existing conditions. Other growth in the area projected by *The Marin Countywide Plan* would continue to occur with Alternative 1 (No Development Alternative), but this alternative would not contribute to such cumulative development. Alternative 1 (No Development Alternative) does not foreclose any site development at a later time but assumes maintenance of the *status quo* for the foreseeable future for comparison with the project and other EIR alternatives. This means that, in addition to no development occurring, prevailing site conditions also would persist unabated or unmitigated.

Alternative 1 (No Development Alternative) would not meet the applicant's goals and objectives for the project because this alternative would maintain the status quo and assumes that no development would occur in the foreseeable future.

Analysis of No Development Alternative

Geology and Soils

Present topographic conditions would remain on the project site under Alternative 1 (No Development Alternative). The only large bedrock landslide mapped near existing development is feature D, located along the western edge of the project site. Exploration and analyses by the applicant's geotechnical consultant indicate that this old and dormant feature is stable in its current configuration. Calculations indicate that it should remain stable in the foreseeable future, even during strong ground shaking from earthquakes. However, there are shallow landslides and colluvial soils that could undergo additional erosion and movement overtime due to heavy rain and seismic events. It is not anticipated that such movements would affect any off-site properties. With no development, no grading, slope stability impacts attributable to site grading, impacts on groundwater, or impacts from disturbing serpentine soil would occur. Soil creep, expansive soils, and liquefaction would not be relevant with no on-site development to affect. While the potential for localized areas of rockfall may still exist, they would not be expected to affect adjacent properties.

Hydrology and Drainage

Absent any development, site drainage patterns would not be subjected to the minor alterations that are associated with the proposed project. Primarily, the intermittent drainageway and seep zone in Sub-watershed 2 would not be eliminated due to roadway and storm drain construction.

Site peak flow rates would remain at current levels and would not surcharge the floodflows that overtax off-site hydraulic structures, including the inadequate three-foot by six-foot box culvert under Highway 101 (southern drainage system) and the SPRR bridge on Miller Creek (northern drainage system), during higher recurrence interval rainstorms (50 to 100 years). However, if the project is not constructed, the identified storm drain system segments that currently lack the capacity to convey the design 100-year peak flow without surface flooding on streets and yards will continue to underperform during severe runoff events. Furthermore, without the construction of the project's residential lots and the associated subsurface drains that are designed to intercept and divert seepage from the west-facing hillslopes, existing lots in the Marinwood Subdivision will continue to experience seepage problems due to seasonally high, shallow groundwater discharge. This alternative would eliminate the project-induced water quality impacts on-site stormwater and downstream receiving waters, including elevated levels of some heavy metals and oil and grease.

Biological Resources

Under this alternative, no development would occur, and the site would remain vacant. Existing conditions would remain unaltered, thus preserving trees, native grasslands, and freshwater seep wetlands.

Visual and Aesthetic Quality

With Alternative 1, the site's existing visual character would remain unchanged.

Transportation and Circulation

With Alternative 1, three intersections would fail to meet the desired LOS D criterion under short-range cumulative conditions during the AM peak hour -- the Miller Creek Road / Marinwood Avenue, Highway 101 Southbound Ramps / Miller Creek Road, and Lucas Valley Road / Los Gatos Road

intersections. The same improvements required for cumulative development with the project (Mitigation Measures 5.5-2 and 5.5-3) also would be required without site development. These improvements would involve signaling two unsignalized intersections and providing an eastbound acceleration lane on Lucas Valley Road in the vicinity of Miller Creek Road.

During the PM peak hour, the unsignalized Lucas Valley Road / Los Gamos Road intersection would operate under LOS E conditions under Alternative 1. As with the proposed project, signalization of the Lucas Valley Road / Los Gamos Road intersection would mitigate this impact.

Under long-range conditions in the AM peak hour, all four unsignalized intersections would deteriorate to unacceptable LOS E conditions (or worse).

During the PM peak hour, the minor left-turn movements at the two unsignalized Highway 101 ramp / Miller Creek Road intersections would operate at LOS F.

Overall, intersection operations under Alternative 1 would be better than those under the proposed project. However, the need for mitigation measures to satisfy Marin County and City of San Rafael level of service criteria would be comparable with and without the proposed project for both AM and PM peak hour conditions.

Air Quality

Alternative 1 would not result in any construction period impacts and would not contribute to local carbon monoxide or regional air quality impacts due to the lack of new traffic.

Noise

With Alternative 1, the existing noise levels on the site would remain unchanged.

Public Services

Demand for public services would not increase with Alternative 1.

- ***Fire Service*** No infrastructural facilities or roadways would be built on the site which would facilitate fire fighting, such as provision of on-site water supplies and roads to accommodate access to open space. In terms of fire fighting capabilities, Alternative 1 would be inferior to the proposed project but, without development, no people or property on the site would be threatened by wildfires.
- ***Police Protection and Public Schools*** With no new on-site population, neither police service nor public schools would be affected.
- ***Water and Sanitary Sewer Service*** With no development, no new water supply would be required for the site. Similarly, no new sanitary sewer service would be required.

Costs and Revenues

Alternative 1 would not change existing economic conditions related to the project site or lead to any physical impacts. Therefore, there would be no impacts on the County or any special districts if no development occurred on the project site. However, this alternative would not generate any new property taxes, and, thus, there would be no increase in revenue to the County or special districts.

6.2 ALTERNATIVE 2 – COUNTYWIDE PLAN DESIGNATION ALTERNATIVE

As stated in Alternative 1 (No Development Alternative), the *State CEQA Guidelines* require every EIR to evaluate a "no project" alternative. CEQA's "no project" requirement also could mean buildout of a site under existing land use designations or zoning. Different plans allow different densities on the site. Current zoning allows 1.38 units per acre (RMP-1.38), which would allow development of a maximum of 146 units. However, this would violate the maximum development allowed under *The Marin Countywide Plan* which allows for a maximum of 106 units (0.1 to 1 unit per acre). Alternative 2 (Countywide Plan Designation Alternative)² assumes that the entire 106-acre site would be developed with housing units consistent with the maximum allowed under *The Marin Countywide Plan*, or 106 units. This alternative does not include any office use. It should, however, be noted that the RMP zoning, which is consistent with the site's *Countywide Plan* designation of Planned Residential, does permit office uses subject to Master Plan and Use Permit approval.

The *San Rafael General Plan 2000* designates the unincorporated site for residential development (Hillside Residential) at a density of 0.5 to 2.0 units per acre. At this density, 53 to 212 housing units would be allowed on the site. This alternative would be consistent with the *San Rafael General Plan 2000* land use designation for the project site.

No specific plan has been prepared to show where 106 units could be built on the site. Therefore, the analysis of this alternative is conceptual. In addition, this alternative makes no assumptions about housing type, such as single-family detached (as with the project) or single-family attached townhouse or duplex units (permitted by RMP zoning), which would influence total site development area.

It is difficult to estimate the actual number of units which ultimately could be approved on the site. It is possible that environmental conditions, lack of public services, or other factors would result in approval of fewer units than permitted by the zoned residential capacity. Nevertheless, Alternative 2 assumes buildout of the maximum number of units permitted under *The Marin Countywide Plan*.

It should be noted that when a public agency reviews a residential project, the agency's ability to reduce the number of housing units is constrained by existing State law. For example, State of California Government Code Section 65589.5(j) states that a public agency cannot deny or reduce the density of a residential development if it is consistent with the applicable general plan, zoning, and development policies unless the following two conditions exist:³

- The housing project would have a specific adverse impact on public health and safety unless the project is disapproved or is approved at a lower density *and*
- There is no feasible method to satisfactorily mitigate or avoid the identified adverse impact other than denial of the project or approval at a lower density.

² In the 1996 Draft EIR this alternative was referred to as the All Residential Development Alternative.

³ Section 65589.5(j) of the Government Code is contained in Section 65589.5, entitled "Disapproval or Approval of Local Agency of Low- and Moderate-income Housing Projects." The legislature included several findings in this section about the problems caused by the lack of affordable housing. Although subsection (j) seems to apply to all housing development projects, the entire section appears to be focused on local government actions which limit approval of affordable housing.

Furthermore, State of California Public Resources Code Section 21085 and *State CEQA Guidelines* Section 15092(c) state that a public agency cannot reduce the proposed number of housing units in a project as a mitigation measure to substantially lessen or avoid a significant effect if the agency determines that there are other feasible mitigation measures or alternatives which would provide a comparable level of mitigation. However, this section does not affect any other requirement on the density of a residential project.

Alternative 2 would not fulfill several of the applicant's objectives. For example, development of 106 housing units would likely result in a development pattern that would not meet the applicant's objectives to preserve the ridgelines as undeveloped open space, preserve as many healthy, mature trees as possible, to preserve, or enhance, the existing seasonal seeps and riparian forest to the maximum extent possible, or to limit the site grading.

Analysis of Countywide Plan Designation Alternative

Geology and Soils

All significant impacts expected to result from project implementation would occur under Alternative 2 (Countywide Plan Designation Alternative). This alternative would involve disturbance of a much larger portion of the project site than would occur during implementation of the proposed project. This would likely result in mass grading of the site to accommodate access roads and to repair the numerous landslides which could potentially impact building sites and roadways. Additionally, due to the larger development area that would be necessary to accommodate more housing units, it is likely that landslide feature B, a large ancient landslide of questionable stability (successfully avoided in the proposed project), would probably require repair through the use of mass grading. Alternative 2 would also result in increased water infiltration and therefore, increased seepage of nuisance water from the slope of landslide feature D into the adjacent housing tract.

Hydrology and Drainage

With nearly four times the number of residential units as proposed for the project, Alternative 2 would eliminate most of the seeped soils on the site through the construction of a dense network of subdrains. The subdrains would be required to protect the expanded number of housing units from seepage damage and nuisance soil conditions. The intermittent drainageway and seep zone in Sub-watershed 2 that would be eliminated by the proposed project would also be eliminated for this alternative to allow for roadway construction and storm drain system installation. Peak flow increases for Alternative 2 would also be much greater than for the proposed project, as the area of impervious surface would be much greater and the time of concentration for local runoff would decrease due to the pervasive storm drain system coverage. Consequently, the flooding impacts of development on inadequately sized downstream hydraulic structures would be more severe than for the proposed project. The installation of a denser network of storm drains and subsurface drains for hillslope drainage would presumably reduce downslope seepage impacts for Marinwood residents relative to the project. However, the peak flows generated by this alternative would have to be mitigated on-site, yet nearly all of the suitable detention basin sites would be lost to residential construction. This would create the need for more creative solutions to peak flow mitigation, such as upgrading of the Marinwood storm drain system or developing subsurface detention storage using oversized pipes or off-line storage vaults.

Due to the much higher residential density proposed for Alternative 2, the impacts on-site erosion and downstream sedimentation would be potentially more significant than those cited for the project. With the development of such a large percentage of the site land, the Best Management Practices strategies would probably rely on more mechanical and less passive forms of water quality abatement. For example, it could be more difficult to integrate vegetated swales into a water quality plan. Alternative 2's impact on site water quality would be slightly more significant than that described for the proposed project due to the increased contaminant loading from more widespread development. However, since commercial contaminant loading rates are higher than those documented for residential development, the increase in contaminant concentrations would be muted to a degree.

Biological Resources

The effects of development under Alternative 2 would depend on the extent to which sensitive biological resources could be avoided or replaced. The potential for up to 106 housing units on the site would greatly increase the likelihood that impacts on sensitive biological resources would be greater than with the project. Assuming that more housing units would affect additional land, the result would be the further incursion of development into undisturbed woodlands, native grasslands, and freshwater seep wetlands than with the project. Of particular concern would be the potential for removal of a large number of oaks and other native tree species under this alternative. Construction of some of the 106 units on the eastern part of the site (proposed for office development by the project) would require an extension of Marinwood Avenue to provide access across Miller Creek and would result in development of the area supporting freshwater seep habitat, native grasslands, and trees along the base of east-facing site slopes.

Visual and Aesthetic Quality

The adverse visual impacts of this alternative would be much greater than from the project. Due to site conditions (such as steep slopes on much of the property), housing construction at this density probably would involve extensive ridgetop development which would result in significant visual impacts. The impacts would be much greater because this alternative would allow development of nearly four times more units than proposed by the project.

While no site plan has been prepared for this alternative and no assumptions have been identified about how much and what type of development would occur adjacent to Highway 101, this part of the site presumably would be developed with housing units, as well.

Transportation and Circulation

Alternative 2 would result in 23 percent fewer daily vehicle trips, 47 percent fewer AM peak hour trips, and 58 percent fewer PM peak hour trips than the project.⁴ The inbound / outbound splits and distribution for this alternative would differ from the proposed project because no office development would occur which generates much higher traffic rates than residential development.

Without a site plan, site access and development area locations have not been defined but ultimately would affect trip distribution rates. Nevertheless, this alternative likely would require the same mitigation necessary for the project.

⁴ 1,215 total daily trips, 110 total AM peak hour trips (28 inbound and 82 outbound), and 128 total PM peak hour trips (82 inbound and 46 outbound).

Air Quality

Alternative 2 would result in potentially significant construction period air quality impacts that could be more intense than from the proposed project due to the increased amount of development. Similar to the project, air quality impacts associated with traffic generation (local carbon monoxide and regional ozone levels) would be less-than-significant. These impacts would be less under this alternative, since housing development in place of office development would result in less traffic.

Noise

It is assumed that some of the Alternative 2 units would be located as close to noise generators (such as Lucas Valley Road or Highway 101) as would units proposed by the project. Thus, the significant land use compatibility impact of the project would also be an impact with Alternative 2.

This 106-unit alternative would generate less traffic than expected from the project's 28 units and office uses. This alternative would increase traffic-generated noise levels along streets serving the site compared with existing conditions but not by as much as with the proposed project. Traffic noise impacts would be less-than-significant under both Alternative 2 and the project.

Construction noise would be a significant short-term impact of this alternative. Impacts likely would be more intense than with the project because more housing units could be built near existing residential neighborhoods with implementation of this alternative.

Public Services

- **Fire Service** Alternative 2 would result in development of more site area than proposed by the project, thus presumably increasing site access and requiring on-site water supplies in the event of a wildfire but simultaneously decreasing open space area on the site. However, more development would expose more on-site residents and property to wildfires than with project implementation.
- **Police Protection** Alternative 2 would generate more calls for police service than the project, a less-than-significant impact in both cases because no physical impacts would result from the increased demand.
- **Water Service** Based on the Marin Municipal Water District's (MMWD) estimate that each new unit would use 0.38 acre-foot of water per year, this alternative would result in an annual water demand of 40 acre-feet, compared with the 11 acre-feet estimated for the project. MMWD facilities would need to be expanded to provide service to Alternative 2 development above 210 feet (the current limit of the water system around the site). This probably would require construction of an on-site water tank on the site's highest elevation. Moreover, a connection to MMWD's existing Skyview Tank may not be practical due to its limited capacity and the large number of on-site housing units expected to require service. Cumulative water demand would not be a significant impact, as with the project, because MMWD assumes development of all parcels at the maximum density allowed.
- **Sanitary Sewer Service** Based on the Las Gallinas Valley Sanitation District's (LGVSD) generation rate of 200 gpd per new housing unit, Alternative 2 would generate an estimated 21,200 gpd, compared with 16,900 gpd generated by the project. This alternative assumes no office development which generates high wastewater flows (an estimated 120 gpd per 1,000 square foot of office space).

- **Public Schools** Development of 106 housing units would generate an estimated 53 Dixie Elementary School District (DESD) students which would exceed the DESD's long-range enrollment forecast which assumed 71 units on the site (as with the previously proposed project). The district would have adequate capacity for these students, therefore this would be a less-than-significant impact. This alternative would generate approximately 21 students for the San Rafael High School District (SRHSD), a less-than-significant impact since capacity is more than adequate.

Costs and Revenues

The total estimated assessed value of this alternative at buildout would be \$53.0 million, based upon the estimated value of each of the housing units at \$500,000. Therefore, this alternative would increase revenues to the County and special districts over what would be expected from the proposed project. Because these increased revenues would create no environmental impacts, this would be a less-than-significant impact.

6.3 ALTERNATIVE 3 – 71 HOUSING UNITS AND NO OFFICE DEVELOPMENT ALTERNATIVE

Alternative 3 (71 Housing Units and No Office Development Alternative)⁵ examines development of 71 housing units on the site. It assumes the same residential site plan as proposed in 1995 and considered in the 1996 Draft EIR but would confine site development to the project's Parcel 1. The previously proposed project will be referred to simply as the "1995 plan" or the "previous proposed project". This alternative assumes no development on the project's Parcel 2, thus differing from the project by not dividing the site and by omitting 94,400 square feet of office and associated development (such as roadway and utility extensions).

This alternative would be consistent with the *San Rafael General Plan 2000* Hillside Residential land use designation for the project site.

This alternative could meet some of the applicant's objectives, such as establishing a conservation easement at the rear of the residential lots and developing a revegetation plan for the site that includes restoration of native grasslands and replacement of trees removed to allow development. However, development of 71 housing units would likely result in a development pattern that would not meet the applicant's objectives to preserve the ridgelines as undeveloped open space, preserve as many healthy, mature trees as possible, to preserve, or enhance, the existing seasonal seeps and riparian forest to the maximum extent possible, or to limit the site grading. Furthermore, this alternative would not fulfill the applicant's objectives related to office development on the site.

⁵ In the 1996 Draft EIR this alternative was referred to as the Proposed Project Without Office Development Alternative.

Analysis of 71-Housing Units and No Office Development Alternative

Geology and Soils

All significant impacts expected to result from project implementation would occur under Alternative 3 (71 Housing Units and No Office Alternative). As with Alternative 2, this alternative would involve the disturbance of a much larger portion of the project site than would occur during implementation of the proposed project. The likely result of Alternative 3 would also be mass grading of the site. Such grading would be necessary to accommodate access roads and to repair the numerous landslides which could potentially impact building sites and roadways. Additionally, due to the larger development area that would be necessary to accommodate more housing units, it is likely that landslide feature B, a large ancient landslide of questionable stability (successfully avoided in the current plan), would probably require repair through the use of mass grading. Alternative 3, as with Alternative 2, would result in an increase in water infiltration and therefore, probably increased seepage of nuisance water from the slope of landslide feature D into the adjacent housing tract.

Hydrology and Drainage

With more than twice the number of dwelling units than the proposed project, Alternative 3 would eliminate the seeped soils on the west-facing site slopes through the construction of a dense network of subdrains. The subdrains would be required to protect the additional number of residential units from seepage damage and nuisance soil conditions. The intermittent drainageway and seep zone in Sub-watershed 2 that would be eliminated by the project would also be eliminated for this alternative to allow for roadway construction and storm drain system installation. Peak flow increases for this alternative would be greater than for the project in Sub-watersheds 1 through 4. However the highest peak flow increase for the project, the 60 plus percent registered in Sub-watershed 6, would be eliminated for this alternative. The peak flow mitigation for Alternative 3 would be similar to that required for the previous proposed project, a detention basin at the site's southwestern corner. This would likely require the elimination of two or three of the 71 units proposed. The increased number of residential units relative to the proposed project would increase the severity of the development impact on the inadequate Erin Drive storm drain system. The impact of the alternative on the Ellen Drive storm drain system would be roughly equivalent to that for the project.

The impact of Alternative 3 on downstream hydraulic structures on Miller Creek (SPRR bridge) and Highway 101 (box culvert) would remain significant, like the project. However, the impact on the Highway 101 box culvert would be the same as for the previous proposed project, which was greater than the current project. Because of the elimination of Sub-watershed 6 office development, the impact on the SPRR bridge on Miller Creek would be less significant than for the project. It would still be considered significant due to the stressed nature of the existing downstream structure. Water quality impacts for Alternative 3 would be similar to those cited for the Las Gallinas Creek Watershed for the previous proposed project and greater than that for the current project. Water quality impacts on Miller Creek would be slightly less for this alternative due to the substitution of additional residential development for office development, which incurs higher contaminant loading rates.

Biological Resources

The siting of all development outside the project's Parcel 2 would reduce impacts on native grasslands and wetland resources compared with the project, but the development assumed by Alternative 3 would remove a substantial number trees and result in impacts on native grasslands and freshwater seep wetlands in the southwest part of the site. Potential impacts associated with the Miller Creek

crossing and anticipated removal of 35 trees and freshwater seep habitat on Parcel 2 would not occur under this alternative.

Impacts on woodland habitat in the southwest part of the site would be significant under this alternative and a minimum of approximately 822 trees would be removed to accommodate the 71 housing units. Development would eliminate the active spring, 0.625 acre of freshwater seep habitat, and approximately 1.4 acres of native grassland with a coverage class of ten percent or greater in the western part of the site. An additional 0.4 acre of native grasslands would be located on individual lots, outside the development area but potentially affected by activities of future residents.

One important aspect of Alternative 3 compared with the project is that Parcel 2, which contains considerable freshwater seep and native grasslands, could be used as a location for replacement habitat to mitigate the effects of developing Parcel 1. Wetlands and grassland habitat could be consolidated and interconnected on Parcel 2. Replacement of trees removed by development also could be implemented on the lower hillside slopes of Parcel 2, although the extent of this alternative's incursion into woodland habitat also must be reduced in order to adequately mitigate the effects of development.

Visual and Aesthetic Quality

Alternative 3 would result in more severe visual impacts than the proposed project. This would be primarily due to the fact that this alternative would result in residential development on the upper elevations of the site, in the upland areas along the ridgelines. For example, from the viewing location from the proposed Lucas Valley Road entrance (Viewpoint 1), the upper elevations would be visible and mitigation would not be available to reduce this impact to a less-than-significant level. Similarly, from Viewpoint 2 (from Erin Drive) and Viewpoint 3 (from Ellen Drive), housing would be visible on the upper elevations of the site and mitigation would not be available to reduce these impacts to a less-than-significant level. However, without development on the eastern part of the site, existing visual conditions from Highway 101 would not change, and the impact of Alternative 3 on Highway 101 views would be less-than-significant.

Transportation and Circulation

Alternative 3 would result in approximately 49 percent fewer average daily trips, 64 percent fewer AM peak hour trips and 61 percent fewer PM peak hour trips than the proposed project. Site access, circulation, inbound / outbound splits, and trip distribution of this alternative would be different from those of the project.

Under Alternative 3 short-range and long-range cumulative conditions and peak hour operations would be similar to those with the project. While the trip distribution and assignment would change (particularly along Miller Creek Road and the adjacent Highway 101 ramps) overall traffic impacts associated with this alternative would be similar to those expected with Alternative 1 (No Development Alternative), and mitigation measures would be the same. The same improvements required for cumulative development (Mitigation Measures 5.5-2 and 5.5-3) also would be required for this alternative.

Air Quality

Alternative 3 would result in less construction period and long-term operational impacts than the proposed project.

Noise

Alternative 3 would result in the same significant land use compatibility impacts as the project.

Implementation of Alternative 3 would increase off-site traffic-generated noise levels along streets which serve the site. This increase would not be as great as with the project (which also would result in traffic noise from office development) but in both cases would be a less-than-significant impact.

Construction noise would be a significant short-term impact of Alternative 3. Although Alternative 3 assumes less overall development than the project proposes, on-site construction would occur adjacent to the same sensitive receptors in existing residential neighborhoods and would result in the same construction noise impacts as expected with project implementation. While the eastern part of the site would remain vacant, compared with office development proposed by the project, no sensitive receptors are located in the immediate vicinity.

Public Services

Service impacts of Alternative 3 and the proposed project would be similar with a few exceptions. Alternative 3 would not provide access or water facilities on the undeveloped eastern part of the site for wildfire control, although no people or property on that part of the site would be threatened by wildfires. This alternative's larger site population would demand more police protection than the project, but still a less-than-significant impact. More development would result in more demand for water and sewer service. In regard to water service the existing MMWD facilities would need to be expanded to serve proposed development on the project site located above an elevation of 210 feet. The impact to the LGVSD would be less-than-significant, the same as for the proposed project. School enrollments would be greater for Alternative 3 than the project due to the increased number of housing units, but still would be a less-than-significant impact.

Costs and Revenues

Alternative 3 would generate more revenue to the County and special districts than the project because of the increased number of housing units, even though no office development would be built. The total estimated assessed value of this alternative with 71 housing units would be \$63.9 million compared to an estimated assessed value of the proposed project of \$44.0 million. The economic impacts of the project and all alternatives would involve no physical changes.

6.4 ALTERNATIVE 4 – 29-LOT SUBDIVISION ALTERNATIVE

Alternative 4 (29-Lot Subdivision Alternative)⁶ was previously formulated to illustrate a site plan designed to mitigate the adverse impacts identified in the 1996 Draft EIR from the proposed development of 71 residential lots on Parcel 1. This alternative assumes 29 residential lots on the lower elevations of Parcel 1 and similar office development on Parcel 2. This alternative is shown on Exhibit 6.4-1.

⁶ In the 1996 Draft EIR this alternative was referred to as the Mitigated Alternative.

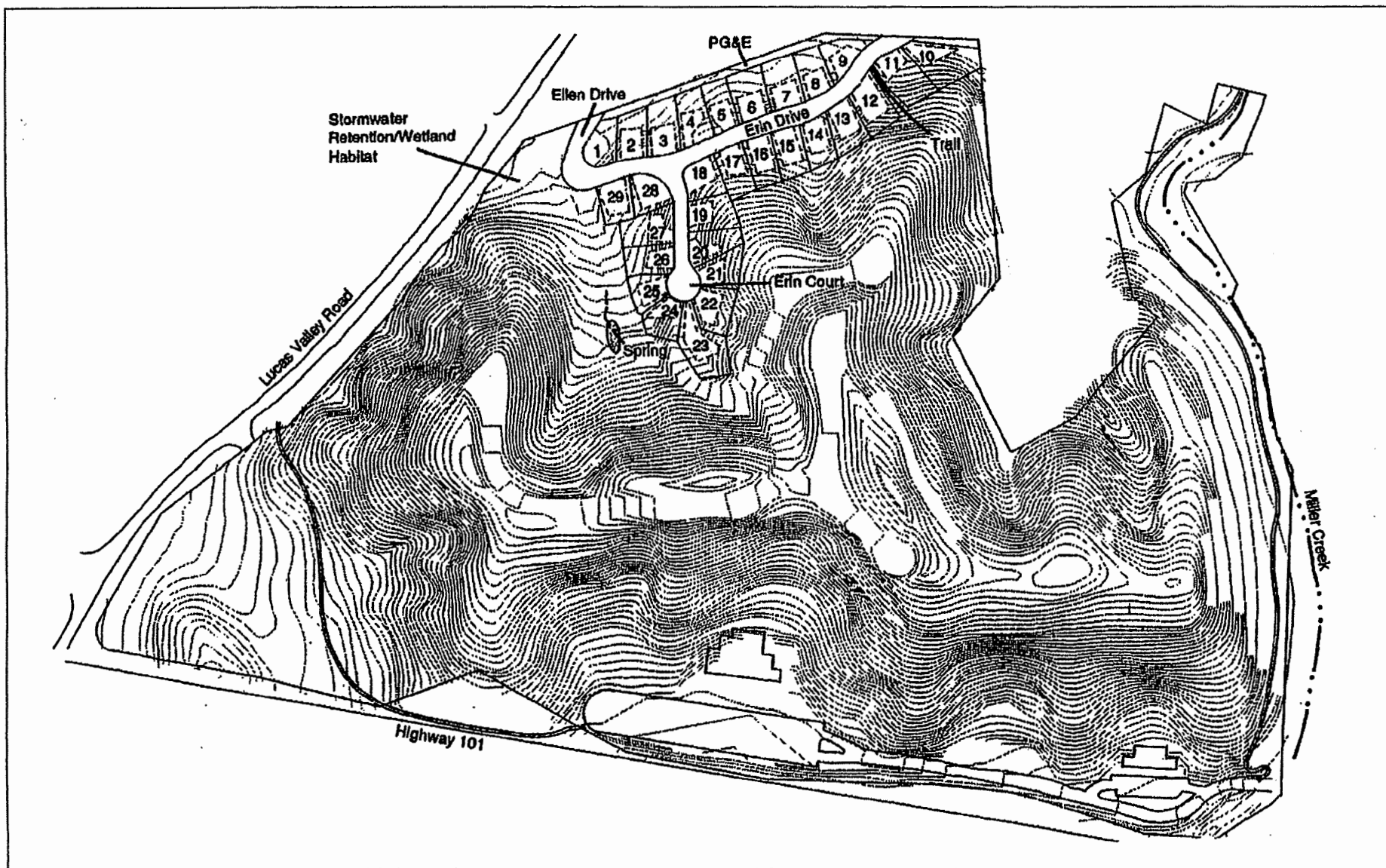


EXHIBIT 6.4-1 29-LOT SUBDIVISION ALTERNATIVE
Oakview Master Plan

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 North

Major aspects of this alternative are described in relation to the previous proposed project and include:

- Confine development to lower site elevations and eliminate upslope lots to reduce visual impacts, eliminate the need to build a water tank on the highest site elevation to provide water service to upper elevation lots, and make site development consistent with *The Marin Countywide Plan* by eliminating ridgeline development.
- Eliminate the site entrance on Lucas Valley Road to reduce traffic impacts and extend Ellen and Erin Drives into the site instead. Alternative 4 (29-Lot Subdivision Alternative) assumes that these extended roadways would connect on-site and form a loop to facilitate access in an emergency.
- Create a Stormwater Retention / Wetland Habitat zone in and around the area proposed for Lot 71 and the proposed Lucas Valley Road entrance in the 1995 plan.
- Preserve the existing on-site spring and associated wetlands.
- Terminate Roadway A in a cul-de-sac (called Erin Court in this alternative).
- Provide trail access into on-site open space areas.
- Design development envelopes to preserve as much natural vegetation as possible, including large oak trees on this alternative's Lots 4 and 5.
- ~~• Exclude an area east and northeast of the spring from development due to the presence of a large ancient landslide in this area. Repair of this landslide would require an extensive amount of earthmoving, not only in this area but also at higher site elevations.~~
- Modification of roadway widths to reflect County requirements. The main loop of Ellen and Erin Drive would be 36 feet wide, and Erin and Ellen Courts would be 28 feet wide. The culs-de-sac would be designed with 40-foot turn-around radii. All on-site roadways would have 50-foot inside curve radii.
- About 400 square feet of parking lot proposed for the northern office building on Parcel 2 would be removed or relocated outside the Stream Conservation Area of Miller Creek for consistency with *The Marin Countywide Plan*.

This alternative would fulfill all of the applicant's objectives for the project site.

This alternative provided the basis for the revised proposed project considered in this EIR.

Analysis of 29-Lot Subdivision Alternative

Geology and Soils

Alternative 4 (29-Lot Subdivision Alternative) greatly reduced the potential geotechnical impacts from the previous Proposed project. This alternative would now be expected to have the same

impacts as the Proposed project and, therefore, the same mitigation measures would be necessary under both the Proposed project and Alternative 4.

Hydrology and Drainage

Alternative 4 would include construction of 29 residential units in Sub-watersheds 2 through 4. The principal difference between the proposed project and Alternative 4 is the reorientation of residential development away from the upper reaches of Sub-watershed 2. This would eliminate the upper segment of Roadway B and its adjoining lots, compared to the 1995 plan, which would allow for the protection of the existing seep in Sub-watershed 2. Otherwise, site subdrain construction for this alternative would likely have a beneficial effect on the reduction of seepage pressures on Marinwood lots along the project's western boundary similar to the project. Peak flow impacts for this alternative would be similar to those of the project. The impact on Marinwood Subdivision flooding due to the inadequate storm drain system capacities (Ellen Drive and Erin Drive systems) would be similar to the project.

Flooding impacts on the SPRR bridge on Miller Creek would be less for Alternative 5 than for the project, although any surcharge of floodwaters to that inadequate structure would still be considered significant. Due to the reorientation of the lots on Parcel 1 and the slight reduction in the peak flow increases affecting the Las Gallinas Creek Watershed, the flooding impact on the Highway 101 box culvert would be slightly less than that for the project. However, as with the downstream Miller Creek structure, the impact would remain significant. Water quality impacts for this alternative would be similar to project impacts for both the south-draining Sub-watersheds 1 and 2 and north draining Sub-watersheds 3 through 6

Biological Resources

Major objectives in formulating Alternative 4 were to protect trees and preserve the active spring and associated seep in the southwest part of the site. Impacts under this alternative as well as the Previous proposed project would be similar in the eastern part of the site (proposed Parcel 2 office development area).

This alternative generally would restrict residential development outside woodland habitat, thus greatly reducing impacts on trees compared with the 1995 plan. Only five trees with trunk diameters exceeding six inches would be removed under this alternative, compared with more than 822 removed by the 1995 plan. This estimate assumes that the development area on this alternative's Lots 4, 5, and 20 would be limited as indicated in Exhibit 6.4-1 to protect nine trees on these lots. The active spring and most of the associated 0.62 acre of freshwater seep would be preserved under this alternative. The proposed project and recommended mitigation would provide for replacement of the spring and associated wetlands either on-site or at an off-site location. Because the spring is near existing development and Miller Creek provides an alternative source of permanent surface water for wildlife, preservation of the spring was not recommended as mitigation for the proposed project.

For the 29-Lot Subdivision Design Alternative, it is assumed that development would avoid the Miller Creek Stream Conservation Area (SCA) as adjusted for the current proposed project. About 400 square feet of parking lot for the northern office building would have intruded into the SCA under the 1995 plan.

Visual and Aesthetic Quality

Similar to the proposed project, Alternative 4 would concentrate development in the site's lower grassland elevations and preserve most existing woodlands. Both Alternative 4 and the project would permanently change the site's grassland character. In addition, the form and line of development on lower site slopes would be visually *dominant* from some viewpoints, a significant impact. Similar to the proposed project this alternative's implementation of landscape screening and other measures required of the project by Mitigation Measure 5.5-1 would reduce the impact to a less-than-significant level.

Several aspects of Alternative 4 would result in beneficial visual impacts. These include creating a Stormwater Retention / Wildlife Habitat area along Lucas Valley Road, preserving existing visual resources on Lucas Valley Road by excluding a roadway entrance, and preserving the existing spring and associated seep in the grassland area.

Similar to the proposed project, with Alternative 4, the upper parts of the site would not be developed, and a water tank would not be required on the ridgetop because existing water facilities could serve lower elevation development.

Office development of Parcel 2 would result in the same significant impacts as for the proposed project (see Impacts 5.4-5 and 5.4-6). It is assumed the 29-Lot Subdivision Design Alternative would include Mitigation Measure 5.4-5 (an expanded version of the applicant's landscape screening plan), which would reduce these impacts to less-than-significant levels.

Transportation and Circulation

Alternative 4 assumes no site access from Lucas Valley Road. The 29 housing units would generate approximately the same number of residential vehicle trips as the project's 28 units.

In terms of access, safety, and traffic operations, Alternative 4 would be superior to the proposed project, which would provide primary residential access from Lucas Valley Road. Alternative 4 would provide two access routes from Las Gallinas Avenue (Ellen and Erin Drives). During the AM peak hour, Las Gallinas Avenue carries heavy southbound traffic in the vicinity of the site. Vehicles exiting the site onto Las Gallinas Avenue would have long delays, such as now encountered by existing residents of Ellen and Erin Drives.

Short- and long-range cumulative conditions and peak hour operations with Alternative 4 would be similar to those estimated for the project. While this alternative would not result in a reduced number of housing units as compared with the proposed project, the residential vehicle circulation / access pattern would shift from Lucas Valley Road to Las Gallinas Avenue. Alternative 4 would eliminate the need for an acceleration lane on Lucas Valley Road (mitigation 5.7-1[d]).

Air Quality

Implementation of Alternative 4 would result in air quality impacts similar to those associated with the proposed project. This would be potentially significant construction period impacts and less-than-significant long-term operational local and regional impacts.

Noise

This alternative would result in less noise impacts than the Proposed project, as housing units would be located farther away from Lucas Valley Road with Alternative 4.

Development-generated traffic would increase noise levels on streets serving the site, but would result in similar less-than-significant impacts as the proposed project.

Construction noise would result in significant short-term impacts on adjacent residents, similar to those from the project.

Public Services

Service impacts of Alternative 4 and the proposed project would be similar. With almost the same amount of development and a similar layout, Alternative 4's impact on both fire service and police protection would be the same. This alternative would result in almost the same water demand as the proposed project. Also, as with the proposed project, MMWD would not need to expand facilities with this alternative because development would be located below 210 feet, the maximum elevation served by the area's existing water supply system. Impacts on the LGVSD would be the same as for the proposed project. Likewise, impacts on the DESD and the SRHSD would be the same as for the proposed project.

Costs and Revenues

Alternative 4 would generate approximately the same revenue for the County and special districts as the project, due to the similar level of development. As with the project and all alternatives, no physical changes would result from economic impacts of site development.

6.5 ALTERNATIVE 5 -- PREVIOUS PROPOSED PROJECT ALTERNATIVE

This alternative assumes that the project site would be developed as the May 1995 proposed project. Exhibit 6.5-1 illustrates the previous site plan. The 1995 plan had the following general characteristics:

- 33.3 acres of low-density residential use – 71 single-family detached housing units.
- 11.1 acres of office use – 94,400 square feet to be constructed in two buildings.
- 52.9 acres of open space.
- 9.0 acres set aside for the proposed Highway 101 / Lucas Valley Road southbound ramps.

Alternatives that are studied in an EIR typically focus on alternatives that are capable of eliminating any significant adverse environmental effects identified for the proposed project or reducing the impacts to a level of insignificance. Because the proposed *Oakview Master Plan* evaluated in this EIR is based on the mitigation measures identified in the 1996 Draft EIR, it is likely that this alternative, the previous proposed project, will not reduce or eliminate significant adverse effects identified in this EIR. This alternative is included in this EIR, however, because it provides a baseline against which the proposed *Oakview Master Plan* can be measured. Such information will be

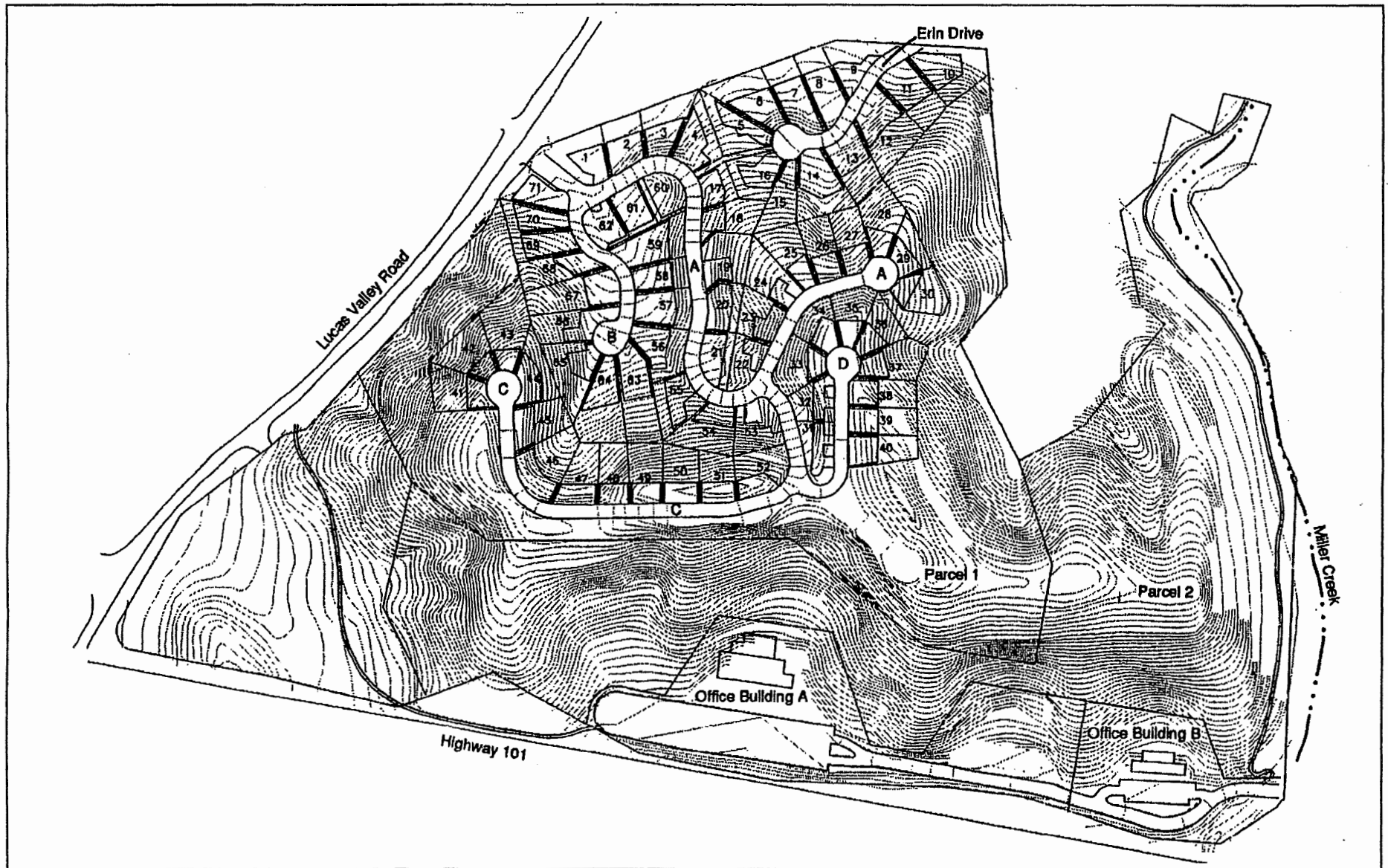
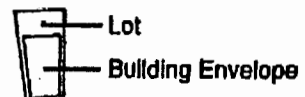


EXHIBIT 6.5-1 PREVIOUS PROPOSED PROJECT
Oakview Master Plan

Source: I.L. Schwartz Associates, Inc.

Legend:



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North

meaningful and useful to decision-makers (the Marin County Planning Commission and Marin County Board of Supervisors) and to the public.

This alternative could meet some of the applicant's objectives, such as establish a conservation easement at the rear of the residential lots and to develop a revegetation plan for the site that includes restoration of native grasslands and replacement of trees removed to allow development. However, development of 71 housing units would likely result in a development pattern that would not meet the applicant's objectives to preserve the ridgelines as undeveloped open space, preserve as many healthy, mature trees as possible, to preserve, or enhance, the existing seasonal seeps and riparian forest to the maximum extent possible, or to limit the site grading. This alternative would, however, fulfill the applicant's objectives related to office development on the site.

Analysis of Previous Proposed Project Alternative ⁷

Geology and Soils

Alternative 5 would have the same impacts as the proposed project plan and, therefore, the same types of mitigation measures would be necessary under both the proposed project and Alternative 5. However, the areal extent and quantities of grading would be substantially greater in Alternative 5 than the proposed project. Grading quantities for building sites, roads and landslide repair, would be expected to be approximately double those of the proposed project. Additionally, increased water infiltration from irrigation and runoff would be likely due to the large increase in residential units. This would result in increased seepage of nuisance water from the slope of landslide feature D into the adjacent housing tract.

Hydrology and Drainage

Alternative 5 would include 71 units of residential development in Sub-watersheds 1-4 and office development in Sub-watershed 6. Development density would be greater (71 units) than proposed by the project (28 units). Alternative 5 would incur less-than-significant drainage pattern impacts that are similar to those of the proposed project, including the conversion of the Sub-watershed 2 drainageway to a storm drain system and the loss of the seep at the head of that drainageway. Peak flow increases would be similar to the project in Sub-watershed 2, which drains toward the south, and greater than the project in the sub-watersheds that drain north to Miller Creek. Alternative 5 flooding impacts on the Marinwood Subdivision storm drain system would be similar to the project along the Ellen Drive system and greater than the project along the Erin Drive system. Alternative 5 impacts on downstream hydraulic structures would be similar to the proposed project in that any surcharge of floodwaters at the Highway 101 box culvert and the SPRR bridge on Miller Creeks would be considered significant. The actual impact of peak flow increases on downstream flooding along Miller Creek (SPRR bridge) would be slightly greater for this alternative than for the project. Water quality impacts overall would be similar to the project, although the contaminant loading rates on stormwater reaching Miller Creek would be somewhat higher for this alternative due to its increased number of housing units.

⁷ The analysis of the previous proposed project is based on the 1996 Draft EIR, *Oakview Master Plan, Use Permit, Tentative Map, Draft Environmental Impact Report*, prepared by Nichols Berman for County of Marin Community Development Agency, September 25, 1996.

Biological Resources

Alternative 5 would have significant impacts on biological and wetland resources. A minimum of 822 trees would be removed to accommodate extensive development in woodland habitat, which has been largely avoided under the proposed project. An estimated 1.9 acres of native grassland would be eliminated under this alternative, somewhat exceeding the 1.6 acres estimated for removal under the proposed project. A total of 1.4 acres of jurisdictional wetlands and other waters would be eliminated, similar to the proposed project. No provisions for wetland mitigation have been defined under this alternative and off-site mitigation may be required due to the lack of available land area on-site where replacement wetlands could be created. This alternative would also conflict with *The Marin Countywide Plan* policy which requires a 100 foot setback from designated streams, which includes Miller Creek. About 400 square feet of the parking lot to the northern office building would intrude into the Steam Conservation Area of Miller Creek, which is not the case under the proposed project.

Visual and Aesthetic Quality

Alternative 5 would result in a number of significant visual impacts from the residential development. The 1995 plan would result in significant visual impacts from the Lucas Valley Road entrance (Viewpoint 1), from the end of Erin Drive (Viewpoint 2) and the view from Ellen Drive (Viewpoint 3). Unlike the proposed project, this alternative would include residential development on the upper parts of the project site. Although mitigation would be available to reduce the impact of the residential development on the upper parts of the project site it would not completely hide the development. Residential development on the upper portion of the project site as viewed from Viewpoints 1, 2, and 3 would result in significant unavoidable visual impacts.

Office development on Parcel 2 would result in the same significant impacts as for the proposed project (see Impacts 5.4-5 and 5.4-6). It is assumed that this alternative would include Mitigation Measure 5.4-5 (an expanded version of the applicant's landscape screening plan), which would reduce these impacts to less-than-significant levels.

Transportation and Circulation

Alternative 5 assumes residential site access from Lucas Valley Road and Las Gallinas Avenue. Alternative 5 would develop 71 housing units and would result in 24 percent more daily vehicle trips, 18 percent more AM peak hour trips, and 19 percent more PM peak hour trips than the proposed project.

Short- and long-range cumulative conditions and peak hour operations with Alternative 5 would result in short- and long-range cumulative conditions and peak hour operations similar to those estimated for the project.

Air Quality

Alternative 5 would result in potentially significant construction period air quality impacts that could be more intense than from the project due to increased amount of development assumed. Long-term local and regional air quality impacts would be greater than the proposed project, but still less-than-significant.

Noise

Alternative 5 would have four lots proposed along Lucas Valley Road that would be exposed to noise levels exceeding the County's noise and land use compatibility standard. The proposed project has only two such lots. Nonetheless the impact remains the same.

The traffic generated by this alternative would result in more traffic on local streets than the proposed project. However, traffic noise impacts would be less-than-significant under either proposal.

Construction noise impacts would be the same with this alternative as with the proposed project except that construction duration would be shorter under the proposed project because there would be fewer units.

Public Services

- **Fire Service** Alternative 5 would result in development of more site area than proposed by the project, thus increasing site access and increasing on-site water supplies in the event of a wildfire but simultaneously decreasing open space area on the site. However, more development would expose more on-site residents and property to wildfires than with project implementation.
- **Police Protection** Alternative 5 would generate more calls for police service than the project, a less-than-significant impact in both cases because no physical impacts would result from the increased demand.
- **Water Service** Based on the Marin Municipal Water District's (MMWD) estimates, this alternative would result in an annual water demand of 40 acre-feet, compared with the 11 acre-feet estimated for the project. MMWD facilities would need to be expanded to provide service to Alternative 5 development above 210 feet (the current limit of the water system around the site). This probably would require construction of an on-site water tank on the site's highest elevation. Moreover, a connection to MMWD's existing Skyview Tank may not be practical due to its limited capacity and the large number of on-site housing units expected to require service. Construction of a Skyview Tank connection could result in biological impacts, depending on the proposed route, and potential visual impacts. Cumulative water demand would not be a significant impact, as with the project, because MMWD assumes development of all parcels at the maximum density allowed.
- **Sanitary Sewer Service** Based on the LGVSD generation rate for housing and office development, Alternative 5 would generate an estimated 25,500 gpd, compared with 16,900 gpd generated by the project. Since the LGVSD wastewater plant has sufficient existing capacity to serve this amount of development this would be a less-than-significant impact.
- **Public Schools** Development of 71 housing units would generate an estimated 36 Dixie Elementary School District (DESD) students. The district would have adequate capacity for these students, therefore this would be a less-than-significant impact. This alternative would generate approximately 14 students for the San Rafael High School District (SRHSD), a less-than-significant impact since capacity is more than adequate.

Costs and Revenues

Alternative 5 would generate more revenue to the County and special districts than the project because of the increased number of housing units that would be built. The total estimated assessed value of this alternative with 71 housing units and 94,400 square feet of office development would be \$82.7 million compared to an estimated assessed value of the proposed project of \$44.0 million. The economic impacts of the project and all alternatives would involve no physical changes.

6.5 ALTERNATIVE SITE ANALYSIS

As discussed in the introduction to this chapter, CEQA does not require an exhaustive analysis of alternatives but requires sufficient information to permit a reasonable choice among alternatives in order to compare environmental consequences. The reason for assessing any alternative to a proposed project -- whether on or off-site -- is to test the extent to which the project's significant adverse impacts could be substantially reduced or avoided. The reason for assessing off-site alternatives, in particular, is to evaluate the extent to which a project's significant adverse impacts -- implemented at the proposed site -- could be substantially reduced or avoided by implementation at *another* site. CEQA, the *State EIR Guidelines*, and judicial decisions have established the following three-step approach for evaluating alternative sites in EIRs.⁸

As a part of the preparation of the 1996 Draft EIR a process was undertaken to identify feasible off-site alternatives. As described in the 1996 Draft EIR this process involved three steps, as follows:

First step Determine the significant impacts of the proposed project. As noted above, the principal reason for analyzing off-site alternatives is to determine if "any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."⁹ As shown in the summary of impacts attributable to the proposed project (Exhibit 3.0-1), a number of significant impacts would result from project implementation. This leads to the second step.

Second step Determine if feasible alternative locations exist. A "feasible alternative" is defined as one which can be "accomplished in a successful manner within a reasonable period of time, taking into account economic, legal, social, and technological factors."¹⁰ Factors considered in determining the feasibility of alternative sites include site suitability for development, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and the applicants' ability to acquire the sites. Moreover, because CEQA requires analysis of a range of reasonable alternatives which would feasibly attain *most* project objectives, the 1996 Draft EIR only dismissed as infeasible alternative sites which would not meet a majority of project objectives. Candidate sites were identified as follows:

⁸ The *State CEQA Guidelines*, Section 15126.6(f)(2) incorporate this three-step approach, based on *Citizens of Goleta Valley v Board of Supervisors* ("*Goleta II*"), 1990, 52 Cal.3d 553 [276 Cal.Rptr.410].

⁹ *Ibid.*, Section 15126.6(f)(2)(A).

¹⁰ *Ibid.*, Section 15364.

- **Define study area** A study area for off-site alternatives was defined to include land in the nearby Marin County area, including both unincorporated and incorporated communities.
- **Identify undeveloped land** Three sources were used to identify undeveloped land in the study area:
 - PROPDEV ¹¹
 - Staff at the Marin County Community Development Agency and City of San Rafael Planning Department ¹²
 - Vacant RMP parcels (land zoned with the same district as the site) were identified throughout unincorporated Marin County. Of the 29,279 assessor's parcels in the County, 2,536 parcels are zoned RMP, with the largest concentrations in the Kentfield, Lucas Valley, Marin City, Sleepy Hollow, Strawberry, Tiburon, and Tamalpais Valley areas. Parcels deemed not available for development include those:
 1. Publicly-owned for the purpose of open space
 2. Subject to permanent agricultural or open space conservation easements
 3. Entirely below the mean high tide line and subject to public trust law
 4. Not separate legal building sites (such as street right-of-ways, merged parcels, interim parcels resulting from lot line adjustments, and private open space and common areas)
 5. Already programmed for development (such as approved master-planned developments currently being considered)

Third step Analyze the alternative sites. Each candidate site was reviewed against specific criteria to determine its appropriateness for further consideration as a feasible alternative site. A feasible site was defined as one which could achieve most of the basic objectives of the project and which could avoid or substantially lessen the significant impacts of the project as proposed.

The *State CEQA Guidelines* recognize that information about alternative sites' physical characteristics, including constraints, is limited. It normally is beyond the scopes of most EIRs to obtain and analyze information about environmental conditions of sites other than the project site. The *State CEQA Guidelines* direct EIRs to rely on available information (such as previous EIRs) to the extent possible but do not require EIRs to analyze alternative sites if the effects cannot be "reasonably ascertained and whose implementation is remote and speculative."

The 1996 Draft EIR identified four potential alternative sites using this methodology. The four sites were as follows:

- Hamilton Air Force Base
- St. Vincent's / Silveira

¹¹ PROPDEV is an inventory of proposed development projects and site information for Marin County.

¹² Nichols • Berman conversation with Jean Hasser, City of San Rafael Planning Department, May 14, 1996, and Dean Powell, Marin County Community Development Agency, May 14, 1996.

- Grady Ranch
- South Luiz Ranch

Since the circulation of the 1996 Draft EIR there have not been amendments to the *San Rafael General Plan 2000* or *The Marin Countywide Plan* that would result in the identification of new feasible alternative sites for the proposed project. Furthermore, additional vacant lands in Marin County jurisdiction have not been rezoned to the RMP district which would result in new feasible alternative sites.

The four alternative sites analyzed in the 1996 Draft EIR are discussed below. The analysis has been updated to reflect current conditions.

ALTERNATIVE SITES CONSIDERED INFEASIBLE

The 1996 Draft EIR evaluated a number of additional alternative sites and determined that each of these sites was infeasible as an alternative site for the Oakview project. The sites considered and rejected included:

- Lindero Office District in Downtown San Rafael
- Shoreline Business Park and Bayview Business Park
- Former Fairchild Semiconductor Plant
- McNear Quarry
- San Quentin Ridge
- Scettrini Site
- Easton Point Project
- Keig Property
- Two Properties on San Pedro Ridge

No new information is available that would change the findings of the 1996 Draft EIR regarding these sites that would now make one or more of these sites to be a feasible alternative site.

Analysis of Potentially Feasible off-site Alternatives

Hamilton Air Force Base

The 1996 Draft EIR identified the closed Hamilton Air Force Base as a feasible alternative site for the office component of the Oakview project. It was stated that the Hamilton Air Force Base site could accommodate the proposed office component of the Oakview project, thus a feasible alternative, and implementation at the Hamilton would reduce significant impacts of the 1995 plan (including geologic, hydrologic, and biotic impacts, such as tree loss). However, it was stated that the feasibility of the Hamilton site for residential development would not be known until the then planning process was completed.

In 1993 the City of Novato adopted the Hamilton Field Master Plan and Development Agreement proposed by the New Hamilton Partnership. This approval allows for development of up to 750 housing units, a number of affordable housing units, and a maximum of 825,000 square feet of

commercial land uses. Both residential and commercial development under the terms of the Development Agreement is proceeding.

The Novato City Council adopted the Hamilton Army Airfield Reuse Plan in October 1995. Consistent with the Reuse Plan in 1999 the City of Novato selected Novato Community Partners (comprised of Shea Homes and Centex Homes) as the Master Developer. The Reuse Plan (and subsequent Development Agreement) allows for 444 residential units in Rafael Village (located on the westside of Highway 101) and 708 affordable housing units in Capehart and Hillside housing (located on 183 acres on the eastside of Highway 101) and 25 single-family homes on the San Pablo Drive site (3.1 acres located on the eastside of Highway 101).

Based on current development activity it appears that the Hamilton site should not be considered a feasible alternative site.¹³

St. Vincent's / Silveira

According to the *San Rafael General Plan* the St. Vincent's / Silveira properties represent the largest potential housing opportunity area in the San Rafael Planning Area. Primarily flat and separate from established neighborhoods, the properties can accommodate a variety of housing types. The area is currently under County jurisdiction and zoned agriculture.

The 1996 Draft EIR stated that the St. Vincent's / Silveira properties appear to meet many of the objectives of the Oakview project. The properties currently are not developed, there is sufficient area to develop 71 housing units and 94,400 square feet of office space (as proposed in the 1995 plan), the applicant may be able to acquire and control the properties, and the properties are centrally located along existing circulation routes.

In June 1998, the San Rafael City Council and the Marin County Board of Supervisors adopted a Memorandum of Understanding (MOU) regarding the future of the St Vincent's / Silveira properties. As agreed to in the MOU, a 16 member Advisory Task Force was appointed to develop recommendations setting forth proposed locations for development, densities, intensities, and design guidelines for those areas appropriate for development, and environmental preservation and management policies for those area inappropriate for development. In May 2000 the Advisory Task Force issued its recommendations for the St. Vincent's / Silveira properties.¹⁴ In regard to development potential the Advisory Task Force established a range of 800 to 1,500 housing units and 120,000 to 310,000 square feet of nonresidential development. It is the intent of the Advisory Task Force that its recommendations be submitted for review and consideration in the San Rafael General Plan Update project, which is now underway, and submitted to Marin County in connection with its anticipated amendment of *The Marin Countywide Plan*.

Based on the recommendations of the Advisory Task Force it appears that the St. Vincent's / Silveira properties remain a feasible alternative site. However, as discussed in the 1996 Draft EIR, the purpose of the alternative site analysis is not simply to find a location which physically can accommodate a project. It also is to provide off-site locations which would reduce or eliminate

¹³ Nichols • Berman conversation with Kristie Richardson, Senior Planner, City of Novato, August 2000.

¹⁴ *St. Vincent's/Silveira Advisory Task Force Recommendations*, May 3, 2000.

environmental impacts of the proposed project. The 1996 Draft EIR stated that based on the information available it could not be concluded whether or not traffic, wetland, visual, and public service impacts associated with the proposed project would be reduced or eliminated at the St. Vincent's / Silveira properties. A complete analysis of environmental impacts of the St. Vincent's / Silveira site cannot be conducted at this time, particularly due to the uncertainty of future City and County actions. It is possible that the St. Vincent's / Silveira site could feasibly obtain the project's overall objectives without some of the adverse environmental impacts associated with the Oakview site, but more information would need to be collected to make that determination.

Grady Ranch

The 1996 Draft EIR evaluated the 1,039-acre Grady Ranch, located immediately west of the Lucas Valley Open Space Preserve on Lucas Valley Road, as an alternative site. The 1996 Draft EIR concluded that this alternative site could be feasible, but, without a detailed site plan, environmental impacts cannot be determined adequately. It is not clear if this alternative site would alleviate the significant impacts of the Oakview project.

Since the 1996 Draft EIR Marin County has approved a Master Plan for the Lusasfilm Corporation for this parcel. The Master Plan allows 456,100 square feet of office development on the Grady Ranch. With the approval of the Master Plan for the Grady Ranch it is unlikely that this parcel would be available as a site for the Oakview project, therefore, this site is considered infeasible.

South Luiz Ranch

The 1996 Draft EIR evaluated the 1,112-acre South Luiz Ranch located directly south of Lucas Valley Estates and the Grady Ranch across Lucas Valley Road. The South Luiz Ranch is designated Planned Residential by *The Marin Countywide Plan* and is zoned RMP-0.1. The 1996 Draft EIR concluded that it was not clear whether the South Luiz Ranch alternative would reduce the Oakview project's significant unavoidable grading, hydrological and erosion, tree removal, visual, and cumulative traffic impacts. In order for the feasibility of this alternative site to be analyzed, a detailed site plan would be required.

Marin County has recently approved a lot line adjustment for the South Luiz Ranch to provide for a 500-acre parcel. The County has received a Design Review application for a single-family house on the 500-acre parcel. With the lot line adjustment an approximate 612 acre parcel remains available for future development. Current zoning would permit a maximum buildout of 61 units on this portion of the South Luiz Ranch.

The remaining portion of the South Luiz Ranch could physically accommodate both the residential and office portions of the Oakview project. However, it is not known if this site is available to buy from the Luiz family. Residential and office development of the South Luiz Ranch could be seen as compatible with the adjacent existing Lucas Valley Estates project and office development on Grady Ranch. In addition, sewer and water lines are present under Lucas Valley Road in front of the South Luiz Ranch. It is not clear whether or not development on the remaining portion of the South Luiz Ranch would result in significant grading, hydrological and erosion, tree removal, visual and cumulative traffic impacts. In order for the feasibility of this alternative site to be analyzed, a detailed site plan would be required.

6.6 ALTERNATIVES CONSIDERED BUT REJECTED

The 1996 Draft EIR evaluated the feasibility of the acquisition of the project site for open space and the potential for different land use on the project site. The 1996 Draft EIR describes the reasons for the rejection of these alternatives. This information remains valid and is incorporated by reference into this EIR.

6.7 COMPARISON OF ALTERNATIVES AND THE PROPOSED PROJECT AND THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE

A comparison of the proposed project and the five on-site alternatives, broken down by type of impact, is given below. Based on the analysis of the project and on-site alternatives, the EIR finds that Alternative 1 (No Development Alternative) would be the environmentally superior alternative because it would avoid the environmental impacts expected from building and operating the proposed project.

Section 15126[d] of the *State CEQA Guidelines* states that, if the environmentally superior alternative is the No Project Alternative, the EIR also shall identify an environmentally superior alternative among the other alternatives. Based on a comparison of the significant environmental impacts of all the build alternatives, Alternative 4 (29-Lot Subdivision Alternative) would be slightly superior to the proposed project and therefore would be the environmentally superior alternative. The primary advantage of Alternative 4 is that it assumes no site access from Lucas Valley Road. In terms of access, safety, and traffic operations, Alternative 4 (29-Lot Subdivision Alternative) would be superior to the proposed project, which would provide residential access primarily from Lucas Valley Road.

A comparison of the environmental merits of each alternative is provided below.

Geology and Soils

Alternative 1 (No Development Alternative) would have the least geologic impact because no grading, slope stability impacts due to grading, groundwater impacts, or impacts from disturbing serpentine soil would occur. The *proposed project and Alternative 4 (29-Lot Subdivision Alternative)* would have the least geologic impact of the development alternatives because less intense site development would minimize impacts. *Alternative 2 (Countywide Plan Designation Alternative)*, *Alternative 3 (71 Housing Units and No Office Development Alternative)* and *Alternative 5 (Previous Proposed Project)* would each disturb a much larger portion of the project site than either the proposed project or Alternative 4. In order to accommodate more housing units, Alternatives 2, 3, and 5 would likely result in mass grading of the site to accommodate access roads and to repair the numerous landslides which could potentially impact building sites and roadways. Due to the amount of development the alternative with the greatest geologic impact would be Alternative 2.

Hydrology and Drainage

Alternative 1 (No Development Alternative) would have the least hydrologic impact, although existing off-site drainage impacts would persist. *Alternative 4 (29-Lot Subdivision Alternative)* would have the least hydrologic impact of the development alternatives because it would preserve the on-site spring. The *proposed project* would follow but would not preserve the on-site spring. *Alternative 2*

(*Countywide Plan Designation Alternative*) would have the greatest hydrologic impacts since the increased area of impervious surfaces would result in high peak flows for this alternative.

Biological Resources

Alternative 1 (No Development Alternative) would have the least biological impact because no habitat would be affected. The *proposed project* and *Alternative 4 (29-Lot Subdivision Alternative)* would have the least biological impact of the development alternatives because they would have the least amount of development, would preserve the largest number of trees, and would provide a wetland habitat area. *Alternative 4*, however, would preserve the active spring and most of the associated 0.62 acre of freshwater seep. *Alternative 3 (71 Housing Units and No Office Development Alternative)* would follow by preserving some wetland habitat on Parcel 2 and allowing re-establishment of native grasslands on undeveloped parts of Parcel 2, but would result in major losses of trees on the ridgeline and native grasslands. *Alternative 5 (Previous Proposed Project)* would create somewhat more impacts, and less area would remain on-site for grassland re-establishment. *Alternative 5* would result in a minimum of 822 trees being removed. The alternative with the greatest biologic impact would be *Alternative 2 (Countywide Plan Designation Alternative)*. Of particular concern would be the potential for removal of a large number of oaks and other native trees under this alternative.

Visual and Aesthetic Quality

Alternative 1 (No Development Alternative) would have the least aesthetic impact because the visual environment would not change. The *proposed project* and *Alternative 4 (29-Lot Subdivision Alternative)* would have the least visual impact of the development alternatives because they would not affect the site's upper slopes. *Alternative 3 (71 Housing Units and No Office Development Alternative)* would follow, due to severe impacts on the upper slopes. *Alternative 5 (Previous Proposed Project)* would add visual impacts with development along Highway 101. The alternative with the greatest visual impact would be *Alternative 2 (Countywide Plan Designation Alternative)*.

Transportation and Circulation

Alternative 4 (29-Lot Subdivision Alternative) would generate approximately the same number of trips as the proposed project. In terms of access, safety, and traffic operations, *Alternative 4 (29-Lot Subdivision Alternative)* would be superior to the proposed project. With the elimination of the office development *Alternative 3 (71 Housing Units and No Office Development Alternative)* would result in 49 percent fewer daily trips than the proposed project and *Alternative 2 (Countywide Plan Designation)* would result in 23 percent fewer daily trips than the proposed project. Overall, all of the alternatives would result in similar short-range and long-range cumulative peak hour conditions which would require mitigation measures.

Air Quality

Alternative 1 (No Development Alternative) would have the least air quality impact since there would be no construction period impacts and no contribution to local carbon monoxide or regional air quality impacts. *Alternative 4 (29-Lot Subdivision Alternative)* and the *proposed project* would result in similar air quality impacts. *Alternative 3 (71 Housing Units and No Office Development Alternative)* would result in lesser construction period and long-term operation impacts than the proposed project. *Alternative 2 (Countywide Plan Designation)* and *Alternative 5 (Previous Proposed Project)* would result in more intense construction period air quality impacts due to increased amounts of development assumed. All of the alternatives would result in less-than-significant long-term local and regional air quality impacts.

Noise

Alternative 1 (No Development Alternative) would have the least noise impact because no new noise would be generated and no new development would be affected by existing noise conditions. Of the development alternatives, it is not clear which alternative would be superior. Based on traffic noise alone, the alternatives would be ranked as listed in Transportation and Circulation. Based on noise exposure of the site, *Alternative 4 (29-Lot Subdivision Alternative)* would have the least impacts, as no residential development would take place next to Lucas Valley Road. Based on construction noise impacts to the surrounding area, *Alternative 2 (Countywide Plan Designation Alternative)* probably would be the worst, and the other development alternatives would be roughly equal.

Public Services

Ranking alternatives is difficult due to varying priorities of different services. More development generally would result in more need for public services. In terms of fire service more residential development (such as with *Alternative 2 [Countywide Plan Designation]*) would expose more on-site residents and property to wildfires than alternatives with less development (such as the *proposed project* and *Alternative 4 [29-Lot Subdivision]*). With regard to water service impacts, alternatives with development above elevation 210 feet (such as *Alternative 2 [Countywide Plan Designation]*, *Alternative 3 [71 Housing Units and No Office Development]*, and *Alternative 5 [Previous Proposed Project]*) would probably require construction of an on-site water tank. The *proposed project* and *Alternative 4 (29-Lot Subdivision)* would not require such a water tank.

Costs and Revenues

Economic impacts would be less-than-significant for all alternatives. While alternatives would generate different revenues for the County and special districts, none of the alternatives would result in any foreseeable physical changes which would result in environmental impacts.

7.0 COMMENTS AND RESPONSES

7.0 COMMENTS AND RESPONSES

7.1 INTRODUCTION TO THE COMMENTS AND RESPONSES

The *State CEQA Guidelines* require that the Lead Agency (Marin County) prepare a final environmental impact report (EIR) before approving a project. The Lead Agency may provide an opportunity for review of the final EIR by the public or commenting agencies, and this review should focus on the responses to comments on the Draft EIR, in accordance with *State CEQA Guidelines* Section 15089.

This Chapter provides the comments on the Draft EIR and responses to the comments. It consists of a list of comments on the Draft EIR, including comments on the EIR process, project merits, and environmental issues; master responses to selected environmental issues; verbatim comment letters submitted on the Draft EIR; summarized oral comments made at the May 7, 2001 Planning Commission Public Hearing on the Draft EIR; and responses to significant environmental issues raised in all the comments. Master responses have been prepared for selected comment topics to provide a comprehensive analysis of major environmental issues raised in multiple comments. Responses to individual comments raising significant environmental points are presented immediately after each comment letter.

The County prepared and on March 21, 2001 circulated the Revised Draft EIR on the proposed *Oakview Master Plan, Use Permit, Vesting Tentative Map* application. During the public review period from March 21, 2001 to May 14, 2001¹ and at the public hearing held by the Marin County Planning Commission on May 7, 2001, comments on the Draft EIR were solicited from government agencies and the public.

The governmental agencies, organizations, and individuals who commented on the Draft EIR are listed in Section 7.2 (*Persons Commenting*). Section 7.3 (*Master Responses*) provides master responses that have been prepared for selected comment topics to provide a comprehensive analysis of major environmental issues raised in multiple comments. These master responses are often referred to in the response to individual comments in Section 7.4.

Section 7.4 (*Response to Comments*) presents and responds to all comments on the Draft EIR and the project's environmental effects. These include comments submitted to the County in writing and made orally at the public hearing. The original letters are reproduced, and comments are numbered for referencing with responses. Responses to individual comments raising significant environmental points are presented immediately after each comment letter. Some responses refer commentors to other comments or responses in this section or to the pages of the Draft EIR (DEIR) where specific topics are discussed. Some comments do not pertain to physical environmental issues but to the merits of the project. These comments are included in this section, although responses to project-

¹ The Notice of Completion issued on March 21, 2001 stated that the public review period would close on May 7, 2001. On March 28, 2001 a corrected and revised Notice of Completion was issued. The corrected and revised Notice of Completion extended the public review period to May 14, 2001

related comments are not necessary in an EIR. However, inclusion in this document will make the commentor's views available to public officials who will make decisions about the project itself.

In some instances, text changes resulting from the comments and responses are recommended. In these instances information that is to be deleted is ~~erossed-out~~, and information that is added is underlined. The text changes resulting from comments and responses have been incorporated in the original Draft EIR text, as indicated in the responses. All of these text changes result in insignificant modifications to the original Draft EIR text.

7.2 PERSONS COMMENTING

Comments on the Draft EIR were received from the following agencies, organizations, and individuals. Letters refer to the order of written comments and their accompanying responses.

Written Comments

COUNTY AND CITY AGENCIES

1. City of San Rafael, Robert M. Brown, AICP, Community Development Director
2. Marin County Department of Public Works, Pat Balderama, Land Use & Water Resources
3. Marin Housing Authority, Barbara Collins, Affordable Housing Strategist
- 3A. Marin County Department of Public Works Traffic Engineering Section, Jason Nutt, Traffic Operations Engineer

SPECIAL DISTRICTS

4. Marin Municipal Water District, Eric McGuire, Environmental Services Coordinator
5. Marinwood Community Services District, Thomas D. Horne, District Manager

STATE AGENCIES

6. Governor's Office of Planning and Research State Clearinghouse, Terry Roberts
7. Department of Fish and Game, Robert W. Floerke, Regional Manager, Central Coast Region
8. Department of Toxic Substances Control, Barbara J. Cook, P.E., Chief Northern California – Coastal Cleanup Operations Branch
9. Department of California Highway Patrol, Golden Gate Division, Tom Noble, Assistant Chief

ORGANIZATIONS

10. Lucas Valley Homeowners Association, Inc., Ron Marinoff, ZAP
11. The Marinwood Association and Marinwood Advocates for Sensible Planning, Frank Rowley and Carol Brandt
12. Marin Conservation League, Susan Stompe, President
13. Marin Audubon Society, Barbara Salzman

INDIVIDUALS

14. Sally Marie McGuire
15. Stanley R. Farber
16. Donald A. and Carolyn E. Huffman
17. Kim Higashi

18. Susan L. Adams, Ph.D., RN, NP
19. Marian K. Blanton
20. Kate Powers
21. Frank Nelson (two letters)
22. Claude and Rebecca Bentley
23. Walter K. Dods
24. Bruce Christy
25. Larry Kennings, Planning Consultant (on behalf of the project applicant)
26. Kathleen Gaines & Ray Welch
27. Marilyn Williams
28. Raoul Stepakoff and Cindy Ostroff
29. Diane J. Ray

Public Hearing Comments

Minutes of the May 7, 2001 Planning Commission public hearing are included in Section 7.4. These are not verbatim minutes but rather provide a summary of the oral comments made at the public hearing. A complete list of all individuals comments on the Draft EIR at the public hearing is provided in the minutes.

7.3 MASTER RESPONSES

This section provides master responses that have been prepared for selected comment topics to provide a comprehensive analysis of major issues raised in multiple comments. These master responses are referred to in the response to individual comments in Section 7.4. These master responses cover the following topics:

- Need for a new alternative
- Energy issues
- Visual analysis
- Transportation and Circulation

Master Response A -- Assisted Living Residential Use Option

In response to written comments regarding the Draft EIR an option to the use of the two buildings located along the frontage of Highway 101 (Buildings A and B) is evaluated in this *Response to Comments*.

A number of commentors (see letters from Barbara Collins, Marin Housing Authority and Lucas Valley Homeowners Association for example) stated that the developer should construct the designated inclusionary housing on-site. A number of commentors (see letter from Barbara Collins, Marin Housing Authority for example) suggested that an alternative site plan that included affordable housing on the project site be evaluated.

In response to these comments the project applicant proposes as an option the use of the two buildings along the Highway 101 frontage for an assisted living residential use. Under this option the 80,000 square foot Building A would be used to house a residential assisted living facility and the 14,400 square foot Building B would be used to house services for the residential assisted living facility, including administrative and support services. The major components of the Assisted Living Residential Use Option would be as follows:

- Be a retirement community that would provide seniors with housing opportunities, meals, transportation services and social services.
- Include 75 residential units, with kitchens, for independent seniors.
- Include 75 residential units, without full kitchens, for less independent seniors.
- Not be a skilled nursing facility.
- Provide full meal service (three meals a day) in group dining facilities.

- Provide housekeeping, maintenance, and laundry and linen services.
- Provide religious, social and recreational activities.
- Provide exercise, cultural and educational activities.
- Provide other services as appropriate.

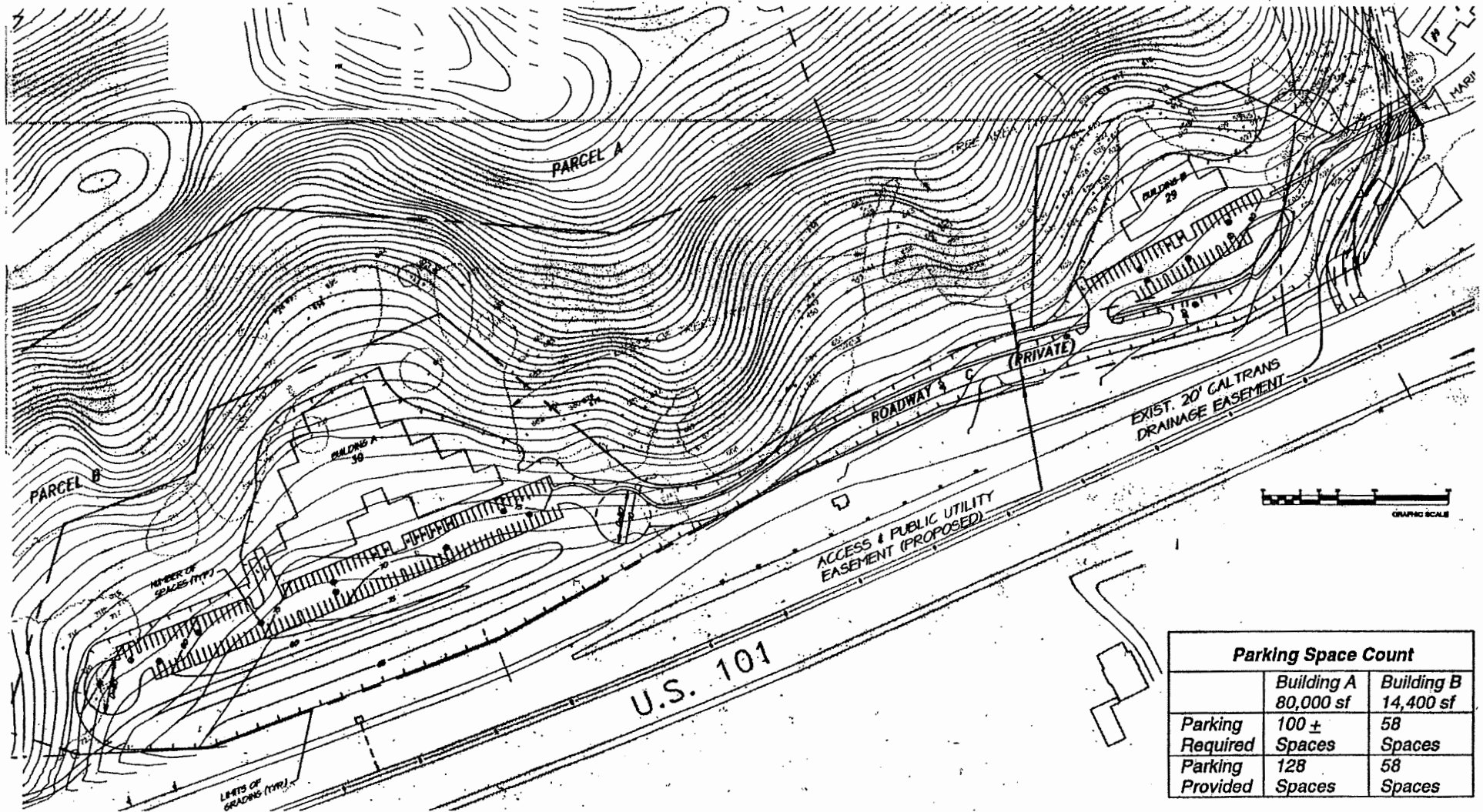
Use the assisted living residential use the footprints of buildings A and B would not change, nor would the bulk or mass of each of the two buildings. Access to the two buildings would be the same as the proposed project, that is Marinwood Avenue would be extended south from its present end north of Miller Creek along the Highway 101 frontage of the project site. One hundred twenty eight (128) parking spaces would be provided for Building A plus one large and one small loading space. Fifty eight (58) parking spaces would be provided for Building B, the same as the proposed project.

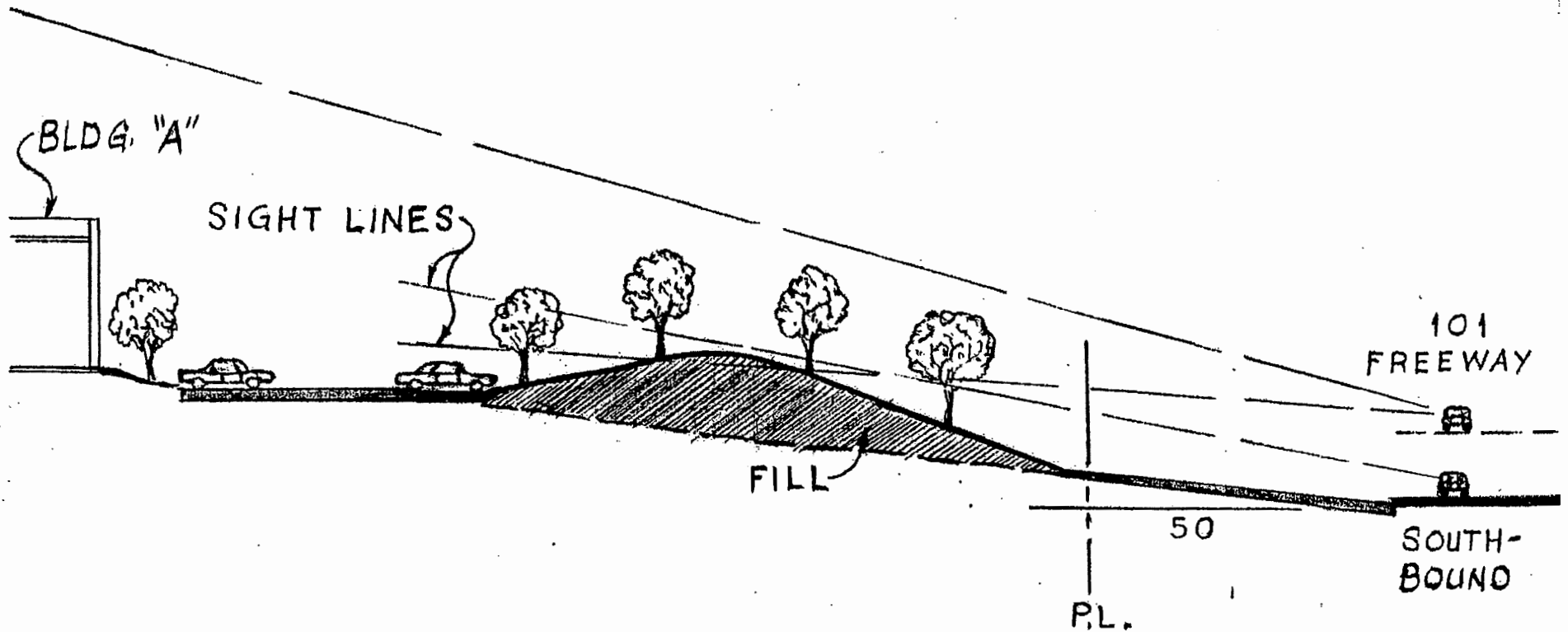
Between the parking lot for Building A and Highway 101 a landscaped berm is proposed.

With this use the portion of the project site in the proposed project proposed for the 28 single-family housing units would remain the same.

Exhibit 7.0-1 shows the building footprint, the extension of Marinwood Avenue and the parking lots layout for the assisted living residential use portion of the proposed project. The layout of the single-family residential portion of the proposed project would be the same (see Exhibit 2.2-5 in the Draft EIR). Exhibit 7.0-2 shows the proposed landscaped berm between the parking lot and Highway 101.

Exhibit 7.0-1
Assisted Living Residential Layout





ANALYSIS OF THE ASSISTED LIVING RESIDENTIAL USE OPTION

This section analyses the change in the use of buildings A and B from administrative / professional office development to an assisted living residential use. This analysis evaluates the potential impacts of a change of land use from on the project site from professional office use to an assisted living residential use. This analysis is provided below

Geology and Soils

The Assisted Living Residential Use option would have the same impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option. However, due to the reduced number of required parking spaces for the assisted living residential use and the proposed berm along a portion of the Highway 101 frontage the areal extent and quantities of grading would be slightly different in the Assisted Living Residential Use option than the proposed project. For the proposed project the estimated quantities of cut and fill for the road and parking lots serving the two offices buildings would be 26,220 and 20,780 cubic yards, respectively. For the Assisted Living Residential Use option the estimated quantities of cut and fill for the road and parking lots serving the two buildings would be 25,400 and 26,100 cubic yards, respectively. The difference in cut and fill amounts would not result in different geology and soils impacts for the Assisted Living Residential Use option than for the proposed project.

Hydrology and Drainage

The Assisted Living Residential Use option would have the same hydrology and drainage impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option. Due to the reduced number of parking spaces provided for this alternative (186 parking spaces) than for the proposed project (378 parking spaces) the Assisted Living Residential Use option would have slightly less impervious surfaces than the proposed project. As a result the increase in site peak flow rates for sub-watershed 6 projected for the proposed project (see Impact 5.2-2 in the Draft EIR) would be slightly less for this alternative. Nevertheless, the significant site peak flow rates anticipated for the proposed project would be the same for the Assisted Living Residential Use option. With the assisted living residential use impacts on downstream hydraulic structures would be similar to the proposed project in that any surcharge of floodwaters at the Highway 101 box culvert and the SPRR bridge on Miller Creek would be considered significant. The actual impact of peak flow increase on downstream flooding along Miller Creek (SPRR bridge) would be slightly less with this use than for the proposed project.

Biological Resources

The Assisted Living Residential Use option would have the same biological resources impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option. Although the parking lot configuration for the assisted living residential use would be slightly different than for the proposed project due to the construction of the berm the impacts to tree removal, disturbance to native grasslands, and disturbance to freshwater seeps and wetlands would be the same as for the proposed project. Potential impacts associated with the Miller Creek crossing and anticipated removal of 35 trees and freshwater seep habitat on Parcel 2 would be the same with this use as for the proposed project.

Visual and Aesthetic Quality

In the Assisted Living Residential Use option the footprints of Buildings A and B would not change from the proposed project, nor would the bulk or mass of each of the two buildings. Access to the two buildings would be the same as the proposed project, that is Marinwood Avenue would be extended south from its present end north of Miller Creek along the Highway 101 frontage of the project site. The one change that would occur is that the number of parking spaces for Building A would be reduced from 320 spaces from the proposed project to 128 parking spaces for this alternative. The reduction in the number of parking spaces would permit the development of a larger landscape berm between the parking lot for Building A and Highway 101.

As a result, the Assisted Living Residential Use option would have the same visual and aesthetic quality impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option. The landscaped berm with the assisted living residential use would provide some increased shielding of the parking lot for Building A than the proposed project.

As discussed below in the discussion of noise, if resident's facing Highway 101 open their windows, interior noise levels would be excessive. Outdoor areas with acceptable noise levels could be provided on the backside of the building and possibly on the front side if the areas were enclosed with a walled plaza or patio. However, a soundwall about ten feet high would be required to provide the necessary shielding in front of the building. Construction of such a soundwall could have a significant visual impact. However, since it is not known if such a soundwall would be constructed nor is the design of such a wall known it would be speculative to further analyze the visual impacts.

Transportation and Circulation

Assisted Living Residential Use option Trip Generation

Trip generation rates for the assisted living residential were taken from the Institute of Transportation Engineers (ITE) Trip Generation Manual.² Exhibit 7.0-3 presents the ITE trip rates and the proposed project with the assisted living residential use estimated trip generation. The single-family detached housing trip rates (ITE Land Use Code 210) were increased by 20 percent over the standard published rates in order to provide a conservative analysis for the larger homes (2,000 plus square feet) proposed by this alternative.

Trip Generation The proposed project would generate approximately 735 daily vehicle trips based on a 150 unit Assisted Living development and 28 single-family homes. Each alternative generated vehicle trip is counted individually. A vehicle departing the project site in the morning and returning in the evening would account for two discrete (though related) vehicle trips.

AM Peak Hour Generation During the AM peak hour, this option would generate an estimated 55 vehicle trips. The 28 housing units would account for 29 trips of which seven would be inbound and 22 would be outbound. The assisted living development would generate 29 vehicle trips of which 11 would be inbound and 14 would be outbound. The total alternative would generate 18 inbound and 36 outbound vehicle trips.

² Institute of Transportation Engineers, Trip Generation, 6th Edition, 1997.

