DRAFT
ENVIRONMENTAL IMPACT REPORT
FOR THE
VENTURA COUNTY MEDICAL CENTER
EXPANSION

SCH #93041042

September 1993

Draft
Environmental Impact Report
for the
Ventura County Medical Center Expansion

SCH # 93041042

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Prepared For:

Ventura County Public Works Agency

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Prepared By:

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September 1993

Project No. 9361-8067

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CONTENTS

		Page
1.0	INTRODUCTION	1-1
1.1	Purpose/Legal Authority	1-1
1.2	Scope and Content	1-1
1.3	Lead, Responsible and Trustee Agencies	1-2
2.0	EXECUTIVE SUMMARY	2-1
2.1	Project Synopsis	2-1
2.2	Areas of Public Controversy	2-1
2.3	Alternatives	2-2
2.4	Summary of Environmental Impacts	2-2
3.0	PROJECT DESCRIPTION	3-1
3.1	Project Proponent	3-1
3.2	Project Location	3-1
3.3	Existing Facilities	3-1
3.4	Proposed Actions	3-4
3.5	Project Objectives	3-10
3.6	Project Need	3-10
3.7	Project Design Features	3-12
4.0	ENVIRONMENTAL SETTING	4-1
4.1	Regional Setting	4-1
4.2	Site-Specific Setting	4-1
5.0	ENVIRONMENTAL IMPACT ANALYSIS	5.1-1
5.1	Land Use	5.1-1
5.2	Aesthetics/Shadows/Light & Glare	5.2-1
5.3	Transportation and Circulation	5.3-1
5.4	Air Quality	5.4-1
5.5	Noise	5.5-1
6.0	GROWTH-INDUCING IMPACTS	6-1
7.0	ALTERNATIVES	7-1
7.1	Alternatives on the Project Site	7-1
7.2	Alternative Sites	7-20

CONTENTS (Continued)

		Page
7.3	Environmentally Superior Alternative	7-28
7.4	Alternatives Viability	7-29
8.0	REFERENCES/PERSONS CONTACTED	8-1
8.1	References	8-1
8.2	Persons Contacted	8-3
9.0	LIST OF PREPARERS	9-1

LIST OF TABLES

3.3-1	Existing VCMC Facilities By Land Use	3-4
3.4-1	Proposed Ambulatory Care Clinic Facilities	3-8
5.3-1	Level of Service Criteria for Signalized Intersections	5.3-4
5.3-2	Level of Service Criteria for Unsignalized Intersections	5.3-5
5.3-3	Existing P.M. Peak Hour Levels of Service	5.3-6
5.3-4	City of San Buenaventura Traffic Impact Criteria	5.3-7
5.3-5	Project Traffic Generation Forecast	5.3-9
5.3-6	Cumulative Project Traffic Generation Forecast	5.3-16
5.3-7	P.M. Peak Hour Intersection Capacity Analysis Summary	5.3-20
5.4-1	Ambient Air Quality Standards	5.4-3
5.4-2	Air Quality Standard Exceedances	5.4-5
5.4-3	Construction Emissions	5.4-8
5.4-4	Parking Structure Local Scale Impacts	5.4-10
5.4-5	Mitigated Construction Emissions	5.4-12
7.1-1	Alternatives' Summary	7-1
7.3-1	Comparison of Onsite Alternatives to the Proposed Project	7-28
7.3-2	Environmentally Superior Alternative	7-29

LIST OF FIGURES

		Page
3.2-1	Regional Location	3-2
3.2-2	Project Location	3-3
3.3-1	Existing VCMC Facilities	3-5
3.4-1	Structures to Be Demolished	3-6
3.4-2	Proposed Site Plan	3-7
3.4-3	Ambulatory Care Clinic Elevations	3-9
5.1-1	Project Vicinity Land Uses	5.1-3
5.1-2	Adjacent Land Uses	5.1-4
5.2-1	Existing Views of the VCMC Campus	5.2-2
5.2-2	Existing Views of the VCMC Campus	5.2-4
5.2-3	Existing Views of the VCMC Campus	5.2-5
5.2-4	Existing Views of the VCMC Campus	5.2-6
5.2-5	Day vs. Night Visual Character	5.2-8
5.2-6	Existing and Post-Project View from Foothill Road	5.2-13
5.2-7	Existing and Post-Project View from Agnus Drive	5.2-14
5.2-8	Shadow Analysis December 21 - 3:00 p.m.	5.2-16
5.2-9	Nighttime Lighting Impacts	5.2-17
5.3-1	Existing Area Traffic Volumes	5.3-3
5.3-2	VCMC Project Traffic Distribution Pattern	5.3-11
5.3-3	VCMC Project Traffic	5.3-13
5.3-4	Existing Traffic Plus VCMC Project Traffic	5.3-14
5.3-5	City of Buenaventura Cumulative Projects Location Map	5.3-17
5.3-6	Future Traffic Volumes Without VCMC Traffic	5.3-18
5.3-7	Future Traffic Volumes With VCMC Traffic	5.3-19
5.5-1	Common Noise Levels and Public Reaction	5.5-2
5.5-2	Typical Construction Equipment Noise Levels	5.5-5
7.1-1	Alternative 1 Site Plan	7-4
7.1-2	Alternative 2 Site Plan	7-8
7.1-3	Alternative 3 Site Plan	7-12
7.1-4	Alternative 3 Photo Simulation	7-13
7.1-5	Alternative 4 Site Plan	7-17
7.1-6	Alternative 4 Photo Simulation	7-18
7.2-1	Alternatives Site Locations	7-22

APPENDICES

1.2 Notice of Preparation/Initial Study (TBA)
5.2 Aesthetic Impact Criteria/Index to Viewing Locations
5.3 Transportation and Circulation/Parking Study
5.4 Air Emission Calculations
5.5 Noise Level Readings/Construction Noise Modeling

1.0 INTRODUCTION

1.1 PURPOSE/LEGAL AUTHORITY

The proposed Ventura County Medical Center (VCMC) expansion involves the redevelopment of portions of the VCMC campus to provide improved medical and medical examiner facilities, as well as increased parking capacity. The project would entail the demolition or removal of 81,888 square feet of existing facilities and the construction of 144,003 square feet of new facilities. The net increase in building floor area on the campus would be 62,115 square feet. A 500-space multiple level parking structure would also be constructed while 229 existing surface spaces would be removed, thereby resulting in a net increase of 271 parking spaces.

In accordance with Section 15121 of the *State CEQA Guidelines*, the purpose of this Environmental Impact Report (EIR) is to serve as an informational document that:

> *"... will inform public agencies, decision-makers and the public generally of significant environmental effects, identify possible ways to minimize the significant effects, and describe alternatives to the project ..."*

1.2 SCOPE AND CONTENT

In accordance with the *State CEQA Guidelines*, an Initial Study was prepared for the proposed project and a Notice of Preparation (NOP) was distributed on May 27, 1993. The Initial Study examined the 28 environmental issue areas on the Ventura County Initial Study Checklist and determined that the proposed project could result in significant impacts on the environment in five environmental issue areas; therefore, an EIR was required. The NOP and Initial Study are presented in their entirety in Appendix 1.2.

This EIR addresses the issues determined by the Initial Study, responses to the NOP (Appendix 1.2), and scoping responses to warrant additional analysis beyond that which was conducted in the Initial Study. These issues are:

- Land Use
- Aesthetics/Shadow/Light and Glare
- Transportation and Circulation
- Air Quality
- Noise

Since the preparation of the Initial Study and circulation of the NOP, some minor revisions to the proposed project have been made. These include a 13,755-square-foot reduction in the size of the proposed Ambulatory Care Clinic, a 64-space reduction in required spaces in the proposed parking structure, and the demolition of one additional structure (the existing Coroners Building).

This EIR addresses the issues referenced above and identifies potentially significant environmental impacts, including site-specific and cumulative effects of the proposed project, in accordance with the provisions set forth in the *State CEQA Guidelines*. In addition, the EIR recommends feasible mitigation measures, where possible, that would reduce or eliminate adverse environmental effects.

The Alternatives section of the EIR is prepared in accordance with Section 15126(d) of the *State CEQA Guidelines*, and focuses on alternatives capable of eliminating or reducing significant adverse environmental effects associated with the project to levels of insignificance while feasibly attaining the basic objectives of the project. In addition, the EIR identifies one "environmentally superior" alternative from the alternatives assessed. The alternatives evaluated include the "No Project" Alternative and four onsite development scenarios. The Alternative section also discusses the feasibility of implementing the proposed project at alternative site locations.

The County hosted a public meeting on the proposed project on April 27, 1993. This optional step attracted approximately 30 members of the public to learn more about the project and the EIR process, and to allow them to express their views about issues that should be addressed in the EIR. The comments provided at the public meeting and a number of letters received from various public agencies and citizens helped to shape the scope of work for the EIR.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and all applicable court decisions. The *State CEQA Guidelines* provide the standard of adequacy on which this document is based. The *Guidelines* state:

> *"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 the proposed project* ***need not be exhaustive****, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but, the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a* ***good faith effort at full disclosure****." [emphasis added] (Section 15151).*

1.3 LEAD, RESPONSIBLE AND TRUSTEE AGENCIES

Because it has principal responsibility for approving the project, the County of Ventura is the lead agency for the EIR. There are no responsible or trustee agencies for the project.

2.0 SUMMARY

This section provides a brief synopsis of the characteristics of the proposed project, a discussion of areas of public controversy, a description of the project alternatives and their environmental impacts, and a summary of the environmental consequences of implementing the proposed project.

2.1 PROJECT SYNOPSIS

The project analyzed herein is the Ventura County Medical Center (VCMC) expansion proposed by the County of Ventura Public Works Agency. The project involves the redevelopment of portions of the VCMC campus to provide improved medical and medical examiner facilities, as well as increased parking capacity. Under the proposed project, three new structures would be built totalling 144,003 square feet of building area. These include a new one-story Mental Health In-Patient Unit, a new one-story Medical Examiner facility, and a five-story Ambulatory Care Clinic that would consolidate a number of currently dispersed onsite facilities. A three-level parking structure would also be built while 81,888 square feet of existing facilities would be demolished. The overall increase in onsite building area would be 62,115 square feet.

There are three primary objectives for implementing the proposed project. These include the following:

- To relieve current overcrowded conditions in the Mental Health In-Patient Unit, Medical Examiners Office, and other campus facilities;
- To provide medical and medical examiner services from coordinated and centralized locations; and
- To provide additional parking to better accommodate the current demand for parking and to compensate for the loss of onsite parking that would result from new building construction.

2.2 AREAS OF PUBLIC CONTROVERSY

A number of residents along the west side of Agnus Drive, immediately east of the VCMC campus, have expressed concern about the environmental consequences of constructing the proposed Ambulatory Care Clinic and parking structure at public meetings held on April 22 and 28 and July 8, 1993, as well as in responses to the Notice of Preparation. Concerns have been focused primarily on the land use and aesthetic issues related to the alteration of views from Agnus Drive that would result from construction of these multi-level structures. Land use and aesthetic impacts are discussed in Sections 5.1 and 5.2 of this EIR.

2.3 ALTERNATIVES

The EIR evaluates five onsite alternatives to the proposed project and examines the feasibility of implementing the project on three alternative sites. The onsite alternatives include the CEQA-required "No Project" alternative and four alternative siting scenarios. The No Project alternative and two of the alternative siting scenarios (Alternatives 1 and 4) were determined to be environmentally superior to the proposed project. The No Project Alternative was determined to be environmentally superior overall while Alternative 4 was determined to be environmentally superior among the remaining alternatives. The analysis of alternative sites determined that other sites could not feasibly be used, based upon criteria set forth by the *California Supreme Court in Citizens of Goleta Valley v. Board of Supervisors* (1990).

2.4 SUMMARY OF ENVIRONMENTAL IMPACTS

Table 2.4-1 summarizes the environmental consequences of implementing the proposed project, mitigation measures recommended to alleviate identified impacts, and the residual impacts following mitigation. The table is organized in the order in which the environmental issues are examined in Section 5.0, Environmental Impact Analysis.

Table 2.4-1. Summary Table

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
LAND USE		
The addition of the five-story Ambulatory Care Clinic (ACC) and the three-level parking structure would intensify the urban nature of the campus. The ACC would be clearly visible from some Agnus Drive properties and its height and massing would create potentially significant compatibility conflicts with Agnus Drive residences.	Project design features and aesthetics mitigation measures would serve to reduce compatibility conflicts associated with the ACC. However, outside of reducing the height of the structure, no measures would fully mitigate impacts.	Significant.
The 75-foot ACC would exceed the 45-foot height limitation in the City of Ventura's H Zone. Though the County is not legally bound to adhere to City zoning standards for projects on County-owned property, this is considered a direct zoning inconsistency.	None available.	Zoning inconsistency would remain.
AESTHETICS/SHADOW/LIGHT AND GLARE		
Temporary obstruction of views would occur during project construction. This impact is considered adverse, but less than significant.	**AES-1. Demolition Housekeeping Plan.** Prior to the commencement of demolition activities, the County and contractor(s) should jointly prepare a demolition/construction good-housekeeping plan for the project. The plan should include such information as designation of onsite locations for materials and equipment storage, schedule for debris removal, description of proposed screening mechanisms, etc.	Less than significant.
The five-story ACC would continue and increase the abrupt transition of scale from the VCMC campus to the single-family residences on Agnus Drive. This impact is considered significant.	**AES-3. Utility Undergrounding.** The existing Southern California Edison (SCE) utility lines strung along the border of the VCMC campus and adjacent residential properties along the west side of Agnus Drive shall be reinstalled underground and the utility poles removed. The undergrounding shall take place in accordance with SCE practices and induce a minimal amount of inconvenience for neighborhood residents.	Although AES-3 would improve visual conditions to Agnus Drive residences, impacts would remain significant.

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
AESTHETICS/SHADOW/LIGHT AND GLARE (Continued)		
Up to four potentially landmark-quality trees would be removed during project site clearance and construction. This impact is considered significant.	**AES-4. Specimen Tree Replacement.** In instances where the siting of proposed structures would result in the removal of trees over 50 feet in height, a specimen of an equivalent type and of a minimum box size of 24 inches shall be planted as a replacement. The replacement location shall be selected by the landscape architect for the site, and shall be as close as feasible to the original location.	Less than significant.
Upon completion of the Mental Health In-Patient Unit, the front yard setback along Loma Vista Road would no longer be consistent, as the Mental Health Unit would extend closer to the street. This impact is not considered significant, but may be adverse to some viewers.	None required.	Less than significant.
The ACC would cast shadows on Agnus Drive yards during late afternoon hours in the winter. Structures would not, however, be affected. Impacts are considered less than significant.	None required.	Less than significant.
Headlights of vehicles in the parking structure could illuminate some Agnus Drive residences. This is a potentially significant impact.	**AES-5. Parking Structure Walls/Landscaping.** The parking structure shall be designed with sufficient facade articulation so as to alleviate monolithic effect. The landscaping scheme shall include plants which will serve to buffer the structural massing.	Less than significant.
The proposed project would be potentially inconsistent with City of Ventura visual policies 1.12, 2.1, 2.19, 2.21, 3.1, 3.5, and 6.2.	**AES-2. Design Plans Coordination.** The proposed architectural and landscaping plans for the proposed structures should, under County supervision, be modified by their respective architects and landscape architects to ensure that features that would serve to create design linkages between the buildings (such features can include surface textures and materials, finish colors, landscaping palette and hardscape materials and patterns, consistent window and door treatments etc.).	Less than significant for policies 1.12, 2.19, 2.21, 3.5, and 6.2. Significant for policies 2.1 and 3.1.

Table 2.4-1 (Continued)

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
TRANSPORTATION AND CIRCULATION		
Project implementation would generate an additional 640 daily trips, with 64 trips being generated during the PM peak hour. These additional trips would not significantly affect any of the six study intersections. Cumulative development in the City would, however, cause poor operating conditions at three intersections.	No mitigation is required for project impacts. As a facility administered by a public agency, the VCMC is not currently required to contribute to the City's Traffic Mitigation Fee Program to address cumulative traffic impacts. The VCMC may, however, be required to contribute to this program in the future. In addition, if any portion of the VCMC Campus is leased to a private company in the future, that company would be required to contribute its "fair-share" fees.	Less than significant.
AIR QUALITY		
Project construction activity would generate nitrogen dioxide emissions exceeding the Ventura County APCD's 25 pounds-per-day threshold. Impacts are considered significant without application of feasible mitigation.	**AQ-2. Equipment Turnoff.** All diesel-powered equipment should be turned off when not in use for more than 30 minutes and gasoline-powered equipment should be turned off when not in use for more than 5 minutes.	
Construction-related PM_{10} emissions have the potential to substantially contribute to local exceedances of the State PM_{10} standards. This impact is considered significant.	**AQ-1. Two-Foot Freeboard.** Trucks transporting earth material offsite shall maintain a minimum 2-foot freeboard. **AQ-3. Daily Watering.** The entire construction area shall be watered twice daily. **AQ-4. Roadway Sweeping.** Roadways in the vicinity of construction access points shall be swept as necessary to prevent the accumulation of silt.	Less than significant.
Operation of the proposed parking structure would increase carbon monoxide concentrations in the immediate vicinity of the structure. However, concentrations would remain substantially below State standards and would be less than significant.	None required.	Less than significant.

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
AIR QUALITY (Continued)		
Although the project would not substantially contribute to cumulative air quality impacts, cumulative development would result in the incremental degradation of regional air quality.	**AQ-5. Bicycle Racks.** Bicycle racks shall be provided in a convenient location to encourage bicycle use by VCMC employees. **AQ-6. Bicycle Lanes.** Bicycle lanes shall be constructed to link project bicycle racks to existing Class II bicycle lanes on Loma Vista Road. **AQ-7. Low Emission Space Heaters.** Space heaters used in all project development shall be low emission designs. Commercial space heaters should be certified by the manufacturer to generate no more than 40 nanograms per joule heat output. This would reduce space heating emissions by up to 79 percent (EPA, 1983). **AQ-8. Maximize Thermal Integrity.** All new structures shall maximize thermal integrity through the use of insulation, dual-pane windows, advanced window glazing to reduce heating and cooling requirements and associated emissions. Solar assisted water heaters shall be installed when feasible. **AQ-9. Trip Reduction Plan.** VCMC shall develop and implement a trip reduction plan to increase average vehicle ridership.	Less than significant.

Table 2.4-1 (Continued)

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
NOISE		
Project construction would generate intermittent noise during the 3-year construction period. Residences along Agnus Drive would experience noise at potentially significant levels. Impacts would be adverse, but are considered less than significant, due to their temporary nature.	**NOI-1. Muffler Exhaust Systems.** All construction equipment, fixed or mobile, operated on the VCMC campus shall be equipped with properly operating muffler exhaust systems. **NOI-2. Equipment Placement.** When feasible, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receptors. **NOI-3. Stockpiling and Vehicle Staging.** Stockpiling and vehicle staging areas shall be located as far as practical from sensitive receptors. **NOI-4. Construction Activity Consolidation.** When feasible, the noisiest construction operations should be arranged to occur together in the construction program to avoid continuing periods of greater annoyance.	Less than significant.
Noise associated with the parking structure would not exceed City thresholds. However, peak noise levels associated with engine start-ups, tire squeal, and car alarms at the parking structure could be annoying to nearby residents.	**NOI-5. Non-Squeal Paving.** Non-squeal paving finishes shall be used within the parking structure and on all external ramps of the parking structure. **NOI-6. Walls.** The design of the parking structure shall incorporate features (such as solid walls of baffles on the east elevation) to reduce noise impacts to the nearest residential areas. **NOI-7. Speed Bumps.** Speed bumps shall be incorporated into the parking structure to reduce vehicle speeds. **NOI-8. Rubberized Expansion Plates.** Parking structure expansion plates shall be of rubberized materials to reduce noise generated by vehicular movement.	Less than significant.

Table 2.4-1 (Continued)

DESCRIPTION OF IMPACT	MITIGATION MEASURES	RESIDUAL IMPACT
NOISE (Continued)		
	NOI-9. Sweeper Operation Restrictions. If noise problems arise from parking structure sweeper operations, sweeping activities shall be restricted to the hours determined appropriate by the County of Ventura.	

3.0 PROJECT DESCRIPTION

The proposed project analyzed herein is known as the Ventura County Medical Center (VCMC) expansion project. This Project Description includes information relative to the features of the proposed project. These include the project proponent and location, existing facilities at the subject site, the proposed physical changes, and the objectives to be accomplished by the proposed project.

3.1 PROJECT PROPONENT

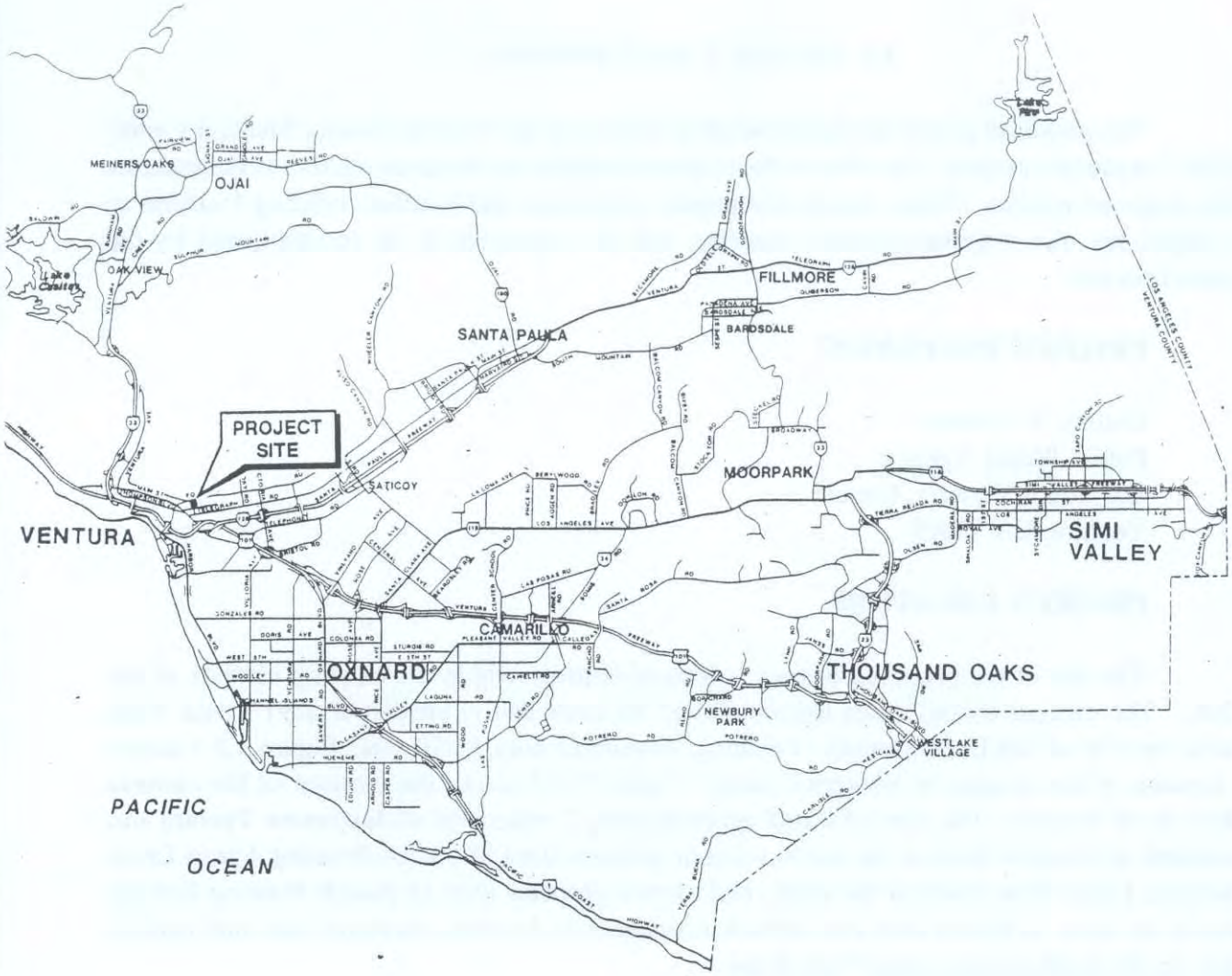
County of Ventura
Public Works Agency
800 South Victoria Avenue
Ventura, CA 93009

3.2 PROJECT LOCATION

The site of the proposed project is located entirely within the existing campus of the VCMC. The campus encompasses approximately 40 acres and is located at 3291 Loma Vista Road in the City of San Buenaventura (Ventura), Ventura County, California. Figure 3.2-1 shows the location of the campus in Ventura County. Figure 3.2-2 shows the location of the campus in the City of Ventura. The site is located approximately 2 miles east of downtown Ventura and is bounded by Foothill Road to the north, western property lines of parcels fronting Agnus Drive to the east, Loma Vista Road to the south, and eastern property lines of parcels fronting Estrella Street to the west. Adjacent land uses include residences to the west, north and east and medical offices to the south across Loma Vista Road.

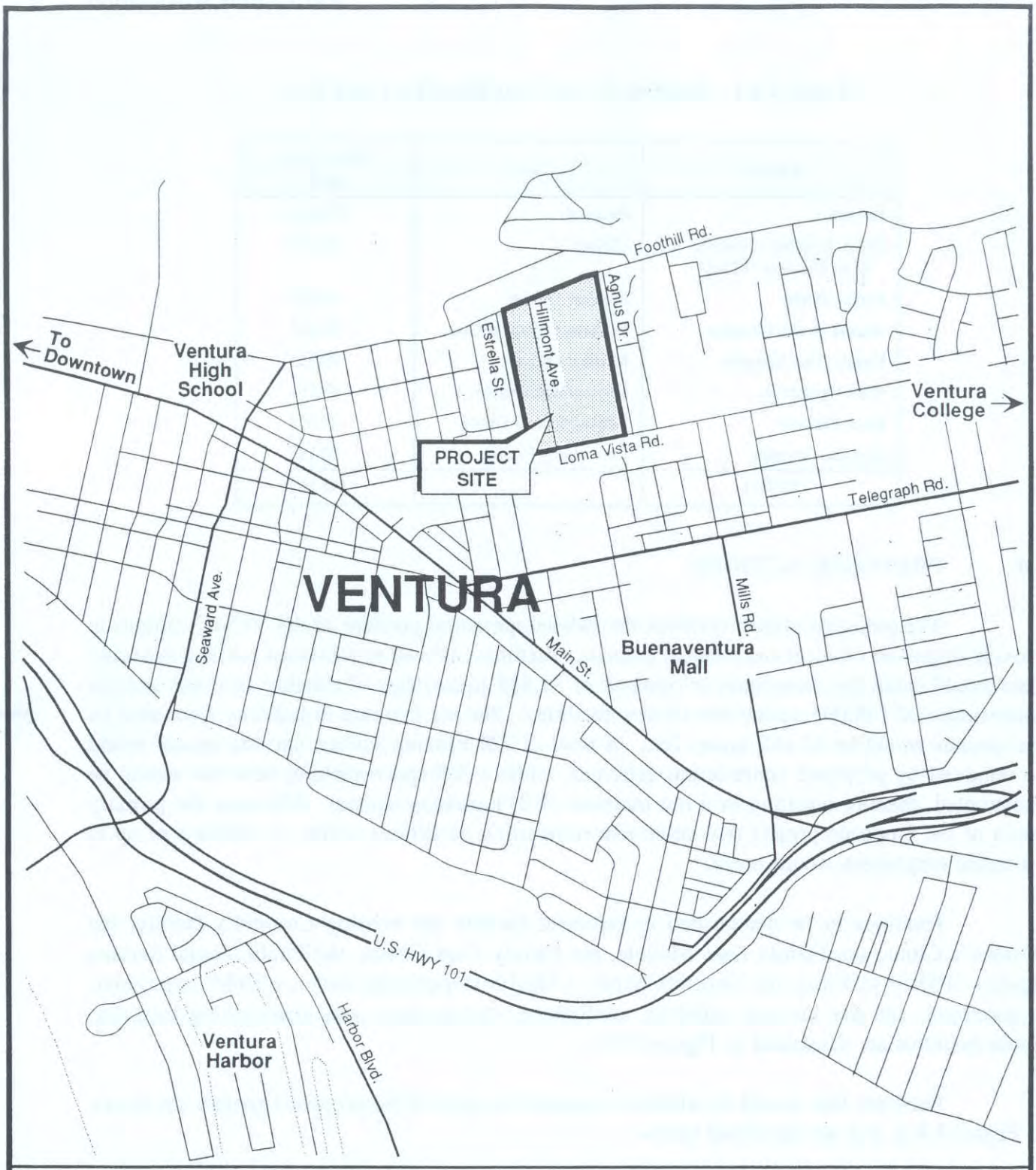
3.3 EXISTING FACILITIES

Existing facilities at the VCMC campus include 60 structures on 40 acres, which total 398,157 square feet of floor area. Onsite land uses include a hospital, various medical clinics and offices, a juvenile corrections complex, maintenance facilities, and a laundry facility. The structures and facilities on the project site can be grouped into eight complexes, based on location within the site and activity. These groupings are listed in Table 3.3-1 and are illustrated in Figure 3.3-1.



REGIONAL LOCATION

FIGURE 3.2-1



PROJECT LOCATION

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Table 3.3-1. Existing VCMC Facilities By Land Use

Facility	Use	Floor Area (sq ft)
Hospital	Hospital	178,995
PSSA Building (formerly HCA Business Offices)	Offices	25,140
Public Health	Medical Offices	18,312
Mental Health Complex	In-Patient Medical Care	37,655
Family Care Complex	Medical Offices	32,555
Plant Operations	Offices/Maintenance	30,581
Bard Building	Office/Medical Office	24,754
Juvenile Complex	Corrections Facility	50,165
TOTAL		**398,157**

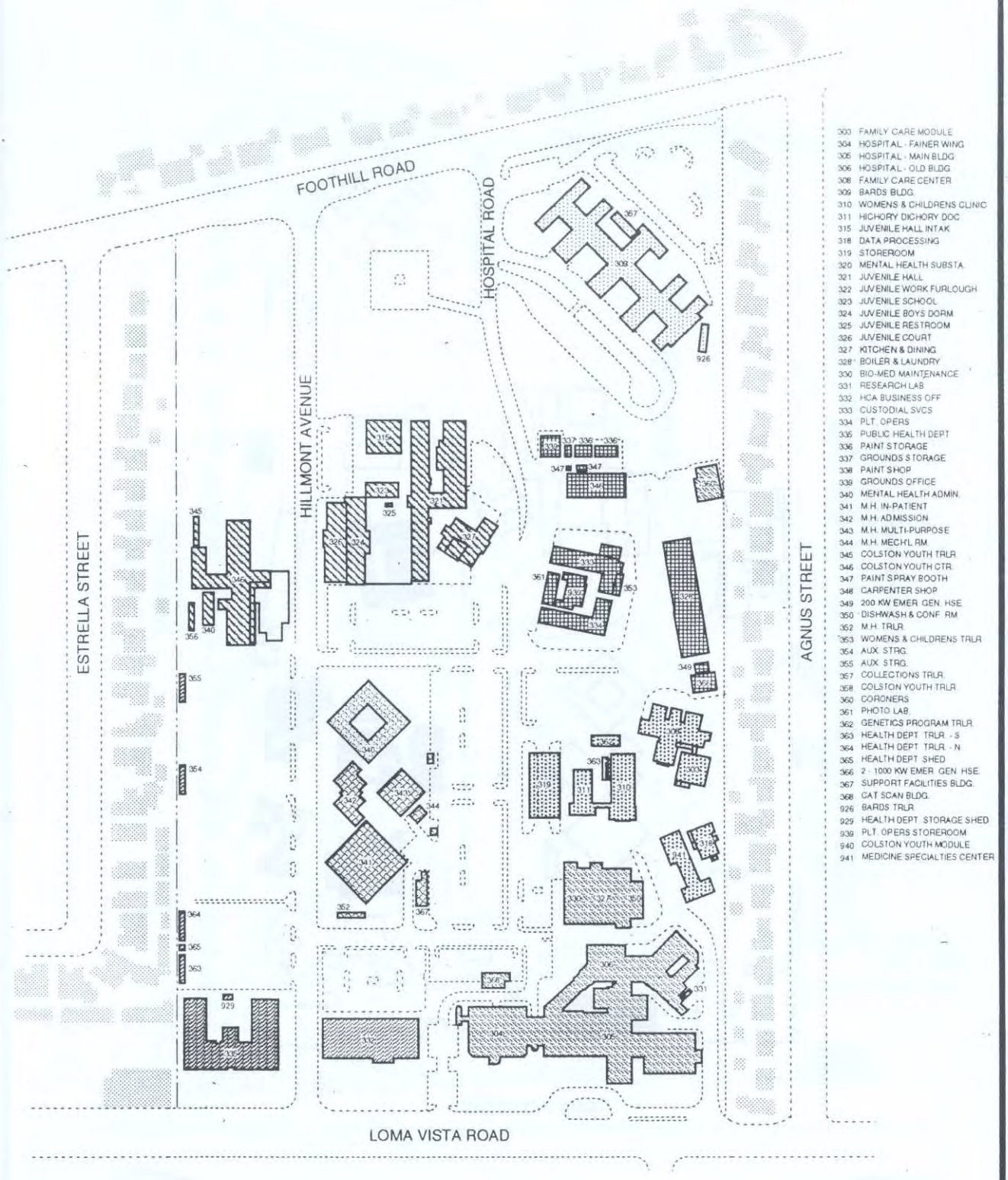
3.4 PROPOSED ACTIONS

The proposed project involves the redevelopment of portions of the VCMC campus to provide improved medical and medical examiner facilities, as well as increased parking capacity. This would entail the demolition or removal of 81,888 square feet of existing facilities and the construction of 144,003 square feet of new facilities. The net increase in building floor area on the campus would be 62,115 square feet. A total of 229 existing surface parking spaces would be removed by proposed construction activities, while a 500-space parking structure would be constructed, thereby resulting in a net increase of 271 parking spaces. Although the primary intent of the proposed project is to relieve overcrowding conditions onsite, an increase of up to 56 onsite employees would occur.

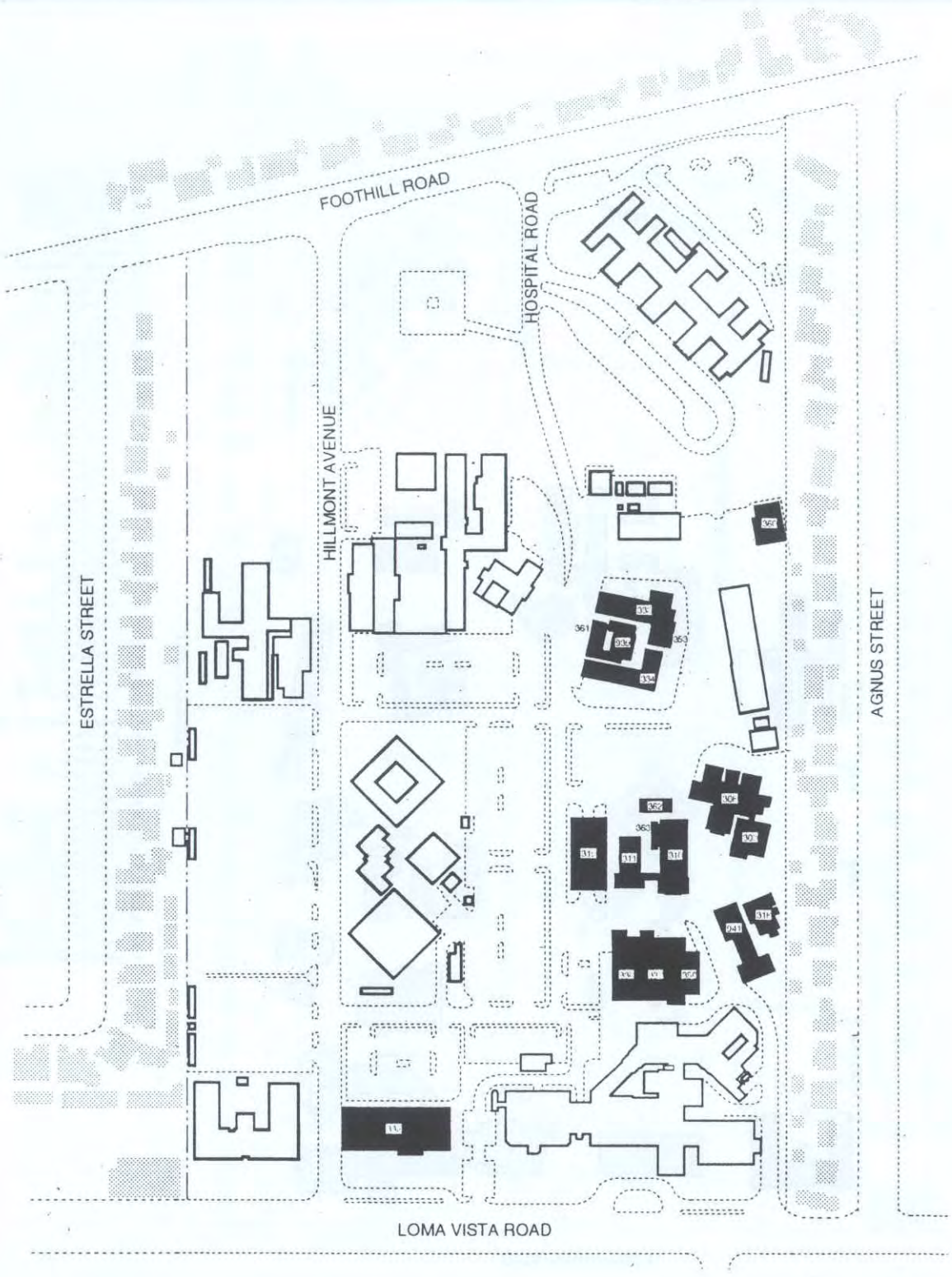
Facilities to be demolished or removed include the existing Coroner's facility, the Women's Clinic, the Family Care Module, the Family Care Center, the Public Social Service Agency (PSSA) building, the Genetics trailer, a Health Department trailer, a child care center, a storeroom, and the kitchen, cafeteria, conference, maintenance, and dishwashing facilities. These facilities are illustrated in Figure 3.4-1.

Facilities that would be added or expanded as part of the proposed project are shown in Figure 3.4-2, and are described below.

Mental Health In-Patient Unit. This component of the project would involve the construction of a one-story, 31,003-square-foot in-patient unit. The 25,140-square-foot PSSA Building would be demolished to accommodate this building. The new Mental Health Unit would include three patient wings with a total capacity of 43 beds (a 15-bed expansion over the existing facility), a nurses' station, group rooms, an occupational therapy room, and recreational areas. The existing Mental Health In-Patient Unit (Building 341) would be vacated and



- EXISTING VCMC FACILITIES



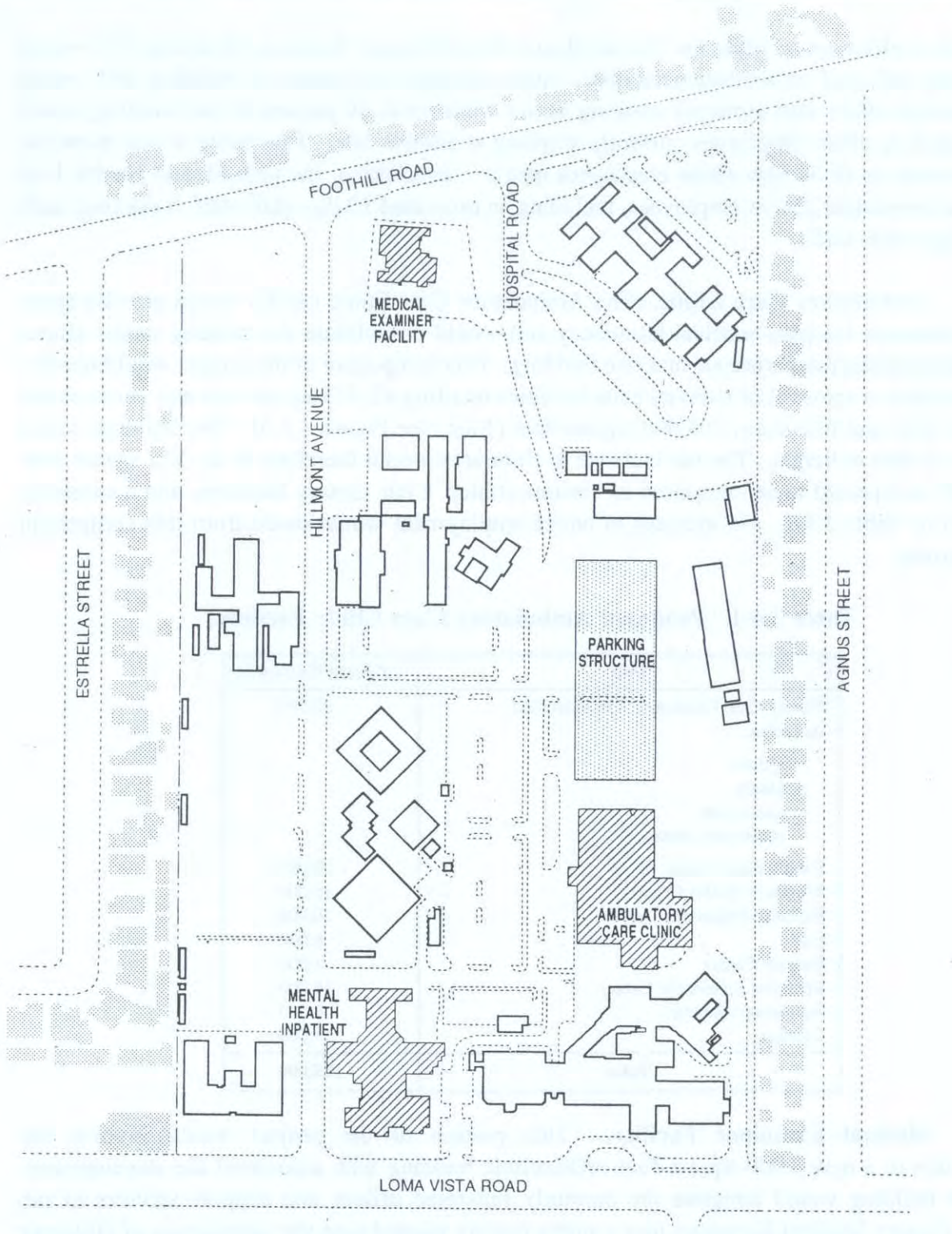
303 FAMILY CARE MODULE
308 FAMILY CARE CENTER
310 WOMENS & CHILDRENS CLINIC
311 HICHORY DICHORY DOC
318 DATA PROCESSING
319 STOREROOM
327 KITCHEN & DINING
330 BIO-MED MAINTENANCE
332 HCA BUSINESS OFF
333 CUSTODIAL SVCS
334 PLT. OPERS.
350 DISHWASH & CONF. RM.
353 WOMENS & CHILDRENS TRLR.
360 CORONERS
361 PHOTO LAB.
362 GENETICS PROGRAM TRLR.
363 HEALTH DEPT. TRLR. - S
939 PLT. OPERS STOREROOM
941 MEDICAL SPECIALTIES CENTER

NORTH

0 250

FEET

STRUCTURES TO BE DEMOLISHED



PROPOSED SITE PLAN

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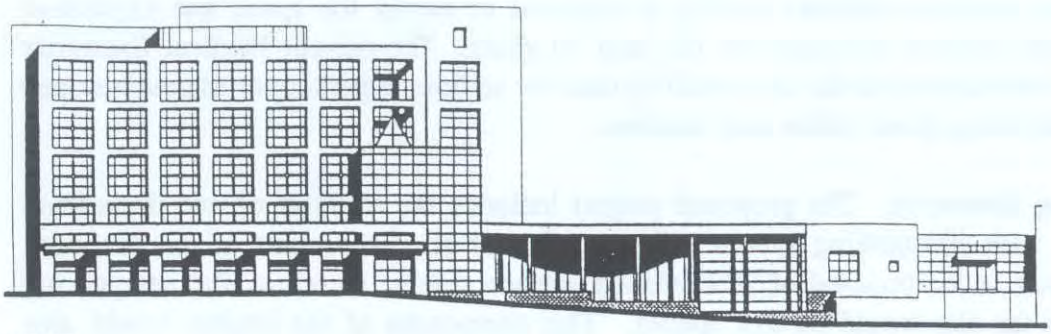
converted to office space while the Mental Health Multi-Purpose Building (Building 343) would be vacated and used as a meeting facility. Approximately 20 percent of building 341 would accommodate office staff currently working onsite while up to 80 percent of the building would be occupied by office employees currently working at another site. This space would therefore accommodate up to 34 new office employees onsite.[1] In addition, the new Mental Health Unit would accommodate 22 new employees, including an estimated 10-day-shift staff, 6 evening staff, and 6 night-shift staff.

Ambulatory Care Clinic. The Ambulatory Care Clinic (ACC) would provide space for the relocated Hospital medical laboratory and would consolidate the existing onsite clinics and cafeteria/dietary departments into one building. This component of the project would involve the demolition or removal of twelve onsite facilities totalling 43,475 square feet and construction of a five-story and two-story, 105,000-square-foot clinic (see Figure 3.4-3). The building would be up to 75 feet in height. The net increase in floor area would therefore be 61,525 square feet. The ACC is expected to be composed of various clinics, a lab, dietary facilities, and a cafeteria, as shown in Table 3.4-1. No increase in onsite employment would result from this component of the project.

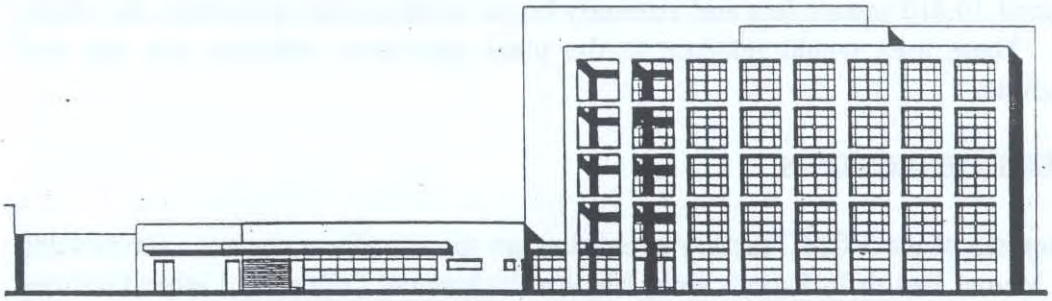
Table 3.4-1. Proposed Ambulatory Care Clinic Facilities

Unit	Square Footage
Family Care Residency Administration including: • offices • library • auditorium • conference rooms	20,000
Family Care Center	20,000
Women's Health Center	10,000
Pediatric Diagnostic Center	10,000
Lab	6,000
Surgery Center	3,000
Medicine Specialties Center	10,000
Admission - Lobby	8,000
Cafeteria	18,000
Total	**105,000**

Medical Examiner Facility. This portion of the project would involve the construction of a new 8,000-square-foot office/clinic building with associated site development. The new building would integrate the currently separated offices and support services of the Ventura County Medical Examiner into a single facility located near the intersection of Hillmont Avenue and Foothill Road. The project would house offices and associated facilities for three doctors, eight investigators, two secretaries, and an autopsy assistant, as well as an autopsy room, a morgue, a laboratory, storage spaces, and related public areas. No increase in onsite employment would occur as a result of this component of the project.



WEST



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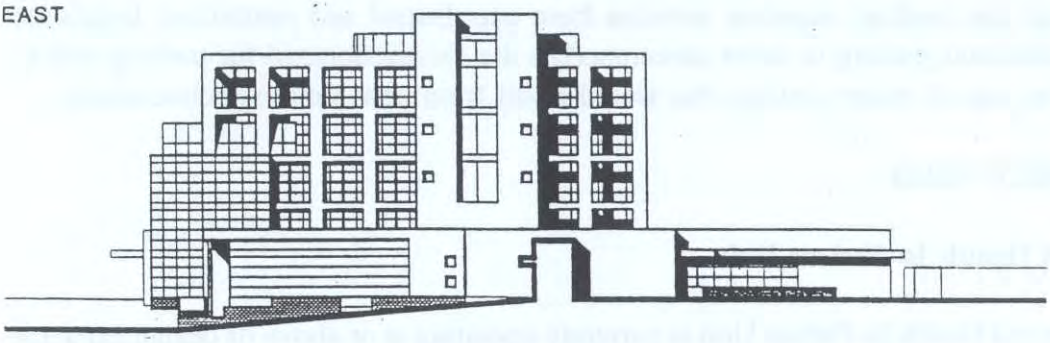

SOUTH

NORTH

SOURCE: Rasmussen & Associates

AMBULATORY CARE CLINIC
ELEVATIONS

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The new medical examiner facility is expected to satisfy the space and expansion requirements of the Medical Examiner for the next 30 years. The current Medical Examiner facility would be demolished and the site would be used for additional parking or as passive open space, possibly including picnic tables and benches.

Parking Structure. The proposed project includes the addition of one three-level parking structure with 500 parking spaces. Construction of all components of the proposed project would result in the removal of 229 existing surface spaces; therefore, the net parking space increase on the site would be 271 spaces. This component of the project would also involve the demolition or removal of five onsite facilities housed in three buildings and a trailer. These structures total 10,810 square feet and currently house maintenance operations, the photo lab, and offices. These uses would relocate to the plant operations complex and the new ambulatory care clinic.

3.5 PROJECT OBJECTIVES

The purposes of the VCMC facility expansion are to: 1) relieve current overcrowded conditions in the Mental Health In-Patient Unit, Medical Examiners Office, and other facilities on the campus that are housed in buildings that, in many cases, were designed for other purposes; 2) provide medical and medical examiner services from coordinated and centralized locations; and 3) provide additional parking to better accommodate the current demand for parking and to compensate for the loss of onsite parking that would result from new building construction.

3.6 PROJECT NEED

3.6.1 Mental Health In-Patient Unit

The Mental Health In-Patient Unit is currently operating at or above its design capacity of 28 beds. The facility averaged 29.5 patients daily in 1992, with a peak one day load of 40 patients.[2] Project implementation would add 15 beds to the facility, increasing capacity to a total of 43 beds and relieving overcrowded conditions. The facility currently used to house and treat patients was designed as an open unit psychiatric hospital for voluntary patients. The current and future need is for a locked unit to treat involuntary patients. The current facility standards for fire, safety, and patient treatment and security cannot be incorporated into the existing facility. In addition, project implementation would consolidate the Mental Health Unit's Crisis Services team, which is currently located in a separate building. The Mental Health In-Patient Unit expansion project would improve the capacity capabilities of the County's Mental Health Services, improve the patient security, and provide a more efficient and effective delivery of health services. The project's location would maintain the unique and distinctive character of this health care profession, yet provide immediate access between the hospital emergency room and the mental health in-patient facilities. The project would also allow the retention of some of the existing Mental Health Services facilities which support the administrative, reception, training, and educational functions of the Mental Health Services staff.

3.6.2 Ambulatory Care Clinic

Ambulatory care services at the VCMC are currently provided by a number of separate clinics dispersed in several buildings/trailers throughout the campus. These buildings and trailers are in most cases very old and are difficult to maintain, inefficient in layout, separate from one another and the hospital, seismically unsafe, and inefficient in utilities consumption. Project implementation would consolidate these clinics into one facility that would provide a variety of care services to patients. The goal of the County Health Care Agency is to improve the efficiency and effectiveness of health care services. In consolidating the clinics under one building, the proposed ACC would optimize the use of staff, operation and maintenance funds, and maximize the synergistic effects of specialized clinics and medical staff in close proximity to one another. It is further intended that the project reinforce the concept of providing specialized out-patient care at a central location in the County while at the same time the Health Care Agency begins to expand the County's capability to provide primary care by the establishment of satellite clinics throughout the County. The ACC location immediately adjacent to the hospital would also provide quick access to the medical laboratory, dietary services, and cafeteria to support the hospital as well as immediate access for patients at the ACC who need more specialized treatment from the hospital.

3.6.3 Medical Examiner Facility

The existing Medical Examiner facilities on campus are also currently separated between two areas; the examination and storage facilities are operated in the VCMC hospital morgue, while the Medical Examiner office is located in a temporary building on the eastern border of the campus (Building 360). Operational and aesthetic conflicts occur related to corpse storage, transfer, and autopsy examination due to the location of the examination and storage facilities within the hospital morgue.[3] In addition, the separation of these facilities from the Medical Examiner office results in administrative difficulties. Project implementation would consolidate the Medical Examiner facilities in a building completely separated from the hospital facility, thereby providing more efficient service and alleviating aesthetic conflicts. The project would also give needed additional storage space for cadavers, body tissue samples, evidence, and records.

3.6.4 Parking Structure

A parking study prepared in August 1992 determined an existing need for 205 additional parking spaces at the VCMC based on: 1) current onsite parking usage; and 2) movement of VCMC campus patrons from off-campus street parking spaces into on-campus parking areas. This need was verified by a subsequent re-examination of VCMC parking needs (see Appendix 5.3). In addition, project implementation would create demand for an estimated 66 additional parking spaces.

To relieve current overcrowded parking conditions and to accommodate additional parking needs generated by the Mental Health In-Patient Unit expansion, project implementation

would increase onsite parking by 271 spaces. The Parking Structure would not only provide consolidated parking to satisfy the current parking demand and that generated as a result of minor increases in on-campus staff population, it would replace parking spaces lost to the construction of the ACC and Mental Health Unit. By consolidating much of the campus parking capability in one structure, it would reduce the time to locate parking, reduce the customer walking time from previously dispersed parking lots, provide for more effective use of land, and reduce the traffic criss-crossing the campus to parking lots.

3.7 PROJECT DESIGN FEATURES

Project design will incorporate the following features designed to reduce potential environmental impacts associated with the project. The features, which were identified in the Initial Study for the proposed project, are organized according to the area of potential impact addressed.

Air Quality

- Regular ground wetting of graded areas will be conducted during construction to control fugitive dust emissions.
- Grading activities will cease during periods when winds exceed 20 miles per hour averaged over one hour.
- Materials excavated, stockpiled, and transported during construction will be wetted regularly.
- Onsite construction vehicle speeds will be limited to 15 miles per hour.
- Construction vehicle traffic areas will be regularly wetted.
- Tarping of trucks removing dirt offsite.

Water Resources

- Slope erosion control measures such as jute matting, silt fences along slope toes, and straw bales will be utilized to control runoff during project construction.

Visual Resources

- Landscaping materials around the Medical Examiner facility will not include trees or shrubs that will ultimately exceed the height of the building, so as not to obstruct distant views.

- Removal of VCMC buildings immediately adjacent to the VCMC eastern boundary wall, and installation of a landscaped buffer 75-150 feet in width in conjunction with the ACC and parking structure.

- The Medical Examiner building will be a single story, and building elevations will be stepped to ensure compatibility with surrounding topography and natural slope lines.

- All mechanical operational units for the Medical Examiner facility will be entirely screened from view of the entire Foothill Road view corridor.

Seismic Hazards

- The proposed Medical Examiner facility is within the Alquist-Priolo Special Studies Zone and will be built in accordance with recommendations contained in a 1992 geotechnical report.

- The proposed parking structure is within an Alquist-Priolo Special Studies Zone, and will be built in accordance with recommendations to be contained in a geotechnical report as part of project design.

Geologic Hazards

- Project implementation will be in accordance with standard geotechnical practices and construction of the Medical Examiner facility will comply with recommendations regarding excavation and compaction in the 1992 Leighton & Associates geotechnical study of that facility.

Hydraulic Hazards

- Project implementation will include revegetation of all constructed slopes and graded areas as soon as feasible following construction. Such revegetation will minimize the potential for long-term sediment transport from the project site.

Noise and Vibration

- Construction activities will conform with standard noise reduction procedures, including limiting construction activity to between 8 a.m. and 5 p.m. Monday through Friday and, when feasible, the use of temporary, movable construction noise barriers to shield sensitive receptors.

- To reduce noise levels at the Mental Health In-Patient Unit's sensitive uses (in-patient quarters), patient rooms and most exterior use areas will be sited to rear of the Mental Health Unit, away from Loma Vista Road. This will allow the

structure to act as a noise attenuation device, shielding patient rooms and most outdoor use areas from excessive vehicle-generated noise.

- Specialty wall and glazing materials will be used for construction of the Mental Health In-Patient Unit.

- A 10-foot wall will be constructed along exterior use areas at the front of the Mental Health In-Patient Unit along Loma Vista Road, thus attenuating noise levels at exterior use areas in the front of the facility.

- All paving within the proposed parking structure and on all external ramps will be Portland Cement Concrete with a non-squeal finish.

Light and Glare

- Lighting sources will be shielded and projected toward the ground to decrease the quantity of light radiated into the nighttime sky.

- The proposed project will maximize the use of non-reflective exterior materials in its construction.

Water Supply

- A sufficient number of toilets will be retrofitted to achieve the 3:1 water consumption offset requirements of City of Ventura Resolution No. 92-73.

- Low flow shower heads (2.5 gallons per minute or less at 40 psi) will be installed on all new construction.

- Sink and lavatory faucets which limit the flow of water to a maximum of 2.5 gallons per minute at 40 psi, will be installed on all new construction.

- New landscaping developed on the subject site in conjunction with the proposed project will be drought tolerant.

- Drip, mini-emitter or low volume sprinkler irrigation systems will be used for all new landscaping developed in conjunction with the proposed project.

Waste Treatment/Disposal

- The VCMC will mulch grass clippings rather than disposing of them. If existing VCMC equipment will not mulch the clippings, one or more mulching lawn mowers will be purchased by the VCMC. In addition, a "green bin" recycling program will be initiated to handle yard wastes other than grass clippings.

- The VCMC will develop an onsite or offsite composting program for organic compostable wastes generated on the VCMC campus.

- Adequate space for waste and recycling bins, as determined by the Ventura County Solid Waste Management Department, will be provided for all new facilities developed as part of the proposed project.

- The VCMC will purchase a baler or develop an alternative method to break down cardboard boxes and reduce the space requirements for recyclable materials bins.

- The contractor that conducts project-related construction and demolition activities will be required to develop County-approved plans for the diversion of construction/demolition wastes through source reduction or recycling.

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[1] This assumes one employee per 250 square feet in the 8,451 square feet that would be occupied by employees from offsite.

[2] Essex, Duane, Ventura County Mental Health Center, 1992.

[3] O'Halloran, Ronald L., Chief Medical Examiner, 1992.

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4.0 ENVIRONMENTAL SETTING

This section provides a general description of the existing environmental conditions in the City of Ventura, as well as a description of the local setting in which the project site is located.

4.1 REGIONAL SETTING

The City of Ventura is located in western Ventura County, California, approximately 60 miles northwest of downtown Los Angeles. As of January 1, 1993, the City's population was 96,112, up 1.4 percent from the January 1, 1992, population of 94,756. The City's population represents approximately 14 percent of the countywide population of 700,087.[1]

Regional access to the City is provided by a system of freeways and highways, and by railroad. The Ventura Freeway (U.S. Highway 101) provides a link from Los Angeles to Santa Barbara and San Francisco to the north. The Santa Paula Freeway (State Route 126) extends to the northeast to Santa Paula and beyond, eventually intersecting the Interstate 5 at Castaic Junction. Access to Ojai and recreational areas in the Los Padres National Forest and to other areas to the north is provided by State Route 33. Amtrak provides passenger rail service to the City at its station in downtown Ventura.

The City is situated on a coastal plain between the Santa Clara and Ventura Rivers. Elevations on the plain range from sea level along the coast to approximately 850 feet in the foothills located north of the City. Drainage of the coastal plain is primarily through natural watercourses which terminate in the Santa Clara River, the Ventura River, or the Pacific Ocean.

Ventura is located in the western portion of the Oxnard Plain Airshed. The City's climate is characterized by cool winters and warm, dry summers tempered by cooling sea breezes. Average annual precipitation in the City ranges from 14 inches along the coast to 15.5 inches near Saticoy. Precipitation occurs primarily during the winter months, with approximately 95 percent of annual rainfall occurring from November through April. Air quality in the City is generally good, with air pollutant levels rarely exceeding state or federal standards.

The City lies within a seismically active region of Southern California. Portions of the City are subject to such geologic hazards as fault displacement, earthquakes and groundshaking, landslides, liquefaction, and flooding.

4.2 SITE-SPECIFIC SETTING

The VCMC campus is located between Loma Vista and Foothill Roads, approximately two miles east of downtown Ventura. The project site is in the Loma Vista community of the City, which is characterized by a large concentration of regional medical facilities and related professional offices along Loma Vista Road. In the areas immediately bordering the Loma Vista Road corridor, a number of residential structures have been converted to small-scale offices.

Hillside areas to the west, north, and east of the site are characterized by a mix of low and high density residential uses.

The project site is located at the base of the Ventura foothills, which provide a scenic backdrop to the City. Some residential development extends onto the flanks of the hills above the VCMC campus, affording panoramic views of the central portion of the City, the Pacific Ocean, and the Channel Islands.

The VCMC Campus is developed with various County-owned buildings, including medical offices and juvenile corrections facilities. The northern half of the campus, which currently consists primarily of grass fields and wooded areas, slopes from north to south and east to west. The southern half of the campus, which contains most of the onsite development, is relatively flat. The overall differential in elevation on the site is approximately 120 feet, from a high of 260 feet at the northeast edge of the campus to a low of approximately 140 feet at the southwest corner of the campus. Onsite surface sheet flow is currently routed to Loma Vista Road via Hillmont Avenue.

The Ventura fault runs through the northern third of the VCMC campus in an east-west direction. Consequently, the sites of the Medical Examiner Facility and the parking structure are subject to fault rupture in the event of seismic activity along the Ventura fault.

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[1] California Department of Finance, Price and Population Data for Local Jurisdictions, April 30, 1993.

5.0 ENVIRONMENTAL IMPACT ANALYSIS

This section of the report examines the environmental issues that will or may have an impact on the environment, as identified in the Initial Study and in the oral and written responses received as a result of the Notice of Preparation. Each issue subsection contains four discussions. The "Setting" discussion describes the existing environmental and/or regulatory structure affecting the project site. The "Impact Analysis" discussion evaluates the impacts of the proposed project on the existing physical and regulatory environment. The "Mitigation Measures" discussion proposes actions which would lessen or eliminate the impacts identified in the "Impact Analysis" discussion. The "Residual Impacts" discussion discloses the level of impact that would still remain as a result of the implementation of the proposed project subsequent to implementation of the recommended mitigation measures.

5.1 LAND USE

By adding structures of greater height and scale than many of those that currently exist on the VCMC campus, project implementation has a potential to impact land use. This section analyzes the proposed project's consistency with adopted City of Ventura land use policies, as well as compatibility with surrounding uses.