Exhibit 7.0-3
Assisted Living Residential Use Trip Generation Estimates

Trip Rates

Land Use	Unit Measure	Daily Rate	AM Peak Hour			PM Peak Hour		
			Rate	In	Out	Rate	In	Out
Assisted Living Facility ¹	Units	2.76	0.17	45%	55%	0.27	56%	44%
Single-Family Housing ²	Units	11.46	1.04	25%	75%	1.21	64%	36%

Project Trip Generation

Land Use	Size/Units	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Total	In	Out	Total	In	Out
Assisted Living	150	414	26	11	14	41	23	18
Single-Family Housing	28	321	29	7	22	34	22	12
Project Total		735	55	18	36	75	45	30

1 - Retirement Community, ITE Trip Generation Manual, Sixth Ed., Land Use: 250

2 - Single-Family Detached Housing, ITE Trip General Manual, Sixth Ed., Land Use: 210

PM Peak Hour Generation During the PM peak hour, this option would generate an estimated 75 vehicle trips, of which 45 would be inbound and 30 would be outbound. The 28 housing units would generate 34 peak hour vehicles trips of which 22 would be inbound and 12 outbound. The assisted living development would generate 41 peak hour trips with 23 inbound and 18 outbound trips.

Trip Distribution

The trip distribution for the Assisted Living Residential Use option is based on the previous 1996 DEIR and the current ABAG Projections 2000 data for CMA Transportation Analysis Zone (TAZ) 170. The project site is located in TAZ 170. The trip distribution percentages for the employees of the assisted living development, single-family and senior residential uses are shown in Exhibit 7.0-4.

Exhibit 7.0-4 Estimate of Peak Hour Vehicle Trip Distribution

Assisted Living Facility Use³		Residential Use	
Destinations	Percentage	Destinations	Percentage
North 101	42	North 101	15
South 101	49	South 101	74
West	2	West	3
East	2	East	3
S. Gallinas	3	S. Gallinas	3
N. Gallinas	2	N. Gallinas	2
Totals:	100 percent		100 percent

Source: Wilbur Smith Associates, February 2002

Impacts and Mitigation Measures

Impact 7.0-1 Existing Plus Assisted Living Use Option AM and PM Peak Hour Conditions

The proposed project with the assisted living residential option alone and in conjunction with existing traffic conditions would create significant AM peak hour impacts for the Lucas Valley Road / Los Gamos Road, Miller Creek Road / Marinwood Avenue, and Highway 101 Southbound Ramps / Miller Creek Road intersections. Significant PM peak hour impacts would be created for the Lucas Valley Road / Los Gamos Road intersection.

Exhibit 7.0-5 shows the project's impact with the assisted living residential use trips on study area intersection and highway segment levels of service in the AM and PM peak hours under existing plus alternative conditions.

During the AM peak hour, the addition of project traffic to existing conditions would result in deteriorated LOS E and F conditions at the unsignalized intersections of Lucas Valley Road / Los

³ Twenty percent of vehicle trips associated with the assisted living development were considered as employee trips.

Exhibit 7.0-5
Existing Plus Assisted Living Residential Use AM/PM Peak Hour Levels of Service

Intersection	Existing AM		Existing Plus Alternative AM		Existing PM		Existing Plus Project PM	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Signalized Intersections								
Lucas Valley/Miller Creek	B	8.1	B	8.1	A	3.9	A	3.9
Lucas Valley/Las Gallinas	B	14.7	B	14.7	B	9.8	B	9.8
US101 SB Ramps/Lucas Valley Road	C	17.9	C	18.2	C	16.1	C	16.3
US101 NB Ramps/Smith Ranch Road	C	22.0	C	22.3	B	9.8	B	9.9
Unsignalized Intersections								
All-Way STOP								
Miller Creek/Marinwood	E	40.7	F	46.8	B	7.7	B	9.1
Miller Creek/Las Gallinas	D	22.7	D	22.8	A	3.7	A	3.8
2-Way STOP/T-Intersections								
US 101 NB Ramps/St. Vincent's Drive								
NBL	B	6.9	B	7.1	C	11.4	C	12.6
EBL	A	2.4	A	2.4	A	2.6	A	2.6
Intersection Average	A	3.6	A	3.8	B	6.4	B	7.1
US 101 SB Ramps/Miller Creek								
SBL	F	>60	F	>60	B	7.8	B	8.2
WBL	A	3.5	A	3.6	A	3.3	A	3.4
Intersection Average	F	>60	F	>60	A	1.5	A	1.4
Lucas Valley/Los Gamos								
NBL	F	>60	F	>60	E	31.2	E	32.8
NBR	B	9.9	C	10.2	C	11.2	C	11.6
WBL	E	37.3	E	40.8	A	4.6	A	4.6
Intersection Average	D	23.1	D	29.3	A	4.6	A	4.7
Highway Segments²								
South of Lucas Valley Road	F	0.97	F	0.98	E	0.92	E	0.92
North of Lucas Valley Road	F	0.96	F	0.96	E	0.91	E	0.91
North of Miller Creek Road	F	0.96	F	0.96	E	0.90	E	0.91

1 - Plus project LOS reflects planned traffic signal installation at SB off-ramp, October 2000.

2 - AM peak hour = southbound commute, PM peak hour = northbound commute.

Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane

Gamos Road, Highway 101 Southbound Ramps / Miller Creek Road, and Miller Creek Road / Marinwood Avenue.

During the PM peak hour, the unsignalized intersection at Lucas Valley Road / Los Gamos Road would to operate at unacceptable LOS E at the northbound left turning movement.

Each adversely impacted intersection is discussed in further detail below:

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, this unsignalized intersection experiences LOS F operations at the southbound left-turn / through movement under existing conditions. The addition of project traffic would result in further deterioration. The intersection operates acceptably in the PM peak hour. The AM peak hour impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour project traffic would result in a change in level of service from LOS E to LOS F as a result of the inbound, (westbound) left-turning project traffic accessing the office use. The AM peak hour impact is considered to be significant.

Lucas Valley Road / Los Gamos Road During the AM and PM peak hours, this unsignalized intersection experiences LOS F and LOS E operations respectively at the northbound left-turn movement under existing conditions. The addition of project traffic would result in further deterioration in the AM and PM peak hours. Both AM and PM peak hour impacts are considered to be significant.

Highway Segment Analysis

In general it should be noted that the project with the assisted living residential option would add vehicle trips to Highway 101 during both the AM and PM peak hours. The increase in traffic levels due to the project however, would have an imperceptible effect on highway operations. For instance, the project is estimated to add 23 PM peak hour vehicle trips to the highway segment north of Miller Creek Road. Under existing conditions this segment carries approximately 7,950 vehicles during the PM peak hour. An increase of 23 vehicles to the existing level of background highway traffic would be undetectable to drivers already on the highway and would have no measurable impact on existing operations. In general, traffic volumes on highways have been observed to fluctuate as much as ten percent on a daily basis. The reasons for day to day shifts are numerous and include such things as weather conditions, seasonal changes, accidents, and roadway construction activities. Therefore the project's contribution to peak hour highway volumes would be insignificant. At all highway study segments the project would affect less than a 0.003 (three-tenths of a percent) change to the V/C ratio

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment operates at LOS F ($V/C = 0.97$) under base year conditions. With the addition of this project's traffic (seven vehicles) the segment would continue to operate at LOS F ($V/C = 0.98$). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E ($V/C = 0.92$) under base year conditions. With the addition of this project's trips (11 vehicles) the segment would continue to operate at LOS E ($V/C = 0.92$). This impact is considered to be less-than-significant.

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment operates at LOS F ($V/C = 0.96$) under base year conditions. With the addition of this project's traffic (three vehicles) the segment would continue to operate at LOS F ($V/C = 0.96$). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E ($V/C = 0.91$) under base year conditions. With the addition of this project's trips (six vehicles) this segment would continue to operate at LOS E ($V/C = 0.91$). This impact is considered to be less-than-significant.

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment operates at LOS F ($V/C = 0.96$) under base year conditions. With the addition of this project's traffic (17 vehicles) the segment would continue to operate at LOS F ($V/C = 0.96$). This impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment operates at LOS E ($V/C = 0.90$) under base year conditions. With the addition of this project's trips this segment would continue to operate at LOS E ($V/C = 0.90$). This impact is considered to be less-than-significant.

Mitigation Measure 7.0-1 The following mitigations would be required to reduce existing plus alternative AM and PM peak hour conditions to a less-than-significant level.

Mitigation Measure 7.0-1(a) Miller Creek Road / Marinwood Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should fund this improvement.

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B under existing plus alternative conditions. Implementation of this measure would reduce this impact to less-than-significant.

Mitigation Measure 7.0-1(b) Lucas Valley Road / Los Gamos Road - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B under existing plus alternative conditions. During the PM peak hour, signalization would result in LOS B operations. Implementation of this measure would reduce this impact to less-than-significant.

As stated, this intersection would be signalized with the programmed improvements to the southbound Highway 101 ramps. If signalized prior to the reconstruction of the ramps, the signal controller and other infrastructure should allow for the later addition of a southbound leg at this intersection as well as for exclusive left-turn phases on the westbound approach and for a north-south split phase.

Mitigation Measure 7.0-1(c) Highway 101 Southbound Ramps / Miller Creek Road - Signalization is the recommended mitigation measure at this intersection. The applicant should pay its fair share toward this improvement.

Significance After Mitigation If this intersection were signalized, it would function at LOS C under existing plus alternative AM peak hour. Implementation of this measure would reduce this impact to less-than-significant.

Implementation of Mitigation Master Plan approval should be conditioned upon the applicant funding Mitigation 7.0-1(a) and 7.0-1(b) and paying its fair share of Mitigation 7.0-1(c) prior to issuance of a building permit.

Impact 7.0-2 Short-Range Cumulative AM and PM Peak Hour Conditions

Short-Range cumulative conditions would create significant peak hour impacts for the Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road intersections.

Exhibit 7.0-6⁴ shows peak hour intersection LOS operations under short-range cumulative conditions (no alternative and alternative scenarios). During the AM peak hour, the unsignalized intersections of Miller Creek Road / Marinwood Avenue, Highway 101 Southbound Ramps / Miller Creek Road and Lucas Valley Road / Los Gamos Road deteriorate from existing conditions under short-range cumulative (no alternative) conditions.

The three Highway 101 study segments deteriorate from base year conditions but remain at LOS F under short-range cumulative conditions during the AM peak hour.

During the PM peak hour, under short-range cumulative conditions, the left turn movement from Los Gamos Road at the unsignalized intersection of Lucas Valley Road / Los Gamos Road would continue to operate at LOS E with the addition of project traffic, with slightly increased delays.

All Highway 101 study segments deteriorate from base year conditions but remain at LOS F under short-range cumulative conditions during the AM peak hour and LOS E during the PM peak hour.

Impacted intersection and highway sections are discussed in further detail below

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the short-range cumulative base (no alternative) would result in an increase of delay at the southbound left-turn / through movement. This movement currently operates at LOS F under existing conditions. This cumulative impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour, project generated traffic added to the short-range cumulative base (no alternative) would result in a worsening in level of service at this intersection from existing conditions LOS E (42.8 sec/veh) to an unacceptable LOS F (53.8 sec/veh). This cumulative impact is considered to be significant.

Lucas Valley Road / Los Gamos Road During the AM peak hour, the addition of project traffic to short-range cumulative (no alternative) base traffic would result in further deterioration of this unsignalized intersection. The northbound left-turn would function at LOS F (>60.0 sec/veh). The

⁴ Level of service calculations prepared as a part of this EIR analysis, are available for review at the Marin County Community Development Agency.

Exhibit 7.0-6
Short-Range Cumulative Plus Assisted Living Residential Use AM/PM Peak Hour
Levels of Service

Intersection	AM Peak Hour				PM Peak Hour			
	Short Range - No Alternative		Short Range - Alternative		Short Range - No Alternative		Short Range - Alternative	
Signalized Intersections	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Lucas Valley/Miller Creek	B	7.9	B	7.9	A	3.7	A	3.7
Lucas Valley/Las Gallinas	B	14.4	B	14.4	B	9.9	B	9.9
US 101 SB Ramps/Lucas Valley	C	17.6	C	20.3	B	13.3	C	19.8
US 101 NB Ramps/Smith Ranch Road	D	35.3	D	35.9	B	9.9	B	10.0
Unsignalized Intersections								
All-Way STOP	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Miller Creek/Marinwood	E	42.8	F	53.8	B	7.3	B	9.1
Miller Creek/Las Gallinas	D	22.0	D	26.5	A	3.5	A	3.7
2-Way STOP/T-Intersections	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
US 101 NB Ramps/St. Vincent's Drive								
NBL	B	6.9	B	7.1	C	11.4	C	12.6
EBL	A	2.4	A	2.4	A	2.6	A	2.6
Intersection Average	A	3.6	A	3.8	B	6.4	B	7.1
US 101 SB Ramps/Miller Creek								
SBL	F	>60	F	>60	B	7.8	B	8.2
WBL	A	3.5	A	3.6	A	3.3	A	3.4
Intersection Average	F	>60	F	>60	A	1.5	A	1.5
Lucas Valley/Los Gatos								
NBL	F	>60	F	>60	E	37.6	E	39.7
NBR	C	10.2	C	10.4	C	14.2	C	14.6
WBL	E	40.8	E	44.8	B	5.1	B	5.1
Intersection Average	E	31.9	E	41.8	B	5.4	B	5.5
Highway Segments¹	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C
South of Lucas Valley Road	F	0.98	F	0.98	E	0.92	E	0.93
North of Lucas Valley Road	F	0.97	F	0.97	E	0.92	E	0.92
North of Miller Creek Road	F	0.97	F	0.98	E	0.91	E	0.91

1 - AM peak hour = southbound commute, PM peak hour = northbound commute;
Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.
(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

westbound left-turn movement would deteriorate to LOS E (44.8 sec/veh). These cumulative impacts are considered to be significant.

During the PM peak hour, this project would add additional traffic to this intersection and the northbound left-turn movement would increase vehicle delay but would continue to operate at LOS E. These cumulative impacts are considered to be significant.

Highway Segment Analysis

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS F (V/C = 0.98) with and without project traffic. This project would add seven trips which would further deteriorate the short-range cumulative LOS F (V/C = 0.978) to LOS F (V/C = 0.979). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (one-tenths of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E without project traffic (V/C = 0.92). When project traffic is added, this highway segment would operate at LOS E (V/C = 0.92). This impact is considered to be less-than-significant.

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS F (V/C = 0.97) with and without project traffic. This projects would add three trips to this segment which would further deteriorate the short-range cumulative LOS F (V/C = 0.966) to LOS F (V/C = 0.967). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (one-tenth of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E (V/C = 0.92) with and without project traffic. This impact is considered to be less-than-significant.

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment would continue to operate at LOS F (V/C = 0.97) without project traffic and LOS F (V/C = 0.97) with project traffic. This project would add 17 trips to this segment which would further deteriorate the short-range cumulative LOS F (V/C = 0.969) to LOS F (V/C = 0.976). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (seven-tenths of one percent).

During the PM peak hour (northbound direction) this highway segment would continue to operate at LOS E (V/C = 0.91) with and without project traffic. This impact is considered to be less-than-significant.

Mitigation Measures 7.0-2 The following mitigations would be required to reduce short-range cumulative AM and PM peak hour conditions to a less-than-significant level.

Mitigation Measure 7.0-2(a) Miller Creek Road / Marinwood Avenue - Same mitigation measure as 7.0-1(a).

Significance After Mitigation If this intersection were signalized, as recommended under existing plus project conditions, it would function at LOS B under short-range AM peak hour conditions.

Implementation of this measure would reduce this impact to less-than-significant. This project's percentage share of short-range traffic growth would be 65 percent during the AM peak hour. During the PM peak hour, the project's percentage share of short-range growth would be 67 percent.

Mitigation Measure 7.0-2(b) Lucas Valley Road / Los Gamos Road - Same mitigation measure as 7.0-1(b).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B under short-range cumulative plus project conditions. During the PM peak hour, signalization would result in LOS B operations. Implementation of this measure would reduce this impact to less-than-significant. This project's percentage share of short-range traffic growth would be 24 percent during the AM peak hour. During the PM peak hour, this project's percentage share of short-range growth would be 38 percent.

Mitigation Measure 7.0-2(c) Highway 101 Southbound Ramps / Miller Creek Road - Same mitigation measure as 7.0-1(c).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS C under short-range cumulative plus alternative conditions. Implementation of this measure would reduce this impact to less-than-significant. The project's percentage share of short-range traffic growth would be 65 percent during the AM peak hour. During the PM peak hour, the project's percentage share of short-range growth would be 60 percent.

Implementation of Mitigation Master Plan approval should be conditioned upon the applicant funding Mitigation 7.0-2(a) and 7.0-2(b) and paying its fair share of Mitigation 7.0-2(c) prior to issuance of a building permit.

Impact 7.0-3 Long-Range Cumulative AM and PM Peak Hour Conditions

Long-range cumulative conditions would create significant peak hour impacts for all of the unsignalized study intersections.

The peak hour LOS for long-range cumulative conditions at study area intersections and highway segments⁵ is shown in Exhibit 7.0-7. Under long-range cumulative conditions programmed improvements to the Highway 101 southbound ramp system would result in improved operations of the Highway 101 Southbound Ramps / Lucas Valley Road.

During the AM peak hour, all of the unsignalized intersections would operate at unacceptable conditions (LOS E and F).

Under PM peak hour conditions, the two unsignalized intersections of Highway 101 Northbound Ramps / Miller Creek Road and Highway 101 Southbound Ramps / Miller Creek Road would operate at LOS F conditions.

Each of these intersections and highway segments is discussed in further detail below:

⁵ Level of service calculations for long-term cumulative conditions, prepared as a part of this EIR analysis, are available for review at the Marin County Community Development Agency.

Exhibit 7.0-7
Long Range Cumulative Plus Assisted Living Residential Use AM/PM Peak Hour
Levels of Service

Intersection	AM Peak Hour				PM Peak Hour			
	Long Range - No Alternative		Long Range - Alternative		Long Range - No Alternative		Long Range - Alternative	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Signalized Intersections								
Lucas Valley/Miller Creek	B	9.4	B	9.4	A	4.1	A	4.1
Lucas Valley/Las Gallinas	C	22.8	C	22.8	B	10.3	B	10.3
Lucas Valley/Los Gatos	D	33.6	D	34.9	C	24.7	C	24.9
US101 NB Ramps/Smith Ranch Road	B	14.1	B	14.1	B	10.7	B	10.7
Unsignalized Intersections								
All-Way STOP								
Miller Creek/Marinwood	F	>60	F	>60	B	9.8	C	12.3
Miller Creek/Las Gallinas	E	34.4	F	45.1	A	4.3	A	4.6
2-Way STOP/T-Intersections								
US 101 NB Ramps/St. Vincent's Drive								
NBL	E	36.1	E	42.1	F	>60	F	>60
EBL	B	5.2	B	5.2	B	5.2	B	5.3
Intersection Average	B	6.4	B	7.5	F	>60	F	>60
US 101 SB Ramps/Miller Creek								
SBL	E	38.9	E	42.3	F	>60	F	>60
SBR	F	>60	F	>60	B	5.6	B	5.9
WBL	B	7.2	B	7.6	B	6.1	B	6.4
Intersection Average	F	57.3	F	>60	D	20.3	D	28.8
Highway Segments¹								
South of Lucas Valley Road	E	0.90	E	0.90	F	0.99	F	0.99
North of Lucas Valley Road	E	0.89	E	0.89	F	0.96	F	0.96
North of Miller Creek Road	E	0.89	E	0.89	F	0.98	F	0.99

1 - AM peak hour = southbound commute, PM peak hour = northbound commute;
Highway volume to capacity (V/C) ratio calculated at 2,200 vehicles per hour per lane.
(V/C) ratio shown for purposes of comparison. Freeway LOS based on HCM 2000 methodology (density).

Highway 101 Northbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the long-range cumulative base would result in increased delay at the northbound left-turn movement. The northbound left-turn movement is projected to operate at LOS E without project traffic. With the addition of project traffic, the movement would operate at LOS F. This cumulative impact is considered to be significant.

During the PM peak hour, the northbound left-turn would operate at LOS F under long-range cumulative conditions, with or without project traffic. This cumulative impact is considered to be significant.

Highway 101 Southbound Ramps / Miller Creek Road During the AM peak hour, project generated traffic added to the long-range cumulative base would result in increased delay at the southbound left-turn and right-turn movements. The southbound left-turn movement is projected to operate at LOS E without project traffic. With the addition of project traffic, the movement would operate at LOS F. The southbound right-turn movement would operate at LOS F with or without the addition of project traffic. These cumulative impacts are considered to be significant.

During the PM peak hour, the southbound left-turn would operate at LOS F under long-range cumulative conditions, with or without project traffic. This cumulative impact is considered to be significant.

Miller Creek Road / Marinwood Avenue During the AM peak hour, this intersection would operate at LOS F conditions, with or without the addition of project traffic. This cumulative impact is considered to be significant.

Miller Creek Road / Las Gallinas Avenue During the AM peak hour, this unsignalized all-way-stop intersection would experience minor deterioration as a result of project trips added to long-range cumulative development. The intersection would operate at unacceptable LOS E (34.4 sec/veh) without the project, and at LOS F (45.1 sec/veh) with the project. This cumulative impact is considered to be significant.

Highway 101 Southbound Ramps / Lucas Valley Road As stated, this location would cease to function as an intersection and is not analyzed for that reason.

Highway Segments

The Marin County CMA 2020 forecast for the Highway 101 study segments includes the addition of a reversible, high occupancy vehicle (HOV) lane. This project is approved and funded and will provide additional capacity to the Highway 101 corridor.

The CMA model estimates of peak hour traffic include a portion of that traffic assigned to the HOV lanes. The EIR long-range freeway analysis accounts for the HOV lane traffic (1,360 AM peak hour southbound vehicles, and 1,285 PM peak hour northbound vehicles) in the long-range without and with project scenarios.

Highway 101 - Segment South of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would operate at LOS E ($V/C = 0.90$) as a result of long-range cumulative development. With the addition of project traffic the segment would continue to operate at LOS E ($V/C = 0.90$). The AM peak hour cumulative impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment would operate at LOS F ($V/C = 0.99$) under the no alternative long-range cumulative development scenario. With the addition of this project's trips this segment would continue to operate at LOS F ($V/C = 0.99$). The project would add 11 trips to this segment which would further deteriorate the long-range cumulative LOS F ($V/C = 0.991$) to LOS F ($V/C = 0.992$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (one-tenth of one percent).

Highway 101 - Segment North of Lucas Valley Road During the AM peak hour (southbound direction) this highway segment would operate at LOS E ($V/C = 0.89$) as a result of long-range cumulative development with and without the project. The AM peak hour cumulative impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment would operate at LOS F ($V/C = 0.96$) under the no alternative and with project scenario. The project would add six trips to this segment which would further deteriorate the long-range cumulative LOS F ($V/C = 0.962$) to LOS F ($V/C = 0.963$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (one-tenth of one percent).

Highway 101 - Segment North of Miller Creek Road During the AM peak hour (southbound direction) this highway segment would operate at LOS E ($V/C = 0.89$) as a result of long-range cumulative development. With the addition of project traffic the segment would remain at LOS E ($V/C = 0.89$). The AM peak hour cumulative impact is considered to be less-than-significant.

During the PM peak hour (northbound direction) this highway segment would operate at LOS F ($V/C = 0.978$) under long-range cumulative conditions. The addition of 23 project trips would further deteriorate to LOS F ($V/C = 0.981$). This is considered to be less-than-significant because the V/C shift from without project traffic to with traffic is less than one percent (three-tenths of one percent).

Mitigation Measure 7.0-3 The following mitigations would be required to reduce long-range cumulative AM and PM peak hour conditions to a less-than-significant level. The applicant would also pay Northgate Activity Center Plan traffic mitigation fees based on 26 PM peak hour project generated trips that would travel through the Highway 101 / Lucas Valley Road / Smith Ranch Road intersection.

Mitigation Measure 7.0-3(a) Miller Creek Road / Marinwood Avenue - Same mitigation measure as 7.0-1(a).

Significance After Mitigation If this intersection were signalized, it would function at LOS B (6.7 sec/veh) under long-range AM peak hour conditions. Implementation of this measure would reduce this impact to less-than-significant. This project's percentage share of long-range traffic growth would be 13 percent during the AM peak hour. During the PM peak hour, the project's percentage share of long-range growth would be 18 percent.

Mitigation Measure 7.0-3(b) Lucas Valley Road / Los Gatos Road - Same mitigation measure as 7.0-1(b).

Significance After Mitigation It was assumed in the analysis that this location would be signalized as part of the Highway 101 / Lucas Valley interchange improvement under long-term cumulative conditions. During the AM peak hour, this signalized intersection would function at LOS D under

long-range cumulative plus project conditions. During the PM peak hour, the intersection would operate at LOS C.

Mitigation Measure 7.0-3(c) Highway 101 Southbound Ramps / Miller Creek Road - Same mitigation measure as 7.0-1(c).

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B under long-range cumulative plus project conditions. The intersection would operate at LOS B during the PM peak hour. Implementation of this measure would reduce these impacts to less-than-significant. This project's percentage share of long-range traffic growth would be 14 percent during the AM peak hour. During the PM peak hour, this project's percentage share of long-range growth would be 8 percent.

Mitigation Measure 7.0-3(d) Miller Creek Road / Las Gallinas Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.

Significance After Mitigation If this intersection were signalized, it would function during the AM peak hour at LOS B (8.1 sec/veh). Implementation of this measure would reduce this impact to less-than-significant. This project's percentage share of long-range traffic growth would be two percent during the AM peak hour. During the PM peak hour this project's percentage share of long-range growth would be five percent.

Mitigation Measure 7.0-3(e) Highway 101 Northbound Ramps / Miller Creek Road - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.

Significance After Mitigation During the AM peak hour, if this intersection were signalized, it would function at LOS B (12.2 sec/veh) under long-range cumulative plus project conditions. The intersection would operate at LOS D (25.6 sec/veh) in the PM peak hour. Implementation of this measure would reduce these impacts to less-than-significant. This project's percentage share of long-range traffic growth would be five percent during the AM peak hour. During the PM peak hour the project's percentage share of long-range growth would be six percent.

Implementation of Mitigation Master Plan approval should be conditioned upon the applicant funding Mitigation 7.0-3(a) and 7.0-3(b) and paying its fair share of Mitigation 7.0-2(c), 7.0-2(d), 7.0-2(e) prior to issuance of a building permit.

Air Quality

Implementation of the Assisted Living Residential Use option would result in air quality impacts similar to those associated with the proposed project. This would be potentially significant construction period impacts and less-than-significant long-term operational local and regional impacts.

Noise

The Assisted Living Residential Use option would have similar significant land use compatibility impacts as the project. Building A, the assisted living facility, would be exposed to noise levels in excess of those deemed compatible with residential land uses per the Program N-1.1b of the Noise Element of the *Marin Countywide Plan*.

Building A would be exposed to an L_{dn} of up to 70 dB. The Noise Element of the *Marin Countywide Plan* states that an acoustical analysis shall be performed for new residential development in areas with greater than a 60 dBA outdoor L_{dn} to determine the appropriate mitigation measures for meeting an exterior noise level of 60 dBA measured at the property line and an interior noise level of 45 dBA. This would be a significant impact.

Mitigation Measure – The site could be designed to meet the County's requirement for interior noise levels by using sound rated windows as necessary and providing the buildings with mechanical ventilation so that the windows could be maintained closed. It should be noted that if resident's facing Highway 101 open their windows, interior noise levels would be excessive. Outdoor areas exposed to an L_{dn} of 60 dB or less could be provided on the back side of the building and possibly on the front side if the areas were enclosed with a walled plaza or patio. However, a soundwall about ten feet high would be required to provide the necessary shielding in front of the building.

Building B would be used to house services for the residential assisted living facility, including administrative services and medical offices, would be exposed to a L_{dn} of 70 dB. The impacts and mitigation measures would be the same as for the proposed project.

Traffic noise impacts with the assisted living residential use option would be the same as for the proposed project.

Construction noise impacts would be the same with the assisted living residential use option as with the proposed project.

Public Services

- **Fire Service** Both the Marinwood Fire Department (fire protection) and the San Rafael Fire Department (paramedic service) expressed concern that the Assisted Living Residential Use option would have greater service impacts than the proposed project.⁶ In 2001 the Marinwood Fire Department responded to a total of 906 calls for service. In 2001 the Marinwood Fire Department responded to a total of 88 calls for service to the Smith Ranch Homes assisted living development (245 units) resulting in a call volume of 2.78 units per call.⁷ Based on this generation rate the assisted living residential facility in this alternative would result in an additional 54 annual calls for service to the Marinwood Fire Department. In addition to the increase in demand for service the Marinwood Fire Department staff has concerns regarding additional equipment which may be required to respond to the assisted living residential facility depending on final design factors such as building height and layout.

The San Rafael Fire Department responded to a total of 6,161 calls for service in 2001, approximately 75 percent of the calls were for paramedic service. A concern expressed by the

⁶ Nichols • Berman conversation with Thomas Horn, District Manager, Marinwood Community Services District and Robert Marcucci, Fire Chief, San Rafael Fire Department, April 2002.

⁷ Memo to Bob Berman, Nichols • Berman from Thomas Horne District Manager, Marinwood Community Services District, April 29, 2002.

San Rafael Fire Department is the increasing number of times when the department receives multiple calls for paramedic service at the same time. Calls for paramedic service are increasing at a rate of approximately six percent per year. Based on its experience with other assisted living facilities within its service area the San Rafael Fire Department states that the proposed assisted living facility would generate more calls for paramedic service than a similar amount of office space. Also, based on recent experience assisted living facilities as compared to other residential development have a larger percentage of calls in the evening hours.

Based on the information available, although the Assisted Living Residential Use option would result in an increase in annual calls for service, the project would not result in substantial adverse physical impacts associated with new or physically altered City of San Rafael or Marinwood Fire Department facilities in order to maintain acceptable service ratios, response times or other performance objectives.

- **Police Protection** The Assisted Living Residential Use option would likely generate more calls for police service than the project, a less-than-significant impact in both cases because no physical impacts would result from the increased demand.
- **Water Service** Based on Marin Municipal Water District's (MMWD) estimates the assisted living residential facility of this alternative would result in an annual water demand of 19.5 acre feet compared with 9.4 acre feet for the office portion of the proposed project.⁸ However, as with the proposed project, the MMWD has sufficient capacity to serve the project.
- **Sanitary Sewer Service** The Las Gallinas Valley Sanitation District (LGVSD) uses a generation rate of 200 gallons per day (gpd) per unit for residential development. For assisted living facilities LGVSD assumes that units without full kitchen facilities would generate 40 percent of the normal daily generation rate and units with full kitchen facilities would generate 100 percent of the daily generation rate.⁹ Therefore, the assisted living residential facility of this alternative would generate an estimated 21,000 gpd compared with 11,328 gpd for the office portion of the proposed project. However, as with the proposed project, the LGVSD wastewater plant has sufficient existing capacity to serve the project and this would remain a less-than-significant impact.
- **Public Schools** Similar to the office portion of the proposed project, the assisted living residential portion of this alternative would not generate any school aged children. Therefore, impacts on the Dixie Elementary School District and the San Rafael High School District would be the same as for the project.

Costs and Revenues

The Assisted Living Residential Use option would generate a similar amount of revenue for the County and special districts as the project, due to the similar level of development. The actual amount of revenue would depend on the estimated value of the two assisted living building as

⁸ The MMWD estimates that an assisted living residential facility would use approximately 0.13 acre-feet per unit per year. Nichols • Berman conversation with Eric McGuire, MMWD, April 2002.

⁹ Nichols • Berman conversation with Al Petrie, District Manager, LGVSD, April 2002.

compared to the estimated value of the two office buildings. As with the project and all alternatives, no physical changes would result from economic impacts of site development.

Master Response B – Visual Analysis

In response to comments received on the Draft EIR new photosimulations of the two buildings located along the frontage of Highway 101 were prepared. –

Exhibit 7.0-8 shows the site from northbound Highway 101 looking northwest. This view is similar to the view in Exhibit 5.4-14 in the Draft EIR. Exhibit 7.0-9 illustrates the project at completion, but before installation of landscaping, as seen from this viewpoint. As discussed in Impact 5.4-5 the form of the proposed Building A would be prominent and would attract attention. The building would become less dominant as the proposed landscaping matures. The berm that is illustrated is the berm that is proposed as a part of the Assisted Living Residential Use option described above. The berm, proposed between the on-site parking lot and Highway 101, would be noticeable and would screen the parking lot from this location.

Exhibit 7.0-10 shows the site from northbound Highway 101 looking southwest. In the comments on the Draft EIR some commentors requested a view of this portion of the project site from southbound Highway 101. However, due to safety concerns it was not possible to photograph the project site from southbound Highway 101. Exhibit 7.0-11 illustrates the project at completion, but before installation of landscaping, as seen from this viewpoint. From this viewpoint Building B would be prominent and would attract attention. A portion of the access road would be visible from this location, as would the concrete retaining wall constructed along the west side of the access roadway in the vicinity of Building A. Similar to the discussion above, the various elements of the project visible in the photosimulation would become less dominant as the proposed landscaping matures.

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Exhibit 7.0-8
View from Northbound Highway 101 Looking Northwest – Existing Conditions



Source: Matt Brockway

Photograph Date: January 18, 2002

*Exhibit 7.0-9
View from Northbound Highway 101 Looking Northwest – Proposed Project*



Source: Matt Brockway

Exhibit 7.0-10
View from Northbound Highway 101 Looking Southwest – Existing Conditions



Source: Matt Brockway

Photograph Date: January 18, 2002

*Exhibit 7.0-11
View from Northbound Highway 101 Looking Southwest – Proposed Project*



Source: Matt Brockway

Master Response C -- Energy

In response to comments that additional information regarding potential energy impacts of the proposed project the following information is provided.

Electric Service Setting

Pacific Gas & Electric Company (PG&E) provides electricity and gas to 12 million Californians, from Eureka to Bakersfield, including the project area. The energy supplied by PG&E is administered by the California Independent Systems Operator (CAISO), a private nonprofit organization created as part of California's 1996 deregulation plan to monitor the ebb and flow of electricity use on the energy grid. The CAISO acts as an auction house; purchasing power as needed from electricity suppliers on behalf of the utility companies, who then deliver electricity to consumers. The CAISO is responsible for overseeing energy supply to approximately 124,000 square miles of California (75 percent of the state), delivered via PG&E, Southern California Edison, and San Diego Gas and Electric.

The intent of the CAISO is to assure the necessary power is available, and when electricity demand nears total available supply, the CAISO orders rolling blackouts to avoid collapse of the entire electricity grid. In 2001, the CAISO had access to about 46,000 megawatts, depending upon how many generators were on-line.¹⁰ This includes an additional 2,000 megawatts of generating capacity from twelve new plants which went on-line in 2001.

California has recently experienced problems related to the price and supply of electricity. The State has addressed these problems and the rising cost of electricity by promoting large-scale conservation efforts, encouraging the building of new electricity generation plants, and entering into long-term contracts with electricity suppliers at fixed rates, in order to avoid the volatility of the regular energy market. In August of 2001, the State's efforts to avoid blackouts were considered largely successful, greatly aided by cool weather and consumer conservation.

Additional energy supply due to new power plants and fewer existing plants being off-line for repair also contributed to the prevention of emergency situations. As mentioned above, by the end of 2001, 2,000 additional megawatts of generating capacity came online, an amount equivalent to about five percent of the CAISO's current peak demand of 40,000 megawatts. There are currently five approved plants representing 3,540 megawatts scheduled to come online in 2002; eight plants representing 4,431 megawatts for 2003; and two plants representing 1,000 megawatts for 2004. Therefore, 15 approved plants providing a total of 8,971 megawatts are scheduled to be available by the end of 2004. Additionally, 21 project representing 11,525 megawatts are under consideration by the

¹⁰ The number of generating plants on-line and therefore the generating capacity available to the CAISO is determined by estimated demand throughout the day, and depends upon both the scheduled and emergency off-line status of generating facilities. When actual generating capacity cannot reach actual peak demand, shortages occur.

California Energy Commission.¹¹ By some estimates, the state will experience a costly energy surplus by 2004.¹²

Energy consumption is measured in kilowatt hours (kWh) and megawatt hours.¹³ The CAISO monitors 164 billion kWh a year. According to the California Energy Commission, the utility demand for Marin County for the year 2000 was 1,568 million kWh.¹⁴ The average household of 2,500 square feet or greater uses 10,079 kWh per year, while office use results in 89,000 kWh per year for a 6,950 square foot office.¹⁵

Project Impacts

The proposed project would result in 94,400 square feet of office space and 28 housing units. Based on PG&E residential and commercial energy consumption surveys, the proposed additional housing and office buildings would require an estimated maximum of 1,491,075 kWh per year, in addition to the existing Marin County usage.

Considering the year 2000 demand of 1,568 megawatts for Marin County, and the additional supply of 8,971 megawatts throughout the state by 2004, energy suppliers would have sufficient capacity to accommodate the proposed project demand of 1.5 megawatts. This would represent an increase in Marin County's energy demand of approximately 0.01 percent. Because adequate energy would be available to serve the project, the project would represent a less-than-significant impact on energy supply.

Cumulative Impacts

The California Energy Code (CCR Title 24, Section 6) provides minimum standards for energy efficiency to be incorporated into new home design. PG&E as well as Federal and State agencies have offered incentive programs to encourage developers to go beyond Title 24. These programs encourage use of Energy Star Rating appliances, automatic light sensors, fluorescent lighting, extra insulation for floors, walls, and attics, double-paned windows with low-emissivity coating, and more efficient sealing of all ducts, walls, windows, and doors. In addition, the Marin County CDA has developed a new energy efficiency program entitled *Building Energy Efficient Structures Today*

¹¹ Power Facilities Licensing Cases Approved by the California Energy Commission.
<http://www.energy.ca.gov/sitingcases/approved.html>

¹² Los Angeles Times, "Sudden Power Glut Puts State in Costly Bind," Saturday, August 11, 2001.

¹³ A kilowatt is one thousand watts, and a megawatt is one million watts. A kilowatt hour is one thousand watts consumed over one hour while a megawatt hour is one million watts of electricity consumed over one hour.

¹⁴ California Energy Commission Utility Deliveries, 2000. (point Reyes response)

¹⁵ Residential Energy Survey Report, PG&E. <http://www.pge.com/003-save-energy/003a-res/pdf/res.pdf>
Commercial Building Survey Report, PG&E, 1999.
http://www.pge.com/003_save_energy/003b_bus/pdf/CEUS_1999.pdf

(BEST). These construction techniques combined with Energy Star appliances could reduce energy use by 30 percent over the average home.¹⁶

Implementation of energy conservation techniques is a voluntary action on the part of the developer. The applicant should be encouraged to implement measures from one or more of these energy conservation programs as a method to lessen future cumulative energy supply impacts.

While any new development would increase demand for electricity, the proposed project is not of sufficient size to consume resources at a substantially increased rate. Additionally, 8,971 megawatts are scheduled to be available by the end of 2004; the proposed project represents 0.018 percent of this additional generating capacity, and if approved in 2002, would likely be built by that time. Therefore, the cumulative effects of project demand on overall energy supply would be considered less-than-significant.

Master Response D – Transportation and Circulation

A number of the commentors expressed a concern that the most up to date information was not used in the Transportation and Circulation section. For example, a number of comments on the Draft EIR related to the use of traffic data that was more than one year old. A concern was expressed that by not using the most recent traffic data project-generated traffic impacts would be understated. Another concern stated was that short-range cumulative conditions were not based on the County's most current list of future projects. A number of commentors requested that this information be updated.

In response to these comments Section 5.5 (*Transportation and Circulation*) of the Draft EIR has been updated based on the most current information available regarding existing conditions and short-range future cumulative conditions.

For example, the peak hour intersection traffic counts used in the Draft EIR analysis were taken in January 2000. The 2000 peak hour volumes at four of the study intersections were compared to peak hour counts taken in March 2001 by Marin County.¹⁷ The four intersections used for comparison purposes are:

- Highway 101 Southbound Ramp / Miller Creek Road
- Miller Creek Road / Marinwood Avenue
- Miller Creek Road / Las Gallinas Avenue
- Lucas Valley Road / Miller Creek Road

The Highway 101 Southbound Ramp / Miller Creek Road intersection showed an increase in morning commute hour traffic of 2.7 percent compared to the January 2000 count. The increase represented a peak hour total of 55 additional intersection vehicles. Morning peak hour traffic volumes at the other

¹⁶ Energy Star is a Federally-monitored appliance rating system.

¹⁷ These counts were taken prior to the traffic calming measures implemented by the County in May 2001 and therefore were comparable to the 2000 counts. See Response to Comment 11-H for further discussion of "freeway jumpers".

three intersections were all lower than the 2000 counts. The decrease in total peak hour traffic at these locations ranged from just under one percent at Miller Creek Road / Las Gallinas Avenue to four percent at Miller Creek Road / Marinwood Avenue. These differences were not significant in terms of the numbers of peak hour vehicles and indicated that traffic in the area had neither improved nor worsened in the 14-month period between the intersection counts.

In March of 2002, Wilbur Smith Associates (the EIR traffic consultant) conducted 15 minute spot check counts of PM peak hour traffic at the Highway 101 / Lucas Valley Road Ramps. These observations indicated that traffic was lower than counts collected in January 2000 at both the northbound and southbound locations by approximately three percent. Again, a difference of three percent is not significant. Studies of traffic flow characteristics have found a potential for wide variability (up to ten percent) in peak hour volumes on a daily basis at the same locations. What the comparisons do suggest is that peak hour traffic has not increased significantly over the past two year period in this area and may have in fact decreased slightly.

The January 2000 study area AM and PM peak hour intersection volumes were increased by 1.5 percent per year (three percent total) and used to provide the base case analysis for both the existing and short-range cumulative revised analysis. The January 2000 intersection volumes were increased to ensure a conservative approach to the analysis of traffic impacts.

In addition to the traffic count data, the Caltrans Highway 101 freeway traffic volumes have been updated. The Draft EIR used 1998 traffic volume data from Caltrans. The updated Highway 101 volumes were taken from the *Caltrans Traffic Operations Division Homepage* and were recorded in June 2000.

The short-range cumulative traffic analyses was based on a manual assignment of vehicle trips generated from approved projects within the study area as listed in the *Marin County Propdev 29, Semi-Annual Proposed Development Survey*, published in August 1999. In response to comments the short-range land use and trip generation numbers have been updated based on the most current version of Propdev (*Marin County Propdev 34, Semi-Annual Proposed Development Survey*, published in February 2002).

As a result of this work Section 5.5 (*Transportation and Circulation*) has been revised and updated.

Section 15088.5(a) of the *State CEQA Guidelines* provides guidance regarding the recirculation of EIRs. CEQA states that if subsequent to public review and interagency consultation, but prior to final certification, the lead agency adds "significant new information" to the EIR which introduces new or more severe impacts, or a feasible project alternative or a mitigation measure which would clearly lessen environmental impacts but the project sponsor declines to adopt, then the lead agency must recirculate the EIR for additional commentary and consultation. New information is considered "significant" when the EIR is changed in a way that "deprives the public of a meaningful opportunity to comment".

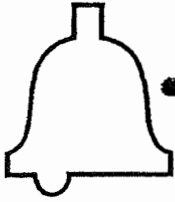
It should be noted that although the Transportation and Circulation section has been updated, no "triggering event" as specified in Section 15088.5(a) of the *State CEQA Guidelines* requiring recirculation has been identified. Based on the revised Transportation and Circulation section no new significant impacts would occur nor no substantial increase in the severity of an environmental impact would occur.

7.4 RESPONSE TO COMMENTS

Response to Written Comments

All comments submitted to the County on the Draft EIR in letters 1 through 29 are presented in the following pages. The original letters are reproduced, and comments are numbered for referencing with responses. Some responses refer readers to other comments or responses in this section or to the pages in the Draft EIR where specific topics are discussed.

CITY OF



LETTER 1

San Rafael

Mayor
Albert J. Boro

Council Members
Paul M. Cohen
Barbara Heller
Cyr N. Miller
Gary O. Phillips

RECEIVED
2001 MAY 14 PM 4:51
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

May 14, 2001

Tim Haddad
Environmental Planning Coordinator
Marin County Community Development Agency
3501 Civic Center Drive Room 308
San Rafael, CA 94903

Re: Revised Draft Environmental Impact Report – Oakview Project (State Clearinghouse No. 99032052)

Dear Mr. Haddad:

The following constitute comments of the City of San Rafael on the Draft EIR for the Oakview Project:

1. Relationship to Public Plans and Zoning

A Section 4.0 of the Draft EIR correctly identifies the project's conflict with the City of San Rafael's General Plan land use designation and the provisions of the Memorandum of Understanding (MOU) whereby the City became a responsible agency by virtue of the requirement for the project to successfully complete the City's discretionary Priority Projects Procedure (PPP). Since the PPP approval would require a finding of consistency with the City's General Plan, which designates the site Hillside Residential, the two office buildings proposed would be inconsistent and may preclude the allocation of traffic capacity. We believe the inconsistency with the San Rafael General Plan constitutes a significant impact. Page 4.0-1 of the DEIR quotes the Marin County Environmental Impact Review Guidelines and Procedures as stating that a significant impact would result from "land uses that would conflict with existing or proposed uses at the periphery of the project area or with other local land use plans." We believe that the City's General Plan, which includes San Rafael's Sphere of Influence, and is applicable to subsequent project approvals as authorized by the MOU, constitutes a "local land use plan" with which the proposed office use is inconsistent.

2. Transportation and Circulation

- B a) The long-range cumulative traffic conditions utilized in the DEIR assume the completion of the Highway 101/Lucas Valley Road southbound ramp improvements. However, Page 5.5-15 of the DEIR notes that "currently there are not sufficient local funds available to construct the project in the near-term." The DEIR assumes that funding, approvals and construction of the interchange improvement will occur prior to 2015. Given that relatively little private development potential remains in San Rafael or the County in the vicinity of the project,

what assumptions were made regarding the cost of the interchange improvement, currently available funds and specific, future developer contributions other than the Oakview project?

b) Page 4.0-39 of the DEIR notes that, "The County agreed that any land use approvals granted to the project site by the County will include provisions for the implementation of the off-ramp [Highway 101/Lucas Valley Road] project." However, on Page 4.0-42, the DEIR notes that, "The Master Plan does not set aside a specific area for the Highway 101/Lucas Valley Road interchange, the application does state that "land reserved for the future development of an interchange is included in Open Space Parcel B." How will the land for the interchange be secured? If land dedication is not required as part of the project approvals, has the purchase price of the land been included in the cost assumptions and developer funding projections referred to above?

c) It is unclear how the 56 trips impacting Lucas Valley Road/Smith Ranch Road as referenced in Mitigation Measure 5.5-3 were calculated. More detailed technical information is required.

d) Mitigation Measure 5.5-3 indicates that the amount of the City of San Rafael's traffic impact fee paid by the applicant "would be offset by 55 percent of the cost of other area-wide improvements financed by the applicant, pursuant to the Board of Supervisors Resolution 84-501." This is inconsistent with the MOU between the City and County which states that "the County will charge the full traffic mitigation fee set in the San Rafael General Plan on all development approvals served by the Lucas Valley/101 interchange." There are no provisions in the MOU for fee reductions based on other off-site traffic improvements.


e) The unsignalized intersection level of service delay calculation listed in the exhibits (such as 5.5-11) is unclear. The delay >60 seconds does not reveal the full traffic impacts. To better assess the impact and mitigation in more detail, actual delay and queue calculations are required. Interim mitigations and solutions must be identified and implemented as project specific mitigations. For example, the project short term impact which cause the intersection of Miller Creek and Northbound 101 ramps to deteriorate to LOS F must be further analyzed and mitigated.

f) A technical appendix revealing the LOS calculation sheets is necessary to further analyze the project impacts. The long term mitigation measures indicate that the Miller Creek interchange can be mitigated with signalization only. San Rafael's General Plan traffic modeling has indicated that this interchange must be widened on the overpass and ramp, in addition to signalization, to achieve an acceptable LOS.

g) The traffic analysis should be reconsidered based on the recent traffic calming measures recently instituted by the County on Miller Creek and Las Gallinas Avenue.

h) We look forward to seeing these issues addressed more fully in the Final EIR.

Sincerely,



Robert M. Brown, AICP
Community Development Director

RESPONSE TO LETTER 1 – CITY OF SAN RAFAEL, ROBERT M. BROWN, AICP, COMMUNITY DEVELOPMENT DIRECTOR

Response to Comment 1-A

Chapter 4.0 of the Draft EIR acknowledges the conflict between *The Marin Countywide Plan's* land use designation and the *City of San Rafael General Plan 2000's* land use designation for the project site. As stated on page 4.0-42 of the Draft EIR the proposed office buildings would not be consistent with the City's Hillside Residential designation.

However, it is the County's position that in this instance, where the project site is not proposed for annexation to the City of San Rafael, where there is a conflict between the County's and the City's land use designation it is the County's General Plan that prevails.

It should also be noted that it is the County's position that there is a significant environmental effect only when a proposed project conflicts with an adopted plan's policy when that policy is related to environmental issues and the conflict results in a significant physical impact. If a policy is not designed to protect an environmental resource or if the conflict does not result in a significant environmental impact than the mere conflict with the policy would not constitute a significant impact.

It is acknowledged that the City of San Rafael has a discretionary approval related to the proposed project through the City's Priority Projects Procedures. Based on the Priority Projects Procedures the City will make its own determination in regard to consistency of the proposed project with the City's General Plan.

Partly in response to comments provided by the City of San Rafael the project applicant has submitted an option to the use of Buildings A and B for an assisted living residential use which is evaluated in this *Response to Comments*. This optional land use removes the proposed office use along Highway 101 and substitutes an assisted living residential use.

Response to Comment 1-B

Assumptions related to the funding and construction of the Highway 101 / Lucas Valley Road southbound ramp improvements by 2015 are provided on page 5.5-15 of the Draft EIR. The primary assumptions are based on the recognition by state and local agencies for the need of these improvements, on the preliminary studies conducted by Caltrans and on the indication that efforts will be made to secure state and federal funds for the project. To date the improvement project remains listed as locally funded without sufficient funds to complete construction. At this time there is no guarantee that improvements will be constructed prior to 2015. A preliminary analysis of the Lucas Valley / Highway 101 ramp intersections under 2015 traffic conditions without the improvements indicates unacceptable LOS F conditions during the AM peak hour and unacceptable mid-range LOS D and LOS E conditions during the PM peak hour. These unacceptable conditions occur with and without traffic from the proposed project.

Response to Comment 1-C

As stated on page 2.0-10 of the Draft EIR within Open Space Area B land is reserved for the future Highway 101 / Lucas Valley Road southbound ramps. It is understood that the project applicant anticipates that the area required for the future interchange would be purchased by the appropriate public agency.

As an alternative it is suggested that dedication of the land necessary for the interchange's southbound ramps be included as a condition of approval of the Master Plan, and subsequent approvals, if the project is recommended for approval by the County Planning Commission and Board of supervisors.

Response to Comment 1-D

The 56 trips calculated to impact the Highway 101 /Lucas Valley Road (SB) and Smith Ranch Road (NB) intersections during the PM peak hour is incorrect. This number represents project vehicle on the freeway mainline and was incorrectly applied to the interchange intersections. The PM peak hour project generated trips which would use the interchange intersections is calculated at 31 vehicles (20 vehicles inbound (west on Lucas Valley road) and 11 vehicles outbound (east on Lucas Valley Road). The routes of these trips can be found on Exhibit 5.5-7. Exhibit 5.5-5 provides information on project peak hour trip generation and Exhibit 5.5-6 shows how project trips were distributed over the roadway network.

During the PM peak hour the majority of project trips would be generated by the office use located on Marinwood Avenue, and the majority of these trips were assigned to the Highway 101 / Marinwood interchange. The project would locate 20 single-family units off of Lucas Valley Road and it is these units which would be responsible for the majority of vehicle activity at the Highway 101 / Lucas Valley Road interchange.

Response to Comment 1-E

Comment noted.

Response to Comment 1-F

The unsignalized intersection delay is not provided beyond LOS F >60 seconds delay per vehicle based on the limitations of the Highway Capacity Methodology (HCM). The software can not calculate meaningful delay values beyond the range of the capacity of a lane. The methodology calculates delay based on an exponential curve, and as near full capacity of a lane (LOS E-F) is reached the addition of even a small number of vehicles results in a disproportionate and inaccurate amount of delay being added to the intersection. The LOS calculation sheets associated with this report do provide specific delay values beyond 60 seconds. Some of the delay values exceed 500 seconds (8.3 minutes) per vehicle and are meaningless as a measure of the full traffic impacts. A better measure is the understanding that LOS F conditions represent a lane or intersection at or near capacity where delays of 45 seconds and more are experienced by motorist and where operational problems linked to excessive queues are prevalent.

The report does identify project impacts at intersections in terms of the number of vehicles added and the effect of these vehicles on LOS operations. In those cases where a intersection is already experiencing unacceptable LOS E-F conditions, the addition of any project generated traffic is clearly noted as a significant impact and the number of project vehicles added is identified. In response to the specific comment regarding the short-range cumulative operations of the Miller Creek/Highway 101 Northbound ramps, the analysis did not identify any significant operational impacts (LOS F) at this intersection and therefore no mitigation was proposed or necessary.

Response to Comment 1-G

Comment noted. A technical appendix was prepared for the EIR transportation analysis and was made available for public review at the Marin County Community Development Agency. The LOS calculation sheets as part of the technical appendix. The revised LOS calculations are also available for review at the Marin County Community Development Agency.


The HCM methodology used for the analysis of the project provides a detailed description of the operations at individual intersections. Based on this methodology, the signalization of the Miller Creek interchange would allow AM and PM peak hour traffic from the project, as well as long-range cumulative traffic (including traffic associated with the St. Vincent's / Silveira development, Scenario 5) to enter and exit Highway 101 at an acceptable level-of-service. While the HCM analysis provides data on estimated queue lengths, it does not provide the ability to analyze the interaction of the individual study intersections. The City of San Rafael's General Plan traffic modeling was not used for purposes of this project analysis. Short-range traffic volume forecast were based on the County's Propdev document and long-term forecasts were developed from the County CMA travel demand model which included buildout of the Lucasfilm projects and the St. Vincent's / Silveira (Scenario 5) development.

Response to Comment 1-H

The traffic calming measures instituted by the County on Miller Creek Road and Las Gillinas Avenue on May 1, 2001 in response to the problem of "freeway jumpers" were discontinued on May 31, 2001. The measures, which appeared to be effective in reducing the volume of AM peak hour freeway cut-through traffic in the Marinwood area have to date not been reinstated. The measures were affective in part, because they made it difficult for vehicles that exited the freeway at Miller Creek Road to travel through the Marinwood neighborhood streets. However, these same measures affected the mobility of local residents and public school employees in the area. The County traffic calming program is discussed in detail later in these comments.

LETTER 2

INTER-OFFICE MEMORANDUM
DEPARTMENT OF PUBLIC WORKS

DATE: May 11, 2001 -
TO: Tim Haddad, CDA- Environmental Coordinator
FROM:  Pat Balderama, Land Use & Water Resources
RE: Draft Revised EIR for Oakview Subd., MP, VTM & UP

Attached are marked-up pages 13 & 14 of the referenced DREIR indicating our comments to said report. If you have any question, please contact us. Thanks.

Impact	Mitigation (RS)	Implemented by	When Implemented	Monitored By	Verified By and Date
<p>5.2-2 (Continued)</p> <p>Prior to</p> <p>(A)</p>	<p>Since the passive stormwater detention storage would be underground, cleanout stubs would be required at the upgradient ends of each storage component (e.g. cistern or pipe array). Periodic maintenance would be required to remove any debris and sediment that accumulate in these storage components.</p> <p>A sediment maintenance plan describing both frequency and timing of sediment removal, as well as excavation equipment and environmental precautions, should be included in the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.</p> <p>Following release of project performance bond, maintenance of the detention basin would be the responsibility of the funding entity established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors.</p>	<p>by a shall be</p>			
<p>5.2-3 Downstream Hydraulic Structures and Flooding</p> <p>Project-induced increases in peak flow rates and / or runoff volumes for Sub-watersheds 2 and 3 would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods.</p>	<p>5.2-3 The following measures would be required to reduce project impacts on downstream flooding due to inadequate storm drain system capacities:</p> <ul style="list-style-type: none"> Replace the existing 18-inch storm drainpipe along the rear of 281 Ellen Drive with a 30-inch RCP, as indicated in the project Schematic Grading Plan. 	Applicant	Development Plan / Prior to Issuance of Grading Plan	CDA / DPW	

Appendix C
Oakview Master Plan Mitigation Monitoring and Reporting Program

<i>Impact</i>	<i>Mitigation (RS)</i>	<i>Implemented by</i>	<i>When Implemented</i>	<i>Monitored By</i>	<i>Verified By and Date</i>
<p>5.2-4 Downstream Hydraulic Structures and Flooding Project-induced increases in peak flow rates for Sub-watersheds 1 and 2 would worsen flooding at the three- by six-foot box culvert under Highway 101. No corrective measures have been agreed upon to remedy this flooding condition and no funding currently exists for such action.</p>	<p>5.2-4 Either of the following measures should be implemented to reduce project impacts on downstream flooding at the three- by six-foot box culvert under Highway 101:</p> <ul style="list-style-type: none"> • Implement Mitigation Measure 5.2-2. • The applicant should participate with the City of San Rafael and Caltrans in funding an upgrade of the existing Highway 101 box culvert. If a drainage fee is required by Marin County, the applicant should at a minimum contribute funding for replacement and / or expansion of the Highway 101 facilities in proportion to the site's development area. For example, if the development area (not open space) draining to the Gallinas tributary at Highway 101 equaled 41.7 acres and the total developed area for that watershed was 500 acres, the project's share of the cost would be 8.3 percent. 	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA /DPW	
<p>5.2-5 Off-Site / Downstream Flooding on Miller Creek Project-induced increases in peak flow rates for Sub-watersheds 3 and 6 would add, however imperceptibly, to the surcharge of floodwaters that create significant backwater flooding at the SPRR bridge on Silveira Ranch. Since this structure lacks adequate capacity to pass the existing 100-year flood discharge without significant inundation of the adjoining ranchlands, the project impact on downstream flooding would be significant impact.</p>	<p>5.2-5 To reduce project impacts on flooding along the on-site and downstream reaches of Miller Creek, <u>either</u> of the following mitigation measures should be implemented:</p> <ul style="list-style-type: none"> • Implement Mitigation Measure 5.2-2. • Pay a drainage fee to Marin County with the stipulation that the fee be applied to the eventual channel modification and bridge removal / replacement on Silveira Ranch. The fee total would be negotiated between the applicant and the County. 	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

B

5.2-4 mitigation must be in place prior to construction of impervious surface but can be removed once this downstream project is complete

**RESPONSE TO LETTER 2 – MARIN COUNTY DEPARTMENT OF PUBLIC WORKS, PAT
BALDERAMA, LAND USE & WATER RESOURCES**

Response to Comment 2-A

Based on this comment the text on page 5.2-16 regarding mitigation measure 5.2-3 and the text in Appendix C of the Draft EIR regarding mitigation measure 5.2-3 in the Draft EIR is revised to read as follows:

~~Following~~Prior to release of project performance bond, maintenance of the detention basin would be the responsibility of theby a funding entity shall be established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors.

Response to Comment 2-B

Since Marin County has no mitigation requirement covering mitigation of development-induced peak flow increases where no downstream hydraulic structures are detrimentally affected, the following language has been added to the discussion of Implementation of Mitigation on page 5.2-19 of the Draft EIR and in the discussion of mitigation 5.2-4 in Appendix C of the Draft EIR:

Mitigation 5.2-2 shall be implemented concurrently with project construction, but the detention basin may be removed once the Highway 101 box culvert upgrade is completed. If and when the detention basin is removed, the proper grading permit shall be obtained from Marin County DPW, Land Development Division. Furthermore, site erosion controls consistent with the provisions of the mitigation measures outlined in this EIR shall be applied to all exposed soil surfaces immediately upon completion of the grading (i.e. basin removal).

Also, see Responses to Comments 25-BB and 25-CC.

LETTER 3


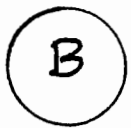
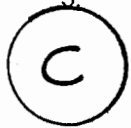
May 7, 2001

In reply to: Oak View Development

Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903
Attn: Tim Haddad

Dear Tim,

I am writing this letter in response to the draft Environmental Impact Review process currently being conducted for the Oak View development in the unincorporated area of the County of Marin. I wish to make three points regarding the project. Those are:

1. I believe that there are no extenuating circumstances that would prevent the developer from building the designated inclusionary housing on-site. While I recognize that, the plan calls for large homes the developer could provide the affordable housing by developing single structures that contain more than one unit but resemble all the homes from the exterior. The units could be offered as below market rate units and administered by the Marin Housing Authority. The in-lieu fees proposed by the developer will not cover the costs of developing the housing elsewhere. In this time of housing crisis, we need to be firm in our conviction about increasing affordable housing stock.

2. In addition to the single-family homes, the applicant is also proposing a new office development adjacent to Highway 101. Any new commercial development encourages job growth. Without housing for the workers of the commercial development, they will be forced to commute, adding to traffic congestion. The site is zoned for residential use and developing the site for only commercial use would not be prudent when we are having a housing crisis. I am optimistic that the EIR will evaluate the impact of traffic on the community if this portion of the site is developed for office space. This site could be used to develop the affordable housing if it cannot be built in the single-family home portion of the development.

3. I encourage the applicant to consider the possibility of offering a range of housing for families of differing incomes. The income ranges should address very-low income families at 50%, 80% and 120% of median income. Rental units are desperately needed for families in Marin County and the developer could partner with a not-for-profit developer to develop and manage the rental units.


Thank you for your consideration of this matter. I can be reached at (415) 499-6697 if you need any other information.

Sincerely,



Barbara Collins
Affordable Housing Strategist
Marin Housing Authority

RESPONSE TO LETTER 3 – MARIN HOUSING AUTHORITY, BARBARA COLLINS, AFFORDABLE HOUSING STRATEGIST

Response to Comment 3-A

Comment noted. This is a comment on the merits of the propose project and not on the adequacy of the Draft EIR. It should be noted, however, that on page 4.0-23 of the Draft EIR in the review of consistency with the County's Housing Element it is stated that as proposed the project is not consistent with Program H-1a Inclusionary Units because the applicant has not shown that it is "not practical" to construct the affordable units on site.

Response to Comment 3-B

Section 5.5 (*Transportation and Circulation*) evaluates the traffic impact of the proposed project including the including office development on a portion of the site that fronts on to Highway 101. Exhibit 5.5-5 shows project trip generation of the office portion of the project and Exhibit 5.5-6 peak hour vehicle trip distribution associated with office use.

Response to Comment 3-C

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

LETTER 3A

INTER-OFFICE MEMORANDUM
DEPARTMENT OF PUBLIC WORKS
TRAFFIC ENGINEERING SECTION

RECEIVED

MAY 22 P 3:16
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

DATE: May 22, 2001
TO: Tim Haddad, Environmental Coordinator
FROM: Jason Nutt, Traffic Operations Engineer
RE: Oakview Master Plan, Tentative Map and Use Permit
Draft Environmental Impact Report
200 Lucas Valley Road, San Rafael
APN 164-270-03

COMPLETENESS

Thank you for the opportunity to review and comment on the draft environmental impact report (EIR) document for the proposed Oakview development. We have carefully reviewed the EIR and found it to be INCOMPLETE based on the following items:

- A** 1. The EIR does not include a description of the socio-economic conditions that create the traffic patterns, as previously requested.
- B** 2. The EIR does not address the County's concerns regarding adding new connections to Lucas Valley Road, as previously advised.
- C** 3. The EIR does not address cumulative traffic impacts/mitigations associated with the St. Vincent/Silveira and Big Rock Ranch developments as previously requested.

ENVIRONMENTAL REVIEW

- D** Mitigation measures identified in Section 5.5-3 do not consider cumulative impacts associated with the St. Vincent/Silveira and Big Rock Ranch developments and therefore are inadequate.

MERITS

In reviewing the draft EIR and listening to comments made during the May 7, 2001, Planning Commission meeting staff has identified the following merit items:

- E** 1. The County will not support a new connection to Lucas Valley Road at this location. Staff has consistently discouraged and denied proposals that include new direct connections. Staff will be willing to re-evaluate the plan identified by 1996 Administrative EIR in which all 29 SFR connected to Las Gallinas Avenue through Ellen and Erin Drives and did not include a direct Lucas Valley Road connection. Staff will recommend denial of the application if this cannot be resolved.

2. The data utilized to describe base or existing traffic counts as shown on Exhibit 5.5-2 is consistent with recent (March & April 2001) traffic counts taken by County staff.
3. The use of "General Office" to determine trip generation for the proposed office space is appropriate.
4. The short-range impacts/mitigations described in Sections 5.5-1 & 5.5-2 are reasonable and consistent with the trip generation data.
5. Staff anticipates unmitigatable impacts at the Miller Creek/Highway 101 interchange resulting from a study of cumulative impacts associated with this development, St. Vincint/Silveira, and Big Rock Ranch. Staff will re-evaluate this merit item upon receipt of a cumulative impact study that clearly identifies the impacts of these three major developments.

cc:

Farhad Mansourian
Pat Balderama

**RESPONSE TO LETTER 3A – MARIN COUNTY DEPARTMENT OF PUBLIC WORKS TRAFFIC
ENGINEERING SECTION, JASON NUTT, TRAFFIC OPERATIONS ENGINEER**

Response to Comment 3A -A

A discussion of socio-economic conditions as they relate to traffic patterns is not typically a component of an EIR transportation impact analysis. The issues of employment, land use, housing, housing affordability, and public transit are very important and directly related to individuals commute options. However, a meaningful discussion of socio-economic conditions related to the proposed project and the overall affects on traffic patterns may best be developed by a economist with a solid background in land use planning.

It can be assumed that the project office component will attract employees from not only Marin County but also the surrounding counties of Alameda, Napa and Sonoma given the lack of affordable housing in the area and in Marin County in general. The proposed project's consistency with the County's Housing Element is discussed in Exhibit 4.1-1. Please see Responses to Comments 18-H and 25-D for additional discussion of affordable housing.

Response to Comment 3A -B

The EIR addresses access to and from Lucas Valley Road as proposed for 20 of the project's residential units. Recommended improvements include widening Lucas Valley Road in the vicinity of the project driveway for construction of an eastbound turn-lane, and construction of eastbound acceleration and westbound deceleration lanes on Lucas Valley Road.

An alternative to the proposed Lucas Valley Road driveway would be to access this residential section of the project from Las Gallinas Avenue via the existing streets, Ellen Drive and Erin Drive. These streets could be extended to provide access to all 20 lots. The primary drawback to this alternative would be during the AM commute period when Las Gallinas Avenue is heavily congested. The 20 homes are estimated to put 21 vehicles on Las Gallinas Avenue during the AM peak hour. The outbound project trips (16 vehicles) would experience significant delay exiting the site due to congestion on Las Gallinas Avenue.

Rerouting project residential trips to Las Gallinas Avenue would represent a relatively small number of additional peak hour vehicles being added to this street. The impact of this action would be experienced predominately by the project vehicles and existing residents of Ellen Drive and Erin Drive during the morning peak commute period. These vehicles would experience delays in excess of 60 seconds (LOS F) as they attempted to turn onto Las Gallinas Avenue. While adding 21 vehicles to Las Gallinas Avenue traffic over the course of an AM peak hour would not usually be considered a significant contribution it is noted that this street already experiences severely congested conditions during weekday mornings and any increase would result in further deterioration of operations.

Response to Comment 3A -C

Cumulative traffic associated with the Big Rock Ranch and St. Vincent's / Silveira development are accounted for in the long-range cumulative analysis, see page 5.5-12 of the Draft EIR.

Response to Comment 3A -D

Please see Response to Comment 3A-C

Response to Comment 3A -E

As stated in the comment letter, these are comments on the merits of the proposed project and not on the adequacy of the Draft EIR.



**MARIN MUNICIPAL
WATER DISTRICT**

LETTER 4

RECEIVED BY

March 27, 2001

220 Nellen Avenue Corte Madera CA 94925-1
www.marinwater.

Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Subject: Oakview Project – Revised Draft EIR

Dear Mr. Haddad;

Our staff has reviewed the section of the above referenced EIR that relates to domestic water supply, and has only a few minor comments, mostly relating to stale data.

- A** 1. Page 5.8-9 refers to MMWD's Water Conservation Ordinance No. 326. This ordinance has been superceded by Ordinance No. 385, which would apply to this project.
- B** 2. Page 5.8-10 notes that MMWD may require the use of recycled water for irrigation. Please note that MMWD will require said use, as well as for non-potable uses in the commercial buildings.
- C** 3. Footnote No. 9 on page 5.8-10, and footnote 1 on page 5.9-1, should state that one acre-foot of water equals 325,851 gallons.
- D** 4. The MMWD system "buy-in" charge, noted on page 5.9-1, and page 5.9-8, was increased to \$23,650 effective May 21, 2001, which would increase the project connection fee to approximately \$514,600.

Please note that ordinances and charges can change over time and those regulations in force at the time of application for water service will be applicable.

If you have any questions please call me at 945-1586.

Sincerely,

Eric McGuire

Eric McGuire
Environmental Services Coordinator

**RESPONSE TO LETTER 4 -- MARIN MUNICIPAL WATER DISTRICT, ERIC MCGUIRE,
ENVIRONMENTAL SERVICES COORDINATOR**

Response to Comment 4-A

Based on this comment paragraph three on page 5.8-9 of the Draft EIR is revised to read as follows:

MMWD Water Conservation Ordinance ~~326~~ 385 requires new development to install low-flow toilets, showerheads, and faucets and plant drought-tolerant landscaping.

Response to Comment 4-B

Based on this comment paragraph one on page 5.8-10 of the Draft EIR is revised to read as follows:

The project is estimated to result in an increased demand of about 20 acre-feet of water per year. This estimate does not include water used for landscape irrigation. The MMWD ~~may~~ will require use of recycled water (available from the main running adjacent to the site under Lucas Valley Road) for irrigation as well as for non-potable uses in the commercial buildings. Irrigation consumption cannot be determined until submittal of landscaping plans which would occur after Master Plan review.

Response to Comment 4-C

Based on this comment footnote 9 on page 5.8-10 of the Draft EIR is revised to read as follows:

One acre-foot of water is equal to ~~325,829~~ 325,851 gallons of water. This measurement refers to the amount of water covering one acre to a depth of one foot.

Response to Comment 4-D

This comment is not clear. On both pages 5.9-1 and 5.9-8 it is stated that the MMWD charges a connection fee of \$23,650 for every acre-foot expected to be used per year. This is the same "buy-in" charge referenced in this comment. The project is estimated to use an average of 20 acre-feet of water per year, therefore, the "buy-in" charge would be \$473,000, as noted in the Draft EIR.

MARINWOOD COMMUNITY SERVICES DISTRICT

775 Miller Creek Road, San Rafael, CA 94903-1323

Phone: (415) 479-7751 - Fax: (415) 479-7759

LETTER 5

RECEIVED BY

2001 MAY 14 A 10: 4

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

May 12, 2001

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Dr., Room 308
San Rafael, CA 9490-4157

Re: Draft Revised EIR for Oakview (Horse Hill) Master Plan

Dear Mr. Haddad,

In their regular meeting held May 8th, the Board of Directors of Marinwood Community Services District discussed at length the Public Services section of the Oakview Master Plan Draft Revised EIR. The Board disagrees with the report's finding that no mitigation is required for impacts 5.8-1 Fire and Emergency Medical Service, and 5.8-4 Cumulative Fire and Emergency Medical Service.

(A) In the opinion of the Board, the proposed commercial development will create new demands on the equipment, personnel and facilities of the Marinwood Fire Department. The Board recognizes that over the years, the existing developed properties in Marinwood have invested over one million dollars in the equipment and facilities of the Fire Department. The community's investment has come from ad valorem property taxes and voter approved fire service charges. The Oakview property has paid taxes and charges at a much lower rate, reflecting a low assessed valuation for the property and the fact that fire service charges have been levied on an acreage basis.

The Board recognized that the commercial development proposed would impose a greater burden on Fire Department personnel, equipment and facilities than the Planned Residential uses permitted under present zoning. The Board feels that the additional burden is inconsistent with the past tax and service charge contributions of the property, and that in fairness, mitigation fees should be charged as a "buy in" to the community's fire protection infrastructure.

Accordingly, the EIR should recognize the impact of the commercial development, and assess mitigation fees to be passed on to the Marinwood Fire Department, to be held in reserve for capital equipment replacement and upgrading.

Sincerely yours,



Thomas D Horne
District Manager

RESPONSE TO LETTER 5 -- MARINWOD COMMUNITY SERVICES DISTRICT, THOMAS D. HORNE, DISTRICT MANAGER

Response to Comment 5-A

It is the opinion of the Marinwood Community Services District (MCSD) that development of 94,400 square feet of office / commercial use as in the proposed project, or an assisted living residential facility as proposed in the Assisted Living Residential Use option would create new demands on the equipment, personnel and facilities of the Marinwood Fire Department.

Over the years, existing properties in Marinwood have invested a significant amount of money in the equipment and facilities of the Marinwood Fire Department. The community's investment has come from ad valorem property taxes and voter approved fire service charges. In comparison to developed properties, it is the MCSD's opinion that the project site has paid taxes and charges at a lower rate, reflecting a low assessed valuation for the property, and the fact that fire service charges has been levied on an acreage basis

It is the Board of Directors of Marinwood Community Services District position that non-residential uses (such as the office or assisted living use) would impose a greater burden on Fire Department personnel, equipment and facilities than the Planned Residential uses permitted under present zoning. As a result, the Board of Directors believes that the additional burden is inconsistent with the past tax and service charge contributions of the property, and that in fairness, mitigation fees should be charge as a "buy in" to the community's fire protection infrastructure.

It is the MCSD's request that the proposed project be assessed mitigation fees to be passed on to the Marinwood Fire Department, to be held in reserve for capital equipment replacement and upgrading.

The *State CEQA Guidelines* requires that, for each significant impact identified in the EIR, the EIR must discuss feasible measures to avoid or substantially reduce the project's significant environmental effect. Appendix G of the *State CEQA Guidelines* asks the following question for determining significant effects related to fire services:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, need for new or physically altered fire facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Based on the comment letter from the MCSD and subsequent discussion with MCSD staff¹⁸ implementation of the project with either the office development or the assisted living facility would likely result in an increased demand in fire department service calls which in turn may require additional staff, equipment, or facilities. As discussed in Section 5.9 (*Costs and Revenues*) of the Draft EIR total annual revenues to the Marinwood Fire Department from the proposed project are estimated at \$44,300. These annual revenues would offset at least part of the increased costs for fire

¹⁸ Nichols • Berman conversation with Thomas Horne, District Manager, Marinwood Community Services District, April 2002.

protection. Since the full cost to the Marinwood Fire Department is not known at this time it is not possible to state whether or not all of the increased costs would be offset by the increased tax revenue.

Based on the information available, although the project would result in an increase in annual calls for service the project would not result in substantial adverse physical impacts associated with new or physically altered Marinwood Fire Department facilities in order to maintain acceptable service ratios, response times or other performance objectives.

Since there would not be a physical impact on the environment from the proposed project in regard to fire protection further discussion of the imposition of mitigation fees to be passed on to the Marinwood Fire Department as a part of the proposed project, as requested by the MCSD, is beyond the scope of this EIR.



Gray Davis
GOVERNOR

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse

LETTER 6

RECEIVED BY

2001 MAY 17 P 12:48



Steve Nissen
DIRECTOR

May 15, 2001

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Tim Haddad
Marin County CDA - Planning Division
3501 Civic Center Drive
Room 308
San Rafael, CA 94903

Subject: Oakview Master Plan/Use Permit/Tentative Map
SCH#: 1995063038

Dear Tim Haddad:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on May 14, 2001, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.



This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures

cc: Resources Agency



**Document Details Report
State Clearinghouse Data Base**

SCH# 1995063038
Project Title Oakview Master Plan/Use Permit/Tentative Map
Lead Agency Marin County

Type EIR Draft EIR
Description Master Plan/Use Permit/Tentative Map for subdivision of a 106.3 acre parcel into two lots for future development of 28 residences and 94,400 square feet of administrative/professional offices.

Lead Agency Contact

Name Tim Haddad
Agency Marin County CDA - Planning Division
Phone (415) 499-6269 **Fax**
email
Address 3501 Civic Center Drive
Room 308
City San Rafael **State** CA **Zip** 94903

Project Location

County Marin
City San Rafael
Region
Cross Streets Lucas Valley Rd. / Las Gallinas Rd.
Parcel No. 164-270-03

Township	Range	Section	Base
-----------------	--------------	----------------	-------------

Proximity to:

Highways Hwy. 101
Airports
Railways
Waterways Miller Creek
Schools Dixie Elementary, San Rafael High
Land Use Vacant property zoned RMP 1.38 (Residential, Multiple Family, Planned District, 1.38 units per acre).
General Plan Land Use Designation: Planned Residential, 1 unit per 1-10 acres.

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Drainage/Absorption; Geologic/Seismic; Noise; Population/Housing Balance; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Conservation; Department of Fish and Game, Region 3; Department of Forestry and Fire Protection; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 4; Regional Water Quality Control Board, Region 2; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

Date Received 03/21/2001 **Start of Review** 03/21/2001 **End of Review** 05/14/2001

**RESPONSE TO LETTER 6 – GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE
CLEARINGHOUSE, TERRY ROBERTS**

Response to Comment 6-A

Comment noted. No additional response necessary.



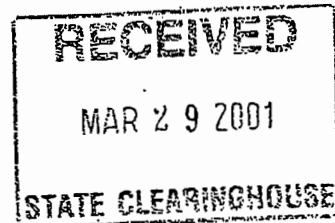
DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

LETTER 7

March 27, 2001

Clear
6/14/01
P



Mr. Tim Haddad
Marin County Planning Department
3501 Civic Center Drive, Room 308
San Rafael, California 94903

Dear Mr. Haddad:

Revised Draft Environmental Impact Report (EIR)
Oakview Development, Marin County
SCH # 1995063038

A Department of Fish and Game personnel have reviewed the revised draft EIR for the proposed Oakview development and we have the following comments. The draft EIR indicates that the development will result in impacts to a minimum estimated 1.4 acres of wetlands. The loss of wetlands is considered a significant adverse impact and Department policies require avoidance of the impact or mitigation to offset wetland loss. The master plan proposes to replace wetlands lost at a 1:1 ratio in an area proposed for future improvements to the Highway 101/Lucas Valley Road interchange. This proposal lacks specific detail and does not adequately mitigate wetland losses.

B The draft EIR also proposes the development of a wetland plan prepared by a qualified wetland consultant which identifies the wetlands which will be impacted, locates a suitable mitigation site, and provides for creation of a minimum 2:1 wetland replacement. The Department believes that, at a minimum, the above measure described in the draft EIR should be required as part of the final EIR. Without a wetland mitigation plan, reviewed and approved by the Department prior to the issuance of a final EIR, we believe the wetland impacts are a significant unmitigated impact and we recommend the EIR not be certified.

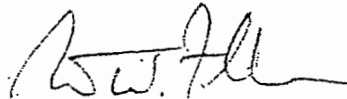
The Department has direct jurisdiction under Fish and Game Code sections 1601-03 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any stream. We recommend early consultation since modification of the proposed project may be required to avoid impacts to fish and wildlife resources. To avoid delays, formal notification under Fish and Game Code Section 1603 should

Mr. Tim Haddad
March 27, 2001
Page 2

be made after all other permits and certifications have been obtained. Work cannot be initiated until a streambed alteration agreement is executed.

If you have any questions, please contact Fred Botti, Associate Wildlife Biologist, at (707) 944-5534; or Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

A handwritten signature in dark ink, appearing to read 'R.W. Floerke', with a stylized flourish at the end.

Robert W. Floerke
Regional Manager
Central Coast Region

cc: ✓ State Clearinghouse

**RESPONSE TO LETTER 7 – DEPARTMENT OF FISH AND GAME, ROBERT W. FLOERKE,
REGIONAL MANAGER, CENTRAL COAST REGION**

Response to Comment 7-A

As discussed under Impact 5.3-4, the Draft EIR concludes that the anticipated loss of 1.4 acres of wetlands would be a significant impact, and that 0.64 acres of additional freshwater seep habitat on the freeway reserve area could be affected by proposed wetland mitigation or could be eliminated by future Highway 101/Lucas Valley Road interchange improvements. As stated on page 5.3-25 of the Draft EIR, use of the future Highway 101 interchange area to create replacement wetland habitat would be inappropriate and any replacement habitat should be located in an area which is preserved in perpetuity.

Response to Comment 7-B

Comment noted. Mitigation 5.3-4(a) calls for preparation of a detailed wetland protection, replacement and restoration program that would provide for a minimum replacement ratio of 2:1 for wetlands affected by the project. Sufficient criteria are defined in the measure to ensure that potential impacts on wetland resources are mitigated to a less-than-significant level. The applicant's representative, Larry Kennings of LAK Associates, has put together two letters providing a general approach to wetland mitigation.¹⁹ Both letters assume a combination of on-site protection, enhancement, and creation, and the possibility of off-site protection, use of an approved mitigation bank, or other options. Development of the site as proposed can not proceed without a detailed wetland mitigation plan approved by jurisdictional agencies, including the Corps, CDFG, RWQCB, and the County. No change to the recommended mitigation is considered necessary in response to the comment.

¹⁹ Letters to Tim Haddad, Marin Community Development Agency from Larry Kennings (applicant's representatives), January 25, 2002 and May 17, 2002.



Jon H. Hickox
Secretary for
Environmental
Protection

Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, California 94710-2721

LETTER 8



Gray Davis
Governor

April 5, 2001

Tim Haddad, Environmental Coordinator
Marin County CDA - Planning Division
3501 Civic Center Dr., Room 308
San Rafael, CA 94903

Dear Mr. Haddad:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Oakview Master Plan, SCH# 1995063038. As you may be aware, the California Department of Toxic Substances Control (DTSC) oversees the cleanup of sites where hazardous substances have been released pursuant to the California Health and Safety Code, Division 20, Chapter 6.8. As a Resource Agency, DTSC is submitting comments to ensure that the environmental documentation prepared for this project to address the California Environmental Quality Act (CEQA) adequately addresses any required remediation activities which may be required to address any hazardous substances release.

A The 106.32-acre site proposed for mixed residential and commercial use is located on the northwest corner of the Lucas Valley Rd. / Smith Ranch Rd. / Highway 101 interchange. Although currently undeveloped the project description does not include a description of the property's past uses. We recommend that a historical assessment of past uses be done. Based on that information, sampling should be conducted to determine whether there is an issue which will need to be addressed in the CEQA compliance document. If hazardous substances have been released, they will need to be addressed as part of this project.

For example, if the remediation activities include the need for soil excavation, the CEQA document should include: (1) an assessment of air impacts and health impacts associated with the excavation activities; (2) identification of any applicable local standards which may be exceeded by the excavation activities, including dust levels and noise; (3) transportation impacts from the removal or remedial activities; and (4) risk of upset should there be an accident at the Site

DTSC can assist your agency in overseeing characterization and cleanup activities through our Voluntary Cleanup Program. A fact sheet describing this program is enclosed. We are aware that projects such as this one are typically on a compressed schedule, and in an effort to use the available review time efficiently, we request that




Mr. Haddad
April 5, 2001
page two

DTSC be included in any meetings where issues relevant to our statutory authority are discussed.

In the near future, DTSC will be administering the \$85 million Urban Cleanup Loan Program, which will provide low-interest loans to investigate and cleanup hazardous materials at properties where redevelopment is likely to have a beneficial impact to a community. The program is composed of two main components: low interest loans of up to \$100,000 to conduct preliminary endangerment assessments of underutilized properties; and loans of up to \$2.5 million for the cleanup or removal of hazardous materials also at underutilized urban properties. These loans are available to developers, businesses, schools, and local governments. A fact sheet regarding this program is attached for your information.

Please contact Edgardo Gillera at (510) 540-3826 if you have any questions or would like to schedule a meeting. Thank you in advance for your cooperation in this matter.

Sincerely,



Barbara J. Cook, P.E., Chief
Northern California - Coastal Cleanup
Operations Branch

Enclosures

cc: without enclosures

Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street
Sacramento, California 95814

Guenther Moskat
CEQA Tracking Center
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

FACT SHEET

SEPTEMBER 2000

Urban Cleanup Loan Program



Overview

California is on the leading edge when it comes to programs and policies to stimulate the redevelopment of Brownfields – abandoned, idled or under-used properties where expansion or redevelopment is complicated by real or perceived environmental contamination. Frequently, these properties, once the source of jobs and economic benefits to the entire community, lie abandoned for fear of the contamination and the liability it implies.

The \$85 million Urban Cleanup Loan Program – which is currently under development by the Department of Toxic Substances Control – will provide new financial assistance tools to help developers, businesses, schools and local governments accelerate the pace of cleanup and redevelopment at these sites.

There will be two main components:

Investigating Site Contamination Program

- Provides low-interest loans of up to \$100,000 to conduct preliminary endangerment assessments of underutilized urban properties.
- Loan repayment over a period of two years, if loan recipient buys the property.
- If property is determined not to be economically feasible to purchase, up to 75 percent of the loan amount can be waived by the State.

Cleanup Loans and Environmental Assistance (CLEAN) Program

- Provides low-interest loans of up to \$2.5 million for the cleanup or removal of hazardous materials at properties where redevelopment is likely to have a beneficial impact on the property values, economic viability and quality of life of a community.

Restoring contaminated property can help bring life and strength to a community. Making a once toxic area viable again means more jobs, an enhanced tax base and a sense of optimism about the future. Together, the programs that make up California's Urban Cleanup Loan Program will make it easier for such sites to be redeveloped and become vital, functioning parts of their communities.

For more information, call (916) 324-0706.



DEPARTMENT OF TOXIC SUBSTANCES CONTROL

The Voluntary Cleanup Program

In 1993, the California Environmental Protection Agency's Department of Toxic Substances Control (DTSC) introduced this streamlined program to protect human health and the environment, ensure investigation and cleanup is conducted in an environmentally sound manner and facilitate the reuse and redevelopment of these same properties. Using this program, corporations, real estate developers, other private parties, and local and state agencies entering into Voluntary Cleanup Program agreements will be able to restore properties quickly and efficiently, rather than having their projects compete for DTSC's limited resources with other lower-priority hazardous waste sites. This fact sheet describes how the Voluntary Cleanup Program works.

Prior to initiation of the Voluntary Cleanup Program, project proponents had few options for DTSC involvement in cleaning up low-priority sites. DTSC's statutory mandate is to identify, prioritize, investigate and cleanup sites where releases of hazardous substances have occurred. For years, the mandate meant that, if the site presented grave threat to public health or the environment, then it was listed on the State Superfund list and the parties responsible conducted the cleanup under an enforcement order, or DTSC used state funds to do so. Because of staff resource limitations, DTSC was unable to provide oversight at sites which posed lesser risk or had lower priority.