5.1.1 Setting

5.1.1.1 Existing Conditions

a. VCMC Campus. The project site is currently developed with 60 structures totalling 398,157 square feet of floor area. Although medical facilities are the primary use on the site, the campus also contains administrative functions and juvenile corrections facilities.

Existing VCMC facilities are shown in Figure 3.3-1 of the Project Description. As that figure illustrates, uses fronting Loma Vista Road include public health and administrative functions, as well as the VCMC Hospital. The Public Health Department, located west of Hillmont Avenue, is a one-story U-shaped structure while the PSSA Building, which is located immediately east of Hillmont Avenue and houses administrative offices, is a two-story structure. The VCMC Hospital, immediately east of the PSSA Building, measures 178,995 square feet and rises up to four floors.

In the central and eastern portions of the campus are several single-story structures and trailers which house the mental health complex, the family care complex, and plant operations. The mental health complex is located along the eastern edge of Hillmont Avenue and consists of a mental health in-patient unit, as well as associated administrative functions. The family care complex, located just north of the hospital on the site's eastern edge, houses various out-patient medical clinics. Plant operations consist of structures and trailers north of the family care complex, as well as a boiler and laundry building and an emergency generator building located on the eastern edge of the site.

The northwestern portion of the campus houses juvenile corrections complex. This complex includes Juvenile Hall on the east side of Hillmont Avenue and the Colston Youth Center on the west side of Hillmont. Correctional facilities consist of a number of one-story structures which contain dormitories, dining facilities, and correctional schools. The Colston Youth Center grounds are completely surrounded by a 10-foot security wire fence for security purposes.

In the northeast corner of the site is the Bard Building. This one-story building fronts Foothill Road and houses mental health out-patient services and associated administrative functions.

b. Surrounding Community. Land uses in the vicinity of the VCMC campus consist primarily of single-family residences to the north and east, single- and multi-family residences to the west, and medical/commercial offices, a church, and a private elementary school to the south across Loma Vista Road (see Figure 5.1-1). Land uses to the north of the site along Foothill Road and to the south along Loma Vista Road are illustrated in Figure 5.1-2. Onsite buildings are generally consistent in use, scale, and height with adjacent commercial and medical office buildings along Loma Vista Road. The one-story structures along the western and northern edges of the campus have not caused any compatibility conflicts with adjacent residential uses. However, certain campus structures, notably the Hospital and the emergency generator, have caused compatibility issues with the single-family residences to the east along Agnus Drive.

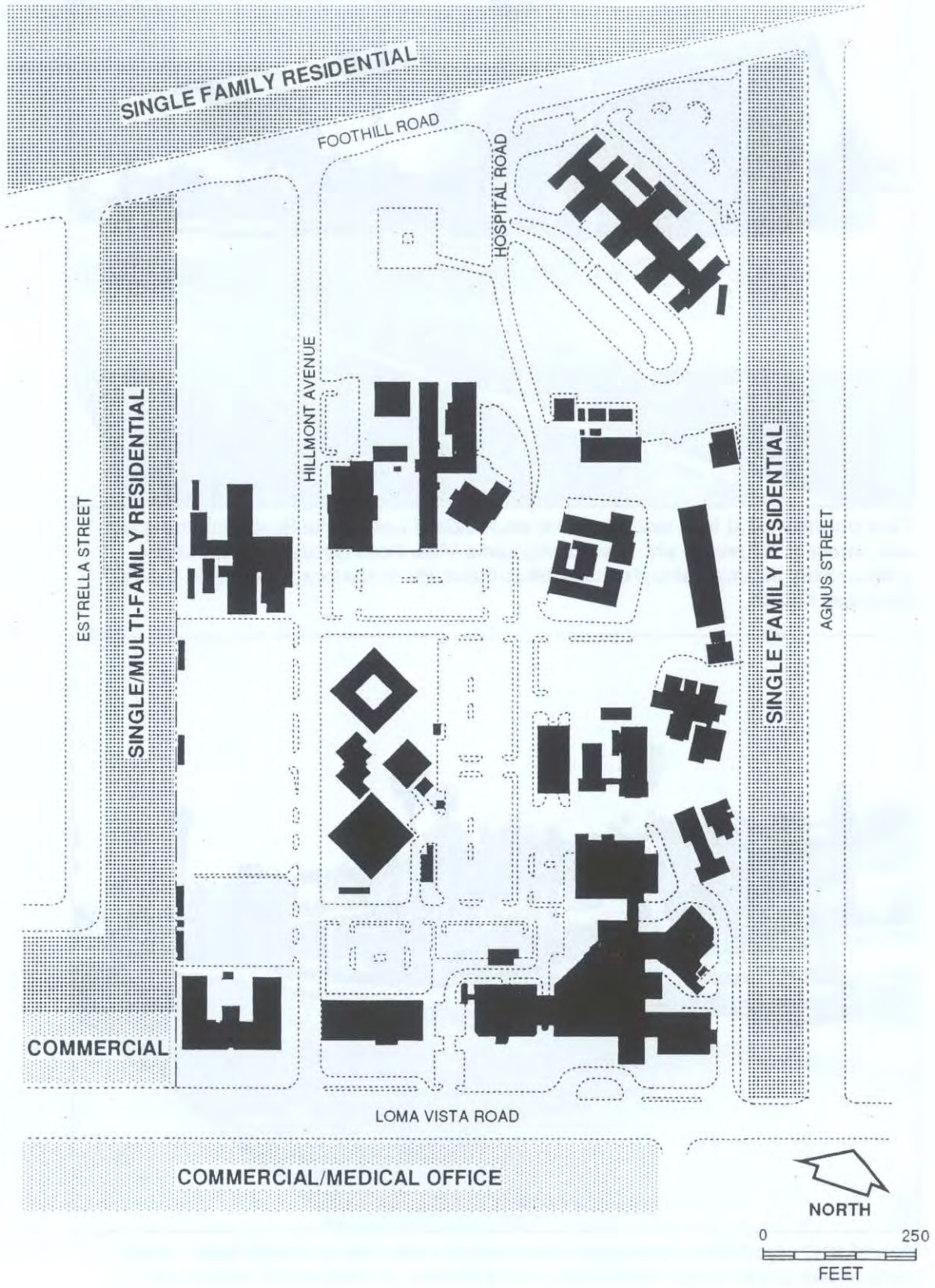
The four-story Hospital is substantially greater in scale and height than the single-family homes abutting the campus near the northeast corner of the Agnus Drive/Loma Vista Road intersection. In the past, Agnus Drive residents have expressed concern about light and glare impacts, noise, loss of privacy, and walk-through traffic associated with VCMC employees and patrons who park on Agnus Drive.

The emergency generator was constructed on the site in 1985 and has been a source of concern to adjacent residents along Agnus Drive since that time. When operating (approximately 1-2 times per month), the generator emits smoke which, because of prevailing westerly winds, sometimes blows into the yards of adjacent residences to the east along Agnus Drive. Emissions from the boiler have become a source of annoyance, as well as a potential health concern, to some Agnus Drive residents. Air quality issues related to boiler emissions are discussed in Section 5.4, Air Quality.

5.1.1.2 Regulatory Setting

Although the County-owned VCMC site is not subject to City of Ventura land use policies, the site does lie within the normal jurisdictional boundaries of the City and the City has defined land use and zoning designations for the site. These City policies are discussed below.

a. Comprehensive Plan Land Use. The City of Ventura Comprehensive Plan designates the VCMC site as "Existing Urban." This land use designation applies to lands that



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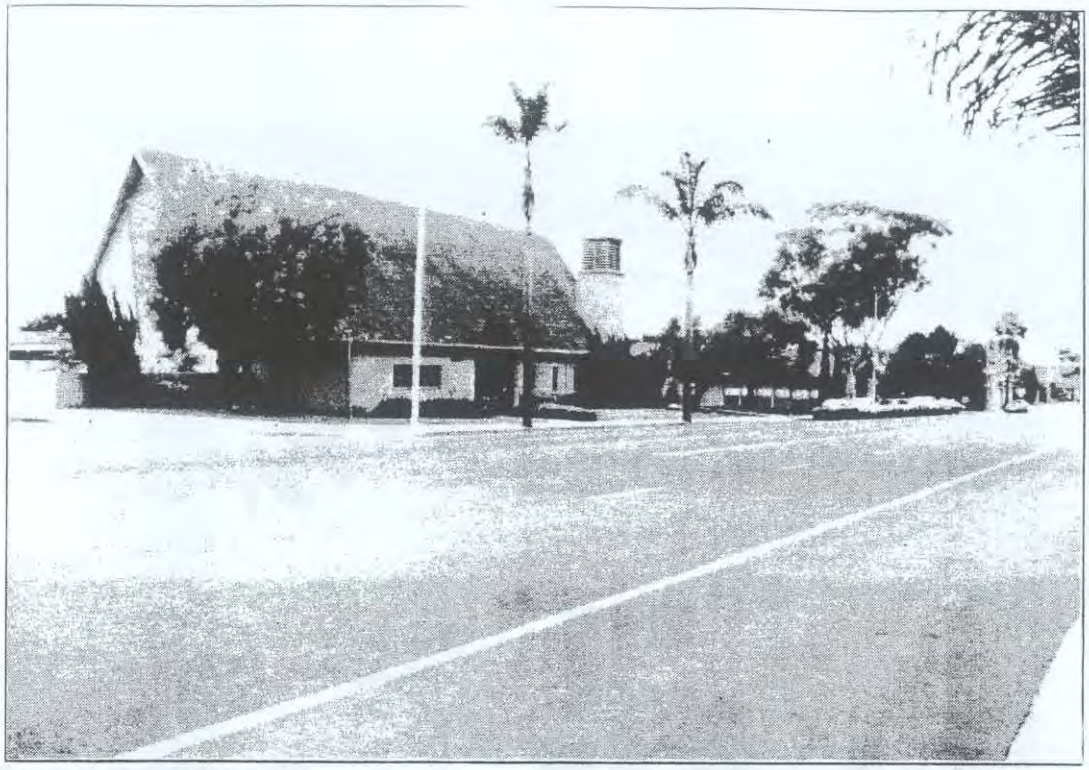

View looking west at land uses along the south side of Loma Vista Road from the south-east corner of the project site. Uses along Loma Vista Road consist primarily of one and two-story commercial and medical office buildings. In the foreground is St. Paul's Episcopal Church.

View of land uses north of the project site along the north side of Foothill Road. As the photo shows, uses along Foothill Road consist primarily of single-family residences.

ADJACENT LAND USES

are already developed with an appropriate use and/or are an integral part of the City's urban form. The allowable future land uses in areas designated Existing Urban are based upon the underlying zoning, or as set forth in the Intent and Rationale Statement for each community in the City.

b. Zoning. The project site is within the Hospital (H) Zone of the City's September 1992 Zoning Ordinance. Uses allowed in the H Zone include government, medical, recreation, and recycling services, as well as parking. Uses permitted subject to approval of a Use Permit include community meeting facilities, day care centers, group care, utility or equipment substations, and helicopter landing, safety, and transportation services. Development of sites in the H Zone is subject to a Planned Development Permit if developed under City jurisdiction.

Buildings and other structures in the H Zone are restricted to three stories in height. In addition, regardless of the number of stories, no structure within the H Zone is allowed to exceed 45 feet in height. It should, however, be noted that at least two sites within the H Zone (the VCMC and Community Memorial Hospital) include buildings that exceed the zone's height restrictions.

5.1.2 Impact Analysis

5.1.2.1 Methodology and Significance Threshold

Land use impacts are analyzed on the basis of two factors: 1) compatibility of proposed development with surrounding uses, and 2) consistency with adopted City of Ventura land use policies. Impacts are considered significant if proposed development on the project site would be incompatible with surrounding land uses.

5.1.2.2 Project Impacts

a. Compatibility with Surrounding Uses. The VCMC campus currently houses a variety of medical facilities while the proposed project would continue similar use of the land on the site. The purpose of the project is to consolidate currently dispersed onsite offices and support services, as well as satisfy future space and expansion requirements. Consequently, the structures proposed as part of the project would be consistent with the current use of the VCMC campus.

The proposed development would generally be consistent with the commercial and medical uses to the south across Loma Vista Road. The one-story Mental Health In-Patient Unit, which would front Loma Vista Road, would also be consistent with the scale of uses across Loma Vista. Although the proposed ACC and parking structure would both be larger in scale than uses across Loma Vista Road, they would be similar to the scale of the existing VCMC Hospital. Because these structures would be located behind the Hospital and would not directly front Loma Vista Road, their scale and height would not pose any compatibility problems for uses along Loma Vista.

The uses that currently exist on the VCMC site generate relatively large volumes of traffic, as well as associated air pollutant emissions and noise. Consequently, onsite uses may be considered incompatible with residential uses to the west, north, and east. Project implementation would continue the use of the site for medical offices and would therefore continue this potential incompatibility. Nevertheless, because the project would merely continue an existing condition rather than creating a new compatibility conflict, this impact is considered less than significant.

The ACC would be approximately 140 feet west of residential properties directly abutting the VCMC site along Agnus Drive and the proposed parking structure would be approximately 150 feet from Agnus Drive properties. At five and three stories, respectively, these structures would exceed the height of the one-story structures and surface parking that they would replace, and of the adjacent Agnus Drive residences, by from two to four stories. As such, these two structures would intensify the urban nature of the campus. It should be noted, however, that the building site coverage on the campus will be reduced to some degree through the consolidation of several one-story buildings and surface parking into a multi-level building and parking structure.

This height issue is minimized in the case of the proposed parking structure by slope characteristics of the site. The foundation elevation of the three-story structure is approximately 169 feet at site of the proposed parking structure, whereas the foundation elevation of the adjacent single-family residential structures immediately east of the proposed structure ranges from 184 feet at the south end to 190 feet at the north end. The result would be a structure reaching 193 feet in elevation, a range of between 9 to 3 feet higher than the ground level of the residences from south to north. In addition, the structure would generally be hidden from view for these residences by the existing boiler and laundry building (for further discussion, please see Section 5.2, Aesthetics/Shadow/Light and Glare). Thus, the compatibility impacts associated with the proposed parking structure are considered less than significant.

Although the ground floor elevation of the ACC building pad is about 10 to 24 feet below that of Agnus Drive residences immediately to the east, the five-story, 75-foot structure would appear substantially taller than existing onsite buildings (other than the existing hospital) and would be clearly visible from some Agnus Drive residences. The setback of onsite structures from Agnus Drive residential properties would be greater following project implementation than currently exists due to the demolition of structures directly abutting Agnus Drive properties. The removal of these structures would represent a beneficial land use compatibility impact. Nevertheless, the intensification of land use and increase in building height by a factor of 5, combined with increased massing associated with the proposed ACC would increase the current scale campatibility issue with existing buildings and create potentially significant scale compatibility conflicts with Agnus Drive residences.

b. Consistency with Adopted Land Use Policies. The proposed ACC, Mental Health In-Patient Unit, Medical Examiner facility, and parking structure are all uses which would be allowed under both the City of Ventura's "Existing Urban" General Plan land use designation

and the H Zone. Consequently, the proposed expansion would create no consistency conflicts in terms of land use type.

At one story each, neither the Mental Health In-Patient Unit and the Medical Examiner facility would exceed the City's height limits for the H Zone. No part of the proposed parking structure would exceed either the three-story nor the 45-foot maximum height limitation. Consequently, the structure would be considered consistent with H Zone height limitations. The five-story ACC would, however, exceed the 45-foot (three-story) height limitation for structures in the H Zone. Consequently, this component of the project would be inconsistent with current City building height policy. Although the County-owned project site is not subject to City land use policies, the proposed project would be inconsistent with this zoning designation.

5.1.2.3 Cumulative Impacts

Project implementation would contribute to a general trend toward more intensive land use that is occurring throughout the City of Ventura. As an example, the Community Memorial Hospital recently expanded its facilities with a medical office tower and a parking structure two blocks west of the VCMC campus. Operators of the Buenaventura Mall have proposed an increase of approximately 450,000 square feet of retail space two blocks south of the VCMC campus. The land areas affected by the proposed project would not be directly affected by these or other currently proposed projects and no direct significant cumulative impact would occur. Nevertheless, the proposed project in combination with the mall expansion project proposal will contribute to an intensification of urban uses in the eastern portion of the Midtown area of Ventura.

5.1.3 Mitigation Measures

The project includes a number of design features to reduce land use impacts related to visual resources, air quality, and noise (see Section 3.7, Project Design Features). In addition, mitigation measures to reduce land use impacts related to aesthetics, increased traffic, air pollutant emissions, and noise are recommended in Sections 5.2.3, 5.3.3, 5.4.3, and 5.5.3, respectively. Outside of reducing the height of the proposed ACC, an option analyzed in Section 7.0, Alternatives, no measures are available to mitigate impacts related to scale incompatibilities with adjacent residences along Agnus Drive or potential inconsistences with established City of Ventura zoning regulations.

5.1.4 Residual Impacts

Mitigation measures recommended in Sections 5.2.3, 5.3.3, 5.4.3, and 5.5.3 would reduce land use compatibility conflicts related to aesthetic impacts to Agnus Drive residences, traffic, air pollutant emissions, and noise to less than significant levels. However, impacts related to the incompatibility of the scale of the proposed ACC would remain significant without a reduction in the height of the structure. In addition, the proposed ACC would remain inconsistent with the height limitation in the City of Ventura's H Zone.

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5.2 AESTHETICS/SHADOWS/LIGHT AND GLARE

The assessment of aesthetic impacts, while being inherently subjective, can be based upon three fundamental criteria: the visual sensitivity of the site (visibility and level of concern of viewers for aesthetic quality); the scenic variety (physical attributes of a site which give it visual interest); and the visual condition (compatibility of the site's characteristics with that of its surroundings) (see Appendix 5.2 for additional detail). This section provides an evaluation and description of the aesthetic, shadowing, light and glare conditions associated with the site under pre- and post-project conditions.

5.2.1 Setting

5.2.1.1 Aesthetics

The proposed project site is located entirely within the existing VCMC campus which encompasses approximately 40 acres. In total, 60 structures, grouped into eight complexes, occupy the site (Figure 3.3-1). Much of the project site area, which is not occupied by structures, is paved with asphalt and concrete for use on public roads (Hillmont Avenue), internal roads, surface parking, and sidewalks. Landscaping is located around most onsite structures, most notably surrounding the facilities fronting Loma Vista Road and the existing Mental Health Complex. Additionally, approximately 4 acres of the site, immediately south of Foothill Road is currently undeveloped. Landscaping in this area includes trees bordering Foothill Road.

The site occupies the slope of the hills that form the backdrop for the City of Ventura. The toe of the slope runs east to west through the area north of the center of the campus. Elevation rises from approximately 140 feet at the southwest corner of the campus to a high of approximately 260 feet at the northeast corner of the campus. Above the toe of the slope, the northern part of the campus reaches approximately 25 percent slope rating. The remainder of the site exhibits relatively level terrain with a typical slope of 4 percent.

Existing structures range from one to four stories in height. The tallest and most massive structure is the VCMC Hospital (Hospital). Parts of the Hospital, which fronts Loma Vista Road, rise to four stories at a maximum height of approximately 60 feet above the finished floor elevation. The Mental Health Complex and PSSA building are two stories while most of the remaining buildings are one. The architectural style of most of the structures varies according to the age of the structure; buildings on the campus are generally not coordinated in style. Most of the campus' buildings represent variations of the post-World War II international style, characterized by simple rectilinear lines, large areas of glazing, little or no architectural decoration, and a "function over form" aesthetic philosophy. All of the structures feature rectangular or square windows and doors without detailed treatments.

The typical surface material used for onsite structures is poured concrete or stucco. Exterior paint color is generally a shade of gray, including dark gray for the Hospital. Figure 5.2-1 includes photos that illustrate the architecture of select buildings on the campus (a

A. View of existing hospital from Loma Vista Road looking north.

B. View of existing mental health complex from Hillmont Avenue looking northeast.

See Figure 5.2-10, View Orientation Map at end of section.

EXISTING VIEWS OF THE VCMC CAMPUS

FIGURE 5.2-1

view orientation map for this and subsequent photõographs is included in Appendix 5.2). There are also several prefabricated structures.

The urban character of the VCMC site within the city of Ventura is distinctive in several ways. The site exhibits a campus quality, with multiple parking areas, a haphazard internal circulation functionality, and a substantial use of landscaping and plaza areas. Several landmark-quality trees live on the campus, especially in the southern and eastern parts near the Hospital and associated structures. Though the architecture is not distinctive, the Hospital is among the city's larger structures. Together with Community Memorial Hospital a few blocks to the west and the strip of medical office buildings lining Loma Vista Road, the campus is a part of a medical district within Ventura. Some of the numerous trees on the campus, notably surrounding the Hospital, reach 60 feet and higher.

The project site is readily viewed from a number of nearby public rights-of-way and surrounding nearby properties. The site can be clearly seen from areas north of Foothill Road due to the higher elevation. The primary view corridor to the north is Foothill Road. Figure 5.2-2 includes a view of the project site from Whitecap Drive, north of the campus. The campus can also be seen from Hillmont Drive. Land uses surrounding the campus include: single-family residences to the east (along Agnus Drive), single- and multi-family residences to the west (along Estrella Street) and north (along and above Foothill Road); and institutional (religious) and office/ commercial uses to the south across Loma Vista Road. Figure 5.2-2 includes a view from Agnus Drive, illustrating that the view of the campus is obstructed by street trees from the street itself. Other views along Agnus Drive and from the rear yards of residential uses on Agnus Drive are illustrated in Figures 5.2-3 and 5.2-4.

Foothill Road has been designated as a "scenic drive" in the City of San Buenaventura Comprehensive Plan. As the VCMC campus borders this road, it lies within the viewshed of this specially-designated corridor. Visual resources along Foothill Road, in the vicinity of the project site, include southwesterly backdrop views of the Pacific Ocean and Channel Islands, and the city in the foreground. Based upon the campus' location in the primary viewshed of an adopted scenic drive, and based on the criteria presented in Appendix 5.2, the site can be considered to have a moderate to high level of visual sensitivity.

5.2.1.2 Shadows

Shadow lengths vary with the angle of the sun and the size and shape of the object creating the shadow. The primary shadowing effect produced by onsite structures occurs during the afternoon hours in winter. The longest shadows are produced on the winter solstice (December 21). The Hospital, at up to 60 feet in height, currently produces the longest shadows generated from the campus. Several trees surrounding the Hospital reach and exceed the 60-foot height, and also produce shadowing.

Residences are generally recognized as the most shadow-sensitive land use type. Due to their proximity to the Hospital and trees, some residences on the west side of Agnus may be

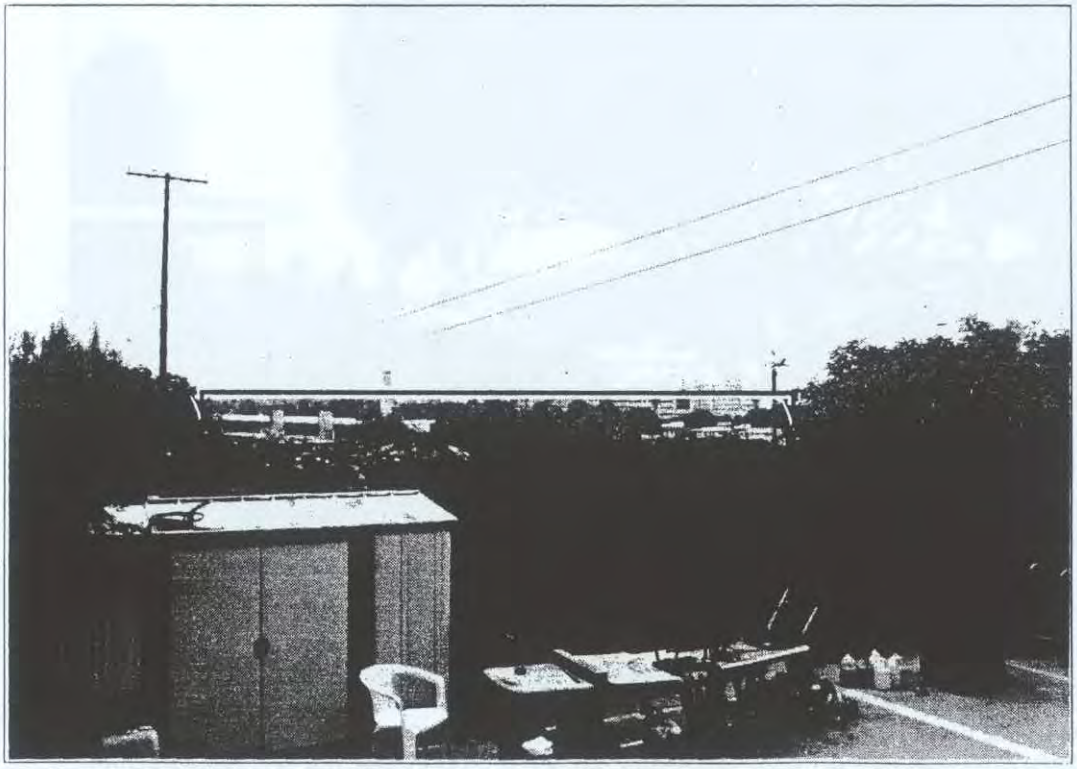
C. Existing view of the VCMC campus and uses south of the campus from 628 Whitecap Drive. Proposed project structures would be visible from this vantage point.

D. Existing view looking south along Agnus Drive from the intersection of Agnus Drive and Fairmont Drive. This view would not be altered by project implementation.

See Figure 5.2-10, View Orientation Map at end of section.

EXISTING VIEWS OF THE VCMC CAMPUS

E. View of existing hospital from Agnus Drive looking west. This view would not change with project implementation.



F. View of site from rear yard at 357 Agnus Drive looking southwest. Line illustrates parapet of proposed parking structure. The viewshed area below the line would be obstructed.

See Figure 5.2-10, View Orientation Map at end of section.

EXISTING VIEWS OF THE VONS CAMPUS

G. Public view of the VCMC campus and uses southwest of the campus from 404 Agnus Drive. The only campus structure that can be seen from this location is the VCMC Hospital. The proposed Ambulatory Care Clinic and parking structure would be visible but would not significantly affect the viewshed.

H. View of the VCMC campus from a side yard at 365 Agnus Drive. Although it would be partially obscured by the tree in the center-left of the photograph, the proposed parking structure would be visible from this location in the left portion of the photo.

See Figure 5.2-10, View Orientation Map at end of section.

EXISTING VIEWS OF THE VCMC CAMPUS

affected by shadowing. Other onsite structures are low enough and far enough away from sensitive uses so as not to create adverse shadowing effects.

5.2.1.3 Light and Glare

Sources of light are primarily associated with urban uses and include interior and exterior night lighting, vehicular lighting from nighttime operation of vehicles, advertising signage, and street, storefront and security lighting. Glare is generated when sunlight is reflected from surface materials. Materials that can produce glare effects include asphalt parking lots, glazed surfaces and metallic surfaces.

The VCMC campus is currently equipped with night lighting for security and safety purposes. Additionally, buildings have internal lighting which can be seen from outside. Due to slope and related viewshed characteristics of the campus, the land uses most sensitive to night lighting include the residential area located north, east and west of the project site. Figure 5.2-5 provides a daytime and nighttime view of the site illustrating the effect of night lighting from a residential area north of the campus.

The same land uses (residences) are apt to be the most affected by glare emanating from the campus. However, due to the relatively low amounts of glazing and shiny surface metal materials used for building facades at the campus, most of the existing glare effects is generated by automobiles; either in transit through the campus or parked in surface lots. Owing to the perimeter landscaping of the campus, much of the glare effect is minimized.

5.2.1.4 Regulatory Setting

Visual (aesthetic) resources within the City of Ventura are defined and protected primarily through the Community Design Element of the City's Comprehensive Plan (1989). In addition, architectural review is conducted by the City's Architectural Review Board for much of the development proposed in the City.

The Community Design Element contains objectives, goals and policies which relate directly and indirectly to the protection of scenic resources. Of particular significance in the evaluation of the potential aesthetic impacts of the proposed project are policies relating to site design. Because the evaluation of aesthetic impacts is a subjective process, the guidance provided by policies set forth in the Community Design Element is particularly useful in evaluating the significance of potential impacts. The policies also help define mitigation measures necessary to ensure that development proceeds in a manner consistent with the City's goals relating to the scenic component of the community's identity.

The City of Ventura Zoning Ordinance (Title 15) has been established to promote and protect the public health, safety, and general welfare. Among the various objectives of the Zoning Ordinance are several relating to aesthetics including the promotion of development at appropriate densities in order to conserve and enhance the City's physical scale and character as

I. Daytime view of the VCMC campus from north of the site along Grove Street.

J. Nighttime view of the VCMC campus from north of the site along Grove Street.

See Figure 5.2-10, View Orientation Map at end of section.

DAY vs. NIGHT VISUAL CHARACTER

defined in the Comprehensive Plan. Of specific relevance to aesthetics is Chapter 15.845 Design Review Procedure. Design review is implemented by the Architectural Review Board (ARB) and is discussed further below.

The City's architectural review procedure is a review and approval process in which the City's ARB examines a proposed project's layout, building design, landscaping, parking, signage and other features affecting the project's appearance. By law, the ARB is charged with administering architectural review in a way that benefits the community. As a County project, the VCMC expansion is not subject to the city's architectural review process. However, because the VCMC campus is located within the City, this analysis will include City evaluation criteria.

5.2.2 Impact Analysis

5.2.2.1 Methodology and Significance Thresholds

a. Aesthetics. This analysis was based upon visual reconnaissance and photo-documentation of the site from area viewing corridors; and review of proposed plans for the VCMC project, applicable planning documents referenced above, and relevant information contained in other sections of this report.

The analysis of aesthetic resource impacts is by its nature subjective; however, the evaluation criteria discussed above and in Appendix 5.2 provide direction for the assessment of potentially significant aesthetic impacts. For the purposes of this analysis, it is assumed that the project would have a significant adverse aesthetic impact if the project would result in the deterioration of the scenic variety or visual condition of the project site, or cause the obstruction of existing scenic views. A beneficial impact was determined to result if the project would improve or enhance visual features or views.

The *State CEQA Guidelines* Appendix G (a) states that a project will normally have a significant effect on the environment if it will "conflict with adopted environmental plans and goals of the community in which it is located." Therefore, for the purpose of this analysis the project is considered to result in a significant aesthetic impact if it conflicts with the visual resources goals and policies outlined in the Community Design Element of the City of Ventura's Comprehensive Plan.

b. Light and Glare. For the purposes of this analysis, the proposed project would result in a significant light and glare impact if it would substantially increase the sources of light and glare at the project site in a manner that would adversely effect sensitive land uses.

c. Shadowing. The impacts of shadows can vary depending upon the land uses affected and the degree to which solar access is obstructed. Solar access is defined as the potential to receive solar rays as an energy source. As previously discussed, it is generally recognized that the most shadow-sensitive uses are residential. This is because of the potential

of shadowing to inhibit or eliminate passive or active solar heating. Furthermore, natural lighting of a home's interior, home gardening and recreational uses are affected by sunlight availability.

Shadow patterns vary according to the surrounding uses, the time of day, and season. The longest shadows are generated on the shortest day of the year, the winter solstice (December 21). Conversely, the shortest shadows are produced on the longest day of the year, the summer solstice (June 21). Daily shadowing effects vary accordingly between the two solstices. If shadow lengths affecting any building are cast over 25 percent of an existing roof top at any time of year, the potential for use of solar energy devices is adversely affected; therefore, for the purposes of this analysis, if such shadowing affects would be produced by the project, it was determined that a significant impact would result.

5.2.2.2 Project Impacts

a. Aesthetics. The proposed project involves the demolition of several existing VCMC structures located in the southeastern quadrant of the site and the northeastern corner of the intersection of Loma Vista Road and Hillmont Avenue (illustrated in Figure 3.4-1). Four new structures would be constructed at the campus (illustrated in Figure 3.4-2).

The Mental Health In-Patient Unit would be a one-story structure which would be located on the site currently occupied by the two-story PSSA Building. The proposed structure would have rectilinear and square window and door treatment, accented by wood and metal trellis treatment. The surface materials to be used include cement and plaster with horizontal striations, split-face block, and small tile detailing. Metal mesh of approximately 6.5 feet in height would be placed in two areas above the roof line to screen mechanical equipment. The current landscaped area in front of the PSSA Building would also be removed and built upon as part of the proposal. A segmented, 10-foot-high, split-face block wall will curve around exterior plaza areas on the Loma Vista Road and Hillmont Avenue frontages. The walls would screen both the plazas and parts of the structural walls from view of the public street and sidewalk system. The landscape plan for the Mental Health In-Patient Unit proposes street trees (Western Catalpa and California Sycamore) as well as other trees to be located primarily along the southern and western site boundaries. Special paving, lawn areas and shrub coverage are also features of the landscape plan.

The five-story ACC would be located directly north of the existing Hospital in the area currently occupied by the Hospital cafeteria, components of the Family Care Complex, and associated landscaped and paved areas. The structure would be linked to the Hospital at the ground floor with a one-story corridor. The architectural concept is illustrated on the elevations shown in Figure 3.4-4. At five stories, the ACC would be the most prominent addition to the campus. Its style can be described as contemporary modernist, updating but remaining consistent with other institutional-style structures on the campus. Highly articulated entryway design is accomplished with recessed windows and square window framing mullions. Glazing is to be accomplished with blue and green tinted glass. The massing and scale of this structure would be consistent with that of the existing Hospital. Windows and doorways would provide some

degree of aesthetic linkage to the Hospital to which it would be physically attached. The proposed landscape plan for the Ambulatory Care Clinic includes: expanses of lawn and courtyard areas east and north of the structure including areas designated for play and picnicking (these areas would accented with Queen Palms); border trees (e.g., Catalina Cherry, Tipuana, Aristocrat Pears); and the use of shrubs, ground covers, and vines.

The proposed three-level parking structure would be located in the area currently occupied by several plant operations buildings, and associated paving and landscaping. Due to sloping conditions of the site, the northeastern portion of the parking structure would be partially below grade, thereby reducing its above-grade appearance. The top of the parking structure would be below the top of the existing boiler and laundry building.

The proposed one-story Medical Examiner Facility would be located at an upland campus site that is currently vacant. The proposed facility is a one-story structure of simple, modernist rectilinear lines with minimal architectural detailing. The surface material for the structure would be cement plaster. Roofing would be clay mission tile. Due to slope characteristics of the site, the structural facade would not be completely visible from the Foothill Road frontage. The landscape plan for the Medical Examiner Facility proposes a perimeter border of shrubs and plants surrounded by bark mulch, and erosion control seeding beyond the border to the north and west of the facility, and erosion control ground cover to the south.

1. *Short-term Impacts*. Demolition of existing facilities and construction of all four new facilities would occur over a period of approximately 3 years. Only the ACC building would involve the use of a crane, which has the potential to obstruct views. All construction activity will alter and temporarily affect the aesthetics of the campus. However, although adverse, this impact is considered to be less than significant due to its temporary nature.

2. *Long-term Impacts*. The overall effect of the project would be to consolidate numerous existing facilities into larger facilities. Because the current arrangement of campus structures lacks a consistent architectural or site planning theme, and because the scale and massing of structures varies greatly, implementation of the proposed project may improve the aesthetic clarity of campus. However, the existing Loma Vista front yard setback that runs the width of the campus would be adversely affected by the Mental Health In-Patient Unit. Additionally, none of the new structures would be architecturally incompatible with the remaining campus buildings, nor would they relate to one another in a coherent design vernacular.

Finally, though open area in the vicinity of the proposed ACC would increase due to the removal of several structures, the introduction of a five-story structure north of the existing Hospital would intensify the urban character of the campus. Its height and massing would lend to its dominance among the campus buildings. Though this effect is not inherently adverse as an internal campus urban design issue, it would continue and increase the abrupt transition of scale from the campus to the single-family neighborhood immediately east of the campus. The

fact that the existing scale difference may be furthered by the ACC building can be considered a significant impact to aesthetic conditions.

The site clearance and construction of the ACC facility will result in the removal of up to four potentially landmark-quality trees. Landmark-quality is defined as a tree of at least 50 years in age or 50 feet in height. Two such trees live between buildings 310 and 311, two others are between buildings 310 and 941 (see Figure 3.4-1). This removal can be viewed as an adverse impact to aesthetic conditions. It should, however, be noted that the landscaped buffer that would be installed in conjunction with the ACC and parking structure would mitigate this impact to some degree by replacing existing one-story buildings with landscaped grounds.

Views from surrounding roadways and land uses would be altered with implementation of the proposed project. In particular, the viewshed that is visible from areas to the north and northeast of the site that are at higher elevations than the project site would be affected. The foreground views from Foothill Road and above would be minimally affected as a result of the construction of the proposed Medical Examiner Facility. The following features would be incorporated into the proposed Medical Examiner facility design:

- Landscaping materials would not include trees or shrubs that would ultimately exceed the height of the building;
- The building would be a single story and building elevations would be stepped to effectively be compatible with surrounding topography and natural slope lines; and
- All mechanical operational units would be entirely screened from the view as seen from Foothill Road.

Figure 5.2-6 shows existing and post-project views from 3133 Foothill Road. Construction of this facility would block views from segments of this designated scenic drive. However, less than 20 percent of the viewshed experienced while traveling in a westerly direction along Foothill Road would be obstructed. This is considered to be a less-than-significant aesthetic impact. Other proposed facilities would be at lower elevations and would not adversely affect distant ocean, island and city views. However, middle-ground views of the Midtown area of the City of Ventura would be altered somewhat. Nevertheless, the alteration does not result in an obstruction of a uniquely scenic feature, and would, therefore, be less than significant.

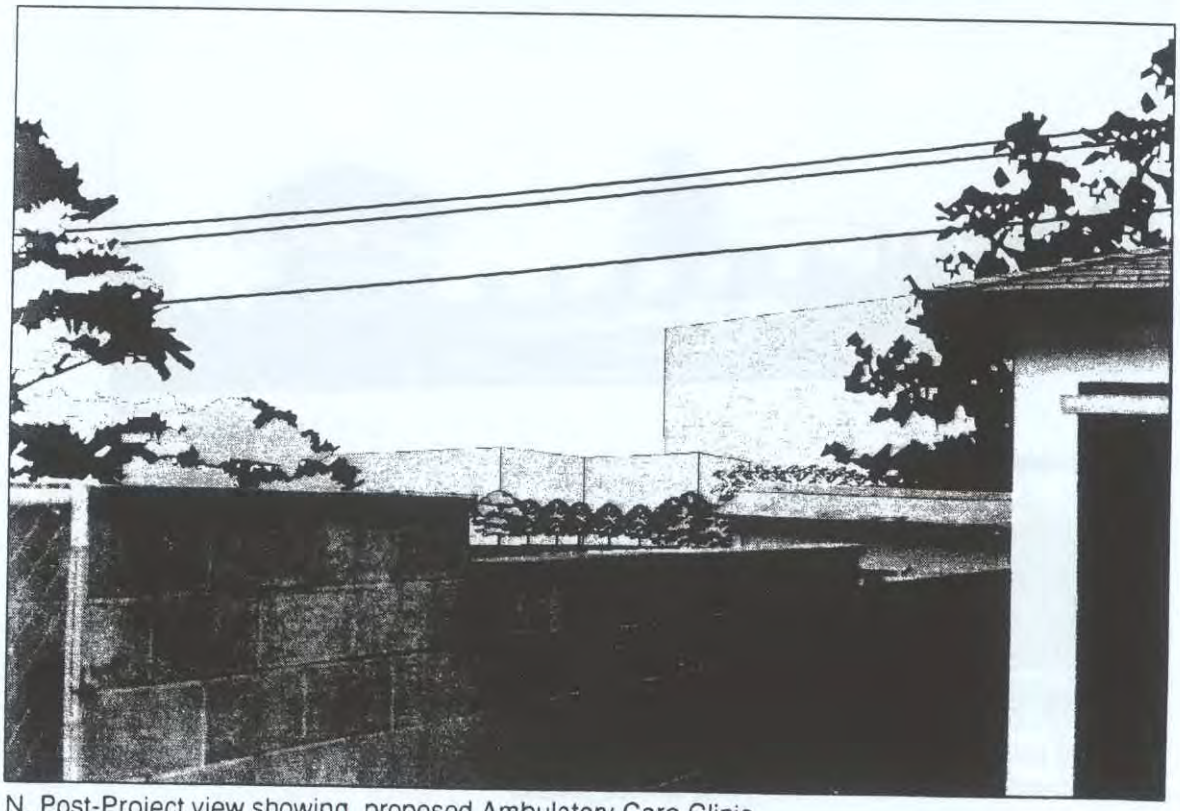
Views of the campus from the northeastern portion of Agnus Drive are currently obstructed due to intervening trees as seen on Figure 5.2-2 D. However, views from the side and rear yards of some homes on the western side of Agnus Drive would be altered with project implementation. Figure 5.2-7 shows existing and post-project views from the rear yard of 273 Agnus Drive. The viewshed from public areas along Agnus Drive (street and sidewalk) would not be substantially changed. Therefore, viewshed impacts associated with project implementation as viewed from these areas may be considered adverse to some residents, but is less than significant based upon the thresholds established above.

Existing southern view from 3133 Foothill Road.

Proposed southern view from 3133 Foothill Road following implementation of the Coroner/ Medical Examiner Facility Phase of the proposed project.

EXISTING AND POST-PROJECT VIEW FROM FOOTHILL ROAD

M. Existing view from rear yard at 273 Agnus Drive looking southwest toward proposed Family Care Complex.



N. Post-Project view showing proposed Ambulatory Care Clinic.

EXISTING AND POST-PROJECT VIEW FROM AGNUS DRIVE

FIGURE 5.2-7

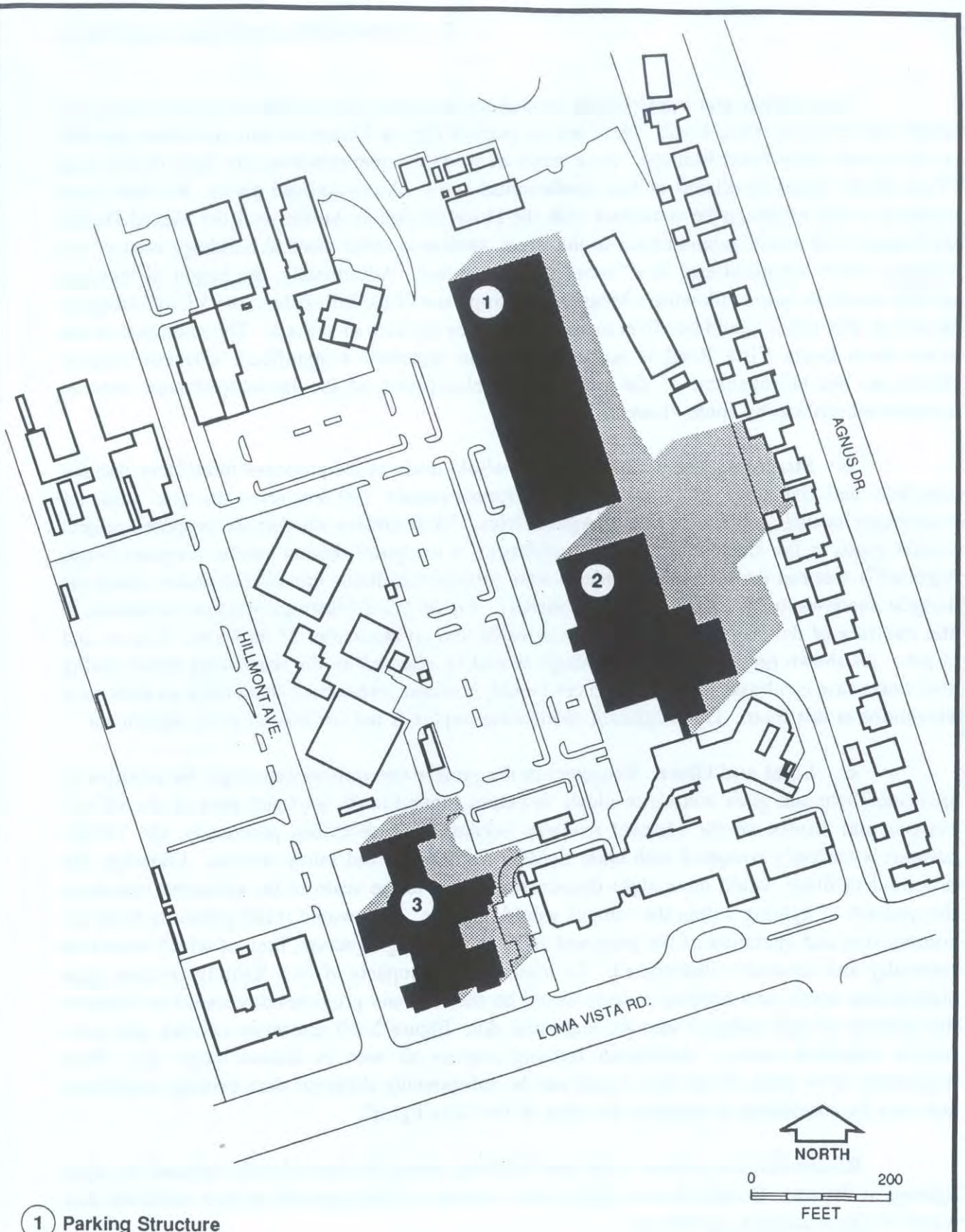
The primary and most visually prominent frontage of the VCMC campus is along the north side of Loma Vista Road. There are no explicit City or County design guidelines specific to the Loma Vista Road frontage. As a result of project implementation, the view from Loma Vista Road would be altered in two fundamental ways. As mentioned above, the front yard setback would no longer be consistent with the Hospital, due to the fact that the Mental Health In-Patient Unit would extend closer to the street, similar to other medical buildings west of the campus which are developed in a "zero-lot-line" manner. Additionally, the height of building profile would be lower, allowing a broader backdrop view of the hills behind the VCMC campus; however, this effect would be offset to some degree by the lack of setback. The alteration of the view from Loma Vista Road is not considered to represent a significant aesthetic impact. However, the infringement of the setback and elimination of the landscaped area may be considered adverse by some viewers.

b. Shadows. The proposed project would result in the proposed three-story parking structure and five-story ACC being located approximately 140 feet from the rear yards of residences located on the west side of Agnus Drive. To determine whether the proposed project would result in the shadowing of these residences, a computer shadow model program (Alias Upfront™) was run for the project under winter solstice conditions (conditions under which the longest shadows to the east would be produced). Figure 5.2-8 illustrates shadow conditions at the interface of the project site and adjacent residences on December 21 at 9 a.m., 12 p.m. and 3 p.m. As shown on the figure, no rooftops would be affected by the shadowing effect during this worst-case condition. Three residences would, however, experience shadowing on their west elevations at this hour. This degree of shadowing impact is not considered to be significant.

c. Light and Glare. Receptors in the project site vicinity that might be sensitive to increased light and glare include residents in homes located north, east and west of the VCMC campus and drivers on the adjacent roadway network. As described previously, the VCMC campus is currently equipped with night lighting for security and safety reasons. Likewise, the proposed facilities would have night illumination. Due to the scale of the proposed structures the quantity of lighting within the campus would increase. This would result primarily from the construction and operation of the proposed ACC and parking structure, both of which would be internally and externally illuminated. To minimize the impacts of new lighting sources upon surrounding areas, new lighting sources would be shielded and projected downward to decrease the quantity of light radiated into the nighttime sky. Figure 5.2-9 illustrates existing and post-project nighttime views. Additional lighting sources as seen in distant views (i.e., from residential areas north of the site) would not be substantially different than existing conditions and may be considered to enhance the view of the "city lights".

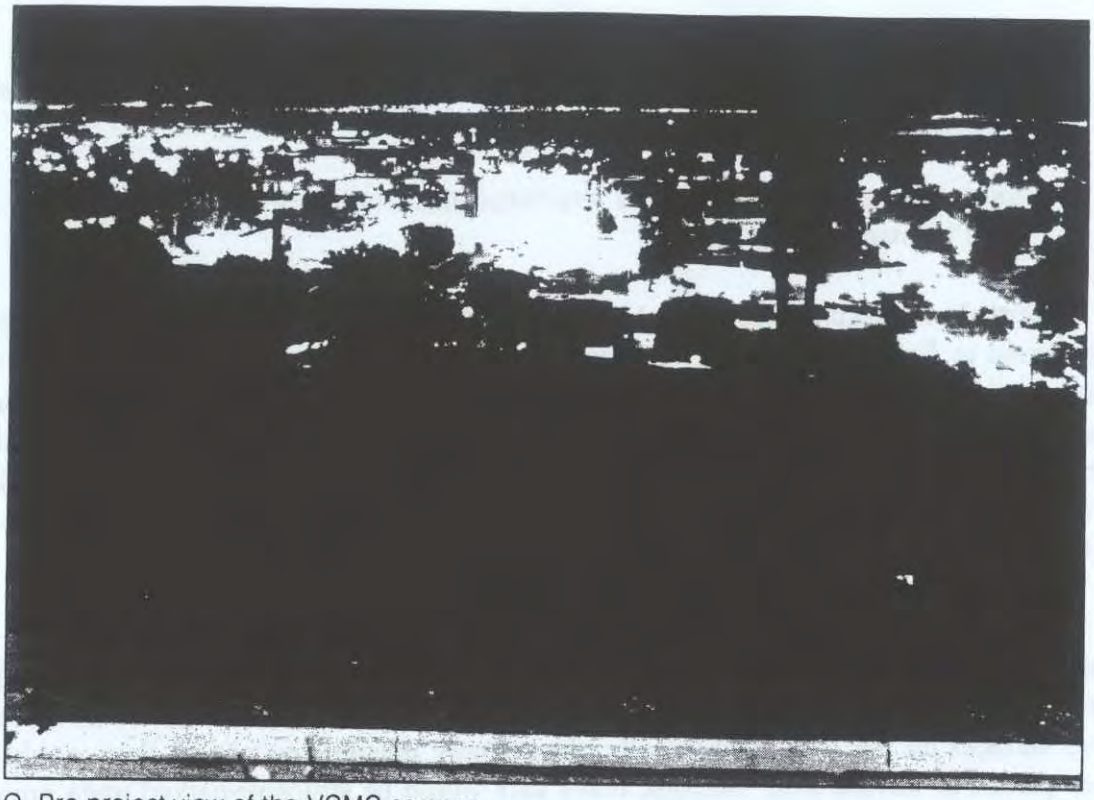
Residential uses closest to the new facilities would be more directly affected by night lighting at the site. Several factors exist or are featured in the proposed project standards that would mitigate impacts, as follows:

- All exterior lighting would be hooded and directed away from residential uses;

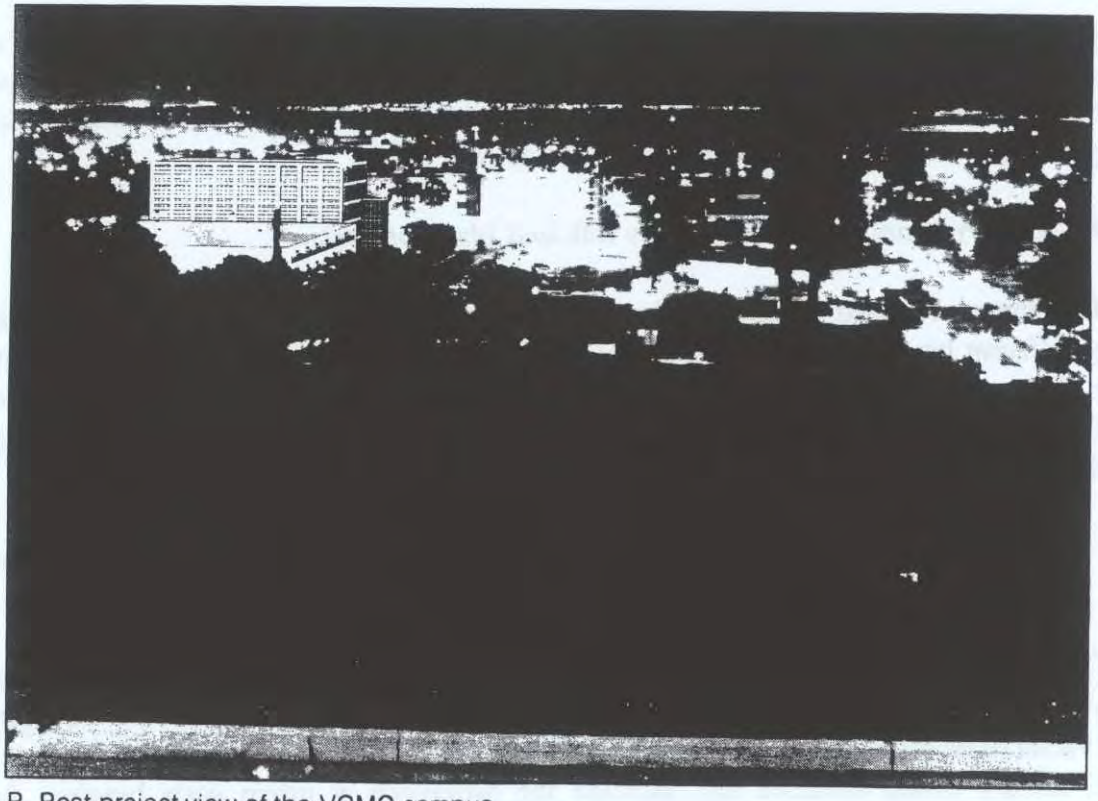


1. Parking Structure
2. Ambulatory Care Clinic
3. Mental Health Inpatient

SHADOW ANALYSIS
DECEMBER 21 - 3:00 PM



O. Pre-project view of the VCMC campus.



P. Post-project view of the VCMC campus.

NIGHTTIME LIGHTING IMPACTS

- The new uses would be set back approximately 150 feet from the rear yards of residences on Agnus Street in most areas; and

- Existing vegetation, walls, and structures block (entirely or in part) the line-of-sight to many residences.

Nevertheless, parking structure lighting standards designed to illuminate the upper level have the potential to flood nearby areas with undesired lighting. The additional lighting at the site may be considered adverse to some nearby residents, and could be potentially significant. It is expected that construction plans for the proposed parking structure would include design features that would block vehicle headlights from illuminating areas outside of the structure. The potential for vehicle lighting from the parking structure to illuminate nearby residences is considered to be a potentially significant lighting impact.

The proposed project would maximize the use of non-reflective materials in its construction including non-reflective glass for the proposed ACC and metal screening for the Mental Health In-Patient Unit and is, therefore, not expected to substantially increase the amount of reflective surfaces on the site. Additionally, the primary potential source of glare would be automobiles parked at surface lots. Because many cars would be structure-parked upon project implementation, glare impacts from this source would likely diminish.

d. Consistency with Relevant Plans and Policies. The following is a list of applicable policies from the Community Design Element of the City of Ventura Comprehensive Plan and a determination of the project's consistency with each policy. Each policy is described in summary format. Any direct inconsistency is indicated.

Policy 1.12 *Use trees and plants to visually link and blend projects.*

The three proposed project landscaping plans, like the architectural plans, were prepared by different landscape architects. A review of plant lists proposed indicates that none of the three plans are coordinated with one another. The plan for the ACC facility does call for retention of several large, established trees. Because the three landscape plans illustrate no clear linkage with one another, the proposed project may be inconsistent with this policy.

Policy 2.1 *Orientation of structures should consider views and visual relationship with surrounding areas.*

The project would result in the alteration of views from Foothill Road, a County potentially-designated and City-designated scenic corridor. Additionally, the ACC structure would alter views from some Agnus Street residential properties. Finally, the height and massing of the ACC facility would continue and increase the difference in urban scale between the campus and the single-family residential area to the east of the campus. Therefore, the project is potentially inconsistent with this policy.

Policy 2.3 *Site design should be within context of established streetscape.*

The project is potentially inconsistent with this policy because the Mental Health In-Patient Unit would eliminate the setback pattern that has been established along the width of the VCMC site's Loma Vista Road frontage. It should, however, be noted that the overall setback pattern along much of Loma Vista Road is from 0 to 10 feet.

Policy 2.5 *Setbacks and building separation should acknowledge need for adequate natural light and air.*

The project is consistent with this policy because proposed structures have adequate space between them, and may improve light and air conditions through the consolidation of several small facilities into more organized units.

Policy 2.13 *Screening of vehicular loading areas.*

The project is potentially consistent with this policy based on screening as illustrated in design plans.

Policy 2.18 *Style and materials should harmonize with surroundings.*

The project is potentially consistent because the architectural styles of the three primary facilities do not depart from the established variations of post-World War II modernist styles which dominate campus architecture.

Policy 2.19 *In areas where a predominant style has not been established new development should be of the highest quality possible.*

This policy is not relevant to the proposed project (please refer to policy 2.18, above).

Policy 2.21 *Incorporation of design characteristics to create attractive visual image from public rights-of-way.*

The proposed project is generally consistent with this policy. However, the setback intrusion discussed in policy 2.3 above may represent an inconsistency.

Policy 2.24 *Landscaping used to relieve building elevations.*

The three landscape plans illustrated for the proposed project appear to relieve building elevations by softening the effect of building elevations on adjacent uses.

Policy 2.27 *Landscape design concern for balance, scale, form, texture and unity and ancillary issues (shade, erosion prevention...).*

The project is potentially consistent with this policy because the existing landscape plan for the project appears to show concern for the design considerations listed.

Policy 2.30 *Lighting ...overall lighting levels should be compatible with the neighborhood's ambient lighting level.*

The VCMC campus is currently much more intensely lit than surrounding neighborhoods because of its nature as a region-serving health and welfare provision facility. Although the proposed project would not significantly alter this condition, design features associated with the project would minimize overall lighting impacts on adjacent uses. Therefore, the proposed project is consistent with this policy.

Policy 3.1 *Gradual transition of building size, height and shape.*

The ACC facility is potentially inconsistent with this policy due to the differential in height and massing between it and the adjacent residential structures. At the same time, it should be noted that a height and massing inconsistency currently exists between the neighborhood and the VCMC Hospital, which is similar in scale to the ACC.

Other facilities, including the parking structure, would be consistent with the policy.

Policy 3.2 *Blend apparent density of development with surroundings.*

Please refer to discussion of policy 3.1, above.

Policy 3.3 *Articulation of massive buildings to support existing scale of development.*

The proposed project structures incorporate articulation of massing. Therefore, the project is potentially consistent with this policy.

Policy 3.5 *Use of architectural materials, colors and textures to enliven simple masses and relate structure to its environment.*

The project is potentially consistent with this policy (see discussion for Policy 2.18).

Policy 6.2 *Positive contribution of buildings and landscaping in scenic corridor.*

The project is potentially inconsistent with this policy due to the alteration of views from Foothill Boulevard associated with the Medical Examiner facility and the ACC facility.

Policy 6.6 *Preservation of views. should be an important criteria for projects located in scenic corridors of the City.*

Although the Medical Examiner Facility would alter views from portions of Foothill Road, less than 20 percent of the view from Foothill Road experienced while traveling west on Foothill Road would be obstructed by the one-story structure. The proposed project is not considered inconsistent with this policy.

Policy 6.12 *Require the use of dense landscape buffers along scenic routes.*

The proposed projeet neither contributes nor detracts from the character of the corridor. The viewshed from the Foothill Road corridor is essentially preserved in the site plan for the proposed project. A landscape buffer is proposed along Foothill Road in front of the proposed Medical Examiner Facility, and existing trees would remain. The proposed project is, therefore, consistent with these policies.

5.2.2.3 Cumulative Impacts

The proposed project, in conjunction with other proposed projects in the Midtown district of the City of Ventura, would contribute to an ongoing change to urban design character to one of a more intense urban nature. In particular, the proposed Buenaventura Mall expansion, two blocks to the south of the VCMC campus, would be visible from the Foothill Road corridor as well. This change is not in and of itself adverse to aesthetics, as design detailing of these and other projects can smooth this intensification without damage to the City's aesthetic condition.

The viewshed from the Foothill Road corridor of the Pacific Ocean and Channel Islands would not be significantly altered by the cumulative change.

5.2.3 Mitigation Measures

5.2.3.1 Project-Specific

The proposed project includes a number of design features which would reduce impacts related to aesthetics, shadows, light, and glare (see Section 3.7, Project Design Features). The measures recommended below would further mitigate project impacts.

a. Aesthetics. The following measures are recommended to mitigate short-term adverse impacts associated with the demolition and construction phase of the project, to provide a more unified theme for the project components, to mitigate viewshed alteration for Agnus Drive residents, and to mitigate the loss of landmark-quality trees.

AES-1 **Demolition Housekeeping Plan.** Prior to the commencement of demolition activities, the County and contractor(s) should jointly prepare a demolition/ construction good-housekeeping plan for the project. The plan should include such information as designation of onsite locations for materials and equipment storage, schedule for debris removal, description of proposed screening mechanisms, etc.

AES-2 **Design Plans Coordination.** The proposed architectural and landscaping plans for the proposed structures should, under County supervision, be modified by their respective architects and landscape architects to ensure that features that would serve to create design linkages between the buildings (such features can include surface textures and materials, finish colors, landscaping palette and hardscape materials and patterns, consistent window and door treatments etc.).

AES-3 **Utility Undergrounding.** The existing Southern California Edison (SCE) utility lines strung along the border of the VCMC campus and adjacent residential properties along the west side of Agnus Drive shall be reinstalled underground and the utility poles removed. The undergrounding shall take place in accordance with SCE practices and induce a minimal amount of inconvenience for neighborhood residents.

AES-4 **Specimen Tree Replacement.** In instances where the siting of proposed structures would result in the removal of trees over 50 feet in height, a specimen of an equivalent type and of a minimum box size of 24 inches shall be planted as a replacement. The replacement location shall be selected by the landscape architect for the site, and shall be as close as feasible to the original location, where consistent with improving the viewshed.

b. Shadows. No significant shadowing impacts would result. Therefore, no mitigation measures are required.

c. Light and Glare. The following measure is required to ensure that vehicle lighting from the proposed parking structure does not interfere with nearby residential uses.

AES-5 **Parking Structure Walls/Landscaping.** The parking structure shall be designed with sufficient facade articulation so as to alleviate monolithic effect. Walls shall be of sufficient height to block vehicular lighting from projecting outside of the structure. The landscaping scheme shall include plants which will serve to buffer the structural massing.

5.2.3.2 Cumulative

No significant cumulative impacts would result. Therefore, no cumulative mitigation measures are required.