DTSC long ago recognized that no one's interests are served by leaving sites contaminated and unusable. The Voluntary Cleanup Program allows motivated parties who are able to fund the cleanup – and DTSC's oversight – to move ahead at their own speed to investigate and remediate their sites. DTSC has found that working cooperatively with willing and able project proponents is a more efficient and cost-effective approach to site investigation and cleanup. There are four steps to this process:

- ✓ Eligibility and Application
- ✓ Negotiating the Agreement
- ✓ Site Activities
- ✓ Certification and Property Restoration

The rest of this fact sheet describes those steps and gives DTSC contacts.

The Voluntary Cleanup Program

Step 1: Eligibility and Application

Most sites are eligible. The main exclusions are if the site is listed as a Federal or State Superfund site, is a military facility, or if it falls outside of DTSC's jurisdiction, as in the case where a site contains only leaking underground fuel tanks. Another possible limitation is if another agency currently has oversight, e.g. a county (for underground storage tanks). The current oversight agency must consent to transfer the cleanup responsibilities to DTSC before the proponent can enter into a Voluntary Cleanup Program agreement. Additionally, DTSC can enter into an agreement to work on a specified element of a cleanup (risk assessment or public participation, for example), if the primary oversight agency gives its consent. The standard application is attached to this fact sheet.



Jack London Square Theater, Oakland:
Under the Voluntary Cleanup Program, a nine-screen theater was built atop a former Pacific Gas & Electric town gas site, creating a regional entertainment hub.

If neither of these exclusions apply, the proponent submits an application to DTSC, providing details about site conditions, proposed land use and potential community concerns. No fee is required to apply for the Voluntary Cleanup Program.



Romero Ranch, Santa Nella: A Voluntary Cleanup Agreement enabled the Nature Conservancy to use the land to preserve natural habitat and promote wildlife development rights.

Step 2: Negotiating the Agreement

Once DTSC accepts the application, the proponent meets with experienced DTSC professionals to negotiate the agreement. The agreement can range from services for an initial site assessment, to oversight and certification of a full site cleanup, based on the proponent's financial and scheduling objectives.

The Voluntary Cleanup Program agreement specifies the estimated DTSC costs, project scheduling, and DTSC services provided. Because every project must meet the same legal and technical cleanup requirements as State Superfund sites, and because DTSC staff provide oversight, the proponent is assured that the project will be completed in an environmentally sound manner.

The purpose of this application is to obtain information necessary to determine the eligibility of the site for acceptance into the Voluntary Cleanup Program. Please use additional pages, as necessary, to complete your responses.

Proponent Name
Principal Contact Name
Phone ()
Address
Proponent's relationship to site
Brief statement of why the proponent is interested in DTSC services related to site

Is this site listed on Calsites? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide specific name and number as listed			
Name of Site			
Address	City	County	ZIP

(Please attach a copy of an appropriate map page)

SECTION 2 **SITE INFORMATION (continued)**

Current Owner

Name _____

Address _____

Phone () _____

Background: Previous Business Operations

Name _____

Type _____

Years of Operation _____

If known, list all previous businesses operating on this property

What hazardous substances/wastes have been associated with the site?

What environmental media is/was/may be contaminated?

☐ Soil

☐ Air

☐ Groundwater

☐ Surface water

Has sampling or other investigation been conducted? ☐ Yes ☐ No

Specify

If Yes, what hazardous substances have been detected and what were their maximum concentrations?

SECTION 2 SITE INFORMATION (continued)

Are any Federal, State or Local regulatory agencies currently involved with the site? ☐ Yes ☐ No
 If Yes, state the involvement, and give contact names and telephone numbers

Agency	Involvement	Contact Name	Phone

What is the future proposed use of the site?

What oversight service is being requested of the Department?

- ☐ PEA ☐ RI/FS ☐ Removal Action ☐ Remedial Action ☐ RAP ☐ Certification
☐ Other (describe the proposed project)

Is there currently a potential of exposure of the community or workers to hazardous substances at the site?

- ☐ Yes ☐ No If Yes, explain

SECTION 3 COMMUNITY PROFILE INFORMATION

Describe the site property (include approximate size)

Describe the surrounding land use (including proximity to residential housing, schools, churches, etc.)

Describe the visibility of activities on the site to neighbors

SECTION 3 COMMUNITY PROFILE INFORMATION (continued)

What are the demographics of the community (e.g., socioeconomic level, ethnic composition, specific language considerations, etc.)?

Local Interest

Has there been any media coverage?

Past Public Involvement

Has there been any past public interest in the site as reflected by community meetings, ad hoc committees, workshops, fact sheets, newsletters, etc.?

Key Issues and Concerns

Have any specific concerns/issues been raised by the community regarding past operations or present activities at the site?

Are there any concerns/issues anticipated regarding site activities?

Are there any general environmental concerns/issues in the community relative to neighboring sites?

Key Contacts

Please attach a list of key contacts for this site, including: city manager; city planning department; county environmental health department, local elected officials; and any other community members interested in the site. (Please include addresses and phone numbers.)

SECTION 4 CERTIFICATION

The signatories below are authorized representatives of the Project Proponent and certify that the preceding information is true to the best of their knowledge.

Proponent Representative

Date

Title

In the agreement, DTSC retains its authority to take enforcement action, if, during the investigation or cleanup, it determines that the site presents a serious health threat, and proper and timely action is not otherwise being taken. The agreement also allows the project proponent to terminate the Voluntary Cleanup Program agreement with 30 days written notice if they are not satisfied that it is meeting their needs.

Step 3: Site Activities

Prior to beginning any work, the proponent must have: signed the Voluntary Cleanup Program agreement; made the advance payment; and committed to paying all project costs, including those associated with DTSC's oversight. The project manager will track the project to make sure that DTSC is on schedule and within budget. DTSC will bill its costs quarterly so that large, unexpected balances should not occur.

Once the proponent and DTSC have entered into a Voluntary Cleanup Program agreement, initial site assessment, site investigation or cleanup activities may begin. The proponent will find that DTSC's staff includes experts in every vital area. The assigned project manager is either a highly qualified Hazardous Substances Scientist or Hazardous Substances Engineer. That project manager has the support of well-trained DTSC toxicologists, geologists, engineers, industrial hygienists, specialists in public participation, and other technical experts.



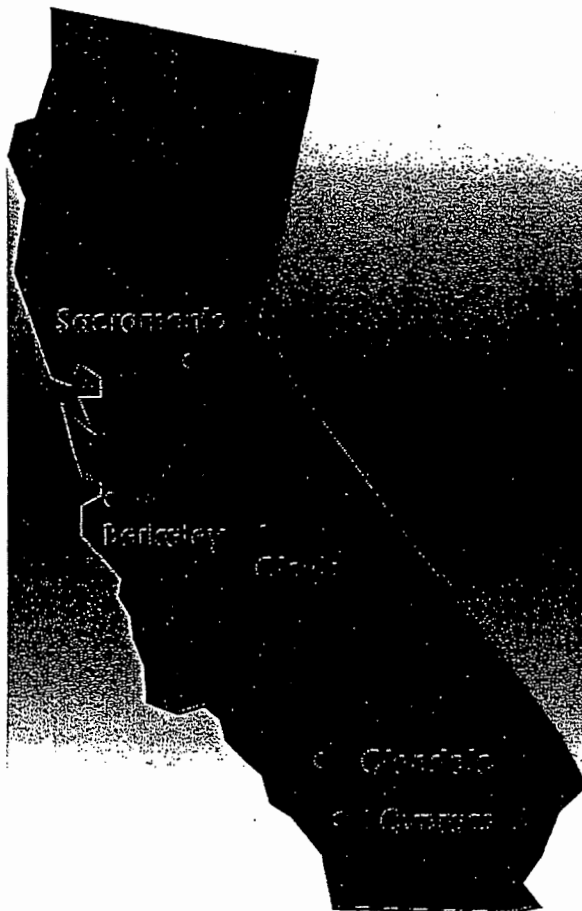
The new Federal Courthouse, Sacramento: The largest construction project in the city's history benefited from the Voluntary Cleanup Program when cleaning up a railyard site.

The project manager may call on any of these specialists to join the team, providing guidance, review, comment and, as necessary, approval of individual documents and other work products. That team will also coordinate with other agencies, as appropriate, and will offer assistance in complying with other laws as needed to complete the project.

Step 4: Certification and Property Restoration

When remediation is complete, DTSC will issue either a site certification of completion or a "No Further Action" letter, depending on the project circumstances. Either means that what was "The Site," is now property that is ready for redevelopment or other reuse.

To learn more about the Voluntary Cleanup Program, contact the DTSC representative in the Regional office nearest you:



DTSC office locations

North Coast California

Lynn Nakashima / Janet Naito
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2737
(510) 540-3839 / (510) 540-3833

Central California

Megan Cambridge
10151 Croydon Way, Suite 3
Sacramento, California 95827
(916) 255-3727

**Central California –
Fresno Satellite**

Tom Kovac
1515 Tollhouse Road
Clovis, California 93612
(209) 297-3939

**Southern California
(Glendale and Cypress)**

Rick Jones
1011 Grandview Avenue
Glendale, California 91201
(818) 551-2862

Additional information on the Voluntary Cleanup Program and other DTSC Brownfields initiatives is available on DTSC's internet web page:

<http://www.dtsc.ca.gov>

RESPONSE TO LETTER 8 -- DEPARTMENT OF TOXIC SUBSTANCES CONTROL, BARBARA J. COOK, P.E., CHIEF NORTHERN CALIFORNIA -- COASTAL CLEANUP OPERATIONS BRANCH

Response to Comment 8-A

In response to this comment the property owner was asked about the past use of the project site. According to a representative of the property owner "the past uses of the site have not included hazardous substances".²⁰ In addition to contact with the property owner a search of environmental records was conducted by Environmental Data Resources, Inc. for the project site. The database review did not disclose any known hazardous substance sites on the project site. For example, review of the Cal-sites, Cortese and Notify 65 databases did not reveal any mapped sites on the project site. A review of the Historical UST Registered Database did identify two underground gasoline storage tanks at "4579 Highway 101" which may be located on the portion of the project site designated for the future Highway 101 / Lucas Valley Road southbound ramps. However, a review of the records of the San Rafael Fire Department and the County of Marin Public Works Department of Waste Management could not confirm existing underground tanks at "4579 Highway 101".²¹ Furthermore, review of the records at San Rafael Fire Department, County of Marin Public Works Department of Waste Management and the San Francisco Region Regional Water Quality Control Board did not reveal any enforcement actions for a site at this address or for the project site.²²

Based on the above it was determined that on-site sampling was not necessary to determine if remediation activities would be required as a part of the proposed project.

²⁰ Letter to Tim Haddad, Community Development Agency from Larry Kennings, LAK Associates (applicant's representative), October 26, 2001.

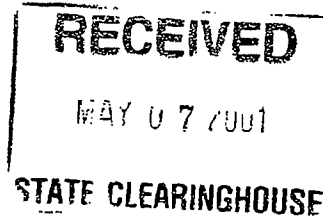
²¹ Nichols • Berman conversation with San Rafael Fire Department and County of Marin Public Works Department of Waste Management staff, April, 2002.

²² *Ibid.*, and Nichols • Berman conversation with John Jang, Regional Water Quality Control Board, April 2002.

Memorandum

LETTER 9

Date: May 2, 2001

To: State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814clear
5/14/01
eFrom: DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
Golden Gate Division

File No.: 301.8324.A09291

Subject: OAKVIEW MASTER PLAN/USE PERMIT/TENTATIVE MAP - SCH
1995063038

The California Highway Patrol received the Notice of Completion, Revised Draft Environmental Impact Report (EIR), for the Oakview Master Plan/Use Permit/Tentative Map project, SCH 1995063038.

A The attached memorandum was prepared by the Marin Area which maintains traffic safety and enforcement jurisdiction near the proposed project. The memorandum addresses the cumulative effects of traffic congestion in the area should the building project proceed. The final EIR should address these concerns through adequate mitigation measures designed to alleviate additional congestion on US-101, at the on/off ramps of Lucas Valley Road and US-101, and arterial roads which may be used in lieu of US-101 and Lucas Valley Road.

Should you have any questions, please contact Captain Robert Morehen, of the Marin Area at (415) 924-1100.

TOM NOBLE
Assistant Chiefcc: CHP - Office of Special Projects
CHP - Marin Area
Marin County CDA - Planning Division, Lead Agency

Memorandum



Clear
5/14/01
E

Date: April 13, 2001

To: Golden Gate Division

From: DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
MARIN AREA

File No.: 350.14004.14058/Admin/Oakview.Doc

Subject: ENVIRONMENTAL DOCUMENT REVIEW
DRAFT ENVIRONMENTAL STATEMENT - SCH 1995063038

Marin Area has reviewed the "Oakview" environmental document and has the following concerns which may be considered as advisable for Departmental input:


The "Oakview" building project, which includes 28 residences and nearly 100,000 square feet of commercial space, is located adjacent to US 101 which is impacted daily by traffic congestion during commute hours. The "Oakview" building project is adjacent also to un-incorporated roadways that are used as alternate routes when freeway congestion occurs during commute hours. The addition of resident and transient commercial traffic, resulting from the building project, has the potential for exacerbating the existing traffic congestion as follows:

Southbound US 101 traffic attempting to exit at Lucas Valley Road will encounter increased traffic congestion at the on/off ramp resulting in additional delays.

B

Traffic congestion on Lucas Valley Road, at the intersection of the southbound off ramp will increase, causing backups on Lucas Valley Road, and potentially causing freeway congestion on the southbound US 101 off ramp to Lucas Valley Road.

Traffic congestion on Lucas Valley Road will increase, causing additional traffic on Las Gallinas Road, which is a county road. Recent meetings involving the local transportation planning authorities were held concerning this issue, during which much public comment was made concerning the traffic congestion issue.


R.J. Morehen, Captain
Commander

RESPONSE TO LETTER 9 – DEPARTMENT OF CALIFORNIA HIGHWAY PATROL, GOLDEN GATE DIVISION, TOM NOBLE, ASSISTANT CHIEF

Response to Comment 9-A

The Draft EIR transportation analysis (see section 5.5) identifies significant impacts related to cumulative traffic with and with out the proposed project. The EIR identifies and recommends impact mitigation and includes a number of alternatives (see Chapter 6.0) to the proposed project.

Response to Comment 9-B

The Draft EIR transportation analysis (see section 5.5) identifies significant impacts related to cumulative traffic with and with out the proposed project. The EIR identifies and recommends impact mitigation and includes a number of alternatives (see Chapter 6.0) to the proposed project.



LETTER 10

Lucas Valley Home Owners Association, Inc

1201 Idylberry Road, San Rafael, CA 94901

April 10, 2000

2000 APR 13 P 2:20

RECEIVED BY
COMMUNITY DEVELOPMENT
4/13/00

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Dr. Room 308
San Rafael, CA 94903-4157

Dear Mr. Haddad:

The following are our comments on the Draft Revised EIR for Oakview Master Plan, Vesting Tentative Map, and Use Permit application.

- (A) 1. We are in favor of Alternative #4. We believe an additional outlet onto Lucas Valley Road would be both unsafe and counterproductive. The suggested mitigation measures would not work. Acceleration lanes proved unsuccessful at the Mt. Lassen & Lucas Valley Road intersection. The proposed number of residential units would not unduly burden existing roads adjacent to the project.
- (B) 2. We feel that an additional alternative be shown. It should consist of a density bonus for affordable housing units that should be built IN the master plan area, perhaps in conjunction with the office complex off of Marinwood Avenue. Payment of an in lieu fee for affordable housing would do little or nothing to increase work force housing in the foreseeable future.
- (C) 3. Construction of the long planned southbound Hwy 101 off ramp at Lucas Valley Road to meet at Los Gatos Drive should be required to be done at the same time as the project. With the Lucas Film project at Big Rock Ranch coming on line and the horrible traffic problems from the Marinwood exit from 101, a lot of traffic will be taking the Lucas Valley exit rather than Marinwood, causing offbound traffic to back up onto Hwy 101. The new offramp would have a very long storage lane to take care of this traffic and not backup 101.
- (D) 4. New traffic counts need to be done. It appears that the last ones were done over 1 year ago. The situation has gotten much worse since then.

Yours very truly,

LUCAS VALLEY HOMEOWNERS ASSOC.

Ron Marinoff

RON MARINOFF, ZAP (Zoning & Planning)

RESPONSE TO LETTER 10 – LUCAS VALLEY HOMEOWNERS ASSOCIATION, INC., RON MARINOFF, ZAP

Response to Comment 10-A

Please see Response to Comment 3A-B.

Response to Comment 10-B

In response to written comments regarding the Draft EIR the applicant has submitted an option to the use of Buildings A and B for an assisted living residential use which is evaluated in this *Response to Comments*. The Assisted Living Residential Use option submitted by the project applicant is evaluated in Section 7.3.

Response to Comment 10-C

Please see Response to Comment 1-B.

Response to Comment 10-D

The peak hour intersection traffic counts used in the Draft EIR analysis were taken in January 2000. The 2000 peak hour volumes at four of the study intersections were compared to peak hour counts taken in March 2001 by Marin County. These counts were taken prior to the traffic calming measures implemented by the County and therefore were comparable to the 2000 counts. The four intersections used for comparison purposes included:

- Highway 101 Southbound Ramp / Miller Creek Road
- Miller Creek Road / Marinwood Avenue
- Miller Creek Road / Las Gallinas Avenue
- Lucas Valley Road / Miller Creek Road

The Highway 101 Southbound Ramp / Miller Creek Road intersection showed an increase in morning commute hour traffic of 2.7 percent compared to the January 2000 count. The increase represented a peak hour total of 55 additional intersection vehicles. Morning peak hour traffic volumes at the other three intersections were all lower than the 2000 counts. The decrease in total peak hour traffic at these locations ranged from just under one percent at Miller Creek Road / Las Gallinas Avenue to four percent at Miller Creek Road / Marinwood Avenue. These differences were not significant in terms of the numbers of peak hour vehicles and indicated that traffic in the area had neither improved nor worsened in the 14 month period between the intersection counts.

In March of 2002, Wilbur Smith Associates (the EIR transportation consultant) conducted 15 minute spot check counts of PM peak hour traffic at the Highway 101 / Lucas Valley Road Ramps. These observations indicated that traffic was lower than counts collected in January 2000 at both the northbound and southbound locations by approximately three percent. Again, a difference of three percent is not significant. Studies of traffic flow characteristics have found a potential for wide

variability (up to ten percent) in peak hour volumes on a daily basis at the same locations. What the comparisons do suggest is that peak hour traffic has not increased significantly over the past two year period in this area and may have in fact decreased slightly.

The January 2000 study area AM and PM peak hour intersection volumes were increased by 1.5 percent per year (3 percent total) and used to provide the base case analysis for both the existing and short-range cumulative revised analysis. The January 2000 intersection volumes were increased to ensure a conservative approach to the analysis of traffic impacts. The revised existing conditions intersection analysis is shown in the revised Section 5.5 (*Transportation and Circulation*).

LETTER 11
**The Marinwood Association
and
Marinwood Advocates for Sensible Planning**

RECEIVED
2001 MAY 20 09
CITY OF SAN RAFAEL
PLANNING DEPARTMENT

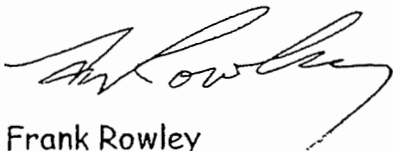
April 27, 2001

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

The Marinwood Association and the Marinwood Advocates for Sensible Planning represent and protect the interests of the Marinwood community. Attached are our comments regarding the Draft Revised Environmental Impact Report for the Oakview Master Plan that are due to you on May 14, 2001.

We are submitting this material prior to the May 14, 2001 due date and by the due date of April 27, 2001 per our conversation with you earlier this month, in order to have these comments included in the informational packets to the Planning Commissioners for the May 7, 2001 hearing.

Sincerely,



Frank Rowley
The Marinwood Association
77 Mark Drive, Suite 8
San Rafael, CA 94903
(415)491-7770



Carol Brandt
Marinwood Advocates for
Sensible Planning
P.O. Box 6853
San Rafael, CA. 94903
(415)491-5092

cc: Supervisor John Kress

PC ATTACHMENT #1

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning- Page 1 of 7

Draft Revised Environmental Impact Report for the Oakview Master Plan

2.0- p.14 Residential Buildings & Office Buildings

A On May 25, 2000 Bob Brown, Planning Director for the City of San Rafael in a letter to Alex Hinds, County of Marin, referenced in paragraph three the following: "More importantly, we noted that the proposed office building is not in compliance with the City's General Plan, which designates the site for low density, hillside residential." The City of San Rafael agreed to no annexation if the County would adhere to the City's General Plan provisions for the Daphne property and the Memorandum of Understanding several years ago. NG-12 in the General Plan states: "The Daphne parcel has long been zoned and designated for limited residential development. The parcel contains key land needed for planned highway interchange improvements. Proposed development shall provide noise setbacks consistent with City standards, retention of community-wide visual resources, ridgeline protection and creekside setbacks. Residential development shall also be compatible with existing area development. It is expected that the maximum development potential previously proposed for the site would be very difficult to achieve." How does the document deal with these discrepancies?

B Regarding the residential buildings: Exhibit 2.2-7 shows lot sizes on the low side of 18,080 square feet to the high side of 36,240 square feet. What is the planned square footage of the actual homes? The lot sizes are not consistent with existing sites in Marinwood, which they are required to be as referenced in the General Plan provision cited above. Most lots in Marinwood average 5,000 square feet to a high side of 9-10,000 square feet. These planned lot sizes are clearly out of proportion with the rest of Marinwood.

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 2 of 7

2.0 - p.21 Exhibit 2.3-1 Cumulative Project in the Study Area, August 1999

C The Marin County PROPDEV 29 survey used is dated. At least two subsequent versions would have been available sufficiently prior to release of the Draft EIR to be incorporated into this analysis. There is no mention of addition proposed housing and buildout of commercial buildings at Hamilton, the proposed buildout of the old military housing in Ignacio and the Fairchild site on Redwood Road.

3.0 - p.46 Energy and Natural Resources

D This Energy section is the typical sort of boilerplate that has been commonplace in EIRs for years (since the 1970's oil crisis that resulted in the CEQA guideline change requiring energy issues be addressed in EIRs). It would seem that with the current Year 2001 energy crisis in full swing that the energy section deserves a lot more treatment and analysis than simply stating that the project will need to comply with Title 24 of the California Administrative Code for energy conservation.

5.5 Transportation and Circulation

p. 5.5-1, second paragraph

E What is the a.m. and p.m. peak hour in the project vicinity and how was it determined?

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 3 of 7

p. 5.5-1, second paragraph

F

Footnote 1 makes references to a 1999 Caltrans document reporting 1998 traffic volumes information. Traffic has seemed to be getting significantly worse in the last couple of years. Isn't there more recent traffic volume data for Highway 101 in the project site vicinity? Higher volumes would result in project-generated traffic impacts being understated.

p. 5.5-3, sixth paragraph

G

Appendix A does not provide any information on Level of Service methodologies for freeway segments as indicated.

p. 5.5-8, fifth paragraph

H

The role of "freeway jumpers" and their adverse effects of peak hours traffic conditions in the Marinwood neighborhood needs to be described in detail. How is this current and well-documented situation accounted for in the HCM Freeway Segment Analysis and the interchanges directly affected?

p. 5.5-9, first paragraph

I

What is the estimated construction timetable for the Highway 101 Gap Closure Project? Is the funding for its construction secure, given the State's energy crisis that is drawing away huge amounts of funds? How do you draw the conclusion that it will improve peak hour traffic flows in the study area? Do you know what proposed projects may be approved during what is presumed to be a lengthy construction time? Already on the books is the construction of the old Fairchild Site by the City of San Rafael for light industrial buildings which will impact Highway 101 traffic. What about the City of San Rafael's plans for additional retail services at Northgate Mall or possible addition of affordable housing units in the Northgate Mall area?

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 4 of 7

p. 5.5-10, fifth paragraph

J How much "further delay" at an intersection that is currently at or below LOS E is required for an impact to be considered significant? Does the City of San Rafael and the County of Marin apply the same standard?

p. 5.5-12, first full paragraph

K The Marin County PROPDEV survey used for the Traffic Analysis is dated. At least two subsequent versions would have been available sufficiently prior to release of the Draft EIR to be incorporated. At the least a subjective description of the changes evident in subsequent PROPDEV versions should be provided in the EIR and a sensitivity analysis as to whether the updated information would lead to any changes in various traffic impact conclusions provided.

p. 5.5-12, fourth paragraph

L It is unclear whether the Lucasfilm Grady Ranch and St. Vincent's/Silveira projects were or were not included in the CMA model. The specific development assumptions used for the cumulative impact analysis needs to be clarified.

p. 5.5-12, fifth paragraph

M The trip rates presented in Appendix B are average rates from the ITE Trip Generation Manual and are different than the trip generation rates that appear (on P. 5.5-16) to actually have been used in the EIR analysis. This discrepancy should be explained.

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 5 of 7

p. 5.5-13, second paragraph

N

The statement that the cumulative analysis is based on the "approximate potential buildout" of the City of San Rafael's General Plan requires explanation. How much less than buildout is assumed? When is buildout expected to occur?

p. 5.5-16, Exhibit 5.5-5

O

The trip generation rates applied to the project are different than, and slightly higher than, the average trip rates identified in the ITE Trip Generation Manual. The differences appear to be in the 20 percent range (higher), although individual rates (e.g. the a.m. peak-hour rate for single family homes) are as much as 40% higher than the average rates. However, these rates still understate traffic generation likely resulting from the proposed project. Page 2.0-11 of the EIR states that capacity for four parking spaces would be provided for each of the project's houses. Larger houses = more traffic. A more realistic trip generation rate for the large homes proposed in the project would 100% (or double) the average ITE rate. Consequently, project impacts on local traffic conditions have been understated in the EIR.

p. 5.5-35, Impact 5.5-6

P

The impact only discusses parking requirements relative to the office uses. What are the requirements for residential uses and how does the project satisfy them?

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 6 of 7

p. 5.5-35, Impact 5.5-7

Q

The impact discussion is silent on the role of the Highway 101 "freeway jumpers" on local traffic conditions. At the April 4th Traffic meeting held at the Marinwood Community Center, Mr. Farhad Mansourian, (Chief Assistant Director, Department of Public Works, County of Marin) told over 300 residents and officials that his electronic traffic counts on Miller Creek Road indicated that 900 cars per hour exit Highway 101 onto the local streets of Marinwood from the hours of 6am-9am, Monday through Friday. Local residents now cannot easily get access to Las Gallinas Avenue during the a.m. peak hours. Additional traffic from the proposed development, even from "only" eight homes on Erin Drive will further exacerbate this situation and constitutes a significant impact requiring mitigation. While the County is planning a trial project for the month of May to address the "freeway jumper's" issue by placing barriers on westbound Miller Creek road to "pinch down" the road to only one lane, thus making it inconvenient (slower) for traffic to bypass through the community of Marinwood, however there is no guarantee that it will be effective in the long-term in reducing local traffic congestion.

Economic and Social Effects

R

The Draft EIR fails to address the Economic and Social Effects of the proposed project according to CEQA guidelines, section 15131. The term "significant effect on the environment" is defined in Section 21068 of CEQA as meaning "a substantial or potentially substantial adverse change in the environment." This focus on physical changes is further reinforced by Sections 21100 and 21151. Economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment.

April 26, 2001

Comments from:

The Marinwood Association and Marinwood Advocates for Sensible Planning

Page 7 of 7

This project will have a significant physical change to the community of Marinwood. This is a residential community and was never designed to have its main entrance off the freeway as an entrance to a major office complex. Not only will this change the entire character of the community but the increased traffic will physically change Marinwood Avenue and instead of a quiet street that can be easily crossed by seniors, school children and other residents to get to the Marinwood Shopping Plaza, the proposed project will turn Marinwood Avenue into a dangerous street full of traffic going to and from the office complex all day long. The housing component of the project will forever change the physical setting of Ellen, Lisa, Elvia and Etta Drives and Courts, which is now a pristine, quiet beautiful bowl of land that residents have as a backdrop to their homes on these streets. The physical change will impact their privacy and create a negative social impact on these residents.

At this time right now, it is impossible for Marinwood residents to allow their children to walk or bike to school safely due to the bypass commute traffic that clogs our streets. As Farhad Mansourian stated at the April 4, 2001 Traffic meeting in Marinwood, 900 cars per hour enter Marinwood via the Marinwood southbound exit ramp and bypass through our community for three hours each morning. This has already severely altered the social aspect of our community. We do not need a 94,400 s.f. office complex with its associated traffic in this community. Both the office complex and the residential portions of this project will have a significant negative impact on the community of Marinwood.

**RESPONSE TO LETTER 11 -- THE MARINWOOD ASSOCIATION AND MARINWOOD
ADVOCATES FOR SENSIBLE PLANNING, FRANK ROWLEY AND CAROL BRANDT**

Response to Comment 11-A

In Chapter 4.0 of the Draft EIR the proposed project is evaluated for consistency with the *City of San Rafael General Plan 2000*. For example, in regard to Policy NG-12 the EIR states that the Master Plan takes into account the concerns regarding noise setbacks. Retention of community wide visual resources, ridgeline protection and creekside setbacks. Each of these issues is evaluated in this EIR.

On page 4.0-46 of the Draft EIR it is also reports that City of San Rafael staff has stated the proposed office use is inconsistent with the City General Plan designation of Hillside Residential and General Plan policy NG-12.

Chapter 4.0 of the Draft EIR acknowledges the conflict between *The Marin Countywide Plan's* land use designation and the *City of San Rafael General Plan 2000's* land use designation for the project site. As stated on page 4.0-42 of the Draft EIR the proposed office buildings would not be consistent with the City's Hillside Residential designation.

However, it is the County's position that in this instance, where the project site is not proposed for annexation to the City of San Rafael, where there is a conflict between the County's and the City's land use designation it is the County's General Plan that prevails. Also see Response to Comment 1-A.

Response to Comment 11-B

Although there are no specific designs for individual houses as stated on page 2.0-19 of Chapter 2.0 (*Description of the Proposed Project*) the maximum size of individual houses, excluding a garage for two cars, would not exceed 4,500 square feet.

There are no specific policies of *The Marin Countywide Plan* that specifically limit the size of residential lots and individual lots. Policy EQ-3.25 Scale of Development does state that the development of residential structures should be in scale with environmental constraints such as steep slopes and the design character of the existing neighborhood. It is the finding of the EIR (see page 4.0-16) that the proposed project is consistent with this policy.

Response to Comment 11-C

As discussed in Master Response D above, the short-range land use and trip generation numbers have been updated based on the most current version of Propdev (*Marin County Propdev 34, Semi-Annual Proposed Development Survey*, published in February 2002).

Response to Comment 11-D

Please see Master Response C -- Energy

Response to Comment 11-E

The peak hour for study area intersections was based on the highest volume derived from four consecutive 15-minute counts taken over a two-hour period. The peak, two-hour morning commute period is generally between 7:00 AM and 9:00 AM in the morning and between 4:00 PM and 6:00 PM for the evening commute. Generally, the peak hour in the study area was found to occur between 7:30 and 8:30 AM and 4:45 and 5:45 PM during the evening.

Response to Comment 11-F

The Caltrans Highway 101 freeway traffic volumes have been updated and are provided in the revised Section 5.5 (*Transportation and Circulation*). The Highway 101 volumes were taken from the *Caltrans Traffic Operations Division Homepage* and were recorded in June 2000.

Response to Comment 11-G

Appendix B (Traffic) of the Draft EIR has been revised. This revised appendix includes a LOS calculation table for freeway segments. This table reflects the Highway Capacity Manual (HCM) 2000 methodology which relates freeway segment LOS to vehicle density per lane. The volume-to-capacity (V/C) ratio is based on the HCM standard of 2,200 vehicles per lane, per hour and is maintained and shown in the revised Section 5.5 (*Transportation and Circulation*) as a means of calculating the project's contribution to the freeway segments.

Response to Comment 11-H

The "freeway jumper" issue has been a long standing problem in the Marinwood area. There have been a number of attempts to address the problem; the most recent of which was conducted by Marin County in conjunction with the Highway Patrol and the Sheriff in May 2001. The information below is based on County documents and observations by Wilbur Smith Associates related to the "freeway jumper" problem.

Over the past several years, commuters have utilized the southbound off-on ramp and Miller Creek Road as by-pass alternatives to increasingly slow traffic conditions on Highway 101. The California Highway Patrol, Caltrans and County have made several attempts to change commuters' habits of bypassing the Highway. In the early 1970's, Caltrans installed a left-turn only sign at the southbound off-ramp attempting to eliminate the on-off mentality. This resulted in commuters turning onto Miller Creek Road and either making a U-turn at Marinwood to get back to the on-ramp or continue on Miller Creek Road to Las Gallinas Avenue. Shortly after this installation the County installed a "No U-turn" sign at the Miller Creek/Marinwood intersection. This caused commuters to either make a right- or left-turn onto Marinwood, then an immediate U-turn creating a situation that was potentially worse than the original problem. After a relatively short trial, all of these prohibitions were lifted.

The By-Pass Route

Historical data demonstrates that commuters have utilized Miller Creek Road and Las Gallinas Avenue to by-pass the congestion on Highway 101. In the 1970s this only occurred during extremely heavy traffic generally the result of an accident. Up until recently, this has become an everyday occurrence. Traffic counts taken by the County in March and April 2001 show that as many as 1,100

cars per hour during peak commute hours traveled this route. One spot count demonstrated an average vehicle-per-hour of 891 vehicles existing Highway 101 onto westbound Miller Creek Road. Of that number, 774 continued through the Marinwood Avenue intersection with 589 turning southbound onto Las Gallinas Avenue and 497 continuing through the Lucas Valley Road intersection. Wilbur Smith Associates traffic counts taken 15 months previously in January 2000 recorded higher volumes (1,485 AM peak hour vehicles) exiting the southbound ramps, with 932 vehicles turning westbound onto Miller Creek Road and 534 vehicle continuing southbound through the intersection and back onto Highway 101 (see Exhibit 5.5-2 in section 5.5).

This mass of commute traffic, occurring at the same time that an average of 200 vehicles enter and exit Miller Creek School creates significant traffic congestion along Las Gallinas Avenue. Other issues include increased traffic volumes at the Miller Creek/Lucas Valley Road intersection, increased traffic on Blackstone & Windstone, increased number of dangerous U-turns just west of Miller creek Road on Lucas Valley Road, and increased speeds on all local streets within Marinwood that connect to either Las Gallinas or Miller Creek.

Recent Actions

Based on a Marinwood community meeting held April 4, 2001, Marin County, CHP and Sheriff agreed to perform an experiment aimed at deterring "freeway jumpers" from entering the Marinwood neighborhood. Starting on May 2001, the County narrowed Miller Creek Road between Marinwood and Las Gallinas from 31 feet to 21 feet in width and eliminated westbound left- and right-turn pockets at the Miller Creek/Las Gallinas. This was intended to force vehicles to stay in line and wait for their turn to continue through the intersection resulting in a backup to the Highway 101 off-ramp. Traffic was additionally detoured at the Marinwood Avenue/Miller Creek Road intersection between the hours of 6:00 to 9:00 AM. prohibiting right turns from westbound Miller Creek, left-turns from eastbound Miller Creek and through traffic northbound onto Marinwood. The traffic control experiment was in place starting May 1, 2001 and operated in the described configuration until May 21, 2001. According to county staff there was a significant change in the commute traffic pattern. The most significant result was the stacking of traffic on Miller Creek Road and the southbound off-ramp from Las Gallinas Avenue, and the lack of congestion on Las Gallinas between Miller creek Road and Freitas Parkway. Counts taken on April 2, 2001 (8:00 to 7:00 AM) prior to the changes recorded 1,048 vehicles traveling southbound on Las Gallinas Avenue south of Miller Creek Road. On May 8, at the same location and time, the number of vehicles was reduced to 717. This corresponds to a 32 percent reduction in volume.

It appears that the addition of the roughly 150 vehicle per hour to the lineup on westbound Miller Creek Road significantly helped meter traffic onto Las Gallinas. It was the addition of these vehicles that helped create the backup of vehicles from Las Gallinas onto the highway off-ramp. Once the turning prohibition onto Marinwood Avenue was lifted, traffic patterns returned to pre-experiment conditions, with the exception, that there were lower volumes.

County DPW had proposed that the temporary experiment become permanent by physically narrowing the lanes on Miller Creek Road from 31 feet to 25 feet (the road was narrowed to 21 feet during the experiment and many complaints were logged by the bicycle community regarding the absence of a safe riding shoulder). The proposed lane width (25 feet) would provide for curb parking, a five foot bike lane, and a twelve foot driving lane. Furthermore, the turning movement at the intersection of westbound Miller Creek Road and Las Gallinas Avenue would be restricted such that left turn, right turn and U-turn or proceeding straight are permitted from a single lane.

To date, the traffic calming proposals tested in May 2001 have not been adopted and the local roadways and intersections continue to operate as described in the Draft EIR. Therefore, for purposes of the EIR it was assumed that traffic volumes and patterns at the Highway 101/Miller Creek Road southbound ramps and other local intersections continue to operate with by-pass freeway traffic.

The HCM analysis methodology of freeway segments calculates operation LOS for peak hour directional vehicle volumes on a given segment of mainline freeway. The HCM intersection analysis accounts for the total peak hour traffic volumes (including freeway jumpers) and calculates a LOS based on these volumes.

Impact of Mitigation Measures

The implementation of the EIR mitigation measures would result in the installation of traffic signals at up to five study area intersections. The intent of these mitigation measures was to improve traffic operations and to insure acceptable peak hour levels of service (LOS). For the county, LOS D or better is considered acceptable at signalized intersections.

As discussed above, a primary contributor to peak period traffic in the Marinwood area is due to vehicles exiting the congested freeway and passing through the local streets.

By recommending signalization of impacted intersections there is a possibility of inducing other motorists to leave Highway 101 and add to the existing by pass traffic. The theory is that improving the existing congested conditions would make this route attractive to a larger number of motorists currently staying on Highway 101. This idea of an indirect negative impact has some merit. The growth inducing affects of roadway improvements have been documented elsewhere under various conditions. An attempt to estimate the potential for increased by-pass traffic in this area due to signalization would require an extensive survey and modeling effort beyond the scope of this study.

A mitigating factor that suggests by-pass traffic would not necessarily grow is the current improvements underway and planned for Highway 101. The Gap-Closure project will provide additional freeway capacity in the Marinwood area and will improve existing downstream bottlenecks. This work when complete will improve highway operations and result in higher peak hour speeds. Should this be the case, the incentive for leaving the highway at Marinwood would lessen for many potential and current by-pass motorists.

Response to Comment 11-I

The estimated timetable for the construction of the 101 Gap Closure Project is approximately five years. Funding for the first phase of the project is secure and the project remains a primary local, state and federally financed effort. Completion of the project will provide additional capacity in the form of HOV lanes in the vicinity of the Marinwood interchange. The Marin County, CMA traffic forecasts estimate that the reversible HOV lane will carry approximately 1,200 to 1,400 vehicles per hour (see CMA 2020 peak hour forecast, Appendix B) during the peak commute periods in peak commute directions.

The light industrial buildings at 4300 Old Redwood Highway are accounted for in the revised short-range cumulative analysis (see revised Section 5.5 [*Transportation and Circulation*]). The trip generation associated with that project is shown in the short-range cumulative project's table in Appendix B. Future projects slated by the City of San Rafael were not noted in the most current

Propdev (*Propdev 34*). Traffic from these projects would be accounted for in the long-range CMA forecasts used in the Draft EIR.

Response to Comment 11-J

The addition of one or more project vehicles to an intersection that is currently operating at an unacceptable LOS E or worse is considered to be a significant impact. The difference between County and City of San Rafael intersection LOS standards is provided on page 5.5-10 of the DEIR.

Response to Comment 11-K

The updated *Propdev 34* short-range land use and trip generation table is provided in Appendix B. The revised short-range intersection analysis based on the *PROPDEV 34* findings is provided in the revised Section 5.5 (*Transportation and Circulation*).

Response to Comment 11-L

Both the Lucasfilm Grady Ranch project and the St Vincent's / Silveira project are included in the CMA model forecasts used in the EIR analysis (see page 5.5-12 of the Draft EIR). Please see Appendix B for additional CMA traffic forecast data.

Response to Comment 11-M

The trip rates shown in Appendix B are the average ITE rates for single-family homes. The rates shown in the Draft EIR (page 5.5-16) are the average rates increased by 20 percent. The inflated rates were used to conduct the Draft EIR analysis in order to account for the larger homes proposed by the project. Text has been added to the revised Section 5.5 (*Transportation and Circulation*) clarifying the use of the non-standard rates.

Response to Comment 11-N

The statement serves to acknowledge that buildout for the City San Rafael like most municipalities can not be known because it is subject to review, revision and many other socio-economic variables. The traffic analysis is based on the County's short-range land use plans as presented in *Propdev 34* and on the CMA long-range traffic forecasts for the area.

Response to Comment 11-O

Residential trip generation rates have been increased by 20 percent over ITE standards in order to provide a conservative estimate of residential trip generation associated with larger (3,000 plus square feet) single-family detached homes. Over the past few years, trip generation surveys in California have indicated that in some cases larger homes can generate additional daily trips compared to smaller single-family homes. The findings are not conclusive, and as yet it has not been established that larger homes consistently generate a higher number of daily trips. The limited research that has been done indicates that when larger homes generate increased trips they do so within a 20 percent daily

trip increase range. The limited survey work also indicates that during peak hours most single-family residential units tend to display similar trip generation characteristics regardless of square footage.

It is worth considering that a larger single family residence in terms of square footage, does not necessarily translate into a larger number of individuals occupying the residence. In fact, family size among higher income households tends to reflect the national average. The higher income households do tend to have higher vehicle ownership rates, but again this does not necessarily translate to a higher than average trip generation rate. A higher number of service related trips have been tied to large single-family homes. These include trips associated with domestic workers, landscape services, general service and deliveries and others. These types of trips are not usually on a day to day basis and more importantly they occur most often during off-peak periods (mid-morning and afternoon).

It is important to note that the ITE trip rate standards for single-family residential units are based on several thousand nationwide surveys taken over four decades. The ITE recognizes that one rate does not fit all situations and provides for variability within a standard range. The suggestion that trip generation rates should be doubled and applied to this project can not be substantiated or justified. The increase to trip rates by 20 percent overall insures that the project residential traffic impacts have not been understated.

Response to Comment 11-P

The project provides adequate parking for all 28 single-family units. Parking is provided in two to three bay on-site garages and on-site driveways.

Response to Comment 11-Q

The Draft EIR impact section was prepared well in advance of the April 2001 meeting. That understood, the impact section accurately describes the AM peak hour conditions at the Highway 101 / Miller Creek Road southbound ramps. The AM peak hour southbound ramp volumes recorded, described and analyzed in the Draft EIR are higher than those reported by Mr. Mansourian's electronic counts which were taken 15 months later than the Draft EIR counts (January 2000).

Please see Response to Comment 11-H for additional information on freeway jumpers.

Response to Comment 11-R

Effects analyzed under CEQA must be related to a physical change in the environment. Economic and social effects are not considered environmental effects under CEQA. These effects need to be considered in EIRs only if they would lead to an environmental effect. As discussed in section 15131 of the *CEQA Guidelines* the evaluation of economic or social effects is generally treated as optional; agencies (such as Marin County) may, but are not required to, evaluate them. Agencies sometimes do include an analysis of economic or social effects of a proposed project.

Consistent with section 15131 of the *CEQA Guidelines* Marin County did decide to include an analysis of the project's fiscal impact on the County and various public services provides (see section 5.9 [*Costs and Revenues*]). Each of the fiscal impacts analyzed in Section 5.9 was determine to be a less-than-significant impact.



LETTER 12

MARIN CONSERVATION LEAGUE

55 Mitchell Boulevard, Suite 21 • San Rafael, CA 94903

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e-mail: mcl@conservationleague.org • web site: www.conservationleague.org

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May 2, 2001

Marin County Planning Commission
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Re: Revised Draft Environmental Impact Report Oakview Master Plan/Use
Permit/Vesting Tentative Map

Dear Commissioners:

Marin Conservation League (MCL) submits the following comments on the
Revised Draft Environmental Report on the proposed Oakview development:

- A** 1. The Countywide Plan land use designation for the project site is "Low Density Planned Residential", which allows a density of one to ten acres per unit. Parcel 1, the residential parcel, consists of 51.9 acres. As a result, the General Plan designation would appear to allow 5 to 52 units on the area being used for residential purposes and not the 10 to 106 units indicated in the Draft EIR. What is the rationale for applying the residential density to the 54.4-acre portion of the property proposed only for office development and future highway right-of-way use? The calculation of the non-residential floor area ratio (FAR) now excludes the residential and highway right-of-way parcels.
- B** 2. The photomontages in the Revised Draft EIR are inadequate to accurately describe what the two proposed office buildings, the associated parking lots and new frontage road will actually look like. Comparing the photomontages of the two office buildings with a visual inspection of the site it is difficult to visually comprehend the positioning of the two buildings. Because both office sites are sloped, either a substantial cut will have to be made into the hill or the buildings will have to be either elevated on fill or located close to the edge of the freeway. The EIR should include a section drawing through this area, which indicates the distance between the outer edge of the two office buildings and the edge of the southbound freeway. The same information should also be shown for the proposed parking lots.
- C** 3. Because the proposed office buildings, parking lots and new frontage road appear to be a continuation of the existing strip development along the freeway corridor in North San Rafael, a photomontage should be included showing a view of the office buildings, 378 car parking

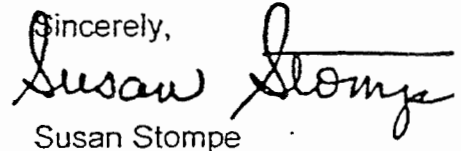
areas and new frontage road, as would be seen from the southbound Highway 101 lanes.

4. The DEIR projects that the 2 office buildings would add almost 1300 daily vehicle trips along Marinwood Avenue. The EIR should contain a qualitative description of how this traffic will change the current character along Marinwood Avenue and not just at the intersections. This information is important since Marinwood Avenue is bordered on the West by residential units and on the East by a small community shopping center.
(D)
5. The projections for peak hour traffic for Marinwood Avenue, the only access road to the 2 office buildings, seems low in light of the almost 400 parking spaces. Because the two office buildings are in auto dependent locations, is the Institute of Transportation Engineers (ITE) number appropriate? If available, actual traffic counts from a suburban office complex should be utilized.
(E)
6. The possible development allowed under both the San Rafael General Plan and Countywide Plan designations on both the St. Vincent's and Silveira properties should be included in the Cumulative Projects in the Study Area section (DEIR 2.0-21) and in the cumulative traffic study (DEIR 5.5-29 through 34), which appears to be based upon dated information.
(F)
7. Likewise the large office/light industrial project currently under construction on the former Fairchild site, along the Redwood Highway Frontage Road, should be included in the cumulative impact analysis.
(G)
8. MCL continues to wonder how 2 large proposed office buildings, with a total of almost 100,000 square feet of floor area and almost 400 parking spaces, located very separate and distinct from the residential part of the development can really be "consistent" with the site's Countywide Plan designation of "Low Density Planned Residential"? In addition, we continue to question of wisdom of approving a discretionary Use Permit for another large office project given the often cited "jobs/housing imbalance" and "lack of workforce housing."
(H)
9. What impacts will the debris flows, slide scarps, and one bedrock slide on the office parcel have on the 2 proposed office buildings?
(I)
10. Information should also be provided as to the likely extent of slope reconstruction grading anticipated on the hillside surrounding the 2 office buildings, parking lots and the new frontage road for the office buildings.
(J)

K

11. With reference to Exhibit 5.1-1, Site Geology, where did the Old Debris Fan Complex originate and what is the meaning of the question mark (?) shown above the Old Debris Fan Complex designation?

Thank you for this opportunity to review the Revised Draft EIR on this development. MCL would appreciate receiving a copy of the consultant's response to our questions and comments.

Sincerely,

Susan Stompe
President

RESPONSE TO LETTER 12 – MARIN CONSERVATION LEAGUE, SUSAN STOMPE, PRESIDENT

Response to Comment 12-A

Consistency with *The Marin Countywide Plan* land use designations for Marinwood is discussed on page 4.0-20 of the Draft EIR. The land use designation of Planned Residential would permit five to 52 housing units on proposed parcel 1. The Master Plan proposes construction of 28 housing units on Parcel 1. The number of housing units, therefore, is consistent with the Planned Residential designation.

Response to Comment 12-B

In response to this and similar comments received on the Draft EIR new photosimulations of the two buildings located along the frontage of Highway 101 were prepared. The new photosimulations, and a discussion of what is illustrated, is in Master Response B. Exhibit 2.2-6 shows the relationship of the location of the office buildings, the parking lots, the access road and southbound Highway 101.

Response to Comment 12-C

As stated in Master Response C, Exhibit 7.0-10 shows the site from northbound Highway 101 looking southwest. In the comments on the Draft EIR some commentors requested a view of this portion of the project site from southbound Highway 101. However, due to safety concerns it was decided not to photograph the project site from southbound Highway 101.

Response to Comment 12-D

If the project office component is constructed as proposed traffic volumes would increase along Marinwood Avenue particularly during the morning and evening commute periods. Currently Marinwood Avenue carries 340 vehicles (210 southbound / 130 northbound) in the AM peak hour. These numbers are taken from the turning movement volumes shown in Exhibit 5.5-2 of the Draft EIR. With the project office component the traffic on Marinwood Avenue would increase to about 520 vehicles (370 southbound / 150 northbound) in the AM peak hour (Exhibit 5.5-8, Draft EIR). This represents a 53 percent increase over current AM peak hour traffic on Marinwood Avenue. The pattern of current peak hour traffic movement is currently between Marinwood Avenue and the Miller Creek Road / Highway 101 ramps. This pattern would continue with the addition of project office traffic. The increased traffic volumes would add delay to vehicles currently using the roadway, however the peak hour volumes with project traffic could be accommodated on Marinwood Avenue at it's current width and configuration.

Response to Comment 12-E

The ITE trip generation rate General Office (Land Use Code 710) is appropriate because it provides a higher daily and peak hour rate than other ITE office related uses, such as Office Park and Research and Development uses. To the EIR preparers knowledge, trip generation survey counts from other

office complex's in Marin County were not available for use in the Draft EIR analysis. Trip generation survey rates taken from other than standard (ITE, Caltrans) sources must be approved by the County for use in traffic analysis.

Response to Comment 12-F

Please see Responses to Comments 11-I, 11-K and 11-L.

Response to Comment 12-G

Please see Response to Comment 11-I.

Response to Comment 12-H

Comment noted. As discussed in the EIR, the project site is zoned RMP-1.38 (Residential, Multiple Family, Planned District, 1.38 units per acre maximum density) which requires Master Plan review for the ultimate development of the site. RMP zoning allows office buildings subject to securing a Use Permit pursuant to Marin County Code Section 22.47.022(12)(e). Consistency of the proposed project with the Marin County Zoning Ordinance is in Chapter 4.0 of the EIR.

Response to Comment 12-I

These landslide features will be mitigated during grading. As stated on page 5.1-18 of the Draft EIR (under Significance after Mitigation):

Because a comprehensive grading and landslide repair program has been formulated as a part of the *Oakview Master Plan* (and subjected to a second-party professional peer review), it has been demonstrated that the landslides can be repaired using the standard geotechnical techniques proposed by the applicant's geotechnical consultant (removal, recompaction, retaining structures and surficial and subsurface drainage measures), in such a way that the significant impacts would be reduced to less-than-significant levels.

Response to Comment 12-J

The project applicant's geotechnical consultant has recommended complete removal and recompaction of the debris flows and other potentially unstable materials present above the proposed commercial development (Kleinfelder, 1999). As specified by the applicant's consultants, the Draft EIR and the Uniform Building Code, these reconstructed slopes cannot exceed 2:1 (horizontal:vertical) in gradient. The Grading and Drainage Plan (IL Schwartz Associates, Inc., 1999) does not show the proposed limits of landslide repair and slope reconstruction. Such detailed information will be included in the final grading plan which will be submitted at a later stage in the approval process (such as Precise Development Plan, Tentative Map and Final Map).

Response to Comment 12-K

The "Old Debris Fan Complex" (material that was washed down from directly above and has coalesced) was mapped from a combination of field reconnaissance and aerial photographic review by the project applicant's geologic consultant (Herzog, 1983) for a previous development proposal and the 1996 Draft EIR geologic consultants Rogers/Pacific, Inc. The question mark was added by the applicant's current geologic consultant, Kleinfelder, Inc., to indicate that the precise contact between the colluvial soils and the debris fan material has not been defined.



Marin Audubon Society Box 599 Mill Valley, California 94942-0599

May 4, 2001

LETTER 13

Planning Commission
Marin County Community Development
3501 Civic Center Drive, #308
San Rafael, CA 94903

RE: OAKVIEW MASTER PLAN DEIR

Dear Commissioners:

The Marin Audubon Society submits the following comments on the DEIR for this 28 unit housing, 20 acres of office development and open space.

RECEIVED
2001 MAY - 8 P. 4: 03
MARIN COUNTY
COMMUNITY DEVELOPMENT
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(A) What is the justification for allowing subdivision of the site into two parcels? On what basis would the decision be made to grant a use permit for offices in an RMP zoned site? Would the subdivision and change in use have any adverse impacts on the neighborhood?

(B) Who would own the open space and how would it be managed.

(C) Potential development at Hamilton and St. Vincent/Silveira should be added to the list of cumulative projects in the study area.

(D) The project drainage system does not appear to comply with Marin County's Stormwater Ordinance which calls for drainages to be retained above ground unless there is an issue of safety. Keeping drainageways above ground in a vegetated channel contributes to improved water quality and enables wildlife habitat to continue. Undergrounding of drainageways in culverts should be identified as an impact requiring mitigation. The drainage should be redesigned so that runoff flows in open naturally vegetated channels above ground and the use of underground culverts is avoided.

(E) Impact 5.2-1 states that the proposed roadway and home construction in the bowl and the fan deposits below would require culverting the channel throughout its length. Explain why. culverting is necessary. Even though the intermittent drainageway is not a blue line stream, it should still be retained above ground

(F) Mitigation 5.2-2 calls for construction of stormwater detention/treatment basins. What habitats are currently in the locations of the proposed detention basins and vegetated swales. In other words, what habitats would be lost to construct these facilities? How would that loss be mitigated?



A Chapter of National Audubon Society

G Describe the size and characteristics of the vegetated swales? How is it determined that they would be adequate to treat the project runoff.

H What potential impacts would result from upgrading of the Highway 101 box culvert as called for in Mitigation 5.2-4.

Implementation of Measure 5.2-5 second bullet (payment of a drainage fee) to reduce impacts on flooding along the on-site and downstream reaches of Miller Creek is not adequate because, even though the fee were paid immediately, it would not mitigate the impact until the necessary improvements are constructed. Would the fee be sufficient to cover the entire cost of the modifications? When and how would the rest of the funds be obtained? What measures would be needed and what impacts would they have on the channel through the Silveira property? If any stream bed, bank or riparian vegetation would be modified, how would those impacts be mitigated?

J Mitigation 5.2-7 What would the most effective BMP's be to mitigate the downstream sedimentation and flooding impacts of erosion?

Could construction of a bridge over Miller Creek be avoided? What type and how much riparian vegetation would be lost with construction of a bridge? If avoidance is not possible, how could bank and vegetation loss be minimized? Mitigation 5.2-8, bullet two, relies on agencies to require the mitigation. The public should be able to have some idea of recommended measures in order to evaluate their effectiveness. What have the project applicants proposed and/or would the EIR consultants recommend?

L What experience is there on the effectiveness of detention basins constructed to dampen flows functioning effectively as water treatment facilities?

M Why can't all drainages be above ground thereby lessening or avoiding the need for downstream traps and filtration systems?

N The applicant should update the tree inventory and identify all tree species to enable species to be distinguished and the trunk diameter of all trees on-site

O Reference to the stand of purple needlegrass on page 5.3-5 (second paragraph, last sentence) should be deleted. If the area meets the 10% criteria, whether it is barely or not, it meets it.

P What would be the fate of all fresh water seeps on the property?

Q Would any of the planned grading impact any tree, wetland or native grassland resources in addition to the impacts identified in this EIR? In other words, would grading itself destroy any more of these resources.

R The project should be redesigned to avoid all tree loss. With the sudden oak death syndrome plaguing native trees in Marin, all native trees should be saved. If only 1% would be removed it should be easy to avoid this small number.

- (S) Regarding Mitigation measure 5.3-2(c):
- temporary fencing should be placed ten feet outside of the drip line not at the dripline
 - landscape irrigation within the dripline of native trees should be prohibited.

- (T) Mitigation 5.3-3 Native grassland mitigation should be at least 2:1 to allow for temporal loss and possible failure.

1.4 acres of scattered fresh water seeps would be lost. Seeps are an unusual habitat type.

How could these and the other wetlands on site be preserved? We agree that the proposed

- (U) mitigation for wetland losses, creating new wetlands in the area reserved for future improvements to the Highway 101 Lucas Valley Road interchange in the southeastern corner of the site, is inadequate. With no certain water source the wetland could not be sustained and the wetland replacement could not be in-kind. What kind of wetlands would be created? Would be in-kind and provide the same habitat value as seeps?

- (V) While we agree with the EIR that a wetland mitigation location and performance criteria should be identified, the first mitigation considered should be avoidance of the impact. How could loss of the swales be avoided and remain as part of the habitat? If that is absolutely impossible, the new on-site for the proposed location for the mitigation should be identified in the EIR and the above information provided. At least a 2:1 mitigation ratio for wetland losses should be provided.

- (W) What measures would be required to minimize impacts of the roadway bridge?

- (X) Would the project block or interfere with movement corridors for wildlife?

- (Y) Do any steelhead or Coho exist in Miller Creek? How would impacts to these species be mitigated? What restrictions on timing would need to be installed?

- (Z) Is there a 100 foot wide buffer along Miller Creek as required by the Countywide Plan? If not the project should be revised to provide a buffer of this width.

- (AA) Discuss indirect impacts to wildlife, specifically the impacts on the habitat value of the site with the proposed housing.

- (BB) If all of the recommended mitigation measures to reduce tree impacts are implemented what would be the remaining tree loss without extensive grading? With extensive grading?

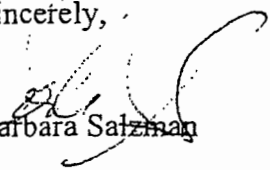
- (CC) Where would mitigation trees and native grasslands be restored? Unless this known, it is unclear that mitigation would be feasible.

- (DD) We strongly disagree with Impact 5.3-8. The mitigation proposed for seep and wetland losses are not adequate to reduce this impact to a less than significant level.

- (EE) A reduced project alternative that avoids wetland and tree losses should be developed.

Thank you for responding to our comments.

Sincerely,



Barbara Salzman

RESPONSE TO LETTER 13 -- MARIN AUDUBON SOCIETY, BARBARA SALZMAN

Response to Comment 13-A

As stated on page 2.0-9 of the Draft EIR the project applicant has identified dividing the existing site into two parcels. As a result the project application includes a proposed Tentative Map to divide the site into two parcels to initiate the development process. The County's use permit procedures are in Marin County Code, Title 22, Zoning, Chapter 22.88 and are summarized in Chapter 4.0 of the Draft EIR starting on page 4.0-30. Physical impacts as they would affect "the neighborhood" such as traffic, air quality, noise, etc. are described throughout the Draft EIR.

Response to Comment 13-B

On page 2.0-11 of the Draft EIR it is stated that the Master Plan does not state precisely how the open space would be managed and maintained. It is stated that the open space would be left in its natural condition. It is proposed that the open space be offered for dedication in fee simple to a public agency such as the Marinwood Community Services District or Marin County Open Space District. If dedicated to either of these districts the district would be responsible for managing and maintaining the open space.

Response to Comment 13-C

Short-range traffic volume forecast were based on the County's PROPDEV document and long-term forecasts were developed from the County CMA travel demand model. Traffic from these projects would be accounted for in the long-range CMA forecasts used in the Draft EIR.

Response to Comment 13-D

In this case, the safety concerns cited in the ordinance are related to ponded stormwater conditions along residential streets and in commercial parking lots. Where residential development is proposed, curb and gutter systems are normally included in the design to accommodate sidewalks. In certain situations curb and gutter systems can be linked with above ground drainage swales to facilitate site stormwater drainage (see "Start at the Source" manual, BASMAA 1999). For the proposed project, the developable portions of the lots within the topographic bowl of Sub-watershed 2 (already substantially devoted to private open space) would be further constricted if a swale drainage were integrated into the design. Moreover, significant additional earthwork would likely be required to accommodate a swale. Thus, the associated impacts to both the project design and to site grading reduce the feasibility of fully above ground drainage on the site. Note that wherever street curb and gutter systems do not have to be accommodated, the Draft EIR has required that the project substitute at-grade biofilters (i.e. grass-line swales) for storm drain segments, particularly in the drainage links to natural waterways. See Mitigation Measure 5.2-11.

Response to Comment 13-E

The Marin County Stream Conservation Ordinance applies strict conservation and setback provisions to development in close proximity to blue-line streams, as identified on USGS quad sheets. However, no specific protections are mandated for other non-blue-line drainageways. The intermittent drainageway in the bowl area of Sub-watershed 2 was the only higher elevation, on-site land suitable for residential development that was not affected by unstable geological conditions or existing stream conservation easements. While this land includes a spring which does support a wetland plant community, the habitat is not critical and the EIR biologist has determined that its loss can be mitigated on-site.

Response to Comment 13-F

The recommended basins and swales would be located in the lower elevations of the site, where proposed grading and development would have resulted in removal of the existing habitat. This would consist primarily of non-native grasslands, but would include areas of native grassland and freshwater seep cover. The native grassland and seep habitat would be replaced as part of recommended Mitigation Measures 5.3-3 and 5.3-4(a). No additional mitigation is considered necessary.

Response to Comment 13-G

Biofilters should be sized and configured (i.e. cross-section) to accommodate incoming floodflows without erosion. For swale slopes of less than two percent (one to two percent is optimal), no instream check dams are required. For swale slopes exceeding two percent (six percent maximum), check dams may be required to increase residence times for stormwater conveyed in the channel. Ideally, biofilter surface area should equal two and three-quarter percent or more of the contributing impervious surface area (see "Start at the Source- Design Guidance Manual for Stormwater Quality Protection"- BASMAA 1999). However, even at lesser percentages the biofilters will reduce the migration of contaminants downstream to receiving waters. Specific native grass and wetland plant species that provide sufficient roughness and rooting density for use in biofilters are cited in Section 8.6 of the BASMAA publication cited above.

Response to Comment 13-H

From a hydrologic standpoint, it is likely that only benefits would be derived from installing a larger culvert under Highway 101. Backwater flooding upstream of the culvert inlet would be reduced by the culvert upgrade. A hydraulic analysis would be required at the time of the upgrade to determine what, if any, impact the replacement project would have on the stability of the downstream flood control channel that extends through the industrial park area east of Highway 101. From a biotic standpoint, some Corps of Engineers jurisdictional area could be affected. However, this would be determined by the sponsoring agencies (e.g. City of San Rafael and Caltrans) during their project environmental review. Appropriate mitigation would be required by either the Corps or the California Department of Fish and Game in its Stream Alteration Agreement permit conditions.

Response to Comment 13-I

Further discussions with the Marin County Department of Public Works regarding the assessment of project impacts on the downstream bridge crossing east of Highway 101 have led to revised language for Mitigation Measures 5.2-2 and 5.2-5. Please see Responses to Comments 25-BB and 25-CC for additional discussion.

Response to Comment 13-J

The most effective mix of BMPs to minimize on-site grading and construction impacts would be a combination of Mitigation Measure 5.2-2 (detention basin construction) and the typical BMPs applied to construction sites as detailed in the project SWPPP. Since the detention basin construction will occur in tandem with the other site grading and construction activities, it will be available to trap any eroded site sediments prior to runoff exiting the project area. Simple preparation of the graded areas to allow for successful seeding and germination of erosion control plantings, hydroseeding or broadcast seeding of appropriate grass species and application of a surface mulch, such as straw is nearly universally effective at deterring erosion of site soils and their transport to on- and off-site drainageways. The County DPW reviews all SWPPPs and will determine if the BMPs described therein are adequate to protect stormwater quality.

Response to Comment 13-K

Access to the eastern portion of the site along Highway 101 would be achieved through use of a bridge crossing over Miller Creek (as proposed). Alternative access could possibly be through construction of a road over the ridgeline. This latter approach would require extensive grading and tree removal. The Miller Creek bridge crossing would be preferable given the comparatively limited disturbance which would occur. The extent of tree removal necessary to accommodate the creek crossing would depend on the final bridge design, although several mitigation measures would serve to minimize anticipated impacts. This includes Mitigation Measures 5.3-2(b), 5.3-2(c), 5.3-2(d), and 5.3-4(c), which call for minimizing tree loss, replacing any vegetation affected by the project, designing the bridge to minimize roadway width standards, restricting construction to the low flow period, and use of silt fencing to control construction debris. No additional mitigation is considered necessary.

Response to Comment 13-L

Water quality assessments documented in the engineering literature show that detention basins for stormwater peak flow attenuation could fulfill water quality objectives as long as the minimum residence time for incoming flows is 24 hours or more for a storm rainfall of 1.0 inch. This design criteria combined with a biofilter (i.e. grassy swale) inlet and pre-treatment detention/wetland area, as provided for in Mitigation 5.2-2, would produce significant reductions in suspended sediment, total phosphorus, total nitrogen, oxygen demand, and trace metals (e.g. see Federal Highway Administration's "Urban Drainage Design Manual- Hydraulic Engineering Circular No. 22" 1996). Additional design details could be integrated to further improve contaminant trapping efficiency.

Response to Comment 13-M

Please see Response to Comment 13-D.

Response to Comment 13-N

As a part of preparation of the EIR the EIR biologist reviewed the tree inventory and mapping and has concluded that the mapping provides a fairly accurate mapping of trees in the vicinity of the proposed improvements. Additional mapping and inventory work is not considered necessary.

Response to Comment 13-O

The large 1.8-acre stand of native grassland above Erin Drive noted by the commentor was mapped and considered as such in the Draft EIR. The composition of the grasslands on the site varies considerably, but most stands identified as native grasslands have a relatively low component of native species.

Response to Comment 13-P

A discussion of potential impacts on wetlands is provided under Impact 5.3-4 on page 5.3-24 of the Draft EIR. Of the 2.26 acres of jurisdictional wetlands identified in Exhibits 5.3-1 and 5.3-2, an estimated 1.4 acres of scattered freshwater seeps would be eliminated by the project. The anticipated limits of grading depicted in Exhibit 5.3-1 show the areas of freshwater seep directly affected by the project.

Response to Comment 13-Q

The anticipated impacts of the project on biological and wetland resources were based primarily on the proposed grading plan. Exhibit 5.3-1 shows the anticipated limits of grading, and how it overlaps and would directly affect areas of native grassland, woodland/tree canopy, and wetlands.

Response to Comment 13-R

While the concerns of the commentor over the affect of Sudden Oak Death and its relationship to tree loss in the county are noted, it is unrealistic to require an applicant to design a project of this size to avoid all tree loss. Such a restriction would basically prohibit access to the east side of the site, and severely limit development in the southwestern portion of the property. The project has been redesigned to avoid most of the woodland cover, and Mitigation Measures 5.3-2(a) through (d) would serve to protect and replace any trees removed as part of the project. The effects of Sudden Oak Death (SOD) raise concerns over the appropriateness of establishing dense replacement plantings on the site as part of proposed mitigation. The higher replacement ratio of 5:1 was recommended with an assumption of eventual loss of seedling plantings. With effective monitoring and maintenance now required for a minimum of five years, this higher ratio is no longer warranted and in effect could contribute to overly dense woodlands, conditions which may contribute to the establishment and spread of SOD. In addition, the current County standard for tree replacement is established under Policy EQ-3.14, which specifies a tree replacement ratio of 2:1. In response to these issues,

Mitigation Measure 5.3-2(d) has been revised to simplify the required replacement ratio to 2:1 for all trees removed as a result of the project, with monitoring and maintenance provided for a minimum of five years.

Based on the above Mitigation Measure 5.3-2(d) is revised to read as follows:

Mitigation Measure 5.3-2(d) A tree replacement program should be prepared to provide for replacement of native trees removed by proposed development. The tree replacement program should be included as a component of the project's Landscape and Vegetation Management Plan (required by Mitigation Measure 5.3-1[a]) and implemented as part of site revegetation and landscaping. Provisions of the tree replacement program should include the following:

- Oaks and other native trees ~~generally~~ should be replaced at a ratio of 2:1 ~~5:1~~ (ratio of replacement trees to number of trees removed).
- ~~All other native tree species should be replaced at a 3:1 ratio.~~
- Species composition of plantings in the tree replacement program should generally be consistent with the percentage of each tree species removed. If off-site nursery stock is used for replacement plantings, plants preferably should be seedlings with a container size of one-gallon or smaller. Younger plant material tends to have a higher survival rate than older nursery stock which has become established under ideal growing conditions provided at most nurseries.
- A program to collect seed and grow seedlings for use in the tree replacement program should be considered as part of the tree replacement program. Seed should be collected on-site in the fall months, planted in temporary containers, and maintained for a period of one or more years until seedlings are ready for plantings. Oak seedlings grown from an on-site seed source would be preferable to use of off-site nursery stock, and this program should be encouraged by ~~reducing the required replacement ratio from 5:1 to 3:1 where seedlings from on-site collection are used as replacement plantings.~~
- If trees proposed for removal are successfully salvaged and transplanted, no additional replacement mitigation should be required for those trees.
- Tree replacement plantings should be monitored as part of the Landscape and Vegetation Management Plan (required for the project by Mitigation Measure 5.3-1([a]) for a minimum of five years. If mature salvaged trees die within this time period, replacement plantings should be made at the 2:1 ~~respective 5:1 or 3:1~~ ratios. Any on-site salvage, locally collected and grown seedlings, or nursery stock plantings lost within this monitoring period should be replaced at a 1:1 ratio on an annual basis.

Response to Comment 13-S

The guidelines identified in Mitigation Measure 5.3-2(c) are considered minimum standards and would be subject to further review by a certified arborist. While the changes suggested by the commentor regarding modification in the vicinity of trees to be preserved are desirable, they are not necessary as a minimum standard. No changes to Mitigation Measure 5.3-2(c) are considered necessary.

Response to Comment 13-T

Mitigation Measure 5.3-3 contains details on grassland restoration and enhancement required to mitigate the loss of native grasslands. This includes preservation of native grassland cover not directly affected by the project, and replacement at a 1:1 ratio on a per acre basis for each cover class lost. The County has no established policy that would require a higher replacement ratio, and the required maintenance and monitoring should provide for successful establishment of the replacement grasslands. Areas restored as grassland would be established within the first year, and the temporal loss would not be considered significant as long as the replacement program was implemented.

Response to Comment 13-U

Most of the freshwater seep habitat on the site is seasonal in nature, and differs little from the surrounding grasslands for most of the year. The commentor is correct that creating replacement wetlands must include consideration of hydrology, and that without a sufficient source of water the area would not support wetland vegetation. This factor would be considered as part of the recommended wetland protection, replacement, and restoration program. As stated in Mitigation Measure 5.3-4(a), replacement wetlands would be provided at a minimum ratio of 2:1 and result in wetlands with a higher habitat value than those lost to development. Further review by the County and trustee agencies would ensure that the wetland replacement program meets these minimum objectives and no changes to the recommended mitigation are considered necessary.

Response to Comment 13-V

The location of most of the freshwater seep habitat on the lower elevations of the site, outside the woodland tree canopy makes preservation of these scattered features difficult. The seeps are of differing sizes and are scattered throughout the non-native grasslands. Recommended mitigation would preferably consolidate the replacement wetlands, which would serve to improve their value. As noted in Mitigation Measure 5.3-4(a), replacement wetlands should preferably be located on-site, but could include consideration of both on-site and an off-site location in the general vicinity. Additional modifications to the extent of proposed grading and restrictions on development may be made by the applicant in meeting the provisions of this mitigation measure. It should be noted that the project was designed to minimize disturbance to the Miller Creek corridor, the most significant wetland resource on the property.

Response to Comment 13-W

The extent of tree removal and disturbance along the creek would depend on the final bridge design, although several mitigation measures would serve to minimize anticipated impacts. This includes Mitigation Measures 5.3-2(b), 5.3-2(c), 5.3-2(d), 5.3-4(c), and 5.3-6 which call for minimizing tree loss, replacing any vegetation affected by the project, designing the bridge to minimize roadway width standards, restricting construction to the low flow period, use of silt fencing to control construction debris, and prohibition on installation of a drop structure under the bridge. No additional mitigation is considered necessary.

Response to Comment 13-X

A detailed discussion of anticipated impacts on wildlife habitat and movement corridors is provided under Impact 5.3-6, and these impacts were considered to be significant. Due to the amount of land to be preserved as open space, proximity of proposed residential use to existing development, and separation of the site from other open space lands, the general impact on wildlife in the Miller Creek corridor is considered to be less-than-significant. Implementation of Mitigation Measure 5.3-6 and other measures to protect and replace sensitive resources would serve to mitigate potential impacts to less-than-significant levels.

Response to Comment 13-Y

As stated on page 5.3-9 of the Draft EIR, steelhead are known from Miller Creek. Fish surveys conducted by Robert A. Leidy on Miller Creek from 1992 through 1998 indicate presence of steelhead, California roach, and three spine stickleback between the Highway 101 and Lucas Valley Road overcrossings. No coho salmon were detected in the Leidy survey or other records maintained by the County. A discussion of potential impacts on special-status species, including aquatic species which may be associated with the Miller Creek corridor is provided under Impact 5.3-7 on page 5.3-28 of the Draft EIR. Implementation of Mitigation Measures 5.3-4(c) and 5.3-6 would minimize impacts on jurisdictional "other waters" and wildlife of the creek, and would alleviate possible adverse impacts on special-status species as well. This includes a restriction that construction of the crossing be performed during the low flow period in the creek (from June through October). No additional mitigation is considered necessary, although trustee agencies may impose additional conditions as part of their permitting review.

Response to Comment 13-Z

The discussion under Impact 5.3-5 addresses conformance of the project with the Stream Conservation Area (SCA) policies of *The Marin Countywide Plan*. Proposed residential and office development would be located outside of and would not affect the SCA designated along the Miller Creek corridor. New stream crossings are allowed within SCA's, and mitigation would be provided to alleviate impacts to the riparian and wetland habitat of Miller Creek.

Response to Comment 13-AA

A discussion of direct and indirect impacts on wildlife is provided under Impact 5.3-6 of the Draft EIR. This includes acknowledgement that residential development would infringe into the woodland habitat in the southwestern portion of the site and destroy the active spring which provides an important source of surface water for wildlife. Developed areas eventually would be frequented by birds and smaller wildlife and also may support species common to suburban areas, such as deer and raccoon. No significant indirect impacts on wildlife are anticipated as part of the project.

Response to Comment 13-BB

A detailed discussion of anticipated impacts on tree resources and recommended mitigation is provided under Impact 5.3-2 of the Draft EIR. Grading has been substantially reduced under the revised Master Plan, which would serve to preserve many of the trees which would have been

removed under the project as originally proposed. Further refinement of the grading plans and establishment of defined building envelope areas which avoid trees should serve to further reduce possible tree loss. However, it is not possible to estimate how many of the trees on individual lots may be saved through restrictions on building envelopes in the residential portion of the project. It should be noted that no trees occur within the anticipated limits of grading in the residential area. See Response to Comment 13-R for changes to the tree replacement ratios recommended in Mitigation Measure 5.3-2(d).

Response to Comment 13-CC

The specific locations where replacement tree plantings would occur are not specified in the Master Plan or Conceptual Landscape Plan. Native species would be used in transitional areas between development and retained woodlands, such as the slope below Erin Drive and above the proposed office buildings. The need to coordinate mitigation for replacement native grasslands and tree plantings is acknowledged under Mitigation Measure 5.3-3, which states that tree plantings should be restricted to outside the existing and restored native grasslands on the site. Further adjustments to the Precise Development Plan may be necessary to accommodate replacement native grasslands, wetlands, and tree plantings.

Response to Comment 13-DD

Mitigation Measure 5.3-4(a) would provide for a minimum replacement ratio of 2:1 for any wetlands affected by the project, with any created wetlands preferably consolidated and of a higher value. Potential impacts on wetlands would be mitigated to a level of less-than-significant with implementation of the recommended measures.

Response to Comment 13-EE

Alternative 4 described in Chapter 6.0 of the Draft EIR was developed to mitigate the adverse impacts identified in the 1996 Draft EIR for the proposed development of 71 residential lots on Parcel 1. Major objectives in formulating this alternative were to protect trees and preserve the active spring and associated seep in the southwest part of the site.

LETTER 14

Marin County
Community Development Agency
3501 Civic Center Drive Room 308
San Rafael, CA 94903

RECEIVED BY
2001 APR 2 P 2:55

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY
3/31/01

Dear Tim Haddad:

I am writing to protest the project being proposed at 200 Lucas Valley Road, Assessor's parcel 164-270-03. I am a resident in Marinwood at the Casa Marinwood complex, next to Miller Creek, the north boundary of the project. I will be directly impacted, negatively, by this project and do not want it approved of at all. I am concerned about the project destroying the beauty of the tree-covered hill that I look out my windows and see. That hill and the surrounding undeveloped areas near me are some of the primary reasons I live here. I am also concerned about the years of construction this project will take and all the ensuing problems, especially the noise, that local residents will have to put up with.

(A) I am very concerned about the all the development that is being planned to take place in Marinwood. Not only will the surrounding beauty of the pastures, hills and trees, be destroyed, but there are already considerable traffic problems both on 101 and on Las Gallinas. I wonder what the projections about the impact of increased traffic to an already jammed situation (bumper to bumper traffic, from about 6:45 AM to 10:30 AM, similar jam, opposite direction, in the afternoon-evening) You may recall the recent *Independent Journal* headlines about the traffic problems from commuters trying to escape the freeway crush crowding the otherwise quiet suburban streets (especially Las Gallinas, starting at the Miller Creek, Marinwood exit). I think both Marinwood and Lucas Valley exits will be impacted by this project, in a very negative manner.

Additionally, I am very concerned about the care of Miller Creek and wonder if the hillside above it will be stable enough to withstand such a project. Our very own County of Marin, Department of Public Works singled out Miller Creek as the pilot creek for creek restoration, which they have been working on since 1995. In the *Public Works Reporter*, we are told: "the knowledge gained from Miller Creek will be used to protect and enhance creeks countywide."

I sincerely hope the impact of this project on Miller Creek, will adequately be considered, with special concern for: hillside destabilization, run-off, erosion, disposal of earth and debris generated by the project, preparation for flooding, knowledge of at least the last 100 year flood statistics, etc. If Miller Creek is the countywide model creek, it needs to be the best possible model it can be.

On a more, for me, emotional note, I feel compelled to mention it will not only be myself and my fellow humans living in this area that will be effected, it will be the innumerable plants and animals that live here. They will be eliminated, destroyed, or diminished, without any voice in the matter at all. Who asks them if their environment will be impacted, who cares about them? I do, Mr. Haddad, and I hope you do too.

Forgive me if I sound preachy, but it is the ability to see the future unfolding before us

that can be the wisest guide for our decisions in the present. Protection of the environment: the air, water, earth and plant and animal life for ourselves and our future grandchildren must be given priority. It is through such protection of the land, one parcel at a time, that some green wildness will be left for them. Our future grandchildren are calling to us, we must not abandon them.

Please, Mr. Haddad, hear their calls and the calls of the ones who do not speak a human tongue. You do not stand alone as the caretaker of the environment, now and into the future, it is our responsibility, all of ours, to respond with the kind of action that truly takes care.

Respectfully,


Sally Marie McGuire

c: Alex Hinds
Philip D. Smith
Independent journal

Marin Independent

*This is me -
Sally Marie McGuire
biking to work to avoid this commute*

Commuters Irk Marinwood residents

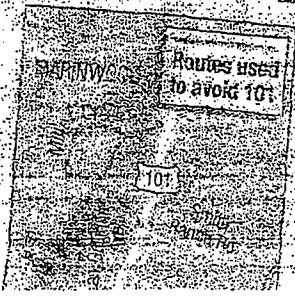


CROWDED: A cyclist rides by Marinwood residents yesterday as she photographs the bumper-to-bumper traffic overflowing from Highway 101 onto Las Gallinas Avenue near the Miller Creek School. *U photo/Jeff Vandeel*

101 'exit jumpers' targeted

By John Nickerson
IJ reporter

When Rita Granados knows she'll have to leave her Las Gallinas Avenue home during the 7 to 9 a.m. morning rush, she takes her car out of her driveway the night before and parks it on Pinewood Drive.



"I can't pull out of my driveway unless I'm very aggressive..."

— Resident Rita Granados

RESPONSE TO LETTER 14 – SALLY MARIE MCGUIRE

Response to Comment 14-A

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR. It should be noted that each of the issues discussed in this comment (such as traffic impacts, impacts to Miller Creek, impacts to plants and animals) is discussed in the EIR.

Stanley R. Farber
81 Grande Paseo
San Rafael, CA 94903-1556

LETTER 15

RECEIVED BY

2001 APR '3 P 1:3

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

April 2, 2001

TO: Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157 -

RE: Oakview Master Plan

(A) My concern about the Oakview Master Plan is of course, Traffic mainly. I live in Casa Marinwood which is bordered by Marinwood Avenue. The Oakview Master Plan would open up Marinwood Avenue to traffic off of 101 which would use this through street as a way off of the freeway blockage to Lucas Valley Road. Many children cross Marinwood Avenue going to the stores and it would become a danger to them to avoid the traffic.

(B) Secondly, building a bridge across Miller Creek could block up the creek if it is not done properly and cause flooding which we have not had since 1981.

If you go ahead with the Oakview Master Plan, I would ask that you do not permit use of Marinwood Avenue, but make cars going to the homes and office buildings to come off the freeway at Lucas Valley Road. Thanks for your consideration.

Very truly yours,

Stanley R. Farber
Stanley R. Farber

RESPONSE TO LETTER 15 – STANLEY R. FARBER

Response to Comment 15-A

Please see Responses to Comments 11-H and 12-D.

Generally, an increase in vehicle traffic in the vicinity of residential development requires the need for heightened awareness toward pedestrian and bicycle safety. With more traffic the potential for conflict/accidents rises. The Draft EIR proposes the signalization of four key intersections in the area. With signalization would come specific phasing requirements that account for the safe movement of pedestrians. Other measures would include marked bicycle lanes and signs indicating pedestrian crossings.

Response to Comment 15-B

A new Miller Creek bridge would be designed to pass the 100-year flood discharge with a minimum of one foot of freeboard (clearance) to accommodate some debris passage. The Marin County Department of Public Works would uphold this requirement. Thus, no obstruction would occur to floodflows up to the 100-year recurrence frequency.

LETTER 16

RECEIVED BY

2001 APR -9 P 2: 22

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

April 5, 2001

Marin County Community Development Agency
3501 Civic Center Dr., Room 308,
San Rafael, Ca., 94903-6269

Dear Marin County Community Development Agency,

OAKVIEW MASTER PLAN AND DREIR REPORT

A

Until the utility supply is increased and the traffic congestion on the 101 Highway has been resolved we cannot agree that this or any other development should be approved.

Sincerely,

*Donald A. Huffman and
Carolyn E. Huffman*

Donald A. Huffman and Carolyn E. Huffman
16450134
13 California Condor Way,
Novato, Ca. 94949

RESPONSE TO LETTER 16 -- DONALD A. AND CAROLYN E.HUFFMAN

Response to Comment 16-A

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

LETTER 17

To: Mr. Hinds

#100060

4/9/01

Re: Oakview master plan etc

(A) I'm strongly opposed to this project. It will add more transportation, more pollution and more noise. Moreover, the open space is obviously land that can't be built on. We need to preserve what is left of all hills which can also be destabilized by further development.

Sincerely,
Kim Flinchbaugh

RESPONSE TO LETTER 17 – KIM HIGASHI

Response to Comment 17-A

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

LETTER 18

4/25/01

To: Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

RECEIVED BY
2001 APR 26 P 1:05

COMMUNITY DEVELOPMENT
AGENCY

From: Susan L. Adams, Ph.D., RN, NP
PO Box 6052
San Rafael, CA 94903
(415) 479-1813

Dear Mr. Haddad and Planning Commission:

I have spent some time reviewing the EIR for the proposed Oakview Project in Marinwood. I have been a resident in Marinwood for the past 14 years and have several concerns about the EIR.

1. **Issues with traffic!**

(A) I believe the traffic impact has been underestimated. The data does not reflect the information that was provided at a recent community meeting for Marinwood residents about our current traffic issues. Mr. Farhad Mansourian presented data demonstrating that Marinwood already has more than 900 cars per hour driving through our neighborhood during morning commuter hours. These cars are exiting the freeway into our community in an attempt to bypass 101 traffic. Pedestrians and cyclists, including school children, are already having difficulty negotiating our streets.

(B) The proposal calls for homes that are far larger than any homes in the immediate surrounding neighborhood. These homes will have space for an additional 2 to 4 cars. Add to this the possible impact from the concurrently proposed Silva development and the traffic nightmares are now compounded. The county needs to address our traffic and transportation issues before allowing any further development to occur.

2. **Environment!**

(C) **Oak Trees:** In case you haven't heard, we are already having an environmental crisis in Marin County with our oak trees. We have no idea what is causing our trees to perish. It is quite possible that our trees are dying from the development that has already occurred in our county. Until there is definitive evidence that the damage is not a result of current land use and development, further development should not be allowed to proceed. More studies need to be done to determine the causative factors in the demise of our existing native plant life in Marin.

D

Miller Creek & Wildlife: Our creek is a wonderful natural resource. The proposal states that there will be some impact on the creek, but that steps will be taken to mitigate any harmful effects. How can this be possible? Construction, run-off from any development, lighting, and other factors will most definitely affect the state of this natural resource for the worse. A bridge crossing the creek and an office building will have significant possibilities for destruction of this habitat area.

Please refer to Section 5.2 pgs. 18-23. These sections describe the adverse impact to our creek.

E

Section 5.3 addresses issues of timing for grading to have minimal impact on wildlife and the creek. Grading should be limited to non-nesting times (Aug 15-Jan 14) and grading shouldn't occur during the wet season (Oct 15-April 30). This leaves a window between May 1 - Aug 15 for grading the full hillside with the least amount of impact. Can grading for this size development be realistically completed during this time? My personal experiences leave me thinking that this is not realistic. With potentially a severe impact on our environment and a small window of time for the disruption caused by grading, I would like to have these issues addressed with more detail.

3. Offices!

F

Why offices in our residential community? What types of businesses are projected to inhabit these offices? What will the business hours be? How will issues of security, garbage, deliveries, and traffic be addressed? Why isn't the county looking at the empty lots that are growing weeds on the East side of 101? Our community would much rather see a revitalization of our local community shopping center.

4. Water and Power!

G

Water and power are not unlimited resources as we are currently seeing. Taking water from fragile ecosystems in Sonoma county should not be the answer for Marin. More development means more need for water and power. It is predicted that this summer, residents will face large numbers of rolling blackouts. Until we address self-sustaining water and power issues for our county, we should not allow further development.

5. Affordable housing

Marin county currently has an affordable housing crisis. In Section 2.0-16, "The Oakview project applicants propose to make an in-lieu payment to satisfy the affordable housing requirement". How will this in-lieu payment be used to address the need for affordable housing in our county? We do not need more 4500 square

foot monster homes in Marin, we can address some of our traffic issues by providing local places for our teachers, nurses, fire and police employees to reside. Currently, many of our service professionals have to live outside of the county. If housing is to be developed, the county should meet the physical requirements for affordable housing, not just an "in-lieu" payment. How will this development fit in with the goals of providing more affordable housing?

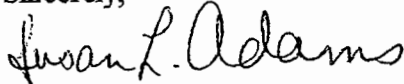
6. County vs. City of San Rafael oversight

I am confused. How is it possible that the City of San Rafael has a say over land that is in an unincorporated part of the county. It seems the county has jurisdiction. (See Section 2.0-23).

These are just a few of the problems I have with the EIR. The data seems outdated. Based on the more recent problems with changes in our traffic, changes in our oak tree health, and our water and power needs during this energy crisis, I strongly urge that another study be done to address these issues using the current situation for our community.

I appreciate the opportunity to express my concerns and look forward to participating in the public meeting.

Sincerely,



Susan L. Adams, Ph.D., RN, NP

RESPONSE TO LETTER 18 -- SUSAN L. ADAMS, PH.D., RN, NP

Response to Comment 18-A

Please see Responses to Comments 11-H and 11-Q.

Response to Comment 18-B

Please see Responses to Comments 11-H and 11-O.

Response to Comment 18-C

Comment noted. Refer to Impact 5.3-2 for a detailed discussion of anticipated impacts on tree resources and adequate mitigation recommended in the Draft EIR. While the concerns of the commentor over the affect of sudden oak death syndrome and its relationship to tree loss in the county are noted, it is unrealistic to require an applicant to design a project of this size to avoid all tree loss or to prohibit new development until the cause of the disease is better understood. The project has been redesigned to avoid most of the woodland cover, and Mitigation Measures 5.3-2(a) through (d) would serve to protect and replace any trees removed as part of the project.

See Response to Comment 13-R for additional discussion of the recommended tree replacement ratios, changes to Mitigation Measure 5.3-2(d), and the affects of SOD.

Response to Comment 18-D

Potential impacts on vegetation and wildlife associated with Miller Creek are addressed under Impacts 5.3-2, 5.3-4, 5.3-6 and 5.3-7 of the Draft EIR. The extent of tree removal and disturbance along the creek would depend on the final bridge design, although several mitigation measures would serve to minimize anticipated impacts. This includes Mitigation Measures 5.3-2(b), 5.3-2(c), 5.3-2(d), 5.3-4(c), and 5.3-6 which call for minimizing tree loss, replacing any vegetation affected by the project, designing the bridge to minimize roadway width standards, restricting construction to the low flow period, use of silt fencing to control construction debris, and prohibition on installation of a drop structure under the bridge. No additional mitigation is considered necessary.

Response to Comment 18-E

Restrictions on grading to protect biological resources would be specific to disturbance near Miller Creek (proposed bridge crossing) or activities near an active raptor nest. Grading may occur on other portions of the site away from the creek because adequate erosion and sedimentation control measures would be required. Mitigation Measure 5.3-7 gives two options regarding avoidance of any active raptor nests, either by restricting grading and tree removal to the non-nesting season (August 15 through January 14) or by conducting a preconstruction survey during the nesting season. If an active nest is encountered, additional mitigation such as construction restrictions may be required. Grading and development could proceed on the remainder of the site outside any temporary no-disturbance

zone until young raptors have fledged as monitored by a qualified wildlife biologist. These restrictions would not significantly affect the feasibility of developing the site.

Based on the professional experience of the EIR geologists, it is believed that the proposed grading could be realistically completed to rough grade stage in three and one-half months (May 1 to August 15).

Response to Comment 18-F

As discussed in Chapter 4.0, offices are permitted uses in the RMP district, subject to Master Plan and Use Permit approval.

Typically the level of detail requested in this comment regarding the operation of the offices (types of businesses, hours of operation, etc.) is not a part of a Master Plan application. The County as a part of the Precise Development Plan and subsequent use permits could require such information.

Response to Comment 18-G

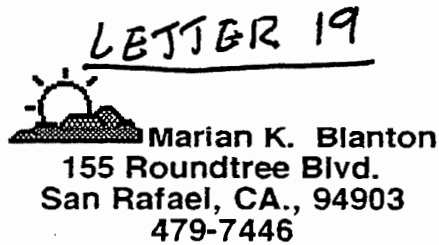
Please see Master Response C -- Energy regarding energy issues. In regard to water the EIR has concluded (see impacts 5.8-8 and 5.8-9) that the Marin Municipal Water District has sufficient capacity to meet the water demands of the proposed project.

Response to Comment 18-H

In Exhibit 4.1-1 it is stated that the proposed project is inconsistent with Housing Element Program H-1.1a regarding the provision of inclusionary housing units. The recommended mitigation measure is that the Master Plan should be conditioned so that 15 percent of the housing units on site should be affordable to moderate, low, or very low income households.

Response to Comment 18-I

Because the project site is in an unincorporated portion of Marin County it is Marin County that has land use jurisdiction over the project site. However, as stated on page 2.0-26 of the Draft EIR although the project site would not be within the City of San Rafael, the project applicant has agreed that the proposed project would be subject to the City's Priority Projects Procedure. Based on criteria contained in the Priority Projects Procedures, which basically evaluates projects against one another and against *San Rafael General Plan 2000* goals and policies, first the San Rafael Planning Commission and second the San Rafael City Council is responsible for making priority project determinations. The City Council has the final authority to make decisions regarding priority project determinations and to allocate all or a portion of available traffic capacity in circulation impact areas based upon the determinations.



April 25, 2001

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Major issues that need further attention and analysis in the Oakview Draft EIR before any decisions are made to permit further development in Marinwood:

1. Section 3.0. page 46 - Energy and Natural Resources:

A

How is the current California energy crisis affecting developments in this area? The office complex alone, would require massive energy consumption. Can we afford to drain energy resources in the midst of California's present crisis? This whole section is a boilerplate piece used in many EIR's since the 1970's, one which does not address our current energy crisis.

2. Traffic - Section 5.5

B

This section ignores the findings of Farhad Mansourian, Traffic Engineer for the County of Marin, who stated at the April 4th Marinwood meeting that electronic traffic counts indicated 900 cars per hour from 6-9am, Monday through Friday, coming off Highway 101 onto the streets of Marinwood -- "freeway jumpers".

C

Page 5.5-1 refers to a 1999 Caltrans document reporting traffic volumes from 1998. There must be more recent data available, for traffic has become significantly worse since 1998.

D

Proposed housing does not match standards of existing Marinwood homes. As stated on page 2.0-11, each new house would have four parking spaces - larger homes equal more traffic. An estimate of number of trips generated must be part of any traffic analysis.

E

Most serious is the potential cumulative impact of more building at Hamilton, possible future development at St. Vincent's/Silveira, two additional projects increasing traffic well beyond what Highway 101 can move, thus diverting still more cars onto our community streets.

F

Safety issues: The current safety issue of our residents, particularly for the elderly and for school children, is how difficult crossing any of our streets has become during peak AM commute hours (6-10am) This situation has worsened over the past 4-5 years.

G

Visual issues: Most of us come home from work off Highway 101 and travel west on Lucas Valley Road. When we see the pristine "open space" on the right (the Daphne property), we realize that we are finally "home." We do not wish to see that property replaced with

million-dollar, 5000 s.f. luxury homes, on 20,000 sf sized lots!

H Creek issues: There is significant potential for degradation of the Miller Creek watershed by construction traffic and constant automobile traffic over the new proposed bridge to the office complex. There is potential for loss of fish habitat, silting of the creek and possible flooding in the winter months, particularly if St. Vincent's/Silveira were ever developed, increasing potential for flooding.

I The office complex: What kind of office will this be? Light industrial? Professional services? How many daily trips will be truck traffic, i.e. delivery and service vehicles? How many trips at nighttime (delivery, service, garbage, cleaning?). Will hours of operation be restricted to daytime use so that headlight glare (if nighttime hours are proposed) would not interfere with the residents at nearby Casa Marinwood subdivision? Will there be on-site services for employees so that their off-site trips during the daytime are limited? Fair Isaac provides onsite ATM, laundry/dry cleaning, cafeteria and other services for employees in order to limit trip generation numbers.

We are opposed to any further development in Marinwood until traffic problems, including safety issues, and current energy crisis, have been resolved. Prudence dictates calling a halt to any more cars or energy consumption in this protected area.

Sincerely,

Marian K. Blanton

Marian K. Blanton

RESPONSE TO LETTER 19 -- MARIAN K. BLANTON

Response to Comment 19-A

Please see Master Response C -- Energy regarding energy issues.

Response to Comment 19-B

Please see Response to Comment 11-Q

Response to Comment 19-C

Please see Response to Comment 11-F

Response to Comment 19-D

Please see Responses to Comments 11-M and 11-O.

Response to Comment 19-E

Please see Response to Comment 3A-C.

Response to Comment 19-F

Please see Response to Comment 15-A.

Response to Comment 19-G

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

Response to Comment 19-H

Issues related to the impact on Miller Creek are discussed in both Section 5.2 (*Hydrology and Drainage*) and Section 5.3 (*Biological Resources*) of the EIR. For example impact 5.2-7 discusses site erosion and downstream sedimentation and flooding impacts and impact 5.3-6 discusses disruption of fish and wildlife habitat along the Miller Creek corridor.

Response to Comment 19-I

Typically the level of detail requested in this comment regarding the operation of the offices (types of businesses, hours of operation, etc.) is not a part of a Master Plan application. The County as a part of the Precise Development Plan and subsequent use permits could require such information.

LETTER 20
April 26, 2001

Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

RE: Revised Draft EIR for Oakview

Dear Madam/Sir:

As a resident of the Marinwood community, I am interested in the development plans of the Oakview parcels. I have looked over the revised draft EIR for the Master Plan of the property and have a few concerns and questions. They are as follow:

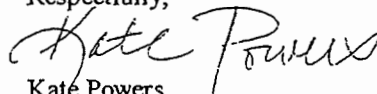
- A Have any studies been done to see how much vacant office space is already available in Marin County? If we are to continue development in Marin, is commercial office space consistent with the type needed?
- B Why hasn't the possible development of the St. Vincent's/Silveira properties been addressed in the cumulative effects section of the draft EIR?
- C It seems inefficient and wasteful of resources to run sewer and other utility infrastructure to Parcel 2 for two office structures. During a time when sustainability is a buzz word, why build office structures in areas other than in-fill areas with developed utility infrastructure?
- D All the cut-and-fill required to extend Marinwood Ave. also seems wasteful for two commercial office buildings. Is this proposal the final buildout of Parcel 2 or are other commercial structures possible in the future along that proposed extension?

My main concern, however, is the health and continued natural state of Miller Creek. It is the collecting point of the watershed surrounding Marinwood and it is the natural gem that many of us in the community cherish. It supports a variety of life from plants and freshwater invertebrates to insects, fish, frogs and other wildlife. It is my opinion that development of any kind that creates negative impacts on the creek is unacceptable. The impervious areas created by the road, the rooftops and the parking lots in particular, of the proposed office structures will increase the frequency of flooding, the volume of peak flow, the quantity of both sediment and pollutants, especially heavy metal pollutants. If this proposed development were to be approved as planned, it is vital to the health of the creek that the runoff from these areas be collected and transported away from the creek not dumped into it. The proposed mitigation measures in the draft EIR are inadequate and will not insure the continued health of the creek.

Finally, access to the proposed office buildings would not only endanger the health of Miller Creek but also exacerbate the traffic problems in the mornings for Casa Marin residents for which Marinwood Ave. is the only road out of the subdivision. Traffic is growing and well publicized problem in Marinwood especially in this area. Why not have access to the proposed commercial buildings come from the south? It seems to me Los Gatos Road could be extended north and incorporated somehow with the planned southbound exit from Highway 101 onto Lucas Valley Road. This is where access to the other office buildings near this interchange occur. Access to the proposed office buildings should not cross Miller Creek and should not impact the residential community of Marinwood.

Thank you for the opportunity to comment on the proposed Oakview development and the draft EIR.

Respectfully,



Kate Powers
360 Miller Creek Road
San Rafael, CA 94903

RESPONSE TO LETTER 20 – KATE POWERS

Response to Comment 20-A

Comment noted. As a part of the environmental review process no office vacancy studies have been prepared, however, this is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

Response to Comment 20-B

The *State CEQA Guidelines* authorizes a lead agency to limit its analysis of probable future projects to those which are planned or which have had an application made at the time the Notice of Preparation (NOP) is released for review. This is a reasonable point in time at which to begin the cumulative impact analysis.

As described in Chapter 2.0 (*Description of the Proposed Project*) the list of cumulative projects in Exhibit 2.3-1 includes nine projects in the vicinity of the project site at the time Marin County issued the NOP to prepare the Revised Draft EIR for the proposed project. The source of this data was *Propdev 29*, prepared by the Marin County Community Development Agency in August 1999. The St. Vincent's / Silveira properties was not included in *Propdev 29*.

It should, however, be noted that in preparing the traffic cumulative analyzes it was decided to do both a short-range cumulative and long-range cumulative condition. The long-range cumulative condition was based on the County's Congestion Management Agency's traffic mode for 1999 and 2020. Peak hour traffic volume from two additional potential long-range projects was added to the long-term cumulative conditions to insure a conservative analysis of cumulative impacts. Vehicle trips associated with the Lucasfilm Grady Ranch project (340 employees) and development of the St. Vincent's / Silveira property (800 residential units and 150,000 square feet of commercial uses) were added to the long-range network for analysis.

Response to Comment 20-C

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

Response to Comment 20-D

As described in Chapter 2.0 (*Description of the Proposed Project*) the Master Plan proposes the construction of two office buildings (one approximately 80,000 square feet and the second approximately 14,400 square feet) on parcel 2. If additional buildings were proposed in the future a separate application, environmental review and County processing would be required.

Response to Comment 20-E

The continued natural state of Miller Creek would be assured by the conformance of the project with the Stream Conservation Area (SCA) policies of *The Marin Countywide Plan*.

Project impervious surface areas would increase peak flow rates and runoff volumes. Implementation of Mitigation Measure 5.2-2, which would mandate the construction of detention basins in site Sub-Watersheds 3 and 6, both of which drain to Miller Creek. These detention basins would maintain post-project peak flow rates at pre-development levels. With the design features specified, these basins and the proposed biofilters (i.e. grassy/vegetated swales) would combine to effectively treat incoming stormwater such that concentrations of stormwater contaminants, including heavy metals, would be reduced significantly. Such treatment of site stormwater runoff would negate the need for diversion of runoff away from Miller Creek.

Response to Comment 20-F

Please see Response to Comment 12-D

The comment related to alternative access to the office component is acknowledged. The Draft EIR did not consider the extension of Los Gamos north to serve as access to the project office development. While no quantitative analysis has been conducted for this proposal there are a few potentially significant issues. First, the proposed Lucas Valley Road / Highway 101 ramp improvements would require up to ten acres of the existing site. An extension of Los Gamos Road north, through this area may interfere with the construction of the proposed improvements. Second, the right-of-way necessary for a Los Gamos extension may encroach on environmentally sensitive areas. Finally, opening a connection through to Lucas Valley Road would undoubtedly attract a portion of the current freeway jumpers onto Marinwood Avenue resulting in higher traffic volumes than estimated with the project in the Draft EIR.

LETTER 21

Frank Nelson
427 Miller Creek Road
San Rafael, CA 94903
Tel. # 479-2254

RECEIVED
2001 APR 27 P
CITY OF SAN RAFAEL
PLANNING
DEPT

APRIL 27, 2001

OAKVIEW DRAFT EIR REVIEW COMMENTS

The focus of these comments is on the impacts resulting from the proposed 94,400 square feet of office use development on Parcel 2.

The impacts commented on are primarily traffic related.

The comments recognize that the office development proposal has raised a clear conflict between property rights and community interests and take the position that more information related to community interests (social effects) should be required before a decision can be made on the proposed office project.

The issues touched on go far beyond NIMBY concerns. The Marinwood Community is involved in an intense COMMUNITY BUILDING PROCESS. One and a half years ago community activists approached our County Supervisor requesting that the county undertake a process to develop a Community Plan for the Marinwood Community. The goal was to create a livable community based on a village model. The main concerns were re-vitalization of the Marinwood Plaza (The village town center), elimination of the highway 101 jumpers and the completion of a network of bike and pedestrian pathways which connect the residences with the community resources. We were told by our Supervisor that these goals could be reached without the benefit of a Community Plan. For the past year and a half the community has been working on achieving these community development goals.

The concern raised by these comments is that the impacts resulting from the proposed office project would make it impossible to reach the community goals.

The conclusion of the comments requests that the EIR be augmented to include a discussion of the social effects of the physical impacts of the proposed office project.

PC ATTACHMENT #

p.5.5-9. Ninth line from top of page: "When complete this construction (Highway 101 Gap Closure Project) will improve peak hour traffic flows in the study area."

Comment: This statement appears to conclude that Highway 101 jumper traffic contributes to the AM peak hour traffic at the study area intersections located within the Marinwood community. And, therefore, it states that the Gap Closure Project will reduce the number of jumper vehicles. (Note: Jumper traffic refers to vehicles which exit Highway 101 at the Miller Creek Road exit and use Miller Creek Road and Las Gallinas Avenue as a by-pass to Highway 101.)

Question: If This is not the intended conclusion then please explain why the Highway 101 Gap Closure Project will improve AM peak hour flows at the study area intersections located within the Marinwood community?

p.5.5-29. Impact 5.5-3 Long-Range Cumulative AM and PM Peak Hour Conditions

This section concludes as follows: "During the AM peak hour, all of the unsignalized intersections would operate at unacceptable operating conditions (LOS E and F conditions)."

Comment: This conclusion appears to conflict with the earlier statement (p.5.5-9) that the Highway 101 Gap Closure Project "will improve peak hour traffic flows in the study area".

Question: Please explain the apparent conflict.

Comment: There is a widely held view within the community that the office project and the traffic it generates are inappropriate for a residential community and conflict with the planning goals of the Marinwood community. For example, the recommended installation of a traffic signal at the intersection of Miller Creek Road/Las Gallinas Avenue (Mitigation Measure 5.5-3(d)) would dramatically alter the nature of the community. The community goal is to implement a bicycle and pedestrian pathway system which is safe and attractive, not to install traffic signals at community intersections for the sole purpose of accommodating drive through traffic and meeting the LOS D requirements. Recently, the community endorsed a trial proposal to block off a portion of the traffic on Miller Creek Road in order to discourage use of community streets for non community purposes. The EIR, however, does not provide information which would inform decision makers about community goals and the impact this project would have on these goals.

Question: What is the responsibility of the EIR when it is faced with a situation where the traffic the project generates and the traffic mitigation recommendations will defeat community goals which are inextricably bound up with traffic circulation?

pp.5.5-15 to 5.5-17 PROJECT TRIP GENERATION

Questions:

- (D)
1. What type of offices are planned for the office project?
 2. What number of vehicles will travel to the office project (AM Peak) exiting from Highway 101?
 3. What number of vehicles will travel to the office project (AM Peak) exiting from Lucas Valley Road onto Marinwood streets?
 4. What number of vehicles will travel to the office project (AM Peak) starting from within the Marinwood community?
 5. Describe the types and sizes of the trucks which will be entering and leaving the office project?
 6. What is the number of truck traffic trips which the project will generate and what is the anticipated route and time of the truck traffic?
 7. What will be the impact of the office project traffic on the traffic to and from Marinwood Plaza and Casa Marinwood along Marinwood Avenue?

pp.5.5-3 to 5.5-8 TRAFFIC ANALYSIS METHODOLOGIES

Including exhibits 5.5-2 and 5.5-3.

Questions:

- (E)
1. Describe the raw data used to conduct the analysis of the LOS at the study area intersections. Please include in the description, the method for conducting the vehicle counts, locations of the counts, the dates and times of the counts, the results of the counts and copies of any field sheets or other documentation of the counts used in the analysis.
 2. During the collection of the raw data was any effort made to determine what portion of the traffic was Highway 101 jumper traffic?
 3. Prior to recommending that a signal be installed at the intersection of Miller Creek Road and Las Gallinas Ave. (5.5-3(d)) was any effort made to gather information related to the social effects the project impacts might have on the community?

4. Would the installation of barriers on Miller Creek Road at the Las Gallinas intersection, limiting the access lane options onto Las Gallinas from three to one have an impact on the LOS calculations? (Note: See attachment of letter from the Marin County Department of Public Works dated April 23, 2001 stating that the trial barriers on Miller Creek Road will be installed on May 1, 2001.)

Comment: A major Marinwood community goal is to re-vitalize the Marinwood Plaza (located along Marinwood Avenue) and enhance its economic and community viability. This could include increasing the number of commercial spaces and adding office space to better serve the community. This could result in increasing the traffic entering and leaving the Marinwood Plaza parking area. (NOTE: This is a clear example of why the Marinwood Community concerns about the impacts of the Oakview office proposal is based on community development grounds, not NIMBY grounds.)

Question:

F 1. Were any traffic allowances for an increased volume at the Marinwood Plaza calculated into the study area intersection LOS computations?

2. What is the EIR position on providing information on the social effects of a projects impact on a community? For example, suppose that the traffic allotment is such that if the office project were built there would be insufficient traffic allotment remaining for the creation of a vibrant Marinwood Plaza serving the social, commercial and business needs of the community?

G 3. Provide information concerning the social effects related to the physical impacts of the project, for example, loss of a portion of a natural unobstructed creek corridor, loss of the opportunity to create a community serving, pedestrian accessible Marinwood Plaza and the loss of the opportunity to create an integrated bike and pedestrian pathway system providing a safe route from all community residences to all community resources.

p.2.0-10 Parcel 2

The proposal for parcel 2 is to develop 20.1 acres for administrative/professional office use. No specific uses for the two office buildings have been proposed.

Comment: This office development proposal conflicts with Environmental and Planning/Policies, the agreement of the applicant, the position of the Planning Director for the City of San Rafael and, if implemented, would defeat the Marinwood Community Vision.

ENVIRONMENTAL: Miller Creek is the environmental treasure of the Community. The Community Vision is to extend the creekside pedestrian pathway from the Community Center facilities across Las Gallinas to the Marinwood Plaza at Marinwood Ave. The vision is to provide residents with a quiet pathway along a natural creek setting, and to provide a safe and pleasant pedestrian access route to community services at the Marinwood Plaza. The proposal to construct a bridge over Miller Creek at the Marinwood Ave entrance to the proposed office site and to add 1,266 daily vehicle trips onto the creek crossing (Exhibit 5.5-5) would forever eliminate the opportunity to implement the Community Vision for a safe, quiet creekside pathway within the Community. Furthermore, the proposed project seriously threatens the unique natural condition of the creek hydrology and riparian habitat. See p.4.0-7 to 4.0-11, Marin Countywide Plan Policies EQ-2.8, EQ-2.9, EQ-2.10, EQ-2.11, EQ-2.19, EQ-2.20, EQ-2.22, EQ-2.23, EQ-2.26 and EQ-2.31.

PLANNING POLICIES: Marin Countywide Plan Policy CD-2.4 states in relevant part as follows: Commercial development should be located in nodes where there is high transit accessibility and service capacity, such as in or near the central business district of cities and towns. Sprawl or continuous strip development along freeway corridors should be discouraged. Marin CWP Policy CF-1.1 states in relevant part as follows: The County's zoning of unincorporated lands in urban service areas should permit less intensive development than is permitted by the city, unless otherwise mutually agreed upon. City of San Rafael General Plan Policy LU-9 at p.4.0-42 of the EIR states: "the office buildings would not be consistent with this policy."

APPLICANTS AGREEMENT: The applicant has agreed to participate in the City's Priority Projects Procedure which states that all applications must be consistent with the San Rafael General Plan 2000. Again, the office buildings would not be consistent with the General Plan. See p.3.0-39 to 3.0-40 and p.4.0-40 to 4.0-41.

POSITION OF THE CITY OF SAN RAFAEL PLANNING DIRECTOR:

Attached is a copy of page one (dated May 25,2000) of a letter regarding the Oakview Project written by the city of San Rafael Planning Director to the Director of the Marin County Community Development Agency. The last sentence of page one reads as follows: "I believe it will not be possible for the City to approve a subsequent PPP application unless the office building is eliminated from the proposal or the City's General Plan is amended."

MARINWOOD COMMUNITY VISION: On July 16, 2000, MASP sponsored a Community Vision meeting at the Marinwood Community Center. Over 200 residents participated in the meeting. Traffic and re-vitalization of the Marinwood Plaza shopping area were seen as the two major concerns of the residents. The vision that emerged was to integrate the open space areas, creek side paths, residential areas, schools, community center and the community shopping area (Marinwood Plaza) into a interconnected system of bicycle and pedestrian paths which are both safe and attractive. In furtherance of these goals MASP has successfully blocked a proposal to entirely replace the Marinwood Plaza with an assisted living Center, instead advocating for a re-vitalization of the Marinwood Plaza which could be mixed use including commercial and office space which responds to the needs of the community. In order to protect the residential and school community from the traffic gridlock on Las Gallinas during the AM Peak hours, MASP has persuaded the County, as a trial project, to install barriers on Miller Creek at the Las Gallinas intersection in order to reduce the auto spaces entering Las Gallinas from three to one for the purpose of backing up traffic, thereby discouraging Highway 101 traffic jumpers. In another effort to improve the safety and livability of the community, Supervisor Kress has agreed to request that Marinwood be designated as a Safe Routes to School study area. -

Summary: Given the above, it would appear that the Oakview Office Project proposal is contrary to environmental and planning policies, community goals, the position of the Planning Director for the City of San Rafael and the prior agreement of the Applicant. p.1.0-5/1.4 EIR OBJECTIVITY states: "This EIR is a factual, objective public disclosure document that takes no position on the merits of the project but instead provides information on which decisions about the project can be based". County staff determined that the EIR should discuss the following topic: Social Effects Related to Physical Impacts. It would appear that if a project would eliminate the possibility of a community being able to implement its stated goals, for example, by permanently altering the natural setting of a treasured community creek and destroying the opportunity of creating a safe and attractive pedestrian and bicycle network throughout the community then, such a project, will have social effects related to physical impacts. I could not find within the EIR any discussion of these social effects.

H

Request: Given the Marinwood Community's Vision Goals and Actions to create a livable community by revitalizing Marinwood Plaza, protecting the natural creek setting, and creating a safe and attractive pedestrian and bicycle path system connecting all parts of the community, please provide information about the social effects related to the physical impacts of the proposed project.

Frank Nelson
427 Miller Creek Road
San Rafael, CA 94903
Tel. # 479-2254

OAKVIEW DREIR

Supplement to oral comments made to the Marin County Planning Commission on May 7, 2001.

REQUESTS FOR ADDITIONAL INFORMATION

1. The DREIR recommends installing signals at the intersections of Las Gallinas and Miller Creek and at Marinwood Avenue and Miller Creek.

I • What impacts would this have on the opportunity for the Community to give priority to safe pedestrian and bike paths within the community? Information should address both the physical safety issues and the planning conflicts signaling raises with the community goal of creating a bike and pedestrian friendly community.

J • If the trial barrier system on Miller Creek is successful and highway 101 jumpers are eliminated and the barrier system or some revised design is permanently installed, what would be the LOS calculation for the intersections at Miller Creek/Marinwood Avenue and Miller Creek/Las Gallinas Avenue? Same question, only include in the LOS calculation the assumption that the office project is not approved and, therefore, the traffic generated by the project is removed from the calculations.

K 2. What impacts would the traffic generated by the office project have on the opportunity to improve and enlarge the Marinwood Plaza so that it can more effectively serve the needs of the community?

L 3. The EIR at p.2.0-11, paragraph 2 under Pedestrian/Bicycle Access references the improvement of a path along the section of Miller Creek from Las Gallinas to Marinwood Avenue to "current standards". What are the specific improvements referred to? How does the estimated 1266 daily vehicle trips along Marinwood Ave and the proposed bridge over the creek impact the opportunity to create a safe and attractive Community pedestrian pathway along Miller Creek continuing to Marinwood Plaza?

COUNTY OF MARIN

DEPARTMENT OF PUBLIC WORKS

P. O. Box 4186, San Rafael, CA 94913-4186 • 415/499-6528 • FAX 415/499-3799

ADMINISTRATION
415/499-6570

ACCOUNTING
415/499-6528

AIRPORT
451-A AIRPORT ROAD
NOVATO, CA 94945
415/897-1754
FAX 415/897-1264

BUILDING MAINTENANCE
415/499-6576
FAX 415/499-3250

CAPITAL PROJECTS
415/499-7877
FAX 415/499-3724

ENGINEERING & SURVEY
415/499-7877
FAX 415/499-3724

COUNTY GARAGE
415/499-7380
FAX 415/499-3738

LAND DEVELOPMENT &
FLOOD CONTROL DISTRICT
415/499-6549

PRINTING
415/499-6377
FAX 415/499-6617

COUNTY PURCHASING AGENT
415/499-6371

COMMUNICATION MAINTENANCE
415/499-7313
FAX 415/499-3738

REAL ESTATE
415/499-6578
FAX 415/499-3724

ROAD MAINTENANCE
415/499-7388
FAX 415/499-3656

TRAFFIC ENGINEERING
415/499-6528

WASTE MANAGEMENT
415/499-6647
FAX 415/499-3724

Mehdi Madjd-Sad

April 23, 2001

Dear Marinwood Area Resident:

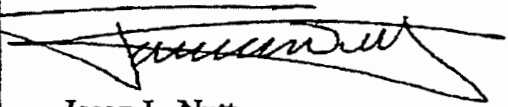
As many of you are aware, we had a very successful community meeting on April 4, 2001. Roughly 300 community members from Marinwood, Lucas Valley, Upper Lucas Valley, Mont Marin and San Rafael Park attended the meeting and provided some very valuable feedback to the County, CHP and Sheriff staff present. In that meeting it was very clear that the community was most interested in keeping the "freeway jumpers" off Marinwood streets.

With that in mind, the County, CHP and Sheriff agreed to perform an experiment aimed at deterring "freeway jumpers" from entering your neighborhood. Starting May 1, the County will narrow Miller Creek Road between Marinwood and Las Gallinas and eliminate the left- and right-turn pockets at Las Gallinas. This will force everyone to stay in line and wait for their turn to continue through the intersection. Golden Gate Transit District Route 1 will also be impacted in the lengthy queues. If you use this bus route, please assume the buses will be delayed and take an earlier or different bus.

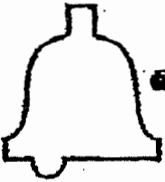
Since we expect this to create a backup to the Highway 101 offramp, we are also detouring traffic at the Marinwood Avenue / Miller Creek Road intersection. Between the hours of 6 - 9 AM right turns from westbound Miller Creek, left turns from eastbound Miller Creek and through traffic northbound on Marinwood will be prohibited and detoured.

Miller Creek Road is going to be very congested throughout the experiment, and we appreciate your patience as we see what it may take to keep the "freeway jumpers" on the freeway.

Very truly yours,


Jason L. Nutt
Traffic Operations Engineer

CITY OF



From City of San Rafael
San Rafael

Mayor
Albert J. Bono

Council Members

Paul M. Cohen

Barbara Heller

Cyr N. Miller

Gery D. Phillips

May 25, 2000

Alex Hinds

Director, Marin County Community Development Agency

3501 Civic Center Drive #308

San Rafael, CA 94903

Re: Oakview (Diaphne/Bacciocco) Mixed Use Development

Dear Alex:

A couple of weeks ago we discussed the City's interest in the Oakview project, and I mentioned that past agreements between the City and County would necessitate subsequent discretionary action by the City. Attached is a copy of the MOU adopted by the City and County in October, 1989. In the MOU the City agreed to waive annexation of the property while the County agreed that the project would be subject to the City's development timing policies (the "PPP" traffic allocation process), traffic mitigation fees and land dedication for implementation of the Lucas Valley/101 interchange upgrade.

A previous development application for the property was processed through the City's PPP procedure in 1986, but was denied without prejudice since the 15% housing affordability requirement was not met, land dedication for the Lucas Valley/101 interchange was not offered, and the timing of project construction would have exceeded the one year PPP allocation period.

We also forwarded a letter to the County in June, 1999 regarding the current development proposal (attached). We requested that the EIR traffic analysis include City adopted trip rates since we will be a responsible agency utilizing the EIR for subsequent actions. I do not believe the requested interaction with our Traffic Engineer has occurred. More importantly, we noted that the proposed office building is not in compliance with the City's General Plan, which designates the site for low density, Hillside Residential. I believe it will not be possible for the City to approve a subsequent PPP application unless the office building is eliminated from the proposal or the City's General Plan is amended.

Community Development Department
1400 Fifth Avenue, P.O. Box 151560, San Rafael, CA 94915-1560
Phone: (415)485-3085 Facsimile: (415)485-3184

RESPONSE TO LETTER 21 -- FRANK NELSON (TWO LETTERS)

Response to Comment 21-A

Please see Response to Comment 11-I.

Response to Comment 21-B

The reference to improved traffic flows is directed primarily toward Highway 101 mainline operations. However, the CMA travel demand 2020 forecasts used in the Draft EIR analysis do account for the affects of fewer freeway jumpers at this interchange due to the HOV lanes. The CMA forecasts at the same time account for the possible impact of increased ramp volumes tied to the St. Vincent's / Silveria development.

Response to Comment 21-C

An EIR is responsible to determine if a project would conflict with applicable land use plans, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. The key point here is that this evaluation is of plans, policies or regulations adopted by an agency with jurisdiction over the site.

As discussed in Chapter 4.0 (*Relationship to Public Plans and Zoning*) this EIR evaluated the Oakview Master Plan in relation to applicable public planning policies and the site's zoning in order to determine the extent to which the proposed project would conform with planning policies and zoning provisions or to document specific inconsistencies. This EIR examines the project's conformance with the:

- *The Marin Countywide Plan*
- *Marin County Zoning Ordinance*
- *San Rafael General Plan 2000*
- Marin Local Agency Formation Commission Policies

The above four documents are the adopted plans, policies or regulations of agencies with jurisdiction over the site. The commentor mentions "community goals" of the Marinwood community. These are not, however, adopted goals of an agency with jurisdiction over the project site and therefore do not fit into the requirement to be analyzed in an EIR.

Response to Comment 21-D

1. The types of offices have not been specified. The use of the ITE General Office Rate represents the high end of office land use trip generation and was used in the Draft EIR analysis to provide a conservatively high estimate.
2. The estimate of AM peak hour trips includes 146 vehicles exiting from Highway 101 and traveling to the office project.

3. An estimate of 11 AM peak hour vehicles.
4. None.
5. Truck activity will depend on the types of office uses. Typical office land uses generate and attract smaller delivery truck trips with an occasional larger truck trip (office supplier, furniture moving vehicle, etc.) on a daily basis. The ITE trip generation rate for General Office use includes an estimate of truck related activity in its calculations.
6. Again, this will depend on the types of specific office uses. Larger delivery trucks should access the office development directly from Highway 101 at the Miller Creek Road ramps.
7. Please see Response to Comment 12-D.

Response to Comment 21-E

1. Intersection peak period (7-9 AM and 4-6 PM) traffic counts conducted on January 18, 2000 and January 26, 2000 provided the raw data for intersection analysis. Please see page 5.5-4 of the Draft EIR for count locations. See Draft EIR Exhibit 5.5-3 for intersection LOS results. The LOS calculations and turning movement volumes are available for review at the Marin County Community Development Agency. Please see Response to Comment 10-D
2. Please see response to comment 11-Q.
3. The recommendation of intersection signalization was based on the calculated impacts of cumulative and project traffic and the County requirement to maintain a specific peak hour LOS threshold. The comment lacks specificity and therefore a further response is not possible.
4. Please see Response to Comment 11-H

Response to Comment 21-F

There were no allowances for increased traffic at the Marinwood Plaza. If an application is filed with the County for a project that could potentially increase traffic at the Plaza, then it is likely that an environmental review of that project including traffic would be conducted at the time of the application.

Response to Comment 21-G

Effects analyzed under CEQA must be related to a physical change in the environment. Economic and social effects are not considered environmental effects under CEQA. These effects need to be considered in EIRs only if they would lead to an environmental effect. As discussed in section 15131 of the *CEQA Guidelines* the evaluation of economic or social effects is generally treated as optional; agencies (such as Marin County) may, but are not required to, evaluate them. Agencies sometimes do include an analysis of economic or social effects of a proposed project.

It should be noted that despite the assertion in this comment, there is no evidence that there would be “insufficient traffic allotment remaining for the creation of a vibrant Marinwood Plaza serving the social, commercial and business needs of the community” as a result of the proposed project.

A two lane roadway, such as Marinwood Avenue, has an hourly capacity of about 800 vehicles. As discussed in Response to Comment 12-D currently Marinwood Avenue carries 340 vehicles (210 southbound / 130 northbound) in the AM peak hour. With the project office component the traffic on Marinwood Avenue would increase to about 520 vehicles (370 southbound / 150 northbound) in the AM peak hour. Therefore, even in the AM peak hour Marinwood Avenue would continue to have capacity for additional vehicles that may be attracted by a vibrant Marinwood Plaza. Furthermore, the implementation of a traffic signal at the Miller Creek Road / Marinwood Avenue, as recommended by the mitigation measures, would improve the operation of this intersection. Development of offices at the end of Marinwood Avenue on the project site would not preclude future development at Marinwood Plaza.

It should also be noted that the EIR concludes (see Impact 5.3-5) that development as proposed would conform with the intent of *The Marin Countywide Plan* policies on Stream Conservation Areas with disturbance limited to the proposed roadway crossing over Miller Creek. Thus disturbance to the Stream Conservation Areas and riparian habitat of Miller Creek would be less-than-significant.

Response to Comment 21-H

Response to Comment 21-D discusses the EIR requirement to assess a project’s conformance to adopted plans. Although Marin County has adopted several community plans (such as the Nicasio Valley Community Plan and the Point Reyes Station Community Plan) there is not an adopted community plan for Marinwood.

Since the “Marinwood Community’s Vision Goals and Actions” is not an adopted plan of Marin County there is no requirement that such a plan be analyzed in this EIR.

The commentor also requests that the EIR “provide information about the social effects related to the physical impacts of the proposed project”. The EIR does identify a number of significant impacts associated with implementation of the proposed *Oakview Master Plan*. With the implementation of the recommended mitigation measure it is concluded that each of the identified significant impacts would be mitigated to a less-than-significant level. The significant impacts before mitigation related to the proposed project are in the areas of geology and soils, hydrology and drainage, biological resources, visual and aesthetic quality, transportation and circulation, air quality, noise, and public services. A review of each of these identified significant impacts (before mitigation) does not reveal any economic or social consequences that would result. Furthermore, since each of the identified significant impacts would be mitigated to a less-than-significant level there would be no residual impacts that may have economic or social consequences.

Response to Comment 21-I

Please see Response to Comment 15-A.

Response to Comment 21-J

Please see Response to Comment 11-H.

Response to Comment 21-K

Please see Response to Comment 21-G.

Response to Comment 21-L

As stated in the project description the existing pedestrian path along the south side of Miler creek between the extension of Marinwood Avenue and Las Gallinas Avenue would be improved. Specific design standards are not included in the Master Plan although such standards would be included in the Precise Development Plan and Tentative Map. If this path is improved as a bicycle path several standards may apply.

The Caltrans Highway Design Manual (HDM) includes bikeway design standards. For bikeways constructed with transportation funding chapter 1000 of the HDM contains both advisory and mandatory design standards and guidelines for Class I shared use paths, Class II bike lanes, and Class III bike routes. Marin County may require the project applicant to utilize Caltrans minimum standards or may allow the applicant to draw on other resources such as the American Association of State Highway Officials (AASHTO), which is a national organization that produces widely recognized guidelines for streets and bikeways.

One standard that may affect the design of the path is the American with Disabilities Act (ADA). This may impact the design in terms of requirements for barrier-free access and in maximum gradients.

April 27, 2001

LETTER 22

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael CA 94903-4157

Dear Mr. Haddad,

Our family has lived in Marinwood since 1956. It has been an area with a good quality of life; safe, quiet, healthy, and designed for walking. We are seeing all of these things eroded in the last few years. The traffic is nearly unbearable during commute times. Farhad Mansourian informed us at our recent community meeting that about nine hundred cars per hour are exiting the freeway into Marinwood in the mornings. Further development leading to more cars, more noise, and negative visual impact is just not acceptable.

The area under consideration for the Oakview development serves several functions as it exists today. It is a physical and visual barrier between our neighborhood and the freeway and industrial areas east of us. It is a small haven for native trees and wildlife. The trees there are mostly live oak and bay laurel, both threatened now by phytophthora. To cut down more of them at this time seems senseless. Many of us would like to see this hill protected as publically-owned open space. There must be some way to achieve this.

Adding homes and the office complex would defeat this objective. Furthermore, the development would have multiple negative impacts on our community:

1.) Making Marinwood Avenue a thoroughfare into the office complex would effectively separate our local shopping area from our homes. Some of my older neighbors are already afraid to walk there, and we are hesitant to let our children cross that street. This area must be kept safe to encourage walking and bicycling.

2.) Construction of a bridge over Miller Creek on Marinwood Ave. could not be done without degrading the creek. The impact on the creek, especially with it's proximity to the Bay, seems unwise.

3.) Expensive homes and more office space are not needed here. With our current issues of power and water limits, now is not the time to add more demand to either system solely for the purpose of the developer's profit, and at the expense of the existing community.

4.) A large part of the charm of our community is it's visual character. Our homes are moderate in scale and achieve a sense of place and connection by the way they look. These proposed large homes don't fit at all. Their glaring ostentation is visually offensive.

PC ATTACHMENT #3

5.) Excessive noise. We are already impacted by freeway noise and vehicle noise on local streets. We do not want to be subjected to construction noise and more noise from more traffic.

6.) Degraded air quality. We are seeing more and more cases of asthma, especially among children. Our over-crowded streets generate tremendous quantities of car exhaust, especially when gridlocked. The worst gridlock is in front of Miller Creek school, and at the intersection of Marinwood Avenue and Miller Creek Road. Both of these areas would be significantly further impacted by traffic if the Oakview development is built.

All communities should be safe and healthy, with children, elders and others free to walk outdoors comfortably. We are living in a new time in which it is imperative to protect and rebuild our sense of community and it's connection to our local natural habitat. Our community in Marinwood is exceptionally well-organized, well-informed, and determined to protect our families' well-being from over-development. We do not want the Oakview development to be imposed upon us.

Sincerely,

A handwritten signature in cursive script that reads "Claude & Rebecca Bentley". The signature is written in dark ink and is positioned below the word "Sincerely,".

Claude and Rebecca Bentley
327 Miller Creek Road
San Rafael CA 94903
479.2721
bentley7@pon.net

RESPONSE TO LETTER 22 -- CLAUDE AND REBECCA BENTLEY

Response to Comment 22-A

Comments noted. These are comments on the merits of the proposed project and not on the adequacy of the Draft EIR.

LAW OFFICES OF
WALTER K. DODS
CREEKSIDE CENTER
7 MT. LASSEN DRIVE, SUITE C-150
SAN RAFAEL, CALIFORNIA 94903
(415) 499-1238
FAX (415) 499-0694

LETTER 23

April 27, 2001

CABLE: TRYS

11:11 PM 2:07

Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157 -

Attn: Mr. Tim Haddad
Environmental Coordinator

Re: "Horsehill"/ Oakview Draft EIR Review Comments

Dear Mr. Haddad:

I would appreciate it if the following comments were provided to the Planning Commission sufficiently in time for them to be considered at the Monday, May 7, 2001 meeting.

Although it is arguably discretionary I believe that CEQA Section 15131: Economic and Social Effects: Should be considered and it does not appear as if this draft EIR has done so.

Creating a major commercial project at the eastern edge of our community - which project has only one entrance/exit which goes across Marinwood Avenue through the Marinwood Plaza certainly could have a divisive effect on the community. It is contrary to the wishes of the community concerning Miller Creek and our hopes for a more-or-less natural walkway along the creek to the Marinwood Plaza. Commercial traffic on Marinwood Avenue needless to say is obviously detrimental to community use of that neighborhood shopping area.

Query: The effect on southbound U.S. 101 traffic of a traffic signal at Marinwood/Miller Creek. Of course, creeping urbanization resulting from such a traffic signal is something which the community opposes.

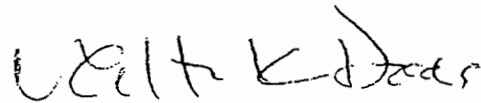
Mr. Tim Haddad
Marin County Community Development Agency
April 27, 2001

I respectfully submit that it should be clear from recent meetings in the community (one attended by Supervisor Kress and other County staff members) that we have a major concern with traffic and comparison to other difficult sites within the county at large is a wrong analogy: Comparison to what we have had and do want is the correct standard.

On another aspect of the draft EIR: Homes which dwarf other homes in the community and intrude on their privacy by both size and sight line (homes constructed above and looking directly down on the yards and living spaces of existing homes) also, I submit, would be divisive creating a "us versus them" feeling which we have never had in this community.

Respectfully submitted.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Walter K. Dods", written in a cursive style.

WALTER K. DODS

WKD/mfh

RESPONSE TO LETTER 23 -- WALTER K. DODS

Response to Comment 23-A

Effects analyzed under CEQA must be related to a physical change in the environment. Economic and social effects are not considered environmental effects under CEQA. These effects need to be considered in EIRs only if they would lead to an environmental effect. As discussed in section 15131 of the *CEQA Guidelines* the evaluation of economic or social effects is generally treated as optional; agencies (such as Marin County) may, but are not required to, evaluate them. Agencies sometimes do include an analysis of economic or social effects of a proposed project.

Consistent with section 15131 of the *CEQA Guidelines* Marin County did decide to include an analysis of the project's fiscal impact on the County and various public services provides (see Section 5.9 [*Costs and Revenues*]). Each of the fiscal impacts analyzed in Section 5.9 was determine to be a less-than-significant impact.

Response to Comment 23-B

Comment related to "creeping urbanization" related to installation of a traffic signal at the Miller Creek Road / Highway 101 southbound ramps. Many freeway intersections throughout California have been signalized in response to growing demands of traffic in both urban and suburban areas.

LETTER 24

May 7, 2001

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Suite 308
San Rafael, CA 94903

RE: Oakview Master Plan Use Permit

Dear Mr. Haddad:

I will be directly impacted by the development. I live at 4 Erin Drive, adjacent to the development.

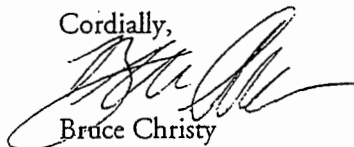
If the proposed development is realized I will have no normal or "reasonable-citizens" amount of privacy. All of my backyard will be in direct view from five of the proposed houses.

Other houses in our neighborhood have some privacy now and in the future, I want to keep some privacy as well.

I believe it is prudent to modify the existing plan regarding the suggested housing for the Erin Drive extension. The modifications to be implemented follow:

1. Setbacks between the houses to be 15 feet per house, not 8 feet.
2. Only six houses to be placed on Erin Drive.
3. Setbacks from street to be 30 feet minimum not 20 feet.
4. The first four houses to be single story.
5. Distance of buffer between existing houses and Erin Drive extension to be increased 10 feet (this is the west side of street).
6. A landscape plan to provide adequate privacy for the backyard at 4 Erin Drive.
7. Drainage assessment of what will happen to 4 Erin Drive regarding underground water and surface water flow patterns.
8. All pre-existing utilities that are above ground to be moved underground.
9. Estimated start date of land development.

Cordially,



Bruce Christy
4 Erin Drive
San Rafael, CA 94903

RESPONSE TO LETTER 24 -- BRUCE CHRISTY

Response to Comment 24-A

Comments noted. These are comments on the merits of the proposed project and not on the adequacy of the Draft EIR.

LARRY KENNINGS, PLANNING CONSULTANT

207 Morning Sun Avenue, Mill Valley, CA 94941 415/383-5141 FAX 415/380-8317 kennings@pacbell.net

LETTER 25

RECEIVED BY

May 14, 2001

2001 MAY 14 P 3: 25

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Subject: Draft Revised Environmental Impact Report for Oakview Master Plan

Dear Tim:

We appreciate the opportunity to comment on the Draft EIR for the Oakview Master Plan. The following comments are from the applicant and the applicant's planning team, including the engineer, geologist and traffic consultant for the project.

Our comments are as follows:

General Questions:

A. The Draft EIR is inconsistent in its presentation. Impact analysis statements are contradictory. References are made to characteristics of the proposed project that do not exist. Graphics are included in the Draft EIR that clearly relate to an earlier project and have nothing to do with the current application. Event dates, such as the date of the public scoping meeting are incorrect. Why is this so?

B. Why does the Draft EIR include, as mitigation measures, action items already included in the applicant's proposed project description?

C. Why does the Draft EIR include, as mitigation measures, actions already required by the Uniform Building Code and/or County permit requirements?

D. The Draft EIR does not include, in any of the sections, a discussion of affordable housing, such as second units as part of the proposed project, nor does the DEIR recognize the current Countywide efforts to develop a region based Housing Element for the Cities and Towns, and the County. How will the Draft EIR address the affordable housing issue? In recognizing the affordable housing issue, how will the traffic analysis included in the Draft EIR be revised to address affordable units that might be assigned to the proposed project, or might be developed in other Marin communities as a result of in-lieu fees?

Specific Comments:

1. Page 2.0-21, Exhibit 2.3-1:

E

How was the list of cumulative projects developed, and by whom? How was the "Study Area" determined? Why was the St. Vincent's/ Silvera Project not included? The list of cumulative projects in the "study area" appears to be far too inclusive. The sites for the Thorndale Office, Merrydale Road Condominiums, Merrydale Assisted Living, Northview Residential, and Vista Marin projects are all located south of the Freitas Parkway interchange at Highway 101. Why were these projects included in the study area?

Please provide an explanation as to how the cumulative list was prepared and why certain projects were included when other, more adjacent, projects were not.

2. Page 2.0-23, last bullet under "Proposed Project":

F

The bullet item refers to a Priority Determination being sought from the City of San Rafael under the Priority Project Procedures. This is not correct. At one point, the applicant requested an extension of the PPP determination. This request was later denied by a City resolution as being premature. Please see March 29, 1996 Pendoley letter to Irv Schwartz. Also, please see City of San Rafael City Council resolution action of April 9, 1996. As the project is not in the City of San Rafael, and according to the MOU, there will be no annexation, the Priority Determination is not necessary.

3. Page 2.0-24, continuation of "Next Steps":

G

If the steps are meant to be sequential, why is there not an additional bullet between the second and third bullet items that states that a Parcel Map is to be filed that would create two parcels as shown on the Vesting Tentative Map?

Please explain why this step was omitted.

4. Page 3.0-38, Environmentally Superior Alternative:

H

The Draft EIR states that "The primary advantage of Alternative 4 is that it assumes no site access from Lucas Valley Road." The Draft EIR fails to acknowledge that the proposed project access was developed as a result of discussions with the Marinwood Association. The proposed project access includes the Association's preference.

The proposed project could be redesigned to include a number of alternative access configurations. Eliminating the access to Lucas Valley Road would not affect the subdivision lotting pattern. One alternative would include connecting Roadway B to Ellen Drive. A second alternative would involve connecting Roadway A to Erin Drive with all access to the proposed lots via Erin Drive. A third alternative would have a connection of Roadway A to Erin Drive with Roadway B connected to Ellen Drive. A

fourth alternative would be to connect Roadway A to Erin Drive so that the entire residential roadway system would be an extension of Erin Drive. This fourth alternative would include an emergency access connection to Ellen Drive.

Please review the alternatives and reconsider, in detail, the Environmentally Superior Alternative.

5. Page 3.0-48, Major EIR Conclusions, third bullet, last two sentences:

I The Draft EIR text states that the ancient bedrock landslide deposit found in Area D is dormant and stable. This statement is inconsistent with the fourth bullet under Alternative 4 on Page 3.0-37.

Please explain the inconsistency between these two statements.

6. Page 4.0-46, second full paragraph:

J This last sentence relates to the proposed office use and its inconsistency with the City of San Rafael's General Plan.

Please revise the text to include a statement that, since the proposed project would be located in the County, the City's General Plan is not the controlling planning document.

7. Page 5.1-5, second full paragraph:

K This paragraph should include an additional statement explaining that, in addition to the subsurface exploration performed by Kleinfelder in 1996 and 1997, several hundred feet of test trenches also were excavated.

Please explain why this information was omitted from the Draft EIR.

8. Page 5.1-5, Geomorphology and Landsliding:

L "Removing mass (toe support) from the base of a potential slide area" is listed twice.

Please correct this duplication, or explain why it was necessary to include it twice.

9. Page 5.1-6, second paragraph:

The discussion of methods of stabilizing unstable hillsides fails to include one of the main methods.

M Please revise this section of the Draft EIR to include "removal of unstable material, installation of a keyway cut into stiff rock or bedrock, installation of drainage and placing and compacting soil to form a drained, compacted fill buttress" as one of the stabilization methods.

10. **Page 5.1-14, paragraph describing Xerorthents-Urban Land Complex (204):**
According to Exhibit 5.1-3, the Xerorthents-Urban Land Complex (204) is not found on the proposed project site.

N

Please correct Exhibit 5.1-3, or remove the unnecessary text from Page 5.1-14. Please explain the inconsistency.

11. **Page 5.1-18, second sentence, first paragraph, top of page:**
"It *appears* that more grading than shown on the Grading and Drainage Plan may be necessary in order to develop the site, including the removal and recompaction of loose colluvial soils, debris flows and shallow landslides, even within the proposed minimal grading approach"

O

Please explain the basis for this statement. What technical evidence was used to determine that more grading, beyond that defined by the project engineer, may be necessary?

12. **Page 5.1-19, Impact 5.1-3:**
The discussion of this impact includes a statement regarding cut slopes in the Franciscan Melange not performing well. This discussion is irrelevant as there is no evidence of Franciscan Melange on the site.

P

Please explain why the statement regarding Franciscan Melange was included in the Draft EIR. Please revise the text accordingly.

13. **Page 5.1-19, Mitigation Measure 5.1-3:**
As stated in the Draft EIR, the proposed project's Grading and Drainage Plan specifies several mitigation techniques related to cut and fill slopes, including measures that would be determined by a geologist or geotechnical engineer during construction. Why is it necessary for the Draft EIR to include mitigation measures similar to those proposed, as well as generic recommendations that are required for any project?

Q

Please explain why the Draft EIR includes mitigation measures that are similar to the project description.

14. **Page 5.1-20, Mitigation Measure 5.1-3, continued, 1st paragraph:**
This bullet item states "This should include terrace drains every 30 feet of vertical height on all slopes with grades steeper than 5:1." As written, this sentence would include both natural and manufactured slopes. It may not be necessary to place terrace drains on undisturbed slopes. It should read terrace drains every 30 feet of vertical height *for graded slopes* steeper than 5:1.

R

Please review this sentence. Please clarify the application to graded slopes instead of natural slopes.

15. **Page 5.1-23, Impact 5.1-4 Groundwater:**

The Draft EIR states that "due to the anticipated increase in water infiltration into Area D as a result of the proposed development, there is a potential for the seepage at the base of the cut on the adjacent property to increase unless the slide is drained properly."

S

The current infiltration is influenced by the existing conditions. The proposed paved areas, including roads, driveways and sidewalks, and the proposed residential development, will change the surface conditions and cover some of the site. Storm water that falls on these improvements, as well as water from the areas around the houses, would be directed and collected in properly designed drainage systems and conveyed into an appropriate drainageway. These improvements would reduce the amount of infiltration.

Please review this impact statement. Please revise the significance determination and eliminate the unnecessary mitigation measures.

16. **Page 5.1-23, Impact 5.1-7:**

No expansive soils have been found on the proposed project site. The last sentence in this discussion appears to be standard form text not related to this proposed project.

T

Please remove the last sentence, as it is not relevant.

17. **Page 5.1-24, Impact 5.1-10:**

The Draft EIR statement regarding artificial fill is confusing. The Draft EIR states, "The areas of artificial fill *appear* to be limited to the periphery of the site." It further states, "*If* these materials are in the vicinity of the proposed grading, they could settle non-uniformly, or be subject to erosion." The proposed project application includes a Grading and Drainage Plan. It should be clear if there is any relationship between the areas of artificial fill and the area proposed for grading.

U

Please provide a map indicating the area of artificial fill.

18. **Page 5.1-25, Impact 5.1-13:**

The Draft EIR includes the word "difficult" to describe geologic conditions. The geologic investigations and conclusions by Kleinfelder, and the proposed project plan eliminate any problems related to the site's geologic characteristics.

V

Please explain the technical definition, and basis for, the term "difficult". Please explain how "difficult" has implications for project planning purposes.

19. **Page 5.1-25, Impact 5.1-13:**

The recommended mitigation measure seems to be somewhat excessive and unnecessary. The proposed project has been designed to avoid potential landslide areas. As an informational resource for the County's decision makers, the Draft EIR must include all relevant material. This discussion includes references to drainage issues that might be better located in the "Hydrology and Drainage" section of the Draft EIR.

W

Please provide an example of a "Geologic Hazard Abatement District" that has been established in Marin County, or location with geotechnical characteristics similar to the proposed project site. Please describe the tax implications. Would this type of district cause the costs of housing to increase, thereby creating an adverse impact on affordable housing opportunities?

Please describe the historic and current programs established for the adjacent neighborhoods to ensure proper inspection and monitoring for routine maintenance, including how a GHAD would impact those neighborhoods, particularly the per house cost involved.

20. **Page 5.2-1, Regional Hydrology, 1st paragraph:**

X The Draft EIR states that a portion of the proposed project site draining to Miller Creek totals about 65.6 acres, or 1.3 percent, of the total watershed area. The text should also include a statement explaining that only approximately 9 acres, or 0.2 percent, of the proposed project site within the Miller Creek watershed is proposed for development.

Please revise the text to include a complete description of the proposed project use area.

21. **Page 5.2-7, 1st paragraph, 1st sentence:**

Y The Draft EIR states that there "Two gaps exist in the perimeter interceptor ditch." While this is a correct statement, it is incomplete. The proposed project would replace the gaps with a concrete interceptor ditch system.

Please revise the text to include the proposed improvements.

22. **Page 5.2-13, Impact 5.2-1, 1st paragraph, 1st sentence:**

The Draft EIR states that the drainageway in Sub-watershed 2 is a "significant channel". This is misleading.

Z Please explain the basis for determining that the drainageway in Sub-watershed 2 is a significant channel. Please provide a definition for "significant channel".

23. **Page 5.2-13, Impact 5.2-2:**

The Draft EIR refers to an appendix including the independent hydrologist's estimates. No such appendix was included in the Draft EIR.

AA Please provide the correct appended materials.

24. **Page 5.2-14, 1st full paragraph, next to last sentence:**

BB The Draft EIR includes a statement specifying that the Marin County Department of Public Works requires that all development projects mitigate fully for increased peak

flows that could negatively affect downstream structures. This is incorrect. There is neither a written policy nor a practice of the DPW that supports this statement.

Please contact John Wooley at the Marin County Flood Control and Water Conservation District. Please contact the Marin County Department of Public Works to determine the actual practice for this watershed. Please provide revised text.

25. Page 5.2-15, Mitigation Measure 5.2-2:

This mitigation measure is overly specific and detailed for a Draft EIR. The proposed project's engineer should be allowed the opportunity to plan and design the detention basins based on his understanding of the site and the proposed subdivision layout.

CC Please revise this entire mitigation measure to include a list of future considerations for the project engineer, rather than specify actions that might not be directly related to the final project. Please explain how these mitigation measures might impact housing costs and restrict affordable housing opportunities.

26. Page 5.2-17, Peer Review, 1st paragraph:

This paragraph is unclear as to which hydrologist prepared what analysis. The April 26, 2000 Erin Drive storm drain modeling was prepared by I. L. Schwartz Associates. The final modeling, dated April 26, 2000, was also prepared by I. L. Schwartz Associates.

DD Please revise the text to reference Schwartz's work.

27. Page 5.2-18, Mitigation Measure 5.2-3:

This mitigation measure recommends the replacement of an 18" storm drain with a 30" storm drain, as proposed by the project's Grading and Drainage Plan. This statement is incorrect. The Grading and Drainage Plan indicates that the replacement storm drain pipe be 27" to match the existing 27" pipe downstream. In addition, the proper mitigation measure should be the detention basin for sub watershed 2 as recommended by Mitigation measure 5.2-2.

EE Please explain why this mitigation measure cannot be revised to include the proper pipe size recommendations and why the pipe replacement would be preferable to the on-site detention basins.

Please explain why this mitigation measure would recommend installing a pipe of such size that would not be able to properly be connected with the downstream pipe. Also, please explain why this mitigation measure mimics the propose project without giving credit to the project engineer?

27. Page 5.2-19, Mitigation Measure 5.2-4:

FF This mitigation measure suggests that the proposed project participate in the funding

of a CalTrans project, as an alternative to constructing storm water detention/treatment basins. The City of San Rafael has corresponded with CalTrans, advising them that the inadequate storm drain culvert under Highway 101 is a State facility installed to deal with a Bay Area-wide infrastructure issue, and that it should be the responsibility of CalTrans to correct any deficiency.

Why was this not noted in the Draft EIR?

28. Page 5.2-19, Impact 5.2-5:

The Draft EIR states that, although project induced increases in peak flow rates would be imperceptible, the project impact would be significant. This appears inconsistent.

GG

Please explain how an imperceptible increase in flow would result in a significant impact.

29. Page 5.2-20, 1st full paragraph, top of page:

The Draft EIR text refers to Marin County guidelines regarding peak flow impacts in inadequate downstream structures.

HH

Please provide the appropriate reference citation for the Marin County guidelines.

30. Page 5.2-20, Mitigation Measure 5.2-5:

This mitigation measure suggests that the proposed project pay a fee for improvements to a facility considerably downstream of the proposed project site even though the Draft EIR states that the potential impact would be "imperceptible".

II

Please explain why the proposed project should pay for improvements so far downstream of the site.

31. Page 5.2-21, Mitigation Measure 5.2-7:

This mitigation measure suggests "restricting grading activities to the period between May 1 and October 15." The Marin County Code Title 24, Section 24.04.625, clearly states that grading is allowed during the winter season, **October 15 to April 15**, with approved erosion control measures in place.

JJ

Please explain why this mitigation measure differs with County Code allowances. Also, please explain how this mitigation measure would effect the construction of affordable housing projects, particularly where funding sources may be withdrawn is required completion schedules are not met.

32. Page 5.2-24, Impact 5.2-9:

The text presented for this impact suggests that the proposed project would have a beneficial effect on the on-going seepage problems experienced by the adjacent homeowners. Page 5.1-20, Impact 5.1-4 indicates the opposite. Which is correct?

KK

Please explain the inconsistency between the statements for Impact 5.2-9 and Impact 5.1-4. Which is correct?

33. Page 5.2-26, Mitigation Measure 5.2-10 (continued) 6th bullet item:

This mitigation measure provides a precise design for a portion of the proposed project that has not yet been specifically designed. It is quite likely that the recommendations presented in this mitigation measure will have little or no relationship to the final site plan for either the residential or commercial areas. The conceptual recommendation for grass-lined swales as a mitigation should be sufficient.

LL

Please explain, in detail, how such recommendations would work for any site plan that might be developed for either the residential area or the commercial area. Please explain why oil/grease traps should be required as mitigation measures if the detention basins would act as a filter.

34. Page 5.2-26 and 27, Mitigation Measure 5.2-10 (continued) 7th bullet:

This mitigation measure suggests that "punched straw" should be used as a surface erosion protection.

MM

Please explain how "punched straw" is preferable to "straw mulch". Also, please explain how the cost of revegetating disturbed areas for three years might increase the cost of providing affordable housing.

35. Page 5.2-27, Mitigation Measure 5.2-10 (continued) 8th bullet:

This mitigation measure suggests that an "irrigation scheduling and chemical management plan" be prepared and implemented.

NN

Please explain, in detail, how such a plan could be applied to 28 individual residential lots. Please explain how this might increase the cost of providing affordable housing.

36. Page 5.3-18, Mitigation Measure 5.3-1(b):

This mitigation measure is unnecessary, as the Master Plan for the proposed project includes similar language. The recommended mitigation measure included in the Draft EIR specifies that "Barriers should be provided where vehicular access to open space may be possible." "Barriers, designed and constructed to the standards established by the Marin County Open Space District and the Fire District would be installed at open space access points" is the Master Plan text.

OO

Why is this mitigation measure included in the Draft EIR?

37. Page 5.3-20, Mitigation Measures 5.3-2(a), 5.3-2(b) and 5.3-2(c):

These mitigation measures duplicate the Master Plan. The Master Plan text specifies "Preliminary development envelopes have been assigned to each lot with the intent to

PP

preserve the existing trees." In addition, the text further states, "Placement envelopes have been established for each lot so as to avoid removal of any mature healthy trees."

The Master Plan text also specifies that "Specific tree protection guidelines would be established to preserve existing vegetation during construction. Existing trees to be saved would be identified and marked prior to construction, and protected with a sturdy, temporary, wire mesh or orange plastic construction fence installed 10' beyond the drip-line to prohibit the intrusion of unnecessary traffic or heavy equipment. Dumping of backfill soil, debris, or construction materials over the root zones or against the trunk of any tree would be prohibited. Trenching work that might be required within the root zone of any tree would be done by hand. Specific details of the tree protection plan would be prepared as part of the Precise Plan.

Restrictions (CC&Rs) prohibiting the removal of healthy, mature trees on individual lots would be included in the titles for each residential parcel. Conservation easements, 50' wide, would be established at the rear of the residential lots to protect existing vegetation."

The Master Plan text specifies that "All landscaped areas would be watered with an automatically controlled irrigation system comprised of a combination of spray, bubbler, and drip circuits."

Please explain why a mitigation measure that duplicates the proposed Master Plan Project Description is included in the Draft EIR.

38. Page 5.3-21-22, Mitigation Measure 5.3-2(d):

This mitigation measure is seriously flawed. There is no policy nor scientific basis for the suggested replacement ratios of 5:1 for oak trees and 3:1 for other native species. The preparer of the Draft EIR clearly has no knowledge of the Sudden Oak Death problem in Marin County, which has infected some of trees on the site. Coast live oak (*Quercus agrifolia*), black oak (*Quercus kelloggii*), California bay (*Umbellularia californica*) and madrone (*Arbutus menziesii*) are among the native plant species that are confirmed victims of SOD. A replacement program that includes these species could increase the tree mortality rate. Using seeds or seedlings from an infected area could have the same result.

QQ

Please explain the basis for both replacement ratios. Were these ratios developed by County policy? Do these ratios reflect scientific knowledge? Were these ratios created by the Department of Fish and Game, or any other responsible agency?

Was the County Agriculture Commissioner, County Fire Marshal or the University of California Cooperative Extension consulted regarding SOD and its impact on native tree species, particularly with regard to replacement with similar species?

Please revise this mitigation measure, and any suggested vegetation replacement program, to reflect the severity of SOD in Marin County.

39. Pages 5.3-22 and 23, Mitigation Measure 5.3-3, and Exhibit 5.3.1:

RR The site was used for grazing purposes, which results in the replacement of native grasses with non-native species. Exhibit 5.3.1 indicates that a limited area of non-native grasses exists on the portion of the site proposed for residential development, with the majority of that area being native grasses. Earlier-field work by qualified botanists from LSA Associates indicated a different pattern of non-native grasses. Exhibit 5.3.1 appears to be a reverse of the actual conditions. The actual extent of native grass area should be reexamined.

Please prepare a map indicating the extent of the native grassland.

40. Page 5.3-25, Mitigation Measure 5.3-4(a):

SS This mitigation measure includes the statement that the on-site mitigation area for the proposed project "will most likely be developed" as an interchange in the future.

Please provide the budget line item and schedule for this improvement.

41. Page 5.4-5, Exhibit 5.4-2:

This exhibit uses an outdated version of the site plan as its base. It is unclear why.

TT **Please correct this exhibit to include the correct base map so as not to mislead the reader.**

42. Page 5.4-11, Mitigation Measure 5.4-1:

This mitigation measure recommends implementing the applicant's proposed landscape plan to "break up the forms and lines of project site development." The landscape plan is included in the application, it seems redundant to recommend implementing the project to mitigate the project.

UU **Please explain why the visual simulations do not include the proposed landscape plan while the mitigation measures recommend implementing the landscape plan proposed by the applicant. Please explain why the proposed project is illustrated without landscaping when a landscape plan is included in the application. Please explain why such a "worst case scenario", that does not carefully represent the proposed project, was used in this section of the Draft EIR.**

43. Page 5.5-18, Exhibit 5.5-7:

VV The Draft EIR should separate the residential and non-residential components of the proposed project when determining contributions to the surrounding street system. Exhibit 5.5-7 indicates that the residential component of the proposed project directly impacts Lucas Valley Road and the Lucas Valley Road interchange at Highway 101

impacts Lucas Valley Road and the Lucas Valley Road interchange at Highway 101 while the non-residential component does not. The non-residential component of the proposed project adds traffic on Las Gallinas Avenue both north and south of Lucas Valley Road, but not directly along Lucas Valley Road. The non-residential component of the project does, however, directly impact Miller Creek Road and the Miller Creek Road interchange at Highway 101.

Please explain why these contributions were not separated in the Draft EIR.

44. Page 5.5-23, Mitigation Measure 5.5-1(b):

WW This mitigation measure recommends that the applicant pay for the installation of a traffic signal at Lucas Valley Road and Los Gamos Road. The Northgate Activity Center Plan includes the installation of a signal at this location. Exhibit 5.5-7 indicates that the proposed project would contribute only 27 AM and 31 PM peak hour trips at the Lucas Valley Road and Los Gamos intersection. When compared to the existing traffic volumes shown on Exhibit 5.5-2, the proposed project would add between 1.3 to 1.8%. This mitigation measure should be consistent with Mitigation Measure 5.5-1(c) by recommending that the applicant be required to pay a fair share rather than "fund the improvement".

Please review this mitigation measure for consistency with other similar mitigation recommendations. Please explain the reason for recommending that the applicant pay more than a fair share of the improvements when the Northgate Activity Center Plan includes the installation of a signal at this location, with or without the Oakview project.

45. Page 5.5-33, Mitigation Measure 5.5-3:

XX This mitigation measure states that the proposed project would add 56 PM peak hour trips through the Highway 101/Lucas Valley Road/Smith Ranch Road intersections. This is incorrect. Exhibit 5.5-7 "AM & PM Project Turning Movements" clearly indicates that the proposed project would add a maximum of 31 PM peak hour trips to these locations.

Please explain why the mitigation measure is inconsistent with Exhibit 5.5-7. Please review the traffic section for other possible inconsistencies.

46. Page 5.6-10, Mitigation Measure 5.6-3, last bullet on page:

YY This mitigation measure is both inappropriate and can not be implemented realistically. It should be noted that, in the portion of the site proposed for residential development, the prevailing wind direction is from the west to the east. Any dust created by project related construction activities would be blown into the new development, not into any adjacent private properties. On the non-residential portion of the site, the ridge generally blocks the wind. Also, it is not clear who would be responsible for determining the wind speeds, or who would be responsible for suspending excavation and grading

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activities. A General Contractor would not have been trained in wind speed calculations.

Please revise this mitigation measure to eliminate inappropriate or unnecessary recommendations.

47. Page 6.0-14, Alternative 4, 8th bullet:

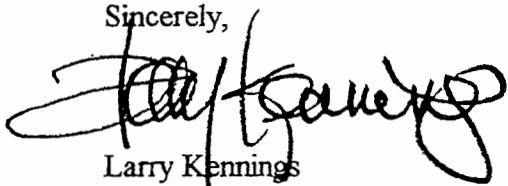
The reference to the implications of the ancient-landslides is not consistent with the statements included on Page 5.1-17, regarding the stability of the landslide areas.

22

Please review the geotechnical section and eliminate this bullet item, as it is inconsistent with other section of the Draft EIR.

The applicant thanks you for this opportunity to comment on the Draft EIR for the Oakview Project.

Sincerely,



Larry Kennings
Planning Consultant

cc: I. L. Schwartz
Douglas Maloney

RESPONSE TO LETTER 25 – LARRY KENNINGS, PLANNING CONSULTANT (ON BEHALF OF THE PROJECT APPLICANT)

Response to Comment 25-A

The commentator's only specific example of where the Draft EIR is inconsistent in its presentation is the statement that "Event dates, such as the date of the public scoping meeting are incorrect".

The public scoping meeting was held on January 26, 2000 and this is the date noted on page 1.0-3. So, it is not clear what the commentator is referring to in this instance.

Response to Comment 25-B

It is common for EIRs to include as mitigation measures that are already included in an applicant's proposed project description. Because project descriptions can change, by including such proposals as mitigation measures the lead agency (in case Marin County) has a mechanism to ensure that the measure will be adopted and can be enforced. Furthermore, *CEQA Guidelines* section 15126.4 specifically includes the incorporation into the EIR mitigation measures which are proposed by project proponents.

Response to Comment 25-C

It is common for EIRs to include as mitigation measures actions that would be required by the Uniform Building Code and / or County permit requirements.

Response to Comment 25-D

The point of this comment is not clear. The proposed project does not propose the construction of any affordable housing units, as second units or any other type of units, on the project site. The project applicant proposes to make an in-lieu payment to satisfy the County's affordable housing requirement. The EIR does, however, recommend that 15 percent of the housing units onsite (four units) be affordable to moderate, low, or very low income households.

Even if the affordable housing units were build offsite it is unlikely that the small number of units (four) would have a significant impact on the traffic analysis included in the Draft EIR.

Response to Comment 25-E

List of short-range cumulative projects taken from the County's Propdev document. The County determined the study area. The St. Vincent's / Silveira project traffic is included in the long-range cumulative analysis. County staff reviewed, commented and approved the Draft EIR list of cumulative short-term project's prior to the analysis.

Response to Comment 25-F

As discussed on page 4.0-41 of the Draft EIR previously the project applicant had agreed to participate in the City's Priority Projects Procedure (PPP) and in June 1995 submitted to the City of San Rafael an Application for Priority Project Determination.²³ Since Marin County had not yet acted on the project application in March 1996 the Oakview project applicant requested "that the City of San Rafael grant a continuance of the Priority Project Procedures until such time as the County has approved our current application."²⁴ There is no indication that at that time City staff stated that the City's PPP did not apply to this project.

In a letter dated November 15, 2000 to Alex Hinds, Director Marin County Community Development Agency from Robert M. Brown, AICP, City of San Rafael Community Development Director Mr. Brown stated "we continue to conclude that the intent of the MOU was to require any development application for this site to be subject to our PPP".

Response to Comment 25-G

It was understood that the present application under consideration in the EIR is for approval of a Master Plan, Use Permit, and Vesting Tentative Map. As shown in exhibit 2.2-1 the purpose of the tentative map is to divide the site into two parcels to initiate the development process. If this is correct, then the step referred to in this comment is not necessary.

Response to Comment 25-H

Access from Lucas Valley Road was analyzed as part of the proposed project. The County DPW Inter-Office Memorandum (May 22, 2001) clearly states that they will not support a new driveway at this location on Lucas Valley Road. Alternative access schemes to the residential component were considered and discussed in the Draft EIR Alternatives section.

Response to Comment 25-I

The subject bullet statement was derived from the text for Alternative 4 from the previous 1996 Draft EIR. This statement is no longer relevant and should be deleted. Based on this comment the fourth bullet on page 3.0-37 is deleted, as follows:

- ~~• Preservation of an area east and northeast of the spring with no development due to the potential presence of a large ancient landslide in this area. Repair of this landslide would require an extensive amount of earthmoving, not only in this area but also at high elevations of the site~~

²³ Oakview Priority Projects Application submitted by Larry A. Kennings, LSA Associates, Inc. on behalf of the Oakview project, June 5, 1995.

²⁴ Letter to Ms. Jean Hasser, Principal Planner, City of San Rafael from Larry Kennings, Principal, LSA, March 20, 1996.

Response to Comment 25-J

Chapter 4.0 of the Draft EIR acknowledges the conflict between *The Marin Countywide Plan's* land use designation and the *City of San Rafael General Plan 2000's* land use designation for the project site. As stated on page 4.0-42 of the Draft EIR the proposed office buildings would not be consistent with the City's Hillside Residential designation.

However, it is the County's position that in this instance, where the project site is not proposed for annexation to the City of San Rafael, where there is a conflict between the County's and the City's land use designation it is the County's General Plan that prevails.

It is, however, acknowledged that the City of San Rafael has a discretionary approval related to the proposed project through the City's Priority Projects Procedures. Based on the Priority Projects Procedures the City will make its own determination in regard to consistency of the proposed project with the City's General Plan.

Response to Comment 25-K

On page 5.1-5, second full paragraph, of the Draft EIR it is stated:

- This work included the excavation of *seven backhoe pits* (emphasis added) and the drilling of six continuous core borings.

Therefore, the backhoe excavated test pits (or trenches) were mentioned in the Draft EIR and no additional text is necessary.

Response to Comment 25-L

The redundancy of the subject bullet statement (page 5.1-5, last paragraph, last bullet) was an error and should therefore have been deleted:

- ~~Removing mass (toe support) from the base of a potential slide area.~~

Response to Comment 25-M

The commentor is referred to page 5.1-5, second paragraph, in the Draft EIR where it is stated:

Grading a site before building (emphasis added), installing drains, retaining walls, or caissons are examples of standard mitigation measures.

Placement of drainage is clearly mentioned. Additionally, removal of material, cutting of a keyway and creation of a compacted soil buttress are all methods of grading. However, to further clarify this statement the text on page 5.1-6 is revised to read as follows:

Engineered grading of a site before building (through removal of unstable material, keyway construction and recompaction), installing drains, retaining walls, or caissons are examples of standard mitigation measures.

Response to Comment 25-N

Xerorthents-Urban Land Complex (204) is found on small portions of the project site. No changes to the text or exhibit are necessary.

Response to Comment 25-O

The Grading and Drainage Plan does not show the extent of grading necessary for landslide repair or include such items as the removal of unstable material, installation of a keyway cut into stiff rock or bedrock, installation of drainage and placing and compacting soil to form a drained, compacted fill buttress. Therefore, since stabilization of these features is necessary, the Grading and Drainage Plan does not accurately reflect the total amount of grading needed.

Response to Comment 25-P

Published maps (Bailey and others, 1964; Blake, 1974; Wagner and others, 1990; and Blake and others, 2000) as well as the project applicant's consultant (Kleinfelder, 1997) map the bedrock as Franciscan material. Additionally, the Oakview Mitigated Master Plan, Use Permit and Vesting Tentative Map (Daphne and Bacciocco, 1999), also lists the site bedrock as belonging to the Franciscan Assemblage. Therefore, no revisions to the Draft EIR text regarding this subject are necessary.

Response to Comment 25-Q

The project applicant's consultant recommends mitigation of potentially unstable slopes through standard geotechnical techniques. Since the EIR preparers concur with this assessment, a summary has been presented, defining and listing the standard mitigation measures to illustrate to others the type of measures that are needed at the project site.

Response to Comment 25-R

Based on this comment the text on page 5.1-20 of the Draft EIR is revised to read as follows:

Design drainage facilities to conform with agency standards. This should include terrace drains every 30 feet of vertical heights on all graded slopes with grades steeper than 5:1...

Response to Comment 25-S

The exact point of this comment is not clear. As stated in impact 5.1-4 there is a potential for seepage as the base of the cut on the adjacent property to increase *unless the slide is drained properly*. The purpose of the mitigation measure is to ensure that the impact of off-site seepage be reduced to a less-than-significant impact.

Response to Comment 25-T

The Soil Survey of Marin does map soils with moderate expansion potential onsite. Therefore, it may be necessary in some areas, exposed during grading; to prevent this potential problem through standard geotechnically engineered grading and design techniques.

Response to Comment 25-U

Old remnant artificial fill areas are not easily observed on a site that is vegetated. Therefore, there is insufficient data to provide a map showing all areas of artificial fill. If fill deposits were present in proposed building areas, it would be the applicant's geotechnical consultant's responsibility to properly identify and mitigate them.

Response to Comment 25-V

Webster's dictionary defines difficult as "requiring extra effort, skill, or thought." This term is appropriate to describe the site geologic conditions. This was made evident in the extensive subsurface exploration that was necessary for the applicant's consultant to accurately characterize the site-specific geologic conditions.

Response to Comment 25-W

The Draft EIR provides a through discussion on the benefits of Geologic Hazard Abatement Districts. For additional information on the subject the commentor is referred to an article by Robert B. Olshansky titled, "Geologic Hazard Abatement Districts," in the July 1986 issue of California Geology. Another excellent summary is available at <http://www.geolith.com/GHADS/ghads>.

Response to Comment 25-X

The Regional Hydrology sub-section is part of The Setting section of the Draft EIR. Here, the project site is described in its existing condition. The low percentage of project development area relative to the area of the Miller Creek Watershed is indirectly cited in Impact 5.2-5 Off-Site/Downstream Flooding on Miller Creek. The 0.7 percent increase in Miller Creek 100-year flood discharge following project development attests to the project's limited development area and influence on downstream flooding.

Response to Comment 25-Y

The Revised Preliminary Drainage Analysis prepared for the project by I.L. Schwartz & Associates (Feb. 1999) did cite the gaps in the interceptor ditch network. However, it did not specifically outline the repair as a task item in the section of the report headed "Proposed Drainage Facilities". Thus, the text of the Draft EIR is appropriate. See also Draft EIR text changes cited in Response to Comment 27-D.

Response to Comment 25-Z

The drainageway in Sub-watershed 2 is “significant” because it is one of the few incised and well-defined drainageways on-site. This differentiates it from the more numerous broad, shallow drainage swales that convey less concentrated stormwater runoff. The more concentrated flow conveyed by this drainageway results from both its larger drainage area and the presence of the identified spring. The spring and the adjacent seeped area not only directly contributes to storm runoff, it also creates a progressively expanding area of saturated soils that promote saturated overland flow during storm events.

Response to Comment 25-AA

The commentor is correct, the referenced peak flow computations were excluded from the Draft EIR appendix. A copy of the peak flow computations for the proposed project is available for review at the Marin County Community Development Agency.

Response to Comment 25-BB

CEQA requires that significant project impacts be mitigated to levels of insignificance whenever feasible. In the “Significance Criteria” section for Hydrology and Drainage (page 5.2-10 of the Draft EIR), a finding of significance would be mandated if the project: a) “Created or contributed runoff water which would exceed the capacity of existing or planned stormwater drainage systems....”, or b) “Substantially altered the existing drainage pattern...., or substantially increased the rate or amount of surface runoff in a manner which would result in flooding on or off-site”. Both of the cases of downstream flooding cited as impacts in the Draft EIR, Miller Creek at the Silveira Ranch bridge and the Highway 101 culvert crossing on the Gallinas Creek tributary, fit the definition of significance cited under a) and b) above. Nuisance flooding is currently affecting the west side of Highway 101 at the box culvert and with increases in incoming peak discharges could create a hazard along the freeway margin. On Miller Creek, however, the backwater flooding at the downstream bridge on Miller Creek during the 100-year flood would not be significantly affected by the project increases in peak flow rates. Since the County DPW does not require peak flow mitigation unless a downstream drainage structure (or system) is detrimentally affected, the Draft EIR is revised to read as follows:

(a) Impact 5.2-2 Site Peak Flow Rates, page 5.2-14, 1st paragraph, next to last sentence:

The Marin County Department of Public Works requires that all development projects mitigate fully for increases in peak flows on drainageways that could negatively affect downstream hydraulic structures ~~or the extent of flooding in natural channels.~~

Impact 5.2-5 Off-site/Downstream Flooding on Miller Creek and Mitigation Measure 5.2-5

Impact 5.2-5 Off-site/Downstream Flooding on Miller Creek

Project induced increases in peak flow rates for Sub-watersheds 3 and 6 would marginally increase the 100-yr. peak discharge ~~add, however imperceptibly, to the surcharge of floodwaters that create significant backwater flooding at the SPRR bridge on Silveira Ranch. Since~~ While this structure lacks adequate capacity to pass the existing 100-year flood discharge without significant inundation of the adjoining ranchlands, the project impact on downstream flooding would be a significant impact minor increase in the flood discharge due to the project would not

produce a detectable increase in either local flood elevations or the spatial extent of the 100-yr. floodplain. Thus, the project impact on flooding along Miller Creek would be less-than-significant.

Ensign and Buckley, Consulting Engineers for the City of San Rafael prepared an updated 100-year flood analysis for Miller Creek. ²⁰ The results cited.....is sufficient to convey the 100-year peak flow with adequate freeboard.

Downstream of the Highway 101 bridge crossing, Miller Creek...reproduced in Exhibit 5.2-2. Since a free flow condition with adequate freeboard to pass the design 100-year flood does not exist at this crossing, Marin County guidelines regarding peak flow impacts on inadequate downstream structures would be applicable. A Master Plan for development of the property is currently in the early stages of preparation. It is anticipated that some degree of channel/floodplain modification will be required along the lower reaches of Miller Creek in order to accommodate future land uses. However, given the minor proportion (0.7 percent) of the 100-year flood discharge that would be generated by the project, no detectable increase in the 100-year flood elevation would result. Therefore, the project impact on downstream flooding along Miller Creek would not be significant.