5.2.4 Residual Impacts

The short-term aesthetic impact associated with disruption of the site during construction is considered adverse, but less than significant, and would be further reduced through implementation of the recommended measure, AES-1. The potentially significant impact that would result if vehicle lighting from the parking structure illuminated nearby residences, would be reduced to a less than significant level with implementation of mitigation measure AES-3. Measure AES-4 would mitigate impacts related to the loss of trees onsite. The policy inconsistencies associated with absence of visual linkages in the project from use of plants and urban design features (City Policies 1.12, 2.19, 2.21, 3.5, 6.2) would be reduced to less than significant through implementation of mitigation measure AES-2.

The significant impact and policy inconsistencies associated with the continuation of the urban scale/massing differences of existing and proposed project structures with relation to residential structures on Agnus Street (City Policies 2.1, 3.1) would remain significant if the project components remain the same size and in the same location as proposed.

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5.3 TRANSPORTATION AND CIRCULATION

This section evaluates the potential traffic impacts of the proposed project on the streets and intersections in the vicinity of the site. This analysis is intended to satisfy the traffic impact requirements of the City of Ventura and be consistent with Ventura County's General Plan Circulation Element policies.

Since the circulation of the May 18, 1993 Notice of Preparation, future onsite parking needs were re-analyzed. As a result of that analysis, it was determined that future additional onsite parking demand would be only 500 spaces, as compared to the 564-space additional demand identified in the NOP. The results of the re-analysis of future onsite parking are presented in Appendix 5.3.

5.3.1 Setting

5.3.1.1 Existing Street Network

Regional access to the VCMC Campus is provided by the Ventura (U.S. 101) Freeway. This six-lane facility, located approximately 2 miles south of the project site, is a major highway which extends through Ventura County and links Ventura with the neighboring communities of Santa Barbara, Oxnard and Camarillo. This highway is one of the main thoroughfares used by local commuters as an intra-community route. Primary access from the U.S. 101 Freeway is provided via the ramp connections at Main Street and Donlon Avenue and the interchange at Seaward Avenue. The principal local network of streets which serve the project site consists of Main Street, Mills Road, Telegraph Road, Loma Vista Road, Hillmont Avenue and Foothill Road. The following discussion provides a brief synopsis of these key area streets. These descriptions are based on an inventory of existing roadway conditions.

- **Main Street** is an existing east-west arterial located south of the VCMC site. Main Street originates at its junction with Telephone Road and extends westerly into the City's downtown business district. This primary roadway varies from a four-lane roadway with a painted median to a six-lane arterial with a raised median. Daily traffic on Main Street totals approximately 28,200 vehicles per day (vpd).

- **Mills Road** is a north-south arterial located east of the project site. Mills is presently a four-lane, divided roadway with a raised median between Telegraph and Main. Mills extends southerly from its terminus at Loma Vista Road connecting with Preble Avenue south of Main Street. Parking is not permitted along most sections of this roadway. Mills Road is estimated to carry daily traffic volumes on the order of 29,400 vpd between Telegraph and Main.

- **Telegraph Road** is an east-west arterial which extends easterly from its terminus at Thompson Boulevard and Main Street to the City of Santa Paula. Telegraph

Road is constructed as a four-lane roadway with a raised median in the vicinity of the project. Daily traffic volumes on Telegraph total about 21,300 vpd.

- **Loma Vista Road** is an east-west arterial which borders that VCMC campus on the south. Loma Vista is four-lane, divided roadway which originates at its junction with Main Street and extends easterly to Victoria Street. Parking is permitted along most sections of this roadway. Daily traffic volumes on Loma Vista range from 11,000 vpd to 22,100 vpd.

- **Hillmont Avenue** is a two-lane local street internal to the VCMC campus. This roadway runs in a north-south direction between Foothill Road and Loma Vista Road. Parking is permitted on Hillmont Avenue. Traffic volumes on this local roadway are estimated to total 4,000 vpd.

- **Foothill Road** is a two-lane local street that borders the VCMC campus on the north. Traffic volumes on Foothill, adjacent to the site total about 9,600 vpd.

5.3.1.2 Existing Area Traffic Volumes

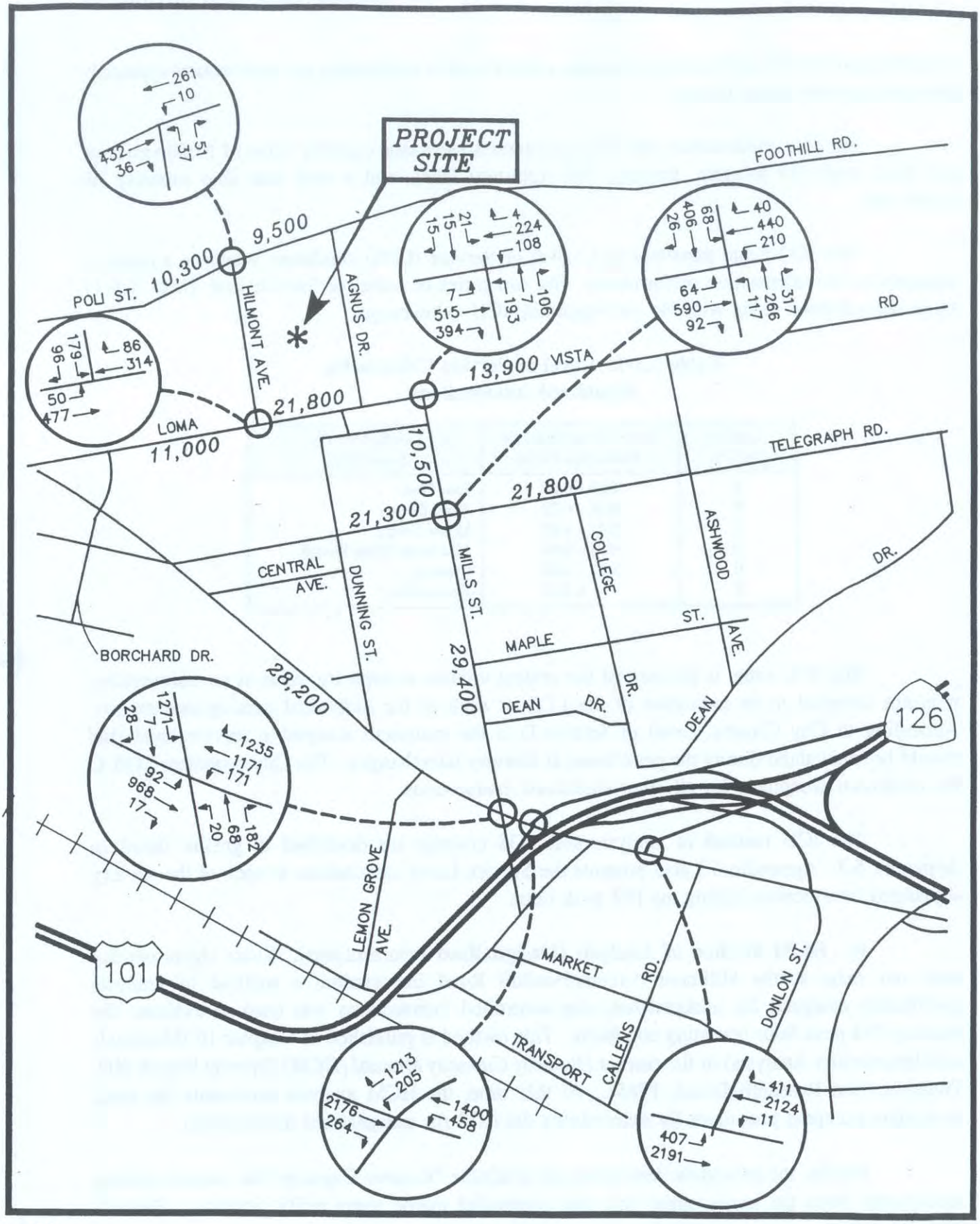
Existing PM peak hour traffic volumes for the seven study intersections listed below were obtained from the City of San Buenaventura and supplemented with manual PM peak hour turning movement counts performed by H.K. Traffic Data in June 1993.

1. Mills Road at Loma Vista Road - signalized with 2-phase (ϕ) operation
2. Mills Road at Telegraph Road - signalized with 8ϕ operation
3. Mills Road at Main Street - signalized with 8ϕ operation
4. U.S. 101 Northbound Ramps at Main Street - signalized 4ϕ operation
5. S.R. 126 Eastbound On-Ramp at Main Street - signalized 4ϕ operation
6. Hillmont Avenue at Loma Vista Road - signalized 2ϕ operation
7. Hillmont Avenue at Foothill Road - Stop-Controlled T-intersection

Figure 5.3-1 presents the existing traffic volumes in the PM peak hour of operation for the seven study intersections. The average daily traffic (ADT) volumes on key area roadways are also shown.

5.3.1.3 Existing Area Traffic Volumes

a. ICU Method of Analysis (Signalized Intersections). In conformance with City of Ventura requirements, existing PM peak hour operating conditions for the six signalized intersections evaluated in this report have been investigated employing the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal green time, and thus capacity, required by existing and/or future traffic. It should



KEY

←XX = PM PEAK HOUR TRAFFIC VOLUMES

XX,XXX = AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 5.3-1

NORTH

EXISTING AREA TRAFFIC VOLUMES

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be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per City requirements, the ICU calculations use a lane capacity value of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and a dual turn lane capacity of 3,200 vph.

The ICU value translates to a Level of Service (LOS) condition, which is a relative measure of the intersection performance. Six categories of Level of Service (see Table 5.3-1) have been defined along with the corresponding ICU value range.

Table 5.3-1. Level of Service Criteria for Signalized Intersections

Level of Service	Intersection Capacity Utilization Value	Level of Service Description
A	0.00 - 0.60	Free Flow
B	0.61 - 0.70	Rural Design
C	0.71 - 0.80	Urban Design
D	0.81 - 0.90	Maximum Urban Design
E	0.91 - 1.00	Capacity
F	≥ 1.01	Forced Flow

The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. According to City Criteria, Level of Service D is the minimum acceptable service level that should be maintained during the peak hours at freeway interchanges. The City considers LOS C the minimum acceptable for all other signalized intersections.

The ICU method of analysis and LOS concept are described in greater detail in Appendix 5.3. Appendix 5.3 also presents the Service Level calculations at each of the six key signalized intersections during the PM peak hour.

b. HCM Method of Analysis (Unsignalized Intersections). Since signal control does not exist at the Hillmont Avenue/Foothill Road intersection, a method of analysis specifically designed for unsignalized, stop-controlled intersections was used to evaluate the existing PM peak hour operating condition. This method is published in Chapter 10 (Unsignalized Intersection Analysis) of the current *Highway Capacity Manual (HCM)* (Special Report 209, Transportation Research Board, 1985). At this time, the HCM analysis represents the most up-to-date accepted procedure for determining the LOS for unsignalized intersections.

Briefly, the procedure determines the available "Reserve Capacity" for various turning movements from the major street and stop controlled minor street traffic streams. Reserve capacity values are determined through a set of calculations which measure the relationship

between conflicting traffic on the major street and the availability of acceptable "gaps" in this stream through which a turning movement can be made from the stop controlled approach of the minor street. LOS conditions for each turning movement are grouped according to the magnitude of the available reserve capacity.

A large reserve capacity value suggests that a stopped vehicle will experience less delay passing through an intersection, and thus, there would be a better LOS. Whereas, other capacity calculation methods use one common value to describe total intersection operation, the Highway Capacity Manual method yields more than one reserve capacity value. Each value corresponds to each conflicting vehicular movement through the intersection.

The Level of Service criteria for unsignalized intersections have been defined and are shown in Table 5.3-2.

Table 5.3-2. Level of Service Criteria for Unsignalized Intersections

Level of Service (LOS)	Reserve Capacity (PCPH)	Expected Delay to Minor Street Traffic
A	≥ 400	Little or no delay
B	300 - 399	Short traffic delays
C	200 - 299	Average traffic delays
D	100 - 199	Long traffic delays
E	0 - 99	Very long traffic delays
F	≤ 0	Severe congestion

The HCM method of analysis and LOS criteria are described in more detail in Appendix 5.3.

c. Existing Level of Service Results. Table 5.3-3 summarizes the existing PM peak hour service level calculations for the seven study intersections based on existing traffic volumes and current street geometry. Review of the upper portion of Table 5.3-3 shows that based on the ICU method of analysis all six signalized intersections currently operate at acceptable LOS's during the PM peak commute hour.

However, given the close proximity of the Mills/Main, U.S. 101 northbound Ramps/ Main and S.R. 126 eastbound On-Ramp/Main intersections with each other, the combined operation of these intersections is considered to be LOS D during the PM peak hour. On this basis, we conclude that the Mills/Main intersection effectively operates at an unacceptable LOS as defined by the City.

Table 5.3-3. Existing PM Peak Hour Levels of Service

Key Signalized Intersection	ICU	LOS
Mills Road @ Loma Vista Road	0.42	A
Mills Road @ Telegraph Road	0.52	A
Mills Road @ Main Street[a]	0.75	C
U.S. 101 Northbound Ramps @ Main Street[a]	0.87	D
S.R. 126 Eastbound On-Ramp @ Main Street[a]	0.57	A
Hillmont Avenue @ Loma Vista Road	0.27	A
Key Unsignalized Intersection	**Reserve Capacity**	**LOS**
Hillmont Avenue @ Foothill Road:		
Northbound Left	312	B
Northbound Right	608	A
Westbound Left	728	A

[a] Combined operation of these intersections are considered LOS D during the PM peak hour due to their close proximity with each other.

In addition, although the levels of service at the Mills/Telegraph and Mills/Main intersections calculate to LOS A and LOS C during the PM peak hour, respectively, field observations show that the existing westbound left-turn lane volumes at these intersections are not fully served by the green time and queues back up into the through lane.

Review of Table 5.3-3 also shows that the unsignalized Hillmont/Foothill intersection is currently operating at an acceptable LOS during the PM peak hour.

5.3.2 Impact Analysis

5.3.2.1 Methodology and Significance Thresholds

a. Methodology. In order to estimate the traffic impact characteristics of the proposed VCMC expansion, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is projected by applying the appropriate vehicle trip generation equations/rates for the desired land use(s).

The second step of the forecasting process is traffic distribution which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are based on the demographics and existing travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage

orientation, while traffic assignment is based on specific volume forecasts related to development conditions.

With the forecasting process complete and project traffic assignments developed, the impact of the project is evaluated by comparing operational conditions at selected key intersections based on expected future traffic conditions with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

The relative impact of the added project traffic volumes generated by the VCMC Expansion Project during the PM peak hour was evaluated based on analysis of future operating conditions at seven key area intersections. Operating levels at key intersections were investigated based on existing plus project traffic volumes and future PM peak hour traffic conditions with the proposed hospital expansion.

The previously discussed capacity analysis procedures were utilized to determine the volume to capacity relationships and service level characteristics for the study locations. The seven key intersections evaluated in this traffic report were selected based on the traffic impact criteria of the City of Ventura and the County of Ventura.

b. Significance Thresholds. The City of Ventura traffic impact criteria was used to assess the significance of the potential traffic impacts associated with the proposed project at City intersections. This criteria is summarized in the Table 5.3-4.

Table 5.3-4. City of Ventura Traffic Impact Criteria

Intersection Level of Service (including Project Traffic)	Peak Hour Project Trips Added to Critical Movements
LOS A	> 150
LOS B	> 75
LOS C	> 45
LOS D	> 15
LOS E	> 10
LOS F	> 5

Per City of Ventura Guidelines, the following scenarios are those for which LOS calculations have been performed:

1) Existing Traffic Conditions
2) Existing plus VCMC Project Traffic without mitigation
3) Condition (2) with mitigation (if necessary)
4) Existing plus VCMC Project Traffic plus Cumulative Traffic without mitigation
5) Condition (4) with mitigation (if necessary)

The County of Ventura traffic impact criteria obtained from the *Guidelines for Preparation of Environmental Assessments for Public Roads and Highway Levels of Service* are as follows:

- **Impact Criteria:** A project that would result in a 10 percent or more of the total project traffic and one or more vehicle trips during the peak hour on a (County) road segment or intersection, will be considered to have an impact on that road segment or intersection's traffic flow.

- **Significance Criteria:**

  1. A project that would have an impact on a road segment or intersection that is currently operating at a less than acceptable Level of Service (Policy 4.2.2-3 of the County General Plan) will be considered to have a significant impact.

  2. A project that would have an impact on a road segment or intersection that is currently operating at an acceptable Level of Service, where cumulative traffic impacts would result in a Level of Service falling below an acceptable level (Policy 4.2.2-4 of the County General Plan), will be considered to have a significant impact.

The County criteria were used to determine if the traffic generated by the VCMC project would impact any facility which is part of the Regional Road Network (i.e., U.S. 101 Freeway, S.R. 126 Freeway) or under the jurisdiction of the County. Evaluation of VCMC project traffic distribution shows that 10 percent of forecast PM peak hour project traffic will not be generated onto any County road segment/intersection or facility which is part of the Regional Road Network. Thus, based on County Guidelines, no analysis of any County roadway facilities is required. County of Ventura Transportation Department Staff concurs with this conclusion.

5.3.2.2 Project Impacts

a. Proposed Project Traffic Generation. The trip generation forecast for the proposed hospital expansion is based on trip generation rates developed by City of Ventura staff. The trip generation rates were based on existing Medical Center square-footage (398,157 SF) and the number of employees (1,016) currently arriving/departing the hospital during the peak hours.

Based on calculations by City staff, the average daily traffic rate for the VCMC is 10.2 trip ends per thousand square feet (10.2 TE/1000 SF), with a PM peak hour trip generation rate of 1.02 trip ends per thousand square feet (1.02 TE/1000 SF). The directional split for VCMC traffic during the PM peak hour is 38 percent inbound, 62 percent outbound. The assumptions used by City staff to obtain these rates are summarized in Appendix 5.3.

Table 5.3-5 shows the trip generation rates used in evaluating the impact of the VCMC Expansion, and presents the forecast PM peak hour and daily project traffic volumes for a "typical" weekday. As shown, the forecast for VCMC expansion results in 640 additional trips on a daily basis (320 inbound, 320 outbound), with 64 trips generated during the PM peak hour (24 entering, 40 exiting).

Table 5.3-5. Project Traffic Generation Forecast

Description	PM Peak Hour			Daily 2-Way
	Inbound	Outbound	Total	
Generation Factors:[a]				
Hospital (trip ends/1000 SF)	0.39	0.63	1.02	10.2
Generation Forecasts:				
VCMC Expansion[b] (62,115 SF)	24	40	64	640

[a] Daily and PM peak hour trip generation rates were developed by City of San Buenaventura staff. The assumptions used by City Staff to develop these rates are summarized in Appendix C.

[b] The Ventura County Medical Center Expansion project consists of approximately 144,003 square-feet of new construction in four new buildings. However, the expansion also includes the demolition or removal of 81,888 SF of existing facilities, thus resulting in a net increase in medical center floor area of 62,115 SF.

b. Proposed Project Traffic Distribution and Assignment. The regional traffic distribution pattern for the VCMC expansion is presented in Figure 5.3-2. With the site envisioned to have a combination of local and sub-regional attraction, project traffic volumes in and out of the site have been distributed and assigned to the adjacent street system based upon several considerations: 1) the site's proximity to major traffic carriers (e.g., U.S. 101 Freeway); 2) expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals; 3) access/egress availability at site driveways on Hillmont and Loma Vista; and 4) existing peak hour turning movement counts at the Hillmont/Loma Vista and Hillmont/Foothill intersections. The City's traffic model runs completed for the project were also used to define the distribution patterns within the City.

Figure 5.3-3 displays the net added PM peak hour project traffic volumes for the VCMC Expansion Project at adjacent intersections and shows the daily project traffic assignments on the key roadways in the study area.

Figure 5.3-4 shows total existing traffic plus VCMC project traffic at the seven study intersections. Existing plus project ADT volumes are also shown in Figure 5.3-4.

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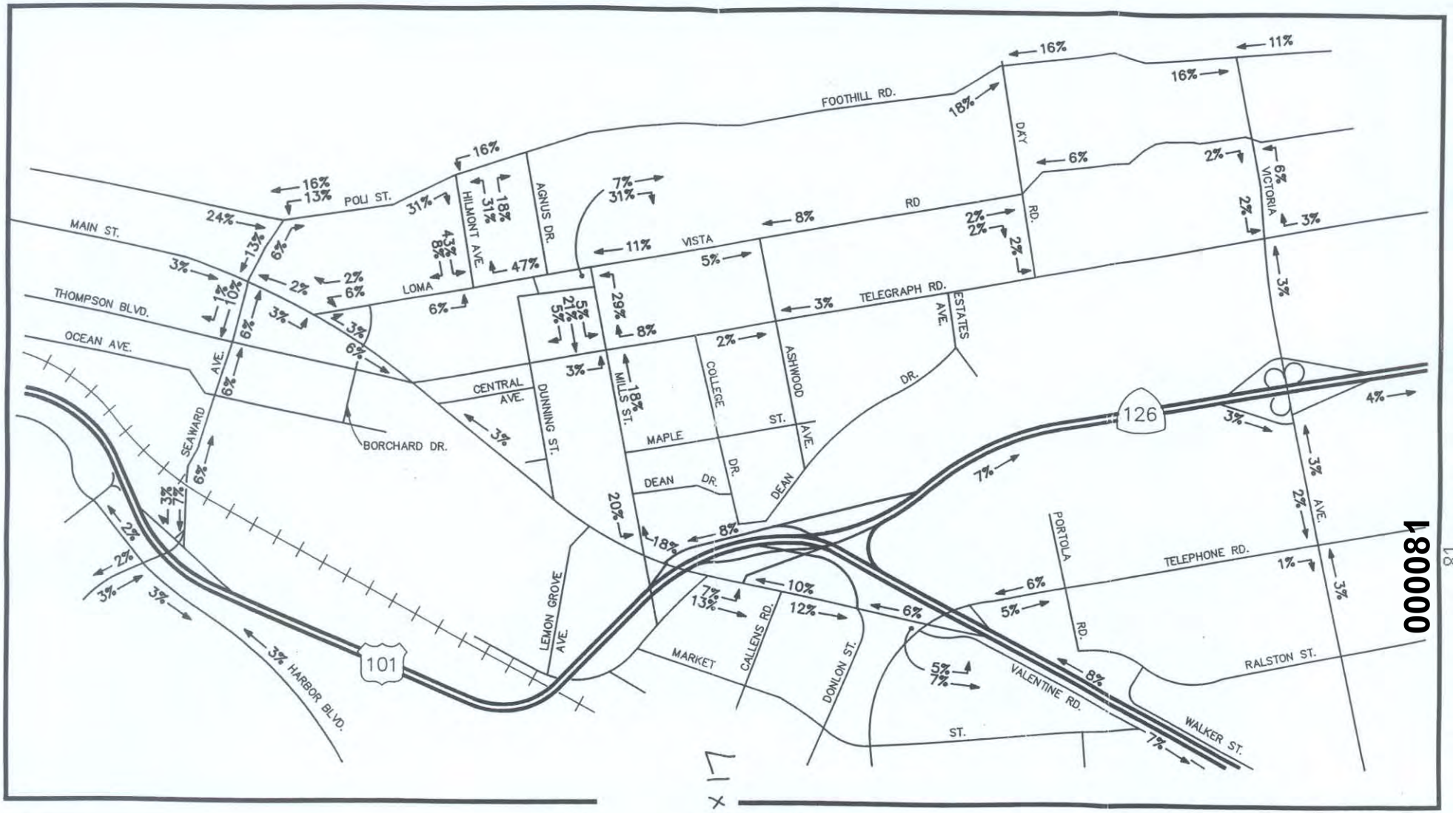

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FIGURE 5.3-2

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5.3-11

VCMC PROJECT TRAFFIC DISTRIBUTION PATTERN
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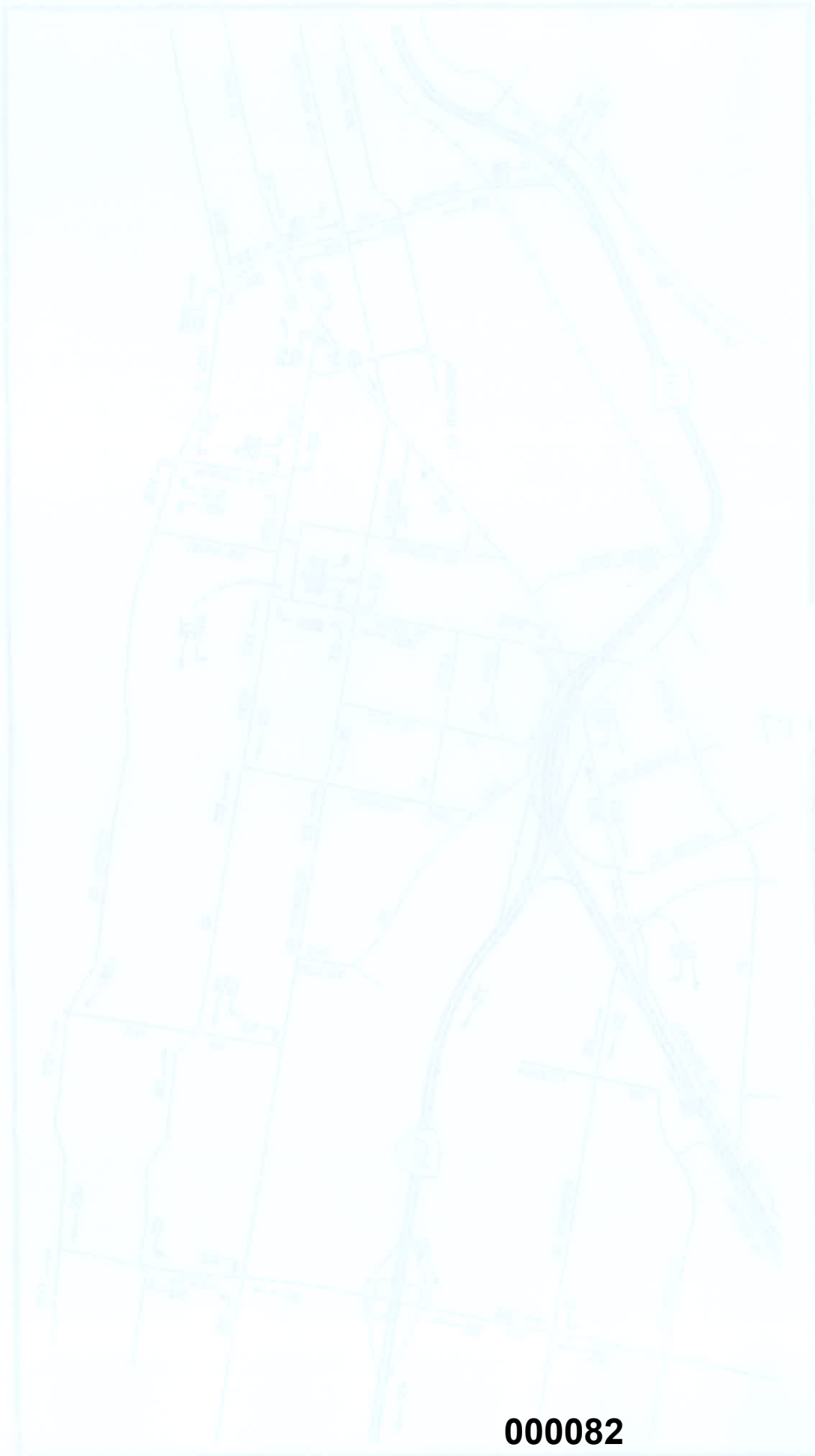

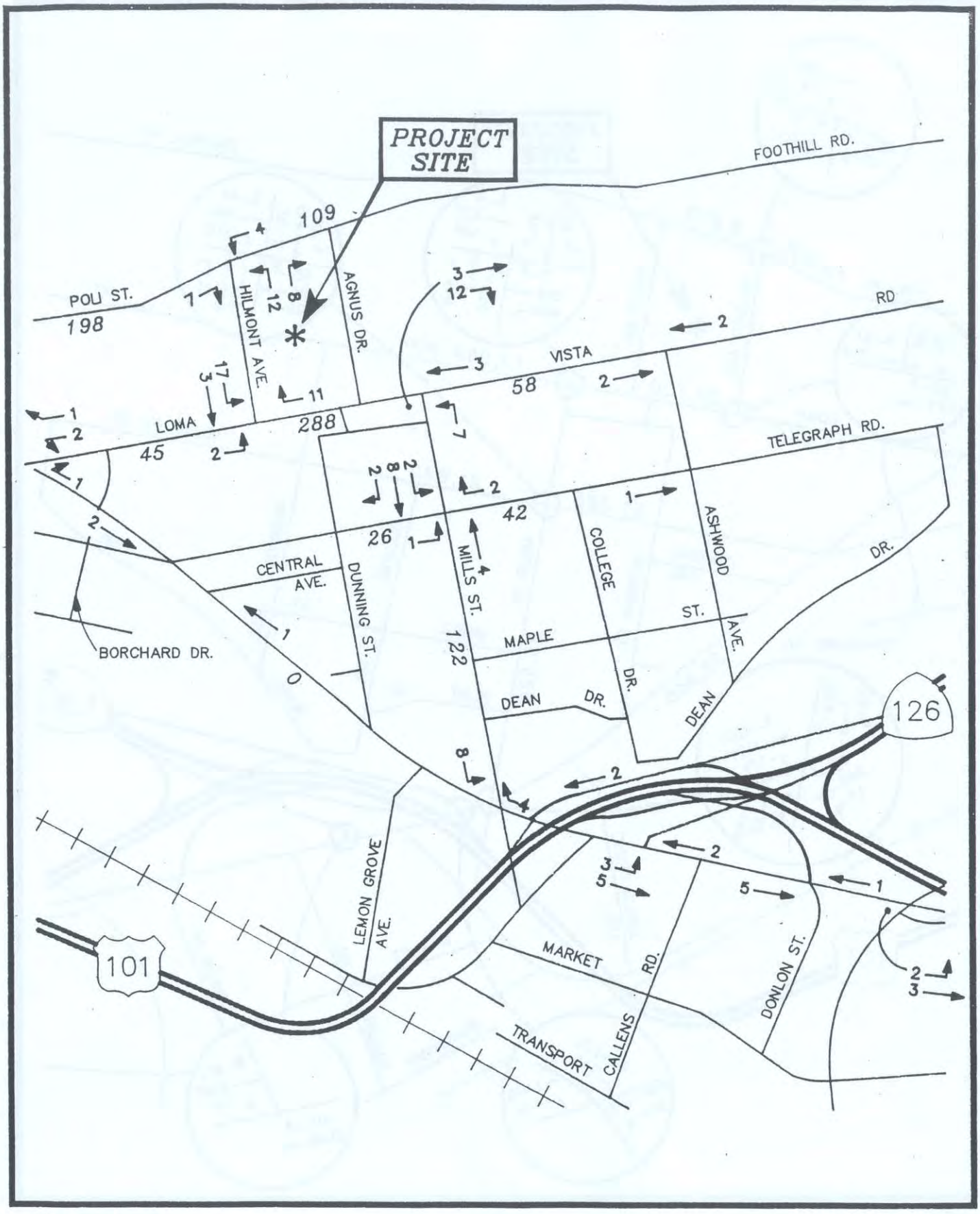

KEY

← XX = PM PEAK HOUR TRAFFIC VOLUMES

XX,XXX = AVERAGE DAILY TRAFFIC VOLUMES

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FIGURE 5.3-3

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VCMC PROJECT TRAFFIC

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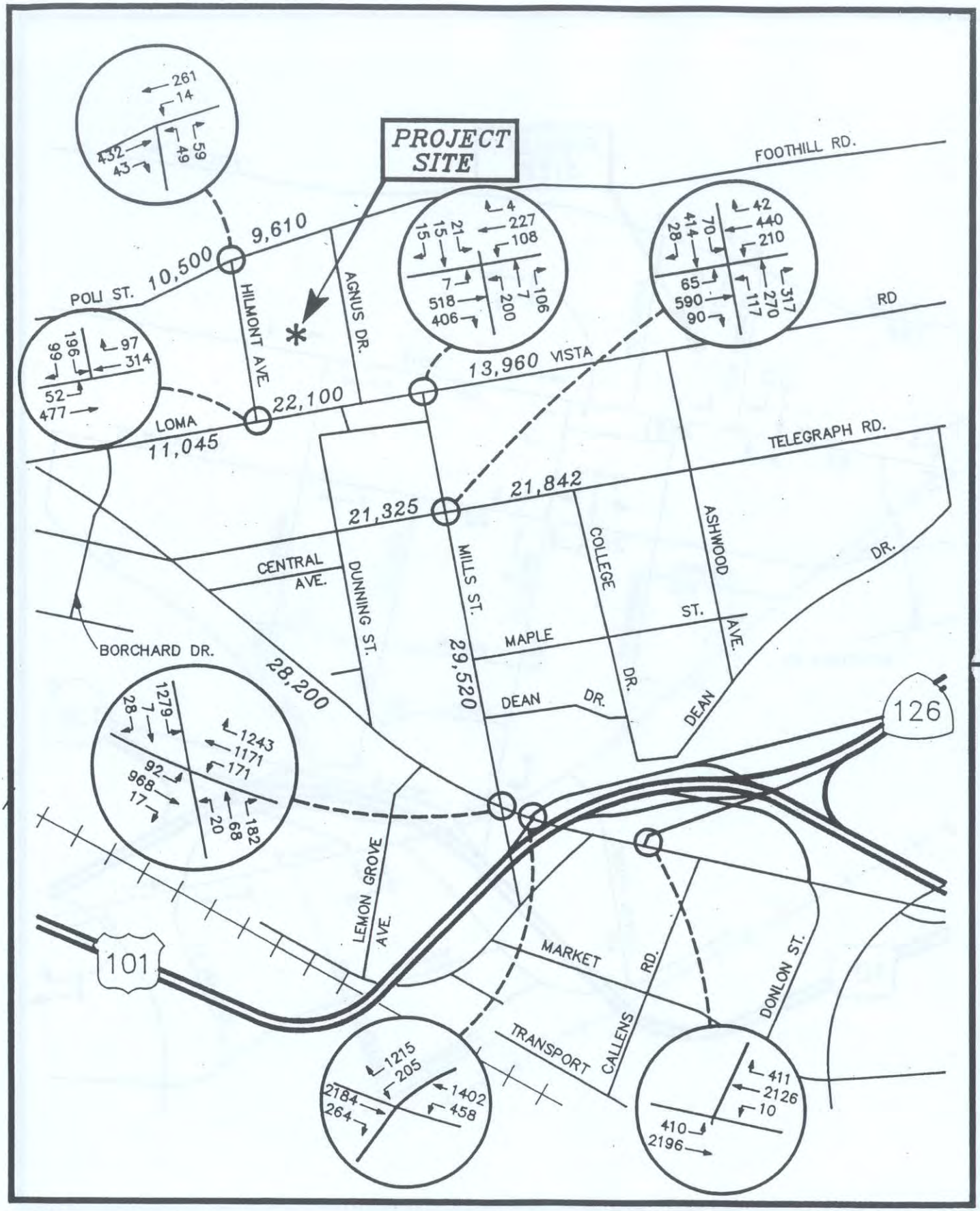

KEY

← XX = PM PEAK HOUR TRAFFIC VOLUMES

XX,XXX = AVERAGE DAILY TRAFFIC VOLUMES

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FIGURE 5.3-4

EXISTING TRAFFIC PLUS VCMC PROJECT TRAFFIC

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c. Cumulative Area Projects and Traffic Characteristics

1. *Cumulative Project Trip Generation Forecast.* The traffic characteristics of 30 planned and/or approved projects in the vicinity of the VCMC campus have been evaluated as part of the local area cumulative development setting. The project list is based on the City of Ventura's pending projects list. These projects and associated trip generation forecasts are summarized in Table 5.3-6. The locations of these projects are shown in Figure 5.3-5.

Review of Table 5.3-6 shows that total cumulative traffic generation is estimated at approximately 24,155 two-way trips per day, with 2,557 trip generated during the PM peak hour (1,117 inbound, 1,440 outbound).

In order to remain consistent with previous traffic studies prepared for these projects, specifically the Buenaventura Mall Expansion EIR Traffic Study, and to account for regional traffic growth outside the study area, an annual growth rate of 1.5 percent (to the year 1997) was applied to the existing traffic volumes at the seven key intersections. This annual traffic growth rate also was assumed to account for pending projects inside the study area that have yet to submit formal development applications to the City.

2. *Cumulative Project Trip Distribution and Assignment.* The daily and PM peak hour traffic volumes for the cumulative projects were distributed and assigned to the study intersections and area roadways according to the methodologies contained in previous traffic studies and EIRs prepared for the noted residential and commercial projects. The traffic distribution patterns for these projects were extracted from the Traffic/Circulation section of *Draft Environmental Impact Report for the Buenaventura Mall Expansion/Renovation Project*, dated April 1993.

Figure 5.3-6 presents future background PM peak hour and daily traffic volumes at the seven key intersections and area roadways evaluated in the study area. Figure 5.3-7 illustrates forecast future background conditions with the inclusion of VCMC project traffic.

d. Peak Hour Intersection Capacity Analysis

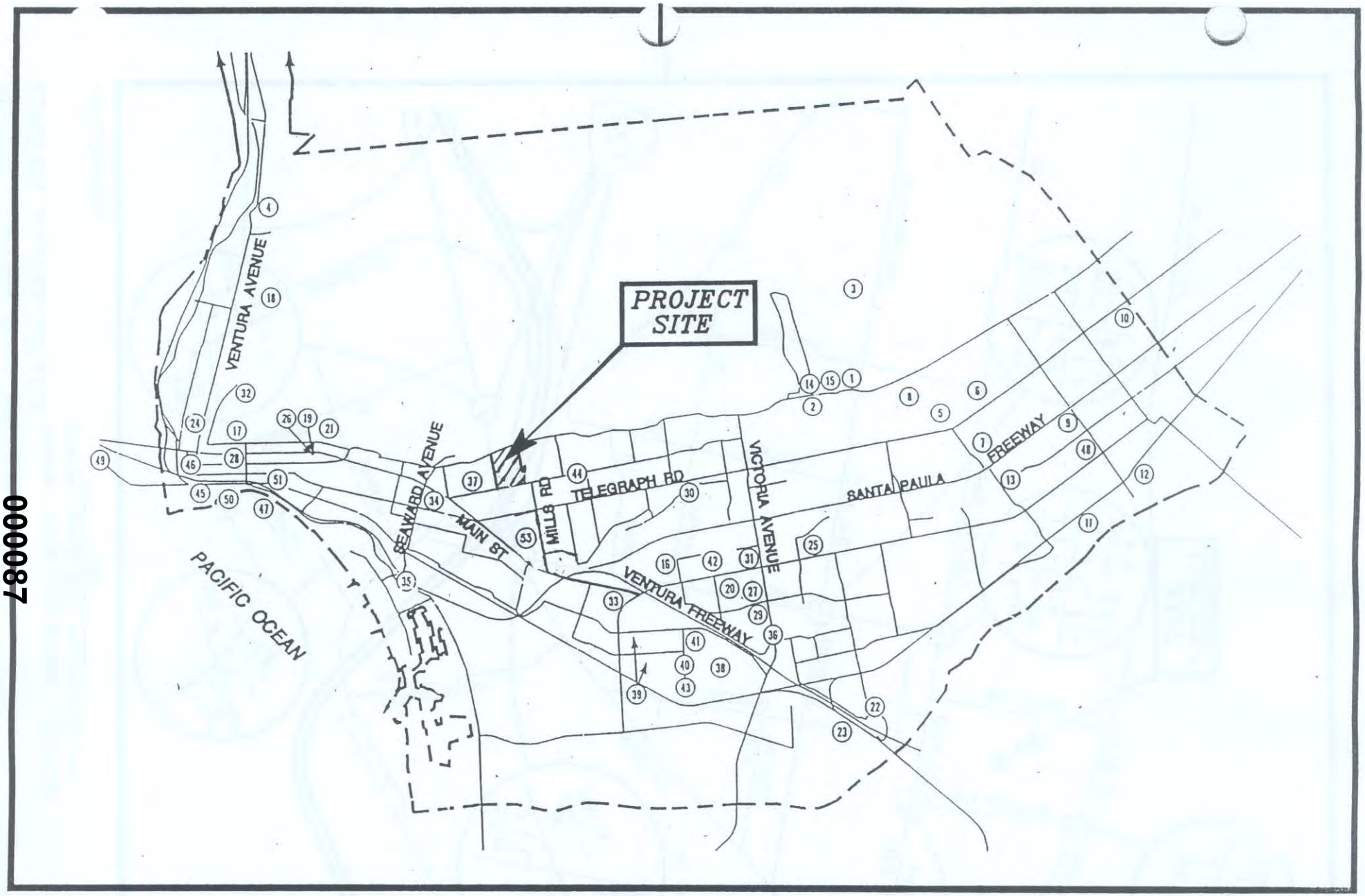
1. *Signalized Intersection Analysis.* Table 5.3-7 summarizes the PM peak hour Levels of Service for the six key signalized intersections. The first column of values (ICU/LOS) in Table 5.3-7 presents a summary of existing PM peak hour traffic conditions (which were also presented in Table 5.3-3).

The second column lists the existing plus VCMC project conditions based on existing intersection geometry. The third column shows the added PM peak hour project trips to the critical movements of the study intersections. The fourth column indicates whether the traffic associated with the VCMC expansion will have a significant impact based on City impact criteria.

Table 5.3-6. Cumulative Project Traffic Generation Forecast

Map #[a] - Project	Land Use	Size/Units	P.M. PEAK HOUR				DAILY 2-WAY	
			Rate	In	Out	Total	Rate	Trips
Residential								
1. RS-16	Single Family	3 DU	1.01	2	1	3	9.5	29
2. RS-14	Single Family	3 DU	1.01	2	1	3	9.5	29
3. RS-51	Single Family	3 DU	1.01	2	1	3	9.5	29
14. RS-69	Single Family	6 DU	1.01	4	2	6	9.5	57
15. RS-71	Single Family	21 DU	1.01	14	7	21	9.5	200
16. RC-17	Condominiums	98 DU	0.55	38	16	54	5.9	578
20. RA-77	Apartments	104 DU	0.63	46	20	66	6.5	676
Commercial								
22. C-159D	Office	85.864 KSF	1.60	27	110	137	12.2	1,048
23. C-239C	Auto Dealer	3.512 KSF	2.60	4	5	9	47.9	168
25. C-266	Office	86.240 KSF	1.60	28	110	138	12.2	1,052
27. C-280	Office	61.750 KSF	1.60	20	79	99	12.2	753
29. C-288	Office	9.798 KSF	2.80	5	22	27	20.3	199
30. C-290	Office	18.055 KSF	2.80	10	41	51	20.3	367
31. C-293	High-Turnover Rest.	0.706 KSF	16.30	6	6	12	205.4	145
33. C-296	Retail	50.500 KSF	4.90	148	99	247	40.7	2,055
34. C-297	Car Wash	2 Stalls	5.00	4	6	10	108.0	216
35. NA	Quality Restaurant	0.573 KSF	7.70	3	1	4	96.5	55
36. NA	Savings & Loan	9.832 KSF	6.80	27	40	67	74.1	719
37. NA	Medical Office	1.210 KSF	4.10	2	3	5	34.2	41
53. NA	Buenaventura Mall[b]	540.562 KSF	NA	662	662	1,324	NA	14,165
Industrial								
38. NA	Office/R&D	60.000 KSF	1.10	7	59	66	7.7	462
39. IND-3Y,3Z,AB	Industrial	32.505 KSF	0.70	8	14	32	1.5	49
39. IND-3AC,3AD	Industrial	26.513 KSF	0.70	8	11	19	1.5	39
39. NA	Warehouse	25.000 KSF	0.60	6	9	15	4.0	100
39. NA	Industrial	8.390 KSF	0.70	2	4	6	1.5	13
40. IND-15W	Industrial	20.528 KSF	0.70	6	8	14	1.5	31
41. NA	Industrial	31.238 KSF	0.70	4	18	22	1.5	47
	Office	63.796 KSF	1.60	20	82	102	12.2	778
42. IND-120	Warehouse	1.300 KSF	0.60	0	1	1	4.0	5
43. NA	Industrial[c]	NA	NA	0	0	0	NA	0
Institutional								
44. INS-17	Museum[d]	0.65 ACRES		2	2	4	NA	40
TOTAL CUMULATIVE TRIP GENERATION				1,117	1,440	2,577		24,155

[a] Refer to Exhibit 5 for locations.
[b] Trip generation for the Mall Expansion/Renovation is based on the Draft EIR for the Buenaventura Mall Expansion/Renovation Project.
[c] Transmission tower assumed not to result in daily or P.M. peak hour trips.
[d] Trip generation for the Dudley House Restoration Project was based on discussions with Goleta Stow Museum Staff.



SOURCE: City of Buenaventura

FIGURE 5.3-5

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CITY OF BUENAVENTURA
CUMULATIVE PROJECTS LOCATION MAP
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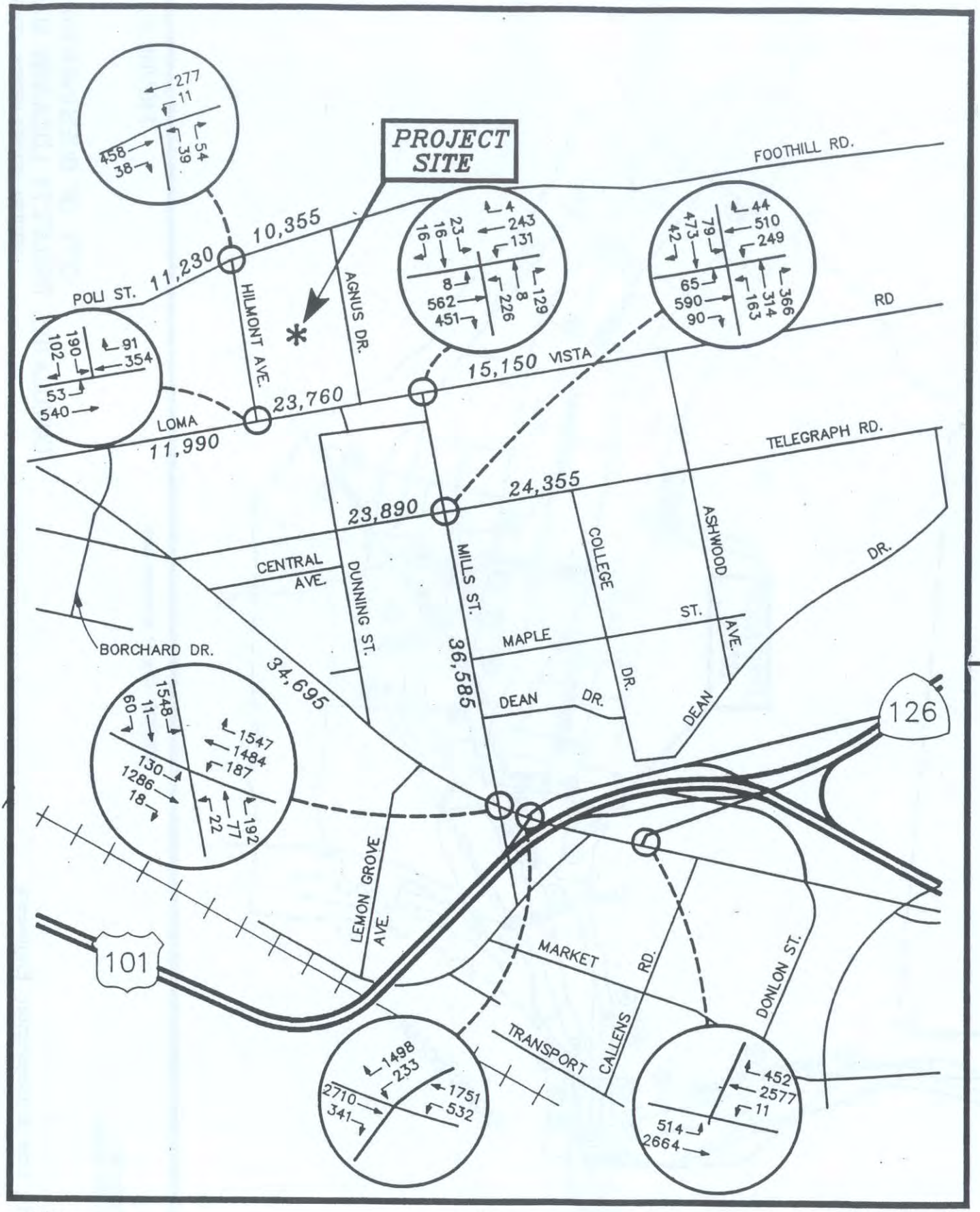


KEY

←XX = PM PEAK HOUR TRAFFIC VOLUMES

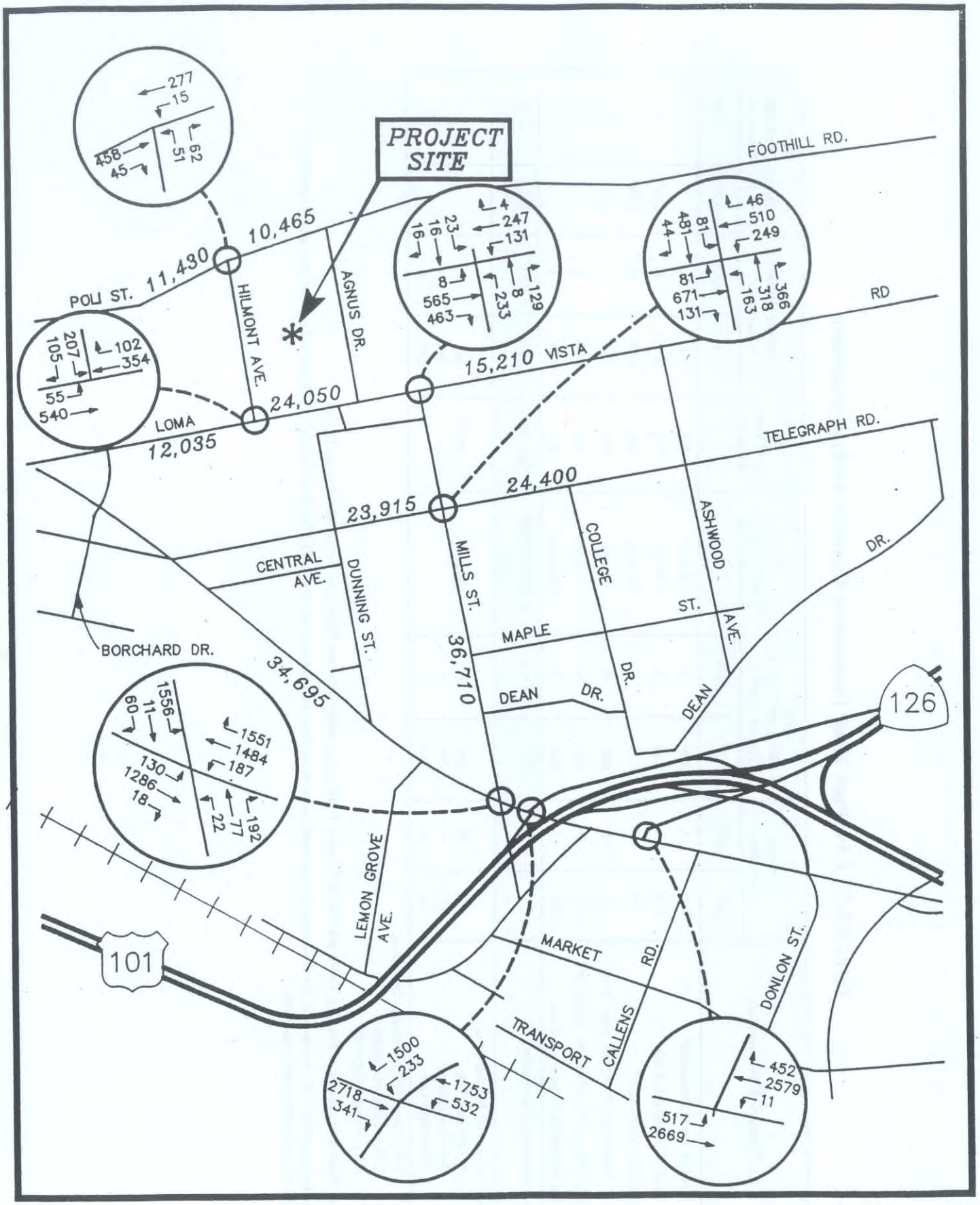
XX,XXX = AVERAGE DAILY TRAFFIC VOLUMES

NORTH

FIGURE 5.3-6

FUTURE TRAFFIC VOLUMES WITHOUT VCMC PROJECT TRAFFIC

VENTURA COUNTY MEDICAL CENTER



KEY

←XX = PM PEAK HOUR TRAFFIC VOLUMES

XX,XXX = AVERAGE DAILY TRAFFIC VOLUMES

NORTH

FIGURE 5.3-7

FUTURE TRAFFIC VOLUMES WITH VCMC PROJECT TRAFFIC

VENTURA COUNTY MEDICAL CENTER

Table 5.3-7. P.M. Peak Hour Intersection Capacity Analysis Summary

Key Signalized Intersections	(1) Existing Conditions		(2) Existing plus VCMC Project Traffic		(3) Project-Added Critical Trips	(4) Significant Impacts	(5) Future Traffic Conditions[a]		(6) Future Conditions With Mitigation	
	ICU	LOS	ICU	LOS			ICU	LOS	ICU	LOS
Mills Road @ Loma Vista Road	0.42	A	0.44	A	22 trips	NO	0.49	A		
Mills Road @ Telegraph Road	0.52	A	0.52	A	6 trips	NO	0.62	B	0.54	A
Mills Road @ Main Street[b]	0.75	C	0.75	C	12 trips	NO	**0.95**	**E**	0.80	C
U.S. 101 Northbound Ramps @ Main Street[b]	0.87	D	0.88	D	8 trips	NO	**1.05**	**F**	0.81	D
S.R. 126 Eastbound On-Ramp @ Main Street[b]	0.57	A	0.57	A	5 trips	NO	0.70	B		
Hillmont Avenue @ Loma Vista Road	0.27	A	0.28	A	30 trips	NO	0.30	A		
Key Unsignalized Intersection	**RC**	**LOS**	**RC**	**LOS**	**Added Critical trips**	**Sign. Imp.**	**RC**	**LOS**	**RC**	**LOS**
Hillmont Avenue @ Foothill Road										
Northbound Left	312	B	293	C	31 trips	NO	265	C		
Northbound Right	608	A	596	A			593	A		
Westbound Left	728	A	718	A			694	A		

Note: ICU = Intersection Capacity Utilization
LOS = Level of Service
RC = Reserve Capacity

[a] Future Conditions consists of Existing Traffic plus VCMC Project Traffic plus Ambient Growth Traffic plus Cumulative Project Traffic.

[b] When the proximity with one another is considered, the combined operation of these intersections are considered LOS D for existing conditions and existing plus project conditions, and LOS E for future traffic conditions.

The fifth column of Table 5.3-7 shows the expected service level conditions with the addition of ambient traffic growth and traffic generated by cumulative projects. The sixth column indicates the forecast operating conditions with intersection improvements (mitigation) recommended to achieve an acceptable LOS, if required.

As previously presented in Table 5.3-3, review of this table indicates that existing peak hour PM peak hour operating conditions are within satisfactory ranges based on City's adopted LOS standards.

Review of the ICU/LOS values shown in Column 2 of Table 5.3-7 show that traffic associated with the VCMC expansion will have no significant impact on the operating conditions of the six key signalized intersections. Based on the significance thresholds previously presented in Table 5.3-6, the added PM peak hour project trips to the critical movements of the six study intersections will not have an adverse impact. All six key signalized intersections are expected to operate at an acceptable service level.

An analysis of future traffic conditions indicates that the combinations of ambient traffic growth and cumulative project traffic will deteriorate the PM peak hour operating conditions at the Mills/Main and U.S. 101 Northbound Ramps/Main intersections to an unacceptable LOS. The Mills/Main intersection is forecast to operate at LOS E with an ICU value of 0.95. The U.S. 101 Northbound Ramps/Main intersection is expected to operate at LOS F. Ambient traffic growth and cumulative project traffic are not expected to result in any changes to the existing service levels at the remaining four key intersections.

However, as previously noted, the proximity of the Main/Mills, U.S. 101 Northbound Ramps/Main and S.R. 126 Eastbound On-ramp/Main intersections to one another produce a situation where the combined operation is a consideration. Similar to Main/Mills intersection, field observations show that the existing westbound left-turn lane volumes at the U.S. 101 Northbound Ramps/Main intersection are not fully served by the green time and queues back up into the through lane, causing congestion at the S.R. 126 On-Ramp/Main intersection. On that basis, the S.R. 126 Eastbound On-Ramp/Main intersection will effectively operate at LOS D.

To offset the impact of ambient traffic, cumulative project traffic, as well as proposed project traffic, intersection improvements (mitigation measures) at the Mills/Main and U.S. 101 Northbound Ramps/Main intersections are required. The implementation of these improvements, which are discussed in the following section, will improve the forecast service levels to an acceptable LOS, with the Mills/Main and U.S. 101 Northbound Ramps/Main intersections expected to operate at LOS C and LOS D, respectively. These improvements should also improve traffic flow through the S.R. 126 On-Ramp/Main intersection.

Although the forecast traffic conditions at the Mills/Telegraph intersection is considered acceptable (0.62/B), the addition of cumulative project traffic during the PM peak hour would worsen the existing westbound left-turning queuing problem. The addition of a second westbound left-turn lane on Telegraph Road would mitigate this problem.

2. *Unsignalized Intersection Analysis.* The PM peak hour capacity analysis for the Hillmont/Foothill unsignalized intersection is summarized on the lower portion of Table 5.3-7. This key intersection currently operates at LOS C or better during PM peak hour. Further, as shown in Table 5.3-7, no significant change in the existing service levels are forecast with the addition of VCMC project traffic, ambient traffic growth or cumulative project traffic.

5.3.3 Mitigation Measures

Although project implementation would not in itself result in any significant traffic impacts, this traffic impact analysis reveals that future traffic volumes will cause poor operating conditions at the Mills/Main, U.S. 101 Northbound Ramps/Main, and Mills/Telegraph intersections. For these three key intersections, this report identifies improvements originally recommended in the *Draft Environmental Impact Report for the Buenaventura Mall Expansion/ Renovation Project*, dated April 1993, that change the intersection geometry to increase capacity. The capacity improvements involve roadway widening and/or restriping lanes in order to reconfigure or add lanes to the various approaches of the intersection. The proposed improvements are expected to offset the impact of future traffic and return Levels of Service to an acceptable range.

- **Mills Road @ Main Street.** Widen westbound approach on Main Street to provide two left-turn lane, three through lanes, and two exclusive right-turn lanes. (Note: This improvement would require the U.S. 101-S.R. 126 off-ramp be widened to three lanes.)

- **U.S. 101 Northbound Ramps @ Main Street.**[1] Restripe the westbound approach to provide dual-left turn lanes on Main Street and widen the U.S. 101 on-ramp to provide an additional receiving lane to accommodate this improvement. Widen U.S. 101-S.R. 126 off-ramp to provide dual left-turn lanes and three right-turn lanes to Main Street (see above).

- **Mills Road @ Telegraph Road.** Widen the westbound approach on Telegraph to provide dual left-turn lanes, two through lanes and one exclusive right-turn lane.

As a facility administered by a public agency, the Ventura County Medical Center would not currently be required to participate in the City's Traffic Mitigation Fee Program. The VCMC may, however, be required to contribute to the program in the future. In addition, if any portion of the campus is leased to a private company in the future, that company would be expected to pay its "fair-share" for the cost of these improvements based on its contribution to cumulative impacts to the local circulation system. No further mitigation is necessary.

5.3.4 Residual Impacts

Project impacts would be less than significant prior to mitigation. Project implementation would not significantly affect any portion of the local circulation system.

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[1] Intersection improvements are based on preliminary street improvement plans developed by the City of San Buenaventura.

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5.4 AIR QUALITY

This section analyzes localized air quality impacts associated with on site construction activity and with the proposed parking structure. Because regional impacts resulting from increased traffic and energy consumption were found to be less than significant in the Initial Study that was circulated with the May 18, 1993 NOP, such impacts are not analyzed herein.

5.4.1 Setting

5.4.1.1 Regional Setting

a. General Climate and Meteorology. The proposed project is located in the western portion of the Oxnard Plain Airshed, a sub-basin of the South Central Coast Air Basin. The Airshed is characterized by cool winters and warm, dry summers tempered by cooling sea breezes. Summer, spring and fall weather is generally a result of the movement and intensity of the semi-permanent high pressure area located several hundred miles to the west. Marine influences generally predominate during this period and cause afternoon onshore flow and evening offshore flow. Winter weather is generally a result of the size and location of low pressure weather systems originating in the north Pacific Ocean.

The nearest climatic data station to the proposed project site is the Ventura weather station. However, the Ventura station does not monitor temperature. The nearest station with long-term temperature data is the Oxnard station. The average daily maximum temperature recorded at the Oxnard station is 70.7 degrees Fahrenheit (°F) for the period of 1951 to 1980 (NOAA, 1982). The hottest month is September, with average maximum daily temperatures (1951-1980) of 76.0°F. The coolest month is January, with an average daily minimum temperature (1951-1980) of 43.5°F. The average annual precipitation recorded at the Ventura station for the same period is 14.54 inches. Approximately 95 percent of this precipitation occurs from November through April.

Ventura County winds are dominated by a daily land-sea breeze cycle, which is broken only by occasional winter storms and infrequent strong Santa Ana winds from the northeast. The sea breeze is generally stronger than the land breeze and results in a net flow from west to east. Westerly sea breezes carry pollutants generated in the coastal areas into the inland valleys where dispersion is restricted. The presence of temperature inversions and westerly transport result in meteorological conditions conducive to ozone formation in the inland valleys.

The project site is near the coast where the majority of ozone precursor emission sources are located. Typically, the net westerly wind flow results in the transport of offshore and coastal emissions to receptors to the east. Due to relatively high wind speeds and net westerly wind flow, high ozone concentrations in the project area are rare.

b. Air Monitoring Network. The air quality of Ventura County is monitored by a network of air monitoring stations operated by the California Air Resources Board (CARB) and

the Ventura County Air Pollution Control District (APCD). The air monitoring network includes nine stations throughout the County. The closest station, and that most representative of the air quality of the project site, is the Main Street, Ventura station, located approximately 2.5 miles west of the project site.

The Main Street, Ventura station only monitors particulate matter less than 10 microns (PM_{10}). Other pollutant data (ozone, carbon monoxide, nitrogen dioxide) is taken from the El Rio station, which is located approximately 6 miles east of the project site. Pollutant concentrations monitored at the El Rio station are generally representative of the project site since, like the project site, they are east of both U.S. Highway 101 and coastal emission sources.

c. Air Quality Standards. Air quality standards are specific concentrations of pollutants that are used as thresholds to protect public health and the public welfare. The U.S. Environmental Protection Agency (EPA) has developed two sets of standards: one to provide an adequate margin of safety to protect human health and the second to protect the public welfare from any known or anticipated adverse effects. At this time, sulfur dioxide is the only pollutant for which the two standards differ.