~~**Mitigation Measure 5.2-5** No mitigation would be required. To reduce project impacts on flooding along the on-site and downstream reaches of Miller Creek, either of the following mitigation measures should be implemented:~~

- ~~• Implement Mitigation Measure 5.2-2.~~
- ~~• Pay a drainage fee to Marin Countyon Silveira Ranch. The fee total would be negotiated between the applicant and the County.~~

~~**Significance After Mitigation** Implementation of the first mitigation.... based on the current County criteria. (i.e., delete entire paragraph)~~

~~**Implementation of Mitigation** Same as for Mitigation Measure 5.2-2."~~

Response to Comment 25-CC

In response to this comment and to Comment 25 BB, Impact 5.2-2 and Mitigation Measure 5.2-2 are revised to read as follows:

Mitigation Measure 5.2-2 The following mitigation measure would be required to reduce peak flow impacts:

~~Construct a stormwater detention/treatment basins, one each in the lower reaches of Sub-watersheds 2, 3 and 6. The Sub Watershed 2 basin should be located in the vacant land paralleling the proposed Roadway A, as shown on the Schematic Drainage Plan. This undeveloped land is situated on the most gently sloping portion of the site, near the southwest corner. It would also have the elongated shape that is best suited for water quality treatment ponds. If the area of the presently designated vacant land is insufficient to provide the necessary basin storage volume, the lower portion of Lot 28 should be added, with a roadway culvert connection.~~

~~The Sub-Watershed 3 basin should be located along the eastern edge of the proposed Erin Drive extension, occupying the base of Lots 2-9. Because of the smaller size and peak discharges associated with Sub-Watershed 3, a narrow, elongated detention basin should be sufficient to accomplish the necessary level of peak flow attenuation. Each entrance driveway would have to be culverted to allow for hydraulic connectivity between storage cells. Basin discharge would join roadway runoff and enter the proposed vegetated swale upslope of #1 Erin Drive.~~

~~To maximize hydraulic efficiency and minimize the potential for maintenance problems, both basins should be equipped with dewatering pipes and emergency weir spillways. The dewatering pipes should be sized to maintain post-project peak flows at pre-project levels for the design 100-year rainstorm. Each emergency overflow weir should be designed conservatively to pass an unattenuated 100-year peak discharge, even though the prescribed basin storage would allow for full attenuation of runoff from that storm. Primary dewatering pipes and emergency weirs should be located at the downgradient ends of each basin, i.e. at the southern end for the Sub-Watershed 2 basin and the northern end for the Sub-Watershed 3 basin. Appropriate energy dissipation should be installed at all spillway discharge outlets.~~

~~The Sub-Watershed 2 and 3 basins should be designed to serve a twofold purpose: (1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain systems, and the Gallinas Creek tributary (i.e. Highway 101 box culvert), and the lower reach of Miller Creek, and (2) filter and cleanse stormwater runoff by use of an vegetated inlet swale and detention area.~~

~~A third detention/treatment basin should be constructed in the low lying developed lands of Sub-Watershed 6, near the eastern edge of either Lot 29 or 30. Given the spatial constraints in this portion of the Sub-Watershed, a passive pipe or cistern type storage underground detention structure should be constructed. Such a structure could be located beneath the Lot 30 parking lot or the northern end of Roadway C. The hydraulic design would ensure that when a particular flood stage in Miller Creek is reached (e.g. 10-year flood), backwater in the storm drain system would induce diverted storm drain system into the storage unit. Once Miller Creek flood levels had receded, the stored stormwater would re-enter the system and discharge to Miller Creek. The size of the off-system storage unit would equal the volumetric difference in the pre- and post-project stormwater hydrographs for the 100-year design rainstorm.~~

~~Since the passive stormwater detention storage would be underground, cleanout stubs would be required at the upgradient ends of each storage component (e.g. cistern or pipe array). Periodic maintenance would be required to remove any debris and sediment that accumulate in these storage components.~~

~~A sediment maintenance plan describing both frequency and timing of sediment removal, as well as excavation equipment and environmental precautions, should be included in the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.~~

~~Following release of project performance bond, maintenance of the detention basin would be the responsibility of a Geologic Hazard Abatement District (GHAD) funded by site lot owners. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13)~~

Basin location shall be selected to minimize excessive topographic manipulation, even if one or more designated residential lots must be eliminated to accommodate its construction. Since stormwater quality impacts can be mitigated, in part, through the integration of water quality enhancements to normal detention basin design, the detention basin should be designed to serve a two-fold purpose: 1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain system- the Gallinas Creek tributary (i.e. Highway 101 box culvert); and (2) filter and cleanse stormwater runoff by use of a vegetated inlet swale and detention area (forebay). Other design considerations shall include:

- Structural measures for normal pond dewatering and end-of-season (e.g. April) dewatering (fully) for mosquito control.
- An emergency overflow spillway with appropriate energy dissipator at the outlet.

The project applicant shall prepare a monitoring and maintenance plan for the detention basin to ensure proper long-term basin functioning. The monitoring and maintenance plan would include provisions for sediment removal and basin repair, as well as associated conditions governing the use of heavy mechanical equipment (e.g. backhoes, excavators) and environmental safeguards and procedures. This information shall be incorporated into the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.

Following release of the project performance bond, maintenance of the detention basin would be the responsibility of the funding entity established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13.)

The "Significance after Mitigation" and "Implementation of Mitigation" sections remain unchanged.

Response to Comment 25-DD

Footnotes 17 and 18 on page 5.2-17 of the Draft EIR credit both reports/calculation sets to I.L. Schwartz & Associates, the project civil engineer.

Response to Comment 25-EE

I.L. Schwartz & Associates specified the 30-inch pipe in their hydraulic reports as the intended and proper replacement for the existing 18-inch pipe. This was confirmed in discussion with Steve Schmidt of Schwartz & Associates on July 26, 2001. Mr. Schmidt discussed the matter with the firm's principal, Irv Schwartz.

Response to Comment 25-FF

The City of San Rafael's position regarding the box culvert issue has not yet been fully accepted by Caltrans and no action has been taken to remedy the situation. This does not change the fact that the culvert lacks sufficient capacity to pass the 100-year flood discharge without nuisance flooding upstream in the vicinity of both its inlet and the inlet of a neighboring culvert downgradient and to the south. Since Mitigation Measure 5.2-4 indicates that the negotiation for any fee assessment/cost share

would be undertaken between the applicant and the City of San Rafael, the City could opt to release the applicant from any responsibility, pending Caltrans' acceptance of the City's position on culvert replacement. Also, as indicated in the language of Mitigation Measure 5.2-4 (page 5.2-19 of the Draft EIR), either detention basin construction (Mitigation 5.2-2) or the cost sharing option could be chosen by the applicant to mitigate the project's flooding impact in the Gallinas Creek Watershed.

Response to Comment 25-GG

Comment noted. See the Draft EIR text revisions regarding project impacts on peak flows, downstream flooding and hydraulic structures on Miller Creek cited in the Responses to Comments 25-BB and 25-CC.

Response to Comment 25-HH

Marin County has no specific guidelines regarding peak flow impacts on inadequate downstream structures. However, the EIR hydrologist spoke with John Wooley, Associate Engineer with the County Land Development Department on July 27, 2001. Mr. Wooley confirmed that where an existing drainage structure was demonstrably inadequate to handle the design inflow without increasing the local flood hazard, development related peak flow increases should be mitigated.

Response to Comment 25-II

The Draft EIR text has been revised to reflect the determination that project peak flow increases on downstream flooding and hydraulic structures along Miller Creek would be less-than-significant. See Responses to Comments 25-BB and 25-CC.

Response to Comment 25-JJ

The comment is correct in that grading outside of stream corridors is allowed during the winter season as long as approved erosion control measures are in-place by October 15th. In response to the comment, the Draft EIR text on page 5.2-21 Mitigation Measure 5.2-7, last sentence is revised to read as follows:

No grading should occur within the Miller Creek Stream Conservation Area during the winter season, thus restricting grading activities at the proposed Miller Creek bridge crossing to the period between May 1 and October 15. Grading in site areas outside of the SCA can occur during the winter season, as long as erosion control measures approved as part of the project Stormwater Pollution Prevention Plan (SWPPP) are installed and properly maintained through this period.

Response to Comment 25-KK

The project affect on groundwater seepage would be beneficial; however, the extent could range from marginally beneficial to significantly beneficial. This would depend on the extent of subsurface drainage installed both along the lot (i.e. building pad) cut slopes and within the identified landslide

on the site. The preliminary grading and drainage plan for the project lacks sufficient detail to determine just how beneficial the project might be in this regard.

Response to Comment 25-LL

The project SWPPP offers any project applicant the chance to propose a mix of BMPs that are specifically tailored to the project being constructed. The County DPW determines whether a particular mix of BMPs is appropriate and adequate to protect water quality in receiving drainageways downstream of a project site. Mitigation Measure 5.2-10 addresses the current project configuration and the resulting opportunities for water quality enhancement. Most of these measures would be transferable to another project configuration with a roughly similar land use mix. However, if a project were proposed that was predominantly light industrial and commercial, a stronger reliance on the less passive BMPs (e.g. in-line sediment traps and filtration systems) would be indicated.

Given the latitude currently offered by the NPDES process and the County DPW in selecting BMPs for stormwater quality control and treatment, the DEIR text (Mitigation Measure 5.2-10, p. 5.2-26, third and fourth bullet items) is revised to read as follows:

- Due to the close proximity...the following BMPs should be considered as part of the project SWPPP such that the project would comply with the requirements of the NDPES Permit and provisions of Title 24 of the Marin County Code (24.04.625), citing erosion control requirements associated with site grading:
- ~~Installation of oil/grease traps or similar in line filtration systems for storm drain systems. Such traps or separators....sinks for pollutants. (Delete entire item.)~~

Also, note that two of the detention basins that were previously required as part of Mitigation Measure 5.2-2 have been eliminated due to a revised determination of the extent of the project impact on downstream flooding along Miller Creek. Thus, in Sub-watersheds 3 and 6 (tributary to Miller Creek) BMPs would be the only remaining stormwater quality treatment options left.

Response to Comment 25-MM

Either punched straw or straw mulch could be used in conjunction with seeding to protect the site against raindrop and rill erosion.

Response to Comment 25-NN

Homeowner education is a significant part of any irrigation scheduling and chemical management plan. A guidebook could be prepared as part of the plan that would instruct homeowners and their landscape contractors in the safe handling and application of irrigation water and lawn chemicals. A qualified water quality and/or turf management specialist should prepare such a plan.

Response to Comment 25-OO

Mitigation Measure 5.3-1(b) was recommended to control the potential for access to proposed open space lands on the property, both during the construction phase and once the project has been

completed. While the Master Plan includes language to prevent access into permanent open space lands in accordance with the Marin County Open Space District and Fire District standards, the mitigation in question serves to emphasize the importance of controlling unauthorized access onto the site, even during the construction phase. No change to the recommended mitigation is considered necessary.

Response to Comment 25-PP

Mitigation Measures 5.3-2(a) through (c) were recommended to protect tree resources on the site and should be implemented as part of the project. These include the inclusion and adjustment of building envelopes on residential lots and need for detailed guidelines prepared by a certified arborist. These measures would be part of a comprehensive Landscape and Vegetation Management Plan which addresses all aspects of mitigation pertaining to trees, native grasslands, wetlands, and landscape compatibility. No changes to the recommended mitigation are considered necessary.

Response to Comment 25-QQ

The concerns of the commentor regarding the affects of sudden oak death syndrome on native tree species in Marin County are noted, but the loss and possible susceptibility of a particular species to this disease should not be used as justification to not require replacement plantings when trees are removed as a result of development. The Marin County Forester²⁵ and a representative of the UC Cooperative Extension²⁶ both confirm that the effects of sudden oak death on woodland habitat should not be used as justification for not replacing trees removed as a result of proposed development.

The Marin County Forester²⁷ and a representative of the UC Cooperative Extension²⁸ both confirm that the effects of sudden oak death on woodland habitat should not be used as justification for not replacing trees removed as a result of proposed development. However, the possible relationship between woodland density and spread of SOD does warrant a reduction in the recommended tree replacement ratio, given the success of maintenance and monitoring of plantings.

See Response to Comment 13-R for additional discussion of the recommended tree replacement ratios, changes to Mitigation Measure 5.3-2(d), and the affects of SOD.

²⁵ Environmental Collaborative conversation with Kent Julin, Marin County Forester, July 2002.

²⁶ Environmental Collaborative conversation with Ellie Rill, UC Cooperative Extension, May 2002.

²⁷ Environmental Collaborative conversation with Kent Julin, May 19, 2002.

²⁸ Environmental Collaborative conversation with Ellie Rill, UC Cooperative Extension, May 2002.

Response to Comment 25-RR

The commentor is correct that the legend for "native grassland" and "non-native grassland" designations were reversed in Exhibit 5.3-1 of the Draft EIR. Exhibit 5.3-1 has been revised. A detailed discussion of the extent of grassland habitat, including estimates of the extent of native cover is provided on pages 5.3-4 and 5 of the Draft EIR. The assessment of potential impacts on grasslands under Impact 5.3-3 was based on a correct mapping of native grasslands in Exhibit 5.3-1, with an estimated 1.6 acres affected by proposed grading and development.

Response to Comment 25-SS

Exhibit 5.5-4 provides a schematic design of the planned Highway 101 interchange improvements. The text on page 5.5-15 of the Draft EIR provides information regarding the timing and funding of these improvements.

Response to Comment 25-TT

The applicant's representatives supplied the base map used to prepare Exhibit 5.4-2 to the EIR consultant. It is understood that the change in topography is based on an earlier version of the proposed project, nevertheless the information portrayed by regarding the "visually prominent ridgelines" and "300 foot setback" remain accurate.

Response to Comment 25-UU

It is standard practice in EIRs prepared by Marin County for the photosimulations to show the proposed project immediately after construction but prior to installation of landscaping. This procedure provides decision makers with a visual tool to better understand the impact of such things as the location, height, and scale of a proposed building. The EIR clearly states that incorporation of the applicant's proposed landscaping would reduce identified visual impacts to a less-than-significant level.

Response to Comment 25-VV

Project traffic is analyzed as a whole. The request to separate the project components traffic generation is unusual and would not serve to identify the full impact of project generated trips. However, the Draft EIR Exhibit 5.5-7 does illustrate the separate land use peak hour trip generation.

Response to Comment 25-WW

Mitigation measures have been reviewed and revised as necessary. See the revised Section 5.5 (*Transportation and Circulation*).

Response to Comment 25-XX

Please see Response to Comment 1-D

Response to Comment 25-YY

The mitigation measure is appropriate since winds can blow in directions other than the prevailing direction. In addition, these are measures to reduce dust from construction sites that are strongly encouraged by the Bay Area Air Quality Management District.

In response to this comment the 12th bullet of Mitigation Measure 5.6-3 on page 5.6-10 of the Draft EIR is revised to read as follows:

Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph cause dust clouds to extend beyond the construction site and affect nearby land uses.

Response to Comment 25-ZZ

The subject bullet statement was derived from the text for Alternative 4 from the previous 1996 DEIR. This statement is no longer relevant and should be deleted. Based on this comment the eighth bullet on page 6.0-14 is deleted, as follows:

- ~~• Exclude an area east and northeast of the spring from development due to the presence of a large ancient landslide in this area. Repair of this landslide would require an extensive amount of earthmoving, not only in this area but also at higher site elevations.~~

LETTER 26

Kathleen Gaines & Ray Welch
365 Quietwood Drive
San Rafael, California 94903
415.472.7575

RECEIVED BY
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MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

May 7, 2001

Tim Haddad
Environmental Coordinator
Marin County Planning Department
Marin Civic Center
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Dear Mr. Haddad:

Our objections to the proposed Oakview Master Plan fall into three categories: appropriate scale; traffic; and energy consumption. These three categories are, in general, all environmental concerns.

Appropriate Scale

Marinwood is a residential community which includes several schools and churches. The only businesses within its boundaries are services primarily for its residents and residents of immediately surrounding communities, including the retail shops on Marinwood Avenue and the small business center at Las Gallinas and Miller Creek.

- (A)
- **Proposed Office Development.** The proposed location, facing Highway 101 and accessed from Marinwood Ave., for 94,400 square feet of office space is not suitable or in keeping with residential character of community. There are no other similar buildings which require access from Marinwood Ave. nor are there any support services for employees of such buildings. Marin County in general, and Marinwood in particular, can no longer support randomly developed commercial structures. There are many other suitable locations within the county which provide buses, food establishments, post offices, banks, and other support services.
 - **Proposed Housing.** There are very few houses in Marinwood over 2,000 square feet and none in the area immediately adjacent to proposed development. In fact, most of the houses adjacent are 1,500 square feet and smaller with one and two car garages. We do not object to new housing in general at that location. We do strongly object, however, to houses over 2,500 square feet and with larger than two-car garages. Houses larger than 2,500 square feet would be out-of-scale, not only visually, but socially. Marin County is sorely in need of modest and affordable housing. We do not need or want any more oversized, overpriced McMansions.

Traffic

Highway 101 between Novato and Central San Rafael is at peak capacity during the AM commute hours and very crowded at PM commute hours. The highway simply cannot support the addition of commuters driving into Marinwood to work at the proposed office development.

B

In addition, it is well-documented that Marinwood Avenue and Las Gallinas suffer from spillover from the AM commute on 101. Many of us feel that because of the traffic problems it is no longer safe for our children to walk and bike to school.

We can safely say that Marinwood residents categorically object to any new buildings, residential or commercial, that would increase the number of auto trips on our already stressed streets.

Energy Consumption

We are currently in the midst of a significant energy crisis in California. The EIR document does not address current energy consumption concerns.

- **Office Buildings.** Would the new commercial development be required to provide some or all of its own electrical power for lighting, heating, cooling, and servers and other high-tech requirements? If not, it is not clear that the current local power stations can adequately supply electricity to such a large development without degrading services for existing residents.

C

Houses. Would these new larger homes be required to have solar panels, Star-rated appliances and other energy conserving devices? Our communities can no longer support oversized houses which use more than their fair share of electricity and natural gas.

Conclusion

We can see no compelling reasons that the proposed Oakview master plan for development would enhance the Marinwood community in any way. We can only see where it would degrade the quality of our community. Therefore, we object to it as proposed for the proceeding reasons.

Very truly yours,



Kathleen Gaines



Ray Welch

RESPONSE TO LETTER 26 – KATHLEEN GAINES & RAY WELCH

Response to Comment 26-A

There are no specific policies of *The Marin Countywide Plan* that specifically limit the size of residential lots and individual lots. Policy EQ-3.25 Scale of Development does state that the development of residential structures should be in scale with environmental constraints such as steep slopes and the design character of the existing neighborhood. It is the finding of the EIR (see page 4.0-16) that the proposed project is consistent with this policy.

County zoning design standards relate to the proposed project, some of which could affect the “appropriate scale” issue discussed in this comment. These requirements are analyzed in Section 4.2 and Exhibit 4.2-1 of the Draft EIR. A summary of requirements that could affect this issue include:

Grading which was found to be consistent with the proposed project’s on-site grading.

Trees and vegetation which was found to be inconsistent but which would be reduced to less-than-significant level with the implementation of Mitigation 5.3-2(a).

Clustering provisions which were found to be consistent as the Master Plan proposes to locate 28 housing units on approximately 15 acres of the site and the office development on approximately 20 acres of the 106-acre site.

Ridgeline provisions which were found to be consistent as no development is proposed along the visually prominent ridgeline.

Building height which was found to be consistent with the Code’s 30-foot height restriction.

Materials and colors which seem to be consistent with the Master Plan’s proposal that the houses be medium-dark to medium-light, earth or grey tones and the proposed exterior materials for the office buildings.

Response to Comment 26-B

Please see Response to Comments 11-H and 15-A.

Response to Comment 26-C

Please see Master Response C – Energy.

LETTER 27
MARILYN WILLIAMS
288 Ellen Drive
San Rafael CA 94903
415 472-4103

May 4, 2001

Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Re: Oakview

Dear Mr. Haddad:

As a resident immediately adjoining this proposed development, I have some very serious concerns about it and here are a few of them:

A

With the energy crisis we are currently facing, I have great concern about this development. There are only so many natural resources which are being stretched to the limit at present, and building new houses and office buildings are only going to increase the demand for our limited energy resources, thus creating further inconveniences and economic hardships on our community.

B

Traffic is a major concern to me. As a resident of Ellen Drive which is adjoining the proposed development, my neighbors and I are presently experiencing a huge amount of traffic, especially between 7:00 a.m. and 9:00 a.m. I must turn left onto Las Gallinas to go to work in the morning, it is very difficult and dangerous to do so. It doesn't take a rocket scientist to figure out that if we add 28 new homes, plus office buildings, this is going to increase tremendously. You can easily project at least two cars for every residence, let alone the traffic generated by the office complex.

C

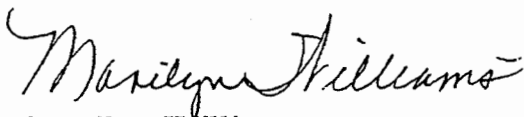
The increased traffic has created a very dangerous situation in our neighborhood, particularly for children and the elderly. We are grateful for the efforts of the DPW in the past week in attempting to discourage the freeway jumpers, but this is an ongoing problem and there is no easy solution.

Since my home is adjacent to the proposed residential development, I am very concerned about water runoff to our homes. If the proposed substantial grading takes place on this hill, it is very likely we would experience a great deal of water and even flooding on our properties. Previous EIR reports state that the hill is unstable, is categorized as ancient landslide material which could certainly result in landslides and flooding. This brings to mind the Novato Partridge Knolls development that experienced the extreme shifting of soil, etc. As you know, before the development was started, a geological study diagnosed the soil as ancient landslide, not suitable for building (just as the previous EIR on this property stated); but it was ignored, and you know the consequences. Please don't let this happen to our neighborhood!

Building on this hill as is presently proposed will most certainly destroy one of the most aesthetically pleasing hills in the area and will alter the quality of life for all the residents of the area. It is the gateway to Lucas Valley and is the atmosphere that attracted us to the area and why we chose to live here. We didn't choose to live here to look at wall to wall houses in our backyards with the attendant noise, traffic, air pollution and loss of trees and wildlife. This development as presently proposed would impact my privacy in a very negative way, and take away the enjoyment of my backyard and swimming pool.

I ask you to consider these issues before making a final decision on this matter.

Sincerely,


Marilyn Williams

RESPONSE TO LETTER 27 -- MARILYN WILLIAMS

Response to Comment 27-A

Please see Master Response C – Energy.

Response to Comment 27-B

Please see Response to Comment 3A-B.

Response to Comment 27-C

Please see Response to Comment 11-H

Response to Comment 27-D

The Draft EIR section on Hydrology and Water Quality documented the anticipated increases in peak flows following project development (see Exhibit 5.2-5). It also mentioned the gaps in the existing interceptor ditch network that is supposed to capture hillslope runoff and transport it off-site rather than onto adjacent downslope properties. However, no impact discussion was presented regarding this deficiency in the present drainage system. Thus, Impact 5.2-3 is revised as follows:

Impact 5.2-3 Downstream Hydraulic Structures and Flooding

Project-induced increases in peak flow rates and/or runoff volumes for Sub-watersheds 2 and 3 would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods. In addition, gaps have been noted in existing cross-slope interceptor ditches. If unrepaired, these gaps would create avenues for off-site, downslope diversion of concentrated ditch flows. This would be a significant impact.

Mitigation Measure 5.2-3 is revised to read as follows:

Mitigation Measure 5.2-3 The following measures would be required to reduce project impacts on downstream flooding due to inadequate storm drains system capacities:

- Replace the existing 18-inch storm drain pipe along the rear of 281 Ellen Drive with a 30-inch RCP, as indicated in the proposed Grading and Drainage Plan.
- Implement Mitigation Measure 5.2-2 (Peak Flow Rates)
- Repair the gaps in the existing concrete, cross-slope interceptor ditch network and any other defects that could result in the diversion of ditch/hillslope runoff onto adjacent lots in the Marinwood Subdivision.

Add a sentence at the end of the paragraph under Significance After Mitigation as follows:

Implementation of the interceptor ditch repair program would eliminate the risk of hillslope runoff diversion onto adjacent properties in the Marinwood Subdivision.

The second sentence in the paragraph under “Implementation of Mitigation” is revised to read as follows

Hydraulic design and construction of any replacement piping in the Ellen Drive and Erin Drive storm drain systems and repairs to the existing cross-slope interceptor ditches should be reviewed and approved by the Marin County Department of Public Works.

Response to Comment 27-E

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

LETTER 28

May 7, 2001

Mr. Tim Haddad
Marin County Community
Development Agency
3501 Civic Center Drive, Rm. 308
San Rafael, CA 94903-4157

Re: Oakview Draft EIR

Dear Mr. Haddad,

We are writing as concerned citizens of Marinwood. We have lived here for 15 years and we have a son attending Silveira School. We feel strongly about preserving the quality of life here and we think of Marinwood as a very special kind of community.

We have been very concerned about the changes over the last several years, largely brought about by increased development and traffic. We feel that there are several issues that should be seriously considered as part of the analysis of the Oakview Draft EIR:

- (A) In view of the current energy crisis in California, how will further residential and office development affect this area?
- (B) How will an already traffic-jammed Highway 101 be affected? And more importantly, how will this impact the serious traffic issues on local streets, in our neighborhoods and near schools?
- (C) We have already had to take action to keep freeway jumpers out of Marinwood during peak hours. Further building will surely aggravate the situation.
- (D) How will development degrade the Miller Creek watershed? We understand that building will potentially increase flooding and silting of the creek.
- (E) If there is a new office complex, what kinds of businesses are proposed? How will this interfere with local traffic? And what kinds of off-site services will be provided for employees?
- (F) When and if we experience another drought, how will more development impact such a crisis?

We know that we share these concerns with our neighborhood and we are a community that is bound together by the desire to keep our neighborhood the safe, attractive place that it has always been. This was evidenced by our community meeting held on April 4th when several hundred people attended to address the traffic problems.

We hope that you will give serious attention to the concerns of this neighborhood as you consider the proposed plans.

Sincerely,

Raoul Stepakoff and Cindy Ostroff

Raoul Stepakoff
Cindy Ostroff

RESPONSE TO LETTER 28 -- RAOUL STEPAKOFF AND CINDY OSTROFF

Response to Comment 28-A

Please see Master Response C – Energy.

Response to Comment 28-B

The Draft EIR transportation analysis and the revised analysis consider the impacts of cumulative and project generated traffic on both Highway 101 and local study area streets.

Response to Comment 28-C

Comment noted. Please see Response to Comment 11-H.

Response to Comment 28-D

Please see Responses to Comments 15-B, 18-D, and 20-E.

Response to Comment 28-E

Typically the level of detail requested in this comment regarding the operation of the offices (types of businesses) is not a part of a Master Plan application. The County as a part of the Precise Development Plan and subsequent use permits could require such information.

Traffic impacts associated with office use on this parcel are discussed in Section 5.5 of the Draft EIR.

Response to Comment 28-F

As discussed in Section 5.8 (*Public Services*) the Marin Municipal Water District (MMWD) has estimated water demand for the year 2025, developed a water supply plan based on the expected demand, and obtained a firm water supply for the water demand through 2025. If the MMWD was forced to institute mandatory water cutbacks due to drought conditions it is assumed that all customers within the MMWD would be treated equally.

LETTER 29

4 Majorca Ct.
San Rafael, 94903
May 7, 2001

Dear Mr. Haddad;

I am a resident of Marinwood. I can't tell you how much I do not want the Oakview plan to be implemented. Casa Marinwood is right next to Miller Creek. I often walk down to the Creek to enjoy it's pastoral pleasures. Very often there are egrets and other wildlife enjoying it with me. A road and bridge over that Creek will put and end to that.

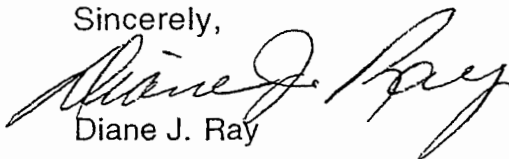
More selfishly, putting an extension on Marinwood avenue across the creek will put an untenable amount of traffic, noise, and fumes on our little neighborhood street. That kind of development will undoubtedly reduce property values and interest in the area as a place to live. Personally, I don't want to live with the noise, fumes and congestion.

A

I thought that area was exempt from development. If it is developed, there are two other sides to that property that could be used to access the site, neither of which would turn an existing neighborhood into another Las Gallinas disaster! I have read that there are reasons that those two access areas are unacceptable. I submit that that is a choice. I submit that if Marinwood were Tiburon, Ross or Kentfield, we wouldn't be having this conversation.

I expect the Marin Community Development Agency to do the right thing. No project. No access from Marinwood. Please keep me posted about this objectionable situation.

Sincerely,


Diane J. Ray

RESPONSE TO LETTER 29 – DIANE J. RAY

Response to Comment 29-A

Comment noted. This is a comment on the merits of the proposed project and not on the adequacy of the Draft EIR.

MARIN COUNTY PLANNING COMMISSION MINUTES
MAY 7, 2001
Marin County Civic Center, Room #328 - San Rafael, California

Commissioners Present: Ray Buddie (out for Items 1-5)
Ross Herbertson
Patty Garbarino (out for Item 8)
Jo Julin
Hank Barner

Commissioners Absent: Jan Alff Wiegel
Paul Lusczynski

Staff Present: Alex Hinds, Agency Director
Brian C. Crawford, Deputy Director of Planning Services
Curtis Havel, Planning Aide
Tim Haddad, Environmental Planning Coordinator
Carey Tate, Planner
Alexandra Morales, Planning Commission Secretary

Jack Baker, DPW

Minutes Approved on: **JUNE 4, 2001**

Convened at 11:15 a.m.
Adjourned at 12:00 noon
Reconvened at 1:00 p.m.
Readjourned at 6:30 p.m.

8. DRAFT REVISED ENVIRONMENTAL IMPACT REPORT: OAKVIEW
MASTER PLAN, VESTING TENTATIVE MAP, AND USE PERMIT

Public hearing to review and accept testimony on the Revised Draft Environmental Impact Report for the Oakview Master Plan, Vesting Tentative Map and Use Permit applications.

The project as revised in 1999 proposes to subdivide the 106.3 acre subject property into two parcels for future residential and office building development. Parcel 1 would include 15.3 acres reserved for eventual site development with 28 detached single-family residences, 1.8 acres of public right of way and 34.8 acres of open space for a total of 51.9 acres. Parcel 2 would consist of 20.1 acres reserved for eventual development of 94,400 square feet of administrative/professional office development, 9.0 acres reserved for future interchange improvements to U.S. Highway 101, and 34.3 acres of open space for a total of 54.4 acres. The subject property is located at **200 Lucas Valley Road, San Rafael**, and is further identified as **Assessor's Parcel 164-270-03**.

Please note that this item does not involve consideration of the merits of the project proposal or a decision on the permit applications.

Tim Haddad, Environmental Coordinator, reiterated the fact that the purpose of the hearing was to receive public comment on the adequacy of the Draft Revised EIR and not the merits of the project. He then presented a brief overview of the project, including the background history and a summary of the environmental review process. He concluded by summarizing the information set forth in the supplemental memorandum dated April 27, 2001, including correspondence received subsequent to the preparation of the staff report.

Tom Lai, project planner, presented the merits of the proposed project, including the background history.

Bob Berman, EIR Consultant, summarized the principal Findings and Conclusions of the EIR, highlighting mitigations for issues identified in the previous EIR, i.e., landslides, drainage, tree removal, visual impacts, traffic impacts, and geologic issues.

The hearing was opened to public comment.

The applicant's representative Irving Schwartz was present to observe, but had no comments.

Concerned residents and community representatives Ron Marinoff (Lucas Valley HOA), Don Dickenson (Marin Conservation League), Ruth Carter (Miller Creek HOA), Frank Nelson (Marinwood Advocates for Sensible Planning), and Susan Adams (Marinwood resident) made the following comments on the Draft EIR:

- The EIR should include an affordable housing alternative, which includes affordable housing on site.
- The proposed mitigation for impacts at the intersection of Lucas Valley Road and Las Gallinas is inadequate.
- The proposed residential density should only be applied to the residential portion of the property.
- More accurate photo montages of the proposed office building should be provided. Said photo montages should include all buildings and parking areas.
- Traffic data (ITE) used in Revised EIR may be understated.
- Level of development permitted should take into consideration cumulative impacts from potential development on the St. Vincent/Silveira and Fair Child properties.
- The proposed office/commercial development should not be considered to be consistent with the low density residential zoning.
- The viability of the project is a serious concern. The document does not address the current energy crisis.

- The document does not address the social effects of the proposed project on the Marinwood Community.
- Potential impacts on oak trees needs to be better addressed given the SODS going on.

The hearing was closed to public comment.

Commissioner Julin commended the EIR consultant for a job well-done in preparing the document. She then asked that the document address the current energy crisis and sustainability of the project; this could be done under the Energy and Natural Resource section.

In response to Commissioner Herbertson, staff stated that the proposed office/commercial development can be allowed through a Use Permit in a low density residential zone.

Commissioner Herbertson commented as follows: 1) further policy analysis regarding the creation of a proposed mixed use in an area which is not easily accessible by public transportation is necessary; 2) an alternative that provides workforce housing on-site should be considered; 3) current traffic data should be used in making calculations; 4) the adequacy of the proposed wetland replacement mitigation should be reconsidered; and 5) mitigation measures for access directly off Lucas Valley Road should be seriously reconsidered.

Commissioner Buddie made the following comments: 1) additional, more accurate photo montages should be provided; 2) the number of vehicular trips should be reconsidered; 3) clarify whether the California Highway Patrol comments refer to the residential or commercial development; 4) cumulative impacts resulting from the proposed project and any potential development of the St. Vincent/Silveira property should be carefully considered; and 5) consider an alternative which provides on-site affordable housing.

Commissioner Garbarino concurred with comments made, emphasizing on the need to provide on-site affordable housing.

Commissioner Barner made the following comments:

- Page 3.0-7 - Unless the culverts are maintained, this is not a mitigation.
- Page 3.0-17 - Proposed oak replacement appears to be a very high ratio. Additionally, given the on-going SODS, it may not be prudent to require that tree replacements come from local seedlings.
- Page 3.0-27 - Planting of trees as a mitigation for dust control is questionable.
- Page 3.0 - Expand on the ramifications of finding the project to be consistent with the County's General Plan, but not with the San Rafael General Plan.
- Page 4.0-9 - Replace "Marinwood County Services" with "Marinwood Community Services".
- Page 5.1-5 - Second and fifth bullets are redundant.
- More readable diagrams should be provided.
- Page 5.2-8 - Discussion on water quality should be reworked, since grazing may have taken place many years ago.
- Page 5.2-9 - Reference to the figure on Page 5.2-6 should be corrected.
- Page 5.2-10 - Discussion of wells may be inaccurate since they may no longer exist.
- The proposed culverts should not be considered a mitigation since their completion is not to take place until after construction of the project.
- Page 5.2-17 - Discussion on the appropriateness of estimates should be reconsidered.
- Traffic trip calculations should consider potential development of the St. Vincent/Silveira property.

The Commission directed staff and the consultant to respond to all oral and written comments received on the Draft Revised EIR.

Responses to May 7, 2001 Public Hearing Comments

On May 7, 2001 the Marin County Planning Commission held a public hearing on the Draft EIR. Comments regarding the adequacy of the Draft EIR are summarized below. A response to the comment is provided directly after the comment.

Comment PH-1

The EIR should include an affordable housing alternative, which includes affordable housing on site.

Response to Comment PH-1

In response to written comments regarding the Draft EIR the applicant has submitted an option to the use of Buildings A and B for an assisted living residential use which is evaluated in this *Response to Comments*. The Assisted Living Residential Use option submitted by the project applicant is evaluated in Section 7.3.

Comment PH-2

The proposed mitigation for impacts at the intersection of Lucas Valley Road and Las Gallinas is inadequate.

Response to Comment PH-2

No mitigation measure is recommended for the Lucas Valley / Las Gallinas intersection, therefore it is not clear exactly what the commentor comment was.

Comment PH-3

The proposed residential density should only be applied to the residential portion of the property.

Response to Comment PH-3

Consistency with *The Marin Countywide Plan* land use designations for Marinwood is discussed on page 4.0-20 of the Draft EIR. The land use designation of Planned Residential would permit five to 52 housing units on proposed parcel 1 (the portion of the site proposed for residential use). The Master Plan proposes construction of 28 housing units on Parcel 1. The number of housing units, therefore, is consistent with the Planned Residential designation.

Comment PH-4

More accurate photomontages of the proposed office building should be provided. Said photomontages should include all building and parking areas.

Response to Comment PH-4

In response to comments received on the Draft EIR new photosimulations of the two buildings located along the frontage of Highway 101 were prepared. The new photosimulations are included in Master Response B in Section 7.3.

Comment PH-5

Traffic data (ITE) used in Revised EIR may be understated.

Response to Comment PH-5

Please see Response to Comment 11-M.

Comment PH-6

Level of development permitted should take into consideration cumulative impacts from potential development on the St. Vincent's / Silveira and Fair Child properties.

Response to Comment PH-6

Please see Response to Comment 20-B for a discussion of St. Vincent's / Silveria. It is assumed that reference to the "Fair Child properties" is the project listed in *Propdev 34* as 4300 Old Redwood Highway. With the inclusion of a revised short-term cumulative list this project is now included in the cumulative list.

Comment PH-7

The proposed office/commercial development should not be considered to be consistent with the low density residential zoning.

Response to Comment PH-7

As discussed in Section 4.2 of the EIR, the project site is zoned RMP-1.38, residential multiple planed district with a maximum allowable density of 1.38 dwelling units per gross acres. Uses permitted in the RMP zone subject to approval by a master plan include single-family houses. Uses permitted in the RMP zone subject to the securing of a use permit include offices. Therefore, the specific uses proposed for the Oakview project site (single-family residential and offices) would be permitted uses in the RMP district, subject to Master Plan and Use Permit approval.

Comment PH-8

The viability of the project is a serious concern. The document does not address the current energy crisis.

Response to Comment PH-8

The issue of "project viability" is a comment on the merits of the propose project and not on the adequacy of the Draft EIR. Energy issues are discussed in Master Response C.

Comment PH-9

The document does not address the social effects of the proposed project on the Marinwood Community.

Response to Comment PH-9

Please see Responses to Comments 11-R, 21-G, 21-H and 23-A.

Comment PH-10

Potential impacts on oak trees needs to be better addressed given the SODS going on.

Response to Comment PH-10

The proposed project is not expected to contribute to the spread of sudden oak death syndrome (SODS) on the site or vicinity. Tree removal would be minimized as called for in Mitigation Measures 5.3-2(a) through (c), with replacement required as called for in Measure 5.3-2(d).

Comment PH-11

The document should address the current energy crisis and sustainability of the project (*Commissioner Julin*)

Response to Comment PH-11

Please see Master Response C – Energy.

Comment PH-12

Further policy analysis regarding the creation of a proposed mixed use in an area which is not easily accessible by public transportation is necessary. (*Commissioner Herbertson*)

Response to Comment PH-12

As discussed on page 5.5-9 of the Draft EIR Golden Gate Transit provides intercounty transit service as well as local bus service within the study area at the Miller Creek Drive and Lucas Valley Road bus pads located along Highway 101. The transit routes that serve the project site are described on pages 5.5-9 and 5.5-10 of the Draft EIR. Based on the availability of this transit service it was determined that the proposed project is consistent with *Marin Countywide Plan* policy CD-2.4 Location of Development in Coordination with the Transportation System.

Comment PH-13

An alternative that provides workforce housing on-site should be considered. (*Commissioner Herbertson*)

Response to Comment PH-13

In response to written comments regarding the Draft EIR the applicant has submitted an option to the use of Buildings A and B for an assisted living residential use which is evaluated in this *Response to Comments*. The Assisted Living Residential Use option submitted by the project applicant is evaluated in Section 7.3.

The project applicant believes that the assisted living residential use on the project site would be more appropriate than another type of housing such as live/work or loft housing.²⁹

²⁹ Letter to Tim Haddad, Marin Community Development Agency from Larry Kennings, LAK Associates, October 26, 2001.

8.0 REFERENCES

8.1 PEOPLE RESPONSIBLE FOR REPORT PREPARATION

This EIR was prepared by an environmental study team led by Nichols • Berman. The analyses were coordinated with Dean Powell, AICP, Thomas Lai, AICP, and Tim Haddad of the Marin County Community Development Agency.

Nichols • Berman, Environmental Planning

Bob Berman
Louise Nichols
Scott MacPherson
Jordan Harrison
Lisa Ornelas

Matthew Brockway – Visual Simulation

Matthew Brockway

Clearwater Hydrology – Hydrology and Drainage

Bill Vandivere, PE

Environmental Collaborative – Biology

Jim Martin
Michael Wood

Illingworth & Rodkin, Inc. – Air Quality and Noise

Rich Illingworth, P.E.
James Reyff

Snyder & Smith Associates – Geology

David L. Snyder, R.G., C.E.G., R.E.A.

Wilbur Smith Associates -- Traffic

William E. Hurrell, P.E.
Ron Foster

8.2 PERSONS AND ORGANIZATIONS CONSULTED

Pat Baldarama, Marin County Public Works Department
Peter Banning, Executive Director, Marin County Local Agency Formation Commission

Robert Beaumont, P.E., Senior Engineer, Marin County Department of Public Works, Land Development Division

Chantry Bell, Associate Planner, City of San Rafael

Art Brook, Transportation Engineer, Marin County Department of Public Works

Bob Brown, Community Development Director, City of San Rafael

Charlotte Cashin, Caltrans staff engineer

Bill Cox, Wildlife Biologist, California Department of Fish and Game

Ben Chuck, Transportation Engineer, Caltrans, District 4.

Tho Do, Transportation Engineer, Marin County Congestion Management Agency

Jean Hasser, Principal Planner, City of San Rafael

Tom Horne, Marinwood Community Services District

John Jang, Regional Water Quality Control Board

Jerry Johnson, Reed Union School District

Kent Julin, Marin County Forester

Larry Kennings, LSA Associates, Inc.

Henry Knauber, Manager, Sanitation District #5

Ron Kuntz, Assistant Superintendent, Tampalpis High School District

Mike Lieberman, Meridian Commercial Real Estates

Brad MacLane, Property Diligence and Valuation

Nadar Mansourian, Traffic Engineer, City of San Rafael

Eric McGuire, Environmental Coordinator, Marin Municipal Water District

Edith McKenna

Jim Mistrion, Marin Municipal Water District

Jay Neuhaus, Fire Chief, Marinwood Fire District

Jason Nutt, Traffic Operations Engineer, Marin County Department of Public Works

Dan Payne, Marin County Sheriff's Department

Al Petrie, District Manager, LGVSD

Andy Preston, Engineer, Department of Public Works, City of San Rafael

Kristie Richardson, Senior Planner, City of Novato

Ellie Rill, UC Cooperative Extension

Irving L. Schwartz, C.E., I.L. Schwartz Associates, Inc.

Mark Sooy, California Highway Patrol

Keith Vincent, Marin Municipal Water District

Peter Vine, District Engineer, Las Gallinas Valley Sanitation District

Jim Wagner, Transportation Engineer, Marin County Department of Public Works.

8.3 BIBLIOGRAPHY

- Association of Bay Area Governments, *1982 Bay Area Air Quality Plan*, December 1982.
- Bay Area Air Quality Management District, *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans*, April 1996, revised December 1999.
- _____, *Bay Area '94 Clean Air Plan (CAP)*, December 1982.
- _____, *BAAQMD CEQA Guidelines*, April 1996, revised December 1999.
- _____, *Bay Area '97 Clean Air Plan and Triannual Assessment*, December 1997.
- Blake, M.C., Bartow, J.A., Frizzell, V.A., Schlocker, J., Sorg, D., Wentworth, C.M., and Wright, R.H. *Preliminary Geologic Map of Marin and San Francisco Counties and Parts of Alameda, Contra Costa and Sonoma Counties, California*, USGS MF-574, 1974.
- Boore, D.M., *Prediction of Strong Ground Motions: in Workshop on Future Directions in Evaluating Earthquake Hazards of California*, United States Geological Survey Open File Report 86-401, 1986
- California, State of, Department of Transportation, Office of Structures Design, *Preliminary Report: Miller Creek Bridge (Widening) - Bridge No. 27-04*, 1983.
- California Native Plant Society, *Inventory of Rare and Endangered Vascular Plants of California*, Special Publication No. 1 (5th Edition), 1994.
- California, State of, Department of Fish and Game and Jones & Stokes Associates, *Guideline to the California Wildlife Habitat Relationship Systems*, 1988 and Volume 1 Amphibians and Reptiles, 1988, Volume II Birds, 1990, and Volume III Mammals 1990.
- California, State of, Department of Fish and Game, California Natural Diversity Data Base, *Special Plants and Animals Lists*, 1994.
- California, State of, Department of Transportation, ~~1994~~2000 *Traffic Volumes on California State Highways*, ~~May 1994~~June 2000.
- California Regional Water Quality Control Board, *Water Quality Plan for the San Francisco Bay Region*, 1995.
- CH2M Hill, *Final Drainage Report: Lucas Valley Road / U.S. 101 Interchange*, 1995.
- Davis, J.F. et al., *Mineral Land Classification: Aggregate Materials in the San Francisco - Monterey Bay Area, Part I, Project Description: Mineral Land Classification for Construction Aggregate in the San Francisco - Monterey Bay Area*, California Division of Mines and Geology, Special Report 146, Part I. 1983.
- _____, *Mineral Land Classification: Aggregate Materials in the San Francisco - Monterey Bay Area, Part III, Classification of Aggregate Resource Areas, North San Francisco Bay Production - Consumption Region*, California Division of Mines and Geology, Special Report 146, Part III, 1983.

- Davenport, C.W., *An Analysis of Slope Failures in Eastern Marin County, California, Resulting from January 3 and 4, 1982 Storm*: California Division of Mines and Geology Open-File Report 84-22SF, 1984.
- DKS Associates and Marin County Congestion Management Agency, *Marin County Congestion Management Program*, October 1999.
- Duncan, J.M., "Prevention and Correction of Landslides", Sixth Annual Nevada Street and Highway Conference, 1971.
- Duncan, J.M., and Stark, T.D., "Soil Strengths from Back Analysis of Slope Failures: Stability and Performance of Slopes and Embankments-II", American Society of Civil Engineers Geotechnical Special Publication No. 31, 1992.
- Ellen, "Areas Susceptible to Landsliding, Marin and Sonoma Counties, California", USGS Map MF-1406, 1995.
- Ensign & Buckley, *Letter Report on the FEMA Limited Map Maintenance Program Flood Insurance Study for Miller Creek*, May 1993.
- Federal Emergency Management Agency, *Flood Insurance Study for Unincorporated Areas of Marin County California*, 1982.
- Hart, E. W., *Fault-rupture Hazard Zones in California*, California Division of Mines and Geology, Special Publication 42, 1984.
- Herzog, Donald, & Associates, *Preliminary Geotechnical Investigation*, Bacciocco/Daphne Property, San Rafael, California, March 21, 1983.
- Howell, T., *Marin Flora*, 1970.
- Huntingdon Herzog Associates, Inc., *Geotechnical Update and Plan Review (Revised)*, Oakview, Marin County, California, letter report to Daphne/Bacciocco, March 25, 1994.
- Illuminating Engineering Society of North America, *Lighting Handbook Reference & Application*, Mark S. Rea, Editor, 1993.
- Institute of Transportation Engineers, *Trip Generation, Fifth Edition*, January 1991.
- James A. Roberts Associates, Inc., *Grady & Luiz Ranches -- Lucas Valley Final Environmental Impact Report*, September 20, 1974.
- LSA Associates, Inc. *Oakview Priority Project Procedures Application*, June 5, 1995.
- Marin County, Planning Department, *County Code, Title 22*, 1983.
- _____, *The Marin Countywide Plan*, January 18, 1984.
- Munz, P. and Keck, D., *A California Flora and Supplement*, 1993.

- Nichols • Berman, *Daphne/Bacciocco Development Plan, Administrative Draft Environmental Impact Report*, prepared for City of San Rafael, January 1986.
- Olshansky, R.B., *Landslide Hazard Reduction: A need for greater government involvement*, Zoning and Planning Law Report, Vol. 12, no. 13, March, pp. 104-112, 1989.
- Olshansky, R.B., and Rogers, J.D., *Unstable Ground: Landslide Policy in the United States*, in Ecology Law Quarterly, vol. 13, No. 4, Boalt Law School, Berkeley, California, March, pp. 201-267, 1987.
- Rantz, S.E., *Mean Annual Precipitation Depth-Duration Frequency Data for the San Francisco Bay Region, California*, U.S. Geological Survey Open-File Report, 1971.
- Rice, S.J., *Geology for Planning Central and Southwest Marin County, California*, CDMG, 1976.
- Rogers, J.D., *Shallow Creep Measurements in Landslides*: M.S. thesis, Department of Civil Engineering, University of California, Berkeley, 1979.
- _____, *Genesis, Properties and Significance of Fracturing of Sandstones*: Ph.D. dissertation, Department of Civil Engineering, University of California, Berkeley, 1982.
- _____, "Pleistocene to Holocene Transition in Contra Costa County" *Geology of the San Ramon Valley and Environs; Field Trip Guidebook of the Northern California Geological Society*, R.C. Crane (editor) 1988.
- _____, "Grading Practices in the Development of Contra Costa County, California", *Geology of the San Ramon Valley and Environs; Field Trip Guidebook of the Northern California Geological Society*, R.C. Crane (editor) 1988.
- _____, "Long Term Behavior of Urban Fill Embankments", *Stability and Performance of Slopes and Embankments-II*, American Society of Civil Engineers Geotechnical Special Publication No. 31, 1992.
- _____, "Recent Developments in Landslide Mitigation Techniques" *Landslides/Landslide Mitigation*, Slosson, J.E., Keene, A.G., and Johnson, J.A., (editors), Geological Society of America, Reviews in Engineering Geology Volume IX, 1992.
- Rogers, J.D., Olshansky, R.B., and Alger, C.A., "Geology, Geomorphology and Landslide Processes of the East Bay Hills, San Francisco Bay Region, California", *Landslides of Central California*: W.M. Brown III (editor), 28th International Geological Congress Field Trip Guidebook, 1989.
- San Rafael, City of, *City of San Rafael Northgate Activity Center Plan*, October 18, 1982.
- San Rafael, City of, *City of San Rafael General Plan 2000*, July 18, 1988 as amended through July 12, 1994.
- Schuster, R.L. (editor) *Landslide Dams: Processes, Risk and Mitigation*, American Society of Civil Engineers, Geotechnical Special Publication No. 3, 1986.

- Schwartz, I.L. Associates, Inc., *Oakview Master Plan Drawings*, eight sheets plus supplements, April 16, 1994, as revised through April 21, 1995 and December 8, 1995.
- Scullin, C.M., *Excavation Grading Code Administration, Inspection and Enforcement*, 1983.
- _____, "Subsurface Exploration Using Bucket Auger Borings and Down-Hole Geologic Inspection", *Standard-of-Care Workshop*, Notes with Specialty Workshop, 35th Annual Meeting Association of Engineering Geologists, 1992.
- _____, "Standard-of-Care versus State-of-the-Art in Grading Code Enforcement", *Building Standards* (magazine): March 1993.
- Seed, H.B. and Idriss, I.M., "Ground Motions and Soil Liquefaction During Earthquakes", *Earthquake Engineering Research Monograph*, 1982.
- Slosson, J.E. and Ploessel, M.R., "Repeatable High Ground Acceleration from Earthquakes", Important Design Criteria: California Division of Mines and Geology, *California Geology*, September 1974.
- Smith, T.C., *Geology of the Upper Ross Valley Western Portion of the San Rafael Quadrangle, Marin County, California*, 1976.
- St. Vincent's/Silveira Advisory Task Force, *Recommendations*, May 3, 2000.
- U.S. Department of Agriculture, 1977, Soil Survey of Marin County; in cooperation with University of California, Agricultural Experiment Station.
- U.S. Environmental Protection Agency, *Results of the National Urban Runoff Program, Volume I, Final Report*, Water Planning Division, 1983.
- United States Geological Survey, *Probabilities of Large Earthquakes in the San Francisco Bay Region, California*, Circular 1053.
- U.S. Department of Agriculture, Soil Conservation Service, *Soil Survey of Marin County California*, 1979.
- U.S. Department of Interior, *Bureau of Land Management Manual*, Bureau of Land Management, 1986.
- U.S. Fish and Wildlife Service, *Endangered and Threatened Wildlife Plants, Annual Notice of Review*, Federal Register 50 CFR Part 17, 1993.
- U.S. Corps of Engineers, *Corps of Engineers Wetlands Delineation Manual*, 1987.
- Wagner, D.L. and Bortugno, E.J., *Geologic Map of the Santa Rosa Quadrangle*, California Division of Mines and Geology, Regional Geologic Map Series, Map No. 2A, scale 1:250,000, 1982.
- Wagner, J. R., *Late Cenozoic History of the Coast Ranges East of San Francisco Bay*, Unpublished Ph.D. Dissertation, University of California, Berkeley, 1978.

Whitlock & Weinberger, *Grady Ranch / Big Rock Ranch -- Traffic Modeling an Analysis*, prepared for the City of San Rafael, July 1995,

Wesnousky, S.G., "Earthquakes, Quaternary Faults and Seismic Hazard in California" *Journal of Geophysical Research*, 1986.

APPENDIX A
SUMMARY OF JANUARY 26, 2000 SCOPING MEETING

APPENDIX A
PUBLIC SCOPING MEETING COMMENTS
January 26, 2000

Meeting held at Marinwood Community Center

Marin County staff in attendance: Tim Haddad, Dean Powell

Nichols • Berman staff in attendance: Bob Berman

As a part of the scoping process for the Oakview Master Plan / Vesting Tentative Map / Use Permit EIR on January 26, 2000 Marin County conducted a public scoping session regarding the proposed project. The purpose of the meeting was to identify environmental issues and concerns that the public may have about the proposed project so that these issues can be evaluated in this EIR.

A summary of the public scoping session is provided below. Specific comments and concerns identified at the scoping meeting were taken into account in the analyses for the Oakview Master Plan EIR. After each specific comment below, the numbers in parentheses (0.0) refer to the section in the EIR where this topic is addressed. In a limited number of instances the specific comment is not addressed in the EIR. In these instances, the reason why the comment is not addressed is provided.

MEETING INTRODUCTION

Tim Haddad gave a brief overview of the EIR process as implemented in Marin County and how the EIR process relates to the proposed project. Tim Haddad also discussed the purpose of the meeting.

Dean Powell gave a brief description of the proposed project.

The public raised some questions about the project and the review process.

COMMENTS FROM MEMBERS OF THE PUBLIC WERE AS FOLLOWS:

Carol Brandt

EIR needs to conform to most recent CEQA guidelines changes.

Wants an analysis of cumulative projects.

Peak-hour trips need to be updated.

Need to look at MTC transportation plan for Highway 101 corridor.

Frank Luederitz

Need to protect open space. Wants EIR to look at ways to protect open space.

Wants more definitive information about project boundaries.

Wants information about building heights.

Concerned about adequacy of existing drainage. Need to address storm runoff.

Concerned about fire protection / fire prevention issues.

Concerned about slope stability for each building site and the sites for the office buildings. Impact of an earthquake on the Hayward fault.

Kate Powers

Wants to know more about existing land constraints on the project site.

Need to explore habitat types.

Concerned about slope stability issues.

How will project respect existing natural conditions.

What is impact on Miller Creek.

David Myles

Impact on traffic, especially cumulative impact.

Impact on Highway 101.

Michael Cope

Concerned about traffic issues on Las Gallinas.

Concerned about most wildlife on the project site, wild turkeys, foxes, not concerned about deer on site.

Robert Chin

Concerned about number of parking spaces in commercial area and impacts of traffic on Marinwood Avenue.

Thinks all access should be from Lucas Valley Road.

Frank Nelson

Said project represents final buildout of Marinwood – how does project represent values of the community.

Concerned about potential for project to impact the existing livable community.

Concerned about traffic issues (especially impact on Highway 101) and noise impacts.

What is impact on water supply. Water availability issues – will existing community be affected.

Bill Colberg

Concerned about bridge across Miller Creek – what will be impact of bridge on creek and potential flooding.

Mentioned wild turkeys on project site.

Concerned about air and noise construction impacts.

Believes all access should be from Lucas Valley Road.

Wants information about how water and sewer will be provided to the office buildings.

What will impact be to police and fire departments.

Will bridge across Miller Creek provide improved access (bicycles and motorcycles) to hillside.

Ron Marinoff

Believes approval of project should be tied to the construction of the Highway 101 southbound off-ramp.

Does not want additional access to Lucas Valley Road.

Wants an alternative that would include affordable housing.

Wants housing to be incorporated into the office buildings.

Wants the office buildings to have underground parking.

Concerned about cumulative traffic – especially Lucasfilm project.

Wants peer review of geologic work.

Dr. Virginia Edwards

Concerned about traffic on local streets. Especially concerned about people on Highway 101 using local streets as a short cut.

Patrick Webb

Expressed concern about EIR process – have Cedar Hill Drive people been notified?

Concerned about visual impacts – especially in the bowl.

Concerned about nighttime visual impacts.

Stuart Quan

Miller creek issues – concerned about flooding along Miller Creek.

Cameron Case

Expressed importance of the sense of community. The proposed project isolates the project.

Wants to prevent encroachment of builders/contractors into the open space.

Why will there be two parcels – what is impact.

Kathleen Gaines

Discussed her ideas about where are the most appropriate areas for office development. She believes office should be located in existing commercial areas.

Discussed Marin County planning and public transit planning.

Stanley Farber

Concerned about traffic issues, what is impact to Highway 101.

Roger Duba

Discussed concerns about geologic issues — mentioned a number of existing geologic studies that should be reviewed.

Requested that “story poles” be placed on the project site.

Wanted to know if project would be a gated community.

Wanted to know if previous issues will be taken into account.

Mentioned a potential senior citizen assisted living project on Marinwood Avenue.

Will St. Vincents / Silveria project be included in the cumulative impact.

Discussed the Lucas Valley Road / Highway 101 interchange project.

Expressed concern about project’s contribution to Highway 101 problems.

Written Comments

Written comments were received from:

Kate Powers
Paul Simoes
Roger Duba
Frank Nelson
Frank Luederitz
Capt. Stuart A. Quan
Richard Kulik
Linda Kulik
Juliette Anthony
Max Probst

Kathleen Gaines and Ray Welch
Carol Brandt – Marinwood Advocates for Sensible Planning
Lisa Pena
Steven Pena
Marian Blanton
Dorothy Mink
Kathleen McNulty and Sean Bowne – Marin Roundtree HOA
Charles Bergeman and Carol McEwen-Bergeman
Bill Colberg
Lyda Beardsley
Renee Gregory
50 additional form letters

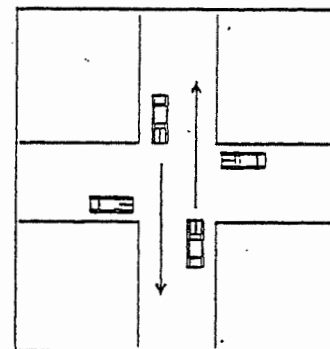
APPENDIX B
TRAFFIC

The OPERATIONS LEVEL METHODOLOGY, which is described in the Transportation Research Board's Highway Capacity Manual, defines Level of Service (LOS) for signalized intersections in terms of delay. Technically, delay is the amount of time an average vehicle must wait at an intersection before being able to pass through the intersection. For signalized intersections, the relationship between LOS and delay is based on the average stopped delay per vehicle.

LEVEL OF SERVICE 'A' - Delay 0.0 to 5.0 seconds

Describes operations with very low delay, i.e., less than 5 seconds per vehicle. This occurs when signal progression is extremely favorable. Most vehicles arrive during the green phase and are not required to stop at all.

Corresponding V/C ratios usually range from 0.00 to 0.60.

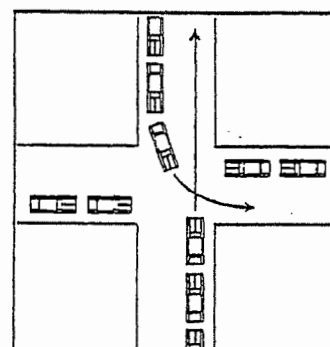


LOS 'A'

LEVEL OF SERVICE 'B' - Delay 5.1 to 15.0 seconds

Describes operations with delay in the range of 5 to 15 seconds per vehicle generally characterized by good signal progression and/or short cycle lengths. More vehicles are required to stop than for LOS 'A' causing higher levels of average delay.

Corresponding V/C ratios usually range from 0.61 to 0.70.

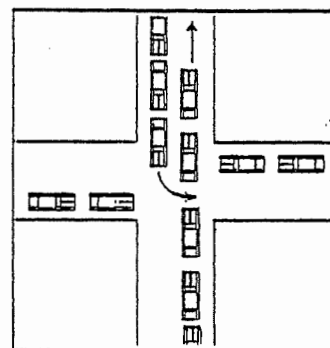


LOS 'B'

LEVEL OF SERVICE 'C' - Delay 15.1 to 25.0 seconds

Describes operations with delay in the range of 15 to 25 seconds per vehicle. Occasionally, vehicles may be required to wait more than one red signal phase. The number of vehicles stopping at this level is significant although many still pass through the intersection without stopping.

Corresponding V/C ratios usually range from 0.71 to 0.80.

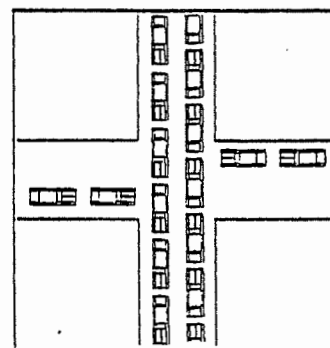


LOS 'C'

LEVEL OF SERVICE 'D' - Delay 25.1 to 40.0 seconds

Describes operations with delay in the range of 25 to 40 seconds per vehicle. At LOS 'D', the influence of congestion becomes more noticeable. Many vehicles stop, and the proportion of vehicles not stopping declines. The number of vehicles failing to clear the signal during the first green phase is noticeable.

Corresponding V/C ratios usually range from 0.81 to 0.90.



LOS 'D'

LEVEL OF SERVICE 'E' - Delay 40.1 to 60.0 seconds

Describes operations with delay in the range of 40 to 60 seconds per vehicle. These high delay values generally indicate poor signal progression, long cycle lengths and high V/C ratios. Vehicles frequently fail to clear the intersection during the first green phase.

Corresponding V/C ratios usually range from 0.91 to 1.00.

LEVEL OF SERVICE 'F' - Delay 60.1 seconds plus

Describes operations with delay in excess of 60 seconds per vehicle. This condition often occurs with oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection.

Corresponding V/C ratios of over 1.00 are usually associated.

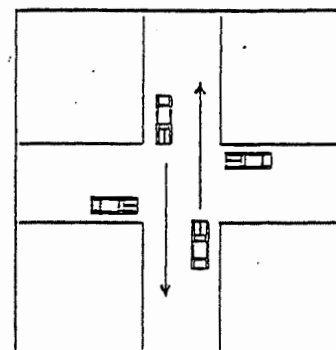
LOS 'E'



The ALL-WAY & PARTIAL STOP-CONTROLLED ANALYSIS METHODOLOGY, which is described in the Transportation Research Board's *Highway Capacity Manual*, defines Level of Service (LOS) for unsignalized intersections in terms of delay. Technically, delay is the amount of time an average vehicle must wait at an intersection before being able to pass through the intersection. For unsignalized intersections, the relationship between LOS and delay is based on the average total delay per vehicle.

LEVEL OF SERVICE 'A' - Delay 0.0 to 5.0 seconds

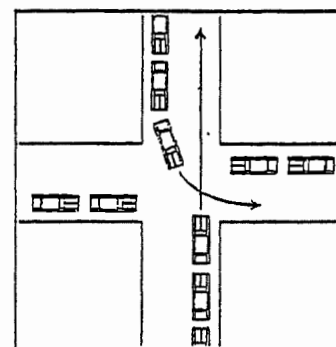
Describes operations with very low delay, i.e., less than 5 seconds per vehicle (Little or no delay).



LOS 'A'

LEVEL OF SERVICE 'B' - Delay 5.1 to 10.0 seconds

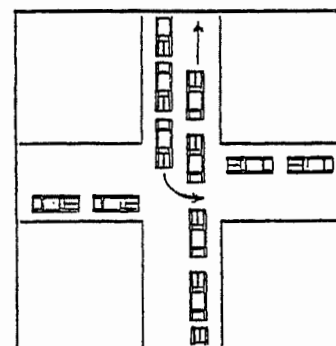
Describes operations with delay in the range of 5 to 10 seconds per vehicle (Short traffic delays).



LOS 'C'

LEVEL OF SERVICE 'C' - Delay 10.1 to 20.0 seconds

Describes operations with delay in the range of 10 to 20 seconds per vehicle (Average traffic delays).



LOS 'D'

LEVEL OF SERVICE 'D' - Delay 20.1 to 30.0 seconds

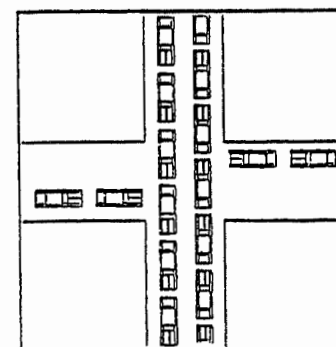
Describes operations with delay in the range of 20 to 30 seconds per vehicle (Long traffic delays).

LEVEL OF SERVICE 'E' - Delay 30.1 to 45.0 seconds

Describes operations with delay in the range of 30 to 45 seconds per vehicle (Very long traffic delays).

LEVEL OF SERVICE 'F' - Delay 45.1 seconds plus

Describes operations with delay in excess of 45 seconds per vehicle (Extreme delays which may affect other movements).



LOS 'F'

SOURCE: Transportation Research Board, "Operations Level Methodology-Unsignalized Intersections", *Highway Capacity Manual*, Special Report 209, 1985.



WILBUR SMITH ASSOCIATES

LEVEL OF SERVICE DIAGRAM

LOS-HCS

Level of Service Criteria for Intersections

Signalized Intersections

Level of Service	Stopped Delay Per Vehicle (sec)
A	≤ 5.0
B	$> 5.0 \text{ and } \leq 15.0$
C	$> 15.0 \text{ and } \leq 25.0$
D	$> 25.0 \text{ and } \leq 40.0$
E	$> 40.0 \text{ and } \leq 60.0$
F	> 60.0

Unsignalized Intersections

Level of Service	Average Total Delay (sec/veh)
A	≤ 5.0
B	$> 5.0 \text{ and } \leq 10.0$
C	$> 10.0 \text{ and } \leq 20.0$
D	$> 20.0 \text{ and } \leq 30.0$
E	$> 30.0 \text{ and } \leq 45.0$
F	> 45.0

Source: *Highway Capacity Manual*, Transportation Research Board, 1994

**OAKVIEW EIR
SHORT-RANGE CUMULATIVE PROJECT LIST**

TRIP GENERATION TABLE												
Case No.	PROJECT	LAND USE	UNITS			Weekday	AM Peak Hour			PM Peak Hour		
							In&Out	In	Out	In&Out	In	Out
1 (49)	127 Merrydale Road	Residential Condominium/ Townhouse	8	UNITS	Rate Trips	5.86 47	0.44 4	17% 1	83% 3	0.54 5	67% 3	33% 2
2 (54)	4300 Redwood Highway	Light Industrial/Office	130	KSF	Rate Trips	6.96 905	0.89 116	82% 95	18% 21	0.92 120	21% 25	79% 95
3 (57)	Alma Via	Assisted Living Medical Facility Office	40	EMPS.	Rate Trips	8.91 357	0.53 22	79% 17	21% 5	1.06 43	34% 15	66% 28
4 (66)	McInnis Park Apts. II	Apartment Complex	42	UNITS	Rate Trips	5.86 247	0.44 19	17% 3	83% 16	0.54 23	67% 15	33% 8
5 (67)	McInnis Park Apts.	Apartment Complex Expansion	8	UNITS	Rate Trips	5.86 47	0.44 4	17% 1	83% 3	0.54 5	67% 3	33% 2
6 (73)	Ranchitos Park	Single-Family Detached Housing	134	UNITS	Rate Trips	9.57 1283	0.75 101	25% 25	75% 76	1.01 136	64% 87	36% 49
7 (77)	Terra Linda Mini Storage	Mini Storage Facility	8.5	KSF	Rate Trips	2.50 22	0.15 2	59% 1	41% 1	0.26 3	51% 2	49% 1
8 (100)	Edgehill	Single-Family Detached Housing	5	UNITS	Rate Trips	9.57 48	0.75 4	25% 1	75% 3	1.01 6	64% 4	36% 2
9 (101)	Lucasfilm Grady Ranch	Film Production Office Commercial	340	EMPS.	Rate Trips	2.73 929	0.43 147	89% 131	11% 16	0.24 82	11% 9	89% 73
10 (102)	Lucasfilm Big Rock	Film Production Office Commercial	100	EMPS.	Rate Trips	2.73 273	0.43 43	89% 38	11% 5	0.24 24	11% 3	89% 21
TOTAL					Trips	3,229	315	183	132	365	157	208

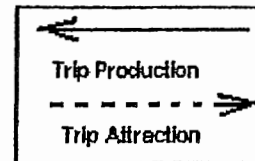
Source: PropDev 34, Marin County Community Development Agency, February 2002.
ITE Trip Generation, Sixth Edition.
Lucasfilm EIR, October 1995
Ranchitos Park DEIR - 2002

Marin CMA - Project Impact Analysis

A.M. Peak Hour Vehicle Volumes (vph) - Year 1999

Project: St. Vincent/Silviera

Figure 1



Attraction from S/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	6,904	1.151	F	3.0	9.0
Scenario 5	15	6,919	1.153	F	3.1	9.2
Scenario 6	145	7,049	1.175	F	3.5	10.5
Scenario 7	115	7,019	1.170	F	3.4	10.2
Scenario 8	172	7,076	1.179	F	3.6	10.8

(*) Total 1999 volume = (6,904 vph) + (1,387 vph, HOV) = 8,291 vph

Production To N/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	4,430	0.63	C	None	None
Scenario 5	151	4,581	0.65	C	None	None
Scenario 6	196	4,626	0.66	C	None	None
Scenario 7	239	4,669	0.67	C	None	None
Scenario 8	257	4,687	0.67	C	None	None

Production To S/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	6,901	1.150	F	3.0	9.0
Scenario 5	96	6,997	1.166	F	3.3	10.0
Scenario 6	161	7,062	1.177	F	3.5	10.6
Scenario 7	231	7,132	1.189	F	3.8	11.3
Scenario 8	265	7,166	1.194	F	3.9	11.7

(*) Total 1999 volume = (6,901 vph) + (1,403 vph, HOV) = 8,304 vph

(1) Queue in miles (MFL only)

(2) Delay in minutes for this section (MFL only)

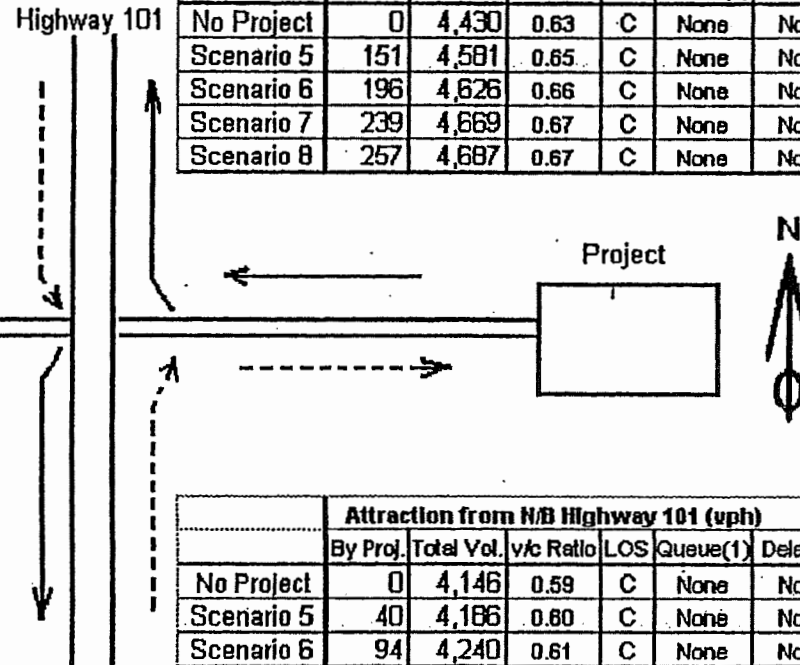
Attraction from N/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	4,146	0.59	C	None	None
Scenario 5	40	4,186	0.60	C	None	None
Scenario 6	94	4,240	0.61	C	None	None
Scenario 7	96	4,242	0.61	C	None	None
Scenario 8	137	4,283	0.61	C	None	None

Miller Creek Road

Highway 101

Project

N



Marin CMA - Project Impact Analysis **P.M. Peak Hour Vehicle Volumes (vph) - Year 1999** **Project: St. Vincent/Silviera**

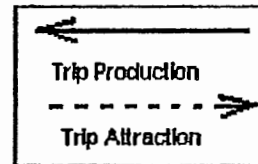
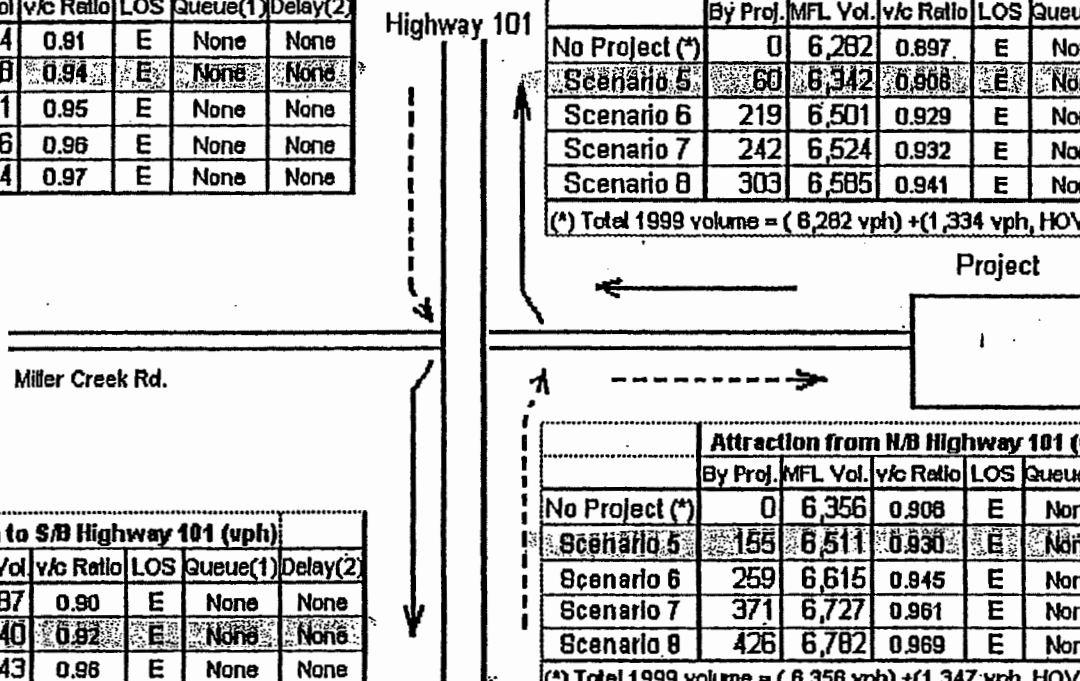


Figure 3

Attraction from S/B Highway 101 (vph)						
	By Proj.	Total Vol	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	5,464	0.81	E	None	None
Scenario 5	164	5,628	0.84	E	None	None
Scenario 6	247	5,711	0.95	E	None	None
Scenario 7	322	5,786	0.96	E	None	None
Scenario 8	350	5,814	0.97	E	None	None

Production to N/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	6,282	0.897	E	None	None
Scenario 5	60	6,342	0.908	E	None	None
Scenario 6	219	6,501	0.929	E	None	None
Scenario 7	242	6,524	0.932	E	None	None
Scenario 8	303	6,585	0.941	E	None	None

(*) Total 1999 volume = (6,282 vph) + (1,334 vph, HOV) = 7,616 vph



Production to S/B Highway 101 (vph)						
	By Proj.	Total Vol	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	5,387	0.90	E	None	None
Scenario 5	153	5,540	0.92	E	None	None
Scenario 6	356	5,743	0.96	E	None	None
Scenario 7	392	5,779	0.96	E	None	None
Scenario 8	495	5,882	0.98	E	None	None

Attraction from N/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	6,356	0.908	E	None	None
Scenario 5	155	6,511	0.930	E	None	None
Scenario 6	259	6,615	0.945	E	None	None
Scenario 7	371	6,727	0.961	E	None	None
Scenario 8	426	6,782	0.969	E	None	None

(*) Total 1999 volume = (6,356 vph) + (1,347 vph, HOV) = 7,703 vph

(1) Queue in miles (MFL only)

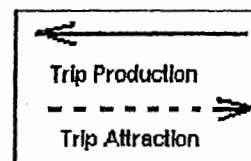
(2) Delay in minutes for this section (MFL only)

Marin CMA - Project Impact Analysis

A.M. Peak Hour Vehicle Volumes (vph) - Year 2020

Project: St. Vincent/Silviera

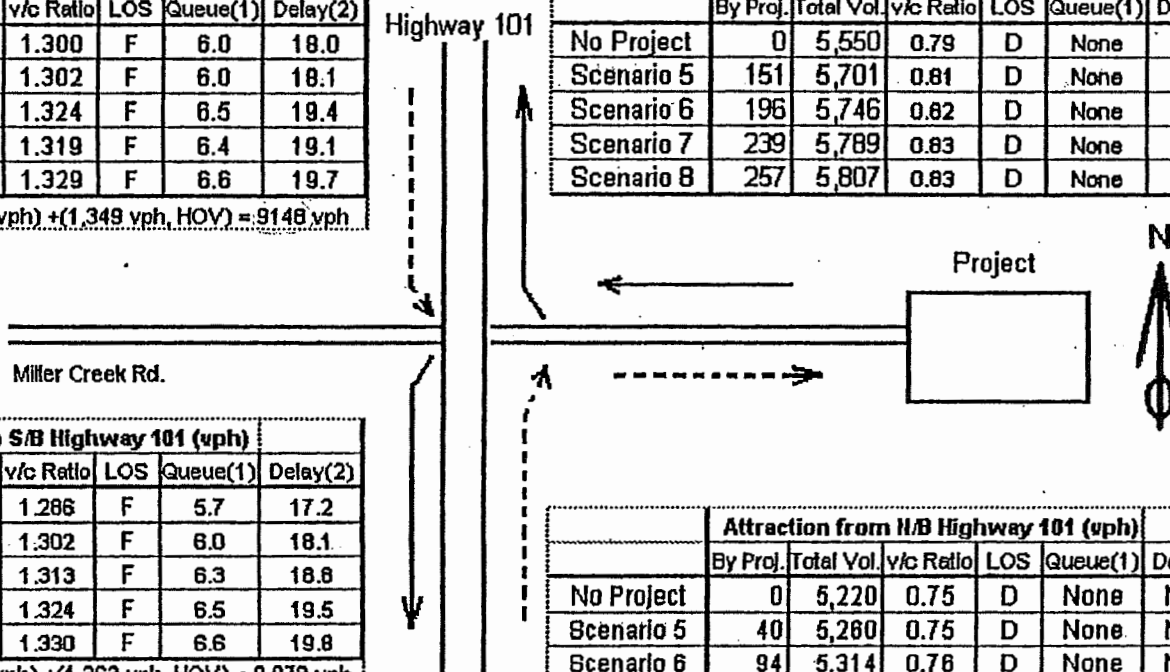
Figure 2



Attraction from S/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	7,799	1.300	F	6.0	18.0
Scenario 5	15	7,814	1.302	F	6.0	18.1
Scenario 6	145	7,944	1.324	F	6.5	19.4
Scenario 7	115	7,914	1.319	F	6.4	19.1
Scenario 8	172	7,971	1.329	F	6.6	19.7

(*) Total Y 2020 volume = (7,799 vph) + (1,349 vph, HOV) = 9,148 vph

Production To N/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	5,550	0.79	D	None	None
Scenario 5	151	5,701	0.81	D	None	None
Scenario 6	196	5,746	0.82	D	None	None
Scenario 7	239	5,789	0.83	D	None	None
Scenario 8	257	5,807	0.83	D	None	None



Production To S/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	7,715	1.286	F	5.7	17.2
Scenario 5	96	7,811	1.302	F	6.0	18.1
Scenario 6	161	7,876	1.313	F	6.3	18.8
Scenario 7	231	7,946	1.324	F	6.5	19.5
Scenario 8	265	7,980	1.330	F	6.6	19.8

(*) Total Y 2020 volume = (7,715 vph) + (1,363 vph, HOV) = 9,078 vph

(1) Queue in miles (MFL only)

(2) Delay in minutes for this section (MFL only)

Attraction from N/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	5,220	0.75	D	None	None
Scenario 5	40	5,260	0.75	D	None	None
Scenario 6	94	5,314	0.76	D	None	None
Scenario 7	96	5,316	0.76	D	None	None
Scenario 8	137	5,357	0.77	D	None	None

Marin CMA - Project Impact Analysis

P.M. Peak Hour Vehicle Volumes (vph) - Year 2020

Project: St. Vincent/Silviera

N

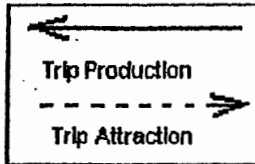
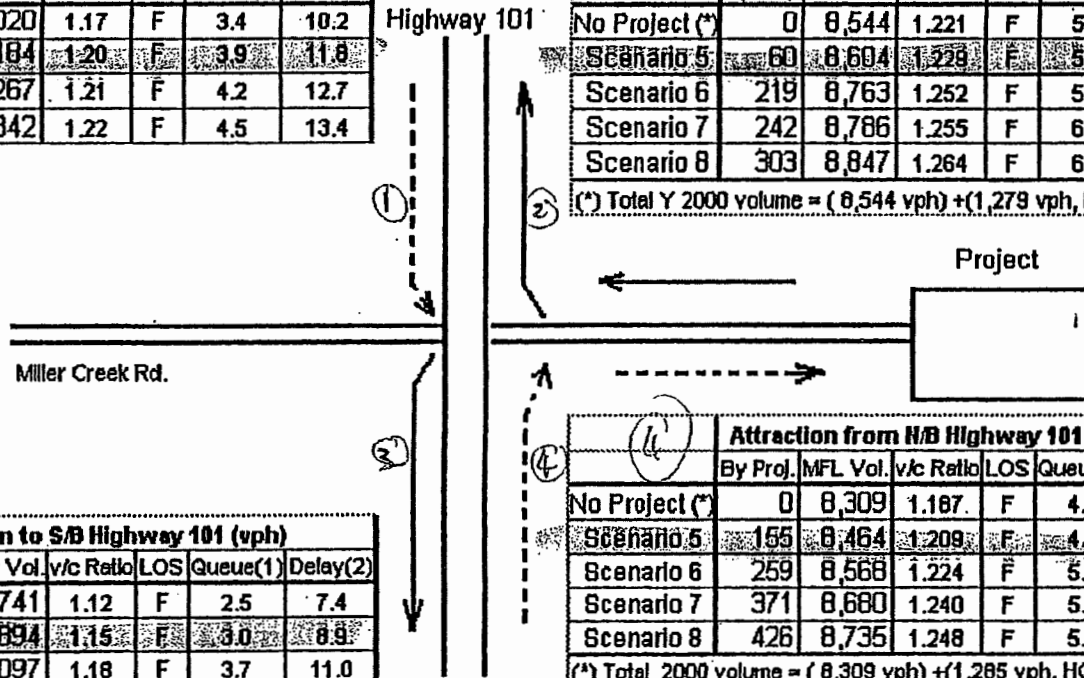


Figure 4

① Attraction from S/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	7,020	1.17	F	3.4	10.2
Scenario 5	164	7,184	1.20	F	3.9	11.8
Scenario 6	247	7,267	1.21	F	4.2	12.7
Scenario 7	322	7,342	1.22	F	4.5	13.4

② Production to N/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	8,544	1.221	F	5.1	13.2
Scenario 5	60	8,604	1.228	F	5.3	13.8
Scenario 6	219	8,763	1.252	F	5.9	15.1
Scenario 7	242	8,786	1.255	F	6.0	15.3
Scenario 8	303	8,847	1.264	F	6.2	15.8

(*) Total Y 2000 volume = (8,544 vph) + (1,279 vph, HOV) = 9,823 vph



③ Production to S/B Highway 101 (vph)						
	By Proj.	Total Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project	0	6,741	1.12	F	2.5	7.4
Scenario 5	153	6,894	1.15	F	3.0	8.9
Scenario 6	356	7,097	1.18	F	3.7	11.0
Scenario 7	392	7,133	1.19	F	3.8	11.3
Scenario 8	495	7,236	1.21	F	4.1	12.4

④ Attraction from N/B Highway 101 (vph)						
	By Proj.	MFL Vol.	v/c Ratio	LOS	Queue(1)	Delay(2)
No Project (*)	0	8,309	1.187	F	4.4	11.2
Scenario 5	155	8,464	1.209	F	4.9	12.5
Scenario 6	259	8,568	1.224	F	5.2	13.4
Scenario 7	371	8,680	1.240	F	5.6	14.4
Scenario 8	426	8,735	1.248	F	5.8	14.9

(*) Total 2000 volume = (8,309 vph) + (1,285 vph, HOV) = 9,594 vph

(1) Queue in miles (MFL only)				
(2) Delay in minutes for this section (MFL only)				

APPENDIX C
MITIGATION MONITORING AND REPORTING PROGRAM

APPENDIX C

OAKVIEW MASTER PLAN MITIGATION MONITORING AND REPORTING PROGRAM

AUTHORITY AND PURPOSE

Pursuant to the California Public Resources Code, Section 21081.6 (Assembly Bill 3180), Marin County is required to implement a mitigation monitoring and reporting program for the *Oakview Master Plan*. The County's monitoring program is established in the conditions of Master Plan approval and as further set forth in the mitigation conditions and verification measures listed herein.

The purpose of this mitigation monitoring and reporting program is to ensure compliance with and effectiveness of the mitigation measures set forth in the Certified EIR for the *Oakview Master Plan*. Assembly Bill 3180 requires monitoring of mitigation measures for those inputs identified in the EIR to be significant.

COUNTY MONITORING PROGRAM FEATURES

The County's mitigation monitoring and reporting program for the *Oakview Master Plan* consists of three major elements:

- A list of mitigation conditions and verifications required of the project sponsor at each stage of project approval and development.
- A checklist to document and verify mitigation condition compliance.
- A general condition of Master Plan approval which required the project sponsor to submit a detailed mitigation compliance plan and checklist at specific stages of the project up to two years after completion of development of all project elements identified in the Master Plan.

PROJECT SPONSOR'S MITIGATION COMPLIANCE PLAN REQUIREMENTS

The project sponsor shall submit a detailed written plan for Mitigation compliance to be reviewed and approved by the Marin County Community Development Agency Director prior to Precise Development Plan approval. The compliance plan will serve a dual purpose of verifying compliance with the mitigation measures for the proposed project and of generating information on the effectiveness of the mitigation measures. This plan shall describe the steps of the project sponsor (and project contractor) will take to assure compliance with project conditions and shall include submission of annual reports to the Community Development Agency describing the project status and a checklist verifying compliance with permit conditions. The plan shall also include provisions for any mitigation compliance or monitoring personnel found necessary to implement the plan. The monitoring personnel will be retained by the project sponsor and will have expertise in the appropriate disciplines. County staff and/or hired consultants under contract to the County will verify mitigation compliance by means of the checklist. The project applicant shall agree to fund any additional County costs for monitoring staff or verification by registered professionals.

The mitigation compliance plan shall organize mitigation measures and verification of compliance according to each phase of the development of the *Oakview Master Plan* project, including a) prior to Master Plan approval; b) prior to Precise Development Plan approval.