The CARB has developed air quality standards which are generally lower in concentration than the Federal standards. California standards exist for ozone, carbon monoxide, PM_{10}, visibility, sulfates, lead, hydrogen sulfide and vinyl chloride. Table 5.4-1 lists the current State and Federal air quality standards.

d. Effects of Air Pollution. The primary chemical compounds that are considered pollutants which are emitted into or formed in the atmosphere from precursors include ozone, oxides of nitrogen, sulfur dioxide, hydrocarbons, carbon monoxide and particulate matter.

Ozone is formed in the atmosphere through a complex series of chemical reactions generally requiring light as an energy source. Ozone is a pungent, colorless gas and a strong irritant which attacks the respiratory system. Respiratory and cardiovascular diseases are aggravated by exposure to ozone. Healthy persons exposed to high concentrations of ozone may experience nausea, dizziness and burning in the chest. Ozone also damages crops and other vegetation.

Oxides of nitrogen (NO_x) which are considered pollutants include nitric oxide (NO) and nitrogen dioxide (NO_2). NO is colorless and odorless and is generally formed by combustion processes which combine atmospheric oxygen and nitrogen. NO_2 is a reddish-brown irritating gas formed by the combination of NO and oxygen in the atmosphere or at the emission source. Both NO and NO_2 are considered ozone precursors because they react with hydrocarbons and oxygen to produce ozone. Exposure to NO_2 may increase the potential for respiratory infections in children and cause difficulty in breathing among healthy persons and especially asthmatics.

Table 5.4-1. Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[a]	National Standards[b]	
		Concentration[c]	Primary[c,d]	Secondary[c,e]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	0.12 ppm (235 µg/m^3)	Same as Primary Standard
Carbon Monoxide	8-hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	Same as Primary Standard
	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Same as Primary Standard
Nitrogen Dioxide	Annual Average	---	0.053 ppm (100 µg/m^3)	Same as Primary Standard
	1-hour	0.25 ppm (470 µg/m^3)	---	Same as Primary Standard
Sulfur Dioxide	Annual Average	---	80 µg/m^3 (0.03 ppm)	---
	24-hour	0.04 ppm (105 µg/m^3)	365 µg/m^3 (0.14 ppm)	---
	3-hour	---	---	1,300 µg/m^3
	1-hour	0.25 ppm (655 µg/m^3)	---	---
Suspended Particulate Matter Less Than 10 Microns Diameter (PM_{10})	Annual Geometric Mean	30 µg/m^3	---	---
	Annual Arithmetic Mean	---	50 µg/m^3	Same as Primary Standard
	24-hour	50 µg/m^3	150 µg/m^3	Same as Primary Standard
Sulfates	24-hour	25 µg/m^3	---	---
Lead	30-day Average	1.5 µg/m^3	---	---
	Calendar Quarter	---	1.5 µg/m^3	Same as Primary Standard
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m^3)	---	---
Vinyl Chloride (Chloroethene)	24-hour	0.010 ppm (26 µg/m^3)	---	---
Visibility Reducing Particles[f]	1 Observation	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70 percent.	---	---

[a] California standards for ozone, carbon monoxide, sulfur dioxide (1-hour), nitrogen dioxide, and particulate matter (PM_{10}) are values that are not to be exceeded. The sulfate, lead, hydrogen sulfide, vinyl chloride, and visibility-reducing particles standards are not to be equaled or exceeded.

[b] National standards, other than ozone and those based on annual arithmetic means, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum-hourly average concentrations above the standard is equal to or less than 1.

[c] Concentrations expressed first in units promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of Hg (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromelus of pollutant per mole of gas. µg/m^3 = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter.

[d] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health. Each state must attain the primary standards no later than 3 years after that state's implementation plan is approved by the Environmental Protection Agency.

[e] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Each state must attain the secondary standard within a "reasonable time" after the implementation plan is approved by the EPA.

[f] This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range when the relative humidity is less than 70 percent.

Source: California Air Resources Board 1991. *California Air Quality Data.*

Sulfur dioxide (SO_2) is a colorless, pungent, irritating gas which affects the upper respiratory tract. Sulfur dioxide may combine with particulate matter and settle in the lungs and cause damage to lung tissues. Sulfur dioxide may combine with water in the atmosphere to form sulfuric acid, which may fall as acid rain and can damage vegetation.

Hydrocarbons include a wide variety of compounds containing hydrogen and carbon. Many hydrocarbons react with NO and NO_2 to form ozone. Generally, ambient hydrocarbon concentrations do not cause adverse health effects directly, but result in ozone formation.

Carbon monoxide (CO) is a colorless, odorless gas generally formed by incomplete combustion of hydrocarbon containing fuels. Carbon monoxide does not irritate the respiratory tract, but does interfere with the ability of blood to carry oxygen to vital tissues.

Particulate matter consists of a wide variety of particle sizes and composition. Generally, particles less than 10 microns (PM_{10}) are considered to be pollutants because they accumulate in the lung tissues and may contain toxic materials that are absorbed into the system.

e. General Air Quality Trends. Two pollutants (ozone and PM_{10}) are of particular interest because State air quality standards for these pollutants are regularly exceeded in Ventura County. Table 5.4-2 lists the monitored maximum concentrations and number of exceedances of State air quality standards for the years 1989, 1990 and 1991. The SO_2 concentrations monitored at the El Rio station during this period are substantially below the State air quality standards. The ozone concentrations monitored at the El Rio station exceeded the State standard (0.09 ppm) for a total of 113 hours from 1989 through 1991. The Federal ozone standard (0.12 ppm) was only exceeded for a total of 8 hours at the El Rio station during the same period. PM_{10} concentrations monitored at the Main Street, Ventura station exceeded the State 24-hour standard for a total of 15 days from 1989 through 1991. The Federal 24-hour PM_{10} standard was not exceeded at the Main Street, Ventura station during this period.

f. Regulatory Setting. Amendments to the Federal Clean Air Act required each Air Pollution Control District to submit an Air Quality Management Plan (AQMP) for approval by CARB and the EPA. The goal of the AQMP was to reduce pollutant concentrations below the Federal standards. The 1982 Ventura County AQMP failed to demonstrate attainment of the Federal ozone standard by the December 31, 1987, deadline. A 1987 AQMP was subsequently prepared and formally approved in July 1988, but did not predict attainment of the federal ozone standard in the foreseeable future.

Because of the failure of the 1982 AQMP to demonstrate attainment of Federal air quality standards, the Citizens to Preserve the Ojai (CPO) sued the EPA in 1988. The suit contended that the EPA should disapprove the 1982 AQMP, impose a moratorium on the construction of new major sources and major modifications to existing sources of reactive organic compounds (ROC), and prepare a Federal Implementation Plan (FIP) to attain the Federal ozone standard in Ventura County. In March 1989, the CPO and EPA reached a settlement that

Table 5.4-2. Air Quality Standard Exceedances

Ozone - El Rio (ppm)	1989	1990	1991
Worst Hour	0.19	0.12	0.12
Number of State Exceedances (Hours > 0.09 ppm)	56	17	40
Number of Federal Exceedances (Hours > 0.12 ppm)	8	0	0
Carbon Monoxide - El Rio (ppm)			
Worst Hour	3.0	3.0	3.0
Number of State Exceedances (Hours > 20 ppm)	0	0	0
Number of State Exceedances (8 hours > 9 ppm)	0	0	0
Nitrogen Dioxide - El Rio (ppm)			
Worst Hour	0.09	0.10	0.09
Number of State Exceedances (Hours > 0.25 ppm)	0	0	0
PM_{10} - Ventura, Main Street (micrograms/cubic meter)			
Worst Sample	66	82	62
Number of State Exceedances (Samples > 50)	9	2	4
Annual Geometric Mean (Standard is 30)	32.8	28.3	29.5
Annual Arithmetic Mean (Standard is 50)	36.1	30.5	31.7

Source: California Air Resources Board, Air Quality Summaries, 1989, 1990, 1991

established a tentative schedule for developing the FIP, which included the development of final rulemaking by February 1992.

However, after adoption of the Federal Clean Air Act Amendments of 1990, the EPA requested court relief from development of FIPs for the Los Angeles, Sacramento, and Ventura County areas. The tentative schedule for completion of the FIP was, therefore, put on hold pending the final outcome of the EPA appeal. The appeal was ultimately rejected by the U.S. Supreme Court in February 1993. Consequently, the EPA must now return to court to establish a binding schedule for developing the FIPs.

The 1990 Amendments to the Federal Clean Air Act require statutory deadlines for attainment of Federal air quality standards. However, guidance for complying with the Amendments has not been released by EPA. The Ventura County APCD is currently preparing a new Federal AQMP to be completed in 1994.

Assembly Bill 2595 (known as the California Clean Air Act) took effect in 1989 with goal of attaining California Air Quality Standards (CAQS) by the earliest practicable date. The Ventura County APCD prepared an AQMP in 1991 to meet the requirements of the California Clean Air Act. The 1991 AQMP was adopted by the Ventura County Board of Supervisors in October 1991 and was approved by CARB in August 1992.

Recent amendments to the California Clean Air Act have changed the methods by which an area is classified for ozone and CO. Previously, classifications were based on the projected attainment dates indicated in each district's air quality plans. However, in accordance with the amendments, classifications are based upon ambient air monitoring data. Ozone classifications are based on data from 1989 through 1991 and include "moderate", "serious", "severe" and "extreme" designations. CO classifications are based upon data from the 1989-1990 and 1990-1991 winter seasons and include "moderate" and "serious" designations. The Ventura County portion of the South Central Coast Air Basin has been tentatively classified as severe for ozone. The South Central Coast Air Basin has been tentatively classified as in attainment for CO.

The 1991 Ventura County AQMP does not contain a predicted date of attainment of the State ozone standard. However, it does include stationary source and mobile source control measures that will substantially reduce emissions. New and revised stationary source control measures that should substantially reduce the projected emissions inventory include various coatings rules (paints), consumer products rules (deodorants, hair spray, etc.) and electrical power generating equipment (Rule 59). New and revised mobile source control measures include various trip reduction related measures, requirements regarding the use of clean fuels, revisions to Rule 210, and an indirect source control program for projects which attract large numbers of vehicles (large commercial or residential projects).

The 1991 AQMP does not specifically address attainment of the State PM_{10} standard. However, many of the control measures contained in the 1991 AQMP would result in substantial reductions in PM_{10} emissions.

5.4.1.2 Site-Specific Setting

The regional setting adequately characterizes the air quality of the project site. Existing sources of air pollutant emissions at the VCMC include vehicular movement to and from the site, the water and space heaters, and a 1,000 kilowatt, diesel-fired emergency generator. Installed in 1985, air emissions from the generator have become a source of concern for some residents east of the campus along Agnus Drive. When operating, the generator emits smoke, which contains such pollutants as nitrogen dioxide and particulates. However, because the emergency generator is typically operated for a few hours each month for testing purposes, its air quality impacts are not generally substantial.

5.4.2 Impact Analysis

5.4.2.1 Methodology and Significance Thresholds

The Ventura County APCD has prepared *Guidelines for the Preparation of Air Quality Impact Analyses* (Guidelines). Thresholds of significance are taken from the Guidelines and are listed below:

- Daily emissions exceeding 25 pounds reactive organic compounds (ROC) or oxides of nitrogen (NO_x);
- Causing an exceedance or making a substantial contribution to an exceedance of an ambient air quality standard;
- Projects inconsistent with the Ventura County AQMP and emitting greater than 2 pounds per day ROC or NO_x;
- Directly or indirectly causing the existing population to exceed the population forecasts in the most recently adopted AQMP.

The Ventura County APCD significance thresholds are not applicable to construction emissions since these emissions are only temporary. However, due to the lack of attainment of the ozone and PM_{10} standards, construction mitigation should be applied to all phases of construction.

Localized impacts associated with the proposed three-level parking structure are considered significant if the increase in CO emissions associated with the structure would result in an exceedance of the federal or state CO standards. Project impacts are also considered significant if the project is found to be inconsistent with the 1991 Ventura County AQMP.

5.4.2.2 Project-Specific Impacts

a. Construction Activity Impacts. Air quality impacts would occur from demolition and construction activities including building demolition, pad construction, parking garage construction, building erection and paving. Heavy equipment and on-road trucks would generate short-term exhaust emissions and fugitive dust. Site preparation emissions are generally much greater than building erection emissions due to the larger size and number of emission sources present. This analysis is based upon a peak day during the construction period. The peak day is expected to occur in 1995 during site preparation for the Ambulatory Care Clinic and parking structure.

Construction equipment assumed to be used for site preparation includes one tracked tractor (Caterpillar D6H), one scraper (Caterpillar 623E) and two wheeled loaders (Caterpillar 966E). In addition, on-road heavy-duty diesel trucks would be used to transport earth materials offsite. Construction exhaust emissions are calculated using fuel-specific emissions factors from the EPA document *Compilation of Air Pollutant Emission Factors (AP-42, Volume II, 1985).* Fuel usage of construction equipment was obtained from the Caterpillar Performance Handbook. It is assumed that 1,500 tons per day of earth materials would be exported on a peak day. Based upon a maximum load of 24 tons per truck, this would require 62.5 truck trips per day. It is assumed that the trucks would transport excess earth material to the Bailard Landfill, a round-trip distance of 13 miles. Exhaust emissions generated by construction-related sources would degrade

local air quality and may cause or contribute to exceedances of the nitrogen dioxide 1-hour State air quality standard. Peak day construction emissions are presented in Table 5.4-3 and the calculations are documented in Appendix 5.4. These emissions exceed the APCD 25-pound-per-day threshold and are considered significant unless mitigated to the degree feasible.

Table 5.4-3. Construction Emissions

Source	Pollutant (Pounds per Day)				
	ROC	CO	NO_x	PM_{10}	SO_2
Heavy Equipment	8.4	23.7	77.2	7.3	8.2
On-road Trucks	4.1	12.2	23.0	3.3	5.6
Bulldozing (dust)	0.0	0.0	0.0	451.5	0.0
Batch Drop (dust)	0.0	0.0	0.0	3.1	0.0
Wind Erosion (dust)	0.0	0.0	0.0	105.6	0.0
TOTAL	**12.5**	**35.9**	**100.2**	**570.8**	**13.8**

Construction activities would also generate PM_{10} (fugitive dust). Fugitive dust would be generated by earth-moving activities (bulldozing), batch drops and wind erosion of exposed soils. Bulldozing emissions are calculated using emission factors in EPA AP-42, Section 8.24 and soil silt content from the 1970 *Soil Survey, Ventura Area, California.* Bulldozing emissions calculations assume that one tracked tractor is in full operation during peak day. Bulldozing PM_{10} emissions are presented in Table 5.4-3.

A batch drop is the process of dumping earth materials onto the soil surface or into a truck. Batch drop emissions are calculated using emission factors in EPA AP-42, Section 11.2.3 and estimated tons per day of materials dumped. To account for batch drops of the wheeled loaders to a stockpile and into trucks, the estimated 1,500 tons per day export value is doubled. Batch drop PM_{10} emissions are presented in Table 5.4-3.

Wind erosion of exposed soil surfaces is estimated using emission factors from the South Coast Air Quality Management District document *CEQA Air Quality Handbook* (1993). Wind erosion calculations assume that a maximum of 4 acres of soil surface are exposed during the peak day. Wind erosion emissions are presented in Table 5.4-3.

Construction related PM_{10} emissions have the potential to cause or substantially contribute to local exceedances of the State PM_{10} standard and may hinder progress towards County attainment of the State PM_{10} standard. In addition, dust generated by construction activities may pose a nuisance to persons living or working near construction sites.

b. Parking Structure Impacts. Traffic-congested intersections and parking garages have the potential to result in high levels of carbon monoxide, known as CO "hot spots." Such "hot spots" are defined as locations where the ambient CO concentrations exceed the State or Federal ambient air quality standards [20 ppm (State) or 35 ppm (Federal) 1-hour]. Sensitive

receptors could be adversely affected if these standards were exceeded. Sensitive receptors are generally defined as land uses that are occupied by persons actively exercising or are more sensitive to air pollution including hospitals, nursing homes, schools and parks. CO can be especially dangerous for people with heart disease, anemia, emphysema, asthma and other respiratory ailments.

The project includes a three-level, above-ground parking garage. Multi-level parking garages tend to concentrate vehicle CO emissions in a small area and may cause CO hotspots during the peak hour. A worst-case scenario was selected for analysis:

- Winter evening (50°F);
- Peak hour volumes are 10 percent of daily volumes (see Traffic Study) such that the number of cars leaving during peak hour is 10 percent of the number of parking spaces;
- All vehicles operate under cold start conditions;
- Worst-case model inputs (50 meter mixing height, 0.5 meters per second wind speed, worst-case wind direction, worst hour ambient CO concentration).

The California Department of Transportation CALINE4 Model was used to estimate ambient CO concentrations. The CALINE4 Model was used in the parking lot mode with links stacked above each other to simulate a multi-level parking garage. Traffic volumes of upper levels were added to traffic volumes of lower levels since traffic exiting from upper levels must pass through lower levels. Parking garage plans were not available and the determination of link locations and elevations within the parking structure assumed 500 car capacity (total), 167 cars per level, ramps located in the center of the structure and exits on the north and west sides of the structure.

Receptors selected for analysis include the proposed Ambulatory Clinic to the south (gym room), proposed patient drop-off area, the Juvenile Court building and the nearest residence on Agnus Drive to the east of the proposed parking garage. The boiler and laundry building is located between the proposed parking garage and the residences on Agnus Drive and would tend to disperse CO emissions prior to reaching the residences. The modeling results are presented in Table 5.4-4 and modeling inputs are included in Appendix 5.4. As the table shows, modeled CO concentrations are substantially less than the State 1-hour standard (20 ppm). Consequently, local scale impacts of the parking garage are considered less than significant.

c. Consistency with 1991 Air Quality Management Plan. Consistency with the 1991 AQMP is determined by comparing the population forecasts used to develop the AQMP to the current population in the area of interest. Projects that would cause the local population to exceed the AQMP projection would be considered inconsistent. The proposed project is

Table 5.4-4. Parking Structure Local Scale Impacts

Receptor Description	CO Concentration (ppm)
Ambulatory Care Clinic gym room	3.8
Residence on Agnus Drive	3.6
Patient drop-off area	4.1
Boiler and laundry building	4.0

comprised of medical facilities that would service the existing population and is not expected to induce population growth. Therefore, the project is considered consistent with the 1991 AQMP.

5.4.2.3 Cumulative Impacts

Because they are temporary in nature, construction activity impacts would not contribute to the long-term cumulative degradation of regional air quality. CO impacts associated with the proposed parking would be localized in nature and also would not contribute to significant cumulative effects.

The cumulative vehicle emissions associated with all currently planned projects in the City of Ventura would exceed County significance thresholds. However, because emissions associated with the proposed project would be less than County significance thresholds, the project's contribution to cumulative regional air quality impacts is considered less than significant.

5.4.3 Mitigation Measures

As discussed in Section 3.7 of the Project Description, several methods to reduce air quality impacts associated with construction activity will be incorporated into the project. These include the following:

- Regular ground wetting of graded areas will be conducted during construction to control fugitive dust emissions.
- Grading activities will cease during periods when winds exceed 20 miles per hour averaged over one hour.
- Material excavated, stockpiled and transported during construction will be wetted regularly.
- Onsite construction vehicle speed will be limited to 15 miles per hour.
- Construction vehicle traffic areas will be regularly wetted.

- Tarping of trucks removing dirt offsite.

5.4.3.1 Additional Construction Activity Measures

The following mitigation measures should be fully implemented in addition to the above methods to reduce ozone precursor emissions and PM_{10} emissions (fugitive dust) associated with site preparation activities of the proposed project.

AQ-1 **Two-Foot Freeboard.** Trucks transporting earth material offsite shall maintain a minimum 2-foot freeboard.

AQ-2 **Equipment Turnoff.** All diesel-powered equipment should be turned off when not in use for more than 30 minutes and gasoline-powered equipment should be turned off when not in use for more than 5 minutes.

AQ-3 **Daily Watering.** The entire construction area shall be watered twice daily.

AQ-4 **Roadway Sweeping.** Roadways in the vicinity of construction access points shall be swept as necessary to prevent the accumulation of silt.

5.4.3.2 Cumulative Operational Measures

Although project implementation would not in itself significantly impact regional air quality, the following mitigation measures are recommended to reduce the project's contribution to the long-term cumulative degradation of regional air quality.

AQ-5 **Bicycle Racks.** Bicycle racks shall be provided in a convenient location to encourage bicycle use by VCMC employees.

AQ-6 **Bicycle Lanes.** Bicycle lanes shall be constructed to link project bicycle racks to existing Class II bicycle lanes on Loma Vista Road.

AQ-7 **Low Emission Space Heaters.** Space heaters used in all project development shall be low emission designs. Commercial space heaters should be certified by the manufacturer to generate no more than 40 nanograms per joule heat output. This would reduce space heating emissions by up to 79 percent (EPA, 1983).

AQ-8 **Maximize Thermal Integrity.** All new structures shall maximize thermal integrity through the use of insulation, dual-pane windows, advanced window glazing to reduce heating and cooling requirements and associated emissions. Solar assisted water heaters shall be installed when feasible.

AQ-9 Trip Reduction Plan. VCMC shall develop and implement a trip reduction plan to increase average vehicle ridership.

5.4.4 Residual Impacts

Implementation of the recommended construction activity mitigation measure, in conjunction with standard construction practices, would reduce NO_x emissions to the extent feasible. The effectiveness of watering on graded surface PM_{10} emissions is approximately 50 percent and 84.3 percent for batch drops and bulldozing (assuming soil moisture is increased to 15 percent). Residual construction activity impacts are considered less than significant. Mitigated peak day construction emissions are presented in Table 5.4-5.

Table 5.4-5. Mitigated Construction Emissions

Source	Percent Control				Mitigated Emissions (lb/day)			
	ROC	CO	NO_x	PM_{10}	ROC	CO	NO_x	PM_{10}
Heavy Equipment	0.0	0.0	0.0	0.0	8.4	23.7	77.2	7.3
On-Road Trucks	0.0	0.0	0.0	0.0	4.1	12.2	23.0	3.3
Bulldozing	0.0	0.0	0.0	84.3	0.0	0.0	0.0	71.0
Batch Drop	0.0	0.0	0.0	84.3	0.0	0.0	0.0	0.5
Wind Erosion	0.0	0.0	0.0	50.0	0.0	0.0	0.0	52.8
TOTAL					**12.5**	**35.9**	**100.2**	**134.9**

Long-term localized and regional air quality impacts would be less than significant prior to mitigation. Implementation of the recommended operational measures would serve to reduce the proposed project's contribution to cumulative impacts upon regional air quality.

5.5 NOISE

This section analyzes the potential noise impacts associated with project-related construction activity and with the proposed parking structure. Noise impacts associated with on-street traffic were analyzed in the Initial Study that was circulated with the May 18, 1993 NOP and were found to be less than significant.

5.5.1 Setting

5.5.1.1 Existing Conditions

a. Noise Characteristics. People are subject to a multitude of sounds in the urban environment. Many of these sounds are the results of necessary normal human activities. Nevertheless, some sounds, such as the those generated by jet aircraft or automobiles, are undesirable. Excessive undesirable noise can cause physical and/or psychological damage.

The amount of annoyance or damage caused by noise is primarily dependent upon three factors: the amount and nature of the noise, the amount of ambient noise present prior to the intruding noise, and the activity of the person working or living in the noise source area. Figure 5.5-1 illustrates normal noise levels associated with a number of activities, as well as the typical public response to such noise.

Because of the physical characteristics associated with noise transmission and reception, noise levels are measured on a logarithmic scale. The unit of measurement for noise is the decibel (dBA). A doubling of noise energy normally results in a 3.0 dBA increase in noise levels. However, a 10 dBA noise increase is required before most people will perceive a doubling of noise. A 1- to 2-dBA change in ambient noise levels generally is not perceptible even to sensitive receptors.

Noise levels diminish (or attenuate) as distance from the noise source increases, based on an inverse square rule. The attenuation rate constant varies with the type of source. From point sources such as industrial facilities or parking structures, an attenuation rate of 6 dBA per doubling of distance from the noise source is typical. By comparison, heavily traveled roads with few gaps in traffic act as continuous line sources and have attenuation rates of approximately 3 dBA per doubling of distance. Less heavily traveled roads typically have attenuation rates of about 4.5 dBA per doubling of distance.

The duration of noise and the time period at which it occurs are important factors in determining the impact of noise on nearby receptors. Noise is more disturbing at night than during the day and noise indices have been developed to account for the varying duration of noise events over time, as well as community response to such events. The Community Noise Equivalent Level (CNEL) and the Day-Night Average Level (Ldn) are two such indices. Both of these indices represent time-weighted average values based on the equivalent sound level (Leq), which is a constant sound level that equals the same amount of acoustic energy as actual

PUBLIC REACTION	NOISE LEVEL (dBA)	COMMON INDOOR NOISE LEVELS	COMMON OUTDOOR NOISE LEVELS
	110	Rock Band	Jet Flyover at 1,000 ft.
LOCAL COMMITTEE ACTIVITY WITH INFLUENTIAL OR LEGAL ACTION	100	Inside Subway Train	Gas Lawn Mower at 3 ft.
LETTERS OF PROTEST	90	Food Blender at 3 ft.	Diesel Truck at 50 ft.
COMPLAINTS LIKELY	80	Garbage Disposal at 3 ft. Shouting at 3 ft.	Noisy Urban Daytime
COMPLAINTS POSSIBLE	70	Vacuum Cleaner at 10 ft. Normal Speech at 3 ft.	Gas Lawn Mower at 100 ft. Commercial Area
COMPLAINTS RARE	60	Large Business Office	Heavy Traffic at 300 ft.
	50	Dishwasher Next Room	Quiet Urban Daytime
ACCEPTANCE	40	Small Theater, Conference Room (Background)	Quiet Urban Nighttime Quiet Suburban Nighttime
	30	Library Bedroom at Night Concert Hall (Background)	Quiet Rural Nighttime
	20	Broadcast and Recording Studio	
	10		
	0	Threshold of Hearing	

SOURCE: Caltrans Noise Manual, California Department of Transportation, March, 1980.

COMMON NOISE LEVELS AND PUBLIC REACTION

000108

time-varying sound over a given time period. The CNEL penalizes noise occurring at night (10 p.m. to 7 a.m.) by 10 dBA to account for increased sensitivity of people to noise after dark. Evening (7 p.m. to 10 p.m.) noise levels are penalized 5 dBA by the CNEL. Appropriately weighted hourly Leqs are then combined over a 24-hour period to calculate the CNEL. The Ldn is roughly equivalent to the CNEL, but does not penalize evening levels.

b. Site-Specific Setting. The primary existing noise sources associated with operations at the VCMC campus include vehicular movement (both onsite and offsite) and mechanical equipment at project site structures. Noise is generated by automobiles entering and leaving all of the onsite parking lots, as well as on adjacent roadways such as Hillmont Avenue, Loma Vista Road, and Foothill Road. Noise levels are greatest in the early morning and late afternoon hours, when traffic to and from the site is the greatest.

Sensitive receptors in the vicinity of the project site include onsite medical facilities and the residences surrounding the campus to the west, north, and south. The residential properties most affected by onsite vehicular movement are those directly abutting the campus to the west along Estrella Street and to the east along Agnus Drive.

Monitoring of current noise levels at two locations on the VCMC site was conducted between 8 a.m. and 9 a.m. on July 2, 1993: immediately west of the emergency generator on the site of existing surface parking and east of the existing boiler and laundry building immediately adjacent to Agnus Drive residential properties. Leq's on the site of the existing surface parking were 56.7 dBA, while Leqs east of the boiler and laundry building were 54.7 dBA. Noise levels at the former site were attributed primarily to motor vehicle operation while levels at the latter site were due primarily to the operation of mechanical equipment at the boiler and laundry building.

5.5.1.2 Regulatory Setting

To limit population exposure to physically and/or psychologically significant noise levels, the State of California, various county governments, and most municipalities in the state have established guidelines and ordinances to control noise. Noise standards in the City of Ventura Noise Element (1989) generally rely on the guidelines set forth by the California Department of Health Service (DHS) Office of Noise Control. According to these land use compatibility guidelines, noise is considered significant if sensitive land uses are exposed to an exterior noise level of greater than 65 dBA CNEL or an interior level of 45 dBA CNEL. Noise sensitive land uses are generally defined as residences, transient lodging, schools, hospitals, nursing homes, churches, meeting halls, office buildings, and mortuaries.

5.5.2 Impact Analysis

5.5.2.1 Methodology and Significance Thresholds

a. Methodology. Noise generated by construction activities on the VCMC campus are assessed using a worst-case scenario which assumes three pieces of construction equipment operating simultaneously.

Estimates of noise levels associated with the proposed parking structure are based on monitoring conducted by Fugro-McClelland in February 1993 at the four-level structure located near the Community Memorial Hospital in Ventura. Noise sampling was conducted near garage exits and entrances distant from other arterial noise sources. This resulted in measured noise levels that generally reflected that associated with activities occurring in and around the parking structure.

Noise monitoring conducted at approximately 50 feet from the structure resulted in an Leq (20-minute sample) of 54.2 dBA, with a peak level (Lmax) of 82.6 dBA. The peak noise level was primarily attributed to a car alarm that was activated for monitoring purposes.

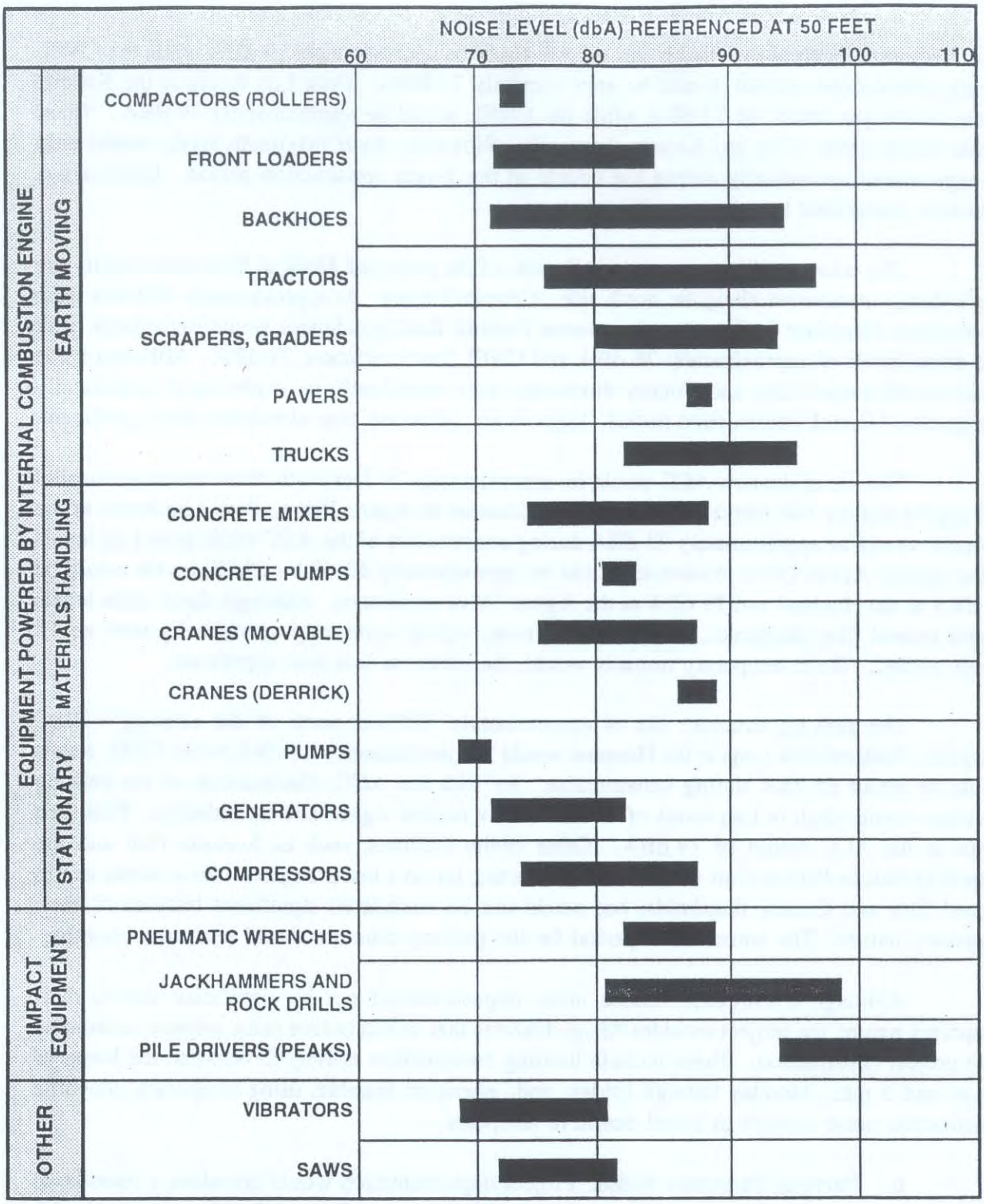
b. Significance Thresholds. For purposes of this EIR, construction noise is considered significant if it would cause a continuous exceedance of the City of Ventura CNEL threshold for a period of 1 year or longer. Noise impacts related to the proposed parking structure are considered significant if sensitive land uses are exposed to exterior noise levels exceeding 60 dBA CNEL or interior levels exceeding 45 dBA CNEL.

5.5.2.2 Project Impacts

a. Construction-Related Noise. Noise generated during construction activities varies considerably, depending upon the type of equipment used, the operating characteristics of equipment, and equipment maintenance. Figure 5.5-2 shows typical noise levels associated with construction equipment.

Construction noise generally represents a short-term impact on ambient noise levels in a given location. The construction equipment anticipated to be used during construction activities on the site include a bulldozer, a loader, and a scraper. Noise sensitive uses most likely to be affected by construction noise are the existing onsite medical facilities and the residences directly abutting the campus along Agnus Drive to the east.

The Mental Health In-Patient Unit would be constructed along Loma Vista Road, approximately 80 feet from the existing Hospital and across Hillmont Avenue from the existing Public Health building. Peak Leq levels at these facilities would be roughly 83-84 dBA while the CNEL would be about 72 dBA. The nearest offsite noise sensitive uses include St. Paul's Episcopal Church and school across Loma Vista Road (approximately 150 feet away) and the residences west of the campus on the east side of Estrella Street (approximately 300 feet away).



NOTE: Based on limited available data samples.

SOURCE: EPA, 1971 "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances," NTID 300-1.

TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS

Peak Leq noise levels at the church and school would be approximately 79 dBA while the CNEL during construction periods would be approximately 76 DBA. Peak Leq levels at the Estrella Street residences would be 73 dBA while the CNEL would be approximately 70 dBA. These levels would exceed City and County thresholds. However, these maximum levels would only be experienced sporadically during the course of the 1-year construction period. Impacts are, therefore, considered less than significant.

The noise sensitive uses nearest the site of the proposed Medical Examiner facility are single-family residences along the north side of Foothill Road. At approximately 200 feet from the Medical Examiner facility site, the nearest Foothill Road residences would experience peak Leq noise levels of approximately 76 dBA and CNEL levels of about 73 dBA. Although these levels would exceed City and County thresholds, they would only be experienced sporadically during the 11-month construction period. Impacts are, therefore, considered less than significant.

The site of the new ACC would be approximately 30 feet north of the existing Hospital and approximately 140 feet from the nearest residences on Agnus Drive. Peak Leq levels at the Hospital would be approximately 93 dBA during construction of the ACC while peak Leq levels at the nearest Agnus Drive residences would be approximately 82 dBA. CNEL levels would be 89 dBA at the Hospital and 79 dBA at the Agnus Drive residences. Although these noise levels would exceed City thresholds, construction activity would occur only sporadically over an 18 month period. These temporary impacts would, therefore, be less than significant.

The parking structure site is approximately 500 feet north of the existing VCMC Hospital. Peak exterior Leqs at the Hospital would be approximately 68 dBA while CNEL levels would be about 65 dBA during construction. As with the ACC, construction of the parking structure would result in Leq levels of 82 dBA at the nearest Agnus Drive residences. Peak Leq levels at the ACC would be 79 dBA. Other onsite facilities, such as Juvenile Hall and the Mental Health In-Patient Unit would also be affected, but to a lesser degree. Noise levels would exceed City and County thresholds, but would not be considered significant because of their temporary nature. The construction period for the parking structure would last seven months.

Although construction-related noise impacts would not be significant due to their temporary nature, the project includes design features that would reduce noise impacts associated with project construction. These include limiting construction activity to between the hours of 8 a.m. and 5 p.m., Monday through Friday, and, whenever feasible, using temporary, movable construction noise barriers to shield sensitive receptors.

b. Parking Structure Noise. Project implementation would introduce a three-level parking structure with 500 spaces near residences along Agnus Drive. Traffic associated with parking structures is not generally of sufficient volume to exceed community noise standards based upon the time-weighted CNEL scale. However, automobile engine start-ups and acceleration, tire squeal noise, and the activation of car alarm systems in structures can be sources of noise annoyance problems.

As currently proposed, the parking structure would be located approximately 150 feet from the property lines of residences along Agnus Drive. Due to the periodic nature of noise from parking structures, operations at the structure would not cause an exceedance of the City's 65 dBA CNEL threshold. However, based upon noise sampling conducted by Fugro-McClelland, noise associated with the parking structure would result in Leq levels of approximately 44.7 dBA and an Lmax level of 73.1 dBA (for incidental occurrences) at the most affected Agnus Drive residences. This is lower than the 54.7 dBA Leq currently generated by operations at the existing laundry building. Consequently, general parking structure noise generally would not be heard over current noise levels in the area. In addition, topographic variations and existing walls and structures (the boiler and laundry building and emergency generator) would buffer noise from the structure to some degree. However, peak noise levels, which would be approximately 73.1 dBA at the nearest residences, may occasionally be audible.

Because noise levels associated with the proposed parking structure would not exceed any established threshold and would not generally be audible to Agnus Drive residents, impacts would be considered less than significant. Nevertheless, by generating peak noise levels that could cause periodic annoyance to adjacent residents, noise impacts associated with the proposed parking structure would be adverse.

As discussed in Section 3.7 of the Project Description, construction activities on the site would conform with standard noise reduction procedures. These include limiting construction activity to between 8 a.m. and 5 p.m, and, when feasible, the use of temporary, movable construction noise barriers to shield sensitive receptors.

5.5.2.3 Cumulative Impacts

Project implementation would incrementally contribute to increases in traffic-related ambient noise levels along roadways in the vicinity of the project site. However, the increase in traffic associated with the project would not increase noise levels by an amount that would be perceptible (3 dBA or greater).

Because noise associated with onsite construction activity would be temporary, it would not contribute to cumulative long-term noise level increases. The proposed parking structure would primarily move currently dispersed parking both onsite and offsite into a single structure. As such, although noise levels would increase slightly at the location of the parking structure, operation of the structure would not contribute to any cumulative noise level increases. Cumulative noise level increases would, therefore, be less than significant.

5.5.3 Mitigation Measures

5.5.3.1 Construction Noise Measures

As discussed above, noise impacts associated with construction activity would be less than significant and the design features that are proposed as part of the project (see Section 3.7,

Project Design Features) would reduce noise levels further. Nevertheless, the following additional measures are recommended to minimize noise impacts to surrounding uses.

NOI-1. Muffler Exhaust Systems. All construction equipment, fixed or mobile, operated on the VCMC campus shall be equipped with properly operating muffler exhaust systems.

NOI-2. Equipment Placement. When feasible, stationary construction equipment shall be placed such that emitted noise is directed away from sensitive noise receptors.

NOI-3. Stockpiling and Vehicle Staging. Stockpiling and vehicle staging areas shall be located as far as practical from sensitive receptors.

NOI-4. Construction Activity Consolidation. When feasible, the noisiest construction operations should be arranged to occur together in the construction program to avoid continuing periods of greater annoyance.

5.5.3.2 Parking Structure Noise Measures

Although long-term noise levels related to the project would not exceed the City's residential noise threshold, the following measures are recommended to minimize noise annoyance from the proposed parking structure.

NOI-5. Non-Squeal Paving. Non-squeal paving finishes shall be used within the parking structure and on all external ramps of the parking structure.

NOI-6. Walls. The design of the parking structure shall incorporate features (such as solid walls or baffles on the east elevation) to reduce noise impacts to the nearest residential areas.

NOI-7. Speed Bumps. Speed bumps shall be incorporated into the parking structure to reduce vehicle speeds.

NOI-8. Rubberized Expansion Plates. Parking structure expansion plates shall be of rubberized materials to reduce noise generated by vehicular movement.

NOI-9. Sweeper Operation Restrictions. If noise problems arise from parking structure sweeper operations, sweeping activities shall be restricted to the hours determined appropriate by the County of Ventura.

5.5.4 Residual Impacts

Noise impacts associated with the proposed project would be less than significant prior to mitigation. Implementation of the recommended mitigation measures would further reduce impacts.

6.0 GROWTH-INDUCING IMPACTS

Section 15126(g) of the *State CEQA Guidelines* requires a discussion of the growth-inducing impact of the proposed action. By increasing the available building area on the site, project implementation would potentially enable campus facilities to accommodate more employees and patients in the future. Therefore, although it is not the primary intent of the project to accommodate expanded services, project implementation may indirectly facilitate growth in service on the VCMC campus.

However, as stated in Section 3.5, one of the primary objectives of the proposed VCMC expansion is to relieve current overcrowding conditions at various campus facilities and clinics. For this reason, the increase in onsite building area on the site is not generally anticipated to induce further growth in services provided, but rather to improve the service that is currently provided. Therefore, the project is not inherently growth inducing.

7.0 ALTERNATIVES

In accordance with Section 15126 (d) of the *State CEQA Guidelines*, this section addresses a range of reasonable alternatives to the proposed project which may be capable of reducing or eliminating some of the environmental impacts associated with the project. Section 7.1 examines five onsite alternative development scenarios while Section 7.2 discusses the feasibility of implementing the proposed project on alternative sites. Section 7.3 compares the various alternatives and presents the environmentally superior alternative.

7.1 ALTERNATIVES ON THE PROJECT SITE

Five reasonable alternative onsite projects were selected for consideration, including the CEQA-required "No Project" Alternative and four alternative siting scenarios. Table 7.1-1 provides a summarized comparison of the characteristics of each of the project alternatives. Textual descriptions of the alternatives are provided in the following subsections, followed by a comparison of the impacts associated with the alternative to those of the proposed project.

Table 7.1-1. Alternatives Summary

New Building Area/ Employment	No Project	Proposed Project	Alternative Site Plan 1	Alternative Site Plan 2	Alternative Site Plan 3	Alternative Site Plan 4
Construction (square feet) Demolition (square feet)	0 0	144,003 81,888	144,003 101,080	144,003 81,888	144,003 81,888	177,003 110,384
Net New Building Area (square feet)	0	62,115	42,923	62,115	62,115	66,619
Net New Employees	0	56	22	56	56	56
Characteristics of New Onsite Parking						
Surface Spaces Structure Spaces Parking Structure Levels	0 0 --	0 500 3	229 271 2	229 271 2½	0 500 3	500 0 --

7.1.1 No Project Alternative

The No Project Alternative assumes a "no change" scenario in which no new development occurs on the site. All existing structures would remain and campus operations would remain in these structures.

7.1.1.1 Land Use

No changes to the existing land use pattern on the VCMC campus would occur under the No Project Alternative. Consequently, no new structures exceeding City of Ventura height

limitations for the Hospital zone would be constructed and no new inconsistencies with County land use policy would occur.

No structures having potential compatibility conflicts with adjacent residences along Agnus Drive would be constructed. Thus, no new compatibility problems would arise. However, none of the existing structures located immediately adjacent to Agnus Drive residential properties would be removed under the No Project alternative. Consequently, the potentially beneficial impacts related to the removal of these buildings would not occur. In addition, the space requirements of the clinics and other medical facilities currently operating on the VCMC campus would not be met.

The No Project Alternative would be superior from a land use policy consistency standpoint. Because this alternative would include neither the adverse or beneficial impacts of the proposed project, its land use compatibility impacts are considered similar. Overall land use impacts are therefore considered somewhat lower for the No Project Alternative.

7.1.1.2 Aesthetics/Shadow/Light & Glare

Under the No Project Alternative, existing aesthetic conditions on the VCMC campus would remain. The Loma Vista Road corridor would not be altered under this alternative and the existing front yard setback along that corridor would not be adversely affected. In addition, no viewshed impacts to the Foothill Road scenic corridor would occur and there would be no alteration of views from Loma Vista Road or Agnus Drive. Thus, none of the adverse impacts associated with the implementation of the proposed project would occur.

At the same time, the beneficial effects associated with improvements in the aesthetic clarity of the campus and the removal of existing structures immediately adjacent to Agnus Drive residences would not occur. Because the No Project Alternative would not include either the adverse or beneficial impacts of the proposed project, its overall aesthetic impacts would be similar.

7.1.1.3 Transportation and Circulation

The No Project Alternative would not generate any new vehicle trips, as compared to the 640 daily trips projected to be generated by implementation of the proposed project. Consequently, although the proposed project's impact on local traffic conditions would be less than significant, the No Project Alternative's impact would be lower.

This alternative would not provide any additional onsite parking, as compared to the 500 additional spaces (271-space increase) provided by the proposed project. Although the No Project alternative would not generate any additional demand for parking on the campus, most of the new parking provided under the proposed project (76%) is intended to relieve overcrowding of existing onsite parking facilities. Thus, this alternative would not have the proposed project's beneficial impacts related to improving campus parking opportunities and reducing

demand for on-street parking, primarily on Loma Vista Road, Hillmont Avenue, and Agnus Drive.

The No Project Alternative would have fewer impacts on offsite circulation but greater impacts on onsite parking conditions. Consequently, overall transportation and circulation impacts are considered similar to those of the proposed project.

7.1.1.4 Air Quality

The No Project Alternative would not result in any increase in air emissions associated with operations at the VCMC campus. By comparison, implementation of the proposed project would add 640 daily automobile trips to and from the campus, resulting in increased emissions of all criteria air pollutants.

The three level parking structure proposed as part of the project would not be added under the No Project Alternative. Thus, although CO concentrations associated with the proposed parking structure would not cause an exceedance of federal or state standards, the increased CO concentrations associated with the structure would not occur under this alternative. Overall air quality impacts would be lower under the No Project Alternative.

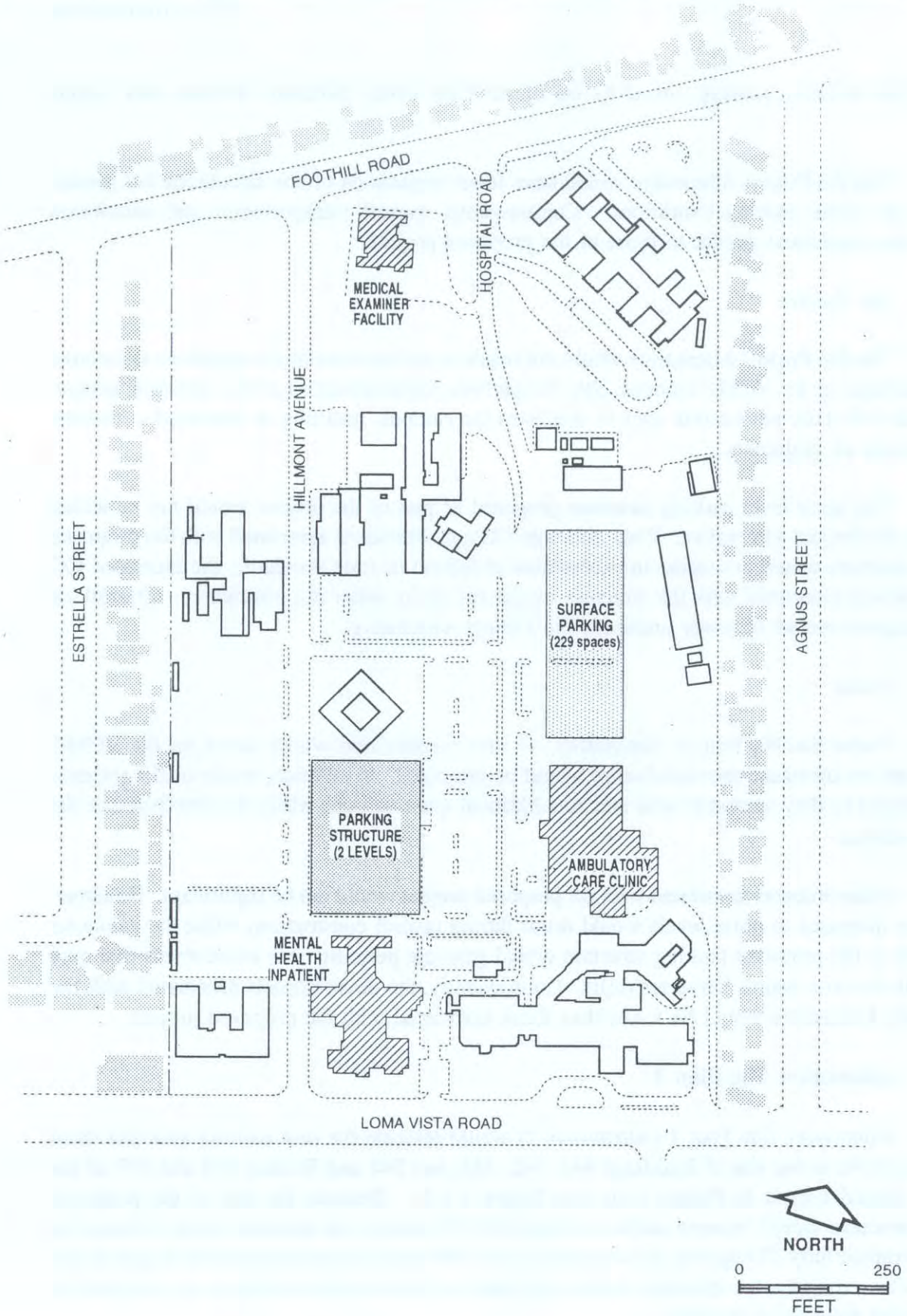
7.1.1.5 Noise

Under the No Project Alternative, no new construction would occur on the VCMC campus and no construction-related noise would be generated. In addition, onsite traffic patterns would remain as they currently exist and no additional noise sources would be introduced to the VCMC campus.

Noise impacts associated with the proposed project would not be significant. However, temporary increases in noise levels would occur during project construction while the vehicular movement at the proposed parking structure would generate periodic peak noise levels that may be audible to some Agnus Drive residents. Consequently, the noise impacts associated with the No Project Alternative would be lower than those associated with the proposed project.

7.1.2 Alternative Site Plan 1

Alternative Site Plan 1 (Alternative 1) would relocate the new parking structure from its proposed site to the site of Buildings 341, 342, 343, and 344 and Trailers 352 and 367 of the existing Mental Health In-Patient Unit (see Figure 7.1-1). Because the site of the proposed parking structure would become surface parking for 229 spaces, the structure under Alternative 1 would contain only 271 spaces, as compared to the 500-space structure proposed as part of the project. Consequently, the structure would only need to be two levels in height, as compared to the proposed three level structure.



ALTERNATIVE 1
SITE PLAN

Under Alternative 1, 19,192 square feet of buildings and trailers at the existing Mental Health In-Patient Unit, which would remain and be occupied under the proposed project, would be demolished/removed. Consequently, implementation of this alternative would add 19,192 fewer net square feet than would the proposed project, thereby resulting in a total net increase of 42,923 square feet of new building area.

Existing structures that would accommodate new office employees under the proposed project would instead be demolished. Therefore, no new office employees could be accommodated onsite under Alternative 1. Consequently, this alternative would accommodate 34 fewer new employees than would the proposed project. This would leave a total increase of only 22 employees, all at the new Mental Health In-Patient Unit.

7.1.2.1 Land Use

This alternative would relocate the proposed parking structure toward the center of the VCMC campus, away from the residences on Agnus Drive. It would also decrease the height of the structure to two levels. Consequently, the structure would be largely outside the viewshed of Agnus Drive residents. In this manner, the potential for land use compatibility conflicts would be reduced to some degree under this alternative.

The ACC would, however, remain in the same location as proposed under the project. Consequently, the height of the five-story structure would continue to be inconsistent with City of Ventura limitations and conflicts associated with the ACC height and massing would be the same as those of the proposed project. Because the ACC is the primary cause of potential land use impacts associated with the proposed project, the primary impact of this alternative would be the same. Nevertheless, by relocating the proposed parking structure further from Agnus Drive residences and reducing its height, Alternative 1's land use impacts would be slightly lower than those of the proposed project.

7.1.2.2 Aesthetics/Shadow/Light & Glare

By relocating the proposed parking structure away from residences along Agnus Drive, Alternative 1 would reduce the potential for viewshed impacts associated with the structure. The two-level structure that would be constructed under this alternative would be west of the five-story ACC and would therefore largely be shielded from view from Agnus Drive properties. Lighting impacts from the structure on Agnus Drive residences would also be reduced under this alternative, although nighttime lighting from the structure would be more visible to residents west of the project site along Estrella Street.

Under Alternative 1, the proposed ACC would, however, remain in the same location as for the proposed project. Consequently, the viewshed impacts associated with the ACC would be the same as those of the proposed project. Light and shadow effects associated with the ACC would also be the same as those of the proposed project.

The proposed Medical Examiner facility would also be in the same location as that of the proposed project. Consequently, viewshed impacts would be the same. Construction of the facility would continue to be inconsistent with County and City policies related to the preservation of views from Foothill Boulevard.

Aesthetics, shadow, and light impacts associated with the parking structure would be lower under Alternative 1 while impacts associated with the ACC and the Medical Examiner facility would the same as those of the proposed project. Overall impacts would therefore be slightly lower under this alternative.

7.1.2.3 Transportation and Circulation

Because Alternative 1 would accommodate fewer new employees on the project site than the proposed project (22, as compared to 56), it would generate fewer additional vehicle trips to and from the site. Internal circulation impacts would be about the same as those of the proposed project. Consequently, impacts to the local circulation system would be somewhat lower under this alternative.

7.1.2.4 Air Quality

Alternative 1 would involve the demolition of four additional structures (encompassing approximately 1.4 acres), as compared to the proposed project. The overall area disturbed during project construction, and dust emissions associated with construction activity, would therefore be somewhat greater. Consequently, short-term air quality impacts associated with construction activities would be greater than those of the proposed project.

The overall increase in onsite employment would be only 22 under this alternative, as compared to the 56-employee increase that would occur under the proposed project. Consequently, although the increase in air emissions associated with the proposed project would be less than County thresholds, the increase in vehicle trips and associated vehicular air emissions would be lower under this alternative.

Because the proposed parking structure would be located toward the center of the VCMC campus and away from sensitive residential uses, the potential for an increase in carbon monoxide (CO) concentrations at the Agnus Drive residences would be lower. However, under this alternative, the structure would be adjacent to the proposed Mental Health In-Patient Unit, thus potentially causing increased CO concentrations at that facility. In addition, the ACC would be directly east of the structure. Consequently, the prevailing westerly winds in the project vicinity may result in somewhat greater exposure of ACC employees and patients to increased CO concentrations. It should, however, be noted that the increase in CO concentrations would be less than significant under either this alternative or the proposed project.

Construction air quality impacts would be greater under this alternative, while emissions associated with long-term vehicular movement would be lower and the potential for

exposure to increased CO concentrations would be about the same. Consequently, overall air quality impacts associated with Alternative 1 would be similar to those of the proposed project.

7.1.2.5 Noise

Temporary noise impacts associated with construction activity would be slightly greater under Alternative 1 due to the greater overall amount of demolition and construction that would occur.

Implementation of this alternative would generate only 22 new employees, as compared to the 56 new employees generated by implementation of the proposed project. Consequently, the increase in traffic and traffic-related noise generated by this alternative would be less than that generated by the proposed project.

In addition, this alternative would locate the proposed parking structure near the center of the VCMC campus and away from Agnus Drive residences. Consequently, the potential for periodic noise level increases at adjacent residences related to parking structure operations would be less under this alternative. However, noise from the parking structure would have greater impacts on the Mental Health Unit and on residences west of the project site under this alternative.

Construction noise would be somewhat greater under Alternative 1, while on-street traffic noise would be lower and noise impacts associated with the proposed parking structure would be about the same. Overall noise impacts associated with this alternative would therefore be about the same as those of the proposed project.

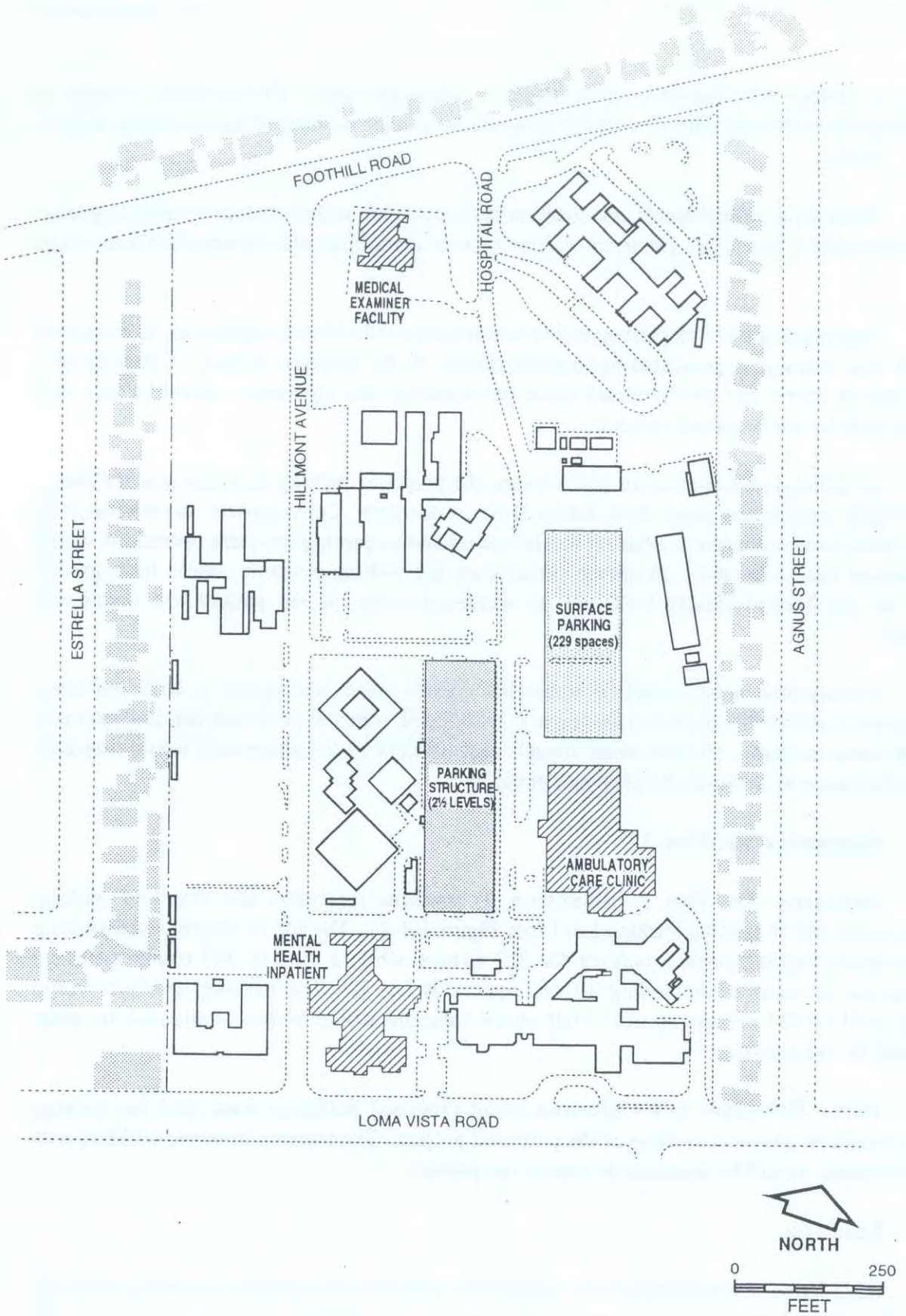
7.1.3 Alternative Site Plan 2

Alternative Site Plan 2 (Alternative 2) involves relocating the proposed parking structure to the site of existing Parking Lot I (see Figure 7.1-2). The site of the proposed parking structure would become surface parking for 229 spaces, while a total of 385 existing surface spaces would be removed (including all 162 spaces at Lot I). The parking structure would contain a total of 427 parking spaces. Half of the structure would be two levels and the other half would be three levels.

Under Alternative 2, the locations of all proposed buildings other than the parking structure would be identical to those of the proposed project. The increase in onsite building area and employment would be identical to that of the project.

7.1.3.1 Land Use

Alternative 2 would reduce the height of a portion of the proposed parking structure and would relocate the structure toward the center of the VCMC campus, away from the residences on Agnus Drive. The structure would therefore be largely outside the viewshed of



ALTERNATIVE 2
SITE PLAN

000124

7-8123

FIGURE 7.1-2

Agnus Drive residents. Consequently, the potential for adverse land use impacts would decrease to some degree under this alternative.

The ACC would, however, remain in the same location as proposed under the project. Potential conflicts associated with the ACC's building height and scale would therefore be the same as those of the proposed project. Because the five-story ACC is the primary cause of potential land use impacts associated with the proposed project, this alternative's primary land use impact would be the same. Nevertheless, the relocation of the proposed parking structure further from Agnus Drive residences and the reduction of its height would render this alternative's potential for land use impacts slightly lower than that of the proposed project.

7.1.3.2 Aesthetics/Shadow/Light & Glare

The two- and three-level parking structure that would be constructed under Alternative 1 would be west of the five-story ACC and would therefore largely be shielded from view from Agnus Drive properties. Consequently, the relocation of the structure away from the Agnus Drive residences under this alternative would reduce the potential for viewshed impacts associated with the structure. The potential for lighting impacts from the structure on Agnus Drive residences would also be reduced under this alternative.

The ACC would, however, remain in the same location as for the proposed project under this alternative. Consequently, the viewshed impacts associated with the ACC would be the same as those of the proposed project. The ACC's light and shadow effects on Agnus Drive residences would also be the same as those of the proposed project.

The proposed Medical Examiner facility would also be in the same location as that of the proposed project. Consequently, viewshed impacts would be the same. Construction of the facility would continue to be inconsistent with County and City policies related to the preservation of views from Foothill Boulevard.

Aesthetics, shadow, and light impacts associated with the parking structure would be somewhat lower under Alternative 1 while impacts associated with the ACC and the Medical Examiner facility would the same as those of the proposed project. Overall impacts would therefore be slightly lower under this alternative.

7.1.3.3 Transportation and Circulation

The increase in vehicle trips generated by Alternative 2 would be the same as that generated by the proposed project. No area roadways would be significantly affected. Impacts to the internal circulation system on the VCMC campus would also be about the same as those of the proposed project. Consequently, impacts to both the onsite and local offsite circulation system would be identical to those associated with the proposed project.

7.1.3.4 Air Quality

Implementation of Alternative 2 would entail the demolition of all buildings planned for demolition under the proposed project, as well as the replacement of existing 1.3-acre Parking Lot I with a parking two-level parking structure. Consequently, construction of this alternative would result in the disturbance of a greater overall area than would construction of the proposed project and overall fugitive dust emissions associated with construction activities would be somewhat greater.

The overall trip generation associated with Alternative 2 would be identical to that of the proposed project. Consequently, the increase in vehicular air emissions associated with this alternative would be the same as that associated with implementation of the proposed project and would be less than County thresholds.

The proposed parking structure would be located toward the center of the VCMC campus and away from sensitive residential uses. Therefore, the potential for an increase in CO concentrations at the Agnus Drive residences would be lower. However, under this alternative, the structure would be adjacent to the proposed Mental Health In-Patient Unit, thus potentially causing increased CO concentrations at that facility. In addition, because the ACC would be directly east of the structure, the prevailing westerly winds in the project vicinity may result in somewhat greater exposure of ACC employees and patients to increased CO concentrations. It should, however, be noted that the increase in CO concentrations would be less than significant under either this alternative or the proposed project.

Construction air quality impacts would be somewhat greater under Alternative 2, while emissions associated with long-term vehicular movement and the potential for exposure to increased CO concentrations would be about the same. Consequently, overall air quality impacts associated with this alternative would be slightly greater than those of the proposed project.

7.1.3.5 Noise

This alternative would entail slightly more construction activity than would the proposed project. As such, overall construction-related noise impacts would be somewhat greater.

Traffic and traffic-generated noise associated with implementation of Alternative 2 would be identical to that generated by the proposed project.

By locating the proposed parking structure toward the center of the campus and away from Agnus Drive residences, the potential for periodic adverse impacts related to peak noise levels from parking structure operations would be reduced. In addition, the ACC would be located between the parking structure and Agnus Drive properties, thus providing additional shielding from parking structure noise impacts. Parking structure noise impacts to the Mental Health Unit and the existing Hospital would, however, be somewhat greater under this alternative due to the closer proximity of the structure to those facilities.

Construction noise impacts would be slightly greater under this alternative while both traffic and parking structure-related noise impacts associated with Alternative 2 would be about the same as those of the proposed project. Consequently, overall noise impacts would be slightly greater.

7.1.4 Alternative Site Plan 3

Under Alternative Site Plan 3 (Alternative 3), the locations of the proposed ACC and Mental Health In-Patient Unit would be reversed (see Figures 7.1-3 and 7.1-4). The ACC would remain a five-story 105,000 square-foot structure, but would front Loma Vista Road. The Mental Health In-Patient Unit would remain at 31,003 square feet but would be located between the existing Hospital and the proposed parking structure. The site plans for these two structures under this alternative have not been determined.

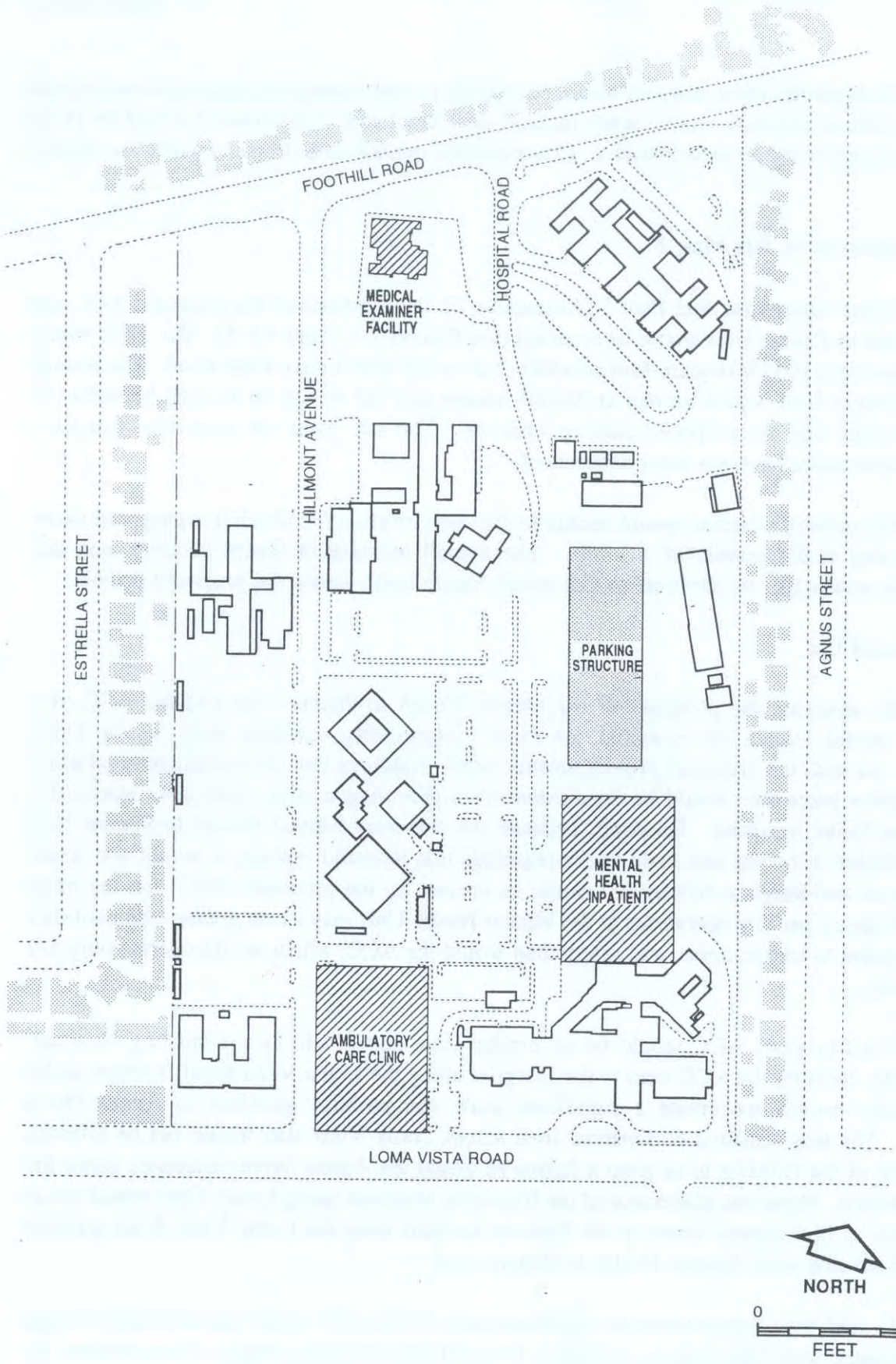
The parking structure would remain in the same location for which it is proposed under the project and would consist of 3 levels. The overall increase in onsite building area and employment would also be identical to that which would occur under the proposed project.

7.1.4.1 Land Use

By reversing the positions of the Mental Health In-Patient Unit and the ACC, this alternative would reduce the potential for scale compatibility conflicts with Agnus Drive residences. As with the proposed project, several onsite buildings that are immediately adjacent to Agnus Drive properties would be demolished, thus providing a more open environment for some Agnus Drive residents. However, because the one-story Mental Health In-Patient Unit would be similar in height and scale to the buildings that it would replace, it would not create the same scale and height conflicts that would be created by the proposed ACC. On the other hand, the 24-hours per day operations at the Mental Health Unit may cause greater compatibility problems related to traffic, noise, and safety than would the ACC, which would operate only 8-9 hours per day.

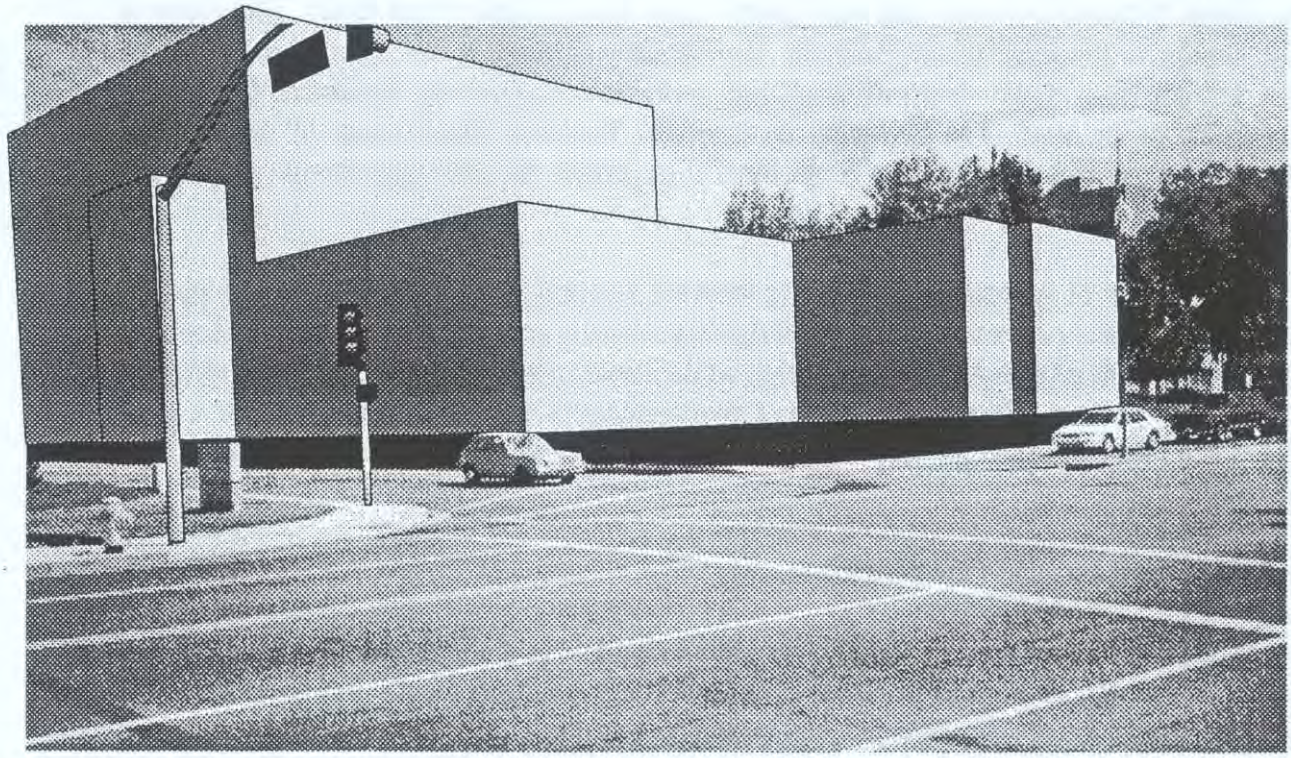
The five-story ACC would be of similar scale and height as the existing Hospital. Consequently, locating the ACC next to the Hospital along the Loma Vista Road frontage under this alternative would not create a significant scale compatibility problem to Agnus Drive residences. The less sensitive commercial uses across Loma Vista also would not be affected by the height of the building to as great a degree as would the Agnus Drive residences under the proposed project. However, placement of the five-story structure along Loma Vista would cause a greater loss of background views of the Ventura foothills from the Loma Vista Road corridor than would the one-story Mental Health In-Patient Unit.

As with the proposed project, implementation of the ACC under this alternative would not be consistent with City policies related to Hospital zone building height. Nevertheless, by locating the five-story ACC away from adjacent sensitive residential uses, this alternative would be more consistent with the local policies related to land use compatibility.



ALTERNATIVE 3
SITE PLAN

Existing view of the VCMC campus from the southwest corner of the intersection of Loma Vista Road and Hillmont Avenue. The Structure in the foreground is the existing HCA Business Office.



View following implementation of Alternative Site Plan 3. The building in the foreground is the Ambulatory Care Clinic. This illustration depicts massing effect only. Window treatment and landscaping are not shown.

ALTERNATIVE 3
PHOTO SIMULATION

000129

Alternative 3 would have fewer land use impacts than the proposed project from a policy consistency standpoint and about the same impact from a land use compatibility standpoint. Consequently, overall land use impacts associated with this alternative would be somewhat lower than those of the proposed project.

7.1.4.2 Aesthetics/Shadow/Light & Glare

The proposed Medical Examiner facility would be in the same location under this alternative as under the proposed project. The alteration of views from Foothill Road associated with the proposed Medical Examiner facility would continue to be inconsistent with City policies related to the preservation of the viewshed from that scenic corridor.

By relocating the ACC to the Loma Vista Road frontage, this alternative would eliminate the proposed project's primary impact to views from residences along the west side of Agnus Drive. The one-story Mental Health In-Patient Unit would not obstruct views from Agnus Drive properties, and would therefore have less visual impact. Although the Mental Health Unit would operate 24 hours per day, the effects of light and glare on Agnus Drive residences would also be somewhat less under this alternative due to the reduced building height of the Mental Health Unit.

The ACC, fronting Loma Vista Road, would be greater in scale than the Public Health building across Hillmont Avenue, and than nearby uses across Loma Vista Road. However, it would be similar to the scale of the Hospital, immediately adjacent to the east. Consequently, the scale and massing of the structure would not represent a significant departure from what currently exists in the area. The five-story ACC would, however, block views of the Ventura foothills to the north from Loma Vista Road more than would the one-story Mental Health In-Patient Unit.

The effects of Alternative 3 on views from the Foothill Road corridor would be similar to those of the proposed project. Aesthetic and lighting impacts to Agnus Drive residences would be reduced to some degree under this alternative while impacts to the Loma Vista Road corridor would be slightly greater. Because the Agnus Drive residences are more visually sensitive than the Loma Vista Road commercial corridor, overall aesthetic impacts are considered lower under this alternative.

7.1.4.3 Transportation and Circulation

Traffic generated by Alternative 3 would be identical to that generated by the proposed project. Consequently, impacts to the local offsite circulation system would also be identical to those associated with the proposed project and would be less than significant. Internal circulation impacts would also be similar to those of the proposed project. Overall transportation and circulation impacts would therefore be similar.

7.1.4.4 Air Quality

The area which would be disturbed during construction of Alternative 3 would be roughly the same as that disturbed under construction of the proposed project. As such, overall fugitive dust emissions associated with construction activities would be similar to that generated by the proposed project.

The overall trip generation associated with Alternative 3 would be identical to that of the proposed project. The increase in vehicular air emissions associated with this alternative would therefore be similar to that generated following implementation of the proposed project and would be less than County thresholds.

Under this alternative, the proposed parking structure would be the same size as that of the proposed project and would be in the same location. Consequently, the potential for an increase in carbon monoxide (CO) concentrations at the Agnus Drive residences and sensitive onsite uses would be the same.

Air quality impacts associated with project construction, long-term vehicular movement, and the proposed parking structure would be similar to those of the proposed project. Overall air quality impacts associated with Alternative 3 would therefore be the same as those which would be experienced under the proposed project.

7.1.4.5 Noise

Areas targeted for construction activity under Alternative 3 are the same as those in which construction would occur under the proposed project. Maximum noise levels experienced by adjacent receptors would therefore be similar. However, this alternative would locate the smaller Mental Health In-Patient Unit next to potentially affected noise sensitive residences along Agnus Drive rather than the five-story ACC. Therefore, the duration of construction-related noise impacts to Agnus Drive residents would be expected to be shorter under this alternative.

Traffic and traffic-generated noise associated with implementation of Alternative 3 would be identical to that generated by the proposed project. In addition, because the parking structure would be in the same location as under the proposed project, noise impacts associated with the structure would be the same.

Short-term construction impacts would be slightly lower under this alternative while long-term operational impacts would be about the same. Overall noise impacts associated with Alternative 3 would therefore be somewhat lower than those of the proposed project.

7.1.5 Alternative Site Plan 4

Under Alternative Site Plan 4 (Alternative 4), the Old Building of the VCMC Hospital (Building 306) would be demolished and the proposed ACC would be moved onto the site of that building and attached to the remaining Hospital facilities (see Figures 7.1-5 and 7.1-6). The ACC would be approximately 138,000 square feet and would consist of a basement and three above ground levels. The new structure would encompass all of the clinics proposed for the ACC, as well as the functions of the hospital facilities that would be removed.

The sites of the ACC and parking structure proposed under the project would become surface parking, and would accommodate up to 510 spaces. This would meet the additional 500-space demand that would exist following project implementation. Thus, no multi-level parking structure would be needed. The Mental Health In-Patient Unit and the Medical Examiner Facility would remain in the locations proposed under the project.

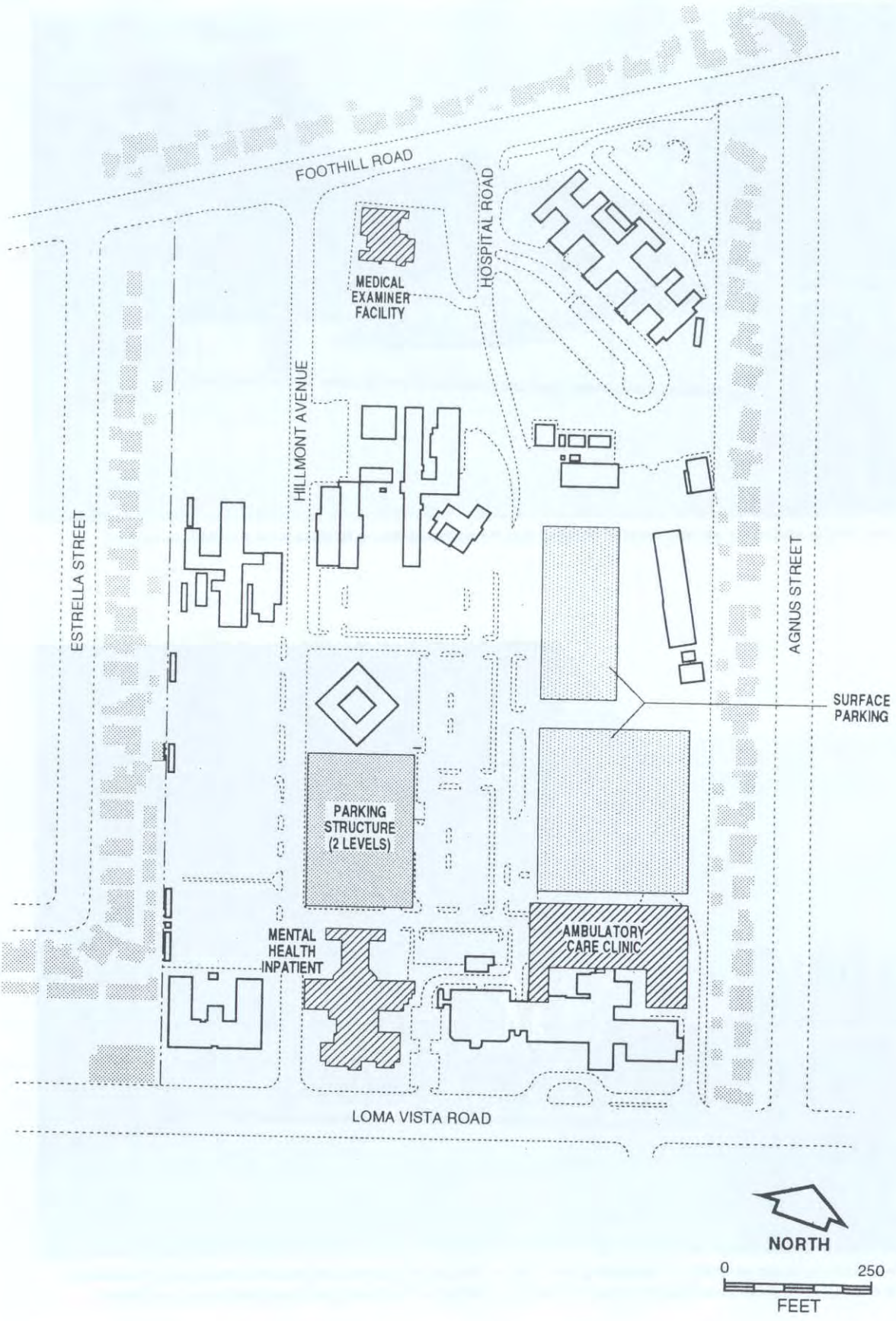
This alternative would entail the demolition of an additional 28,496 square feet of building area as compared to the project and the construction of an additional 33,000 square feet. Thus, the net increase in onsite building area would be 4,504 square feet greater than that which would occur under the proposed project, bringing the total increase to 66,619 square feet. The increase in onsite employment would be identical to that experienced under the proposed project.

7.1.5.1 Land Use

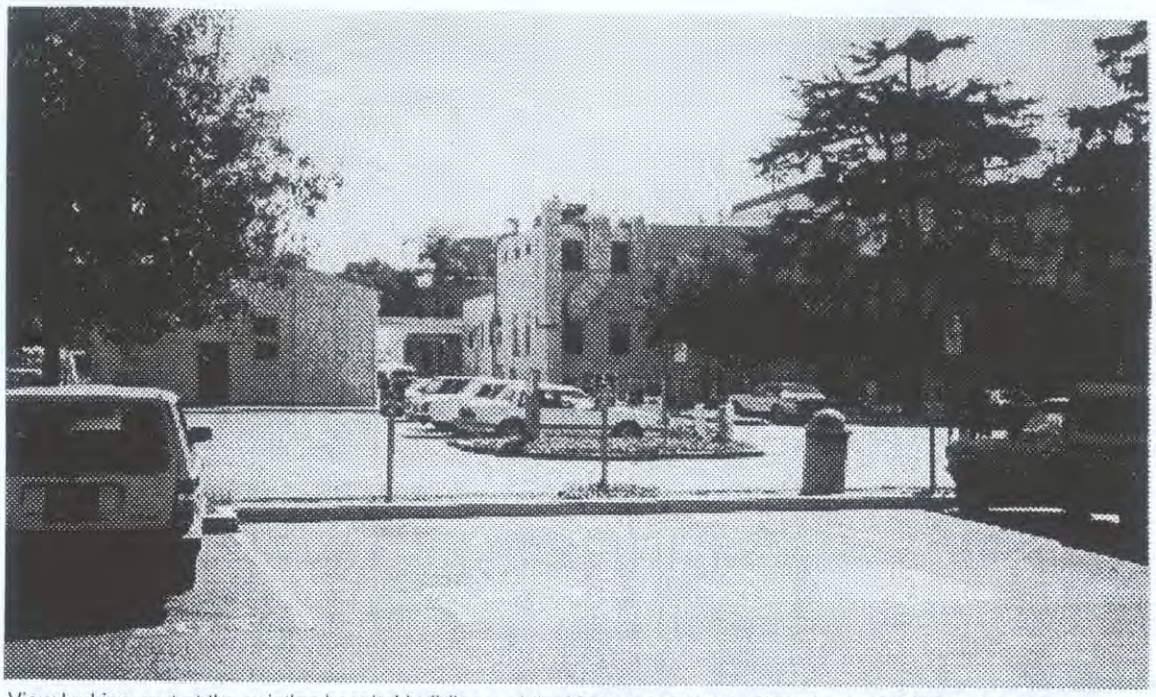
Under Alternative 4, the ACC structure would be three stories tall and would therefore be within the 45-foot (three-story) height limit for hospitals within the City of Ventura Zoning Ordinance. The ACC that would be constructed under this alternative could be considered incompatible with the use and scale of Agnus Drive residences, and therefore inconsistent with City land use policy. However, rather than adding a five-story structure on a site that currently houses one-story buildings, it would replace an existing structure of similar height. Consequently, no additional residences would be significantly affected.

Because this alternative would not include a multi-level parking structure, it would not present any potential new land use impacts associated with onsite parking. By comparison, portions of the proposed project structure would be visible from certain Agnus Drive residences while the structure would potentially generate compatibility problems related to noise impacts.

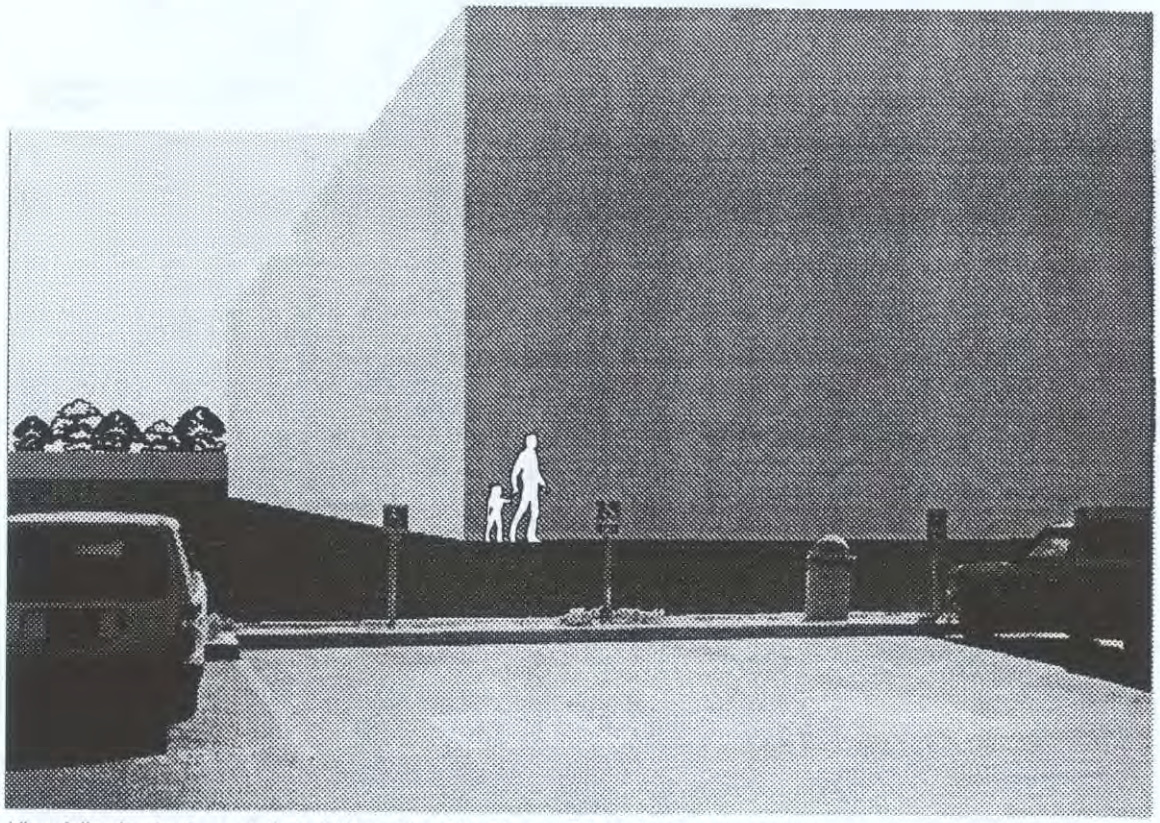
The three-story ACC and surface parking that would be constructed under Alternative 4 would have fewer land use impacts than would the proposed project's five-story ACC and three-level parking structure, from both compatibility and policy consistency standpoints. Consequently, overall land use impacts would be lower under this alternative.



ALTERNATIVE 4
SITE PLAN



View looking east at the existing hospital building and the kitchen & dining facilities from a VCMC parking lot.



View following implementation of Alternative Site Plan 4. The building in the foreground is the 3 story Ambulatory Care Clinic. This illustration depicts massing effect only. Window Treatment and Landscaping are not shown.

ALTERNATIVE 4
PHOTO SIMULATION

000134

FIGURE 7.1-6

7.1.5.2 Aesthetics/Shadow/Light & Glare

Impacts associated with the Medical Examiner facility and Mental Health In-Patient Unit would be identical to those of the proposed project. The Medical Examiner facility would continue to be inconsistent with City policies related to the preservation of views from the Foothill Road scenic corridor.

By moving the ACC onto the site of the existing Old Building of the VCMC Hospital and reducing the height of the building to three floors, visual impacts to Agnus Drive residences would be reduced. Under this alternative, the ACC would be located on a site which currently houses a building of similar height. Therefore, no loss of views would occur to adjacent Agnus Drive residents. In addition, the reduced building height would reduce the potential for light and glare impacts to some degree.

The three-level parking structure that would be constructed under the proposed project would not substantially alter views from Agnus Drive residences. By replacing the 3-level parking structure with surface parking, this alternative would eliminate any viewshed impacts associated with the structure. The potential for glare impacts from parked vehicles would be about the same as that of the proposed project but lighting impacts would be lower due to elimination of rooftop lighting for the structure.

This alternative would reduce visual, light, and glare impacts associated with the proposed ACC and parking structure. As such, it would have fewer overall aesthetic impacts.

7.1.5.3 Transportation and Circulation

The increase in onsite employment and offsite vehicle trips generated by Alternative 4 would be the same as that generated by the proposed project. Consequently, impacts to the local offsite circulation system would also be identical to those associated with the proposed project and no roadways would be significantly affected. Internal circulation impacts would also be identical to those of the proposed project. Overall transportation and circulation impacts would be comparable.

7.1.5.4 Air Quality

Because this alternative would entail the demolition of one additional structure (the Old Building of the Hospital) as compared to the proposed project, the area which would be disturbed during construction would be slightly greater. Consequently, overall fugitive dust emissions generated by project site construction activity under this alternative would be slightly greater than that generated by the proposed project.

The overall increase in vehicle trips to and from the site associated with Alternative 4 would be identical to that of the proposed project. The increase in vehicular air emissions

associated with this alternative would therefore be similar to that generated following implementation of the proposed project and would be less than County thresholds.

Under this alternative, proposed parking would be in approximately the same location as the proposed project's parking structure. Consequently, the impacts related to localized increases in carbon monoxide (CO) concentrations would be the same as those of the proposed project and would be less than significant.

Air quality impacts associated with long-term vehicular movement and the proposed parking structure would be similar to those of the proposed project while temporary impacts related to construction would be slightly greater. Therefore, overall air quality impacts associated with implementation of Alternative 4 would be slightly greater than those which would result from implementation of the proposed project.

7.1.5.5 Noise

Because it would entail the demolition and reconstruction of the Old Building of the VCMC Hospital, Alternative 4 would involve slightly more construction and slightly more demolition than the proposed project. Although noise levels experienced would be similar to those related to construction the proposed project, the duration of construction noise would be expected to be somewhat longer. Short-term construction noise impacts would therefore be slightly greater than those of the proposed project.

Traffic and traffic-generated noise associated with Alternative 4 would be identical to that generated by the proposed project. This alternative's parking lots would be in approximately the same location as the proposed parking structure. However, because residences along Agnus Drive would be shielded from noise to a greater degree under this alternative, noise impacts associated with parking would be slightly lower.

Short-term construction impacts would be slightly greater under Alternative 4 while long-term operational impacts would be slightly greater. Overall noise impacts associated with this alternative would therefore be about the same as those of the proposed project.

7.2 ALTERNATIVE SITES

Section 15126 of the *State CEQA Guidelines* state that an EIR must "describe a range of reasonable alternatives to the project, or to the location of the project, which could feasibly attain the basic objectives of the project." The California Supreme Court, in *Citizens of Goleta Valley v. Board of Supervisors* (1990), indicates that a discussion of alternative sites is needed if the project "may be feasibly accomplished in a successful manner considering the economic, environmental, social, and technological factors involved" at another site.

As suggested in *Goleta*, the alternative sites should be evaluated for feasibility according to the following criteria:

1) *Could the size and other characteristics of the site physically accommodate the project?*

2) *Is the site reasonably available for acquisition (sale or lease)?*

3) *Is the timing of carrying out the alternative reasonable for the applicant?*

4) *Is the project economically feasible on the site?*

5) *What are the land use designation(s) of the site?*

6) *Does the lead agency have jurisdiction over the site?*

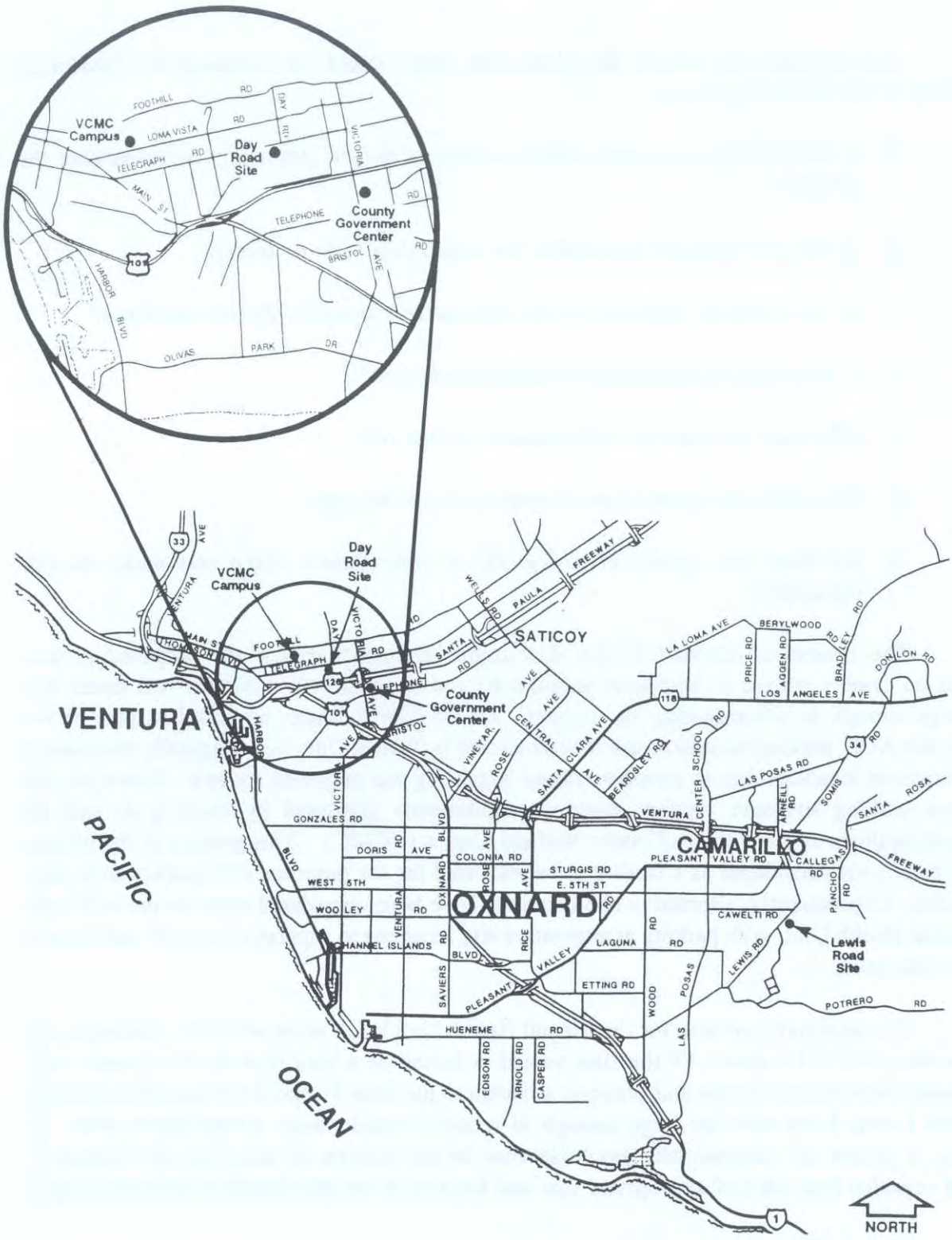
7) *Are there any social, technological, or other factors which may make the site infeasible?*

The review of alternative sites that might be considered for the proposed project focused on County owned or long term leased sites and commercially available real estate that was large enough to accommodate the project. Of the four facilities proposed as part of the project, the ACC, parking structure, and Mental Health In-Patient Unit were originally considered for alternative locations due to concerns raised regarding the proposed project. However, the proposed parking structure supports parking requirements generated by existing as well as proposed facilities at the Ventura County Medical Center (VCMC). This portion of the project was therefore not considered as a facility to be relocated for the purposes of the alternative sites discussion. Consequently, alternative site locations have been considered only for the ACC and the Mental Health Unit, with parking at alternative site locations to support only ACC and Mental Health Unit needs.

The minimum site size for the Mental Health Unit is 1.8 acres while the minimum site size for the ACC is 3.2 acres. Of the sites owned or leased on a long term by the County, only the County Government Center and property adjacent to the State Hospital in Camarillo (referred to as the Lewis Road site) are large enough to receive consideration as alternative sites. In addition, a review of commercially available sites in the vicinity of the cities of Ventura or Oxnard revealed four sites of appropriate size and location to be considered as alternative sites.

7.2.1 County Owned/Leased Sites

The two county sites considered are the 80-acre County Government Center and a 44-acre property adjacent to the Camarillo State Hospital on Lewis Road that is currently on long-term lease by the County. The Government Center is located at 800 South Victoria Avenue in



ALTERNATIVE SITE LOCATIONS

FIGURE 7.0-1

the City of Ventura, approximately four miles east of the proposed project site. The Lewis Road site is located at the intersection of Cawelti and Lewis Road in the unincorporated area of Ventura County. It is approximately 14 miles southeast of the proposed project site (see Figure 7.2-1). The most likely site for future development at the Government Center is the parking area due east of the Hall of Justice Courts Building. At the Lewis Road site, the southeast quadrant of about 10 acres could potentially be developed.

The following discussion analyzes the feasibility of implementing the proposed project at these two sites, according to the factors identified in Goleta.

1) *Could the size and other characteristics of the sites physically accommodate the project?* Both the Government Center and Lewis Road sites are large enough to physically accommodate the proposed ACC or Mental Health Unit projects. Both sites are also relatively flat and pose no constraints to development.

2) *Is the site reasonably available for acquisition (sale or lease)?* The site at the Government Center is owned by the County and is therefore reasonably available. The site at Lewis Road is on a 50-year lease which will expire in 2040. Consequently, it is also reasonably available for development.

3) *Is the timing of carrying out the alternative reasonable for the applicant?* The construction of the Mental Health Unit is projected to begin in January 1994. Currently allowed uses of the Lewis Road site include housing or the operation of residential care. Therefore, the lease between the state and Ventura County would have to be modified by legislative action and the facility design would need to be altered to adapt to the site. Consequently, project implementation, if allowed at all, would be delayed and the County's needs would not be met. Therefore, the timing of carrying out the project at this alternative site does not appear to be reasonable. The ACC design would also have to be site adapted, thereby delaying the design completion and 1995 construction start at the Lewis Road site.

   At the Government Center the two facilities would also have to be redesigned and site adapted to the alternative site, causing unreasonable delays for the construction of the Mental Health Unit, and perhaps the ACC.

4) *Is the project economically feasible on the site?* One of the primary reasons for locating the projects on the VCMC campus is the concentration of population and urban infrastructure in the area, including private medical practices. The Lewis Road alternative site is a rural and agricultural area located a relatively long distance from any urban center. Thus, implementation of the project at that location would increase costs associated with commuting and transportation. For these reasons, the proposed project is not economically feasible at the Lewis Road site.

The Government Center site is in an urban setting which has commuting and transportation advantages that the Lewis Road site does not have. The Government Center is, however, a densely populated and developed site and the infrastructure impact of placing either or both of the projects at this site would be considerable. The combination of losing existing parking spaces to site the project(s) and increased traffic and parking generated by the project(s) would require significant upgrades to parking capacity, and to secondary and interior roads serving the Government Center. For this reason, implementation of the project at this site is not economically feasible.

For either of the sites there is an additional economic burden on the project(s). The location of these projects at the VCMC affords use of the other health care services which are either required by medical licensing or highly desirable for effective and efficient health care. Blood bank, blood typing, medical laboratory, cafeteria, dietary food services, emergency room services, and other functions are essential or highly desirable services which would have to be duplicated to some degree at these other sites to adequately support the project(s).

5) *What are the land use designation(s) of the site?* The Lewis Road site is zoned as State/Federal Facility. The State Department of General Services has leased the property which is within the boundaries of Camarillo State Hospital to Ventura County for the purposes of constructing housing or operating residential care services. The site is within the Area of Interest for the City of Camarillo but outside the City's Sphere of Influence. Under the Ventura County Guidelines for Orderly Development, urban development is allowed outside a city's sphere of influence only at the discretion of the County of Ventura. For these reasons, implementation of the project at the Lewis Road site would be inconsistent with County land use policy.

   The Ventura County Government Center is located within the City of Ventura and its Sphere of Influence and is zoned as R1-1AC (Residential - 1 Acre). Among other things, this zoning allows governmental services including municipal and county administrative functions and is a permitted use by right. The proposed project would be consistent with this zoning.

6) *Does the lead agency have jurisdiction over the site?* The Public Works Agency of the County of Ventura is the lead agency for the proposed project. In as much as the Lewis Road site is leased from the State, the lead agency does not have jurisdiction over that site. The Government Center site is within the jurisdiction of the lead agency.

7) *Are there any social, technological, or other factors which may make the site infeasible?* There are factors which disadvantage both alternative sites for either

project. The Mental Health In-patient service operates under the medical license of the General Hospital at the VCMC and insures immediate access to acute primary medical treatment for mental health patients. This treatment is not available at either of the alternative sites, thereby making the project not medically licensable without additional extensive facilities. At either site Mental Health Services would be a split operation between the out-patient and administrative services at the VCMC and the in-patient services at an alternative location. This would create operational inefficiencies that would not occur if the In-patient unit was constructed at the VCMC campus.

In regard to the ACC, the VCMC has established several satellite primary care clinics in the County and is in the development stage for several more clinics. The County Health Care Agency direction is to provide more localized access to primary care for the County through these satellite clinics and concentrate on the more specialized primary care out-patient services at the VCMC. The Ambulatory Care Clinic would fulfill that specialized care with ready access to more specialized services at the VCMC. At either alternative site location, this direction in health care treatment is negated.

Specifically at the Lewis Road site on State leased land, the siting of the Mental Health In-patient Unit would classify the unit as a public institution. As a public institution, acute psychiatric hospitalization is not Medicaid reimbursable. Given that over 50% of the unit patients are Medicaid recipients, location of the Mental Health Unit at the Lewis Road site is infeasible.

At the Government Center, the primary issue for both projects is the mixing of governmental functions at a single site. Unlike the Lewis Road site, the Government Center is a center of Administrative and Judicial business for the county. The addition of health care services for the County at the Government Center and the splitting up of those services from the VCMC is inefficient, and in the case of the Mental Health Unit, potentially incompatible. Given the anxiety and disorientation of many of the mental health patients, their participation in the programs is partially based on the neutrality or comfortable atmosphere of the facility's setting. Placing the primary mental health in-patient service adjacent to the main judicial and pre-trial detention services for the County could effectively discourage much of the voluntary patient participation and use of the facility.

Implementation of the project(s) as proposed at either of the two county owned/leased sites would be infeasible as discussed above for the following reasons:

Lewis Road Site - 1) The timing is not reasonable for the applicant; 2) the projects would not be economically feasible; 3) the projects would not be allowed under current land use designation in the lease; 4) the lead agency does not have jurisdiction over the site; and 5) the site would split the operation of health care services, thereby

reducing efficient delivery of services and the desirable synergistic effects of consolidated specialized medical facilities at the VCMC.

County Government Center - 1) The timing is not reasonable for the applicant; 2) the projects would not be economically feasible; and 3) the site would split the operation of health care services, thereby reducing efficient delivery of services and the desirable synergistic effects of consolidated specialized medical facilities at the VCMC.

7.2.2 Commercially Available Sites

A list of commercially available sites was compiled using the following parameters:

- The site would be undeveloped other than utility or street access.
- The site would be within or immediately adjacent to the cities of Oxnard or Ventura.
- The site would be 2 to 5.5 acres in size.
- The site was or could be zoned for medical uses as contemplated under the project.

Based on the first three criteria, four sites were available. However, of these four, only one may currently allow medical uses. For this reason, as well as because of its appropriate size for both facilities and because it is the closest of the four to VCMC campus, this site was chosen as representative of commercially available sites for the purposes of analysis. The site is a 5.22-acre parcel at the intersection of Telegraph and Day Road in Ventura and will hereafter be referred to as the Day Road site. The site is in the City of Ventura, one mile east of the VCMC and across the street from the eastern half of the Ventura College campus (see Figure 7.2-1).

The following discussion analyzes the feasibility of implementing the proposed project at the Day Road site, according to the factors identified in *Goleta*.

1) *Could the size and other characteristics of the site physically accommodate the project?* The Day Road site encompasses 5.22 acres of relatively flat land. The size and other characteristics of the site could physically accommodate both the Mental Health Unit ACC.

2) *Is the site reasonably available for acquisition (sale or lease)?* The site is on the real estate market for sale and is therefore reasonably available.

3) *Is the timing of carrying out the alternative reasonable for the applicant?* The designs of the two projects would have to be site adapted to conform to the new site. In the case of the Mental Health Unit, this would result in an unavoidable delay to the project construction start date of January 1994. Site adaptation of the ACC would cause a delay in completing the design and the final design would not be complete in time to be eligible for supplemental state project funding under SB 1732. Therefore, the timing of carrying out the projects at this alternative site does not appear to be reasonable.

4) *Is the project economically feasible on the site?* The site is essentially undeveloped and would require infrastructure beyond the scope of the currently proposed project to adequately support both the ACC and Mental Health Unit. The land cost would add about $2.3 million to the costs of the projects as originally proposed. For these reasons, implementation of the proposed project is not economically feasible at the Day Road site.

5) *What are the land use designation(s) of the site?* The entire site is currently zoned by the City of Ventura as R1-7 (Residential-Single Family 7,000 square-foot minimum lot size). In the City's Comprehensive Plan Updated to the Year 2010, this site is further designated as PMXD (Planned Mixed Use Development). Hospitals and professional office buildings would be allowed under this zoning and land use designation.

6) *Does the lead agency have jurisdiction over the site?* The entire Day Road site is within the City of Ventura. Therefore, the lead agency, County of Ventura, Public Works Agency, currently has no jurisdiction over the site. If, however, the site were purchased by the County, the lead agency would have jurisdiction.

7) *Are there any social technological, or other factors which may make the site infeasible?* There are disadvantages to siting either facility at the Day Road site which are similar to those associated with siting the project at the Lewis Road or Government Center sites. Mental Health Unit licensing at a location other than the VCMC would require additional extensive facilities over those included in the proposed project scope. Operations at Mental Health Services would also be split between the VCMC and this site, thus creating operational inefficiencies that would not occur under the proposed project. Development of the ACC at a site other than VCMC negates the advantages of the concept of satellite clinics with more specialized treatment of out-patients at the VCMC in the ACC.

Implementation of the project as proposed at the Day Road site would be infeasible, as discussed above, for the following three reasons:

1) The timing does not appear to be reasonable for the applicant.

2) The project is not economically feasible.

3) The site would split the operation of health care services, thereby reducing efficient delivery of services and the desirable synergistic effects of consolidated specialized medical facilities at the VCMC.

7.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The *State CEQA Guidelines* require identification of the Environmentally Superior Alternative among those alternatives analyzed. Because no offsite alternatives to the proposed project were found to be feasible, this analysis will focus on the onsite alternatives discussed in Section 7.1.

Table 7.3-1 presents a comparison of the impacts of each alternative to those of the proposed project for all of the environmental issue areas studied in this EIR. As the figure illustrates, all of the alternatives would be superior to the proposed project from a land use standpoint while all other than the No Project Alternative would be superior in terms of aesthetic impact. Only the No Project Alternative and Alternative 1 would be superior from a transportation standpoint and only the No Project Alternative would be superior for air quality and noise.

Table 7.3-1. Comparison of Onsite Alternatives to the Proposed Project

Alternative	Land Use	Aesthetics/ Shadow/ Light and Glare	Transportation and Circulation	Air Quality	Noise
No Project	-	=	=	-	-
Alternative 1	-	-	-	=	=
Alternative 2	-	-	=	+	+
Alternative 3	-	-	=	=	=
Alternative 4	-	-	=	+	=

\- Impact is lower than that of the proposed project.
= Impact is the same as that of the proposed project.
\+ Impact is greater than that of the proposed project.

Table 7.3-2 presents the environmentally superior alternative for each issue area. As the figure shows, the No Project Alternative would be the environmentally superior alternative for air quality and noise, while Alternative 4 would be environmentally superior for land use and aesthetics, and Alternative 1 would be superior from a transportation standpoint. Because the No Project Alternative would be environmentally superior for two issues and would not have impacts greater than those of the proposed project for any issue (see Figure 7.3-1), it is considered the overall Environmentally Superior Alternative. Among the remaining alternative scenarios, either Alternative 4 (as the overall superior alternative for two areas) or Alternative 1 (as the overall

superior for one area and the superior among the remaining alternatives for two areas) could be considered the overall superior alternative. However, Alternative 4 is selected as the Environmentally Superior Alternative among the remaining scenarios because the issues for which its impacts are relatively high (air quality, noise) are temporary in nature while its relatively beneficial land use and aesthetic impacts would be permanent.

Table 7.3-2. Environmental Superior Alternative

Alternative	Land Use	Aesthetics/ Shadow/ Light and Glare	Transportation and Circulation	Air Quality	Noise
Proposed Project					
No Project				+	+
Alternative 1			+	✓	✓
Alternative 2					
Alternative 3				✓	✓
Alternative 4	+	+			

\+ Environmentally superior alternative for a given issue area.

✓ Environmentally superior alternative among the remaining alternatives if the No Project Alternatives is superior overall.

7.4 ALTERNATIVES VIABILITY

This subsection discusses the capability of each of the onsite project alternatives to meet the objectives of the proposed project, as described in Sections 3.5 and 3.6 of the Project Description. The discussion has been provided by the County Health Care Agency.

7.4.1 No Project

The No Project Alternative perpetuates the inefficient delivery of health care services in facilities that are seismically unsafe, operationally inefficient and difficult to maintain. The excessive age and condition of these existing facilities is a significant detractor to the quality care deserved by the public and the no project alternative is not considered a viable option.

The No Project Alternative also continues the ineffective and inconvenient parking situation on the campus for patients, as well as health care professionals, through the excessive dispersal of parking spaces throughout the campus.

7.4.2 Alternative Site Plan 1

Alternative 1 would have a significant impact on the ability of the Mental Health Services to carry out its services. The location of the two-level parking structure would eliminate several key permanent buildings which the Mental Health Services was relying upon to use. The buildings that would be removed are to provide meeting, training, and conference room space for

the entire staff which is not available in the new proposed project nor in any other building in the Mental Health Services. Also eliminated would be the main reception building for visitors to the Mental Health Services department and the staff of the administrative and support services of the department. This alternative for a two-story versus a three-story parking structure would diminish the beneficial effects of consolidating 500 parking spaces in one location, as discussed in the Project Objectives/Needs. This alternative would also have the detrimental effect of placing the parking structure immediately adjacent to an inpatient acute care function. The patients at this facility can be expected to be abnormally sensitive to noise and light as compared to the thresholds of other than acutely ill mental health patients.

7.4.3 Alternative Site Plan 2

Alternative 2 would have the same diminishment of beneficial effects for the campus parking situation as noted under Alternative 1. The parking structure site for this alternative is also a less efficient shape for easily negotiable parking. However, by moving the two and one-half story parking structure farther away from the Mental Health Inpatient Unit project, the impact of noise and light on the patients at the Unit would be somewhat reduced beyond that noted in alternative Site Plan 1.

7.4.4 Alternative Site Plan 3

Alternative 3 would not meet several of the project objectives for the ACC and the Mental Health In-Patient Unit. Placing the ACC away from the main hospital would require the duplication of medical laboratory and blood bank services in the hospital and in the ACC. The location of the kitchen and dietary functions away from the hospital would also increase the cost of delivering these services. The ACC location would also diminish the delivery of health care services and the immediate access of staff and patients between the ACC and hospital. Overall this alternative increases the cost of design and construction of the project and the cost of operations and maintenance for the facilities.

In addition, this alternative would not meet primary objectives of the Mental Health Unit expansion. The unique and distinctive character of mental health care services dictates development of facilities in the immediate vicinity of the hospital in physically separate buildings but within easy and immediate access to the emergency room of the hospital. This alternative location would place the Mental Health Unit as a part of the hospital and without immediate access to the emergency room for patients and the Mental Health Services crisis intervention teams.

7.4.5 Alternative Site Plan 4

Alternative 4 would not meet the project objective of the Ambulatory Care Clinic to improve the delivery of health services within the near future. The removal of a significant portion of the existing hospital and the services and support contained therein in addition to the temporary relocation of functions as a result of the parking project would cause an unacceptably

high level of disruption of medical services. In addition, the cost of relocating these health services for about 2 years as well as the additional demolition, design and construction costs would make this alternative economically infeasible. The use of strictly surface parking at the VCMC does not meet the project objective of consolidating parking and reducing driving and walk time as well as more effective land use and traffic distribution.

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8.2 PERSONS CONTACTED

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Goldstein, David, County of Ventura, Solid Waste Management Department
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APPENDIX 1.2
NOTICE OF PREPARATION/
INITIAL STUDY

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NOTICE FOR PUBLIC AGENCIES

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

To: _____ (Agency)
_____

_____ (Address)

From: County of Ventura
Public Works Agency
800 S. Victoria Avenue
Ventura, CA 93009

Contact: Alec T. Pringle
Project Manager
Engineering Services Division
(805) 654-2083

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

The potential environmental effects of the project are contained in the Initial Study, a copy of which is included herein. It is also available at the Public Works Agency, Engineering Services Division. The potential impact issues identified in the Initial Study include: land use, air quality, noise, aesthetics, and transportation/circulation.

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

Please send your response to Alec Pringle at the address shown above. We will need the name of the contact person at your agency.

PROJECT TITLE: Ventura County Medical Center Expansion

PROJECT LOCATION: The project area encompasses acres entirely within the City of San Buenaventura. The site measures approximately 40 acres and is located at 3291 Loma Vista Road. It is bordered by Foothill Road on the north, Loma Vista Road on the south, eastern property lines of properties fronting the east side of Estrella Street on the west, and western property lines of properties fronting the west side of Agnus Drive on the east. The project area is bisected by Hillmont Avenue, which runs north to south between Foothill and Loma Vista Road.

PROJECT DESCRIPTION: The proposed project involves the redevelopment of the VCMC campus to provide improved medical and coroner facilities, as well as increased parking capacity. The project would entail the demolition or removal of 79,425 square feet of existing facilities and the construction of 157,558 square feet of new facilities. The net increase in building floor area on the campus would be 78,133 square feet. A 564-space parking structure would also be constructed while 186 existing surface spaces would be removed, thereby resulting in a net increase of 378 parking spaces.

Facilities to be demolished or removed would include the Women's Clinic, the Family Care Module, the Family Care Center, the former PSSA building, the Genetics trailer, a Health Department trailer, a childcare center, a storeroom, and the kitchen, conference, maintenance, and dishwashing facilities contained in the north wing of the Hospital.

Facilities that would be added or expanded as part of the proposed project are described below.

Mental Health In-Patient Unit. This component of the project would involve the construction of a one-story, 31,003 square-foot in-patient unit. The new Mental Health Unit would include three patient wings with a total capacity of 43 beds (a 15-bed expansion over the existing facility), a nurses' station, group rooms, a new occupational therapy room, and recreational areas.

Ambulatory Care Clinic. The Ambulatory Care Clinic would involve the demolition or removal of twelve on-site facilities totalling 43,475 square feet and construction of a four- or five-story, 118,755 square foot clinic. The net increase in floor area would therefore be 75,280 square feet. The Ambulatory Care Clinic is expected to be composed of various clinics, a lab, dietary facilities, and a cafeteria.

Medical Examiner Facility. This portion of the project would involve the construction of a new 7,800 square foot office/clinic building with associated site development. The project would house offices and associated facilities for three doctors, eight investigators, two secretaries, and an autopsy assistant, as well as an autopsy room, a morgue, a laboratory, storage spaces, and related public areas.

Parking Structure. The proposed project includes the addition of one five-level parking structure with 564 parking spaces. Construction of all components of the proposed project would result in the loss of 186 existing surface spaces; therefore, the net parking space increase would be 378 spaces.

Date: _____ Signature: _____

Alec T. Pringle
Project Manager
(805) 654-2083

INITIAL STUDY
For The
VENTURA COUNTY
MEDICAL CENTER EXPANSION

Prepared For:

COUNTY OF VENTURA PUBLIC WORKS AGENCY

May 1993

INITIAL STUDY
For The
VENTURA COUNTY
MEDICAL CENTER EXPANSION

* * * * *

Prepared For:

COUNTY OF VENTURA
PUBLIC WORKS AGENCY
800 South Victoria Avenue
Ventura, California 93009

* * * * *

Prepared By:

FUGRO-McCLELLAND (WEST), INC.
2140 Eastman Avenue / Ventura, California 93003

May 1993

Job Number 9261-5007

CONTENTS

		Page
1.0	PROJECT DESCRIPTION	1-1
1.1	Project Proponent	1-1
1.2	Project Location	1-1
1.3	Existing Facilities	1-1
1.4	Proposed Actions	1-5
1.5	Project Objectives	1-8
1.6	Project Need	1-9
1.7	Project Design Features	1-10
2.0	INITIAL STUDY CHECKLIST	2-1
3.0	DISCUSSION OF RESPONSES TO CHECKLIST	3-1
3.1	General Plan Environmental Goals and Policies	3-1
3.2	Land Use	3-1
3.3	Air Quality	3-2
3.4	Water Resources	3-4
3.5	Mineral Resources	3-5
3.6	Biological Resources	3-6
3.7	Agricultural Resources	3-7
3.8	Visual Resources	3-8
3.9	Paleontological Resources	3-13
3.10	Cultural Resources	3-13
3.11	Energy Resources	3-14
3.12	Coastal Beaches and Sand Dunes	3-14
3.13	Seismic Hazards	3-14
3.14	Geologic Hazards	3-17
3.15	Hydraulic Hazards	3-18
3.16	Aviation Hazards	3-19
3.17	Fire Hazards	3-19
3.18	Hazardous Materials/Waste	3-20
3.19	Noise and Vibration	3-20
3.20	Light and Glare	3-22
3.21	Traffic and Circulation	3-25
3.22	Water Supply	3-27
3.23	Waste Treatment/Disposal	3-29
3.24	Utilities	3-32
3.25	Flood Control/Drainage	3-33
3.26	Law Enforcement	3-33

CONTENTS (Continued)

		Page
3.27	Fire Protection	3-34
3.28	Education	3-35
3.29	Recreation	3-35
4.0	MANDATORY FINDINGS OF SIGNIFICANCE	4-1
5.0	DETERMINATION OF ENVIRONMENTAL DOCUMENT	5-1
6.0	LIST OF PREPARERS/PERSONS CONTACTED	6-1
7.0	REFERENCES	7-1

LIST OF APPENDICES

A	AIR QUALITY
B	NOISE
C	SOLID WASTE GENERATION

LIST OF FIGURES

Figure		
1.2-1	Regional Location	1-2
1.2-2	Project Location	1-3
1.3-1	VCMC Facilities	1-4
1.4-1	Structures to be Demolished	1-6
1.4-2	Draft Site Plan	1-7
3.8-1	Existing Views	3-9
3.8-2	Existing Views of the VCMC Campus	3-10
3.8-3	Potential View Impacts From The Proposed Medical Examiner Facility	3-12
3.13-1	Ventura Fault and Special Study Zone Location	3-16
3.20-1	Day vs. Night Visual Character	3-23
3.20-2	Nighttime Lighting Impacts	3-24

LIST OF TABLES

Table

1.3-1	Existing VCMC Facilities By Land Use	1-1
1.4-1	Proposed Ambulatory Care Clinic Facilities	1-8
3.21-1	PM Peak Hour LOS Summary Table Ventura County Medical Center Expansion	3-26
3.23-1	Current Solid Waste Generation	3-30

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1.0 PROJECT DESCRIPTION

1.1 PROJECT PROPONENT

County of Ventura
Public Works Agency
800 South Victoria Avenue
Ventura, CA 93009

1.2 PROJECT LOCATION

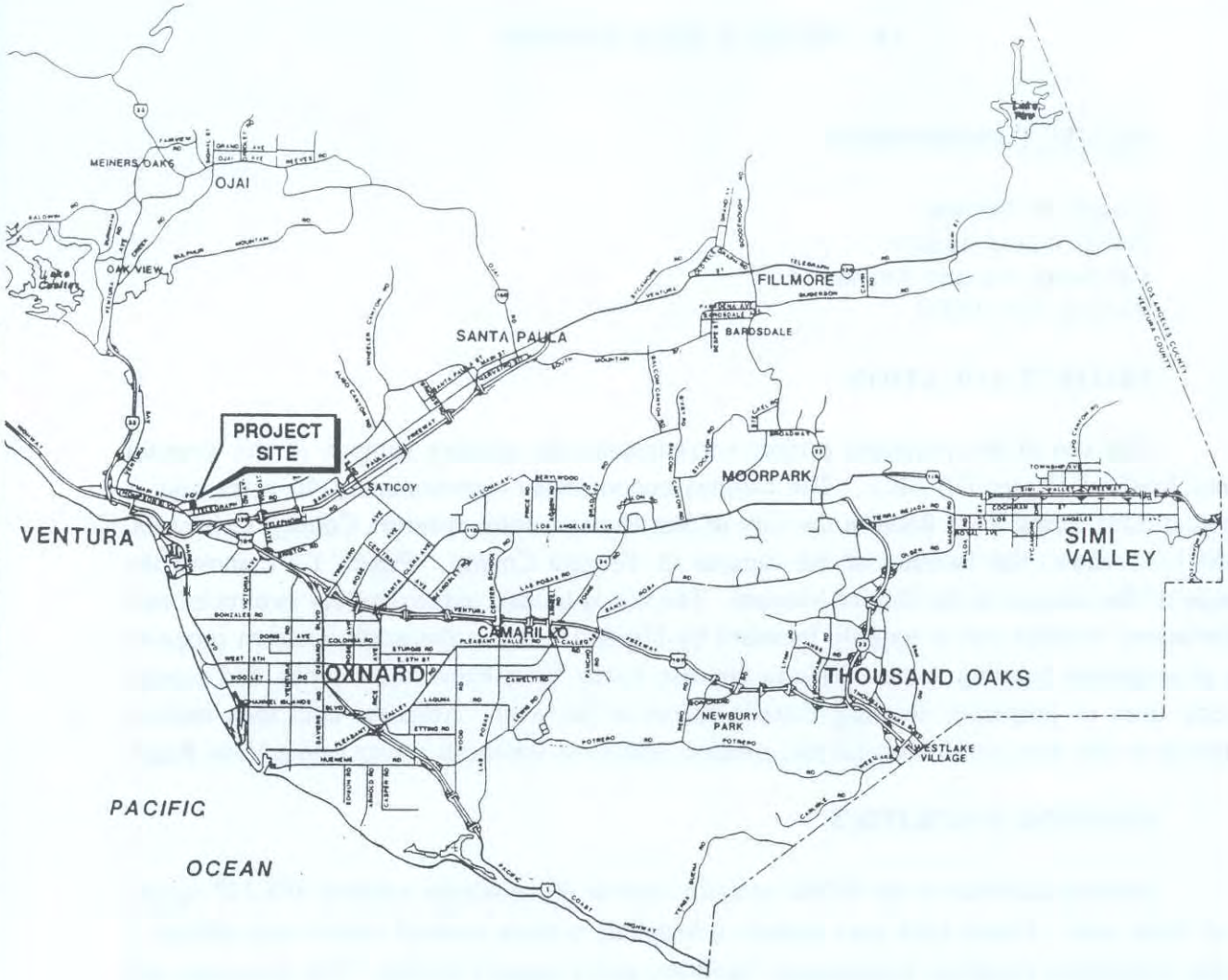
The site of the proposed project encompasses the existing campus of the Ventura County Medical Center (VCMC). The campus encompasses approximately 40 acres and is located at 3291 Loma Vista Road in the City of San Buenaventura, Ventura County, California. Figure 1.2-1 shows the location of the campus in Ventura County. Figure 1.2-2 shows the location of the campus in the City of Ventura. The site is located approximately two miles east of downtown Ventura and is roughly bounded by Foothill Road to the north, western property lines of properties fronting Agnus Drive to the east, Loma Vista Road to the south, and eastern property lines of properties fronting Estrella Street to the west. Adjacent land uses include residences to the west, north and east and medical offices to the south across Loma Vista Road.