The project applicant shall agree to perform the measures of them and to comply with the verification and reporting requirements identified in the Compliance Plan as a condition of approval of the project. The project applicant understands and agrees that activities for a given phase shall not commence until the County has approved the applicant's mitigation plan for that phase. The project sponsor's responsibilities include administering and preparing daily logs, status reports, compliance reports, and the final construction monitoring report; monitoring on-site, day-to-day construction activities, including the direction of environmental monitors and environmental specialists in the understanding of all permit conditions, site-specific project requirements, construction schedules and environmental quality control effort; ensuring contractor knowledge of and compliance with all appropriate permit conditions; reviewing all construction impact mitigations and, if need be, proposed improvements to the County; and requiring correction of observed activities that violate project environmental conditions, or that represent unsafe or dangerous conditions.

The project sponsor shall submit a detailed written plan for mitigation compliance to be reviewed and approved by the Marin County Community Development Agency Director at each phase of project development. The compliance plan will serve a dual purpose of verifying compliance with the mitigation measures for the proposed project and of generating information on the effectiveness of the mitigation measures. This plan shall describe the steps the project sponsor (and project contractor) will take to assure compliance with project conditions and shall include a checklist verifying compliance with permit conditions. The plan shall also include provisions for any mitigation monitoring personnel found necessary to implement the plan. The monitoring personnel will be retained by the project sponsor and will have expertise in appropriate disciplines. County staff and/or hired consultants under contract to the County will verify mitigation compliance by means of the checklist. The project applicant shall agree to fund any additional County costs for monitoring staff or verification by registered professionals. The mitigation plan shall organize mitigation measures and verification compliance according to the *Oakview Master Plan* project, including: a) prior to Development Plan approval; b) prior to Improvement Plan approval; c) prior to grading permit approval; d) prior to building permit approval; e) prior to final occupancy.

The project sponsor shall agree to perform the measures required of them and to comply with the verification and reporting requirements identified in the Compliance Plan as a condition of approval of the project. The project applicant understands and agrees that activities for a given phase shall not commence until the County has approved the applicant's plan for that phase.

COMMUNICATION AND REPORTING REQUIREMENTS

Prior to any construction activities, meetings shall be convened involving County staff, the project sponsor and general contractors to review the mitigation monitoring program, to identify responsibilities and authority of participants, to define what criteria will be used to gauge permit compliance, and to identify under what conditions the County will halt construction activities and require remedial or corrective measures.

The plan shall formulate an effective reporting system which documents on-site monitoring activities and compliance with conditions. The plan shall include submission of annual reports to the Community Development Agency describing the project status and a checklist verifying compliance

with permit conditions. Annual reports shall be submitted for each year until one year after occupancy.

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<i>Impact</i>	<i>Mitigation (RS)</i>	<i>Implemented by</i>	<i>When Implemented</i>	<i>Monitored By</i>	<i>Verified By and Date</i>
Geology and Soils					
<p>5.1-1 Landsliding Several landslide deposits are present and have been identified in or near areas of proposed development. While some of the large ancient landslides were found to be stable, numerous smaller landslides are also present. These surficial landslides and debris flows could become reactivated during periods of heavy rain. Without adequate subsurface exploration and subsequent mitigation, landslide movements could potentially risk human life, damage or destroy existing structures off-site, block or damage roadways and escape routes (isolating people on-site and limiting access of emergency services), and sever utility service lines.</p>	<p>5.1-1 In order to mitigate the potential for future landslide movements, landslides and colluvial soils near proposed development areas should be repaired during grading. Standard techniques proposed to repair the landslides include removal and recompaction of loose materials, keying and benching, and installation of subdrains and surficial drainage systems. All grading should be performed in compliance with the Uniform Building Code, as well as local code and agency standards, under the observation and testing of the project geotechnical engineer and engineering geologist</p>	Applicant	Development Plan	DPW	

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<p>5.1-3 Slope Stability If not properly designed for, and/or mitigated during grading, cut, natural and fill slopes with gradients of 2:1 (horizontal : vertical) or steeper, could potentially erode or fail due to the low shear strength of some of the on-site materials.</p>	<p>5.1-3 The proposed Grading and Drainage Plan limits cut and fill slopes to an average of ten feet in height by combining cut slopes with engineered timber retaining walls. Additionally, the applicant's geologist recommends thin buttress or stability fills on slopes found to be of weak materials during grading. They also recommend both surficial and subsurface drainage provisions. Although already proposed as part of the Grading and Drainage Plan, the specifics, such as extent and location, of these measures would be determined by the applicant's geologist or geotechnical engineer in the field at the time of construction. As currently proposed, mitigation measures would consist of a combination of site-specific recommendations by the applicant's consultant and local agency and code requirements. The following measures would be feasible in mitigating site-specific conditions and producing stable natural slopes, as well as engineered slopes, where cutting and filling would occur on the site:</p> <ul style="list-style-type: none"> • Evaluate the effects of bedding orientation (information acquired during the design phase investigation required for the Precise Development Plan) on the gross stability of existing and proposed slopes in the development area to prepare the geotechnical consultant to observe and direct grading operations and make site-specific determinations (see immediately following measure). 	Applicant	Construction Contract and Construction of Individual Lots	DPW	

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5.1-3 (Continued)	<ul style="list-style-type: none">• Examine natural and cut slopes during grading to confirm their potential for long-term stability. If the geotechnical consultant determines that the exposed earth materials are weaker than expected, mitigate this condition by recompacting as an earth buttress or stability fill or by the selected use of retaining walls or other acceptable methods, as have been proposed by the applicant's geologist.• Design drainage facilities to conform with agency and code standards. This should include terrace drains every 30 feet of vertical height on all <u>graded</u> slopes with grades steeper than 5:1. The terrace drains should have a minimum flowline gradient of six percent to make them self-cleaning (a minimal tenet of the Uniform Building Code). They also should be fitted with downdrains every 150 linear feet of terrace to allow for quick drainage.• Plant cut and fill slopes with ground cover in order to prevent erosion, raveling, or development of rills, sloughs, and other failures which could reduce the effectiveness of stabilization methods whereas roots of newly planted vegetation would enhance stability of graded slopes by holding materials in place.				

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5.1-4 Groundwater The direct impact of proposed development on groundwater would be less-than-significant. However, due to the anticipated increase in water infiltration into area D as a result of the proposed development, there is the potential for the seepage at the base of the cut on the adjacent property to increase unless the slide is drained properly.	5.1-4 Drainage devices should be employed during grading to reduce the potential for seepage from area D to the adjacent residential development. This should include a subdrain system to intercept this seepage water and a surficial drainage system to reduce the ponding and infiltration of surface water into the landslide. The drainage system should be designed by the project engineer and installed under his / her supervision. With proper surficial and subsurface drainage provisions, the impact of off site seepage should be reduced to a less than significant level.	Applicant	Construction Contract	DPW	
5.1-5 Soil Creep Soil creep could result in damage to structures built on moderate to steep hillsides.	5.1-5 The following measure would be required to mitigate soil creep impacts: <ul style="list-style-type: none"> Design any structures on sloping ground to take creep forces into account. The Master Plan and Master Plan drawings indicate that proposed residential structures would be founded on raised-floor foundations which follow the existing topography with minimal grading. As such, the foundations for such structures should be designed for creep loads. The design phase investigations for development of individual lots should determine the depth of the weathering profile and the zone affected by creep and should be used to establish specific design standards for each lot to comply with the Uniform Building Code as required to obtain site alteration and building permits from the County for construction of individual housing units or ancillary residential structures. 	Applicant	Prior to issuance of Building Permit	DPW	
5.1-6 Seismicity Strong seismic shaking is expected to occur on the site some time during the "life" of the development and could cause damage to structures and induce landsliding.	5.1-6 The following measure would be required to mitigate seismic impacts other than seismically-induced landsliding: <ul style="list-style-type: none"> Design and build all on-site structures, roads, and utilities in conformance with the UBC. 	Applicant	Development Plan	DPW	

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5.1-9 Rockfall Rockfall could damage structures or injure people. Bedrock outcrops and / or residual boulders are reportedly rare at the site.	5.1-9 The following measure would be required to mitigate potential rockfall impacts: <ul style="list-style-type: none"> Remove any unstable materials encountered adjacent to development areas. Remove the materials and place rip-rap or other engineered erosion control devices, construct rockfall entrapment trenches, or undertake selective rock bolting of remaining materials with galvanized or gray PVC-coated gabion mesh. Set development back from eroding rock faces not mitigated by the above measures or in addition to implementing those measures, depending on specific situations. 	Applicant	Development Plan	DPW	
5.1-10 Artificial Fill Areas New construction on existing artificial fill, where encountered, could settle unevenly and be damaged or could stimulate or accelerate erosion.	5.1-10 The following measures would be required to mitigate artificial fill impacts: <ul style="list-style-type: none"> Conduct field investigations when formulating the Final Grading Plan required for the Development Plan to determine the presence and limits of such materials in the vicinity of parts of the site proposed for development. Remove and recompact artificial fill located in or adjacent to areas of proposed grading during landslide repair, grading operations for road construction, or development of individual private lots under the observation and testing of a registered engineer. 	Applicant	Prior to Issuance of Grading Permit	DPW	

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<p>5.1-13 Maintenance of Geotechnical and Hydrologic Mitigation Measures The difficult geologic conditions on-site and the mitigation measures required to stabilize landslides would involve long-term monitoring and maintenance after site development to ensure the effectiveness and success of mitigation.</p>	<p>5.1-13 The following measure would be required of the applicant to insure the effectiveness of long-term maintenance in mitigating the project's impacts:</p> <ul style="list-style-type: none"> The project applicant shall be responsible to establish a funding entity to insure the effectiveness of long-term maintenance in mitigating the project's geotechnical and hydrologic impacts. This entity could be a homeowners' or property owners' association, an assessment district, or a Geologic Hazard Abatement District (GHAD) for the project site. Whatever entity is established it shall provide for the technical aspects of long-term maintenance to be handled by a geotechnical consultant and reviewed by the County. The professional consultant should follow a regular maintenance schedule and should prepare and submit progress reports to the County every six months for its review. This would place a responsible professional, agreed to by the County, in the position of overseeing the site. Only site property owners would participate by paying taxes/fees into the fund. 	Applicant	Prior to Approval of Final Subdivision Map	CDA - Planning	

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Hydrology and Drainage					
<p>5.2-2 Site Peak Flow Rates Project grading, construction of impervious surfaces, and installation of a storm drain system would increase site peak flow rates from Sub-watershed 1 by 1.6 percent and from Sub-watersheds 2, 3 and 6 by a minimum of 17 to 69 percent</p>	<p>5.2-2 The following mitigation measure would be required to reduce peak flow impacts:</p> <ul style="list-style-type: none"> Construct a stormwater detention / treatment basins, one each in the lower reaches of Sub-watersheds 2, 3 and 6. The Sub-watershed 2 basin should be located in the vacant land paralleling the proposed Roadway A. This undeveloped land is situated on the most gently sloping portion of the site, near the southwest corner. It would also have the elongated shape that is best suited for water quality treatment ponds. If the area of the presently designated vacant land is insufficient to provide the necessary basin storage volume, the lower portion of Lot 28 should be added, with a roadway culvert connection. The Sub-watershed 3 basin should be located along the eastern edge of the proposed Erin Drive extension, occupying the base of Lots 2 through 9. Because of the smaller size and peak discharges associated with Sub-watershed 3, a narrow, elongated detention basin should be sufficient to accomplish the necessary level of peak flow attenuation. Each entrance driveway would have to be culverted to allow for hydraulic connectivity between storage cells. Basin discharge would join roadway runoff and enter the proposed vegetated swale upslope of 1 Erin Drive. 	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

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5.2-2 (Continued)	<p>————— To maximize hydraulic efficiency and minimize the potential for maintenance problems, both basins should be equipped with dewatering pipes and emergency weir spillways. The dewatering pipes should be sized to maintain post-project peak flows at pre-project levels for the design 100-year rainstorm. Each emergency overflow weir should be designed conservatively to pass an unattenuated 100-year peak discharge, even though the prescribed basin storage would allow for full attenuation of runoff from that storm. Primary dewatering pipes and emergency weirs should be located at the downgradient ends of each basin, i.e. at the southern end for the Sub-watershed 2 basin and the northern end for the Sub-watershed 3 basin. Appropriate energy dissipation should be installed at all spillway discharge outlets.</p> <p>————— The Sub-watershed 2 and 3 basins should be designed to serve a two-fold purpose: (1) fully attenuate 100-year peak flows from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain systems, the Gallinas Creek tributary (i.e. Highway 101 box culvert), and the lower reach of Miller Creek, and (2) filter and cleanse stormwater runoff by use of an vegetated inlet swale and detention area.</p>				

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5.2-2 (Continued)	<p>————— A third detention / treatment basin should be constructed in the low-lying developed lands of Sub-watershed 6, near the eastern edge of either Lot 29 or 30. Given the spatial constraints in this portion of the sub-watershed, a passive pipe or cistern-type storage underground detention structure should be constructed. Such a structure could be located beneath the Lot 30 parking lot or the northern end of Roadway C. The hydraulic design would ensure that when a particular flood stage in Miller Creek is reached (e.g. 10-year flood), backwater in the storm drain system would induce diverted storm drain system into the storage unit. Once Miller Creek flood levels had receded, the stored stormwater would re-enter the system and discharge to Miller Creek. The size of the off-system storage unit would equal the volumetric difference in the pre- and post-project stormwater hydrographs for the 100-year design rainstorm.</p>				

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5.2-2 (Continued)	<p>———— Since the passive stormwater detention storage would be underground, cleanout stubs would be required at the upgradient ends of each storage component (e.g. cistern or pipe array). Periodic maintenance would be required to remove any debris and sediment that accumulate in these storage components.</p> <p>———— A sediment maintenance plan describing both frequency and timing of sediment removal, as well as excavation equipment and environmental precautions, should be included in the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.</p> <p>———— Following release of project performance bond, maintenance of the detention basin would be the responsibility of the funding entity established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors.</p> <p>———— Basin location shall be selected to <u>minimize excessive topographic manipulation, even if one or more designated residential lots must be eliminated to accommodate its construction. Since stormwater quality impacts can be mitigated, in part, through the integration of water quality enhancements to normal detention basin design, the detention basin should be designed to serve a two-fold purpose: 1) fully attenuate 100-year peak flows</u></p>				

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5.2-2 (Continued)	<p>from Sub-watersheds 2 and 3 to pre-project levels and, thus, reduce pressure on the downstream storm drain system- the Gallinas Creek tributary (i.e. Highway 101 box culvert); and (2) filter and cleanse stormwater runoff by use of a vegetated inlet swale and detention area (forebay). Other design considerations shall include:</p> <ul style="list-style-type: none"> • Structural measures for normal pond dewatering and end-of-season (e.g. April) dewatering (fully) for mosquito control. • An emergency overflow spillway with appropriate energy dissipator at the outlet. <p>The project applicant shall prepare a monitoring and maintenance plan for the detention basin to ensure proper long-term basin functioning. The monitoring and maintenance plan would include provisions for sediment removal and basin repair, as well as associated conditions governing the use of heavy mechanical equipment (e.g. backhoes, excavators) and environmental safeguards and procedures. This information shall be incorporated into the project's Stormwater Pollution Prevention Plan (SWPPP) submitted to the County Department of Public Works.</p> <p>Prior to release of the project performance bond, maintenance of the detention basin by a funding entity shall be established by the project applicant. Such an entity could chose to maintain the basin and other erosion and sediment control measures itself or could hire bonded independent contractors. (Also, see Geology Mitigation Measure 5.1-13.)</p>				

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5.2-3 Downstream Hydraulic Structures and Flooding Project-induced increases in peak flow rates and / or runoff volumes for Sub-watersheds 2 and 3 would exacerbate flooding in portions of the adjacent Marinwood Subdivision due to inadequate storm drain capacities and extant backwater conditions during floods. <u>In addition, gaps have been noted in existing cross-slope interceptor ditches. If unrepaired, these caps would create avenues for off-site, downslope diversion of concentrated ditch flows.</u>	5.2-3 The following measures would be required to reduce project impacts on downstream flooding due to inadequate storm drain system capacities: <ul style="list-style-type: none"> • Replace the existing 18-inch storm drainpipe along the rear of 281 Ellen Drive with a 30-inch RCP, as indicated in the project Schematic Grading Plan. • <u>Repair the gaps in the existing concrete, cross-slope interceptor ditch network and any other defects that could result in the diversion of ditch/hillslope runoff onto adjacent lots in the Marinwood Subdivision.</u> 	Applicant	Development Plan / Prior to Issuance of Grading Plan	CDA / DPW	
5.2-4 Downstream Hydraulic Structures and Flooding Project-induced increases in peak flow rates for Sub-watersheds 1 and 2 would worsen flooding at the three- by six-foot box culvert under Highway 101. No corrective measures have been agreed upon to remedy this flooding condition and no funding currently exists for such action.	5.2-4 Either of the following measures should be implemented to reduce project impacts on downstream flooding at the three- by six-foot box culvert under Highway 101: Implement Mitigation Measure 5.2-2. The applicant should participate with the City of San Rafael and Caltrans in funding an upgrade of the existing Highway 101 box culvert. If a drainage fee is required by Marin County, the applicant should at a minimum contribute funding for replacement and / or expansion of the Highway 101 facilities in proportion to the site's development area. For example, if the development area (not open space) draining to the Gallinas tributary at Highway 101 equaled 41.7 acres and the total developed area for that watershed was 500 acres, the project's share of the cost would be 8.3 percent.	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

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5.2-5 Off-Site / Downstream Flooding on Miller Creek Project induced increases in peak flow rates for Sub-watersheds 3 and 6 would add, however imperceptibly, to the surcharge of floodwaters that create significant backwater flooding at the SPRR bridge on Silveira Ranch. Since this structure lacks adequate capacity to pass the existing 100-year flood discharge without significant inundation of the adjoining ranchlands, the project impact on downstream flooding would be significant impact.	5.2-5 To reduce project impacts on flooding along the on-site and downstream reaches of Miller Creek, either of the following mitigation measures should be implemented: • Implement Mitigation Measure 5.2-2: Pay a drainage fee to Marin County with the stipulation that the fee be applied to the eventual channel modification and bridge removal / replacement on Silveira Ranch. The fee total would be negotiated between the applicant and the County.	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

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<p>5.2-7 Site Erosion and Downstream Sedimentation and Flooding Hillslope grading activities associated with construction of residential and commercial structures, roadways, and driveways would result in large areas of bare soils which would be subject to erosion by rainfall and hillslope runoff. Eroded sediments would eventually be discharged to off-site drainage channels, including Miller Creek, where sedimentation could reduce flood conveyance or impair water quality.</p>	<p>5.2-7 To reduce project impacts of on-site erosion and downstream sedimentation it would be necessary to:</p> <ul style="list-style-type: none"> • Prepare and implement a comprehensive Stormwater Pollution Prevention Plan (SWPPP), which is submitted as part of the NPDES General Construction Activity Stormwater Permit (General Permit) filing with the State Water Resources Control Board. The NPDES General Permit is required for all developments which would disturb more than five acres of land. The SWPPP describes on-site measures for erosion control and stormwater treatment to be implemented during and following project construction, as well as a schedule for monitoring of performance. These measures are referred to as Best Management Practices (BMPs) for the control of point and non-point source pollutants in stormwater. BMPs incorporated in the project SWPPP would likely include <i>in-situ</i> protection, seeding and mulching of bare ground, planting of trees and shrubbery in both disturbed upland and riparian areas, and installation of other forms of biotechnical slope stabilization, such as appropriately staked straw bale perimeters, silt fences, or staked plant wattles on the slope contour. No grading should occur <u>within the Miler Creek bridge crossing</u> during the winter season, thus restricting grading activities <u>at the proposed Miller Creek bridge crossing</u> to the period between May 1 and October 15. <u>Grading in site areas outside of the SCA can occur during the winter season, as long as erosion control measures approved as a part of the Stormwater Pollution Plan (SWPPP) are installed and properly maintained during this period.</u> 	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

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<p>5.2-8 Site Erosion and Downstream Sedimentation and Flooding Construction of the proposed Marinwood Avenue bridge would disturb the banks of Miller Creek significantly in the vicinity of the construction area. Subsequent bank erosion and downstream sedimentation could exacerbate flooding downstream of the Highway I01 bridge.</p>	<p>Mitigation Measure 5.2-8 To reduce project impacts of on-site erosion and downstream sedimentation due to construction of the Marinwood Avenue Bridge on Miller Creek, it would be necessary to:</p> <p>Implement Mitigation 5.2-7.</p> <ul style="list-style-type: none"> Acquire a 1603 Stream Alteration Agreement from the California Department of Fish and Game (CDFG). In addition to measures outlined in the project SWPPP for graded or exposed soil surfaces, the applicant's construction contractor(s) and field engineer should implement temporary measures, where required, to minimize channel sedimentation during bridge construction. Due to the good quality stream habitat and culverting impacts to aquatic life, a bypass pipe through the work area is not recommended. Some form of cofferdam segregating the work areas from the active channel are would be preferable. All such measures would be described in the Stream Alteration Agreement submittal and would be subject to approval CDFG. <p>Submit an application or letter of notification, as appropriate, to the U.S. Army Corps of Engineers for an Army Fill Permit, in accordance with provisions of the Nationwide Permit Program.</p> <p>Acquire a Waiver of Water Quality Certification from the RWQCB.</p>	Applicant	Development Plan / Construction Contract	CDA / DPW RWQCB CDFG Corps	

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<p>5.2-10 Water Quality- Violation of Water Quality Standards Proposed residential development in Sub-watersheds 2 and 3 and commercial development in Sub-watershed 6 would increase the stormwater contaminant loading for some heavy metals, including copper, lead and zinc to levels exceeding those listed by regulatory agencies for the protection of aquatic habitats. Oil and grease concentrations in the site runoff reaching Miller Creek and the Gallinas Creek tributary would not exceed regulatory agency thresholds, however, even small concentrations are considered significant by the RWQCB. Establishment of irrigated landscaping and its associated herbicide and pesticide inputs could potentially result in the downstream migration of nutrient and contaminant residues in stormwater drainage channels leading to the recently constructed wetland pond in the industrial park area east of Highway 101, and potentially to Gallinas Creek Marsh.</p>	<p>5.2-10 The following measures would be required to minimize impacts on-site and downstream water quality to less-than-significant levels:</p> <ul style="list-style-type: none"> • Implement Mitigation Measure 5.2-2 (Peak Flows). • The stormwater detention basins recommended for construction as part of the program for peak flow mitigation should be designed to maximize their water quality treatment function. Proper configuration, sizing and inlet / outlet characteristics would maximize deposition of particulates in incoming stormwater and would favor the growth of emergent vegetation to facilitate filtering opportunities. Specific design characteristics for wet ponds are listed in the California Storm Water Best Management Practices Handbook for Construction Activity. • Implement Mitigation Measure 5.2-7 (Site Erosion and Downstream Sedimentation and Flooding). • Due to the close proximity to the sensitive wetland and aquatic habitats in the receiving waters of Miller Creek and lower Gallinas Creek, the following BMPs are considered a minimum for Oakview stormwater treatment to comply with the requirements of the NPDES General Permit and provisions of Title 24 of the Marin County Code (24.04.625), citing erosion control requirements associated with site grading. 	Applicant	Development Plan / Construction Contract	CDA / DPW	

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5.2-10 (Continued)	<ul style="list-style-type: none"> • Installation of oil / grease traps or similar in-line filtration systems for storm drain systems. Such traps or separators should be accompanied by a cleanout / maintenance program that ensures acceptable trap efficiencies, specifies appropriate disposal procedures, and reduces the risk that the traps become sinks for pollutants. • Institute a regular schedule of street and parking lot sweeping. The frequency of cleaning should be higher (e.g. twice monthly) during the winter rainy season, yet maintained year-round. Regular cleaning of paved surfaces reduce the “first flush” phenomenon wherein the highest concentration of contaminants are flushed off the surfaces during the early portion of a runoff event. 				

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5.2-10 (Continued)	<ul style="list-style-type: none"> Incorporate grass-lined swales to convey stormwater from paved surfaces to creek channels or wetlands. Grass-lined swales filter particulates from stormwater and, as a result, reduce the entry of heavy metals and contaminated sediments to drainageways. The current development plan includes one grass-lined (i.e. vegetated) swale each toward the lower end of Sub-watersheds 2 and 3, although the one proposed for Sub-watershed 2 would not provide significant water quality benefits. Two additional swale locations could be integrated into the project design for Sub-watershed 6 stormwater drainage. The first swale would extend downslope from the eastern edge of the Lot 30 parking lot to the top of the existing cut-slope, at the freeway interface. The second swale would extend from the northernmost storm drain inlet along Roadway C (Marinwood Avenue extension), parallel to the freeway, to the southern bank of Miller Creek. To forestall excessive rilling within such swales, it may be necessary to install biodegradable fabric along the swale flowline. Initially, the swale may need to be irrigated along with the landscaping. Revegetate all disturbed areas prior to the onset of each winter rainy season during and for 2-3 years following completion of construction. Use of an erosion control grass and forb mixture, favoring native species, would be best suited to this task. In addition, some type of surface erosion protection (e.g. jute netting, erosion control blankets, punched straw) should be installed to reduce the erosive energy of incoming raindrops for the first couple of winter seasons. 				

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Oakview Master Plan Mitigation Monitoring and Reporting Program

<i>Impact</i>	<i>Mitigation (RS)</i>	<i>Implemented by</i>	<i>When Implemented</i>	<i>Monitored By</i>	<i>Verified By and Date</i>
5.2-10 (Continued)	<ul style="list-style-type: none"> Prepare and implement an irrigation scheduling and chemical management plan governing the application of irrigation water and chemical amendments to landscaped areas adjacent to buildings and within or adjacent to parking lot facilities. Components of such a plan would likely include an irrigation schedule linked to soil moisture levels or related variables such as temperature, humidity and wind speed. Specific chemical inputs proposed for application to vegetation should be among those tested and cleared for use by the USEPA. Frequency and scheduling of these chemical inputs should also be indicated, based on-site-specific characteristics (e.g. soil and vegetative cover and rates of uptake) and the acknowledged sensitivity of downstream receiving waters. Implement Mitigation Measure 5.2-8 (Site Erosion and Downstream Sedimentation and Flooding). 				
5.2-11 Cumulative Water Quality Impacts Contaminants in stormwater discharges from the site would contribute to the contaminant loading of the waters of Miller Creek (a spawning stream), the Gallinas Creek tributary, and eventually Gallinas Creek.	<p>5.2-11 The following measures would be required to reduce cumulative water quality impacts:</p> <ul style="list-style-type: none"> Implement Mitigation Measure 5.2-10. 	Applicant	Development Plan / Construction Contract	CDA / DPW	

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Biological Resources					
5.3-1 General Vegetation Removal and Landscaping Impacts Grading associated with project implementation would remove existing vegetation in areas proposed for development, primarily involving non-native grassland but also affecting oak woodland, native grasslands, and freshwater seeps. Landscape plantings would replace much of the vegetative cover disturbed by project implementation, raising concerns about the appropriateness of proposed plant materials, compatibility with sensitive plant communities, and need for long-term management to ensure successful establishment.	5.3-1(a) A qualified landscape architect should prepare a detailed Landscape and Vegetation Management Plan in consultation with a plant ecologist experienced in management of native species. This Landscape and Vegetation Management Plan should be incorporated into the Final Landscape Plan prepared as a part of the Precise Development Plan. The plan should: 1) provide for re-establishment of native vegetation on graded slopes around the fringe of proposed development; 2) provide details on native plantings associated with proposed restoration, enhancement, and mitigation.; 3) establish a program to salvage suitable native plants for use in landscaping and revegetation; 4) identify unsuitable species which should not be used in landscaping; 5) control the establishment and spread of introduced broom; and 6) specify long-term management provisions to ensure re-establishment of landscape improvements.	Applicant	Development Plan	CDA - Planning	
5.3-1 (Continued)	5.3-1(b) Vehicles and motorcycles should not be allowed to travel off designated roadways to prevent further disturbance to grassland cover and other vegetation. Barriers should be provided where vehicular access to open space areas may be possible.	Applicant	Development Plan	CDA-Planning	

Impact	Mitigation (RS)	Implemented by	When Implemented	Monitored By	Verified By and Date
5.3-2 Tree Removal and Woodland Impacts Proposed development has generally been sited to avoid areas of woodland vegetation, although an estimated 35 trees would still be removed. Additional trees could be adversely affected by grading and construction unless protective measures are implemented. Although anticipated tree removal represents only a small percentage of the total number of trees on the site, their loss would still be considered significant due to their age and length of time needed to replace them	5.3-2(a) The development envelope shown on the Master Plan's Residential Area Layout should be revised to indicate building envelope areas which are intended to minimize tree removal. Deed restrictions or some other mechanism should be established over individual lots to prevent possible tree removal and disturbance of other native vegetation outside the identified building envelopes. Trees adjacent to building envelopes on Lots 8, 9, and 10 should be thinned or pruned under the guidance of a certified arborist rather than removed during house construction and yard landscaping.	Applicant	Development Plan	CDA-Planning	
5.3-2 (Continued)	<p>5.3-2(b) Where feasible from an engineering and geotechnical standpoint and warranted based on the good to excellent health and structure of the tree, trees near the limits of anticipated grading should be preserved and protected. Individual specimen-sized trees should be preserved by retaining walls, short over-steepened slopes, and other methods. Protection of larger native trees with trunk diameters exceeding 24 inches should take precedence over smaller live oaks and California bay which are abundant in the woodland habitat.</p> <p>5.3-2(c) A certified arborist should prepare detailed guidelines to protect trees to be preserved from possible damage. Trees to be retained should be identified in the field with flags or other obvious marking method before any grading.</p>	Applicant	Development Plan / CC&Rs	CDA-Planning	
		Applicant	Development Plan	CDA-Planning	

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5.3-2 (Continued)	5.3-2(d) A tree replacement program should be prepared to provide for replacement of native trees removed by proposed development. The tree replacement program should be included as a component of the project's Landscape and Vegetation Management Plan (required by Mitigation Measure 5.3-1[a]) and implemented as part of site revegetation and landscaping.	Applicant	Prior to Issuance of Grading Permit	CDW	
5.3-3 Disturbance to Native Grasslands Proposed development would affect an estimated minimum of 1.6 acres of native grasslands on the site with a coverage classification of ten percent or greater. Native grassland species present consist mainly of purple needlegrass and California oatgrass. Because the CNDDB considers this natural community sensitive due to its rarity, any future loss of native grasslands would "substantially" diminish habitat for plants.	5.3-3 A grassland restoration and enhancement program should be required to mitigate the loss of native grasslands disturbed by proposed development which provides for replacement of native grasslands at a 1:1 ratio, meets or exceeds the cover class lost, and emphasizes the use of purple needlegrass and California oatgrass. A qualified plant ecologist experienced in grassland restoration using native grasses should prepare the program. The grassland program should be included as a component of the Landscape and Vegetation Management Plan required for the project by Mitigation Measure 5.3-1(a) and should be implemented as part of site revegetation and landscaping.	Applicant	Development Plan / Construction Contract	CDA / DPW	

Appendix C**Oakview Master Plan Mitigation Monitoring and Reporting Program**

<i>Impact</i>	<i>Mitigation (RS)</i>	<i>Implemented by</i>	<i>When Implemented</i>	<i>Monitored By</i>	<i>Verified By and Date</i>
5.3-4 Disturbance to Freshwater Seeps and Wetlands Proposed development would affect a minimum estimated 1.4 acres of scattered freshwater seep wetlands and a limited area of unvegetated other waters.	5.3-4(a) A qualified wetland consultant should prepare a detailed wetland protection, replacement, and restoration program which satisfies adopted standards and criteria of the County, Corps, CDFG, and RWQCB. The program should be prepared as a component of the recommended Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a) at the Precise Development Plan stage of the County's planning and project approval process and should be implemented as part of site revegetation and landscaping. The wetland plan should clearly identify the total wetland and other jurisdictional area affected by the project, replace wetland habitat at a minimum 2:1 ratio (consistent with County policy), and provide for re-establishment, enhancement, and / or replacement of wetland vegetation.	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / CDFG /USACOE	

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Oakview Master Plan Mitigation Monitoring and Reporting Program

<i>Impact</i>	<i>Mitigation (RS)</i>	<i>Implemented by</i>	<i>When Implemented</i>	<i>Monitored By</i>	<i>Verified By and Date</i>
5.3-4 (Continued)	5.3-4(b) A detailed erosion and sedimentation control plan should be prepared and implemented during construction on the site. The plan should contain detailed measures to control erosion of stockpiled earth and exposed soil, provide for revegetation of graded slopes before the first rainy season following construction, and specify procedures for monitoring the plan's effectiveness. The revegetation component of the plan should be consistent with the Landscape and Vegetation Management Plan required by Mitigation Measure 5.3-1(a).	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA/DPW	
5.3-4 (Continued)	5.3-4(c) The bridge or arched culvert proposed for the Marinwood Avenue crossing of Miller Creek should minimize disturbance to jurisdictional waters and riparian vegetation by designing it to conform with the County's minimum roadway width standards and restricting abutments to the upper channel banks. Construction should be performed during the low flow period in the creek (from June through October), and construction debris should be kept outside of the creek channel by using silt fencing or other effective methods. Replacement planting with native trees and shrubs should be provided adjacent to the structure as part of mitigation following completion of bridge construction.	Applicant	Development Plan / Prior to Issuance of Grading Permit	CDA / DPW	

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Impact	Mitigation (RS)	Implemented by	When Implemented	Monitored By	Verified By and Date
5.3-6 Disruption of Fish and Wildlife Habitat Site development would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along the Miller Creek corridor.	5.3-6 The following measure would be required to mitigate impacts on wildlife resources: Disturbance within the Miller Creek corridor on the site should be minimized to protect its function for fish and wildlife movement. The proposed bridge or arched culvert crossing should be designed to avoid impeding movement of fish and wildlife along the creek channel, and drop structures under the bridge should be prohibited. Improvements to the existing creekside path should be limited to stabilizing and possibly surfacing, and lighting should be prohibited along the path to minimize disrupting creek use by wildlife at night.	Applicant	Development Plan	CDA-Planning	
Impact 5.3-7 Impacts on Special-Status Plant and Animal Species No special-status species would be affected directly. However, the Miller Creek bridge could affect possible dispersal habitat of special-status turtle, frog, steelhead, and shrimp species, but would not affect other on-site habitat, and would not require confirmation surveys for those species. A possibility remains that raptors not presently occupying the site could establish nests between now and when development occurs which construction activities could destroy or induce raptors to abandon. This would be a potentially significant impact which only can be determined through supplemental field surveys before construction.	5.3-7 If any active raptor nests are established within the vicinity of proposed grading in the future, they should be avoided until young birds are able to leave the nest (fledge) and forage on their own. Avoidance may be accomplished either by scheduling grading and tree removal during the non-nesting period (August 15 through January 14) or, if this is not feasible, by conducting a pre-grading survey for raptor nests.	Applicant	Prior to Issuance of Grading Permit	CDA-Planning	
Visual and Aesthetic Quality					
5.4-1 View from Proposed Lucas Valley Road Entrance From this viewpoint development on the lower parts of the site would dominate the view and contrast with the surrounding grassland area.	5.4-1 Implement the applicant's proposed project landscaping (which includes street trees, a 20-foot wide landscaped area between existing homes on Ellen Drive and Lisa Court and the project site and entry landscaping along Lucas Valley Road at the entrance to the project site) as shown in the Conceptual Landscape Plan. This would break up the form and lines of project site development.	Applicant	Development Plan	CDA – Planning	

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Impact	Mitigation (RS)	Implemented by	When Implemented	Monitored By	Verified By and Date
5.4-2 View from Proposed Lucas Valley Road Entrance Nighttime Nighttime lighting could dominate the view from this viewpoint.	5.4-2 The following measures would be required to be incorporated into the Precise Development Plan as a condition of Master Plan approval to mitigation visual impacts: <ul style="list-style-type: none"> • Shield or focus outdoor night lighting downward and select roadway and pavement surfaces to minimize upward reflected light. • Recess lighting elements within fixtures to prevent glare. • Conceal lights to avoid glare and avoid placing lights too close to objects to prevent reflected glare. • Avoid high-angle high-candela distribution. • Select lighting fixtures which can be shielded after installation, if a problem is identified. • Because light trespass effects are subjective and site-specific, quantifiable criteria (such as controlling the amount of luminescence or restricting certain angles of lighting) usually cannot be identified. For this reason, the applicant should consult a lighting design specialist to determine light source locations, light intensities, and types of light sources for the office buildings. A lighting plan for site roadways and public areas (such as office building parking lots) should be incorporated in the Precise Development Plan as a condition of Master Plan approval. 	Applicant	Development Plan / CC&Rs	CDA-Planning	
5.4-3 View from the End of Erin Drive When viewed from this location, development would appear to dominate.	5.4-3 Same as Mitigation Measure 5.4-1.	Applicant	Development Plan	CDA-Planning	
5.4-4 View from Ellen Drive Development would dominate the surrounding grassland area.	5.4-4 Same as Mitigation Measure 5.4-1.	Applicant	Development Plan	CDA - Planning	

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5.4-5 View Looking Northwest from Highway 101 Northbound The form of Office Building A visible from this viewpoint would dominate the surrounding environment.	5.4-5 Implement the applicant's proposed project landscaping (which includes landscaping around the office area) as shown in the Conceptual Landscape Plan. This would break up the form and lines of project site development.	Applicant	Development Plan	CDA – Planning	
5.4-6 View Looking West from Highway 101 Northbound Office Building B's form would dominate the surrounding environment.	5.4-6 Same as Mitigation 5.4-5	Applicant	Development Plan	CDA – Planning	
Transportation and Circulation					
5.5-1 Existing Plus Project AM and PM Peak Hour Conditions The proposed project and in conjunction with existing traffic conditions would create significant AM peak hour impacts for the Lucas Valley Road / Los Gamos Road, Miller Creek Road / Marinwood Avenue, and Highway 101 Southbound Ramps / Miller Creek Road intersections. Significant PM peak hour impacts would be created for the Lucas Valley Road / Los Gamos Road intersection.	<p>5.5-1 The following mitigations would be required to reduce existing plus project AM and PM peak hour conditions to a less-than-significant level.</p> <p>5.5-1(a) Miller Creek Road / Marinwood Avenue - The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should fund this improvement.</p> <p>5.5-1(b) Lucas Valley Road / Los Gamos Road The recommended mitigation measure at this intersection is the installation of a traffic signal. <u>The applicant should pay its fair share toward this improvement.</u>The applicant should fund this improvement.</p> <p>5.5-1(c) Highway 101 Southbound Ramps / Miller Creek Road Signalization is the recommended mitigation measure at this intersection. The applicant should pay its fair share toward this improvement.</p>	<p>Applicant / Marin County</p> <p>Applicant / Caltrans</p> <p>Applicant / Caltrans</p>	Prior to Issuance of Building Permit	<p>DPW-Traffic</p> <p>DPW-Traffic / Caltrans</p> <p>DPW-Traffic / Caltrans</p>	
5.5-2 Short-Range Cumulative AM and PM Peak Hour Conditions Short Range cumulative conditions would create significant peak hour impacts for the Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road intersections.	5.5-2(a) through 5.5-2(c) The recommended improvements for Miller Creek Road / Marinwood Avenue, Lucas Valley Road / Los Gamos Road, and Highway 101 Southbound Ramps / Miller Creek Road are the same as recommended for Impact 5.5-1.	Same as measure 5.5-1	Same as measure 5.5-1	Same as measure 5.5-1	

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<p>5.5-3 Long-Range Cumulative AM and PM Peak Hour Conditions Long-range cumulative conditions would create significant peak hour impacts for all of the unsignalized study intersections.</p>	<p>5.5-3 The following mitigations would be required to reduce long-range cumulative AM and PM peak hour conditions to a less-than-significant level. The applicant would also pay Northgate Activity Center Plan traffic mitigation fees based on 56 PM peak hour project generated trips that would travel through the Highway 101 / Lucas Valley Road / Smith Ranch Road intersection. The amount of this fee would be offset by 55 percent of the cost of other area-wide improvements financed by the applicant, pursuant to the Board of Supervisors Resolution 84-501.</p> <p>5.5-3(a) Miller Creek Road / Marinwood Avenue Same mitigation measure as 5.5-1(a).</p> <p>5.5-3(b) Lucas Valley Road / Los Gamos Road - Same mitigation measure as 5.5-1(b).</p> <p>5.5-3(c) Highway 101 Southbound Ramps / Miller Creek Road – Same mitigation measure as 5.5-1 (c).</p> <p>5.5-3(d) Miller Creek Road / Las Gallinas Avenue The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.</p> <p>5.5-3(e) Highway 101 Northbound Ramps / Miller Creek Road The recommended mitigation measure at this intersection is the installation of a traffic signal. The applicant should pay its fair share toward this improvement.</p>	<p>Applicant / Marin County</p> <p>Applicant / Caltrans</p> <p>Applicant / Caltrans</p> <p>Applicant / Marin County</p> <p>Applicant / Caltrans</p>	<p>Prior to Issuance of Building Permit</p>	<p>DPW-Traffic</p> <p>DPW – Traffic / Caltrans</p> <p>DPW-Traffic /Caltrans</p> <p>DPW – Traffic</p> <p>DPW – Traffic / Caltrans</p>	

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5.5-7 Project Access Impacts The Lucas Valley Road access intersection would have operational problems.	5.5-7 The project applicant has proposed the following roadway improvements at the Lucas Valley Road access driveway: <ul style="list-style-type: none"> • Construction of an eastbound left-turn lane on Lucas Valley Road at the project entrance. • Construction of an eastbound acceleration lane on Lucas Valley Road. • Construction of a westbound deceleration lane on Lucas Valley Road. 	Applicant / Marin County	Development Plan / Prior to Issuance of Building Permit	DPW-Traffic	

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Air Quality					
<p>5.6-3 Impacts to Sensitive Receptors Dust generation from short-term construction activities associated with development of the project components would cause potential health and nuisance air quality impacts to adjacent land uses.</p>	<p>5.6-3 Master Plan approval should be conditioned to require contractors to incorporate measures to reduce dust and equipment exhaust emissions into construction plans.</p> <p>Emissions from construction activities can be greatly reduced by implementing dust control measures. The significance of construction impacts to air quality is typically determined based on the control measures that will be implemented. Implementation of the measures listed below would reduce the dust impacts associated with grading and new construction to a less-than-significant level:</p> <ul style="list-style-type: none"> • All active construction areas shall be watered at least twice daily and more often during windy periods. Active areas adjacent to residences should be kept damp at all times. • All hauling trucks shall be covered or at least two feet of freeboard shall be maintained. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas and sweep streets daily (with water sweepers) if visible soil material is deposited onto the adjacent roads. 	Applicant	Construction Contract	DPW	

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5.6-3 (Continued)	<ul style="list-style-type: none"> Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas that are inactive for 10 days or more). Enclose, cover, water twice daily, or apply (non-toxic) soil binders to exposed stockpiles. Limit traffic speeds on any unpaved roads to 15 mph. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. Replant vegetation in disturbed areas as quickly as possible. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site. Install wind breaks, or plant trees / vegetative wind breaks on the windward side(s) of construction areas. Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph <u>cause dust clouds to extend beyond the construction site and affect nearby land uses.</u> 				

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Noise					
<p>5.7-1 Land Use Compatibility Impact Noise levels on some proposed residential lots and in the proposed office area would exceed the Noise and Land Use Compatibility criteria set forth by the Noise Element of the <i>Marin Countywide Plan</i>. While indoor noise levels in office structures would conform to County criteria through normal building design, exterior sound levels could result in a potentially significant impact on residents' use of their lots' yards, and interior levels with residents' windows open could conflict with the criteria.</p>	<p>5.7-1 No measures would be required to mitigate noise exposure of proposed office buildings. The following measure would be required to reduce the impact of noise exposure on future residential use of proposed Lots 27 and 28:</p> <ul style="list-style-type: none"> Design property-line privacy fences to shield the backyards of Lots 27 and 28. Fences should be six feet high and of solid construction so that there are no cracks or gaps either in the fence itself or at the bottom. A double-sided wooden fence or board-on-board construction consisting of a minimum of three-quarter-inch thick wood would provide the necessary sound attenuation. A masonry sound wall of the type discouraged by County policy would not be required. Lot-by-lot site plans submitted to the County during design review should show the noise reduction solution selected. Depending on proposed site orientation and noise shielding (in response to the immediately preceding measure), design and build (or require the future homeowners to build) second floors of housing units on Lots 27 and 28 with mechanical ventilation so that windows can be closed to achieve interior noise criteria. 	Applicant	Development Plan / CC&Rs	CDA-Planning	

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<p>5.7-3 Construction Noise During construction, noise levels would be elevated outside and inside existing homes immediately adjacent to the project site boundary.</p>	<p>5.7-3 Countywide Plan Policy N-2.4 requires that measures should be taken during all phases of construction to minimize exposure of neighboring properties to excessive noise levels from construction-related activity. Further, the Noise Element states that the Community Development Agency reserves the right to set hours for construction-related activities involving the use of machinery, power tools, or hammering. The type of construction, site location, and noise sensitivity of nearby land uses would determine the hours of construction. The conditions of approval would specify hours for staging and type of construction activities. In order to implement these policies, the following measures would be required to mitigate the project's short-term construction noise impacts:</p> <ul style="list-style-type: none"> • Adequately muffle and maintain all equipment used on the project site. All internal combustion engine-driven equipment should be fitted with intake and exhaust mufflers which are in good condition. Good mufflers with quieted compressors should result in all non-impact tools generating a maximum noise level of 85 dB when measured at a distance of 50 feet. • Powered construction equipment should be turned off when not in use. • Assign a disturbance coordinator to be available on-site during construction. • Clearly post the name and telephone number of the disturbance coordinator so that neighbors have a contact person at the project site with whom to discuss problems and who can facilitate resolution of these problems. 	Applicant	Construction Contract	CDA-Planning	

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5.7-3 (Construction)	<ul style="list-style-type: none"> Confine residential construction to 8:00 AM to 5:00 PM on weekdays, at least during periods when construction is taking place within 1,000 feet of the nearest existing homes. Construction hours for activity in other parts of the site could be lengthened as appropriate, including commercial construction on Parcel 2. 				

Key:

Monitored By:

CDA- Planning = Marin Community Development Agency – Planning Division
DPW-Traffic = Marin County Department of Public Works – Traffic Division
CDFG = California Department of Fish and Game
USACOE = U.S. Army Corps of Engineers
MMWD = Marin Municipal Water District
BAAQMD = Bay Area Air Quality Management District
Caltrans = California Department of Transportation
MFD = Marinwood Fire Department

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OAKVIEW

Master Plan
Use Permit
Vesting Tentative Map

**Final Environmental Impact Report
Response to Comments Amendment**

COUNTY OF MARIN
COMMUNITY DEVELOPMENT AGENCY

State Clearinghouse No.99032052

DECEMBER 2002

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OAKVIEW

*Master Plan
Use Permit
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***Final Environmental Impact Report
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**OAKVIEW MASTER PLAN / USE PERMIT/ VESTING TENTATIVE MAP
FINAL ENVIRONMENTAL IMPACT REPORT
RESPONSE TO COMMENTS AMENDMENT**

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INTRODUCTION

The *State CEQA Guidelines* requires that the lead agency (Marin County) prepare and certify a Final Environmental Impact Report (EIR) that includes a response to comments on the Draft EIR before considering a project for approval. The Lead Agency may provide an opportunity for review of the Final EIR by the public or commenting agencies, and this review should focus on the responses to comments on the Draft EIR, in accordance with *State CEQA Guidelines* Section 15089.

The lead agency must, however, provide each public agency that commented on the Draft EIR with a copy of the lead agency's proposed response of that agency's comments at least ten days before certifying the Final EIR (see Public Resources Code Section 21092.5). Lead agencies are not required by Public Resources Code Section 21092.5 to provide precertification responses to individuals and organizations that commented on the Draft EIR, although they may choose to do so.

The Marin County *Environmental Impact Review Guidelines* do, however, provide for a minimum ten-day period for review of the Final EIR prior to any action to certify it. The County's guidelines state that the review of a Final EIR shall exclusively focus on the adequacy of the response to comments on the Draft EIR. A separate public hearing to receive testimony on the recommendations to certify or certification of a Final EIR shall not be required. Written comments received on the Final EIR response to comments within the review period deadline shall be considered together with any written or oral response from staff or the EIR preparer, at the time action is taken by the certifying or recommending body to certify the Final EIR.

The County prepared and on June 27, 2002 circulated the *Oakview Master Plan Use Permit Vesting Tentative Map Final Environmental Impact Report*. A Notice of distribution of the Final EIR for review and notice of the public meeting of the Planning Commission to consider a recommendation for certification of the Final EIR was published and began a 14 day review and comment period on the Final EIR ending on July 12, 2002. The Final EIR comment period was re-noticed and extended for an additional 14 days at the request of the community. The extended comment period on the Final FEIR ended on July 26, 2002. On August 5, 2002 the Marin County Planning Commission held a meeting to consider the adequacy and completeness of the *Oakview Master Plan, Use Permit, Vesting Tentative Map Final EIR* in conjunction with their recommendation to the Marin Board of Supervisors for certification of the Final EIR.

In accord with the County EIR guidelines noted above, written responses to comments received at the August 5, 2002 Planning Commission meeting and during the extended 28 day Final EIR review period have been prepared. These responses address issues raised regarding the Final EIR Response to Comments. These written comments and responses present amplifications, clarifications and/or additional information which in some cases result in minor and insignificant modifications to the EIR. They do not, however, raise new or more severe impacts or new mitigations or alternatives not considered in the EIR and do not require recirculation for further review and comment in accordance with *State CEQA Guidelines* Section 15088.5. The written responses together with the comments are incorporated as a minor amendment to the Final EIR.

Written Comments

Written comments on the Final EIR were received from the following agencies, organizations, and individuals. Numbers refer to the order of written comments and their accompanying responses.

COUNTY AND CITY AGENCIES

1. City of San Rafael, Bob Brown, Community Development Director

STATE AGENCIES

2. California Regional Water Quality Control Board, San Francisco Bay Region, Farhad Ghodrati, Environmental Scientist

ORGANIZATIONS

3. Marinwood Association, Walter K. Dods, Officer
4. Lucas Valley Home Owners Association, Inc. Daniel S. Chaffin, M.D., Chair, ZAP Committee
5. Marinwood Advocates for Sensible Planning, Carol Brandt
6. California Native Plant Society, Marin Chapter, John Walters, Chairman-Conservation
7. Marin Conservation League, Kathy Lowrey, President

INDIVIDUALS

8. Larry Kennings, Planning Consultant (on behalf of the project applicant)
9. Marian K. Blanton
10. Stanley R. Farber
11. Susan L. Adams, Ph.D., RN
12. Ron Marinoff
13. Kathleen Gaines & Ray Welch
14. Elaine & Clarence Wiebke
15. Ruth Carter
16. Marian K. Blanton
17. Lisa Lightner, Walter Lightner, Gloria Lightner
18. Sally McGuire
19. Anne and Mac Haralin
20. Maurice Monson
21. David & Paula Snyder
22. Frank K. Luederitz
23. Alan & Nancy Nation
24. Jeffrey and Marjorie Bondy

Planning Commission Meeting Comments

Minutes of the August 5, 2002 Planning Commission meeting are included. These are not verbatim minutes but rather provide a summary of the oral comments made at the public hearing.

Comments received on the Final EIR can generally be classified into one of three categories. These categories are as follows:

1. **Project Merits / Process Comments** -- These comments do not pertain to physical environmental issues but to the merits of the project or pertain to comments on the County's review process. These comments are included in this document although responses to these comments are not necessary. Inclusion of these comments will make the commentor's views available to public officials who will make decisions about the project itself.
2. **Commentor Opinion** -- These are comments from commentors which either support or disagree with the conclusions of specific information included in the Final EIR. Although a commentor may hold a different opinion than the information provided in the Final EIR these comments do not, however, focus on the adequacy of a specific response to comment in the Final EIR. Section 15151 of the *State CEQA Guidelines* states that an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Furthermore, disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts.

In light of section 15151 commentor's opinions are included in this document although responses to these comments are not necessary. Inclusion of these comments will make the commentor's views available to public officials who will make decisions about the project itself. Where appropriate, some additional explanatory information to help clarify information provided in the Final EIR is provided.

3. **Questions Regarding Adequacy of Responses** -- These are comments from commentors who question the adequacy of a specific response to comment provided in the Final EIR. Responses to individual comments requiring clarification of environmental issues regarding the response to comments on the Draft EIR are provided in this document.

In preparing the responses to the comments received on the *Oakview Master Plan, Use Permit, Vesting Tentative Map Draft EIR* in some instances text changes to the Draft EIR were recommended. The text changes recommended in the original Draft EIR text have all been incorporated into the text in the Final EIR. In these instances information that is recommended to be deleted is ~~crossed out~~, and information that is added is underlined.

No additional text changes to the Final EIR are recommended as a result of the comments and responses to the Final EIR.

MASTER RESPONSES

This section provides master responses that have been prepared for selected comment topics to provide a comprehensive analysis of issues raised in multiple comments. These master responses are referred to in the responses to individual comments. These master responses cover the following topics:

- Traffic Short-Term and Long-Term EIR Cumulative Analysis
- County/City of San Rafael Traffic Methodology and Findings

Master Response A – Traffic Short-Term and Long-Term EIR Cumulative Analysis

The Final EIR evaluates study area traffic under short-range and long-range cumulative conditions. Cumulative conditions represent an estimate of traffic growth due to approved or planned development (background growth). The California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) evaluate the potential effects of cumulative growth. For the *Oakview EIR*, two approaches were used to develop first short-range cumulative traffic and then long-range cumulative conditions.

Short-Range Cumulative Analysis

The short-range-cumulative conditions were estimated based on known projects in the vicinity of the study area. The short-range cumulative peak hour traffic was calculated from projects that were currently under construction and those that were approved for construction. The source for the status, location and description of these projects was the County's *Propdev* report.¹ Using *Propdev*, development projects were identified that would be likely to have an affect on study area intersections. This approach was used in the absence of a short-range cumulative travel demand model. This analysis method is known as a "list based" approach, and is recognized as a dependable and effective means of estimating short-range cumulative traffic growth.

As described in *Chapter 2.0 Description of the Proposed Project* the list of the short range cumulative projects (see Exhibit 2.3-1) included nine projects in the vicinity of the project site at the time Marin County issued the Notice of Preparation (NOP) to prepare the Revised Draft EIR for the proposed project. The source of this data was *Propdev 29*, prepared by the Marin County Community Development Agency in August 1999. As a part of the preparation of the response to comments the short-range cumulative traffic analyses was updated based on *Propdev 34* published in February 2002.

The intent of the short-range cumulative analysis was to measure a relatively short horizon (three to four year period) of traffic growth from projects which would likely have a direct impact on the study area intersections. Essentially it is a look at what is known and what is likely to occur in terms of development over the next few years. *Propdev 34* lists a total of 122 projects for all of Marin County. Appendix B of the Final EIR includes an exhibit which lists the ten short-range cumulative projects which were included in the short-range analysis of traffic. These projects were identified based on proximity and on the likelihood that vehicle trips generated from these developments would potentially use study area intersections. The *Propdev 34* projects (with the exception of Lucasfilm)

¹ *Propdev* is Marin County's semi-annual proposed development survey.

fall roughly within a three mile radius of the proposed project. These projects combined were estimated to generate 3,230 daily vehicle trips, 315 AM peak hour trips and 365 PM peak hour trips.

Short-range cumulative estimates of daily and peak hour traffic were developed from the Institute of Traffic Engineers (ITE) *Trip Generation*, 6th Edition. Distribution of peak hour trips is based on a manual assignment of traffic and is based on previous traffic studies including the *Merrydale Assisted Living Facility Transportation Study*, May 1998, *Lucasfilm Grady Ranch / Big Rock Ranch Master Plan EIR*, October 1995 and the Marin County CMA Traffic Model outputs for Year 1999. Model generated origin and destination tables were used for Traffic Analysis Zone (TAZ) 170 (proposed project location) as well as TAZ's in the vicinity of the proposed project.

Comments on the Final EIR short-range cumulative analysis were received related to the residential developments currently underway at Hamilton Field in Novato. These comments are addressed in detail in the body of this document (see Response to Comment 3-A). The short-range cumulative analysis did not include traffic from these projects for the following reasons. The Hamilton Field projects are located well outside the three mile radius of proximity to the project site. At the time of the preparation of the Draft EIR and the Response to Comments it was not possible for Wilbur Smith Associates (WSA), the EIR's transportation analysts, to accurately quantify the number of short-range cumulative peak hour trips associated with Hamilton Field developments that would travel to the study area from Highway 101. Based on WSA's understanding of the existing land uses and the forecast development for the area it was understood that the number of trips likely to travel from Hamilton Field to the Marinwood community would be minimal. The Marin County Department of Public Works analysis² has recently reviewed the ABAG land use projections for 2005 and the CMA transportation model traffic analysis zones for Hamilton Field. This review has determined that 450 residential units (Shea and Centrx Homes) in the Hamilton Field development would distribute an estimated eight vehicle trips to the study area in the morning and the evening peak hours. This level of trip activity would be minimal and have no impact on the Final EIR intersection LOS analysis.

Long-Range Cumulative Analysis

Long-range cumulative traffic conditions were based on the most recent *Marin County CMA Travel Demand Model forecasts*. The long-range cumulative traffic volumes would be expected to occur with the projected *General Plan* land uses for Marin County and the surrounding Bay Area counties. The CMA Model uses a 20 year horizon and identifies proposed growth in the counties of Marin, Sonoma and San Francisco. The focus of the CMA forecast is primarily on Highway 101 traffic and other major arterials in the County. The Final EIR, which considers a long-range cumulative horizon year of 2015, used 75 percent of the projected CMA growth when developing future intersection turning movements.

Exhibit 1 provides a summary of the projected growth used in developing estimates of 2015 peak hour traffic volumes for the Final EIR. The traffic analysis zones shown in Exhibit 1 provide a sample of the data used. The three TAZ's shown are critical in that they reflect projected growth from the CMA model for the project study area and the Silveira Ranch and St. Vincent's properties.

² See Marin County, Department of Pubic Works Memorandum, Art Brook, Transportation Engineer, Re: Oakview Subdivision EIR Traffic Analysis, October 24, 2002 in Appendix A.

Exhibit 1
Summary of CMA Travel Demand Model Growth Forecast (2015)

Traffic Analysis Zone (TAZ)	Development Area	Employees	Commercial - Square Feet	Dwelling Units
170	Oakview	295	84,820	16
169	Silveira	528	151,942	738
174	St. Vincent's	527	151,727	737
Totals		1,350	388,489	1,491

Source: County of Marin, Department of Public Works, October 2002.

It is worth considering that forecasting peak hour intersection turning movement volumes 15 to 20 years into the future is a speculative task. No traffic model or methodological approach can claim a high degree of accuracy to this level of detail. What can be accomplished is that a reasonably sufficient order of magnitude, in terms of traffic growth is developed, distributed to the future network and evaluated. The Final EIR has provided a long-range cumulative traffic analysis which takes into consideration the CMA estimates of future land use, dwelling units and jobs in the local vicinity of the proposed project as well as the regional intra-county growth conditions. Using existing peak hour traffic volumes as a baseline, future estimates of traffic growth have been developed and conservatively distributed to the study area network.

A number of steps were taken to develop long-range, intersection peak hour turning movement volume estimates. The CMA highway mainline forecasts were used to develop an average peak hour background traffic growth percentage between 1999 and 2020 highway volumes. The peak hour average growth for the three studied highway sections was 17 percent (AM peak hour) and 23 percent (PM peak hour) when adjusted for 2015 conditions. CMA Traffic Model network peak hour link volumes (1999 and 2020) were compared to the estimates of background traffic growth in the study area. Peak hour growth percentages were applied to existing peak hour intersection turning movement volumes.

A conservative approach toward the analysis of long-range cumulative impacts was followed in the Final EIR. For instance, vehicle trips associated with the Lucasfilm Grady Ranch project (340 employees) located west of the project site were developed independent of the CMA forecast and added to the long-range network for analysis. Exhibit 1 shows that the Oakview project was included in the CMA forecast model. These trips were not taken out of the network when the Final EIR developed project trips were overlaid onto the 2015 cumulative network. The approach of using both a growth factor and project based trip generation undoubtedly results in some double counting of vehicle trips in the area. The approach was warranted however based on the comparisons (1999 to 2020) of network link volumes and results in a conservatively high estimate of cumulative traffic.

The Final EIR 2015 roadway network included the following improvement projects as part of the traffic analysis.

- The Highway 101 Gap Closure Project will be completed, providing a reversible HOV lane from North San Pedro Road to Lucky Drive, and one auxiliary lane southbound from Lucas Valley Road to Mission Avenue, San Rafael.

Highway 101 / Lucas Valley Road southbound ramp improvements. The programmed improvements to the Highway 101 southbound ramps include the following:

- The existing southbound loop off-ramp would be removed and replaced with a direct off-ramp which will align with Los Gamos Road creating a north (southbound) approach at this intersection. This intersection would be signalized.
- A new loop on-ramp would be constructed on the north side of Lucas Valley Road. This ramp would eliminate the need for a left-turn lane for westbound Lucas Valley Road traffic headed southbound on Highway 101. A free right-turn lane would be provided for westbound traffic headed south on Highway 101.
- The existing westbound left-turn lane at the Highway 101 southbound on-ramp, which extends under the underpass, would be converted to a through lane. That additional through lane would be carried through the intersection with Los Gamos Road and would merge back to a single westbound through lane west of this intersection.
- An additional eastbound through lane would be constructed from just west of Los Gamos Road to just prior to the Highway 101 underpass. At the intersection of Los Gamos Road, the additional through lane would occupy what is currently an exclusive right-turn lane.
- The existing southbound on-ramp from eastbound Lucas Valley Road would be reconstructed and would provide two on-ramp lanes and an HOV lane. The HOV lane would begin on the on-ramp.

Because free right-turn lanes would be provided for each of the southbound on-ramps, the intersection of Highway 101 Southbound Ramps / Lucas Valley Road would cease to exist. No movements at this location would be controlled. For this reason the intersection was not analyzed under long-range cumulative conditions.

County/City of San Rafael Traffic Methodology and Findings

Essentially there are no significant differences in the way EIR Transportation sections are prepared between Marin County and the City of San Rafael. The CEQA requirements of project impact disclosure, evaluation of cumulative conditions and the development and evaluation of impact mitigation measures do not change from one agency to another.

Significance Criteria

Significance criteria have been developed by the County and the City of San Rafael by which transportation facilities are evaluated. Failure of a freeway segment or an intersection to meet significance criteria thresholds results in a finding of unacceptable operations and is deemed a significant impact requiring mitigation. The County currently considers an impact to be significant if it causes the intersection, or a movement of the intersection, to fall below level of service (LOS) D. Causing further delay at an intersection at or below LOS E is also considered to be a significant impact.

LOS is a qualitative measure used to describe operational conditions within a traffic stream. Six levels of service are defined for both intersection and freeway operations. They are given letter designations from A to F, with A representing the best operating conditions and LOS F the worst. The County of Marin has designated LOS D as the lowest (worst) acceptable LOS category for intersection operations. The City of San Rafael considers an LOS mid-D standard for signalized intersections

within the Northgate Activity Center Plan Area. The County of Marin has conditionally adopted the mid-D LOS standard for the Lucas Valley / Highway 101 interchange. The remaining study area intersections are within the jurisdiction of Marin County and the LOS D threshold is used to determine significant environmental impacts at these intersections.

Unsignalized intersections were considered to be significantly impacted if a movement of the intersection fell below LOS D. Causing an increase in delay at an intersection at or below LOS E is also considered to be a significant impact. Highway 101 segments were analyzed using the methodology described in the 2000 Highway Capacity Manual (HCM), Chapter 23. The concept of density was used to define LOS. In order to provide a means of measuring the project's peak hour contribution to freeway traffic a volume-to-capacity (V/C) ratio was also used. The procedure for calculating the V/C ratio of a freeway segment usually employs a numerical figure of 0.01 (or one percent) as the smallest quantified change in the V/C ratio. However, for the Final EIR the V/C analysis quantified the change in the V/C ratio from project contributions in increments of 0.001 (or 1/10 of one percent). This was done in order to show as accurately as possible the smallest measurable contributions of the project to the V/C ratio for segments of Highway 101.

Analysis Methodology

The basic analysis methodology used to evaluate freeway segments, arterial segments and signalized and stop-controlled intersections is all based on the Transportation Research Board (TRB) Highway Capacity Manual (HCM). The current edition of the HCM was updated in 2000, previous versions still in use under some conditions are September 1997 and October 1994.

While the underlying analysis methodology is constant, there are a number of different software packages which apply HCM methodology. Therefore, it is not unusual to produce different LOS evaluation results using different software applications at the same location with the same traffic volumes. The differences are typically within five to ten seconds of delay but have been found to be as great as two service levels (LOS B compared to LOS D for instance). The reasons for the differences are not always readily explainable, however some software packages are designed to evaluate intersections as stand alone facilities while others measure conditions as coordinated networks.

The intersection analysis software used for the *Oakview EIR* was TRAFFIX, which was developed by Dowling Associates and has been used and recognized as a reliable analysis tool for several years. TRAFFIX provides a range of options which are valuable in terms of running and tracking various traffic scenarios under multiple conditions. It is EIR preparers understanding that the City of San Rafael uses Synchro 5 to analyze signalized intersections. The difference between the two software's is that Synchro 5 can be used to analyze traffic signals within an interrelated network whereas TRAFFIX provides HCM analysis for individual study intersections.

Analysis of Cumulative Conditions

Master Response A provides an explanation of how *Propdev 34* and the CMA Travel Demand Model were used in the Final EIR to develop traffic growth forecasts for the short-range and long-range cumulative conditions. It is the EIR preparers understanding that the City of San Rafael has, and continues to develop a citywide traffic model used to generate cumulative forecasts for local planning projects. The core of the city model is the county CMA forecasts for Highway 101 and other major local arterials. Both the county and the city use a ME2 model software package. The city has developed its model to focus on local critical intersections and road segments, and to analyze the impacts of various projects throughout the city and to some extent in the Oakview study area. The

county CMA model as noted, focuses on Highway 101 and has a regional orientation. Therefore, the city model develops short-range and long-range cumulative conditions using a different approach than that which was used for the Final EIR. Using a different approach as well as different background data guarantees only that there will be differences in the analysis results of Final EIR study intersections between the EIR and the city efforts.

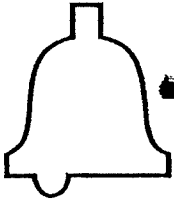
It is important to note that during the preparation of the Draft EIR, Marin County requested the use of or output data from the City of San Rafael traffic model.³ It was WSA's understanding that the city, as lead agency for the St. Vincent's/Silveira project was doing current traffic modeling for that proposed project. It was WSA's intent to review the city forecasts and hopefully to use their approach (model) in order to maintain consistency between the studies. The City however was unable to accommodate the County's request.⁴ From that point, WSA focused on the use of the county CMA model for the development of long-range cumulative traffic estimates. The city continues to point to differences in analysis findings between their work and the Final EIR. Such differences under the circumstances are unavoidable, but not necessarily significant in terms of impact disclosure and required mitigation measures. The city comments related to specific analysis differences are addressed in Response to Comment 1-A.

³ See letter to Nadar Mansourian, City of San Rafael from Tim Haddad, Marin County Community Development Agency, March 10, 2002.

⁴ See letter to Tim Haddad, Marin County Community Development Agency from David Bernardi, San Rafael Department of Public Works, March 14, 2000.

RESPONSE TO WRITTEN COMMENTS

All comments submitted to the County on the Final EIR in letters 1 through 24 are presented in the following pages. The original letters are reproduced, and comments are numbered for referencing with responses. Some responses refer commentors to other comments or responses in this section or to the pages of the Final EIR where specific topics are discussed.



San Rafael

LETTER 1

RECEIVED
JUL 12 A 10:56
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Mayor
Albert J. Boro

Council Members
Paul M. Cohen
Barbara Heller
Cyr N. Miller
Gary O. Phillips

July 11, 2002

Tim Haddad
Environmental Planning Coordinator
Marin County Community Development Agency
3501 Civic Center Drive Room 308
San Rafael, CA 94903

Re: Final Environmental Impact Report – Oakview Project (State Clearinghouse No. 99032052)

Dear Mr. Haddad:

The City of San Rafael continues to have questions related to the traffic analysis for the proposed project. We would appreciate further Planning Commission consideration of the following as they determine the adequacy of the FEIR:

- A**

• The City's recent traffic counts and subsequent traffic modeling indicates that the Smith Ranch Road/101 Northbound off-ramp experiences 40.9 seconds of delay during the AM peak which equates to LOS D. The FEIR in Exhibit 5.5-3 indicates 22 seconds of delay, LOS C. This discrepancy continues throughout the analysis. The Short-Range Cumulative analysis summarized in Exhibit 5.5-11 shows delay of 35.3 seconds/LOS D, while the City's information suggests 57.4 seconds/LOS E. For the Long-Range Cumulative analysis summarized in Exhibit 5.5-13, the City projects LOS D in both the AM and PM peak periods, compared to the FEIR's conclusion of LOS B. These are significant differences.
- B**

• A number of the mitigation measures for intersection improvements require the payment of a proportional amount of the improvement cost by the project. Until the improvements occur, the County's congestion limits would be exceeded. Since there is relatively little development potential remaining in the vicinity of the Oakview development proposal, how realistic is it to expect that the improvements will be made within a reasonable time period? Should not the County require the installation of the improvements by the developer, with provisions for reimbursement from future development projects?
- C**

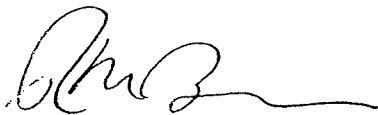
• While the City appreciates consideration of an alternative land use to the proposed office development, we continue to have concerns about the appearance

Community Development Department
1400 Fifth Avenue, P.O. Box 151560, San Rafael, CA 94915-1560
Phone: (415)485-3085 Facsimile: (415)485-3184

of this alternative from Highway 101. One benefit of an assisted living facility would be a reduction in the amount of the site which would be developed, particularly for parking. The description of the assisted living alternative in the FEIR indicates that 128 parking spaces would be provided. This amount of parking seems excessive for a 150 unit assisted living facility. The ITE's Parking Generation manual, 1987, indicates a need for 0.31 spaces per assisted living unit. A recent analysis by Fehr & Peers Associates for the Elder Care Alliance project in San Rafael compared the ITE parking rate with the actual parking utilization of three San Rafael assisted living projects and recommended 0.20 spaces per assisted living unit plus 0.91 spaces per day shift employee, resulting in a combined rate of 0.44 spaces/unit. These studies suggest that a 150 unit assisted living facility would require between 46 and 66 parking spaces, about one-third to one-half the number of spaces being proposed.

Once again, thank you for the opportunity for input on this project of mutual interest.

Sincerely,

A handwritten signature in black ink, appearing to read 'Bob Brown', with a long horizontal flourish extending to the right.

Bob Brown
Community Development Director

RESPONSE TO LETTER 1 -- CITY OF SAN RAFAEL, BOB BROWN, COMMUNITY DEVELOPMENT DIRECTOR

Response to Comment 1-A

The comment refers to the AM peak hour LOS analysis findings for the study intersection of Smith Ranch Road / Highway 101 Northbound off-ramp. The comment states that the existing conditions analysis of this intersection conducted by WSA in the Final EIR is different from the "recent traffic counts and subsequent traffic modeling" conducted by the City of San Rafael. The difference is a WSA calculation of 22.0 seconds of delay, LOS C and a City of San Rafael calculation of 40.9 seconds of delay, LOS D. This represents a difference of one service level and 18.9 seconds of delay. The comment continues to compare findings of the Final EIR short-range and long-range cumulative LOS analysis at this intersection again finding that they are different, with the City analysis showing higher delay and in some cases worse LOS.

The response to this comment in terms of the existing conditions findings is that the peak hour traffic volumes, the LOS analysis assumptions and LOS calculations used in the Final EIR are documented and are part of the public record. It is not unusual that individual intersection analysis will differ when there are a number of agencies working in the same area using different traffic count data. Issues of specific intersection analysis consistency are typically handled between agencies and their consultants. It is only when numbers, and analysis assumptions related to intersection operations are compared can meaningful discussions and if necessary adjustments be considered. Unfortunately, the "recent traffic counts and subsequent traffic modeling" conducted by San Rafael was not provided and therefore WSA cannot compare or comment on these findings.

It is demonstrated in the Final EIR that the proposed project would have a marginal impact on the operations of the Lucas Valley Road/Highway 101 northbound ramps intersection, particularly during the AM peak hour. The reason for this is that the majority of project related vehicle trips using this intersection are related to the residential component. The residential component consists of 28 single family units expected to generate 29 AM peak hour vehicle trips (7 inbound and 22 outbound). Project traffic added to existing traffic at this intersection accounts for less than a two second increase in delay. This small increase would be expected to remain relatively constant with the Final EIR existing volumes or the City existing volumes. Therefore, the findings and the subsequent mitigation proposed in the Final EIR for this intersection would not substantially change under existing conditions where the AM peak hour operated at LOS C or LOS D. There would be no new significant impacts related to the project as documented in the FEIR as a result of a change in existing operations from LOS C to LOS D at the Smith Ranch Road/Highway 101 Northbound off-ramp.

The comment continues to point out differences in LOS findings at the Smith Ranch Road/Highway 101 Northbound off-ramp intersection under short-range and long-range cumulative conditions. Once again the response recognizes that differences in analysis findings at specific intersections are not uncommon and can be expected when the baseline data and the land use assumptions may be different. In the case of cumulative conditions the City of San Rafael is basing a comparison of findings on the forecasts of the city developed model. It is important to understand that the Final EIR does not use the City of San Rafael developed model for any traffic operational analysis. In the Final EIR short-range cumulative conditions are based on vehicle trips that would be generated from approved projects within the study area. The source for the development of short-range (four years or less) forecast is *Propdev 34*. These forecasts represent the short-range cumulative traffic volumes that would be

generated by existing plus project, plus approved projects in the general area. Long-range cumulative traffic conditions analyzed in the Final EIR are based on the most recent *Marin County Congestion Management Agency (CMA) Travel Demand Model* forecasts.

Without being able to review the recent work conducted by the City of San Rafael, to consider the baseline volumes and to understand the land use and employment assumptions used, it is not possible to further respond to these comments. .

Response to Comment 1-B

The Final EIR identifies a total of four study area intersections which would require signalization in order to operate at acceptable LOS under short-range and long-range cumulative conditions. In addition, the report identifies the need for proposed improvements to the Highway 101/Lucas Valley Road southbound ramps. The project contributes traffic to all of the impacted intersections, although the intersections are shown to fail under cumulative conditions with and without project generated traffic. The Final EIR identifies the percent of the project's traffic contribution at each impacted location. The project would be required to pay a proportional amount of the needed improvement cost based on the percent contribution of project traffic.

The County could require that the project applicant install the needed improvements, with the exception of the proposed Highway 101/Lucas Valley Road southbound ramp improvements, as a condition of project approval. If the project were to pay for the signalization of the impacted intersections provisions would have to be made to insure reimbursement from future development projects in the area.

Response to Comment 1-C

The comment regarding the proposed parking supply of 128 spaces for the 150 unit assisted living facility is correct. Based on available data and industry standards a parking supply between 50 and 70 spaces would be sufficient for the assisted living residential use. Should the Assisted Living Residential option become the approved project, the parking supply should be scaled back to an appropriate level.



Winston H. Hickox
Secretary for
Environmental
Protection

San Francisco Bay Region

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Gray Davis
Governor

LETTER 2

Date: July 15, 2002
File No.: 2158.02 (SM)

Mr. Tim Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, #308
San Raphael, CA 94903-4157

RECEIVED
2002 JUL 16 P 4:16
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Re: Oakview Master Plan/Use Permit/Tentative Map Final Environmental Impact Report (SCH# 1995063038)

Dear Mr. Haddad:

We have reviewed Final Environmental Impact Report (EIR) for the above referenced Master Plan and Use Permit and offer the following comments with which the Regional Water Quality Control Board (RWQCB) is concerned. These comments are to advise the County of Marin and the project sponsor of our concerns, so they may be incorporated into the planning and design process. Regional Board staff is available to work with the project sponsor to develop a project in compliance with State water quality standards.

A The proposed project consists of the subdivision of a 106.3-acre parcel of land into two lots. These two lots will be used for the future development of 28 residences and professional offices. The project also includes the construction of a bridge over Miller Creek at Marinwood Avenue.

As mentioned in Section 5.2-8 Site Erosion and Downstream Sedimentation and Flooding, a Storm Water Pollution Prevention Plan (SWPPP) needs to be developed and implemented in order to minimize impacts the project will have on water quality. A SWPPP is required by the State Construction Storm Water General Permit (General Permit). The SWPPP should be consistent with the terms of the General Permit, the Manual of Standards for Erosion & Sedimentation Control Measures by the Association of Bay Area Governments (ABAG), policies and recommendations of the local urban runoff program (city and/or county), and the Recommendations of the RWQCB. Preparation of a SWPPP should be a condition of development. Implementation of the SWPPP should be enforced during the construction period via appropriate options such as citations, stop work orders, or withholding occupancy permits.

The project proposes to construct a bridge over Miller Creek at Marinwood Avenue. The removal of vegetation and the construction of the bridge will cause bank erosion and increased sedimentation in the creek. The impacts due to construction should be minimized and sedimentation should be controlled during and after construction. This should be done by developing and implementing an erosion control plan, or equivalent plan. This plan should be

California Environmental Protection Agency

included in the SWPPP. Specifications of all control measures that will be used or anticipated to be used should be included in the Erosion Plan. The parameters include, but are not limited to, the following:

- Stabilize and prevent erosion from temporary conveyance channels and outlets.
- Use sediment controls and filtration to remove sediment from water generated by dewatering or collected on-site during construction. For large sites, stormwater settling basins will often be necessary.
- Limit access routes and stabilize access points.

The project may impact water quality and beneficial uses of waters of the State by increasing pollutants in stormwater and altering the hydrograph of the receiving water. A plan for both construction and post-construction project design measures and other best management practices should be prepared. Best Management Practices are required to reduce the amount of urban stormwater runoff, including pesticides, metals, nutrients, and sediments in the runoff from the project site. Regional Board staff recommend obtaining a copy of "Start at the Source," a site planning and design guidance manual for stormwater quality protection. The manual provides innovative design techniques for structures, parking lots, drainage systems, and landscaping. This manual may be obtained at most cities planning offices.

The EIR specifies that the amendment to the General Plan allow for construction that would disturb more than five acres of land. The size of the project requires that, as stated in Section 5.2-7 of Exhibit 3.0-1, Site Erosion and Downstream Sedimentation and Flooding Mitigation, the project be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity (General Permit). This can be accomplished by filing a Notice of Intent (NOI) with the State Water Resources Control Board, Division of Water Quality. Copies of the General Permit and NOI can be obtained from the State Board's web page, www.swrcb.ca.gov/stormwtr/construction.html, or by contacting the Board at (510) 622-2300. The project sponsor must propose and implement control measures that are consistent with the General Permit and with the recommendations and policies of the local agency and the RWQCB.

The RWQCB is in the process of developing Total Maximum Daily Loads for water bodies listed under Section 303(d) of the Clean Water Act and will be establishing water quality targets for these watersheds. The EIR states in 5.2-10 Water Quality – Violation of Water Quality Standards, that the receiving waters of Miller Creek and Gallinas Creek will be impacted. Both of these creeks are listed under section 303(d) of the Clean Water Act as being impaired by diazinon. This project has the potential to contribute to significant adverse water quality impacts because it could result in the discharge of sediment to an existing water body that is already impaired. The associated Mitigation plan acknowledges the need to limit potential sediment sources from the site and to employ Best Management Practices throughout construction.

For further information about our regulations and requirements, please refer to the **General Comments** documents, which discusses the Regional Board's areas of responsibility, and which should be of assistance to the project sponsor.

If you have any question, please call Farhad Ghodrati at (510) 622-2331.

Sincerely,

A handwritten signature in cursive script, appearing to read "Farhad Ghodrati".

Farhad Ghodrati
Environmental Scientist

Enclosure: General Comments
Cc: SCH# 1995063038

***RESPONSE TO LETTER 2 -- CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
SAN FRANCISCO BAY REGION, FARHAD GHODRATI, ENVIRONMENTAL SCIENTIST***

Response to Comment 2-A

The letter from the California Regional Water Quality Control Board, San Francisco Bay Region, does not raise any questions regarding the adequacy of the Draft EIR or the responses to the comments on the Draft EIR. Rather the letter provides information about the Regional Board's areas of responsibility and its regulations and requirements. According to the letter the comments are provided to advise the County of Marin and the project sponsor of the Regional Board's concerns so they may be incorporated into the planning and design process. Furthermore, according to the letter the Regional Board staff is available to work with the project sponsor to develop a project in compliance with State water quality standards.

RECEIVED

MARINWOOD ASSOCIATION

77 Mark Drive, Suite #8

San Rafael, CA 94903

2002 JUL 12 P 1:44

Phone: 491-7770 Fax: 491-7777

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

LETTER 3

HAND DELIVERED

July 12, 2002

Mr. Tim Haddad
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Re: Oakview Final Environmental Impact Report

Dear Mr. Haddad:

These comments are submitted on behalf of the Marinwood Association - a volunteer community organization of approximately 40 years existence. We are a qualified California non-profit organization. These comments are concurred in by Mr. Fran Rowley the President, Mr. Robert V. Chin, Vice President and Ms. Marilyn Williams, Secretary. I am the Treasurer and immediate past Vice President - Treasurer. In addition, I respectfully note that I am a Director of the Marinwood Community Services District and have lived in Marinwood for 32 years. These comments are not made on behalf of the Marinwood Community Services District but I do think it is fair to identify myself as a member of that Board of Directors.

We respectfully submit that the Final EIR is either insufficient in the following respects or that the conclusions are unfounded:

- I. TRAFFIC: Please see mitigation 5.5 - 1(a)(b), 5.5 - 2(a) - (c), 5.5 - 3(a) and (d) and 5.5 - 7 [Please compare Exhibit 4.1 - 1 at page 4.0 - 14].

Mr. Tim Haddad
Marin County Community Development Agency
July 12, 2002
Re: Oakview Final Environmental Impact Report

A For many years, we had only one traffic light controlled intersection in the community, Lucas Valley Road and Las Gallinas. Very shortly, we will have three - Lucas Valley Road at Miller Creek, Lucas Valley Road at Las Gallinas and Lucas Valley Road at the Highway 101 interchange. Adding traffic light controlled intersections at Miller Creek and Marinwood and Miller Creek and Las Gallinas plus the light at Lucas Valley and the new entrance into and out of this project arguably does not mitigate but accentuates the traffic problems. The community as a whole does not want lights at Miller Creek and Las Gallinas and Miller Creek and Marinwood. If a light is added at Lucas Valley at the entrance into the project there will then be three lights within the space of one mile. We would prefer not. The costs for these traffic signals to be borne by the developer could be better utilized (please see remarks below addressed to FIRE).

See 2.1 - 21. The Cumulative Projects Evaluation does not address at all the development currently taking place at Hamilton nor any construction north of Miller Creek/St. Vincent's Drive much less the St. Vincent's/Silvera project.

II PRIVACY: Please see mitigation 5.4 - 3 and 4, Exhibit 4.2 - 1, page 4.0 - 35: Ridge Lines and photo montage Exhibits 5.4 - 10 and 11.

B The mitigation suggested is insufficient. The proposed homes on Erin Drive will totally dominate the view from the existing homes on Erin Drive and totally extinguish any existing backyard, bedroom and outdoor living space privacy of those existing homes. We suggest that no mitigation of this vital issue is possible and that these homes should be deleted.

III. FIRE PROTECTION: Please see 3.0 - 33, mitigation 5.8 - 4.

C The effect of this project on the ability of the Marinwood Fire Department to provide adequate service is insufficiently discussed. The District currently has 10 regular fire fighters and three vehicles. One such vehicle is in need of replacement. Although an additional 20 houses (deleting the 8 from Erin Drive) would not create an undue burden even given the strained entrance/exit at Lucas Valley Road, a multi-story commercial building much less a residential care facility with only one access road (Marinwood Avenue from Miller Creek) which necessarily passes a commercial shopping area and a high density residential area (Casa Marinwood) could place a burden on the department. We suggest that an appropriate mitigation would be for the

Mr. Tim Haddad
Marin County Community Development Agency
July 12, 2002
Re: Oakview Final Environmental Impact Report

developer to utilize the funds which they obviously have available and earmarked for traffic lights at Las Gallinas and Miller Creek and Marinwood and Miller Creek for a suitable replacement fire engine for the District.

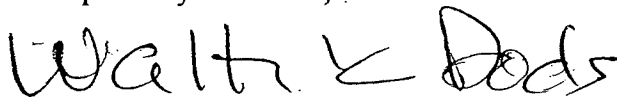
IV. ADDITIONAL COMMENTS: Please see mitigation 5.3 - 6 at 3.0 - 22 and 5.3 - 8: Wildlife.

D Although there is some minimal discussion of the effects of the project on the fauna around the Miller Creek riparian corridor, there is an insufficient discussion of the effects of the project on fauna throughout the rest of the site namely deer and wild turkey. On many walks through the area, I have at times seen two or three groups of deer numbering 12 - 15 in a group suggesting that there could well be as many as 50 or 60 deer regularly living in the area. In addition, 12 - 15 wild turkeys can be seen at various times at various places within the site.

E Lastly, please see 2.0 - 11: Pedestrian/Bicycle Access. No "mitigation"/improvement to the trails/path along the south side of Miller Creek between Marinwood Avenue and Las Gallinas Avenue is necessary or desired. This is one of the very few remaining totally natural places which is easily foot accessible. We respectfully suggest that any "improvement" is contraindicated and would be a derogation of what is now suitable and acceptable.

These comments may not be as succinct or in the best order but it was extremely difficult to read and digest all of this material and confer appropriately with my colleagues with the very limited time period.

Respectfully submitted,



WALTER K. DODS

Officer - Marinwood Association

WKD/mfh

cc: Ms. Carol Brandt - MASP

Mr. Fran Rowley - President, Marinwood Association

Ms. Genevieve Bolding - President, Marinwood CSD

Mr. Thomas D. Horne - CSD District Manager (for Fire Department)

RESPONSE TO LETTER 3 -- MARINWOOD ASSOCIATION, WALTER K. DODS, OFFICER

Response to Comment 3-A

The commentor states that the proposed mitigation of providing traffic signals may accentuate traffic problems in the area rather than provide improved conditions.

The Final EIR, under long-range cumulative conditions proposes the signalization of four study intersections along Miller Creek Road. The study intersection of Lucas Valley Road/Los Gatos Road would also be signalized as part of the proposed Highway 101 southbound ramps improvement project. The comment is understood to suggest that signals, by improving traffic flow in the area could result in attracting more freeway pass-through traffic during peak morning commute periods than is currently experienced. This situation could potentially occur if freeway drivers determine that a signalized Miller Creek Road and Las Gallinas Avenue afford a time savings to their destination over congested freeway conditions. This pass-through (freeway jumpers) activity currently exists and has been documented and studied by Marin County.