1.3 EXISTING FACILITIES

Existing facilities at the VCMC campus include 60 structures totalling 398,157 square feet of floor area. Onsite land uses include a hospital, various medical clinics and offices, a juvenile corrections complex, maintenance facilities, and a laundry facility. The structures and facilities on the proposed site can be grouped into eight complexes, based on location within the site and activity. These groupings are listed in Table 1.3-1 and are illustrated in Figure 1.3-1.

Table 1.3-1. Existing VCMC Facilities By Land Use

Facility	Land Use	Floor Area (sq ft)
Hospital	Hospital	178,995
PSSA Building (formerly HCA Business Offices)	Offices	25,140
Public Health	Medical Offices	18,312
Mental Health Complex	In-Patient Medical Care	37,655
Family Care Complex	Medical Offices	32,555
Plant Operations	Offices/Maintenance	30,581
Bard Building	Office/Medical Office	24,754
Juvenile Complex	Corrections Facility	50,165
TOTAL		**398,157**



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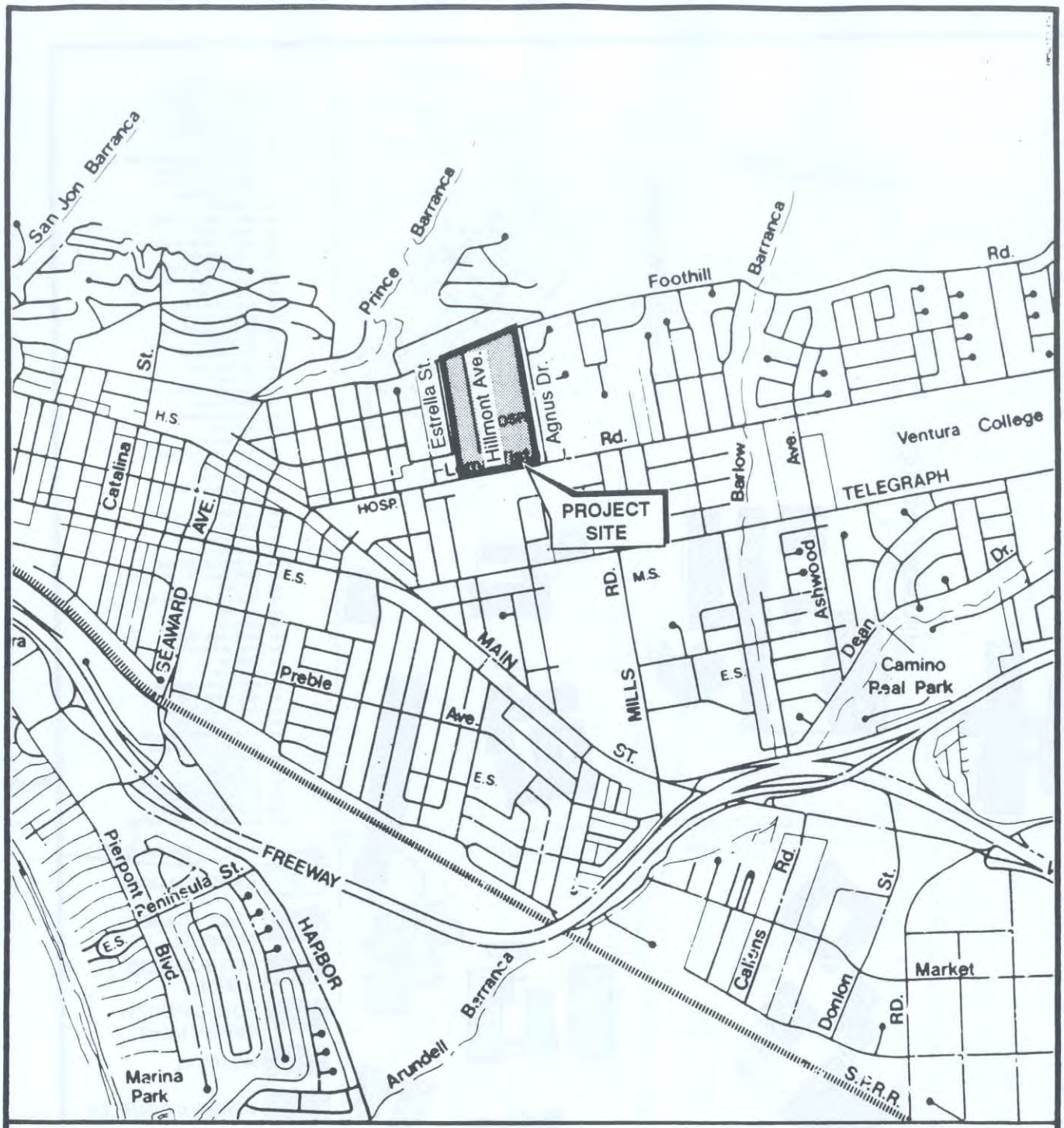
REGIONAL LOCATION



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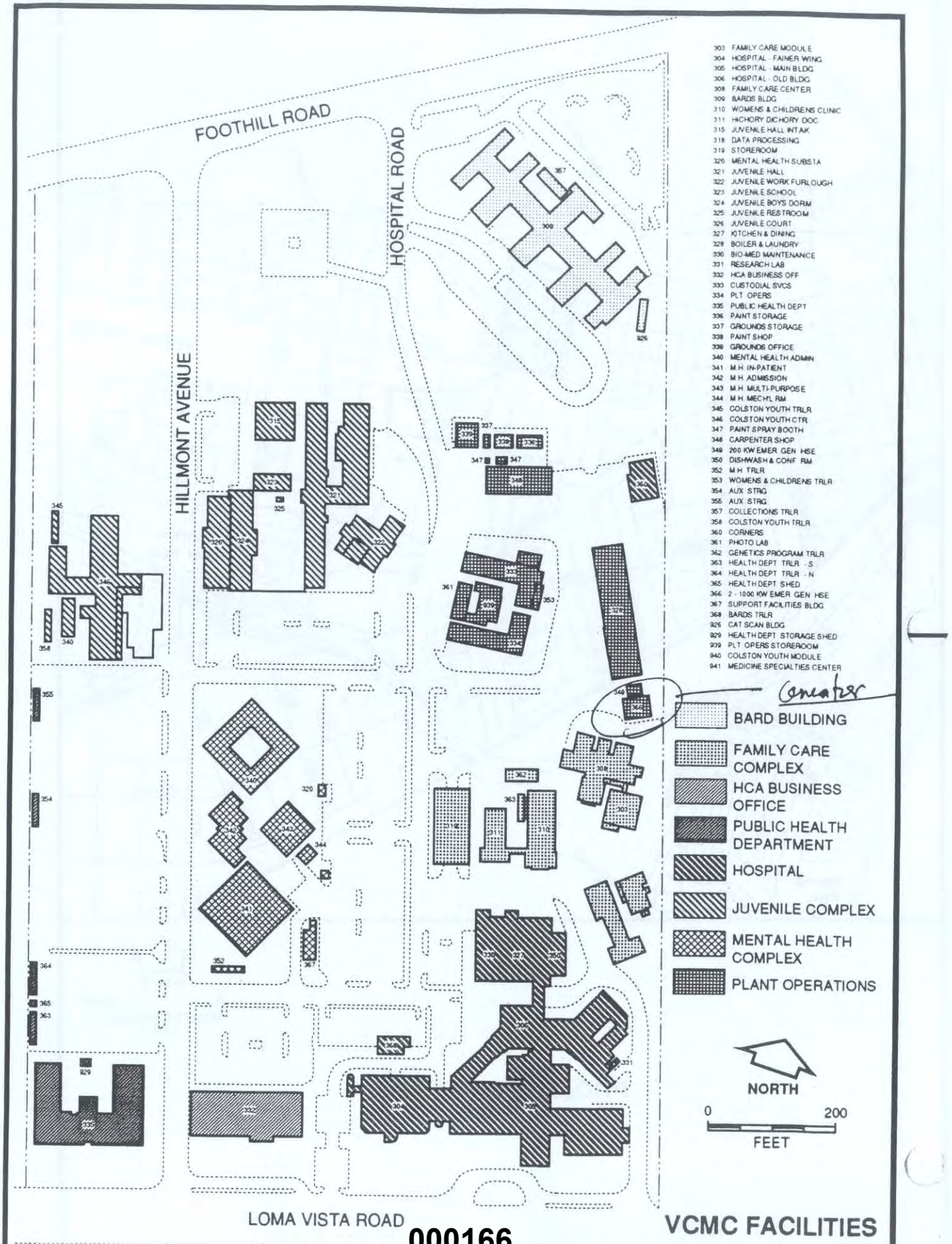
PROJECT LOCATION

FIGURE 1.2-2



VCMC FACILITIES

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1.4 PROPOSED ACTIONS

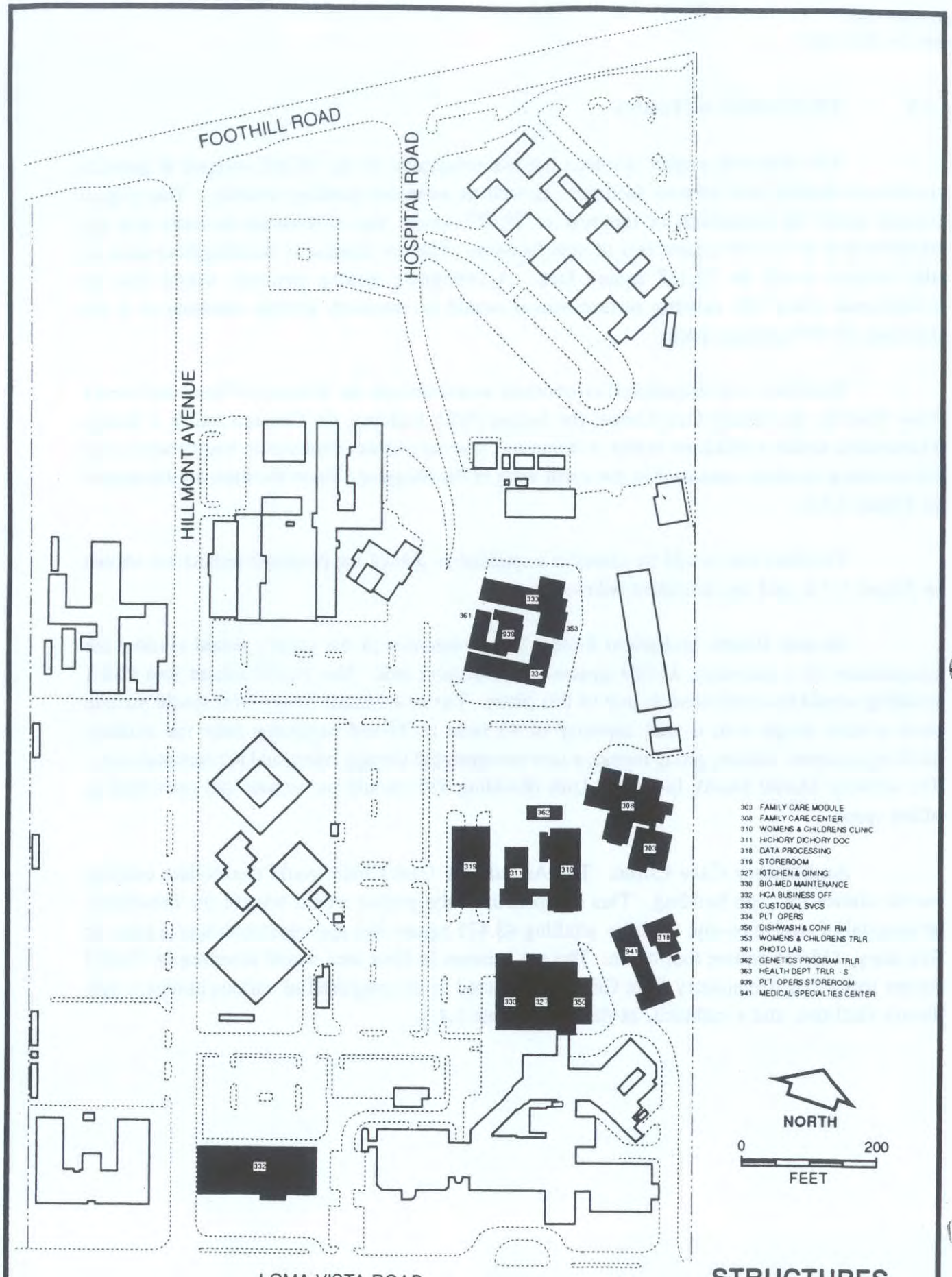
The proposed project involves the redevelopment of the VCMC campus to provide improved medical and coroner facilities, as well as increased parking capacity. The project would entail the demolition or removal of 79,425 square feet of existing facilities and the construction of 157,558 square feet of new facilities. The net increase in building floor area on the campus would be 78,133 square feet. A 564-space parking structure would also be constructed while 186 existing surface spaces would be removed, thereby resulting in a net increase of 378 parking spaces.

Facilities to be demolished or removed would include the Women's Clinic, the Family Care Module, the Family Care Center, the former PSSA building, the Genetics trailer, a Health Department trailer, a childcare center, a storeroom, and the kitchen, conference, maintenance, and dishwashing facilities contained in the north wing of the Hospital. These facilities are illustrated in Figure 1.4-1.

Facilities that would be added or expanded as part of the proposed project are shown in Figure 1.4-2, and are described below.

Mental Health In-Patient Unit. This component of the project would involve the construction of a one-story, 31,003 square-foot in-patient unit. The 25,140 square foot PSSA Building would be demolished as part of this phase. The new Mental Health Unit would include three patient wings with a total capacity of 43 beds (a 15-bed expansion over the existing facility), a nurses' station, group rooms, a new occupational therapy room, and recreational areas. The existing Mental Health In-Patient Unit (Building 431) would be vacated and converted to office space.

Ambulatory Care Clinic. The Ambulatory Care Clinic would consolidate existing on-site clinics into one building. This component of the project would involve the demolition or removal of twelve on-site facilities totalling 43,475 square feet and construction of a four- or five-story, 118,755 square foot clinic. The net increase in floor area would therefore be 75,280 square feet. The Ambulatory Care Clinic is expected to be composed of various clinics, a lab, dietary facilities, and a cafeteria, as shown in Table 1.4-1.



STRUCTURES TO BE DEMOLISHED

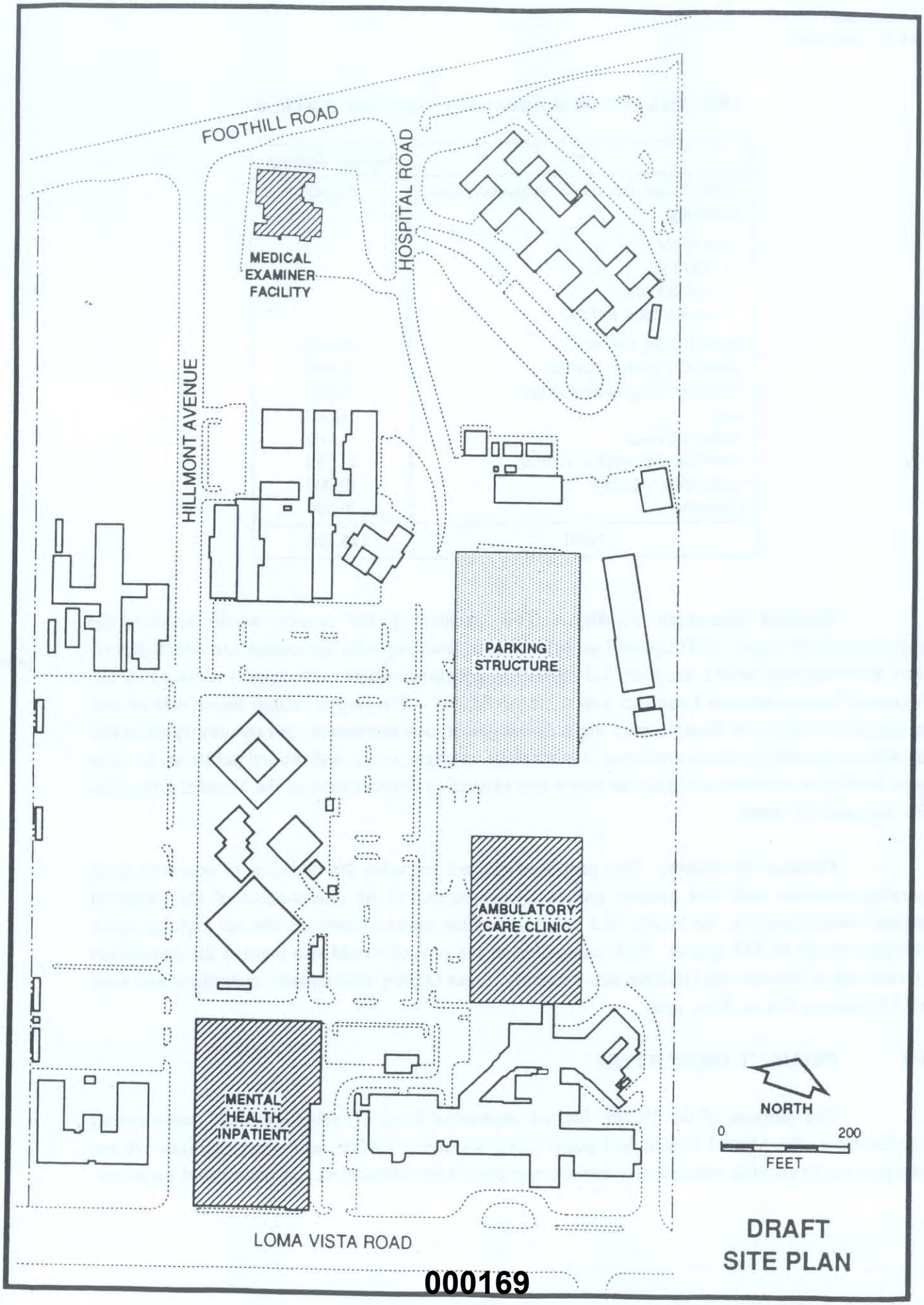

FOOTHILL ROAD
HOSPITAL ROAD
MEDICAL EXAMINER FACILITY
HILLMONT AVENUE
PARKING STRUCTURE
AMBULATORY CARE CLINIC
MENTAL HEALTH INPATIENT
LOMA VISTA ROAD
NORTH
0
200
FEET
DRAFT
SITE PLAN

Table 1.4-1. Proposed Ambulatory Care Clinic Facilities

Unit	Square Footage
Family Care Residency Administration including: • offices • library • auditorium • conference rooms	22,500
Family Care Center	22,500
Women's Health Center	11,585
Pediatric Diagnostic Center	11,585
Lab	6,000
Surgery Center	3,000
Medicine Specialties Center	11,585
Admission - Lobby	10,000
Cafeteria	20,000
Total	**118,755**

Medical Examiner Facility. This portion of the project would involve the construction of a new 7,800 square foot office/clinic building with associated site development. The new building would integrate the currently separated offices and support services of the Ventura County Medical Examiner into a single facility. The project would house offices and associated facilities for three doctors, eight investigators, two secretaries, and an autopsy assistant, as well as an autopsy room, a morgue, a laboratory, storage spaces, and related public areas. The new facility is expected to satisfy the space and expansion requirements of the Medical Examiner for the next 15 years.

Parking Structure. The proposed project includes the addition of one five-level parking structure with 564 parking spaces. Construction of all components of the proposed project would result in the loss of 186 existing surface spaces; therefore, the net parking space increase would be 378 spaces. This component of the project would also involve the demolition or removal of five on-site facilities that currently house facility maintenance operations and total 10,810 square feet of floor area.

1.5 PROJECT OBJECTIVES

The purpose of the VCMC facility expansion is to: (1) relieve current overcrowded conditions in the Mental Health In-Patient Unit, Coroner's Office, and other facilities on the campus; (2) to provide medical and coroner services from coordinated and centralized locations,

and (3) to provide additional parking to better accommodate the current demand for parking and to compensate for the loss of on-site parking that would result from new building construction.

1.6 PROJECT NEED

The Mental Health In-Patient Unit is currently operating at or above its design capacity of 28 beds. The facility averaged 29.5 patients daily in 1992, with a peak one day load of 40 patients.[1] Project implementation would add approximately 15 beds to the facility, increasing capacity and relieving overcrowded conditions. In addition, project implementation would consolidate the Mental Health Unit's Crisis Services team, which is currently located in a separate building.

Ambulatory Care Services at the VCMC are currently provided by a number of separate clinics located throughout the campus. Project implementation would consolidate these clinics into one facility that would provide a variety of care services to patients. This consolidation would provide upgraded facilities as well as improved service efficiency. A consolidated clinic administration would also be located within this facility, providing greater administrative efficiency.

The existing Medical Examiner facilities operated on the campus are also currently separated between two areas; the examination and storage facilities are currently operated in the VCMC hospital morgue, while the current Medical Examiner office is located in a temporary building on the eastern border of the campus (Building 360). Operational and aesthetic conflicts occur related to corpse storage, transfer, and autopsy examination due to the location of the examination and storage facilities within the hospital morgue.[2] In addition, the separation of these facilities from the Medical Examiner office creates administrative difficulties. Project implementation would consolidate the Medical Examiner facilities in a building completely separated from the hospital facility, thereby providing more efficient service and alleviating aesthetic conflicts.

A parking study prepared by Linscott, Law & Greenspan, Engineers in August 1992 determined an existing need for 205 additional onsite parking spaces based on: (1) current onsite parking usage, and; (2) movement of VCMC campus patrons from off-campus street spaces into on-campus parking areas. To relieve current overcrowded parking conditions and to accommodate future parking needs, project implementation would increase on-site parking by 378 spaces. This would provide sufficient parking areas for projected net on-campus parking demand.

1.7 PROJECT DESIGN FEATURES

Project design will incorporate the following features designed to reduce potential environmental impacts associated with the project. The features are organized according to the area of potential impact addressed.

Air Quality

- Regular ground wetting of graded areas will be conducted during construction to control fugitive dust emissions.
- Grading activities will cease during periods when winds exceed 30 miles per hour.
- Materials excavated, stockpiled, and transported during construction will be wetted regularly.
- Onsite construction vehicle speeds will be limited to 15 miles per hour.
- Construction vehicle traffic areas will be regularly wetted.

Water Resources

- Slope erosion control measures such as jute matting, silt fences along slope toes, and straw bales will be utilized to control runoff during project construction.

Visual Resources

- Landscaping materials around the Medical Examiner facility will not include trees or shrubs that will ultimately exceed the height of the building, so as not to obstruct distant views.
- The Medical Examiner building will be a single story, and building elevations will be stepped to ensure compatibility with surrounding topography and natural slope lines.
- All mechanical operational units for the Medical Examiner facility will be entirely screened from view of the Foothill Road view corridor.

Seismic Hazards

- The proposed Medical Examiner facility will be built in accordance with recommendations contained in the Staal, Gardner & Dunne geotechnical report (1992) regarding foundation construction

- A geotechnical report will be prepared for the proposed parking structure.

Geologic Hazards

- Project implementation will be in accordance with standard geotechnical practices and will comply with recommendations regarding excavation and compaction in the 1992 Staal, Gardner & Dunne geotechnical study.

Hydraulic Hazards

- Project implementation will include revegetation of all constructed slopes and graded areas. Such revegetation will minimize the potential for long-term sediment transport from the project site.

Noise and Vibration

- Construction activities will conform with standard noise reduction procedures, including limiting construction activity to between 8 a.m. and 5 p.m. and, when feasible, the use of temporary, movable construction noise barriers to shield sensitive receptors.

- To reduce noise levels at the Mental Health In-Patient Unit's sensitive uses (in-patient quarters), patient rooms and most exterior use areas will be sited to rear of the Mental Health Unit, away from Loma Vista Road. This will allow the structure to act as a noise attenuation device, shielding patient rooms and most outdoor use areas from excessive vehicle-generated noise.

- Specialty wall and glazing materials will be used for construction of the Mental Health In-Patient Unit.

- A 10-foot wall will be constructed at the front of the Mental Health In-Patient Unit along Loma Vista Road, thus attenuating noise levels at exterior use areas in the front of the facility.

- All paving within the proposed parking structure and on all external ramps will be Portland Cement Concrete with a non-squeal finish.

Light and Glare

- Lighting sources will be shielded and projected toward the ground to decrease the quantity of light radiated into the nighttime sky.

- The height of lighting for the rooftop level of the proposed parking structure will be limited to the parapet height.

- The proposed project will utilize non-reflective exterior materials in its construction.

Water Supply

- A sufficient number of toilets will be retrofitted to achieve the 3:1 water consumption offset requirements of City of Ventura Resolution No. 92-73.

- Low flow shower heads (2.5 gallons per minute or less at 40 psi) will be installed on all new construction.

- Sink and lavatory faucets which limit the flow of water to a maximum of 2.5 gallons per minute at 40 psi, will be installed on all new construction.

- New landscaping developed on the subject site in conjunction with the proposed project will be drought tolerant.

- Drip, mini-emitter or low volume sprinkler irrigation systems will be used for all new landscaping developed in conjunction with the proposed project.

Waste Treatment/Disposal

- The VCMC will mulch grass clippings rather than disposing of them. If existing VCMC equipment will not mulch the clippings, one or more mulching lawn mowers will be purchased by the VCMC. In addition, a "green bin" recycling program will be initiated to handle yard wastes other than grass clippings.

- The VCMC will develop an on-site or off-site composting program for organic compostable wastes generated on the VCMC campus.

- Adequate space for waste and recycling bins, as determined by the Ventura County Solid Waste Management Department, will be provided for all new facilities developed as part of the proposed project.

- The VCMC will purchase a baler or develop an alternative method to break down cardboard boxes and reduce the space requirements for recyclable materials bins.

- The contractor that conducts project-related construction and demolition activities will be required to develop County-approved plans for the diversion of construction/demolition wastes through source reduction or recycling.

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[1] Essex, Duane, Ventura County Mental Health Center, 1992.

[2] O'Halloran, Ronald L., Assistant Chief Medical Examiner, 1992.

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2.0 INITIAL STUDY CHECKLIST

ISSUE (Responsible Department)		PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
GENERAL:	1. General Plan Environmental Goals and Policies (Plng.)	X				X			
LAND USE:	2. Land Use (Plng.)								
	a. community character				X				X
	b. housing		X				X		
	c. growth inducement	X				X			
RESOURCES:	3. Air Quality (APCD)								
	a. regional		X				X		
	b. local				X				X
	4. Water Resources (PWA)								
	a. groundwater quantity	X				X			
	b. groundwater quality	X				X			
	c. surface water quantity		X			X			
	d. surface water quality		X			X			
	5. Mineral Resources (Plng)								
	a. aggregate		X				X		
	b. petroleum		X				X		
	6. Biological Resources								
	a. endangered, threatened, or rare species	X				X			
	b. wetland habitat	X				X			
	c. coastal habitat	X				X			
	d. migration corridors	X				X			
	e. locally important species/communities	X				X			
	7. Agricultural Resources (Ag. Dept.)								
	a. soils	X				X			
	b. water	X				X			
	c. air quality/micro-climate	X				X			
	d. pests/diseases	X				X			
	e. land use incompatibility	X				X			
	8. Visual Resources								
	a. scenic highway (Plng.)				X	X			
	b. scenic area/feature				X	X			
	9. Palentological Resources	X				X			
	10. Cultural Resources								
	a. archaeological		X			X			
	b. historical (GSA)		X			X			
	c. ethic, social or religious		X			X			
	11. Energy Resources	X				X			
	12. Coastal Beaches & Sand Dunes	X				X			

ISSUE (Responsible Department)		PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
		N	LS	S	U	N	LS	S	U
HAZARDS:	13. Seismic Hazards (PWA)								
	a. fault rupture	—	X	—	—	X	—	—	—
	b. ground shaking	—	X	—	—	X	—	—	—
	c. tsunami	X	—	—	—	X	—	—	—
	d. seiche	X	—	—	—	X	—	—	—
	e. liquefaction	X	—	—	—	X	—	—	—
	14. Geologic Hazards (PWA)								
	a. subsidence	X	—	—	—	X	—	—	—
	b. expansive soils	X	—	—	—	X	—	—	—
	c. landslides/mudslides	X	—	—	—	X	—	—	—
	15. Hydraulic Hazards (PWA/FCD)								
	a. erosion/siltation	X	—	—	—	X	—	—	—
	b. flooding	X	—	—	—	X	—	—	—
	16. Aviation Hazards (Airports)	X	—	—	—	X	—	—	—
	17. Fire Hazards (Fire)	X	—	—	—	X	—	—	—
	18. Hazardous Materials/Waste								
	a. above-ground hazardous mtl's. (Fire)	X	—	—	—	X	—	—	—
	b. below-ground hazardous mtl's. (EH)	X	—	—	—	X	—	—	—
	c. hazardous waste (EH)	—	X	—	—	X	—	—	—
	19. Noise and Vibration	—	—	—	X	—	X	—	—
	20. Glare	—	—	—	X	—	X	—	—
PUBLIC FACILITIES/ SERVICES	21. Transportation/Circulation								
	a. public roads and highways								
	(1) level of service (PWA)	—	—	—	X	—	—	—	X
	(2) safety/design (PWA)	X	—	—	—	X	—	—	—
	(3) tactical access (Fire)	X	—	—	—	X	—	—	—
	b. private roads and driveways (Fire)								
	(1) safety/design	X	—	—	—	X	—	—	—
	(2) tactical access	X	—	—	—	X	—	—	—
	c. pedestrian/bicycle								
	(1) public facilities (PWA)	X	—	—	—	X	—	—	—
	(2) private facilities	X	—	—	—	X	—	—	—
	d. parking (Plng.)	—	—	—	X	—	—	—	X
	e. bus transit	X	—	—	—	X	—	—	—
	f. railroads	X	—	—	—	X	—	—	—
	g. airports (Airports)	X	—	—	—	X	—	—	—
	h. harbors (GSA)	X	—	—	—	X	—	—	—
	i. pipelines	X	—	—	—	X	—	—	—

ISSUE (Responsible Department)	PROJECT IMPACT DEGREE OF EFFECT*				CUMULATIVE IMPACT DEGREE OF EFFECT*			
	N	LS	S	U	N	LS	S	U
22. Water Supply								
a. quality (EH)	X				X			
b. quantity (PWA/EH)		X				X		
c. fire flow (Fire)	X				X			
23. Waste Treatment/Disposal								
a. Individual Sewage Disposal System (EH)	X				X			
b. sewage collection/ treatment facilities		X				X		
c. solid waste facilities (SWMD)	X				X			
24. Utilities								
a. electric		X				X		
b. gas		X				X		
c. communication	X				X			
25. Flood Control/Drainage								
a. FCD facility (FCD)	X				X			
b. other facilities (PWA)	X				X			
26. Law Enforcement/Emergency Svs. (Sheriff)								
a. personnel/equipment	X				X			
b. facilities	X				X			
27. Fire Protection (Fire)								
a. distance/response time	X				X			
b. personnel/equipment/facilities	X				X			
28. Education								
a. schools	X				X			
b. libraries (Lib. Agency)	X				X			
29. Recreation (GSA)								
a. local parks/facilities	X				X			
b. regional parks/facilities	X				X			
c. regional trails/corridors	X				X			

*Explanation: Degree of Effect

N = No Effect
LS = Less Than Significant Effect
S = Significant Effect; MND or EIR Required.
U = Unknown; EIR Required

Agencies

APCD - Air Pollution Control District
PWA - Public Works Agency
Plng. - Planning Division
GSA - General Services Agency
Ag. Dpt. - Agricultural Department
FCD - Flood Control District
Airports - Department of Airports
Fire - Fire Protection District
Sheriff - Sheriff's Department
EH - Environment Health Division
SWMD - Solid Waste Management Department
Lib. Agency - Library Services Agency

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3.0 DISCUSSION OF RESPONSES TO CHECKLIST

3.1 GENERAL PLAN ENVIRONMENTAL GOALS AND POLICIES

3.1.1 Potential Impacts

The proposed project is located within the City of San Buenaventura. As such, although the County-owned VCMC site is exempt from City planning regulations, the City of San Buenaventura's Comprehensive Plan Update to the Year 2010 will be used as the primary document for determining consistency with general plan environmental goals and policies.

The most applicable goals and policies relative to the proposed project are contained in the Intent and Rationale for Land Use Designations section. The future land use map indicates that the subject site should remain in its current use as "existing urban". The designation implies that the medical and social service facilities that exist should remain. The proposed project represents a continuation and upgrading of an established use with no direct encroachment into the surrounding residential areas. As such, the proposed project is consistent with the City's Comprehensive Plan.

3.1.2 Mitigation Measures

No mitigation measures are required.

3.2 LAND USE

3.2.1 Potential Impacts

a. Community Character. Land uses in the vicinity of the site consist primarily of single-family residences. Construction activity associated with implementation of the proposed project would have potential temporary impacts to the community character of the surrounding residential land uses. These impacts would include a reduction in the aesthetics of the project site during construction, as well as increases in noise, dust generation, and traffic. However, due to their temporary nature, these construction-related impacts are considered less than significant.

As proposed, the facilities constructed would be contained on the existing VCMC campus and would be consistent with the current land uses onsite. The project would consolidate dispersed offices and support services, as well as satisfy future space and expansion requirements. New structures constructed as part of the proposed project would be integrated into the existing facilities onsite. The proposed Ambulatory Care Clinic and the parking structure are significantly larger buildings than the ones they would replace. The Ambulatory Care Clinic is proposed to measure approximately 118,755 square feet and rise four or five floors. The existing hospital building measures 178,995 square feet and rises four floors. The proposed parking structure will rise five levels. The scale of these two structures would intensify the urban nature of the campus. The intensified scale may result in compatibility problems with the single-family

neighborhood to the east. Therefore, project implementation may have a significant effect on the community character.

b. Housing. As the proposed project does not involve housing construction or demolition, housing stock within Ventura County would not be affected. Although the proposed project would increase building square footage on the VCMC campus, the primary purpose of this expansion is to relieve current overcrowded conditions at campus facilities. Consequently, implementation of the proposed project would not substantially increase the number of employees currently working at the VCMC campus. Construction-related jobs generated by the project would be temporary and are expected to be filled by workers already living in the area, as there have historically been more construction workers than construction jobs within the Ventura County area. In addition, the proposed project would not result in any cumulative impact to housing within Ventura County. Therefore, project implementation would have a less than significant impact on housing in Ventura County.[1]

c. Growth Inducement. Project implementation would increase on-site building square footage and at least one facility (the Mental Health In-Patient Unit) would experience a direct increase in employment as a result of the project. However, the primary purpose of the project is to relieve existing overcrowded conditions at various VCMC campus facilities and to consolidate dispersed campus clinics and support services. Consequently, the proposed project would not be inherently growth-inducing. Impacts are therefore considered less than significant.

3.2.2 Mitigation Measures

Feasible mitigation measures that address issues of land use compatibility should be explored as part of an environmental impact report preparation process.

3.3 AIR QUALITY

3.3.1 Potential Impacts

a. Regional. Air pollution control is administered at three government levels in California: federal, state and local. The federal government has established ambient air quality standards to protect the public health and welfare. The State of California has established separate standards which are generally more stringent than federal standards. Air quality within Ventura County is monitored by the Ventura County Air Pollution Control District (VCAPCD) and the California Air Resources Board (CARB). The VCAPCD is responsible for administering air pollution control programs within the County.

The site of the proposed project is located within the Oxnard Plain Airshed, which has been designated as a non-attainment area by the VCAPCD for the federal and state ozone standards of 0.12 and 0.09 parts per million (ppm), respectively. Maximum particulate (PM_{10}) levels in the County also exceed the state 24-hour concentration standard of 50 $\mu g/m^3$, although the County is in compliance with the federal PM_{10} standard.[2]

Project implementation would result in increased long-term traffic within the project area. However, this increase is not expected to be significant (for further discussion of traffic related impacts, see Section 3.21, Traffic and Circulation). Based upon projected increases from project related traffic, potential air quality impacts were analyzed using the California Air Resources Board URBEMIS3 Model (Appendix A). VCAPCD Air Quality Guidelines state that a significant impact would occur if an individual project exceeded County thresholds of 25 lbs/day of oxides of nitrogen (NO_x) and/or 25 lbs/day of reactive organic gases (ROG). Results of the URBEMIS3 Model indicate that the proposed project would result in long-term emissions of 12.4 lbs/day of NO_x and 9.5 lbs/day of total organic gases (approximately 90 percent of which are ROG). These amounts are both less than the VCAPCD Significance Thresholds. Therefore, the long-term impacts to regional air quality would be less than significant.

b. Local. During the construction phase of the project, demolition and construction activities would generate temporary emissions from fugitive dust and construction equipment exhaust. Construction emissions would be generated by excavation activities on the site and by transportation and disposal of excavation materials offsite.

Fugitive dust emissions generated during grading, excavation and soil removal activities are difficult to estimate accurately because of the number and variability of the factors involved. These include soil moisture, wind speed, amount of equipment operating, and silt content of soil.

Grading and demolition activities at the project site could potentially create dust nuisance, thereby producing a temporary local air quality impact. This temporary impact would be reduced by approximately 50 percent by regular watering of the site during grading activities (EPA, 1985). Standard dust control during construction is mandated by Ventura County Grading Ordinance and VCAPCD Rule 51. Both are applicable to this project and would include:

- Regular ground wetting of graded areas;
- Cessation of grading activities during periods when winds exceed 30 miles per hour (mph);
- Wetting of excavated, stockpiled and transported materials;
- On-site construction vehicle speed limits of 15 mph; and
- Wetting of construction vehicle traffic areas.

VCAPCD significance thresholds for emissions are 25 lbs/day of NO_x and ROG. However, the 1989 VCAPCD Guidelines state that construction related emissions are not counted towards these thresholds due to their short-term nature. Therefore, due to the size of the proposed project and the short-term nature of the emissions, on-site fugitive construction

equipment emissions are not expected to significantly impact air quality in the Oxnard Air Shed.[3]

Members of the public have expressed concerns over CO and other localized proposed emissions from the proposed parking structure adversely affecting residences downwind of the proposed project.

In summary, the proposed project may generate significant long-term impacts to adjacent residential areas from the proposed parking structure. Compliance with all VCAPCD control measures would reduce impacts to regional air sheds to less than significant levels.

3.3.2 Mitigation Measures

Mitigation measures should be developed to address concerns related to localized emissions as part of an EIR preparation process.

3.4 WATER RESOURCES

3.4.1 Potential Impacts

a. Groundwater Quantity. The proposed project is located within the Mound Groundwater Basin. As the proposed project is located within an urban area on a site that is largely developed, it does not involve significant new overcovering of permeable surface area. Project implementation may result in some incremental change in groundwater infiltration rates on the project site; however, because important water-bearing aquifers are overlain by one or more low permeability "clay caps", no effect on groundwater storage in the Mound Ground Water Basin would occur as a result of the proposed project. Therefore, project-specific and cumulative impacts to groundwater quantity associated with project implementation would be less than significant.

b. Groundwater Quality. The majority of urban-generated water pollutants are those associated with petroleum by-products which collect on streets and parking areas that are subsequently washed into groundwater supplies with the first rainstorm of the winter season. Pollutants carried in surface water could potentially infiltrate below the surface and contaminate shallow groundwater. However, because important water-bearing aquifers are separated from shallow groundwater of probable poor quality by one or more low permeability "clay caps", the impact of the proposed project is considered less than significant.

c. Surface Water Quantity. The nearest surface water bodies to the proposed project site are Hall Canyon Creek and Prince Barranca, located north and west of the subject site, respectively. Surface water quantity of the creek would not be altered by project implementation. Surface runoff from the proposed project site generally is collected at storm drains on Loma Vista Road and does not result in any change to surface flow conditions.

Due to the developed nature of the site, existing flow paths, storm runoff volumes, peak flows and velocities would not be significantly altered by project implementation. Any potential changes in drainage would be incorporated into the site development plan, and accomplished in accordance with the County of Ventura's Building Code and Chapter 70 of the Uniform Building Code. Therefore, project-specific and cumulative impacts to surface water quantity due to project implementation would be less than significant.

d. Surface Water Quality. During construction, surface water quality may be degraded due to increased turbidity resulting from soil runoff. Soil loss would occur because of sheet erosion, with the most serious erosion occurring on freshly graded slopes. The southern portion of the site, where the construction of the Mental Health In-Patient Unit, Ambulatory Care Clinic, and parking structure is proposed, is relatively flat; therefore little soil loss would be expected to occur. The VCMC campus as a whole, however, has a north to south slope differential of approximately 88 feet, with moderate slopes occurring on the northern portion of the site. As proposed, the Medical Examiner Facility would be constructed on the northerly portion of the site, where the gradient is approximately 50 percent. Due to the existing slopes in this area of the VCMC campus, the potential for soil erosion during the construction of the Medical Examiner Facility would exist. However, slope erosion control measures such as jute matting, silt fences along slope toes, and straw bales in drainage courses would be utilized during project construction. In addition, the revegetation of constructed slopes would provide long-term erosion control. Surface water quality impacts would therefore be less than significant.

As the project site is currently developed with uses similar to what is proposed, project implementation is not expected to significantly increase the amount of surface water pollutants generated on the site. Therefore, project-specific and cumulative impacts to surface water quality associated with project implementation would be less than significant.

3.4.2 Mitigation Measures

No mitigation measures are required.

3.5 MINERAL RESOURCES

3.5.1 Potential Impacts

a. Aggregate. The proposed project would use a finite amount of aggregate material (mainly construction grade sand and gravel), during construction. Due to the size of the project, this amount is not expected to be significant. Adequate aggregate resources are available in the county to meet local demand for the next 50 years.[4] Therefore, no significant project-specific or cumulative impacts on aggregate mineral resources would occur due to project implementation.

b. Petroleum. During the construction phase of the project petroleum resources (oil and gas) would be used for the operation of construction equipment. However, this project and cumulative projects would have a less than significant impact on the demand for petroleum

resources because these resources are considered a world-wide, national, and statewide resource. Such a resource is beyond the scope of local governments to effectively manage or control.

3.5.2 Mitigation Measures

No mitigation measures are required.

3.6 BIOLOGICAL RESOURCES

3.6.1 Potential Impacts

The subject site is located in an urbanized area and is currently developed with extensive medical and social service facilities. Open areas of the site are covered with non-native, disturbed grassland communities. These undeveloped portions of the site are routinely disked for weed control. As a result of these conditions, the subject site does not represent significant biological resource habitat.

a. Endangered, Threatened, or Rare Species. No rare or otherwise sensitive animal and/or plant species are known to occur in the immediate vicinity of the project site.[5] Due to the urban nature of the project area and the lack of biological resources onsite, project implementation would not impact endangered, threatened or rare species on the project site or in the project area.

b. Wetland Habitat. No wetland areas exist on or in the immediate vicinity of the project site. In addition, surface runoff is largely captured in urban storm drain systems and is conveyed to outfalls as part of the City of Ventura's storm drain runoff system. Therefore, no project-specific impacts to wetland habitat would occur as a result of project implementation.

c. Coastal Habitat. The project site is not located within a coastal habitat. Therefore, no impacts to coastal habitat would occur as a result of project implementation.

d. Migration Corridor. Potential migration corridors in the vicinity of the project site include the Hall Canyon Creek/Prince Barranca drainage system, located north and west of the subject site. This potential migration corridor would not be affected by development at the subject site, due to distance of the proposed project from the drainage. Therefore, no impacts to migration corridors would occur due to project implementation.

e. Locally Important Species/Communities. The majority of the proposed project site is developed, with some areas of non-native, disturbed grassland located in the northwestern corner of the site. Therefore, it is not expected that any significant wildlife activity currently occurs on the project site. The disturbed grassland area in the northwest corner may provide foraging habitat for raptors; however, loss of this foraging area would not significantly impact raptors in the vicinity because of large foraging areas in the hills north of the subject site. Therefore, the proposed project would not impact locally important species or community.

3.6.2 Mitigation Measures

No mitigation measures are required.

3.7 AGRICULTURAL RESOURCES

3.7.1 Potential Impacts

a. Soils. The U.S. Soil Conservation Service Important Farmlands Inventory (IFI) system is used in Ventura County to evaluate which lands have agricultural value. The proposed project site is currently developed, and is located in an urban area. The project area does not include land of any significant agricultural value. Therefore, project implementation would have no impact on agricultural resources.

b. Water. Based upon the water demand rates contained in City of Ventura Ordinance 92-73, project implementation would increase water consumption at the VCMC campus by approximately 4,604 gpd. This increase would be offset by fixture retrofit in accordance with Ordinance 92-73. Therefore, the proposed project would not deplete water available for agricultural uses. The proposed project would not significantly affect groundwater or surface water quality in the project area. Therefore, no project-specific or cumulative impacts to agricultural water would be associated with project implementation.

c. Air Quality/Micro-Climate. Project implementation would result in dust dispersal during the construction phase. However, as the project site is located in an urban area, dust generation would not have any significant affect on agricultural resources. As discussed in Section 3.3, standard dust control measures would be implemented during project construction. The proposed project would not generate dust during long-term operations. Therefore, no project-related or cumulative impacts would be associated with project implementation.

d. Pests/Diseases. Due to the location of the project site within an urban area, project implementation would not introduce any pests or diseases to agricultural lands. Therefore the proposed project would have no pest or disease related impacts to agricultural lands.

e. Land Use Incompatibility. As agricultural lands are not located on or near the proposed project site, the proposed project would not promote uses that are incompatible with agricultural lands. Therefore, project implementation would have no land use incompatibility impacts with regards to agriculture.

3.7.2 Mitigation Measures

No mitigation measures are required.

3.8 VISUAL RESOURCES

3.8.1 Potential Impacts

a and b. Scenic Highway and Scenic Area/Feature. The VCMC Campus is bordered by Foothill Road to the north, Loma Vista Road to the south, properties fronting Estrella Street to the west, and properties fronting Agnus Drive to the east. Land uses to the north, west, and east consist primarily of single family residences. Land uses to the south across Loma Vista Road are primarily commercial office. Views from areas north and northeast of the project site that are at higher elevations would stand to be affected by development of the site. Existing views from several sites along Agnus Drive and north of Foothill Road are shown in Figures 3.8-1 and 3.8-2. Existing views from north of Foothill Boulevard would not be expected to be significantly altered by project implementation. As the photographs in Figure 3.8-2 show, views from northeast of the site along Agnus Drive are already partially obscured by existing structures and trees. Views from properties along the west side of Agnus Drive closest to the proposed Ambulatory Care Clinic and parking structures would be affected by the new structures. However, viewsheds from most public viewing areas (streets and sidewalks) would not be significantly changed. Consequently, project implementation would not significantly affect views from this area.

Foothill Road has been designated as a "scenic drive" in the City of San Buenaventura Comprehensive Plan. As the VCMC campus fronts Foothill Road, the subject site lies within the viewshed of this scenic drive. Visual resources along Foothill Road in the vicinity of the project include southwesterly views of the Pacific Ocean and Channel Islands in the background, and the city in the foreground. Land uses in this vicinity include residential housing and the existing VCMC campus facilities. Present views from Foothill Road are partially disrupted by the existing four-story hospital facility located on the southeast corner of the project site.

Project implementation would entail the construction of four new structures on the VCMC Campus. Due to the north to south slope of the project site, only the Medical Examiner Facility, located near the top of the slope in the northwest portion of the project site, would affect views from Foothill Road. The other three buildings, located downslope from the Medical Examiner Facility, would be constructed at heights and finished-grades that would not significantly obstruct views from Foothill Road. The effect of the Ambulatory Care Clinic and parking structure on the viewshed would be to interrupt the views of the existing hospital itself and other nearby facilities, and not to adversely affect distant ocean, island, and city views. Therefore, these proposed facilities would not impact any scenic highways or other viewshed features in the project area. Nevertheless the proposed project would likely affect views from several residences along Agnus Drive, immediately east of the campus.

The location of the proposed Medical Examiner Facility could potentially affect aesthetics of Foothill Road by blocking southerly views of the ocean and city. However, the finished grade of the facility would be lower than that of the Foothill Road grade, diminishing the effective height of the structure and its impact on the Foothill Road viewshed. Figure 3.8-3

A. Existing view of the VCMC campus and uses south of the campus from 628 Whitecap Drive.

B. Existing view looking south along Agnus Drive from the intersection of Agnus Drive and Fairmont Drive. This view would not be altered by project implementation.

EXISTING VIEWS OF THE VCMC CAMPUS

A. Public view of the VCMC campus and uses southwest of the campus from 404 Agnus Drive. The only campus structure that can be seen from this location is the VCMC Hospital. The proposed Ambulatory Care Clinic and parking structure would be visible but would not significantly affect the viewshed.

B. View of the VCMC campus from a side yard at 365 Agnus Drive. Although it would be partially obscured by the tree in the center-left of the photograph, the proposed parking structure would be visible from this location in the left portion of the photo.

EXISTING VIEWS OF THE VCMC CAMPUS

illustrates the potential impact of the structure by comparing the existing view from Foothill Road to that which would exist following project implementation.

The following design features, which would be incorporated into the proposed Medical Examiner facility, would serve to minimize visual impacts associated with the proposed structure:

- Landscaping materials should not include trees or shrubs that would ultimately exceed the height of the building, so as not to obstruct distant views.
- The building would be a single story, and building elevations would be stepped to effectively be compatible with surrounding topography and natural slope lines.
- All mechanical operational units would be entirely screened from view of the Foothill Road view corridor.

The proposed one-story facility would also utilize setbacks and landscaping in its design, and would represent continuity of land uses on the project site. Implementation of these design features would render potential visual impacts associated with the Medical Examiner facility to a level that is less than significant.

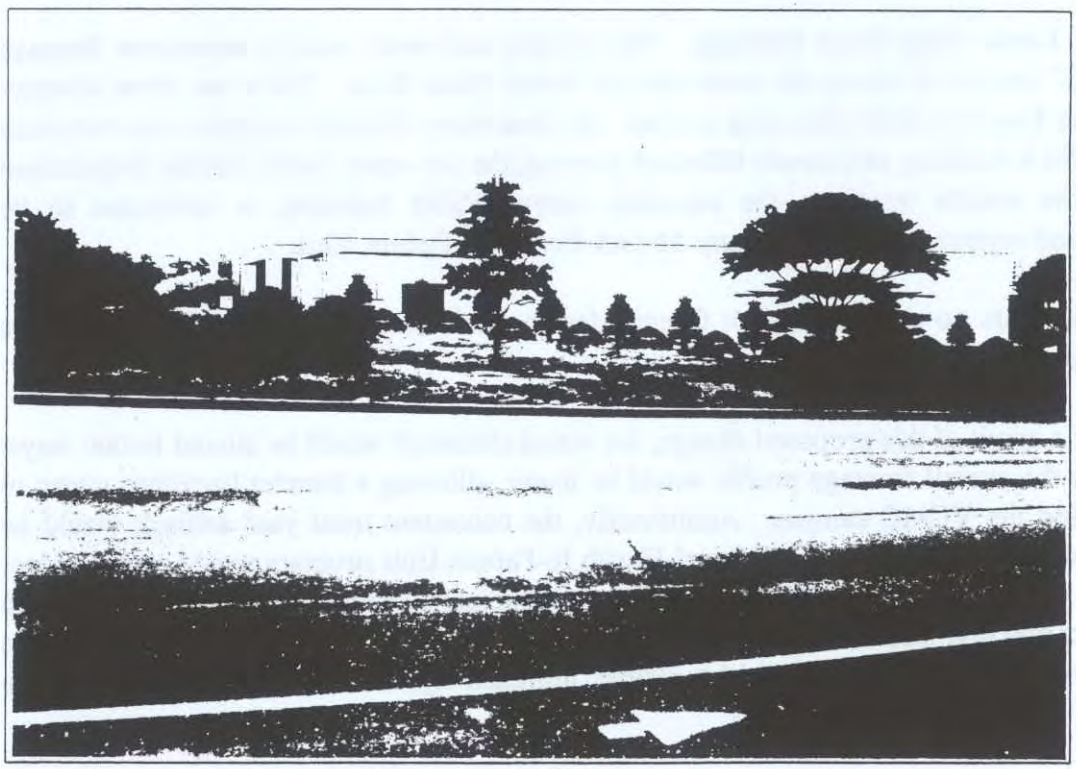
c. Loma Vista Road frontage. The primary and most visually prominent frontage of the VCMC campus is along the north side of Loma Vista Road. There are three campus structures that front the street from east to west: the four-story Hospital complex, the two-story the former PSSA building, and across Hillmont Avenue, the one-story Public Health Department building. The middle structure, the two-story former PSSA building, is scheduled to be demolished and replaced with a one-story Mental-Health In-Patient Unit.

There are no explicit City or County design guidelines that govern the Loma Vista Road frontage.

As a result of this proposed change, the visual character would be altered in two ways. The height at the overall frontage profile would be lower, allowing a broader backdrop views of the hills behind the VCMC campus. Additionally, the consistent front yard setback would be interrupted, owing to the fact that the Mental-Health In-Patient Unit structure would extend closer to the street. At the same time, designs for the new structure include a curvilinear wall, which would be incorporated into the architecture and landscaping plan. The setback would remain larger than the adjacent private medical buildings immediately west of the campus, which are developed in a "zero-lot line" manner.

Because of the reduced building massing and the setback conditions in the larger context of the Loma Vista Road district, the visual impacts related to the proposed Mental-Health In-Patient Unit would not be significant. However, the potential obstruction of views from Agnus Drive that would occur as a result of implementation of the proposed Ambulatory Care Clinic and parking structure could represent a significant effect.

Existing southern view from 3133 Foothill Road.



Proposed southern view from 3133 Foothill Road following implementation of the Coroner/ Medical Examiner Facility Phase of the proposed project.

POTENTIAL VIEW IMPACTS
FROM THE PROPOSED
MEDICAL EXAMINER FACILITY

3.8.2 Mitigation Measures

Measures should be developed that could mitigate view obstruction from residences on Agnus Drive.

3.9 PALEONTOLOGICAL RESOURCES

3.9.1 Potential Impacts

The project site is located in a zone of undetermined paleontological potential.[6] As the project site is currently developed and has been extensively disturbed by previous construction and excavation, the probability of encountering significant resources is considered remote. Therefore, potential impacts to paleontological resources are considered to be less than significant.

3.9.2 Mitigation Measures

No mitigation measures are required; however, in the event that paleontological resources are uncovered during excavation and construction, the County of Ventura requires that work in the vicinity of the find be temporarily suspended and a qualified paleontologist be contacted to evaluate the find. Once the find has been examined and evaluated, and an appropriate mitigation plan has been agreed upon, construction or excavation work on the project site may continue.

3.10 CULTURAL RESOURCES

3.10.1 Potential Impacts

a, b, and c. Archaeological, Historical and Ethnic, Social or Religious. Due to the developed nature of the site, the probability of encountering significant archaeological, cultural or historic resources is considered remote. Therefore, potential impacts to cultural resources are considered less than significant.

3.10.2 Mitigation Measures

No mitigation measures are required; however, in the event that archaeological resources are uncovered during excavation and construction, the County of Ventura would require that work in the vicinity of the find be temporarily suspended and a qualified archaeologist be contacted to evaluate the find. Once a find has been examined and evaluated, and an appropriate mitigation plan has been agreed upon, construction or excavation work in the area may be continued.

3.11 ENERGY RESOURCES

3.11.1 Potential Impacts

During the construction phase of the proposed project, oil and gas reserves would be used for the operation of construction equipment. Due to the size of the proposed project, the quantity of these resources required would not significantly impact energy resources available in the project area.

Electricity for the new facilities would be produced and sold to the VCMC by Southern California Edison. Natural gas would be provided by the Southern California Gas Company.

The proposed project would increase daily consumption of electricity on the subject site by an estimated 3,832 kilowatt hours (kWh) and increase daily natural gas consumption by an estimated 12,501 cubic feet. Energy purveyors indicate that they can meet this level of demand without service interruption. In addition, the project would incorporate energy efficiency into design, in accordance with Title 24 of the California Code of Regulations. Impacts would therefore be less than significant.

3.11.2 Mitigation Measures

No mitigation measures are required.

3.12 COASTAL BEACHES AND SAND DUNES

3.12.1 Potential Impacts

The proposed project site is not located within the vicinity of any coastal area. Therefore, no impacts to coastal beaches and/or sand dunes would occur as a result of project implementation.

3.12.2 Mitigation Measures

No mitigation measures are required.

3.13 SEISMIC HAZARDS

3.13.1 Potential Impacts

The subject site is located on the northern flank of the Ventura basin, a major structural trough within the larger Transverse Ranges Geomorphic Province of California. The Ventura Basin is a structurally controlled basin bordered on the north by the Red Mountain and the San Cayetano faults, and on the south by the Oak Ridge fault. This region is characterized by east-

west trending structural features such as the Ventura Avenue Anticline, the Ventura syncline, and the Red Mountain, Oak Ridge, San Cayetano, and Ventura faults.

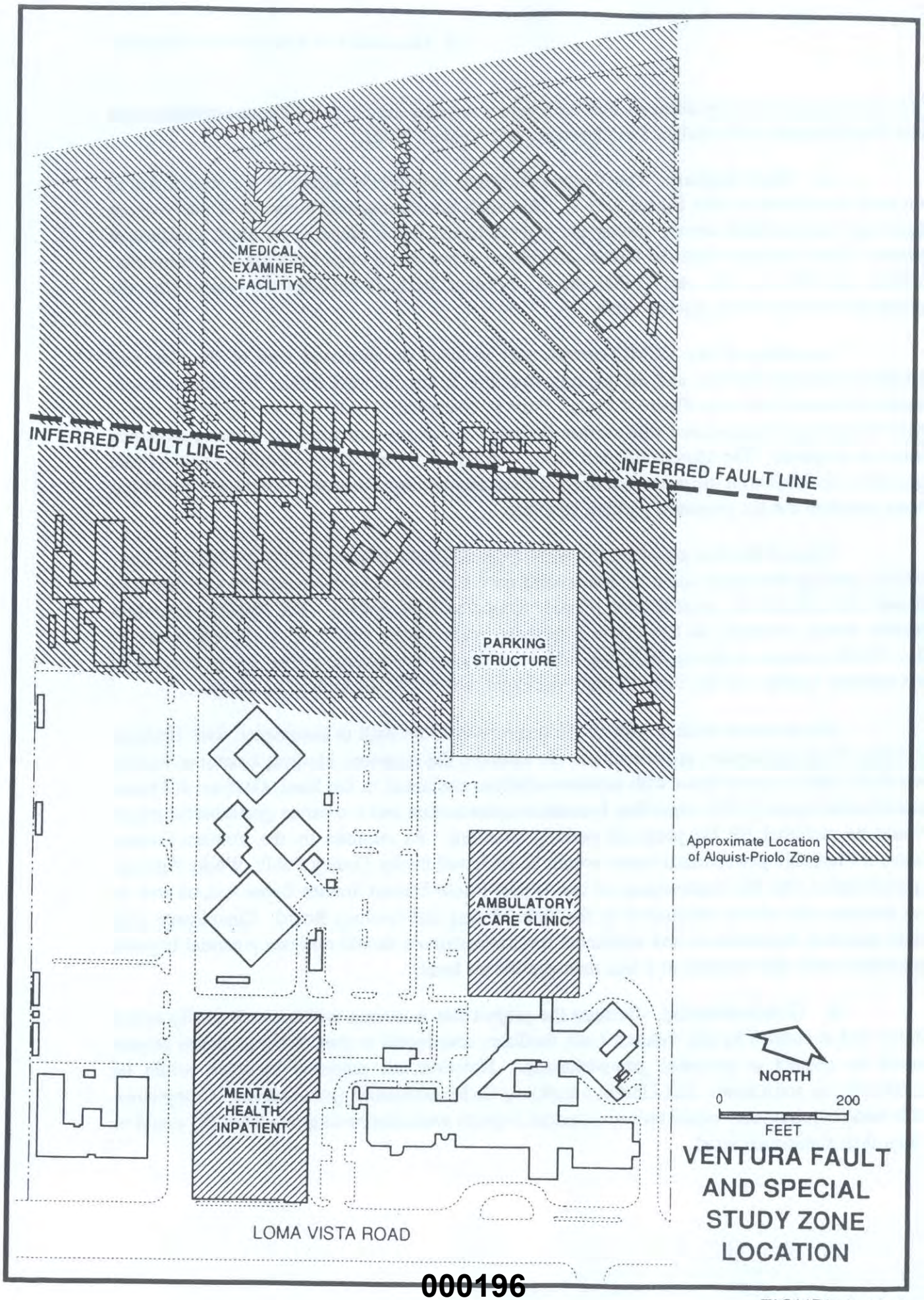
a. Fault Rupture. The Ventura fault runs through the middle of the project site in an east-west direction (see Figure 3.13-1). Although the seismogenic potential of the Ventura fault has been debated among geologists, a geotechnical report prepared by Staal, Gardner & Dunne (1992) indicates that the fault is considered active based upon evidence of deformation within the Holocene (the past 11,000 years). Because the fault traverses the subject site, the potential for onsite fault rupture exists.

A portion of the VCMC campus that includes the proposed sites of the Coroner/ Medical Examiner facility and the parking structure is also located within the Alquist-Priolo Special Studies Zone (see Figure 3.13-1). Prior to construction in this zone, a geologic report identifying hazards associated with surface fault rupture for any structures for human occupancy must be prepared. The aforementioned Staal, Gardner & Dunne report identifies fault rupture hazards associated with the proposed Medical Examiner facility; however, no geologic report has been prepared for the proposed parking structure.

Three of the four proposed structures (Mental Health In-patient Unit, Ambulatory Care Clinic, parking structure) would be constructed on the sites of existing structures, and therefore would not increase the potential for impacts related to fault rupture. The Medical Examiner facility would, however, be located on a currently undeveloped site in the northwest corner of the VCMC campus, as shown in Figure 3.13-1. Although the location of the facility is north of the inferred location of the Ventura fault, the exact location of the fault is unknown.

All structures built as part of the project would be built in accordance with Uniform Building Code earthquake specifications. In addition, the proposed Medical Examiner facility would be built in accordance with recommendations contained in the Staal, Gardner & Dunne geotechnical report (1992) regarding foundation construction and a separate geotechnical report would be prepared for the proposed parking structure. As required by the Ventura County General Plan, this geotechnical report would be reviewed by the County Public Works Agency, in accordance with the requirements of the Alquist-Priolo Special Studies Zones Act, as well as the policies and criteria established by the State Mining and Geology Board. Compliance with these standard requirements and additional recommendations should mitigate potential impacts associated with fault rupture to a less than significant level.

b. Groundshaking. Because the project site is located within a seismically active region and is crossed by the Ventura fault, facilities constructed as part of the proposed project would be subject to potential groundshaking. However, all proposed facilities would be constructed in accordance with Uniform Building Code earthquake specifications. Compliance with these requirements would reduce potential impacts associated with groundshaking would to a less than significant level.



VENTURA FAULT AND SPECIAL STUDY ZONE LOCATION

FIGURE 3.13-1

c. Tsunami. The elevation of the project site place it outside the tsunami hazard zone established by the Ventura County General Plan Hazards Appendix (1989). Therefore, no tsunami related impacts would be associated with project implementation.

d. Seiche. The project site is not located near any large inland body of water that could potentially be affected by seiche conditions during a seismic event. Therefore, no seiche-related impacts would result from project implementation.

e. Liquefaction. The project site is located outside the liquefaction hazard zone established by the Ventura County General Plan Hazards Appendix. Groundwater levels onsite are estimated to be approximately 40 feet below the surface. Groundwater was not encountered onsite during the Staal, Gardner & Dunne geotechnical study (1992). Therefore, no liquefaction related impacts would be associated with project implementation.

3.13.1.1 Mitigation Measures

No mitigation measures are required.

3.14 GEOLOGIC HAZARDS

3.14.1 Potential Impacts

The topography of the site is characterized by a slight north to south slope on the southern portion and a medium north to south slope in the north-northwest portion. Elevations of the site range from approximately 147 feet above sea level on the southern portion of the site to 235 feet above sea level. Soils located on the majority of the site are mapped as Sorrento loam, with some areas of Soper gravelly loam.

a. Subsidence. The project site is located outside subsidence zones established in the Ventura County General Plan Hazards Appendix (1989). However, both Sorrento loam and Soper gravelly loam have moderate shrink-swell characteristics. Therefore, although soils onsite are not characterized as hazardous, the potential for soil subsidence does exist onsite. Project implementation would be in accordance with standard geotechnical practices and would comply with recommendations regarding excavation and compaction in the Staal, Gardner & Dunne geotechnical study. This would reduce potential impacts associated with subsidence to less than significant levels.

b. Expansive Soils. The project site is located within a moderate expansive soil zone, as established by the Ventura County General Plan Hazards Appendix. Both Sorrento loam and Soper gravelly loam soils have moderate shrink-swell characteristics. Therefore, the potential exists for expansive soils to be located onsite. All construction associated with the proposed project would be accordance with standard geotechnical practices and would comply with recommendations regarding excavation and compaction in the Staal, Gardner & Dunne geotechnical study. As soils onsite are not expected to have high expansive characteristics, potential impacts from soils onsite are considered to be less than significant.

c. Landslides/Mudslides. The project site is not located within any landslide/ mudslide zones established by the Ventura County General Plan Hazards Appendix. Therefore, project implementation would not be expected to result in any significant landslide or mudslide impacts.

3.14.2 Mitigation Measures

All construction associated with the proposed project would be in accordance with standard geotechnical requirements and the recommendations of the Staal, Gardner, and Dunne Fault Hazard Study for the Medical Examiner's Facility. No mitigation measures are required.

3.15 HYDRAULIC HAZARDS

3.15.1 Potential Impacts

a. Erosion/Siltation. As discussed in Section 3.14, soils on the project site consist of loamy soils of the Sorrento and Soper series. The majority of the site is covered by Sorrento loam. Surface runoff for this soil is characterized as medium, and erosion hazards are considered to be slight.

During the construction phase of the project, soils exposed by onsite grading and foundation construction could be affected by wind and water erosion. As discussed in Sections 3.3 and 3.4, standard construction techniques would be undertaken in order to reduce short-term wind and water erosion. These standard techniques would reduce construction related erosion/siltation impacts to a less than significant level.

Project implementation would include revegetation of all constructed slopes and graded areas. Such revegetation would minimize the potential for long-term sediment transport from the project site. Therefore, potential long-term impacts from soil erosion and/or siltation would be reduced to a less than significant level.

b. Flooding. The proposed project site is not located within any 100-year floodplain as established by the FEMA Flood Insurance Rate Map for the City of San Buenaventura (1985). Therefore, no significant flood-related impacts would occur as a result of project implementation.

3.15.2 Mitigation Measures

As discussed above, project implementation would include revegetation of all constructed slopes and graded areas. No mitigation measures are required.

3.16 AVIATION HAZARDS

3.16.1 Potential Impacts

The subject site is not located within any of the airport hazard zones established by the Ventura County General Plan Hazards Appendix (1989). However, the hospital currently receives helicopter flights on an emergency basis. These flights currently arrive at and depart from a helicopter pad located atop the VCMC hospital in the southwest corner of the site.

None of the facilities proposed as part of the project would be for emergency medical service. Therefore, project implementation would not increase the need for emergency helicopter service on the subject site and no additional impacts related to helicopter hazards would occur. On-site helicopter operations would continue to comply with Federal Aviation Administration safety requirements.

3.16.2 Mitigation Measures

No mitigation measures are required.

3.17 FIRE HAZARDS

3.17.1 Potential Impacts

The subject site is located within a low fire hazard zone. Although project implementation would result in additional structures, these structures would be built in accordance with the Uniform Fire Code regulations, including the use of flame retardant building materials where feasible. In addition, the project involves demolition of older structures which were not originally designed with fire preventative features required today. As a result, the proposed project likely represents an improvement in fire safety features over the current VCMC development.

Project implementation would not introduce new fire hazards into the project area. Therefore, no project-specific or cumulative impacts to fire hazard would be associated with project implementation.

3.17.2 Mitigation Measures

No additional mitigation measures are required.

3.18 HAZARDOUS MATERIALS/WASTE

3.18.1 Potential Impacts

a. Above-Ground Hazardous Materials. Above-ground hazardous materials currently stored on the project site include paint and paint thinner waste oil. Project implementation would not significantly increase the use or storage of hazardous materials onsite. Therefore, no project-specific or cumulative impacts would be associated with project implementation.

b. Below-Ground Hazardous Materials. A 12,000-gallon underground tank containing diesel and a 15,000-gallon tank containing #5 fuel oil currently exist on the project site. The proposed project would not affect either of these tanks or include the installation or use of any additional underground tanks for the storage of hazardous materials. Therefore, no project-specific or cumulative impacts would be associated with project implementation.

c. Hazardous Waste. The proposed project would not generate significant quantities of hazardous waste during construction or operational phases. However, bio-medical wastes are currently generated on-site and would continue to be generated following project implementation. Although no significant increase in the generation of infectious wastes is anticipated, the improper storage, handling, and disposal of bio-medical wastes could contaminate groundwater and surface water resources. Direct contact with these wastes could also result in adverse health effects to humans. However, compliance with applicable California Department of Health and Safety regulations enforced by the Environmental Health Division would reduce any potential adverse impacts related to bio-medical wastes to a level considered less than significant.

3.18.2 Mitigation Measures

No mitigation measures are required.

3.19 NOISE AND VIBRATION

3.19.1 Potential Impacts

Both the City and County of Ventura have established standards for noise-sensitive uses, measured in Community Noise Equivalent Levels (CNEL). County noise level criteria dictate that indoor noise levels in habitable rooms not exceed 45 dBA CNEL. Outdoor noise levels should not exceed 60 dBA CNEL. A significant impact would occur if: (1) a proposed project would subject a noise-sensitive use to noise levels in excess of these standards; or (2) a proposed project would result in an increase in ambient noise levels of 3 dB(A) to Leq 50 dB(A), whichever is greater, during any hour from 6 a.m. to 7 p.m.

Project construction would generate temporary noise impacts at potentially significant levels. Short-term noise is associated with heavy equipment involved in demolition, grading, and construction of facilities proposed as part of the project. Noise levels associated with

construction activity typically range from 73 to 96 dBA at 50 feet from individual pieces of equipment. Such noise level may adversely impact sensitive receptors at medical and educational facilities on the VCMC campus as well as adjacent single family residences. Construction activities would conform with standard operating procedures, including limiting construction activity to between 8 a.m. and 5 p.m. and the use of temporary, movable construction noise barriers, when feasible, to shield sensitive receptors such as adjacent residences and the campus hospital and clinics. Nevertheless, impacts would be adverse and unavoidable. However, because noise level increases associated with construction activity would be temporary in nature, impacts would be considered less than significant.

Long-term impacts would result primarily from traffic on adjacent roadways. Sensitive receptors for long-term noise located on the VCMC campus include the Hospital, Mental Health In-patient Facility, and Juvenile Complex. The proposed project would site the Mental Health In-patient Facility fronting Loma Vista Road east of Hillmont Drive. Other proposed facilities would be set back from roadways and would not be expected to experience significant noise impacts.

Noise levels associated with traffic along Loma Vista Road at Hillmont Drive were estimated using a modification of the updated version of the Federal Highway Noise Model (Stamina 2.0) published by the Federal Highway Administration in 1982. This model provides the user with CNEL noise levels by using average daily traffic volumes (ADTs), vehicle speeds, and distances to receptors. The 1991 Traffic volumes used in this model were provided by the City of Ventura. The maximum posted speed in the vicinity of the project site is 35 mph on both Loma Vista Road and Hillmont Avenue. The average distance to receptors is assumed to be approximately 50 feet from roadway centerline.

The model indicates that the current exterior noise level at the front of the proposed Mental Health In-patient Facility property line is approximately 68.4 dBA CNEL. This exceeds the 60 dBA CNEL County threshold by over 8 dBA. Based upon the proposed increase in net square footage at the VCMC campus, implementation of the proposed project could potentially result in increases to existing traffic levels on Loma Vista Road east of Hillmont by up to 351 trips per day. Noise levels generated by traffic increases along these roadways would also be increased. Noise modeling for project-related traffic increases indicates that ambient levels plus project-related increases would yield a receptor exterior noise level of 68.5 dBA CNEL at the front of the Mental Health In-patient Facility, a 0.1 dBA increase over existing levels. Exterior noise levels would remain above the 60 dBA CNEL threshold for habitable rooms but the noise level increase would not be perceptible to the human ear.

Based upon the results of the Stamina 2.0 model, project implementation would not significantly increase noise levels along Loma Vista Road. However, as proposed, the Mental Health In-Patient facility would abut Loma Vista Road, thereby placing a noise sensitive land use in an area with projected ambient noise levels well in excess of the County's 60 dBA CNEL standard.

To reduce noise levels at the facility's sensitive uses (patient rooms), patient rooms and most exterior use areas would be sited to rear of the Mental Health Unit, away from Loma Vista. This would allow the structure to act as a noise attenuation device, shielding patient rooms and most outdoor use areas from excessive vehicle-generated noise. Specialty wall and glazing materials would also be used for building construction. In addition, a 10-foot wall would be constructed at the front of the facility along Loma Vista Road, thus attenuating noise levels at exterior use areas in the front of the facility. As shown in Appendix B, this wall would reduce exterior sound levels at the front of the facility by approximately 12 dBA, bringing exterior noise levels at the front of the Mental Health In-patient facility to about 56.5 dBA CNEL. These design features would therefore reduce long-term traffic noise impacts to less than significant levels.

Tire squeal noise in the proposed parking facility could also create long-term noise impacts, particularly during nighttime hours when ambient noise levels are lower. While all paving within the structure and on all external ramps would be Portland Cement Concrete with a nonsqueal finish, impacts from this nuisance noise may be significant. In addition, engine start-ups, and door slams could create noise that could annoy residents immediately east of the proposed project.

3.19.2 Mitigation Measures

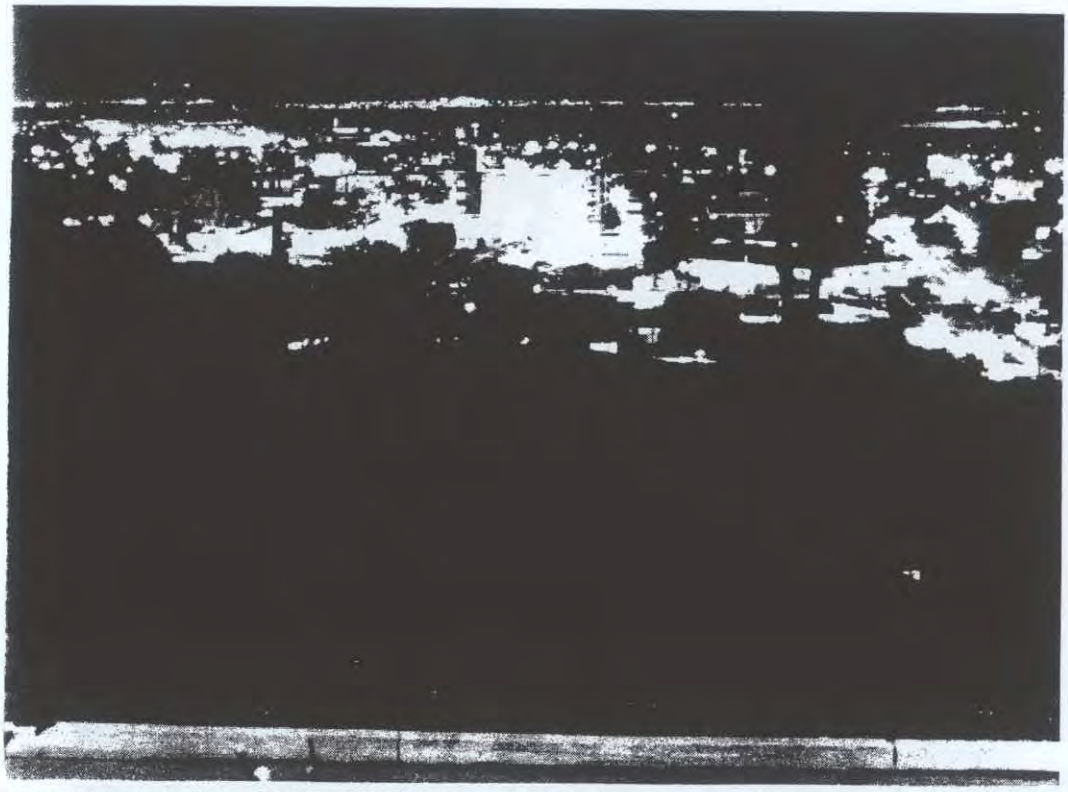
Measures should be developed which will address potentially significant nuisance noise generated by activity within the parking structure as part of an EIR process.

3.20 LIGHT AND GLARE

3.20.1 Potential Impacts

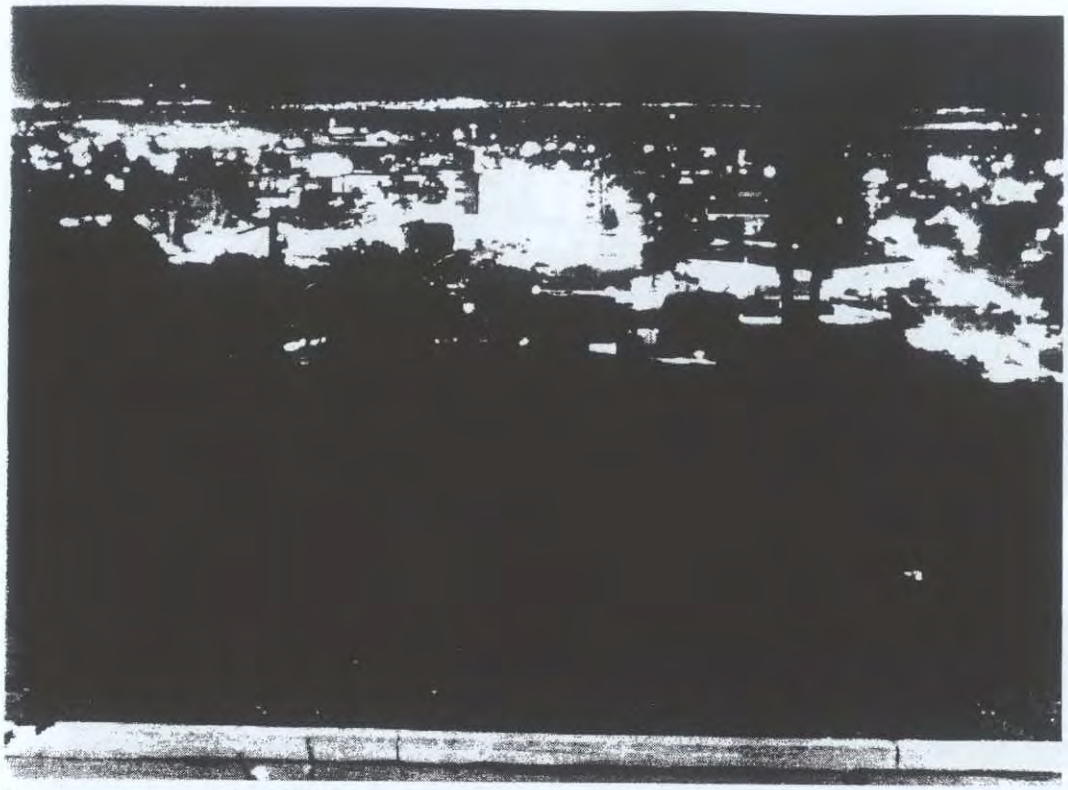
Receptors in the project site area that may be sensitive to increased light and glare include the residential units east and west of the VCMC campus, as well as residences north of Foothill Road. The VCMC campus is currently equipped with night lighting for safety and security reasons. Figure 3.20-1 compares daytime views of the VCMC campus to nighttime views. The new facilities constructed as part of the proposed project would also be illuminated at night, and could potentially increase the quantity of night lighting in the project area. The potential effect of the new lighting sources on the campus to residences north of Foothill Road is shown in Figure 3.20-2. As the figure illustrates, the addition of proposed structures would alter nighttime lighting conditions by adding two new large structures which would also be internally and externally illuminated. However, because the project site is already lighted with both structural and parking lot illumination, project implementation would not substantially increase lighting sources on the campus. In addition, new lighting sources would be shielded and projected toward the ground to decrease the quantity of light radiated into the nighttime sky. Also, lighting for the rooftop level of the parking structure would be limited to the parapet height, so as not to cast lighting on surrounding areas. Nevertheless, potential light impacts

Daytime view of the VCMC campus from north of the site along Grove Street.

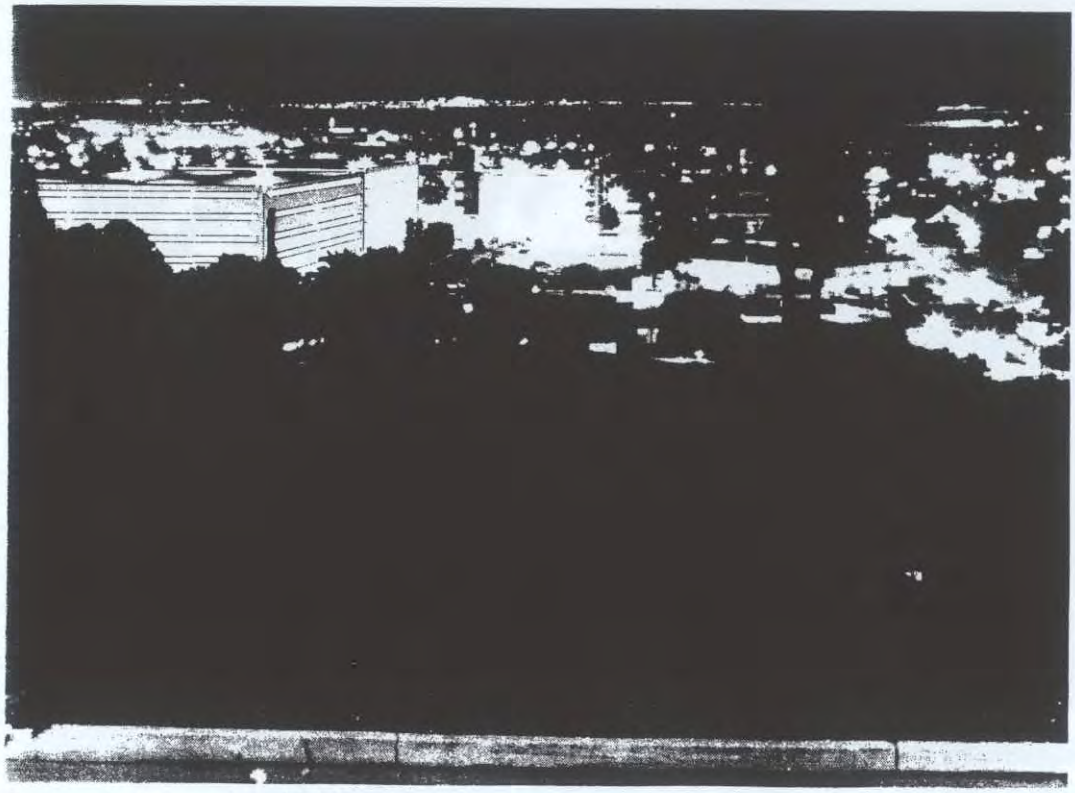


NIghttime view of the VCMC campus from north of the site along Grove Steet.

DAY vs. NIGHT VISUAL CHARACTER



Pre-project view of the VCMC campus.



Post-project view of the VCMC campus.

NIGHTTIME LIGHTING IMPACTS

associated with project implementation have caused concern for residents immediately east of the site and may be significant.

Glare is produced by light reflected off atmospheric particles and dispersed into the surrounding area. Reflective surfaces such as metal cars and glass buildings, and unshielded light bulbs may create glare. The proposed project would utilize non-reflective materials in its construction, and is not expected to add significant amounts of reflective surfaces to the site. Additional sources of light would be added, but would be expected to cause only minimal, if any, glare. Automobiles on the top level of the proposed parking structure may cause glare impacts. However, impacts would not be expected to be greater than currently exist on site and would not be significant. Overall glare impacts associated with project implementation would therefore be less than significant.

Potential shadowing effects may adversely affect residences along Agnus Drive.

3.20.2 Mitigation Measures

Mitigation Measures should be developed to address potentially adverse light and shadow effects as part of the EIR preparation process.

3.21 TRAFFIC AND CIRCULATION

3.21.1 Potential Impacts

Potential traffic impacts associated with the proposed project were examined for five critical intersections in the City of San Buenaventura. These five study intersections include the following:

- Main Street at Loma Vista Road
- Main Street at Telegraph Road
- Main Street at Mills Road
- Main Street at Seaward Avenue
- Mills Road at Telegraph Road

In conformance with the City of San Buenaventura requirements and the County of Ventura's Congestion Management Plan (CMP) guidelines, the PM peak hour operating conditions at the five study intersections were investigated according to the Intersection Capacity Utilization (ICU) Method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship based on the individual V/C ratios of key conflicting movements.

The intersection capacity analysis was performed for: (1) existing traffic conditions; and (2) existing plus project traffic conditions. Traffic volume data used in the analysis was based upon modeled data obtained from the City's MINUTP model. This data was provided by

City of San Buenaventura staff. The trip generation rates used to forecast the proposed project's trip generation were based upon the existing square footage and the number of employees currently arriving/departing the hospital during peak traffic hours. This data was also provided by City of San Buenaventura staff.

The trip generation forecast for the proposed expansion is based on trip generation rates developed by City of San Buenaventura staff. The trip generation rates developed were based on the existing VCMC square footage (398,157 square feet) and the number of employees (1,016) currently arriving/departing the hospital during peak hours.

Based on calculations by City staff, the daily traffic rate for the VCMC is 10.2 trips per thousand square feet (10.2/KSF), with a PM peak hour trip generation rate of 1.02 trips per thousand square feet (1.02/KSF). The directional split for VCMC traffic during the PM peak hour is 38 percent inbound and 62 percent outbound. Using these rates, the proposed VCMC expansion would generate approximately 797 vehicle trips per day with approximately 80 of these trips occurring during the PM peak hour (30 inbound, 50 outbound).

Table 3.21-1 summarizes the PM peak hour levels of service at the five study locations. This table indicates that four of the five study area intersections currently operate at acceptable levels of service during the PM peak hour. (LOS C is the minimum acceptable level according to City of San Buenaventura standards.) Only the intersection of Main Street at Mills Road currently operates at a poor level of service during this period with a V/C ratio of 0.84 (Los D).

Table 3.21-1. PM Peak Hour LOS Summary Table
Ventura County Medical Center Expansion

Intersection	Existing Conditions		Existing Plus Project Conditions		Change in V/C Ratio	Project Peak Hour Trips added to Critical Movements
	LOS	V/C Ratio	LOS	V/C Ratio		
Main Street @ Loma Vista Road	A	0.44	A	0.44	0.00	4 trips
Telegraph Road	A	0.50	A	0.50	0.00	4 trips
Mills Road	**D**	**0.84**	**D**	**0.85**	**+0.01**	15 trips
Seaward Avenue	B	0.69	B	0.69	0.00	7 trips
Mills Road @ Telegraph Road	A	0.52	A	0.52	0.00	8 trips

According to City standards, a project would have a significant traffic impact when the addition of project traffic to an intersection exceeds the threshold criteria allowed for added peak hour trips to the critical movements of an intersection. For an intersection that operates at LOS D, the threshold criterion is 15 peak hour trips. The threshold criteria for intersections operating at LOS C, B, and A are 45 trips, 75 trips, and 150 trips, respectively.

As shown in Table 3.21-1, the addition of project traffic to the existing volume network would not result in any significant impact at the five study intersections. The addition of VCMC traffic to the intersection at Main Street and Mills Road would total 15 trips, which would result in a V/C ratio increase of 0.01 (from 0.84 to 0.85). The increase in trips at this key intersection approaches the threshold but is not greater than the threshold value. Therefore, the impact associated with project-generated traffic is considered insignificant. At the four remaining intersections, from four to eight trips would be added to the critical movements, resulting in V/C ratio increases of 0.00.

However, capacity analysis was conducted only at five intersections deemed by City of San Buenaventura staff to be critical. Certain signalized intersections near the hospital that have not been analyzed may be adversely affected. In addition, the County of Ventura has indicated that an analysis should include roadways in the County General Plan that could be adversely affected.

3.21.2 Mitigation Measures

Further analysis should be conducted to determine appropriate traffic mitigation if roadway segments or intersections not analyzed to date will be adversely affected. In addition, the parking demand should be analyzed in greater detail.

3.22 WATER SUPPLY

3.22.1 Potential Impacts

a. Water Quality. The project site is not located near any surface or groundwater sources of municipal water supply. Therefore, no impacts to the quality of water supply would occur as a result of project implementation.

b. Water Quantity. Water supply is currently provided to the project site by the Casitas Municipal Water District via a network of feeder lines extending from 12-inch City lines located along Loma Vista, Foothill Road and Hillmont Avenue.

The proposed project would be subject to City of Ventura Resolution No. 92-73, which states that any increase in water consumption resulting from non-residential development must be offset by a decrease in water consumption at a 3:1 ratio. Based on the water demand rates contained in Resolution No. 92-73, implementation of the proposed project would result in a water demand increase of approximately 4,604 gallons per day (gpd) (see the VCMC Water Audit). This demand rate is based upon gallons per square foot demand for the various uses on the site. Because project implementation would primarily increase building square footage without directly increasing employee or patient populations, this estimate may overstate the demand increase that would actually occur.

The additional project demand would be offset by fixture retrofitting, in accordance with Resolution No. 92-73. Based upon a demand increase of approximately 4,604 gpd, the proposed project would require a water savings of 13,812 gpd. According to Resolution No. 92-73, this required savings would correspond to the retrofit of between 96 and 207 toilets with ultra low flow fixtures to meet the 3:1 offset goal (see the VCMC Water Audit, 1993). Part or all of the required water savings could also be met by the retrofit of existing on-site landscaping and irrigation systems with drought-tolerant landscaping and drip irrigation systems.

The range in the required number of retrofit toilets is based upon the frequency of fixture use with regards to land use. These retrofits would be in addition to the use of ultra low flow toilets in the new structures. The number of fixtures required for this retrofit is currently available at various existing facilities on the VCMC campus; therefore, fixture retrofit could take place entirely onsite. However, the required retrofits could also be achieved off-site. Compliance with Resolution No. 92-73 would more than offset the increase in water consumption associated with proposed project and would reduce impacts to local water supply to a less than significant level.

In addition, the following water conservation techniques would be integrated into project design:

- Low flow shower heads (2.5 gallons per minute or less at 40 psi) would be installed on all new construction.
- Sink and lavatory faucets which limit the flow of water to a maximum of 2.5 gallons per minute at 40 psi, would be installed on all new construction.
- New landscaping developed on the subject site in conjunction with the proposed project would be drought-tolerant.
- Drip, mini-emitter or low volume sprinkler irrigation systems would be used for all new landscaping developed in conjunction with the proposed project.

c. **Fire Flow.** Project design would include adequate hydrant coverage for the new facilities, as per the Uniform Fire Code. Ventura County Fire Department staff indicate that standard sprinkler systems within the proposed facilities would reduce the fire flow required by approximately 50 percent. Fire flows in the area are adequate to accommodate the proposed facilities and would not be affected by project implementation.[7] Therefore, no project-specific or cumulative impacts to fire flow would occur due to project implementation.

3.22.2 Mitigation Measures

No mitigation measures are required.

3.23 WASTE TREATMENT/DISPOSAL

3.23.1 Potential Impacts

a. Individual Sewage Disposal System. The proposed project would be connected to the City's sewer treatment system and would not utilize individual sewage disposal systems onsite. Therefore, no project-specific or cumulative impacts to individual sewage disposal systems would be associated with project implementation.

b. Sewage Collection/Treatment Facilities. Sewage collection treatment of the proposed facility is provided by the City of Ventura's Wastewater Reclamation Plant. The plant provides tertiary treatment and has an existing design capacity of 14.0 MGD (average daily flow). The plant is currently operating at 8.1 MGD. Project-generated sewage can be estimated based on water usage of the proposed project. As discussed in Section 3.22, project implementation would result in a water demand increase of 4,604 gpd. However, this water consumption increase would be more than offset by the reduction in consumption related to toilets retrofitted in association with the requirements of City of Ventura Resolution No. 9273. Therefore, no project-specific or cumulative impacts to sewage collection or treatment facilities would occur due to project implementation.

c. Solid Waste Facilities. Solid waste generated within the City of Ventura, including the VCMC campus, is deposited in the Bailard Landfill. The permit to operate the landfill is scheduled to expire in December 1993.[8]

Based on the Ventura County Solid Waste Management Department's (VCSWMD) solid waste generation rates, current solid waste generation on the VCMC campus is estimated at 1,401 tons per year (tpy), as shown in Table 3.23-1. The majority of the waste (70 percent) is generated at the VCMC Hospital while the remaining 30 percent is divided among the various other campus facilities.

Such materials as office paper, newspaper, cardboard, HDPE and PET plastic, glass, and aluminum are currently recycled through the County's RAP (Recycle All Paper) program in most buildings on the VCMC campus, and limited recycling is taking place in the Hospital. Paper recycling containers are currently located in facility offices and beverage container recycling receptacles are located in kitchen and dining areas. There are two paper only recycling bins and eight mixed recyclable material bins on the campus.

According to the VCSWMD, the lack of adequate space for refuse and recyclables bins is one of the primary constraints to management of recycling and refuse disposal on the VCMC campus. This lack of space is due to both a shortage of space for receptacles as well as the lack of a baler or other system to break down bulky cardboard boxes, which constitute a large portion of the VCMC wastestream.[9]

Table 3.23-1 Current Solid Waste Generation

Facility	Square Feet	Generation Rate (tons/sf/yr)	Total Generation (tons/yr)
Hospital	178,995	.0055	984.5
PSSA Building	25,140	.0014	35.2
Public Health	18,312	.0027	49.4
Mental Health Complex	37,655	.0027	101.7
Family Care Complex	32,555	.0027	87.8
Plant Operations	30,581	.0014	42.8
Bard Building	24,754	.0014	34.6
Juvenile Complex	50,165	.0013	65.2
Total	**398,157**		**1,401.2**

The VCSWMD has developed guidelines for solid waste analysis, including solid waste generation and reduction rates. These guidelines state that a project shall be considered individually significant if the solid waste disposal rate exceeds 65 net tons per year (tpy) and the solid waste diversion rate is less than 25 percent.

Based upon the County's per employee waste generation rates for health services, the proposed project would increase long-term solid waste generation at the VCMC campus by an estimated 127.96 tpy (see Appendix C). In addition, short-term increases in solid waste generation would occur during project-related demolition and construction.

The long-term generation associated with project implementation would exceed the County' significance threshold. However, VCMC staff are currently in the process of developing a more extensive recycling program which will extend current programs to the Hospital and any new facilities constructed on the campus.

Combined, the materials that are currently recycled on the VCMC campus through the RAP program account for approximately 19.5 percent of the total 127.96 tpy increase in solid waste generation that would occur as a result of project implementation. If all such materials generated by new campus facilities are recycled, as much as a 24.98 tpy reduction in solid waste disposal could be achieved. Assuming that the materials recycled through the RAP program also account for 19.5 percent of the waste generated at the VCMC Hospital, extension of the RAP program to that facility would reduce on-site waste disposal by up to 192 tpy. Implementation of campus-wide recycling efforts would supplement project programs and mitigate the project's effects.

In addition to the extension of the currently planned recycling program to the VCMC Hospital and all new facilities that are part of the proposed project, the following features will be implemented campus-wide to further reduce solid waste generation on the VCMC campus:

- The VCMC will mulch the grass clippings from campus lawns rather than disposing of the clippings. If existing equipment will not mulch the clippings, one or more mulching lawn mowers will be purchased by the VCMC. Grass clippings on campus lawns will be used as mulch for campus landscaping rather than the current method of disposing clippings in trash receptacles. In addition, a "green bin" recycling program will be initiated for other yard wastes. Yard waste accounts for an estimated 13.8 percent of the increase in waste generation associated with the proposed project. Diversion of all yard wastes generated in association with the proposed project could therefore reduce the increase in solid waste generation associated with project implementation by up to 17.77 tpy. Implementation of campus-wide mulching could reduce the generation of such waste by an even greater amount.

- The VCMC will develop an on-site or off-site composting program for organic compostable wastes generated on the campus. One possible approach would be to compost kitchen scraps from their own facility using worm boxes or closed air compost containers. This approach would require at least one day of labor every six months to harvest finished vermipost or compost as well as regular maintenance of the worm boxes or compost bins. Organic compostables constitute an estimated 11.8 percent of the increase in solid waste generation associated with the proposed project. If all such materials are composted, a disposal reduction of up to 15.1 tpy could be achieved. A campus-wide program would result in an even greater reduction.

- Adequate space for waste and recycling bins, as determined by the Ventura County Solid Waste Management Department, will be provided for all new facilities developed as part of the proposed project.

- The VCMC will purchase a baler for the VCMC facility or develop an alternative method to break down cardboard boxes and reduce the space requirements for recyclable materials bins. An example of an alternative method might be assigning custodians to manually break down cardboard boxes.

- The contractor that conducts project-related construction and demolition activities will be required to develop County-approved plans for the diversion of construction/demolition wastes through source reduction or recycling.

Full implementation of currently planned programs and the additional programs recommended as part of the proposed project could reduce solid waste disposal associated with project implementation by as much as 57.85 tpy (45 percent). In addition, implementation of these programs campus-wide would further reduce waste generation associated with existing on-site facilities while extension of the RAP program to the VCMC Hospital would reduce on-site

disposal by up to 192 tpy. These programs would accomplish as great a reduction as is feasible on the campus and the diversion rate would exceed the County's 25 percent diversion target. Both project and cumulative impacts to County solid waste facilities are therefore considered less than significant.

3.23.2 Mitigation Measures

No mitigation measures are required.

3.24 UTILITIES

3.24.1 Potential Impacts

a. Electric. Electrical service to the project site is provided by Southern California Edison. Current average daily consumption of electricity on the VCMC campus is estimated at 30,273 kilowatt-hours (kWh).[10] Project implementation would increase on-site electrical power consumption and would require the extension of distribution lines to the new facilities. Based upon electricity consumption factors contained in the South Coast Air Quality Management District's (SCAQMD) Air Quality Handbook, the proposed 88,378 square foot increase would increase electrical demand by 3,832 kWh per day.[11] This would represent a 13 percent increase over estimated current on-site consumption. Because the primary purpose of the project is to relieve current overcrowded conditions rather than accommodate an expansion of services, this estimate may overstate the actual increase that would occur.

Southern California Edison staff indicate that this increase in electrical demand would not impact its service in the area and that onsite distribution improvements are expected to be routine.[12] In addition, energy efficiency would be incorporated into project design, in accordance with Title 24 of the California Code of Regulations. Therefore, no project-specific or cumulative impacts to electrical service would be associated with project implementation.

b. Natural Gas. Natural gas service to the subject site is provided by the Southern California Gas Company. Current average daily natural gas use on the VCMC campus is estimated at 47,931 cubic feet. Project implementation would increase natural gas use onsite and would require the extension of distribution lines to the new facilities. Based upon natural gas demand factors in the SCAQMD's Air Quality Handbook, the increase in square footage would result in an increase in demand for natural gas of approximately 12,501 cubic feet per day.[13] This would represent a 26 percent increase over current estimated consumption on the VCMC campus. Again, it should be noted that this estimate may overstate the actual consumption increase because project implementation would primarily relieve current overcrowded conditions on the campus rather than provide for expansion of services.

This increase would not be expected to impact natural gas service in the area and onsite distribution improvements would be routine. Therefore, no project-specific or cumulative impacts to natural gas service would be associated with project implementation.

c. Communications. Communications to the project site is provided by PacBell. Project implementation would require the extension and/or expansion of communications service to the Coroners/Medical Examiner's facility, the Ambulatory Care Clinic, and the Mental Health In-Patient facility. PacBell personnel indicate that this expansion is expected to be routine and would not impact its service in the area. Therefore, no project-specific or cumulative impacts to communication are anticipated.

3.24.2 Mitigation Measures

No mitigation measures are required.

3.25 FLOOD CONTROL/DRAINAGE

3.25.1 Potential Impacts

a. Flood Control District Facility. The project site is not located within the 100-year floodplain. No flood control district facilities are present on or near the project site. The project site itself does not contain any areas which are subject to flooding. Therefore, no project-specific or cumulative impacts to flood control facilities would occur due to project implementation.

b. Other Facilities. As previously discussed, the project site is not located within any floodplain and does not have any areas that are subject to flooding. Onsite drainage is currently routed to Loma Vista Road via Hillmont Avenue. Although project implementation may incrementally increase the amount of impervious surface area onsite, drainage patterns would not be expected to be significantly altered. Any alteration of drainage patterns would be incorporated in the site development plans in accordance with the County of Ventura's Building Code, and Chapter 70 of the Uniform Building Code. Therefore, no project-specific or cumulative impacts to private drainage facilities would occur due to project implementation.

3.25.2 Mitigation Measures

No mitigation measures are required.

3.26 LAW ENFORCEMENT

3.26.1 Potential Impacts

a and b. Personnel/Equipment and Facilities. Police protection for the project site is provided by the City of San Buenaventura Police Department and the Ventura County Sheriff's Department. The nearest City Police Department station to the project site is the department headquarters, located at 1425 Dowell Drive. Response time for the city police department is based upon patrol unit location and the nature of the call, but is under three minutes for emergencies. The closest sheriff's station to the proposed site is the "David" station, located in

the Ventura County Government Center at 800 South Victoria Avenue. Response time to the project site is based upon patrol unit location and nature of the call.

During the first 8 months of 1992, the City Police Department received a total of 264 calls for service from the VCMC campus. In addition, 137 calls for service were received from the 800 block of Hillmont Avenue and the 300 block of Hospital Road. The majority of these calls dealt with missing walkaways from the campus Mental Health Unit. The total number of calls related to the VCMC facilities for the 8-month period are therefore estimated by the City Police Department at 401.

Although project implementation would result in an increase in on-site building square footage, this increase is not expected to affect police service to the site. Nevertheless, project implementation would be expected to incrementally increase the number of calls for service on the VCMC campus. Project related enforcement concerns at the site would include equipment theft and trespassing during construction. During construction and operation of the new facilities, equipment and tools used at the project site would be secured to prevent theft. Long-term enforcement concerns include burglary, auto theft and vandalism during operation of the facilities and crime associated with potentially dangerous patients. The proposed Mental Health In-patient Facility incorporates more stringent security design features than does the existing facility it is replacing. In addition, mental health staff are trained for emergency situations involving patients. Therefore, project implementation is not expected to significantly increase enforcement calls to the project site.

The introduction of structured parking as an element of the proposed project represents a concern for the safety of employees, particularly those walking to their cars in late night hours. These safety issues would be addressed through programming and design features, which would be reviewed by the City Police Department.

3.26.2 Mitigation Measures

No mitigation measures are required.

3.27 FIRE PROTECTION

3.27.1 Potential Impacts

a and b. Distance/Response Time and Personnel, Equipment and Facilities. Fire protection for the site is provided by Ventura City Fire Station No. 2, located approximately 2 miles from the site. Response time to the site is less than 5 minutes and is considered adequate. Additional equipment and personnel are available from Ventura City Stations 3 and 5, located within a 5-mile radius of the project site. City of Ventura fire personnel indicate that staffing and equipment at these stations are adequate to accommodate the proposed project. Therefore, no project-specific or cumulative impacts to fire protection would be associated with project implementation.

3.27.2 Mitigation Measures

No mitigation measures are required.

3.28 EDUCATION

3.28.1 Potential Impacts

a and b. Schools and Libraries. The proposed project would not affect enrollment at area schools or demand for library service. Schools on the VCMC campus may experience air quality and noise impacts during project construction. However, such impacts would be of short-term duration and would be considered less than significant.

3.28.2 Mitigation Measures

No mitigation measures are required.

3.29 RECREATION

3.29.1 Potential Impacts

a, b, and c. Local and Regional Parks, Facilities and Trails. The project would take place entirely on the VCMC campus. Aside from small-scale recreational facilities within both the Youth Detention Complex and the Mental Health In-patient Unit, no recreational uses exist onsite. Project implementation would not affect local or regional parks, facilities, or trails. The Mental Health In-patient facility would include newly programmed recreational space to improve provision of onsite needs. Therefore, no project-specific or cumulative impacts to recreational opportunities would occur due to project implementation.

3.29.2 Mitigation Measures

No mitigation measures are required.

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1 Wood, Steve, Ventura County Planning Department, personal communication, November 1992.

2 Thomas, Chuck, Ventura County Air Pollution Control District, personal communication, November 1992.

3 Ibid

4 Resources Appendix, Ventura County General Plan, 1988.

5 California Natural Diversity Database, 1992.

6 Lander, Bruce, Paleoenvironmental Associates, 1992.

7 Morgan, Diane, Ventura County Fire Protection District, personal communication, November 1992.

8 County of Ventura, Draft Environmental Impact Report: Weldon Canyon Landfill, 1992.

9 David Goldstein, Ventura County Solid Waste Management Department, January 1993.

10 This figure includes the 23,336 kWh/day consumed by the VCMC hospital as identified in the 1992 VCMC Water/Energy Conservation Study prepared by Black & Veatch and assumes consumption rates provided by the South Coast Air Quality Management District for the remainder of the campus.

11 In order to provide a worst case estimate, the Hospital consumption rate of 17.9 kWh/square foot/year is used for the entire increase in square footage associated with the project.

12 Rembolt, Donald, Southern California Edison, personal communication, 1992.

13 The SCAQMD handbook does not include a natural gas consumption rate for medical facilities. Consequently, the Hotel/Motel rate of 4.8 cubic feet/square foot/month, which is the highest rate identified in the handbook, is used to provide a worst-case analysis.

4.0 MANDATORY FINDINGS OF SIGNIFICANCE

		Yes/Maybe	No
1.	Does the project have the potential to significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	X	
2.	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future).	X	
3.	Does the project have impacts which are individually limited, but cumulatively considerable? (Several projects may have relatively small individual impacts on two or more resources, but the total of those impacts on the environment is significant).	X	
4.	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	X	

5.0 DETERMINATION OF ENVIRONMENTAL DOCUMENT

On the basis of this initial evaluation:

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

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measure(s) described in Section C of the Initial Study will be applied to the project. A MITIGATED NEGATIVE DECLARATION should be prepared.

☒ I find the proposed project, individually and/or cumulatively MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.*

_____ _____

Signature of Preparer Date

Alec T. Pringle, Project Manager

*EIR Issues of Focus: Land Use (community character); Air Quality (localized emissions); visual resources; noise and vibration; light, glare, and shadow; and transportation/circulation (level of service, parking)

6.0 LIST OF PREPARERS/PERSONS CONTACTED

6.1 LIST OF PREPARERS

This environmental document was prepared by Fugro-McClelland (West), Inc. and Linscott, Law & Greenspan, Engineers, while under contract to the County of Ventura, Public Works Agency. Persons directly involved in the preparation of this report were:

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7.0 REFERENCES

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California Department of Fish and Game (1992), Natural Diversity Database.

Hayes, Russ, City of Ventura Police Department, Letter dated December 1, 1992.

Santa Barbara, City of (1989), Water Demand Factor and Conservation Study.

South Coast Air Quality Management District (1992), CEQA Air Quality Handbook Final Draft.

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Ventura, City of (1992), Resolution No. 92-73.

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County of Ventura (1988), General Plan Resources Appendix.

County of Ventura (1992), Draft Environmental Impact Report: Weldon Canyon Landfill.

U.S. Department of Housing and Urban Development (1984), Noise Assessment Guidelines.

Ventura County Air Pollution Control District (1989), Guidelines for the Preparation of Air Quality Impact Analyses.

Ventura County Public Works Agency (1992), Fault Hazard Study: Medical Examiner's Facility, prepared by Staal, Gardner & Dunne, Inc..

Ventura County Solid Waste Management Department (1992), Guidelines for the Preparation of Environmental Assessments for Solid Waste Impacts.

APPENDIX A
AIR QUALITY

Project Name : VCMC Date : 02-20-1993

Analysis Year = 1995 Temperature = 60
EMFAC7 VERSION : EMFAC7D ...11/88

Unit Type	Trip Rate	Size	Tot Trips	Days Op.
edical Office Building	10.2/1000 Sqf	78	797	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
rip Length	8.4	3.7	3.9	7.4	3.6
Started Cold	88.2	40.1	58.0	77.2	27.0
rip Speed	35	35	35	35	35
ercent Trip	27.0	17.0	56.0		

Vehicle Fleetmix

Vehicle Type	Percent Type	Leaded	Unleaded	Diesel
Light Duty Autos	72.8	1.7	95.6	2.7
Light Duty Trucks	14.3	2.2	95.0	2.8
dium Duty Trucks	4.3	5.3	94.7	0.0
vy Duty Trucks	3.9	29.8	70.3	N/A
Heavy Duty Trucks	3.9	N/A	N/A	100.0
Motorcycles	0.9	100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TOG	CO	NOx
Medical Office Building	9.5	99.9	12.4

Project Emissions Report in Lb/Day

Unit Type	FUEL USE	PM10	SOx
Medical Office Building	138.4	15.1	1.3

APPENDIX B
NOISE

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EXISTING

NOISE PREDICTION MODEL - MODIFIED FHWA STAMINA 2.0

Loma Vista Road e/o Hillmont

DATA	Date:	03/01/93
Enter ADT:	21800	
Enter vehicle speed:	35	
Enter % of Medium trucks:	1.8	
Enter % of Heavy trucks:	0.7	
Enter % of Evening Traffic -		
(default=17%) Autos:	12.9	
Medium Trucks:	4.9	
Heavy Trucks:	2.7	
Enter % of Nighttime Traffic -		
(default=15%) Autos:	9.6	
Medium Trucks:	10.3	
Heavy Trucks:	10.8	
Enter % road gradient:	0	
Enter distance from site to centerline of road, feet:	50	

RESULTS

		Hard Sites
Noise Level at site -		
Ldn, dBA:	68.0	68.0
CNEL, dBA:	68.4	68.4

Distance To Contour From Centerline, feet (4.5 dB/2x) -	Ldn	CNEL
75 dBA:	NA	NA
70 dBA:	37	39
65 dBA:	80	84
60 dBA:	172	182
55 dBA:	371	392
50 dBA:	798	845

EXISTING + PROJECT

NOISE PREDICTION MODEL - MODIFIED FHWA STAMINA 2.0

Loma Vista Road e/o Hillmont

DATA	Date:	03/01/93
Enter ADT:	22154	
Enter vehicle speed:	35	
Enter % of Medium trucks:	1.8	
Enter % of Heavy trucks:	0.7	
Enter % of Evening Traffic -		
(default=17%) Autos:	12.9	
Medium Trucks:	4.9	
Heavy Trucks:	2.7	
Enter % of Nighttime Traffic -		
(default=15%) Autos:	9.6	
Medium Trucks:	10.3	
Heavy Trucks:	10.8	
Enter % road gradient:	0	
Enter distance from site to centerline of road, feet:	50	

RESULTS

		Hard Sites
Noise Level at site -		
Ldn, dBA:	68.1	68.1
CNEL, dBA:	68.5	68.5

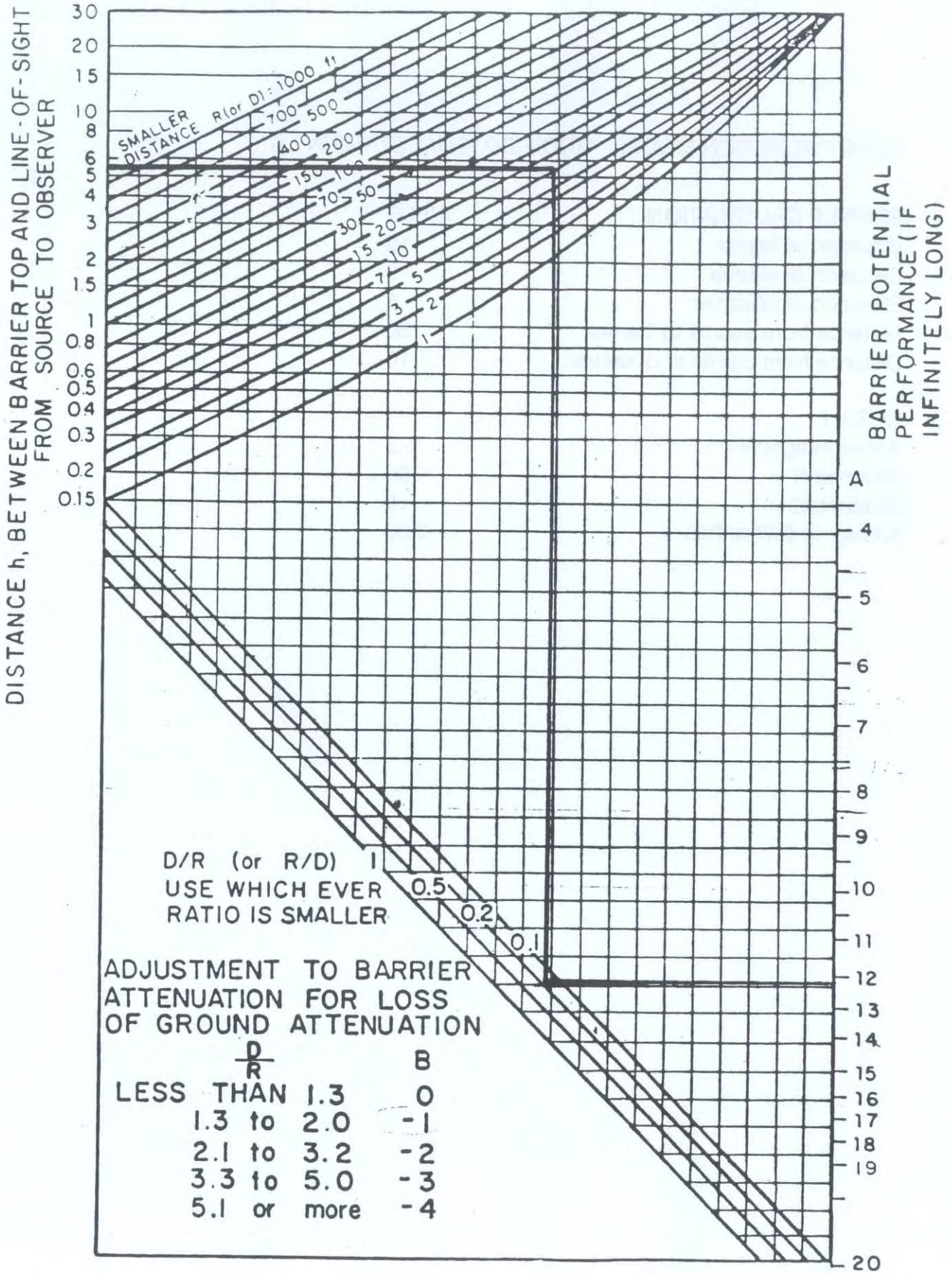
Distance To Contour From Centerline, feet (4.5 dB/2x) -	Ldn	CNEL
75 dBA:	NA	NA
70 dBA:	37	40
65 dBA:	81	85
60 dBA:	174	184
55 dBA:	375	396
50 dBA:	807	854

NOISE PREDICTION MODEL - MODIFIED FHWA STAMINA 2.0

BARRIER CALCULATION	INPUT
Elevation of barrier:	10
Elevation of source:	3
Elevation of observer:	5
Distance from source to barrier:	50
Distance from barrier to observer:	10

RESULT	
Barrier Height =	5.3
Distance R =	50
Distance S =	10
Smaller of D/R or R/D =	0.20

NOISE BARRIER WORKCHART 6



APPENDIX C

SOLID WASTE GENERATION

VENTURA COUNTY SOLID WASTE MANAGEMENT DEPARTMENT
SOLID WASTE PROJECT IMPACT CALCULATION

PROJECT: County Hospital VCMC 01/27/93

(values in tons/year)

MATERIAL TYPE	RESIDENTIAL	COMMERICAL	INDUSTRIAL	TOTAL
CARDBOARD	0.000	16.057	0.000	16.057
MIXED PAPER	0.000	6.927	0.000	6.927
NEWSPAPER	0.000	2.886	0.000	2.886
LEDGER	0.000	4.297	0.000	4.297
NONRECYCLABLE PAPER	0.000	18.385	0.000	18.385
PAPER TOTAL	0.000	48.546	0.000	48.546
HDPE	0.000	0.127	0.000	0.127
PET	0.000	0.125	0.000	0.125
FILM PLASTIC	0.000	3.975	0.000	3.975
OTHER PLASTIC	0.000	13.140	0.000	13.140
PLASTICS TOTAL	0.000	17.367	0.000	17.367
RECYCLABLE GLASS	0.000	1.035	0.000	1.035
NONRECYCLABLE GLASS	0.000	2.373	0.000	2.373
GLASS TOTAL	0.000	3.408	0.000	3.408
ALUMINUM	0.000	0.452	0.000	0.452
FERROUS METALS	0.000	2.853	0.000	2.853
NONFERROUS METALS	0.000	0.652	0.000	0.652
WHITE GOODS	0.000	0.000	0.000	0.000
METAL TOTAL	0,000	3.964	0.000	3.964
YARD WASTE	0.000	17.767	0.000	17.767
ORGANIC COMPOSTABLES	0.000	15.096	0.000	15.096
ORG. NONCOMPOSTABLES	0.000	1.773	0.000	1.773
TIRES AND RUBBER	0.000	6.877	0.000	6.877
WOOD WASTES	0.000	1.562	0.000	1.562
ORGANIC TOTAL	0.000	25.305	0.000	25.305
INERT SOLIDS	0.000	0.391	0.000	0.391
HHW	0.000	0.123	0.000	0.123
OTHER SPEC. WASTE TOTL	0.000	0.514	0.000	0.514
SLUDGE	0.000	0.000	0.000	0.000
OTHER SPECIAL WASTE	0.000	11.084	0.000	11.084
SPECIAL WASTE TOTAL	0.000	11.084	0.000	11.084
TOTAL WASTE	0.000	127.962	0.000	127.962

APPENDIX 5.2
AESTHETIC IMPACT CRITERIA/
INDEX TO VIEWING LOCATIONS

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Table 4.7-1. Scenic Variety Classes

	Distinctive	Common	Minimal
Landform	>60% slope exposed ridges; steep, highly dissected canyons	20-60% slope, small ridges, knolls, canyons	<20% slope level to rolling terrain
Vegetation/ Drainages	High variation in vegetative types; such as mixture of trees, shrubs, and grassland forming edges	Some variation in vegetative types, height, and density	Graded areas, bare soils
Shorelines/Rivers (where applicable)	Perennial streams, pools, falls, vegetated shoreline	Intermittent streams, diversified shoreline	Gullies
General Landscape Character	Variety in detail, with many unique boundaries between different units.	Some variation, with indistinct boundaries	No variety boundaries
Urban Design Character	Powerful sense of unity and proportion with design variation. Strong design linkages provided by: • Building silhouette; • Spacing between buildings; • Setbacks from street property line; • Proportion of windows, bays, doorways, and other features; • Massing of building form; • Location and treatment of entryway; • Surface material, finish and texture; • Shadow patterns; • Building scale; • Style of architecture; and • Landscaping if any.	Some sense of unity and proportion. Moderate design linkages.	No sense of unity and proportion. Design linkage absent, or strong unity with no design variation (monotonous).

SOURCE: Adapted from U.S. Department of Agriculture (1974), *National Forest Landscape Management*, Forest Service, Washington, D.C., Vol. 2, Ch. 1 and Hedman and Jaszewski (1984), *Fundamentals of Urban Design*, American Planning Association, Chicago, Illinois.

Table 4.7-2. Criteria for Rating Sensitivity Levels

Travel Route or Use Area	Sensitivity Level		
	1	2	3
Primary Travel Route and Use Area	At least 1/4 of users have major concern for visual quality	Fewer than 1/4 users have major concern for visual quality	N/A
Secondary Travel Routes and Use Areas	At least 3/4 of users have major concern for visual quality	Between 1/4 and 3/4 of users have major concern for visual quality	Fewer than 1/4 of users have major concern for visual quality.

NOTES: The proportions of users indicated (1/4, 3/4) are approximate. These user ratios indicate a relationship between the number of travelers and their appreciation for aesthetics while enroute to a destination. In accordance with the U.S. Forest Service methodology, a greater sensitivity is assumed to be felt by those driving, walking, and bicycling for pleasure and those engaged in recreation activities than those commuting for work-related purposes.

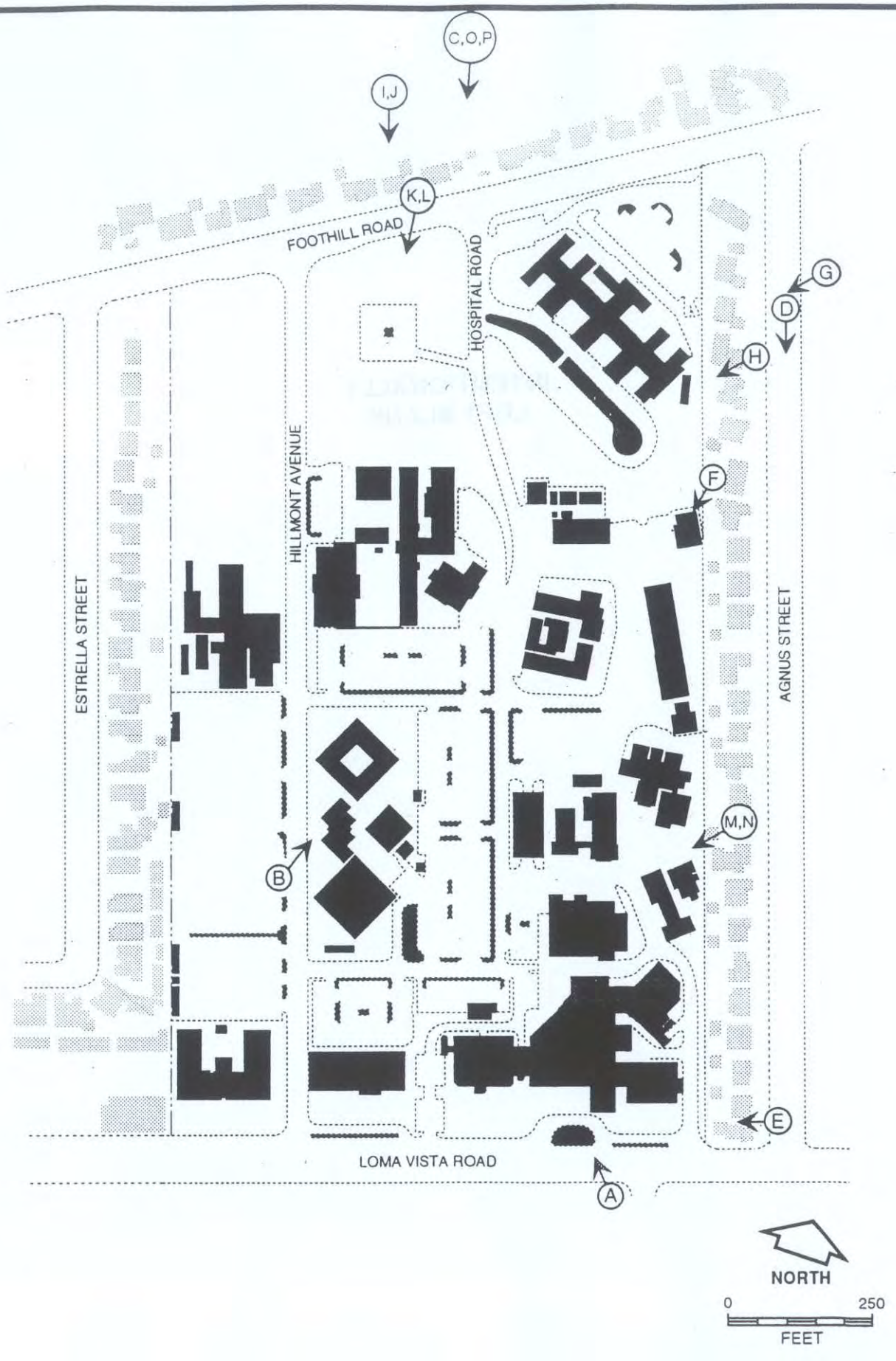
Sensitivity: Level 1 - highly sensitive
Level 2 - moderately sensitive
Level 3 - low sensitivity

SOURCE: U.S. Department of Agriculture (1974), *National Forest Landscape Management*, Forest Service, Washington, D.C., Vol. 2, Ch. 1. Table 4.7-2 modified by Lawrence Headley, Arthur Little, Inc., Santa Barbara, California, 1985.