The new signals, if installed would require operational coordination with the existing signals in the area in terms of cycle timing and phasing. It would be necessary for Marin County to coordinate with Caltrans and insure that traffic operations in the area are improved and safe as a result of signalization. Traffic signals are designed to operate with significantly higher numbers of vehicles per hour than are stop-controlled intersections. Signals, in most cases, provide a better level of control over high volume traffic operations with the potential to coordinate and meter flows within a signalized network. The study area could use a signalized network to benefit local traffic needs over those of freeway, pass-through traffic. It is noted however that the close proximity of the Highway 101 interchange would influence how traffic signals in the study area are operated.

The comment indicates that a signal has been proposed for Lucas Valley Road at the entrance to the residential component of the project. The Final EIR does not propose a signal at this location and no analysis has been conducted for a signal at this location.

Cumulative Evaluation

The second part of the comment refers to the evaluation of cumulative projects. The comment notes that current development projects at Hamilton Field are not addressed. This is correct for the short-range cumulative analysis which did not include the *Propdev 34* projects located in Novato at Hamilton Field. The rationale at the time the Oakview project analysis was scoped was to provide a short-range analysis (approximately three to four years out) that evaluated the potential impact of local approved projects that could directly effect peak hour operations at the study area intersections. The Hamilton Field projects were not considered because it was not possible to gauge the impact of these residential projects on the individual study area intersections. Further it was understood that the Final EIR long-range cumulative analysis would include the overall impact of these residential projects under build out (2015) conditions. The Hamilton Field projects are described in detail as part of this response.

The comment further states that the cumulative analysis does not consider development (unspecified) north of Miller Creek Road nor does it consider the potential development of the St. Vincent's and Silveira properties. The Final EIR short-range analysis includes all approved or under construction projects that are identified in the *Propdev 34* located within the local area. The long-range (2015)

cumulative analysis based on the County CMA model forecasts includes overall growth in the area from the build-out of a number of projects which include Hamilton Field and St. Vincent's/Silveira. Appendix B of the Final EIR provides background data related to the analysis of short-range and long-range cumulative traffic. The Final EIR, specifically describes the steps taken to insure that the St. Vincent's/Silveira and the Lucasfilm projects were accounted for in the analysis of long-range conditions.

The above mentioned Hamilton Field residential developments consist of the following three projects:

Capehart/Hillside - At build out the project will develop 351 affordable town house units and 297 affordable apartment units. Phase 1, currently under construction will construct 161 town house units. Phase 1 completion estimated within two years.

Pointe Marin - Formerly Rafael Village. At build out the project will develop 344 single family units and 100 elderly attached units. Phase 1, currently under construction will construct 186 single family units and 100 elderly attached units. Phase 1 completion estimated less than two years.

Hamilton Meadows - Project delayed (methane gas). At build out the project will develop 235 single family units. The project has been cleared for construction. Construction of the entire project estimated within two years.

Exhibit 2 shows the estimated trip generation associated with the currently under construction (Phase 1) Hamilton Field projects. While completion of Phase 1 for all three projects is estimated at two years, it is noted that full occupancy of all units may extend a year or two beyond the completion date depending on market conditions and other factors.

Exhibit 2 provides an unadjusted overview of the vehicle trip generation associated with the Hamilton Field residential developments currently under construction. This trip generation estimate is not adjusted for internal trip activity at Hamilton Field. Typically, internalization of trips accounts for a reduction of 20 percent or less and is tied to the existence of employment and commercial uses on-site.

The peak hour trips from these developments will primarily affect traffic on Highway 101 in the vicinity of the proposed project. Approximately 75 percent of the peak hour residential development trips would be expected to travel south of Hamilton Field on Highway 101. This translates into approximately 225 southbound Highway 101 trips during the morning commute hour and 255 northbound peak hour commute trips during the afternoon peak hour. Adding these trips to the Final EIR short-range cumulative plus project Highway 101 segment analysis does not change the LOS findings. The segments would continue to operate at LOS F in the morning and LOS E during the afternoon commute. Because these vehicle trips are added to the cumulative background traffic they do have the effect of lowering the Oakview project peak hour percent contribution percentage to the Highway 101 segments.

Exhibit 2

Summary – Hamilton Field Trip Generation Estimates (Phase 1)

Trip Rates			AM Peak Hour			PM Peak Hour		
Land Use	Unit Measure	Daily Rate	Rate	In	Out	Rate	In	Out
Single Family ^a	Units	9.57	0.75	25%	75%	1.01	64%	36%
Town House ^b	Units	5.86	0.44	17%	83%	0.54	67%	33%
Elderly Housing ^c	Units	3.48	0.07	63%	37%	0.10	59%	41%
Project Trip Generation								
			AM Peak Hour Trips			PM Peak Hour Trips		
Project	Size/Units	Daily Trips	Total	In	Out	Total	In	Out
Capehart/Hillside	161 Town Homes	944	71	12	59	87	58	29
Pointe Marin	186 Single Family	1,781	140	35	105	188	120	68
	100 Elderly Units	348	7	4	3	10	6	4
Hamilton Meadows	235 Single Family	2,249	177	44	133	238	152	86
Totals	682	5,322	395	96	299	523	337	186

Source: City of Novato Planning Department, H. Grunt, October 2002.

a ITE Land Use 210

b ITE Land Use 230

c ITE Land Use 253

Response to Comment 3-B

The commentor expressed a concern that the proposed homes at the end of Erin Drive would totally dominate the view from the existing homes on Erin Drive and extinguish any existing backyard, bedroom and outdoor living space privacy of those existing homes. The commentor suggests that these proposed homes should be deleted.

Impact 5.4-3 describes the future view from the end of Erin Drive and does state that this would be a significant visual impact. It is acknowledged that the bulk and mass of the houses would appear even larger as they would be seen from a lower elevation which tends to increase the visual perception of bulk. Only one lot (lot 1) would be immediately adjacent to an existing residence on Erin Drive. The other lots which would be on the extension of Erin Drive (lots 2 through 8) would front onto the Erin Drive and back up to the proposed open space parcel. Therefore, even though the proposed houses would be at a higher elevation than the existing homes on Erin Drive the location and sitting of the new lots would seem to minimize any impact to the privacy of the existing homes. Furthermore, the Conceptual Landscape Plan proposes the planting of street trees along the extension of Erin Drive (as

well as the other residential streets). The street trees are planned as medium height, canopy trees (such as Holly or Scarlet Oak). In addition to the street trees, a 50-foot landscaped buffer would be established along the edge of the property directly adjacent to the existing neighborhood at Ellen Drive and Lisa Court. The proposed landscaping would further minimize any impact to the privacy of the existing homes.

It should be noted that proposed houses would be subject to the County's design review process.⁵ Issues such as the scale, mass, height, area and materials of the proposed houses as well as the impact on the enjoyment of other property in the vicinity are considered during design review.

Response to Comment 3-C

Additional information in regard to the impact to the Marinwood Community Services District (MCSD) is provided in response to letter 5 in the Final EIR (see Response to Comment 5-A). It continues to be the position of the Board of Directors of the MCSD that the proposed project be assessed mitigation fees to be passed on to the Marinwood Fire Department, to be held in reserved for capital equipment replacement and upgrading.⁶ The Marin County Planning Commission and Board of Supervisors would consider this request during the consideration of the merits of the project.

It is possible that the office component of the proposed project (or the assisted living residential use option) may require additional fire department staff, equipment, or facilities. This determination cannot, however, be made until a specific project proposal is presented to the MCSD for its review and comment.⁷ Based on the information available, the need for additional fire department staff, equipment, or facilities would not result in substantial adverse physical impacts associated with new or physically altered Marinwood Fire Department facilities. Therefore, based on the significance criteria contained in the EIR (see page 5.8-2) the proposed project would not result in a significant fire and emergency medical services impact.

Response to Comment 3-D

As discussed under Impact 5.3-6 on page 5.3-26 of the Final EIR, the proposed project would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along Miller Creek, which are identified as significant impacts. Smaller resident mammals, amphibians, and reptiles would be eliminated from areas encompassed by proposed grading, but these species are relatively common and their loss would not be considered significant. Similarly, activities of larger species such as deer, raccoon, wild turkeys, and numerous species of birds would be affected by proposed development, but most of these species adapt readily to suburban habitat and eventually would utilize developed areas on the site as well.

⁵ Marin County Code, Title 22, Zoning, Section 22.82.

⁶ Nichols • Berman conversation with Thomas Horne, District Manager, Marinwood Community Services District, October, 2002.

⁷ *Ibid.*

Response to Comment 3-E

The project proposes to improve the existing pedestrian path along the south side of Miller Creek between the extension of Marinwood Avenue and Las Gallinas Avenue. The commentor states that this part of the proposed project is neither necessary nor desired. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.



Lucas Valley Home Owners Association, Inc.

1201 Idylberry Road, San Rafael, CA 94903

415-472-3202 Fax 415-472-7512

LETTER 4

July 19, 2002

Mr. Tim Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

RECEIVED
2002 JUL 24 PM 2:45
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Re: The FEIR for Oakview

Dear Tim:

I am writing to express concerns primarily about the Traffic Impacts of this project as set forth in the Final EIR. I appreciate the extension of time you recently provided for response because very dramatic recent events would appear to cast grave doubt and uncertainty about all assumptions regarding traffic and its mitigation.

A As we are all aware, a major economic "slowdown" began in the Fall of 2000. Many small businesses in Marin County have since closed. Many of our larger employers in the County have imposed substantial and sometimes massive lay-offs. It is entirely possible that the reduced traffic volumes found in January and April 2001, as compared to similar studies in the same Marinwood/Lucas Valley areas in 2000, may in part be a reflection of employee lay-offs in Marin businesses.

B Secondly, as I write today, the State of California does not have a budget for the fiscal year that began July 1, and in Sacramento there is little indication that the political deadlock will end soon. However the State Budget for this year finally evolves, it will involve massive cuts even in constitutionally decreed commitments. Any assumption that the State's \$24 Billion deficit will leave CalTrans Highway 101 funds sacrosanct over the next five years (as indicated in the FEIR) is a Las Vegas gamble. Similarly, assumptions regarding all State funding contributions to many County projects (including traffic mitigation) are at this time subject to grave question. It is assumed that deficits for the State will extend for at least one more year and probably longer. Similar detrimental effects on County income are also likely to continue for a similar period.

Compounding these grave financial changes that were obviously not contemplated in this FEIR, is the potential interaction of forthcoming County plans regarding response to Bioterrorism threats and the adverse consequences of extreme traffic congestion. Additionally, the financial drain on the County's increasingly limited resources that will be imposed by efforts to meet the new threats imposed may well force the County to

postpone traffic mitigation actions. (It is indeed even possible that the County may have to require fees from commercial buildings to cover the increasing cost to the County of providing protection against Bioterror threats).

In addition, the Golden Gate Highway District is facing extreme financial difficulties at this time. (Possibly also related to the business slowdown). Bus schedules may be substantially curtailed, and public transport may be reduced.

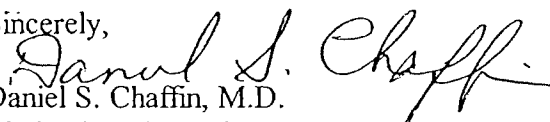
All of the above very recent developments appear to render the FEIR's assumptions about traffic impact and mitigation very uncertain at least for the next few years, and possibly forever. Traffic congestion in the areas adjoining the Oakview project is often close to gridlock at this time. If the FEIR's assumptions about future traffic prove to be seriously flawed because of the new elements discussed above, the gridlock that will ensue will have a devastating effect on the economic health of this County.

For these reasons centering around traffic, it seems questionable whether the addition of 94,400 square feet of new commercial building in Marinwood adjacent to Highway 101 is at all appropriate at this time.

C Finally, in connection with more specific concerns about traffic, it makes no sense to create a new street entering Lucas Valley Road, and the mitigations offered (merging lanes) are highly unlikely to help. Eight homes of the 28 proposed will go through Erin Drive according to the FEIR (Page 20-10). The remaining 20 homes will thus not break any precedent by going through Erin or one of the other adjacent streets leading to Las Gallinas. Lucas Valley Road is already faced with desperate drivers late for work and/or getting children to school or doctors. One more Lucas Valley Road intersection for just 20 homes is a high price to pay in terms of potential accidents. Additionally, more traffic lights often only cause desperate drivers to go faster trying to beat them.

Please also give consideration to the comments of Mr. Ron Marinoff in his letter of July 6.

Sincerely,


Daniel S. Chaffin, M.D.

Chair, ZAP Committee

Lucas Valley Homeowners Association

RESPONSE TO LETTER 4 -- LUCAS VALLEY HOME OWNERS ASSOCIATION, INC. DANIEL S. CHAFFIN, M.D., CHAIR, ZAP COMMITTEE

Response to Comment 4-A

The comment refers to a possible connection between an economic slowdown and lower traffic levels. It is entirely possible that reduced traffic volumes recorded in April and January 2001 and in March 2002 compared to traffic volumes taken in January 2000 at six study area intersections are directly related to the economic downturn which began in the fall of 2000. It is worth noting that the difference in intersection peak hour volumes is four percent or less. This range of difference is not significant and can be also be explained as falling within the observed rate of difference found to occur in traffic counts taken at the same location within a number of consecutive days (daily, peak hour traffic fluctuation plus or minus five percent).

Response to Comment 4-B

The estimated timetable for the construction of the Highway 101 Gap Closure Project is approximately five years. Funding for the first phase of the project is secure and the project remains a primary local, state and federally financed effort. Changes in funding to this and other freeway projects due to the overall State budget deficit are speculative at this time. It is possible that the State may chose to delay the funding of some freeway projects. However, that would likely be done over a period of time and would be based on priority listing. The fact that the Gap Closure project has secured funding indicates that the work will continue for the foreseeable future.

Marin County's plans regarding a response plan to bio terrorism threats is beyond the scope of the transportation impacts of the proposed project.

Response to Comment 4-C

The Final EIR addresses access to and from Lucas Valley Road as proposed for 20 of the project's residential units. Recommended improvements include widening Lucas Valley Road in the vicinity of the project driveway for construction of an eastbound turn-lane, and construction of eastbound acceleration and westbound deceleration lanes on Lucas Valley Road. The project does not include the installation of a traffic signal at his location.

Access to the entire residential section of the project could be made from Las Gallinas Avenue via the existing streets, Ellen Drive and Erin Drive. These streets could be extended to provide access to all 20 lots. The primary traffic drawback to this alternative would be during the AM commute period when Las Gallinas Avenue is heavily congested. The 20 homes are estimated to put 21 vehicles on Las Gallinas Avenue during the AM peak hour. The outbound project trips (16 vehicles) would experience significant delay exiting the site due to congestion on Las Gallinas Avenue.

LETTER 5

Marinwood Advocates for Sensible Planning

P.O. Box 6853
San Rafael, CA 94903

RECEIVED

2002 JUL 25 P 12:57

MARIN COUNTY
COMMUNITY DEVELOPMENT
DEPT

July 21, 2002

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Dear Mr. Haddad:

The Marinwood Advocates for Sensible Planning represent and protect the interests of the Marinwood community. Attached are our comments regarding the Final Environmental Impact Report for the Oakview Master Plan.

Project Description 2.2 - Page 2.0-16 – Low and Moderate Income Housing

A It is not acceptable to accept in-lieu fees to satisfy the affordable housing requirement. We have heard about our housing crisis almost on a daily basis in the news and most recently in the debates for Supervisor, District One election on March 5th, 2002. The County must start to take a hard-line approach with developers and demand that affordable housing be included in all proposed developments, including this proposed project.

Cumulative Development Assumptions 2.3 – Page 2.0-21

Exhibit 2.3-1 Cumulative Projects in the Study Area, August 1999

B Not included in this list is the recent project being built right now in Ignacio on the old Hamilton housing site. There are 450 homes being developed by Shea and Centrex homes. This is a significant number and should be analyzed in the EIR as a project that will have a cumulative impact in the study area.

Growth Inducing Impacts 3.5 – Page 3.0-43

C The second to the last paragraph says that the Marinwood Fire Department does not anticipate expanding their personnel or improving their equipment as a result of this proposed project. The letter #5 from Thomas Horne, Marinwood CSD District Manager, says just the opposite. He says that the CSD Board has the opinion that the proposed commercial development will create new demands on the equipment, personnel and facilities of the Marinwood CSD and that mitigation fees should be charged as a "buy in" to the community's fire protection infrastructure.

Impact and Mitigation Measures – 5.5-1 – Page 5.5-21

D Miller Creek Road and Las Gallinas Avenue: It is easy to make a broad "traffic engineering" related statement in an EIR such as "*these impacts are considered to be less-than-significant*". However, in dealing with the daily reality of traffic in this area, it is getting worse and worse every day, even in so-called off-peak times like the summer season. Separate from the strict analysis of traffic impacts, our community can't afford to have any more cars clogging our streets during the AM and PM commute hours. As previously mentioned, none of these analyses take into consideration the potential cumulative impacts of the 450 homes being constructed in Ignacio. The car trips generated by 450 homes will be significant and most will be traveling south on Highway 101 on their way to work or school.

Impact 5.5-7 – page 5.5-38

E Signalization is proposed for Miller Creek Road and Marinwood Avenue. We do not want signalization at this intersection and we do not want signalization at Miller Creek/Las Gallinas. Signalization only makes it appear easier to travel through a community and will encourage more commuters to take the short cut through our neighborhood. Signals generally make an area appear "urban" and that is not what we envision for our community. This is a neighborhood – we do not want it to become a thoroughfare consisting of a steady stream of traffic and signals at every intersection.

Mitigation measure 5.5-7 - The entrance to the homes on Lucas Valley Road.

F The EIR states that there will be eastbound left turn lanes, acceleration and deceleration lanes and a stop sign that has enough "stopping sight distance" for east and west bound autos on Lucas Valley Road. Can anyone imagine trying to turn right or left on Lucas Valley Road from this proposed entrance, even with the "help" of a stop sign? Does anyone really think that cars that have already had to stop at Miller Creek/Lucas Valley, Las Gallinas/Lucas Valley are going to be able to safely stop for a stop sign at this new intersection? How safe would this be for children trying to cross the street at this stop sign? It is obvious that due to the difficulty of trying to execute particularly a left turn onto Lucas Valley Road from the new homes, that most people will use Erin Drive as an alternative exit and entrance rather than deal with the speed of the traffic on Lucas Valley Road. Erin Drive will eventually become more congested with traffic.

Master Response C – Energy – page 7.0-33

G Project Impacts – the analysis states, "Because adequate energy would be available to serve the project, the project would represent less-than-significant impact on energy supply." How can this statement be made in light of the current energy crisis that we have faced this past year and are currently facing this summer? What analysis was done to back up this statement and what information does the consultant have to make such a broad-brush statement that there will be adequate energy available?

We do not need additional commercial development in this area in light of the high vacancy rate we are facing in this County. Additionally, this project has no relationship to the community at all. The proposed homes are out-of-scale with the surrounding neighborhood character and the proposed office complex and houses have no relationship to each other. It appears as though the applicant is just slapping down an office complex on one side of the hill and homes on the other and calling it "Oakview". It is not "smart" planning – it does not make sense for this community.

Respectfully submitted,



Carol Brandt

Marinwood Advocates for Sensible Planning

cc: Mr. Walter Dods, Officer – Marinwood Association
Mr. Fran Rowley, President – Marinwood Association
Mr. Frank Nelson, MASP

RESPONSE TO LETTER 5 -- MARINWOOD ADVOCATES FOR SENSIBLE PLANNING, CAROL BRANDT

Response to Comment 5-A

The commentator is opposed to the project applicant's proposal to make an in-lieu payment to satisfy the County's affordable housing requirement.

In the review of the conformance of the *Oakview Master Plan* with *The Marin Countywide Plan* (Exhibit 4.1-1) it is noted that the project is inconsistent with program H-1.1a of the Housing Element (Inclusionary Units) and that the Master Plan should be conditioned so that 15 percent of the housing units on site be affordable to moderate, low, or very low income households. It should be noted that the recommendation that the Master Plan be conditioned to require affordable housing units on site is in response to Marin County policies and not as an EIR mitigation measure.

Response to Comment 5-B

Comment noted, please see Response to Comment 3-A.

Response to Comment 5-C

As stated in this comment, additional information in regard to the impact to the Marinwood Community Services District (MCSD) is provided in response to letter 5 in the Final EIR (see Response to Comment 5-A). It continues to be the position of the Board of Directors of the MCSD that the proposed project be assessed mitigation fees to be passed on to the Marinwood Fire Department, to be held in reserved for capital equipment replacement and upgrading.⁸ The Marin County Planning Commission and Board of Supervisors would consider this request during the consideration of the merits of the project.

It is possible that the office component of the proposed project (or the assisted living residential use option) may require additional fire department staff, equipment, or facilities. This determination cannot, however, be made until a specific project proposal is presented to the MCSD for its review and comment.⁹ Based on the information available, the need for additional fire department staff, equipment, or facilities would not result in substantial adverse physical impacts associated with new or physically altered Marinwood Fire Department facilities. Therefore, based on the significance criteria contained in the EIR (see page 5.8-2) the proposed project would not result in a significant fire and emergency medical services impact.

⁸ Nichols • Berman conversation with Thomas Horne, District Manager, Marinwood Community Services District, October, 2002.

⁹ *Ibid.*

Response to Comment 5-D

Less-than-Significant as used in the Final EIR is not intended as a broad statement. Based on significance criteria established by the County, a traffic intersection operates either acceptably (LOS D or better) or unacceptably (LOS E or worse). In the Final EIR less-than-significant most often describes what happens at specific unsignalized study intersections operating at unacceptable levels. The installation of a traffic signal improves operations to acceptable levels rendering the previous impact to less-than-significant with mitigation. In addition, please see Response to Comment 3-A.

Response to Comment 5-E

Comment noted. Please see Response to Comment 3-A. In addition, the comment notes that the community is becoming more urban in look and feel due to an increase in traffic and the installation of traffic signals. This is a quality of life issue that confronts many communities experiencing the effects of growth. There is no one answer or approach in dealing with these issues. The location of the Marinwood Community adjacent to Highway 101 with direct freeway access at Marinwood Avenue and St. Vincent's Drive further exacerbates the impacts of cumulative growth. The Final EIR transportation analysis does indicate that traffic in the area will likely continue to increase with or without the Oakview project and that many of the proposed mitigation measures would be required to meet County criteria for acceptable traffic operations with or without the project.

Response to Comment 5-F

It is important to note that as discussed in the Final EIR the residential access driveway on Lucas Valley Road would not place stop signs on Lucas Valley Road (nor would there be a traffic signal here). Only traffic on the access driveway would be stop controlled, traffic on Lucas Valley Drive would remain uncontrolled as it is currently. Please see Response to Comment 4-C for additional information.

Response to Comment 5-G

The statement that the proposed project would have a less-than-significant impact on energy supply is based on the information provided in Master Response C – Energy. This master response provides information regarding the electric service setting and project impacts. The electric service setting discusses power plants scheduled to come online in 2002, 2003 and 2004, year 2002 electric demand in Marin County and the projected electrical demand of the proposed project.

California Native Plant Society

MARIN CHAPTER, ONE HARRISON AVENUE, SUASALITO, CA. 94965

LETTER 6

July 22, 2002

RECEIVED

2002 JUL 26 P 3:32

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Marin County Community Development Agency
Attn: Mr. Tim Haddad, Environmental Coordinator
3501 Civic Center Drive, #308
San Rafael, Ca. 94903-4157

RE: FEIR OAKVIEW MASTER PLAN

Dear Mr. Haddad

The California Native Plant Society, Marin Chapter lists the following comments and recommendations relative to the FEIR Oakview Master Plan.

WETLANDS:

A This project will have a very significant impact upon the fresh water seeps and springs and the habitat they provide for flora and fauna. There will be an increased potential for erosion and water degradation. Construction activities will contribute to increase (volume) of water runoff in Miller Creek, increased loads of sediment, and the inevitable increase of urban pollutants such as petroleum from automobile, fertilizers, herbicides, and pesticides associated with landscape maintenance will tend to degrade water quality. This will have a detrimental impact upon Miller Creek which is one of the Marin creeks slated for restoration work that will enhance the return of steelhead trout and Coho salmon.

WETLAND MITIGATION:

B The applicant for this project has neglected to disclose a detailed plan for wetland mitigation. The Conceptual Landscape Plan seems to indicate that the wetland mitigation would be 1:1. We offer the following suggestions:

- .The County of Marin's replacement is based on a 2:1 ratio. This ratio should be the minimum for wetland replacement.
- .Mitigation for wetland restoration should not be considered for the southeast corner of this site because of future 101/Lucas Valley Road interchange improvements.
- .Wetland mitigation on this site will be difficult because artificial water must be used. If suitable on site areas are not available, then off site areas should be used.

TREES:

The over all loss of 625 trees is a significant loss. Because the loss of the trees is spread over much of the project area, it represents a fragmentation of existing plant and animal habitat. We suggest that the loss could exceed three times the minimum loss for the following reasons:

- C
- .Trees not removed for construction activities may be adversely effected because of long-term changes in drainage patterns, irrigation, and other conditions.
 - .Most of the tree loss on this project will be along the ridgelines and steep west-facing slopes. These trees because of thin soils and rocky ridges will have their roots in root corridors. When these roots are cut during construction activity, fungal and bacterial spores will eventually kill healthy trees that are retained. The remaining trees will be at risk for at least five years.
- Mitigation Measure 5-3-1 (a) states that replacement trees should



Dedicated to the preservation of California native flora

California Native Plant Society

MARIN CHAPTER, ONE HARRISON AVENUE, SAUSALITO, CA. 94965

-2-

be of 1 gal. size or smaller. We have noted from our restoration efforts that trees of this size will not be successful because of deer predation. Trees that are less than five feet tall must be protected by wire cages if the plantings are going to be successful. Replacement trees should be planted at a 2:1 ratio for those that are lost. Because of the SOD disease (Sudden Oak Death) only oak trees of the white oak species ex. *Quercus lobata* etc. should be planted because of their resistance to the disease. Great care must be taken when removing oaks, bays, and other trees that are subject to this fungal disease (*Phytophthora ramorum*). There are at least twelve species of trees and shrubs that harbor this disease.

DISRUPTION OF FISH AND WILDLIFE HABITAT: 5-3-6

The proposed Marinwood Avenue extension bridge will have a significant impact upon the habitat value of Miller Creek. Tree loss, interruption of wildlife corridors, contamination of fish spawning areas in the vicinity of the bridge crossing, and the intersection of the creek-side path.

- D
- .Tree replacement for trees lost to road and bridge construction should include red and white alder, big leaf maple (*Acer macrophyllum*) Oregon ash (*Fraxinus oregona*), Box elder (*Acer negundo* var. *californicum*). These trees are all native to Marin and are found along stream corridors. Mitigation for stream trees should be at a 3:1 ratio. This mitigation could be used to enhance the stream corridor in areas which have been degraded.
 - .All run off water from drainages of developed areas should be channeled into vegetated filter strips to reduce contamination of Miller Creek.
 - .Night lighting of the existing path along Miller Creek should be prohibited. Night lighting of the path will have a very significant effect upon aquatic species within the creek channel as well as wild life who depend upon the creek for water.

NATIVE GRASSLANDS: 5-3-3

The stands of native grasslands on this project are scattered and do not meet the standard set by CNDDB which states that the loss of ten percent or greater would constitute an impact to a sensitive natural community and should be considered significant. We suggest the following mitigation:

- E
- .That the aggregate amount of native stands which are removed be concentrated to revegate graded slopes.
 - .We suggest that color-coded flags be set at 25-foot intervals instead of 50-foot intervals as stated in the proposed mitigation.
 - .A buffer zone in front of these native stands should be considered (25-30) feet to protect the stands from intrusion into their habitat. if other native grasses beside purple needle grass and California oat grass are found, they should be included in the mitigation.

Thank you for considering our comments and recommendations.

Sincerely,

John Walters
John Walters, Chairman-Conservation
California Native Plant Society, Marin Chapter
110 Santa Cruz Ave.
San Anselmo, Ca. 94960



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RESPONSE TO LETTER 6 -- CALIFORNIA NATIVE PLANT SOCIETY, MARIN CHAPTER, JOHN WALTERS, CHAIRMAN-CONSERVATION

Response to Comment 6-A

The concerns of the commentor regarding impacts on wetlands and habitat value of Miller Creek are noted. In regard to these concerns please see the discussion of wetlands and wildlife habitat in Impact 5.3-4 and 5.3-6 in the Final EIR, respectively.

Response to Comment 6-B

Mitigation Measure 5.3-4(a) on page 5.3-25 of the Final EIR includes all of the suggestions made by the commentor regarding the details of recommended wetland mitigation. No additional response is necessary.

Response to Comment 6-C

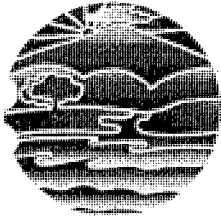
A detailed discussion of the potential impacts of the project on tree resources is provided in Impact 5.3-2 of the Final EIR, which includes a worst-case estimate of the number of trees possibly removed as a result of development. Revisions in the proposed project have substantially reduced the estimated number of trees to be removed to a total of 35 trees. Controls called for in Mitigation Measures 5.3-2(a) through (d) should serve to minimize the potential for damage to other tree resources. Please see Response to Comment 13-R (Marin Audubon Society comments) for a discussion of tree loss and changes to Mitigation Measure 5.3-2(d) made in response to concerns over Sudden Oak Death. The tree replacement program called for in Mitigation Measure 5.3-2(d) includes a monitoring component for a minimum of five years, which would ensure that plantings survive, including use of browse protection as determined necessary.

Response to Comment 6-D

A discussion of the potential impacts of the project on the Miller Creek corridor is provided in Impact 5.3-6 of the Final EIR. Mitigation Measure 5.3-6 states that disturbance to the creek should be minimized through use of a bridge or arched culvert design, that drop structures should be prohibited in the creek, and that night lighting should be prohibited along the path to minimize disrupting wildlife use of the creek at night. As recommended in Mitigation Measure 5.3-2(d), tree species should be replaced at the same ratio as those removed.

Response to Comment 6-E

A detailed discussion of the potential impacts of the project on native grasslands is provided under Impact 5.3-3 of the Final EIR, which concludes that the loss of an estimated 1.6 acres of native grasslands would be a significant impact. The provisions of the recommended grassland restoration and enhancement program described in Mitigation Measure 5.3-3 are considered adequate to mitigate potential impacts on native grassland, and no changes to these recommendations are considered necessary.



MARIN CONSERVATION LEAGUE

1623A Fifth Avenue • San Rafael, CA 94901

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LETTER 7

July 25, 2002

Board of Directors

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Marin County Planning Commission
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

RECEIVED
MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

2002 JUL 26 P 2:01

Re: Final Environmental Impact Report Oakview Master Plan/Use
Permit/Vesting Tentative Map

Dear Commissioners:

On May 2, 2001 the Marin Conservation League (MCL) submitted comments on the Revised Draft Environmental Report on the proposed Oakview development. We were, and still are particularly concerned about the impacts of the 94,400 square foot office complex proposed along the highway 101 frontage of the property. Comments 2 and 3 of our letter were:

2. *"The photomontages in the Revised Draft EIR are inadequate to accurately describe what the two proposed office buildings, the associated parking lots and new frontage road will actually look like. Comparing the photomontages of the two office buildings with a visual inspection of the site it is difficult to visually comprehend the positioning of the two buildings. Because both office sites are sloped, either a substantial cut will have to be made into the hill or the buildings will have to be either elevated on fill or located close to the edge of the freeway. The EIR should include a section drawing through this area, which indicates the distance between the outer edge of the two office buildings and the edge of the southbound freeway. The same information should also be shown for the proposed parking lots."*
3. *"Because the proposed office buildings, parking lots and new frontage road appear to be a continuation of the existing strip development along the freeway corridor in North San Rafael, a photomontage should be included showing a view of the*

Patricia Sisco
Office Manager



Recycled Paper

office buildings, 378 car parking areas and new frontage road, as would be seen from the southbound Highway 101 lanes.

A MCL believes that the information and new photomontages in the Final EIR inadequately describe the visual impact of this portion of the proposed project. The new photomontages only partially reflect a new "assisted living" alternative use. While the structures would remain the same size, the parking requirement for a 75-unit facility would be significantly reduced. This would allow the size of the parking lot for building A to be reduced from 320 spaces to 128 spaces.

The photomontages assume that the area which would not be required for the almost 200 parking spaces would be used for an earthen berm to help screen the building and remaining parking spaces. However, the text refers to the likelihood that, because of the excessive highway noise, a 10-foot high sound wall would be required on top of the berm if this area were utilized for residential use. The visual impact of this wall is not shown in the new photomontages.

In addition, and as important, there is still no accurate representation of the visual impact of the office option and associated 378 space parking lots that would not be screened with the earthen berm. MCL still believes that to fully disclose the impacts of BOTH options, cross sections (indicating elevations) drawn from the freeway to the natural hillside behind the building should be provided for both alternatives.

Comment number 6 of our May 2, 2001 letter was:

"The possible development allowed under both the San Rafael General Plan and Countywide Plan designations on both the St. Vincent's and Silveira properties should be included in the Cumulative Projects in the Study Area section (DEIR 2.0-21) and in the cumulative traffic study (DEIR 5.5-29 through 34), which appears to be based upon dated information."

B While neither Response 12-F nor Appendix B referred to therein really explain what assumptions were used in the CMA traffic modeling regarding potential development on the Silveira and St. Vincent's properties, page 5.5 -14 states that "Vehicle trips associated with .. development of the St. Vincent Silveria (sic) property CMA designated Scenario 5 (800 residential units and 150,000 square feet of commercial use) located east of the project site were added to the long-range network for analysis."

This assumption appears to very significantly understate potential cumulative traffic impacts, particularly at the Marinwood and Lucas Valley/Smith Ranch Road interchanges. The application submitted by Shapell Industries to the City of San Rafael in March 2002 proposes construction of a total of 856 residential units, 124,000 square feet of commercial space and a new 80,000 square foot campus, in addition to reuse of the existing buildings on the St. Vincent's property.

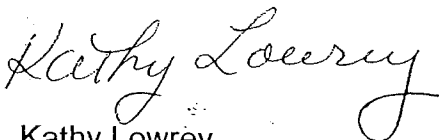
In addition, the Silveira family recently submitted to the City their "Concept Plan" that they asked to have reviewed in the Shapell EIR. This plan includes 924 residential units, 190,000 square feet of commercial space, a "hospitality" use of unspecified size at the Marinwood interchange, an additional unspecified amount of residential development on the former County Honor Farm site, a 13-acre public elementary school and a 9-acre future transit station. All of the above development would feed into either the Marinwood or Lucas Valley/Smith Ranch Road interchanges.

Together these proposals include a total of 1790 residential units (plus an additional unspecified amount on the former honor farm site owned by the Silveiras) and 314,000 square feet of commercial space (plus an unspecified size "hospitality" use at the entrance to the Silveira property). This level of development is actually close to that permitted under the May 2000 recommendation from the St. Vincent's/Silveira Advisory Task Force. However, it is over twice that apparently analyzed in the Final EIR.

MCL requests that the consultant explain why the above described cumulative growth assumption was used rather than: (1) the level of development proposed by the two property owners, (2) that allowed under the San Rafael General Plan or (3) that permitted by the Marin Countywide Plan.

MCL feels that it is essential that the Final EIR address the above issues in order to provide both the public and the County decision makers a full understanding of the impacts of this development proposal. There could cumulatively be significantly increased congestion and visual impacts and the pastoral views and oak-studded hillsides between San Rafael and Novato could be a thing of the past if all of the now contemplated development between the two cities comes to fruition.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Lowrey".

Kathy Lowrey
President

DD:ps

RESPONSE TO LETTER 7 -- MARIN CONSERVATION LEAGUE, KATHY LOWREY, PRESIDENT

Response to Comment 7-A

The commentor is correct that based on the noise analyses a soundwall about ten feet high may be necessary as a part of the Assisted Living Residential Use option. However, it is indicated on page 7.0-24 of the Final EIR that it is possible that the site could be designed to meet the County's noise requirements without the use of a soundwall. For example, the assisted living residential building could be designed to meet the County's requirement for interior noise levels by using sound rated windows as necessary and providing the building with mechanical ventilation so that the windows could be maintained closed. Also, outdoor areas meeting the County's requirement for exterior noise levels could be provided on the back side of the building.

It is stated in the analysis of the Assisted Living Residential Use option that construction of a soundwall could have a significant visual impact. However since it is not known if such a soundwall would be required nor is the design of such a wall known it was determined that it would be speculative to further analyze the visual impacts of such as wall.

In response to this comment three sections of a portion of the project site have been prepared. As shown on each section, the maximum building height would be 30 feet above the natural grade. The sections also show the proposed landscaped berm along the Highway 101 frontage and the line of sight view for Highway 101 motorists.

Exhibit 3 shows office building B, the proposed parking area, landscaping and the Marinwood Avenue extension and the northbound and southbound travel lanes of Highway 101.

Exhibit 4 shows office building A, the proposed parking area, the landscaped berm and the northbound and southbound travel lanes of Highway 101.

Exhibit 5 assumes that building A would be used for the assisted living residential use. Due to the reduced parking requirements for the assisted living residential use this allows for the development of a more extensive landscaped berm between the parking lot and Highway 101.

Response to Comment 7-B

Please see Master Response A -- Short-Term and Long-Term EIR Cumulative Analysis.

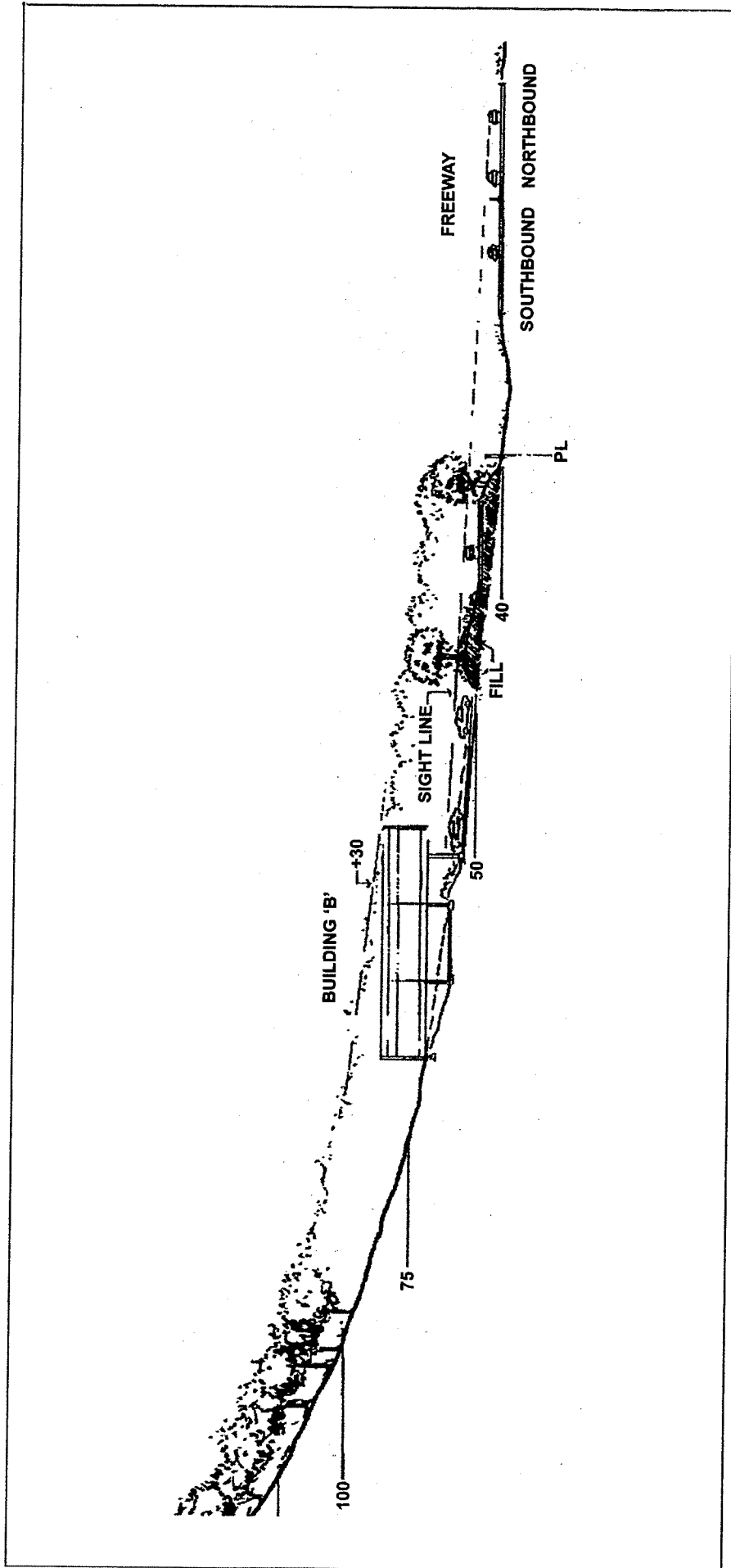
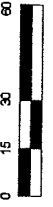


EXHIBIT 3 SECTION A -- OFFICE BUILDING B
Oakview Master Plan

Source: IL Schwartz Associates, Inc



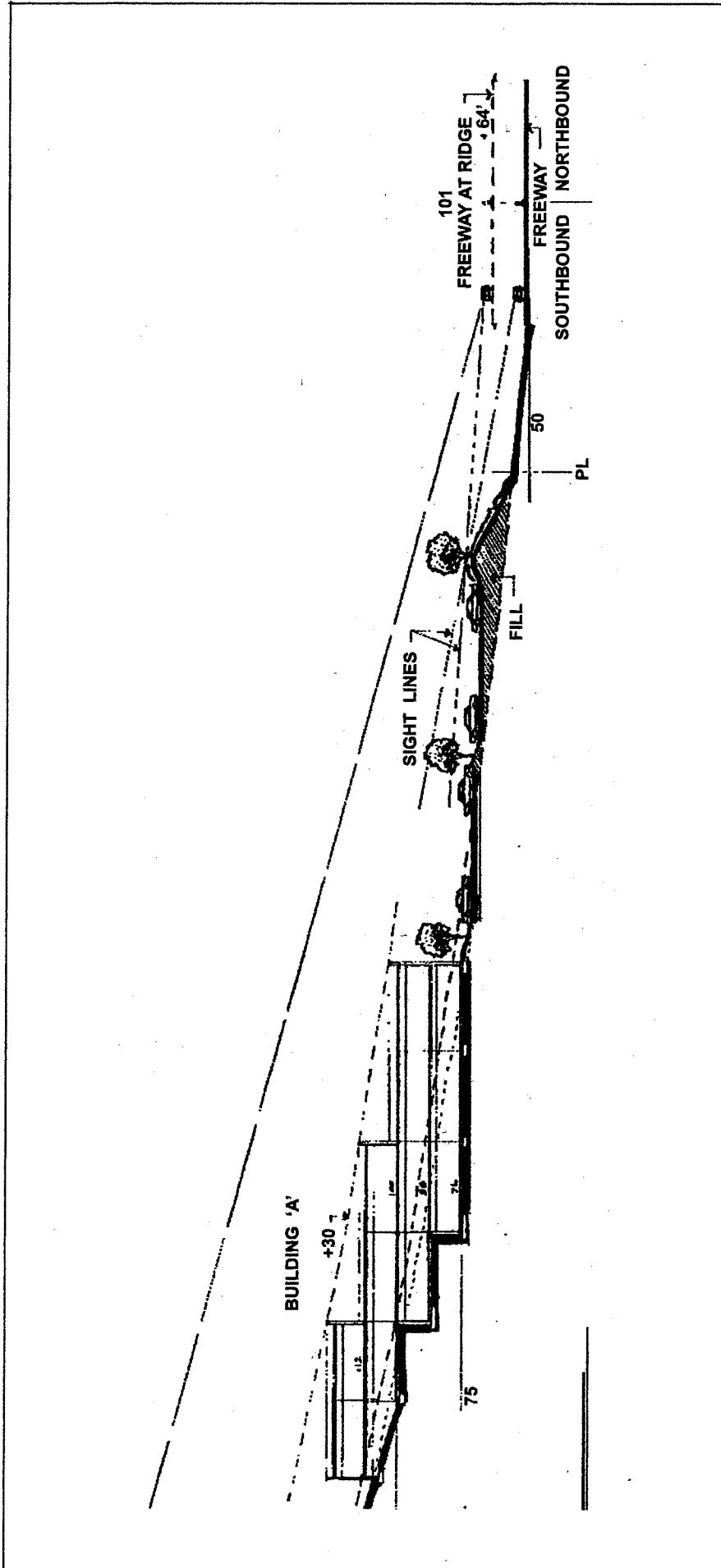


EXHIBIT 4 SECTION B -- OFFICE BUILDING A
Oakview Master Plan

Source: IL Schwartz Associates, Inc

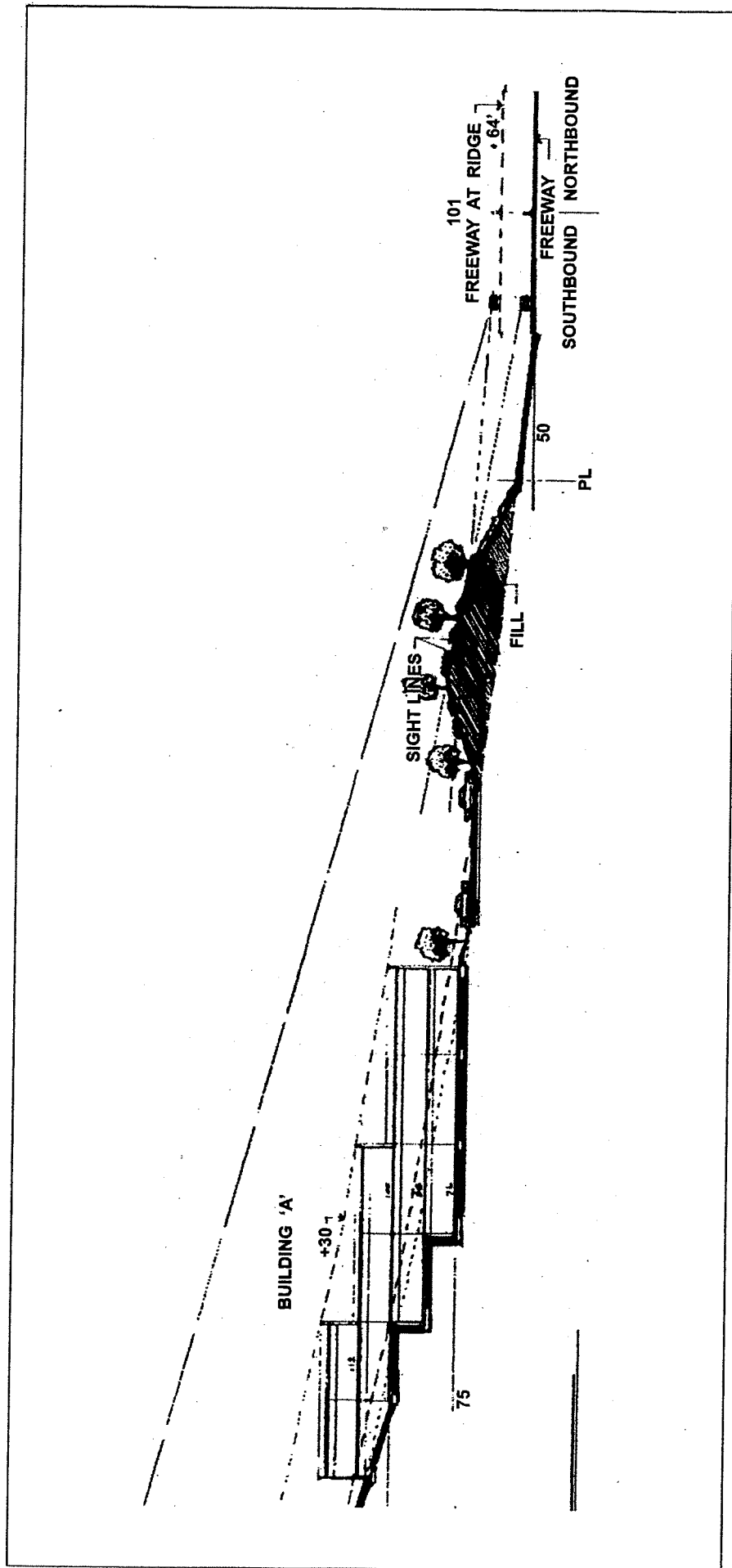


EXHIBIT 5 SECTION C -- ASSISTED LIVING RESIDENTIAL USE OPTION
Oakview Master Plan

Source: IL Schwartz Associates, Inc



LAK ASSOCIATES

150 Gate Five Road Ste 203 Sausalito CA 94965
tel: (415) 331-4551 fax: (415) 331-4573 lakassoc@sbcglobal.net

RECEIVED

LETTER 8

2007 JUL 11 P 1:4

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

July 11, 2002

Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

Subject: **Final Environmental Impact Report for Oakview Master Plan,
Vesting Tentative Map and Use Permit Application**

Dear Tim:

On behalf of the applicant for the Oakview Project, please note our appreciation for this opportunity to comment on the adequacy of the response to comments included as part of the Final Environmental Impact Report. In general terms, we find that most of the responses presented in the document are adequate, with a few notable exceptions.

A Response to Comment 1-A (Letter from Bob Brown, Planning Director, City of San Rafael) is inadequate as it fails to recognize that the applicant is not required to participate in the City's Priority Projects Procedure (PPP). Attached, please find a copy of a letter prepared by Douglas J. Maloney, the applicant's attorney, dated October 12, 2000, clarifying the relationship of the proposed project to the PPP.

B Response to Comment 25-P (LAK Associates Letter) is incorrect and therefore inadequate. While the geology of the general area is Franciscan Assemblage, it does not mean that there is Franciscan Melange within the project site. There is no Franciscan Melange located on the subject property.

C Response to Comment 25-T (LAK Associates Letter) is in error and therefore inadequate. No expansive soils were found during the site specific study performed by the project geologist.

D Response to Comment 25-V (LAK Associates Letter) is inadequate as only the dictionary definition is included. Comment 25 requested a technical definition of the term "difficult" in describing the geologic conditions. If "difficult" is not a specific geologic term, the geologic conditions should be clearly described in technical terms.


E Master Response A – Assisted Living Residential Use Option is inadequate as the discussion fails to recognize the significant reduction in traffic generation at Miller Creek Road/Marinwood Avenue. Requiring the applicant to be responsible for the funding of a traffic signal at that intersection, with no additional fair share participation by others is unjustified.

Tim Haddad
July 11, 2002
Page 2

F Master Response A – Assisted Living Residential Use Option is inadequate because it should clearly state that this alternative use, combined with the residential development proposal, is the environmentally superior alternative.

Thank you for your consideration in this matter.

Sincerely,



Larry Kennings
Planning Consultant

cc: Irving Schwartz
Douglas J. Maloney
Daphne Daphne
Edward Bacciocco

LAW OFFICES

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

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October 12, 2000

REFER TO FILE NUMBER

Bob Brown
Community Development Director
City of San Rafael
1400 Fifth Ave., P. O. Box 151560
San Rafael, CA 94915-1560

Re: Oakview Project (Daphne/Bocciaocco)

Dear Bob,

The property owners have retained me to advise them whether they should proceed with their current proposal which includes office use. They are understandably concerned about your letter to Alex Hinds dated May 25, 2000 (A copy of which is attached) in which you state that, "I believe it will not be possible for the city to approve a subsequent PPP application unless the office building is eliminated from the proposal or the City's general plan is amended"

This conclusion is based on your declaration, in the same letter, that, "In the MOU the City agreed to waive annexation of the property while the County agreed that the project would be subject to the City's development timing policies (the "PPP" traffic allocation process) traffic mitigation fees and land dedication for implementation of the Luca Valley/101 interchange upgrade."

An analysis of this issue must begin with the following premises:

1. The City has agreed that the property will be developed under the jurisdiction of the County.
2. The County's zoning and master plan allow office use on the property.
3. The City is certainly entitled to express its position on the proposal, as determined by the City Council, but it has no legal authority to approve or disapprove it.

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

Bob Brown
October 12, 2000
Page 2

Therefore unless, as you believe, the MOU requires the property owners to secure a PPP traffic allocation from the City, the City has no discretionary authority over the project. The only provision in the MOU pertaining to timing of development is numbered paragraph 4, "Timing of Development" which provides:

The City and the County mutually agree to the goal of maintaining a traffic level of Service at the mid-point of the D range at the Lucas Valley/101 interchange. The City has adopted this standard in its General Plan and is implementing the standard through the Priority Projects Procedure. The County agrees that it will **coordinate development approvals with the city to assure that traffic Level of Service at mid-point D is not exceeded at the Lucas Valley/101 interchange.** The County further agrees that it shall issue no building permits that would result in less that Level of Service mid-point D at the Lucas Valley/101 intersection.
[Emphasis added.]

This section does not specifically, or by implication, require the applicants to apply for, or secure, a Priority Projects Procedure designation from the City. It only requires the County to coordinate development approvals with the city to achieve a specified traffic performance standard. This objective can be easily accomplished within the County review process. That is particularly true here because the primary traffic impacts from the office use in the proposal do not involve the Lucas Valley/101 intersection.

The fact that a Priority Project status was granted to the property in 1989 is not relevant here because, at that time, the property was proposed to be annexed to the City in the course of the approval process.

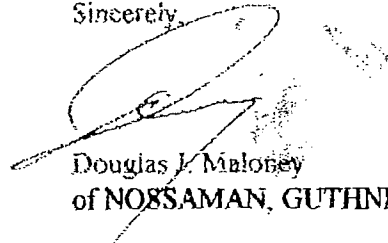
Therefore I intend to advise the property owners that they are not required to comply with the City's Priority Project Procedure and should proceed with their application. However before I do, I would appreciate the opportunity to discuss this with you in detail to insure that I have not overlooked some pertinent authority to the contrary. I will call you shortly for an appointment.

NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

Bob Brown
October 12, 2000
Page 3

Thank you in advance for giving this matter your careful consideration

Sincerely,

A handwritten signature in dark ink, appearing to read "Douglas J. Maloney", is written over a circular stamp. The signature is fluid and cursive.

Douglas J. Maloney
of NOSSAMAN, GUTHNER, KNOX & ELLIOTT, LLP

DDM:jm

cc. Daphne Daphne
Irving I. Schwartz
Tim Haddad

RESPONSE TO LETTER 8 -- LARRY KENNINGS, PLANNING CONSULTANT (ON BEHALF OF THE PROJECT APPLICANT)

Response to Comment 8-A

It is the project applicant's representative's opinion that the *Oakview Master Plan* project is not subject to the City of San Rafael's Priority Project Procedure (PPP). The commentor has included a letter from the project applicant's attorney putting forth his reasoning why the City's PPP does not apply. However, this is only the project applicant's attorney opinion and to date, there has been no information submitted that provides concurrence of this opinion by City of San Rafael staff.

In fact, City of San Rafael staff has stated that the project is subject to PPP and do not believe the MOU can be interpreted any other way. City staff will request that a condition of approval be included requiring the applicant's successful completion of the City's PPP prior to issuance of construction permits.¹⁰

Response to Comment 8-B

Most publications do not map all of the specific contacts of the mélange within the Franciscan Complex or Assemblage. Instead the units are often lumped together and the term Franciscan Mélange and Assemblage are often used interchangeably. However, to respond to the commentor in the precise manner, the EIR preparers will accept the mapping and terminology from the most recent publication for this area by Blake and others, 2000 of the USGS. The onsite unit is specifically described as, "Cretaceous aged sandstone and shale of the Franciscan Complex belonging to the Novato Quarry Terrane." Hopefully, this clears up this matter of precise terminology

Response to Comment 8-C

Because moderately expansive soils are known to exist in the vicinity of the subject site, the possibility of discovering a layer of such material after grading remains as conditions often vary between test pit or boring locations. The EIR Engineering Geologist therefore recommends an expansion index test at pad grade be performed and evaluated by the applicant's geotechnical engineer.

Response to Comment 8-D

The previous response (see Response to Comment 25-V in the Final EIR) stated, "This term is appropriate to describe the site geologic conditions. This was made evident in the extensive subsurface exploration that was necessary for the applicant's consultant to accurately characterize the site-specific geologic conditions." The site has landslides and debris-flow deposits that made the

¹⁰ Nichols • Berman communication with Bob Brown, Community Development Director, City of San Rafael, September 26, 2002.

geology complex and therefore proved time consuming to explore and evaluate. A less-than-difficult site would have required a much lower level of effort to determine the proper mitigation measures.

Response to Comment 8-E

Comment noted. Cost of the installation of a traffic signal at Miller Creek Road/Marinwood Drive under the Assisted Living Residential option would be based on a fair share participation.

Response to Comment 8-F

As stated by County staff at the August 5, 2002 Planning Commission meeting the Assisted Living Residential Use option was not included in the comparison of the alternatives in the Final EIR because the project applicant simply offered it as an option, but did not commit to it. The Assisted Living Residential Use option was evaluated in the Final EIR (see pages 7.0-5 through 7.0-26) and was compared to the proposed project at a similar level of detail as the other alternatives considered.

A summary comparison of the Assisted Living Residential Use option and the proposed project is provided in Exhibit 6.

Exhibit 6

Comparison of Assisted Living Residential Use Option and Proposed Project

<i>Impact Category</i>	<i>Assisted Living Residential Use Option Compared with Proposed Project</i>
Geology and Soils	The Assisted Living Residential Use option would have the same geology and soils impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option.
Hydrology and Drainage	The Assisted Living Residential Use option would have the same hydrology and drainage impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option.
Biological Resources	The Assisted Living Residential Use option would have the same biological resources impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option.
Visual and Aesthetic Quality	The Assisted Living Residential Use option would have the same visual and aesthetic quality impacts as the proposed project and, therefore, the same types of mitigation measures would be necessary under both the proposed project and the Assisted Living Residential Use option. The landscaped berm with the assisted living residential use would provide some increased shielding of the parking lot for Building A than the proposed project. However, if the noise mitigation included construction of a soundwall along Highway 101 this could have a significant visual impact.

Exhibit 6 (continued)

Comparison of Assisted Living Residential Use Option and Proposed Project

Impact Category	Assisted Living Residential Use Option Compared with Proposed Project
Transportation and Circulation	<p>The Assisted Living Residential Use option would generate 414 daily vehicle trips versus 1,266 daily vehicle trips of the office component of the proposed project.</p> <p>There is relatively little difference in terms of peak hour intersection impacts between the proposed project and the Assisted Living Residential option. The reason for this is that the cumulative No-Project scenario causes the unsignalized study intersections to fail without traffic from either the project or the assisted living option. Therefore, although the Assisted Living Residential option is estimated to generate 73 percent fewer trips during the AM peak hour and 66 percent fewer trips in the PM peak hour the net effect is that both the project and the assisted living option would add traffic to pre existing unacceptable conditions.</p> <p>The Assisted Living Residential option does show better LOS under long-range cumulative conditions compared to the Proposed Project at the following intersections:</p> <p>Miller Creek/Marinwood - PM peak hour, assisted living is LOS C (12.3 seconds delay), Proposed Project LOS D (21.6 seconds delay). While the intersection shows improvement it is not significant because the County considers LOS D or better operations acceptable.</p> <p>At the Miller Creek/Highway 101 ramps during the AM peak hour the assisted living option shows improvement to the northbound left-turn movement, it improves to LOS E (42.1 seconds delay) compared to the Proposed Project where it is at LOS F (>60 seconds delay). Both LOS E and LOS F are considered unacceptable conditions and both conditions would require mitigation.</p> <p>Likewise, the southbound left-turn movement in the AM peak hour improves to LOS E (42.3 seconds delay) with the assisted living option under long-range cumulative conditions from LOS F (51.2 seconds delay) under long-range cumulative conditions with the project. Both LOS E and LOS F are considered unacceptable conditions and both conditions would require mitigation.</p> <p>The remaining study area intersections operate at essentially the same levels under long-range cumulative conditions with either the assisted living option or the Proposed Project.</p>
Air Quality	Implementation of the Assisted Living Residential Use option would result in air quality impacts similar to those associated with the proposed project.

Exhibit 6 (continued)

Comparison of Assisted Living Residential Use Option and Proposed Project

Impact Category	Assisted Living Residential Use Option Compared with Proposed Project
Noise	The Assisted Living Residential Use option would have similar significant land use compatibility impacts as the proposed project. The assisted living facility would be exposed to noise levels in excess of those deemed compatible with residential land uses per the Noise Element of <i>The Marin Countywide Plan</i> . Mitigation would be required to design the facility to meet the County's interior and outdoor area noise levels.
Public Services	The Assisted Living Residential Use option would have similar public service impacts as the proposed project. Although the Assisted Living Residential Use option would result in an increase in annual calls for fire protection and paramedic service, this option would not result in substantial adverse physical impacts associated with new or physically altered City of San Rafael or Marinwood Fire Department facilities in order to maintain acceptable service rations, response times or other performance objectives.
Costs and Revenues	As with the proposed project the Assisted Living Residential Use option, no physical changes would result from economic impacts of site development.

Based on the above it can not be clearly stated that the Assisted Living Residential option is clearly environmentally superior to the proposed project.

LETTER 9



Marian K. Blanton
155 Roundtree Blvd.
San Rafael, CA., 94903-1670
(415) 479-7446
mgblanton@saber.net

RECEIVED

2002 JUL -3 A 6:21

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

July 1, 2002

Attn: Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

County Planning Commission certification of FEIR for Oakview Master Plan (SCH #1995063038) will be publicly reviewed this month, smack dab in the middle of the vacation season. We know how wrong this project would be for Marinwood and for the County, should approval be granted.

Here are just some of the reasons:

- A
1. Accumulation of traffic from Shea's construction of 450 homes in the Ignacio Blvd. , added to future St. Vincent's/Silveira proposed development, will further aggravate gridlock already experienced on 101 during commute hours--and beyond.
 2. Additional traffic on Marinwood Ave., past the shopping center, over a proposed new bridge (Miller Creek) would exacerbate, further, an already untenable driving condition during commute hours in this area.
 3. Adding an additional 94,400 sq. feet of commercial space to a community already showing office space vacancy all over San Rafael, in our industrial parks, and in new city center buildings, is folly in the present period of economic uncertainty.
 4. Trying to accommodate more cars after having successfully implemented a slowdown of freeway jumpers defeats the work of residents who struggled to protect cyclists and others trying to cross busy Marinwood thoroughfares.
 5. How can we justify building 28 more luxury homes in a County crying out for affordable housing? Where is the moral justification for giving such a green light? What about additional water and energy consumption? What about adding traffic to Lucas Valley? Does the Marin County Planning Commission represent ordinary citizens trying to live in their neighborhoods?

Not until transportation has been demonstrably improved on the 101 corridor can we support any additional development for Marinwood.

Marian Blanton

Marian Blanton

RESPONSE TO LETTER 9 -- MARIAN K. BLANTON

Response to Comment 9-A

The commentator states her reasons as to why this project is “wrong” for Marinwood and for the County. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.

Stanley R. Farber
81 Grande Paseo
San Rafael, CA 94903-1556

LETTER 10

RECEIVED

2002 JUL -3 A 6:39

July 1, 2002

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Tom Haddad
Marin County Community Development Agency
3501 Civic Center Drive Room 308
San Rafael, CA 94903-4157

Dear Mr. Haddad:

Thank you for sending the FEIR to the Oakview Master Plan.
My considerations are as follows:

A Page 5.5-3 and 5.5-6 Extension of Marinwood Avenue will add much more southbound traffic to that road than the FEIR predicts, Making it difficult for people to cross to the shopping center. Any consideration for this area should be proceeded by work on the freeway (101) through San Rafael to speed the southbound traffic and keep more cars on the freeway during commute time.

Very truly yours,


Stanley R. Farber

RESPONSE TO LETTER 10 -- STANLEY R. FARBER

Response to Comment 10-A

The extension of Marinwood Avenue is intended to serve the office component of the proposed project. It is not proposed as a through road extension in the Final EIR. The Final EIR estimates of traffic on Marinwood Avenue are based on existing peak hour traffic counts and ITE trip generation rates for office use.

7/5/02

LETTER 11

RECEIVED

To: Mr. Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, #308
San Rafael, CA 94903-4147
415-499-6269

2002 JUL -5 A 10:43

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

From: Susan L. Adams, Ph.D, RN
PO Box 6052
San Rafael, CA 94903
415-479-1813

Re: FEIR for Oakview Master Plan; SCH#1995063038

Dear Mr. Haddad,

Thank you for sending me a copy of the Oakview Final EIR. As per my discussion with Mr. Alex Hinds, I understand that this two week time frame for written public comments is being provided as a courtesy to the neighborhood. However, the timing of the release during July 4th vacation does not allow enough time for many of the interested community members to review the final document and thus gives the appearance of trying to slip this past us. With that said, I would like to submit my comments to you.

I would like to suggest that there are still some serious questions regarding components of this FEIR:


- A 1. This proposal still calls for commercial development. I would suggest that in light of a continuous vacancy rate of 20-25% in Marin County commercial buildings, that yet another commercial building will not address the needs of our community. There are "For Lease" signs in the commercial property on the south side of Lucas Valley Road. The new San Rafael Corporate Center has an 85% vacancy rate. The new 4th St. mixed use building is also relatively vacant. And finally, the location of this commercial space in proximity to Miller Creek poses potential risk to the creek area via asphalt runoff into the creek and pedestrian and vehicular traffic over the creek via a bridge crossing.
- B 2. This proposal still calls for "in-lieu" fees in place of "affordable housing" (pg. 2.0-16). In light of the current struggle that our county is facing regarding building affordable housing, any developer who is allowed to build in Marin should be required to actually build affordable units. And the affordability level should be set at the very low level in order to truly be affordable for our service workers.
- C 3. This proposal is based on assumptions in the Marin Countywide Plan and the San Rafael General Plan 2000. Both the City and County are nearing completion of their 2020 plans. It would seem prudent to hold approval for any new development until these plans are completed. The community has been very involved with this process and are addressing issues related to our current situation regarding water, traffic, environmental protection, housing, and economics.
- D 4. The Marin Municipal Water District is listed as the provider for water for domestic and fire protection purposes (pg. 2.0-13). Yet the cumulative projects listed on pg. 1999 are outdated. There are currently other applications on the table that are not listed. Two developments off of Los Ranchitos (one for 134 units and one for a senior assisted living development) and the St. Vincent's application for 866 units is not included in the cumulative projects list. These "cumulative" projects do not address the overall county plan for units in areas outside of the study area, but still requiring MMWD services. The county planners should seriously consider the overall county impact for water usage in order to avoid some of the problems we faced during our drought years. While it is true that some of Marin's water is being diverted from the Russian River, it is also true that there is an

increased demand for Russian River water from Sonoma County due in large part to their growth. The question must be raised re: what happens to our water resources regionally beyond 2025? My discussions with three of the five members of the MMWD lead me to believe that there are some serious board concerns about the cumulative effects of countywide development on our water resources. I would suggest that the EIR for this development address this issue.

- E** 5. This proposal states that maximum floor area, excluding a garage for two cars, shall not exceed 4500 square feet. It is implied that this type of development will fit with the existing community. I would like to suggest that these luxury homes fit more with northwestern Blackstone and with the western end of Lucas Valley Road, not with the smaller ranch style homes of Las Gallinas.
- F** 6. This proposal states that there is adequate space in the schools to meet the needs for this new development. Again, I would like to suggest that the cumulative effects of the Los Ranchitos proposed development and St. Vincent's proposed development be considered.
- G** 7. Section 5.3 pg. 7 lists the wildlife in the area. I would just like to add that for at least the past two years, a flock of wild turkeys has been roaming the Oakview property.
- H** 8. Re: traffic: I recently attended a San Rafael general planning meeting where the issue of worsening traffic was being addressed. This is a real problem. While 28 homes may not seem like it will have an impact by itself, each home will generate 10 car trips per day (280 total trips). The St. Vincent's proposal for 856 units would add 8560 car trips/day and Los Ranchitos' 134 units would add 1,340 car trips/day. The cumulative effect for all of the proposals now on the table in this area will be about 10,000 car trips/day. I believe this volume of traffic to be a serious problem and urge our county planners to consider this when deciding the merits of any new development.
- I** 9. Finally, I would like to see Marin take the lead in pushing for more green building strategies for any development or redevelopment that is proposed. The long term benefits for our community will outweigh the short term gains for the developers.

I appreciate the opportunity to submit my suggestions. I plan to attend the meeting on August 5, 2002. I believe that there are still unanswered questions leaving this Final EIR incomplete. I urge the county planners and the board of supervisors to (at the very least), hold off approving new developments until we have our new city and county plans (2020) completed.

Sincerely,



Susan L. Adams, Ph.D., RN

cc: Mr. Alex Hinds
members of the Board of Supervisors

RESPONSE TO LETTER 11 -- SUSAN L. ADAMS, PH.D., RN

Response to Comment 11-A

The commentor states that due to the current vacancy rate in Marin County commercial buildings the proposed office buildings would not address the needs of the community. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.

Response to Comment 11-B

The commentor is opposed to the project applicant's proposal to make an in-lieu payment to satisfy the County's affordable housing requirement.

In the review of the conformance of the *Oakview Master Plan* with *The Marin Countywide Plan* (Exhibit 4.1-1) it is noted that the project is inconsistent with program H-1.1a of the Housing Element (Inclusionary Units) and that the Master Plan should be conditioned so that 15 percent of the housing units on site be affordable to moderate, low, or very low income households. It should be noted that the recommendation that the Master Plan be conditioned to require affordable housing units on site is in response to Marin County policies and not as an EIR mitigation measure.

Response to Comment 11-C

The commentor states that both the County of Marin and the City of San Rafael are in the process of updating their respective general plans and that approval of any development should not be completed until these General Plans are updated. Local governments have a responsibility to process development applications that have been filed and have been accepted as complete. The current Oakview application (Master Plan, Use Permit, and Vesting Tentative Map) was determined to be complete in July 1999.¹¹ The County does not have the authority to arbitrarily decide not to process the application pending completion of some other process.

Response to Comment 11-D

As discussed in section 5.8 Public Services of the EIR the project site is within the Marin Municipal Water District (MMWD) service area. The MMWD provides approximately 75 percent of the water from its own reservoirs on Mt. Tamalpais and in west Marin. The MMWD also imports water from the Russian River to augment local supplies. District voters approved a bond measure in 1992 to increase incrementally the quantity of water from the Russian River. County planning projections indicate that the Marin water sources plus Russian River water will provide sufficient supply for at least the first few decades of the 21st century. Average annual water use within the MMWD service

¹¹ Letter to Irving L. Schwartz, C.E., I.L. Schwartz Associates, Inc. from Dean R. Powell, AICP, Principal Planner, Marin County Community Development Agency, July 26, 1999.

area is approximately 28,600 acre-feet (8,800 million gallons). The MMWD's current storage capacity is approximately 79,600 acre-feet (25,900 million gallons).¹²

Response to Comment 11-E

The commentor states that the size of the houses proposed would not fit in with the smaller ranch style homes of Las Gallinas. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.

Following the Planning Commission's review of the Final EIR it will consider the merits of the proposed Master Plan, Vesting Tentative Map and Use Permit. During consideration of the Master Plan the Planning Commission would consider such issues as compatibility of the proposed project with adjacent development. In consideration of compatibility the Planning Commission may consider the size of the proposed houses and may consider establishing a maximum size for individual houses. The Board of Supervisors would also consider the merits of the Master Plan, Vesting Tentative Map and Use Permit.

At both the Planning Commission and Board of Supervisor's public hearings individuals can comment on the merits of the project.

Response to Comment 11-F

Enrollment at the Dixie Elementary School District (DESD) continues to decline. In the Draft EIR it was reported that the three elementary schools had a capacity of about 1,350 and a February 2000 enrollment of 1,272 leaving a residual capacity of about 78 students. Current enrollment is 1,142 leaving a residual capacity of about 208 students.

In the Draft EIR it was reported that the Miller Creek Middle School has a capacity of about 750 students with an enrollment of 624 for a remaining capacity of 126. Current enrollment is 714 leaving a remaining capacity of 36.

The San Rafael High School District operates the Terra Linda High School, the San Rafael High School and the Madrone Continuation School. The three schools have an existing capacity of approximately 4,000 and an enrollment of 2,060.¹³

The State Allocation Board (SAB) standard student yield factors are 0.5 students per household for K-8 and 0.2 students per house for 9-12. Using these factors, the proposed 28 residential units would generate up to 14 new k-8 students and six new high school students.

As discussed in the Draft EIR both the Dixie Elementary School District and the San Rafael High School District has adequate capacity for these new students. As a result the project demand, and contribution to cumulative demand for public schools would be less-than-significant.

¹² Information for this response is from *Ranchitos Park Residential Development Draft EIR*, City of San Rafael and Environmental Science Associates, September 5, 2001, pages IV.J-4 and IV.J-5.

¹³ *Ranchitos Park Residential Development Draft EIR*, City of San Rafael and Environmental Science Associates, September 5, 2001, page IV.J-4.

Response to Comment 11-G

Comment noted.

As discussed under Impact 5.3-6 on page 5.3-26 of the Final EIR, the proposed project would alter existing patterns of wildlife use and could disrupt movement of fish and wildlife species along Miller Creek, which are identified as significant impacts. Smaller resident mammals, amphibians, and reptiles would be eliminated from areas encompassed by proposed grading, but these species are relatively common and their loss would not be considered significant. Similarly, activities of larger species such as deer, raccoon, wild turkeys, and numerous species of birds would be affected by proposed development, but most of these species adapt readily to suburban habitat and eventually would utilize developed areas on the site as well.

Response to Comment 11-H

Comment noted. Cumulative traffic is estimated to have a significant impact on intersection and freeway operations in the study area. The Final EIR evaluates the potential impact of cumulative traffic with and without the proposed project.

Response to Comment 11-I

The commentator states that she would like to see Marin take the lead in pushing for more green building strategies for any development or redevelopment that is proposed. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.

It should be noted that in October 2001 the Marin County Board of Supervisors adopted the Building Energy Effective Structures Today (BEST) program. This program exists to enhance energy efficiency and conservation in residential, commercial, and community facilities.

On October 22, 2002 the Marin County Board of Supervisors adopted new energy code requirements for homes larger than 3,500 square-feet (sf). The Single Family Dwelling Energy Efficiency Ordinance (Ordinance 3356) will apply to dwellings for which a building permit has not been applied for and accepted as complete by the Building Division prior to January 1, 2003, or received Design Review approval prior to October 22, 2002.

The goals of Ordinance 3356 are to reduce the annual and peak energy consumption of large homes, and to ensure that a new single family home larger than 3,500 sf do not exceed the energy use of the Title 24 standard of the equivalent home designed at 3,500 sf. This can be achieved with readily available energy efficiency measures and/or by supplementing energy use with renewable energy.

Ordinance 3356 applies only to single family dwellings constructed in the County's unincorporated area.

Energy efficiency and green building consultation is available to Marin residents and businesses at no cost, through the County of Marin. The assistance is based on the Leadership in Energy and Environmental Design (LEED) Green Building rating system. For assistance contact Sam Ruark, BEST program coordinator, Community Development Agency by phone at 415.507.2659 or by email at sruark@co.marin.ca.us

LETTER 12

RON MARINOFF

66 Mount Rainier Drive, San Rafael, CA 94903

July 6, 2002

Tim Haddad, Env. Coordinator
Marin County Comm. Dev. Agency
3501 Civic Center Dr. Room 308
San Rafael, CA 94903-4157

Dear Sir:

In regard to the final EIR for the Oakview Master Plan,
we have the following comments:

- A 1. Master Response A on page 7.0-5 is totally unacceptable and has no relationship to "Affordable Housing". Assisted living facilities in Marin currently charge between \$4000 and \$6000 or more per month. Also, affordable housing should be built on site and in-lieu funds should not be seen as acceptable. No reason is given as to why this housing cannot be built on site. Also, there is no discussion of a density bonus for affordable housing on site.
- B 2. 515-7 Project Access Impacts, Appendix C in regard to new entrance to Lucas Valley Road are not responsive to our earlier letter regarding this solution tried and failed at Mr. Lassen Dr. and Lucas Valley Rd. No reason to believe this proposal would work. We agree with the Marin County Public Works Dept. in opposing this intersection.

Yours very truly,

Ron Marinoff

RON MARINOFF

RECEIVED

2002 JUL -9 P 3:45

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

RESPONSE TO LETTER 12 -- RON MARINOFF

Response to Comment 12 - A

In response to comments on the Draft EIR the project applicant proposed as an option the use of the two buildings along the Highway 101 frontage for an assisted living residential use. The commentor is correct that in proposing the assisted living residential use the project applicant did not make any commitment in regards to the provision of the affordable housing on site.

The same conclusion regarding the project's conformance with program H-1.1a of the County's Housing Element is also valid for the proposed project with the assisted living residential option. Based on a proposed 150 residential units in the assisted living facility, Housing Element program H-1.1a would require that 22 of the units be affordable by households of low or moderate income.¹⁴

Response to Comment 12 - B

The opposition by the Marin County Department of Public Works Traffic Engineering Section (see Letter 3A in the Final EIR) to a project driveway at Lucas Valley Drive is understood. An alternative to the proposed Lucas Valley Road driveway would be to access this residential section of the project from Las Gallinas Avenue via the existing streets, Ellen Drive and Erin Drive. These streets could be extended to provide access to all 20 lots. The primary traffic drawback to this alternative would be during the AM commute period when Las Gallinas Avenue is heavily congested. The 20 homes are estimated to put an additional 21 vehicles on Las Gallinas Avenue during the AM peak hour. The outbound project trips (16 vehicles) would experience significant delay exiting the site due to congestion on Las Gallinas Avenue.

Even under conditions where all 28 project homes were accessed from either Erin Drive or Elvia Court, the combined traffic from the project and the existing homes on these streets would not warrant the installation of a traffic signal on Las Gallinas Avenue. The impact of project residential traffic to Las Gallinas Avenue would be experienced as a significant delay by the traffic headed outbound on either of these minor streets.

¹⁴ Marin County Code Title 22 (Zoning Ordinance), Chapter 22.97, 1988. Subsection 22.97.030 states that in applying the percentages, any decimal fraction less than or equal to 0.50 may be disregarded and any decimal fraction greater than 0.50 shall be construed as requiring one dwelling unit. In accordance with the County's current inclusionary housing ordinance, a 150-unit assisted living residential project would require 22 affordable housing units.

LETTER 13
Kathleen Gaines & Ray Welch
365 Quietwood Drive
San Rafael, California 94903
415.472.7575

RECEIVED

2002 JUL -9 P 2:05

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

July 6, 2002

Tim Haddad
Environmental Coordinator
Marin County Planning Department
Marin Civic Center
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Re Oakview Development EIR

Dear Mr. Haddad:

First, we want to object to the timing of the EIR and comment period. Release of the EIR during the July 4 holiday week shows disregard and disrespect for the community. You must have know that many residents are on vacation and will be unable to submit written comments. In addition, both the San Rafael and Dixie school districts are on summer break. It is unlikely that the two districts, directly impacted by the proposed development, will be able to submit comments during this time.

While the detailed June 2002 Final EIR may address environmental issues to the letter of the law, we do not feel that it adequately addresses our concerns about quality of life in Marinwood. We are confident that most of our neighbors share these concerns. We oppose the proposed development for the following reasons.

Appropriate Scale and Siting

Marinwood is a residential community which includes several schools and churches. The only businesses within its boundaries are services primarily for its residents and residents of immediately surrounding communities, including the retail shops on Marinwood Avenue and the small business center at Las Gallinas and Miller Creek.

- A • **Proposed Office Development.** The response to our May 7, 2001 letter does not effectively address the appropriateness of the proposed 94,400 square foot office development. It would adversely affect the residential nature of the surrounding neighborhood and significantly impact the creek and hillside woodlands. Moreover, its scale, architecture and siting are the epitome of sprawl development—by definition, ugly, environmentally destructive, and sociologically irresponsible. There are options for infill commercial development in central and northern Marin County that do not involve destroying green fields, regardless of its technical allowability under current zoning.
- B • **Proposed Housing.** Our communities can no longer support oversized houses which use more than their fair share of electricity and natural gas. Even though the Marin Countywide Plan does not specifically limit the size of residential lots and houses, the houses and lots proposed are simply too big relative to existing housing in the adjoining area of the community. We don't object to new housing in our neighborhood. However, it should be in scale with existing housing, most of which is under 2,000 square feet with a one- or two-car garage. Clustered townhomes such as the housing at Casa Marinwood might also be acceptable and might provide more affordable homes for our teachers and firefighters.

Traffic

C The EIR does not address the cumulative impacts of other nearby developments. These include the buildout of new homes on Ignacio Blvd., the Lucas-Big Rock development, and development of the St. Vincent's, Silveira Ranch, and Silveira properties. Highway 101 between Novato and Central San Rafael is at peak capacity during the AM commute hours and very crowded at PM commute hours. The highway simply cannot support the addition of commuters driving into Marinwood to work at the proposed office development without causing significant travel delays for all motorists in the area.

The proposed homes would also increase traffic to and from neighborhood schools, most particularly Terra Linda High School which is not adequately supported by Golden Gate Transit.

Recent improvements to Marinwood Avenue and Las Gallinas have reduced spillover from the AM commute on 101. New office development would undo the good that has been done by once again increasing traffic on our community surface streets and rendering them unsafe for pedestrians, bicyclists, and local residents.

Conclusion

We can see no compelling reasons that the proposed Oakview master plan for development would enhance the Marinwood community in any way. We can only see where it would degrade the quality of our community. We also do not see that the development would enhance Marin County or the City of San Rafael which already suffer from a glut of overdeveloped office space, traffic gridlock, and an adequate supply of luxury homes.

Therefore, we continue object to the Oakview development.

Very truly yours,



Kathleen Gaines



Ray Welch

RESPONSE TO LETTER 13 -- KATHLEEN GAINES & RAY WELCH

Response to Comment 13 -- A

The commentor states that the Final EIR does not effectively address the “appropriateness of the proposed 94,400 square foot office development”. As previously stated, offices are a permitted use in the RMP zone subject to the securing of a use permit. All potential environmental impacts of the proposed office development are addressed in the EIR. Beyond those impacts discussed in the EIR the “appropriateness” of the office portion of the project is a comment on the merits of the proposed project and not on the adequacy of the EIR.

Response to Comment 13 -- B

The commentor expresses a concern with the size of the proposed housing. This is a comment on the merits of the proposed project and not on the adequacy of the EIR.

Following the Planning Commission’s review of the Final EIR it will consider the merits of the proposed Master Plan, Vesting Tentative Map and Use Permit. During consideration of the Master Plan the Planning Commission would consider such issues as compatibility of the proposed project with adjacent development. In consideration of compatibility the Planning Commission may consider the size of the proposed houses and may consider establishing a maximum size for individual houses. The Board of Supervisors would also consider the merits of the Master Plan, Vesting Tentative Map and Use Permit.

At both the Planning Commission and Board of Supervisor’s public hearings individuals can comment on the merits of the project.

Response to Comment 13 -- C

Please see Master Response A and Response to Comment 3-A.

LETTER 14

July 6, 2002

RECEIVED

Marin County Community Development Agency
3501 Civic Center Drive, Room 308,
San Rafael, CA 94903

2002 JUL -9 P 1:56

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Attention: Tim Haddad, Environmental Coordinator

Re: Oakview Master Plan Final Environmental Impact Report (FEIR)

The Oakview Master Plan should not be approved for many reasons, the most important of which is traffic.

A Recently, residents of Marinwood worked diligently to alleviate problems with freeway traffic turning onto Miller Creek Road and Las Gallinas and rendering it impossible for parents to safely drop their children off for school. Traffic on Lucas Valley Road is increasing daily with the expansion of George Lucas' business, the office buildings on Los Gatos and membership at the YMCA.

The future cumulative effect of the proposed Oakview development together with St. Vincent's Village and the building of 450 homes at Hamilton on Ignacio Boulevard will put traffic at a gridlock on the freeway and our neighborhood streets.

We do not need an additional 28 luxury homes in Marinwood. When we look at the hills where we once enjoyed hiking our views are now blocked by large luxury homes – and we ask “What about energy consumption?” “What about water usage?” “What is happening to the beautiful green open space of Marinwood?”

PLEASE –vote against this project.

E. Wiebke
Elaine & Clarence Wiebke
216 Roundtree Way
San Rafael, CA 94903

RESPONSE TO LETTER 14 -- ELAINE & CLARENCE WIEBKE

Response to Comment 14 -- A

Please see Master Response A and Response to Comment 3-A.

LETTER 15

Ruth Carter

RECEIVED 93 Windstone Drive
Marinwood, CA 94903

2002 JUL -9 P 1:39 415/492-8160
415/491-1490

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Attention: Tim Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Dear Mr. Haddad:

As President of the Miller Creek Homeowners Association, I received a copy of the Oakview Master Plan FEIR last week (SCH1995063038). I read through the FEIR to see the changes that came about because of the feedback of both the public at large and the Supervisors to the Draft EIR. I was surprised to find that there were no significant differences between the documents. Both include much the same size and scope.

A The issues that I, as well as others, raised at the Public Scoping Meeting did not seem to be addressed at all, the most significant of which is the impact of such a large size office building on traffic. This community has demonstrated on many occasions that we believe the negative impact of this additional traffic is untenable. Some mornings we have to wait up to 10 minutes to even get on the freeway during the weekday morning commute. Add to that a combination of the Oakview Project and the 450 homes being built on Ignacio Blvd., and last, but definitely not least, the proposed St. Vincent's Village. The negative impact of that much increased car traffic is almost inconceivable and seems almost too ludicrous to contemplate. Why make a bad situation even worse? Why add additional cars to an already congested and soon to be more congested area?

Additionally, the Marinwood community worked very hard to garner public support for managing traffic flow through our residential neighborhood. By adding more cars to freeway traffic, it is inevitable that more commuters will use side streets to avoid freeway congestion and our neighborhood will suffer as a result.

B Also, there were concerns raised about the environmental impact, both physical and esthetic, of such a large building, which were not addressed at all. Moreover, there is still a lack of planning for affordable housing (28 luxury homes does not sound affordable to me).

I cannot urge you strongly enough to reject this proposal at the appropriate time.

Respectfully submitted,



Ruth Carter
President,
Miller Creek Homeowners Association

RESPONSE TO LETTER 15 -- RUTH CARTER

Response to Comment 15 -- A

The Final EIR disclosed a number of traffic related impacts within the study area. The impacts result from the combination of cumulative background growth as well as from the proposed project. The key elements of the Final EIR analysis are disclosure of project impacts and development of mitigation. The mitigation measures developed for the *Oakview Master Plan* for the most part involve the installation of signals at unsignalized intersections. The signals work as mitigation only if they are effectively coordinated throughout the study area and only if the improvements underway and planned for Highway 101 move forward.