Table 4.7-3. Visual Condition Rating Guidelines

Visual Condition Class	Guidelines
VC-1	a) All features within the field of view appear to be characteristic of the region; b) Or, features appearing incongruous (out of place, incompatible) are evident, but would usually be overlooked by the casual viewer (inconspicuous due to such factors as size, distance, distribution, context, screening, or the predominant orientation of the views).
VC-2	a) Uncharacteristic features, appear incongruous, are not easily overlooked, and may attract attention, but are visually subordinate to inherent features. b) Or, uncharacteristic features are subordinate to the predominant characteristics of the area, but are similar enough to the inherent features of the area to be regarded as at least moderately compatible with them.
VC-3	a) Uncharacteristic features appear incongruous and compete for attention (are distracting and co-dominant) with those that are inherent to the area; b) Or, uncharacteristic features demand attention (are visually dominant), but are moderately compatible with features inherent to the area.
VC-4	Uncharacteristic features appear incongruous and dominate the field of view. The primary character of the area may be subdued by comparison and difficult to recognize.
VC-5	Uncharacteristic features appear incongruous and so dominate the field of view, due to their size and/or distribution, that the character of the area is unrecognizable or does not appear to be the same as that for the rest of the region.

SOURCE: Modified from USFS, 1974 and Lawrence Headley, 1985.



000235 VIEW ORIENTATION MAP

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APPENDIX 5.3
TRANSPORTATION AND CIRCULATION/ PARKING STUDY

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LEVEL OF SERVICE (LOS)
AND INTERSECTION CAPACITY UTILIZATION (ICU)

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Level of Service concept denotes any one of a number of various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the Highway Capacity Manual of 1985. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

The Intersection Capacity Utilization (ICU) method of intersection capacity analysis has been used in our studies. It directly relates traffic demand and available capacity for key intersection movements, regardless of present signal timing. The capacity per hour of green time for each approach is calculated based on the methods of the Highway Capacity Manual. The proportion of total signal time needed by each key movement is determined and compared to the total time available (100 percent of the hour). The result of summing the requirements of the conflicting key movements plus an allowance for clearance times is expressed as a decimal fraction. Conflicting key traffic movements are those opposing movements whose combined green time requirements are greatest.

The resulting ICU represents the proportion of the total hour required to accommodate intersection demand volumes if the key conflicting traffic movements are operating at capacity. Other movements may be operating near capacity, or may be operating at significantly better levels. The ICU may be translated to a Level of Service as tabulated below.

The Levels of Service (abbreviated from the Highway Capacity Manual) are listed here with their corresponding ICU and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e., when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

LEVEL OF SERVICE	LOAD FACTOR	EQUIVALENT
A (free flow)	0.0	0.0 - 0.60
B (rural design)	0.0 - 0.1	0.61 - 0.70
C (urban design)	0.1 - 0.3	0.71 - 0.80
D (maximum urban design)	0.3 - 0.7	0.81 - 0.90
E (capacity)	0.7 - 1.0	0.91 - 1.00
F (forced flow)	Not Applicable	Not Applicable

SERVICE LEVEL A - Page 2

There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

SERVICE LEVEL B

This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

SERVICE LEVEL C

At this level stable operation continues. Loading is still intermittent but more frequent that at Level B. Occasionally drivers may have to wait through more than one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

SERVICE LEVEL D

This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

SERVICE LEVEL E

This represents near capacity and capacity operation. At capacity (ICU = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

SERVICE LEVEL F

Jammed conditions. Traffic backed up from a downstream location on one of the streets restricts or prevents movement of traffic through the intersection under consideration.

ROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

PT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING

AM PEAK HOUR

	EXISTING TRAFFIC			.000	AMBIENT GROWTH				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND TRAFFIC							
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	
NBL	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
NBT	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*
NBR	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000	
SBL	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
SBT	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000	
SBR	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
EBL	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000	
EBT	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*
EBR	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
WBL	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
WBT	0	3200	0.000		0	0	3200	0.000		0	0	3200	0.000		0	0	3200	0.000		0	0	3200	0.000		0	0	3200	0.000	
WBR	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
	CLEARANCE 0.00				CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00			
	ICU VALUE 0.00				ICU VALUE 0.00					ICU VALUE 0.00					ICU VALUE 0.00					ICU VALUE 0.00					ICU VALUE 0.00			
	OF SERVICE A				LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A			

PM PEAK HOUR

MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	
NBL	193	0	0.000		0	193	0	0.000		7	200	0	0.000		18	218	0	0.000		15	233	0	0.000		0	233	0	0.000	
NBT	7	3200	0.063	*	0	7	3200	0.063	*	0	7	3200	0.065	*	0	7	3200	0.070	*	1	8	3200	0.075	*	0	8	3200	0.075	*
NBR	106	1600	0.066		0	106	1600	0.066		0	106	1600	0.066		15	121	1600	0.076		8	129	1600	0.081		0	129	1600	0.081	
SBL	21	1600	0.013	*	0	21	1600	0.013	*	0	21	1600	0.013	*	0	21	1600	0.013	*	2	23	1600	0.014	*	0	23	1600	0.014	*
SBT	15	1600	0.019		0	15	1600	0.019		0	15	1600	0.019		0	15	1600	0.019		1	16	1600	0.020		0	16	1600	0.020	
SBR	15	0	0.000		0	15	0	0.000		0	15	0	0.000		0	15	0	0.000		1	16	0	0.000		0	16	0	0.000	
EBL	7	1600	0.004		0	7	1600	0.004		0	7	1600	0.004		0	7	1600	0.004		1	8	1600	0.005		0	8	1600	0.005	
EBT	515	3200	0.284	*	0	515	3200	0.284	*	3	518	3200	0.289	*	7	525	3200	0.299	*	40	565	3200	0.321	*	0	565	3200	0.321	*
EBR	394	0	0.000		0	394	0	0.000		12	406	0	0.000		27	433	0	0.000		30	463	0	0.000		0	463	0	0.000	
WBL	108	1600	0.068	*	0	108	1600	0.068	*	0	108	1600	0.068	*	15	123	1600	0.077	*	8	131	1600	0.082	*	0	131	1600	0.082	*
WBT	224	3200	0.071		0	224	3200	0.071		3	227	3200	0.072		3	230	3200	0.073		17	247	3200	0.078		0	247	3200	0.078	
WBR	4	0	0.000		0	4	0	0.000		0	4	0	0.000		0	4	0	0.000		0	4	0	0.000		0	4	0	0.000	
	CLEARANCE 0.00				CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00			
	ICU VALUE 0.42				ICU VALUE 0.42					ICU VALUE 0.44					ICU VALUE 0.46					ICU VALUE 0.49					ICU VALUE 0.49			
	EVEL OF SERVICE A				LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A					LEVEL OF SERVICE A			

N/S: MILLS ROAD
E/W: LOMA VISTA ROAD
1633-4

MILLS ROAD/ LOMA VISTA ROAD
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 4

000241

PROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING

AM PEAK HOUR

	EXISTING TRAFFIC				AMBIENT GROWTH .000				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND GROWTH				WITH MITIGATION			
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
NBT	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
NBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
SBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
SBT	0	3200	0.000		0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000
SBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
EBL	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
EBT	0	3200	0.000	*	0	0	3200	0.000	* 0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*	0	0	3200	0.000	*
EBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
WBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	3200	0.000	*
WBT	0	3200	0.000		0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000
WBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00			
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A			

000242

241

PM PEAK HOUR

MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	117	1600	0.073		0	117	1600	0.073	0	117	1600	0.073	35	152	1600	0.095	* 11	163	1600	0.102	* 0	163	1600	0.102	*
NBT	266	1600	0.166	*	0	266	1600	0.166	* 4	270	1600	0.169	*	23	293	1600	0.183	25	318	1600	0.199	0	318	1600	0.199	
D NBR	233	1600	0.146		0	233	1600	0.146	0	233	1600	0.146	20	253	1600	0.158	29	282	1600	0.176	0	282	1600	0.176	
SBL	68	1600	0.043	*	0	68	1600	0.043	* 2	70	1600	0.044	*	5	75	1600	0.047	6	81	1600	0.051	0	81	1600	0.051	
SBT	406	3200	0.127		0	406	3200	0.127	8	414	3200	0.129	29	443	3200	0.138	* 38	481	3200	0.150	* 0	481	3200	0.150	*
D SBR	0	1600	0.000		0	0	1600	0.000	2	2	1600	0.001	14	16	1600	0.010	2	18	1600	0.011	0	18	1600	0.011	
EBL	64	1600	0.040		0	64	1600	0.040	1	65	1600	0.041	10	75	1600	0.047	6	81	1600	0.051	0	81	1600	0.051	
EBT	590	3200	0.184	*	0	590	3200	0.184	* 0	590	3200	0.184	*	26	616	3200	0.193	* 55	671	3200	0.210	* 0	671	3200	0.210	*
D EBR	45	1600	0.028		0	45	1600	0.028	0	45	1600	0.028	30	75	1600	0.047	9	84	1600	0.053	0	84	1600	0.053	
WBL	210	1600	0.131	*	0	210	1600	0.131	* 0	210	1600	0.131	*	19	229	1600	0.143	* 20	249	1600	0.156	* 0	249	3200	0.078	*
WBT	440	3200	0.138		0	440	3200	0.138	0	440	3200	0.138	29	469	3200	0.147	41	510	3200	0.159	0	510	3200	0.159	
D WBR	13	1600	0.008		0	13	1600	0.008	2	15	1600	0.009	0	15	1600	0.009	4	19	1600	0.012	0	19	1600	0.012	
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.52				ICU VALUE 0.52				ICU VALUE 0.52				ICU VALUE 0.57				ICU VALUE 0.62				ICU VALUE 0.54			
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE B				LEVEL OF SERVICE A			

N/S: MILLS ROAD
E/W: TELEGRAPH ROAD
1633-1

MILLS ROAD/ TELEGRAPH ROAD
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 1

Adjusted RTOR

PROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

AM PEAK HOUR

MVT	EXISTING TRAFFIC VOL	CAP	V/C	AMBIENT GROWTH .000 ADD VOL	TOT VOL	CAP	V/C	VCMC PROJECT TRAFFIC ADD VOL	TOT VOL	CAP	V/C	CUMULATIVE TRAFFIC ADD VOL	TOT VOL	CAP	V/C	BACKGROUND GROWTH ADD VOL	TOT VOL	CAP	V/C	WITH MITIGATION ADD VOL	TOT VOL	CAP	V/C
NBL	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
NBT	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
NBR	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
SBL	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBT	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000
SBR	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EBL	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
EBT	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000
EBR	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
WBL	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	3200	0.000
WBT	0	6400	0.000	0	0	6400	0.000	0	0	6400	0.000	0	0	6400	0.000	0	0	6400	0.000	0	0	4800	0.000
WBR	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	3200	0.000
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00		
	ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00		
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A		

PM PEAK HOUR

MVT	EXISTING TRAFFIC VOL	CAP	V/C		AMBIENT GROWTH ADD VOL	TOT VOL	CAP	V/C		VCMC PROJECT TRAFFIC ADD VOL	TOT VOL	CAP	V/C		CUMULATIVE TRAFFIC ADD VOL	TOT VOL	CAP	V/C		BACKGROUND GROWTH ADD VOL	TOT VOL	CAP	V/C		WITH MITIGATION ADD VOL	TOT VOL	CAP	V/C	
NBL	20	1600	0.013		0	20	1600	0.013		0	20	1600	0.013		0	20	1600	0.013		2	22	1600	0.014		0	22	1600	0.014	
NBT	68	1600	0.043		0	68	1600	0.043		0	68	1600	0.043		3	71	1600	0.044		6	77	1600	0.048		0	77	1600	0.048	
NBR	109	1600	0.068	*	0	109	1600	0.068	*	0	109	1600	0.068	*	0	109	1600	0.068	*	10	119	1600	0.074	*	0	119	1600	0.074	*
SBL	1271	0	0.000		0	1271	0	0.000		8	1279	0	0.000		159	1438	0	0.000		118	1556	0	0.000		0	1556	0	0.000	
SBT	7	4800	0.272	*	0	7	4800	0.272	*	0	7	4800	0.274	*	3	10	4800	0.314	*	1	11	4800	0.339	*	0	11	4800	0.339	*
SBR	28	0	0.000		0	28	0	0.000		0	28	0	0.000		29	57	0	0.000		3	60	0	0.000		0	60	0	0.000	
EBL	92	1600	0.058	*	0	92	1600	0.058	*	0	92	1600	0.058	*	29	121	1600	0.076	*	9	130	1600	0.081	*	0	130	1600	0.081	*
EBT	968	4800	0.202		0	968	4800	0.202		0	968	4800	0.202		228	1196	4800	0.249		90	1286	4800	0.268		0	1286	4800	0.268	
EBR	9	1600	0.006		0	9	1600	0.006		0	9	1600	0.006		0	9	1600	0.006		1	10	1600	0.006		0	10	1600	0.006	
WBL	171	1600	0.107		0	171	1600	0.107		0	171	1600	0.107		0	171	1600	0.107		16	187	1600	0.117		0	187	3200	0.058	
WBT	1171	6400	0.350	*	0	1171	6400	0.350	*	0	1171	6400	0.350	*	204	1375	6400	0.413	*	109	1484	6400	0.448	*	0	1484	4800	0.309	*
WBR	1066	0	0.000		0	1066	0	0.000		4	1070	0	0.000		197	1267	0	0.000		115	1382	0	0.000		0	1382	3200	~~0.432~~ 0.269	* ★
	CLEARANCE 0.00				CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00					CLEARANCE 0.00				
	ICU VALUE 0.75				ICU VALUE 0.75					ICU VALUE 0.75					ICU VALUE 0.87					ICU VALUE 0.94					ICU VALUE ~~0.97~~ 0.80				
	LEVEL OF SERVICE C				LEVEL OF SERVICE C					LEVEL OF SERVICE C					LEVEL OF SERVICE D					LEVEL OF SERVICE E					LEVEL OF SERVICE ~~E~~ C				

N/S: MILLS ROAD (S-P)
E/W: MAIN STREET
1633-2

MILLS ROAD (S-P) / MAIN STREET
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 2

★ Adjusted to account for Right-turn over lap phase.

Adjusted for RTOR

PROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

AM PEAK HOUR

	EXISTING TRAFFIC				AMBIENT GROWTH .000				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND GROWTH				WITH MITIGATION			
	OPT. APPR. PHASING				OPT. APPR. PHASING				OPT. APPR. PHASING				OPT. APPR. PHASING				OPT. APPR. PHASING				OPT. APPR. PHASING			
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	3200	0.000 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	0	3200	0.000		0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	4800	0.000
EBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EBT	0	4800	0.000	*	0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000 *
EBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
WBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	3200	0.000 *
WBT	0	4800	0.000		0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000
WBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00			
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A			

PM PEAK HOUR

MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	205	1600	0.128	*	0	205	1600	0.128	* 0	205	1600	0.128	* 9	214	1600	0.134	* 19	233	1600	0.146	* 0	233	3200	0.073 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	1213	3200	0.379		0	1213	3200	0.379	2	1215	3200	0.380	172	1387	3200	0.433	113	1500	3200	0.469	0	1500	4800	0.313
EBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
EBT	2176	4800	0.453	*	0	2176	4800	0.453	* 8	2184	4800	0.455	* 332	2516	4800	0.524	* 202	2718	4800	0.566	* 0	2718	4800	0.566 *
EBR	264	1600	0.165		0	264	1600	0.165	0	264	1600	0.165	52	316	1600	0.198	25	341	1600	0.213	0	341	1600	0.213
WBL	458	1600	0.286	*	0	458	1600	0.286	* 0	458	1600	0.286	* 31	489	1600	0.306	* 43	532	1600	0.333	* 0	532	3200	0.166 *
WBT	1400	4800	0.292		0	1400	4800	0.292	2	1402	4800	0.292	221	1623	4800	0.338	130	1753	4800	0.365	0	1753	4800	0.365
WBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.87				ICU VALUE 0.87				ICU VALUE 0.88				ICU VALUE 0.96				ICU VALUE 1.05				ICU VALUE 0.81			
	LEVEL OF SERVICE D				LEVEL OF SERVICE D				LEVEL OF SERVICE D				LEVEL OF SERVICE E				LEVEL OF SERVICE F				LEVEL OF SERVICE D			

N/S: U.S. 101 NB RAMPS
E/W: MAIN STREET
1633-3

U.S. 101 NB RAMPS / MAIN STREET
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 3

ROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

PT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING

AM PEAK HOUR

	EXISTING TRAFFIC				AMBIENT GROWTH .000				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND GROWTH				WITH MITIGATION			
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	3200	0.000 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	4800	0.000
EBL	0	3200	0.000		0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000
EBT	0	4800	0.000	*	0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000	* 0	0	4800	0.000 *
EBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	3200	0.000 *
WBT	0	4800	0.000		0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000	0	0	4800	0.000
WBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00				ICU VALUE 0.00			
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A			

PM PEAK HOUR

MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	3200	0.000 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	4800	0.000
EBL	407	3200	0.127	*	0	407	3200	0.127	* 3	410	3200	0.128	* 69	479	3200	0.150	* 38	517	3200	0.162	* 0	517	3200	0.162 *
EBT	2191	4800	0.456		0	2191	4800	0.456	5	2196	4800	0.458	269	2465	4800	0.514	204	2669	4800	0.556	0	2669	4800	0.556
EBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WBL	10	1600	0.006		0	10	1600	0.006	0	10	1600	0.006	0	10	1600	0.006	1	11	1600	0.007	0	11	3200	0.003
WBT	2124	4800	0.443	*	0	2124	4800	0.443	* 2	2126	4800	0.443	* 255	2381	4800	0.496	* 198	2579	4800	0.537	* 0	2579	4800	0.537 *
WBR	411	1600	0.257		0	411	1600	0.257	0	411	1600	0.257	3	414	1600	0.259	38	452	1600	0.283	0	452	1600	0.283
	CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00				CLEARANCE 0.00			
	ICU VALUE 0.57				ICU VALUE 0.57				ICU VALUE 0.57				ICU VALUE 0.65				ICU VALUE 0.70				ICU VALUE 0.70			
	LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE A				LEVEL OF SERVICE B				LEVEL OF SERVICE B				LEVEL OF SERVICE B			

N/S: S.R. 126 EB ON-RAMP
E/W: MAIN STREET
1633-7

S.R. 126 EB ON-RAMP / MAIN STREET
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 7

PROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING

AM PEAK HOUR

	EXISTING TRAFFIC				AMBIENT GROWTH .000				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND GROWTH							
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	0	1600	0.000	*	0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000	* 0	0	1600	0.000 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
EBL	0	1600	0.000		0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000	0	0	1600	0.000
EBT	0	3200	0.000	*	0	0	3200	0.000	* 0	0	3200	0.000	* 0	0	3200	0.000	* 0	0	3200	0.000	* 0	0	3200	0.000 *
EBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WBL	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
WBT	0	3200	0.000		0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000	0	0	3200	0.000
WBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
	CLEARANCE		0.00		CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00
	ICU VALUE		0.00		ICU VALUE			0.00	ICU VALUE			0.00	ICU VALUE			0.00	ICU VALUE			0.00	ICU VALUE			0.00
	LEVEL OF SERVICE		A		LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A

PM PEAK HOUR

MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C	ADD VOL	TOT VOL	CAP	V/C
NBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
NBT	0	0	0.000	*	0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000	* 0	0	0	0.000 *
NBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBL	179	1600	0.112	*	0	179	1600	0.112	* 17	196	1600	0.123	* 0	196	1600	0.123	* 11	207	1600	0.129	* 0	207	1600	0.129 *
SBT	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
SBR	96	1600	0.060		0	96	1600	0.060	3	99	1600	0.062	0	99	1600	0.062	6	105	1600	0.066	0	105	1600	0.066
EBL	50	1600	0.031	*	0	50	1600	0.031	* 2	52	1600	0.033	* 0	52	1600	0.033	* 3	55	1600	0.034	* 0	55	1600	0.034 *
EBT	477	3200	0.149		0	477	3200	0.149	0	477	3200	0.149	34	511	3200	0.160	29	540	3200	0.169	0	540	3200	0.169
EBR	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WBL	0	0	0.000		0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000	0	0	0	0.000
WBT	314	3200	0.125	*	0	314	3200	0.125	* 0	314	3200	0.128	* 21	335	3200	0.135	* 19	354	3200	0.143	* 0	354	3200	0.143 *
WBR	86	0	0.000		0	86	0	0.000	11	97	0	0.000	0	97	0	0.000	5	102	0	0.000	0	102	0	0.000
	CLEARANCE		0.00		CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00	CLEARANCE			0.00
	ICU VALUE		0.27		ICU VALUE			0.27	ICU VALUE			0.28	ICU VALUE			0.29	ICU VALUE			0.30	ICU VALUE			0.30
	LEVEL OF SERVICE		A		LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A	LEVEL OF SERVICE			A

N/S: HILLMONT AVENUE
E/W: LOMA VISTA ROAD
1633-5

HILLMONT AVENUE LOMA VISTA ROAD
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 5

000246

ROJECT NAME: VENTURA COUNTY MEDICAL CENTER EXPANSION

PT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING | OPT. APPR. PHASING

AM PEAK HOUR

	EXISTING TRAFFIC				AMBIENT GROWTH .000				VCMC PROJECT TRAFFIC				CUMULATIVE TRAFFIC				BACKGROUND GROWTH							
MVT	VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	
NBL		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
NBT		1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
NBR		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
SBL		0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*
SBT		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
SBR		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
EBL		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
EBT		1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
EBR		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
WBL		1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*	0	0	1600	0.000	*
WBT		1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000		0	0	1600	0.000	
WBR		0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00	
ICU VALUE			0.00		ICU VALUE			0.00		ICU VALUE			0.00		ICU VALUE			0.00		ICU VALUE			0.00		ICU VALUE			0.00	
LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A	

000247

PM PEAK HOUR

					ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C		ADD VOL	TOT VOL	CAP	V/C	
MVT	VOL	CAP	V/C																										
NBL	37	0	0.000		0	37	0	0.000		12	49	0	0.000		0	49	0	0.000		2	51	0	0.000		0	51	0	0.000	
NBT	0	1600	0.055	*	0	0	1600	0.055	*	0	0	1600	0.068	*	0	0	1600	0.068	*	0	0	1600	0.071	*	0	0	1600	0.071	*
NBR	51	0	0.000		0	51	0	0.000		8	59	0	0.000		0	59	0	0.000		3	62	0	0.000		0	62	0	0.000	
SBL	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*	0	0	0	0.000	*
SBT	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
SBR	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
EBL	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
EBT	432	1600	0.293	*	0	432	1600	0.293	*	0	432	1600	0.297	*	0	432	1600	0.297	*	26	458	1600	0.314	*	0	458	1600	0.314	*
EBR	36	0	0.000		0	36	0	0.000		7	43	0	0.000		0	43	0	0.000		2	45	0	0.000		0	45	0	0.000	
WBL	10	1600	0.006	*	0	10	1600	0.006	*	4	14	1600	0.009	*	0	14	1600	0.009	*	1	15	1600	0.009	*	0	15	1600	0.009	*
WBT	261	1600	0.163		0	261	1600	0.163		0	261	1600	0.163		0	261	1600	0.163		16	277	1600	0.173		0	277	1600	0.173	
WBR	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000		0	0	0	0.000	
CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00		CLEARANCE			0.00	
ICU VALUE			0.36		ICU VALUE			0.36		ICU VALUE			0.38		ICU VALUE			0.38		ICU VALUE			0.39		ICU VALUE			0.39	
LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A		LEVEL OF SERVICE			A	

N/S: HILLMONT AVENUE
E/W: POLI ST.-FOOTHILL ROAD
1633-6

HILLMONT AVENUE POLI ST.-FOOTHILL ROAD
VOLUME-CAPACITY ANALYSIS
INTERSECTION #: 6

LEVEL OF SERVICE FOR UNSIGNALIZED INTERSECTIONS

The computations described in the 1985 HCM result in a solution for the capacity of each lane on the minor approaches to a STOP or YIELD-controlled intersection. Level of Service for this methodology are stated in very general terms, and are related to general delay ranges. The criterias are given in the following table, and are based on the reserve, or unused, capacity of the lane in question.

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

RESERVE CAPACITY (PCPH)	LEVEL OF SERVICE	EXPECTED DELAY TO MINOR STREET TRAFFIC
≤ 400	A	Little or no delay
300-399	B	Short traffic delays
200-299	C	Average traffic delays
100-199	D	Long traffic delays
0- 99	E	Very long traffic delays
< 0	F	Severe congestion

Caution should be used in the interpretation of these criterias. They are stated in general terms, without specific numeric values. It is, therefore, not possible to directly compare an unsignalized LOS with a signalized intersection analysis LOS in terms of specific delay values without collecting delay data directly at the subject site. The levels of service in this type of analysis are not associated with the delay values cited for signalized intersections.

Level of Service F exists when there are insufficient gaps of suitable size to allow a side street demand to safely cross through a major street traffic stream. This is generally evident from extremely long delays experienced by side street traffic, and by queuing on the minor approaches. Level of Service F may also appear in the form of side street vehicles selecting smaller than usual gaps. In such cases, safety may be a problem, and some disruption to the major traffic stream may result. It is important to note that LOS F may not always result in long queues, but may result in adjustments to a normal gap acceptance behavior.

Source: Highway Capacity Manual, Transportation Research Board
Special Report 209, 1985. Edited for clarity

****

IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... Foothill Road

NAME OF THE NORTH/SOUTH STREET..... Hillmont Avenue

NAME OF THE ANALYST..... REB

DATE OF THE ANALYSIS (mm/dd/yy)..... 07-14-1993

TIME PERIOD ANALYZED..... PM PEAK HOUR

OTHER INFORMATION.... FUTURE TRAFFIC CONDITIONS

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	0	15	51	--
THRU	458	277	0	--
RIGHT	45	0	62	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	2	2	--

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	0	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	NB	5.50	5.50	0.00	5.50
MAJOR LEFTS	WB	5.00	5.00	0.00	5.00
MINOR LEFTS	NB	6.50	6.50	0.00	6.50

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... FUTURE TRAFFIC CONDITIONS

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
NB LEFT	56	326	321	321	265	C
RIGHT	68	642	642	642	573	A
MAJOR STREET						
WB LEFT	17	710	710	710	694	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... FUTURE TRAFFIC CONDITIONS

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c (pcph) p	ACTUAL MOVEMENT CAPACITY c (pcph) M	SHARED CAPACITY c (pcph) SH	RESERVE CAPACITY c = c - v R SH	LOS
MINOR STREET						
NB LEFT	41	355	352	> 352	> 312	> B
				> 484	> 387	>B
RIGHT	56	664	664	> 664	> 608	> A
MAJOR STREET						
WB LEFT	11	739	739	739	728	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... EXISTING CONDITIONS

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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... Foothill Road

NAME OF THE NORTH/SOUTH STREET..... Hillmont Avenue

NAME OF THE ANALYST..... REB

DATE OF THE ANALYSIS (mm/dd/yy)..... 07-14-1993

TIME PERIOD ANALYZED..... PM PEAK HOUR

OTHER INFORMATION.... EXISTING PLUS VCMC PROJECT TRAFFIC

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	0	14	49	--
THRU	432	261	0	--
RIGHT	43	0	59	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	2	2	--

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	0	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	NB	5.50	5.50	0.00	5.50
MAJOR LEFTS	WB	5.00	5.00	0.00	5.00
MINOR LEFTS	NB	6.50	6.50	0.00	6.50

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... EXISTING PLUS VCMC PROJECT TRAFFIC

MOVEMENT	FLOW-RATE v(pcph)	POTENTIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
NB LEFT	54	351	347	347	293	C
RIGHT	65	661	661	661	596	A
MAJOR STREET						
WB LEFT	15	733	733	733	718	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... EXISTING PLUS VCMC PROJECT TRAFFIC

CITY OF SAN BUENAVENTURA
TRIP GENERATION CALCULATIONS FOR THE VENTURA COUNTY MEDICAL CENTER

REC'D DEC 08 1992

CITY OF SAN BUENAVENTURA
MEMORANDUM

DATE: December 7, 1992
TO: John Correa, County of Ventura
FROM: Toan Nguyen, City of San Buenaventura

SUBJECT: VENTURA COUNTY MEDICAL CENTER EXPANSION - PROJECT NO. 9261-5005 - TRAFFIC COMMENTS FOR DRAFT REPORT DATED NOVEMBER 1992.

1. Level-of-Service:

The ADD VOL column of EXISTING PLUS PROJECT from Appendix A for Seaward Avenue/Main Street Volume-Capacity Analysis should be corrected as "2 for NBT, 8 for SBT, 1 for WBT" as shown in Figure 2 PROJECT TRAFFIC VOLUMES of the Linscott, Law & Greenspan report.

2. Proposed trip rate:

As discussed during our telephone conversation on 12/4/92, the proposed trip rate needs to be re-calculated due to several discrepancies in the square footage and number of employees.

The trip generation rates for the net increase in hospital use (70,562 sqft) is calculated based on the existing square footage (398,157 sqft) and the number of employees currently arriving at the hospital during normal working hours (1,016 employees).

For each employee an average rate of 4 trips per day is assigned. This was based on the type of work performed by the employees including client and/or patient trips.

The trip rate per 1,000 sqft is calculated as follows:

1,016 employees * 4 trips/employee = 4,064 ADT trips
4,064 ADT trips / 398,157 sqft = 10.2 ADT trips per 1,000 sqft

Total of trips generated by the additional square footage of hospital use is:

ADT: 720 trips (10.2 * 70,562 / 1000)
PM: 72 trips (10% of ADT)

3. Mitigation Measures:

We concur with the proposal to mitigate the intersection of Main Street and Mills Road by re-striping of the westbound Main Street approach to include two through lanes, two right turn only lanes, and one left turn only lane. This mitigation should be implemented by the hospital upon completion of the expansion.

CITY OF SAN BUENAVENTURA
MEMORANDUM

DATE: November 18, 1992

TO: Richard Barretto, Linscott, Law & Greenspan

FROM: Kathleen Lowry, Transportation Planner

SUBJECT: VENTURA COUNTY MEDICAL CENTER
JUSTIFICATION OF TRIP GENERATION RATE

The trip generation rates for the net increase in hospital use was calculated based on the existing square footage by use type and the number of employees currently arriving at the hospital during peak hours.

A. Employee population:
The existing employee population that arrives and departs between 6:00 a.m. and 6:00 p.m. totals 99 employees. (Per John Correa, County staff, fax dated June 92, see attached)

B. Trip rate/employee
For each employee an average rate of 4 trips per day assigned. This was based on the type of work performed by the employees including client and/or patient trips.

C. P.M. Trip rate assumption
Ten percent of the ADT rate was assigned to the P.M. rate.

D. Existing Square Footage
The existing square footage of the site is 39,614 square feet. (Based on data provided by John Correa, see attached)

E. Trip rate per square footage
The trip rate per square footage is calculated as followed:
99 employees = 396.0 ADT (99 emp * 4 trips/employee)
39.6 p.m. trips (10% of ADT rate)
Trip rate = 396.0 ADT trips/39,614 sq. feet =
10.0 trips/1,000 sq. feet

F. Proposed trip rate:
Proposed net increase in square footage = 117,537 sq. feet

ADT = 1,175 trips/1,000 sq. feet
PM Trips = 117 trips/1,000 sq. feet

Existing

Ped Clinic	3780 SF	7 employees
Family Clinic	7700 SF	17
Womens Clinic	5612 SF	13
Genetics Clinic	1000 SF	1
Amb Care Admin	1000 SF	8
Ortho Clinic	2620 SF	5
Med Spec Clinic	690 SF	3
Eye clinic	150 SF	3
Rapid Care	1570 SF	8
Internal Med Clinic	4817 SF	9
Surg. Spec Clinic	150 SF	3
	(77)	--- subtotal 29,089 SF
Food Service	10,525 SF	22
	(99)	--- total 39,614 SF

376 Main 13 pm

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To Kathy Lowery	From Lonn Correa
Co. City of Vta	Co. County of Vta
Dept.	Phone # 654 2083
Fax # 648-1809	Fax # 654 3952

Model Trip Rate
The model generated 104 p.m. trips which is within 10% of the projected trip rate.

f you have any questions please call me at 805-654-7743.

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VENTURA COUNTY MEDICAL CENTER
FOLLOW-UP PARKING STUDY
(6/22/93)

This report is a follow-up study of the parking demand generated by current and proposed uses at the Ventura County Medical Center (VCMC). The original VCMC parking study was prepared by Linscott, Law & Greenspan, Engineers (LLG) to assess the parking demand associated with current on-site uses, as well as those needs that would be generated by the proposed expansion of the facility. The purpose of this study is to re-examine the assumptions in that study to determine whether the level of parking recommended will actually be needed to accommodate current and future parking demand.

PROJECT BACKGROUND

In mid-1992, the County of Ventura proposed a 78,133 square-foot expansion of the facilities on the VCMC campus. The proposal included the construction of four new structures totalling 157,558 square feet, and the demolition or removal of 13 buildings/trailers totalling 79,425 square feet.

In August 1992, LLG prepared a study of VCMC parking demand for the County, analyzing both current parking needs on the site and the increase in parking demand that would be generated by the proposed expansion. That study found that a total of 378 additional parking spaces would be needed on the campus following the proposed expansion, including a current demand for 205 additional spaces and a demand for 173 additional spaces that would be generated by 115 new employees anticipated to be generated the proposed VCMC expansion.

Based on the siting of the proposed new structures on the site, it was determined that the new construction would result in the removal of 186 existing surface parking spaces. Consequently, these spaces would need to be replaced in addition to the 378 spaces needed to accommodate current parking shortages and the increase in demand associated with the proposed expansion. It was therefore determined that a 564-space parking structure would be needed to accommodate projected onsite parking demand.

Since the preparation of the August 1992 parking study, the construction and demolition totals associated with the project have been slightly revised. Total building area proposed to be constructed has been downward revised to 144,003 square feet while one additional building (the existing Coroner's Building) is proposed to be demolished, bringing total demolition to 81,888 square feet. Based on these revised figures, the total increase in on-site building area would be 62,115 square feet. In addition, the projected increase in onsite employment associated with the expansion has been downward revised to 56 employees, including 44 day-shift employees.

PARKING REQUIREMENT ANALYSIS

As discussed above, the August 1992 VCMC parking study analyzed the additional demand for parking associated with both current on-site uses and the facility expansion. This report therefore re-examines the assumptions used to assess both current and projected future demand. In addition, the assumption that 186 surface parking spaces would be removed as part of the proposed expansion will be re-examined.

Current Demand

On-site Supply/Demand

The August 1992 LLG parking study found a surplus of 40 parking spaces on the VCMC site (excluding the 69-space surplus at Lot A, which, because of its location at the northeast corner of the site, is used exclusively by the employees and visitors of the HCA Administration and the Mental Health Outpatient Clinic). This 40-space surplus translates into a parking occupancy rate of 95 percent (848 observed demand / 888 existing supply), meaning that the site is essentially in balance.

Although onsite parking is considered essentially "balanced", the August 1992 parking study recommends a 10 percent circulation factor to ensure that the last vehicle to be parked does not have to search for the last vacant space. To achieve this factor, an additional 45 onsite spaces would be needed, bringing total onsite parking to 933 spaces. The assumptions used for this analysis appear to be reasonable; therefore, no change in onsite parking associated with current onsite demand is recommended.

Off-site Demand

Field surveys conducted by LLG as part of its 1992 parking study indicated that up to 145 VCMC-related vehicles are parked on adjacent streets on a daily basis. Providing a 19 percent factor for circulation, a need for 160 additional spaces was determined to be needed to move current on-street parkers onsite.

LLG's analysis of on-street parking assumed that all on-street parkers on Agnus Drive, Hillmont Avenue, St. Paul's Drive, San Pablo Street, and segments of Loma Vista Road within an approximately one block radius are associated with the VCMC facility. This was based on the finding, based on interviews with VCMC staff, that VCMC employees and visitors consistently park on each of these road segments.

Some of the on-street parking that occurs on Loma Vista Road may, however, be associated with other medical facilities and businesses across Loma Vista Road from the VCMC site. Consequently, the 145 vehicles determined to be associated with the VCMC may overstate the actual level of on-street parking from VCMC operations to some degree.

Nevertheless, no accurate estimate of the proportion of total on-street parking that can be attributed to VCMC operations can be made. This "worst-case" estimate of additional parking needed to bring on-street parkers onto the site therefore appears to be reasonable. No change to the 160 additional spaces suggested in the August 1992 parking study is recommended.

Expansion-Generated Demand

LLG's analysis of parking demand generated by the VCMC expansion was based upon the assumption the expansion would generate 115 new employees on the site. Since that time, it has been determined that the actual increase in onsite employment would be considerably lower. The 15-bed expansion of the Mental Health In-Patient Unit would be expected to generate 22 new employees, approximately 10 of whom would work on the day shift. In addition, 34 new office employees may occupy the existing Mental Health Unit.

However, neither the new Medical Examiner facility nor the ACC would be expected to generate any new employees. Rather, these facilities would serve to relieve overcrowding conditions that currently exist at the existing Medical Examiner facility and various VCMC clinics. Consequently, the increase in the staffing on the site is expected to be only 56 employees. An estimated 44 of these new employees would work on the day shift. Only these employees would contribute to daytime peak demand for onsite parking.

Based on the August 1992 parking study, the current parking demand ratio for VCMC employees is 1.38 parked vehicles per employee. Providing a 10 percent factor for circulation results in a recommended parking demand ratio of 1.5 spaces per day shift employee.

The application of this recommended ratio to the day shift employees anticipated to be added as a result of the VCMC expansion yields an additional parking demand of 66 spaces (1.5 spaces/employee x 44 employees).

Existing Surface Space Removal

As part of the Initial Study for the VCMC expansion, it was determined that construction of the proposed structures would result in the removal of 186 existing surface parking spaces. However, project implementation as currently proposed would result in the loss of 229 spaces. These include spaces from Lots B, C, D, E, F, I, M, and O (see Table 1). This is 43 more spaces than were anticipated to be removed as part of the Initial Study. Consequently, 229 additional spaces must be provided in order to offset the loss of surface parking associated with the proposed expansion.

Table 1. VCMC Parking Spaces to be Removed

Lot	Parking Spaces to be Removed
B	44
C	74
D	17
E	10
F	5
I	6
M	67
O	6
TOTAL	229

Total Additional On-Site Demand

Based on this re-analysis of the assumptions contained in the August 1992 parking study, the only area in which projected on-site demand can be reduced is in the area of demand created by the proposed VCMC expansion. Because the expansion-generated daytime employment would be only 44 employees rather than the 115 originally anticipated, the additional demand for parking would be only 66 spaces. This is 107 fewer spaces than the 173 originally anticipated to be needed to accommodate new employees on the site.

As shown in Table 2, total parking demand on the VCMC site following buildout of the proposed expansion would be 271 additional spaces. This includes 205 additional spaces needed for current uses on the site, as well as 66 spaces needed to accommodate the projected increase in employment on the site. Because construction of the proposed facilities on the VCMC site would result in the removal of 229 existing surface spaces, this number of additional spaces would also be needed to compensate for this loss. Thus, the proposed parking structure for the campus would need to accommodate 500 spaces.

Table 2. Parking Structure Requirements

Source of Need	Spaces
Current Onsite Demand	45
Current Offsite Demand	160
Expansion-generated Demand	66
Replacement of Removed Spaces	229
TOTAL	500

VCMC ALTERNATIVES' PARKING REQUIREMENTS

Spaces Removed: Proposed Project, Alts 1,3		Spaces Removed: Alt 2		Spaces Removed: Alt 4	
Lot B	44	Lot B	44	Lot B	44
Lot C	74	Lot C	74	Lot C	74
Lot D	17	Lot D	17	Lot D	22
Lot E	10	Lot E	10	Lot E	10
Lot F	5	Lot F	5	Lot F	5
Lot I	6	Lot I	162	Lot I	6
Lot M	67	Lot M	67	Lot M	67
Lot O	6	Lot O	6	Lot O	6
Total	229	Total	385	Total	234

Parking Requirements

Assumptions:

Existing Mental Health Site Area =	38400	sf
Proposed Parking Structure Site Area =	44800	sf
Parking Structure Site (if surface pkg) =	80000	sf
Lot I Site Area =	52800	sf
Proposed ACC/Parking Structure Site =	178400	sf
Area per surface parking space =	350	sf
Area per structure parking space =	300	sf
Parking Demand =	271	spaces

Proposed Project

Parking:	
Parking Structure	
Spaces per Floor	149
Total Number of Floors	3.35

Alternative 1

Parking:	
Parking Structure Site	229
M.H. Parking Structure	
Spaces per Floor	128
Total Number of Floors	2.12

Alternative 2

Parking:	
Parking Structure Site	229
Lot I Parking Structure	
Spaces per Floor	176
Total Number of Floors	2.43

Alternative 3

Parking:	
Parking Structure	
Spaces per Floor	149
Total Number of Floors	3.35

Alternative 4

Parking:	
ACC/Parking Structure Site	510

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APPENDIX 5.4
AIR EMISSION CALCULATIONS

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Project: VCMC
Date: July 1993

Heavy Duty Construction Emissions

				Emission Factors lb/1000 gallons					Emissions lbs				
Equipment Type	BHP	Gal/hr	Total Hrs	CO	THC	NOx	SOx	PM	CO	THC	NOx	SOx	PM
Track Tractor(CAT D6)	165	6.5	8.0	78.50	27.60	284.92	31.10	25.30	4.1	1.4	14.8	1.6	1.3
Wheeled Tractor	225	8.3	0.0	268.50	64.60	436.67	31.10	46.50	0.0	0.0	0.0	0.0	0.0
Scraper(CAT 623E)	330	11.5	8.0	84.60	19.00	258.60	31.20	27.30	7.8	1.7	23.8	2.9	2.5
Grader (CAT 140G)	150	6.0	0.0	54.65	12.73	253.84	31.10	22.20	0.0	0.0	0.0	0.0	0.0
W. Loader (CAT 966E)	216	7.5	16.0	98.66	43.20	321.23	31.20	29.30	11.8	5.2	38.5	3.7	3.5
Tracked Loader	78	3.0	0.0	82.85	40.55	339.82	31.20	24.00	0.0	0.0	0.0	0.0	0.0
Off-Highway	450	7.2	0.0	123.46	13.16	286.10	31.20	17.70	0.0	0.0	0.0	0.0	0.0
Roller	30	2.1	0.0	188.37	30.09	404.51	31.10	24.20	0.0	0.0	0.0	0.0	0.0
Misc.	70	4.6	0.0	153.51	33.70	368.01	31.10	30.10	0.0	0.0	0.0	0.0	0.0
								Total	23.7	8.4	77.2	8.2	7.3

Note: Hourly fuel use from the Caterpillar Performance Handbook
Emission factors from EPA AP-42, Volume II

Project Name : VCMC

Date : 07-13-1993

Analysis Year = 1995 Temperature = 60
EMFAC7 VERSION : EMFAC7D ...11/88

Unit Type	Trip Rate	Size	Tot Trips	Days Op.
Truck Trips	62.5/Day	1	63	1

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Work	Non-Work
Trip Length	8.4	3.7	3.9	13.0	13.0
Started Cold	88.2	40.1	58.0	5.0	5.0
Trip Speed	35	35	35	35	35
Percent Trip	27.0	17.0	56.0		

Vehicle Fleetmix

Vehicle Type	Percent Type	Leaded	Unleaded	Diesel
Light Duty Autos	0.0	1.7	95.6	2.7
Light Duty Trucks	0.0	2.2	95.0	2.8
Medium Duty Trucks	0.0	5.3	94.7	0.0
Heavy Duty Trucks	0.0	29.8	70.3	N/A
Heavy Duty Trucks	100.0	N/A	N/A	100.0
Motorcycles	0.0	100.0	N/A	N/A

Project Emissions Report in Lb/Day

Unit Type	TOG	CO	NOx
Truck Trips	4.5	12.2	23.0
Total	4.5	12.2	23.0

ROC = TOG * 0.907
= 4.1

Project Emissions Report in Lb/Day

Unit Type	FUEL USE	PM10	SOx
Truck Trips	140.1	3.3	5.6
Total	140.1	3.3	5.6

Project: VCMC
Date: July 1993

BULLDOZING - FUGITIVE DUST

E (lb/hr): 0.75*(silt) ^ 1.5/moisture ^ 1.4

Silt (%)	Moisture (%)	lb PM10/hr	hrs/day	lb PM10/day
65	4	56.4	8.0	451.5

Emission factors from EPA AP-42, Section 8.24
Silt content from 1970 Soil Survey of the Ventura Area (Sorrento loam)

BULLDOZING - FUGITIVE DUST (Mitigated)

E (lb/hr): 0.75*(silt) ^ 1.5/moisture ^ 1.4

Silt (%)	Moisture (%)	lb PM10/hr	hrs/day	lb PM10/day
65	15	8.9	8.0	71.0

Project: VCMC
Date: July 1993

BATCH DROP DUST

E (lb/ton): 0.35(0.0032)*(wind/5) ^ 1.3/(moisture/2) ^ 1.4

Moisture (%)	Wind (mph)	Tons/Day	lb PM/Ton	lb/Day PM	lb PM10/Day
4	10	3000	0.00299	8.96	3.13

BATCH DROP DUST (Mitigated)

E (lb/ton): 0.35(0.0032)*(wind/5) ^ 1.3/(moisture/2) ^ 1.4

Moisture (%)	Wind (mph)	Tons/Day	lb PM/Ton	lb/Day PM	lb PM10/Day
15	10	3000	0.00047	1.41	0.49

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: VCMC : Parking Lot
RUN: WORST WIND (WORST CASE ANGLE)
POLLUTANT: CO

I. SITE VARIABLES

U=	.5 M/S	Z0=	100. CM	ALT=	130. (FT)
BRG=	WORST CASE	VD=	.0 CM/S		
CLAS=	5 (E)	VS=	.0 CM/S		
MIXH=	50. M	AMB=	3.0 PPM		
SIGTH=	25. DEGREES	TEMP=	10.0 DEGREE (C)		

II. LINK VARIABLES

	LINK DESCRIPTION	*	LINK COORDINATES (FT) X1	Y1	X2	Y2	*	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A.	LINK A	*	0	0	0	220	*	PK	26	161.0	.0	26.0
B.	LINK B	*	0	220	90	220	*	PK	26	161.0	.0	26.0
C.	LINK C	*	90	245	90	0	*	PK	26	161.0	.0	26.0
D.	LINK D	*	90	0	-25	0	*	PK	26	161.0	.0	26.0
E.	LINK E	*	0	0	0	220	*	PK	20	161.0	11.0	26.0
F.	LINK F	*	0	220	90	220	*	PK	20	161.0	11.0	26.0
G.	LINK G	*	90	220	90	0	*	PK	20	161.0	11.0	26.0
H.	LINK H	*	90	0	0	0	*	PK	20	161.0	11.0	26.0
I.	LINK I	*	0	0	0	220	*	PK	10	161.0	22.0	26.0
J.	LINK J	*	0	220	90	220	*	PK	10	161.0	22.0	26.0
K.	LINK K	*	90	220	90	0	*	PK	10	161.0	22.0	26.0
L.	LINK L	*	90	0	0	0	*	PK	10	161.0	22.0	26.0

III. RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (FT) X	Y	Z
1. RECPT 1	*	55	-186	5.0
2. RECPT 2	*	300	-70	5.0
3. RECPT 3	*	-20	-100	5.0
4. RECPT 4	*	160	220	5.0

JOB: VCMC : Parking Lot
RUN: WORST WIND (WORST CASE ANGLE)
POLLUTANT: CO

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. RECPT 1	358.	3.8	.1	.0	.2	.1	.0	.0	.0	.0
2. RECPT 2	307.	3.6	.0	.0	.1	.0	.0	.0	.0	.0
3. RECPT 3	18.	4.1	.2	.0	.2	.2	.1	.0	.1	.0
4. RECPT 4	257.	4.0	.1	.2	.3	.0	.0	.1	.1	.0

RECEPTOR	CONC/LINK (PPM) I	J	K	L
1. RECPT 1	.0	.0	.0	.0
2. RECPT 2	.0	.0	.0	.0
3. RECPT 3	.0	.0	.0	.0
4. RECPT 4	.0	.0	.0	.0

EMFAC7PC EMISSION FACTORS - FOR CALINE4
VERSION :EMFAC7D ...11/88

YEAR : 1995 TEMPERATURE : 50
PERCENT VMT COLD : 100.0 PERCENT VMT HOT : 0.0

PM10 Percent Exhaust : 99.1 Tire Wear : 40.0
Sulfur Content Leaded :450.0 ppm Unleaded :200.0 ppm
Sulfur Content Diesel :0.280 %

	GRAMS PER MILE		
Speed	TOG	CO	NOX
5 MPH	12.83	161.03	1.92

Idle Emission Factors

TOG	0.13	Gr/Min	Fuel Use	24.0 MPG
CO	1.22	Gr/Min	PM10	0.096 GR/MILE
NOx	0.08	Gr/Min	Sox	0.064 Gr/Mile

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APPENDIX 5.5
NOISE LEVEL READINGS/
CONSTRUCTION NOISE MODELING

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TUGRO ◘ McClelland

AMBIENT NOISE MEASUREMENT DATA SHEET

Job Name: VCMC

Job Number:

Location: VCMC (in front of generator)

Date: 7/2/93

Operator: Joe Power

Day of Week: Friday

Conditions: Sky Overcast

Wind Still

Noise Sources (List): Autos, Laundry facility, mechanical operations, (primary source)
garbage trucks, movers delivering laundry

Distance From Primary Source(s): 50-100 feet

3.4 calibration

Begin Time: 8:05 a.m.

End Time: 8:25 a.m.

Leq: 56.7

Max Hold Peak:

SEL:

Max Hold Slow:

NOTES:

Noise Meter: B&K Type 2222

Leq Range: 85-145 ___
65-125 ___
45-105 ✓
25- 85 ___

Function: Max Hold Peak ___
Max Hold Slow ___
SEL ___
Leq ___

Calibrator: B&K Type 4230

Calibrated at: _____ dBA

~~Source~~ ~~16~~ ~~feet~~

FUGRO ◘ McClelland

AMBIENT NOISE MEASUREMENT DATA SHEET

Job Name: VCMC
Job Number: 9361-8067
Location: VCMC (behind laundry)
Date: 7/2/93
Operator: Joe Powers
Day of Week: Friday
Conditions: Sky Overcast
Wind Still

Noise Sources (List): Laundry room operations, mechanical equipment, birds

Distance From Primary Source(s): 30 feet

Begin Time: 8:27 a.m.
End Time: 8:47
Leq: 54.7
Max Hold Peak:
SEL:
Max Hold Slow:

NOTES:

Noise Meter: B&K Type 2222

Leq Range: 85-145 ___
65-125 ___
45-105 ___
25- 85 ___

Function: Max Hold Peak ___
Max Hold Slow ___
SEL ___
Leq ___

Calibrator: B&K Type 4230
Calibrated at: _____ dBA Correct

Source - top of bldg. Planned
Wall - 8 ft.

CONSTRUCTION NOISE IMPACT PROJECTION

Assumed Attenuation: 6 dBA per doubling of distance

NOISE SOURCE	NUMBE OF UNIT	ASSUME USE FACTOR	MAX SOUND PRESSURE LEVEL @ 50 FT (dBA)	DISTAN (Feet)	NOISE LEVEL Leq (dBA)
BACKHOE	0	0.73	85	30	NA
COMPACTOR	0	0.73	83	30	NA
CONCRETE MIXER	0	0.73	85	30	NA
CONCRETE PUMP	0	0.73	82	30	NA
COMPRESSORS	0	0.73	81	30	NA
CRANE	0	0.73	83	30	NA
DERRICK	0	0.73	88	30	NA
D8 DOZER (no muffler or en	0	0.73	90	30	NA
D8H DOZER (muffler & part	0	0.73	83	30	NA
D8K (muffler, engine enc., lub	1	0.73	80	30	83
ELECTRIC GENERATOR	0	0.73	90	30	NA
FORKLIFT	0	0.73	80	30	NA
[illegible]RBAGE TRUCK (COMP	0	0.73	90	30	NA
[illegible]ADER	0	0.73	85	30	NA
HOE EXCAVATOR	0	0.73	85	30	NA
JACK HAMMERS	0	0.73	88	30	NA
LOADER	1	0.73	83	30	86
PAVER	0	0.73	89	30	NA
PICK-UP TRUCK	0	0.73	79	30	NA
PICK-UP (2.5 tn)	0	0.73	79	30	NA
PICK-UP (4-W DRIVE)	0	0.73	75	30	NA
PILE DRIVER (PEAK)	0	0.73	101	30	NA
PNEUMATIC TOOLS	0	0.73	86	30	NA
PUMP	0	0.73	66	30	NA
ROCK DRILL	0	0.73	98	30	NA
SCRAPER	1	0.73	88	30	91
SHEEPSFOOT ROLLER	0	0.73	78	30	NA
SHREDDER	0	0.73	75	30	NA
TRUCK TRACTOR	0	0.73	82	30	NA
VACUUM TRUCK	0	0.73	76	30	NA
VAN	0	0.73	77	30	NA
WATER TRUCK	0	0.73	88	30	NA
WATER WAGON	0	0.73	83	30	NA

TOTAL Leq DURING NORMAL OPERATIONS: 93

CONSTRUCTION NOISE IMPACT PROJECTION

Assumed Attenuation: 6 dBA per doubling of distance

NOISE SOURCE	NUMBE OF UNIT	ASSUME USE FACTOR	MAX SOUND PRESSURE LEVEL @ 50 FT (dBA)	DISTAN (Feet)	NOISE LEVEL Leq (dBA)
ACKHOE	0	0.73	85	100	NA
OMPACTOR	0	0.73	83	100	NA
ONCRETE MIXER	0	0.73	85	100	NA
ONCRETE PUMP	0	0.73	82	100	NA
OMPRESSORS	0	0.73	81	100	NA
RANE	0	0.73	83	100	NA
ERRICK	0	0.73	88	100	NA
8 DOZER (no muffler or en	0	0.73	90	100	NA
8H DOZER (muffler & par	0	0.73	83	100	NA
8K (muffler, engine enc., lub	1	0.73	80	100	73
LECTRIC GENERATOR	0	0.73	90	100	NA
ORKLIFT	0	0.73	80	100	NA
ARBAGE TRUCK (COM	0	0.73	90	100	NA
RADER	0	0.73	85	100	NA
OE EXCAVATOR	0	0.73	85	100	NA
ACK HAMMERS	0	0.73	88	100	NA
OADER	1	0.73	83	100	76
AVER	0	0.73	89	100	NA
ICK-UP TRUCK	0	0.73	79	100	NA
ICK-UP (2.5 tn)	0	0.73	79	100	NA
ICK-UP (4-W DRIVE)	0	0.73	75	100	NA
ILE DRIVER (PEAK)	0	0.73	101	100	NA
NEUMATIC TOOLS	0	0.73	86	100	NA
UMP	0	0.73	66	100	NA
OCK DRILL	0	0.73	98	100	NA
CRAPER	1	0.73	88	100	81
HEEPSFOOT ROLLER	0	0.73	78	100	NA
HREDDER	0	0.73	75	100	NA
RUCK TRACTOR	0	0.73	82	100	NA
ACUUM TRUCK	0	0.73	76	100	NA
AN	0	0.73	77	100	NA
/ATER TRUCK	0	0.73	88	100	NA
/ATER WAGON	0	0.73	83	100	NA

OTAL Leq DURING NORMAL OPERATIONS:	82
SSUMED DAYTIME AMBIENT WITHOUT CONSTRUCTION:	50
SSUMED NIGHTTIME AMBIENT:	40
UMBER OF DAYTIME HOURS OPERATING:	11
UMBER OF EVENING HOURS OPERATING:	0
UMBER OF NIGHTIME HOURS OPERATING:	0
STIMATED Ldn:	79
STIMATED CNEL:	79

CONSTRUCTION NOISE IMPACT PROJECTION

Assumed Attenuation: 6 dBA per doubling of distance

NOISE SOURCE	NUMBE OF UNIT	ASSUME USE FACTOR	MAX SOUND PRESSURE LEVEL @ 50 FT (dBA)	DISTAN (Feet)	NOISE LEVEL Leq (dBA)
BACKHOE	0	0.73	85	150	NA
COMPACTOR	0	0.73	83	150	NA
CONCRETE MIXER	0	0.73	85	150	NA
CONCRETE PUMP	0	0.73	82	150	NA
COMPRESSORS	0	0.73	81	150	NA
CRANE	0	0.73	83	150	NA
DERRICK	0	0.73	88	150	NA
D8 DOZER (no muffler or en	0	0.73	90	150	NA
D8H DOZER (muffler & part	0	0.73	83	150	NA
D8K (muffler, engine enc., lub	1	0.73	80	150	69
ELECTRIC GENERATOR	0	0.73	90	150	NA
FORKLIFT	0	0.73	80	150	NA
[illegible]RBAGE TRUCK (COMP	0	0.73	90	150	NA
[illegible]ADER	0	0.73	85	150	NA
HOE EXCAVATOR	0	0.73	85	150	NA
JACK HAMMERS	0	0.73	88	150	NA
LOADER	1	0.73	83	150	72
PAVER	0	0.73	89	150	NA
PICK-UP TRUCK	0	0.73	79	150	NA
PICK-UP (2.5 tn)	0	0.73	79	150	NA
PICK-UP (4-W DRIVE)	0	0.73	75	150	NA
PILE DRIVER (PEAK)	0	0.73	101	150	NA
PNEUMATIC TOOLS	0	0.73	86	150	NA
PUMP	0	0.73	66	150	NA
ROCK DRILL	0	0.73	98	150	NA
SCRAPER	1	0.73	88	150	77
SHEEPSFOOT ROLLER	0	0.73	78	150	NA
SHREDDER	0	0.73	75	150	NA
TRUCK TRACTOR	0	0.73	82	150	NA
VACUUM TRUCK	0	0.73	76	150	NA
VAN	0	0.73	77	150	NA
WATER TRUCK	0	0.73	88	150	NA
WATER WAGON	0	0.73	83	150	NA

TOTAL Leq DURING NORMAL OPERATIONS: 79

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IDENTIFYING INFORMATION

AVERAGE RUNNING SPEED, MAJOR STREET.. 30

PEAK HOUR FACTOR..... 1

AREA POPULATION..... 150000

NAME OF THE EAST/WEST STREET..... Foothill Road

NAME OF THE NORTH/SOUTH STREET..... Hillmont Avenue

NAME OF THE ANALYST..... REB

DATE OF THE ANALYSIS (mm/dd/yy)..... 07-14-1993

TIME PERIOD ANALYZED..... PM PEAK HOUR

OTHER INFORMATION.... EXISTING CONDITIONS

INTERSECTION TYPE AND CONTROL

INTERSECTION TYPE: T-INTERSECTION

MAJOR STREET DIRECTION: EAST/WEST

CONTROL TYPE NORTHBOUND: STOP SIGN

TRAFFIC VOLUMES

	EB	WB	NB	SB
LEFT	0	10	37	--
THRU	432	261	0	--
RIGHT	36	0	51	--

NUMBER OF LANES

	EB	WB	NB	SB
LANES	1	2	1	--

ADJUSTMENT FACTORS

	PERCENT GRADE	RIGHT TURN ANGLE	CURB RADIUS (ft) FOR RIGHT TURNS	ACCELERATION LANE FOR RIGHT TURNS
EASTBOUND	0.00	90	20	N
WESTBOUND	0.00	90	20	N
NORTHBOUND	0.00	90	20	N
SOUTHBOUND	-----	---	---	-

VEHICLE COMPOSITION

	% SU TRUCKS AND RV'S	% COMBINATION VEHICLES	% MOTORCYCLES
EASTBOUND	0	0	0
WESTBOUND	0	0	0
NORTHBOUND	0	0	0
SOUTHBOUND	---	---	---

CRITICAL GAPS

		TABULAR VALUES (Table 10-2)	ADJUSTED VALUE	SIGHT DIST. ADJUSTMENT	FINAL CRITICAL GAP
MINOR RIGHTS	NB	5.50	5.50	0.00	5.50
MAJOR LEFTS	WB	5.00	5.00	0.00	5.00
MINOR LEFTS	NB	6.50	6.50	0.00	6.50

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... EXISTING CONDITIONS

MOVEMENT	FLOW-RATE v(pcph)	POTEN-TIAL CAPACITY c_p (pcph)	ACTUAL MOVEMENT CAPACITY c_M (pcph)	SHARED CAPACITY c_{SH} (pcph)	RESERVE CAPACITY $c_R = c_{SH} - v$	LOS
MINOR STREET						
NB LEFT	41	355	352	> 352	> 312	> B
				> 484	> 387	>B
RIGHT	56	664	664	> 664	> 608	> A
MAJOR STREET						
WB LEFT	11	739	739	739	728	A

IDENTIFYING INFORMATION

NAME OF THE EAST/WEST STREET..... Foothill Road
NAME OF THE NORTH/SOUTH STREET.... Hillmont Avenue
DATE AND TIME OF THE ANALYSIS..... 07-14-1993 ; PM PEAK HOUR
OTHER INFORMATION.... EXISTING CONDITIONS

INTENTIONALLY
LEFT BLANK