The comment notes that adding more traffic to the freeway could result in an increase of pass-through traffic to the community. More traffic is being added to the freeway (see Response to Comment 3-A) from the current development at Hamilton Field and other smaller projects in the vicinity of the study area. The planned Highway 101 improvements, a reversible HOV lane and a southbound auxiliary lane will increase the peak hour commute capacity and will absorb some of the anticipated future traffic. However, the Final EIR analysis shows that peak hour freeway operations will remain at congested LOS E and LOS F conditions under cumulative conditions with the planned improvements.

Response to Comment 15 -- B

The commentor states that there were concerns raised about the environmental impact, both physical and esthetic, of such a large building, which were not addressed at all. Moreover, there is still a lack of planning for affordable housing (28 luxury homes does not sound affordable to me).

It is unclear from the comment which specific environmental impacts were not addressed in the EIR. **Section 1.1 EIR Requirement** discusses the process the County used to determine the scope of the EIR. Each of the environmental concerns and issues raised during the County's scoping process are addressed in the EIR.

The comment in regard to the issue of affordable housing is a comment on the merits of the proposed project and not on the adequacy of the EIR

LETTER 16

Marian K. Blanton
155 Roundtree Blvd.
San Rafael, CA 94903
479-7446
mgblanton@saber.net

RECEIVED

2002 JUL 11 P 3:31

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

July 10, 2002

Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Re: Oakview FEIR

Dear Mr. Haddad:

A I have just learned that Oakview FEIR includes installation of traffic signals at every major intersection across Las Gallinas Ave. in order to control traffic flow. That "solution" will merely encourage additional vehicles to join the hundreds of commuters now using Marinwood surface streets as an extension of 101 corridor. We want less, not more traffic on our neighborhood streets.

We cannot accept a solution to gridlock that converts our tranquil community into a substitute for solving mass transportation needs, south bound, in order to encourage commercial development in Marinwood.

B A second element of the FEIR, to substitute an assisted care living facility for the 92,000+ sq. feet of office space, to be located above CPH station on 101, is also not acceptable. There are few seniors who would select a living facility in a bare, viewless location, isolated from mass transit, choosing to breathe vehicular exhaust fumes, day and night. Any planning for development must put current residents' needs above the short-term benefit that may accrue to a single entity, namely-- the developer.

Look more carefully at areas of Marin County already sustaining commercial development, for additional building, please.

Marinwood does not want to join the ranks of communities which have lost their residential quality because local lawmakers chose the interests of the few over the many. We urge you to reject the current Oakview FEIR proposals.

Sincerely,

Marian K. Blanton

Marian K. Blanton

RESPONSE TO LETTER 16 -- MARIAN K. BLANTON

Response to Comment 16 -- A

Comment noted. Please see Response to Comments 5-E and 15-A.

Response to Comment 16 -- B

The commentor states that the assisted care living residential use option is not acceptable. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

LETTER 17

RECEIVED

July 12, 2002

2002 JUL 15 P 3:55

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Tim Haddad
Marin County Community Development Agency
3501 Civic Center Drive Rm # 308
San Rafael, CA 94901

Re: Final Environmental Impact Report (FEIR)

Dear Mr. Haddad,

We do not feel it is in the best interest of our community to support the Oakview Master Plan Final Environmental Impact Report.

A Twenty eight new luxury homes and 94,400 square feet of office space on beautiful land for the benefit of a few. Luxury homes do not belong in Marinwood. Just think of the extra energy and water consumption these homes would use compared to the average Marinwood home. Why does the county need more office space? So much is now available in San Rafael.

The traffic problems on the local streets in Marinwood have been unbearable at commute times. Think what this new development will be with the 450 new homes being built in Ignacio and what about St. Vincents Village?

We urge a no vote on the FEIR. This project will not in anyway benefit the residents of Marinwood and can only add a burden to the whole county.

Sincerely,

Lisa Lightner, Walter Lightner, Gloria Lightner

Lisa Lightner, Walter Lightner, Gloria Lightner
206 Roundtree Way
San Rafael, CA 94903

Tel 415 479-5692

RESPONSE TO LETTER 17 -- LISA LIGHTNER, WALTER LIGHTNER, GLORIA LIGHTNER

Response to Comment 17 -- A

The commentators provide several reasons why they are opposed to the proposed project. The commentators “urge a no vote on the Final EIR”. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

It should be noted that the County will not be asked to vote “yes” or “no” on the Final EIR. Rather, the CEQA Guidelines require that the County certify that the Final EIR is complete. No action can be taken to approve, conditionally approve, or deny the project until the Final EIR is certified. County acceptance of the EIR upon certification does not require approval of the project studied in the EIR.

LETTER 18

7/12/02

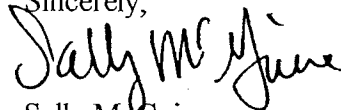
Dear Tim Haddad:

I am writing to protest any development at all on 200 Lucas Valley Road. I am a Marin County resident living in the Casa Marinwood complex. We already have traffic problems in Marinwood and this project will only make an already crowded roadway worse, not to mention highway 101. We do not need more office buildings. We do need to preserve the little remaining open space that is left. The plants and animals that live there need to be protected, for their sake and for ours. Miller Creek needs to be protected.

A

We humans must stop developing the land for profit. Enough has been done already. Greed is at the root of this. Greed and self-interest. Who speaks for the land or the animals or the plants. It does not matter if they are not part of an endangered species, they have their own right to live. We humans need the green of the trees and the gold of the grasses that grow there. I need to look out my windows and see the trees, not office buildings or more houses. I need to be able to see the birds and hear their songs. this project will destroy their homes for a few homes for humans, it is not fair or right. We are destroying our planet with our selfishness and greed. It is downright stupid of us to do this. We not only destroy the land and animals that live there, but we destroy the future for our children. The yet unborn, will never know the wildness that we all need for our sanity if we develop it all. Please do not allow this development. Preserve the whole parcel intact.

Sincerely,



Sally McGuire
1 Majorca Ct.
San Rafael, CA 94903

RECEIVED

2002 JUL 15 P 3:

MARIN COUNTY
COMMUNITY DEVELOPMENT
7-15-02

RESPONSE TO LETTER 18 -- SALLY MCGUIRE

Response to Comment 18 - A

The commentator provides several reasons why she is opposed to the proposed project. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

LETTER 19

Anne and Mac Hamlin
231 Deepstone Drive
San Rafael, CA 94903

RECEIVED

JUL 17 12 3: 26

MARIN COUNTY
COMMUNITY DEVELOPMENT
DEPT

July 15, 2002

Mr. Timothy Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive
Room 308
San Rafael, CA 94903

Dear Mr. Haddad:

Having lived in Marinwood for the last eight and a half years and witnessed the impact of increasing traffic every year, we are compelled to comment on the Oakview development plan:

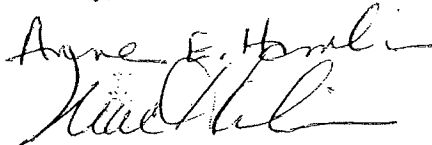
A Increased traffic is, of course, the most visible result of the pressure to build new developments to the North, and gridlock in Marinwood has become common. We have watched quick trips to the local grocery store and to our daughter's school become twenty-minute ordeals simply because our neighborhood streets are over-run with commuters looking to save a few minutes.

But even more disturbing is the increased burden on our supply of water, power and the level of community services that Oakview would cause. These resources are already a grave concern at current housing levels.

Adding to the demand for our roads and resources serves no one in this community and threatens our resources countywide. A vote against this development is a vote for the preservation of this neighborhood and our future in Marin.

Please vote NO.

Sincerely,



Anne and Mac Hamlin

RESPONSE TO LETTER 19 -- ANNE AND MAC HAMLIN

Response to Comment 19 -A

The commentators provide several reasons why they are opposed to the proposed project. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

LETTER 20
RECEIVED

#6 Lisa Court
San Rafael, Ca 94903
July 26, 2002

2002 JUL 23 P 1:04

Tim Haddad, Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Comments on Nicholas - Berman EIR dated June 2002
State Clearinhouse No. 95063038

Mr. Haddad:

A You should be aware that curb parking in front of the church on Las Gallinas near Ellen Ct. presents a hazard to vehicles exiting Ellen Court onto Las Gallinas. Especially vans, pickups, and trailers parked along that curb block visual access of northbound traffic when we are attempting to exit Ellen Ct. Vehicles turning right off of Lucas Valley road to go north on Las Gallinas present a hazard to cars exiting Ellen Ct. In fact, nothing larger than a compact sedan should be allowed to park between Lucas Valley Road and Ellen Ct. or generally within 150 feet of an intersection.

Will an accident at the new Lucas Valley access result in another traffic light?

Couldn't the developer provide vehicle access at Los Gamos Road rather than dump traffic onto Lucas Valley Road through a new access? Some day the Los Gamos intersection will have a stop light.

B Can my new neighbor see into my back patio or window from any window or deck of his house?

C Where does the EIR address the new resident that will leave his engine idle, especially diesel, and dump exhaust fumes in my back yard?

D Before any commitment is made, the responsibility for replacing the culvert crossing Highway 101 should be placed, with the developer paying his full share.

E All drainage modifications necessary in the Erin/Lisa/Ellen Court areas should be paid for by the developer.

F Under landscaping page 5.4-10 the EIR recommends a 50 foot buffer strip with clusters of drought resistant trees and shrubs. I think the developer should be held to that.

Generally, I feel that the more the developer builds on the Freeway side of the hill, the better for us on the West side. However, it is depressing to see unoccupied buildings. Are you sure you want a rest home next to the Freeway, next to the noise and exhaust fumes?

Sincerely,

A handwritten signature in black ink, appearing to read "Maurice Monson". The signature is written in a cursive, flowing style. There is a large, dark ink blot or smudge at the beginning of the signature, near the first letter.

Maurice Monson

RESPONSE TO LETTER 20 -- MAURICE MONSON

Response to Comment 20-- A

Comments refer to on-street parking conditions in the vicinity of Ellen Court. If parked vehicles are obstructing sightlines for vehicles exiting Ellen Court then parking on Las Gallinas (at this location) should be restricted in order to provide clear street views and safer operations in the area.

Extending Los Gamos to provide access to the projects residential component is not practical due to potential environmental constraints located on-site. Caltrans will require approximately 10 acres of the site in the general vicinity of Los Gamos in order to construct planned improvements for the southbound Highway 101 ramps. The use of Los Gamos for project access could conflict with the ramp improvement plans.

Response to Comment 20 -- B

The proposed houses would be subject to the County's design review process. Issues such as the scale, mass, height, area and materials of the proposed houses as well as the impact on the enjoyment of other property in the vicinity are considered during design review.

Response to Comment 20 -- C

The air quality section of the EIR focuses on air quality impacts of the traffic generated by buildout of the proposed project. Carbon monoxide concentrations were modeled using the screening procedures established by the Bay Area Air Quality Maintenance District. The modeling is based on average vehicle speeds which takes into account normal vehicle idling time. Exhibit 5.6-2 shows predicted carbon monoxide concentrations at the busiest intersection near the Oakview project site. Exhibit 5.6-2 shows carbon monoxide concentrations associated with future conditions are predicted to remain below California and national ambient air quality standards. Based on this information it is reasonable to assume that carbon monoxide concentrations would not exceed California or national ambient air quality standards in the backyards of existing residences.

Response to Comment 20 -- D

This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

Response to Comment 20 -- E

This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

Response to Comment 20 -- F

The 50 foot landscaped buffer along the edge of the property directly adjacent to the existing neighborhood at Ellen Drive and Lisa Court, mentioned on page 5.4-10 of the EIR, is a part of the proposed project.

David & Paula Snyder

LETTER 21

509 Miller Creek Road • San Rafael, CA 94903 • (415) 499-3463 • (415) 479-4864 fax • ddss@mindspring.com

2002 JUL 25 P 12:54

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

July 25, 2002

Tim Haddad
Marin County Community Development Agency
3501 Civic Center Dr. Room 308
San Rafael, CA 94903

Re: **Oakview Master Plan Final Environmental Impact Report, June 2002**
County of Marin Community Development Agency
State Clearinghouse No. 95063038

Dear Mr. Haddad,

Thank you so much, or please thank whoever extended the comment period on the Oakview project at Highway 101 and Lucas Valley Rd.

We've been residents of Marinwood for nearly 12 years. Our neighborhood has managed to retain an ideal atmosphere of older homes, trees and safe streets for children. The Oakview Project will be an invasion with the increased noise and traffic. This letter is a response to the Final Environmental Impact Report.

The Final Environmental Impact Report for the Oakview Master Plan is deficient. It fails to completely analyze cumulative impacts of other projects and proposes traffic mitigation measures that will adversely affect the quality of life in our neighborhood.

TRAFFIC:

- A
- 1) Even with the implementation of the mitigation measures discussed in the FEIR, the additional traffic from the project will cause a deterioration of the quality of life in our neighborhood. Traffic had decreased a bit since the redesign of Miller Creek Rd. at Las Gallinas. However, the impact seems to be short-lived, every time traffic on southbound 101 is slow, people still take the Marinwood exit. For example, recently I was heading North on Las Gallinas shortly after 9:00 a.m., and Las Gallinas was backed up to Pinewood with "highway jumpers." And we're talking about summer commuter hours! When Las Gallinas becomes too full, the overspill of commuters are still taking Miller Creek Rd. to Lucas Valley.
 - 2) Concerns raised earlier have not been adequately addressed. Captain R.J. Morehen, Commander of the Department Of California Highway Patrol, submitted a document stating, "The addition of resident and transient commercial traffic, resulting from the building project, has the potential for exacerbating the existing traffic congestion..." He

addressed concerns about Southbound 101 traffic attempting to exit, traffic congestion on Lucas Valley and Las Gallinas, which he termed a "country road." (Final EIR, page 7.0-76)

- 3) The report indicates that traffic from Oakview will be mitigated by stoplights at all main intersections in Marinwood (Final EIR page 4.0-21). Why should we accommodate a developer by decreasing the standards of our neighborhood? This is where people live, we don't want to sit at stoplights or deal with traffic lights flashing in our bedroom windows!!! (Please also note Final EIR page 3.0-26).

From our understanding, the Final EIR is based upon Cumulative Projects in the Study Area, dated August 1999, (page 2.0-21) DOES NOT TAKE INTO ACCOUNT THE IMPACT OF DEVELOPMENT OF HAMILTON FIELD, SIVIERA RANCH, AND IGNACIO ROAD!! How can a reasonable approach to traffic and air pollution not include larger projects in the area, both immediate and within just a few miles?

IMPACT ON DIXIE SCHOOL DISTRICT

B

- 1) Section 2.3 of the FEIR, Cumulative Development Assumptions, does not include development at Silveira Ranch. The cumulative impacts of these projects on local schools should have been considered in Section 5.8, Public Schools.

Our conclusion is that the FEIR for the Oakview Master Plan fails to adequately address important issues. We urge that the project not be allowed to move forward until these concerns have been addressed.

Sincerely,

Paula R. Snyder
— David M. Snyder

Paula and David Snyder

RESPONSE TO LETTER 21 -- DAVID & PAULA SNYDER

Response to Comment 21 -- A

Comments noted. Please see Master Response A and Response to Comment A-3.

Response to Comment 21 -- B

As discussed in the Draft EIR and in response to comment 11-F both the Dixie Elementary School District and the San Rafael High School District has adequate capacity for these new students. As a result the project demand, and contribution to cumulative demand for public schools would be less-than-significant.

LETTER 22

July 26, 2002

RECEIVED

Mr. Tim Haddad
Environmental Coordinator
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

2002 JUL 26 A 9 48

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Final Environmental Impact Report For Oakview Master Plan,
Vesting Tentative Map and Use Permit

Dear Sir,

The Use Permit is a stratagem to avoid the Marin County
Master Plan, and thus create commercial zoning.

A The subject property shall be developed as one single
property in accordance with the Marin County Master Plan.
No Tentative Map shall be approved or issued.
No Use Permit shall be approved or issued.

Very truly yours,

Frank K. Luederitz

Frank K. Luederitz
219 Elvia Court
San Rafael, CA 94903

RESPONSE TO LETTER 22 -- FRANK K. LUEDERITZ

Response to Comment 22 -- A

The commentator is opposed to the proposed project. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

The commentator does state that the use permit is a stratagem to avoid the Marin County Master Plan, and thus create commercial zoning. The intent of this comment is not entirely clear, however, it should be noted that the applicant has requested approval of a Master Plan for the project site to allow residential, office, and open space uses on the project site, approval of a Use Permit to allow office uses in the RMP zone, and approval of a Vesting Tentative Map to divide the property into two parcels. In considering these requests the County will require conformance with the relevant policies of *The Marin Countywide Plan and the Marin County Zoning Ordinance*.

LETTER 23

ALAN & NANCY NATION
58 GRANDE PASEO
SAN RAFAEL, CA 94903
415 479 4215

RECEIVED

2002 JUL 25 A 10: 5

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903-4157

July 26, 2002


Attn: Tim Haddad,
Environmental Coordinator

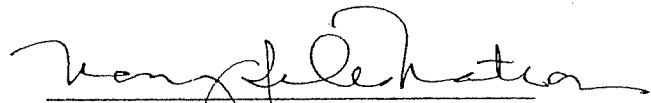
Re: FEIR Oakview Master Plan, Vesting Tentative Map and use Permit

To whom it may concern,

A We would like to **object** to the planned development of the area as described in the FEIR. The plan would present a much higher traffic congestion in the area and would adversely affect the quality of life in this neighborhood.

Sincerely,


Alan Nation


Nancy Isles Nation

RESPONSE TO LETTER 23 -- ALAN & NANCY NATION

Response to Comment 23 -- A

The commentators provide the reasons why they are opposed to the proposed project. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

LHTE- Res'd after 7/26/02
LETTER 24
Comment End

Drs. Jeffrey & Marjorie Bondy
5 Corte del Rey
San Rafael, California 94903

RECEIVED

2002 JUL 29 P 3:51

MARIN COUNTY
COMMUNITY DEVELOPMENT
AGENCY

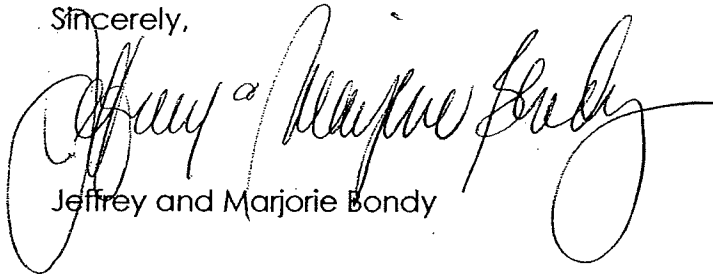
Tim Haddad
Marin County Community Development Agency
3501 Civic Center Drive
Room 308
San Rafael, California 94903-4157

July 24, 2002

Dear Mr. Haddad,

A We would like to take this opportunity to express our concerns regarding the Oakview Development Project. The development of this land, as proposed, is frightening to many of us who live in the surrounding area. It is certain to exacerbate the traffic problems that presently pose an inconvenience, and will encroach upon the open, free feeling that drew us to Marin in the first place. "Progress" of this kind is not in the interest of the community.

Sincerely,


Jeffrey and Marjorie Bondy

RESPONSE TO LETTER24 -- JEFFREY AND MARJORIE BONDY

Response to Comment 24-- A

The commentors provide the reasons why they are opposed to the proposed project. This is a comment of the merits of the proposed project and not on the adequacy of the EIR.

7. FINAL ENVIRONMENTAL IMPACT REPORT: OAKVIEW MASTER PLAN, VESTING TENTATIVE MAP AND USE PERMIT

Meeting to consider the adequacy and completeness of the Final Supplemental Environmental Impact Report (FSEIR) for the Oakview Master Plan, Vesting Tentative Map, and Use Permit which proposes to subdivide the 106.3 acre subject property into two parcels for future residential and office building development. Parcel 1 would include 15.3 acres reserved for 28 detached single-family residential lots, 1.8 acres of public right-of-way, and 34.8 acres of open space for a total of 51.9 acres. Parcel 2 would consist of 20.1 acres reserved for 94,400 square feet of administrative/professional office development, and 34.3 acres of open space for a total of 54.4 acres. All open space areas would be deeded or offered for dedication to the Marin County Open Space District, the Marinwood Community Services District, or a similar public entity. The subject property is located at 200 Lucas Valley Road, San Rafael, and is within the unincorporated area of Marin County immediately north of the City of San Rafael. The project site is in the northwestern quadrant of the U.S. Highway 101/Lucas Valley Road interchange, bounded on the east by Highway 101, on the south by Lucas Valley Road, on the west by residential lots along Ellen Drive, Erin Drive, Lisa Court, and Elvia Court, and on the north by Miller Creek, and is further identified as Assessor's Parcel 164-270-03.

Tim Haddad, Environmental Planning Coordinator, summarized the environmental review process, commenting on the identified impacts, Countywide Plan consistency, alternatives explored, and response to comments on the Draft EIR, as set forth in the staff report. He concluded by stating that the Final EIR was adequate and complete to be acceptable for certification as it provided adequate information and analysis for the Commission to make an informed decision.

Tom Lai, project planner, presented an overview of the proposal commenting on the merits and different components of the proposed project.

Staff responded to Commissioners' questions in the following manner:

- The 15% inclusionary housing requirement is based on 28 units.
- The assisted living facility was proposed as an alternative to provide housing. Should assisted living actually be one of the components of the project, 15% of those units would be required to be affordable. However, this issue would be further analyzed at the merit stage of the project.
- The assisted living option was not included in the comparison of the alternatives in the EIR because the project sponsor simply offered it as an option, but did not commit to it. However, under CEQA requirements, this option for an all residential use on the site would be within the parameters of the alternatives evaluated and the impacts of said option were discussed in the EIR at a similar level of detail. The impacts of this option make it comparable to the all residential alternative. The impacts would be less than the proposed project.
- Under the project sponsor's conceptual mitigation plan, wetlands will be restored on site to the extent feasible, but off-site restoration or "banking" will also take place.
- The EIR did not use the San Rafael General Plan's build out scenario for cumulative traffic impacts (which also takes into consideration future potential projects in the surrounding area), but rather used the Marin County Congestion Management Agency's projections which the County staff and EIR traffic consultant believe are more conservative, and more accurately reflect worst case impacts. The methodology used was reviewed and deemed appropriate by the County Traffic Engineer.

- Even though the meeting was not noticed as a public hearing, under the Brown Act members of the public interested in speaking should be allowed to do so.

Members of the audience were invited to speak.

Susan Adams, concerned citizen, respectfully disagreed that the Final EIR adequately addressed traffic cumulative impacts.

Don Dickenson, Marin Conservation League, noted their letter dated July 25, 2002 expressing concern regarding the adequacy of the Final EIR in terms of visual and traffic cumulative impacts. The photo montages in the Final EIR did not accurately depict the proposed office component of the project, including the buildings, associated parking lots, and new frontage road. Additionally, the Final EIR failed to acknowledge the potential development allowed for the St. Vincent's/Silveira properties which will significantly impact traffic at the Marinwood and Lucas Valley interchanges. Therefore, he concluded by requesting that the Final EIR not be certified until those issues have been adequately addressed.

Frank K. Luederitz, concerned resident, expressed concern with the proposed rezoning of the property

Paul Cohen, concerned citizen, echoed the concern regarding the accuracy of traffic cumulative impacts based on the methodology used, and asked that the traffic modeling used for the project be carefully reviewed to ensure that actual traffic impacts are identified. Additionally, while he agreed that impacts from the assisted living facility may be less, said impacts would be different. It is important to know how different said impacts would be. He also felt that the EIR should address the access thresholds for signalization for Lucas Valley Road. He concluded by stating that the timing of the project may not be the best given the availability of existing office development.

Breuer Gerd, concerned homeowner, expressed concern that drainage issues and access from Lucas Valley Road were not adequately addressed in the Final EIR.

The meeting was closed to public comment.

Commissioner Barner agreed that traffic may not have been adequately evaluated. In his opinion, regardless the percentage in traffic increase, the fact that the Level of Service is already at F would result in a significant, unavoidable impact. Additionally, while the MOU with the City clearly states that traffic impacts will not exceed a certain level, it does not indicate what actions will be taken if traffic impacts are already exceeded. Commissioner Barner also expressed concern that since many revisions to the text have been made, failure to go through and change all references has made the document very confusing. Examples related to basin vs. basins and conflicting tree replacement ratios cited. Other concerns related to some of the mitigations, especially the trade off between mechanical ventilation (air conditioning) vs. energy conservation in that the mitigation as proposed (air conditioning) may increase energy impacts and/or reduce efficiency and this was not addressed. He concluded by stating that the subject location may not be the best location for an assisted living facility given the proximity to Highway 101 noise.

Commissioner Berland concurred with concerns regarding the traffic analysis and stated that the Hamilton development was also left out. He concluded by requesting that more easily readable exhibits be provided.

Commissioner Thompson also shared the concerns raised regarding the traffic study and asked that a clear statement on the cumulative effects of growth be included in the EIR text itself, not just in the response to comments.

Commissioner Buddie stated that while he understood the traffic modeling used in the Final EIR, he agreed that a preview of the worse case scenario was important given the location of the property. Another concern was the lack of adequate information regarding the potential assisted living component of the project.

Commissioner Julin and Madam Chair Garbarino shared the concerns raised by fellow Commissioners. Furthermore, Commissioner Julin agreed that it would be beneficial to obtain more information regarding potential cumulative impacts, especially given the allowable, existing, planned, and proposed development in the surrounding area. She concluded by suggesting that the office and residential components of the project be analyzed separately.

Staff explained that based on Guideline Amendments, CEQA currently allows for an EIR to "freeze" the environmental setting, including traffic generation in the vicinity of the study area using conditions found at the time a Notice of Preparation is prepared since it would be difficult to catch up with changing traffic circumstances when a project is in process for a long time. However, when a project is actually implemented and subsequent approvals are applied for, and impacts beyond those analyzed in the EIR are identified, further environmental impact review might be required. Staff also noted that CEQA Guidelines Amendments now made provisions for "diminimum cumulative impacts, which provide that a minor contribution to an existing impact is not cumulatively considerable if it does not measurably change the existing problem.

After taking into consideration all information presented, and expressing individual comments and concerns, the Commission directed staff to provide the following information:

- A • Potential cumulative impacts of the St. Vincent/Silveira project, and a summary clarifying what both short and long term cumulative impacts are for the project
- B • An explanation of diminimus cumulative impacts as defined by CEQA as applied to this project, and why incremental traffic impacts was not considered significant when the current LOS is at F already.
- C • Separate impacts from the residential and office components of the project.
- D • Thresholds which would trigger signalization on Lucas Valley Road and Las Gallinas Road, if access is granted to either.
- E • A comparison between County and City methodologies for cumulative traffic analysis.
- F • More information regarding the potential assisted living facility component of the project to identify what other impacts might be generated, and comparison in terms of environmental superiority or not with the project alternatives.

M/s Julin/Buddie, and passed unanimously, to continue this matter to a future date to be noticed. Motion passed 7/0.

RESPONSE TO PLANNING COMMISSION MEETING COMMENTS

Response to Comment PH – A

The EIR assess the effects of implementing the proposed project under existing environmental conditions and under anticipated future conditions. The cumulative effects of project implementation, in conjunction with other planned development in the study area, are discussed in each individual section of the EIR and summarized in *Section 3.6 Cumulative Impacts*.

The CEQA Guidelines authorize a lead agency to limit its analysis of probable future projects to those which are planned or which have had an application made at the time the Notice of Preparation (NOP) is released for review. This is a reasonable point in time at which to begin the cumulative impact analysis.

As described in *Chapter 2.0 Description of the Proposed Project* the list of cumulative projects in Exhibit 2.3-1 includes nine projects in the vicinity of the project site at the time Marin County issued the NOP to prepare the Revised Draft EIR for the proposed project. The source of this data was *Propdev 29*, prepared by the Marin County Community Development Agency in August 1999. The St. Vincent's / Silveira properties were not included in *Propdev 29*.

It should, however, be noted that in preparing the traffic cumulative analyses it was decided to do both a short-range cumulative and long-range cumulative condition. The long-range cumulative condition was based on the County's Congestion Management Agency's traffic mode for 1999 and 2020. Peak hour traffic volume from two additional potential long-range projects was added to the long-term cumulative conditions to insure a conservative analysis of cumulative impacts. Vehicle trips associated with the Lucasfilm Grady Ranch project (340 employees) and development of the St. Vincent's / Silveira properties (800 residential units and 150,000 square feet of commercial uses) were added to the long-range network for analysis.

As a part of the preparation of the response to comments the short-range cumulative traffic analyses was updated based on *Propdev 34* published in February 2002. The St. Vincent's / Silveira properties were not included in *Propdev 34*.

As identified in the EIR the following are significant cumulative impacts which can be reduced to less-than-significant impacts:

- **Hydrology** Cumulative water quality impacts to Miller Creek, the Gallinas Creek tributary, and Gallinas Creek (see Impact 5.2-11 Cumulative Water Quality Impacts).
- **Transportation** Short-range cumulative conditions would create significant peak hour impacts for the Highway 101 Southbound Ramps / Miller Creek Road, Miller Creek Road / Marinwood Avenue, and Lucas Valley Road / Los Gatos Road intersections (see Impact 5.5-2 Short-Range Cumulative AM and PM Peak Hour Conditions)
- Long-range cumulative conditions would create significant peak hour impacts for the Highway 101 Northbound Ramp / Miller Creek Road, Highway 101 Southbound Ramp / Miller Creek Road, Miller Creek / Marinwood Avenue and Miller Creek Road / Las Gallinas Avenue intersections (see Impact 5.5-3 Long-Range Cumulative AM and PM Peak Hour Conditions)

The project's cumulative effect would be less-than-significant for the following topics:

- **Geology and Soils** No cumulative geology and soils impacts were identified in the EIR.
- **Biological Resources** No cumulative biological resources impacts were identified in the EIR.
- **Air Quality** Cumulative impacts on carbon monoxide emissions and on regional (ozone precursor) emissions would be less-than-significant.
- **Public Services** Cumulative impacts were evaluated for each of the public service provides (fire and emergency medical services, police services, water supply, sanitary sewer, schools, and parks and recreation and it was determined that no significant cumulative impacts would occur.

Response to Comment PH – B

Section 15130(a)(4) of the *State CEQA Guidelines* states that an EIR may determine that a project's contribution to a significant cumulative impact is de minimus and thus is not significant. A de minimus contribution means that the environmental conditions would essentially be the same whether or not the proposed project is implemented.

There was a major revision to the *State CEQA Guidelines* in 1998, prior to the issuance of the Notice of Preparation for this EIR. Subsequently Communities for a Better Environment sued the California Resources Agency regarding some of the revisions. On October 28, 2002 the 3rd Appellate District Court ruled in the lawsuit. The court upheld some of the sections challenged and invalidated some of the sections. The *State CEQA Guidelines* sections dealing with the de minimus issue (15130(a)(4), 15064(i)(4) and 15152(f)(2) were invalidated.

In regards to impacts on Highway 101 the significance criteria for Highway 101 impacts are described on page 5.5-12 of the EIR.

Three segments of Highway 101 were analyzed in the EIR during the AM and PM peak hours. The segments include:

North of the Miller Creek Road Interchange

Between Miller Creek Road and Lucas Valley Road; and

South of the Lucas Valley Road Interchange

The proposed project would add vehicle trips to each of the three segments to Highway 101 during the AM and PM peak hours for all three of the scenarios evaluated (existing plus project, short-range cumulative plus project and long-range cumulative plus project. For each of the scenarios studied the increase in traffic levels due to the project, however, would have an imperceptible effect on Highway 101 operations. For example, in the existing plus project scenario the project is estimated to add 68 PM peak hour vehicle trips to the highway segment north of Miller Creek Road. Under existing conditions this segment carries approximately 7,950 vehicles during the PM peak hour. An increase of 68 vehicles to the existing level of background highway traffic would be undetectable to drivers already on the highway and would have no measurable impact on existing operations. In general, traffic volumes on highways have been observed to fluctuate as much as ten percent on a daily basis. The reasons for day to day shifts are numerous and include such things as weather conditions, seasonal changes, accidents, and roadway construction activities. Therefore the project's contribution to peak

hour highway volumes would be insignificant. At all highway study segments the project would affect less than a 0.008 (eight-tenths of a percent) change to the V/C ratio.

In summary, the proposed project would generate highway vehicle trips at all three study analysis segments for each scenario. The analysis indicated that project generated highway trips resulted in less than a one percent increase in the volume-to-capacity (V/C) ratio for each of the highway segments. The number of peak hour commute direction project Highway 101 trips ranged between 11 vehicles and 67 vehicles. This number of vehicle trips against the background Highway 101 volumes would not be noticeable to a driver on Highway 101 and would have no measurable effect on traffic flow operations. It was based on these facts that the EIR determined that the impacts on each of the three segments of Highway 101 would be less-than-significant.

Response to Comment PH – C

A comparison of the project trip generation characteristics for the two project components is shown in Exhibit 5.5-5. The exhibit shows that the residential component would be expected to generate 75 percent fewer daily vehicle trips and roughly 85 percent fewer AM and PM peak hour vehicle trips compared to the office use component. This obviously is a significant reduction compared to the proposed project and compared to a project which built just the office component. The impacts associated with the residential units would be experienced primarily on Lucas Valley Road (with current project proposed access driveways) and to a lesser extent on Las Gallinas Avenue, while the office use would directly effect Marinwood Avenue and the Highway 101 ramps at Miller Creek Road.

A key to understanding the EIR traffic analysis is that the study area intersections including Marinwood Avenue/Miller Creek Road and the Miller Creek Road/Highway 101 ramps are expected to experience deteriorating traffic conditions without the project due to forecasted estimates of cumulative growth in the area. The project in fact is not responsible for any of the identified short-range and long-range cumulative impacts. What the project does do is add additional traffic to conditions which are already unacceptable based on the County's significance criteria and cause them to deteriorate further.

In response to the initial comment/request, if you start out with a cumulative "no project" scenario under which the four study intersections located on Miller Creek Road are all experiencing some level of unacceptable peak hour operations problems then it doesn't matter in terms of mitigation (install traffic signals) what portion of the proposed project is added to the network. Obviously the office component carries the higher trip generation compared to residential use however the mitigation measures would remain the same under cumulative no project, cumulative plus project, cumulative plus residential component only and cumulative plus office component only.

Response to Comment PH – D

It is unlikely that traffic signals would be installed on either Lucas Valley Road or Las Gallinas Avenue to accommodate project access traffic. As proposed, the project would create a driveway off of Lucas Valley Road to serve 20 residential units. This level of development would not justify installation of a traffic signal. Instead the project trips to and from the site would be expected to wait for appropriate gaps in the through traffic on Lucas Valley Road. The same conditions would hold for Las Gallinas Avenue. Even under conditions where all 28 project homes were accessed from either Erin Drive or Elvia Court, the combined traffic from the project and the existing homes on these streets would not warrant the installation of a traffic signal. The impact of project residential traffic to

Las Gallinas Avenue would be experienced as a significant delay by the traffic headed outbound on either of these minor streets.

The Caltrans *Traffic Manual* provides guideline for evaluating intersections for signalization. The signal warrant most often used is the peak hour volume warrant. This warrant considers the total volume of both main intersection approaches as well as the volume of the minor street, high volume approach. At both Lucas Valley Road and Las Gallinas Avenue the minor streets fail to meet the minimum Caltrans peak hour warrant threshold of 100 vehicles per hour.

There are a number of different warrants that can be used to evaluate intersections. While the majority consider traffic volumes over varying time periods, issues such as intersection accident history and school safety can be used to justify installation of a traffic signal. Therefore it is possible that a case could be made for the installation of a traffic signal on Las Gallinas Avenue at either Erin Drive or Elvia Court. The analysis would have to demonstrate that a signal would improve safety in the location of the school.

Response to Comment PH – E

Please see Master Responses A and B.

Response to Comment PH – F

A summary comparison of the Assisted Living Residential Use option and the proposed project is provided in Exhibit 6 in Response to Comment 8-F.

The EIR found that based on a comparison of the significant environmental impacts of all the build alternatives, Alternative 4 (29- Lot Subdivision Alternative) would be slightly superior to the proposed project and therefore would be the environmentally superior alternative. The primary advantage of Alternative 4 is that it assumes no site access from Lucas Valley Road.

Based on Exhibit 6 the Assisted Living Residential Use option does not appear to be environmentally superior to the proposed project or the build alternatives considered in the EIR. Unlike the proposed project or the build alternatives considered in the EIR the Assisted Living Residential Use option would require mitigation to design the facility to meet the County's interior and outdoor area noise levels. If the mitigation included construction of a soundwall along Highway 101 this could have a significant visual impact.

In addition, both the Marinwood Fire Department (fire protection) and the San Rafael Fire Department (paramedic service) expressed concern that the Assisted Living Residential Use option would have greater service impacts than the proposed project.

For these reasons, Alternative 4 continues to be environmentally superior alternative.

APPENDIX A

INTER-OFFICE MEMORANDUM

DEPARTMENT OF PUBLIC WORKS

October 24, 2002

To: Tim Haddad, Environmental Coordinator

From: Art Brook, Transportation Engineer

Re: Oakview Subdivision EIR Traffic Analysis

Post-It® Fax Note	7671	Date	10/28/02	# of pages	3
To	BOB BERMAN		From	TIM HADDAD	
Co./Dept.	→		Co.	EYE-AND	
Phone #			Phone #	FORWARD TO	
Fax	(707) 745-5856		Fax #	RON FOSTER	

The Marin County Transportation Model was developed to predict travel demand on regional Golden Gate Corridor facilities throughout Marin and Sonoma and extending into San Francisco. Our model is accurate within 4% of predicting existing PM peak traffic volumes on the various highway segments in the County of Marin. We have typically found that the critical operation of our system is in the PM peak when the volumes are the highest. Our model also predicts traffic volumes on major facilities throughout the County of Marin and we have found that the sum of critical turning movements in our model set are within about 10% of the observed existing volumes. In the specific case of Marinwood the Marin Transportation Model over predicts the PM peak traffic volumes so the sum of critical movements at representative intersections is 15-23% higher than observed volumes. In the AM peak the model underpredicts some of the volumes so the model's AM volumes should be used to anticipate a relative change. Therefore the County model gives a conservative estimate.

Oakview EIR Short Term Transportation Impact Analysis

There are two different approaches that could be used to provide a reasonable projection of short-term impacts. One of those choices would be to take a near term ABAG land development projection and project that travel demand which would provide a time related sense of development, the second would be to summarize the impacts of all currently proposed and approved outstanding developments to estimate a likely near term development scenario.

The Marin County's subdivision of the ABAG projections for traffic zone 169, which Oakview is in, show that Marinwood should expect 11 more jobs and 15 more households than existed in 2000 by 2005, and 257 more jobs and 91 more households than existed in 2000 by 2020. The travel demand modeled by the EIR transportation sub consultant showed 312 more jobs and 28 households in their short term analysis which is more jobs than projected for 20 years and about 10 years of residential growth.

The EIR transportation sub consultant used Propdev listings, a County Community Development Agency provided project summary to estimate the proposed development's short-term transportation impacts and the presently proposed and approved projects. Those base development assumptions are now being challenged, as new projects are being proposed, reviewed and approved for development. Specifically commenters stated omitted/overlooked projects include:

Project size	Project Name/ Developer	Project Location
450 homes	Shea & Centrex Homes	Ignacio Blvd

Tim Haddad, Environmental Coordinator
 October 24, 2002
 Page 2

Continued Project size	Project Name/ Developer	Project Location
See projected long term development section	St. Vincent's	St. Vincent's
See projected long term development section	Silveira	Silveira
See note below this table	Lucas Big Rock	Lucas Valley Rd

Notes: The St. Vincent's' and Silveira properties are involved in annexation and prezonings for which an EIR is being prepared. These projects will likely take an extended amount of time before they are acted on and can be developed therefore they should not be included in the short-term analysis. Lucas Valley Big Rock was the #10 project on the Draft EIR Short term development listing in Appendix B.

The only project, which is still outstanding in the short-term analysis, therefore is the 450 home Shea & Centrex Homes development in Ignacio. That development is expected to generate 468 AM peak hour trips with 25% inbound and 75% outbound of those there would be: 29 trips in and 185 trips out on the highway coming in south, 13 trips in and 21 trips out within their development zone, 2 trips in and 6 trips out affecting Marinwood and 72 trips in and 139 trips out on the highway to the north. The project will also generate 544 pm peak hour trips with 64% inbound and 36% outbound of those there would be 128 trips in and 55 trips out on the highway coming in south, 33 trips in and 27 trips out within their development zone, 5 trips in and 3 trips out affecting Marinwood and 182 trips in and 114 trips out on the highway to the north. The small increases described in this paragraph should not significantly change any of the conclusions about needed improvements.

The ABAG estimate of the 2005 development growth in adjoining Marin Traffic Model zones shows an increase of 537 households and an increase of 656 employees, the modeled short term transportation impacts account for an increase of 225 dwelling units and about 1129 employees, which is about 3 years of growth.

Long Term Transportation Impact Analysis

The Marin County Transportation Model is the local model that has most consistently been certified by Metropolitan Transportation Commission over the last 10-15 years as being consistent with their regional model and useable to analyze transportation impacts on regional facilities, like major highways. In the County's experience, our model has also projected intersection turning-movements at critical locations within 10% of critical movement sums of counted volumes. This is true for the Tamalpais Valley Planning Area and Strawberry Community. The Las Gallinas Ave. / Lucas Valley Rd and Highway 101 SB ramps / Miller Creek Rd intersections are over predicted by 15-23% giving a conservative view.

Wilbur Smith estimated long-term 15-year growth by a linear subdivision of the 20-year growth estimate, which would represent the following new development in the immediate study area:

Tim Haddad, Environmental Coordinator

October 24, 2002

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75% of 20-year growth estimate				
Zones	Dwelling Units	Employees	Approx Sq. Ft.	Commercial
General Development Area				
164	8	15	4,317	South of and westerly of Lucas Valley Rd.
165	-8	0	0	Canyon Oak/Cedar Hill Dr. in San Rafael
166	8	11	3,237	Los Gamos Dr. Tech Center
167	-4	144	41,439	North west corner Northgate Industrial Park
168	14	5	1,295	Western portion of Smith Ranch
169	738	528	151,942	Silveira
170	16	295	84,820	Oakview
171	24	3	863	Marinwood west of Las Gallinas Ave.
172	8	2	432	Marinwood off Lucas Valley Rd. out to Big Rock
173	33	3	863	Marinwood north of Miller Creek Rd. and east of Las Gallinas Ave.
174	737	527	151,727	St. Vincent

c: Farhad Mansourian, Chief Assistant Director

Jason Nutt, Traffic Operations

Tho Do, Associate Engineer

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OAKVIEW
Master Plan
Tentative Map

**Amendment to the
Final Environmental Impact Report**

County of Marin
Community Development Agency

State Clearinghouse No. 1995063038

November 2004

INTRODUCTION

Marin County prepared and on March 21, 2001 circulated the Revised Draft EIR on the proposed *Oakview Master Plan, Use Permit, Vesting Tentative Map* application. During the public review period from March 21, 2001 to May 14, 2001 and at the public hearing held by the Marin County Planning Commission on May 7, 2001, comments on the Draft EIR were solicited from government agencies and the public.

On June 27, 2002 Marin County circulated the *Oakview Master Plan Use Permit Vesting Tentative Map Final Environmental Impact Report (2002 Oakview Final EIR)*. A notice of distribution of the Final EIR for review and notice of the public meeting of the Planning Commission to consider a recommendation for certification of the *2002 Oakview Final EIR* was published and began a 14 day review and comment period on the Final EIR ending on July 12, 2002. The Final EIR comment period was re-noticed and extended for an additional 14 days at the request of the community. The extended comment period on the Final FEIR ended on July 26, 2002. On August 5, 2002 the Marin County Planning Commission held a meeting to consider the adequacy and completeness of the *Oakview Master Plan, Use Permit, Vesting Tentative Map Final EIR* in conjunction with their recommendation to the Marin Board of Supervisors for certification of the Final EIR.

In accord with the County EIR guidelines, written responses to comments received at the August 5, 2002 Planning Commission meeting and during the extended 28 day Final EIR review period were prepared (see *Oakview Master Plan, Use Permit, Vesting Tentative Map Final EIR Response to Comments Amendment*, December 2002). These responses addressed issues raised regarding the Final EIR Response to Comments. These written comments and responses presented amplifications, clarifications and/or additional information which in some cases resulted in minor and insignificant modifications to the EIR.

On April 18, 2003 the project sponsor submitted a revised application to Marin County that reflected the assisted living residential option considered in the *Oakview Master Plan, Use Permit, Vesting Tentative Map Final EIR*. This second amendment to the Final EIR has been prepared to review the revised Oakview project to determine if the revisions result in "significant new information" requiring recirculation in accordance with *State CEQA Guidelines* Section 15088.5

MITIGATION ALTERNATIVE DESCRIPTION

In response to comments received during the public review of the Oakview project and from the Planning Commission the project applicant has submitted a revised project (Mitigation Alternative).¹ As a part of the application a letter report by Dowling Associates regarding the traffic impacts of the

¹ Letter to Mr. Tom Lai, Principal Planner from Larry Kennings, LAK Associates, April 17, 2003 and *Mitigation Alternative, Topography and Boundary* (sheet 2 of 10), *Technical Site Plan* (sheet 4 of 10) *Grading and Drainage Plan* (sheet 5 of 10), *Alternative Access Residential Area Layout* (sheet 6 of 10), *Assisted Living Administrative/Professional Layout* (sheet 7 of 10) *Sections Administrative/Professional Layout* (sheet 7 of 7) and *Conceptual Landscape Plan* (sheet x of 10), June 26, 2003, revised August 4, 2003, revised December 31, 2003.

Mitigation Alternative was submitted.² Two additional letter reports were submitted by the applicant's civil engineer.³ The following additional project description information is incorporated by reference into the Final EIR Amendment.

- Letter to Mr. Tom Lai, Principal Planner from Larry Kennings, LAK Associates, April 17, 2003 and *Mitigation Alternative, Topography and Boundary* (sheet 2 of 10), *Technical Site Plan* (sheet 4 of 10) *Grading and Drainage Plan* (sheet 5 of 10), *Alternative Access Residential Area Layout* (sheet 6 of 10), *Assisted Living Administrative/Professional Layout* (sheet 7 of 10) *Sections Administrative/Professional Layout* (sheet 7 of 7) and *Conceptual Landscape Plan* (sheet x of 10), June 26, 2003, revised August 4, 2003, revised December 31, 2003.

This letter and exhibits both describe and illustrate the revisions to the proposed project.

- Letter to Mr. Irving L. Schwartz, ILS Associates, Inc. from John Dowden and Alice Chen, AICP, Dowling Associates, Inc., regarding Oakview Development Project – Intersection of Erin Drive and Las Gallinas Avenue, June 25, 2003.

This letter report assessed the traffic impacts of the revised proposed project.

- Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Master Plan and Tentative Map Draft Conditions of Approval, June 24, 2004 and Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Southbound Highway 101/Lucas Valley Road Off-Ramp Parcel, June 24, 2004.

These letters comment on tentative project conditions and the applicant's commitment regarding the donation of land for the Southbound Highway 101/Lucas Valley Road off-ramp project.

- Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Master Plan, November 12, 2004.

This letter provides the applicant's commitment to incorporate noise mitigation measures into the proposed project.

The revisions to the previous Oakview Master Plan are:

- Eliminate the direct access to Lucas Valley Road resulting in all 28 housing units having access off of Las Gallinas Avenue via Erin Drive.
- Eliminate Office Building B (14,400 square feet) and expand Building A to 94,000 square feet.
- Use Building A for an assisted living residential use. A total of 150 residential units is proposed, 75 with kitchens for independent seniors and 75 without full kitchens, for less independent seniors.

² Letter to Mr. Irving L. Schwartz, ILS Associates, Inc. from John Dowden and Alice Chen, AICP, Dowling Associates, Inc., regarding Oakview Development Project – Intersection of Erin Drive and Las Gallinas Avenue, June 25, 2003.

³ Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Master Plan and Tentative Map Draft Conditions of Approval, June 24, 2004 and Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Southbound Highway 101/Lucas Valley Road Off-Ramp Parcel, June 24, 2004.

- Reduce the number of parking spaces for Building A to 81.
- Realign the access road and bridge cross Miller Creek in order to reduce the required grading.
- Increase the landscaped berm area between the proposed assisted living facility and Highway 101.
- A voluntary offer of dedication of an appropriate interest (such as a fee simple dedication if required by the California Department of Transportation or an easement) for public roadway purposes over the approximately 9.4-acre portion of the Tentative Map that is identified as Interchange Acquisition Parcel A' and Interchange Acquisition Parcel B'.
- In response to potential noise impacts from Highway 101 the assisted living facility (Building A) would incorporate the following measures:⁴

Outdoor living spaces would be provided as secluded courtyards with the segment of the building closest to Highway 101 shielding the courtyard areas from the noise generated by highway traffic.

Construction of an earth berm along the Highway 101 frontage is proposed in order to shield the building from noise generated by Highway 101 traffic.

All windows on the Highway 101 frontage side of the building would be non-operable (sealed).

Windows would be sound rated.

It is still proposed to divide the project site into two parcels to initiate the development process.⁵ Parcel 1 would be 51.9 acres and Parcel 2 would be 54.4 acres. The general characteristics of the revised master plan are shown in Exhibit 1.

⁴ Letter to Tom Lai from Irving L. Schwartz, C.E., ILS Associates, Inc. regarding Oakview Master Plan, November 12, 2004.

⁵ Previously the project applicant had requested approval of a Vesting Tentative Subdivision Map. It is now requested to eliminate the word Vesting from the project application. This change will have no environmental consequences.

Exhibit 1
Oakview Revised Master Plan Project Characteristics

Land Use	Acreage
Residential Area (28 units)	15.3 acres
Assisted Living Area (Building A)	11.0 acres
Open Space	
Parcel A	33.1 acres
Parcel B	34.6 acres
Parcel C	1.1 acres
Off Ramp	
Parcel A'	0.6 acres
Parcel B'	8.8 acres
Public Right-of-Ways	1.8 acres
Total Oakview Project Site	106.3 acres

In the previous Master Plan Lot 29 was proposed as the location for Building B. It is now proposed that Lot 29 be a wetland mitigation site.

State CEQA Guidelines Section 15088.5 provides the guidance as to when a lead agency (in this case Marin County) is required to recirculate an EIR when "significant new information" is added prior to certification. The term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement". "Significant new information" requiring recirculation includes a disclosure showing that:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

ANALYSIS OF MITIGATION ALTERNATIVE

This section analyses the proposed changes in the Oakview Master Plan project as presented in the Mitigation Alternative. As discussed above, it is now proposed in addition to the 28 single-family detached housing units to develop an assisted living residential use on the project site instead of the

previously proposed office use. It should be noted that in the *Oakview Master Plan Use Permit Vesting Tentative Map Final Environmental Impact Report* the option of using the two buildings located along the frontage of Highway 101 (Buildings A and B) for an assisted living residential use was evaluated.⁶

The analysis of the Mitigation Alternative is provided below.

GEOLOGY AND SOILS

Snyder & Smith Associates (the EIR geologists) have evaluated and reviewed the Mitigation Alternative. In general, from a soils and geologic perspective there are no significant changes to impacts as a result of the revisions. The following is a listing of the potential impacts and a summary of those impacts as they relate to revisions to the previous Master Plan.

Impact 5.1-1 Landsliding The changes in the previous Master Plan do not change the impact of landsliding on the project site. The potential impact remains the same, the applicant would be responsible for implementing the mitigation measures proposed by their geotechnical consultant and would be responsible for grading, and repairing landslides identified by the Master Plan. A comprehensive grading and landslide repair program has been formulated as a part of the Oakview Master Plan, which demonstrates that the landslides can be repaired using standard geotechnical techniques proposed by the applicant's geotechnical consultant, which would reduce the significant impact of landsliding to a less-than-significant level.

Impact 5.1-2 Grading The changes in the previous Master Plan do not affect this impact. Based on previous work, the possible large ancient bedrock landslides near the areas of the proposed development have been found to be stable in their current positions and the need for mass grading was eliminated. No mitigation measures are deemed necessary because the direct impacts of grading would be less-than-significant.

Impact 5.1-3 Slope Stability The changes in the previous Master Plan do not affect this impact. Slope stability issues regarding cut and fill slopes will not change and implementation of Mitigation Measure 5.1-3 by the applicant and applicant's geotechnical consultant would reduce the potential for slope instability to a less-than-significant level.

Impact 5.1-4 Groundwater The changes in the previous Master Plan do not affect this impact. As stated in the 2002 *Oakview Final EIR*, due to the limited extent of proposed grading and relative depth of the groundwater table (at least 34 feet below ground surface), direct impacts to the groundwater table would be less-than-significant and would not require mitigation measures beyond those proposed by the applicant's consultants requiring standard grading and drainage techniques.

Impact 5.1-5 Soil Creep The changes in the previous Master Plan do not affect this impact. Soil creep is an impact that affects all of the proposed areas of development. As stated in Mitigation Measure 5.1-5, any structures on sloping ground should be designed to take creep forces into account. Implementing this mitigation measure would reduce soil creep impacts to a less-than-significant level.

⁶ See Master Response A – Assisted Living Residential Use Option, *Oakview Master Plan Use Permit Vesting Tentative Map Final Environmental Impact Report*, County of Marin Community Development Agency, June 2002, pages 7.0-5 to 7.0-26.

Impact 5.1-6 Seismicity The changes in the previous Master Plan do not affect this impact. The location of the proposed structures in the Mitigation Alternative has remained relatively the same as the previous Master Plan; therefore, impacts related to seismicity remain the same. The Mitigation Alternative is located within the same proximity of seismically active faults.

Impact 5.1-7 Expansive Soils The changes in the previous Master Plan do not affect this impact. It was determined by the applicant's geotechnical consultant that the on-site soils are not expansive. In addition, the Soil Survey of Marin County indicates that the site soils have a low to moderate shrink-swell potential. Therefore, no additional measures beyond standard geotechnical engineering grading and design techniques would be necessary.

Impact 5.1-8 Liquefaction The changes in the previous Master Plan do not affect this impact. As stated in the 2002 Oakview Final EIR the potential impacts from liquefaction are less-than-significant and liquefaction is not expected to occur and no mitigation is required.

Impact 5.1-9 Rockfall The changes in the previous Master Plan do not affect this impact. The areas for development are located in the relatively same location, few large rock outcrops are present and standard geotechnical design and adherence to Mitigation Measure 5.1-9 would reduce any potential for rockfall impacts to a less-than-significant level.

Impact 5.1-10 Artificial Fill Areas The changes in the previous Master Plan do not affect this impact. The presence of existing artificial fill areas would remain the same. Therefore, implementation of Mitigation Measure 5.1-10 would remain the same and would mitigate any artificial fill areas encountered in areas of new construction.

Impact 5.1-11 Faulting and Ground Surface Rupture The changes in the previous Master Plan do not affect this impact. As indicated in the 2002 Oakview Final EIR the probability of fault and ground surface rupture is very low. The location of proposed development has remained relatively the same; therefore, as indicated in the EIR no mitigation would be required.

Impact 5.1-12 Aggregate and Rare Mineral Resources The changes in the previous Master Plan do not affect this impact. There are no known areas of known aggregate resources or deposits of rare minerals within the site boundaries; therefore, no mitigation would be required for this impact.

Impact 5.1-13 Maintenance of Geotechnical and Hydrologic Mitigation Measures The changes in the previous Master Plan do not affect this impact as long as long-term maintenance established by a Geologic Hazard Abatement District (GHAD) is implemented for the project. Establishment and operation of a GHAD as indicated in Mitigation Measure 5.1-13 would reduce the magnitude of long-term geologic and hydrologic impacts to a less-than-significant level.

Impact 5.1-14 Naturally Occurring Asbestos The changes in the previous Master Plan do not affect this impact. There are no known substantial concentrations of naturally occurring asbestos at the project site; therefore, the possibility of exposure is considered to be very low and no mitigation would be required.

HYDROLOGY AND DRAINAGE

Clearwater Hydrology (the EIR hydrologist) has evaluated and reviewed the Mitigation Alternative. From a hydrologic and water quality standpoint, the Mitigation Alternative does not differ significantly from the Master Plan analyzed in the 2002 Oakview Final EIR. The configuration of the

proposed residential development and its stormwater drainage system appear to be unchanged from the Master Plan analyzed in the 2002 *Oakview Final EIR*. While the Lucas Valley access driveway has been eliminated in favor of a single access drive (Erin Road extension), stormwater runoff would be collected at the same two locations as before. Similarly, portions of the upslope site runoff would be discharged to the northern branch of Las Gallinas Creek and to Miller Creek. The elimination of Building B has resulted in a reduction in the project area subjected to grading and the likely concentration of contaminants, particularly heavy metals, associated with the Mitigation Alternative. Otherwise, roadway access remains similar to the previous Master Plan.

Clearwater Hydrology (the EIR hydrologist) assumed that the draft conditions of approval⁷ will be implemented regardless of whether or not they are depicted on the present plans. The following is a listing of the potential impacts and a summary of those impacts as they relate to revisions to the previous Master Plan.

Impact 5.2-1 Site Drainage Patterns The currently proposed 28-lot subdivision would not increase the watershed areas subject to grading and stormwater system installation. The reduction in impervious surface coverage associated with the development of a single assisted living residential building (Building A) and related parking lots would result in a reduction in the extent of natural drainageway conversion to storm drain systems. Otherwise site drainage patterns would remain unchanged. Thus, the less-than-significant impact identified in the 2002 *Oakview Final EIR* would remain unchanged.

Impact 5.2-2 Site Peak Flow Rates Peak flow rate increases due to the proposed residential development would remain approximately the same as those computed for the 2002 *Oakview Final EIR*, due to the similarity in the development configuration and stormwater management. Similar to the previous Master Plan, stormwater detention would be required to mitigate this significant impact. The reduced impervious surface area associated with the office development configuration would also reduce the previously computed increase in post-project peak flow rates. However, overall the significant impact would remain unchanged.

Impact 5.2-3 Downstream Hydraulic Structures and Flooding (Miller Creek) The 2002 *Oakview Final EIR* analyzed the impact of the project on the downstream storm drain system in the adjoining Marinwood subdivision. The analysis indicated that localized flooding in the vicinity of particular storm drain inlets in the Marinwood subdivision would worsen due to the increase in upslope peak flows. Since both the number and coverage of residential lots and the extent and configuration of the storm drain system would remain unchanged for the Mitigation Alternative, the degree of impact would also remain unchanged. The requirement for repair of existing, deteriorated cross-slope drain segments (Mitigation Measure 5.2-3) would remain for the Mitigation Alternative.

Impact 5.2-4 Downstream Hydraulic Structures and Flooding (Las Gallinas Creek) Since the number and distribution of residential lots and impervious surface coverage, as well as the stormwater management scheme, would remain unchanged, the Mitigation Alternative would have the same impact on flooding during severe rainstorms in the vicinity of the three foot by six foot box culvert under Highway 101 as the previous Master Plan. The impact would remain significant and equivalent to that of the analyses in the 2002 *Oakview Final EIR*.

⁷ CDA Administrative Draft Only Revision #8, June 3, 2004.

Impact 5.2-5 Off-site / Downstream Flooding on Miller Creek While the portion of Parcel 1 that would drain to Miller Creek and associated peak flow rates would remain unchanged from the previous Master Plan, Parcel 2 peak flow rates would decrease due to the elimination of Building B plus the reduction in the number of parking spaces and the resulting decrease in impervious surface area. The combined effect of these project modifications would be a reduction in the computed post-project increase in peak flow rates. Thus, the less-than-significant impact cited in the 2002 Oakview Final EIR would remain unchanged.

Impact 5.2-6 Off-site/Downstream Flooding in the Marinwood Subdivision The Mitigation Alternative development configuration and its stormwater management scheme, including upslope diversions of hillslope runoff by cross-slope interceptor drains toward Lucas Valley Road, would remain unchanged from the previous Master Plan. Therefore, the less-than-significant impact cited for that project would remain unchanged for the Mitigation Alternative.

Impact 5.2-7 Site Erosion and Downstream Sedimentation and Flooding For the project site as a whole, the area subjected to grading would be decreased under the Mitigation Alternative. This is due to the elimination of Building B. However, since the potential for rainfall and runoff-induced erosion would remain high and downstream sedimentation remains a significant concern, the significant impact cited in the 2002 Oakview Final EIR would remain unchanged for the Mitigation Alternative.

Impact 5.2-8 Site Erosion and Downstream Sedimentation and Flooding The Miller Creek crossing would remain a component of the Mitigation Alternative. The crossing configuration, width and other details, would likely remain unchanged from the preliminary layout described for previous Master Plan. Thus, the extent of this impact would remain unchanged and significant, with the same recommended mitigation measures.

Impact 5.2-9 Groundwater Seepage The Mitigation Alternative configuration and its stormwater and groundwater management scheme, including the installation of subsurface drains in the developed hillside areas of Watersheds 2 and 3, would remain unchanged from the previous Master Plan. Thus, the beneficial impact cited for the previous Master Plan would apply as well to the Mitigation Alternative.

Impact 5.2-10 Violation of Water Quality Standards The currently proposed 28-lot subdivision would not increase the watershed areas subject to grading and stormwater system installation. In addition, the water quality mitigation measures incorporated into the stormwater detention basin design as per the draft conditions of approval would remain part of the mitigation program for the Mitigation Alternative. For Parcel 2, the reduction in impervious surface coverage associated with the development of a single assisted living residential facility and related parking lots would result in a reduction in the concentration of stormwater contaminants discharged to Miller Creek. Overall, therefore, the significant impact identified for the previous Master Plan in the 2002 Oakview Final EIR would remain unchanged and similar mitigation measures would apply.

Impact 5.2-11 Cumulative Water Quality Impacts Given the same project conditions noted above under the discussion to Impact 5.2-10, the cumulative water quality impact of the Mitigation Alternative would remain unchanged and significant.

BIOLOGICAL RESOURCES

Environmental Collaborative (the EIR biologist) has evaluated and reviewed the Mitigation Alternative. In general, the proposed revisions to the Master Plan are not expected to have any new

significant impacts on biological or wetland resources. The extent of proposed building footprint, number of buildings, and associated improvements has been reduced under the Mitigation Alternative through elimination of Building B in the northeast corner of the site. The reduction in building footprint, grading and parking area on the east side of the site collectively would serve to preserve an additional 12 trees, reducing the number of protected trees to be removed from 35 to 23.

Impact 5.3-1 General Vegetation Removal and Landscaping Impacts The proposed revisions to the previous Master Plan are not expected to have any new significant impacts associated with general vegetation removal and landscaping. As discussed in the 2002 Oakview Final EIR, proposed development would require removal of existing vegetation to accommodate new structures, roadways, parking lots, landscaping, and other improvements. The Mitigation Alternative would reduce the extent of natural cover occupied by new structures and parking with the elimination of Building B in the northeastern portion of the site and reduction in the size of the parking lot near the proposed Building A. Potential impacts would therefore be less than those associated with the previous Master Plan, and no new mitigation would be required. Mitigation Measures 5.3-1(a) and 5.3-1(b) would still be required to ensure successful re-establishment of vegetative cover and landscape improvements and provide for replacement and enhancement with native species, thus reducing impacts on general vegetation resources to less-than-significant levels.

Impact 5.3-2 Tree Removal and Woodland Impacts An estimated 23 trees would be removed to accommodate proposed improvements under the Mitigation Alternative, a reduction of ten trees from the previous Master Plan. Most of these would be removed in the vicinity of the proposed crossing of Miller Creek and to accommodate roadway and other improvements in the vicinity of the Building A. Most of the trees to be retained in comparison to the previous Master Plan are located in the vicinity of the proposed Wetland Mitigation Site where Building B was previously proposed.

As discussed in the 2002 Oakview Final EIR, trees not directly removed by grading or other development activities may be damaged or adversely affected during construction or as a result of long-term changes to drainage patterns, irrigation, and other conditions. Mature oaks and other trees are sensitive to changes in drainage patterns, soil compaction, trenching, landscape irrigation, and other modifications within the root zone. Considerable care is necessary to protect trees in the vicinity of grading, building and roadway construction, and landscaping. Wounding of trunks and major roots during construction is a common problem which results in the invasion of harmful organisms and can contribute to structural decay of the tree. Root loss and a reduction in potential rooting area often contribute to long-term tree decline. In general, any disturbance within the dripline should be avoided to prevent adverse changes which may affect the long-term health and condition of trees to be preserved. Monitoring by a certified arborist would ensure that vulnerable trees are treated appropriately during construction.

Implementation of Mitigation Measures 5.3-2(a), 5.3-2(b), 5.3-2(c), and 5.3-2(d) would still be required to minimize removal and damage to existing trees to be retained, and to provide replacement tree plantings reducing significant impacts on trees to less-than-significant levels.

Impact 5.3-3 Disturbance to Native Grasslands Native grasslands would still be affected under the Mitigation Alternative, with no reduction in the estimated total of 1.6 acres of affected stands with a cover class of ten percent or greater. No stands of native grassland were mapped in the northeastern corner of the site where Building B was previously proposed, so the total acreage of native grasslands affected by the project remains the same. Implementation of Mitigation Measure 5.3-3 would still be required to provide for protection and replacement of native grasslands disturbed by the revised project, thus reducing impacts on sensitive grassland resources to less-than-significant levels.

Impact 5.3-4 Disturbance to Freshwater Seeps and Wetlands The Mitigation Alternative would still have a significant impact on jurisdictional wetlands and unvegetated other waters, affecting an estimated 1.39 rather than 1.43 acres under the previous Master Plan. This would include the active spring and an estimated 0.62 acres of associated freshwater seep habitat in the southwestern portion of the site, and approximately 0.64 acres of scattered seasonal wetlands near the proposed Building A.

The northeastern portion of the site previously identified for Building B (Lot 29) has been identified as a Wetland Mitigation Site under the Mitigation Alternative. This would serve to protect approximately 0.11 acres of jurisdictional wetlands on this portion of the site, unless wetland mitigation would result in the complete regrading of this area in an attempt to maximize created wetlands. No conceptual wetland mitigation plan has been prepared yet by the applicant, making it difficult to evaluate the adequacy or feasibility of accomplishing wetland replacement on the site. However, given the County standard for wetland replacement at a minimum 2:1 ratio (defined under Countywide Policy EQ-2.43a), a minimum of 2.7 acres of wetland mitigation would have to be provided as part of the project. It seems highly unlikely that this replacement mitigation could be accommodated completely on-site given the heavily wooded, hillside slopes which are to remain undeveloped under the Mitigation Alternative. The remaining undisturbed open grasslands would presumably be used to accommodate the required native grassland mitigation as well, competing for the remaining land area potentially suitable for wetland mitigation.

One location suitable for possible enhancement as part of the wetland mitigation plan is restoration of the south side of Miller Creek east of the proposed Marinwood Avenue extension onto the site. The mid-level to upper channel bank has been heavily graded in the past and is now used as a track for biking jumping, affecting an area of approximately 0.07 acres. The heavy bike use has prevented re-establishment of vegetative cover, and sediment most likely moves into the creek during rainfall events. Trash has also been dumped throughout the area.

Implementation of Mitigation Measures 5.3-4(a), 5.3-4(b), and 5.3-4(c) would still be required to reduce impacts on wetland and surface water resources to less-than-significant levels.

Impact 5.3-5 Disturbance to Stream Conservation Areas and Riparian Habitat The Stream Conservation Area (SCA) policies of *The Marin Countywide Plan* require provision of setbacks from the tops of stream banks, and restoration and enhancement as part of development.⁸ As with the previous Master Plan, proposed development under the Mitigation Alternative would generally be located outside of the SCA designated along the Miller Creek corridor. The Marinwood Avenue extension would involve construction of a new Miller Creek crossing which would affect a limited area of riparian vegetation. New stream crossings are allowed within SCAs, as is habitat restoration activities. Mitigation would be provided under Mitigation Measures 5.3-4(c) and 5.3-6 to address impacts to the riparian and wetland habitat of Miller Creek. No additional mitigation would be required to address this less-than-significant impact.

Impact 5.3-6 Disruption of Fish and Wildlife Habitat As with the previous Master Plan, the Mitigation Alternative would alter existing patterns of wildlife use on parts of the site proposed for development by replacing grassland, freshwater seeps, and the fringe of woodland habitat with new buildings, roadways and other paved surfaces, and landscaping. No new significant impacts on

⁸ Streams subject to the SCA policies include all creeks identified with solid or dashed blue-lines on USGS topographic maps or smaller creeks with at least 100 feet of riparian vegetation along their banks. On the project site, this definition only applies to Miller Creek.

wildlife resources would be affected under the Mitigation Alternative, although the Miller Creek crossing could still affect sensitive habitat along this important fish and wildlife corridor. Implementation of Mitigation Measure 5.3-6 would still be required to reduce impacts on wildlife resources associated with Miller Creek to less-than-significant levels.

Impact 5.3-7 Impacts on Special-Status Plant and Animal Species The Mitigation Alternative is not expected to have any new significant impacts on special-status species. A pre-construction survey would still be required to confirm absence of any raptor nesting activity on the site prior to construction. Construction of the Miller Creek crossing could affect possible dispersal habitat for western pond turtle, California red-legged frog, foothill yellow-legged frog, steelhead, and California freshwater shrimp. Implementation of Mitigation Measures 5.3-4(c) and 5.3-6 would minimize impacts on jurisdictional "other waters" and wildlife use of the creek, and would alleviate possible adverse impacts on these species of concern as well. Further consultation with jurisdictional agencies may be required as part of the wetland permitting process, which would further ensure adequate mitigation and protective measures. This may include pre-construction surveys to ensure potential take of steelhead, California red-legged frog, and California freshwater shrimp is avoided during in-channel construction activities. Implementation of Mitigation Measure 5.3-7 would still be required to avoid potential impacts on nesting raptors if new nests are established in the vicinity of proposed construction.

Impact 5.3-8 Cumulative Development Implementation of the Mitigation Alternative would not result in appreciable changes in the project contribution to cumulative impacts on biological resources. Avoidance of additional tree resources and wetland would somewhat reduce potential impacts of the previous plan, and the corresponding mitigation requirements. Required mitigation would address any project contribution to cumulative impacts on biological and wetland resources, and no new mitigation is considered necessary.

VISUAL AND AESTHETIC QUALITY

With the elimination of the access from Lucas Valley Road the daytime (Impact 5.4-1) and nighttime (Impact 5.4-2) visual impacts for the Mitigation Alternative would be slightly reduced from the previous Master Plan. Although the new road (extension of Erin Drive in the Mitigation Alternative) would likely be less visible from Lucas Valley Road than with the previous Master Plan the visibility of the housing units would still result in a significant visual impact. Implementation of Mitigation Measures 5.4-1 and 5.4-2 would still be required.

With the elimination of Building B and the increase in the size of Building A the view of the project would change from what is discussed in the 2002 Oakview Final EIR. Exhibit 7.0-9 in the 2002 Oakview Final EIR illustrates Building A and Exhibit 7.0-11 illustrates Building B from Highway 101. With the elimination of Building B the visual impact of this building as viewed from Highway 101 (Impact 5.4-6) would not occur. With the reduction in the number of parking spaces for Building A (from 128 parking spaces in the Assisted Living Residential Use Option to 81 for the Mitigation Alternative) this would allow for a larger landscape berm between the parking lot for Building A and Highway 101 than previously proposed. A larger landscaped berm would provide an increase in shielding from what is illustrated in Exhibit 7.0-9. Although slightly larger than Building A in the previous Master Plan, Building A in the Mitigation Alternative would have the same visual and aesthetic quality impacts as the proposed project, and therefore, the same types of mitigation measures as for the previously Master Plan would be necessary.

TRANSPORTATION AND CIRCULATION

As a part of this analysis a peer review of the project applicant's traffic report (Dowling report)⁹ was prepared by Wilbur Smith Associates (the EIR traffic analysts).

Applicant's Traffic Analysis

The Dowling report focuses on the impact of directing all 28 housing units to take access at Erin Drive. The report considers three intersections, two of which, Erin Drive/Las Gallinas Avenue and Elvia Court/Las Gallinas Avenue were not analyzed as part of the 2002 *Oakview Final EIR*. The third intersection, Las Gallinas Avenue/Lucas Valley Road is analyzed in the EIR. The analysis of the traffic impacts associated with the access change considers only existing plus project peak hour traffic conditions

Trip Generation

The estimated trip generation related to the 28 single-family homes used in the Dowling analysis is based on the rates developed for the 2002 *Oakview Final EIR*. Exhibit 2 shows that the Mitigation Alternative would be expected to generate 321 vehicle trips daily at the Erin Drive access. During the morning commute peak hour there would be 29 total vehicle trips with seven inbound and 22 outbound vehicle trips. In the evening peak hour the 28 single-family homes are expected to generate a total of 34 vehicle trips with 22 inbound and 12 outbound.

Exhibit 2

Trip Generation Estimates

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Trip Rates Single-Family Housing	Units	11.46	1.04	25%	75%	1.21	62%	36%
Trip Generation Single Family Housing	28	321	29	7	22	34	22	12

Source: *Oakview Master Plan Use Permit Vesting Tentative Map Final Environmental Impact Report*, June 2002.

The Dowling report provides a peak hour level of service analysis of the three intersections under existing conditions and under existing plus project conditions. Residential vehicle trips were distributed using the directional percentages developed for the 2002 *Oakview Final EIR*. The project trip distribution percentages for the residential use are shown in Exhibit 3.

⁹ Letter to Mr. Irving L. Schwartz, ILS Associates, Inc. from John Dowden and Alice Chen, AICP, Dowling Associates, Inc., regarding Oakview Development Project – Intersection of Erin Drive and Las Gallinas Avenue, June 25, 2003.

Exhibit 3
Estimate of Peak hour Residential Use Vehicle Trip Distribution

Destinations	Percentage
North 101	15
South 101	75
West	3
East	2
South Gallinas	3
North Gallinas	2
Total	100

Source: Wilbur Smith Associates

Intersection Level of Service

The level of service (LOS) analysis findings provided in the Dowling report indicate that the proposed change to the project's access would not result in any significant operational changes to the signalized intersection at Las Gallinas / Lucas Valley Road. Nor would the proposed change adversely affect the two unsignalized intersections at Elvia Court and Erin Drive on Las Gallinas Avenue. A summary of the Dowling LOS findings are shown in Exhibit 4. Wilbur Smith Associates (EIR traffic analyst) also calculated level of service for the three intersections and duplicated the Dowling results. In the 2002 Oakview Final EIR the signalized intersection at Las Gallinas Avenue / Lucas Valley Road was found to operate with shorter delays but with the same LOS (see Exhibit 4). This difference is explained by changes to the intersection left turn phasing (currently protected at all approaches) and to a difference in analysis software. The 2002 Oakview Final EIR used an earlier version of the Traffix software used by Dowling in their 2003 report and this accounts for changes in the delay calculations.

Exhibit 4
Intersection LOS Summary

Intersection	Existing				Existing with Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Las Gallinas / Elvia	B	14.9	A	9.6	C	15.0	A	9.6
Las Gallinas / Erin	C	15.7	B	10.8	C	17.9	B	11.7
Las Gallinas / Lucas Valley	C	28.0	B	19.9	C	28.2	B	19.9
2002 Final EIR								
Las Gallinas / Lucas Valley	C	15.7	B	10.4	C	16.0	B	10.6

Source: Wilbur Smith Associates

For this analysis Wilbur Smith Associates calculated the levels of service using the 2000 Highway Capacity Manual methodologies. For the signalized (Lucas Valley Road) and all-way-stop control (Elvia Court) intersections the delays represent the average delay for the intersection. For the stop-controlled T-intersection at Erin Drive, the delay and LOS represent the stop controlled approach of Erin Drive, the through traffic on Las Gallinas Avenue at Erin Drive is uncontrolled. As shown in **Exhibit 2** the intersections on Las Gallinas would operate at acceptable LOS C or better with all project residential trips using Erin Drive.

Traffic Conditions on Las Gallinas Avenue

The Dowling report notes that the LOS calculations shown in Exhibit 4 assume normal vehicle flows on Las Gallinas Avenue. The report further notes that Las Gallinas Avenue is often congested and backed up during the morning peak period and that during these times the analysis results do not reflect the actual delays at the intersections of Erin Drive and Elvia Court. The primary source of congestion is from Highway 101 traffic using Las Gallinas Avenue as a bypass route into downtown San Rafael. The report notes observations of southbound Las Gallinas Avenue traffic backed up from the signal to at Lucas Valley Road to beyond Elvia Court during the morning peak period.

Besides the southbound traffic backing up due to the Highway 101 diversion, morning peak period northbound traffic flows are affected by activity at the Miller Creek Middle School. Parents dropping off students cause traffic back-ups from the school driveway located about 150 feet north of Elvia Court as far south as Erin Drive. The combination of the highway bypass and school traffic on Las Gallinas Avenue results in a constraint on traffic attempting to turn left into or out of Erin Drive. There were just two westbound left-turn vehicles (outbound) documented at Erin Drive during the morning peak hour and no southbound left-turn vehicles (inbound). With the shifting of all 28 single-family homes to the Erin Drive access the number of morning peak hour left-turns is estimated to increase by 18 vehicles for a total of 20 westbound left turns from Erin Drive. Under congested (backed-up) conditions on Las Gallinas Avenue it is expected that the 20 left-turn vehicles at Erin Drive would experience greater delay than the calculated 17.9 seconds per vehicle shown in Exhibit 4.

Right in/right-out only

The Dowling report evaluated prohibiting left turns from entering or exiting Erin Drive at Las Gallinas Avenue. This restriction could be accomplished with the construction of a raised median in the center of Las Gallinas Avenue at Erin Drive. The purpose of this action would be to improve (lessen) periods of delay that would be experienced by project generated left-turns at Erin Drive during the morning peak commute period. It was assumed that project trips wanting to head south on Las Gallinas Avenue from Erin Drive would likely use the all-way stop intersection at Elvia Court to turn around by making a right into Elvia Court, then turn around to make a left-turn back onto Las Gallinas Avenue heading southbound. Currently, there are about ten vehicles turning left from Elvia Court and heading south on Las Gallinas Avenue during the morning peak hour. If the project were developed with right in/right out only access at Erin Drive the number of westbound left-turns at Elvia Court could increase to about 30 vehicles during the morning peak hour. This increase would add some delay to the Elvia Court intersection but would not change the overall LOS C conditions calculated for the morning peak hour plus project scenario according to the Dowling report.

The Dowling analysis also considered the possibility of making the Erin Drive / Las Gallinas Avenue an all-way-stop intersection. The report found that the intersection did not meet the Caltrans Traffic Manual warrants for all-way stop controls. The warrants are based on minimum traffic volumes, speed, visibility and reported accidents.

Dowling Report Conclusions

The Dowling report concludes that the revised plan to provide access for all 28 housing units at Erin Drive would not result in significant delays to existing or project traffic at the intersection of Erin Drive / Las Gallinas Avenue under normal operating conditions. The Dowling report also indicates that there would be no adverse affects at the all-way stop controlled Elvia Court / Las Gallinas Avenue and signalized Lucas Valley Road / Las Gallinas Avenue intersections during either the morning or afternoon peak commute periods. The Dowling report points out that under conditions of backed-up traffic on Las Gallinas Avenue vehicles would be adversely impacted entering and exiting Erin Drive during the AM peak hour.

The Dowling report indicates that the prohibition of left-turns at the intersection of Erin Drive / Las Gallinas Avenue would reduce delays for side street traffic at Erin Drive and would be expected to have little effect on vehicle delays at Elvia Court and Las Gallinas Avenue. The Dowling report found that the Erin Drive / Las Gallinas Avenue intersection did not meet Caltrans warrants for an all-way stop sign control.

2002 Oakview Final EIR - Revision Implications

Wilbur Smith Associates evaluated the proposed access change to the Master Plan in order to determine if the revision could result in any new significant environmental impacts not previously documented or any substantial increase in the severity of an environmental impacts previously discussed in the 2002 Oakview Final EIR. To this end, vehicle trips generated from the project residential component (28 single-family homes) were consolidated at the Erin Drive access and distributed in accordance to the percentages developed for the EIR and shown above. The key analysis results are shown in Exhibit 4 (existing conditions and existing plus project conditions) and in Exhibit 5, which provides a comparison of morning and evening peak hour long-range cumulative conditions for the EIR study intersection at Lucas Valley Drive / Las Gallinas Avenue. The only EIR study intersection affected by the proposed access change is the Lucas Valley Drive / Las Gallinas Avenue facility. All other EIR study intersections would remain unchanged by the proposed access change.

Exhibit 5 Long Range Cumulative Intersection LOS Summary

	Long Range Base				Long Range with Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
Intersection	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
2002 Final EIR								
Las Gallinas / Lucas Valley	D	25.3	B	10.8	D	26.6	C	10.8
2004 August								
Las Gallinas / Lucas Valley	D	36.1	C	20.0	D	36.6	C	20.0

Source: Wilbur Smith Associates

Exhibit 5 shows LOS at the Lucas Valley Drive / Las Gallinas Avenue under future cumulative conditions and as such presents a worst case scenario. The LOS calculations from the 2002 Oakview Final EIR present conditions where 20 residential units would have access directly at Lucas Valley Road. The 2004 analysis shows LOS with all residential vehicle trips access Las Gallinas Avenue via Erin Drive. With the exception of the PM peak hour base condition LOS B to LOS C, there is no change in intersection LOS. As noted previously some of the difference in calculated delay is

attributable to use of a new version of intersection analysis software and changes made to the left-turn signal phasing since the EIR was prepared.

Findings / Conclusions

The analysis provided in the Dowling report provides an accurate description of peak hour traffic operations on Las Gallinas Avenue under existing and existing with project conditions. Wilbur Smith Associates agrees with the assessment of no significant impact related to the proposed change that would make Erin Drive the sole access for the proposed 28 housing units. Wilbur Smith Associate's further analysis of long-range cumulative conditions indicates that the EIR study intersections would operate as documented in the 2002 *Oakview Final EIR* with the proposed access change. The proposed access change would not result in any new significant impacts nor would the revision require any change in proposed mitigation measures developed for the 2002 *Oakview Final EIR*.

Prohibiting left-turns

Making Erin Drive a right-turn in/right turn out facility would address the issue of extended delay that would be experienced by project generated left-turns during the morning commute period. This change to Erin Drive could be constructed within the existing right-of-way and would serve to reduce the vehicle delay that would be experienced by project trips wanting to travel south on Las Gallinas Avenue. A potential drawback to this proposal would be the use of Elvia Court as a turnaround by some southbound project traffic. This condition, if it were to occur would likely cause concerns with the existing residents of Elvia Court. The decision regarding left-turns at Erin Drive is a decision that would be made by County decision makers (Planning Commission and Board of Supervisors) during the review of the merits of the proposed project.

Las Gallinas Avenue Traffic Congestion

The 2002 *Oakview Final EIR* and the Dowling report both identify congested conditions on Las Gallinas Avenue during the weekday morning commute period as the primary traffic circulation problem in the study area. Traffic diverting from a congested southbound Highway 101 has been a long standing problem in this area and a number of actions have been initiated by Marin County to address this problem. This highway bypass commute traffic, occurring at the same time that an average of 200 vehicles enter and exit Miller Creek School creates significant back-ups along Las Gallinas Avenue.

The California Highway Patrol, Caltrans and County have made several attempts to change commuters' habits of bypassing the Highway. Starting in the early 1970's, a number of actions and tests have been initiated with varying degrees of success. The problem persists and it is understood that as long as Highway 101 experiences high levels of southbound morning congestion commuters will continue to use Las Gallinas Avenue as a bypass route.

In relation to the project, the through traffic flow on Las Gallinas Avenue has a direct affect on the functioning of Erin Drive as a project access. Highway 101 commute conditions do vary and on days when traffic is moving relatively well vehicles will stay on the freeway and Las Gallinas Avenue will operate without major back-ups. However, when morning commute freeway traffic slows and conditions are very congested as they are frequently Las Gallinas Avenue backs-up and vehicles attempting to turn left from Erin Drive will experience extended periods of delay.

Future plans in the Highway 101 corridor in Marin County call for a high occupancy vehicle (HOV) lane system between the Richardson Bay Bridge and Route 37. A portion of this system is under

construction and will when complete connect existing HOV lanes in northern San Rafael to the existing lanes in Corte Madera. The Gap Closure Project will improve commute traffic flows on Highway 101 in the vicinity of the project and likewise will have an affect on the level of through traffic flow on Las Gallinas Avenue. Under conditions where through traffic is flowing on Las Gallinas Avenue traffic at Erin Drive is expected to operate within acceptable levels of delay under existing and future conditions.

Substitution of Mitigation Measures

Mitigation Measures 7.0-1(b), 7.0-2(b), and 7.0-3(b) require the project applicant to pay its fair share of the cost to install a traffic signal at the Lucas Valley Road / Los Gamos Road intersection. The applicant's fair share would be 38 percent of the design and construction budget.

The traffic impact fees collected would satisfy the project's obligations under the County's Transportation Facilities Fees Ordinance which would fund the improvements that are identified in the Northgate Activity Center Plan for this area. The southbound Highway 101 off-ramp project is identified as a major component of the Northgate Activity Center Plan. This improvement would include construction of the southbound off-ramp that would intersect with the Lucas Valley Road / Los Gamos intersection to create a signalized intersection, acquisition of land for the off-ramp, and widening of the Smith Ranch Road underpass.

The project applicant proposes a voluntary dedication of an approximately 9.4-acre portion of the property to the County or the California Department of Transportation (Caltrans) for construction of the future freeway interchange improvements. A recent appraisal of the interchange's land area by Caltrans noted a current market value of approximately four million dollars. By proposing the voluntary dedication of the land for the future interchange improvements, the project would provide a mitigation with greater financial value than the project's payment of its fair share obligations for installation of a signal at the Lucas Valley Road / Los Gamos Drive intersection. Furthermore, acquisition of the project site land would remove a major obstacle in implementing the Northgate Activity Center's traffic improvements.

Therefore, it is determined that the voluntary dedication of land for the future freeway interchange would provide an equivalent or more effective means of mitigating the significant traffic impacts at the Lucas Valley Road / Los Gamos Road intersection than the previously identified mitigation measure.

AIR QUALITY

Implementation of the Mitigation Alternative would result in air quality impacts similar to those discussed in the 2002 Oakview Final EIR. Construction period impacts would be potentially significant, long-term operational local and region impacts would be less-than-significant.

An air quality issue not analyzed within the scope of the impact analysis in the EIR is the concern of the potential health risks to residents of the assisted living facility from toxic air contaminants (TAC) due to the site's proximity to Highway 101. For example, diesel exhaust is a TAC of growing concern in the Bay Area. This issue was not considered for impact analysis in the EIR because it is an emerging concern for which no standards or criteria have been designated or officially set. Studies are continuing to develop data and information regarding the potential effect of TAC on sensitive receptors. Unlike the "criteria" air pollutants evaluated in the EIR no safe levels of exposure to TACs have been established at this time because additional review of this issue by regulatory agencies is needed before official standards and criteria can be set.